United States General Accounting Office

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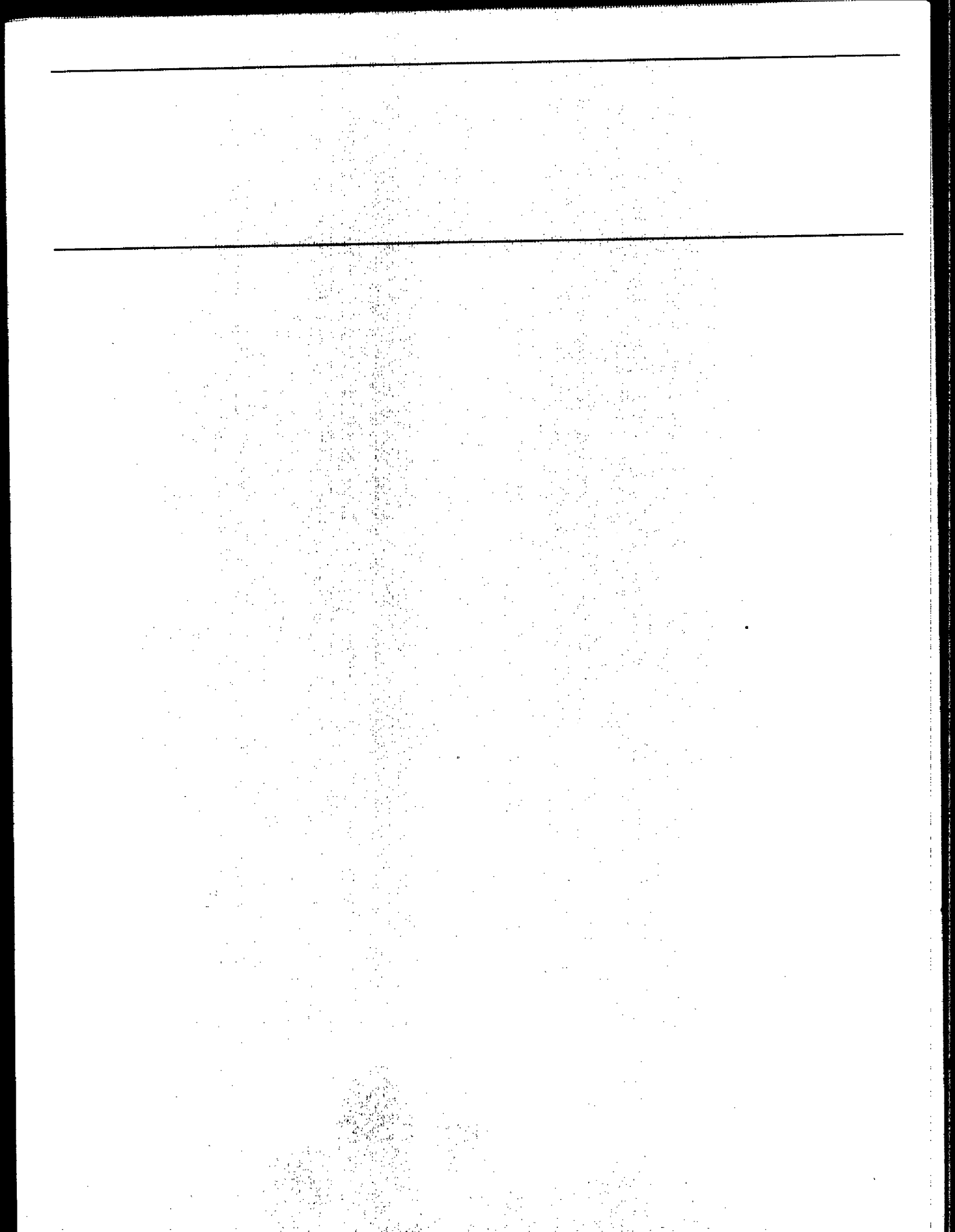
Report to the Chairman, Committee on Public Works and Transportation, House of Representatives

January 1992

WATER POLLUTION

State Revolving Funds Insufficient to Meet Wastewater Treatment Needs

GAO/RCED-92-35



GAO

United States
General Accounting Office
Washington, D.C. 20548

145959

Resources, Community, and
Economic Development Division

B-245465

January 27, 1992

The Honorable Robert A. Roe
Chairman, Committee on Public
Works and Transportation
House of Representatives

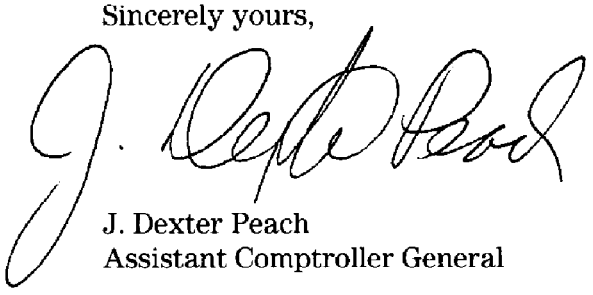
Dear Mr. Chairman:

As requested by the former Chairman, we have reviewed the states' implementation of the Environmental Protection Agency's (EPA) State Water Pollution Control Revolving Fund Program. Specifically, this report discusses the ability of the state revolving funds to meet the nation's wastewater treatment needs and recommends changes to federal statutes that will increase the efficiency and effectiveness of the program.

As arranged with your office, unless you publicly announce its contents earlier, we will make no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies to other appropriate congressional committees; the Administrator, EPA; and the Director, Office of Management and Budget. We will also make copies available to other interested parties.

This work was performed under the direction of Richard L. Hembra, Director, Environmental Protection Issues, who may be reached at (202) 275-6111. Other major contributors to this report are listed in appendix V.

Sincerely yours,



J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

Through the 1987 amendments to the Clean Water Act, the Congress dramatically changed the federal role in financing wastewater treatment, shifting responsibility for financing more than $83.5 billion in wastewater treatment needs to the states and, in exchange, authorizing the federal government to provide $8.4 billion in capitalization grants for state revolving funds (SRFs) over 6 years.

Given the importance to public health and the environment of meeting the nation's wastewater treatment needs, the Chairman, House Committee on Public Works and Transportation, asked GAO, among other things, to assess (1) whether statutory or regulatory changes are necessary to increase the efficiency and effectiveness of the program and (2) whether SRFs can meet the nation's wastewater treatment needs. GAO has previously reported on how states are implementing SRFs.

Background

The Federal Water Pollution Control Act Amendments of 1956 provided the first federal grants for constructing wastewater treatment facilities. Although the initial federal commitment was relatively small, the Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act) increased federal grants to an unprecedented level—$18 billion through 1976.

The Congress reduced federal funding for construction grants in the late 1970s and through the 1980s. Then, in the 1987 amendments, the Congress created a funding program at the state level—the State Water Pollution Control Revolving Fund Program—to replace construction grants altogether. The SRFs are capitalized with federal grants and a 20-percent state match through 1994, after which time the federal contribution will end. States provide loan assistance to local governments through the SRFs. As the loans are repaid, the funds are replenished, and additional loans can be made to other local governments.

The Congress created a flexible framework for states to develop SRF loan assistance programs that meet their particular needs. The 1987 amendments to the Clean Water Act allow states to use the funds to support other water quality programs, including estuary protection and nonpoint-source pollution control. States are authorized to leverage their SRFs by issuing bonds guaranteed by money in the SRFs.

Results in Brief

On the basis of GAO's survey of state officials responsible for SRFs, visits to five states, and consultations with financial experts and others, GAO

concluded that although the SRF Program is structurally sound, a number of provisions of the 1987 amendments to the Clean Water Act and administrative problems may impede the efficiency and effectiveness of its implementation. These include (1) statutory restrictions on using the SRFs to purchase land on which a wastewater treatment plant is to be built, (2) a shortage of EPA staff with sufficient financial expertise to assist and oversee state programs effectively, and (3) a maximum loan term that, in many cases, can be shorter than the design life of the plant and equipment financed through the SRF.

SRFs are an efficient alternative to the Construction Grants Program for providing a subsidy to local governments. SRFs increase the flexibility of states to meet priority needs and encourage local governments to reduce costs and improve operations and maintenance. However, the program will not generate enough funds to close the tremendous gap between wastewater treatment plant needs and available resources. States estimate that SRFs will meet only a small percentage of their needs and will pose particular problems for small communities. Many small communities cannot repay loan assistance at any interest rate and cannot compete with larger communities for loans.

Principal Findings

Statutory Modifications and Other Changes Could Improve SRFs

Several changes could improve the ability of states to meet local needs through SRFs. For example, the Clean Water Act prohibits the use of SRFs to purchase land unless the land itself is used directly in the waste treatment process. Under this definition, wetlands used to filter wastewater as part of the treatment process are eligible for SRF assistance. However, other land that may be necessary for treatment operations, such as land upon which a treatment plant can be built and easements and rights of way needed for wastewater collection systems, cannot be purchased with SRF assistance. To obtain funds for such purchases, communities must often borrow in the private financial market at higher interest rates, and, as a result, their costs increase. Forty-two states responding to GAO's survey maintained that the costs of acquiring land necessary for treatment operations should be eligible for SRF assistance.

According to EPA officials, the agency's oversight objectives are to ensure statutory compliance and to provide financial advice to states.

These responsibilities require a mix of skills, including expertise in engineering, accounting, and financial analysis. However, most of EPA's regional staff, charged with oversight and providing guidance to states on the SRF Program, are engineers who lack training in financial analysis and banking. While EPA recognizes the need, few EPA regions have staff with this experience.

Finally, the statute prohibits states from offering loan terms beyond 20 years. Although the design life of most plants and equipment is 20 years, some treatment facilities, such as filtration systems and lagoons, have design lives exceeding 20 years. Small communities, which often need such treatment facilities, are particularly affected by the restriction on the loan term because a disparity between the loan term and the design life of the project may increase user charges unnecessarily. Most states maintained that they should have the flexibility to extend loan terms when the design life of the plant and equipment exceeds 20 years.

Unmet Wastewater Treatment Needs

Even if the modifications discussed above are implemented, states expect to meet only about 31 percent of the nation's wastewater treatment needs through SRFs by the year 2001.[1] This estimate assumes current levels of federal capitalization, state matching funds, and proceeds from leveraging. However, the percentage of overall wastewater treatment needs that states will meet is actually much lower because EPA does not include in its needs survey many of the needs that are eligible for SRF assistance, including needs for nonpoint-source pollution control and estuary protection.

It will be particularly difficult for SRFs to meet the needs of small communities. Per capita costs for wastewater treatment plants are often relatively high in small communities because they cannot take advantage of economies of scale. When these high per capita costs are combined with low per capita income, debt may be unsupportable at any interest rate. In addition, some of the statutory requirements noted above increase costs disproportionately for small communities, making it more difficult for them to qualify for SRF assistance. For example, the restriction on the use of SRF funds for purchasing land is most burdensome for small communities because they may need to replace septic tank systems with centralized treatment facilities, which require a collection system. However, the costs of purchasing easements and rights of way

[1] For this analysis, total wastewater needs are those estimated in EPA's 1988 Needs Survey Report to Congress for 1988 to 2008.

for the necessary land are not eligible for SRF assistance. Almost three-quarters of the states responding to GAO's survey maintain that SRFs will not meet wastewater treatment needs in small communities.

While some fine-tuning will improve the SRF Program's efficiency and effectiveness, states and local governments are faced with a large and widening gap between wastewater treatment needs and available resources. EPA needs to develop a strategy to help states and local governments close the financing gap. GAO believes that the recent reports on financing environmental services by the agency's Environmental Financial Advisory Board can serve as a starting point for addressing this difficult issue.

Matters for Congressional Consideration

The Congress may wish to consider amending the Clean Water Act to (1) authorize EPA to allow states to determine what land can be financed through the SRF for each project and (2) allow states to equate loan terms with the design life of the plant and equipment being financed.

Recommendations to the Administrator, EPA

GAO recommends, among other things, that the Administrator, EPA, develop (1) a plan to improve the mix of skills of EPA's personnel in the regions so that they can provide financial advice to states; (2) models to estimate needs comprehensively, including needs associated with nonpoint-source pollution control and estuary protection; and (3) a long-term strategy to help states and local governments close the gap between needs and available resources to meet water quality goals set forth in the Clean Water Act and, in particular, to assist small communities in meeting their wastewater treatment needs.

Agency Comments

EPA's comments on a draft of this report are included in appendix IV. EPA generally agreed with the factual information and conclusions in the report and with the thrust of GAO's recommendations. EPA elaborated on its efforts to deal with the issues raised by GAO's recommendations and its plans for making further progress in these particular areas. It did not, however, comment on GAO's matters for congressional consideration. EPA's comments and GAO's evaluation of them are discussed at the end of chapters 2, 3, and 4.

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Chapter 4 Need to Develop a Strategy to Improve the Ability of State and Local Governments to Meet Wastewater Treatment Needs

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Abbreviations

ASIWPCA	Association of State and Interstate Water Pollution Control Administrators
CSO	combined sewer overflow
EFAB	Environmental Financial Advisory Board
EPA	Environmental Protection Agency
NGA	National Governors' Association
SRF	state revolving fund

Introduction

In the past few decades, federal, state, and local governments have invested billions of dollars in wastewater treatment facilities to prevent contaminated waste from entering the nation's waterways, thereby protecting the environment and reducing health hazards. But the Environmental Protection Agency (EPA) estimates that billions of dollars more are needed to construct and upgrade wastewater treatment facilities to comply with the requirements of the Clean Water Act.

The replacement of the federal Construction Grants Program by the State Water Pollution Control Revolving Fund (SRF) Program represents a dramatic shift in the nation's method of financing $83.5 billion in wastewater treatment needs. Under the Construction Grants Program, EPA gave funds directly to local governments for facility construction. The SRF Program shifts to the states the responsibility for identifying investment priorities and managing a program to subsidize local governments. State revolving funds (SRFs) are loan programs for which the initial capital is provided through federal grants and state contributions. States use the fund to provide a range of financial assistance, primarily loans, to local governments. As loans are repaid, the fund is replenished and loans can be made for other eligible water pollution control projects. The 1987 amendments to the Clean Water Act (Water Quality Act of 1987) authorize states to use SRF assistance for wastewater treatment, nonpoint-source pollution control, and estuary protection projects.

The Federal Role Continues to Change

The federal effort to address the nation's water pollution control needs through the construction of wastewater treatment facilities began with the Federal Water Pollution Control Act Amendments of 1956. Through the act, the Congress provided the first grants to local governments for constructing wastewater treatment facilities. Through subsequent amendments, the Congress limited the maximum federal contribution for eligible projects to 55 percent of eligible construction costs.

While the initial commitment was relatively small, the Congress substantially increased the federal role through the Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act). This act formally created the Construction Grants Program, increased the federal share of costs to 75 percent, and established the federal government as the leader of the water pollution control effort. Because of a perceived need for drastic improvement in wastewater treatment, the act increased federal grants to an unprecedented level—$18 billion from 1972 through 1976. Also, the Congress charged EPA, in cooperation with the states,

with the responsibility for assessing the nation's wastewater treatment needs biennially and reporting the results to the Congress.

Concerns were raised in the 1980s about the efficiency of providing grants to finance local facilities, particularly in times of federal budget restraint. EPA maintained in 1984 that the availability of federal funds had discouraged state and local governments from providing funding.[1] Also, evidence showed that local governments were not charging adequate user fees to cover the costs of operating and maintaining wastewater treatment plants. In 1984, the federal share of project costs was reduced from 75 percent to 55 percent of eligible costs. The Congress also reduced federal funding for construction grants in the late 1970s and early 1980s.

In the 1987 amendments to the Clean Water Act, the Congress further reduced the federal role in financing wastewater treatment facilities by creating the State Water Pollution Control Revolving Fund Program and phasing out the Construction Grants Program. Thus, the Congress shifted the responsibility for wastewater treatment and water pollution control back to the states. The SRFs are state programs established to provide a permanent source of funding to meet wastewater treatment, nonpoint-source pollution control, and estuary protection needs. Within broad federal guidelines, states have flexibility to establish and manage the programs to meet their particular priorities. The 1987 amendments expanded the costs eligible for assistance, including the costs to build excess treatment capacity for anticipated growth.

EPA is responsible for providing grants to capitalize the programs, assisting states in establishing SRFs, and overseeing the state programs. To capitalize these programs, the Congress authorized $8.4 billion between fiscal years 1989 and 1994. Federal funding for the SRFs peaked with a $2-billion appropriation for the program in 1991 and will be phased out entirely in 1995. When capitalization grants end, it will be the first time since 1956 that the federal government has not had a major role in financing wastewater treatment facilities.

[1] Study of the Future Federal Role in Municipal Wastewater Treatment: Report to the Administrator, EPA (Washington, D.C.: Dec. 1984).

How the SRF Program Operates

As a condition of receiving federal capitalization grants, states provide a matching amount equal to 20 percent of the total grant and agree to use the money to (1) construct wastewater treatment works, (2) control pollution from nonpoint sources, and/or (3) protect estuaries. However, before funding other wastewater treatment works and nonpoint and estuary projects, states must ensure that wastewater treatment facilities on their National Municipal Policy List comply or are en route to compliance with Clean Water Act enforceable deadlines, goals, and requirements.[2] According to EPA officials, all states have met this requirement.

States can provide a range of financial assistance to local governments through the SRF, such as direct loans, refinancing, and bond insurance purchases. Also, they are authorized to leverage the federal grants by issuing bonds guaranteed by resources in the SRFs and depositing the proceeds in their SRFs.

States must make binding commitments (a legal obligation by the state to a local recipient that defines the terms for assistance under the SRF) to local governments within 1 year of receiving federal grant payments. Also, certain requirements apply to loans issued up to the amount of the federal grants. For example, before offering assistance to local governments, states must ensure that loan recipients comply with Davis-Bacon wage requirements, which also applied to the Construction Grants Program.[3] Furthermore, states must comply, and ensure that loan recipients comply, with other federal requirements associated with the receipt of federal grants, such as the promotion of equal employment opportunities and participation by minority-owned businesses.

Finally, the 1987 amendments to the Clean Water Act established several reporting requirements for states that receive federal capitalization grants. Each fiscal year states must provide an intended use plan to EPA, describing projects chosen to receive funding and the state's strategy for distributing funds. Also, states must provide an annual report to EPA on the use and status of funds distributed during the previous fiscal year. SRF programs must undergo an annual EPA review and an independent audit.

[2] The National Municipal Policy List was developed by states and EPA in 1984 to identify state priorities among facilities that were not in compliance with the Clean Water Act.

[3] Wages paid for the construction of treatment works must conform to the prevailing wage rates established for the locality by the U.S. Department of Labor under the Davis-Bacon Act.

Objectives, Scope, and Methodology

On October 9, 1990, the former Chairman of the House Committee on Public Works and Transportation asked us to review states' implementation of the State Water Pollution Control Revolving Fund Program. In subsequent discussions with the new Chairman's office, we agreed to do the following:

- Describe how states have implemented their SRF programs, including whether and how states are using the funds.
- Determine whether statutory or regulatory changes are necessary to increase the efficiency and effectiveness of the program.
- Assess the ability of SRFs to meet the nation's wastewater treatment needs.

We addressed the first objective in a report issued in March 1991, Water Pollution: States' Progress in Developing State Revolving Loan Fund Programs (GAO/RCED-91-87). That report discussed the status of state efforts to develop SRFs and described key characteristics of SRFs, including how loan funds are structured and how municipalities are using the funds. The report also outlined the major issues that states, EPA, and others have raised concerning how certain regulatory and statutory requirements affect the ability of SRFs to meet the nation's wastewater treatment needs.

To address the second and third objectives, we conducted a telephone survey of 50 states and Puerto Rico. All states and Puerto Rico responded to the survey. We asked states to identify regulatory and statutory problems and to indicate how these problems affect their ability to meet needs through the SRFs. In addition, we asked for estimates of needs that would be met, given current assumptions about the resources that would be available from federal capitalization grants, state contributions, and proceeds from leveraging. Finally, we asked states to indicate whether nonpoint and estuary projects would be funded with the SRFs. The data collected during the survey are summarized in appendix II. Individual state responses are provided in appendix III.

To gain a more thorough understanding of state programs and the issues facing states, we conducted five site visits, meeting with officials in Maine, New Jersey, Texas, Florida, and West Virginia. The states were chosen for the diversity of their SRF programs, economic conditions, and water quality needs. During the site visits we had the opportunity to discuss the SRF programs in detail and to obtain examples of how the programs work and how they are hindered by the issues we examined.

Other interviews included contacts with officials at EPA headquarters and the 10 EPA regions. We discussed agency views on the issues raised by states and the role of EPA in monitoring state programs. Also, we discussed EPA's approach and methodology for estimating the nation's wastewater treatment needs, including the agency's plans for a more comprehensive survey.

We also contacted several associations for their views on the statutory and regulatory framework for SRFs: the Association of State and Interstate Water Pollution Control Administrators, the National Governors' Association, the Council of Infrastructure Financing Authorities, and the Government Finance Officers' Association.

Finally, we attended a financing symposium with participants from EPA, state governments, and representatives of the private financial community. The purpose of our attending the symposium was to obtain information on SRF implementation issues, including leveraging and the long-term stability of SRFs.

We conducted our review from January 1991 through August 1991 in accordance with generally accepted government auditing standards.

Improving the Efficiency and Effectiveness of SRFs

Although the SRF Program is structurally sound, a number of statutory provisions and administrative problems may impede the efficiency and effectiveness of its implementation. These include (1) restrictions on using the SRFs to purchase land necessary for a wastewater treatment facility; (2) a shortage in EPA regions of the financial expertise required for the agency to assist and oversee state programs; (3) limitations on the use of SRFs to cover states' administrative costs; and (4) a maximum loan term that, in many cases, can be shorter than the estimated design life of the plant and equipment being financed through the SRF.

SRFs Replace Construction Grants as the Primary Source of Finance for Wastewater Treatment Plants

Replacing construction grants with the SRF Program was a step toward more efficient government investment in wastewater treatment facilities, and EPA and states have enthusiastically implemented the SRF Program. Concerns had arisen that federal grants were providing inappropriate incentives to local governments, which were resulting in underpriced wastewater services and dependence on federal aid for constructing and replacing facilities.

Officials in 28 states maintained in our survey that, as a result of the SRFs, local governments will develop user charges that better reflect operation, maintenance, and replacement costs. In addition, as local governments assume more responsibility for the cost of facilities, they will probably seek less costly alternatives to meeting their needs. For example, a representative of the Midwest Rural Assistance Program, which provides technical assistance to rural communities for wastewater and drinking water projects, told us that the Construction Grants Program had encouraged small, rural communities to seek centralized collection and treatment systems instead of less expensive on-site systems. He maintained that centralized systems were often inappropriate for small communities, particularly those in rural areas with large distances between houses.

Also, states have the flexibility under the SRF Program to target their particular needs, whether for wastewater treatment, nonpoint-source pollution control, or estuary protection. Wyoming currently uses all of its SRF resources for projects other than wastewater treatment. However, the limited resources in the SRFs and the lack of documented needs for nonpoint-source pollution control and estuary protection will restrict the use of SRFs for these purposes. In addition, as officials in EPA's Municipal Support Division pointed out, some of the nonpoint and estuary activities that states undertake, such as public education, may not be appropriate for loan financing.

The flexibility to target needs that was granted to states under the SRF Program promotes more efficient government investment. However, we found several impediments to states' implementation of the program.

Some Land Necessary for Wastewater Treatment Is Not Eligible for SRF Assistance

Under the Clean Water Act, SRF loans cannot be made to purchase land unless the land itself is directly used in the waste treatment processes. For example, wetlands used to filter wastewater as part of the treatment process are eligible for purchase with SRF assistance. However, other land that may be necessary to establish a treatment facility, including land upon which a treatment plant would be built and easements and rights of way for wastewater collection systems, are not eligible for purchase with SRF assistance. Therefore, the cost of some of the land necessary for a wastewater treatment facility may have to be financed through debt raised in the private market, primarily through bond issuance.

An official in EPA's Municipal Support Division stated that this restriction in the Construction Grants Program was designed to prevent local governments from purchasing unnecessary land with federal grant money. Because the grant money did not have to be repaid, local governments might have tried to use grant money to purchase land surrounding facilities for purposes other than wastewater treatment. When the Congress established the SRF Program, it extended the restriction to SRFs as well.

An important difference between the Construction Grants Program and the SRF Program—the need to repay the money borrowed from SRFs—makes it much less likely that local governments will purchase unnecessary land. States reported to EPA that they expect that loans will encourage local governments to keep costs, and therefore user charges, as low as possible. With loans, EPA maintains, communities already face higher user charges than if they had financed the facility with construction grants. Therefore, communities are unlikely to make unnecessary land purchases that would drive user charges even higher.

An official in charge of the Florida SRF program told us that Florida has procedures in place to assess the amount of land that is necessary for projects. He maintained that states could ensure that local governments do not purchase too much land and that land requirements must be determined for each project.

The cost of land can be a significant portion of the total cost of a project, particularly in small communities. For example, a Florida official stated that land costs can represent about 20 percent of project costs for unsewered communities, including the costs of easements and rights of way that are ineligible for SRF assistance. Of the states we surveyed, 42 maintained that all land required for a project should be eligible for SRF assistance.

When communities cannot secure grants from other sources to purchase the ineligible land, they may be able to issue bonds if they have sufficient credit. However, issuing bonds increases project costs. Interest rates are higher for bonds than for SRF loans, and the legal and administrative costs of issuing bonds, which can reach as high as 7 to 10 percent of the amount of the bond issue, further increase costs. According to a Maryland official, interest rates for tax-exempt bonds are 2 percent higher than for Maryland's SRF loans, and rates on bank loans are 4 percent higher.

Thus, the ineligibility of certain land costs for SRF assistance poses a financial problem for many communities. The bill that has been proposed in the Senate to reauthorize the Clean Water Act (S. 1081) would extend the eligibility of land to include all that is necessary for a project. According to the acting Chief of EPA's SRF Branch, the agency has not yet developed a formal position on the issue.

EPA Regions Need More Financial Expertise to Oversee and Assist States

The Clean Water Act requires EPA to review state programs annually to ensure that they comply with the act's requirements. Officials in EPA's Municipal Support Division decided that, in addition to reviewing state programs to ensure compliance, EPA should provide financial advice to states to improve their ability to meet wastewater needs through the SRFs. States' abilities to develop and manage these complex financial programs vary. However, the personnel in EPA regions with primary responsibility for assisting states often lack the necessary financial skills to advise states.

EPA views its role as helping states develop and manage programs that best meet their needs. According to EPA officials, they want to ensure that states fully understand the impacts of their fund management decisions on the long-term financial health of their SRFs. Maintaining the financial stability of SRFs is important to protect the multibillion-dollar federal investment in existing wastewater facilities. Many of the existing facilities, which were financed with construction grants, were

built in the 1970s when the Construction Grants Program was at the peak of funding. These facilities have design lives that are typically around 20 years and will soon need major renovation and expansion.

While EPA headquarters retains responsibility for approving certain complex leveraging plans, EPA has delegated responsibility to its regional offices for overseeing and assisting states. In most regions, the same staff, mainly engineers, that had been in charge of the Construction Grants Program assumed responsibility for the SRF Program. However, given EPA's new role in the SRF Program, we believe that regional staff need additional expertise in financial analysis and banking. According to EPA officials, some EPA regions have relied on a consulting firm, under contract to EPA headquarters until the end of fiscal year 1993, for support. However, an official in EPA's SRF Branch told us that the availability of contractor support has caused some regions to move more slowly in hiring people with financial expertise.

The Director of EPA's Municipal Support Division stated that as EPA moves from the Construction Grants Program to the financially complex SRF Program, the agency must fully utilize existing financial expertise as well as place a high priority on hiring staff with financial skills. He maintained that this is important to EPA's success in achieving further improvements in water quality in the long term.

To encourage regions to develop the appropriate financial expertise to meet agency objectives, the Director of the Municipal Support Division sent a memorandum to regions in March 1989 outlining the financial skills that regions should have. In addition to the engineers to evaluate local projects and the accountants to analyze SRF outlays, revenues, and the adequacy of cash flow, he maintained, regions should have staff able to analyze the soundness of leveraging proposals and to develop more efficient and effective methods for using SRFs to address overall water quality needs. The memorandum included several examples of how regions could assist states, indicating that experience in banking and bond markets would be useful, particularly for providing guidance on leveraging.

In our recent discussions with regional officials, we found that the mix of skills was heavily weighted toward engineering; about half of the staff responsible for the SRF Program are engineers. Other SRF staff generally include accountants, grant administrators, and program analysts. However, according to regional officials, only 2 of EPA's 10 regions have a staff member with experience in lending and bond markets. In recent

discussions with officials in EPA's Municipal Support Division, they said that another region had hired a person with financial skills to assist states.

Officials in EPA's Municipal Support Division said that they recognize that the lack of financial skills in regions continues to be a problem and have recommended, in their mid-year evaluations of some regions, that they hire people with financial skills. However, according to these officials, some regions have not been able to hire people with appropriate financial skills because they cannot offer salaries competitive with private sector salaries. EPA officials also said that instead of hiring new staff, regions had moved people into the SRF Program when their jobs in the Construction Grants Program ended.

EPA officials told us that they are developing additional guidance for regions on conducting annual reviews, including indexes for states and regional staff to use in examining the financial health of programs. However, as one regional official told us, the "cookbook" approach to review that EPA is trying to create may improve oversight, but without financial skills the staff will not be able to detect the subtleties of state programs that may be important.

Limitations on Using the SRF to Cover Administrative Costs Pose Problems for Some States

States raised two issues concerning their ability to use SRFs to cover administrative costs: first, whether the allowance, which is limited to 4 percent of the capitalization grant, is adequate to cover their administrative costs and, second, whether states should be able to use any portion of the SRF to cover administrative costs after the capitalization grants ended.

Under the Construction Grants Program, the Congress limited the use of federal funds for state program administration to 4 percent of the amount authorized. The Congress extended the 4-percent limitation to SRFs but defined it as 4 percent of the federal grant actually appropriated. EPA officials suggest that the 4-percent limitation was intended to ensure that states would not deplete the SRFs with large administrative expenditures. When grants end in 1994, states will not be able to use any portion of their SRFs to cover administrative expenses. Some states are now setting aside a portion of the 4-percent allowance so that they will have some funds available to pay administrative costs when grants end.

Although limiting use of the SRF to cover administrative costs can help ensure that states do not deplete the SRFs with large administrative expenditures, the restriction poses several problems for states. First, 16 states reported to EPA that the 4-percent allowance would not be adequate to cover their administrative costs between 1989 and 1994.[1] For some states the allowance is not adequate because their administrative costs have increased under their SRF programs. Twenty states reported in our survey that their administrative costs are higher now than they were under the Construction Grants Program. Some of the states cite the additional costs of leveraging funds or hiring staff with financial skills as reasons for the increases in their administrative costs. States cannot necessarily substitute financial analysts for engineers. Officials from several states said that they still need engineers on their staffs to evaluate local construction plans and monitor ongoing plant construction. In the short term, states also need engineers to close out the Construction Grants Program. Legislation introduced to reauthorize the Clean Water Act, S. 1081, proposes to base the 4-percent allowance on grants appropriated and the state match, instead of just the grant. Therefore, states would have more money from the SRFs for administration under this bill.

States that issue bonds to leverage their SRFs may have higher administrative costs than other states because they face additional costs for (1) developing a leveraging program and issuing bonds and (2) administering a larger number of projects. EPA reported that nearly half of the states that find the 4-percent allowance inadequate are leveraging.

Although the 1987 amendments to the Clean Water Act allow states to increase funds for projects through leveraging, they do not allow them to increase funds proportionally for project administration. Because the percentage of the fund that can be used to cover administrative costs is linked to the capitalization grant rather than to the entire fund, states that leverage cannot use more of their SRFs for administration. For example, in 1990 Minnesota used about $21 million in capitalization grant and state matching funds to leverage almost $70 million. Thus, instead of $21 million for projects, Minnesota had about $70 million, yet

[1] Another 28 states reported that they expect to have adequate funds through the 4-percent allowance to cover administrative costs through 1994.

its allowance for administrative costs remained at $716,000, or 4 percent of the capitalization grant.[2] Minnesota reported administrative costs of $2.6 million in 1990.[3]

EPA officials told us that they did not think that states should have a problem with the 4-percent allowance because they could rely on fees charged to loan recipients to pay administrative costs exceeding the allowance. According to our survey, in 1990, 7 states charged fees to communities that borrowed money, and 32 states plan to charge fees after the federal grants end. However, reliance on fees to cover administrative costs may further reduce the ability of small communities to afford SRF assistance.[4] Officials from West Virginia told us that the state is hard pressed to find communities qualified to accept SRF assistance, even at a 0-percent interest rate and without loan origination fees. Unless states base fees on borrowers' ability to pay, they will reduce the ability of small communities to afford SRF assistance.

Officials in Texas told us that if they charge a fee and keep the proceeds out of the fund, the proceeds are subject to state appropriation. In these times of state budget deficits, this fee may be a tempting source of revenue to meet other needs. However, if the state deposits proceeds of fees in the SRF, it will not be able to use them to cover administrative costs except up to the limit of 4 percent of the federal capitalization grant.

For other states that will rely on annual state appropriations to meet administrative costs after 1994, the uncertainty of securing adequate funding through the state appropriation process could impede the development of long-term strategies for the SRF. In at least one state, New Jersey, the costs of administering the state's environmental programs are increasingly covered from revenues obtained outside the appropriations process, such as proceeds from licenses and fines. An official from Louisiana suggested allowing states to use the interest earned by the SRF—but not the principal—to cover administrative costs. Officials in EPA's Municipal Support Division expressed concern that the use of interest earnings to cover administrative expenses would adversely affect the long-term financial health of the fund.

[2] Minnesota actually had $70 million available for projects because it used $21 million to guarantee its bonds.

[3] State Revolving Fund Final Report to Congress, EPA (Washington, D.C.: Oct. 1991).

[4] In our survey, 47 states told us that small communities would have difficulty repaying SRF loans. See chapter 3.

Finally, because the 4-percent allowance applies to the amount of money appropriated rather than authorized, states cannot accurately estimate the funds that will be available to administer their programs. In 1989 and 1990, for example, the appropriation for capitalization grants was about 20 percent less than the authorization.

Several issues should be examined in connection with the elimination after 1994 of the 4-percent allowance, including the effect on small community access to SRF assistance and the ability of states to cover administrative costs with fees, particularly if the fees charged to borrowers are based on their ability to pay. In addition, problems raised by states point to the need for EPA to assess whether states should have more flexibility in using SRFs to cover administrative costs while the 4-percent allowance is still available. Most importantly, EPA should determine whether states that leverage should be allowed to use a portion of the proceeds from leveraging that are deposited in the SRF to cover administrative costs. EPA would need statutory authorization to allow states to use more of the SRF to cover administrative costs.

The Maximum Loan Term May Be Less Than the Design Life of Plant and Equipment

The Congress established a 20-year maximum term for loans issued through the SRFs. Officials in EPA's Municipal Support Division said that 20 years corresponds to the design life of most plants and equipment used in wastewater treatment. Without a maximum loan term, the officials suggested, states would be tempted to extend loan terms beyond the design life in order to reduce user charges for communities. Extending loan terms beyond the design life of equipment would be a disservice to communities, which could be faced with large replacement needs after 20 years but might not be able to issue additional debt because of the outstanding debt for the plant.

Although most plants and equipment used for wastewater treatment are designed to last about 20 years, some have longer design lives. For example, according to a Utah official, collection systems have a design life of approximately 40 years. Twenty-seven states responding to our survey maintained that the maximum term should be extended or that states should have the flexibility to adjust the term to the design life of the plant or equipment financed.[5]

[5] When asked how long loan terms should be—20, 25, 30 years or other, 24 states responded 20 years, 1 state responded 25, 6 states responded 30, and 19 states and Puerto Rico responded "other". All respondents answering "other" favored extending the loan term beyond 20 years with various conditions on the extension, such as limiting longer terms to the design life of the plant and equipment.

The proposed legislation to reauthorize the Clean Water Act (S. 1081) includes a provision to extend the maximum loan term to 40 years for innovative projects. An official in EPA's Municipal Support Division said that if the loan term is extended, the Congress should consider linking the term to the design life of the plant and equipment. He told us that EPA is concerned about allowing an extension of loan terms for all communities because such an extension could slow the replenishment of the SRFs. However, large communities would probably require plants and equipment for existing centralized treatment facilities for which the design life is generally 20 years. If this is the case, the impact on the fund of extending the loan term to correspond with the design life of the item financed for all communities would be small.

Several state officials mentioned that 20-year loan terms posed particular problems for small communities. Low technology solutions, such as filtration ponds and lagoons, which are often appropriate in small communities, generally have design lives extending far beyond 20 years. Limiting the loan term increases annual debt service payments, and hence user charges, in communities that may not be able to afford higher charges. However, extending the loan term can significantly increase financing costs over the life of the loan, depending on the interest rate charged. Some states told us that they help small communities afford SRF loans by offering low interest rates or by combining loan assistance with grants from other state or federal sources.

Conclusions

Replacing construction grants with SRFs was a step toward more efficient government investment in wastewater treatment facilities. A majority of the officials we surveyed stated that, as a result of SRFs, local governments will develop user charge systems that better reflect operation, maintenance, and replacement costs. In addition, it is likely that, as local governments assume more of the cost of facilities, they will seek less costly alternatives to meeting their needs. However, several issues affecting the ability of states to meet their needs through the SRFs remain unresolved.

First, while the restriction on purchasing land was appropriate in the Construction Grants Program, we believe that an across-the-board restriction on the eligibility of land purchases for SRF assistance is counterproductive for many local governments. Under the current restriction, project costs are increased when local governments must

seek additional financing to purchase necessary land. Unlike the Construction Grants Program, the SRF Program encourages local governments to minimize costs because they must repay the loan. As a result, local governments are unlikely to purchase land that is not necessary for a project. States can implement procedures to assess local estimates of land requirements and at the same time determine the eligibility of the land purchase for SRF assistance.

Second, to help states maximize needs met through SRFs and to protect the federal investment in wastewater treatment facilities, EPA can help states develop long-term financial strategies to meet their needs through SRFs. In addition, EPA is responsible for monitoring programs to ensure compliance with the Clean Water Act. These responsibilities require a mix of staff skills, including expertise in accounting, engineering, and finance. However, most EPA regions have not hired staff with the financial skills to enable them to provide guidance to states on this complex financial program.

Third, EPA can determine whether it is appropriate in some cases for states to use more than 4 percent of their capitalization grants for administrative costs. In particular, leveraging states are burdened by the limitation because they may have many more projects than states with direct loan programs, yet their 4-percent allowance remains the same. EPA should also examine the impacts on states of ending the 4-percent administrative allowance. To the extent that states rely on fees to borrowers to cover administrative costs, the affordability of SRF assistance will decrease, especially for small communities.

Finally, to avoid unnecessarily high user charges in many communities, states could be authorized to extend loan terms beyond 20 years when the design life of the plant and equipment is known to be longer. At the same time, however, states could be prohibited from offering loans for terms that extend beyond the design life of the plant and equipment financed. In these circumstances, other subsidies currently used by states, such as reduced interest rates and grants from outside the SRF, are more appropriate to reduce a community's user charges.

Matters for Consideration by the Congress

The Congress may wish to consider amending the Clean Water Act as follows:

- Authorize EPA to allow states that have demonstrated that they have controls in place to determine how much land is necessary and should be financed through the SRFs for particular projects.
- Allow states to extend the loan term to correspond with the design life of the plant and equipment being financed.

Recommendations to the Administrator, EPA

We recommend that the Administrator, EPA take the following steps:

- Compare the skills of regional staff currently managing the SRF Program with the skills needed, develop a plan to meet these needs through training and hiring, and include these needs in the agency's proposed budget.
- On the basis of an assessment of the impacts of the 4-percent allowance for administrative costs, determine if any states should be allowed to use more of their SRFs to cover administrative costs. In addition, EPA should assess the impact of total reliance on fees and state appropriations after federal capitalization grants end and determine whether the Congress should be asked to amend the statute to allow states to use some portion of their SRFs to cover administrative costs.

Agency Comments and GAO's Evaluation

EPA pointed out that although the skill mix in some of its regions appears to be adequate, it is still concerned that the remaining regions may not have sufficiently trained staff to allow the agency to assist states in their financial planning and to provide adequate oversight of state programs. The agency stated that it plans to reinforce the guidance that it has given the regions, continue to provide training, and encourage the regions to develop adequate in-house financial expertise.

EPA said that it has assessed the adequacy of the 4-percent administrative allowance in its State Revolving Fund Final Report to Congress. As noted in this chapter, EPA found that 28 states expect to have sufficient allowances from their capitalization grants to cover their projected administrative costs for the 1989 to 1994 period. Sixteen states projected shortfalls between their expected administrative expenses and the 4-percent capitalization grant allowance. Although EPA has examined the issue, it did not assess whether anything should be done to help offset these shortfalls. Given the problems these shortfalls could cause for these SRF programs, we continue to believe that EPA should determine

whether some states should be allowed to use more of their SRF funds for administrative costs. In addition, EPA should assess the problems that states could face after 1994 when the allowance ends.

EPA did not comment on our matters for congressional consideration, which would authorize EPA to allow states with controls to determine how much land is necessary for particular projects and should be financed through the SRFs and would allow states to extend the loan term to correspond with the design life of the plant and equipment being financed.

States' Wastewater Treatment Needs Exceed Resources

Even if certain restrictions on the use of SRFs are eliminated, states will still be able to meet only a small portion of their wastewater treatment needs through the SRFs. On the basis of current levels of SRF capitalization, states estimate that they will meet only about 31 percent of their wastewater treatment needs by 2001.[1] However, the percentage of needs that states will meet is actually much lower because EPA does not include in its needs survey many of the needs that are eligible for SRF assistance, particularly nonpoint-source pollution control projects. In addition, EPA does not include needs associated with replacing aging wastewater treatment facilities.

Given the limited resources available through the SRFs for meeting large investment needs for wastewater treatment, few states are using the funds to meet nonpoint-source pollution control and estuary protection needs. The extent to which states will be able to meet a larger percentage of needs will depend on the ability and willingness of states to contribute additional capital to the SRFs.

The problem of insufficient funds will affect small communities disproportionately.[2] Because small communities do not benefit from economies of scale, they often face higher per-household costs for wastewater treatment as a percentage of median household income than larger communities. In addition, they often have lower per-household incomes. However, they are less likely to receive subsidies through the SRF because small local governments may have difficulty repaying SRF loans. As a result, unmet needs in small communities pose a growing threat to local water quality and public health.

Water Quality Investment Needs Are Understated

EPA's 1988 survey of wastewater treatment needs estimates that the nation will need to spend $83.5 billion by the year 2008 to meet wastewater requirements under the Clean Water Act. While this estimate represents tremendous investment needs, the actual requirement is much higher. For example, costs associated with replacing wastewater treatment facilities are not included because, in the past, replacement costs were not eligible for construction grants. In addition, the survey does not include estimates for nonpoint-source pollution control and estuary

[1] For this analysis, total wastewater needs for 1988 to 2008 are estimated at $83.5 billion, according to EPA's 1988 Needs Survey Report to Congress. In our survey, we asked states what percentage of the needs that EPA estimated for 1988 to 2008 they would meet through the SRFs by the year 2001.

[2] In our survey we did not define what constitutes small and large communities for each state because such a definition is relative to the size of communities in the state.

protection needs that are eligible for SRF assistance. Without a complete estimate of water pollution needs, the Congress cannot make realistic funding decisions, and the states cannot effectively set funding priorities.

For a variety of reasons, state and local governments have not developed cost estimates for all water quality needs eligible for SRF assistance. First, even though needs exist, many small local governments cannot afford to plan projects without assurance that financial assistance will be available for facility construction.

Some needs are difficult to quantify, particularly when they do not involve facility construction. For example, an important component of states' nonpoint-source pollution programs is the development and implementation of best management practices to reduce nonpoint-source pollution. These costs may be more difficult to quantify than the costs of treatment plant construction.[3] At the same time, we know that undocumented nonpoint needs amount to many billions of dollars nationwide. Pennsylvania alone estimates $3 billion to $5 billion in costs to clean up the runoff from abandoned coal mines.

In addition, EPA does not always require particular remedies for states to deal with water pollution problems, including those associated with nonpoint-source pollution and estuary protection. Therefore, it is not clear how states can measure needs associated with managing the problems. For both nonpoint-source pollution and estuary protection, EPA requires states to develop management plans but does not mandate controls that have to be put in place. For wastewater treatment, however, states are required to construct facilities to provide a certain level of treatment.

Officials from EPA's Municipal Support Division told us that they had requested states to provide estimates of nonpoint and estuary needs for the 1990 survey but had received very few. Although they recognize the problems facing states in estimating these costs, EPA officials told us that they have no plans to include additional guidance to states in the 1992 needs survey. However, the Director of EPA's Office of Wastewater Enforcement and Compliance told us that they could develop models to estimate nonpoint-source pollution control needs in watersheds. The

[3] EPA officials also maintain that these administrative costs are less appropriate than capital costs to be financed through loans.

watershed estimates could be used to develop nonpoint needs estimates in states.

Costs associated with correcting combined sewer overflows (CSOs) have also been vastly underestimated in recent needs surveys.[4] The 1988 survey includes some of the costs of correcting CSOs, but less than a third of the CSOs are included. While the EPA survey estimates $16 billion in CSO needs, EPA officials maintain that more realistic estimates range from $50 billion to $60 billion. An official told us that EPA is trying to improve estimates for the 1992 survey by developing models that will estimate CSO needs on a state by state basis.

Finally, needs may be underestimated because many states and local governments have not planned projects to respond to some of the new requirements that will affect wastewater treatment plants, such as new requirements under the Water Quality Act of 1987 to control toxic water pollutants. The act requires EPA and states to develop numeric toxic discharge limits and to incorporate the limits in permit requirements. These responsibilities are expected to add significantly to the costs facing some local governments.

In addition to measuring certain needs incompletely, the 1988 survey underestimates other needs by including only the costs of new construction and excluding replacement costs. The Clean Water Council estimates that by the year 2000 replacement costs could more than double the $8 billion a year that governments will need to invest in wastewater treatment facilities. Many of the nation's wastewater facilities were built during the 1970s when construction grants were at their highest level. These facilities, having design lives of around 20 years, will soon need major replacement and rehabilitation.

Because wastewater treatment needs have not been fully documented, the Congress cannot make comprehensive funding decisions. Likewise, many states cannot set investment priorities without an accurate assessment of their specific needs. Thirty-five states said that it is only somewhat likely or unlikely that they will use the SRFs in the near future to meet nonpoint needs. An official in EPA's Municipal Support Division suggested that, in part, nonpoint needs are not a high priority for SRF

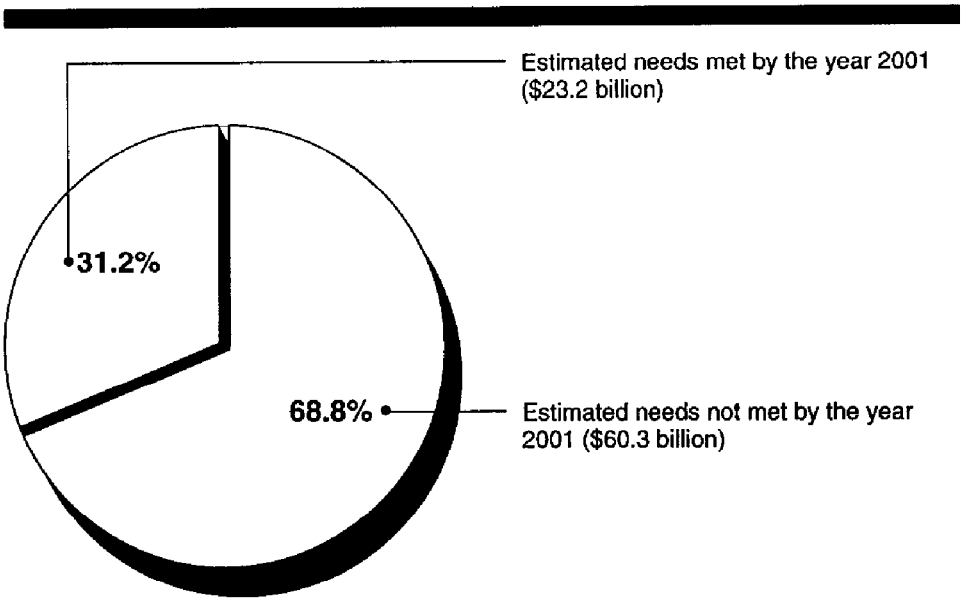
[4] Combined sewer overflow systems collect and treat both sewage and stormwater. Most combined sewer systems have the capacity to handle normal flows, but during large storms the excess flow containing raw sewage, industrial wastewater, and stormwater is discharged untreated into rivers and streams.

funding because they have not been assessed, whereas large wastewater treatment needs have been documented.

SRFs Will Meet a Small Percentage of Documented Needs

States we surveyed estimated that through their SRFs, by the year 2001, they will meet about 31 percent of their total needs, as documented by EPA (see fig. 3.1).[5] Available resources include capitalization grants, state matching funds, and leveraging. EPA recently reported to the Congress that the funds available to states after 1994 will decline substantially without additional infusions of capital from federal or state sources.[6]

Figure 3.1: Percentage of Needs That States Expect to Meet Over the Next 10 Years



Note: Needs are those identified by EPA in its 1988 Needs Survey Report to Congress to cover population growth through the year 2008—$83.5 billion.

Source: EPA's 1988 Needs Survey Report to Congress and state responses to GAO's survey.

[5] See appendix I for detail by state.

[6] State Revolving Fund Final Report to Congress, EPA (Washington, D.C.: Oct. 1991).

Among the reasons for the projected decline in SRF resources are the following:

- Few states expect to receive additional state appropriations when federal capitalization grants end in 1994.
- Most states are charging interest rates below inflation, thereby eroding the purchasing power of their SRFs.
- States that leverage increase funds available in the short term but may have less capital available in the longer term.

Federal and State Seed Money Is Limited

The Congress authorized $8.4 billion to capitalize the SRFs, anticipating that the initial federal capitalization grants and the state match would allow the SRFs to be self-sustaining. However, because the gap between needs and the available resources is so large, the SRFs will meet only a small percentage of wastewater needs.

Federal grants to capitalize the SRFs were authorized only through fiscal year 1994. Moreover, in fiscal years 1989 and 1990, annual appropriations fell about 20 percent below annual authorizations. Until grants end in fiscal year 1994, states will provide a 20-percent match to the federal grant, but thereafter the mandatory state contribution ends.

Only nine states responding in our survey expect their state legislatures to provide additional money to capitalize their funds after federal grants end. Many states cite budget problems as the main reason why additional funds will not be forthcoming. Two states said that because of state budget problems, they could not even count on getting the state match. If the match is not provided, however, these states will not be eligible to receive a federal grant.

States Are Charging Low Interest Rates

EPA noted in its report to the Congress on SRFs that most states are charging interest rates on SRF loans to local governments that are inadequate to maintain the purchasing power of the SRFs. While states are authorized to charge any rate at or below the market rate, many states charge rates that are below inflation. In states that charge interest rates below the rate of inflation, the purchasing power of the SRFs will decline each year unless additional capital is added to the fund. As a result, the decline in purchasing power will not be a problem in most states until capitalization grants end.

States have different reasons for offering low interest rates. Sixteen states reported to EPA that they adjust interest rates on the basis of the community's economic condition. An official in Florida told us that the state charged interest rates that are 2 percent below the rate of interest in the private market because of the additional project costs associated with the federal requirements on SRF assistance. Arizona estimates that Davis-Bacon wage requirements, which are tied to federal grants, increase project costs by 20 percent. EPA officials maintain that Davis-Bacon wage requirements are problematic primarily for rural communities because regional wage rates are based on those in metropolitan areas.

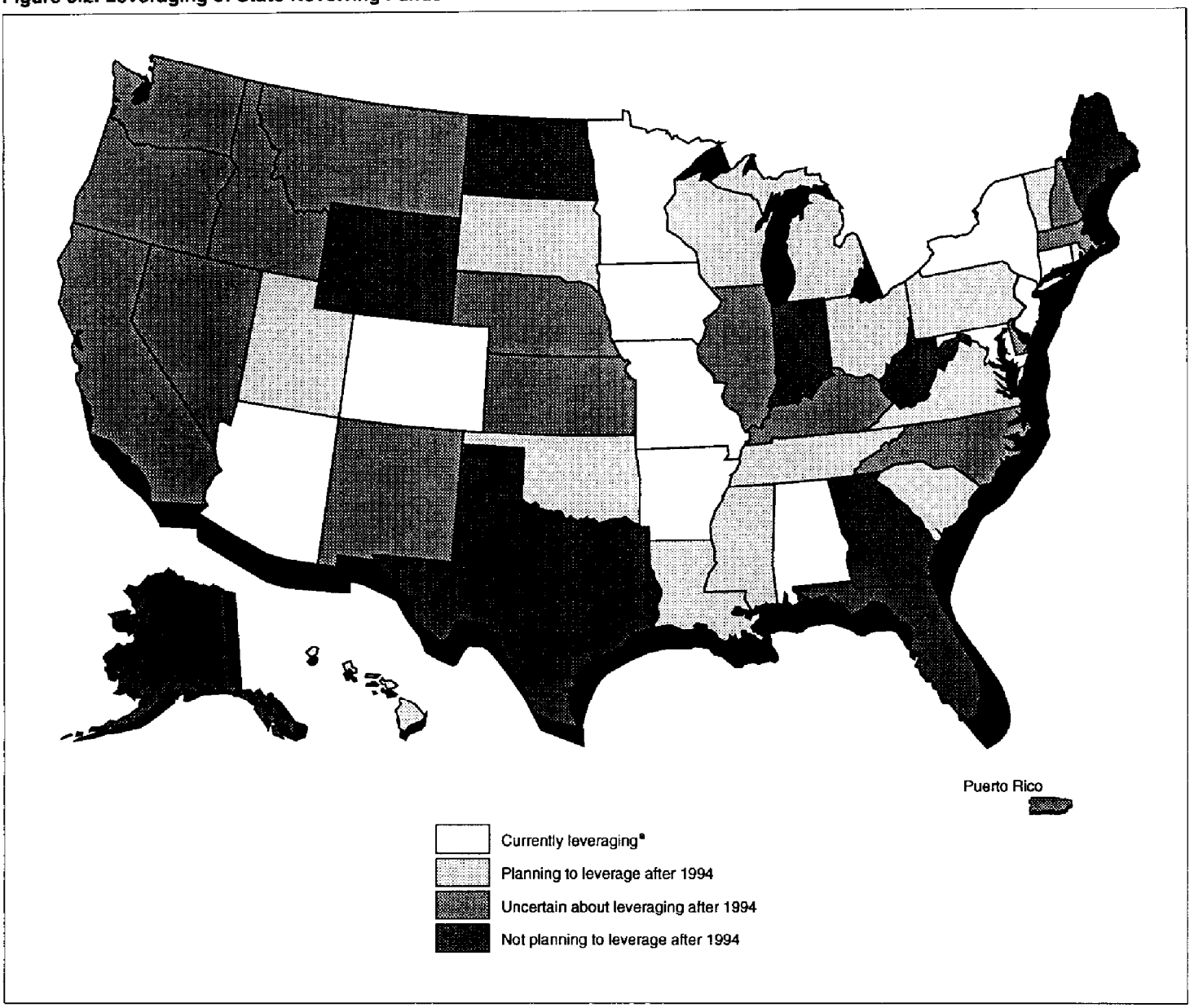
Florida mentioned that after the requirements associated with the federal grants end, it will be able to increase interest rates slightly. However, states with needs in many small communities may be unable to find borrowers unless substantial subsidies are provided. Some states, such as New Mexico and Utah, offer SRF loans at 0-percent interest for small communities.

EPA regional officials told us that, in some cases, they have warned states that they are charging interest rates that will reduce the purchasing power of the SRFs over time. However, EPA officials maintain that they cannot force states to charge higher rates because states have the statutory authority to charge any rate at or below the market rate.

Leveraging Increases Available Funds Only in the Short-Term

EPA defines leveraging as using SRF resources to secure bonds; bond proceeds increase money available to lend to local governments. By this definition, our survey showed, 11 states are leveraging and 15 others plan to leverage after federal grants end in fiscal year 1994 (see fig. 3.2). Other states, such as Texas, issue bonds guaranteed by the general faith and credit of the state and deposit the proceeds in their SRFs. EPA defines this practice as a state "overmatch."

Figure 3.2: Leveraging of State Revolving Funds



[a]All other states and Puerto Rico are not currently leveraging.
Source: GAO's survey of the states.

In deciding whether to leverage, public policymakers in each state must balance the value of meeting more needs in the short term against the importance of maintaining the long-term stability of the fund. Through

leveraging, states can significantly increase the money immediately available for lending to local governments, but in the longer term the purchasing power of the fund may be depleted more rapidly than through a direct loan program. The long-term reduction in purchasing power occurs because bonds are issued at market rates, while the proceeds are loaned at subsidized rates. Some states, such as Wisconsin, offset this disadvantage by providing additional state appropriations to the fund.

The decision to leverage depends on overall investment needs and the readiness of projects to proceed with construction. States with low demand for loan assistance may determine that the costs of leveraging outweigh the benefits. States with large needs and many projects ready to proceed may determine that it is worthwhile to pay the additional costs of leveraging to assist more projects in the short term. New York, for example, has aggressively leveraged its fund; as a result, it plans to fund many more projects than it could otherwise have funded. For 1991 New York estimated that with a $226-million capitalization grant and a $45-million state match, it would leverage $794 million. One New York official said that state officials decided to leverage the fund, even though the fund's ability to meet needs in the long term may be reduced by the costs of leveraging.

States' decisions to leverage may be affected not only by the long-term costs of leveraging but also by restrictions placed on the issuance of tax-exempt bonds under the Tax Reform Act of 1986. The most important restriction identified by states is the limitation on earnings from arbitrage. Twenty-six states in our survey responded that the arbitrage restriction adversely affected their programs. The restriction requires that money raised through the issuance of tax-exempt bonds not be invested to earn more than 0.125 percent above the interest rate at which the bonds were issued. Thus, when a state issues tax-exempt bonds to leverage SRF resources, the proceeds cannot be invested to earn interest for the SRF. The rate of interest on tax-exempt bonds is below the interest rate on private loans, since earnings are tax-exempt. Any additional interest earned generally must be rebated to the U.S. Treasury.

The restriction on earnings from arbitrage limits states' ability to increase earnings for the SRF. In addition, in order to comply with the restriction, states must implement complicated accounting procedures to track each tax-exempt dollar while it is in the SRF as well as after it has been loaned to a local government to ensure that interest earnings do not

exceed the allowable rate. If a local government deposits the money in a bank and earns market interest on the account, the state's bond issue could lose its tax-exempt status. Several bills have been introduced in the Congress to modify arbitrage restrictions.

The Congress imposed arbitrage restrictions to curtail the issuance of tax-exempt bonds by state and local governments to raise revenue. The Congress was concerned that bonds were issued primarily to earn profits (arbitrage) rather than to support public projects. State and local governments were issuing tax-exempt bonds and investing the proceeds in taxable securities at interest rates higher than the tax-exempt bond rate. Subsidies provided to government entities through tax-exempt bonding are considered to be tax expenditures in the federal budget because taxes on interest earned are forgone.

SRFs Provide Limited Assistance to Small Communities

While the limited resources of most SRFs restrict states' ability to meet wastewater treatment needs overall, the assistance that SRFs are providing to small communities are particularly limited. Thirty-four of the states responding to our survey said that the SRF will not meet the needs of small communities, and 24 states told us that unmet needs in small communities will have significant health and environmental impacts. We found that the large majority of SRF resources have thus far been loaned to larger communities, primarily because they are viewed as better credit risks.

Although small communities are receiving a greater percentage of resources under the SRF Program than under the Construction Grants Program, they are still not receiving as much money as would be consistent with the proportion of the total population that resides in small communities. Because larger cities can secure financing in the private market, officials in EPA's Municipal Support Division said that EPA expects states to direct assistance to small communities. Many small communities cannot afford to repay a loan at any interest rate. Some states attempt to supplement the funds available to these communities through federal and state grant programs, but these funds are generally limited and will not keep pace with the accelerating costs of environmental compliance.

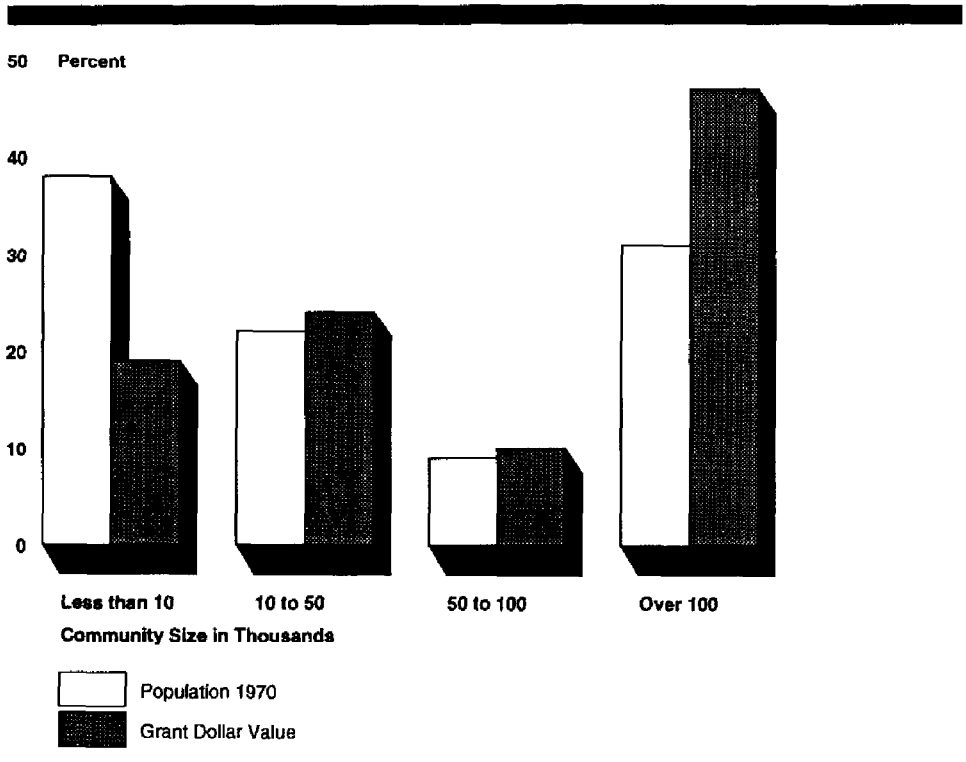
EPA recognizes the problems facing small communities, particularly those that are economically distressed, in financing wastewater treatment infrastructure. EPA has conducted studies of the costs facing large and small communities that indicate that households in small communities

face much higher user charges as a percentage of household income than households in large communities.[7]

Small Communities Have Not Received a Proportional Share of Federal Assistance

We examined data from EPA and from the U.S. Bureau of the Census and found that small communities are not receiving financial assistance from the SRFs in proportion to their representation in the U.S. population. Figures 3.3 and 3.4 show that although small communities are receiving a somewhat higher proportion of total funds under the SRF Program than under the Construction Grants Program, the distribution of SRF loan assistance among communities of various sizes is similar to that of grants under the Construction Grants Program.

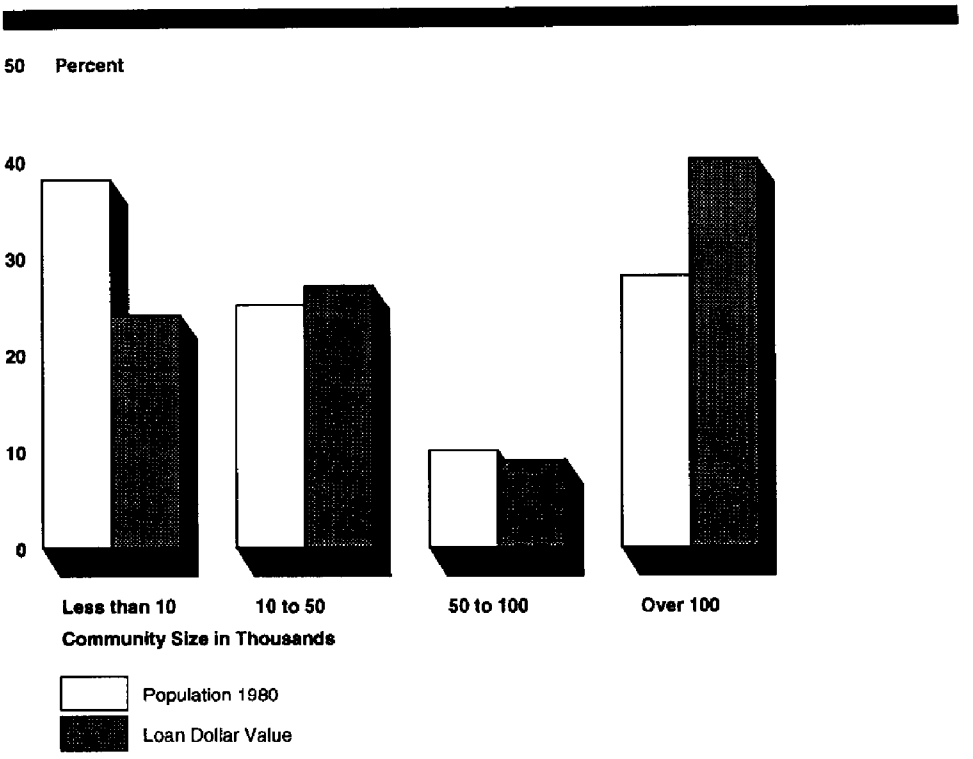
Figure 3.3: Distribution of Grant Awards, Fiscal Years 1972-80



Source: 1990 Preliminary Draft Strategy for Municipal Wastewater Treatment—Funding, EPA (Jan. 1981).

[7] The Municipal Sector Study: Impacts of Environmental Regulations on Municipalities, Office of Policy, Planning, and Evaluation, EPA (Sept. 1988), and A Preliminary Analysis of the Public Costs of Environmental Protection: 1981-2000, Administration and Resources Management, EPA (May 1990).

Figure 3.4: Distribution of SRF Loan Awards, Fiscal Years 1987-90



Source: Loan data from state annual reports to EPA and population data from the U.S. Bureau of Census.

In a 1981 evaluation of the Construction Grants Program, EPA determined that small communities did not receive a fair proportion of the construction grants because the grants went to larger communities.[8] While localities with fewer than 10,000 people represented 38 percent of the national population, they received only 19 percent of the grant money between 1972 and 1980. Communities with populations over 100,000 represent 31 percent of the total population yet received 47 percent of the grant money awarded during the same period.

Under the Construction Grants Program, EPA maintained, large communities received more than their share of federal grants for a variety of reasons, including that (1) they had larger, more able staffs to get projects ready to proceed to construction; (2) EPA enforcement concentrated on large communities, which therefore were under greater pressure to comply with Clean Water Act requirements; and (3) the effects

[8] 1990 Preliminary Draft Strategy for Municipal Wastewater Treatment—Funding, Office of Water and Waste Management, EPA (Jan. 1981).

of substandard water quality were greater in large communities.[9] An EPA official told us that following this assessment a provision was included in the 1981 amendments to the Clean Water Act that authorized states to set aside 4 to 7.5 percent of their grants for small communities. States designated as rural were required to set aside grants for small communities; for other states, the set-aside was optional.

This funding balance continues under the SRF Program. As figure 3.4 shows, small communities are receiving significantly fewer SRF resources than would be expected, given the percentage of the total population residing in the communities.[10] Communities with populations under 10,000 received 24 percent of the money loaned from SRFs between 1987 and 1990 but represented 38 percent of the national population. However, cities with populations over 100,000 have not received as large per-capita SRF loan awards as they did under the Construction Grants Program. The decrease in the proportion of funds awarded to these communities may have occurred because many of their needs were met with construction grants. However, they still received more than was consistent with their representation in the total population.

While EPA officials are aware of the problems facing small communities in securing SRF assistance, statutory guidelines authorize the states to establish their own criteria for choosing projects. However, to encourage states to involve small communities, EPA is preparing a brochure on the benefits of SRF assistance for small communities that states can use in marketing their programs. In addition, EPA allows states to use part of their 4-percent administrative allowance for community outreach. However, we believe that states are unlikely to use the 4-percent allowance for this purpose, given the problems that many states have covering their administrative costs with the allowance.

Small Communities Have Difficulty Competing for SRF Loans

Small communities are at a disadvantage when they must compete with larger communities for SRF assistance. In general, small communities may not have credit ratings and may represent higher credit risks because of their small revenue bases. In addition, to secure loans, local governments must have the technical and financial expertise to develop adequate proposals. Communities may inadvertently eliminate themselves from program participation because they lack the necessary expertise. In New York, for example, officials found that many small

[9] 1990 Preliminary Draft Strategy for Municipal Wastewater Treatment—Funding

[10] For the purposes of this analysis, small communities are defined as having populations under 10,000.

communities thought they could not afford a loan, but with the state's assistance in analyzing their needs and financial situation, they found that they could.

Small communities also have difficulty acquiring SRF assistance because states consider factors other than health and environmental needs in offering loan assistance. While 92 percent of the states responding to our survey cited environmental and health needs as the most important factors they use to select communities for financial assistance, states ranked the communities' readiness to start project construction and ability to repay the loan as the second and third most important factors. If a state determines that a community on its priority list is not ready to begin construction on a project, the community is passed over for a community that is ready. However, without the certainty of a loan to fund the project, small communities are often unable or unwilling to undertake the large up-front costs to plan and design a treatment facility.

In addition, if a state determines that the community cannot support user charges adequate to repay the loan or that the community poses a credit risk, states may not make the loan. One exception is the state of Wisconsin, which processes SRF loans on the basis of environmental need rather than of a community's ability to repay the loan. Wisconsin provides grants for a portion of the total project cost so that charges to the local users are reduced.

Some small communities cannot afford a loan at any interest rate because they cannot support the necessary user charges to repay a loan. For example, Montana officials reported that in one small town in the state, Stockett, raw sewage was overflowing septic systems into a creek, but the community could not afford to build a collection system and treatment lagoon to replace the septic tanks. While the town's residents could afford monthly user charges of only $12 per household, the cost of an improved system would increase user charges to at least $42 a month per household (assuming various grants for about 65 percent of the cost and an SRF loan for the balance).

In assessing the impact of treatment costs on households, EPA has shown that a loan program will result in significantly higher user charges than a grant program. In its State Revolving Fund Final Report to Congress, EPA estimated that the differences in user fees for communities financing a project with a 4-percent loan and financing the project with a construction grant for 70 percent of the project costs ranged from a $72 annual increase in user charges per household (21 percent increase) for

facilities serving communities of 1,000 to an annual increase of $22 per household (19 percent increase) for facilities serving communities of 100,000.[11]

Finally, states that leverage may place SRF assistance further beyond the means of some small communities because states may pass on the costs associated with issuing bonds by charging higher interest rates on SRF loans. Leveraging also requires that the SRF loan portfolio comprise communities with good credit ratings. Because many small communities are unrated, they are viewed by the credit rating agencies as risky, and their inclusion in the loan portfolio increases interest rates on state bonds.

Kansas and Texas mentioned that they set aside limited SRF resources for small communities, allowing a few of them to receive SRF assistance without competing with larger communities. However, the set-aside is relatively small—5 to 10 percent of a state's SRF. Texas planned to provide an SRF set-aside for economically distressed communities and to divide the remaining funds along population groupings so that communities of equal size would compete for a given amount of financial assistance. However, in 1990 and 1991 Texas had enough money in the SRF to fund all of the projects that were ready to proceed with construction.

Alternatives Provide Little Relief to Small Communities

Because the SRF Program is unable to provide adequate financing for small communities, some states have other grant and loan assistance programs. In addition, other federal agencies have programs to provide grant and loan assistance for small community wastewater treatment projects. However, the assistance available through these other sources is relatively limited.

Thirty-seven states have other state programs (grants, loans, or a combination) that provide assistance for water pollution control projects. While about half of these programs are not directed solely to small communities, they are available to small or disadvantaged communities that cannot otherwise afford an SRF loan. The dollar amount allocated for these state programs varies, but it is comparatively small. EPA estimates that between 1988 and 1999 states will spend $6.7 billion through various state programs to meet wastewater treatment needs.[12] EPA did

[11] EPA assumed a 70-percent grant: a 55-percent federal grant and a 15-percent supplemental state grant.

[12] State Revolving Fund Final Report to Congress, EPA (Washington D.C.: Oct. 1991). (All amounts cited from this report are in 1988 dollars.)

not estimate what percentage of these funds will be spent in small communities.

Small communities also obtain assistance from other federal programs. These include the Department of Housing and Urban Development's State and Small Cities Program; the Department of Agriculture's Water and Waste Disposal Systems for Rural Communities; and the Economic Development Administration's Grants for Public Works and Development Facilities. However, the money available for water pollution control through these federal programs also is relatively limited; only about $2.2 billion is available from 1988 through 1999 for water pollution control.[13]

The $2.2 billion that EPA estimates will be spent through federal programs, together with the estimated $6.7 billion in state expenditures from 1988 to 1999, will make about $742 million a year available outside of the SRF. In addition, according to states' estimates, approximately $2 billion will be spent each year through the SRFs. However, information is not available to estimate what percentage of these totals will be available to small communities.

Households in Small Communities Will Face Much Higher Costs

EPA projects that compliance with existing and new environmental mandates will significantly increase local wastewater treatment costs, as well as costs for drinking water and solid waste disposal. EPA has conducted a study to assess the costs for households in cities of various sizes of maintaining current levels of environmental quality and meeting requirements of new regulations in all EPA program areas. In this study, EPA determined that the smallest communities (fewer than 500 residents) will be affected most by the environmental mandates; costs per household will rise from $670 in 1987 to $1,580 by the year 2000 (1988 dollars) to maintain current levels of environmental quality and comply with new regulations. (See table 3.1)

These cost increases will be most acutely felt in the very small communities that have low per-household income. The cost of environmental protection for these small communities is projected to rise from 2.8 percent of average household income in 1987 to 5.6 percent in 2000. According to officials whom we talked to in several states, projects may be delayed or not undertaken, resulting in continued noncompliance with the Clean

[13] State Revolving Fund Final Report to Congress.

Water Act. Such noncompliance could seriously threaten local public health.

Table 3.1: Cost of Environmental Protection Per Household as Percentage of Household Income, by City Size (1988 Dollars)

	1987			2000		
City size	Average household cost of environmental programs	Average household income	Cost as a percentage of household income (percent)	Average household cost of environmental programs[a]	Average household income	Cost as a percentage of household income (percent)
500 or less	$670	$24,277	2.8	$1,580	$28,357	5.6
500 - 2,500	$473	$26,361	1.8	$763	$30,792	2.5
2,500 - 10,000	$433	$30,546	1.4	$605	$35,680	1.7
10,000 - 50,000	$444	$31,685	1.4	$665	$37,010	1.8
50,000 - 100,000	$373	$37,189	1.0	$539	$43,440	1.2
100,000 - 250,000	$291	$33,769	0.9	$436	$39,445	1.1
250,000 - 500,000	$335	$31,943	1.0	$529	$37,312	1.4
500,000 or more	$393	$34,756	1.1	$629	$40,597	1.5
Population-weighted average	$419	$31,617	1.3	$647	$36,931	1.8

[a]Includes costs of maintaining current levels of environmental quality plus costs of complying with new regulations.

Source: A Preliminary Analysis of the Public Costs of Environmental Protection: 1981-2000, EPA (Washington, D.C.: May 1990).

Unmet Needs Will Result in Noncompliance and Other Problems

Because compliance problems in small communities have not been fully documented, we were unable to determine how much assistance small communities need. EPA's monitoring of Clean Water Act violations is limited to major and significant minor wastewater treatment facilities.[14] However, states have provided anecdotal evidence of large needs in small communities. Twenty-four states told us that unmet needs in small communities will have significant health and environmental impacts. Utah said that its health department may have to condemn entire towns because towns cannot afford to improve their wastewater treatment systems.

Because small communities are unable to respond adequately to their wastewater needs, their rate of noncompliance with Clean Water Act

[14] Major facilities are those with a design or actual flow of 1 million gallons per day or greater, a service population of 10,000 or more, or a significant impact on water quality. Facilities that do not meet one or more of the above criteria are categorized as minor facilities.

requirements is likely to be high. Ten states maintain that noncompliance will increase, particularly when all of the requirements of the Clean Water Act take effect. For example, as we explained in a recent report entitled Water Pollution: Stronger Efforts Needed by EPA to Control Toxic Water Pollution (GAO/RCED-91-154, July 19, 1991) wastewater treatment plants are facing some very expensive requirements associated with more stringent limitations on toxic discharges that were included in the 1987 Clean Water Act amendments. The act requires adoption of numerical toxic discharge limits that will be incorporated into discharge permits for wastewater facilities.

Small communities could also experience public health problems caused by diseases carried in untreated wastewater. West Virginia, for example, has identified more than 40 small communities that are discharging raw sewage directly into the state's waterways. Nationwide, the Centers for Disease Control reported that there have been 203 reported outbreaks of waterborne disease associated with contaminated potable water from 1981 through 1988; these resulted in over 54,000 reported cases of illness. However, these cases do not reflect the complete picture, since most waterborne diseases are not reported, investigated, or documented by public health officials.

Conclusions

States will at best meet only 31 percent of their wastewater treatment needs through the SRFs over the next 10 years. States that leverage will increase the funds available over the short term but in the longer term may have less money available than states with direct loan programs. Most direct loan programs will also lose purchasing power because of the low interest rates charged by states on money loaned through the SRF. As a consequence, the money available through many SRFs may decline significantly after federal capitalization grants end.

The extent of the shortfall is understated, however, because EPA's needs survey does not completely estimate the costs of complying with the Clean Water Act. As a result, the Congress does not have a realistic assessment of needs on which it can base funding decisions. In addition, states cannot set priorities among competing needs if nonpoint and estuary needs are not assessed. While these needs are difficult to quantify because they cannot be measured in accordance with specific regulatory and statutory requirements, EPA can develop models for estimating pollution needs in watersheds to develop state estimates.

Some resources are available from other state and federal sources, but these are not large enough to close the gap between investment needs and current funding. Given the budget problems experienced by states across the country, large state investment in wastewater infrastructure is not likely to be forthcoming in the near term. Similarly, other federal programs will provide only $2.2 billion between 1988 and 1999.

Unmet needs will pose a particular problem for small communities because their costs per household are higher and they have few financing options outside the SRF. Although small communities are receiving more money than they did under the Construction Grants Program, they are not receiving assistance through the SRF Program in proportion to their population, largely because they cannot compete effectively for loans with the more financially capable large communities. While the full extent of needs in small communities has not been documented, states maintain that environmental and public health problems will result if these needs are not met. Moreover, new Clean Water Act requirements will increase the gap between needs and the resources available to deal with them.

The problems facing small communities are part of the broader problem of a large and growing gap between needs and resources. Although the recommendations in our report will enable the SRFs to meet communities' needs more effectively, EPA will need to develop a comprehensive strategy to address this broader problem. We discuss this issue in chapter 4.

Recommendation to the Administrator, EPA

We recommend that the Administrator, EPA, develop models to provide more comprehensive estimates of needs, including needs associated with nonpoint-source pollution and estuary protection.

Agency Comments

EPA generally agreed with the facts and conclusions in this chapter and pointed out that it has initiated several efforts to ensure high quality needs information. The agency noted that it is currently developing models to generate estimates of needs for combined sewer overflows as well as stormwater and is investigating cost-estimating techniques for nonpoint-source pollution control and estuary protection.

Need to Develop a Strategy to Improve the Ability of State and Local Governments to Meet Wastewater Treatment Needs

Our analysis of the nationwide gap between the high costs of meeting wastewater treatment needs and the limited resources available to do so suggests that two factors may significantly affect the ability of state and local governments to finance wastewater treatment plants: First, provisions of the Tax Reform Act affect the ability of state and local governments to issue tax-exempt debt, and second, competition for limited resources is growing.

The Tax Reform Act of 1986 restricts the ability of state and local governments to finance infrastructure improvements by placing limitations on the issuance of tax-exempt bonds. Furthermore, state and local governments must weigh wastewater treatment plant construction against a host of other competing demands—a task made all the more difficult by a slow economy and growing budget deficits at all levels of government. There are no easy solutions to these problems, but we believe that confronting them now may help to prevent today's problem from becoming tomorrow's crisis.

The Tax Reform Act of 1986

Much of state and local governments' investment in wastewater treatment facilities is financed through the issuance of tax-exempt bonds. For tax-exempt bonds, governments pay below-market rates of interest to bondholders because the interest the bonds earn is tax-exempt. However, the Tax Reform Act of 1986 reduced state and local ability to finance infrastructure by placing restrictions on the issuance of tax-exempt bonds. First, as explained in chapter 3, the act restricted arbitrage earnings—the interest earned by investing tax-exempt bond proceeds. This restriction limits government earnings on bond proceeds to 0.125 percent above the initial yield on the bonds.

Second, certain provisions of the act made it more expensive for state and local governments to issue tax-exempt bonds. For example, the act reduced the percentage of proceeds from certain tax-exempt bonds that can be used to pay the costs of issuing the bonds. State and local governments must cover any additional costs from general revenues.

Changes in the tax law also have complicated and lessened the attractiveness of private investment in environmental infrastructure. Before the Tax Reform Act, state and local governments could attract private resources by supplying matching funds through tax-exempt revenue bonds and by providing accelerated depreciation schedules and a 10-percent investment tax credit for infrastructure projects. However, concerns were raised that the investment tax credit and depreciation

schedules that existed before the act led private investors to make decisions that were not based on the viability of transactions but on the opportunity to obtain tax shelters.

In our recent report, Environmental Protection: Meeting Public Expectations With Limited Resources (GAO/RCED-91-97, June 18, 1991), we pointed out that the Tax Reform Act discouraged private investors by (1) limiting the dollar value of tax-exempt private activity bonds that can be issued in each state, including those for financing wastewater treatment facilities;[1] (2) repealing the investment tax credit; and (3) making tax allowances for depreciation less attractive to investors by extending the number of years over which plant and equipment can be depreciated.

Several provisions of the Tax Reform Act, such as the limits on private activity bonds, were intended to prevent abuses of the tax code. Local governments had been criticized for using proceeds from tax-exempt bonds for projects, such as shopping malls, that provided only indirect public benefit. According to data from the Federal Reserve Board of Governors, in 1985 about 33 percent of outstanding long-term tax-exempt bonds were used for private activities.

However, some argue that the Tax Reform Act went too far in restricting the ability of state and local governments to issue tax-exempt bonds for important public works projects. For example, the Anthony Commission on Public Finance, which was established by Representative Anthony to examine this issue, reported in 1989 that the act had created several barriers to financing public infrastructure.[2] Among other concerns, the Commission maintained that limiting the funds that can raised through private activity bonds discourages private investment in public infrastructure, even when it may be the most cost-effective alternative for local governments.

[1] Bonds are deemed private activity bonds when more than 10 percent of the involvement or benefit from bond proceeds is for private parties; thus, a bond is a private activity bond if 10 percent or more of the flow to a wastewater treatment plant is from an industrial facility.

[2] Preserving the Federal-State-Local Partnership: The Role of Tax-Exempt Financing, Anthony Commission on Public Finance (Washington, D.C.: Oct. 1989), p. 16.

Increasing Costs of Environmental Mandates

The gap between wastewater treatment needs and the resources available to meet them is tremendous. Governments at all levels will spend approximately $5 billion per year over the next decade to deal with an $83.5-billion problem.[3] Furthermore, needs continue to increase. In their recent national survey of water pollution infrastructure needs, the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) estimated that states and localities will have to spend about $116 billion by 2010 to construct and upgrade wastewater treatment facilities. ASIWPCA estimated that state and local governments will need to spend another $22.4 billion for other water quality needs. These estimates of needs are low because they do not include many costs associated with new environmental mandates.

For local communities EPA projects that the burden of pollution control will increase dramatically by the year 2000, resulting in substantially higher user fees. EPA estimates that local costs associated with all environmental mandates will reach $32.6 billion (1986 dollars) a year by 2000, almost double the annual expenditures in 1986.[4] As indicated in chapter 3, costs per household to comply with current and new regulations will more than double in the smallest communities between 1987 and 2000. This large increase will affect small communities disproportionately because they generally have lower average incomes and higher unit costs for environmental infrastructure.

Furthermore, according to EPA, many smaller communities will face severe difficulties securing the necessary capital to comply with environmental mandates. As we explained in chapter 3, most small communities lack the economic base to fund large-scale capital projects on their own. In addition, most small communities cannot meet the creditworthiness/affordability criteria for SRF assistance that states establish to protect the financial integrity of their SRFs. At the same time, few resources are available through other federal and state programs to meet the needs of small communities.

States will also face rising costs of environmental protection. EPA estimates that state expenditures will rise from approximately $3 billion a year in 1986 to almost $4.5 billion a year in the year 2000.[5] EPA has increasingly encouraged alternative financing mechanisms to help states

[3] Environmental Investments: The Cost of a Clean Environment, EPA, (Washington, D.C.: Nov. 1990).

[4] Environmental Investments: The Cost of a Clean Environment, pp. 8-49.

[5] Environmental Investments: The Cost of a Clean Environment, pp. 8-47 to 8-50.

finance environmental programs, including public-private partnerships for the provision of environmental services, pollution taxes, and compliance penalties and fines. However, according to a study by the National Governors' Association (NGA), these alternatives will not alone enable states to meet the costs of current regulations.[6] NGA reported that alternative financing mechanisms make up only 14 to 19 percent of states' annual operating budgets for air pollution, water pollution, and hazardous and solid waste control.

In addition to the investment needs associated with environmental mandates, state and local governments are facing other pressing infrastructure needs. In Fragile Foundations: A Report on America's Public Works (Feb. 1988), the National Council on Public Works Improvement reported that national spending on infrastructure overall was inadequate to maintain a stable and growing economy. The Council estimated that the $45 billion spent each year on infrastructure would have to double to $90 billion a year just to meet growth and replacement needs.

Many local governments are unable to raise resources adequate to meet these investment needs and, therefore, the competition for limited resources among infrastructure needs is increasing. Testifying before the Subcommittee on Water Resources, House Committee on Public Works and Transportation, on his experiences with the SRF program, the Mayor of New Bedford, Massachusetts, said that communities are committed to providing clean water but are faced with growing competition for limited resources. He maintained that communities like New Bedford cannot support enough debt to do all that they need to do. They are faced with huge investment needs in many areas, including providing adequate health care, reducing homelessness and crime, and rebuilding deteriorating bridges and streets.[7]

Developing a Comprehensive Strategy

The extent and complexity of the finance issues associated with meeting Clean Water Act requirements call for coordinated efforts of EPA, other federal agencies, and state and local governments to find solutions. Alternative financing mechanisms, for example, cannot be implemented in isolation from a review of how fiscal policy affects infrastructure investment. For example, as we discuss in chapter 3, fiscal policy has

[6] Funding Environmental Programs: An Examination of Alternatives, NGA, Natural Resources Policy Studies Unit (Washington, D.C.: 1989).

[7] Testimony of Mayor John K. Bullard, April 17, 1991, before the Subcommittee on Water Resources, House Committee on Public Works and Transportation.

important impacts on the ability of states to leverage funds for their SRFs.

Part of the solution lies in identifying opportunities to increase resources to state and local governments. This involves examining a range of options, such as (1) identifying ways to expand the use of alternative financing mechanisms, including fees and taxes; (2) investigating the establishment of a national or state trust fund to be capitalized by a charge added to sewer bills; (3) providing tax incentives for private investment in wastewater treatment plants; (4) assessing the need for targeted grants and technical assistance to the most disadvantaged communities; and (5) developing regional authorities or cooperative agreements between rural authorities to help small local governments meet their wastewater treatment needs more efficiently.

In addition, coordination among the various agencies that provide financial assistance to state and local governments could result in more effective targeting of resources. For example, some states have helped small communities that could not afford SRF loans to secure grants or grant/loan combinations from agencies such as the Department of Agriculture and the Department of Housing and Urban Development.

To comprehensively examine the financing issues facing state and local governments in the provision of environmental services, EPA helped to establish the Environmental Financial Advisory Board (EFAB) in October 1989 as an independent adviser to the Administrator. EFAB members include Members of Congress; federal, state, and local officials; representatives from academia and associations; and experts in the business, banking, and financial communities. Four working groups have addressed issues in the following areas: (1) incentives to the private sector; (2) small community financing strategies; (3) public sector financing options, such as SRFs and trust funds; and (4) economic incentives, including impacts of fiscal policy.

While this work is commendable, it falls short of a needed long-term strategy to meet wastewater treatment and other environmental investment needs. EPA can use EFAB's analysis to move forward on such a strategy. Such an effort would involve working with the Department of the Treasury, which decided not to participate in the work of EFAB, to evaluate the need for revising fiscal policy to promote investment in wastewater infrastructure.

Conclusions

The ability of state and local governments to meet environmental infrastructure needs has declined with changes in fiscal policy and increasing costs of environmental mandates. We believe that under present policies the gap between needs and available resources will continue to grow.

EFAB has analyzed many of the broader financing issues affecting environmental infrastructure investment and the options available, including the problems facing small communities. This analysis can serve as a starting point for developing a long-term strategy to deal with the financing problems associated with Clean Water Act compliance.

Recommendation to the Administrator, EPA

We recommend to the Administrator that EPA use the analysis of the EFAB working groups as a starting point for developing a long-term strategy to help state and local governments close the gap between needs and available resources to meet water quality goals set forth in the Clean Water Act. In particular, we recommend that the Administrator develop a plan to help small communities meet their wastewater treatment needs.

Agency Comments and GAO's Evaluation

EPA stated that it is working to close the funding gap between needs and available resources by providing a range of technical assistance, educational, and outreach programs. In addition, it plans to implement several EFAB proposals in such areas as small community financing of environmental infrastructure, implementation of appropriate fee systems for wastewater treatment, and expansion of public/private partnerships. While we support EPA's efforts, we believe that, given the tremendous funding gap that exists, EPA needs to develop specific strategies to deal with funding problems over the long term. This would involve establishing goals and estimating how particular programs would contribute to meeting them, setting timetables for meeting goals, and coordinating efforts within EPA and with other federal agencies to close the gap between resources and needs.

EPA's 1988 Design Year Needs That States Expect to Meet Through the SRF Over the Next 5 and 10 Years

Dollars in millions

State	EPA's design year needs	Needs that states expect to meet			
		5 years		10 years	
		Percent	Dollars	Percent	Dollars
Alabama	$781	28	$219	39	$305
Alaska	221	10	22	15	33
Arizona	979	10	98	25	245
Arkansas	370	50	185	75	278
California	6,539	8	523	10	654
Colorado	196	63	123	68	133
Delaware	127	33	42	66	84
Florida	6,186	6	371	10	619
Georgia	1,007	13	131	17	171
Hawaii	413	7	29	14	58
Idaho	124	32	40	53	66
Indiana	1,721	30	516	100	1,721
Iowa	646	30	194	50	323
Kansas	720	13	94	15	108
Kentucky	1,457	2	29	10	146
Louisiana	1,189	15	178	25	297
Maine	341	25	85	31	106
Massachusetts	5,836	10	584	12	700
Michigan	3,321	20	664	30	996
Mississippi	548	20	110	25	137
Missouri	1,222	35	428	60	733
Montana	69	33	23	43	30
Nebraska	114	40	46	50	57
Nevada	165	25	41	40	66
New Hampshire	854	25	214	50	427
New Jersey	3,754	18	676	23	863
New Mexico	130	42	55	59	77
New York	12,721	26	3,307	37	4,707
N. Carolina	1,799	7	126	10	180
N. Dakota	34	100	34	100	34
Ohio	3,579	9	322	17	608
Oklahoma	476	55	262	55	262
Oregon	1,273	15	191	20	255
Pennsylvania	1,644	9	148	15	247
S. Carolina	684	19	130	25	171
S. Dakota	87	22	19	37	32
Tennessee	1,467	10	147	15	220

(continued)

State	EPA's design year needs	Needs that states expect to meet: 5 years Percent	5 years Dollars	10 years Percent	10 years Dollars
Texas	4,975	90	4,478	100	4,975
Utah	583	10	58	20	117
Vermont	209	50	105	70	146
Virginia	957	20	191	50	479
Washington	2,685	4	107	6	161
W. Virginia	976	10	98	15	146
Wisconsin	1,399	50	700	75	1,049
Wyoming	18	100	18	100	18
Total	**$74,596**		**$16,158**		**$23,238**
Percentage of design year needs that states expect to meet:			21.7%		31.2%

Note: EPA defines design year needs as the investment necessary to provide adequate wastewater treatment systems for the 1988 population, as adjusted for population growth and migration for the next 20 years.

Note: Five states and Puerto Rico did not respond to this survey question.

Source: EPA's 1988 Needs Survey Report to Congress and state responses to GAO's survey.

Summary of State Responses to Key Survey Questions

Incentives Offered to Communities to Encourage Participation in SRF

1. Does your state offer incentives to certain communities to encourage their participation in the SRF?[a]

   26 Yes
   25 No

2. Does your state offer incentives to communities whose participation will improve the credit rating of the SRF?

   8 Yes
   18 No

3. Does your state offer incentives, such as lower interest rates, to help disadvantaged communities qualify for loan assistance?

   19 Yes
   7 No

State Views on Administrative Costs

4. Does your state presently pay more, less, or about the same amount in administrative costs under the SRF Program as it paid under the Construction Grants Program?

   20 More
   14 About the same
   12 Less
   2 Other
   3 Don't know/Can't say

5. Do you favor or oppose the use of some portion of the SRF to pay administrative costs after the capitalization grants end in 1994?

   41 Favor
   3 Oppose
   4 Uncertain
   3 Other

6. After 1994, do you plan to recover administrative costs through fees to recipients of loan assistance?

   39 Yes
   5 No
   7 Uncertain

State Views on Continuation of EPA Oversight After 1994

7. In your opinion, should the following federal requirements be continued after the capitalization grants end in 1994?

   Annual report
   21 Yes
   30 No

   Annual EPA review
   10 Yes
   41 No

   Annual audits
   17 Yes
   34 No

[a]Only states that responded "yes" to this question were asked the next two questions.

State Views on Statutory Issues

8. Federal requirements allow SRF assistance only for publicly owned wastewater treatment plants. Should investor-owned wastewater treatment plants be allowed to use the SRF or be prohibited from using the SRF, or do you have some other opinion?

10	Allow investor-owned plants to use SRF
27	Prohibit investor-owned plants from using SRF
8	Other opinion
6	Don't know/Can't say

9. In your opinion, should the maximum loan term remain at 20 years, be extended to 25 years, or be extended to 30 years, or do you prefer some other alternative?

24	Remain at 20 years
1	Extend to 25 years
6	Extend to 30 years
20	Other[b]
0	Don't know/Can't say

10. Federal requirements prohibit the use of SRFs for purchasing land that is not integral to the treatment process, even though it may be needed for the facility. Do you think that the cost of land should or should not be eligible for SRF assistance, or are you uncertain?

42	Yes, eligible cost
3	No, not eligible
4	Uncertain
2	Other

State Views on SRF Assistance for Disadvantaged Communities

11. In your state, are disadvantaged communities—defined as those that would have difficulty repaying an SRF loan—the smaller communities, the large metropolitan areas, or both?

40	Smaller communities
1	Large metropolitan areas
7	Both
3	Other

12. Have any disadvantaged communities received loan assistance through your SRF to meet wastewater treatment plant needs?

24	Yes
23	No
2	Other
2	Don't know/Can't say

13. Do you think your SRF can generally meet the needs of the disadvantaged communities in your state?

2	Definitely yes
9	Probably yes
5	Uncertain
20	Probably not
14	Definitely not
1	Other

[b]States responding "other" favored extending the loan term beyond 20 years with various conditions on the extension, such as limiting the longer term to the design life of the project.

State Assistance Programs Other Than the SRF

14. Does your state currently operate any state programs, other than the SRF, that can be used to finance water pollution control projects in disadvantaged communities?

37 Yes
14 No

15. Does your state offer loan programs, grant programs, or a combination of both?[c]

22 Grant
14 Loan
19 Combination grant and loan

State Views on Leveraging

16. Does your state leverage the SRF to increase funds available?

11 Yes
40 No

17. Does your state plan to leverage the SRF after the capitalization grants end in 1994?[d]

11 Definitely yes
13 Probably yes
17 Uncertain
6 Probably not
4 Definitely not

State Views on Impacts of the 1986 Tax Reform Act

18. The Tax Reform Act of 1986 included several provisions that may affect SRFs, depending on how the program operates. Indicate for each provision whether it currently affects your SRF.

Limits on earnings from arbitrage[e]

26 Yes
22 No
3 Uncertain

Limits on the amount of tax-exempt private activity bonds that can be issued

5 Yes
35 No
11 Uncertain

Limits on issuance of blind pool bonds[f]

11 Yes
34 No
6 Uncertain

State Views on Additional State Appropriations to SRF After Federal Grants End

19. Does your state plan to appropriate money to capitalize the fund after federal capitalization grants end in 1994?

2 Definitely yes
7 Probably yes
16 Uncertain
18 Probably not
8 Definitely not

[c]Total will not add to 51 because some states offer more than one type of assistance program.

[d]All states were asked this question, even those that were leveraging. Of the 11 states that are leveraging, all but 2 indicated that they would probably or definitely continue to leverage after 1994: Colorado noted "uncertain" and Iowa noted "probably not."

[e]Arbitrage provisions limit the amount of interest that a state can earn on the proceeds of tax-exempt bonds to a rate that does not exceed by more than 0.125 percent the rate at which the bonds were issued.

[f]Limits on blind pool bond issuance include limitations on earnings from arbitrage and the requirement that 95 percent of the proceeds be loaned within 3 years.

20. Do you think that your capitalization grant and state matching funds will be sufficient without additional state funds or assistance from state programs?[g]

4 Yes
22 No

State Views on Use of SRF to Provide Estuary and Nonpoint Assistance

21. Does your state plan to provide loan assistance from the SRF for estuary protection in the next 5 years.[h]

2 Very likely
2 Moderately likely
3 Somewhat likely
7 Not very likely

22. How likely is it that your state will provide SRF assistance for nonpoint projects over the next five years?

8 Very likely
8 Moderately likely
14 Somewhat likely
21 Not very likely

State Views on Potential Barriers to Use of SRF for Estuary and Nonpoint Projects

23. We are interested in barriers to using SRFs for projects other than wastewater treatment plant construction, that is, for nonpoint and estuary projects. How much impact, if any, do the following issues have on funding nonpoint and estuary projects?

SRFs must meet large needs for wastewater treatment.

20 No impact
7 Hinders somewhat
22 Strongly hinders
2 Uncertain

It is difficult to use loan assistance to finance projects that do not involve construction.

22 No impact
10 Hinders somewhat
14 Strongly hinders
5 Uncertain

[g]Only states that responded "probably not" and "definitely not" in the previous question were asked this question.

[h]Only the 14 states in the National Estuary Program are eligible to use the SRF for estuary projects.

Individual State Responses to Key Survey Questions

Table III.1: Incentives Offered to Communities to Encourage Participation in SRF

State	States that offer incentives	States offer incentives to	
		Improve credit rating	Help disadvantaged communities
Alabama	Yes	Yes	No
Alaska	No		
Arizona	No		
Arkansas	No		
California	No		
Colorado	Yes	No	Yes
Connecticut	No		
Delaware	Yes	Yes	Yes
Florida	No		
Georgia	No		
Hawaii	No		
Idaho	No		
Illinois	No		
Indiana	Yes	No	Yes
Iowa	No		
Kansas	Yes	Yes	No
Kentucky	Yes	No	Yes
Louisiana	No		
Maine	No		
Maryland	Yes	Yes	Yes
Massachusetts	No		
Michigan	Yes	No	No
Minnesota	Yes	Yes	Yes
Mississippi	No		
Missouri	Yes	No	Yes
Montana	Yes	No	Yes
Nebraska	Yes	Yes	Yes
Nevada	No		
New Hampshire	Yes	Yes	No
New Jersey	No		
New Mexico	No		
New York	Yes	No	Yes
N. Carolina	No		
N. Dakota	No		
Ohio	Yes	No	Yes
Oklahoma	Yes	No	No
Oregon	No		
Pennsylvania	Yes	No	No

(continued)

State	States that offer incentives	States offer incentives to	
		Improve credit rating	Help disadvantaged communities
Puerto Rico	No		
Rhode Island	Yes	Yes	Yes
S. Carolina	Yes	No	Yes
S. Dakota	No		
Tennessee	Yes	No	Yes
Texas	Yes	No	Yes
Utah	Yes	No	Yes
Vermont	Yes	No	No
Virginia	Yes	No	Yes
Washington	Yes	No	Yes
W. Virginia	No		
Wisconsin	Yes	No	Yes
Wyoming	No		

Table III.2: State Views on Administrative Costs

State	Costs of operating SRF compared to Construction Grants Program	Opinions on use of SRF to pay costs after 1994	Plan to charge fees to help pay costs
Alabama	Same	Other	Yes
Alaska	Less	Favor	No
Arizona	Same	Favor	Yes
Arkansas	More	Favor	Yes
California	Less	Uncertain	Yes
Colorado	More	Favor	Yes
Connecticut	More	Oppose	Yes
Delaware	Same	Favor	No
Florida	Less	Favor	Yes
Georgia	Less	Favor	Yes
Hawaii	Same	Favor	Yes
Idaho	More	Favor	No
Illinois	Same	Favor	Uncertain
Indiana	More	Favor	Yes
Iowa	Same	Uncertain	Yes
Kansas	More	Favor	Yes
Kentucky	Less	Favor	Yes
Louisiana	More	Favor	Yes
Maine	Less	Favor	Yes
Maryland	Less	Other	Yes
Massachusetts	More	Oppose	Uncertain
Michigan	More	Favor	Yes
Minnesota	Same	Favor	Yes
Mississippi	More	Favor	Yes
Missouri	Same	Favor	Yes
Montana	More	Favor	Yes
Nebraska	More	Other	Yes
Nevada	More	Favor	Yes
New Hampshire	Less	Favor	Yes
New Jersey	More	Favor	Yes
New Mexico	Same	Favor	Yes
New York	Less	Favor	Yes
N. Carolina	Same	Favor	Yes
N. Dakota	Other	Uncertain	Yes
Ohio	Less	Oppose	Yes
Oklahoma	Same	Favor	Yes
Oregon	Don't know	Favor	Yes
Pennsylvania	Same	Favor	Uncertain

(continued)

State	Costs of operating SRF compared to Construction Grants Program	Opinions on use of SRF to pay costs after 1994	Plan to charge fees to help pay costs
Puerto Rico	Don't know	Favor	Uncertain
Rhode Island	Don't know	Favor	Yes
S. Carolina	More	Favor	Yes
S. Dakota	More	Favor	Yes
Tennessee	More	Favor	Yes
Texas	More	Favor	No
Utah	Same	Favor	Yes
Vermont	Same	Favor	Uncertain
Virginia	More	Favor	Uncertain
Washington	Less	Favor	No
W. Virginia	Less	Favor	Yes
Wisconsin	More	Uncertain	Uncertain
Wyoming	Other	Favor	Yes

Table III.3: State Views on Continuation of EPA Oversight After 1994

State	Annual report	Annual review	Annual audit
Alabama	Yes	No	Yes
Alaska	No	No	No
Arizona	Yes	Yes	Yes
Arkansas	No	No	No
California	No	No	No
Colorado	No	No	No
Connecticut	No	No	No
Delaware	Yes	Yes	Yes
Florida	Yes	No	No
Georgia	Yes	Yes	Yes
Hawaii	Yes	No	Yes
Idaho	Yes	Yes	Yes
Illinois	No	No	No
Indiana	Yes	Yes	Yes
Iowa	No	Yes	No
Kansas	Yes	No	Yes
Kentucky	No	No	No
Louisiana	Yes	No	No
Maine	Yes	Yes	Yes
Maryland	Yes	No	No
Massachusetts	No	No	No
Michigan	No	No	No
Minnesota	No	No	Yes
Mississippi	No	No	Yes
Missouri	No	No	No
Montana	No	No	No
Nebraska	Yes	Yes	Yes
Nevada	No	No	No
New Hampshire	No	No	Yes
New Jersey	No	No	No
New Mexico	No	No	No
New York	No	No	No
N. Carolina	Yes	No	No
N. Dakota	No	No	No
Ohio	No	No	Yes
Oklahoma	Yes	Yes	No
Oregon	Yes	Yes	Yes
Pennsylvania	Yes	No	No
Puerto Rico	No	No	No
Rhode Island	Yes	No	No

(continued)

State	Annual report	Annual review	Annual audit
S. Carolina	Yes	No	No
S. Dakota	No	No	No
Tennessee	No	No	No
Texas	No	No	No
Utah	No	No	No
Vermont	Yes	No	No
Virginia	Yes	No	Yes
Washington	No	No	No
W. Virginia	No	No	No
Wisconsin	No	No	No
Wyoming	No	No	Yes

Table III.4: State Views on Statutory Issues

State	Offering SRF assistance to investor-owned facilities	Preferred maximum length of loan term[a]	Eligibility of all necessary land for SRF assistance
Alabama	Prohibit	20 years	Yes
Alaska	Prohibit	20 years	Other
Arizona	Allow	30 years	Yes
Arkansas	Prohibit	Other	Yes
California	Don't know	20 years	Uncertain
Colorado	Prohibit	Other	Yes
Connecticut	Other	Other	Yes
Delaware	Prohibit	Other	No
Florida	Prohibit	20 years	Yes
Georgia	Allow	20 years	Yes
Hawaii	Allow	20 years	Uncertain
Idaho	Allow	30 years	Yes
Illinois	Prohibit	Other	Yes
Indiana	Allow	Other	Yes
Iowa	Don't know	20 years	Yes
Kansas	Prohibit	20 years	Yes
Kentucky	Allow	20 years	Yes
Louisiana	Prohibit	20 years	Yes
Maine	Prohibit	20 years	Other
Maryland	Other	25 years	Yes
Massachusetts	Other	Other	No
Michigan	Prohibit	Other	Yes
Minnesota	Other	Other	Yes
Mississippi	Prohibit	20 years	Yes
Missouri	Prohibit	20 years	Uncertain
Montana	Prohibit	Other	Yes
Nebraska	Prohibit	20 years	Yes
Nevada	Allow	20 years	Yes
New Hampshire	Prohibit	30 years	Yes
New Jersey	Prohibit	Other	Yes
New Mexico	Prohibit	30 years	Yes
New York	Other	Other	Yes
N. Carolina	Prohibit	20 years	Yes
N. Dakota	Don't know	20 years	Yes
Ohio	Don't know	Other	Yes
Oklahoma	Don't know	20 years	Yes
Oregon	Allow	20 years	Yes
Pennsylvania	Allow	Other	Yes

(continued)

State	Offering SRF assistance to investor-owned facilities	Preferred maximum length of loan term[a]	Eligibility of all necessary land for SRF assistance
Puerto Rico	Prohibit	Other	Yes
Rhode Island	Allow	30 years	Yes
S. Carolina	Prohibit	20 years	Yes
S. Dakota	Prohibit	20 years	Yes
Tennessee	Other	20 years	Yes
Texas	Prohibit	Other	Yes
Utah	Prohibit	Other	Yes
Vermont	Other	20 years	Yes
Virginia	Other	Other	No
Washington	Don't know	Other	Yes
W. Virginia	Prohibit	Other	Yes
Wisconsin	Prohibit	20 years	Yes
Wyoming	Prohibit	30 years	Uncertain

[a]States responding "other" favored extending the loan term beyond 20 years with various conditions on the extension such as limiting longer terms to the design life of the project.

Table III.5: State Views on SRF Assistance for Disadvantaged Communities

State	What communities are disadvantaged	Provided SRF assistance to disadvantaged communities	Will the SRF meet the needs of disadvantaged communities
Alabama	Smaller	Yes	Probably not
Alaska	Smaller	No	Definitely not
Arizona	Smaller	No	Definitely not
Arkansas	Smaller	No	Definitely not
California	Smaller	No	Definitely not
Colorado	Smaller	No	Probably not
Connecticut	Large	Yes	Probably yes
Delaware	Smaller	No	Uncertain
Florida	Smaller	No	Definitely not
Georgia	Smaller	No	Probably not
Hawaii	Other	No	Definitely yes
Idaho	Smaller	Yes	Probably not
Illinois	Both	No	Probably not
Indiana	Both	No	Probably yes
Iowa	Smaller	Yes	Probably not
Kansas	Smaller	Yes	Probably yes
Kentucky	Smaller	Yes	Definitely not
Louisiana	Smaller	Yes	Definitely not
Maine	Smaller	Other	Definitely not
Maryland	Smaller	Yes	Uncertain
Massachusetts	Both	Don't know	Definitely yes
Michigan	Smaller	Yes	Probably not
Minnesota	Smaller	Yes	Probably not
Mississippi	Smaller	Yes	Probably yes
Missouri	Smaller	No	Definitely not
Montana	Smaller	No	Definitely not
Nebraska	Smaller	Yes	Probably not
Nevada	Smaller	No	Probably yes
New Hampshire	Both	No	Probably yes
New Jersey	Both	No	Probably yes
New Mexico	Smaller	Yes	Probably yes
New York	Smaller	Yes	Other
N. Carolina	Smaller	No	Definitely not
N. Dakota	Smaller	No	Probably not
Ohio	Smaller	Yes	Definitely not
Oklahoma	Smaller	No	Probably not
Oregon	Smaller	Yes	Definitely not

(continued)

State	What communities are disadvantaged	Provided SRF assistance to disadvantaged communities	Will the SRF meet the needs of disadvantaged communities
Pennsylvania	Both	Yes	Probably not
Puerto Rico	Other	Other	Uncertain
Rhode Island	Other	No	Probably not
S. Carolina	Smaller	Yes	Uncertain
S. Dakota	Smaller	No	Probably not
Tennessee	Smaller	Yes	Probably not
Texas	Smaller	Yes	Definitely not
Utah	Smaller	Yes	Probably not
Vermont	Smaller	Don't know	Probably not
Virginia	Smaller	Yes	Probably not
Washington	Both	Yes	Probably not
W. Virginia	Smaller	Yes	Probably not
Wisconsin	Smaller	No	Uncertain
Wyoming	Smaller	No	Probably yes

Table III.6: State Assistance Programs Other Than the SRF

State	Have other programs	Type of program - grant (G), loan (L), combination (C)
Alabama	No	
Alaska	Yes	G,L
Arizona	No	
Arkansas	Yes	C
California	Yes	G
Colorado	Yes	G,C
Connecticut	Yes	G
Delaware	No	
Florida	Yes	G,L
Georgia	Yes	G,L
Hawaii	Yes	C
Idaho	Yes	G
Illinois	Yes	G,C
Indiana	No	
Iowa	No	
Kansas	No	
Kentucky	Yes	L,C
Louisiana	No	
Maine	Yes	G
Maryland	Yes	G
Massachusetts	Yes	L
Michigan	No	
Minnesota	Yes	G,C
Mississippi	No	
Missouri	Yes	G
Montana	Yes	C
Nebraska	No	
Nevada	No	
New Hampshire	Yes	G
New Jersey	Yes	L,C
New Mexico	Yes	G
New York	No	
N. Carolina	Yes	C
N. Dakota	No	
Ohio	Yes	L,C
Oklahoma	Yes	C
Oregon	Yes	L,C
Pennsylvania	Yes	G,C

(continued)

State	Have other programs	Type of program - grant (G), loan (L), combination (C)
Puerto Rico	No	
Rhode Island	Yes	G,C
S. Carolina	Yes	G
S. Dakota	Yes	C
Tennessee	Yes	G,L,C
Texas	Yes	L
Utah	Yes	L,C
Vermont	Yes	L
Virginia	Yes	G
Washington	Yes	L,C
W. Virginia	Yes	G
Wisconsin	Yes	G,C
Wyoming	Yes	G,L

Table III.7: State Views on Leveraging

State	States leveraging SRF	States that plan to leverage after 1994
Alabama	Yes	Definitely yes
Alaska	No	Probably not
Arizona	Yes	Probably yes
Arkansas	Yes	Definitely yes
California	No	Uncertain
Colorado	Yes	Uncertain
Connecticut	Yes	Definitely yes
Delaware	No	Uncertain
Florida	No	Definitely not
Georgia	No	Probably not
Hawaii	No	Definitely yes
Idaho	No	Uncertain
Illinois	No	Uncertain
Indiana	No	Probably not
Iowa	Yes	Probably not
Kansas	No	Uncertain
Kentucky	No	Uncertain
Louisiana	No	Probably yes
Maine	No	Definitely not
Maryland	Yes	Definitely yes
Massachusetts	No	Uncertain
Michigan	No	Probably yes
Minnesota	Yes	Definitely yes
Mississippi	No	Probably yes
Missouri	Yes	Probably yes
Montana	No	Uncertain
Nebraska	No	Uncertain
Nevada	No	Uncertain
New Hampshire	No	Uncertain
New Jersey	Yes	Probably yes
New Mexico	No	Uncertain
New York	Yes	Definitely yes
N. Carolina	No	Uncertain
N. Dakota	No	Probably not
Ohio	No	Definitely yes
Oklahoma	No	Probably yes
Oregon	No	Uncertain
Pennsylvania	No	Probably yes
Puerto Rico	No	Uncertain

(continued)

State	States leveraging SRF	States that plan to leverage after 1994
Rhode Island	No	Definitely yes
S. Carolina	No	Probably yes
S. Dakota	No	Probably yes
Tennessee	No	Definitely yes
Texas	No	Definitely not
Utah	No	Probably yes
Vermont	No	Probably yes
Virginia	No	Probably yes
Washington	No	Uncertain
W. Virginia	No	Definitely not
Wisconsin	No	Definitely yes
Wyoming	No	Probably not

Table III.8: State Views on Impacts of 1986 Tax Reform Act Provisions on SRFs

State	Arbitrage	Limits on tax-exempt debt	Limits on blind pool issues
Alabama	Yes	Uncertain	Yes
Alaska	No	No	No
Arizona	Yes	Uncertain	Yes
Arkansas	No	No	Yes
California	No	No	No
Colorado	No	Yes	No
Connecticut	Yes	Yes	Yes
Delaware	Uncertain	Uncertain	Uncertain
Florida	Yes	No	No
Georgia	Yes	No	No
Hawaii	Yes	No	Uncertain
Idaho	No	No	No
Illinois	No	No	No
Indiana	No	Uncertain	Uncertain
Iowa	Yes	No	Uncertain
Kansas	Yes	No	Yes
Kentucky	Yes	No	No
Louisiana	Yes	Uncertain	No
Maine	Yes	No	Yes
Maryland	Yes	No	Yes
Massachusetts	Yes	Uncertain	No
Michigan	No	No	No
Minnesota	Yes	No	No
Mississippi	Uncertain	Uncertain	No
Missouri	Yes	Uncertain	No
Montana	Yes	No	Yes
Nebraska	Yes	No	No
Nevada	No	No	No
New Hampshire	No	No	No
New Jersey	Yes	No	No
New Mexico	Yes	No	No
New York	Yes	No	No
N. Carolina	No	No	No
N. Dakota	No	No	No
Ohio	Yes	Yes	Yes
Oklahoma	No	No	No
Oregon	Yes	No	No
Pennsylvania	No	No	No
Puerto Rico	Uncertain	Uncertain	Uncertain

(continued)

State	Arbitrage	Limits on tax-exempt debt	Limits on blind pool issues
Rhode Island	Yes	Yes	No
S. Carolina	No	No	No
S. Dakota	Yes	No	Yes
Tennessee	No	No	No
Texas	Yes	No	Yes
Utah	Yes	No	No
Vermont	No	No	No
Virginia	No	Uncertain	No
Washington	No	Uncertain	Uncertain
W. Virginia	No	No	No
Wisconsin	No	Yes	No
Wyoming	No	No	No

Table III.9: State Views on Additional State Appropriations to SRF After Federal Grants End

State	Likelihood of additional state appropriations	If no additional appropriations, is the SRF sufficient to meet needs?
Alabama	Definitely not	Yes
Alaska	Probably not	No
Arizona	Probably not	No
Arkansas	Definitely not	No
California	Uncertain	
Colorado	Probably not	No
Connecticut	Definitely yes	
Delaware	Probably yes	
Florida	Probably not	No
Georgia	Probably not	No
Hawaii	Uncertain	
Idaho	Probably yes	
Illinois	Uncertain	
Indiana	Uncertain	
Iowa	Definitely not	No
Kansas	Definitely not	No
Kentucky	Probably not	No
Louisiana	Probably not	No
Maine	Probably yes	
Maryland	Uncertain	
Massachusetts	Uncertain	
Michigan	Probably yes	
Minnesota	Probably not	No
Mississippi	Probably not	Yes
Missouri	Uncertain	
Montana	Uncertain	
Nebraska	Definitely not	No
Nevada	Probably not	No
New Hampshire	Uncertain	
New Jersey	Probably not	No
New Mexico	Probably yes	
New York	Probably not	No
N. Carolina	Uncertain	
N. Dakota	Definitely not	Yes
Ohio	Probably not	No
Oklahoma	Probably not	No
Oregon	Definitely not	No
Pennsylvania	Uncertain	

(continued)

State	Likelihood of additional state appropriations	If no additional appropriations, is the SRF sufficient to meet needs?
Puerto Rico	Uncertain	
Rhode Island	Probably yes	
S. Carolina	Probably not	No
S. Dakota	Uncertain	
Tennessee	Probably yes	
Texas	Definitely not	No
Utah	Uncertain	
Vermont	Uncertain	
Virginia	Uncertain	
Washington	Probably not	No
W. Virginia	Probably not	No
Wisconsin	Definitely yes	
Wyoming	Probably not	Yes

Table III.10: State Views on Use of SRF to Provide Estuary and Nonpoint Assistance

State	Likelihood of SRF assistance for Estuary projects[a]	Likelihood of SRF assistance for Nonpoint projects
Alabama		Not very likely
Alaska		Not very likely
Arizona		Somewhat likely
Arkansas		Not very likely
California	Not very likely	Very likely
Colorado		Somewhat likely
Connecticut	Very likely	Not very likely
Delaware	Somewhat likely	Moderately likely
Florida	Moderately likely	Moderately likely
Georgia		Somewhat likely
Hawaii		Very likely
Idaho		Not very likely
Illinois		Not very likely
Indiana		Not very likely
Iowa		Not very likely
Kansas		Not very likely
Kentucky		Somewhat likely
Louisiana		Somewhat likely
Maine	Not very likely	Not very likely
Maryland		Very likely
Massachusetts	Not very likely	Not very likely
Michigan		Moderately likely
Minnesota		Somewhat likely
Mississippi		Somewhat likely
Missouri		Moderately likely
Montana		Somewhat likely
Nebraska		Not very likely
Nevada		Moderately likely
New Hampshire		Not very likely
New Jersey	Moderately likely	Not very likely
New Mexico		Not very likely
New York	Somewhat likely	Somewhat likely
N. Carolina	Not very likely	Not very likely
N. Dakota		Very likely
Ohio		Moderately likely
Oklahoma		Somewhat likely
Oregon		Not very likely
Pennsylvania	Somewhat likely	Very likely
Puerto Rico		Somewhat likely

(continued)

State	Likelihood of SRF assistance for	
	Estuary projects[a]	Nonpoint projects
Rhode Island	Not very likely	Not very likely
S. Carolina		Somewhat likely
S. Dakota		Not very likely
Tennessee		Somewhat likely
Texas	Not very likely	Moderately likely
Utah		Moderately likely
Vermont		Not very likely
Virginia		Somewhat likely
Washington	Very likely	Very likely
W. Virginia		Not very likely
Wisconsin		Very likely
Wyoming		Very likely

[a]Only states in the National Estuary Program are eligible to use the SRF for estuary projects. For all other states, this question is not applicable.

Table III.11: State Views on Potential Barriers to Use of SRF for Estuary and Nonpoint Projects

State	State has large wastewater treatment needs	Difficult to use SRF for projects not involving facility construction
Alabama	Strongly impacts	Somewhat impacts
Alaska	No impact	No impact
Arizona	Strongly impacts	Strongly impacts
Arkansas	No impact	No impact
California	No impact	No impact
Colorado	Strongly impacts	No impact
Connecticut	Somewhat impacts	Strongly impacts
Delaware	No impact	Somewhat impacts
Florida	Strongly impacts	Strongly impacts
Georgia	Strongly impacts	Somewhat impacts
Hawaii	Strongly impacts	No impact
Idaho	Somewhat impacts	No impact
Illinois	Somewhat impacts	No impact
Indiana	No impact	No impact
Iowa	Strongly impacts	Strongly impacts
Kansas	Strongly impacts	Strongly impacts
Kentucky	No impact	Uncertain
Louisiana	Strongly impacts	No impact
Maine	Strongly impacts	No impact
Maryland	Strongly impacts	No impact
Massachusetts	Strongly impacts	Uncertain
Michigan	No impact	Somewhat impacts
Minnesota	Strongly impacts	Uncertain
Mississippi	No impact	Somewhat impacts
Missouri	No impact	No impact
Montana	No impact	Strongly impacts
Nebraska	No impact	No impact
Nevada	No impact	No impact
New Hampshire	Uncertain	Strongly impacts
New Jersey	Strongly impacts	No impact
New Mexico	Strongly impacts	Strongly impacts
New York	Strongly impacts	Somewhat impacts
N. Carolina	Strongly impacts	Strongly impacts
N. Dakota	Somewhat impacts	Somewhat impacts
Ohio	No impact	Uncertain
Oklahoma	Somewhat impacts	No impact
Oregon	Somewhat impacts	Strongly impacts
Pennsylvania	Strongly impacts	Somewhat impacts

(continued)

State	State has large wastewater treatment needs	Difficult to use SRF for projects not involving facility construction
Puerto Rico	Uncertain	Uncertain
Rhode Island	Strongly impacts	Strongly impacts
S. Carolina	Somewhat impacts	No impact
S. Dakota	No impact	No impact
Tennessee	No impact	No impact
Texas	No impact	Somewhat impacts
Utah	Strongly impacts	Strongly impacts
Vermont	No impact	No impact
Virginia	Strongly impacts	Strongly impacts
Washington	No impact	No impact
W. Virginia	Strongly impacts	Strongly impacts
Wisconsin	No impact	Somewhat impacts
Wyoming	No impact	No impact

EPA's Comments on This Report

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

NOV 26 1991

OFFICE OF
POLICY, PLANNING AND EVALUATION

Mr. Richard Hembra
Director, Environmental Protection Issues
Resources, Community, and Economic Development Division
General Accounting Office
Washington, D.C. 20548

Dear Mr. Hembra:

The Environmental Protection Agency (EPA) has reviewed the General Accounting Office (GAO) draft report entitled "Water Pollution: State Revolving Funds are Insufficient to Meet Wastewater Treatment Needs" (GAO/RCED-92-35). In accordance with Public Law 96-226, I am hereby providing official Agency comments on the draft report. In general, the report describes the State Revolving Fund program accurately. Our comments regarding the report's recommendations follow, and we have attached several technical corrections.

Chapter 2

In Chapter 2, GAO recommends that EPA compare the skills of Regional staff currently managing the SRF program with the mix of skills needed, develop a plan to meet these needs, through training and hiring, and include these needs in the Agency's proposed budget.

EPA supports the concern over ensuring an appropriate skill mix in the Regions. EPA has worked closely with the Regional Offices to define what mix of skills is needed to facilitate implementation of the individual State Revolving Funds, and to promote maintaining a skilled staff in the Regions. EPA has developed and conducted training for Regional and State staff in each of the last three years, and has engaged a contractor to provide additional financial training to the Regions. While the skill mix in some Regions is now adequate, EPA is still concerned that the remaining Regions have sufficiently trained staff to assist States in their financial planning and to provide adequate oversight of State programs. EPA plans to reinforce the guidance that we have given to the Regions, continue to provide EPA and contractor training and to work with the Regions to develop adequate in-house financial expertise.

GAO further recommends that EPA assess the impact of the four percent allowance for administrative costs to determine if, in some cases, States should be allowed to use more of their SRF for administrative costs.

EPA has already assessed the impact of the 4 percent allowance established by statute. In the SRF Report to Congress, EPA found that 28 States expect to have sufficient allowances from their capitalization grants to cover their projected administrative costs for the 1989 to 1994 period. Sixteen States projected shortfalls between their expected administrative expenses and the 4 percent capitalization grant allowance.

Chapter 3

In Chapter 3, GAO recommends that the EPA develop models for States to use in providing more comprehensive estimates of needs, including needs associated with nonpoint source pollution and estuary protection.

EPA agrees that obtaining accurate information on needs is an important step in planning to meet the Nation's water quality goals. To support this focus on ensuring high quality needs information, EPA is currently developing models to generate estimates of needs for combined sewer overflows as well as stormwater and is investigating cost estimating techniques for nonpoint source pollution controls and estuary protection.

Chapter 4

In Chapter 4, GAO recommends that EPA use the analysis and recommendations of the EFAB work groups as a starting point for developing a long-term strategy to help States and local governments close the gap between needs and available resources to meet water quality goals set forth in the Clean Water Act. In particular, GAO recommends that the Administrator develop a plan to help small communities meet their wastewater treatment needs.

EPA's strategy to help State and local governments close the funding gap focuses on five areas. First, EPA is developing options for long-term funding of wastewater treatment programs in the context of Clean Water Act reauthorization. Alternative approaches are being developed on the basis of in-house analyses and proposals as well as recommendations of EPA's independent Environmental Financing Advisory Board (EFAB). EPA will also implement several EFAB recommendations in such areas as regularized estimates of water quality needs, small community financing, the implementation of fee systems, and the expansion of public/private partnerships.

Second, EPA has worked with States to help them develop strong SRF programs. As part of building strong programs, EPA helps States consider the appropriateness of leveraging State programs and encourages States to develop assistance programs for small, economically distressed communities (through offering low interest loans etc.). Third, EPA promotes keeping costs to municipalities at a minimum through good facility maintenance and pollution prevention, and through water conservation. Fourth, EPA works with municipalities in evaluating and implementing innovative, low cost treatment approaches for small communities. Finally, EPA conducts numerous educational and outreach activities to provide State and local governments with information on how to meet their financing needs.

EPA also works closely with other Federal agencies to focus efforts toward assisting States in developing and delivering small community wastewater treatment assistance. We are working with the Extension Service at the U.S. Department of Agriculture to develop a course to train the 16,000 county extension agents to provide assistance to small communities. We are working with the Farmers Home Administration to coordinate priorities in its wastewater grant and loan programs with EPA's small communities outreach and education program. EPA was successful in getting the Department of Housing and Urban Development to make the small community outreach activities eligible costs under their Community Development Block Grant program.

Detailed technical comments are attached. Thank you for the opportunity to respond to the draft report.

Sincerely,

Richard D. Morgenstern
Acting Assistant Administrator

Attachment

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