



The Clean Water State Revolving Fund

Practical Approaches to Improving Pace



*Hands On
Approaches*





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
WATER

To the SRF Community

The Clean Water State Revolving Fund (CWSRF) was established to provide a highly effective means for funding the long term water infrastructure needs of the country. Ultimately, the success of the CWSRF will be judged by the environmental results it helps to achieve. In order to achieve these results, the program must recycle loan repayment streams from current projects into new loans for future water quality projects. The rate at which the program is revolving and applying financial resources to achieve environmental results has become known as the ***pace of the program***. This brochure describes how states have developed practical and innovative approaches to improving the pace of loan activity in their CWSRF programs.

Eventually, based on the President's goals for future capitalization, it is expected that the CWSRF program will generate an estimated \$2 billion per year in environmental financing assistance and the new Drinking Water State Revolving Fund (DWSRF) will generate \$500 million per year. Revolving the CWSRF program at \$2 billion per year will require States to maintain high demand and usage of CWSRF funds now and through the future to maximize the benefits of the program. Likewise, as implementation of the Drinking Water program moves forward, maintaining program pace in the States will ensure that the DWSRF reaches its goal of revolving at \$500 million per year nationally.

While the pace of loan activity alone is not an adequate measure of a program's success, it is an effective gauge of how States are maintaining and meeting demand for funding. For a program to be successful, funding must be directed quickly toward achieving environmental benefits and meeting the short and long term environmental goals of a State. Achieving environmental benefits has been the focus of our efforts to promote integrated priority setting and linkages to statewide and watershed planning efforts. Maintaining high pace levels to reach environmental goals can help to maximize the benefits and usage of CWSRF funds.

This brochure presents case studies that highlight approaches States have employed to improve pace by meeting specific customer, community and environmental needs. These effective ideas reflect both the goals and flexibility of the CWSRF by broadening the CWSRF customer base and expanding the breadth of environmental activities funded.

Sincerely,

A handwritten signature in blue ink that reads "R. T. Kuhlman". The signature is fluid and cursive, with a long horizontal line extending to the right.

Richard T. Kuhlman
Office of Wastewater Management



The Clean Water State Revolving Fund

Practical Approaches to Improving Pace

Hands On Approaches

Introduction

Since its beginning in the late 1980s, the Clean Water State Revolving Fund (CWSRF) program has proven to be a highly effective environmental funding approach. All fifty states and Puerto Rico have well-established CWSRFs and are now approaching ten years experience in running their programs. Continued federal and state commitment to the CWSRF has resulted in \$24 billion of available funding (through fiscal year 1997).

Over 5,000 loans have been made totaling \$20 billion. Today, annual CWSRF loan principal and interest repayments alone total approximately \$1 billion. Some of the payments will go to repay bonds used by CWSRF programs in leveraging federal capitalization funds or to repay revenue bonds issued to provide state matching funds. However, much of the \$1 billion in

Over 5,000 loans have been made to date totaling \$20 billion. Today, annual CWSRF loan principal and interest repayments alone total approximately \$1 billion.

annual repayments now flowing into state CWSRF program accounts will soon be recycled into new loans for critical water pollution control projects. Eventually, based on goals for future federal capitalization, it is expected that CWSRF programs will generate an estimated \$2 billion per year in low-interest loans.

The CWSRF program funds a wide variety of environmental infrastructure projects. In addition to funding traditional wastewater treatment projects, many states are now using the CWSRF to fund nonpoint source, wetlands, or national estuary projects that address problems such as agricultural, rural, and urban runoff and contaminated urban stormwater. Some of the nonpoint source and estuary protection projects being funded include conservation tillage equipment, structural erosion controls, agricultural waste compost facilities, habitat restoration, riparian zone protection, and conservation district stormwater controls.

Recognizing the success of the CWSRF program, the U.S. Congress recently established a similar revolving fund program for critical public health and compliance-related projects as part of the Safe Drinking Water Act of 1996. The Drinking Water State Revolving Fund (DWSRF) program is similar in many ways to the CWSRF. States are now in the process of designing and implementing their DWSRF programs and will soon be making low-interest

loans to community water systems for vitally important drinking water projects. It is expected that the DWSRF will eventually provide at least \$500 million annually in assistance for eligible drinking water projects.

Pace of CWSRF Loan Activity

State use of available CWSRF resources was high through the end of state fiscal year (SFY) 1997 (June 30, 1997), demonstrating that states continue to make significant progress toward maximizing the benefit of the CWSRF program. From fiscal year 1992 to fiscal year 1997, cumulative funds committed to loans increased from 73 percent to 82 percent of cumulative funds available. However, the pace within individual state CWSRF programs varies according to demand and management ability. This report will document effective techniques that have been used by states to improve or maintain a high level of demand for CWSRF funding.

Well-Designed CWSRF Strategies Help States To Meet Water Quality Needs

The Clean Water Act provides states with the flexibility to design a CWSRF program that best meets their needs. States have taken advantage of this flexibility to creatively manage their CWSRF so that funds are used in a timely manner. This is important because faster-pace loan activity can



Eventually, based on goals for future federal capitalization, it is expected that the CWSRF will generate an estimated \$2 billion per year in low-interest loans.

be one of the ways to achieve a higher level of environmental protection benefits over time.

Overall, states that have maintained high levels of loan activity have done a good job of identifying who their potential customers are and how best to overcome any barriers to participation in the CWSRF program. States have used a variety of techniques to increase or maintain loan activity. For example, states have implemented targeted marketing programs to reach out to communities and other customers that are hesitant to move forward with a needed project. This report explores the approaches that eight states use to improve the effectiveness of their CWSRF programs by

New York structured its program successfully to fund both

large and small communities.

South Dakota structured a program to fund small, potentially high-risk communities.

meeting specific community and environmental needs. These approaches fall into six categories:

- Expanding the CWSRF Customer Base
- Marketing the CWSRF Program
- Providing Implementation Assistance
- Providing Assistance in Identifying the Best Capital Funding Options
- Coordinating with State Compliance/Enforcement Efforts
- Coordinating with State Nonpoint Source and Estuary Efforts

Expanding the CWSRF Customer Base

The most successful states have done a good job in identifying who their potential customers are and have designed low-interest loan solutions to address their customers' (e.g., communities, individuals, nonprofits, etc.) needs. Several states have expanded their customer base to address the needs of small and disadvantaged communities. Some states have also taken the initiative to fund high-priority nonpoint source (contaminated runoff from urban, agricultural, and other sources without a discernible point of discharge) pollution control and estuary management projects in addition to more traditional wastewater projects. Activities that broaden both a program's customer base and the breadth of environmental activities that are funded can include:

Seeking participation of new customers

States have taken steps to identify and address the needs of targeted customers.

- Many states have implemented special programs targeted at increasing small community participation. They often provide CWSRF loans with interest rates that are even lower than the rate offered for larger communities. They also help communities comply with program requirements by providing specialized technical assistance.
- Some larger communities that could benefit from the CWSRF are hesitant to participate because they are concerned about CWSRF loan requirements. These communities may need additional attention from the state CWSRF to address their questions and to clarify how CWSRF requirements can be addressed without significant additional costs.
- Some states use separate state grants for facility planning to encourage communities to move forward with a project.

Broaden eligibilities under the program to fund nonpoint source and estuary projects.

To continue working toward the goal of addressing the most serious water pollution control challenges, many states have opened their CWSRF programs to fund nonpoint source and estuary protection projects. Projects funded include agriculture best management practices, landfill closures, septic system replacement, and many others. The number of CWSRF assis-

tance agreements and loan funds provided for nonpoint source and estuary projects are:

- Nonpoint source projects: 495 assistance agreements totaling \$528 million.
- Estuary projects: 7 assistance agreements totaling \$3 million.

Funding of these activities is expected to increase substantially as the CWSRF's potential for addressing nonpoint source and estuarine problems is realized.

Marketing the CWSRF Program

States use a variety of techniques to market the CWSRF program to potential borrowers. Marketing usually consists of outreach (mailing of flyers, brochures, and pamphlets); presentations at meetings and workshops; and targeted presentations to specific municipalities or other potential customers such as farmers, homeowners, etc.

- **Outreach.** Mailings are periodically sent to municipal governments and other potential customers informing them of the CWSRF program and its benefits. The mailings introduce the CWSRF program, encourage participation, and provide information on low-cost funding that is available.
- **Presentations at scheduled meetings and workshops.** State personnel often participate in local meetings or workshops, provide CWSRF program information, and determine the level of interest in the CWSRF. For

example, a state may attend a League of Cities or Association of Towns and Townships meeting to provide CWSRF program information.

- **Targeted presentations.** Visiting a potential customer, such as a municipality or conservation district, provides an opportunity to communicate how the CWSRF program can address their specific funding needs. A focused discussion helps to clarify the benefits of the CWSRF program and the process for obtaining a loan.

Taken together, these marketing activities can have a significant impact on the level of CWSRF loan activity.

Providing Implementation Assistance

Many states offer assistance to those customers that may have difficulty understanding the requirements associated with CWSRF loans and the steps in the implementation process. Areas where a state may assist customers include:

Understanding roles and responsibilities.

States help facilitate dialogue and foster mutual understanding between

Minnesota devised a statewide approach to provide CWSRF loans for nonpoint source activities.





Connecticut combined state grants and CWSRF loans to make projects even more affordable and to increase project implementation.

wastewater project stakeholders, including:

- Local representatives - e.g., elected officials, public works/engineering departments, consultants
- State representatives - e.g., permitting agencies, nonpoint source or estuary program offices, bond financing authorities

Helping with the implementation process.

Much of the implementation process occurs at the local level. However, customers with limited capabilities often lack technical expertise in facility planning and design, development of user charge systems, and techniques to build public support. To alleviate community concerns, many states offer:

- Grants to procure implementation assistance
- Direct technical assistance from engineers or state program specialists
- Relevant educational materials
- Assistance in meeting federal requirements in the application process

Providing Assistance in Identifying the Best Capital Funding Options

CWSRF programs often serve an important role by helping borrowers devise the best available funding solutions for their projects. Activities include:

Educating customers about low-interest loans.

Many borrowers are not aware of the substantial savings that result from low-interest CWSRF loans. States often need to demonstrate that low-interest loans equate to a partial grant and that annual costs will be substantially lower when a customer receives a CWSRF loan.

Identifying other funding sources.

States can make necessary projects more affordable by identifying other available funding sources. For instance, combining a state grant program with CWSRF loans results in a higher subsidy for borrowers most in need. Other potential funding sources include:

- Supplemental state loans/grants
- Rural Utility Service loans/grants (USDA)
- Other USDA funding programs
- Federal Clean Water Hardship Grant Program (U.S. EPA)
- Community Block Development Grant Program (HUD)
- Local financing (where CWSRF funds are limited)
- Nonpoint Source Grants (U.S. EPA)

Coordinating with State Compliance/Enforcement Efforts

Depending on the role of the lead CWSRF state agency, enforcement may or may not be a significant factor in program implementation. A state environmental agency that coordinates its enforcement activities with the CWSRF agency can encourage communities that are not in compliance with federal regulations to take advantage of the CWSRF as a financial solution to their compliance problems.

Coordinate state level enforcement efforts with CWSRF loans.

Oklahoma has successfully used enforcement to complement its CWSRF program. The majority of borrowers are facing enforcement orders and often use CWSRF loans to fund needed improvements.

Coordinate compliance-related tracking/monitoring with CWSRF program outreach.

Texas uses its tracking system to determine which municipalities are nearing capacity (reached 75 - 90 percent of the total load that can be handled by their wastewater treatment plant) and might need financial assistance to expand their treatment facilities.

Coordinating with State Nonpoint Source and Estuary Efforts

CWSRF programs play important roles in some states by working with other state programs to finance projects designed to address high priority nonpoint source problems and high priority problems affecting national estuaries.

Develop loan tools for Nonpoint Source and Estuary Programs.

Minnesota's CWSRF has worked with the Minnesota Department of Agriculture and the Minnesota Department of Trade and Economic Development to develop CWSRF loan programs designed to meet the needs of borrowers. For example, the State Department of Agriculture, in conjunction with the CWSRF program, operates the State's Agriculture Best Management Practices Loan Program.

Coordinate Federal Nonpoint Source Grants and CWSRF loans.

Section 319 of the Clean Water Act provides for nonpoint source pollution control grants. However, the grant funds are limited compared to the funding that is available through the CWSRF program. Coordinated use of grant funds and CWSRF loans can make critical nonpoint source control projects more affordable.

Provide information/technical support.

State CWSRF programs can encourage the use of loans for nonpoint source and estuary management projects by providing information and participating in meetings and conferences to explain the benefits of CWSRF loans and how to obtain them.

Oklahoma coordinated enforcement efforts with CWSRF loan availability to increase demand for its loan programs.



Optimizing CWSRF Assistance: Case Studies

The following case studies provide information on the techniques implemented by states to maintain or strengthen their CWSRF programs. The case studies discuss effective CWSRF outreach and marketing practices, the role of state enforcement, and the way states have addressed special needs in small communities and broadened loan assistance to address nonpoint source pollution. States highlighted in this document include:

Arizona

Overcoming negative community perceptions

Connecticut

Combining the CWSRF with State funding programs

Minnesota

Funding a variety of NPS activities through statewide partnerships

New York

Meeting the needs of large and small communities

Oklahoma

Partnering with enforcement to maximize demand

South Dakota

Targeting small communities for funding

Tennessee

Providing extensive technical assistance and coordinating with EPA initiatives

Texas

Identifying and meeting community needs through targeted marketing

Minnesota



Assistance Activity

Minnesota has a very successful and diverse CWSRF program. Since 1989, the Minnesota Public Facilities Authority (MPFA) has provided approximately \$560 million in clean water assistance. MPFA has made 181 loans totaling \$508 million for traditional wastewater infrastructure projects and has funded 226 nonpoint source pollution prevention projects with \$49 million in loans since 1995. Figure 1 compares Minnesota's investments in wastewater and nonpoint source projects. Minnesota was one of the first states to leverage its CWSRF program. To date, leveraging has provided over \$400 million in funds available for loans.

Over the next five years, over 200 municipalities are planning environmental infrastructure improvements, with a total cost estimated to exceed

\$616 million. As a result of this, demand for funding

through Minnesota's CWSRF is strong. The state estimates that just to maintain wastewater treatment systems at the present level, 30-45 projects totaling \$65-\$100 million per year need to

be funded. The annual demand for CWSRF wastewater infrastructure loans currently ranges from \$100-\$150 million. The annual demand for CWSRF nonpoint source loans is over \$15 million.

Maximizing CWSRF Resources

The continuing success of Minnesota's CWSRF is due to the State's focus on funding qualifying communities that wish to participate, and expanding the CWSRF to address nonpoint source pollution and coordinating with state enforcement activities.

Serving Large and Small Communities

Minnesota tailors its interest rates to the financial condition of its municipal borrowers. Larger, financially secure cities, such as Minneapolis/St. Paul, participate in the CWSRF and receive below market financing on their wastewater treatment projects. The participation of Minneapolis/St. Paul actually helps the CWSRF to issue higher quality bonds at lower interest rates, thus allowing deeper subsidies to smaller, disadvantaged communities.

Minnesota funds a variety of nonpoint source activities through CWSRF-supported state agency partnerships.

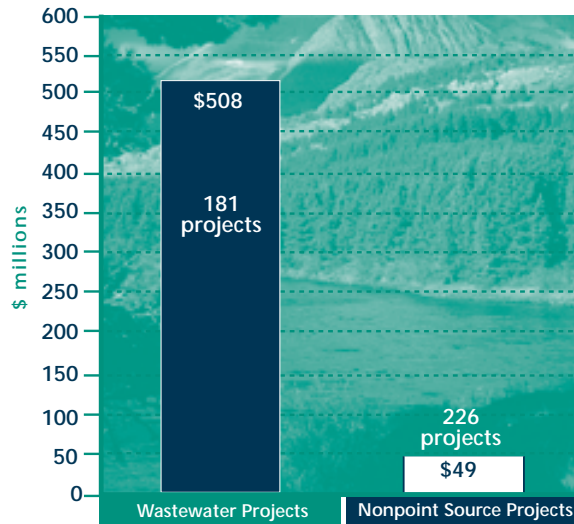


Figure 1. DWSRF Projects Funded in Minnesota

Addressing Nonpoint Source Pollution Control

Since 1995, Minnesota has implemented five nonpoint source loan programs that fund a variety of water quality protection projects. The loan programs and the agencies that operate them include: 1) Clean Water Partnership Loan Program, Minnesota

Pollution Control Agency (MPCA); 2) Agriculture Best Management Practices Loan Program, Department of Agriculture; 3) Tourism Loan Program, Department of Trade and Economic Development; 4) Small Cities Development Program, Department of Trade and Economic Development; and 5) Stormwater Loan



Broadening the Minnesota CWSRF Program Customer Base

Agriculture Best Management Practices Loan Program
Minnesota Department of Agriculture

What is eligible?

Water quality improvement projects that mitigate or prevent nonpoint source pollution in rural areas

Who is eligible?

Farmers, rural landowners, and agribusiness

Interest rate?

3 percent

Clean Water Partnership Loan Program

Minnesota Pollution Control Agency

What is eligible?

Most best management practices addressing nonpoint source pollution

Who is eligible?

Local units of government and watershed districts participating in a watershed management project

Interest rate?

2 percent

Tourism Loan Program
Minnesota Department of Trade and Economic Development

What is eligible?

Septic system upgrades or replacements for non-compliant systems

Who is eligible?

Corporations, sole proprietorships, or partnerships engaged in water-based tourism related business

Interest rate?

50-50 loan program/ 2 percent for tourism program and market rate from local bank

Contact

Jeff Freeman

Minnesota Public Facilities Authority
500 Metro Square, 121 7th Place East
St. Paul, MN 55101
612.296.2838

Marge Velky

Minnesota Pollution Control Agency
Clean Water Partnership Program
520 Lafayette Road
St. Paul, MN 55155
612.296.8834

Paul Burns

Minnesota Department of Agriculture
Agriculture Best Management Practices
Loan Program
90 West Plato Blvd.
St. Paul, MN 55107
612.296.1488

Bob Ahlin

Dept. of Trade and Economic Development
Tourism Loan Program
500 Metro Square, 121 7th Place East
St. Paul, MN 55101
612.296.6858

Anita Gallentine

Dept. of Trade and Economic Development
Small Cities Development Program
500 Metro Square, 121 7th Place East
St. Paul, MN 55101
612.296.7057

Pete Skwira

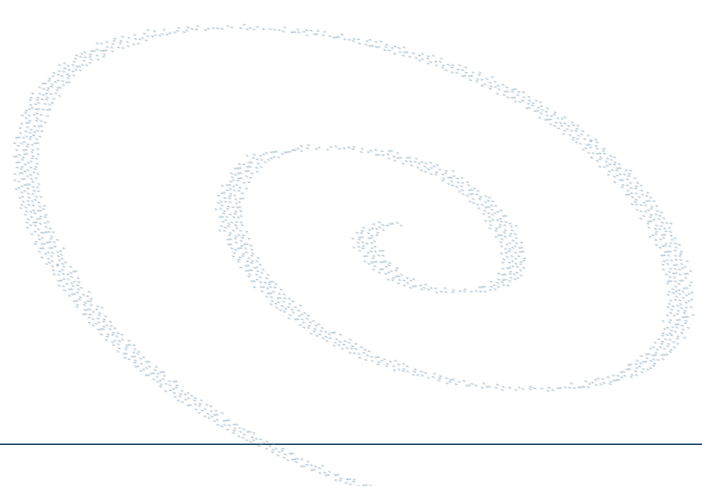
Minnesota Pollution Control Agency
Stormwater Loan Program
520 Lafayette Road
St. Paul, MN 55155
612.296.8617

Program, MPCA/MPFA. According to state officials, the pace of the CWSRF nonpoint source programs varies from program to program, but the overall demand for funding exceeds the funds targeted for nonpoint source projects.

Coordinating Enforcement and Funding Activities

In Minnesota, projects in non-compliance or those facing enforcement actions often use the CWSRF to fund the necessary infrastructure improve-

ments. To avoid enforcement action, some borrowers use CWSRF assistance to maintain compliance. For example, two small unsewered communities (one with a population of approximately 500, the other less than 50) that have failing septic systems draining to rivers recently received low-interest CWSRF loans combined with federal grant money to correct these problems.



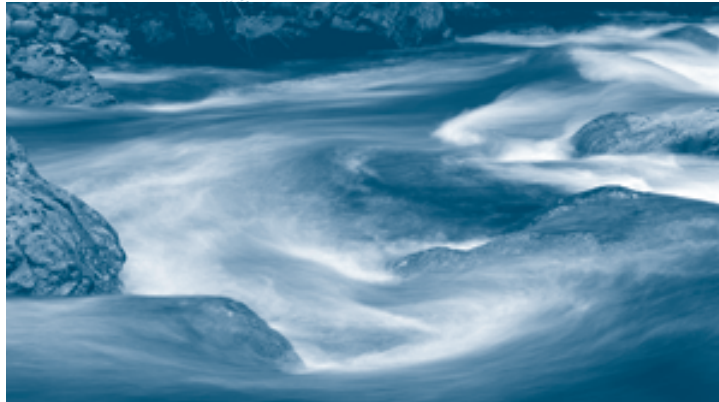
Tennessee

Assistance Activity

Tennessee's CWSRF is an example of a program that has worked especially hard to meet the needs of communities within the state. Tennessee is also a good example of a state that provides technical assistance and funding for local planning to help communities develop the capacity they need to receive CWSRF funding.

As a complement to the CWSRF, the state provides funding in the form of loans from the Tennessee Local Development Authority (TLDA). TLDA provides loans to local governments for the construction of water, wastewater, and solid waste projects. It offers a repayment period up to 30 years and interest rates tailored to a community's ability to pay (rates are locked at the bond rate). The presence of the TLDA program frees up more money in the CWSRF to meet other needs in the state.

Tennessee has made significant progress in funding wastewater projects since the CWSRF initiated operations in 1989. The state has provided \$278 million in assistance (as shown in Figure 1) to communities of all sizes. Of the 83 loans that have been disbursed, 47 have been for communities with populations below 10,000. To ensure that loans from the CWSRF are affordable to all communities, the state offers a fixed interest rate that is based on a community's financial capability. Economically weak communities characterized by lower



income levels, tax revenue, and property values receive lower interest rates on CWSRF loans. The result is that a community's user fee burden (measured as a percentage of household income) is reduced.

Maximizing CWSRF Resources

Coordinating Assistance to Increase Water Pollution Control Activities

Tennessee participates in a number of EPA initiatives to support and improve local governments' technical and managerial capabilities and to increase interest in CWSRF funding. These include Municipal Wastewater Pollution Prevention (MWPP), Small Communities Outreach and Education (SCORE), and the Small Town Environment Program (STEP).

As of SFY96, Tennessee had provided 99 percent in assistance of the cumulative funds available, making it one of the top CWSRF pace-setters in the country.



- The MWPP initiative is a two-year, \$50,000 grant from EPA for the purpose of developing a pollution prevention program. The goal is to encourage better planning of wastewater treatment facilities through financial and technical assistance. With proper implementation, the program should increase the quality and pace of project activities.
- SCORE is an established network of federal, state, and nonprofit agencies who work with small communities that lack personnel and expertise to address wastewater and drinking water needs. Their goal is to help maintain and build water and wastewater treatment facilities that comply with applicable technology, enhance effective financial management and operation, and provide pollution prevention and educational efforts.

- STEP is a self-help, loan program targeted at small communities and is similar to the Rensselaerville Institute (New York) Self-Help program. The program makes three-year loans at a maximum of \$150,000 (interest rates based on ability to pay) to correct drinking water and wastewater problems and to maintain compliance through the construction of infrastructure.

Contact

Jim Poff
 Dept. of Environment and Conservation
 Division of Construction Grants and Loans
 8th Floor, L&C Tower
 401 Church Street
 Nashville, TN 37243
 615.532.0451

STEP, SCORE, MWPP, TLDA
 same address as above
 615.532.0445

The integration of the CWSRF and these programs along with Tennessee's customer-oriented approach keeps funds moving quickly. The State works with communities during all stages of the financing process to avoid any problems that may delay the issuance of loans. Tennessee representatives provide assistance at preapplication meetings across the state to answer questions and alleviate community concerns. They also attend other workshops and seminars, and distribute informative brochures explaining the different types of state assistance offered.

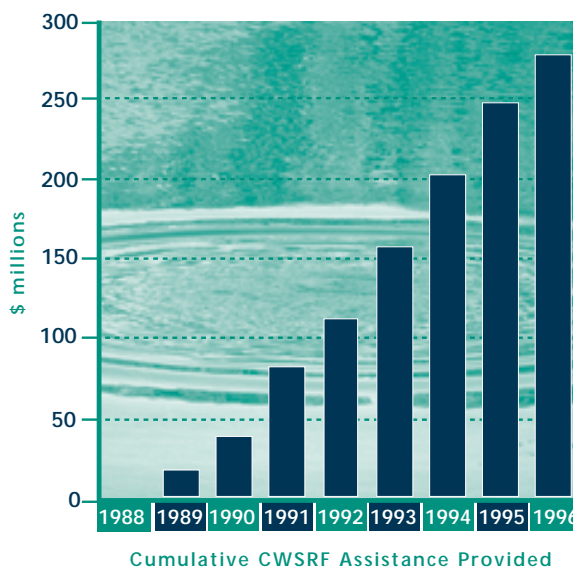


Figure 1. Cumulative CWSRF Assistance



Assistance Activity

Arizona had a slow start; its first projects were not funded until 1992. However, since then, the state has experienced a high level of demand for CWSRF funding. By 1996, the Arizona CWSRF had provided nearly \$100 million in loan assistance. In fiscal year 1997, Arizona closed nine additional loans for a total of \$32 million and in fiscal year 1998 is scheduled to close loans totaling \$50 million. Figure 1 shows the cumulative funding in Arizona's CWSRF projected through fiscal year 1998. From 1992 to 1998, the state's funding will have increased by 500 percent.

Because of the strong need for financial assistance, the State has found it desirable to leverage its program in the bond market to increase resources available for immediate funding needs. As of 1996, Arizona had

issued \$86 million in leveraging bonds. Arizona has contributed over \$13 million in state-match funds, with the federal government providing over \$77 million toward capitalization. State and federal contributions taken together, Arizona has over \$176 million invested in its CWSRF.

Arizona's CWSRF provides loans to meet the needs of all types of communities in the state. Loans have provided environmental funding for large and small communities, communities that have only small needs, as well as those communities that have short-

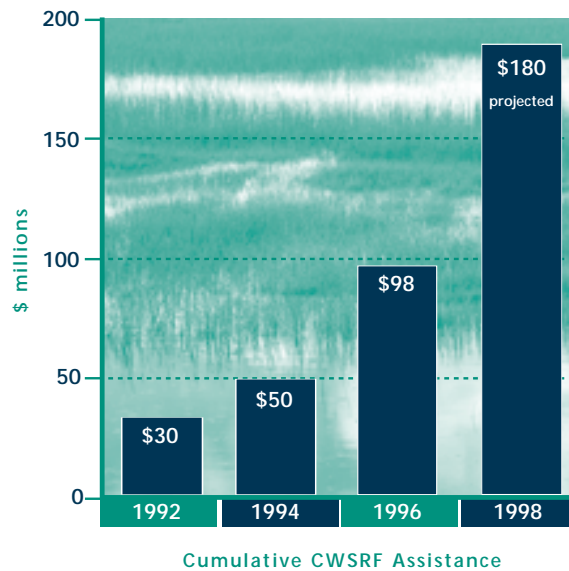


Figure 1. Growth in Arizona's CWSRF

Arizona has overcome many negative perceptions held by communities across the state.

Why is Arizona Successful?

Commitment to all communities

To alleviate the concerns of small communities, WIFA offers hands-on in-the-field assistance for the applications process.

Program streamlining

WIFA has simplified the loan application process and helps inform local governments of the pertinent information necessary for compliance with the CWSRF program.

Contacts

To ensure the success of the CWSRF, the WIFA staff communicates regularly with local government finance and community development directors and city and town managers to explore their needs and future plans.

term financing needs. One-half of the projects funded in 1996 were for communities with populations below 10,000. Although the state has funded only wastewater treatment projects in the past, it is considering nonpoint source projects for the future. Arizona currently has over \$2.2 billion in funding needs (estimated 20 year needs).

Maximizing CWSRF Resources

After reorganizing in 1992, Arizona's Water Infrastructure Finance Authority (WIFA) has worked hard to increase local community participation in the CWSRF program. Initially, WIFA works to educate communities so that they understand that low interest CWSRF loans provide a high level of subsidy that is comparable to a significant grant. Next, since Arizona law requires that debt-related projects receive voter authorization, WIFA staff constantly work with local governments to obtain the support necessary for loan approval.

The state provides continuous support to communities during the project planning and loan application process. The state has also simplified the loan application process so that it is more easily understood by smaller communities.

One effective marketing technique that Arizona uses is to coordinate state funding options through its Rural Infrastructure Committee. The Committee serves as a single point of contact for communities that need help determining what infrastructure funding options are best for them. As a component of its services, the Committee promotes the program through monthly meetings in communities throughout the state. The pur-



pose of the meetings is to allow communities to take advantage of the funding expertise and technical resources of state personnel.

WIFA staff members also continuously make targeted presentations to different municipal bodies. The purpose of these presentations is to gain support



from communities and encourage them to take advantage of the CWSRF.

Arizona is a good example of how a state can increase loan assistance provided by the CWSRF. By streamlining the application process, conducting continuous outreach to educate communities on the availability and benefits of CWSRF loans, and providing hands-on assistance during the preliminary project planning and loan application process, the Arizona CWSRF has helped to assure the ability of its program to meet current and future environmental needs.

Contact

Greg Swartz, Executive Director
Water Infrastructure Finance
Authority of Arizona
3033 North Central
Phoenix, AZ 85012
602.207.4707

Connecticut



Assistance Activity

Connecticut has a well-funded Clean Water Fund program that combines federal and state funding programs and is aggressive in meeting its wastewater funding needs. To date, Connecticut has funded 120 wastewater projects with \$968 million in Clean Water Fund assistance. Part of the State's success stems from combining assistance from a separate state grant and loan program (the State Water Pollution Control Account) with assistance from the CWSRF program. When projects receive both a state grant (20 percent for most projects) and a loan, the loan interest rate is fixed at 2 percent. This interest rate and the grant make the financing very attractive to local governments.

Because of the strong demand for funding, the State decided to leverage its CWSRF. As of SFY97, the State had obligated \$590 million in leveraging bonds to fund projects. This amount is triple the cumulative federal capitalization grants received for funding projects. As of fiscal year 1997, Connecticut's

grant program had provided \$232 million in funding assistance. Figure 1 compares the sources of funding in the Connecticut Clean Water Fund.

Maximizing CWSRF Resources

States use a variety of techniques to enhance the pace of financial assistance provided from their CWSRF programs. In Connecticut, the state identified several factors that greatly affect pace:

- The availability of additional subsidies through state grants
- Attractive low-interest rates on CWSRF loans
- A consistent enforcement approach

Combining CWSRF Assistance with State Grants

Connecticut strategically mixes CWSRF funding assistance with funding from its state grant program. Depending on the type of project, the State implements the following assistance formula: 45 - 80 percent of the funding is provided by the CWSRF and the remainder (20 - 55 percent) is contributed by the state grant program. The State funds four categories of wastewater projects. The four categories include wastewater treatment,

Connecticut's experience demonstrates the benefits of combining the CWSRF with other state funding sources.

obligated \$590 million in leveraging bonds to fund

projects. This amount is triple the cumulative federal capitalization grants received for funding projects. As of fiscal year 1997, Connecticut's

combined sewer overflows (CSOs), interceptor projects, and small community projects. Wastewater treatment projects get a minimum grant contribution of 20 percent, while CSO projects receive grants of 50 percent because of the costly nature of CSOs. To encourage the creation of regional authorities, the state will increase the grant portion by 5 percent.

The Connecticut Clean Water Fund, structured into state grant and federal loan components, also coordinates combined funding packages with other state and federal programs. These include the Clean Water Hardship Grant, Rural Utilities Service Grants and other direct grants provided by the state legislature.

Low-Interest Rate Loans For Communities

The State believes that the fixed 2 percent interest rate is essential to the program's continued success. The rate, coupled with flexible grant participation, allows the State to encourage priority projects to move forward and to help make the project affordable to the community in question. Without it, the State believes it would have difficulty attracting many potential borrowers.

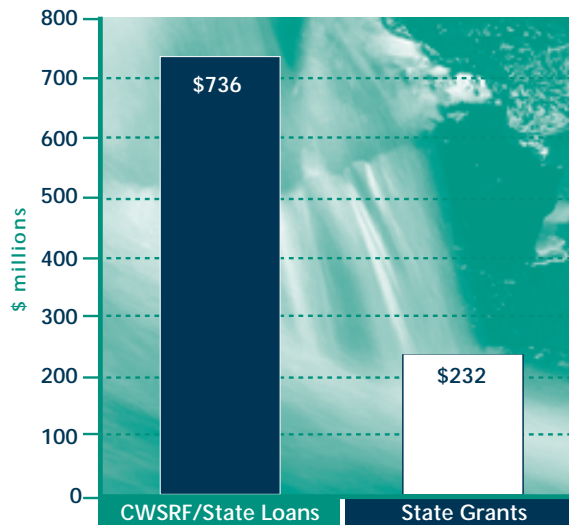


Figure 1. Clean Water Fund Funding

Consistent Enforcement

Connecticut officials view the CWSRF and other funding programs available to the State as complementary to the State's enforcement program. When enforcing federal and state clean water requirements, the State uses the Clean Water Fund to make projects more affordable. By strategically combining funding options and enforcement, Connecticut has developed a highly effective CWSRF program.

Clean Water Hardship Grants Program

EPA's newly implemented Clean Water Hardship Grants Program is the most recent addition to the grant resources of the State. The Hardship Grants Program for Rural Communities targets its assistance to rural, impoverished communities of 3,000 or fewer. Funds are available for the design and construction of treatment facilities or for technical assistance.



Contact
 Robert Norwood
 Department of Environmental Protection
 79 Elm Street
 Hartford, CT 06106
 860.424.3746

Oklahoma

Assistance Activity

Although not a formally leveraged program, Oklahoma's CWSRF is operated in partnership with a state bond program to achieve higher funding levels. The state bond/loan program dates back to the time of the Federal Construction Grants program. Started in 1982, loans from the bond program provided funding for project costs not covered by the Construction Grant program. Today, the State uses the bond program to provide loans that are used in combination with the CWSRF loans. The State provides interim construction financing as well as long-term financing through the CWSRF and state bond program.

The Oklahoma Water Resources Board (OWRB) provides short-term construction financing in the form of a

Oklahoma operates a successful CWSRF program that is predominately enforcement driven.

direct loan to the local community. The loan has an interest rate of 4.25 percent with an annual 0.5 percent administration fee and its term does not usually extend beyond two years after the construction completion date.

For long-term loans, the OWRB combines state bond proceeds at market rate with below market funding from the CWSRF. The result is a low-interest long-term loan that can be used to finance projects or refinance interim loans.

As of SFY96, 52 wastewater projects received \$217 million in assistance. Total assistance provided has increased by 500 percent since 1992. As shown in Figure 1, assistance provided is a combination of CWSRF loans and state bond funds.

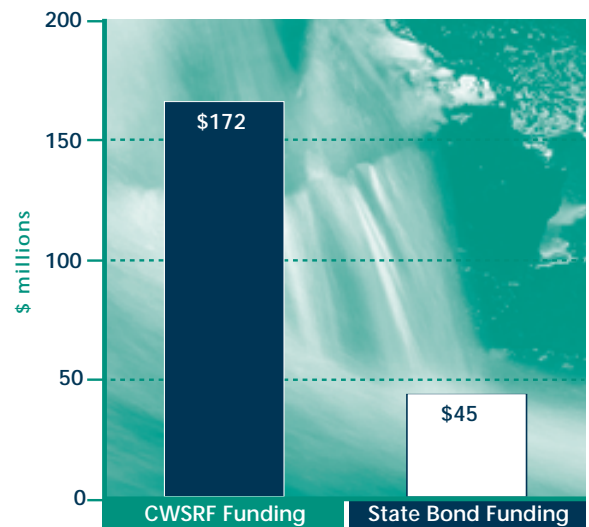


Figure 1. Cumulative Project Funding (as of SFY96)



high. For instance, 50 of the 57 loans approved for SFY97 have pending enforcement orders and total over \$200 million.

Second-Round Loans Attract Small Communities to the CWSRF
Oklahoma has indicated that, in

Maximizing CWSRF Resources

The Positive Use of Enforcement

Increases CWSRF Customers

Oklahoma increases the pace of funding with its successful enforcement-driven CWSRF. Because the Oklahoma Department of Environmental Quality (ODEQ) provides the OWRB with information on enforcement activities, the OWRB is aware of the systems that may be in need of assistance to maintain compliance. The OWRB effectively promotes the CWSRF to those communities. As a result, communities that have been cited for non-compliance or those that must upgrade their infrastructure to avoid future compliance problems are most often the customers of the CWSRF. Oklahoma is a good example of how a state can coordinate enforcement efforts with low cost funding through the CWSRF program to make projects more affordable and ready to move forward quickly. The enforcement program keeps the demand for CWSRF dollars

the past, small communities were not attracted to the CWSRF program. These communities were reluctant to participate due to concerns regarding federal and state requirements associated with loan programs. Therefore, Oklahoma's initial strategy was to attract large communities to the CWSRF, fund large projects, and use the loan repayments for second-round loans to small communities (population less than 10,000). The funds for second-round loans come primarily from principal and interest repayments on first-round loans and carry fewer project requirements (e.g., exemption from most federal cross-cutting laws and authorities).

Contact

Paul Hodge, Assistant Chief
Financial Assistance Division
Oklahoma Water Resources Board
3800 North Classen Boulevard
Oklahoma City, OK 73118
405.530.8800



South Dakota



Assistance Activity

South Dakota has devised a successful program that meets the needs of local communities. Because most of the communities in the state are small, the CWSRF has targeted their needs. As a result, more than two-thirds of the 83 loans have been made to communities below 10,000 in population. Figure 1 shows the number of loans made to communities with populations under 10,000 as of SFY96.

Small communities may be viewed as posing a credit risk to CWSRF programs. Smaller communities often have lower household income levels and less diversity of employment opportunities, making them more susceptible to economic downturns. To date, however, the State has had no default or repayment problems, even though more than one-half of all loans have been made to communities with populations below 3,500. In addition, the State has been able to leverage its CWSRF program by using small community repayments as security for the CWSRF leverage bonds.

To further meet the needs of its communities, the South Dakota CWSRF funds nonpoint source projects in addition to traditional wastewater projects. South Dakota has funded 4 nonpoint source projects totaling over \$2 million.

As an added incentive for participation, South Dakota offers different fixed interest rates, depending on the loan term and whether the loan is from leveraged funds or disbursed directly from CWSRF capitalization funds. Loans from the CWSRF have 10-, 15-, or 20-year terms with interest rates of 4.5 percent, 5 percent, and 5.25 percent respectively. The leveraged loans have 10-, 15-, or 20-year terms with one interest rate of 6.25 percent. Like many other states, South Dakota has a state grant program that provides additional assistance to CWSRF projects.

As shown in Figure 2, the federal government has provided \$60 million in capitalization funding. Along with state match funds of \$24 million and leveraging funds of \$4 million, South Dakota has \$88 million invested in its CWSRF. The projects funded to date have received \$69 million in CWSRF assistance.

South Dakota has demonstrated excellence in funding small communities.

Maximizing CWSRF Resources

Structuring the CWSRF to Meet Community Needs

The population of South Dakota is 700,000, and the vast majority of communities are small and rural. Recognizing its customer base, the State has maintained the objective of funding communities with funding needs, regardless of population size.

The State has worked to fine-tune the CWSRF assistance provided to meet the needs of the small communities that comprise the vast majority of potential loan customers. The State offers flexible interest rates and repayment terms, and it combines state grants with CWSRF loans to assure a very high level of subsidy for deserving communities.

Protecting CWSRF Funds

The State considers loans made to small towns and nonpoint source projects as having higher risk compared to loans for larger communities. To

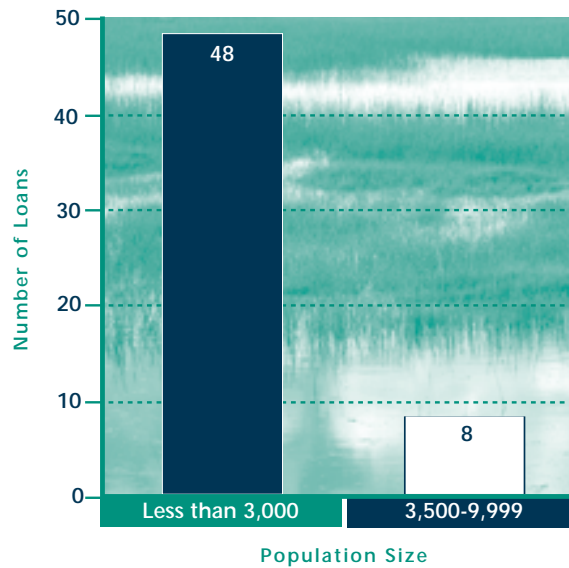
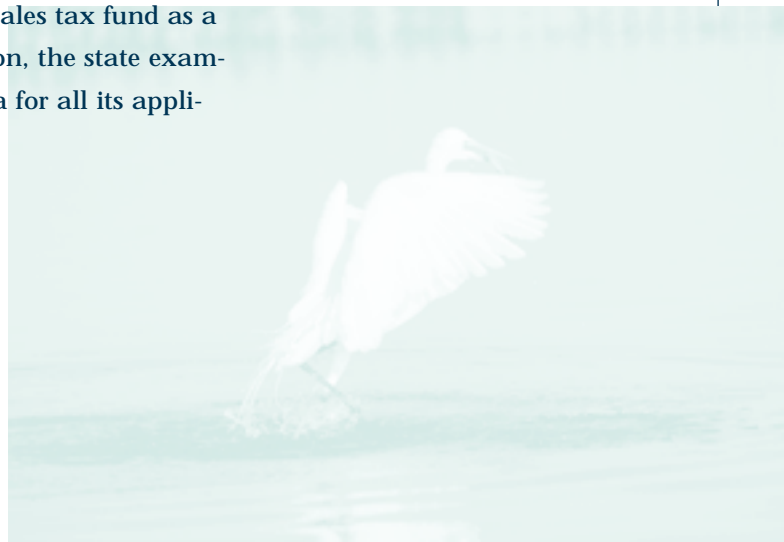


Figure 1. Small Community Loans

counter any problems associated with these potential borrowers, the state may require that the loans be “double barreled.” Double barreling requires a community to pledge a second revenue source to repay the loan in the event that the first source is not sufficient. A common example would be a community pledging wastewater revenues to repay its loan and pledging revenues from its sales tax fund as a backup. In addition, the state examines certain criteria for all its applicants.

Factors to Consider with High-Risk Loans

- “double barreling” the loan – provide second revenue source for security
- other outstanding debts
- how the borrower will meet a CWSRF annual loan debt service “coverage requirement” of 110 percent
- increase/decrease in user population, rate increase history
- local support for the project
- revenue sources for the project



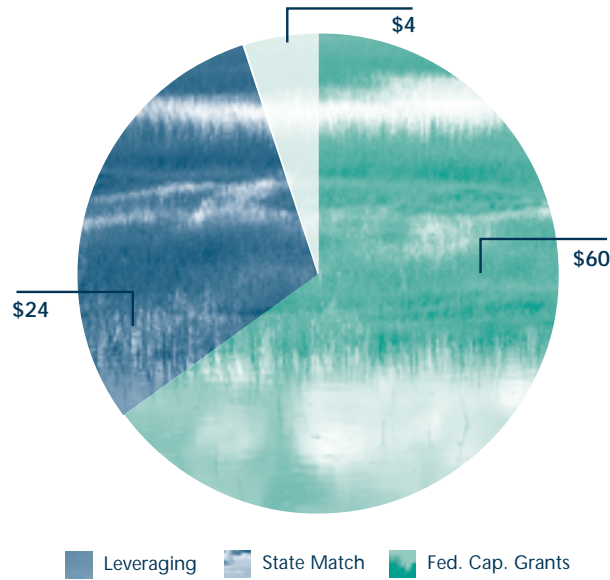


Figure 2. Total CWSRF Investment (\$ millions)

Reaching Out to Customers

South Dakota is active in reaching out to customers and marketing its CWSRF and other state grant and loan programs. The targeted groups are municipal leagues, wastewater conferences, and regional planning districts. The state makes presentations to these groups to inform them about CWSRF funding availability, what projects are eligible, what loan terms are available, and how the loan application and funding process works. State officials are accessible to assist communi-

ties with any potential problems during the application process. The presence of state officials encourages more communities to participate in the CWSRF program. South Dakota also distributes brochures and sends correspondence to potential borrowers on a regular basis to build awareness of CWSRF funding availability. Potential borrowers are identified on an ongoing basis, and information on the funding programs and state water planning process is provided to and through the state rural water association, planning districts, water development districts, and other associations.

Contact

James Feeney
 South Dakota Department of Environment
 and Natural Resources
 523 East Capitol
 Pierre, SD 57501
 605.773.4216



Assistance Activity

Since 1990, New York has funded 611 projects (including 44 nonpoint source projects) as shown in Figure 1. New York has provided \$3.5 billion in assistance for all projects, including \$300 million in loans for nonpoint source projects. The State also implements a successful leveraging program. Since its inception, New York has leveraged almost \$3 billion dollars as additional funds for projects.

As a large program, New York strives to address the needs of all municipal loan applicants. Almost one-third of the loans were made to communities with populations below 3,500. The CWSRF in New York is attractive to borrowers because of low interest rates on two types of loans, short-term and long-term financing. Short-term financing consists of interest-free short-term loans that allow municipalities to design and initiate construction on water quality projects. The loans are available for up to three years. Long-term financing is the bulk of assistance provided at below market rates (one-half to two-thirds of market rate with interest-free direct loans available depending on financial hardship). The below-market rate offers substantial savings for communities. For example, a million dollar project, financed with a subsidized 2.96



New York

percent interest rate as compared to a typical market rate (5.92 percent), would provide a savings of approximately \$393,036 over the 20 year life of the loan as shown in Figure 2.

As shown in Figure 3, New York has \$4 billion invested in its CWSRF. The federal government has provided \$1 billion toward capitalization, the state has provided \$255 million in matching funds and obtained leveraging funds of approximately \$3 billion.

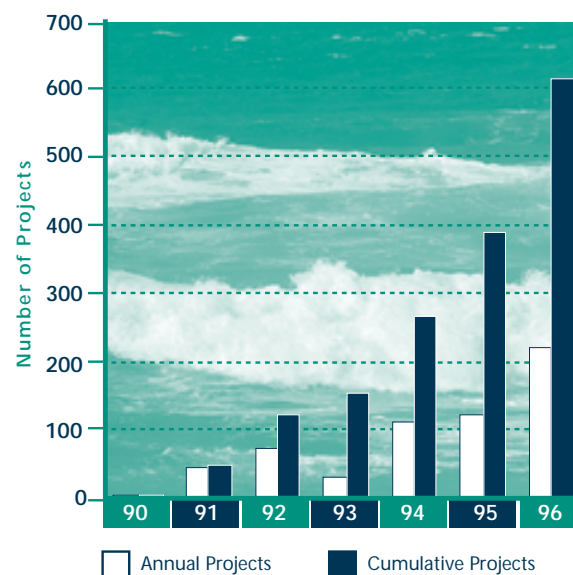
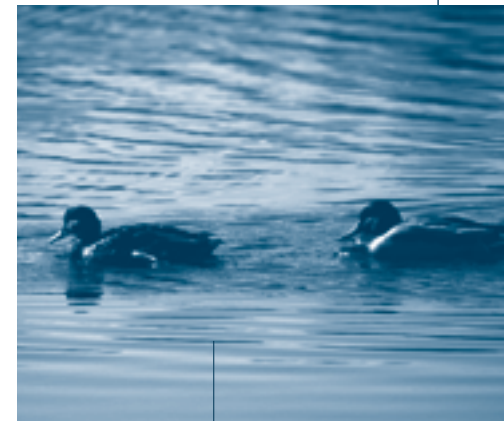


Figure 1. New York's CWSRF Projects

New York has the largest CWSRF in the country. As of SFY96, New York had provided \$3 billion in CWSRF assistance and expects to see this total grow to \$4 billion in loans by the year 2000.

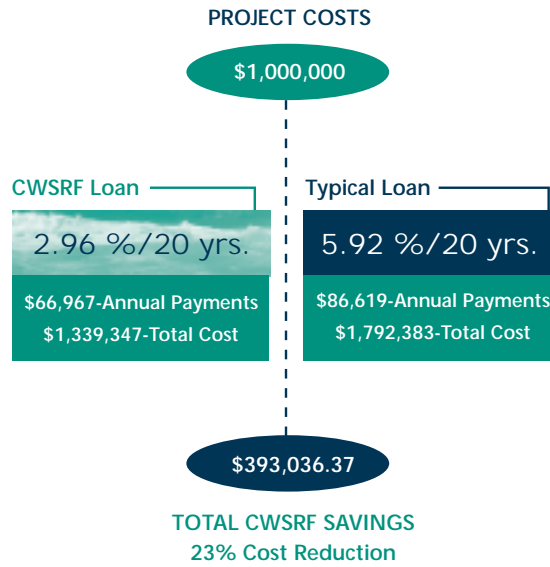


Figure 2. New York CWSRF Loan Savings

Maximizing CWSRF Resources

New York's success in implementing its CWSRF program is partially due to the substantial wastewater funding needs of the state. Total needs are estimated to be \$16 billion for the next 20 years. The state has also done a good job in designing and implementing a CWSRF that meets the needs of its communities.

Self-Help for Small Communities Interested in the CWSRF
New York's CWSRF serves loan recipients that range in size from New York City to very small municipalities in the rural parts of the state. Small and rural

communities in New York have documented wastewater needs of \$710 mil-

lion. The state has also estimated \$654 million in additional needs for small and rural communities. To better assist small communities, New York, with the assistance of The Rensselaerville Institute, established the Self-Help Support System in 1985. The system provides help to small communities to address their water and wastewater challenges. The program encourages local citizens to take responsibility for meeting project requirements. The types of assistance available under the Self-Help program to help lessen costs associated with project implementation include technical advice (engineering and financial), and how-to materials.

Effective Marketing and Outreach Efforts

The state has an effective marketing program that fosters communities' interest in CWSRF loans. State representatives regularly attend and participate in various workshops, seminars, and conferences. The New York State Environmental Facilities Corporation has two field representatives for rural and other small communities. Each representative travels to different small municipalities and provides information on the CWSRF, including assistance on application procedures and how to comply with program requirements.

Contact

Robert E. Davis, P.E.
Director of Engineering and Program Management
New York State Environmental Facilities Corporation
50 Wolf Road, Room 502
Albany, NY 12205-2603
518.457.3833

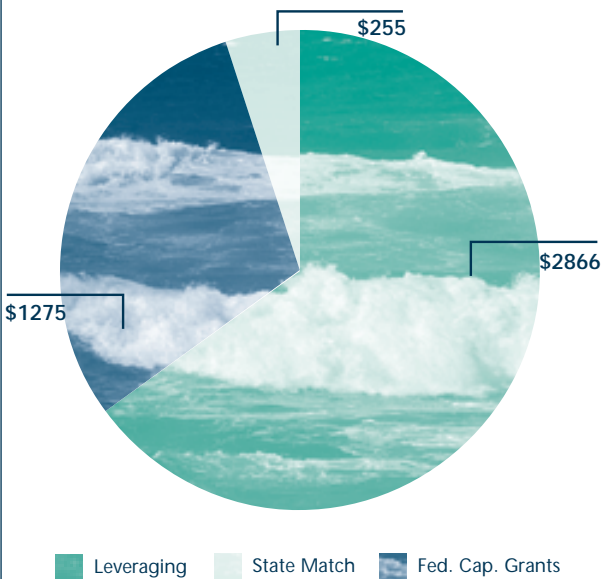


Figure 3. Total CWSRF Investment (\$ millions)

Assistance Activity

Texas is a good example of a state that has continuous, strong demand for CWSRF funding. Even though CWSRF loan interest rates are set only 0.7 or 1.2 percent below the prevailing market rate, the state experiences strong demand for CWSRF loan funding from new and repeat customers.

Texas also leverages its program and receives additional state contributions (“advanced match”) beyond the required 20 percent state match to provide additional funding for loans. By combining federal capitalization grants with state match and advanced match funds, leveraging bond proceeds, and loan repayments, the Texas CWSRF has a current annual loan volume of about \$250 million. The financial structure Texas has established for the CWSRF has worked well for its communities. Over one-half of the projects funded have been for communities below 10,000 in population. Also, the size of each project loan has decreased from an average of \$18 million in 1990 to an average of just over \$7 million per project in 1996, indicating a willingness to serve customers of varying size.

As shown in Figure 1, the federal government has provided \$703 million in capitalization funding. Along with state match of \$269 million and \$554 million of funds from leveraging, Texas has \$1.5 billion invested in its CWSRF. The cumulative assistance provided in the CWSRF funding



Texas

increased from \$122 million in 1989 to \$1.3 billion in 1996 which demonstrates an annual growth rate of nearly 40 percent (Figure 2).

Maximizing CWSRF Resources

Overall, Texas has a fast-moving program. Because Texas is a populous state with significant wastewater construction needs, demand for CWSRF funds has always been strong. The state also identified targeted marketing and enforcement efforts as important factors that increase demand.

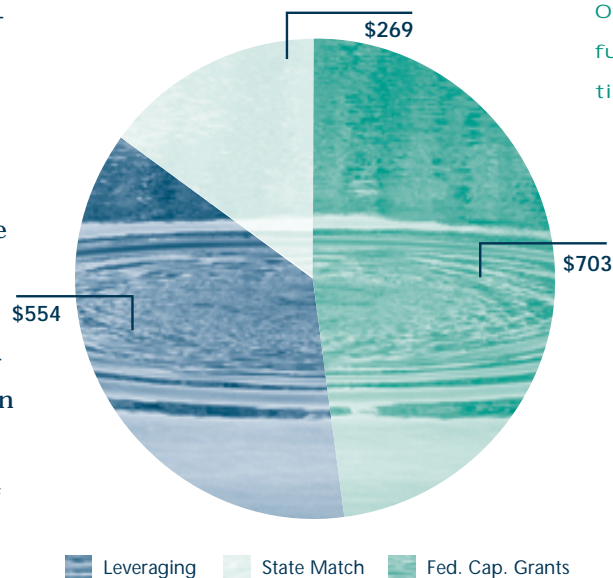
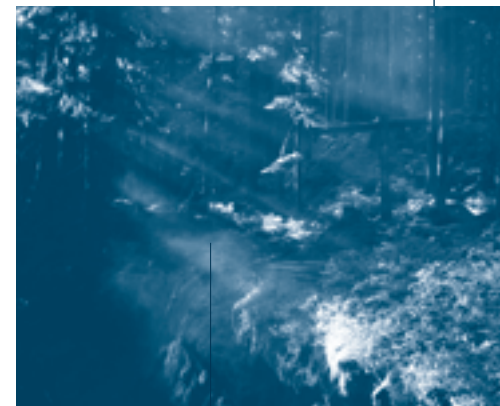


Figure 1. Total CWSRF Investment (\$ millions)



Over one-half of the projects funded have been for communities below 10,000 in population.

Texas is Sensitive to CWSRF Customer Needs

- First come/first serve funding allows applicants to proceed at their own schedules.
- Customers have a funding option that allows them to fix interest rates and receive funds quickly. Especially helpful for smaller communities that may not have the financial capability to pay for planning costs up-front.
- Funding continuous capital improvements in cities. For example, Houston received CWSRF money to remove all sanitary sewer overflows (SSOs) from its system.



Targeted Marketing Increased Interest in Loan Funding

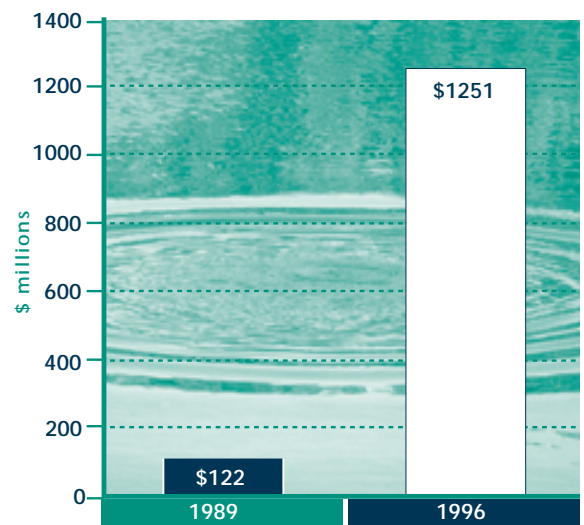
The Texas Water Development Board (TWDB) coordinates with other state agencies on various marketing efforts for the CWSRF. Financial and engineering consultants also market the CWSRF at workshops and conferences. Texas is well aware of the needs of the communities and tailors its program to meet those needs. An example of targeted marketing includes a Memorandum of Understanding with the Texas Soil and Water Conservation Board to pursue and fund agriculture nonpoint source projects. TWDB also participates with the Texas Natural Resource Conservation Commission in seminars regarding nonpoint source project funding. Texas also remains aware of customer needs through regular customer polls, focus groups, customer surveys, and day-to-day interaction. These marketing efforts, in conjunction with the size and popularity of the CWSRF program, are responsible for its success.

Texas Natural Resources Conservation Commission's 75/90 Rule and CWSRF Funding

As the state regulatory agency, the Texas Natural Resources Conservation Commission (TNRCC) tracks the status of wastewater treatment facilities with the "75/90 rule." The 75/90 rule is a preventative measure that keeps municipalities from violating their wastewater discharge permits. When a facility reaches 75 percent of its capacity, the municipality is notified in writing that it should begin planning for a plant expansion. When the plant reaches 90 percent of its capacity, the city must begin or should be ready to begin the design and construction phase of the plant expansion. The TWDB contacts those entities who have received 75/90 notices and often provides CWSRF funding to improve their wastewater treatment facilities.

Contact

Mark Hall
 Texas Water Development Board
 1700 North Congress Avenue
 (POB 13231)
 Austin, TX 78711
 512.463.8489



Cumulative CWSRF Assistance Provided

Figure 2. Growth in CWSRF Funding



United States
Environmental Protection Agency
(4204)
Washington, DC 20460

Official Business
Penalty for Private Use
\$300