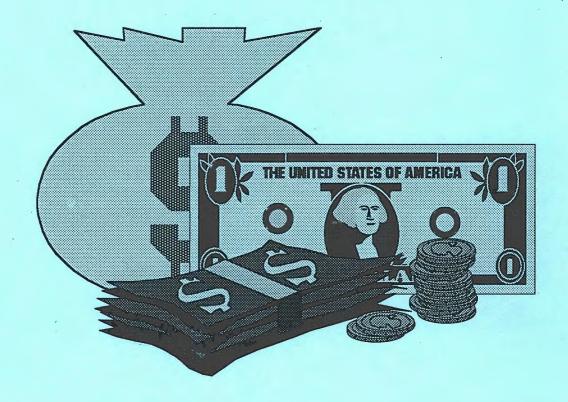
### **\$EPA**

# **Innovative Options** For Financing **Nongovernmental Public** Water Supplies' Needs



This publication was prepared for the U.S. Environmental Protection Agency, Office of Drinking Water, by The Cadmus Group, Inc. under Contract No. 68-C0-0020. The EPA Work Assignment Manager was James Bourne. The Cadmus Project Manager was Laurie Potter. The principal author and technical contributor was Tom Spofford, Public Finance for Environmental Applications of Milton, Massachusetts, a former Associate at Cadmus. The chief editor was Kenneth Mayo.

The authors wish to thank the many people who provided information and advice in the production of this document, particularly the individuals from the organizations profiled in this text who graciously consented to initial interviews and reviewed drafts of the report.

Inclusion in this publication of a particular financing organization, or a specific technique, does not signify endorsement by the Environmental Protection Agency, and no endorsement is expressed or implied. Our purpose is to communicate useful alternatives from among many financing mechanisms that have evolved for addressing the capital needs of nongovernmental Community Water Systems.

For further information on this publication, please contact James Bourne in the Office of Ground Water and Drinking Water at (202) 260-5557.

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### Introduction

The 1986 Amendments to the Safe Drinking Water Act (SDWA) will profoundly affect financially strapped nongovernmental community drinking water systems nationwide. They will have to make large investments in property, plant, and equipment if they are to comply with new regulations. Their generally poor financial condition, however, will make such investment difficult. Unable to fund improvements out of operating revenues, many also are unable to borrow money at affordable rates, if they can borrow money at all.

Due to their small size and lack of access to capital, many small systems will find it difficult to finance these necessary increases. A broad range of financing programs exist to help governmental entities borrow funds for capital expenditures at reduced costs. However, small nongovernmental systems have few possibilities for funding the capital costs of compliance with the SDWA Amendments at the same favorable terms. This publication discusses six financing options available to nongovernmental Community Water Systems (CWSs). Many of these mechanisms are targeted exclusively at nongovernmental CWSs. Others are available to publicly-owned and nongovernmental systems alike.

This document describes a range of alternative funding mechanisms available to assist small, non-public drinking water systems in financing infrastructure improvements needed to stay in compliance with State and Federal regulations. Many of these mechanisms, as you will see, target their assistance to nongovernmental CWSs

who would be unable to borrow independently, or who would not receive terms favorable enough to be an economically viable project.

### Small, Nongovernmental Systems

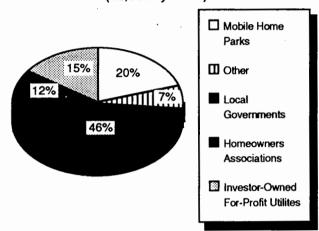
I.S. Environmental Protection Agency (EPA) defines a CWS as a system that provides water to at least 15 connections or to the same 25 persons year-round. A small CWS serves 501 to 3,300 persons, while a very small system serves 25 to 500. About 87 percent of the nation's 59,200 CWSs are small or very small; yet they serve only about 10 percent of the population. It is interesting to note that 90 percent of the 15,800 CWSs that violated drinking water regulations in FY 1990 were small systems.

As the term implies, nongovernmental CWSs are the property of individuals or entities other than such governmental bodies as municipalities, counties, or special utility agencies. There are three principal types of nongovernmental CWS:

- investor-owned, for-profit utilities,
- non-profit water providers, including customerowned non-profit organizations (known as cooperatives) and homeowners' associations, and
- mobile home parks that also operate CWSs.

Roughly half of all CWSs are owned by governmental entities, and the other half are nongovernmental. Nearly 94 percent of the nongovernmental CWSs are small systems. Figure 1 below shows the pattern of CWS ownership.

FIGURE 1
Ownership of Community Water Systems
(52,000 systems)

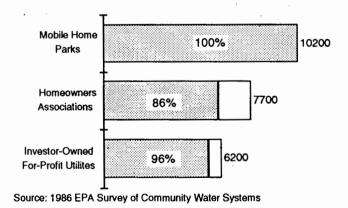


Source: 1986 EPA Survey of Community Water Systems

Figure 2 below shows the percentage of nongovernmental CWSs that are classified as small and very small systems.

#### FIGURE 2

Percentage of Nongovernmental Community Water Systems Serving 3,300 people or less (small and very small systems)



#### The Six Profiles

This report profiles six quite varied financing mechanisms which might be appropriate for small drinking water systems. Each profile explains how the mechanism works, how it can help small drinking water systems, and what types of systems are best served by that mechanism. The profiles are:

- The New Jersey Economic Development Board's program of tax-exempt "private activity bond" financing;
- The Texas Water Development Board's program of taxable loans to chartered non-profit water supply corporations;
- The Safe Drinking Water Bond Law Program of loans operated by the California Department of Water Resources;
- The PENNVEST loan and grant program of the Pennsylvania Infrastructure Investment Authority;
- The Water and Waste Disposal Loan and Grant Program of the U.S. Department of Agriculture's Rural Development Administration (RDA). This was formerly a Farmers Home Administration (FmHA) program; and
- The Shorewood Water Company's financings undertaken by the First Albany Corporation.

Each profile discusses how public and private lenders reduce the risk these financially weak water systems will fail to repay their loans. Although the techniques vary from one mechanism to another, they are essential to ensuring that funds are available for loan to financially weak borrowers.

Many of the profiles describe the use of tax-exempt borrowing by governments to provide funds for loan to nongovernmental water systems. There is a lower rate of interest for these funds because the buyers of tax-exempt notes do not pay Federal tax on the interest. Thus, the US Treasury subsidizes certain capital projects, such as infrastructure enhancement, schools, etc. that are for a public purpose. The use of tax-exempt financing by private concerns is closely regulated by Federal tax law, which restricts the volume of such financing and the types of private organizations permitted to receive it.

#### Some New Terms

ome of the financial terms used in the profiles may be new to many readers. The most important ones are discussed below; others are explained in the profiles.  Tax-exempt Financing: Borrowing by State or local governments at reduced rates because the interest that lenders receive is exempt from Federal income tax.

The interest charged on tax-exempt loans is typically about 2 percentage points less than the rate charged for loans whose interest is subject to Federal income tax. That means if the taxable interest rate on a 20-year loan is 8 percent, a government should be able to borrow tax-exempt at about 6 percent. Borrowing at the lower rate saves the government about 25 percent in interest charges over the life of the loan.

In some States, the interest paid by the State and its local governments is also exempt from State income tax. This makes tax-exempt bonds and notes even more attractive to lenders in these States.

- Tax-exempt Bond: A government security that earns tax-exempt interest for the bondholder. A bond is the government's promise to repay, with interest, the money loaned to it by the bondholder.
- Tax-exempt Private Activity Bond Financing: The use of tax-exempt borrowing to raise funds for the use or benefit of any nongovernmental organization, such as private for-profit water utilities and non-profit water supply cooperatives. The state allocation process for this financing is competitive: other nongovernmental organizations seeking the same financing mechanism may include non-profit community development corporations or small manufacturing companies. Federal tax law restricts private access to tax-exempt financing; however it allows governments to issue tax-exempt private activity bonds to aid facilities that furnish water. There is one constraint imposed by the Federal Tax Code: utility water rates must be regulated by the state to be eligible for this financing. Typically, for-profit utilities are rate regulated, while non-profit water utilities often are not.
- Tax-exempt Private Activity Bond Volume Cap: The
  maximum amount of tax-exempt private activity
  bonds (of all types) that each State can issue annually, under Federal tax law. The cap is equal to \$150
  million or \$50 per capita, whichever is larger.

To keep such financing below the cap, each State has a process for determining which eligible projects will be allowed to finance on a tax-exempt basis. Often, this determination is made by senior State financial officials such as the State treasurer's staff, the State's chief financial officer, or the staffs of State economic or community development agencies.

- Market Rate: The interest rate charged on borrowed funds, based entirely on conditions in the credit markets, with no subsidy to the borrower.
- Below-market Rate: An interest rate lower than the prevailing market rate. For example, a State agency may obtain funds at a tax-exempt rate of 6 percent and loan those funds to private CWSs at 3 percent; the CWSs benefit from being able to borrow at the below-market rate.
- Reserves: Funds set aside or "held in reserve" to meet a potential future need. Borrowers frequently must have or accumulate reserves to provide a financial cushion against future events that might jeopardize their repayment of a loan.
- Bond Rating: An indication of the likelihood that a bond issuer will default on its obligation to repay the bond with interest. The higher the rating, the lower the risk that the loan will not be repaid. The two broad categories of bond rating are "investment grade" and "below investment grade."

The credit markets reward relatively low-risk borrowers with low interest rates; riskier borrowers pay higher rates. The riskier borrowers, those with the lowest bond rating, pay higher rates—if they can borrow at all.

Virtually every organization that regularly borrows in the national credit market has a bond rating, but many small borrowers do not. Unrated borrowers lack an important tool for communicating with potential lenders and may be limited to borrowing from local financial institutions. Borrowers with very low bond ratings also may find their credit sources severely restricted.

Many of the profiles discuss mechanisms to provide loans to borrowers who are unrated or whose bond rating is below investment grade. Many small, nongovernmental CWSs are unrated.

### A Final Word

his publication presents just a few interesting and, it is hoped, useful examples of the financial mechanisms in place across the nation. These examples illustrate that there is little national uniformity. In fact, they emphasize that there is tremendous variation across states in the availability and effectiveness of mechanisms promoting capital access for nongovernmental water systems. No single publication could present the entire range of mechanisms.

For an example of taxable market rate loans, see the profile of the Texas Water Development Board. Tax-exempt market rate loans are discussed in the New Jersey Economic Development Authority and the Financing a For-Profit Investor-Owned Water Utility in New York State profiles. Examples of below-market rate loans are provided in the profiles of PENNVEST, the California Safe Drinking Water Bond Law Program, and the RDA's Water and Waste Disposal Loan and Grant Program.

# New Jersey Economic Development Authority

he New Jersey Economic Development Authority (NJEDA) provides tax-exempt private activity bond financing and taxable financing for several types of projects, including industrial and commercial developments, and water, wastewater, solid waste, and other environmental projects. NJEDA is an independent financing agency. It is entirely separate from, and is not supported by, the finances of the State.

### Impact of State Law and the Federal Tax Code

o State provisions prevent NJEDA from issuing tax-exempt private activity bonds for privatelyowned CWSs. However, restrictions in the Federal Tax Code limit the types of private sector CWSs to which NJEDA can lend tax-exempt funds. One restriction is that a system's rates must be set by or approved by a governmental body if the system is to qualify for taxexempt financing. The New Jersey Board of Public Utilities regulates the rates of all investor-owned water systems in the State, regardless of their size. The State also regulates the four CWSs organized as private homeowners associations, but it does not regulate rates for CWSs operated by mobile home parks. 1 Therefore, because the Board of Public Utilities does not regulate rates for mobile home parks, only the rate-regulated investor-owned systems and the four homeowners association systems would qualify for loans of tax-exempt funds, under the Federal Tax Code.

### How the Financing Works

JEDA borrows funds on a tax-exempt basis and then lends the funds to privately-owned CWS, thereby allowing nongovernmental CWSs to receive the Federal tax exemption. This method is called conduit financing. NJEDA pledges to repay its bondholders only with payments from its borrowers. Each loan is secured separately and is entirely unrelated to every other CWS loan, because NJEDA does not pool its borrowed funds for relending to CWSs. This last characteristic of conduit financing is important because the ability to obtain financing is measured by the system's credit-worthiness. Smaller, financially weaker systems may not qualify for a NJEDA loan.

At least one small tax-exempt private activity bond financing was accomplished through a private placement. In such events, financing occurs directly between a borrower and a lender, without being offered in the national credit markets. The borrower's bond rating is not the only credit worthiness measurement used by a lender in a private placement. The borrower's credit history and expected revenue stream are other characteristics that must be reviewed by the lender.

<sup>&</sup>lt;sup>1</sup> Based on the results of the first quarter 1989 NRRI survey which asked 45 state public utility regulators to describe the extent and manner of regulation of privately-owned water systems.

### Loan Activity

The ability of a financing agency to obtain an allocation of its State's private activity bond volume cap is an important consideration when such bonds are used to generate loan funds. (The cap is a limit, set by Federal tax law, on the amount of private activity bonds that each State can issue annually. The law sets the cap at \$150 million or \$50 per capita, whichever is larger.)

The New Jersey State Treasurer administers the cap allocation to ensure that the annual volume of tax-exempt private activity bonds does not exceed the Federal limit. Historically, NJEDA has obtained volume cap allocation sufficient to let it make tax-exempt financing available for its nongovernmental CWS borrowers. Since 1979, NJEDA has made more than \$400 million available to investor-owned for-profit water utilities. It has made twenty-four loans ranging from less than \$1 million to nearly \$100 million, averaging \$19 million.

### Loan Terms

ll NJEDA loans are made at market rates. For both publicly issued and privately placed financings, each borrower establishes its credit worthiness independently of NJEDA. NJEDA does not provide additional financial assurance for the borrower, and no governmental body (state, county or locality) assumes any obligation to repay, guarantee, or otherwise support repayment of the loan. The Authority may advise a CWS on how to obtain credit enhancements such as a letter of credit or bond insurance, but it does not help the borrower obtain them. (Typically, such enhancements are used to lower the total cost of borrowing for an entity already judged credit worthy; they are not used to facilitate access to credit for a borrower who cannot borrow independently.)

The rates CWSs pay reflect their strengths and weaknesses as borrowers, and the tax-exempt nature of the financing. This essentially means that credit worthy borrowers may have access to tax-exempt loans through NJEDA, but unrated borrowers or borrowers rated below investment grade ratings may not. This is borne out by the program's loan history. Nearly all loans to nongovernmental CWSs have gone to borrowers with investment grade bond ratings, mostly large utilities, with access to national credit markets.

Borrowers pay all transaction costs. These one-time fees include NJEDA processing fees, bond rating fees, and fees for bond counsel or an underwriter.

### Summary

The NJEDA offers tax-exempt private activity bond financing to all investor-owned CWSs in the State. Federal Tax Code provisions restrict NJEDA from offering financing to CWSs organized as mobile home parks because the New Jersey Board of Public Utilities does not regulate their rates. CWSs organized as non-profit homeowners associations can obtain NJEDA financing, if their rates are regulated by the New Jersey Board of Public Utilities. So far, only four such systems meet this requirement.

NJEDA's market-rate financing provides no subsidy to its borrowers, other than the modestly lower interest rate attributable to the exemption of bondholders' interest income from Federal income taxes. NJEDA does not help borrowers obtain "credit props" such as letters of credit that can help weak or unrated borrowers improve their access to debt financing.

Without subsidized interest rates or help from NJEDA in obtaining credit enhancements, the weakest investor-owned CWSs are unlikely to gain access to tax-exempt private activity bond financing. Therefore, private activity bond financing alone cannot cure a borrower's inability to establish credit worthiness, nor does it guarantee a borrower below-market interest rates. These limitations of private activity bond financing reflect the fact that it is essentially without subsidy, and can be provided without appropriations of State funds.

The potential volume of NJEDA financing is constrained by the Authority's ability to secure allocations of private activity bond volume cap. If the demand for tax-exempt financing exceeded the issuer's cap allocation, the issuer must choose between issuing taxable financing or delaying the financing: in expectation that tax-exempt financing allocation may be available in the future.

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### **Texas Water Development Board**

he Texas Water Development Board (TWDB) op erates a loan program serving governmental en tities and State chartered non-profit water supply cooperatives structured under Texas law as "1434A corporations." There are about 950 1434A corporations in Texas.

### Impact of State Law and the Federal Tax Code

The Texas Constitution prohibits the TWDB from lending to any nongovernmental CWS but a 1434A corporation. That means most of the privately-owned CWSs in the State cannot borrow from the TWDB.

Texas' inventory of privately-owned CWSs is the nation's largest. As of March 1992, the Federal Reporting Data System (FRDS) listed 2,959 privately-owned CWSs in the State. With almost 12 percent of the national inventory, Texas has more privately-owned CWSs than every EPA Region except Regions 4 and 6.

To fund its loans to non-profit water supply corporations, the TWDB issues taxable State bonds. Since these bonds are not tax-exempt, they are not subject to the Federal Tax Code provisions that restrict the amount of funds that can be raised, or the type of private-sector entity that can borrow those funds. Consequently, any nongovernmental CWS eligible under Texas State law can obtain TWDB financing.

TWDB is considering whether to issue tax-exempt private activity bonds in place of taxable bonds. Tax-exempt private activity bonds would have lower interest rates than the interest TWDB pays to investors who buy its bonds. That, in turn, would reduce the rates TWDB must charge its borrowers. However, TWDB is concerned that it may not be able to obtain a sufficiently large portion of the State private activity bond volume cap to fund its program if it raises loan funds through tax-exempt debt.

The cap is the maximum amount of private activity bonds that each State can issue annually. Federal tax law sets the cap at \$150 million or \$50 per capita, whichever is larger. If the TWDB issued tax-exempt private activity bonds to raise loan funds, it would have to compete with other nongovernmental financing needs authorized in the Federal Tax Code to issue tax-exempt debt, such as sewage treatment, solid waste, student loans, and housing.

### Loan Activity

ince it began providing loans to nongovernmental CWSs in 1988, TWDB has made 36 loans worth about \$16 million to nongovernmental CWSs. The Board expects to loan more than \$9 million more during 1992. Table 1 shows the program's annual loan activity.

The value of TWDB's loans to nongovernmental CWSs ranged from \$100,000 to \$3.9 million. About 75

percent of the 36 loans made or committed through March, 1992, were worth less than \$1 million and averaged about \$360,000. The remaining 25 percent were for more than \$1 million.

### **Loan Terms**

1/2 of 1 percentage point charge is added to the State of Texas' taxable interest rate reflecting TWDB's issuance costs and the risk that borrowers may default. Since the State holds a strong AA bond rating, its cost of taxable debt is close to the best rate attainable. (It was 8.18 percent in early 1992.) All TWDB's loans have been made to unrated borrowers, who would have been unable to secure comparable loan terms on their own. Borrowing from the TWDB has saved them significant sums in financing costs.

TWDB requires each applicant to engage a consulting engineer, financial advisor, and bond attorney. Applicants pay these one-time "transaction costs" from available funds, or by increasing the size of their loan. On a small loan, the transaction costs can be sizeable. For example, costs averaged more than 4.5 percent of the amount of three loans ranging from \$150,000 to \$350,000.

Successful borrowers normally are issued loan commitments within 45 days of TWDB's receipt of their application.

### Loan Security Provisions

lo ensure that loans will be repaid, TWDB imposes extensive loan security provisions on its 1434A borrowers. They must grant to TWDB a first lien on all revenues generated by the system and a pro-rated first lien mortgage on the total assets of the borrowing system. If the borrower defaults, these provisions make TWDB the first legal claimant of system revenues and system assets for the duration of the loan. TWDB will "share" a first lien equally with another lender, such as the RDA, in an arrangement known as a "parity first lien".

In addition, 1434A borrowers also must meet the loan security provisions TWDB requires of its other borrowers. For example, during the first five years of their loans, all borrowers must set aside from revenues a debt service reserve fund equal to a year's worth of loan payments. This fund must be maintained over the life of the loan.

All borrowers also must meet an "additional bonds test" before incurring additional debt during the life of their TWDB loan. To meet this test, a system must collect in the year immediately before a proposed bond sale net revenues of at least 125 percent of the annual interest

payments on its TWDB loan and the additional bonds it plans to issue. (Net revenue is the revenue remaining after the payment of operating expenses, excluding any interest expense or depreciation.) The additional bonds test assures TWDB that the borrower will not take on additional debt that reduces its ability to repay the TWDB loan.

The loan security provisions discussed above reduce the risk of nonpayment by TWDB's borrowers. The repayment record of TWDB borrowers is important to the State for two reasons.

- If TWDB gets borrowers to repay all of the Board's borrowing costs, TWDB will not require appropriations from the State Legislature for that purpose.
- This "self-sustaining debt' is not considered in at least one bond rating agency's calculation of taxsupported state debt. Generally, having less taxsupported debt may improve a State's bond rating, although this is not the only, or the most important, factor in that determination. A higher bond rating lowers a State's borrowing costs. The State's bond rating directly influences the TWDB's cost of loan funds, and thus the costs borne by TWDB's borrowers.

### Summary

The TWDB is authorized to lend to roughly onethird of the privately-owned CWSs in the State. Its program provides access to fixed rate debt financing for unrated borrowers who otherwise would have difficulty borrowing on reasonable terms, if at all. In addition, TWDB provides quick turnaround time on loan approval decisions.

TWDB loans provide market-rate financing without subsidy based on the State's costs of borrowing in the taxable market. Since Texas' bond rating is a strong AA, TWDB can obtain nearly the best taxable rates the credit market has to offer. Although taxable rates are usually about 2 percentage points higher than tax-exempt rates—and borrowers must pay that higher cost—raising loan funds in the taxable credit market has advantages. For example, TWDB avoids significant Federal Tax Code restrictions on loan volume and the types of systems to which it can lend. This enhances the Board's ability to serve Texas' large inventory of nongovernmental CWSs.

### For More Information:

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# California Safe Drinking Water Bond Law Program

The California Safe Drinking Water Bond Law Program (SDWBLP) makes loans to publicly and privately owned water systems that meet the U.S. EPA definition of CWSs and domestic water systems. Part of a larger State program to fund publicly owned water systems, the Program is intended to help privately-owned CWSs that would have difficulty borrowing on their own .

Public and nongovernmental CWSs can borrow from the program regardless of whether they are organized as non-profit or for-profit utilities, or in some other form such as mobile home parks. The Program has loaned funds to privately and publicly owned mobile home parks.

Loan funds come from tax-exempt State of California general obligation (GO) bonds. The Program makes loans at one-half of the State's most recent GO bond interest rate. (California GO bonds are backed by the full faith and credit, including the taxing authority, of the State. Unlike revenue bonds, which are repaid with the revenues of the projects they fund, GO bonds are repaid with general tax revenue.)

As of April 1992, the SDWBLP has made 477 loan commitments to all eligible water systems. Approximately 22% of the total, or 103 commitments, were made to non governmental CWS borrowers. Almost \$49 million has been committed to non governmental borrowers and the average loan is \$475,000.

### Impact of Federal Tax Code

the Federal Tax Code permits the use of up to 5% or \$5 million, whichever is less, of a tax-exempt bond sale's proceeds to fund projects of private-sector organizations. This amount is known as the "minor portion" of the bond sale.

Loan funds raised from the minor portion of a taxexempt bond sale are not counted against the private activity bond volume cap. The cap is the maximum amount of private activity bonds that each State can issue annually. Federal tax law sets the cap at \$150 million or \$50 per capita, whichever is larger.

The Federal Tax Code requires water utilities to be rate-regulated to be eligible for private activity bond financing. In most states, private for-profit water utilities are the only type of private CWSs that qualify. However, the Federal Tax Code does not restrict the type of privately owned CWSs that can be financed with minor portion funds.

The State of California raises all of the funds loaned to privately owned CWSs through the SDWBLP from the minor portion of tax-exempt bond sales. The Program's bond authorization does not distinguish between public and private CWSs when making loans, and no California law bars the State from lending tax-exempt bond funds to privately owned CWSs.

To earmark the minor portion of a tax-exempt bond sale's proceeds for loan to nongovernmental CWSs, the State must first determine that no other private sector projects require part of the minor portion. This review to ensure conformance with the Federal Tax Code's provisions regarding the private sector use of tax-exempt bond funds is called "due diligence." A routine part of bond sale preparations, due diligence typically involves the staff of the State's debt-issuing office, such as the California Treasurer's Office.

Using the minor portion approach, the amount of financing available to privately-owned CWSs is determined by the amount of financing required for other purposes. Consequently, the supply of loan funds available to privately-owned CWSs is related only indirectly to their demand for tax-exempt financing.

### Loan Activity

Privately and publicly owned CWSs borrow at the same rate of interest, one-half the rate paid by the State on its most recent sale of 20-year, GO debt. As of March, 1992, California's GO debt was rated AA. All borrowers pay an administrative fee of 5 percent of the amount borrowed. The Program also makes some grants available, but only to especially needy public sector borrowers.

By the end of April 1992, the SDWBLP had made 477 loan commitments to all eligible drinking water systems in California. Averaging about \$475,000 each, these commitments totalled almost \$49 million. The Program also had made 103 commitments, about 22 percent of the total, to nongovernmental CWSs.

State statute limits loan duration to 50 years, but in practice loans rarely exceed 25 years. The longest loan period yet approved is 35 years. Program officials will seek loan durations as low as 10-15 years if they conclude that an applicant's customers can afford the higher water rates necessary to retire the debt rapidly. Officials will increase the repayment period, or fund some portion of a public project with a grant, if the project would push water rates beyond 1.5 percent of the median household income in the applicant's service area.

Borrowers using the Program generally are unrated, and typically lack access to debt financing on their own. Before 1984, need for Program funding was determined by a "lender of last resort" test. Applicants had to produce letters demonstrating that conventional lenders were unwilling to lend to them. This test was discontinued in 1984, but the credit worthiness of Program borrowers has not improved substantially.

Applicants who were able to secure normal commercial credit also have borrowed from the Program by showing that the commercial loan terms were so adverse their financial stability was jeopardized, or their customers would face financial hardship.

### Loan Security Provisions

Il private sector borrowers must retain a third party fiscal agent to collect loan payments and transmit them to the State.

A nongovernmental system must also secure its loan by granting the State a lien on its facilities. The lien gives the State the right to seize and operate the water system to produce the revenue necessary to continue loan payments, or sell it to satisfy the outstanding debt.

Each borrower, public or private, must fund from rate revenues a debt service reserve fund containing one year's loan payments by the tenth year of the loan. The reserve fund must contain two year's worth of loan payments by then if the borrower's water charges are based on consumption.

The debt service reserve fund is a common security feature of tax-exempt revenue bond borrowings. It ensures that, if a borrower becomes unwilling or unable to meet scheduled loan payments, debt service will continue uninterrupted for one year while longer term remedies are pursued.

The Program may impose additional requirements on public or private borrowers. For example, a borrower may have to maintain and collect higher user charges than those required to meet scheduled loan payments. (In other words, the revenues that remain after operating and maintenance expenses are paid, but before payment to the debt service reserve fund is made, must be no less than, say, 125 percent of annual debt service.) Or, the borrower may be barred from incurring new debt until it can prove that its revenues exceed, by some predetermined margin, the total annual payments for the Program's loan and the proposed new debt.

Such loan security provisions complicate the borrowing process, and some requirements, such as the debt service reserve, may increase user costs. However, they reduce the lender's risk, which is a key concern when considering loans to unrated borrowers.

### Summary

The SDWBLP, and California's use of the minor portion of tax-exempt bond sales to provide loan funds, make all nongovernmental CWSs in the State eligible for tax-exempt financing. California's reliance on the minor portion of bond sales does, however, limit the amount of money available for loan to these systems. The Program benefits nongovernmental CWSs in several ways:

- It provides access to long-term, fixed-rate debt financing for borrowers with weak credit standing who otherwise would be unlikely candidates for commercial loans.
- It takes advantage of California GO's strong bond rating and tax-exempt status by loaning funds raised through State bond sales. This enables the program to raise loan funds at favorable rates.
- It conveys to borrowers a substantial interest rate subsidy, which reduces borrowers' interest costs to one-half the rate paid by the State.

These benefits effectively convert a nongovernmental CWS with little chance of borrowing on favorable terms, if at all, into a system that can borrow at interest rates far below those paid by a strong public-sector entity.

The Program requires periodic reauthorization of State GO bonds to fund loans. General State revenues also are needed to service that portion of Program debt (one-half the State's interest costs) not covered by loan repayment income from Program borrowers.

By imposing on borrowers security requirements that reduce the risk of default, the Program strengthens its position as lender. The cost of these measures is the price borrowers must pay to obtain access to debt financing and subsidy that otherwise would be unavailable.

### For More Information:

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# Pennsylvania Infrastructure Investment Authority

The Commonwealth of Pennsylvania established the Pennsylvania Infrastructure Investment Authority (PENNVEST) in 1988 to provide low-interest loans and grants for improvements to water and wastewater facilities. Unlike most State infrastructure finance agencies, PENNVEST can lend to privately owned water systems. Many PENNVEST loans have been made to privately owned CWSs, although most PENNVEST loans are made to publicly owned systems.

### Capitalization for PENNVEST Water Loans

ENNVEST has three sources of funds for its water and wastewater loan programs:

- General Obligation Bonds. The Commonwealth has authorized \$675 million in GO bonds to be provided to PENNVEST. (GO bonds are backed by the full faith and credit, including the taxing power, of the issuing government. A GO bond typically is repaid with general tax revenues of the issuing government.) These GO bond funds fall into two categories:
  - The first is "revolving" or equity funding. In this category, PENNVEST has received \$375 million that it is not required to repay. PENNVEST thus is free to re-lend the loan payments received from its borrowers to fund other infrastructure projects.

- The second category is "non-revolving" funding. PENNVEST has received \$300 million from the Commonwealth that it must repay at the very low interest rate of 1 percent.
- Revenue Bonds. PENNVEST is authorized to raise funds by issuing revenue bonds, and by May 1992 the Authority had issued \$110 million worth. (Revenue bonds are paid off from the revenues of the projects that they fund. In PENNVEST's case, they are paid off with the loan repayments received from borrowers.)
- 3. Loan Repayments. PENNVEST also may lend funds from loan repayments that are not used to retire its revenue bonds and "non-revolving" funding from the Commonwealth. PENNVEST revenue bond borrowings include a condition that loan repayment income (received from its borrowers) must be at least 154 percent of the loan payments PENNVEST must make on its revenue bonds. Once that condition is satisfied, PENNVEST must use any excess loan repayments to fund its scheduled repayment of "non-revolving" funds to the Commonwealth. Any loan repayment income that remains after these scheduled repayments are made by PENNVEST can be used to make new loans.

### Impact of the Federal Tax Code

The Federal Tax Code permits issuers of tax-exempt governmental bonds to use up to 5 percent or \$5 million, whichever is less, of the bond sale proceeds to fund nongovernmental projects or organizations. These funds are known as the "minor portion" of the tax-exempt bond sale.

Loan funds raised from the minor portion of a taxexempt bond sale are not subject to the private activity bond volume cap. The cap is the maximum amount of private activity bonds that each State can issue annually. Federal tax law sets the cap at \$150 million or \$50 per capita, whichever is larger.

Although the Federal Tax Code limits access to taxexempt private activity bond financing to water utilities whose rates are regulated (which limits the financing to for-profit water utilities in most States), it does not restrict the type of private CWS that can be financed with minor portion funds. As a result, for-profit water systems, privately owned non-profit systems, and mobile home parks have access to loans of minor portion dollars.

Much of the funds borrowed by privately owned CWSs from PENNVEST come from the minor portion of tax-exempt Commonwealth of Pennsylvania bond sales. (Some or all of the minor portion of a Commonwealth bond sale will be set aside for use by PENNVEST.) PENNVEST also earmarks the full minor portion of its revenue bond sales for loans to privately owned CWSs.

To set aside the minor portion of a tax-exempt bond sale for loans to private CWSs, the Commonwealth first must determine how much of the funds raised by the entire Commonwealth bond sale will be used by nongovernmental entities. This review to ensure conformance with Federal tax law is part of the bond sale preparations called "due diligence." Staff of the Commonwealth's debt-issuing office, such as Pennsylvania's Office of the Budget, typically are involved in the review. PENNVEST must negotiate with the Office of the Budget to secure some or all of the minor portion of a bond sale, since other projects involving private entities also may make demands on those funds. (Any State bond-financed project with significant private-sector involvement is likely to compete for minor portion funds.)

When planning a sale of tax-exempt PENNVEST bonds, PENNVEST officials must conduct a similar due diligence review to determine what portion of the proceeds of its own bonds will be loaned to private organizations. A loan to any privately owned CWS constitutes a nongovernmental use of tax-exempt bond proceeds, and is subject to the limitations of Federal tax law.

The funds that PENNVEST provides to nongovernmental CWSs are obtained from the 5 percent minor portion of tax-exempt financings.

### Loan Activity

PENNVEST made 271 loans totalling \$413 million to publicly and privately owned water systems from its inception in 1988 to March 1992. Small systems received 154 loans averaging about \$550,000 for a total of \$85 million. Sixty-three loans totalling almost \$49 million have been made to support private-sector projects in four broad categories:

- investor owned, for-profit CWSs,
- CWSs organized as non-profit homeowners associations,
- CWSs operated by mobile home parks, and
- industries requiring process water or water for purposes other than the provision of potable water to residential customers.

CWSs have received more than 75 percent of the private-sector loans made by PENNVEST, and close to 60 percent of the private-sector loan funds. Many of these loans have been for less than \$100,000. At least nine mobile home parks and six homeowners associations have received PENNVEST loans.

Interestingly, while PENNVEST provides less than 25 percent of its nongovernmental loans to organizations that are not CWSs, these loans account for more than 40 percent of the total volume of PENNVEST's nongovernmental loans.

### Issuance of Private Activity Bonds to Fund Loans to Privately Owned CWSs

Ithough PENNVEST can issue tax-exempt private activity bonds on behalf of privately owned CWSs, the Authority has not done so. The allocation of a portion of the Commonwealth's private activity bond volume cap for this purpose cannot be ensured.

If PENNVEST were to issue tax-exempt private activity bonds for privately owned CWSs, the Federal Tax Code would restrict their use to privately owned CWSs whose rates are regulated. Although the Pennsylvania Public Utility Commission regulates all investor-owned water systems regardless of size, it does not regulate water rates charged by CWSs organized as homeowners

associations or mobile home parks. Consequently, it appears unlikely that PENNVEST would be able to make tax-exempt private activity bond financing available to such systems.

#### Loan Terms

PENNVEST offers privately owned water systems the same loan terms offered to publicly owned borrowers. The maximum duration of most loans is 20 years. All loans are made at below-market interest rates. How far below depends on the unemployment rate of the county in which the PENNVEST-financed facility is locate.

Interest rates vary from 1 percent to 6 percent in the first 5 years of a loan. Afterwards, rates very from a minimum of 25 percent to a maximum of 75 percent of the Commonwealth's cost of borrowing. For example, the Commonwealth is paying 6.44 percent interest on the \$250 million of long-term GO bonds it sold in March 1992. On this basis, PENNVEST loans would bear a long-term interest rate of 1.61 percent to 4.83 percent.

PENNVEST also has limited grant funding available to further subsidize water system projects. If repayment of a loan at the minimum initial interest rate of 1 percent would require a median-income household served by the financed facility to spend more than 2.3 percent of its income for water, then PENNVEST will consider grant financing for the project.

### The PENNVEST Program: Key Components

The Commonwealth of Pennsylvania's contributions deeply capitalize PENNVEST. This deep capitalization enables PENNVEST to make a high volume of loans and to provide substantial average subsides to borrowers. Loans to public and private borrowers outstanding as of April 1992 bear an average interest rate of 2.2 percent. Because the Commonwealth's capital contributions are available to PENNVEST at no cost (the \$375 million revolving contribution) or low cost (the \$300 million in loans repayable at 1 percent), PENNVEST can loan these funds at low rates of interest.

The Commonwealth's deep capitalization also facilitates PENNVEST's own revenue bond borrowings. PENNVEST raised \$60 million in November 1990 to provide a portion of the funds needed to meet \$218 million in approved loan commitments. The balance of the required funds came from the Commonwealth's contributions. PENNVEST structured its own borrowing to make the loan repayments on the entire \$218 million available first to repay its \$60 million revenue bond.

Under this arrangement, PENNVEST's loan repayment income is sufficient-even at the low average interest rate of 2.2 percent to repay its borrowing costs by a wide margin. PENNVEST pledged for this borrowing that loan repayment income would never be less than 154 percent of its scheduled bond repayments. That is enough to cover all scheduled payments on PENNVEST's borrowings, even in the unlikely event that 35 percent of PENNVEST's borrowers default on their loans.

Since PENNVEST's could show such high coverage of its own borrowing costs, and because the number of borrowers was more than 100, the bond rating agency Standard & Poor's (S&P) gave the revenue bond sale a strong AA rating. (This is an unusually high rating for a borrower with no taxing power.)

The bond pool was large enough to permit S&P to rate the sale without considering the credit qualities of PENNVEST's individual borrowers. This allowed PENNVEST to offer financing without imposing stringent credit-quality screening, which could eliminate weaker borrowers, including a disproportionate share of small borrowers.

### Summary

PENNVEST's ability to provide tax-exempt financing for privately owned CWSs is both driven and limited by the volume of tax-exempt borrowing by PENNVEST and the Commonwealth of Pennsylvania to meet needs unrelated to the requirements of privately owned CWSs.

Under State law, any privately owned CWS in Pennsylvania is eligible for a PENNVEST loan. The way PENNVEST generates tax-exempt funds to loan to these systems avoids the Federal Tax Code restrictions on what type of privately owned CWS can borrow funds raised by selling tax-exempt private activity bonds. If PENNVEST could not obtain the minor portion of Commonwealth bond sales, and had to rely on private-activity bonds instead, only privately owned CWSs whose rates are regulated by the Commonwealth would be eligible for loans of tax-exempt funds under the Federal Tax Code.

PENNVEST has been able to generate very high low volume and substantial subsidies in its portfolio of public- and private-sector loans. As the PENNVEST loan portfolio grows, the Authority's ability to loan money to borrowers not considered credit worthy by the customary market standards also increases. Also, high annual loan volumes require large PENNVEST revenue bond sales, which increase the size of the 5 percent minor portion available for loan to private CWSs. Both these benefits-access to loans for weak borrowers and access to

loans for privately owned CWSs-are facilitated by establishing and continuing a large lending program.

PENNVEST is nearing the end of its first round use of its initial capitalization funds from the Commonwealth and from the sale of PENNVEST revenue bonds. The Authority will require additional Commonwealth support in the form of bond sale proceeds to continue providing high loan volumes and deep subsidies. Its work in this area is supported by the citizens of Pennsylvania. In April 1992, voters authorized an additional \$300 million in capital contributions to PENNVEST. ■

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# Financing a For-Profit Investor-Owned Water Utility in New York

The Shorewood Water Corporation is a for-profit investor-owned CWS on Long Island in New York State that serves about 5,000 customers. Although Shorewood is not a small CWS, it lacked access to the national credit markets, similar to many small CWSs. A regional investment banking firm headquartered in Albany, New York developed financings for the Shorewood Water Corporation which illustrate a successful approach to overcoming barriers to capital access. The financings described here were completed in November, 1987 and December, 1991.

The regional investment firm arranged tax-exempt private activity bond financing for Shorewood by enlisting the support of New York State water utility rate regulators in permitting a "debt service surcharge" on customer bills to finance the revenue required to repay the utility's debt. Prior to this financing, Shorewood was unrated and thus did not have access to the national debt market. The approach described below enhanced Shorewood's credit worthiness and resulted in the utility earning a BBB bond rating.

### Development of the Shorewood Private Activity Bond Financing: The Key Components

Shorewood's financial condition did not support an investment grade bond rating. Without an investment grade rating Shorewood would be limited to seeking financing from local financial institutions. Bor-

rowers in Shorewood's situation frequently must agree to terms that are much less favorable, and generally more expensive, than those available to stronger borrowers who can finance in the national credit market. For example, weaker borrowers may be unable to secure fixed-rate financing or fixed-rate financing may only be available for a period that is much shorter than the utility owner(s) desires. Variable-rate financing may introduce more financial risk than the utility owner(s) is willing to assume. Another provision may require that the utility owner(s) make a personal repayment pledge to secure a loan. Because of these unfavorable loan terms, the utility owner(s) may elect not to borrow the necessary funds to make system improvements which would otherwise have been completed.

To reassure the lenders that there would be adequate revenue to repay Shorewood's debt over the full life of the loan, the financing plan designed for Shorewood created a legal link between Shorewood's rate payers and the lenders. There were two elements to this arrangement: a "debt service surcharge" and a contractual pledge between Shorewood and its lenders to repay the loan.

The debt service surcharge appears as a separately identified charge on each customer's bill and represents the customer's share of the debt service payable on Shorewood's loan. Shorewood was authorized by the New York State Public Service Commission (NYSPSC) to collect the debt service surcharge in the amount needed

to repay the loan over the full life of the loan. Shorewood obtained this NYSPSC ruling in advance of its bond sale, so that it would be able to demonstrate to potential lenders that it had full legal authority to collect sufficient revenues to repay its loan. This arrangement was then noted in the loan documents executed for Shorewood's bond sale. In these documents, Shorewood pledged to its bondholders to collect and apply the debt service surcharge only for the purpose of repaying its loan.

Through the debt service surcharge and Shorewood's pledge in its bond documents the investment firm created a new revenue stream dedicated solely to repaying Shorewood's lenders. Armed with these mechanisms assuring Shorewood's ability to repay its debt, the investment firm was able to obtain a letter of credit for Shorewood's borrowing. The letter of credit pledges that a financial institution will, for a specified period of time, advance funds to pay debt service to lenders if the borrower fails to make scheduled loan payments. With the letter of credit, Shorewood was able to borrow at rates that reflected the AAA bond rating of the financial institution that provided the letter of credit.

Shorewood subsequently borrowed additional tax-exempt funds using the same combination of a debt service surcharge and a contractual pledge to its borrowers to use the surcharge revenues only to repay its loan. In the second financing the letter of credit was eliminated: Shorewood borrowed entirely on the strength of its own credit and the strength of the NYSPSC-approved debt service surcharge. Although the letter of credit allowed Shorewood to sell its bonds with the very favorable AAA bond rating, the fees charged for the letter of credit offset most of the benefits. For the second financing, Shorewood achieved a BBB (low investment grade) rating, and successfully borrowed at favorable tax-exempt rates.

The key ingredients in this approach are:

- Collaboration with state water utility rate regulators to ensure that the water utility can demonstrate to lenders that it has regulatory approval to impose rate increases sufficient in size and duration to retire proposed long term debt. This approach requires rate regulators to approve a rate increase on a prospective basis, based on forecasts of borrowing costs. Most rate regulation of water utilities is done on a retrospective basis, and regulators examine historical costs only.
- Creation of dedicated income stream, pledged to repay borrowing costs, which is approved by the New York Public Service Commission as a "debt service surcharge".

 Issuance of tax-exempt private activity bonds by a finance agency for the benefit of the water utility. This mechanism permits private utilities access to cheaper tax-exempt financing, which is commonly only available to governmental bodies.

### Impact of State Law

ny financing agency authorized under New York
State law to issue tax-exempt private activity
bonds for the benefit of a privately-owned organization engaged in the furnishing of water for public
consumption may provide tax-exempt financing under
this approach. It also does not need to be authorized to
serve state-wide: a county or municipal industrial development authority or an economic development finance agency can also use this approach, provided it is
authorized to issue tax-exempt private activity bonds for
water supply purposes.

One constraint in using this approach is that the finance agency must secure an allocation of private activity bond volume cap from the state entity that allocates volume cap. (The cap is equal to \$150 million or \$50 per capita, whichever is larger.) Therefore the financing agency must compete with other projects for tax-exempt financing.

### Impact of Federal Tax Code

Hederal Tax Code provisions place restrictions on the types of privately owned CWSs that may finance with tax-exempt bonds. One restriction, for example, is that rates must be established or approved by a governmental body, and not all privately-owned CWSs meet this requirement.

The National Regulatory Research Institute (NRRI) periodically surveys state public utility regulators to determine the extent and manner of regulation of privately owned water systems. NRRI's latest published survey results reviewed regulatory practices in the first quarter of 1989. The survey results indicate that the NYSPSC regulates rates for all investor-owned CWSs, regardless of size. In addition, New York regulates rates for all CWSs organized as private homeowners associations. New York does not regulate rates for CWSs operated by mobile home parks. Therefore, only New York CWSs operated by mobile home parks would be ineligible for tax-exempt private activity bond financing under the Federal Tax Code.

### Summary

The Shorewood financing used creative financing mechanisms that provided financial assurance to the lender to increase the borrowing capacity of an unrated for-profit water system. The approach also did not rely on subsidy funding. The Shorewood financing is essentially a straightforward tax-exempt private activity bond financing, but with a critical difference: the borrower's credit worthiness was enhanced by the cooperation and support of state public utility rate regulators. Without the support of the NYSPSC for the debt service surcharge, and without action by NYSPSC on a prospective basis, Shorewood would have been unable to complete its financings.

The financing approach used in the Shorewood case could be applied to other water systems, provided that the water systems meet Federal Tax Code eligibility tests and provided that state utility rate regulators approve the debt service surcharge on a prospective basis. It is likely that the debt service surcharge approach will be more readily accepted by states whose water utility rate regulators currently use forecast data as a basis for considering rate increase requests. NRRI's 1989 survey of 45 states indicates that 17 use either a future test year in water utility rate cases, or a combination of a historic test year and forecast data.

The Shorewood approach requires that the state entity responsible for allocating tax-exempt private activity bond volume cap make an allocation to the financing agency that borrows on behalf of the nongovernmental CWS. If such allocations are difficult to acquire, the volume of such financings that can be accomplished will be limited by the availability of volume cap allocation. Alternatively, issuers could substitute taxable financing, using the same mechanisms.

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## Rural Development Administration Rural Water And Waste Disposal Loan Program

The Rural Development Administration (RDA), formerly the Farmers Home Administration (FmHA), operates the Water and Waste Disposal Loan and Grant Program. This organization provides financing for rural water systems that cannot afford loans from conventional sources. These systems may be run by government or by non-profit associations, cooperatives, or non-profit corporations. RDA also can provide grants of up to 75 percent of the eligible costs of projects in low-income areas. Regulations prohibit loans or grants to profit-making organizations, including investor-owned, for-profit water systems.

An agency of the U.S. Department of Agriculture, RDA makes loans directly to borrowers. State and district offices of the FmHA continue to operate the program at the field level. Prospective borrowers apply at local FmHA offices; there is no State-level public or private intermediary. Under a joint policy statement with the EPA, RDA gives projects required to meet federal SDWA standards priority when committing available funds.

The minimum interest rates on RDA loans is 5 percent. The maximum rate is the same as the tax-exempt borrowing rate of the most credit-worthy States and municipalities issuing tax-supported bonds. These favorable terms result in a subsidy to the borrower. For example, the maximum rate during the first six months of 1992 was 6.625 percent. Access to tax-exempt financ-

ing is one of the primary benefits of borrowing through RDA, because these borrowers would often otherwise be unable to secure reasonable borrowing terms.

### Loan Activity

uring FY 1991, RDA made 579 loans to water systems. The loans totaled \$316 million and averaged \$546,000 each. About a third of the loans (close to 200 loans worth at least \$100 million) went to nongovernmental CWSs. RDA also made 283 loans totaling \$184 million for waste disposal, sewer, and combined water and waste disposal projects.

Also during FY 1991, RDA made 376 grants to domestic water systems totaling \$163 million. Another 236 grants worth \$145 million were made for waste disposal and sewage projects, combined water and waste disposal projects, and technical assistance and training. Again, nongovernmental CWSs received significant RDA support; nearly one-third of the grant funds, \$50 million, went to these systems.

Almost two-thirds of all loans made to water systems were accompanied by grants. About one-half of the 200 loans made to nongovernmental CWSs were paired with a grant. With loans and grants totaling \$366 million in FY 1991, RDA is clearly a major provider of credit to rural water systems nationwide. It may be the principal source of credit for such systems in some states.

RDA uses a formula which incorporates Census data on rural population and the number of households in poverty to allocate loan and grant funds to States. Data from the 1990 Census will be used to compute the FY 1993 state allocations. The State allocations shown below reflect the total funding available for both water and waste disposal projects from the Federal budget for fiscal year 1991. The total allocation of the top 10 states averages about \$31 million, while the bottom 10 averages about \$2 million.

### **Basic Program Eligibility Requirements**

o be eligible for a RDA grant or loan, an applicant must be a rural:

- municipality, county, or other political subdivision of a State (however, the service area of the project may not include any area in any city or town having a US Census population greater than 10,000), or
- association, cooperative, or corporation operated on a not-for-profit basis, or

To receive a loan for a water-related project, an applicant must show that the loan will be used for installation, repair, improvement, or expansion of a rural water facility, including treatment plants, distribution lines, well pumping facilities and related costs. This broad definition covers the cost of necessary land acquisition, "soft costs" such as planning and engineering, and construction costs.

In addition to demonstrating that the facility plans and specifications comply with State and local regulations, eligible applicants must show:

- an inability to self-finance the project, or to secure conventional commercial financing at reasonable rates:
- the legal authority to construct, operate, and maintain the proposed facility; and
- the legal authority to apply for, secure, and repay the loan.

### Eligibility Criteria for Subsidized Loans

hether an applicant is eligible for a subsidized loan depends largely on the median house hold income of the proposed project's service area. Loans at 5 percent interest are available only for projects that are necessary to meet health or sanita-

tion standards. To be eligible for this interest rate, the median household income must be below the Federal poverty level (\$13,950 for a family of four in 1992), or less than 80 percent of the statewide nonmetropolitan median household income.

Intermediate rate loans (whose interest rate falls between 5 percent and the "market rate") are available to applicants who do not qualify for 5 percent loans, if the median household income of their project's service area is not more than the State's nonmetropolitan median household income. The interest rate on these loans is currently capped at 7 percent.

In 1991, RDA made 40 percent of its loans at the 5 percent interest; 45 percent of its loans at intermediate rates; and 15 percent at the market rate.

### **Eligibility Criteria for Grants**

rants to fund construction projects are available only if they are necessary to bring user charges to a reasonable level. To determine whether a user charge is reasonable, RDA compares it to charges in communities facing similar economic conditions that are served by established systems constructed at a similar cost per user. Therefore, a CWS could not use a grant to reduce its user charges below the level paid by users of comparable systems.

RDA will consider a grant of up to 75 percent of eligible project costs only if:

- the portion of the average annual user charge allocated to pay off debt is more than 0.5 percent of the median household income in the service area, and
- the median household income is either below the federal poverty line or less than 80 percent of the State's nonmetropolitan household income (whichever is easier to satisfy).

RDA will consider a grant of up to 55 percent of eligible project costs only if debt service for the project is more than 1 percent of the median household income, provided the median household income in the service area is no more than the State's nonmetropolitan median household income.

Projects serving areas where household incomes are higher than these limits are ineligible for RDA grants.

### RDA Water and Waste Disposal Loan and Grant Program Ten States with Largest Funding Allocations, FY 1991 (Dollars in Millions)

State	% Allocation	Loan \$	Grant \$	Total \$
Puerto Rico	5.26	23.766	13.963	37.729
Pennsylvania	5.26	23.626	13,881	37.507
N. Carolina	5.15	23.116	13.581	36.697
Texas	4.92	22.101	12.985	35.086
New York	4.40	19.784	11.623	31.407
Ohio	4.16	18.673	10.971	29.644
Michigan	4.00	17.997	10.574	28.571
Georgia	3.69	16.549	9.723	26.272
Kentucky	3.44	15.442	9.073	24.515
Tennesse	3.32	14.909	8.759	23.668
Total	43.63%	\$195.963	\$115.133	\$311.096

### RDA Water and Waste Disposal Loan and Grant Program Ten States with the Smallest Funding Allocations, FY 1991 (Dollars in Millions)

State	% Allocation	Loan \$	Grant \$	Total \$
Nevada	0.16	0.699	0.411	1.110
Rhode Island	0.18	0.792	0.465	1.257
Hawaii	0.18	0.826	0.485	1.311
Alaska	0.20	0.907	0.533	1.440
Wyoming	0.23	1.018	0.598	1.616
Delaware	0.27	1.196	0.702	1.898
Utah	0.33	1.491	0.876	2.367
Vermont	0.51	2.276	1.337	3.613
N. Dakota	0.53	2.371	1.393	3.764
Montana	0.58	2.586	1.519	4.105
Total	3.17%	\$14.162	\$8.319	\$22.481

### Other Loan Terms

DA loans are written for the shortest of three possible terms: 1) the useful life of a facility, 2) a maximum of 40 years, or 3) a shorter period required by State law. Provisions to secure RDA's position are incorporated in all loans. Standard security provisions applicable to all loans made to non-profit borrowers include:

- The borrower must pledge that all its revenue will be made available to repay its RDA loan. This requirement, in effect, makes the RDA loan a "general obligation" of the borrower. In other words, RDA has first claim on all revenues of the borrower, up to the amount needed to make the loan payment when due.
- RDA takes a lien on all assets it finances and on all related assets of the borrower. This lien is similar to a home mortgage held by a bank. In either case, the lender may seize the asset and sell it to pay off the loan if the borrower defaults on the obligation.

Additional loan security provisions may be required if RDA determines they are necessary. These additional provisions may extend beyond the borrower organization to personally involve members of the non-profit organization, or a unit of government in the project's service area:

- RDA may require members of the borrowing organization to personally guarantee the loan's repayment through promissory notes or similar documents, or by pledging members' assets to provide loan collateral in addition to the assets covered by RDA's first lien.
- RDA may require a local government to secure a loan with its revenues—if there are many seasonal users of the planned facility and RDA concludes that year-round residents would have to pay higher fees than RDA considers reasonable.

Borrowers whose loans are not backed by governmental taxing authority must fund reserves to reduce RDA's risk that loans will not be repaid, or repaid on time. These reserves accumulate during the early years of the loan and can include:

- A debt service reserve to supply funds for scheduled loan payments if a borrower does not make a timely payment. The debt service reserve is always required when a borrower does not pledge its taxing power to pay off the debt.
- An emergency maintenance reserve to fund unanticipated maintenance needs.

- A facility extension reserve to provide for future system expansion.
- A replacement reserve to fund the replacement of components whose useful life is shorter than the duration of the loan.

The emergency maintenance, facility extension, and replacement reserves are required on a case by case basis, depending on RDA's assessment of the borrower.

Nongovernmental CWSs that borrow from RDA are expected to accumulate enough debt service reserves to make one scheduled loan payment. RDA expects these borrowers to accumulate the reserve within 10 years after the loan is made.

All CWS borrowers must obtain fidelity bond coverage (to protect the CWS from the consequences of any financial impropriety by its employees) and property insurance. RDA also may require other forms of insurance to protect its position as lender.

RDA will make loans to projects that are partially funded by other lenders. In fact, RDA encourages joint financing as a way to stretch its loan funds.

Loan applicants must show evidence of support for their project by requiring new users of the financed facility to make a cash contribution to the project. The amount of the contribution is negotiated by the borrower and RDA. This requirement serves to test the economic feasibility of projects that will provide substantial service to new users, and it reduces the requirement for RDA financing. RDA may reduce the required contribution, or waive it entirely, if it jeopardizes service to low-income families. A waiver also may be granted if the financed facility is required by State statute or local ordinance.

### Summary

DA's Water and Waste Disposal Loan Program provides a large volume of low-interest loans and grants nationwide. By making low-cost loans and grants, RDA in effect subsidizes the construction projects it supports. And the program explicitly recognizes SDWA compliance as a priority when making financing awards.

The RDA loan program provides a large amount of loan and grant funds to CWSs organized as customerowned, not-for-profit entities. Even more loans are provided to government-owned CWSs. RDA does not

provide loans or grants to mobile home parks, unless they are not-for-profit organizations or are served by water systems which are otherwise eligible for RDA financing.

The loan program's target organizations—those unable to borrow independently, or to borrow at reasonable terms—and the deep subsidies it provides make the program especially attractive to rural nongovernmental CWSs facing high compliance capital costs, low customer incomes, or both.

In recent years, the RDA program has been able to make loans in the same year application was made. Projects that require grant funding may experience delays until funds become available.

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