United States Environmental Protection Agency
Office Of Water (WH-547)
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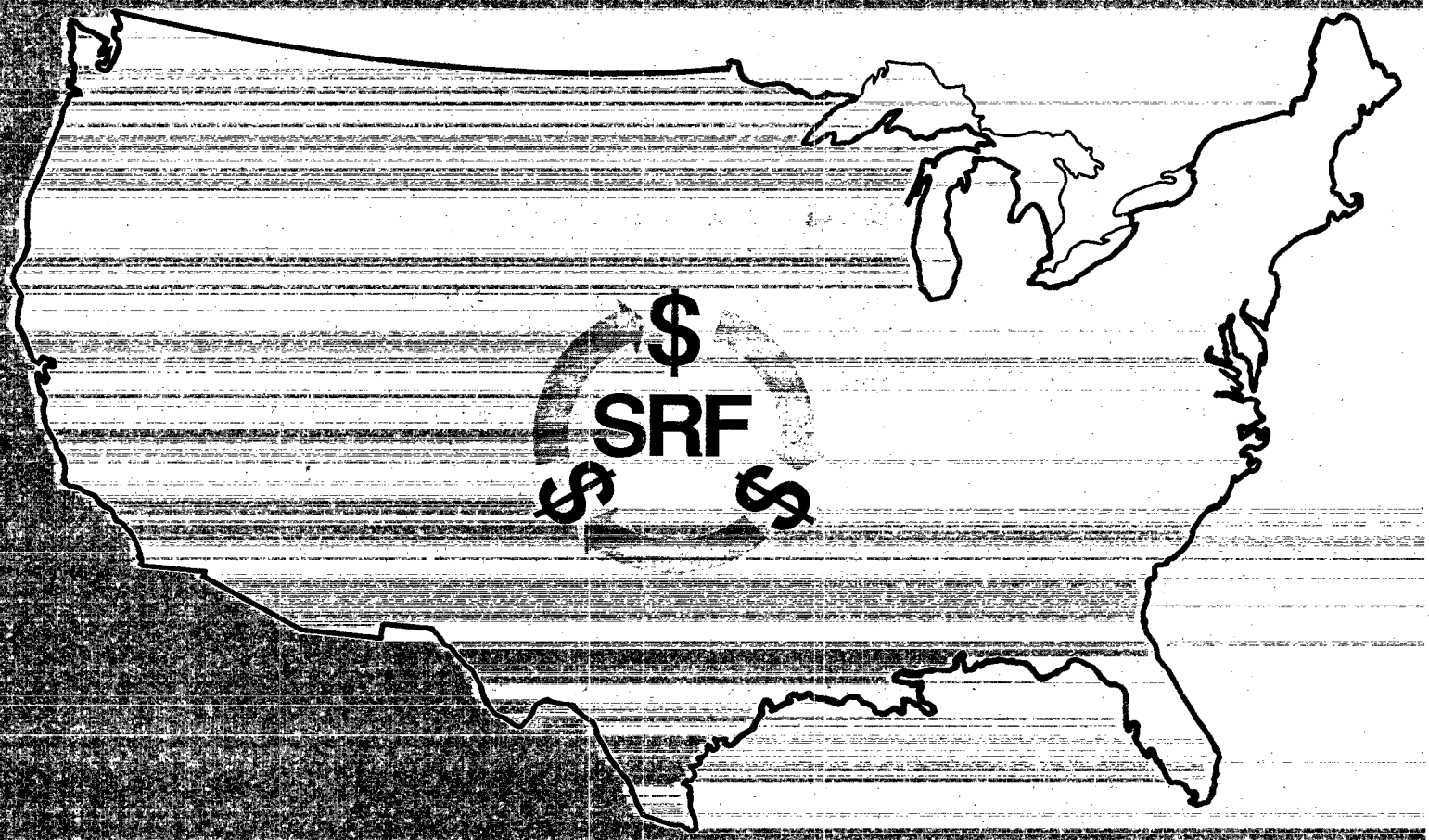
October 1991

EPA

State Revolving Fund

Final Report To Congress



Financial Status And Operations Of Water Pollution Control Revolving Funds

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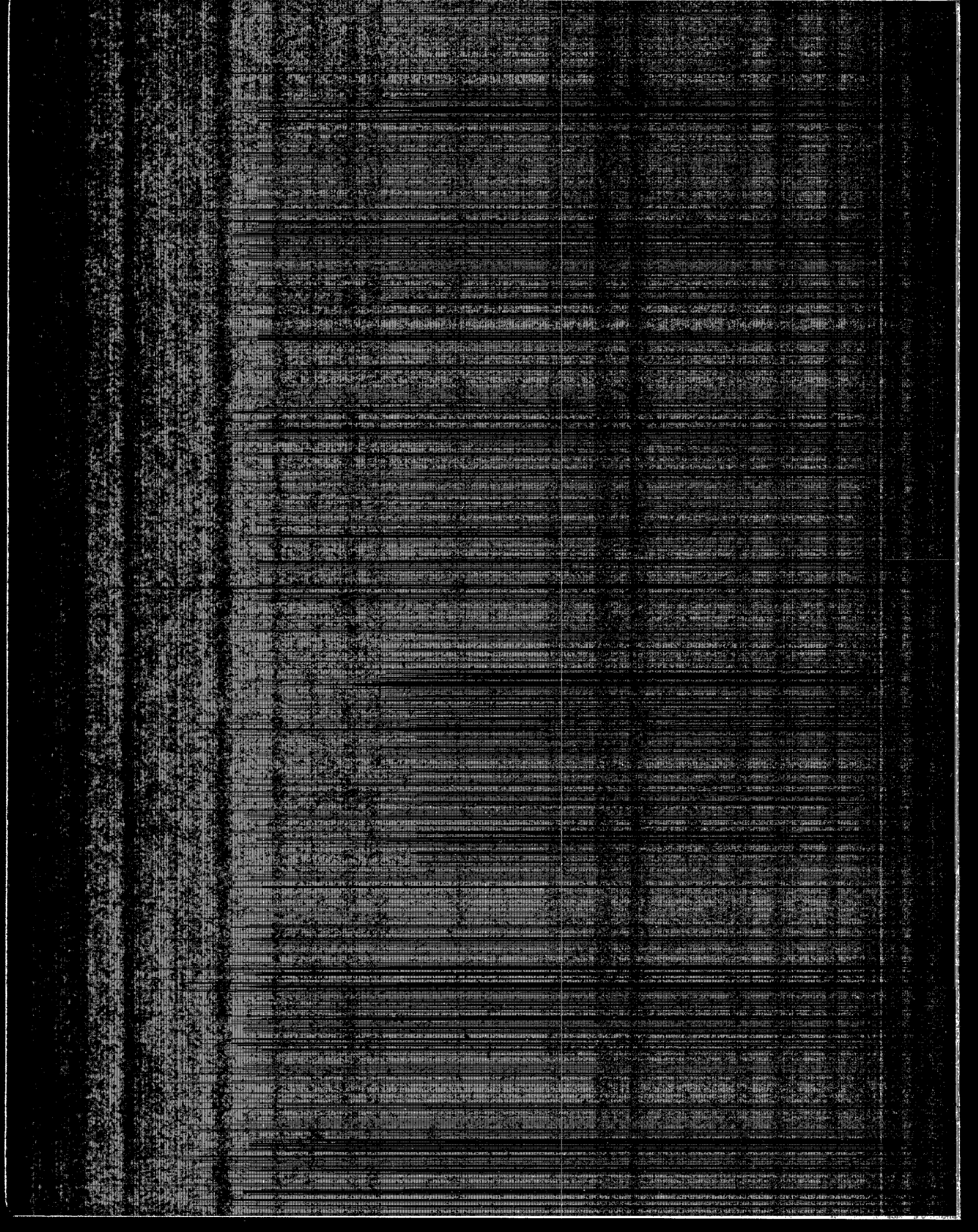

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 02 1991

THE ADMINISTRATOR

Honorable Dan Quayle
President of the Senate
Washington, D.C. 20510

Dear Mr. President:

Enclosed is the "State Revolving Fund (SRF) Final Report to Congress." The Environmental Protection Agency (EPA) prepared this Report in cooperation with the States and water pollution control planning and financing agencies as required by Section 516(g) of the Clean Water Act (CWA).

The SRF Final Report addresses the financial status and operations of water pollution control revolving funds established by the States under Title VI of the CWA. It incorporates information provided to EPA by 47 of the 51 existing SRF programs. This Report complements the SRF Interim Report submitted to the Congress earlier this year.

The SRF program is a significant step in restoring the responsibility for financing wastewater treatment facilities to the States and municipalities. This Report presents a national overview of the development and implementation of the program. We have included elements of individual State programs as appropriate to highlight particular operational characteristics resulting from the State flexibility that is a fundamental attribute of SRFs.

I would be pleased to discuss the results of this comprehensive assessment of the SRF program at your convenience.

Sincerely yours,

William K. Reilly

Enclosure

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

OCT 02 1991

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Honorable Thomas S. Foley
Speaker of the House
of Representatives
Washington, D.C. 20515

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STATE REVOLVING FUND (SRF)
FINAL REPORT TO CONGRESS

Financial Status and Operations of Water Pollution
Control Revolving Funds

October 1991

U.S. Environmental Protection Agency
Office of Wastewater Enforcement and Compliance (WH-547)
Washington, DC 20460
Tel. (202) 260-2268

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How Final Report Findings Differ from Interim Report Findings

The State Revolving Fund Interim Report to Congress pointed out that the nine States which it reviewed in detail should not be considered representative of all States. Many of the findings in this final report, based on analyses of all of the States for which information is available, are the same as those presented in the interim report; certain findings in this report, however, differ from those presented in the interim report. The contrasts are summarized below.

The relative contribution of leveraged monies to overall SRF funds is greater in this final report than it was in the interim report. For the nine States reviewed in the interim report, leveraged funds accounted for 23 percent of available SRF funds from 1988 to 1999. For the forty-six States that provided funding estimates for this final report, leveraging accounts for 37 percent of total SRF funds from 1988 to 1999. Loan repayments, which contributed 23 percent to available SRF funds from 1988 to 1999 in the interim report, contribute only 11 percent to total SRF funds during that time period for the forty-six States covered in this final report. Loan repayments are often used to retire the debt from leveraged SRF program bonds.

In the interim report, the nine States projected that their SRF assistance would be used to fund a higher percentage of wastewater treatment projects and a lower percentage of wastewater collection and conveyance projects in the 1988 to 1999 time period than the forty-six States in this final report project. The percentage of SRF assistance projected to be used for nonpoint source control program activities is lower for the nine States in the interim report than for the forty-six States in this final report. Additionally, while estuarine protection activities were not projected to receive SRF assistance by the nine interim report States, the forty-six States in the final report project that a small percentage of SRF assistance will be used for estuarine protection activities.

In the interim report, all nine States had a gap between available Federal and State funding for wastewater projects from 1988 to 1999 and Category I to V design year wastewater project needs as reported in the 1988 needs survey; in this final report, five States project sufficient Federal and State funding to cover all of their Category I to V wastewater project needs in the 1988 to 1999 time period.

In the interim report, staff size appeared to be related to the use of leveraging, with leveraged programs reporting larger administrative staffs. In this final report, leveraging does not appear significantly linked with staff size; some of the programs with the smallest staffs leverage their funds. However, leveraging does appear to be related to administrative costs. More than half of the States that operate leveraged programs estimated administrative expenses exceeding the 4 percent administrative cost allowance in the 1989 to 1994 time period.

SECTION ONE

EXECUTIVE SUMMARY

1.1 Background

This Report to Congress describes the financial status and operations of State Revolving Funds (SRFs) established pursuant to Title VI of the Clean Water Act (CWA) as amended by the Water Quality Act of 1987 (P.L. 100-4). As funding under the CWA Title II construction grants program is phased out, SRFs have become one of the principal funding sources for wastewater treatment facilities, collection systems, and other water quality projects in most States.

This report updates information contained in the Interim SRF Report to Congress. Both reports address the informational requirements of Section 516(g) of the CWA. (Section 516(g) is summarized on page 2-1 of this report.) The interim report provided a national-level overview of program implementation, and detailed information for nine States (Connecticut, Georgia, Minnesota, New Jersey, New Mexico, South Dakota, Tennessee, Texas, and Virginia). This report provides specific information, as of late 1990, for nearly all States and presents an updated overview of SRF program implementation at the national level.

The State specific information contained in this report is based on responses to an EPA questionnaire that was mailed to all States. Forty-seven States submitted responses to the questionnaire. Of these, forty-six provided quantitative data on available funding, and all forty-seven provided descriptive information about their SRF programs.

1.2 Status of SRF Program Implementation

As of September 30, 1990, all fifty States and Puerto Rico had established SRF programs and received capitalization grants from the U.S. Environmental Protection Agency (EPA). Twenty-seven States had received two grants, twelve had received three grants, and two States had received four grants. A total of $2.8 billion in Federal funds had been awarded to these programs. Nationwide, as of September 30, 1990, SRFs had entered into approximately 400 binding commitments to provide assistance for construction of wastewater treatment projects as well as for several nonpoint source activities.

With capitalization of SRFs well under way, the current emphasis in implementing the program is on assuring that the State programs are viable and well managed. Many of the States with straightforward loan programs are exploring leveraging and other more sophisticated financing techniques for possible modifications of their programs in future years. Using program guidance developed by the Agency to assist in the conduct of annual reviews, EPA Regional Offices have performed reviews of many SRFs. While the findings of these reviews are generally positive, a number of minor operational problems have been reported. The Regional Offices are continually working with the States to improve program management on both the Federal and State levels.

1.3 Construction Needs of Wastewater Treatment Projects

Section 516(g)(A) requires EPA to identify facilities in "significant noncompliance" (SNC) with the Act and to develop estimates of the construction costs of bringing those facilities into compliance. The definition of SNC as used in EPA's enforcement program was expanded for the purposes of this report because it does not include all facilities with construction needed to attain compliance. If EPA or a delegated State enters into an agreement to resolve the basis of noncompliance, the facility is removed from the SNC list, even though construction necessary to achieve physical compliance has not taken place. As a result, the universe of facilities needing construction to achieve physical compliance is larger than the SNC universe needing construction. This report deals with facilities which need construction in order to achieve or return to compliance (see Section 3.1). EPA identified 4,689 facilities in the fifty States and Puerto Rico which met the definition used in this report. The cost of construction necessary to bring these facilities back into compliance is estimated to be $12.0 billion.

Because a high level of compliance has already been achieved, the above estimate of compliance-related construction needs represents a small percentage of the cost of constructing all facilities eligible for SRF funding. The estimate does not include wastewater treatment and collection costs for facilities currently in compliance, but which have major wastewater funding needs as documented in the 1988 Needs Survey[1]. If all documented funding requirements in Categories I through V of the 1988 Needs Survey[2] are included, a total of $83.0 billion will be needed to construct SRF-eligible wastewater treatment and collection system projects[3]. This $83.0 billion does not include costs associated with new funding eligibilities, replacement needs, and new enforceable requirements of the 1987 CWA Amendments. These water quality activities, programs, and requirements, which include nonpoint source control, sludge disposal, estuary protection, and storm sewer projects, will add significantly to the potential demand for SRF funds. Documented estimates of the funding needs for these activities, however, are not available.

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[1]The Needs Survey is a biennial assessment of the cost of wastewater treatment and collection systems required to meet the goals of the Clean Water Act. The survey divides community wastewater treatment and collection needs into five categories.

Category I = Secondary Treatment
Category II = Advanced Treatment
Category IIIA = Infiltration/Inflow Correction
Category IIIB = Replacement/Rehabilitation of Sewers
Category IVA = New Collector Sewers
Category IVB = New Interceptor Sewers
Category V = Combined Sewer Overflows (CSO)

[2]The 1988 Needs Survey is the most current available for use in this report. The 1990 Needs Survey is expected to be available in the Spring of 1991.

[3]Includes documented needs for 50 States and Puerto Rico.

1.4 Total Funds Available in SRFs and Other Programs

Based on data provided by forty-six States, Federal and State funds totaling approximately $28.7 billion will be available from 1988 to 1999 to meet SRF-eligible needs. This total includes Federal and State contributions to SRFs, EPA construction grants, other (non-EPA) Federal grant and loan programs, other State grant and loan programs, and repayments on SRF loans by local recipients.

Of the $28.7 billion in Federal and State funding for SRF-eligible needs in the forty-six States from 1988 to 1999, $23.8 billion will be administered through State programs. Of this, $17.0 billion will be available through the States' SRFs. Between 1990 and 1995, the amount of SRF funding available annually in the forty-six States is projected by State officials to decrease by about 40 percent. At this time State funding in general does not appear to be increasing sufficiently to offset the phase out of Federal SRF monies. Only fifteen of the forty-six States project further capitalization or leveraging of their SRFs beyond 1994; of these, only nine project additional annual funding for their SRFs in an amount equal to or greater than the annual average provided by Federal capitalization grants from 1988 to 1994. However, historical experience indicates that local funding increases as Federal funding decreases.

1.5 Comparison of Wastewater Treatment Needs to Funds Available

For the forty-six States that provided estimates of available funding, funds available from Federal and State sources from 1988 to 1999 are projected to be sufficient to cover all SNC needs in forty-three of the forty-six States and from 52 to 84 percent of the needs in the remaining three States. However, the SNC-related needs only represent a "snapshot" as of June 30, 1990. While it is not possible to quantify future SNC-related needs, it is predictable that there will be additional significant violations through 1999 that will require construction to correct. The reasons for potential violations include population growth which will generate flows and/or pollutant loadings in excess of design capacity. During this period, some number of treatment plants will reach the end of their useful lives and face the need for major rehabilitation or replacement. Finally, additional regulations in the area of toxics control, storm water management, and sludge disposal may result in significant new violations that might require construction to correct. Similarly, in 27 percent of 46 States providing data, Federal and State funding is projected to be sufficient to meet or exceed all secondary and advanced treatment needs (Categories I and II). Such needs tend to be among the highest priority needs for most States. As in the case of SNC-related needs, Category I and II needs represent a "snapshot" as of a given point in time and additional needs will be identified in these categories through 1999.

It is possible to make some additional comparisons of funding availability and need using data contained in the 1988 Needs Survey. Federal and currently projected State funding covers an average of only 35 percent of the 77.6 billion of Category I to V design year needs documented for the forty-six States in the 1988 Needs Survey. The gap between available Federal and State funds and Category I to V needs represents the amount that may need to be funded from State and local sources between 1988 and 1999 if all needs are to be met. Local sources provided approximately 40 percent of the financing for such projects in the mid 1980s.

1.6 SRF Program Operations

All forty-seven States that responded to the SRF questionnaire offer SRF loans at below-market interest rates. Loan repayments are used to fund additional loans (with the exception of repayments used to retire SRF program debt). The key structural and operating characteristics of the States' programs include:

- Method of Obtaining Matching Funds - States obtain matching funds in a variety of ways. The most commonly used methods are State appropriations, State general obligation bonds, and SRF program revenue bonds. Other approaches include pledging the loan repayments of an existing wastewater treatment loan program and obtaining the State match directly from the loan recipients.

- Use of Leveraging - Over one quarter of the SRF programs currently borrow to provide additional lendable funds. Additional States plan to consider some type of leveraging in the future.

- Types of Assistance - The States plan to provide assistance primarily in the form of loans. States also plan to use a small portion of funds for refinancing existing debt. States with leveraged programs will use some funds to secure bond issues.

- Interest Rates - All of the State programs offer loans at below-market interest rates, although two of the States offer some SRF loans at up to market rates. Interest charges typically range from 2 to 5-1/2 percent. Approximately one third of the States vary interest rates based on a community's ability to pay.

- Type of Projects Funded - States used virtually all SRF funds for sewage treatment and collection system projects through FY 1990. Several States intend to use a portion of their SRF funds for nonpoint source control programs in the future. One State, Wyoming, intends to use all of its SRF funds for nonpoint source control activities from 1991 to 1994. A few States also plan to use a small percentage of their SRF funds for estuarine activities.

- Measures to Assure Fund Viability - States uniformly view the soundness of their loan portfolios as the critical factor in assuring long-term viability of the SRFs. States carefully scrutinize applicants to evaluate their creditworthiness. States require communities to pledge revenues from a range of sources to assure loan repayments. User fees and full faith and credit are commonly used as assurances for repayment. In the event of default, several States reported that they can intercept other State assistance to the recipient.

1.7 Administration of State SRF Programs

SRF program administration requires a mix of technical, financial, and general administrative personnel. In the forty-five States that reported staffing figures, staff size varied from 2 to 70 people in FYs 1989-1990. Most of the States anticipate significant staff expansion

over the next several years as personnel shift from the construction grants to the SRF programs and the number of projects and the amount of money in the SRF programs increase.

The CWA restricts the cumulative total of SRF funds used for administrative expenses to four percent of the amount of capitalization grant awards. The adequacy of the four percent SRF administrative expense allowance varies significantly among the States. The majority of the States should not have difficulty covering their projected administrative expenses during the 1989 to 1994 time period. Sixteen States, however, do not expect to cover their administrative costs with the four percent allowance during the 1989 to 1994 time period; over 75 percent of administrative costs are covered in seven of these sixteen States. After the allotment of the final Federal capitalization grants in 1994, States will have to rely primarily on alternative funding sources such as appropriated funds, or on unused allowances "banked" from previous years to cover their administrative expenses. States typically have not developed specific plans to fund these costs after 1994. Many States currently charge loan closing fees or other types of fees to help pay their administrative expenses. Several additional States plan to begin charging fees to help cover their administrative costs in the future.

1.8 Impact of the SRF Program on User Fees

Very few facilities financed with SRF loans have been completed. Therefore, actual data on the user fee impact of the SRF program are not available. For purposes of this report, a financial model is used to assess the impact of SRF funding on user fees. The model simulates the user fee impact of SRF funding versus construction grants funding for a range of community sizes. In the analysis, user fees are assumed to cover all debt service and operation and maintenance costs for a new wastewater treatment facility (excluding land).

The analysis shows that SRF loans generally provide less of a subsidy to communities than construction grant funding. This occurs despite the expanded eligibility of project funding under the SRF program. If SRF loans are issued at four percent interest, a common rate charged for SRF loans, user fees are expected to be approximately 20 percent higher than projects constructed with construction grants assistance. However, SRF loans still provide a substantial subsidy. On average, user fees for treatment facilities constructed with a 4 percent SRF loan will be approximately 14 percent lower than facilities constructed with market rate financing.

1.9 Impact of the SRF Program on Treatment Plant Efficiency

Because wastewater treatment plants have only recently been funded with SRF program assistance, there are no actual data available on the efficiency of SRF-financed treatment plants. However, many State officials expect that SRF-financing will lead to lower-cost facilities because communities must finance the entire cost of the facility. Most officials anticipate a reduction in the use of innovative and alternative technologies because, unlike the construction grants program, the SRF program offers no special incentives for such projects. The potential impact of a shift toward lower-cost, non-innovative facilities on treatment plant efficiency is unclear. However, State officials indicated that they expect no major changes in treatment plant efficiency.

1.10 Advantages of the SRF Program

The SRF program offers many financial and environmental advantages to Federal, State, and local governments. The revolving nature of the SRFs creates a perpetual source of low cost financing. The funds invested now for the capitalization of SRFs will work for many years to assist communities in meeting their needs, providing more money for more communities than would one-time loans or grants.

For the Federal government, the program furthers the long-standing national policy of assisting States and local governments in financing the construction of wastewater treatment facilities. SRFs also facilitate the goal of restoring the responsibility for funding these activities to the States and municipalities. In the process of resuming this responsibility, the States also have increased flexibility to design and operate their SRFs to address the water quality concerns most important to them and their communities.

For communities receiving SRF assistance, below market interest rates are the single most important advantage of the program. This reduced cost of capital enables some projects to be completed that otherwise would not be affordable and reduces the level of user fees required to repay project debt.

1.11 Issues Associated with SRF Implementation

The overall implementation of the SRF program has been smooth. The number of issues associated with implementation has been reduced as people and institutions become more familiar with program requirements. There do not appear to be any fundamental flaws in the structure of the SRF program or any significant impediments to successful implementation that have not been adequately managed.

State officials in the SRF programs identified a number of areas of concern that affect their ability to implement their programs. Many of these concerns arise from Federal and State statutes, regulations, and policies.

Of primary concern to most officials was Federal funding of the SRF program. The States believe that funding the program at less than the full authorized levels will reduce their ability to accomplish the goals of the CWA, including the 1987 Amendments. They also report that uncertainty in the level of funding due to the appropriations process makes planning difficult for them and their communities.

Several States mentioned that they anticipate difficulty in providing SRF assistance to economically distressed communities because these communities may be unable to repay loans even at very low interest rates. Many of these communities were unable to accept a grant under the construction grants program because they could not finance the local share. Similarly, they will not be able to repay a loan under the SRF program even at low interest rates because the subsidy will be even less than it was under the construction grants program.

The States report that the application of "cross-cutters" (i.e., Federal laws and authorities that exist independently of the SRF program, such as the National Historic

Preservation Act, but apply to certain activities undertaken under the program) adds significantly to administrative and project costs. In addition, the States are having difficulty monitoring and assuring compliance with cross-cutters because at any time, Federal laws can be enacted that apply to the SRF program, and a permanent list of these authorities cannot be identified. States recommend that Congress consider exempting the SRF program from all Federal cross-cutters. As an alternative, some State officials recommend that compliance with cross-cutters be based on the intent of law rather than specific requirements, and be determined by the Governor of each State.

The States believe that Federally mandated Title II requirements on the SRF program can also increase project costs. The most frequently mentioned requirement in this regard is the Davis-Bacon Act.

The letter of credit (LOC) payment process was also cited as an impediment. Several States expressed concern about the loss of interest earnings on Federal funds caused by the LOC process. Also, States mentioned that the LOC process becomes cumbersome because States have to comply with their own overlapping fiscal and accounting procedures which can impede the quick transfer of funds. Thus, although the LOC itself as a method of payment is not causing delays beyond the maximum of 36 hours necessary to make the electronic transfer of funds, delays are occurring in some States due to State processing problems associated with the cash disbursements.

Several States reported that the statutory restriction on the use of SRF funds for administrative costs is an impediment to establishing effective SRFs. The CWA restricts the amount of money in an SRF that can be used for administrative expenses to four percent of all capitalization grant awards received by the fund. A number of States expect that the allowed amount will be inadequate to cover the full costs of administering their funds during the period of Federal capitalization. As discussed in Subsection 1.7 of this executive summary, quantitative data show that twenty-eight of the responding States should be able to pay all of their administrative expenses with the four percent allowance during the period of Federal capitalization.

Land eligibility was also cited as an impediment. The purchase of land for a wastewater treatment facility is not an eligible cost under the SRF program unless the land is integral to the treatment process or used for sludge disposal. This statutory restriction means communities must obtain separate financing for land.

The CWA also requires that recipients of SRF assistance provide a dedicated source of revenue to cover loan repayments. Because of this, some States reported that it may be difficult to fund nonpoint source and estuarine activities. To address this concern, EPA has completed a case study guidebook that presents examples of how expanded use activities can be funded under the SRF program.

SECTION TWO

INTRODUCTION

2.1 Program Background

Title VI of the Clean Water Act (CWA), as amended by the Water Quality Act of 1987 (P.L. 100-4), authorizes the Administrator of the EPA to make capitalization grants to States for State Water Pollution Control Revolving Funds (SRFs). The SRF program is intended to bring to a successful culmination a long-standing national policy of assisting States and municipalities in financing the construction of publicly owned wastewater treatment works (POTWs). This new program, however, is fundamentally different from the Title II construction grants program that has provided financial assistance for many years and received its last appropriation in fiscal year (FY) 1990.

Unlike the construction grants program under which EPA provided grant assistance directly to municipalities for wastewater treatment projects, the SRF program is designed to give individual States the responsibility for developing and operating their own programs, including providing financial assistance for POTW construction and other eligible activities. Financial assistance provided by SRFs can include loans and various forms of credit enhancements, but not grants. A key element of SRFs is their "revolving" nature--most disbursements return to the program to provide assistance to additional recipients. SRF assistance can be used for a broader range of water quality management activities than construction grants assistance, such as the implementation of nonpoint source management programs and the development and implementation of comprehensive conservation and management plans under the National Estuary Program.

The SRF program is a significant step in restoring the responsibility for financing wastewater treatment facilities to the States and municipalities. The CWA allows flexibility in the program; each SRF is designed and operated to address the water quality needs in a particular State and its communities. EPA cooperates with and provides technical assistance to States in establishing their programs.

2.2 Purpose of the Report to Congress

Section 516(g) of the CWA requires EPA to prepare a Report to Congress on the financial status and operations of the State SRFs. In accordance with Section 516(g), the report must provide:

(A) an inventory of the facilities that are in significant noncompliance with the enforceable requirements of the CWA;

(B) an estimate of the cost of construction necessary to bring such facilities into compliance with such requirements;

(C) an assessment of the availability of sources of funds for financing such needed construction, including an estimate of the amount of funds available for providing assistance for such construction through September 30, 1999, from the water pollution control revolving funds established by the States under Title VI of the CWA;

(D) an assessment of the operations, loan portfolio, and loan conditions of such revolving funds;

(E) an assessment of the effect on user fees of the assistance provided by such revolving funds compared to the assistance provided with funds appropriated pursuant to Section 207 of the CWA; and

(F) an assessment of the efficiency of the operation and maintenance of treatment works constructed with assistance provided by such revolving funds compared to the efficiency of the operation and maintenance of treatment works constructed with assistance provided under Section 201 of the CWA.

The report was to be prepared in cooperation with the State water pollution control planning and financing agencies. EPA formed a workgroup of State and EPA Regional staff directly involved in the SRF program to assist in the development of this report. The workgroup participated in the development of the approach and commented on draft questionnaires and a draft of the report. Workgroup participants are identified in Appendix A.

2.3 Scope and Organization of This Report

This report provides a national-level overview of SRF program implementation and presents detailed information on the SRF programs in forty-seven States. This final report addresses the informational requirements of Section 516(g) of the CWA, and updates information contained in the Interim SRF Report to Congress.

The interim report contained detailed information on the SRF programs in nine States (Connecticut, Georgia, Minnesota, New Jersey, New Mexico, South Dakota, Tennessee, Texas, and Virginia) as of June 1989. To provide information for the interim report, each of the nine States completed a program questionnaire; additionally, program officials were interviewed during EPA site visits to each State. The information contained in this final report is based on questionnaires received from forty-seven States, follow-up phone conversations with program officials from many of those States, and the information collected for the interim report. Information in this final report is based on the status of State programs as of late 1990.

This report is organized to respond to Section 516(g) of the CWA and to provide additional information that may be of use to Congress in evaluating the SRF program.

- Section Three estimates the cost of bringing facilities that are currently in significant noncompliance into compliance with the enforceable requirements of

the CWA and discusses new enforceable requirements and new funding eligibilities of the CWA [responsive to Sections 516(g)(2)(a) and 516(g)(2)(b)].

- Section Four discusses the funds available to address these needs from State SRFs and other sources [responsive to Section 516(g)(2)(c)].

- Section Five compares available funds to the funding needs required for compliance with the CWA [also responsive to Section 516(g)(2)(c)].

- Sections Six and Seven describe the operation and administration of State SRFs [responsive to Section 516(g)(2)(d)].

- Section Eight provides an assessment of the impact of SRF funding on user fees in comparison to construction grants funding [responsive to Section 516(g)(2)(e)].

- Section Nine provides an assessment of the impact of SRF financing on the efficiency of POTW operation and maintenance [responsive to Section 516(g)(2)(f)].

- Section Ten describes the advantages of the SRF program to the Federal government, States, and communities.

- Section Eleven presents a discussion of the impediments States have encountered in implementing their SRFs.

2.4 Status of Nationwide Implementation

To initiate an SRF program, States must apply for a capitalization grant from EPA. The capitalization grant is the Federal seed money that the State uses to establish its revolving loan fund. To qualify for the capitalization grant, the State must provide matching funds equal to at least 20 percent of the grant and conform to the applicable Title VI program requirements.

As of September 30, 1990, all fifty States and Puerto Rico had established SRF programs and received capitalization grants from EPA. (The District of Columbia, the U.S. Virgin Islands, and the Trust Territories have been authorized by Congress to receive CWA Title VI funds without having to establish an SRF.) Twenty-seven States had received two grants, twelve had received three grants, and two States had received four grants (Table 2-1). A total of $2.8 billion in Federal funds had been awarded to these programs. Nationwide as of September 30, 1990, SRFs had entered into approximately 400 binding commitments to provide assistance for construction of wastewater treatment projects as well as for several nonpoint source activities.

It is clear that a successful transition has been made from the construction grants program to the SRF program in most States. With capitalization of SRFs well under way, the current emphasis in implementing the program is on assuring that the State programs are

TABLE 2-1

States With Approved SRF Programs
In Order of First SRF Grant Award Date(a)

STATE	FIRST SRF GRANT AWARD DATE
Tennessee(b)	March 1988(c)
Texas(b)	March 1988(d)
Georgia	April 1988(d)
New Mexico	May 1988(c)
Utah	June 1988(d)
Virginia	June 1988(d)
Connecticut	September 1988(d)
Louisiana	September 1988(d)
New Jersey	October 1988(d)
Nebraska	October 1988(e)
South Carolina	November 1988(d)
Alaska	November 1988(e)
Arkansas	December 1988(d)
South Dakota	March 1989(e)
Oklahoma	March 1989(d)
Kentucky	March 1989(d)
North Carolina	March 1989(e)
Minnesota	April 1989(e)
Alabama	April 1989(e)
Florida	April 1989(e)
Kansas	April 1989(e)
Iowa	May 1989(e)
New Hampshire	May 1989(e)
Vermont	May 1989(e)
Mississippi	June 1989(e)
Maine	June 1989(e)
Illinois	June 1989(e)
Missouri	June 1989(e)

Continued

TABLE 2–1, continued

States With Approved SRF Programs
In Order of First SRF Grant Award Date(a)

STATE	FIRST SRF GRANT AWARD DATE
Ohio	June 1989(e)
California	June 1989(d)
Michigan	July 1989(e)
Idaho	August 1989(e)
Maryland	August 1989(e)
Colorado	August 1989(e)
Wisconsin	September 1989(e)
Pennsylvania	September 1989(e)
Massachusetts	September 1989(e)
Indiana	September 1989(f)
Hawaii	September 1989(e)
Nevada	September 1989(e)
Puerto Rico	September 1989(f)
Oregon	September 1989(e)
Washington	September 1989(e)
New York	March 1990(f)
North Dakota	August 1990(f)
West Virginia	August 1990(f)
Wyoming	September 1990(f)
Montana	September 1990(f)
Rhode Island	September 1990(f)
Arizona	September 1990(f)
Delaware	September 1990(f)

(a) Status as of September 30, 1990
(b) Received the first grants in the program
(c) State has received four capitalization grants
(d) State has received three capitalization grants
(e) State has received two capitalization grants
(f) State has received one capitalization grant

viable and well managed. Many of the States with straightforward loan programs are exploring leveraging and other more sophisticated financing techniques for possible modifications of their programs in future years. EPA, through its Regional Offices, is assisting the States in this process through a mission support contract that provides SRF training and the advice and support of financial and legal professionals.

Using program guidance developed by the Agency to assist in the conduct of these reviews, the Regional Offices have performed reviews of many SRFs. While the findings of these reviews are generally positive, a number of minor operational problems have been reported. The Regional Offices are working with the States to address these problems and make necessary improvements.

2.5 Federal Funding

Federal funding for State SRFs includes both Title VI allotments and Title II transfers as authorized by Section 205(m). The latter category consists of funds transferred at State discretion from the construction grants allotment to the SRF program. As of September 30, 1990, Federal funding for the SRF programs totaled $2.8 billion (see Table 2-2). All funds committed in FY 1988 were Title II funds transferred at State discretion to their SRF programs; Title VI funds were not authorized until FY 1989. Thus far, approximately 33 percent of Federal contributions to SRF programs have come from Title II transfers and approximately 67 percent from Title VI allotments. Many States chose to transfer the maximum allowable amount of their Title II funds to SRFs in FY 1989 and FY 1990.

TABLE 2–2

Federal Funding of SRFs
($ Millions as of September 30, 1990)

STATE	REALLOTTED/ DEOBLIGATED	TITLE II TRANSFERS (FYs '87,'88,'89,'90)	TITLE VI 1989 ALLOTMENT(a)	TITLE VI 1990 ALLOTMENT(a)	TOTAL FEDERAL SRF GRANTS(b)
Alabama	0.0	0.0	10.5	10.9	21.5
Alaska	0.0	4.4	5.6	5.8	15.8
Arizona	0.0	0.0	6.3	6.6	12.9
Arkansas	0.0	14.1	6.1	6.3	26.6
California	0.0	110.1	67.5	69.8	247.4
Colorado	0.0	6.6	8.6	7.8	23.0
Connecticut	0.0	49.9	11.6	12.0	73.4
Delaware	0.0	0.2	4.6	4.7	9.5
Florida	0.0	55.4	31:8	32.9	120.1
Georgia	0.0	57.7	15.9	16.5	90.1
Hawaii	0.0	0.3	7.3	7.5	15.1
Idaho	0.0	0.0	4.6	4.7	9.3
Illinois	0.0	13.2	42.7	44.1	100.0
Indiana	0.0	0.0	22.7	0.0	22.7
Iowa	0.0	0.0	12.8	13.2	26.0
Kansas	0.0	0.0	8.8	8.8	17.6
Kentucky	1.3	31.1	12.0	12.4	56.9
Louisiana	0.0	12.0	10.4	10.7	33.1
Maine	0.0	0.1	7.3	7.5	14.9
Maryland	0.0	0.0	22.8	23.6	46.4
Massachusetts	0.0	61.3	32.0	33.1	126.5
Michigan	0.0	0.2	40.6	42.0	82.7
Minnesota	0.0	0.0	17.3	17.9	35.3

Continued

TABLE 2–2, continued

Federal Funding of SRFs
($ Millions as of September 30, 1990)

STATE	REALLOTTED/ DEOBLIGATED	TITLE II TRANSFERS (FYs '87,'88,'89,'90)	TITLE VI 1989 ALLOTMENT(a)	TITLE VI 1990 ALLOTMENT(a)	TOTAL FEDERAL SRF GRANTS(b)
Mississippi	0.0	13.8	8.5	8.8	31.0
Missouri	0.0	0.0	26.1	27.0	53.2
Montana	0.0	0.0	4.6	4.7	9.3
Nebraska	0.0	0.0	4.8	4.9	9.7
Nevada	0.0	0.0	4.6	4.7	9.3
New Hampshire	0.0	0.6	9.4	9.7	19.8
New Jersey	0.0	124.4	38.5	41.9	204.8
New Mexico	0.0	12.0	4.6	4.8	21.4
New York	0.0	0.0	104.1	107.7	211.8
North Carolina	0.0	21.1	17.0	17.6	55.7
North Dakota	0.0	0.0	4.6	4.7	9.3
Ohio	0.0	9.2	53.1	54.9	117.2
Oklahoma	0.0	9.3	7.6	7.9	24.7
Oregon	0.0	3.4	10.7	11.0	25.0
Pennsylvania	0.0	0.0	37.4	38.6	76.0
Puerto Rico	0.0	0.0	12.3	0.0	12.3
Rhode Island	0.0	0.6	6.3	6.5	13.4
South Carolina	0.0	22.3	9.7	10.0	42.0
South Dakota	0.0	0.0	4.6	4.7	9.3
Tennessee	0.0	35.9	13.7	14.2	63.7
Texas	1.8	172.7	43.1	44.6	262.2
Utah	0.0	12.9	4.9	5.1	22.9
Virginia	2.6	73.1	19.3	20.0	114.9

Continued

TABLE 2–2, continued

Federal Funding of SRFs
($ Millions as of September 30, 1990)

STATE	REALLOTTED/ DEOBLIGATED	TITLE II TRANSFERS (FYs '87,'88,'89,'90)	TITLE VI 1989 ALLOTMENT(a)	TITLE VI 1990 ALLOTMENT(a)	TOTAL FEDERAL SRF GRANTS(b)
Vermont	0.0	1.3	4.6	4.7	10.6
Washington	0.0	1.0	16.5	17.0	34.4
West Virginia	0.0	0.0	14.7	6.2	20.9
Wisconsin	0.0	0.1	25.5	26.4	52.0
Wyoming	0.6	2.2	4.6	4.7	12.1
TOTAL	6.3	932.5	925.0	912.2	2,775.9

(a) This figure generally represents the Title VI allotment minus 1% or $100,000, whichever is greater. The 1% or $100,000 is reserved under Section 604(b) of the CWA for planning under Sections 205(j) and 303(e).

(b) Totals vary due to rounding.

SECTION THREE

CONSTRUCTION NEEDS OF STATES FOR COMPLIANCE WITH THE CLEAN WATER ACT

Sections 516(g)(2)(a) and (b) of the Act require EPA to prepare an inventory of facilities currently in significant noncompliance with enforceable requirements of the Act and an estimate of the cost of construction necessary to bring such facilities into compliance. Section 3.1 provides the required inventory and cost estimates. Section 3.2 provides estimates of SRF-eligible construction needs for all facilities regardless of their compliance status.

3.1 Compliance Related Needs

Significant noncompliance (SNC) is a term used by EPA to identify facilities (generally with flows greater than 1 million gallons per day (mgd)) covered under the National Pollution Discharge Elimination System (NPDES) which are in serious and/or repeated violations of effluent limits, compliance schedule milestones, reporting requirements or other administrative or judicial requirements, and that require priority management attention. Some facilities in significant noncompliance may require construction or other corrective actions in order to come back into compliance. However, when a facility owner/operator enters into a compliance agreement with EPA and commits to resolve the basis of noncompliance, the facility is removed from the SNC list, even though construction necessary to achieve physical compliance has not taken place. Thus, the universe of facilities needing construction to achieve physical compliance is larger than the SNC universe needing construction. This report deals with facilities which need construction in order to achieve or return to compliance.

EPA does not routinely collect data specifically on the construction-related needs to bring SNC facilities back into compliance. As a result, EPA's estimate of "significant noncompliance," as used in this report, and associated construction needs is based on a compilation of data from several sources. First, EPA prepared a list of facilities in SNC with outstanding construction needs as reported in its Permit Compliance System (PCS) national database as of June 30, 1990. EPA then prepared a list of facilities in PCS with a "resolved pending" (RP) enforcement status as of June 30, 1990. This second list consists of facilities that had been classified as SNC but, for enforcement purposes, are no longer in SNC because they are on construction schedules. These RP facilities were included because they were not yet physically meeting their permitted effluent limits as of June 30, 1990.

The SNC and RP lists do not include facilities with flows of less than 1 million gallons per day (mgd) unless there is a significant impact on water quality. Therefore, EPA has for the purposes of this report expanded its definition of significant noncompliance to include secondary treatment (Category I) and/or advanced treatment (Category II) needs of all facilities with flows of less than 1 mgd, based on the 1988 Needs Survey.

Table 3-1 shows the number of facilities in the fifty States and Puerto Rico that meet the SNC definition used in this report. The cost of construction needed to bring these facilities into compliance is estimated to be $12.0 billion. The construction costs for each of the three categories of SNC defined for this report are concentrated among a small group of States that differs for each category. Eight States account for nearly 78 percent of SNC construction needs. For RP facilities, 82 percent of the needs are concentrated in five States. Forty-nine percent of the Categories I and II treatment needs for facilities with flows less than 1 mgd occur in seven States. The total need for this latter category of facilities represents nearly 54 percent of the total SNC need as defined in this report; the number of facilities in this category accounts for nearly 94 percent of the facilities inventoried. For the remainder of this report, the aggregated construction needs for the three groups of facilities shown in Table 3-1 will be referred to as "SNC needs."

While Table 3-1 provides an estimate of the cost of construction required to correct significant violations (as required under Section 516(g) of the Act), States strongly assert that a comparison of SNC-related needs with SRF funding availability is not a reasonable measure of the ability of SRF programs to meet current and future municipal sewage treatment construction needs.

The Agency developed the concept of "SNC" as a method for setting priorities for its enforcement effort. The reasons why certain types of violations are included in the definition are based on enforcement considerations rather than on construction needs. Thus, repeated failure to monitor or report effluent data is a significant violation but does not require construction to correct. Conversely, major and legitimate construction needs exist independently of significant violations. For example, Houston, Texas, is not considered to be in significant violation, although it has been sued by the State and is under administrative order to correct its sewage collection system overflow problems. Inclusion of Houston's construction needs would add about $800 million to the estimate of Texas' SNC needs presented in Table 3-1. Further, the 1987 Amendments expanded eligibilities under the SRF program to include funding required for compliance with new enforceable requirements of the Act (e.g., storm sewers) and for the implementation of new programs (e.g., nonpoint source control programs). These potential demands on SRF funds are also not included in the SNC cost estimates in Table 3-1.

The SNC-related needs shown in Table 3-1 only represent a "snapshot" of needs as of June 30, 1990. While it is not possible to quantify future SNC-related needs, it is predictable that there will be additional significant violations through 1999 that will require construction to correct. The reasons for potential violations include population growth which will generate flows and/or pollutant loadings in excess of design capacity. During this period, some number of treatment plants will reach the end of their useful lives and face the need for major rehabilitation or replacement. Finally, additional regulations in the area of toxics control, storm water management, and sludge disposal may result in significant new violations that might require construction to correct.

In order to provide additional perspective on the adequacy of SRF program funds, the next section addresses SRF-eligible funding needs beyond those associated with the correction of significant violations.

TABLE 3–1

Construction Needs for Facilities in Significant Noncompliance

State	SNC Facilities With Construction Needs		Resolved Pending Facilities With Construction Needs		Categories I and II Needs for Facilities with Flows Less Than 1 mgd(a)		Total SNC Needs	
	Number	Estimated Cost ($ Thousands)	Number	Estimated Cost ($ Thousands)	Number	Estimated Cost ($ Thousands)	Number	Total Cost ($ Thousands)
Alabama	11	61,950	1	11,500	122	96,343	134	169,793
Alaska	0	0	0	0	9	25,833	9	25,833
Arizona	0	0	0	0	8	15,428	8	15,428
Arkansas	7	26,300	4	23,000	159	98,264	170	147,564
California	4	927,620	5	36,050	37	737,587	46	1,701,257
Colorado	1	40,000	1	3,750	34	25,120	36	68,870
Connecticut	8	196,000	1	1,000	15	39,244	24	236,244
Delaware	1	500	0	0	2	13,691	3	14,191
Florida	1	30,660	0	0	47	183,485	48	214,145
Georgia	2	15,250	1	13,000	74	134,526	77	162,776
Hawaii	0	0	2	120,470	10	75,465	12	195,935
Idaho	0	0	0	0	35	17,875	35	17,875
Illinois(b)	4	24,990	0	0	9	3,800	13	28,790
Indiana	19	80,600	6	31,540	293	163,315	318	275,455
Iowa	0	0	0	0	167	136,605	167	136,605
Kansas	1	300	0	0	78	58,541	79	58,841
Kentucky	3	9,350	0	0	179	157,141	182	166,491
Louisiana	6	16,100	15	124,500	163	190,093	184	330,693
Maine	7	63,400	1	6,000	41	48,975	49	118,375
Maryland	0	0	0	0	58	36,202	58	36,202
Massachusetts	11	689,500	1	10,000	26	165,322	38	864,822
Michigan	3	22,200	2	12,900	67	110,806	72	145,906
Minnesota	4	91,230	0	0	161	203,597	165	294,827
Mississippi	4	7,100	1	3,500	127	108,112	132	118,712
Missouri	3	59,530	1	19,000	174	80,957	178	159,487
Montana	1	6,500	1	4,450	26	13,692	28	24,642
Nebraska	0	0	1	4,200	48	12,359	49	16,559

Continued

(a) Includes all surface water discharging facilities with flows of less than 1 mgd with secondary and/or advanced treatment needs based on the 1988 Needs Survey. These are included in this report's definition of significant noncompliance as described in Section 3.1.

(b) Illinois' estimates of Category I and II needs of facilities with flows less than 1 mgd, provided by that State, are as of January 1991.

TABLE 3-1, continued

Construction Needs for Facilities in Significant Noncompliance

State	SNC Facilities With Construction Needs		Resolved Pending Facilities With Construction Needs		Categories I and II Needs for Facilities with Flows Less Than 1 mgd(a)		Total SNC Needs	
	Number	Estimated Cost ($ Thousands)	Number	Estimated Cost ($ Thousands)	Number	Estimated Cost ($ Thousands)	Number	Total Cost ($ Thousands)
Nevada	0	0	0	0	3	667	3	667
New Hampshire	4	164,370	0	0	16	54,630	20	219,000
New Jersey	10	115,090	0	0	37	182,175	47	297,265
New Mexico	0	0	3	28,000	9	8,289	12	36,289
New York	9	236,120	7	659,100	127	338,287	143	1,233,507
North Carolina	3	21,800	0	0	110	171,013	113	192,813
North Dakota	0	0	0	0	25	7,266	25	7,266
Ohio	8	98,135	11	87,954	316	453,322	335	639,411
Oklahoma	5	11,600	0	0	61	59,882	66	71,482
Oregon	0	0	2	11,650	40	51,166	42	62,816
Pennsylvania	5	55,590	6	20,530	228	343,162	239	419,282
Rhode Island	2	32,000	1	420	1	8,348	4	40,768
South Carolina	0	0	1	500	49	85,315	50	85,815
South Dakota	4	10,500	2	19,300	155	44,026	161	73,826
Tennessee	6	38,000	4	17,950	114	142,587	124	198,537
Texas	15	247,000	25	196,700	439	834,909	479	1,278,609
Utah	0	0	0	0	20	107,199	20	107,199
Vermont	1	500	0	0	13	13,961	14	14,461
Virginia	5	19,300	3	7,500	94	133,130	102	159,930
Washington	1	3,800	3	625,000	42	46,988	46	675,788
West Virginia	4	9,270	1	7,000	205	255,864	210	272,134
Wisconsin	1	11,161	0	0	102	75,920	103	87,081
Wyoming	0	0	0	0	9	4,876	9	4,876
Puerto Rico	0	0	0	0	8	38,960	8	38,960
TOTAL	184	3,443,316	113	2,106,464	4,392	6,414,320	4,689	11,964,100

(a) Includes all surface water discharging facilities with flows of less than 1 mgd with secondary and/or advanced treatment needs based on the 1988 Needs Survey. These are included in this report's definition of significant noncompliance as described in Section 3.1.

3.2 Additional SRF Eligibilities

As described above, many communities with major construction needs have not experienced compliance problems in the past and are, therefore, not included on EPA's SNC or RP lists. The Needs Survey, required by Section 205(a) and 516(b)(1) of the CWA, is a biennial assessment of the cost of constructing all publicly-owned wastewater treatment works necessary to meet the goals of the CWA regardless of compliance status. The 1988 Needs Survey showed a design year[1] need of $83.0 billion to satisfy all currently documented needs[2] nationwide through the year 2008 (see Table 3-2).[3] The 1987 Amendments to the CWA allow SRFs to fund certain activities not eligible under the construction grants program and not included in the $83.0 billion needs cited above. The 1990 Needs Survey, which was not available during preparation of this report, will include State cost estimates for these SRF-eligible activities. Additionally, EPA has or will soon promulgate rules related to new enforceable requirements as specified in the 1987 Amendments.

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[1]"Design year" needs reflect the total needs for documented facilities to satisfy the design year population. Year 2008 is used as the design year to better approximate a 20-year design life for facilities in the Needs Survey.

[2]To be incorporated into the Needs Survey, an estimate of construction needs must conform to a number of criteria, including:

- The projects included in the needs estimate must address a documented public health or water quality problem.
- The projects must be required to rectify a current problem (e.g., needs solely for future growth requirements cannot be included). However, if a project has a legitimate current need, the cost for meeting future growth needs is included in the survey.
- The needs must be project-specific (e.g., needs for a county-wide problem are not acceptable).

Wastewater treatment needs are reported in five categories in the 1988 Needs Survey.

Category I - Secondary Treatment
Category II - Advanced Treatment
Category IIIA - Infiltration/Inflow Correction
Category IIIB - Replacement/Rehabilitation of Sewers
Category IVA - New Collector Sewers
Category IVB - New Interceptor Sewers
Category V - Combined Sewer Overflows

[3]Includes fifty States and Puerto Rico.

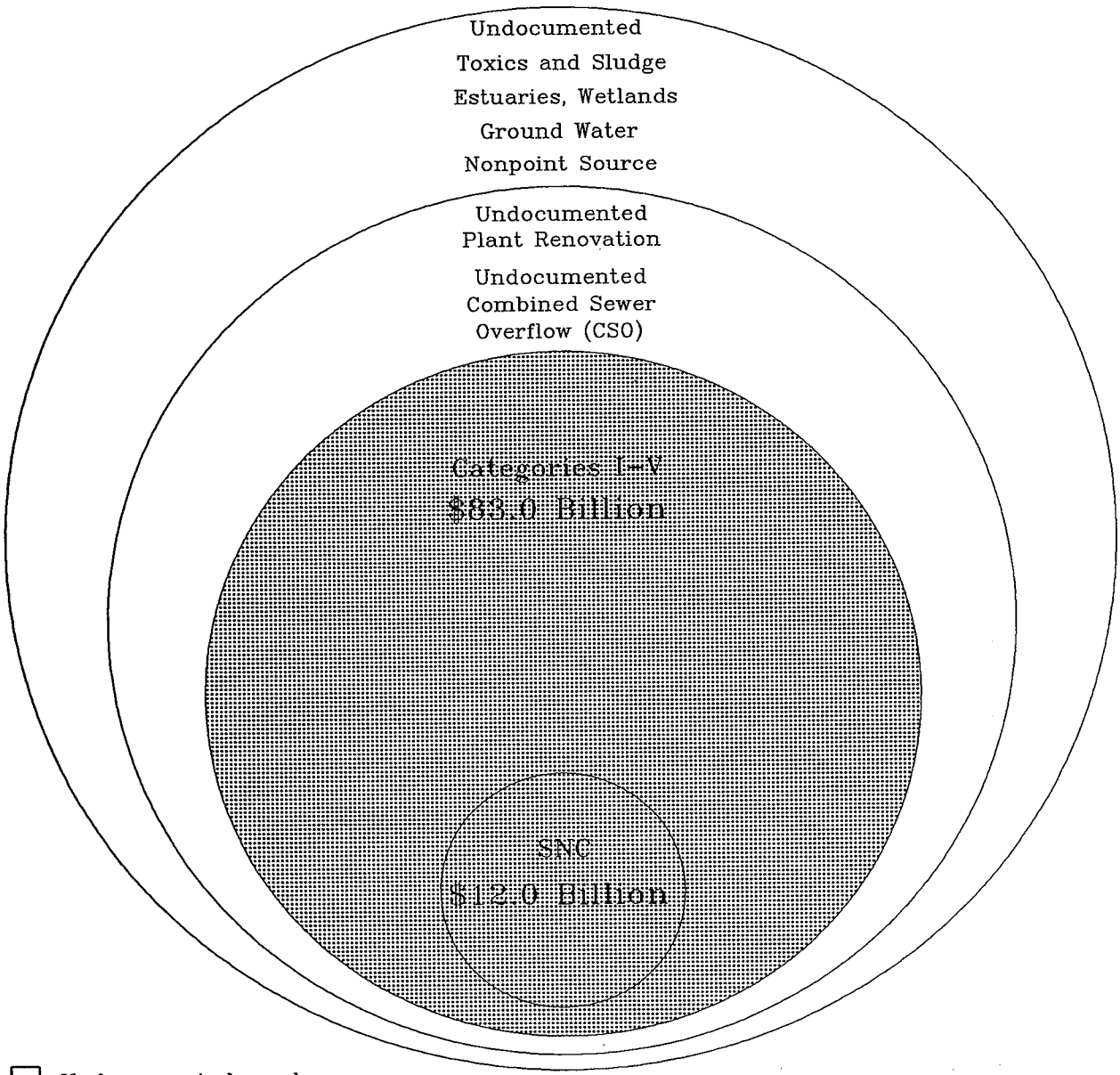
TABLE 3–2

Category I to V Wastewater Treatment and Conveyance Needs

STATE	1988 Design Year Needs ($ Millions, 1988)
Alabama	781
Alaska	221
Arizona	979
Arkansas	370
California	6,539
Colorado	196
Connecticut	1,392
Delaware	127
Dist. of Columbia	278
Florida	6,186
Georgia	1,007
Hawaii	413
Idaho	124
Illinois	2,958
Indiana	1721
Iowa	646
Kansas	720
Kentucky	1,457
Louisiana	1,189
Maine	341
Maryland	919
Massachusetts	5,836
Michigan	3,321
Minnesota	1,106
Mississippi	548
Missouri	1,222
Montana	69
Nebraska	114
Nevada	165
New Hampshire	854
New Jersey	3,754
New Mexico	130
New York	12,721
North Carolina	1,799
North Dakota	34
Ohio	3579
Oklahoma	476
Oregon	1,273
Pennsylvania	1,644
Rhode Island	408
South Carolina	684
South Dakota	87
Tennessee	1,467
Texas	4,975
Utah	583
Vermont	209
Virginia	957
Washington	2,685
West Virginia	976
Wisconsin	1,399
Wyoming	18
Puerto Rico	1592
Virgin Islands	27
TOTALS	83,276

The major categories of new eligibilities are nonpoint source control and programs for the protection of ground water, estuaries, and wetlands. The primary programs with new enforceable requirements are those addressing storm water, toxics discharges, and sludge use and disposal. The costs of meeting the needs for these new eligibilities and enforceable requirements (which are discussed in more detail in Appendix B) as well as the costs for maintaining compliance at existing facilities are not included in the 1988 Needs Survey. These new eligibilities and other requirements, however, will add substantially to SRF-eligible needs. Figure 3-1 shows that the SNC needs, described in Section 3.1, are only a part of the SRF-eligible financing requirements nationwide.

Figure 3–1
SRF–Eligible Projects and Activities of All States Documented and Undocumented (a)



Undocumented needs

Documented needs

Note: Figure is not to scale.

(a) Includes fifty States and Puerto Rico.

SECTION FOUR

AVAILABILITY OF SRF AND OTHER FUNDING FOR ELIGIBLE PROJECTS

Funding for wastewater treatment, collection, and conveyance projects comes from a mix of Federal, State, and local sources. Prior to the 1987 CWA Amendments, the construction grants program provided the largest share of Federal funding for these projects. With the phaseout of the construction grants program, SRFs will shift the relative contribution for wastewater project funding away from Federal sources towards State and local sources. In addition to changing the funding source mix for wastewater projects, the SRF program expands the scope of wastewater and other water quality projects and activities eligible for CWA financial assistance (see Section 3.4).

4.1 Availability of Funding from All Sources

Wastewater treatment, collection, and conveyance projects can receive funding from the construction grants program, State SRF programs, other State programs, other (non-EPA) Federal sources, and local sources. Other Federal sources include the Farmers Home Administration, the Department of Housing and Urban Development, and the Economic Development Administration. Local sources could include municipal appropriations, user fees, impact fees, and debt financing.

Table 4-1 and Figure 4-1 show the total amount of funding for wastewater projects coming from Federal and State sources, including CWA Titles II and VI, other Federal sources, and other State sources in the forty-six States that provided funding data. SRF loan repayments, which come from local sources and represent a portion of the total local source funding contribution, are included in Table 4-1 under State funding. For the period 1988 to 1999, approximately $28.7 billion (in 1988 dollars) in Federal and State funding is projected to be available for wastewater treatment and conveyance projects in the forty-six States. For the States in aggregate, CWA Titles II and VI monies contribute approximately $9.4 billion from 1988 to 1999. Other Federal sources play a small but consistent role, contributing an additional $2.2 billion during that time period. State funding, which is projected to decline from 1991 to 1994 and then slightly increase, contributes approximately $17.0 billion from 1988 to 1999. It should be noted that several States were unable to provide estimates of funding from a range of Federal and State sources.

The funding provided by each source varies throughout the 1988 to 1999 time period. CWA Titles II and VI funding for the forty-six States declines from $1.9 billion in 1988 to $517 million in 1994 (the last year of capitalization grants) to zero thereafter, based on the authorizations specified in the 1987 CWA Amendments. State funding peaks at $2.9 billion in 1991 then declines to $1.5 billion in 1994 because most States plan to reduce their matching fund contributions as Federal capitalization grant contributions decline. After 1995, funding

TABLE 4-1

Annual New Federal and State Funding for Wastewater Projects(a)
Aggregated for Forty-Six States(b)
($ Millions)

FUNDING SOURCE:	Actual			Projected					Total	1988 Constant(d) Dollar Total
	1988	1989	1990	1991	1992	1993	1994	1995-1999(c)		
CWA Title II and VI	1,881	1,829	1,578	2,029	1,597	1,059	517	0	10,490	9,441
Other Federal(e)	277	261	276	255	244	241	238	192	2,749	2,228
State(f)	1,163	1,894	1,982	2,905	2,183	1,880	1,468	1,542	21,184	17,000
TOTAL(g)	3,321	3,984	3,836	5,189	4,023	3,180	2,223	1,734	34,423	28,669

(a) Table excludes funds not considered available for wastewater project funding, including debt service reserves and monies used to repay State bonds. Most States projected CWA Title II and VI funding at authorized levels from 1991 to 1994. Six states estimated 1990 funding at authorized levels. Several states were unable to project funding contributions for some "other Federal" and "State" programs. Several States expressed concern about projecting available funds ten years into the future, and stated that the figures provided are best estimates.

(b) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.

(c) Annual average.

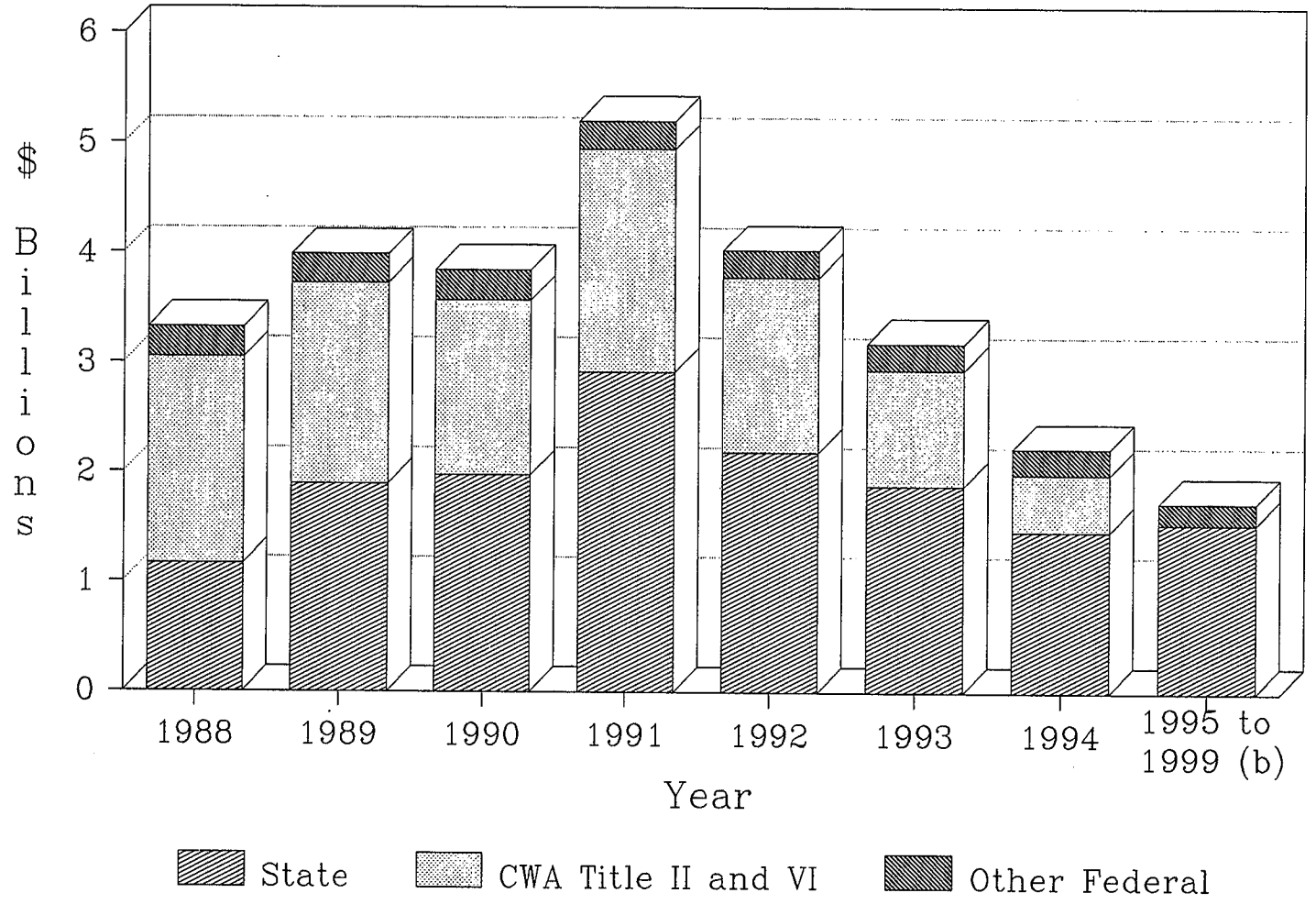
(d) Current year dollars for 1989 to 1999 discounted assuming 4.5% annual inflation, the average inflation rate for State and local government purchases from 1982 to 1988.

(e) Includes Farmers Home Administration, Department of Housing and Urban Development, and Economic Development Administration.

(f) SRF loan repayments, which come from local sources, are included under State funding.

(g) Totals vary due to rounding.

Figure 4-1
Total Federal and State Funding Projected to be Available for Wastewater Projects Aggregated for Forty-Six States(a)



(a) Delaware, Montana, North Dakota, and Ohio did not provide funding projections for this report. (b) Annual average.
Note: Figure presents nominal dollar data not adjusted for inflation.

from State sources increases slightly as higher levels of loan repayments flow back into the SRFs and are available for relending. In general the States do not plan to provide additional funding of SRFs to replace Federal capitalization grants after they are discontinued in 1994. It should be noted, however, that fifteen States do plan to further capitalize their SRFs after the Federal capitalization period. Of these, nine will provide future capitalization at a level substantially greater than the average annual Federal capitalization of their fund from 1988 to 1994; the other six at a level less than one-half of average Federal capitalization (See State specific funding data in Appendix C).

During the mid-1980s, local sources contributed approximately 40 percent of the financing for wastewater treatment projects.[1] Because nearly half of the States were unable to project local source funding other than that provided by SRF loan repayments, and because many States that did project local funding indicated that their projections were highly uncertain, Table 4-1 does not include local funding projections. Section Five of this report provides estimates of the amount of local funding that may be needed to meet wastewater collection and conveyance needs in the forty-six States. Funding for wastewater projects from all sources for each of the forty-six States is presented in Appendix D.

4.2 Availability of SRF and Other State Program Funding

Much of the available funding detailed in Section 4.1 is administered through State programs including SRFs, non-SRF State loan programs, and State grants. Table 4-2 shows the amount of actual and projected funding available through SRF and other State programs aggregated for the forty-six States from 1988 to 1999. Figure 4-2 presents a graphic illustration of these data. The States project that their programs will provide funding totalling $23.8 billion (in 1988 dollars) from 1988 to 1999.

In most of the forty-six States, the SRF programs have or will become the predominant source of State funding for wastewater projects. The States' SRFs are comprised of funds from Federal capitalization grants (including Title II transfers), State match and overmatch monies, SRF leveraging, loan repayments, and interest earnings. Collectively these sources are expected to contribute approximately $19.5 billion to SRFs in the forty-six States from 1988 to 1999. Of this, approximately $2.4 billion is projected to be held in debt service reserve accounts, leaving a total of approximately $17.0 billion in SRF funds available for project assistance during that time period. Figure 4-3 illustrates the increasing cumulative amount of SRF funds projected to be made available for forty-six States from 1988 to 1999.

Federal capitalization grants contribute to SRF capitalization through 1994 and, at authorized levels, are projected to provide 35 percent of all SRF funds in the forty-six States for the period 1988 to 1999. State match and overmatch monies together contribute about 16 percent of SRF funds available for this time period. Leveraging contributes about 37 percent and loan repayments contribute about 11 percent to the 1988 to 1999 SRF total. The

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[1]U.S. EPA. Environmental Investments: The Cost of a Clean Environment. Office of Policy, Planning, and Evaluation. December 1990.

TABLE 4-2

Estimated Annual Contributions to SRFs and Other State Programs(a) Aggregated for Forty-Six States(b) ($ Millions)

FUNDING SOURCE:	Actual			Projected					Total	1988 Constant(d) Dollar Total
	1988	1989	1990	1991	1992	1993	1994	1995-1999(c)		
SRF Cap. Grant	349	1,116	1,152	1,987	1,576	1,049	512	0	7,741	6,770
State Match	61	218	218	376	307	196	95	0	1,471	1,287
Overmatch	57	267	275	47	47	178	194	*286	2,493	1,899
Leveraged Funds	67	401	709	1,688	1,293	850	777	645	9,010	7,117
Loan Repayments(e)	0	16	7	33	109	226	327	486	3,147	2,212
SRF Interest Earnings	0	2	5	19	25	28	30	34	278	203
SRF Sub-Total	534	2,019	2,366	4,151	3,357	2,527	1,934	1,450	24,140	19,487
SRF Debt Service Reserves	(14)	(196)	(282)	(632)	(465)	(318)	(257)	(172)	(3,027)	(2,438)
SRF Available(f)	520	1,823	2,084	3,519	2,892	2,209	1,677	1,278	21,113	17,049
Cumulative SRF Available	520	2,342	4,426	7,945	10,837	13,046	14,723	16,001 to 21,113		
State Grant Programs	571	556	482	230	241	147	136	136	3,041	2,627
Other State Programs	421	631	568	1,143	627	573	167	128	4,772	4,093
TOTAL(g)	1,512	3,009	3,134	4,892	3,759	2,929	1,980	1,542	28,925	23,770

(a) Table excludes funds not considered available for wastewater project funding, including monies used to repay State bonds. Most States projected CWA VI funding at authorized levels from 1991 to 1994. Six states estimated 1990 funding at authorized levels. Several states were unable to project funding contributions for some "other Federal" and "State" programs. Several States expressed concern about projecting available funds ten years into the future, and stated that the figures provided are best estimates.

(b) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.

(c) Annual average.

(d) Current year dollars for 1989 to 1999 discounted assuming 4.5% annual inflation, the average inflation for State and local government purchases from 1982 to 1988.

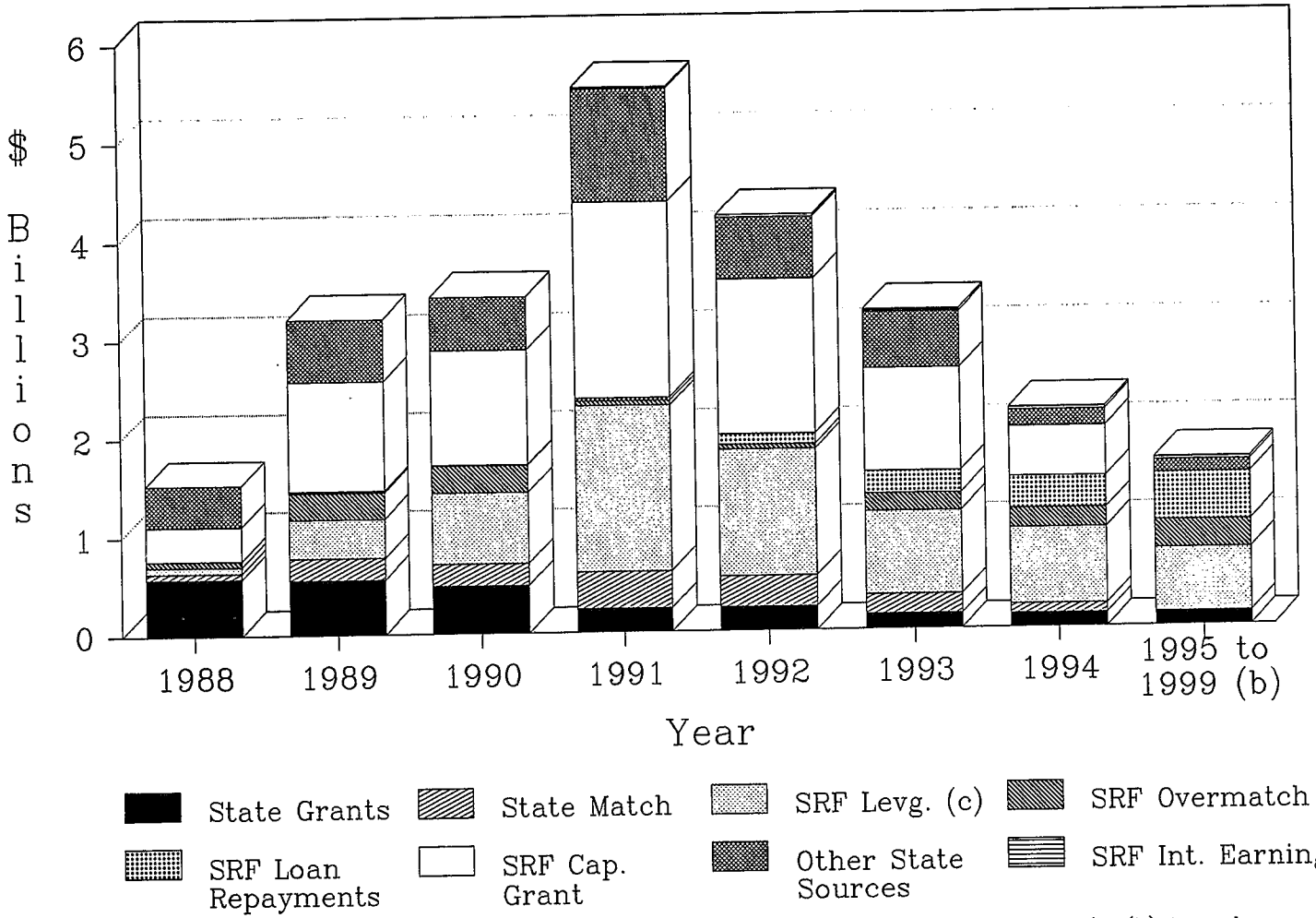
(e) SRF loan repayments are from local funds.

(f) Represents the amount of SRF money available to finance eligible projects during the time period covered.

(g) Totals vary due to rounding.

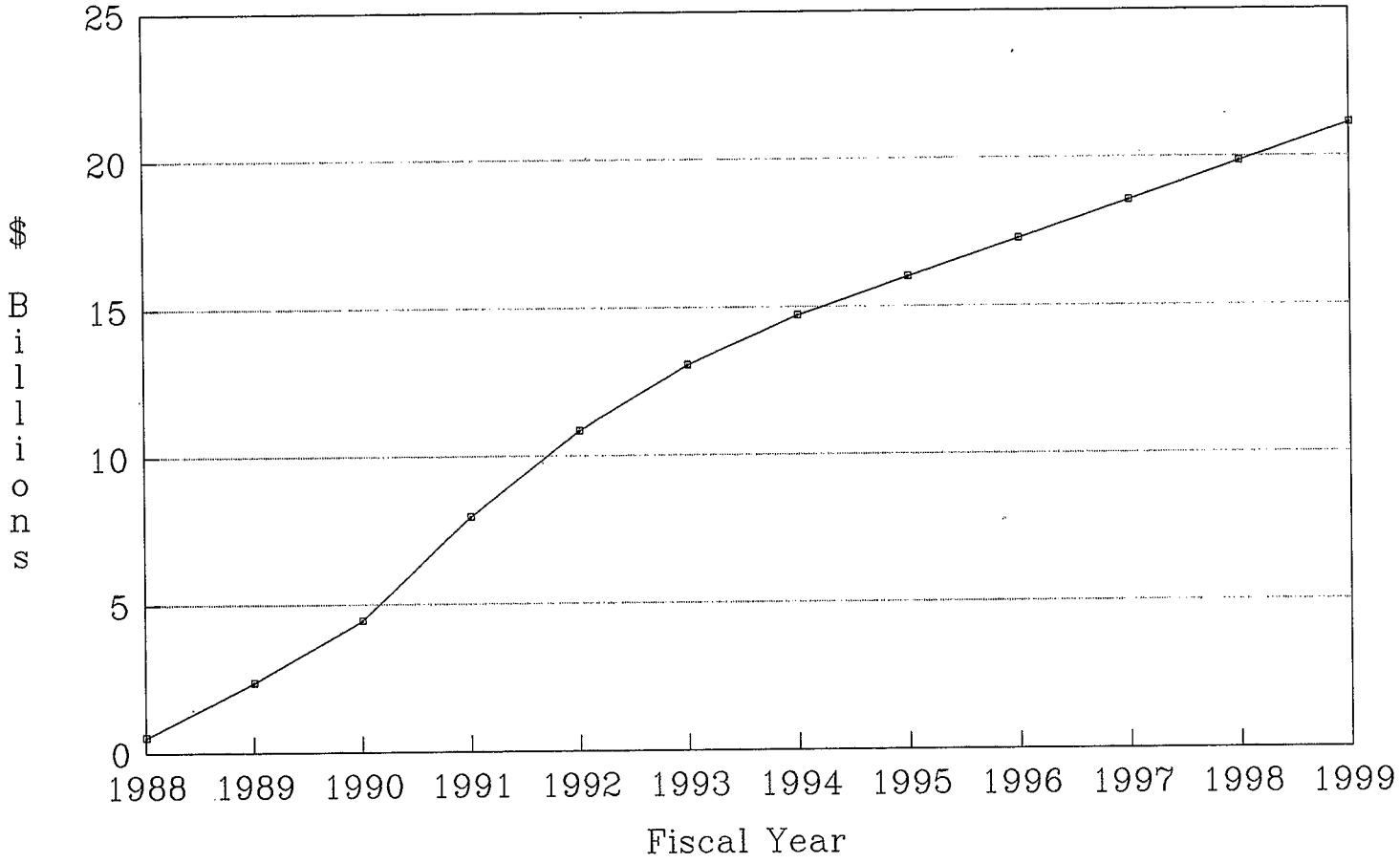
* This figure represents the overmatch contributions of six States.

Figure 4-2
Estimated Annual Contributions to SRFs and Other State Programs Aggregated for Forty-Six States(a)



(a) Delaware, Montana, North Dakota, and Ohio did not provide funding estimates for this report. (b) Annual average.
(c) Leveraged funds are net of debt service reserve funds regardless of the actual source of debt service reserves.
Note: Figure presents nominal dollar data not adjusted for inflation.

Figure 4-3
Estimated Cumulative SRF Funds Available
In Forty-Six States ($ Billions)(a)



(a) Nominal dollars. 1988–1989 actual; 1990–1999 projected.

percentage contributed by loan repayments increases rapidly throughout the time period, rising to 33 percent for 1995-1999. Overall, new contributions to SRFs and other State programs are projected to drop after 1994, the last year of Federal capitalization funding.

As shown in Table 4-2, annual new capitalization investments in SRFs are projected to decrease about 40 percent in nominal terms, from $2.1 billion to $1.3 billion, between 1990 and 1995; due to inflation, the decrease will be greater. Total State funding will decrease by over 50 percent during that same time period. Although SRF loan repayments will increase beyond 1995, this increase is not expected to be sufficient to offset the phase-out of Federal capitalization grants within the time frame of this analysis. Additional State capitalization and/or leveraging may be necessary to maintain or increase the annual level of available SRF funding for wastewater treatment and conveyance. However, as reported in the SRF Report to Congress Questionnaires, most States do not plan to provide increased assistance for wastewater treatment projects after the end of the federal capitalization period. As discussed in Subsection 4.1, of the forty-six States, fifteen States projected future capitalization of the SRF at various levels beyond 1994.

In addition to SRF assistance, many States will continue to provide financial assistance using State grants and/or other non-SRF programs, although these programs will provide less assistance as SRFs become more established. Appendix C shows the estimated amount of SRF and other State program funding to be provided from 1988 to 1999 for each of the forty-six States.

4.3 Current and Anticipated Uses of SRF Assistance

State SRF programs may provide assistance for wastewater treatment projects, wastewater collection and conveyance projects (including CSO and storm water projects), implementation of approved NPS and ground water control activities, and planning and implementation of approved estuary protection activities. States must, however, use SRF funds "in the fund as a result of capitalization grants" (i.e., the capitalization grant, repayments of the first round of loans awarded from the grant, and the State match) for wastewater treatment projects on the National Municipal Policy (NMP) list, or otherwise satisfy the "First Use" requirements, before these funds can be used to provide assistance for any other projects or activities. First use requirements are satisfied by a State when all NMP facilities are in compliance, are on enforceable schedules, have enforcement actions filed, or have a funding commitment during or prior to the first year covered in a State's most recent SRF Intended Use Plan.

The forty-six States are using the majority of their SRF assistance for wastewater treatment projects. Table 4-3 shows the actual and projected SRF funding used for the different types of eligible projects and activities. In 1988, over 85 percent of SRF assistance went to treatment projects. After 1995 the States estimate that treatment projects will account for 61 percent of SRF assistance. Most of the remaining funds will be used for wastewater collection and conveyance projects, including CSO and storm water projects. Wastewater collection and conveyance projects account for 28.5 percent of projected SRF assistance for 1991 to 1994 and 31.9 percent for 1995 to 1999. Beginning in 1989, the States report that a

TABLE 4–3

Planned Uses of SRF Assistance Aggregated for Forty–Six States(a)
($ Millions)

	Funds Committed				
	Federal Fiscal Year(s)				
TYPE OF PROJECT/ACTIVITY	1988	1989	1990	1991–1994 Aggregated	1995–1999 Aggregated
Wastewater Treatment Projects (Section 212)	398.9	773.8	1,285.6	7,387.1	4,171.3
(% of Total)	85.4%	81.3%	76.6%	69.0%	61.2%
Wastewater Collection & Conveyance (Section 212)	68.0	176.6	389.9	3,055.1	2,174.6
(% of Total)	14.6%	18.6%	23.2%	28.5%	31.9%
Nonpoint Source & Ground Water (Section 319)(b)	0	1.3	1.4	200.6	439.0
(% of Total)	0.0%	0.1%	0.1%	1.9%	6.4%
Estuarine Activities (Section 320)	0	0	0.04	60.16	30.16
(% of Total)	0.0%	0.0%	0.0%	0.6%	0.4%
TOTAL	466.9	951.7	1,678.2	10,703.1	6,814.3
	100%	100%	100%	100%	100%

Note: Funds used for administrative expenses and debt service reserves are not included in this table. The amount of money used for funding projects in individual years may differ from SRF funding available in those years because project funding schedules are not necessarily tied to available funds year–by–year..

(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.

(b) Wyoming intends to use all of its available SRF funds for NPS activities in the 1991 to 1994 time period.

small percentage of SRF assistance will be used for NPS activities. One State, Wyoming, intends to use all of its available SRF funds for NPS activities in the 1991 to 1994 time period. The States project using only a very small percentage of SRF assistance for implementation of estuary management plans developed under the National Estuary Program.

SECTION FIVE

COMPARISON OF WASTEWATER TREATMENT NEEDS TO AVAILABLE FUNDS

This section compares the wastewater treatment and conveyance needs of the forty-six States that provided funding data to the total projected funding available from Federal and State sources in those States. The section also estimates the amount of local funding that may be needed, in addition to Federal and State funding, to meet documented needs.

Table 5-1 compares the needs of SNC facilities in the forty-six States to funding available during 1988-1999 (in 1988 dollars). The SNC needs data are derived from Table 3-1 as explained in Section 3.1. Table 5-1 shows that SRF funds are adequate to cover SNC needs in forty-three of the States and from 52 to 84 percent of the needs in the remaining three States. As pointed out in Section Three, however, the SNC-related needs represent a "snapshot" as of June 30, 1990; there will likely be additional significant violations through 1999 that will require construction to correct. Furthermore, SRF funding extends far beyond the requirements of SNC facilities.

Table 5-2 compares the design year Category I and II wastewater treatment needs in the forty-six States to funding available from Federal and State sources during 1988-1999 (in 1988 dollars). Similarly, Table 5-3 compares design year Category I through V wastewater treatment needs in the 46 States to funding available from the same sources for the same period. The design year needs data are derived from the 1988 Needs Survey, which was the most current available during preparation of this report (the 1990 Needs Survey is expected to be available in the Summer of 1991). The tables show the proportion of Category I and II (Table 5-2) or Categories I through V (Table 5-3) design year needs potentially covered by Federal and State funds. The gap, if any, between Federal and State funding and design year needs is shown in the right hand columns of both tables. The design year needs in Tables 5-2 and 5-3 are estimates made at the time the 1988 Needs Survey was conducted. These estimates will almost certainly increase over the 12-year study period forming the basis of the available funding estimates in the tables.

For the forty-six States in aggregate, total Federal and State funding is sufficient to cover 69 percent of Category I and II design year needs and 35 percent of all Category I to V design year needs. State and local funding, therefore, may need to provide $9.1 billion or 31 percent of Category I and II needs and $50.3 billion or 65 percent of all Category I to V needs.[1] The proportion of design year needs covered by Federal and State sources varies widely among the States. Five States project sufficient funding from Federal and State sources in the 1988 to 1999 time period to completely cover their Category I to V design year needs. Eight States project

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[1]For the 46 States in aggregate, there is total Federal and State funding of $20.6 billion available for Category I and II needs (see Table 5-2) and a total of $27.3 billion available for all Category I through V design year needs (see Table 5-3). These funding totals do not include the excess funds available in States where funds are sufficient to cover 100 percent of the needs, since it is assumed funds exceeding needs in one State will not be available to meet design year needs in other States.

available Federal and State funds to meet 75 to 99 percent of their design year needs. Five States project coverage of 50 to 74 percent of their design year needs; seventeen project coverage of 24 to 50 percent of these needs. Eleven States project Federal and State funding to cover less than 25 percent of their design year needs; of these, two project coverage of only 12 percent of their design year needs. One of these two States, Michigan, did not provide 1995 to 1999 funding data and would, therefore, show a smaller gap if more complete funding estimates were available; the other State, Florida, provided more complete funding information, and, as indicated in the table, has projected needs in excess of projected available funds.

In the mid-1980s, localities typically provided approximately 40 percent of such funds.[2] The approximate 65 percent local funding share for the forty-six States in aggregate therefore represents an increase of over 50 percent in the level of local funding needed for wastewater treatment and conveyance for the period covered. Further, localities will be responsible for repaying SRF loans. Based on the final composition of grant and loan funding, localities will ultimately be responsible for paying well over 65 percent of the cost of wastewater treatment and conveyance.

The total cost of SRF-eligible projects in the forty-six States will greatly exceed the design year needs presented in Tables 5-2 and 5-3. New needs are expected to arise between 1988 and 1999 due to economic growth and wastewater treatment plant renovation and expansion. The latter needs are likely to be significant because many treatment plants built in the 1970s will be reaching their design capacity during the 1990s. In addition, funding needs arising from the new funding eligibilities and new enforceable requirements (e.g., toxics control, storm water management, and sludge disposal) will add substantially to the documented needs. Some States have already committed funds to address these additional needs and will continue to do so in the future. Therefore, not all of the Federal and State funds shown in Table 5-3 will be available for Category I to V wastewater treatment and conveyance projects. Appendix B to this report discusses the new eligibilities and new enforceable requirements.

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[2]U.S. EPA. Environmental Investments: The Cost of a Clean Environment. Office of Policy, Planning, and Evaluation. December 1990.

TABLE 5-1

Comparison of SNC Needs to Federal and State Funds Available
For Forty-Six(a) States
($ Millions, in 1988 Dollars)

STATE	Total SNC Needs	Actual and Projected Funds(b) 1988 to 1999			Total Federal and State Funds Available 1988 to 1999
		SRF(c)	Other State	Other Federal	
Alabama	170	251	0	111	362
Alaska	26	69	32	5	106
Arizona	15	85	0	67	151
Arkansas	148	71	100	128	298
California	1,701	945	97	385	1,427
Colorado	69	149	9	57	215
Connecticut	236	707	177	0	884
Florida	214	490	17	252	759
Georgia	163	248	248	248	744
Hawaii	196	101	0	1	101
Idaho	18	53	39	52	144
Illinois	29	532	484	208	1,223
Indiana	275	256	166	279	701
Iowa	137	229	0	84	313
Kansas	59	83	0	63	146
Kentucky	166	205	80	111	395
Louisiana	331	328	0	121	449
Maine	118	59	142	0	201
Maryland	36	579	45	98	722

Continued

TABLE 5-1, continued

Comparison of SNC Needs to Federal and State Funds Available
For Forty-Six(a) States
($ Millions, in 1988 Dollars)

STATE	Total SNC Needs	Actual and Projected Funds(b) 1988 to 1999			Total Federal and State Funds Available 1988 to 1999
		SRF(c)	Other State	Other Federal	
Massachusetts	865	220	1,682	80	1,982
Michigan	146	334	0	70	404
Minnesota	295	482	222	146	849
Mississippi	119	123	3	76	202
Missouri	159	769	151	157	1,077
Nebraska	17	48	8	48	105
Nevada	1	54	0	26	80
New Hampshire	219	79	115	39	234
New Jersey	297	1,069	144	34	1,247
New Mexico	36	81	14	15	110
New York	1,234	3,309	68	405	3,783
North Carolina	193	196	27	167	390
Oklahoma	71	342	377	24	743
Oregon	63	119	50	101	271
Pennsylvania	419	363	695	368	1,427
Rhode Island	41	56	0	27	83
South Carolina	86	152	0	14	167
South Dakota	74	59	2	24	86
Tennessee	199	253	205	108	566

Continued

TABLE 5-1, continued

Comparison of SNC Needs to Federal and State Funds Available
For Forty-Six(a) States
($ Millions, in 1988 Dollars)

STATE	Total SNC Needs	Actual and Projected Funds(b) 1988 to 1999			Total Federal and State Funds Available 1988 to 1999
		SRF(c)	Other State	Other Federal	
Texas	1,279	845	177	294	1,315
Utah	107	79	36	17	132
Vermont	14	44	56	23	123
Virginia	160	352	184	98	634
Washington	676	170	424	91	685
West Virginia	272	138	0	31	169
Wisconsin	87	1,802	413	122	2,338
Wyoming	5	73	32	24	129
TOTAL(d)	11,240	17,049	6,720	4,899	28,669

(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.

(b) Funds available data are derived from Table D-1. All funds have been discounted to 1988 dollars. Funds not considered available for wastewater project funding, including debt service reserves and monies used to repay State bonds, are excluded. Some of Virginia's non-SRF funds included in their total funds figure have been targeted for wastewater conveyance projects, and thus may not be available to fund treatment needs. Several States were unable to provide Federal funding estimates for some non-EPA Federal programs and non-SRF State programs.

(c) SRF monies include loan repayments from local sources. Loan repayments account for 12% of SRF funds from 1988 to 1999. Michigan, New Hampshire, and Rhode Island did not provide SRF funding projections for the 1995 to 1999 time period.

(d) Totals vary due to rounding.

TABLE 5–2

Comparison of Design Year Category I and II Secondary and Advanced Wastewater Treatment Needs, Federal and State Funds Available, and Funds Needed for Forty–Six(a) States
($ Millions, in 1988 Dollars)

	STATE	Design Year Needs(c) (Cat. I–II)	Actual and Projected Funds(b) 1988 to 1999 SRF(d)	Other State	Other Federal	Total Federal and State Funds Available 1988 to 1999	Potential Funding Gap(e)
(f)	Alabama	324	251	0	111	362	(38)
	(% of Cat. I–II Need)		77%	0%	34%	112%	-12%
(f)	Alaska	94	69	32	5	106	(12)
	(% of Cat. I–II Need)		73%	34%	6%	113%	-13%
	Arizona	692	85	0	67	151	541
	(% of Cat. I–II Need)		12%	0%	10%	22%	78%
(f)	Arkansas	215	71	100	128	298	(83)
	(% of Cat. I–II Need)		33%	46%	59%	139%	-39%
	California	3,385	945	97	385	1,427	1,958
	(% of Cat. I–II Need)		28%	3%	11%	42%	58%
(f)	Colorado	144	149	9	57	215	(71)
	(% of Cat. I–II Need)		104%	6%	39%	149%	-49%
(f)	Connecticut	421	707	177	0	884	(463)
	(% of Cat. I–II Need)		168%	42%	0%	210%	-110%
	Florida	2,427	490	17	252	759	1,668
	(% of Cat. I–II Need)		20%	1%	10%	31%	69%
(f)	Georgia	436	248	248	248	744	(308)
	(% of Cat. I–II Need)		57%	57%	57%	171%	-71%
	Hawaii	174	101	0	1	101	73
	(% of Cat. I–II Need)		58%	0%	0%	58%	42%
(f)	Idaho	73	53	39	52	144	(71)
	(% of Cat. I–II Need)		72%	53%	71%	197%	-97%
(f)	Illinois	759	532	484	208	1,223	(464)
	(% of Cat. I–II Need)		70%	64%	27%	161%	-61%

Continued

TABLE 5–2, continued

Comparison of Design Year Category I and II Secondary and Advanced Wastewater Treatment Needs, Federal and State Funds Available, and Funds Needed for Forty–Six(a) States
($ Millions, in 1988 Dollars)

	STATE	Design Year Needs(c) (Cat. I–II)	Actual and Projected Funds(b) 1988 to 1999 SRF(d)	Other State	Other Federal	Total Federal and State Funds Available 1988 to 1999	Potential Funding Gap(e)
(f)	Indiana	337	256	166	279	701	(364)
	(% of Cat. I–II Need)		76%	49%	83%	208%	-108%
(f)	Iowa	311	229	0	84	313	(2)
	(% of Cat. I–II Need)		73%	0%	27%	101%	-1%
	Kansas	193	83	0	63	146	47
	(% of Cat. I–II Need)		43%	0%	33%	76%	24%
(f)	Kentucky	245	205	80	111	395	(150)
	(% of Cat. I–II Need)		83%	33%	45%	161%	-61%
	Louisiana	505	328	0	121	449	56
	(% of Cat. I–II Need)		65%	0%	24%	89%	11%
(f)	Maine	150	59	142	0	201	(51)
	(% of Cat. I–II Need)		39%	95%	0%	134%	-34%
(f)	Maryland	591	579	45	98	722	(131)
	(% of Cat. I–II Need)		98%	8%	17%	122%	-22%
	Massachusetts	2,560	220	1,682	80	1,982	578
	(% of Cat. I–II Need)		9%	66%	3%	77%	23%
	Michigan	876	334	0	70	404	472
	(% of Cat. I–II Need)		38%	0%	8%	46%	54%
(f)	Minnesota	550	482	222	146	849	(299)
	(% of Cat. I–II Need)		88%	40%	26%	154%	-54%
	Mississippi	282	123	3	76	202	80
	(% of Cat. I–II Need)		43%	1%	27%	72%	28%
(f)	Missouri	515	769	151	157	1,077	(562)
	(% of Cat. I–II Need)		149%	29%	30%	209%	-109%

Continued

TABLE 5–2, continued

Comparison of Design Year Category I and II Secondary and Advanced Wastewater Treatment Needs, Federal and State Funds Available, and Funds Needed for Forty–Six(a) States
($ Millions, in 1988 Dollars)

	STATE	Design Year Needs(c) (Cat. I–II)	Actual and Projected Funds(b) 1988 to 1999 SRF(d)	Other State	Other Federal	Total Federal and State Funds Available 1988 to 1999	Potential Funding Gap(e)
(f)	Nebraska	66	48	8	48	105	(39)
	(% of Cat. I–II Need)		73%	12%	73%	159%	-59%
	Nevada	124	54	0	26	80	44
	(% of Cat. I–II Need)		44%	0%	21%	65%	35%
(f)	New Hampshire	139	79	115	39	234	(95)
	(% of Cat. I–II Need)		57%	83%	28%	168%	-68%
	New Jersey	1,831	1,069	144	34	1,247	584
	(% of Cat. I–II Need)		58%	8%	2%	68%	32%
(f)	New Mexico	55	81	14	15	110	(55)
	(% of Cat. I–II Need)		147%	26%	27%	200%	-100%
(f)	New York	2,106	3,309	68	405	3,783	(1,677)
	(% of Cat. I–II Need)		157%	3%	19%	180%	-80%
	North Carolina	631	196	27	167	390	241
	(% of Cat. I–II Need)		31%	4%	26%	62%	38%
(f)	Oklahoma	293	342	377	24	743	(450)
	(% of Cat. I–II Need)		117%	129%	8%	253%	-153%
	Oregon	517	119	50	101	271	246
	(% of Cat. I–II Need)		23%	10%	20%	52%	48%
(f)	Pennsylvania	751	363	695	368	1,427	(676)
	(% of Cat. I–II Need)		48%	93%	49%	190%	-90%
(f)	Rhode Island	41	56	0	27	83	(42)
	(% of Cat. I–II Need)		137%	0%	65%	202%	-102%
	South Carolina	292	152	0	14	167	125
	(% of Cat. I–II Need)		52%	0%	5%	57%	43%

Continued

TABLE 5-2, continued

Comparison of Design Year Category I and II Secondary and Advanced Wastewater Treatment Needs, Federal and State Funds Available, and Funds Needed for Forty-Six(a) States
($ Millions, in 1988 Dollars)

	STATE	Design Year Needs(c) (Cat. I-II)	Actual and Projected Funds(b) 1988 to 1999 SRF(d)	Other State	Other Federal	Total Federal and State Funds Available 1988 to 1999	Potential Funding Gap(e)
(f)	South Dakota	57	59	2	24	86	(29)
	(% of Cat. I-II Need)		104%	4%	43%	150%	-50%
	Tennessee	584	253	205	108	566	18
	(% of Cat. I-II Need)		43%	35%	19%	97%	3%
	Texas	2,761	845	177	294	1,315	1,446
	(% of Cat. I-II Need)		31%	6%	11%	48%	52%
	Utah	462	79	36	17	132	330
	(% of Cat. I-II Need)		17%	8%	4%	29%	71%
(f)	Vermont	94	44	56	23	123	(29)
	(% of Cat. I-II Need)		47%	59%	24%	131%	-31%
(f)	Virginia	399	352	184	98	634	(235)
	(% of Cat. I-II Need)		88%	46%	25%	159%	-59%
	Washington	1,077	170	424	91	685	392
	(% of Cat. I-II Need)		16%	39%	8%	64%	36%
	West Virginia	337	138	0	31	169	168
	(% of Cat. I-II Need)		41%	0%	9%	50%	50%
(f)	Wisconsin	780	1,802	413	122	2,338	(1,558)
	(% of Cat. I-II Need)		231%	53%	16%	300%	-200%
(f)	Wyoming	9	73	32	24	129	(120)
	(% of Cat. I-II Need)		812%	353%	264%	1429%	-1329%
	TOTAL	29,665	17,049	6,720	4,899	20,599 (g)	9,066
	(% of Cat. I-II Need)		57%	23%	17%	69%	31%

Continued

FOOTNOTES FOR TABLE 5-2

(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.

(b) Funds available data are derived from Table D-1. All funds have been discounted to 1988 dollars. Funds not considered available for wastewater project funding, including debt service reserves and monies used to repay State bonds, are excluded. Some of Virginia's non-SRF funds included in their total funds figure have been targeted for wastewater conveyance projects, and thus may not be available to fund treatment needs. Several States were unable to provide Federal funding estimates for some non-EPA Federal programs and non-SRF State programs.

(c) For a discussion of design year needs, see Footnote #1 and #2, Section 3.2.

(d) SRF monies include loan repayments from local sources. Loan repayments account for 12% of SRF funds from 1988 to 1999. Michigan, New Hampshire, and Rhode Island did not provide SRF funding projections for the 1995 to 1999 time period.

(e) Derived by subtracting actual and projected 1988 to 1999 SRF, other State, and Federal funding from design year needs.

(f) State's available funds exceed Category I-II design year needs.

(g) Total equals sum of State and Federal funds for 19 States whose Category I-II design year needs exceed available funds, plus funds equaling design year needs in 27 States whose funds exceed needs. Available funds in excess of design year needs in any one State are assumed not to help meet needs in any other State.

TABLE 5-3

Comparison of Design Year Category I to V Wastewater Treatment and Conveyance Needs, Federal and State Funds Available, and Funds Needed for Forty-Six(a) States
($ Millions, in 1988 Dollars)

	STATE	Design Year Needs(c) (Cat. I-V)	Actual and Projected Funds(b) 1988 to 1999 SRF(d)	Other State	Other Federal	Total Federal and State Funds Available 1988 to 1999	Funding Gap(e)
	Alabama	781	251	0	111	362	419
	(% of Cat. I-V Need)		32%	0%	14%	46%	54%
	Alaska	221	69	32	5	106	115
	(% of Cat. I-V Need)		31%	14%	2%	48%	52%
	Arizona	979	85	0	67	151	828
	(% of Cat. I-V Need)		9%	0%	7%	15%	85%
	Arkansas	370	71	100	128	298	72
	(% of Cat. I-V Need)		19%	27%	35%	81%	19%
	California	6,539	945	97	385	1,427	5,112
	(% of Cat. I-V Need)		14%	1%	6%	22%	78%
(f)	Colorado	196	149	9	57	215	(19)
	(% of Cat. I-V Need)		76%	5%	29%	110%	-10%
	Connecticut	1,392	707	177	0	884	508
	(% of Cat. I-V Need)		51%	13%	0%	63%	37%
	Florida	6,186	490	17	252	759	5,427
	(% of Cat. I-V Need)		8%	0%	4%	12%	88%
	Georgia	1,007	248	248	248	744	263
	(% of Cat. I-V Need)		25%	25%	25%	74%	26%
	Hawaii	413	101	0	1	101	312
	(% of Cat. I-V Need)		24%	0%	0%	25%	75%
(f)	Idaho	124	53	39	52	144	(20)
	(% of Cat. I-V Need)		42%	31%	42%	116%	-16%
	Illinois	2,958	532	484	208	1,223	1,735
	(% of Cat. I-V Need)		18%	16%	7%	41%	59%

Continued

TABLE 5-3, continued

Comparison of Design Year Category I to V Wastewater Treatment and Conveyance Needs, Federal and State Funds Available, and Funds Needed for Forty-Six(a) States
($ Millions, in 1988 Dollars)

STATE	Design Year Needs(c) (Cat. I-V)	Actual and Projected Funds(b) 1988 to 1999 SRF(d)	Other State	Other Federal	Total Federal and State Funds Available 1988 to 1999	Funding Gap(e)
Indiana	1,721	256	166	279	701	1,020
(% of Cat. I-V Need)		15%	10%	16%	41%	59%
Iowa	646	229	0	84	313	333
(% of Cat. I-V Need)		35%	0%	13%	48%	52%
Kansas	720	83	0	63	146	574
(% of Cat. I-V Need)		12%	0%	9%	20%	80%
Kentucky	1,457	205	80	111	395	1,062
(% of Cat. I-V Need)		14%	5%	8%	27%	73%
Louisiana	1,189	328	0	121	449	740
(% of Cat. I-V Need)		28%	0%	10%	38%	62%
Maine	341	59	142	0	201	140
(% of Cat. I-V Need)		17%	42%	0%	59%	41%
Maryland	919	579	45	98	722	197
(% of Cat. I-V Need)		63%	5%	11%	79%	21%
Massachusetts	5,836	220	1,682	80	1,982	3,854
(% of Cat. I-V Need)		4%	29%	1%	34%	66%
Michigan	3,321	334	0	70	404	2,917
(% of Cat. I-V Need)		10%	0%	2%	12%	88%
Minnesota	1,106	482	222	146	849	257
(% of Cat. I-V Need)		44%	20%	13%	77%	23%
Mississippi	548	123	3	76	202	346
(% of Cat. I-V Need)		22%	1%	14%	37%	63%
Missouri	1,222	769	151	157	1,077	145
(% of Cat. I-V Need)		63%	12%	13%	88%	12%

Continued

TABLE 5-3, continued

Comparison of Design Year Category I to V Wastewater Treatment and Conveyance Needs, Federal and State Funds Available, and Funds Needed for Forty-Six(a) States
($ Millions, in 1988 Dollars)

STATE	Design Year Needs(c) (Cat. I-V)	Actual and Projected Funds(b) 1988 to 1999 SRF(d)	Other State	Other Federal	Total Federal and State Funds Available 1988 to 1999	Funding Gap(e)
Nebraska	114	48	8	48	105	9
(% of Cat. I-V Need)		42%	7%	42%	92%	8%
Nevada	165	54	0	26	80	85
(% of Cat. I-V Need)		33%	0%	16%	49%	51%
New Hampshire	854	79	115	39	234	620
(% of Cat. I-V Need)		9%	13%	5%	27%	73%
New Jersey	3,754	1,069	144	34	1,247	2,507
(% of Cat. I-V Need)		28%	4%	1%	33%	67%
New Mexico	130	81	14	15	110	20
(% of Cat. I-V Need)		62%	11%	12%	85%	15%
New York	12,721	3,309	68	405	3,783	8,938
(% of Cat. I-V Need)		26%	1%	3%	30%	70%
North Carolina	1,799	196	27	167	390	1,409
(% of Cat. I-V Need)		11%	2%	9%	22%	78%
(f) Oklahoma	476	342	377	24	743	(267)
(% of Cat. I-V Need)		72%	79%	5%	156%	-56%
Oregon	1,273	119	50	101	271	1,002
(% of Cat. I-V Need)		9%	4%	8%	21%	79%
Pennsylvania	1,644	363	695	368	1,427	217
(% of Cat. I-V Need)		22%	42%	22%	87%	13%
Rhode Island	408	56	0	27	83	325
(% of Cat. I-V Need)		14%	0%	7%	20%	80%
South Carolina	684	152	0	14	167	517
(% of Cat. I-V Need)		22%	0%	2%	24%	76%

Continued

TABLE 5-3, continued

Comparison of Design Year Category I to V Wastewater Treatment and Conveyance Needs, Federal and State Funds Available, and Funds Needed for Forty-Six(a) States
($ Millions, in 1988 Dollars)

STATE	Design Year Needs(c) (Cat. I-V)	Actual and Projected Funds(b) 1988 to 1999 SRF(d)	Other State	Other Federal	Total Federal and State Funds Available 1988 to 1999	Funding Gap(e)
South Dakota	87	59	2	24	86	1
(% of Cat. I-V Need)		68%	2%	28%	98%	2%
Tennessee	1,467	253	205	108	566	901
(% of Cat. I-V Need)		17%	14%	7%	39%	61%
Texas	4,975	845	177	294	1,315	3,660
(% of Cat. I-V Need)		17%	4%	6%	26%	74%
Utah	583	79	36	17	132	451
(% of Cat. I-V Need)		14%	6%	3%	23%	77%
Vermont	209	44	56	23	123	86
(% of Cat. I-V Need)		21%	27%	11%	59%	41%
Virginia	957	352	184	98	634	323
(% of Cat. I-V Need)		37%	19%	10%	66%	34%
Washington	2,685	170	424	91	685	2,000
(% of Cat. I-V Need)		6%	16%	3%	26%	74%
West Virginia	976	138	0	31	169	807
(% of Cat. I-V Need)		14%	0%	3%	17%	83%
(f)(g) Wisconsin	1,399	1,802	413	122	2,338	(939)
(% of Cat. I-V Need)		129%	30%	9%	167%	-67%
(f) Wyoming	18	73	32	24	129	(111)
(% of Cat. I-V Need)		406%	177%	132%	715%	-615%
TOTAL	77,570	17,049	6,720	4,899	27,314 (h)	50,256
(% of Cat. I-V Need)		22%	9%	6%	35%	65%

Continued

FOOTNOTES FOR TABLE 5-3

(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.

(b) Funds available data are derived from Table D-1. All funds have been discounted to 1988 dollars. Funds not considered available for wastewater project funding, including debt service reserves and monies used to repay State bonds, are excluded. Some of Virginia's non-SRF funds included in their total funds figure have been targeted for wastewater conveyance projects, and thus may not be available to fund treatment needs. Several States were unable to provide Federal funding estimates for some non-EPA Federal programs and non-SRF State programs.

(c) For a discussion of design year needs, see Footnote #1 and #2, Section 3.2.

(d) SRF monies include loan repayments from local sources. Loan repayments account for 12% of SRF funds from 1988 to 1999. Michigan, New Hampshire, and Rhode Island did not provide SRF funding projections for the 1995 to 1999 time period.

(e) Derived by subtracting actual and projected 1988 to 1999 SRF, other State, and Federal funding from design year needs.

(f) State's available funds exceed Category I-V design year needs.

(g) A large portion of Wisconsin's available Federal and State funds will be used to fund pollution prevention and urban stormwater needs. These needs were not included in the 1988 Needs Survey. With the addition of these new needs, Wisconsin projects that total funds available will equal needs and Wisconsin's funding gap will be 0%.

(h) Total equals sum of State and Federal funds for 41 States whose Category I-V design year needs exceed available funds, plus funds equaling design year needs in five States whose funds exceed needs. Available funds in excess of design year needs in any one State are assumed not to help meet needs in any other State.

SECTION SIX

SRF PROGRAM OPERATIONS

This section discusses how the States operate their SRF programs. Program structure is described in Section 6.1. Section 6.2 discusses special programs for small and economically distressed communities, and Section 6.3 describes the mechanisms used to ensure the viability of the States' SRFs.

6.1 Structure of the State SRF Programs

All of the forty-seven States that responded to the SRF questionnaire offer SRF loans at below-market interest rates. Loan repayments, except for those required to retire program debt, are used to fund additional loans. While the SRFs have some basic similarities, the programs differ in several ways, including their manner of obtaining matching funds, their use of leveraging, and their method of determining interest rates.

Method of Obtaining Matching Funds

The States have adopted several different approaches toward generating matching funds. The most commonly used methods are State appropriations, State general obligation (G.O.) bonds, and State or SRF program revenue bonds. Of the forty-six States that provided data on their method of obtaining State matching funds, 21 obtained their match with State appropriations, 12 with G.O. bonds, 5 with revenue bonds, and 1 with a combination of State appropriations and revenue bonds. The remaining 7 States use a variety of other methods which include pledging the loan repayments of existing wastewater treatment loan programs and requiring SRF loan recipients to provide their own matching funds. One State, Washington, obtains its State match through a tax on tobacco products.

The method a State uses to supply the match affects the amount of lendable funds in the SRF in the long term. Funds provided by a State G.O. bond or appropriation generally do not need to be paid back by the SRF. Therefore, when these funds are loaned by the SRF, the repayments are available to fund additional loans. In cases where loans are made with matching funds provided by SRF revenue bonds or similar debt instruments, less money will be available to fund additional loans if SRF interest earnings are used to repay the SRF debt.

Leveraging

For most States, the SRF capitalization grant and the State match constitute all available capitalization for program assistance. SRF programs in 13 of the forty-seven States that responded to the questionnaire issue debt to provide additional lendable funds. Some of

the States that are not currently leveraging indicated that they intend to consider this option in the future.

Each of the leveraged SRF programs is different. States have designed leveraging structures that best address their particular needs and achieve their program goals. All of the leveraged SRF programs developed to date, however, fit into one of two general categories: reserve fund leveraging or blended rate leveraging.

The reserve fund approach, which is the most common of the two, uses some or all of the capitalization grant and/or the State matching funds as a reserve fund within the SRF that serves two purposes. First, these monies secure a revenue bond issue, the proceeds of which are deposited into the SRF and lent to SRF assistance recipients. In addition, the reserve fund produces investment interest earnings that are used along with loan repayments to pay debt service on the bonds. It is this feature that allows the SRF to charge less interest on loans than it must pay on its bonds, effectively providing an interest rate subsidy to communities.

An SRF program that leverages using the blended rate approach provides an interest rate subsidy through a different mechanism. The SRF in this case also issues revenue bonds, but secures the bonds through a traditional debt service reserve fund from bond proceeds and lends the balance of the proceeds to recipients at the market interest rate of the bonds. The capitalization grant and State matching funds are lent to the assistance recipient at zero percent interest. Each recipient receives half of its loan assistance from capitalization and match funds at zero percent and half of its loan assistance from bond proceeds at market rate. The effective interest rate on the SRF loan produced by this "blending" is below market rates and provides a subsidy to communities borrowing from the program.

Types of Assistance

Table 6-1 presents the estimated distribution of available funds among the various types of SRF assistance. The data are aggregated for the forty-six States that provided information on types of SRF assistance. (Appendix E provides these data for each of the forty-six States.) The States intend to provide most of their financial assistance through loans. Twenty-two of the States indicated that loans would be the only form of financial assistance provided. Twenty-four States plan to use a small amount of program funds for refinancing. States that leverage through revenue bonds will often use some funding to secure program indebtedness. As Table 6-1 shows, the portion of aggregate funds committed as revenue or security for SRF debt is expected to increase beginning in 1991 as additional States implement leveraged SRFs. While this shift leads to a corresponding decrease in the portion of funds used for loans the overall impact of the increase in leveraging is a significant increase in the amount of funds lent.

Interest Rates

All States offer SRF loans at below market rates, although two of States reportedly offer some of their SRF loans at up to market rates. The vast majority of SRF loans are issued at interest rates of 2 to 5-1/2 percent. The range of interest rates and methods of setting

TABLE 6-1

Types of SRF Assistance and Administrative Costs
Aggregated for Forty-Six States(a)

($ Millions)

	Funds Committed					
	Federal Fiscal Year(s)					
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994 Aggregated	1995-1999 Aggregated	Total
Loans (i.e., new loans) (% of Total)	428.2 88%	939.0 92%	1,533.2 82%	9,153.0 75%	5,914.6 80%	17,967.9 78%
Purchase or Refinance Existing Debt Obligation (% of Total)	37.9 8%	26.3 3%	152.8 8%	1,486.5 12%	765.1 10%	2,468.6 11%
Guarantee or Purchase Insurance for Local Debt (% of Total)	0.0 0%	0.0 0%	0.0 0%	0.0 0%	0.0 0%	0.0 0%
Revenue or Security for SRF Debt (% of Total)	14.1 3%	56.4 6%	160.7 9%	1,462.5 12%	640.3 9%	2,333.9 10%
Loan Guarantees for "Sub-State Revolving Funds" (% of Total)	0.0 0%	0.0 0%	0.0 0%	0.0 0%	0.0 0%	0.0 0%
Administrative Expenses (max. 4% of cap grant)(b) (% of Total)(c)	7.4 2%	18.4 2%	40.2 2%	206.0 2%	79.6 1%	351.7 2%
TOTAL	487.6 100%	1,023.3 100%	1,869.6 100%	12,203.1 100%	7,399.5 100%	22,983.1 100%

(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.

(b) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards received by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(c) Note that this figure is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

loan interest rates are presented in Table 6-2. Sixteen States report that they adjust their interest rates based on the economic condition of the community (see discussion in Section 6.2).

In setting interest rates for SRF loan recipients, States must set rates low enough to make the program attractive to communities, but high enough to ensure the long term viability of the fund. The differing approaches used by the States reflect their perception of this trade-off. Some States reported that the high cost of program requirements (described in detail in Section Eleven) had to be offset by very low interest rates to make the SRF program attractive in their State. Various analyses have estimated that an interest rate subsidy of 2 to 3 percent to loan recipients (compared to the rate they can obtain in the market) is necessary to offset these costs.

The low, subsidized interest rates offered by SRF programs, however, reduce the level of funding available in the SRF in future years. After initial capitalization, SRFs will rely to a large extent on loan repayments to provide capital from which to make additional loans. While the initial SRF capitalization funds will be maintained by the principal portion of the repayments, the growth or decline of the fund depends directly on the rate of interest charged to recipients. In general, to maintain a level amount of actual project purchasing power, an SRF would have to charge an average interest rate equal to the inflation rate (which since 1982 has averaged 4.5 percent per year for State and local government purchases[1]). There would be some fluctuation in the amount available for loans each year, based on the repayment schedules, but an SRF charging interest at the inflation rate would, over time, provide a steady source of loan assistance.

An SRF with a loan portfolio that has an average interest rate below the inflation rate will lose purchasing power without additional State capitalization. In addition to inflation, SRF program expenses such as the purchase of local debt insurance, allowable administrative costs, and SRF loan defaults, could diminish lendable SRF funds over time in the absence of adequately high interest charges or further capitalization. Therefore, a State that makes a policy decision to provide loans below the inflation rate will need to make the financial commitment to provide further capitalization if it desires to maintain the fund in real terms. If a State desires to increase the size of the fund in real terms, it must provide further capitalization, charge interest rates in excess of inflation, or both. It appears that the policies adopted by many States will not maintain or increase the fund. As noted in Subsection 4.1, only fifteen States plan to provide further capitalization of their SRF through leveraging or "overmatch" beyond 1994. Of these, nine will provide future capitalization at a level substantially greater than the average annual Federal capitalization of their fund from 1988 to 1994; the other six at a level less than one-half of average Federal capitalization. And Table 6-2 indicates that many SRF programs make loans at interest rates below reasonably expected rates of inflation.

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[1]Based on U.S. Department of Commerce News. U.S. Bureau of Economic Analyses. BEA 90-33. July 27, 1990.

TABLE 6-2

SRF Loan Interest Rate Structures of Forty-Seven Responding States(a)

State:	Rate	Explanation
Alabama	5%	Uniform rate on all loans.
Alaska	4% to 5%	Interest rate set at 66% of Municipal Bond Index for State G.O. bonds at time loan is signed.
Arizona	5%	Uniform rate on all loans.
Arkansas	3.5% to 4.0%	Uniform rate of 4% on all loans except for I&A projects, which are charged only 3.5% interest.
California	50% of market	Interest rate set at 1/2 that of most recent sale of State G.O. bonds; G.O. bond interest can not exceed 12%.
Colorado	4%; 65% of market	Direct loans - 4%; leveraged program loans - 65% of market.
Connecticut	2%	Additional subsidy of 20 to 50% State grant for all projects.
Delaware	2% to 5%	Rate varies depending on communities' ability to pay and cost per household in relation to income.
Florida	3% below market	3% below General Obligation 20-Bond Index for tax-exempt 20-yr bonds.
Georgia	2%	Uniform rate on all loans. Varies FY to FY.
Hawaii	3.5%	Uniform rate on all loans set at 50% of State G.O. bond on market at end of June each year.
Idaho	4%	Uniform rate on all loans.
Illinois	2.5% to 4.0%	2.5% charged for compliance needs existing as of 10/89; 1/2 market rate for others.
Indiana		Undetermined at this time.
Iowa	4.86%	Rate varies FY to FY based on State bond interest.
Kansas	60% of market	State sets rate based on 60% of prior 3 month average of 20 Bond Buyers Index.
Kentucky	2.3% to 4.3%	Interest rate depends on median household income of county.
Louisiana	5.5%	Rate subject to change annually based on review committee recommendations.
Maine	2% below market	Rate set 2% below Bond Bank's cost of funds.
Maryland	53%-70% of market	Interest rate depends on median household income of county. Rates may be as low as 0% in certain cases.
Massachusetts	45% "grant equivalency"	Rate may vary based on cost of borrowing. Additional subsidy (State grant) depends on communities' ability to pay.
Michigan	2%	Uniform rate on all loans.
Minnesota	0% to 6.05%	Rate varies depending on communities' ability to pay, household income, sewer service fees, and poverty.
Mississippi	3%	Uniform rate on all loans.
Missouri	50% of market	SRF interest rate equals 50% of market rate.

Continued

TABLE 6-2, continued
SRF Loan Interest Rate Structures of Forty-Seven Responding States(a)

State:	Rate	Explanation
Nebraska	3.5% to market	Rate varies depending on median household income, existing debt, and option of accelerated payback.
Nevada	65% of market	Uniform rate on all loans.
New Hampshire	Variable	Rate varies 1st 5yrs., 1/6 of G.O. Bond index 1st yr., 2/6 the 2nd, etc., after 6 yrs it's set 1% higher than the index.
New Jersey	3.5% to 4.0%	Varies from funding cycle to funding cycle based on cost of borrowing.
New Mexico	5%	Uniform rate on all loans.
New York	0% to 2/3 of market	Rate varies based on communities' ability to pay and interest rate on EFC bonds.
North Carolina	lesser of 1/2 market or 4%	Rate is set at the lesser of 50% of market (based on 20 year bond index) or 4%.
Oklahoma	60% of market	Varies depending on interest rate on 20 year tax exempt revenue bonds.
Oregon	0% then 3%	For first 5 years - 0%; from years 5 to 20 - 3%.
Pennsylvania	1% to 75% of market rate	Rate varies depending on communities' ability to pay; unemployment rate, user fees, economic distress factors.
Rhode Island	4% below market; variable	High risk loans-variable rate, low risk-4% below market with a longer repayment.
South Carolina	4.5% and 2%	Rate varies annually based on State G.O. bonds. For hardship cases, 2% flat rate.
South Dakota	3%	Uniform rate on all loans.
Tennessee	0% to market rate	Rate varies based on communities' ability to pay.
Texas	2% to 5.75%	Except for hardship loans the rate depends on interest rate on TWDB bonds for state match and overmatch.
Utah	0% to market Rate	Rate varies depending on communities' ability to pay.
Vermont	0% to 80% of market	Rate is 0% for CSOs, otherwise up to 80% of market based on treasurers discression.
Virginia	0% to 7%	Rate varies depending on communities' ability to pay.
Washington	0% to 5%	Rate varies depending on communities' ability to pay; also varies based on term of loan.
West Virginia	0% to 4%	Rate varies depending on communities' ability to pay; source of state match.
Wisconsin	0% to 7.5%	Rate varies depending on community ability to pay, and environmental priority by type of project.
Wyoming	0%	Uniform rate on all loans.

(a) Montana, North Dakota, and Ohio did not provide interest rate information for this report.

As an additional source of capital, SRFs have the capability to invest and earn interest on funds between the time they are received by the SRF and the time they are disbursed to municipalities. Some SRFs may generate substantial investment earnings which will enhance the purchasing power of the fund.

The determination of interest rates is left exclusively to each State. All of the States have incorporated some interest rate subsidy into SRF program design. About 20 percent of the States have set current interest rates that can be expected to be significantly below inflation rates. However, some of these States have already established policies for additional capitalization of their SRFs that will offset such subsidies. EPA is currently assessing capitalization levels necessary to maintain various fund values for all the States. As part of the SRF annual review process, EPA will monitor the impact of various interest rate structures on the financial condition of SRFs.

States that issue bonds to leverage their SRFs would have another concern in protecting the long term viability of their funds. If loans are made at a rate less than that at which the bonds are issued, loan repayments will not be adequate to repay the bonds. Additional funds will have to be provided to make up the difference. Some States use investment earnings from their debt service reserve funds for this purpose. A leveraged SRF provides a significantly greater amount of loan assistance in the early years of the program than does an unleveraged fund. However, the use of loan repayments to retire leverage bond debt will limit the capital growth of the fund as well as the long-term balance of lendable funds. Additional State capitalization in future years will be necessary if the State wants to expand its leveraged amount.

6.2 Special Programs for Small and/or Economically Distressed Communities

State officials reported that many economically distressed communities throughout the country cannot afford SRF loans even at very low interest rates. These communities include the colonias[2] in Texas, Indian lands, and some very small communities in Minnesota, among others. Many States take the needs of these communities into account in developing and operating the SRF and related programs. Sixteen States consider the economic condition of the community in setting interest rates for SRF loans. Ten of these States indicated that they may offer zero interest SRF loans to economically distressed communities. An eleventh State, Wyoming, offers zero interest on all SRF loans, including loans to economically distressed communities.

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[2]In the area immediately adjacent to the international boundary with Mexico, there are over 200,000 people living in small communities known as "colonias". These communities are economically distressed and either have inadequate water and sewage service or lack these services altogether. In the Agency's appropriation for fiscal year 1990, Congress authorized the State of Texas to establish a special revolving fund to serve residents of these communities. Funds from the special revolving fund can only be used to finance indoor plumbing and improvements in connections to potable water distribution and sewage collection systems. The special revolving fund has been capitalized from the construction grant allotment for Texas.

In addition to offering special interest rates, several States operate other loan or grant programs that provide additional subsidies to economically distressed communities. Of the forty-five States that responded to questions regarding small and economically distressed communities, twenty-six indicated they provide State grant funding to help small and/or economically distressed communities meet their wastewater project needs. While several of these State programs provide substantial assistance, the principal form of subsidy for wastewater treatment in small and/or economically distressed communities in many States is the low rate of interest offered under the SRF program.

6.3 Ensuring the Viability of the SRF Programs

All of the States plan to operate their SRF programs through 1999 and beyond. In their responses to the questionnaire, States primarily approach the viability of their SRFs in terms of securing reliable loan repayment streams. It appears that most States intend to ensure the long-term viability of their programs through sound management of their loan portfolios. The CWA requires that all SRF loan recipients specify a dedicated source of revenue to repay the loan. The States employ several other measures to assure the long term viability of their SRFs.

All of the States give careful consideration to affordability before issuing a loan under the SRF program. All States either review credit information or undertake their own financial review of applicants before issuing loans. States uniformly view the soundness of their loan portfolio as the most important factor in the long-term viability of their programs.

In addition to financial review, States use some combination of community pledges and/or assurances to secure loans. All States require communities to pledge user fees, the full faith and credit of the community, or both, before issuing a loan. Some States require communities to pledge both user fees and full faith and credit (the "double barrel" pledge) for every loan.

Some States purchase insurance on their SRF debt to help protect the long term viability of their programs. (Note that this insurance is for SRF program debt such as leverage or match bonds. This is different from the purchase of insurance for local debt obligations as a form of SRF assistance as presented in Table 6-1.) While these insurance policies add to program costs, they also lower the interest rates charged on the bonds by providing an additional level of protection to the fund and the holders of SRF program bonds. At least one State requires loan recipients to maintain a loan repayment reserve.

An important aspect of loan portfolio management is the reduction of potential losses through late payments and loan defaults. There are several common elements in State plans for anticipating and reacting to problems with loans:

- States typically plan to review annual audited statements and/or community user fees to ensure that communities are operating in a fiscally sound manner and are charging sufficient fees to cover their indebtedness.

- When potential problems are spotted, States will work with the community to rectify the problem and prevent a default. The State may encourage an increase in user fees. Many States indicated that they would consider restructuring or refinancing in the event of serious problems.

- States will, in general, use all recourse allowed under State law in the event of a default. This recourse typically includes suing the community, seeking a court order to require the community to raise user fees, and withholding state-shared tax revenues or other State funding to the community.

Because the program is so new, it is not possible to provide any statistics concerning the frequency of late payments, default, or other loan problems. None of the States report any problems, as yet, with their current loans.

SECTION SEVEN

ADMINISTRATION OF SRF PROGRAMS

At the time information was being collected for this report, the States were still making the transition from the construction grants program to the SRF program. In some States construction grants personnel were in the process of taking on the duties associated with the SRF program; some individuals divided their time between the two programs. As a result, cost accounting for time spent on the construction grant versus SRF program was difficult for some States. As the number of SRF projects and the amount of money in the SRFs increase, most States project increasing SRF staff size and escalating administrative costs. This section summarizes the States' estimates of the number and type of personnel and the associated cost of administering the SRF program over the next several years.

7.1 Agencies and Personnel Involved With SRF Program Administration

Administering the SRF program requires a mix of administrative, technical, accounting, and financial personnel. Table 7-1 shows the number and type of staff working in SRF programs in forty-five States that reported staffing figures for FYs 1989 and 1990. For the forty-five States, 49 percent of SRF personnel worked in technical support, 20 percent in financial management, 29 percent in general administration, and the remainder in other capacities. States' technical and financial experts often work in separate agencies. Thirty-four States have two or three different agencies involved in running their SRF programs. Seven States have more than three agencies involved in SRF administration. Only four States reported that all aspects of their SRF program are handled through a single agency.

The total number of personnel involved in SRF programs during FYs 1989 and 1990 varies considerably among the forty-five States, ranging from 2 to 70 (see Table 7-1). For the forty-five States reviewed in this analysis, the amount of SRF funding appears to be an important factor, but leveraging does not appear to be as significant in determining staff size. Two of the ten States that reported having the largest staffs operate leveraged programs, yet two of the ten States that reported the smallest staffs also leverage. Some States did, however, report that they anticipated future staffing increases due to increased leveraging activity.

Thirty-four States anticipate modest to substantial increases in both technical and financial personnel as the number of SRF projects and the amount of money in the SRFs increase. Seven States reported that they expect staffing needs to remain relatively constant.

TABLE 7-1

Employment in Administration and Operation of SRFs
In Forty-Five States(a)
FY 1989-1990

	Annual Full Time Employee Equivalents					
	Staff Function					
	Admin.	Technical Support	Financial Management		Other	Total
			Accounting	Finance		
Alabama	6	4	3	6	0	19
Alaska	0.5	0.7	0.1	0.2	0	1.5
Arizona	0.75	0.75	0	0	0	1.5
Arkansas	10	7	1	1	0	19
California	7.2	18.4	4.3	0	0	29.9
Colorado	2.4	1.65	0.15	2.2	0	6.4
Connecticut	4	12	5	1	1	23
Florida	9	19	4.5	2.5	0	35
Georgia	3	6	1	0.25	0	10.25
Hawaii	3	6	1	0.5	0.25	10.75
Idaho	1.03	1.22	0.25	0.5	0	3
Illinois	1	2	1.1	0.1	0	4.2
Indiana	5	20	6	0	0	31
Iowa	1.5	2.5	1	0.5	0	5.5
Kansas	2	0.2	0.2	3	0	5.4
Kentucky	1.7	2.5	0	1	0.8	6
Louisiana	5	5	2	2	2	16
Maine	3	3.5	2	2	0	10.5
Maryland	6.5	9	3	2	0	20.5
Michigan	9	25	3	2	0	39
Minnesota	4.5	11.5	2	4	0	22
Mississippi	7.2	14	1.2	1.1	0	23.5
Missouri	2.5	1	0.5	0	0	4
Nebraska	1.1	1	0.5	0.5	0	3.1
Nevada	1.07	0.75	0.75	0	0	2.57
New Hampshire	2	4	1	1	0	8
New Jersey	23.5	33	8	6	0	70.5
New Mexico	2	1	1.25	0	0	4.25
New York	22.38	23.25	10	4.25	0	59.88
North Carolina	6	24	1	1	4	36
Oklahoma	3.1	1.8	0	0.4	0.2	5.5
Oregon	2.02	0.1	0.1	0.1	0.1	2.42
Pennsylvania	5	10	2	3	0	20
Rhode Island	0	3	0	1	0	4
South Carolina	3.7	9.87	1.4	1	0	15.97
South Dakota	1	2.5	1	1	5.5	11
Tennessee	3.95	5.5	1.25	0.25	0.2	11.15
Texas	7.2	14.8	2.9	2.4	0	27.3
Utah	1	3	1	0	0	5
Vermont	0.91	0.97	0.34	1.3	0	3.52
Virginia	6.8	10.5	1.5	3	1.5	23.3
Washington	1.3	7.4	0.25	1.5	0	10.45
(b) West Virginia	1.6	2.2	1	1	0	5.8
Wisconsin	9	7	0.05	2	0	18.05
(c) Wyoming	1.5	3	1	1	0	6.5
TOTAL	201.91	341.56	78.59	63.55	15.55	701.16
(% of Total)	29%	49%	11%	9%	2%	100%

(a) Delaware, Massachusetts, Montana, North Dakota, and Ohio did not provide employment data for this report.

(b) West Virginia's figures represent projected FY 1991 staffing.

(c) Wyoming's figures represent projected FY 1991 staffing.

After the equivalency requirements[1] of the last capitalization grant are met, States may change the nature and number of SRF program staff if the workload decreases. States that begin to leverage may need to add staff with financial expertise.

7.2 Costs Associated With SRF Program Administration

Annual administrative expenses for 1989 to 1995 for forty-four States that provided cost projections are presented in Table 7-2. Included in each State's estimates are all direct and indirect costs associated with SRF program administration. Also shown are each State's SRF administrative expense allowances. The allowances for 1989 and 1990 are an amount equal to four percent of the actual capitalization grants awarded. The allowances for 1991 to 1994 are estimated based on the authorized capitalization grant.[2] Program requirements limit the amount of SRF funds spent on administrative expenses in a given year to four percent of the cumulative capitalization grant amount, less previous expenditures of SRF funds on administration. States can accumulate or "bank" any unused portion of their expense allowance for use in future years.

The table shows that the cumulative SRF administrative expense allowance will be adequate in some States and not in others. Based on State estimated administrative expenses and SRF capitalization grant awards at authorized amounts, twenty-eight States are expecting to have sufficient allowances from their capitalization grants to cover their projected administrative costs for the 1989 to 1994 time period. Of the sixteen States, highlighted in Table 7-2, that are projected to experience shortfalls between their expected administrative expenses and the four percent capitalization grant allowance, over 75 percent of the administrative costs are covered in seven States, from 50 to 75 percent of costs are covered in six States, and less than 50 percent of costs are covered in the remaining three States.

While leveraging does not appear to have a significant impact on staff size, it does appear to increase program administration expenses. Nearly half of the States projected to experience administrative expenses in excess of their four percent administrative cost allowance between 1989 and 1994 operate leveraged programs.

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[1]The equivalency requirements are 16 statutory CWA Title II requirements included in Section 602(b)(6) that cover wastewater treatment projects constructed in whole or in part with funds "directly made available by" Federal SRF capitalization grant awards. These incorporate requirements regarding the type of technologies, analyses, and issues which must be taken into account by such projects. After States have committed funds equal to the total amount of capitalization grant awards, additional SRF-funded wastewater treatment projects are not subject to these requirements.

[2]Where States projected capitalization grants at less than authorized amounts, the allowances are based on four percent of the amount of capitalization grant funding which they project.

TABLE 7–2

Comparison of
Estimated SRF Administrative Costs And
Administrative Expense Allowances(a) For Forty–Four(b) States
($ Thousands)

	Actual		Projected				1989 to 1994	Projected
STATE	1989	1990	1991	1992	1993	1994	TOTAL	1995
Alabama								
Estimated Admin. Costs	27	81	120	140	203	340	911	625
Administrative Allowance	424	436	828	624	416	208	2,936	
Alaska								
Estimated Admin. Costs	0	50	88	118	219	267	743	322
Administrative Allowance	406	232	485	436	291	145	1,994	
Arizona								
Estimated Admin. Costs	0	0	500	700	700	700	2,600	700
Administrative Allowance	256	260	640	480	320	160	2,116	
Arkansas								
Estimated Admin. Costs	0	996	1,041	1,221	1,292	1,369	5,919	1,450
Administrative Allowance	546	556	636	476	316	160	2,690	
California								
Estimated Admin. Costs	0	1,626	2,862	3,142	3,268	3,398	14,296	3,534
Administrative Allowance	5,104	4,792	6,944	5,208	3,472	1,736	27,256	
Colorado								
Estimated Admin. Costs	236	430	555	690	838	1,000	3,749	1,159
Administrative Allowance	463	485	760	570	380	190	2,849	
Connecticut								
Estimated Admin. Costs	1,664	1,789	1,923	2,067	2,222	2,389	12,054	2,568
Administrative Allowance	892	932	1,196	892	596	296	4,804	
Florida								
Estimated Admin. Costs	490	1,600	2,250	2,700	3,200	3,700	13,940	3,800
Administrative Allowance	2,268	2,332	2,480	2,320	1,560	760	11,720	
Georgia								
Estimated Admin. Costs(d)	606	954	1,240	1,210	990	1,030	6,030	990
Administrative Allowance	1,224	1,560	1,624	1,228	812	404	6,852	

Continued

TABLE 7–2, continued

Comparison of
Estimated SRF Administrative Costs And
Administrative Expense Allowances(a) For Forty–Four(b) States
($ Thousands)

	Actual		Projected				1989 to 1994	Projected
STATE	1989	1990	1991	1992	1993	1994	TOTAL	1995
Hawaii								
Estimated Admin. Costs	0	303	309	324	341	358	1,634	376
Administrative Allowance	292	292	472	356	236	120	1,768	
Idaho								
Estimated Admin. Costs	0	60	150	220	300	350	1,080	400
Administrative Allowance	180	188	476	356	236	116	1,552	
Illinois								
Estimated Admin. Costs	63	430	1,229	1,668	2,554	3,234	9,178	3,532
Administrative Allowance	2,000	2,000	4,000	3,000	2,000	1,000	14,000	
Indiana								
Estimated Admin. Costs	200	500	2,000	2,000	2,000	2,000	8,700	2,000
Administrative Allowance	908	940	2,340	1,756	1,172	584	7,700	
Iowa								
Estimated Admin. Costs(e)	0	165	200	220	242	266	1,093	293
Administrative Allowance	508	528	1,324	992	660	332	4,344	
Kansas								
Estimated Admin. Costs	160	340	873	655	436	218	2,682	325
Administrative Allowance	340	352	876	660	440	220	2,888	
Kentucky								
Estimated Admin. Costs	18	301	450	690	850	1,070	3,379	1,190
Administrative Allowance	872	708	1,168	876	584	292	4,500	
Louisiana								
Estimated Admin. Costs	480	520	1,040	1,144	1,250	1,500	5,934	1,650
Administrative Allowance	420	432	1,040	720	480	240	3,332	
Maine								
Estimated Admin. Costs	750	600	700	650	600	600	3,900	600
Administrative Allowance	295	301	720	540	360	180	2,396	
Maryland								
Estimated Admin. Costs	200	684	773	1,417	1,351	1,172	5,597	762
Administrative Allowance	912	944	2,348	1,760	1,176	584	7,724	

Continued

TABLE 7–2, continued

Comparison of
Estimated SRF Administrative Costs And
Administrative Expense Allowances(a) For Forty–Four(b) States
($ Thousands)

	Actual		Projected				1989 to 1994	Projected
STATE	1989	1990	1991	1992	1993	1994	TOTAL	1995
Michigan								
Estimated Admin. Costs	0	400	1,000	1,100	1,150	1,200	4,850	1,250
Administrative Allowance	1,620	1,676	3,352	3,132	2,088	1,044	12,912	
Minnesota								
Estimated Admin. Costs	2,340	2,600	2,650	2,650	2,650	2,700	15,590	2,700
Administrative Allowance	692	716	1,760	1,320	880	440	5,808	
Mississippi								
Estimated Admin. Costs(g)	79	579	898	999	1,107	1,199	4,861	1,259
Administrative Allowance	608	632	724	648	432	216	3,260	
Missouri								
Estimated Admin. Costs	0	66	490	700	900	1,100	3,256	1,200
Administrative Allowance	1,000	1,040	2,080	1,560	1,040	520	7,240	
Nebraska								
Estimated Admin. Costs(h)	34	169	255	375	400	410	1,643	430
Administrative Allowance	192	196	488	364	244	120	1,604	
Nevada								
Estimated Admin. Costs	0	0	46	320	350	390	1,106	430
Administrative Allowance	183	190	477	357	238	119	1,564	
New Jersey								
Estimated Admin. Costs	3,650	4,370	4,570	5,370	5,670	6,070	29,700	6,070
Administrative Allowance	2,604	2,772	3,724	2,840	1,844	920	14,704	
New Mexico								
Estimated Admin. Costs	0	75	240	280	320	360	1,275	404
Administrative Allowance	344	344	344	344	240	120	1,736	
New York								
Estimated Admin. Costs(j)	0	3,770	5,551	5,877	6,213	6,504	27,915	6,886
Administrative Allowance	4,160	4,320	9,040	7,960	5,320	2,640	33,440	

Continued

TABLE 7-2, continued

Comparison of
Estimated SRF Administrative Costs And
Administrative Expense Allowances(a) For Forty-Four(b) States
($ Thousands)

	Actual		Projected				1989 to 1994	Projected
STATE	1989	1990	1991	1992	1993	1994	TOTAL	1995
North Carolina								
Estimated Admin. Costs	17	181	519	905	1,162	1,331	4,114	1,747
Administrative Allowance	908	1,320	1,760	1,320	880	440	6,628	
Oklahoma								
Estimated Admin. Costs	21	371	304	314	800	900	2,710	1,000
Administrative Allowance	304	314	784	588	392	196	2,578	
Oregon								
Estimated Admin. Costs	0	50	200	400	470	490	1,610	510
Administrative Allowance	561	441	1,096	824	548	276	3,745	
Pennsylvania								
Estimated Admin. Costs(k)	100	462	1,070	1,700	2,590	3,360	9,282	3,970
Administrative Allowance	1,494	1,546	2,538	2,856	1,904	952	11,290	
Rhode Island								
Estimated Admin. Costs	50	75	250	300	350	350	1,375	500
Administrative Allowance	264	271	652	489	326	163	2,165	
South Carolina								
Estimated Admin. Costs	491	611	685	567	690	713	3,757	725
Administrative Allowance	914	765	820	739	493	245	3,976	
South Dakota								
Estimated Admin. Costs	200	200	400	400	400	400	2,000	400
Administrative Allowance	188	236	472	360	236	120	1,612	
Tennessee								
Estimated Admin. Costs	147	286	600	758	930	1,138	3,858	1,428
Administrative Allowance	608	948	1,164	1,034	689	344	4,787	
Texas								
Estimated Admin. Costs	880	1,424	2,104	2,984	3,634	3,967	14,993	4,223
Administrative Allowance	3,308	2,912	4,308	3,176	2,052	588	16,344	
Utah								
Estimated Admin. Costs	128	180	225	300	300	250	1,383	150
Administrative Allowance	284	252	484	364	240	120	1,744	

Continued

TABLE 7–2, continued

Comparison of
Estimated SRF Administrative Costs And
Administrative Expense Allowances(a) For Forty–Four(b) States
($ Thousands)

STATE	Actual 1989	Actual 1990	Projected 1991	Projected 1992	Projected 1993	Projected 1994	1989 to 1994 TOTAL	Projected 1995
Vermont								
Estimated Admin. Costs	80	85	487	588	657	748	2,644	750
Administrative Allowance	183	192	380	356	237	119	1,467	
Virginia								
Estimated Admin. Costs	560	600	600	800	800	800	4,160	800
Administrative Allowance	1,228	1,080	1,924	1,444	960	480	7,116	
Washington								
Estimated Admin. Costs	0	232	390	490	800	800	2,712	980
Administrative Allowance	664	668	1,680	1,240	840	400	5,492	
West Virginia								
Estimated Admin. Costs	0	100	400	600	800	1,000	2,900	1,000
Administrative Allowance	0	800	1,912	1,136	756	380	4,984	
Wisconsin								
Estimated Admin. Costs	199	755	1,675	1,900	2,100	2,250	8,879	2,400
Administrative Allowance	960	1,000	2,480	1,880	1,240	640	8,200	
Wyoming								
Estimated Admin. Costs	0	0	200	240	260	260	960	260
Administrative Allowance	183	194	477	358	238	119	1,570	

Note: The administrative allowance is based on actual capitalization grants awarded for FY 1989 and 1990, and on 4 percent of the authorized capitalization grant funding for 1991 to 1994 for most States. For States that projected capitalization grant funding at less than authorized amounts, the allowance is based on four percent of the projected amount. Shaded States project administrative costs exceeding the 4% allowance in the 1989 to 1994 time period.

(a) Administrative expense allowance represents the total Federal source of funds available for administering SRFs.

(b) Delaware, Massachusetts, Montana, New Hampshire, North Dakota, and Ohio did not provide administrative cost estimates for this report.

(c) 1989 administrative costs for five months.

(d) 1990 administrative costs for three months.

(e) In fiscal year 1989 many "start up" costs were paid with proceeds from the State Match Revenue Bond issue.

(f) Excludes bond issuance costs paid from bond proceeds.

(g) 1990 administrative costs for ten months.

(h) New Jersey's administrative costs are estimated based on 1988 cost and staffing data, and staff increase projections, supplied by New Jersey DEP. New Jersey's 1988 costs cover most, but not all, SRF employees. Actual costs may be higher than those estimated here.

(i) 1990 administrative costs for nine months.

(j) 1990 administrative costs for nine months.

(k) 1988 administrative costs for three months.

It is important to note that no funds from capitalization grants are shown for 1995 or subsequent years. After the final Federal grant allotment, States will have to rely on alternative funding sources, such as appropriated funds, or banked allowances to cover their administrative expenses. Projected administrative expenses for 1995 are shown in Table 7-2.

SRF program representatives made recommendations regarding the short-term (up to FY 1995) and long-term (after FY 1995) funding of administrative costs. For the short term, 19 States recommended increasing the four-percent ceiling or allowing four percent of the authorized, rather than the appropriated amount. As an effective alternative, representatives from ten States recommended that their SRF programs charge a loan closing or similar fee. Two States recommended a separate Federal grant for administrative costs.

For the long term, States suggested a variety of funding methods, although they have not yet developed specific plans. Twenty-one States recommended instituting a closing or other type of fee to cover administrative costs. Ten States have already implemented a loan closing fee. It should be noted that any such fees collected must be kept out of the SRF itself so that they will not be counted towards or limited by the four-percent ceiling. Several States recommended the following administrative cost funding mechanisms, some of which (marked by an asterisk) are not currently allowed or viable in the SRF program:

- using State appropriations;
- using fund reserves*;
- transferring unused 205(g) funds (Federal grant funds for States to implement certain Title II program management activities)*;
- using a portion of the debt service payments*; and
- having the Federal government provide funds matching State appropriations for administrative costs on a dollar for dollar basis (up to 10 percent of the actual loans made).

SECTION EIGHT

POTENTIAL IMPACT OF THE SRF PROGRAM ON COMMUNITY USER FEES

As explained in Section Six, SRF programs offer loans at below-market rates for eligible projects. By contrast, the construction grants program generally provided a 55 percent grant for the eligible cost of projects[1] coupled in many cases with a State grant. This section examines the impact on user fees of a shift from construction grants funding to SRF funding for a typical facility. Because the SRF programs have been operating only a short time and data are not yet available on SRF-financed facilities, an analytical modeling approach is used to assess the impact of the SRF program on user fees. The sections that follow describe the scope and methodology of the analysis and present the analytical results.

8.1 Scope of the Analysis

This analysis assesses the incremental financial burden placed on households resulting from SRF loan financing of wastewater treatment facilities compared to construction grant funding. It is based on theoretical typical facilities and compares user fees for identical facilities built with SRF assistance versus construction grant funding. Although some changes in design may occur as the source of funding assistance changes from construction grants to SRF loans, interviews with State officials suggest these changes will be minor. One possible change is more construction of reserve capacity.[2] Reserve capacity was not eligible under the construction grants program after 1984 except in certain grandfathered phased or segmented projects. Reserve capacity is eligible for funding with SRF monies. As a result of the differing eligibilities of reserve capacity, the analysis assumes that a slightly higher percentage of costs are eligible under SRF financing in comparison to construction grants financing.

Land costs, except for those to acquire land that is an integral part of the treatment process or used for sludge disposal, are ineligible under both the SRF and construction grants programs. Since there will be no change in a community's ability to finance land costs with the switch to SRF funding, this item is not included in the analysis. The costs assessed here are limited, therefore, to construction and operation and maintenance (O&M) of the wastewater treatment facilities.

In conjunction with the construction grants program, States have typically provided a 10 to 15 percent State grant to municipalities. Under the SRF, States must provide a 20 percent match to receive a capitalization grant from EPA. It is not anticipated that many States will

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[1]Innovative or alternative projects could receive a 75 percent grant.

[2]Extra treatment capacity built into treatment plants and interceptor sewers to accommodate flow increases due to future population growth.

provide grants to municipalities as a general rule in conjunction with an SRF loan. However, some States anticipate the continuation of separate grant programs for special circumstances, such as communities which are economically distressed. As a result, the user fee impact analysis presented here assumes no State grants under the SRF program.

There is no provision in the analysis for existing debt, which can vary significantly from one community to the next. The incremental cost calculated here for the new facility could represent all of the financial burden for wastewater treatment in a community, or only a fraction of that burden.

8.2 Methodology

To assess the impact of user fees under the SRF program, a model which simulates user fees was developed. The model is structured to simulate user fees under the construction grants program and under the SRF program. The variables that the model uses to derive the user fees are identified in Table 8-1. The first column in Table 8-1 lists each of the different variables. The second column presents the value for each variable most commonly found under both the construction grants and SRF programs. The values in the second column were used to calculate the user fees presented in this chapter. The third column presents the range of values for the variables depending on particular conditions in a State.

Based on the input variables in Table 8-1 the model calculates other values used in the analysis. These calculated values include facility capital cost, daily flow rate, and the number of hook-ups. Output from the model includes the annual cost of capital financing (assuming level debt service), the annual O&M cost, and the total annual user fees per household under the construction grants and SRF programs. The user fee calculated by the model represents the annual incremental costs of construction and O&M for a new facility; it does not include land costs or costs of existing debt service.

Appendix F contains a sample input-output page from the model, the formulas used in the model and a description of the standard variable values and their sources, including a detailed description of the capital and O&M cost curves and their derivations. The model presented in Appendix F is designed so the user can input any of the variables presented in Table 8-1 and calculate the impact on user fees. The capital cost curve is an inflated version of EPA's Construction Costs for Municipal Wastewater Treatment Plants: 1973-1978, developed to describe construction grants-funded projects.[3] The O&M cost curve is derived from a user fee survey of 161 construction grants-funded projects in EPA Region III. EPA is currently undertaking a comprehensive national survey of user fees and O&M costs.

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[3]Cost curves reflect the capital cost of the components of a secondary treatment facility for all community size categories.

TABLE 8-1

User Charge Variables, Standard Values, and Range

VARIABLE	STANDARD VALUE	ESTIMATED RANGE
SRF interest rate:	4%	0-9%
Market interest:	8%[a]	7-11%
Persons/household:	Fixed at 2.64	-
Gallons/person/day:	90-110 depending on community size	90-110 depending on community size
Loan period:	20 yrs	5-20 yrs
Percent total costs eligible under a 55% construction grant:	90%	75-100%
Percent total costs[b] funded by State grant under construction grants program:	15%	0-25%
Percent total costs eligible under SRF:	100%	-
Percent total costs funded by State grant in conjunction with SRF loans:	0%	0-50%
Population served by facility:	Fixed at one of the following: 1,000; 2,500; 10,000; 100,000	-

[a]Recent cost of borrowing funds in the municipal bond market.
[b]Applies to all eligible costs.

8.3 Comparison of User Fees Under the SRF and Construction Grants Programs

The results of a comparison of user fees under SRF and construction grants financing for facilities serving four community population sizes are presented in Table 8-2. The results reflect the standard values displayed above in Table 8-1.

In Table 8-2, user fees are calculated as the household's proportional share of two cost components: the annualized cost of the capital expenditure and the annual operation and maintenance cost. The SRF and construction grants programs subsidize only the capital expenditure portion. But as Table 8-2 illustrates, it is the second cost, O&M, that often drives the user fees. The O&M costs account for approximately 60 percent of user fees under the SRF program and about 73 percent of user fees under the construction grants program.

Table 8-2 also shows that the size of the community served by a facility has a substantial impact on user fees under both the SRF program and the construction grants program. User fees for facilities serving communities with a population of 1,000 are over 3 times greater than user fees for facilities serving communities of 100,000. This disparity in user fees across community sizes is not altered significantly under the SRF loan program, due in part to the predominance of O&M costs in the overall user fee.

Table 8-2 indicates that user fees are higher under the SRF program than under the construction grants program. The difference in user fees under a 4 percent loan compared to a 55 percent construction grant ranges from $72 annually for facilities serving communities of 1,000 to $22 annually for facilities serving communities of 100,000. This represents a 21 percent increase for a community of 1,000 and a 19 percent increase for a community of 100,000.

8.4 Impact of SRF Loan Interest Rate on Level of Subsidy

The interest rate charged on SRF loans has a significant impact on user fees. One way of quantifying the value of the SRF loan subsidy is by expressing the loan interest rate in terms of a "grant equivalent." For example, a 4 percent SRF loan, a common rate charged for SRF loans, is equivalent to a grant subsidy of 16 percent under the construction grant program (assuming a 15 percent State grant is provided along with the construction grant). A zero interest SRF loan is equivalent to a 42 percent construction grant, while a 6 percent interest SRF loan is equivalent to a 1 percent construction grant. Table 8-3 shows various SRF loan interest rates and their construction grant equivalents.

Another way to quantify the value of the SRF loan subsidy is to compare projected user fees for facilities constructed with SRF loans to facilities constructed with market rate financing. A facility designed to serve a community of 1,000 constructed with an SRF loan using a 4 percent interest rate would have an annual user fee of $351, whereas the same facility financed with a market rate loan charging 8 percent interest would have an annual user fee of $407. Thus, the SRF reduces annual user fees by 14 percent. For a facility designed to serve a community of 100,000, annual user fees would be $116 with a 4 percent SRF loan compared with $134 for a market rate loan, a savings of 13 percent.

TABLE 8-2

Annual Household Wastewater Treatment Costs: Comparison of State Revolving Fund and Construction Grants Financing

($ Per Household Per Year)

POPULATION SERVED BY FACILITY	CAPITAL FINANCING COST (SRF)	CAPITAL FINANCING COST (CG)	O&M COST	HOUSE-HOLD USER(a) FEE (SRF)	HOUSE-HOLD USER(a) FEE (CG)	DIFFERENCE IN USER FEE (SRF VS. CG)	PERCENT DIFFERENCE IN USER FEES (SRF VS. CG)
1,000	146	75	204	351	279	72	21%
2,500	122	62	184	306	247	59	19%
10,000	89	45	122	211	167	44	21%
100,000	47	24	70	116	94	22	19%

a) Represents the user fee for a new wastewater treatment facility minus land costs.

Standard variable values:

SRF Interest Rate: 4%
Market Interest Rate: 8%
Gallons/Person/Day: 90-110 (depending on community size)
Loan Period: 20 years
Eligible Cost SRF: 100%
Eligible Cost CG: 90%
State Grant In Conjunction with SRF Loan: 0%
State Grant Under CG Program: 15%

TABLE 8-3

SRF Interest Rate and Construction Grant Equivalent[a]

SRF Interest Rate	Construction[b] Grant Equivalent
0%	42%
1%	36%
2%	29%
3%	23%
4%	16%
5%	9%
6%	1%

[a]Ineligible costs financed at an 8% market rate.

[b]This number represents the construction grant equivalent (assuming construction grants are coupled with a 15% State grant) necessary to achieve the same subsidy as an SRF loan at the interest rate shown in the same row.

8.5 Summary of Key Findings

Key findings of this theoretical analysis include:

- For facilities serving the community sizes examined in this analysis, the household user fee under a 4 percent SRF loan is approximately 20 percent greater than the user fee under a 55 percent construction grant.[4]
- The absolute dollar difference in user fees under a 4 percent SRF loan compared to a 55 percent construction grant[4] ranges from about $22 annually for a community of 100,000 to about $72 for a community of 1,000.

[4]Assuming a 15 percent State grant is provided along with the construction grant.

- A 4 percent SRF loan, a common rate charged for SRF loans, provides the same financial subsidy as a construction grant[5] that funds 16 percent of eligible cost.

- Even at zero percent interest, SRF loans cannot provide the same financial subsidy as a 55 percent construction grant.[5] Therefore, user fees will generally be higher under the SRF program than the construction grants program.

- Community size has a substantial impact on user fees under both the SRF program and the construction grants program. Because of economies of scale, total user fees to cover operation and maintenance in addition to capital costs are estimated to be about three times as great for a community of 1,000 compared to a community of 100,000.

- While SRF loans provide less of a subsidy than construction grants, SRF loans still provide a substantial subsidy. User fees for facilities constructed with SRF loans charging 4 percent interest will be approximately 14 percent lower on average than facilities constructed with market rate financing.

[5]Assuming a 15 percent State grant is provided along with the construction grant.

SECTION NINE

POTENTIAL IMPACT OF THE SRF PROGRAM ON FACILITY OPERATIONS

This section summarizes the opinions of State SRF officials on whether the SRF program will lead to changes in the operation of wastewater treatment facilities. Because the SRF is a new program, program officials had minimal information about the impact of SRF funding on facility operation. Anticipated changes in facility sizing, design, and operating efficiency are discussed below.

9.1 Anticipated Changes in Sizing, Design, and Operation and Maintenance Costs of New Facilities

Because communities have to pay for a larger portion of project capital costs under the SRF program than under the construction grants program, there is an incentive to construct lower cost facilities to minimize the impact of capital costs on user fees. Of forty-three SRF program officials who expressed opinions on facility costs under the SRF program, nineteen expect that costs will decrease, twenty-one expect no change, and three expect cost increases.

SRF officials expressed divergent views on the effect of SRF financing on facility sizing. SRF officials in thirteen States expect that facilities will be smaller; most of the twelve expected that facility size would decrease because communities must repay the loans and will, therefore, tend to keep the size and costs of projects to a minimum. Twenty-six States expect no change in facility sizing. Six States anticipate that facilities will actually be larger because, according to four of the six, the SRF can be used to fund reserve capacity projects that were ineligible under the construction grants program. In some cases, increased facility size may result from the expansion of existing facilities rather than the construction of larger new facilities. Two States anticipate that new construction will become less common, with municipalities favoring phased improvements over new construction.

The SRF program provides less incentive for the use of innovative and alternative technologies than the construction grants program. While several States require innovative and alternative technology projects be considered during the planning phase of project development, few States offer any direct incentive for innovative or alternative technology projects.[1] As many States pointed out, this is a change from the construction grants program which provided direct incentives for innovative and alternative technology projects (e.g., 75 percent grants rather than 55 percent).

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[1]Consideration of innovative and alternative treatment technologies is one of the CWA Title II equivalency requirements (described in Footnote 3, Section 7.1). Therefore, in all States, projects subject to equivalency requirements must evaluate innovative and alternative technologies.

Thirty of the forty-five States that expressed opinions felt that the number of innovative and alternative projects undertaken would decrease, twelve expected no change, and three expected an increase. Because the SRF is a loan program, communities assume a greater financial risk. The added risk and uncertainty associated with innovative technologies may discourage their use. Proven alternative technologies will still be chosen, however, and might be preferred if they have lower overall costs.

Most SRF program administrators view the O&M requirements under the construction grants program as constructive and integral to the successful operation of facilities. In their questionnaires, thirty-seven States said they did not expect O&M requirements to change under the SRF program. Nine States said that O&M requirements would change. Five of these States indicated that O&M programs would be more rigorous under their SRF programs. The other four States indicated that they would not apply certain construction grant O&M requirements within their SRF programs.

The majority of the State program officials anticipate little or no change in the O&M costs of facilities built with SRF funds. While the increased debt service costs under the SRF program are expected to increase pressure to keep O&M expenditures down, municipalities may also wish to spend more on O&M to prolong plant life. Twenty-six States reported that they expect O&M costs to remain about the same under the SRF program as they were under the construction grants program. The other eighteen States that expressed an opinion on O&M costs were split, with nine expecting cost decreases and ten expecting increases.

SECTION TEN

ADVANTAGES OF THE SRF PROGRAM

The SRF program offers benefits to all levels of government concerned about water quality. These benefits are both financial and environmental, helping responsible agencies and officials to use their limited resources to achieve the goal of clean water.

10.1 Federal Government

The SRF program provides a mechanism for the Federal government to further the long-standing national policy of assisting States and local governments in financing wastewater treatment and other water quality management activities. At the same time, the program facilitates the goal of restoring the responsibility for financing water quality construction and management to State and local governments.

The "revolving" nature of the SRFs developed under this program allows a limited amount of Federal funds to satisfy many more water quality needs than would happen with direct grants or one-time loans.

10.2 The States

The primary benefit of the SRF program to the States is that it allows flexibility in providing financial assistance. Each State designs its SRF to address the particular water quality concerns of that State and its communities. States can structure their SRF to meet a broad range of needs or to focus on a limited number of needs of major concern. By varying the types and terms of SRF assistance, States can reach "target" types of communities or projects. Also, States can integrate or coordinate the SRF with other State programs to develop a comprehensive system for financing water quality management, tailoring the level of subsidy to the varying needs of their communities.

Another substantial benefit of the revolving funds is their ability to sustain themselves. The SRF loan repayment stream provides a continuing source of funding which is not subject to annual appropriations and therefore allows for more certain projections of the availability of funds for assistance.

Expanded eligibilities under the SRF program further increase its flexibility. In addition to the new types of activities and facilities that can be funded, SRFs, in comparison to construction grants, can fund a larger portion of the costs of traditional types of treatment works. Fewer Federal requirements apply to SRF assistance than to construction grants, and certain of the SRF funds carry none of the requirements of Title II. This reduction in requirements can reduce the cost of facilities.

10.3 Communities

Low interest rates are the single most important benefit to communities mentioned by the States. Due to the Federal grant and State match (and in some cases leveraged funds) that capitalize SRFs and because of the funds' fiscal strength, loan recipients can obtain interest rates lower than they could get on their own. This reduced cost of capital enables some projects to be completed that otherwise would not be affordable and reduces the level of user fees required to repay project debt.

An example is provided by using the model presented in Section Eight of this report to calculate the debt service costs for a community with a population of 10,000 people, building a wastewater treatment plant with a capital cost of $4.56 million and borrowing the entire amount. With a 20-year, four percent SRF loan the annual capital cost per household would be $89. If the community borrowed the funds at a market interest rate of eight percent, the annual capital cost per household would be $123, or 38 percent higher than capital cost per household with an SRF loan.

Some States, such as Minnesota and Virginia, charge no interest on SRF loans during the construction period, providing even more savings in the cost of capital. Most SRFs do not charge closing costs, providing an additional savings over market financing for loan recipients.

Even in States that charge closing costs or administrative fees, communities experience savings because the administrative burden of capital financing is centralized at the State level, realizing economies of scale. State governments are more likely than municipalities to have the management and financial institutions and expertise necessary to access the public finance market at the most advantageous time and at the lowest cost. These reductions in financing costs can result in significant overall savings to a community and the beneficiaries of its water quality projects and activities.

Other benefits to communities mentioned by the States include starting construction more quickly than under the construction grants program (with resultant savings in capital cost inflation), fewer eligibility constraints, no maximum or minimum assistance amount (unless imposed by the State), and efficient disbursements for incurred costs.

Communities also benefit from many features of the SRF program discussed above as benefits to the States. State-specific SRF program design and expanded eligibilities allow more communities to meet their particular needs. The variety of assistance types (i.e., credit enhancements) broadens the scope of the program to include communities that do not require direct grant or loan assistance. Also, fewer Federal requirements and restrictions on the assistance provided can reduce administrative complexities, costs, and time delays.

Finally, the SRF provides a long-term funding program to meet the water quality management needs of many communities. The revolving nature of the fund creates a perpetual source of affordable financing. The funds invested now for the capitalization of SRFs will work for many years to assist communities in meeting their needs, providing more money for more communities.

SECTION ELEVEN

ISSUES ASSOCIATED WITH SRF IMPLEMENTATION

Officials of the States' SRF programs identified a number of areas of concern that affect their ability to effectively implement their programs. Some of these impediments arise from Federal and State statutes, regulations, and policies while others are inherent in a new financial assistance program such as the SRF. This section presents the major concerns expressed by the States and discusses the realized or potential impact of each on the program.

Federal Funding

Many State officials expressed serious concern regarding the Federal funding of the SRF program. The FY 1989 and 1990 appropriations for Clean Water Act Title II (funds of which can be transferred to the SRF program) and Title VI were less than the authorized amounts, as were FY 1991 Title VI amounts. State officials believe that future appropriations will also fall short of the authorized levels.

State officials also expressed concern about uncertainty as to what the Federal funding level will be from year to year. Because the States must provide matching funds based on the capitalization grant amount, such uncertainty makes planning difficult for both the States and communities. In many States the budget process is not coordinated with that of the Federal budget. If an SRF fails to obtain an appropriation or bond authorization for its match because the State legislature goes out of session before the necessary amount can be determined, significant delays in program implementation can occur.

Ability to Reach Communities With Assistance

A few States mentioned that they anticipate difficulty in providing SRF assistance to particular communities. Some economically distressed communities cannot afford to pay back a loan even at a 0 percent interest rate. States will have to work closely with communities that have financial capability problems to structure an assistance package that provides adequate, affordable funding to meet water quality objectives and regulations. As discussed in Subsection 6.2, such an assistance package may need to incorporate funding from other State aid programs in addition to the SRF. To be effective, financial assistance for small, economically distressed communities should also be coordinated with technical assistance outreach programs.

Cross-Cutting Federal Laws and Authorities

The States report that the application of other (non-CWA) Federal laws and authorities (e.g., National Historic Preservation Act, Coastal Zone Management Act, Executive Orders 11625 and 12138, Women's and Minority Business Enterprise) to the SRF program leads to a number of difficulties. These "cross-cutters" apply to projects funded in whole or in part by

"funds directly made available" by the Federal capitalization grant. The States are unsure of their responsibilities for monitoring and assuring compliance with the cross-cutters; therefore, it is difficult to build the appropriate procedures into their SRFs. This concern arises because at any time, Federal laws can be enacted that apply to the SRF program, and a permanent list of these authorities cannot be identified. (The Agency is now examining twenty-four cross-cutting Federal authorities and will soon distribute a handbook describing their application in the SRF program.) In addition, once the State responsibilities and procedures are developed, the administrative costs of the program will increase as State officials ensure compliance. While several States indicated that cross-cutting authorities that apply to assistance recipients may increase project costs and delay project completion, EPA was unable to obtain descriptions of how cross-cutters affected specific projects. State officials are also concerned about EPA's role in reviewing State project-specific compliance actions.

In order to facilitate compliance with other Federal laws and authorities, EPA is working with the appropriate Federal agencies to develop programmatic agreements for major cross-cutters that outline the roles and responsibilities of the various government entities involved. Several States and their representatives have recommended another approach to managing compliance with cross-cutters. They urge that compliance be "as determined by the Governor" of each State and that the focus should be on certifying compliance with the intent of law rather than adherence to project-specific requirements. These States would prefer, however, that the SRF program be exempted entirely from cross-cutters by Congress.

Effect of Program Requirements on Project Costs

Several States expressed the view that the Title VI Federal requirements associated with the SRF program add substantially to project costs as well as administrative costs. In particular, the Title II "equivalency requirements" for treatment works, which apply only to "funds directly made available" by Federal capitalization grants, are said to reduce the program's attractiveness to communities. Texas and New Jersey officials estimate cost increases of up to 20 percent in some communities due to Federal requirements.

Tennessee SRF officials assert that prevailing wage rates mandated under the Davis-Bacon Act, along with other equivalency requirements, could increase project costs by as much as 30 percent. Five other States also said that the Davis-Bacon requirements increase project costs. Studies reviewed by EPA show a wide variety of project cost increases due to Davis-Bacon. A 1983 study by the Federal Highway Administration estimates an impact of two to four percent, while a 1982 study by Oregon State University estimates cost increases of 26 to 38 percent in rural areas of the country. For water and sewerage systems in Utah, a 1986 study by the State of Utah reports construction bids averaging 17.5 percent higher for projects subject to the Davis-Bacon Act compared to those not subject to Federal wage rates. As these studies suggest, the impact of Davis-Bacon wage rate requirements varies considerably based on local socioeconomic and market conditions and State prevailing wage rate laws.

Some States have chosen to apply the Federal requirements discussed above to all projects funded by their SRFs, not only to those projects funded by an amount equal to the "funds directly made available" by their capitalization grants ("equivalency projects"). Although

not a Clean Water Act or EPA requirement, States are using this practice to facilitate the handling of projects and to provide for equal treatment to all assistance recipients.

Letter of Credit Process

Payment of capitalization grants to an SRF occurs through a Federal letter of credit (LOC). No cash is transferred to the fund until the SRF requests a cash draw, up to the amount available in the LOC, generally as costs are incurred. Many States indicated that this process is an impediment to the implementation of the SRF program for a number of reasons.

Tennessee and New Mexico point out, for instance, that lack of immediate cash payments to the SRF prevents the State from earning interest on the Federal funds. Those interest earnings would help the fund grow and increase the amount available for assistance. But, in an effort to ease the pressure of program outlays on the Federal budget deficit, the LOC payment process was instituted to coordinate outlays with the actual expenditure of Federal funds. This process complies with provisions of the Intergovernmental Cooperation Act (31 U.S.C. 6503; Pub. L. 97-258) which require Federal agencies to "schedule the transfer of grant money to minimize the time elapsing between transfer of the money from the Treasury and the disbursement by a State."

The LOC process was cited by several States as particularly cumbersome in regard to the refinancing of projects. The States report that the LOC payment and cash draw provisions generally do not correspond well with the timing of the financial procedures of refinancing existing local debt. In order to facilitate the refinancing of some projects, EPA has provided for the immediate cash draw of a portion of each capitalization grant for this purpose.

Another concern of some of the States is that the LOC adds one more level of complexity to their programs. Under a cash payment system, cash would be available for disbursement as costs are incurred. With the LOC payment system, however, a request for a cash draw from the LOC must be made before that cash is available for disbursement. The cash draw may take up to 36 hours, usually considerably less, as the funds are transferred to the SRF.

There have been reports that the "LOC process" can take several weeks. States must comply with their own overlapping fiscal and accounting procedures which can impede the quick transfer of funds. Thus, although the letter of credit itself as a method of payment is not causing delays beyond the maximum of 36 hours necessary to make the electronic transfer of funds, delays are occurring in some States due to State processing problems associated with the cash disbursements.

Administrative Expenses

The CWA restricts the amount of money in an SRF that may be used for administrative expenses to four percent of all capitalization grant awards received by the fund. The amount available each year to cover administrative costs is four percent of all awards received up to and

including that year minus the amount of administrative expenses paid by the fund in previous years.

A number of States expressed concern that the allowed amount would be inadequate to pay the full costs of administering their fund. This appears to be especially true of leveraged funds because of the additional financial operations and management they require. While States have expressed this concern, the data presented in Section Seven indicate that twenty-eight of forty-four responding States should be able to fund their administrative costs with the four percent allowance through FY 1994. The States expressed particular concern about the administration of the SRFs after FY 1994, when capitalization grants are scheduled to end.

SRF program representatives made recommendations regarding the short-term (up to FY 1995) and long-term (after FY 1995) funding of administrative costs. For the short term, nineteen States recommended increasing the four-percent ceiling or allowing four percent of the authorized, rather than the appropriated, amount, changes that would require legislative action. While this would allow additional SRF funds to be used for administrative expenses, it is neither normal practice nor prudent to pay the operating costs of a revolving loan program with its capital funds. Doing so can jeopardize the fiscal integrity of the capital account because it is an open-ended, consumptive use of funds. As an effective alternative, representatives from ten States recommended that their SRF programs charge a loan closing or similar fee. Two States recommended a separate Federal grant for administrative costs.

For the long term, States suggested a variety of funding methods. Twenty-one States recommended instituting a closing or other type of fee to cover administrative costs. Ten States have already implemented a loan closing fee. It should be noted that any such fees collected should be kept out of the SRF itself so that they will not be counted towards or limited by the four-percent ceiling. Several study States recommended the following administrative cost funding mechanisms, some of which (marked by an asterisk) are not currently allowed or viable in the SRF program:

- using State appropriations;
- using fund reserves*;
- transferring unused 205(g) funds (Federal grant funds for States to implement certain Title II program management activities)*;
- using a portion of the debt service payments*; and
- having the Federal government provide funds matching State appropriations for administrative costs on a dollar for dollar basis (up to 10 percent of the actual loans made).

Eligibility of Land

The purchase of land for a wastewater treatment facility is not an eligible cost under the SRF program unless the land is integral to the treatment process or used for sludge disposal. Several States recommended that this restriction be lifted because it makes the SRF less attractive as a source of financing. Since land upon which to build a facility must often be purchased, a community seeking assistance from an SRF may have to finance land acquisition through another source. This increases total financing costs for the project, especially since the land financing is unlikely to be at a subsidized interest rate. Minnesota mentioned that this restriction is especially problematic for small communities.

The restriction on the use of SRF funds for the purchase of land is statutorily imposed by the CWA. Therefore, legislative action would be necessary to expand the eligibility of land under the SRF program.

Identification of Repayment Revenue Source

The CWA requires that recipients of SRF assistance provide a dedicated source of revenue to cover repayments. While nonpoint source, ground water, and estuarine programs are a high water quality priority in many States and are eligible for assistance under the SRF program (see Section 3 and Appendix B), the activities associated with such "expanded uses" do not typically provide a source of revenue to repay loans. Because of this, some States reported that it may be difficult to provide SRF assistance for expanded use activities. At least twelve States, however, currently fund or plan to fund expanded use activities through their SRFs.

Although the revenue to repay SRF loans may not be derived directly from the funded activities themselves, repayment sources are available. An assistance recipient can dedicate the proceeds of fees (e.g., permit fees, inspection fees, impact fees), taxes (e.g., property taxes, sales taxes, pollution taxes), or fines and penalties to the repayment of an SRF loan. EPA has prepared a case study guidebook to present examples of how expanded use activities may be funded under the SRF program.

Financial and Legal Aspects of the Program

A number of States commented that SRFs involve more financial and legal complexity than construction grants and many other funding programs. States and communities have an increasing need for expertise in public finance and bond and tax law to effectively utilize SRFs. While these added complexities can increase costs, they also are the elements of the program that increase the available forms of assistance (i.e., credit enhancements) and the amount of funds available (i.e., leveraging). Each State should determine whether or not its water quality needs are such that its SRF should incorporate various financial complexities.

EPA is aware of the potential delays and problems that financial and legal complexities may present to the program. In an effort to assist States to develop and implement effective SRFs, the Agency has put in place a mission support contract for use by EPA Headquarters, Regional Offices, and, through the Regions, States. The contract team has provided training

and the advice and support of financial managers, investment bankers, and bond attorneys during the development and establishment of many SRFs.

Many SRFs issue bonds to raise State match, overmatch, or leverage funds. Some programs purchase, refinance, or provide security for local bonds issued for wastewater treatment projects. In order to minimize the cost of capital, States and municipalities may use tax-exempt financing in these situations. By doing so, however, SRFs become subject to the many provisions of Federal tax laws and regulations that affect tax-exempt bonds. The statutory and regulatory framework surrounding tax-exempt financing is very complex and cannot be covered in this report.

Although none of the tax laws or regulations prevent a State from developing an SRF and making use of the financial mechanisms allowed under the CWA, they do restrict the flexibility of the States in structuring their SRFs. These provisions can increase the costs of providing assistance and administering the program. Arbitrage tracking, for example, can be an intricate and costly process. Delays can occur during program development and implementation as State officials and bond counsel ensure that the program follows the applicable laws and regulations. This diligence is necessary to safeguard the tax-exempt status of SRF-related bonds.

The overall implementation of the SRF program has been very effective. As with any new program, especially one like the SRF which involves fundamental changes in the roles and responsibilities of the Federal, State, and local governments, some operational difficulties have arisen. However, EPA and the States have worked closely and successfully to develop solutions that are enabling SRFs to become effective State financing programs.

The number of issues associated with implementation, such as those discussed above, has been reduced as people and institutions become more familiar with program requirements. There do not appear to be any fundamental flaws in the structure of the SRF program or any significant impediments to successful implementation that have not been adequately managed by the States and EPA.

APPENDIX A

SRF REPORT TO CONGRESS WORKGROUP MEMBERS

APPENDIX A

SRF REPORT TO CONGRESS WORKGROUP MEMBERS

State Members

C.R. Miertschin
Construction Grants Division
Texas Water Development Board
P.O. Box 13231 - Capitol Station
Austin, TX 78711-3231
512-463-7853

David Hanna
Wastewater Construction Grants
Environmental Improvement Division
1190 St. Francis Dr.
Harold Runnels Bldg.
Santa Fe, NM 87504-0968
505-827-2812

Fred Esmond
Division of Construction Management
New York State Department of
Environmental Conservation
50 Wolf Road, Room 438
Albany, NY 12233
518-457-6252

Paul Zugger, Chief
Surface Water Quality Division
Department of Natural Resources
P.O. Box 30038
Corner of Pine and Allegan
Lansing, MI 48909
517-373-1949

Doug Garrett
Department of Natural Resources
Water Pollution Control Program
205 Jefferson St.
P.O. Box 176
Jefferson City, MO 65101
314-751-5723

Alternate for Doug Garrett:

Susan Hoppel
Nebraska Department of Environmental
Control
301 Central Mall South
Lincoln, NE 68508
402-471-2182

Regional Members

Roger Janson
Region I
U.S. Environmental Protection Agency
John F. Kennedy Federal Building
Rm. 2203
Boston, MA 02203
617-565-3580; 8-835-3580

Lee Murphy
Region III
U.S. Environmental Protection Agency
(3WM-20)
841 Chestnut St.
Philadelphia, PA 19107
215-597-3847; 8-597-3847

Richard Hoppers
Region VI
U.S. Environmental Protection Agency
1445 Ross Ave., 12th Floor, Suite 1200
Dallas, TX 75202
214-655-7110; 8-255-7110

Mike Muse
Region IX
U.S. Environmental Protection Agency
215 Fremont St.
San Francisco, CA 94105
415-974-8341; 8-454-8341

APPENDIX B

NEEDS ASSOCIATED WITH NEW SRF PROGRAM FUNDING ELIGIBILITIES AND NEW ENFORCEABLE REQUIREMENTS

APPENDIX B

NEEDS ASSOCIATED WITH NEW SRF PROGRAM FUNDING ELIGIBILITIES AND NEW ENFORCEABLE REQUIREMENTS

This Appendix describes the potential impact of new funding eligibilities and new requirements under the CWA on the need for SRF financing. The discussion considers these issues primarily from a qualitative, national perspective rather than a quantitative, State-specific one. This approach is necessary because the cost implications of many of the new requirements are either not available or, when available, are very preliminary.

B.1 New Funding Eligibilities

Nonpoint Source Pollution Control

Congress specified in the 1987 Amendments to the CWA that States prepare Assessment Reports to identify the significant impact that nonpoint source (NPS) pollution can have on water bodies. These reports should identify waters unlikely to achieve water quality standards without NPS controls as well as the sources causing the water quality impairment. In addition, Section 319 of the CWA requires States to develop Management Programs to address these impairments.

All States have submitted their Assessment Reports and Management Programs. EPA has approved or partially approved management programs for all jurisdictions. EPA and State agencies will identify funds available to carry out the activities necessary for meeting water quality standards. Funding is authorized in the CWA to implement these NPS control activities, and includes grants under Section 319 and Section 201(g)(1)(B) and assistance from the SRF program.

To be eligible for SRF financing, NPS activity must meet three threshold requirements: the State must have SRF-authorizing legislation which makes Section 319 activities eligible for SRF assistance, the activity must be included in the State's approved NPS Management Program, and the activity must be on the State's SRF Intended Use Plan (IUP). Twelve States have indicated they plan to fund NPS activities through the SRF program in the future. One of the twelve, Wyoming, plans to use all of its available SRF funds for NPS projects from 1991 to 1994.

Estuarine Protection

Section 320 of the CWA established the National Estuary Program to ensure protection of estuarine areas "threatened by pollution, development, or overuse." The program calls for the development and implementation of Comprehensive Conservation and Management Plans (CCMPs) to achieve this protection.

As of July 1990, 17 estuaries had been accepted for participation in the National Estuary Program:

- Buzzards Bay, Massachusetts
- Narragansett Bay, Rhode Island
- Long Island Sound, Connecticut and New York
- Puget Sound, Washington
- San Francisco Bay, California
- Santa Monica Bay, California
- Albemarle/Pamlico Sounds, North Carolina
- New York/New Jersey Harbor, New York and New Jersey
- Delaware Estuary, Delaware and New Jersey
- Delaware Inland Bays, Delaware
- Sarasota Bay, Florida
- Galveston Bay, Texas
- Casco Bay, Maine
- Massachusetts Bays, Massachusetts
- Indian River Lagoon, Florida
- Tampa Bay, Florida
- Barataria-Terrebonne, Louisiana

In coordination with the States, EPA convenes management conferences to develop CCMPs for estuaries included in the National Estuary Program. Conference planning activities and actions needed to implement the CCMPs are eligible for funding under the SRF program. Since most of the management conferences are still assessing the status of their estuaries, final CCMPs have yet to be developed. Consequently, comprehensive cost estimates for CCMP implementation activities are not available at this time.

The State of Washington reported that its SRF provided funding for CCMP activities in FY 1990. Two other States, California and Pennsylvania, indicated that they intend to fund CCMP activities through their SRFs in the future. Additionally, Connecticut reported that it intends to make loans for wastewater treatment and CSO projects that are closely tied to the nutrient reduction strategy being developed for the Long Island Sound CCMP.

Ground Water Protection

Section 319 of the CWA emphasizes ground water protection by encouraging States to assess the impact of NPS problems on ground water quality and by authorizing grants for ground water protection activities related to NPS problems. As an ongoing effort under Section 106 of the CWA, EPA provides grant money to States to support the development of State Ground Water Protection Strategies. Most States have submitted Ground Water Protection Strategies to EPA. The Agency encourages States to keep the Strategies current.

The CWA provides a mechanism for using SRF monies for ground water protection under the NPS program. For ground water protection activities to be eligible, they must be identified in the State's EPA-approved NPS Management Program through direct identification or incorporation by reference to the State's Ground Water Protection Strategy. State Ground-Water Protection Strategies do not generally include cost estimates. Therefore, it is not

possible at this time to determine the extent to which ground water protection activities will add to the total cost of SRF-eligible water pollution control activities.

Wetlands Protection

EPA encourages states to coordinate planning and implementation of programs for nonpoint source pollution control, ground water protection, and estuarine protection. Although no new program efforts were established for wetlands protection in the 1987 Amendments, wetlands protection is also a priority concern. Implementation of wetlands protection activities is SRF-eligible to the extent that the activities are included as part of approved State Nonpoint Source Management Programs or estuary CCMPs.

Maintaining Permit Compliance

Traditional Needs Surveys have not captured the needs associated with wastewater treatment facilities which are compliant at the time of the survey, but in need of near term improvements, because they are at a design capacity, near retirement, or in an area where stream standards will be upgraded. This is particularly critical in areas which are experiencing population growth. These needs are eligible for funding from SRFs and will add substantially to States' total needs for wastewater funding.

B.2 New Enforceable Requirements

Separate Storm Sewers

The 1987 Clean Water Act Amendments expand the permitting program for discharges from municipal separate storm sewers to include comprehensive storm water quality management programs to reduce the discharge of pollutants. Section 402(p) of the CWA provides deadlines for EPA to establish permit application requirements for discharges from large municipal separate storm sewer systems (systems serving a population of 250,000 or more) and discharges from medium municipal separate storm sewer systems (systems serving a population between 100,000 and 250,000). EPA is to study discharges from other municipal separate storm sewers and issue regulations based on the results of these studies.

On November 16, 1990, EPA published a final rule on permit application requirements in the Federal Register. The rule covers permit application requirements for discharges from large and medium municipal separate storm sewers. The requirements are sufficiently flexible to allow the development of site-specific permit conditions. Under the requirements, municipal applicants will be required to submit proposed storm water management programs as part of their permit application.

The municipal storm water management programs that municipal permittees will be required to develop and implement as permit conditions will address a wide range of structural and nonstructural controls. Structural controls include the removal of illicit connections, regional storm water management basins, retention and infiltration basins, and other retrofit

projects. Nonstructural controls include developing and implementing an ordinance to control construction site runoff, street sweeping, operation and maintenance improvements, public education programs, and waste collection programs to discourage illegal dumping.

Structural improvements to municipal separate storm sewer systems qualify for assistance from Federal funds authorized after FY 1990 for the SRF program. Activities for storm water pollution control are also eligible for SRF assistance if they are part of approved Section 319 State Nonpoint Source Management Programs or Section 320 estuary Comprehensive Conservation and Management Plans. Structural improvements and control activities for storm sewers that are part of these programs will, therefore, increase SRF-eligible needs. Estimates of the dollar amount of the increase are not yet available. Initial cost estimates should be available after municipal applicants submit cost analyses of implementing municipal storm water management programs. These cost analyses are required as part of the permit application for large and medium-sized municipal systems.

Discharge of Toxic Pollutants

Section 304(l) of the CWA requires EPA and the States to address the reduction of toxics from point source discharges. EPA promulgated requirements to implement Section 304(l) in June 1989. Section 304(l) required States to prepare lists of water bodies not meeting water quality standards because of point source discharges of one or more of the 126 priority toxic pollutants. Section 304(l) also required States to prepare lists of point sources discharging these pollutants and to develop control strategies to reduce these discharges.

As of July 1990, the States and EPA had identified 193 municipal facilities and 53 CSOs or storm water drains that are discharging toxic pollutants into impaired waters. To comply with new, more stringent limits on toxic pollutants, the treatment facilities will have to choose between either enforcing more stringent pretreatment requirements or installing more advanced technology within the facility. Communities with CSO and storm sewer problems will have a choice of adopting either nonstructural (e.g., street cleaning) or structural (e.g., separation of sanitary and storm sewers) controls. With certain restrictions, these options are eligible for assistance from SRFs.

EPA and the States have completed identifying impaired waters and point sources of toxic discharges and are now completing control strategies. After public comment, additional water bodies and facilities have been added to States' lists, while others have been deleted. After the control strategies become incorporated into final permits, facilities will have three years to comply with their new effluent limits. Because most facilities have yet to determine necessary treatment modifications, it is not possible to assess the cost of these new controls at this time.

Sludge Use and Disposal Regulations

Sludge is a byproduct of the wastewater treatment process. Treatment facilities bear the responsibility for managing their sludge. The 1987 CWA Amendments require EPA to

identify toxic pollutants of concern in sludge, establish numerical limits for each pollutant, and determine appropriate beneficial use and disposal practices to protect human health and the environment.

EPA proposed regulations in February 1989 that address five sludge beneficial use and disposal practices: incineration, land application, monofill (sludge-only), distribution and marketing, and surface impoundments. These new requirements may generate additional costs for treatment facilities. SRF programs can provide financial assistance for the capital costs of POTW investments. Eligible capital costs might include upgrades for an existing treatment process, hardware purchases for sludge disposal (e.g., a truck to transport the material to a landfill), or engineering costs associated with a capital investment project.

As part of its regulatory development process, EPA prepared a regulatory impact analysis estimating the costs to treatment works of complying with the proposed regulations. Data in the record provide a basis for estimating capital costs. The total capital costs (including engineering costs) associated with POTW compliance with the proposed sludge regulations are estimated to be $408.3 million (1988 dollars). The methodology used to estimate the cost of compliance with the proposed regulation will change, however, based on new data gathered from a national sewage sludge survey. Thus, this cost estimate may change. Furthermore, this cost estimate is for the proposed regulation; the cost associated with the final regulation may differ substantially.

Ocean Dumping Ban Act

The Ocean Dumping Ban Act of 1988 affects the State Revolving Fund program in New York and New Jersey. The Act requires these states to commit ten percent of their capitalization grants awarded for fiscal years 1990 and 1991, and ten percent of their State match associated with those grants, to provide assistance authorized under Title VI for identifying, developing, and implementing alternatives to ocean dumping of sewage sludge.

Summary

Sludge use and disposal, new toxics requirements, separate storm water sewers, NPS pollution control, and ground water, estuary, and wetlands protection activities are eligible for, and could add substantially to the demand for, SRF assistance. With the exception of the estimated $408 million for compliance with proposed sludge beneficial use and disposal regulations, comprehensive estimates of the financing needs for these new eligibilities and requirements are not available. It is anticipated that costs associated with new funding eligibilities and new requirements will substantially exceed the Category I through V needs estimated in the 1988 Needs Survey.

APPENDIX C

ESTIMATED ANNUAL FUNDING FOR SRFS AND OTHER STATE PROGRAMS BY STATE

TABLE C-1

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Alabama								
SRF Cap. Grant		10.6	10.9	20.7	15.6	10.4	5.2	
State Match		2.1	2.2	4.1	3.1	2.1	1.0	
Overmatch								
Leveraged Funds		25.7	31.0	50.0	25.0	25.0	25.0	25.0
Loan Repayments(b)								
SRF Interest Earnings								
SRF Sub-Total		38.4	44.1	74.8	43.7	37.5	31.2	25.0
SRF Debt Service Reserves		(7.2)	(8.0)	(14.0)	(7.0)	(7.0)	(7.0)	(7.0)
SRF Available(c)		31.2	36.1	60.8	36.7	30.5	24.2	18.0
State Grant Programs		-						
Other State Programs		-						
TOTAL(d)		31.2	36.1	60.8	36.7	30.5	24.2	18.0
Alaska								
SRF Cap. Grant	0.0	10.1	5.8	12.1	10.9	7.3	3.6	
State Match	0.0	2.0	1.2	2.4	2.2	1.5	0.7	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	0.0	0.0	0.2	0.4	0.5	1.0	3.4
SRF Interest Earnings	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
SRF Sub-Total	0.0	12.6	7.4	15.2	13.9	9.7	5.8	3.9
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(c)	0.0	12.6	7.4	15.2	13.9	9.7	5.8	3.9
State Grant Programs(e)	10.0	11.0	12.0					
Other State Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL(d)(f)	10.0	23.6	19.4	15.2	13.9	9.7	5.8	3.9

(a) Annual average.

(b) Alabama's SRF loan repayments are used to retire SRF bonds during the time period. and are thus not available to fund projects.

(c) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(d) Totals vary due to rounding.

(e) Alaska's State Grants are appropriated annually. Projections after 1990 are not possible.

(f) Total does not include Alaska's State Grant funding after 1990.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Arizona								
SRF Cap. Grant	0.0	6.4	6.5	16.0	12.0	8.0	4.0	
State Match	0.0	1.2	1.3	2.4	1.6	0.8	0.4	
Overmatch	0.0				0.0			
Leveraged Funds	0.0	10.8	10.7	21.6	14.4	7.2	3.6	1.0
Loan Repayments	0.0							1.0
SRF Interest Earnings	0.0							
SRF Sub-Total	0.0	18.4	18.5	40.0	28.0	16.0	8.0	2.0
SRF Debt Service Reserves		(6.4)	(6.5)	(12.0)	(8.0)	(4.0)	(2.0)	
SRF Available(b)	0.0	12.0	12.0	28.0	20.0	12.0	6.0	2.0
State Grant Programs	0.0							
Other State Programs	0.0							
TOTAL(c)	0.0	12.0	12.0	28.0	20.0	12.0	6.0	2.0
Arkansas								
SRF Cap. Grant	0.0	13.6	13.9	15.9	11.9	7.9	4.0	0.0
State Match	0.0	2.7	2.8	3.2	2.4	1.6	0.8	0.0
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	26.4	15.3	11.4	7.6	3.5
Loan Repayments(d)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Interest Earnings(e)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Sub-Total	0.0	16.4	16.7	45.5	29.5	20.9	12.4	3.5
SRF Debt Service Reserves	0.0	0.0	0.0	(26.4)	(15.3)	(11.4)	(7.6)	(3.5)
SRF Available(b)	0.0	16.4	16.7	19.1	14.3	9.5	4.8	0.0
State Grant Programs	0.0	0.0	0.1	0.3	0.2	0.2	0.2	0.2
Other State Programs(f)	0.0	0.0	9.3	13.5	13.5	13.5	13.5	13.5
TOTAL(c)	0.0	16.4	26.1	32.8	27.9	23.1	18.5	13.7

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

(d) Arkansas' SRF loan repayments are used to retire SRF bonds during the time period, and are thus not available to fund projects.

(e) Arkansas' SRF interest earnings are used to retire SRF bonds during the time period, and are thus not available to fund projects.

(f) Arkansas Soil & Water Conservation Commission Loan Program.

TABLE C–1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995–1999(a)
California								
SRF Cap. Grant	–	127.6	119.8	173.6	130.2	86.8	43.4	0.0
State Match	–	25.5	24.0	34.7	26.0	17.4	8.7	0.0
Overmatch	–	–	–	–	–	–	–	–
Leveraged Funds	–	–	–	–	–	–	–	–
Loan Repayments	–	–	–	–	10.9	24.6	40.8	50.3
SRF Interest Earnings	–	–	–	–	–	–	–	–
SRF Sub-Total	–	153.1	143.8	208.3	167.1	128.8	92.9	50.3
SRF Debt Service Reserves	–	–	–	–	–	–	–	–
SRF Available(b)	–	153.1	143.8	208.3	167.1	128.8	92.9	50.3
State Grant Programs(c)	–	–	2.0	5.0	10.0	8.0	0.0	0.0
Other State Programs(d)	1.5	5.4	21.5	37.1	3.0	3.0	3.0	3.0
TOTAL(e)	1.5	158.5	167.3	250.4	180.1	139.8	95.9	53.3
Colorado								
SRF Cap. Grant	0.0	11.6	12.1	19.0	14.3	9.5	4.8	0.0
State Match	0.0	0.9	3.5	3.4	2.5	1.7	0.8	0.0
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	6.9	36.0	34.0	24.0	16.0	8.0	5.0
Loan Repayments	0.0	0.0	0.1	0.3	0.5	0.8	1.3	1.4
SRF Interest Earnings	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
SRF Sub-Total	0.0	19.4	51.7	56.6	41.3	28.0	15.0	6.5
SRF Debt Service Reserves	0.0	(3.1)	(16.0)	(17.0)	(12.0)	(8.0)	(4.0)	(1.4)
SRF Available(b)	0.0	16.3	35.7	39.6	29.3	20.0	11.0	5.1
State Grant Programs	1.0	0.8	0.6	1.0	1.0	1.0	1.0	1.0
Other State Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL(e)	1.0	17.1	36.3	40.6	30.3	21.0	12.0	6.1

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) California's Small Community Grant Program

(d) California's Water Quality Control Fund loan program and Water Reclamation Loan Program.

(e) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

	Actual			Projected				
FUNDING SOURCE:	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Connecticut								
SRF Cap. Grant	28.1	22.3	23.3	29.9	22.3	14.9	7.4	
State Match	5.6	4.4	4.6	6.0	4.4	3.0	1.5	
Overmatch	52.8	23.2	70.8	35.2	37.6	38.0	41.3	41.9
Leveraged Funds								
Loan Repayments	0.0	0.0	0.0	5.2	8.2	14.2	18.7	30.9
SRF Interest Earnings								
SRF Sub-Total	86.5	49.9	98.7	76.3	72.5	70.1	68.9	72.8
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	86.5	49.9	98.7	76.3	72.5	70.1	68.9	72.8
State Grant Programs	21.6	12.4	24.6	18.8	18.0	19.0	17.2	18.1
Other State Programs								
TOTAL(c)	108.1	62.3	123.3	95.1	90.5	89.1	86.1	90.9
Florida								
SRF Cap. Grant(d)	0.0	56.7	58.3	62.0	58.0	39.0	19.0	
State Match	0.0	11.8	12.1	12.9	12.2	8.1	4.1	
Overmatch	0.0	3.4	(0.1)	(0.9)	(0.2)	0.9	(3.0)	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments(e)	0.0	0.0	0.0	0.0	10.5	16.2	22.5	33.3
SRF Interest Earnings(e)	0.0	0.1	0.2	4.0	5.1	4.0	4.0	4.0
SRF Sub-Total	0.0	72.0	70.5	78.0	85.6	68.2	46.6	37.3
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	0.0	72.0	70.5	78.0	85.6	68.2	46.6	37.3
State Grant Programs	1.7	2.6	0.9	1.9	0.5	0.0	0.0	0.0
Other State Programs	0.1	6.2	0.2	0.5	0.5	0.5	0.5	0.5
TOTAL(c)	1.8	80.8	71.6	80.4	86.6	68.7	47.1	37.8

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

(d) Florida's capitalization grant for 1991 projected at 80% of authorized amount.

(e) Indicates year obligated, not year earned.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Georgia								
SRF Cap. Grant	28.0	30.6	39.0	40.6	30.7	20.3	10.1	
State Match(b)								
Overmatch								
Leveraged Funds								
Loan Repayments	0.0	0.2	2.0	3.9	5.2	7.9	10.1	13.5
SRF Interest Earnings								
SRF Sub-Total	28.0	30.8	41.0	44.5	35.9	28.2	20.2	13.5
SRF Debt Service Reserves								
SRF Available(c)	28.0	30.8	41.0	44.5	35.9	28.2	20.2	13.5
State Grant Programs	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Other State Programs	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
TOTAL(d)	54.0	56.8	67.0	70.5	61.9	54.2	46.2	39.5
Hawaii								
SRF Cap. Grant		7.3	7.3	11.8	8.9	5.9	3.0	
State Match		1.5	1.5	2.4	1.8	1.2	0.6	
Overmatch		46.9						
Leveraged Funds								
Loan Repayments							0.5	1.3
SRF Interest Earnings							0.6	1.3
SRF Sub-Total		55.7	8.8	14.2	10.7	7.1	4.7	2.5
SRF Debt Service Reserves								
SRF Available(b)		55.7	8.8	14.2	10.7	7.1	4.7	2.5
State Grant Programs								
Other State Programs								
TOTAL(c)		55.7	8.8	14.2	10.7	7.1	4.7	2.5

(a) Annual average.

(b) Georgia's State match is from non-SRF loans dedicated for repayment into the SRF. Repayments on the State match loans are included with SRF loan repayments.

(c) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(d) Totals vary due to rounding.

TABLE C–1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995–1999(a)
Idaho								
SRF Cap. Grant	0.0	4.5	4.7	11.9	8.9	5.9	2.9	0.0
State Match	0.0	1.0	1.0	2.4	1.8	1.2	0.6	0.0
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	0.0	0.0	0.3	0.6	1.3	1.9	2.5
SRF Interest Earnings	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
SRF Sub-Total	0.0	5.5	5.7	14.6	11.4	8.5	5.5	2.6
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	0.0	5.5	5.7	14.6	11.4	8.5	5.5	2.6
State Grant Programs	8.8	9.8	1.5	3.0	2.0	2.0	2.0	2.0
Other State Programs	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL(c)	8.8	20.8	7.2	17.6	13.4	10.5	7.5	4.6
Illinois								
SRF Cap. Grant	0.0	50.0	50.0	100.0	75.0	50.0	25.0	0.0
State Match	0.0	10.0	10.0	20.0	15.0	10.0	5.0	0.0
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	0.0	0.0	1.8	8.6	17.4	24.4	36.0
SRF Interest Earnings	0.0	0.1	0.6	0.6	0.6	0.6	0.6	0.6
SRF Sub-Total	0.0	60.1	60.6	122.4	99.2	78.0	55.0	36.6
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	0.0	60.1	60.6	122.4	99.2	78.0	55.0	36.6
State Grant Programs	65.0	181.4	128.3	74.5	74.5	0.0	0.0	0.0
Other State Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL(c)	65.0	241.5	188.9	196.9	173.7	78.0	55.0	36.6

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

	Actual			Projected				
FUNDING SOURCE:	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Indiana								
SRF Cap. Grant		22.7	23.5	58.5	43.9	29.3	14.6	
State Match	-	4.5	4.7	11.6	8.7	5.8	2.9	
Overmatch	-	-	-	-	-	-	-	-
Leveraged Funds	-	-	5.0	15.0	15.0	15.0	10.0	0.0
Loan Repayments	-	-	-	-	0.5	2.5	4.0	4.0
SRF Interest Earnings	-	-	0.2	1.0	1.5	1.5	1.5	1.0
SRF Sub-Total	-	27.2	33.4	86.1	69.6	54.1	33.0	5.0
SRF Debt Service Reserves	-	0.0	(2.0)	(7.0)	(7.0)	(5.0)	(2.9)	0.0
SRF Available(b)	-	27.2	31.4	79.1	62.6	49.1	30.1	5.0
State Grant Programs	18.4	7.4	7.7	10.0	10.0	10.0	10.0	10.0
Other State Programs	-	-	-	10.0	10.0	10.0	10.0	10.0
TOTAL(c)	18.4	34.6	39.1	99.1	82.6	69.1	50.1	25.0
Iowa								
SRF Cap. Grant	0.0	12.7	13.2	33.1	24.8	16.5	8.3	
State Match	0.0	2.5	2.6	6.6	5.0	3.3	1.7	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0
Leveraged Funds(d)	0.0	12.6	13.0					0.0
Loan Repayments	0.0	0.0	0.0	0.0	1.2	3.8	5.0	5.0
SRF Interest Earnings	0.0	0.0	1.0	1.5	0.7	0.4	0.0	0.0
SRF Sub-Total	0.0	27.8	29.8	41.2	31.7	24.0	15.0	25.0
SRF Debt Service Reserves	0.0	(2.2)	(1.0)	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	0.0	25.6	28.8	41.2	31.7	24.0	15.0	25.0
State Grant Programs								
Other State Programs								
TOTAL(c)	0.0	25.6	28.8	41.2	31.7	24.0	15.0	25.0

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

(d) The extent to which Iowa will leverage between 1991 and 1994 is not yet known.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

	Actual			Projected				
FUNDING SOURCE:	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Kansas								
SRF Cap. Grant	0.0	8.5	8.8	21.9	16.5	11.0	5.5	
State Match	0.0	1.7	1.8	4.4	3.3	2.2	1.1	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0
SRF Interest Earnings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Sub-Total	0.0	10.2	10.6	26.3	19.8	14.2	7.6	2.0
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	0.0	10.2	10.6	26.3	19.8	14.2	7.6	2.0
State Grant Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other State Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL(c)	0.0	10.2	10.6	26.3	19.8	14.2	7.6	2.0
Kentucky								
SRF Cap. Grant	17.2	21.8	17.7	29.2	21.9	14.6	7.3	
State Match	0.0	6.6	3.5	5.7	4.3	2.8	1.4	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	15.7	1.1	1.7	3.1	4.6	5.9	6.8
SRF Interest Earnings	0.0	0.3	0.6	0.9	1.3	1.9	2.5	3.0
SRF Sub-Total	17.2	44.4	22.9	37.5	30.6	23.9	17.1	9.8
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	17.2	44.4	22.9	37.5	30.6	23.9	17.1	9.8
State Grant Programs	0.0							
Other State Programs	10.7	35.8	36.4	1.0	1.0	0.0	0.0	0.0
TOTAL(c)	27.9	80.3	59.3	38.5	31.6	23.9	17.1	9.8

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Louisiana								
SRF Cap. Grant	12.0	10.5	10.8	26.0	18.0	12.0	6.0	
State Match	2.4	2.1	2.2	5.2	3.6	2.4	1.2	
Overmatch								
Leveraged Funds								55.0
Loan Repayments	0.0	0.0	0.1	0.5	2.0	3.2	5.3	8.7
SRF Interest Earnings	0.0	0.1	0.2	0.3	0.4	0.4	0.4	0.5
SRF Sub-Total	14.4	12.7	13.3	32.0	23.9	18.0	12.8	64.2
SRF Debt Service Reserves								
SRF Available(b)	14.4	12.7	13.3	32.0	23.9	18.0	12.8	64.2
State Grant Programs								
Other State Programs								
TOTAL(c)	14.4	12.7	13.3	32.0	23.9	18.0	12.8	64.2
Maine								
SRF Cap. Grant		7.4	7.5	18.0	13.5	9.0	4.5	0.0
State Match		1.5	1.5	3.6	2.7	1.8	0.9	0.0
Overmatch		0.3	0.3					
Leveraged Funds								
Loan Repayments				0.2	0.3	0.5	1.5	3.0
SRF Interest Earnings								
SRF Sub-Total		9.2	9.3	21.8	16.5	11.3	6.9	3.0
SRF Debt Service Reserves		(2.0)	(2.5)	(4.0)	(3.5)	(2.7)	(1.2)	(0.7)
SRF Available(b)		7.2	6.8	17.8	13.0	8.6	5.7	2.3
State Grant Programs								
Other State Programs		19.0	21.0	36.0	31.0	23.0	11.0	6.0
TOTAL(c)		26.2	27.8	53.8	44.0	31.6	16.7	8.3

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Maryland								
SRF Cap. Grant	0.0	22.8	23.6	58.7	44.0	29.4	14.6	
State Match	0.0	4.6	5.0	7.0	8.8	5.9	2.9	
Overmatch	0.0	1.4	0.3	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	26.6	175.1	101.4	67.8	33.6	15.0
Loan Repayments	0.0	0.0	0.2	0.9	0.9	2.3	2.0	7.7
SRF Interest Earnings	0.0	0.0	0.1	0.4	0.2	0.1	0.1	0.0
SRF Sub-Total	0.0	28.8	55.8	242.1	155.3	105.4	53.3	22.7
SRF Debt Service Reserves	0.0	0.0	(0.9)	(17.6)	(13.2)	(8.8)	(4.4)	(1.9)
SRF Available(b)	0.0	28.8	54.8	224.5	142.1	96.6	48.9	20.8
State Grant Programs	3.6	15.5	15.5	0.0	0.0	0.0	0.0	0.0
Other State Programs	2.0	3.4	3.5	4.4	0.0	0.0	0.0	0.0
TOTAL(c)	5.6	47.7	73.8	228.8	142.1	96.6	48.9	20.8
Massachusetts								
SRF Cap. Grant	0.0	62.0	65.0	82.0	61.0	41.0	20.0	
State Match	0.0	12.0	13.0	16.0	12.0	8.0	4.0	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.1
SRF Interest Earnings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Sub-Total	0.0	74.0	78.0	98.0	73.0	49.0	25.3	2.1
SRF Debt Service Reserves	0.0	0.0	0.0	(75.0)	(45.0)	(40.0)	0.0	0.0
SRF Available(b)	0.0	74.0	78.0	23.0	28.0	9.0	25.3	2.1
State Grant Programs	120.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other State Programs	67.0	72.0	77.0	750.0	450.0	400.0	(d)	(d)
TOTAL(c)	187.0	146.0	155.0	773.0	478.0	409.0	25.3	2.1

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

(d) Additional State authorizations will be needed for future year program needs.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Michigan								
SRF Cap. Grant		40.5	41.9	83.8	78.3	52.2	26.1	
State Match		8.1	8.4	16.8	15.6	10.4	2.1	
Overmatch		0.1	3.1	-	-	-		
Leveraged Funds		-		-	-	-		
Loan Repayments		-		-	-	-		
SRF Interest Earnings		-		-	-	-		
SRF Sub-Total		48.7	53.4	100.6	93.9	62.6	28.2	
SRF Debt Service Reserves		-						
SRF Available(b)		48.7	53.4	100.6	93.9	62.6	28.2	
State Grant Programs		0.0	0.0	0.0	0.0	0.0	0.0	
Other State Programs		0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL(c)		48.7	53.4	100.6	93.9	62.6	28.2	
Minnesota								
SRF Cap. Grant	0.0	17.3	17.9	44.0	33.0	22.0	11.0	
State Match	0.0	3.5	3.6	8.8	6.6	4.4	2.2	
Overmatch		0.2	0.7	0.0	0.0	0.0	0.0	0.0
Leveraged Funds		45.4	69.8	65.0	60.0	48.0	48.0	48.0
Loan Repayments(d)								
SRF Interest Earnings								
SRF Sub-Total	0.0	66.3	92.0	117.8	99.6	74.4	61.2	48.0
SRF Debt Service Reserves	0.0	(16.8)	(17.3)	(42.5)	(31.7)	(21.1)	(10.5)	0.0
SRF Available(b)	0.0	49.6	74.6	75.3	67.9	53.3	50.7	48.0
State Grant Programs	23.0	24.0	9.0	15.0	15.0	15.0	15.0	15.0
Other State Programs	6.8	9.8	6.5	11.8	11.8	11.8	11.0	2.0
TOTAL(c)	29.8	83.4	90.1	102.1	94.7	80.1	76.7	65.0

(a) Annual average. Michigan did not provide funding projections for 1995 to 1999.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

(d) Minnesota's loan repayments are used to repay State bond issues.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Mississippi								
SRF Cap. Grant	0.0	15.2	15.8	18.1	16.2	10.8	5.4	
State Match	0.0	3.1	3.2	3.6	3.2	2.2	1.1	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	0.0	0.0	0.7	1.8	3.0	4.2	6.4
SRF Interest Earnings	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2
SRF Sub-Total	0.0	18.3	19.2	22.6	21.4	16.2	10.9	8.4
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	0.0	18.3	19.2	22.6	21.4	16.2	10.9	8.4
State Grant Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other State Programs	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL(c)	3.1	18.3	19.2	22.6	21.4	16.2	10.9	8.4
Missouri								
SRF Cap. Grant	0.0	25.0	26.0	52.0	39.0	26.0	13.0	
State Match	0.0	5.0	5.0	10.0	8.0	5.0	3.0	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0
Leveraged Funds	0.0	0.0	0.0	100.0	75.0	70.0	95.0	120.0
Loan Repayments	0.0	0.0	0.0	0.0	0.0	34.0	31.0	33.4
SRF Interest Earnings	0.0	0.0	0.0	0.0	1.0	2.0	2.0	2.4
SRF Sub-Total	0.0	30.0	31.0	162.0	123.0	137.0	154.0	165.8
SRF Debt Service Reserves	0.0	0.0	0.0	(51.0)	(38.0)	(36.0)	(48.0)	(52.8)
SRF Available(b)	0.0	30.0	31.0	111.0	85.0	101.0	106.0	113.0
State Grant Programs	33.0	26.0	30.0	19.0	23.0	6.0	6.0	6.0
Other State Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL(c)	33.0	56.0	61.0	130.0	108.0	107.0	112.0	119.0

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Nebraska								
SRF Cap. Grant		4.8	4.9	12.2	9.1	6.1	3.0	
State Match		0.9		3.0	4.0			
Overmatch								
Leveraged Funds								
Loan Repayments					0.2	0.3	0.5	2.0
SRF Interest Earnings		0.0	0.1	0.0	0.0	0.0	0.0	0.0
SRF Sub-Total		5.7	5.0	15.2	13.3	6.4	3.5	2.0
SRF Debt Service Reserves		0.0	0.0	(0.3)	(0.4)	0.0	0.0	0.0
SRF Available(b)		5.7	5.0	14.9	12.9	6.4	3.5	2.0
State Grant Programs	2.2	1.8	1.2	1.3	0.3	0.3	0.3	0.3
Other State Programs								
TOTAL(c)	2.2	7.5	6.2	16.2	13.2	6.7	3.8	2.3
Nevada								
SRF Cap. Grant	0.0	4.6	4.7	11.9	8.9	6.0	3.0	
State Match	0.0	0.9	0.9	2.4	1.8	1.2	0.6	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	0.0	0.0	0.0	0.9	2.0	2.5	2.8
SRF Interest Earnings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Sub-Total	0.0	5.5	5.7	14.3	11.6	9.1	6.1	2.8
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	0.0	5.5	5.7	14.3	11.6	9.1	6.1	2.8
State Grant Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other State Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL(c)	0.0	5.5	5.7	14.3	11.6	9.1	6.1	2.8

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
New Hampshire								
SRF Cap. Grant	-	9.4	9.7	23.0	17.0	11.5	5.7	
State Match		1.8	1.9	4.8	3.6	2.4	1.2	
Overmatch								
Leveraged Funds								
Loan Repayments								
SRF Interest Earnings								
SRF Sub-Total		11.2	11.6	27.8	20.6	13.9	6.9	
SRF Debt Service Reserves		0.0	0.0	0.0	0.0	0.0	0.0	
SRF Available(b)		11.2	11.6	27.8	20.6	13.9	6.9	
State Grant Programs	12.2	9.1	11.0	12.3	19.1	17.0	13.1	10.0
Other State Programs								
TOTAL(c)	12.2	20.3	22.6	40.1	39.7	30.9	20.0	10.0
New Jersey								
SRF Cap. Grant	70.3	65.1	69.3	93.1	71.0	46.1	23.0	
State Match	14.1	13.0	13.8	19.4	14.8	9.6	4.8	
Overmatch								
Leveraged Funds	67.0	68.8	77.6	104.9	84.0	61.0	40.6	25.4
Loan Repayments	0.0	0.2	0.7	2.1	5.6	10.1	15.2	25.4
SRF Interest Earnings								
SRF Sub-Total	151.4	147.1	161.4	219.5	175.4	126.8	83.6	50.8
SRF Debt Service Reserves	(14.1)	(6.5)	(7.9)	(9.7)	(7.4)	(4.8)	(2.4)	0.0
SRF Available(b)	137.3	140.6	153.5	209.8	168.0	122.0	81.2	50.8
State Grant Programs	0.0	19.6	28.9					
Other State Programs	56.6	44.4						
TOTAL(c)	193.9	204.6	182.4	209.8	168.0	122.0	81.2	50.8

(a) Annual average. New Hampshire did not provide SRF funding projection for 1995 to 1999.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C–1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995–1999(a)
New Mexico								
SRF Cap. Grant	5.6	8.6	8.6	8.6	8.6	6.0	3.0	
State Match	1.1	1.8	1.1	1.7	1.7	1.7	0.6	
Overmatch	1.7	0.0	0.0	0.9	0.3	0.8	1.4	
Leveraged Funds								
Loan Repayments	0.0	0.0	0.1	0.6	1.0	2.3	3.1	5.5
SRF Interest Earnings								
SRF Sub-Total	8.4	10.4	9.8	11.8	11.6	10.8	8.1	5.5
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	8.4	10.4	9.8	11.8	11.6	10.8	8.1	5.5
State Grant Programs	4.2	3.5	1.0	1.0	0.5	0.5	0.5	0.5
Other State Programs	0.2	0.0	0.0	0.0	0.0	0.0	0.3	0.5
TOTAL(c)	12.8	13.9	10.8	12.8	12.1	11.3	8.9	6.5
New York								
SRF Cap. Grant	0.0	104.0	108.0	226.0	199.0	133.0	66.0	
State Match	0.0	20.8	21.6	45.3	39.8	26.6	13.2	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	207.9	794.0	620.0	500.0	500.0	307.0
Loan Repayments(d)	0.0	0.0	0.0	1.2	4.2	8.8	20.2	54.0
SRF Interest Earnings	0.0	0.0	1.1	7.2	10.1	12.6	13.2	14.0
SRF Sub-Total	0.0	124.8	338.6	1,073.7	873.1	681.0	612.6	375.0
SRF Debt Service Reserves	0.0	0.0	(69.3)	(264.6)	(206.6)	(166.7)	(166.7)	(102.0)
SRF Available(b)	0.0	124.8	269.3	809.1	666.5	514.3	445.9	273.0
State Grant Programs	38.6	15.7	16.0	0.0	0.0	0.0	0.0	0.0
Other State Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL(c)	38.6	140.5	285.3	809.1	666.5	514.3	445.9	273.0

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

(d) Includes freed-up corpus allocation.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
North Carolina								
SRF Cap. Grant	0.0	22.7	33.0	44.0	33.0	22.0	11.0	
State Match	0.0	4.5	6.6	8.8	6.6	4.4	2.2	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	0.0	0.0	0.0	0.1	1.0	3.3	5.9
SRF Interest Earnings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Sub-Total	0.0	27.2	39.6	52.8	39.7	27.4	16.5	5.9
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	0.0	27.2	39.6	52.8	39.7	27.4	16.5	5.9
State Grant Programs	0.5	1.3	0.2	0.0	0.0	0.0	0.0	0.0
Other State Programs	3.1	8.0	1.3	2.0	2.0	2.0	2.0	2.0
TOTAL(c)	3.6	36.5	41.1	54.8	41.7	29.4	18.5	7.9
Oklahoma								
SRF Cap. Grant	9.3	7.6	7.9	19.6	14.7	9.8	4.9	
State Match	1.9	1.5	1.6	3.9	2.9	2.0	1.0	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	39.1	68.3	28.6	5.8	40.0
Loan Repayments	0.0	0.0	0.0	0.0	0.8	2.2	5.1	5.6
SRF Interest Earnings	0.0	0.0	0.0	1.8	1.3	0.7	0.4	1.0
SRF Sub-Total	11.1	9.1	9.4	64.4	88.1	43.3	17.2	46.6
SRF Debt Service Reserves	0.0	0.0	0.0	(3.9)	(6.8)	(2.9)	(0.6)	(3.0)
SRF Available(b)	11.1	9.1	9.4	60.5	81.3	40.4	16.6	43.6
State Grant Programs	1.2	1.4	2.0	2.0	2.5	2.5	2.5	3.0
Other State Programs	8.6	35.8	23.0	30.0	35.0	40.0	45.0	50.0
TOTAL(c)	20.9	46.3	34.4	92.5	118.8	82.9	64.1	96.6

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Oregon								
SRF Cap. Grant	0.0	14.0	11.0	27.4	20.6	13.7	6.9	
State Match	0.0	2.8	2.2	5.5	4.1	2.7	1.4	
Overmatch								
Leveraged Funds								
Loan Repayments					1.1	1.9	2.7	5.2
SRF Interest Earnings								
SRF Sub-Total	0.0	16.8	13.2	32.9	25.8	18.3	11.0	5.2
SRF Debt Service Reserves								
SRF Available(b)	0.0	16.8	13.2	32.9	25.8	18.3	11.0	5.2
State Grant Programs								
Other State Programs	0.3	2.0	5.9	13.0	13.0	13.0	13.0	0.0
TOTAL(c)	0.3	18.8	19.1	45.9	38.8	31.3	24.0	5.2
Pennsylvania								
SRF Cap. Grant	0.0	37.4	38.7	63.5	71.4	47.6	23.8	
State Match	0.0	7.5	7.7	12.7	14.3	9.5	4.8	
Overmatch	0.0	0.9	0.6	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	(d)	(d)	(d)	(d)	(d)	(d)
Loan Repayments	0.0	0.0	0.0	2.3	4.7	8.7	13.2	13.9
SRF Interest Earnings	0.0							
SRF Sub-Total	0.0	45.7	46.9	78.5	90.4	65.8	41.8	13.9
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	0.0	45.7	46.9	78.5	90.4	65.8	41.8	13.9
State Grant Programs								
Other State Programs(e)	69.9	292.9	216.9	167.3	NA	NA	NA	NA
TOTAL(c)	69.9	338.6	263.8	245.8	90.4	65.8	41.8	13.9

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

(d) Leverage proposal under discussion.

(e) Includes Department of Commerce and Non-SRF loan funds. Loan fund projection not available after 1991.

TABLE C–1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995–1999(a)
Rhode Island								
SRF Cap. Grant		6.6	6.8	16.3	12.2	8.1	4.1	
State Match		1.3	1.4	3.2	2.4	1.6	0.8	
Overmatch								
Leveraged Funds								
Loan Repayments								
SRF Interest Earnings								
SRF Sub–Total		7.9	8.1	19.5	14.6	9.8	4.9	
SRF Debt Service Reserves		0.0	0.0	0.0	0.0	0.0	0.0	
SRF Available(b)		7.9	8.1	19.5	14.6	9.8	4.9	
State Grant Programs								
Other State Programs								
TOTAL(c)	0.0	7.9	8.1	19.5	14.6	9.8	4.9	
South Carolina								
SRF Cap. Grant	0.0	22.9	19.1	20.5	18.5	12.3	6.1	
State Match	0.0	4.6	3.8	4.2	3.7	2.5	1.2	
Overmatch	0.0							
Leveraged Funds	0.0							
Loan Repayments	0.0	0.0	0.0	0.0	4.3	5.2	5.9	10.4
SRF Interest Earnings	0.0							
SRF Sub–Total	0.0	27.4	22.9	24.7	26.5	20.0	13.3	10.4
SRF Debt Service Reserves								
SRF Available(b)	0.0	27.4	22.9	24.7	26.5	20.0	13.3	10.4
State Grant Programs								
Other State Programs								
TOTAL(c)	0.0	27.4	22.9	24.7	26.5	20.0	13.3	10.4

(a) Annual average. Rhode Island did not provide funding projections for 1995 to 1999.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
South Dakota								
SRF Cap. Grant	0.0	4.7	5.9	11.8	9.0	5.9	3.0	
State Match	0.0	0.9	1.2	2.4	1.8	1.2	0.6	
Overmatch								
Leveraged Funds								
Loan Repayments	0.0	0.0	0.0	0.4	0.8	1.6	2.2	4.3
SRF Interest Earnings(b)								
SRF Sub-Total	0.0	5.6	7.1	14.6	11.6	8.7	5.8	4.3
SRF Debt Service Reserves(c)	0.0	(1.2)	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(d)	0.0	4.4	7.1	14.6	11.6	8.7	5.8	4.3
State Grant Programs(e)	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Other State Programs	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL(f)	0.4	6.2	7.1	14.6	11.6	8.7	5.8	4.3
Tennessee								
SRF Cap. Grant	24.8	15.2	23.7	29.1	25.8	17.2	8.6	
State Match	5.0	3.0	4.7	5.8	5.2	3.5	1.7	
Overmatch	0.3	–	–	–	–	–	–	–
Leveraged Funds	–	–	–	–	–	–	–	–
Loan Repayments	–	–	0.1	1.0	3.4	6.6	10.0	18.2
SRF Interest Earnings	0.1	0.5	0.7	1.0	1.6	2.0	2.5	4.0
SRF Sub-Total	30.3	18.7	29.2	36.9	36.0	29.3	22.8	22.2
SRF Debt Service Reserves	–	–	–	–	–	–	–	–
SRF Available(d)	30.3	18.7	29.2	36.9	36.0	29.3	22.8	22.2
State Grant Programs	8.1	7.9	8.7	4.3	4.9	6.6	8.4	10.0
Other State Programs	69.3	9.6	6.5	6.5	6.5	6.5	6.5	6.5
TOTAL(f)	107.7	36.2	44.4	47.7	47.4	42.4	37.7	38.7

(a) Annual average.

(b) Interest portion of repayments goes to repay South Dakota's State Match bonds and is thus not included as it is not available to the SRF.

(c) South Dakota's debt service reserve funds are from a State appropriation.

(d) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(e) The amount of South Dakota's State grant funds unknown after 1990.

(f) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Texas								
SRF Cap. Grant	105.2	82.7	72.8	107.7	79.4	51.3	14.7	
State Match	21.0	16.6	14.6	22.0	16.5	11.0	5.5	
Overmatch	0.0	66.1	58.2	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	0.0	0.6	3.2	11.3	17.4	29.2	35.0
SRF Interest Earnings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Sub-Total	126.2	165.4	146.2	132.9	107.2	79.7	49.4	35.0
SRF Debt Service Reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)	126.2	165.4	146.2	132.9	107.2	79.7	49.4	35.0
State Grant Programs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other State Programs	21.7	20.2	6.4	36.8	26.7	26.7	26.7	10.0
TOTAL(c)	147.9	185.6	152.6	169.7	133.9	106.4	76.1	45.0
Utah								
SRF Cap. Grant	8.7	7.1	6.3	12.1	9.1	6.0	3.0	
State Match	1.7	1.4	1.3	2.4	1.8	1.2	0.6	
Overmatch	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments	0.0	0.0	0.4	0.7	1.7	2.6	3.3	4.3
SRF Interest Earnings	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.3
SRF Sub-Total	10.4	8.5	8.1	15.3	12.8	10.1	7.2	4.6
SRF Debt Service Reserves								
SRF Available(b)	10.4	8.5	8.1	15.3	12.8	10.1	7.2	4.6
State Grant Programs	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other State Programs	2.2	2.5	2.5	2.0	2.8	3.4	4.1	4.4
TOTAL(c)	13.1	11.5	11.0	17.8	16.1	14.0	11.8	9.4

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Vermont								
SRF Cap. Grant	0.0	4.6	4.8	9.5	8.9	5.9	3.0	
State Match		0.9	0.0	1.9	1.8	1.2	0.6	
Overmatch		2.1		0.1				0.5
Leveraged Funds								
Loan Repayments								1.0
SRF Interest Earnings								
SRF Sub-Total	0.0	7.6	4.8	11.5	10.7	7.1	3.6	1.5
SRF Debt Service Reserves								
SRF Available(b)	0.0	7.6	4.8	11.5	10.7	7.1	3.6	1.5
State Grant Programs	3.0	14.8	4.4	6.6	5.0	5.0	5.0	5.0
Other State Programs								
TOTAL(c)	3.0	22.4	9.2	18.1	15.7	12.1	8.6	6.5
Virginia								
SRF Cap. Grant	39.9	30.7	27.0	48.1	36.1	24.0	12.0	
State Match	8.0	6.1	6.0	10.0	7.2			
Overmatch	1.9	-	20.0	-	2.8			
Leveraged Funds								
Loan Repayments	0.0	0.2	1.8	5.0	6.6	8.8	13.3	21.1
SRF Interest Earnings								
SRF Sub-Total	49.8	37.0	54.8	63.1	52.7	32.8	25.3	21.1
SRF Debt Service Reserves								
SRF Available(b)	49.8	37.0	54.8	63.1	52.7	32.8	25.3	21.1
State Grant Programs	0.4	0.2	0.2	0.2	0.2			
Other State Programs	77.6	33.2	80.0					
TOTAL(c)	127.8	70.4	135.0	63.3	52.9	32.8	25.3	21.1

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Washington								
SRF Cap. Grant	-	16.6	16.7	42.0	31.0	21.0	10.0	
State Match	-	3.3	3.3	8.4	6.2	4.2	2.0	
Overmatch		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leveraged Funds		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loan Repayments		0.0	0.0	0.0	0.2		4.0	7.4
SRF Interest Earnings								
SRF Sub-Total		19.9	20.0	50.4	37.4	25.2	16.0	7.4
SRF Debt Service Reserves		0.0	0.0	0.0	0.0	0.0	0.0	0.0
SRF Available(b)		19.9	20.0	50.4	37.4	25.2	16.0	7.4
State Grant Programs	40.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Other State Programs								
TOTAL(c)	40.0	64.9	65.0	95.4	82.4	70.2	61.0	52.4
West Virginia								
SRF Cap. Grant	0.0	0.0	20.0	47.8	28.4	18.9	9.5	
State Match								
Overmatch								
Leveraged Funds								
Loan Repayments				1.0	2.0	4.0	5.5	6.3
SRF Interest Earnings								
SRF Sub-Total			20.0	48.8	30.4	22.9	15.0	6.3
SRF Debt Service Reserves								
SRF Available(b)			20.0	48.8	30.4	22.9	15.0	6.3
State Grant Programs								
Other State Programs								
TOTAL(c)			20.0	48.8	30.4	22.9	15.0	6.3

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

TABLE C-1, continued

Estimated Annual Funding for SRFs and Other State Programs by State
($ Millions)

FUNDING SOURCE:	Actual			Projected				
	1988	1989	1990	1991	1992	1993	1994	1995-1999(a)
Wisconsin								
SRF Cap. Grant		24.0	25.0	62.0	47.0	31.0	16.0	
State Match		5.0	5.0	13.0	10.0	6.0	3.0	
Overmatch		122.0	121.0	12.0	6.0	138.0	144.0	211.6
Leveraged Funds		231.0	231.0	263.0	191.0			
Loan Repayments								
SRF Interest Earnings								
SRF Sub-Total		382.0	382.0	350.0	254.0	175.0	163.0	211.6
SRF Debt Service Reserves		(151.0)	(151.0)	(87.0)	(63.0)			
SRF Available(b)		231.0	231.0	263.0	191.0	175.0	163.0	211.6
State Grant Programs	146.0	134.0	152.0	0.0	0.0	0.0	0.0	0.0
Other State Programs								
TOTAL(c)	146.0	365.0	383.0	263.0	191.0	175.0	163.0	211.6
Wyoming								
SRF Cap. Grant	-	4.6	4.8	11.9	9.0	6.0	3.0	
State Match	-	1.0	1.0	2.4	1.8	1.2	0.6	
Overmatch	-	-	-	-	-	-	-	-
Leveraged Funds	-	-	-	-	-	-	-	-
Loan Repayments	-	-	-	-	5.0	5.0	5.0	5.0
SRF Interest Earnings	-	-	-	-	0.2	0.4	0.7	0.8
SRF Sub-Total	-	5.5	5.8	14.3	15.9	12.6	9.3	5.8
SRF Debt Service Reserves	-	-	-	-	-	-	-	-
SRF Available(b)	-	5.5	5.8	14.3	15.9	12.6	9.3	5.8
State Grant Programs	1.9	3.7	2.1	2.0	2.5	2.6	3.0	3.0
Other State Programs	0.4	3.7	0.9	1.3	0.3	-	-	-
TOTAL(c)	2.3	12.9	8.8	17.6	18.7	15.2	12.3	8.8

(a) Annual average.

(b) Represents SRF funds available to finance projects during the time period covered, i.e., does not include debt service reserve funds.

(c) Totals vary due to rounding.

APPENDIX D

TOTAL ANNUAL CONTRIBUTIONS OF FEDERAL AND STATE FUNDS FOR WASTEWATER PROJECTS BY STATE

TABLE D-1

Total Annual Contributions of Federal and State Funds for Wastewater Projects by State(a)
($ Millions)

	Actual			Projected					
FUNDING SOURCE:	1988	1989	1990	1991	1992	1993	1994	1995-1999(b)	Total
Alabama									
CWA Title II and VI	10.4	21.3	10.9	20.7	15.6	10.4	5.2		94.5
Other Federal	10.1	8.6	9.5	9.5	9.5	9.5	9.5	9.5	113.7
State (c)		20.6	25.2	40.1	21.1	20.1	19.0	18.0	236.1
TOTAL	20.5	50.5	45.6	70.3	46.2	40.0	33.7	27.5	444.3
Alaska									
CWA Title II and VI	0.0	10.1	11.5	12.1	10.9	7.3	3.6		55.6
Other Federal (d)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State (e)	10.0	13.5	13.6	3.1	3.0	2.4	2.2	3.9	67.0
TOTAL	10.0	23.6	25.1	15.2	13.9	9.7	5.8	3.9	122.6
Arizona									
CWA Title II and VI	7.8	12.7	12.0	16.0	12.0	8.0	4.0		72.5
Other Federal	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	60.0
State	0.0	5.6	5.5	12.0	8.0	4.0	2.0	2.0	47.1
TOTAL	12.8	23.3	22.5	33.0	25.0	17.0	11.0	7.0	179.6
Arkansas									
CWA Title II and VI	5.4	19.3	14.7	15.9	11.9	7.9	4.0		79.2
Other Federal	14.4	13.0	11.8	11.8	11.8	11.8	11.8	11.8	145.4
State (f)	0.0	2.7	12.2	16.9	16.0	15.2	14.5	13.7	145.9
TOTAL	19.9	35.0	38.7	44.6	39.7	34.9	30.3	25.5	370.5
California									
CWA Title II and VI	189.0	238.6	128.8	188.6	150.2	96.8	48.4		1040.4
Other Federal (g)	2.9	3.5	1.7	8.5	7.5	5.0	3.5	3.3	49.1
State	1.5	30.9	47.5	76.8	49.9	53.0	52.5	53.3	578.6
TOTAL	193.4	273.0	178.0	273.9	207.6	154.8	104.4	56.6	1668.1
Colorado									
CWA Title II and VI	18.4	14.6	15.7	19.0	14.3	9.5	4.8		96.2
Other Federal	0.9	1.7	5.3	3.9	3.7	3.7	3.7	3.7	41.3
State	1.0	5.5	24.2	21.6	16.1	11.5	7.2	6.1	117.8
TOTAL	20.3	21.8	45.2	44.5	34.0	24.7	15.7	9.8	255.3
Connecticut									
CWA Title II and VI	28.1	22.3	23.3	29.9	22.3	14.9	7.4		148.2
Other Federal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State	80.0	40.0	100.0	65.2	68.2	74.2	78.7	90.9	960.8
TOTAL	108.1	62.3	123.3	95.1	90.5	89.1	86.1	90.9	1109.0
Florida									
CWA Title II and VI (h)	89.7	56.7	58.3	62.0	58.0	39.0	19.0		382.7
Other Federal	12.0	18.6	19.8	15.3	15.7	16.2	16.7	18.4	206.3
State	1.8	24.1	13.3	18.4	28.6	29.7	28.1	37.8	333.0
TOTAL	103.5	99.4	91.4	95.7	102.3	84.9	63.8	56.2	922.0

Note: Most States project 1991 to 1994 Title VI funding at authorized levels.

(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.

(b) Annual average.

(c) Since all of the repayments from Alabama's SRF loans are used to retire SRF bonds during this period, none of the repayments are anticipated to be available for wastewater project construction. Therefore, repayments are not included.

(d) This information is not available to the Alaska Department of Environmental Conservation.

(e) Grants are appropriated by Alaska's legislature annually. It is impossible to project these figures as they will depend on a number of variables. Therefore, State grant projections are not included.

(f) Since all of Arkansas' SRF loan repayments and SRF investment earnings are used to retire SRF bonds during this period, none of the repayments are anticipated to be available for wastewater construction. Repayments, therefore, are not included.

(g) Information on HUD funds spent for wastewater projects in California is not available; projections for future EDA program funding also are not available.

(h) Florida's FY 1991 SRF Capitalization Grant amount is based on 80% of the authorized appropriation. SRF Capitalization Grant amounts for FY 1992-1994 are based on 100% appropriations.

TABLE D-1, continued

Total Annual Contributions of Federal and State Funds for Wastewater Projects by State(a)
($ Millions)

FUNDING SOURCE:	Actual			Projected					
	1988	1989	1990	1991	1992	1993	1994	1995–1999(b)	Total
Georgia									
CWA Title II and VI	36.5	30.6	39.0	40.6	30.7	20.3	10.1		207.8
Other Federal	26.9	24.8	25.0	25.0	25.0	25.0	25.0	25.0	301.7
State	26.0	26.2	28.0	29.9	31.2	33.9	36.1	39.5	408.8
TOTAL	89.4	81.6	92.0	95.5	86.9	79.2	71.2	64.5	918.3
Hawaii									
CWA Title II and VI		15.3	7.3	11.8	8.9	5.9	3.0		45.0
Other Federal									0.0
State		48.4	1.5	2.4	1.8	1.2	1.7	2.5	69.7
TOTAL		63.7	8.8	14.2	10.7	7.1	4.7	2.5	114.7
Idaho									
CWA Title II and VI	11.2	9.0	9.4	11.9	8.9	5.9	2.9		59.2
Other Federal	3.9	4.3	2.0	4.8	3.1	3.2	3.1	3.1	39.9
State	8.8	16.3	2.5	5.7	4.5	4.6	4.6	4.6	70.0
TOTAL	23.9	29.6	13.9	22.4	16.5	13.7	10.6	7.7	169.1
Illinois									
CWA Title II and VI	103.9	92.2	93.4	100.0	75.0	50.0	25.0		539.5
Other Federal (c)	8.8	8.5	3.9	3.5	NA	NA	NA	NA	24.7
State	65.0	191.5	138.9	96.9	98.7	28.0	30.0	36.6	832.0
TOTAL	177.7	292.2	236.2	200.4	173.7	78.0	55.0	36.6	1396.2
Indiana									
CWA Title II and VI	55.4	45.2	46.6	58.5	43.9	29.3	14.6		293.5
Other Federal	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	228.0
State	18.4	11.9	15.6	40.6	38.7	39.8	35.5	25.0	325.5
TOTAL	92.8	76.1	81.2	118.1	101.6	88.1	69.1	44.0	847.0
Iowa									
CWA Title II and VI	31.1	25.0	13.2	33.1	24.8	16.5	8.3		152.0
Other Federal (d)	6.1	4.2	2.6	4.0	6.0	5.0	4.0	4.0	51.9
State	0.0	12.9	15.6	8.1	6.9	7.5	6.7	25.0	182.6
TOTAL	37.2	42.1	31.4	45.2	37.7	29.0	19.0	29.0	386.5
Kansas									
CWA Title II and VI	20.7	16.9	17.5	21.9	16.5	11.0	5.5		110.0
Other Federal (e)	5.7	3.5	6.4	1.8	1.8	1.8	1.8	1.6	31.0
State	0.0	1.7	1.8	4.4	3.3	3.2	2.1	2.0	26.5
TOTAL	26.4	22.1	25.7	28.1	21.6	16.0	9.4	3.6	167.5
Kentucky									
CWA Title II and VI	44.2	25.1	18.6	32.6	21.9	14.6	7.3		164.3
Other Federal	12.8	5.4	6.7	7.5	8.0	8.0	8.0	8.0	96.4
State	10.7	58.5	41.6	9.3	9.7	9.3	9.8	9.8	197.8
TOTAL	67.7	88.9	66.9	49.4	39.6	31.9	25.1	17.8	458.5

Note: Most States project 1991 to 1994 Title VI funding at authorized levels.
(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.
(b) Annual average.
(c) Illinois' "Other Federal" includes EDA funding for both water and wastewater projects.
(d) Information is not available for FmHA, EDA, and other Federal programs in Iowa.
(e) Estimates were provided by the Kansas Department of Health and Environment, not the Federal agencies providing the funds.

TABLE D-1, continued

Total Annual Contributions of Federal and State Funds for Wastewater Projects by State(a)
($ Millions)

FUNDING SOURCE:	Actual			Projected					
	1988	1989	1990	1991	1992	1993	1994	1995-1999(b)	Total
Louisiana									
CWA Title II and VI	24.4	20.8	21.3	26.0	18.0	12.0	6.0		128.5
Other Federal	12.0	10.5	8.3	9.0	9.0	9.0	9.0	9.0	111.7
State	2.4	2.2	2.5	6.0	5.9	6.0	6.8	64.2	352.8
TOTAL	38.8	33.5	32.0	41.0	32.9	27.0	21.8	73.2	593.1
Maine									
CWA Title II and VI		7.4	7.5	18.0	13.5	9.0	4.5		59.9
Other Federal									0.0
State		18.8	20.3	35.8	30.5	22.6	12.2	8.3	181.5
TOTAL		26.2	27.8	53.8	44.0	31.6	16.7	8.3	241.4
Maryland									
CWA Title II and VI	55.6	45.4	46.8	58.7	44.0	29.4	14.6		294.4
Other Federal (c)	NA	NA	NA	NA	NA	NA	NA	NA	0.0
State (d)	5.6	24.9	50.2	170.1	98.1	67.2	34.3	20.8	554.7
TOTAL	61.2	70.3	97.0	228.8	142.1	96.6	48.9	20.8	849.2
Massachusetts									
CWA Title II and VI	80.0	62.0	65.0	82.0	61.0	41.0	20.0		411.0
Other Federal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State (e)	187.0	84.0	90.0	691.0	417.0	368.0	5.3	2.1	1852.8
TOTAL	267.0	146.0	155.0	773.0	478.0	409.0	25.3	2.1	2263.8
Michigan									
CWA Title II and VI	0.0	113.5	41.9	83.8	78.3	52.2	26.1		395.8
Other Federal									0.0
State		8.2	11.5	16.8	15.6	10.4	2.1		64.6
TOTAL	0.0	121.7	53.4	100.6	93.9	62.6	28.2	(f)	460.4
Minnesota									
CWA Title II and VI	42.2	34.4	35.5	44.0	33.0	22.0	11.0		222.1
Other Federal	8.6	9.1	9.9	6.7	6.7	6.7	6.7	6.7	87.9
State	29.8	66.1	72.2	58.1	61.7	58.1	66.5	65.0	737.5
TOTAL	80.6	109.5	117.7	108.8	101.4	86.8	84.2	71.7	1047.4
Mississippi									
CWA Title II and VI	22.8	17.7	16.8	18.7	16.3	10.8	5.4		108.5
Other Federal	5.6	4.8	4.2	5.3	5.3	5.3	5.3	5.3	62.3
State	3.1	3.1	3.4	4.5	5.2	5.4	5.5	8.4	72.2
TOTAL	31.5	25.6	24.4	28.5	26.8	21.5	16.2	13.7	243.0
Missouri									
CWA Title II and VI	64.0	51.0	52.0	52.0	39.0	26.0	13.0		297.0
Other Federal	8.0	4.0	7.0	4.0	4.0	4.0	3.0	4.0	54.0
State	33.0	31.0	35.0	78.0	69.0	81.0	99.0	119.0	1021.0
TOTAL	105.0	86.0	94.0	134.0	112.0	111.0	115.0	123.0	1372.0

Note: Most States project 1991 to 1994 Title VI funding at authorized levels.
(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.
(b) Annual average
(c) Projections are not available for funding from "Other Federal" sources for Maryland.
(d) Projections are not available for funding from SRF Investment Earnings in 1995-1999, Grant Program(s) from 1991-1999, and from other State programs from 1992-1999 in Maryland.
(e) Massachusetts reports that additional State authorizations will be needed for State program needs after 1993.
(f) Michigan did not provide projections for 1995-1999.

TABLE D-1, continued

Total Annual Contributions of Federal and State Funds for Wastewater Projects by State(a)
($ Millions)

FUNDING SOURCE:	Actual			Projected					
	1988	1989	1990	1991	1992	1993	1994	1995-1999(b)	Total
Nebraska									
CWA Title II and VI	11.7	9.6	4.9	12.2	9.1	6.1	3.0		56.6
Other Federal	1.4	3.8	4.8	3.4	3.4	3.4	3.4	3.4	40.6
State	2.2	2.7	1.3	4.0	4.1	0.6	0.8	2.3	27.0
TOTAL	15.3	16.1	11.0	19.6	16.6	10.1	7.2	5.7	124.3
Nevada									
CWA Title II and VI	11.3	9.1	9.4	11.9	8.9	6.0	3.0		59.6
Other Federal	0.4	0.4	0.8	0.7	0.7	0.7	0.7	0.7	7.9
State	0.0	0.9	0.9	2.4	2.7	3.2	3.1	2.8	27.0
TOTAL	11.7	10.4	11.2	15.0	12.3	9.8	6.8	3.5	94.5
New Hampshire									
CWA Title II and VI	21.3	18.0	18.6	23.0	17.0	11.5	5.7		115.1
Other Federal (c)	1.2	0.1	0.3	UNK	UNK	UNK	UNK	UNK	1.6
State	12.2	10.9	12.9	17.1	22.7	19.4	14.3	10.0	159.5
TOTAL	34.7	29.0	31.8	40.1	39.7	30.9	20.0	10.0	276.2
New Jersey									
CWA Title II and VI	87.8	74.0	77.9	93.1	71.0	46.1	23.0		472.9
Other Federal (d)	NA	NA	NA	NA	NA	NA	NA	NA	NA
State	123.6	139.5	113.1	116.7	97.0	75.9	58.2	50.8	978.0
TOTAL	211.4	213.5	191.0	209.8	168.0	122.0	81.2	50.8	1450.9
New Mexico									
CWA Title II and VI	10.6	8.6	8.6	8.6	8.6	6.0	3.0		54.0
Other Federal	1.0	1.0	1.5	1.0	1.0	1.0	1.0	1.0	12.5
State	7.2	5.3	2.2	4.2	3.5	5.3	5.9	6.5	66.1
TOTAL	18.8	14.9	12.3	13.8	13.1	12.3	9.9	7.5	132.6
New York									
CWA Title II and VI (e)	229.0	197.0	203.0	226.0	199.0	133.0	66.0		1253.0
Other Federal (f)	NA	NA	NA	NA	NA	NA	NA	NA	0.0
State (g)	38.6	36.5	177.3	583.1	467.5	381.3	379.9	273.0	3429.2
TOTAL	267.6	233.5	380.3	809.1	666.5	514.3	445.9	273.0	4682.2
North Carolina									
CWA Title II and VI	35.2	22.7	33.0	44.0	33.0	22.0	11.0		200.9
Other Federal (h)	12.9	12.9	14.3	14.0	14.0	14.0	14.0	14.0	166.0
State	3.6	13.8	8.1	10.8	8.7	7.4	7.5	7.9	99.4
TOTAL	51.7	49.4	55.4	68.8	55.7	43.4	32.5	21.9	466.3
Oklahoma									
CWA Title II and VI	18.6	15.2	15.7	19.6	14.7	9.8	4.9		98.5
Other Federal									
State	11.7	38.7	26.5	72.9	104.1	73.1	59.2	96.6	869.2
TOTAL	30.2	53.9	42.3	92.5	118.8	82.9	64.1	96.6	967.7

Note: Most States project 1991 to 1994 Title VI funding at authorized levels.

(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this table.

(b) Annual average.

(c) Projections for FmHA and HUD funding for New Hampshire are unkown at this time. Funding projections for "Other Federal" programs are not available.

(d) Funding projections for "Other Federal" programs are not available for New Jersey.

(e) New York's FY 1991 SRF Capitalization Grant amount is based on 80% of the authorized appropriation. SRF Capitalization Grant amounts for FY 1992-1994 are based on 100% appropriations.

(f) Funding projections for "Other Federal" programs are not available for New York.

(g) New York's SRF Loan Repayments projections include freed-up corpus allocation.

(h) Projections for FmHA grant and loan funds for North Carolina represent funding for wastewater facilities only.

TABLE D-1, continued

Total Annual Contributions of Federal and State Funds for Wastewater Projects by State(a)
($ Millions)

FUNDING SOURCE:	Actual			Projected					
	1988	1989	1990	1991	1992	1993	1994	1995-1999(b)	Total
Oregon									
CWA Title II and VI	13.7	29.9	23.4	36.9	20.6	13.7	6.9		145.1
Other Federal	6.3	6.3	4.2	5.7	5.7	5.7	5.7	5.3	66.1
State	0.3	4.8	8.1	18.5	18.2	17.6	17.1	5.2	110.5
TOTAL	20.3	41.0	35.7	61.1	44.5	37.0	29.7	10.5	321.6
Pennsylvania									
CWA Title II and VI	91.0	74.3	76.6	63.5	71.4	47.6	23.8		448.2
Other Federal (c)	30.1	30.1	35.2	35.2	35.2	35.2	35.2		236.3
State (d)(e)	69.9	301.3	225.2	182.3	19.0	18.2	18.0	13.9	903.5
TOTAL	191.0	405.7	337.0	281.0	125.6	101.0	77.0	13.9	1588.0
Rhode Island									
CWA Title II and VI	15.4	12.3	13.2	16.3	12.2	8.1	4.1		81.6
Other Federal									0.0
State		1.3	1.4	3.2	2.4	1.6	0.8		10.7
TOTAL	15.4	13.6	14.6	19.5	14.6	9.8	4.9	(f)	92.4
South Carolina									
CWA Title II and VI	6.8	22.9	20.1	28.0	18.5	12.3	6.1		114.7
Other Federal									0.0
State	0.0	4.6	3.8	4.2	8.0	7.7	7.2	10.4	87.4
TOTAL	6.8	27.4	23.9	32.2	26.5	20.0	13.3	10.4	202.1
South Dakota									
CWA Title II and VI	11.3	9.3	7.9	11.8	9.0	5.9	3.0		58.2
Other Federal	0.8	0.5	0.9	0.9	0.9	0.9	0.9	0.5	8.3
State (g)	0.4	1.5	1.2	2.8	2.6	2.8	2.8	4.3	35.6
TOTAL	12.5	11.3	10.0	15.5	12.5	9.6	6.7	4.8	102.1
Tennessee									
CWA Title II and VI	38.4	22.0	27.7	29.1	25.8	17.2	8.6		168.9
Other Federal	17.6	17.6	21.5	4.6	4.6	4.6	4.6	4.6	98.1
State	82.8	21.0	20.7	18.6	21.6	25.2	29.1	38.7	412.5
TOTAL	138.8	60.7	69.8	52.3	52.0	47.0	42.3	43.3	679.4
Texas									
CWA Title II and VI	165.3	96.0	72.8	107.7	79.4	51.3	14.7		587.2
Other Federal	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.3	278.2
State	42.7	102.9	79.8	62.0	54.5	55.1	61.4	45.0	683.4
TOTAL	231.1	222.0	175.7	192.8	157.0	129.5	99.2	68.3	1548.8
Utah									
CWA Title II and VI	12.1	8.6	9.5	12.1	9.1	6.0	3.0		60.4
Other Federal	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12.0
State	4.4	4.4	4.7	5.7	7.0	8.0	8.8	9.4	89.9
TOTAL	17.5	14.0	15.2	18.8	17.1	15.0	12.8	10.4	162.3

Note: Most States project 1991 to 1994 Title VI funding at authorized levels.
(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.
(b) Annual average.
(c) "Other Federal" funding for Pennsylvania for 1995-1999 is unknown.
(d) Projections for the SRF Leveraged Portions are not provided for 1990-1999, a leverage proposal is under discussion in Pennsylvania.
(e) Projections for Non-SRF Loan Program funding are not available for 1992-1999.
(f) Rhode Island did not provide projections for 1995-1999.
(g) Excludes funds considered not available for wastewater project funding, including debt service reserves and monies used to repay State bonds.

TABLE D-1, continued

Total Annual Contributions of Federal and State Funds for Wastewater Projects by State(a)
($ Millions)

FUNDING SOURCE:	Actual			Projected					
	1988	1989	1990	1991	1992	1993	1994	1995-1999(b)	Total
Vermont									
CWA Title II and VI	11.2	9.1	9.5	9.5	8.9	5.9	3.0		57.1
Other Federal	0.8	0.9	1.4						3.1
State	3.0	17.8	4.4	8.6	6.8	6.2	5.6	6.5	84.9
TOTAL	15.0	27.8	15.3	18.1	15.7	12.1	8.6	6.5	145.1
Virginia									
CWA Title II and VI	48.3	42.4	27.0	48.1	36.1	24.0	12.0		237.9
Other Federal (c)	14.7	12.0	12.5	12.5	12.5	12.5	12.5	NA	89.2
State	87.9	39.7	108.0	15.2	16.8	8.8	13.3	21.1	395.2
TOTAL	150.9	94.1	147.5	75.8	65.4	45.3	37.8	21.1	722.3
Washington									
CWA Title II and VI	42.0	32.6	33.7	42.0	31.0	21.0	10.0		212.3
Other Federal (d)	2.8	2.9	6.3	7.6	NA	NA	NA	NA	19.6
State	40.0	48.3	48.3	53.4	51.4	49.2	51.0	52.4	603.6
TOTAL	84.8	83.8	88.3	103.0	82.4	70.2	61.0	52.4	835.5
West Virginia									
CWA Title II and VI	17.6	9.7	25.0	47.8	28.4	18.9	9.5		156.9
Other Federal									0.0
State				1.0	2.0	4.0	5.5	6.3	43.8
TOTAL	17.6	9.7	25.0	48.8	30.4	22.9	15.0	6.3	200.7
Wisconsin									
CWA Title II and VI	37.0	92.0	47.0	62.0	47.0	31.0	16.0		332.0
Other Federal									0.0
State	146.0	341.0	358.0	201.0	144.0	144.0	147.0	211.6	2539.0
TOTAL	183.0	433.0	405.0	263.0	191.0	175.0	163.0	211.6	2871.0
Wyoming									
CWA Title II and VI	5.2	13.6	6.5	18.2	9.0	6.0	3.0		61.4
Other Federal	0.0	0.2	0.0	0.4	0.4	0.4	0.4	0.4	3.8
State	2.3	8.3	3.9	5.6	9.8	9.2	9.3	8.8	92.3
TOTAL	7.5	22.2	10.4	24.3	19.1	15.6	12.7	9.2	157.5

Note: Most States project 1991 to 1994 Title VI funding at authorized levels.
(a) Delaware, Montana, North Dakota, and Ohio did not provide funding information for this report.
(b) Annual average.
(c) Projections are not available for funding from "Other Federal" sources for Virginia.
(d) Projections are not available from FmHA for 1992-1999 for Washington.

APPENDIX E

DISTRIBUTION OF AVAILABLE FUNDS BY TYPES OF ASSISTANCE BY STATE

TABLE E-1

Types of SRF Assistance by State
($ Millions)

Alabama	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	—	28.43 (74.1%)	26.58 (63.4%)	112.40 (65.4%)	113.00 (65.0%)
Purchase or Refinance Existing Debt Obligation	—	2.30 (6.0%)	4.53 (10.8%)	12.00 (7.0%)	12.00 (6.9%)
Guarantee or Purchase Insurance for Local Debt	—	—	—	—	—
Revenue or Security for SRF Debt	—	7.20 (18.8%)	10.40 (24.8%)	45.50 (26.5%)	45.60 (26.2%)
Loan Guarantees for "Sub-State Revolving Funds"	—	—	—	—	—
Administrative Expenses (a) (max. 4% of cap. grant) (b)	—	0.42 (1.1%)	0.44 (1.0%)	2.07 (1.2%)	3.13 (1.8%)
TOTAL	—	38.35 (100%)	41.95 (100%)	171.97 (100%)	173.73 (100%)

Alaska	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	12.05 (99.8%)	4.40 (63.9%)	35.80 (85.6%)	17.00 (81.0%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	2.40 (34.8%)	5.00 (12.0%)	3.00 (14.3%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0.03 (0.2%)	0.09 (1.3%)	1.00 (2.4%)	1.00 (4.8%)
TOTAL	0 (100%)	12.08 (100%)	6.89 (100%)	41.80 (100%)	21.00 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Arizona	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)		12.00 (58.8%)	12.00 (58.8%)	52.00 (55.3%)	3.00 (100%)
Purchase or Refinance Existing Debt Obligation					
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt		8.20 (40.2%)	8.20 (40.2%)	41.00 (43.6%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (a) (max. 4% of cap. grant) (b)		0.20 (1.0%)	0.20 (1.0%)	1.00 (1.1%)	0 (0.0%)
TOTAL		20.40 (100%)	20.40 (100%)	94.00 (100%)	3.00 (100%)

Arkansas	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	0 (0.0%)	0.40 (100.0%)	131.10 (95.9%)	8.30 (100.0%)
Purchase or Refinance Existing Debt Obligation				4.00 (2.9%)	
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1.60 (1.2%)	0 (0.0%)
TOTAL	0 (100%)	0 (100%)	0.40 (100%)	136.70 (100%)	8.30 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

California	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	—	75.50 (100.0%)	24.40 (93.8%)	679.90 (85.8%)	228.00 (66.9%)
Purchase or Refinance Existing Debt Obligation	—	—	—	100.00 (12.6%)	100.00 (29.3%)
Guarantee or Purchase Insurance for Local Debt	—	—	—	—	—
Revenue or Security for SRF Debt	—	—	—	—	—
Loan Guarantees for "Sub-State Revolving Funds"	—	—	—	—	—
Administrative Expenses (a) (max. 4% of cap. grant) (c)	—	—	1.60 (b) (6.2%)	12.70 (b) (1.6%)	13.00 (b) (3.8%)
TOTAL	—	75.50 (100%)	26.00 (100%)	792.60 (100%)	341.00 (100%)

Colorado	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	19.38 (55.3%)	3.20 (9.1%)	91.60 (65.6%)	26.50 (66.7%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	4.40 (12.6%)	20.00 (56.9%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	—	—	—	—	—
Revenue or Security for SRF Debt	0 (0.0%)	11.00 (31.4%)	11.50 (32.7%)	45.80 (32.8%)	13.25 (33.3%)
Loan Guarantees for "Sub-State Revolving Funds"	—	—	—	—	—
Administrative Expenses (a) (max. 4% of cap. grant) (c)	0 (0.0%)	0.24 (0.7%)	0.43 (1.2%)	2.18 (1.6%)	0 (0.0%)
TOTAL	0 (100%)	35.02 (100%)	35.13 (100%)	139.58 (100%)	39.75 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) A total of $27,200,000 is estimated to be available for administration of the SRF from the four percent amount.

(c) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Connecticut	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	86.50 (99.0%)	50.90 (98.3%)	98.70 (98.9%)	281.80 (99.7%)	364.00 (100.0%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)		
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)		
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)		
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)		
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0.84 (1.0%)	0.87 (1.7%)	1.14 (1.1%)	0.80 (0.3%)	0 (0.0%)
TOTAL	87.34 (100%)	51.77 (100%)	99.84 (100%)	282.60 (100%)	364.00 (100%)

Florida	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994 (c)	1995-1999
Loans (i.e., new loans)	0 (0.0%)	54.90 (99.1%)	84.60 (94.8%)	253.30 (87.8%)	161.30 (86.6%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	3.00 (3.4%)	25.00 (8.7%)	25.00 (13.4%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0.50 (0.9%)	1.60 (1.8%)	10.20 (3.5%)	0 (0.0%)
TOTAL	0 (100%)	55.40 (100%)	89.20 (100%)	288.50 (100%)	186.30 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

(c) Florida's estimates are based on receiving 80% of appropriations authorized in the Clean Water Act in FY 1991, and 100% of authorized amounts thereafter.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Georgia	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	26.00 (95.9%)	29.00 (96.0%)	32.80 (83.5%)	68.70 (65.0%)	67.50 (100.0%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	5.00 (12.7%)	33.00 (31.2%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	1.10 (4.1%)	1.20 (4.0%)	1.50 (3.8%)	4.00 (3.8%)	0 (0.0%)
TOTAL	27.10 (100%)	30.20 (100%)	39.30 (100%)	105.70 (100%)	67.50 (100%)

Hawaii	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)			41.26 (99.3%)	29.60 (92.8%)	12.70 (100.0%)
Purchase or Refinance Existing Debt Obligation					
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (a) (max. 4% of cap. grant) (b)			0.30 (0.7%)	1.30 (4.1%)	0 (0.0%)
TOTAL			41.56 (100%)	31.90 (100%)	12.70 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Idaho	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	5.30 (96.4%)	5.50 (96.5%)	34.00 (97.1%)	46.00 (100.0%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0.20 (3.6%)	0.20 (3.5%)	1.00 (2.9%)	0 (0.0%)
TOTAL	0 (100%)	5.50 (100%)	5.70 (100%)	35.00 (100%)	46.00 (100%)

Illinois	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	24.70 (99.8%)	91.30 (99.5%)	290.00 (97.1%)	180.00 (97.3%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0.06 (0.2%)	0.43 (0.5%)	8.60 (2.9%)	4.90 (2.7%)
TOTAL	0 (100%)	24.76 (100%)	91.73 (100%)	298.60 (100%)	184.90 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Indiana	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	15.00 (54.3%)	60.00 (62.7%)	390.00 (67.7%)	200.00 (95.2%)
Purchase or Refinance Existing Debt Obligation	—	5.00 (18.1%)	7.50 (7.8%)	10.60 (1.8%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	—	—	—	—	—
Revenue or Security for SRF Debt	—	6.70 (24.3%)	27.07 (28.3%)	164.29 (28.5%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	—	—	—	—	—
Administrative Expenses (a) (max. 4% of cap. grant) (b)	—	0.90 (3.3%)	1.13 (1.2%)	11.01 (1.9%)	10.00 (4.8%)
TOTAL	0 (100%)	27.60 (100%)	95.70 (100%)	575.90 (100%)	210.00 (100%)

Iowa	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	0 (0.0%)	30.13 (c) (99.5%)	110.85 (99.2%)	123.45 (98.8%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	—	—	—	—	—
Revenue or Security for SRF Debt	—	—	—	—	—
Loan Guarantees for "Sub-State Revolving Funds"	—	—	—	—	—
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0 (0.0%)	0.17 (0.5%)	0.93 (0.8%)	1.55 (1.2%)
TOTAL	0 (100%)	0 (100%)	30.29 (d) (100%)	111.78 (100%)	125.00 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

(c) Loans made in 1990 include FY 1989 and FY 1990 SRF funds.

(d) Totals vary due to rounding.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Kansas	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)(a)	No Program	0 (0.0%)	19.50 (98.3%)	63.00 (96.6%)	10.00 (100.0%)
Purchase or Refinance Existing Debt Obligation					
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (b) (max. 4% of cap. grant) (d)	0.16 (c) (100.0%)	0.34 (100.0%)	0.34 (1.7%)	2.18 (3.3%)	0 (0.0%)
TOTAL	0.16 (100%)	0.34 (100%)	19.84 (100%)	65.20 (e) (100%)	10 (100%)

Kentucky	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	13.50 (93.9%)	7.60 (91.4%)	103.50 (92.2%)	123.00 (95.3%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	5.70 (5.1%)	6.00 (4.7%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (b) (max. 4% of cap. grant) (d)	0.69 (100.0%)	0.88 (6.1%)	0.71 (8.6%)	3.00 (2.7%)	0 (0.0%)
TOTAL	0.69 (100%)	14.38 (100%)	8.31 (100%)	112.20 (100%)	129.00 (100%)

(a) Direct loans are the only type of financing practiced by the Kansas SRF.

(b) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(c) From State Bond revenues.

(d) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

(e) Totals vary due to rounding.

TABLE E–1, continued

Types of SRF Assistance by State
($ Millions)

Louisiana	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991–1994	1995–1999
Loans (i.e., new loans)	13.94 (96.8%)	12.14 (96.7%)	15.08 (96.7%)	59.52 (96.0%)	44.59 (44.8%)
Purchase or Refinance Existing Debt Obligation					55.00 (55.2%)
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0.46 (3.2%)	0.42 (3.3%)	0.52 (3.3%)	2.48 (4.0%)	
TOTAL	14.40 (100%)	12.56 (100%)	15.60 (100%)	62.00 (100%)	99.59 (100%)

Maine	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991–1994	1995–1999
Loans (i.e., new loans)		8.47 (92.5%)	9.03 (96.8%)	43.20 (96.0%)	15.00 (100.0%)
Purchase or Refinance Existing Debt Obligation		0.40 (4.4%)			
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (a) (max. 4% of cap. grant) (b)		0.29 (3.2%)	0.30 (3.2%)	1.80 (4.0%)	0 (0.0%)
TOTAL		9.16 (100%)	9.33 (100%)	45.00 (100%)	15.00 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Maryland	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	0 (0.0%)	90.00 (85.8%)	436.00 (85.3%)	93.00 (85.1%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	5.00 (4.8%)	25.00 (4.9%)	7.00 (6.4%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	9.00 (8.6%)	44.00 (8.6%)	9.30 (8.5%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0.91 (100.0%)	0.94 (0.9%)	5.87 (1.1%)	0 (0.0%)
TOTAL	0 (100%)	0.91 (100%)	104.94 (100%)	510.87 (100%)	109.30 (100%)

Massachusetts	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	0 (0.0%)	0 (0.0%)	306.40 (76.8%)	36.00 (80.0%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	76.60 (19.2%)	9.00 (20.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0 (0.0%)	0 (0.0%)	16.00 (4.0%)	0 (0.0%)
TOTAL	0 (100%)	0 (100%)	0 (100%)	399.00 (100%)	45.00 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Michigan	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999 (a)
Loans (i.e., new loans)	0 (0.0%)	1.80 (81.8%)	38.00 (97.4%)	261.00 (96.2%)	
Purchase or Refinance Existing Debt Obligation	0 (0.0%)				
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)				
Revenue or Security for SRF Debt	0 (0.0%)				
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)				
Administrative Expenses (b) (max. 4% of cap. grant) (c)	0 (0.0%)	0.40 (18.2%)	1.00 (2.6%)	10.40 (3.8%)	
TOTAL	0 (100%)	2.20 (100%)	39.00 (100%)	271.40 (100%)	

Minnesota	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	47.00 (70.9%)	73.90 (80.4%)	200.00 (64.7%)	250.00 (100.0%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	1.80 (2.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt (d)	0 (0.0%)	16.80 (25.3%)	17.30 (18.8%)	105.80 (34.2%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (b) (max. 4% of cap. grant) (c)	0 (0.0%)	0.70 (1.1%)	0.70 (0.8%)	3.50 (1.1%)	0 (0.0%)
TOTAL	0 (100%)	66.30 (100%)	91.90 (100%)	309.30 (100%)	250.00 (100%)

(a) Michigan did not provide projections for 1995-1999.

(b) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(c) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

(d) In addition to the Debt Service Reserve Fund, loan repayments are also pledged to bond holders as a moral obligation of the State.

TABLE E–1, continued

Types of SRF Assistance by State
($ Millions)

Mississippi	Funds Committed (a) Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991–1994	1995–1999
Loans (i.e., new loans)	0 (0.0%)	11.00 (99.3%)	25.00 (97.7%)	58.60 (95.7%)	30.00 (100.0%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (b) (max. 4% of cap. grant) (c)	0 (0.0%)	0.08 (0.7%)	0.58 (2.3%)	2.61 (4.3%)	0 (0.0%)
TOTAL	0 (100%)	11.08 (100%)	25.58 (100%)	61.21 (100%)	30.00 (100%)

Missouri	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991–1994	1995–1999
Loans (i.e., new loans)	0 (0.0%)	0 (0.0%)	0 (0.0%)	340.00 (d) (65.9%)	660.50 (d) (70.9%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	173.00 (33.5%)	264.10 (28.3%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (b) (max. 4% of cap. grant) (c)	0 (0.0%)	0 (0.0%)	0.07 (100.0%)	3.10 (0.6%)	7.30 (0.8%)
TOTAL	0 (100%)	0 (100%)	0.07 (100%)	516.10 (100%)	931.90 (100%)

(a) Existing direct loan program. If leveraging is implemented, figures may be substantially higher.

(b) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(c) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

(d) Includes loan funds from repayments of short-term loans.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Nebraska	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	—	5.54 (96.7%)	5.73 (96.6%)	34.50 (96.6%)	14.50 (100.0%)
Purchase or Refinance Existing Debt Obligation					
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (a) (max. 4% of cap. grant) (b)		0.19 (3.3%)	0.20 (3.4%)	1.21 (3.4%)	—
TOTAL		5.73 (100%)	5.93 (100%)	35.71 (100%)	14.50 (100%)

Nevada	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)				32.00 (89.4%)	12.50 (100.0%)
Purchase or Refinance Existing Debt Obligation				2.70 (7.5%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (a) (max. 4% of cap. grant) (b)	—	—	—	1.10 (3.1%)	0 (0.0%)
TOTAL				35.80 (100%)	12.50 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

New Hampshire	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999 (a)
Loans (i.e., new loans)	NA	11.20 (96.6%)	11.30 (96.7%)	69.60 (96.7%)	
Purchase or Refinance Existing Debt Obligation	NA	—	—	—	
Guarantee or Purchase Insurance for Local Debt	NA	—	—	—	
Revenue or Security for SRF Debt	NA	—	—	—	
Loan Guarantees for "Sub-State Revolving Funds"	NA	—	—	—	
Administrative Expenses (b) (max. 4% of cap. grant) (c)	NA	0.39 (3.4%)	0.39 (3.3%)	2.40 (3.3%)	
TOTAL	NA	11.59 (100%)	11.69 (100%)	72.00 (100%)	

New Jersey	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	134.00 (88.9%)	128.50 (93.4%)	199.20 (94.6%)	581.00 (94.1%)	254.20 (100.0%)
Purchase or Refinance Existing Debt Obligation					
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt	14.10 (9.4%)	6.50 (4.7%)	7.90 (3.8%)	24.30 (3.9%)	
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (b) (max. 4% of cap. grant) (c)	2.70 (1.8%)	2.60 (1.9%)	3.50 (1.7%)	12.10 (2.0%)	
TOTAL	150.80 (100%)	137.60 (100%)	210.60 (100%)	617.40 (100%)	254.20 (100%)

(a) New Hampshire did not provide projections for 1995-1999.

(b) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(c) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

New Mexico	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	2.80 (100.0%)	16.00 (100.0%)	9.30 (95.9%)	33.80 (97.1%)	27.40 (95.8%)
Purchase or Refinance Existing Debt Obligation	—	—	—	—	—
Guarantee or Purchase Insurance for Local Debt	—	—	—	—	—
Revenue or Security for SRF Debt	—	—	—	—	—
Loan Guarantees for "Sub-State Revolving Funds"	—	—	—	—	—
Administrative Expenses (a) (max. 4% of cap. grant) (c)	0 (0.0%)	0 (0.0%)	0.40 (4.1%)	1.00 (2.9%)	1.20 (b) (4.2%)
TOTAL	2.80 (100%)	16.00 (100%)	9.70 (100%)	34.80 (100%)	28.60 (100%)

New York	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	0 (0.0%)	109.30 (39.3%)	1299.90 (39.5%)	816.90 (48.6%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	97.60 (35.1%)	1161.80 (35.3%)	544.10 (32.4%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt (d)	0 (0.0%)	0 (0.0%)	69.30 (24.9%)	804.70 (24.5%)	308.00 (18.3%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (c)	0 (0.0%)	0 (0.0%)	1.80 (0.6%)	20.70 (0.6%)	10.60 (0.6%)
TOTAL	0 (100%)	0 (100%)	278.00 (100%)	3287.10 (100%)	1679.60 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) New Mexico anticipates that it may bank a portion of its 4% of capitalization grant administrative allowance for use after 1995.

(c) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

(d) Funds committed are equal to three times the amount deposited for security. Aggressive leveraging and full appropriations are assumed.

TABLE E–1, continued

Types of SRF Assistance by State
($ Millions)

North Carolina	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991–1994	1995–1999
Loans (i.e., new loans)	0 (0.0%)	21.80 (100.0%)	31.70 (99.4%)	136.50 (97.2%)	29.70 (79.8%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0 (0.0%)	0.20 (0.6%)	3.90 (2.8%)	7.50 (20.2%)
TOTAL	0 (100%)	21.80 (100%)	31.90 (100%)	140.40 (100%)	37.20 (100%)

Oklahoma	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991–1994	1995–1999
Loans (i.e., new loans)			11.10 (96.8%)	202.05 (88.0%)	200.00 (100.0%)
Purchase or Refinance Existing Debt Obligation			0 (0.0%)	11.10 (4.8%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt			0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt			0 (0.0%)	14.13 (6.2%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"			0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)			0.37 (3.2%)	2.22 (1.0%)	0 (0.0%)
TOTAL			11.47 (100%)	229.50 (100%)	200.00 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Oregon	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991–1994	1995–1999
Loans (i.e., new loans)		14.25 (84.8%)	10.79 (81.5%)	52.80 (83.9%)	27.60 (87.3%)
Purchase or Refinance Existing Debt Obligation		2.00 (11.9%)	2.00 (15.1%)	8.00 (12.7%)	4.00 (12.7%)
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (a) (max. 4% of cap. grant) (b)		0.56 (3.3%)	0.44 (3.3%)	2.10 (3.3%)	0 (0.0%)
TOTAL		16.82 (c) (100%)	13.23 (100%)	62.90 (100%)	31.60 (100%)

Pennsylvania	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991–1994	1995–1999
Loans (i.e., new loans)	0 (0.0%)	43.43 (96.7%)	45.39 (96.7%)	247.48 (96.8%)	140.00 (99.2%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	1.50 (3.3%)	1.55 (3.3%)	8.25 (3.2%)	1.20 (0.8%)
TOTAL	0 (100%)	44.93 (100%)	46.94 (100%)	255.73 (100%)	141.20 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

(c) Totals vary due to rounding.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Rhode Island	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999 (a)
Loans (i.e., new loans)		5.61 (70.8%)	7.80 (96.0%)	51.02 (100.0%)	
Purchase or Refinance Existing Debt Obligation		2.00 (25.2%)			
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (b) (max. 4% of cap. grant) (c)		0.32 (4.0%)	0.33 (4.0%)		
TOTAL		7.92 (d) (100%)	8.13 (100%)	51.02 (100%)	

South Carolina	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	20.70 (97.7%)	20.61 (97.1%)	71.40 (96.4%)	52.00 (100.0%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (b) (max. 4% of cap. grant) (c)	0 (0.0%)	0.49 (2.3%)	0.61 (2.9%)	2.70 (3.6%)	UNK (e)
TOTAL	0 (100%)	21.19 (100%)	21.23 (f) (100%)	74.10 (100%)	52.00 (100%)

(a) Rhode Island did not provide projections for 1995-1999.

(b) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(c) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

(d) Totals vary due to rounding.

(e) Unknown.

(f) Totals vary due to rounding.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

South Dakota	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	5.70 (96.6%)	7.10 (97.3%)	39.60 (94.7%)	22.70 (91.9%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	1.00 (2.4%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0.20 (3.4%)	0.20 (2.7%)	1.20 (2.9%)	2.00 (8.1%)
TOTAL	0 (100%)	5.90 (100%)	7.30 (100%)	41.80 (100%)	24.70 (100%)

Tennessee	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	19.15 (96.7%)	17.63 (96.7%)	27.50 (96.7%)	93.63 (96.7%)	94.96 (c) (96.4%)
Purchase or Refinance Existing Debt Obligation (d)	NA	—	—	—	—
Guarantee or Purchase Insurance for Local Debt	NA	—	—	—	—
Revenue or Security for SRF Debt	NA	—	—	—	—
Loan Guarantees for "Sub-State Revolving Funds"	NA	—	—	—	—
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0.66 (3.3%)	0.61 (3.3%)	0.95 (3.3%)	3.23 (3.3%)	3.53 (3.6%)
TOTAL	19.81 (100%)	18.24 (100%)	28.45 (100%)	96.86 (100%)	98.49 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

(c) Does not include loans from non-SRF State loan program.

(d) Refinancing may be done through loans under Tennessee's SRF law.

TABLE E–1, continued

Types of SRF Assistance by State
($ Millions)

Texas	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991–1994	1995–1999
Loans (i.e., new loans)	100.50 (79.6%)	165.40 (100.0%)	145.60 (100.0%)	308.10 (96.0%)	175.00 (95.3%)
Purchase or Refinance Existing Debt Obligation	25.70 (20.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0 (0.0%)	0 (0.0%)	12.70 (4.0%)	8.70 (4.7%)
TOTAL	126.20 (100%)	165.40 (100%)	145.60 (100%)	320.80 (100%)	183.70 (100%)

Utah	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991–1994	1995–1999
Loans (i.e., new loans)	10.40 (96.7%)	8.50 (96.7%)	8.00 (96.9%)	43.60 (97.3%)	23.30 (100.0%)
Purchase or Refinance Existing Debt Obligation					
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0.36 (3.3%)	0.29 (3.3%)	0.26 (3.1%)	1.21 (2.7%)	0 (0.0%)
TOTAL	10.76 (100%)	8.79 (100%)	8.26 (100%)	44.81 (100%)	23.30 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Vermont	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	—			15.89 (71.1%)	25.11 (100.0%)
Purchase or Refinance Existing Debt Obligation	—	5.70 (98.4%)	5.80 (98.5%)	5.00	
Guarantee or Purchase Insurance for Local Debt	—				
Revenue or Security for SRF Debt	—				
Loan Guarantees for "Sub-State Revolving Funds"	—				
Administrative Expenses (a) (max. 4% of cap. grant) (b)	—	0.10 (1.6%)	0.09 (1.5%)	1.47 (6.6%)	
TOTAL		5.80 (100%)	5.89 (100%)	22.36 (100%)	25.11 (100%)

Virginia	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	34.90 (73.4%)	34.90 (93.7%)	60.00 (98.7%)	136.00 (97.1%)	0 (100%)
Purchase or Refinance Existing Debt Obligation	12.20 (25.6%)	1.50 (4.0%)	0 (0.0%)	0 (0.0%)	—
Guarantee or Purchase Insurance for Local Debt	—	—	—	—	—
Revenue or Security for SRF Debt	—	—	—	—	—
Loan Guarantees for "Sub-State Revolving Funds"	—	—	—	—	—
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0.48 (1.0%)	0.83 (2.2%)	0.80 (1.3%)	4.00 (2.9%)	—
TOTAL	47.58 (100%)	37.23 (100%)	60.80 (100%)	140.00 (100%)	0 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Washington	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	—	18.80 (91.1%)	19.40 (96.6%)	120.50 (97.2%)	52.00 (91.2%)
Purchase or Refinance Existing Debt Obligation	—	1.15 (5.6%)	0 (0.0%)	—	—
Guarantee or Purchase Insurance for Local Debt	—	—	0 (0.0%)	—	—
Revenue or Security for SRF Debt	—	—	0 (0.0%)	—	—
Loan Guarantees for "Sub-State Revolving Funds"	—	—	—	—	—
Administrative Expenses (a) (max. 4% of cap. grant) (b)	—	0.69 (3.3%)	0.68 (3.4%)	3.50 (2.8%)	5.00 (8.8%)
TOTAL		20.64 (100%)	20.08 (100%)	124.00 (100%)	57.00 (100%)

West Virginia	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	0 (0.0%)	10.00 (97.1%)	115.00 (96.6%)	25.84 (96.2%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	0 (0.0%)	0.30 (2.9%)	4.00 (3.4%)	1.03 (3.8%)
TOTAL	0 (100%)	0 (100%)	10.30 (100%)	119.00 (100%)	26.87 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

TABLE E-1, continued

Types of SRF Assistance by State
($ Millions)

Wisconsin	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	0 (0.0%)	0 (0.0%)	0 (0.0%)	995.00 (99.4%)	1058.00 (100.0%)
Purchase or Refinance Existing Debt Obligation	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guarantee or Purchase Insurance for Local Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Revenue or Security for SRF Debt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Loan Guarantees for "Sub-State Revolving Funds"	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Administrative Expenses (a) (max. 4% of cap. grant) (b)	0 (0.0%)	1.00 (100.0%)	1.00 (100.0%)	6.00 (0.6%)	0 (0.0%)
TOTAL	0 (100%)	1.00 (100%)	1.00 (100%)	1001.00 (100%)	1058.00 (100%)

Wyoming	Funds Committed Federal Fiscal Year(s)				
TYPE OF ASSISTANCE	1988	1989	1990	1991-1994	1995-1999
Loans (i.e., new loans)	—	—	—	41.30 (96.0%)	50.00 (100.0%)
Purchase or Refinance Existing Debt Obligation					
Guarantee or Purchase Insurance for Local Debt					
Revenue or Security for SRF Debt					
Loan Guarantees for "Sub-State Revolving Funds"					
Administrative Expenses (a) (max. 4% of cap. grant) (b)				1.70 (4.0%)	0 (0.0%)
TOTAL				43.00 (100%)	50.00 (100%)

(a) The CWA restricts the amount of SRF money that may be used for administrative expenses to 4% of all capitalization grant awards recieved by the fund. The amount of SRF money available each year for administrative expenses is limited to 4% of all grant awards minus the amount of administrative expenses paid by the SRF in previous years.

(b) Note that this number is a percentage of total SRF funds available, not a percentage of capitalization grant awards.

APPENDIX F

USER FEE CALCULATION MODEL

APPENDIX F

USER FEE CALCULATION MODEL

Variable List and Description

Community size: This is a basic input whose value for each model run is set at either 1,000, 2,500, 10,000 or 100,000, by the user.

SRF interest rate: Another critical input that the user adjusts for each model run. The value can vary between zero and the market rate. The base value is four percent, a "typical" value for existing SRF programs.

Market interest rate: This variable changes with time and financial market conditions. Also, different States define market rate differently in their Capitalization Grant Applications. The base value used in the analysis, eight percent, is the value that best reflects recent costs of borrowing capital in the municipal bond market.

Persons/Household: This is an integral part of the analysis since we are attempting to assess impacts on households in a community, not on individuals. The number included here, 2.64, is the national average value released by the Bureau of the Census in the Spring of 1989. It is the best information available.

Gallons/Person*Day: Analyses of this type usually assume a value of about 100. The value varies somewhat depending on geographical location (rural versus urban), age and condition of the system (which affects losses because of leaks), and, most importantly, community population. This analysis assumes a value 90 for communities sizes 0-1,000; 100 for 1,000-5,000; and 110 for 5,001+.

Loan period: This is the maximum loan period allowed under SRF regulations. Most States have indicated they intend to make 20-year loans, so this analysis assumes a base loan duration of 20 years.

Cost eligible SRF(%): This is the percentage of total capital costs eligible for loans under the SRF program. Since this analysis ignores land costs, typically the largest ineligible cost, and since the flexibility of the SRF program allows expanded eligibility, the analysis assumes all costs (100 percent) are SRF-eligible.

Cost eligible CG (%): This is the percentage of total capital costs eligible for grants under the Construction Grant program. EPA staff familiar with the Construction Grants program recommended a base value of 90 percent.

State grant (%): The State grant is the percentage of total capital costs funded through a State construction grant program. It is independent of any Federal financial assistance. The base value is zero for the SRF program and 15 percent for the Construction Grants program.

Flow rate (mgd): In millions of gallons per day, it equals the number of persons in the community multiplied by the daily water usage per person.

Capital cost: Derived according to updated EPA construction cost curves. The original cost curve comes from EPA's Construction Costs for Municipal Wastewater Treatment Plants: 1973-78. The curve in this document was updated according to EPA's inflation index for construction of wastewater treatment plants. The costs in EPA's report were January 1979 dollars. These were assumed to be the same as March 1979 dollars (the EPA inflation index is keyed to March each year). A factor of 1.602 was used to bring March 1979 dollars up to March 1989 dollars.

Eligible: The total capital cost multiplied by the percent eligible under SRF.

Ineligible: The total capital cost less the eligible costs. This is the amount of funds the community must raise from the State or from other sources outside the SRF.

O&M cost: Derived from composite data provided by EPA Region III staff who had done a rate study of 161 wastewater treatment plants built under the Construction Grants program. The curve was assumed to flatten out at either end, beyond the range of the composite data. The cost curve derived from the data was inflated using the GNP deflator from the Economic Report of the President. The shape of the curve was compared with that of an O&M cost curve developed by EPA in 1981 to confirm that the economies of scale implied by the model's O&M cost curve are reasonable. Also to ensure reasonableness, the values derived from the model's cost curve were compared with unit, average values calculated in studies undertaken by California and Pennsylvania. A comprehensive national study of user charges and O&M costs is now underway at EPA; the results of this study will provide an updated source for O&M costs.

Number of hookups: The number of households served by the wastewater treatment plant. It is equal to the community population divided by the number of persons per household.

MODEL OUTPUT ILLUSTRATING THE EFFECTS OF CERTAIN VARIABLES ON USER FEES

**********USER CHARGE CALCULATION MODEL**********

*******INPUT SECTION**********

I. USER SUPPLIED INPUTS

Community Size:	1,000	Loan Period:	20
SRF Interest Rate:	4.0	Cost Eligible SRF(%):	100
Market Intrst Rate:	8.0	Cost Eligible CG(%):	90
Persons/Household:	2.64	State Grant/SRF (%):	0
Gallons/Person*Day:	90	State Grant/CG (%):	15

II. MODEL CALCULATED INPUTS

Flow Rate (mgd):	0.090
Number of Hookups:	379
Capital Cost:	$752,427
Eligible:	$752,427
Ineligible:	$0
Annual O & M Cost:	$77,427

*******OUTPUT SECTION**********

I. CAPITAL COST FINANCING

	Cost of financing capital portion per household	Savings realized using program option
No grant or loan:	$202	N/A
With SRF Loan:	$146	28%
With 55% CG:	$102	50%
With SRF Loan and State Grant:	$146	28%
With 55% CG and State Grant:	$75	63%

II. O & M COST FINANCING

Cost of financing O & M portion per household:	$204

III. TOTAL ANNUAL COST FINANCING

	Total annual cost of financing per household	Savings realized using program option
No grant or loan:	$407	N/A
With SRF Loan:	$351	14%
With 55% CG:	$307	25%
With SRF Loan and State Grant:	$351	14%
With 55% CG and State Grant:	$279	31%

A Construction Grant that equaled 31% of eligible costs would provide savings equivalent to those provided by the SRF loan (this does not include the effects of any state grant)

A Construction Grant that equaled 31% of eligible costs would provide savings equivalent to those provided by the SRF loan (this does include the effects of any state grant)

A Construction Grant, after including the effects of a Construction Grant State Grant, that equaled 16% of eligible costs would provide savings equivalent to those provided by the SRF loan (this does not include the effects of any SRF state grant)

A Construction Grant, after including the effects of a Construction Grant State Grant, that equaled 16% of eligible costs would provide savings equivalent to those provided by the SRF loan (this does include the effects of any SRF state grant)

CONTENTS OF USER CHARGE MODEL CELL BY CELL

The user charge model runs on Lotus 123 software

```
A1: [W19] '
A2: [W19] '**********************USER CHARGE CALCULATION MODEL**********************
A5: [W19] '*******INPUT SECTION***********
A7: [W19] 'I. USER SUPPLIED INPUTS
A9: [W19] 'Community Size:
B9: (,0) [W15] 1000
D9: [W21] 'Loan Period:
E9: 20
A10: [W19] 'SRF Interest Rate:
B10: (F1) [W15] 4
D10: [W21] 'Cost Eligible SRF(%):
E10: (F0) 100
A11: [W19] 'Market Intrst Rate:
B11: (F1) [W15] 9
D11: [W21] 'Cost Eligible CG(%):
E11: 90
A12: [W19] 'Persons/Household:
B12: [W15] 2.64
D12: [W21] 'State Grant/SRF (%):
E12: 10
A13: [W19] 'Gallons/Person*Day:
B13: [W15] @IF(B9<1001,90,@IF(B9<5001,100,110))
D13: [W21] 'State Grant/CG (%):
E13: 15
E14: (H) +E11/100
E15: (H) ((100-E11)+(0.45*E11))/100
A16: [W19] 'II. MODEL CALCULATED INPUTS
E16: (H) ((100-E11)+(0.45*E11)-(E13*(E11/100)))/100
A18: [W19] 'Flow Rate (mgd):
B18: (F3) [W15] +B13*B9/10^6
C18: (H) +B18
E18: (P0) '
A19: [W19] 'Number of Hookups:
B19: (F0) [W15] +B9/B12
A20: [W19] 'Capital Cost:
B20: (C0) [W15] (4.26*10^6)*C18^0.72
A21: [W19] '  Eligible:
B21: (C0) [W15] (E10/100)*B20
D21: (H) [W21] @IF(E12<=(100-E10),B21,(100-E12)/100*B20)
A22: [W19] '  Ineligible:
B22: (C0) [W15] +B20-B21
D22: (H) [W21] +B22-(E12*B20/100)
A23: [W19] 'Annual O & M Cost:
B23: (C0) [W15] @IF(C18<0.2,2.6-(2.7*C18),@IF(C18>5,0.68-(0.0018*C18),1.189*C18^-0.342))*365000*B18
D23: (H) [W21] @IF(D22>0,D22,0)
B25: (C0) [W15] '
A26: [W19] '*******OUTPUT SECTION**********
A28: [W19] 'I. CAPITAL COST FINANCING
B30: [W15] 'Cost of financing
D30: [W21] '     Savings realized
B31: [W15] 'capital portion
D31: [W21] '     using program
B32: [W15] 'per household
D32: [W21] '     option
A34: [W19] '  No grant or loan:
B34: (C0) [W15] (@PMT(B20,B11/100,E9)/B9)*B12
D34: [W21] "N/A
A36: [W19] '  With SRF Loan:
B36: (C0) [W15] ((@PMT(B22,B11/100,E9)+@PMT(B21,B10/100,E9))/B9)*B12
D36: (P0) [W21] (B34-B36)/B34
A38: [W19] '  With 55% CG:
B38: (C0) [W15] (@PMT(B20*E15,B11/100,E9)/B9)*B12
D38: (P0) [W21] (B34-B38)/B34
A40: [W19] '  With SRF Loan
A41: [W19] '  and State Grant:
B41: (C0) [W15] ((@PMT(D23,B11/100,E9)+@PMT(D21,B10/100,E9))/B9)*B12
D41: (P0) [W21] (+B34-B41)/B34
A43: [W19] '  With 55% CG
A44: [W19] '  and State Grant:
B44: (C0) [W15] (@PMT(B20*E16,B11/100,E9)/B9)*B12
D44: (P0) [W21] (+B34-B44)/B34
A46: [W19] 'II. O & M COST FINANCING
B48: [W15] 'Cost of financing
B49: [W15] 'O & M portion
B50: [W15] 'per household:
C50: (C0) (B23/B9)*B12
A53: [W19] 'III. TOTAL ANNUAL COST FINANCING
B55: [W15] 'Total annual cost
D55: [W21] '     Savings realized
B56: [W15] 'of financing
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B57: [W15] 'per household
D57: [W21] '     option
A59: [W19] '  No grant or loan:
B59: (C0) [W15] +B34+C50
D59: [W21] "N/A
A61: [W19] '  With SRF Loan:
B61: (C0) [W15] +C50+B36
D61: (P0) [W21] (B59-B61)/B59
A63: [W19] '  With 55% CG:
B63: (C0) [W15] +B38+C50
D63: (P0) [W21] (B59-B63)/B59
A65: [W19] '  With SRF Loan
A66: [W19] '  and State Grant:
B66: (C0) [W15] +B41+C50
D66: (P0) [W21] (B59-B66)/B59
A68: [W19] '  With 55% CG
A69: [W19] '  and State Grant:
B69: (C0) [W15] +B44+C50
D69: (P0) [W21] (B59-B69)/B59
A71: [W19] 'A Construction Grant that equaled
C71: (P0) +D36/(E11/100)
D71: [W21] ' of eligible costs would
A72: [W19] 'provide savings equivalent to those provided by the SRF loan (this
A73: [W19] 'does not include the effects of any state grant)
A75: [W19] 'A Construction Grant that equaled
C75: (P0) +D41/(E11/100)
D75: [W21] ' of eligible costs would
A76: [W19] 'provide savings equivalent to those provided by the SRF loan (this
A77: [W19] 'does include the effects of any state grant)
A79: [W19] 'A Construction Grant, after including the effects of a Construction
A80: [W19] 'Grant State Grant, that equaled
C80: (P0) (D36-(E13*E14)/100)/(E11/100)
D80: [W21] ' of eligible costs would
A81: [W19] 'provide savings equivalent to those provided by the SRF loan (this
A82: [W19] 'does not include the effects of any SRF state grant)
A84: [W19] 'A Construction Grant, after including the effects of a Construction
A85: [W19] 'Grant State Grant, that equaled
C85: (P0) (D41-(E13*E14)/100)/(E11/100)
D85: [W21] ' of eligible costs would
A86: [W19] 'provide savings equivalent to those provided by the SRF loan (this
A87: [W19] 'does include the effects of any SRF state grant)
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