FINANCING UNDER THE CLEAN WATER ACT: THE MOVE FROM FEDERAL GRANTS TO STATE LOANS*

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Introduction

The Clean Water Act of 1987 changed dramatically the way that the nation's *$83.5* billion in wastewater treatment needs (to meet population in year 2008) will be financed (U.S. EPA, February 1989). The Construction Grants Program that provided more than *$57* billion to local governments for treatment plant construction since 1972 was phased out and replaced by State Revolving Funds (SRFs). SRFs are authorized to provide a range of loan assistance to local governments for wastewater treatment plant construction, estuary protection, and non-point source pollution projects.

Congress created the SRF Program to develop financial capability at the state level as a tradeoff to reduced federal commitment. As states and local governments must increasingly find resources to compensate for federal retrenchment, in the area of environmental protection as elsewhere, SRFs could prove to be an important new mechanism to help fill the gap between investment needs and resources available. At the same time, the move to SRFs increases state and local financial responsibilities. Their ability to sustain SRFs and to meet wastewater treatment needs depends on the broader picture of resources available and competing demands for those resources. SRF's effectiveness in meeting wastewater treatment needs is also linked to the regulatory and statutory framework for SRFs.

This article outlines the history of financing wastewater treatment facilities, provides an overview of the SRF program, and discusses some of the issues that will affect the ability of the SRFs to meet our nation's wastewater treatment needs.

The views and positions expressed in this article are those of the aut hor and do not represent the posit ion of the GAO.

Trends in Financing Wastewater Treatment Plants

The federal government began investing in wastewater treatment plant construction in the 1950s. Two factors supported a federal financial role. First, the huge capital outlays associated with the plants made it difficult for many local governments to finance the facilities on their own. In addition, the health and environmental benefits of improving wastewater treatment are not confined within local or state borders. When the Federal Water Pollution Control Act of 1956 authorized federal grants for the construction of wastewater treatment plants, the small federal role was considered necessary and important.

By 1972, however, Congress perceived that state and local governments were not investing enough money in wastewater treatment plant construction, and as a result, needs were growing rapidly. The Clean Water Act passed that year included a much expanded financing role for the federal government. The Act authorized $18 billion in construction grants to local governments through 1976. At that time, Congress considered the federal financial commitment a temporary subsidy of states to meet the large and growing investment needs for wastewater treatment.

The 1972 Clean Water Act also required wastewater treatment plants to provide secondary treatment of wastewater, further increasing investment demands. While the federal government

provided approximately $4 billion in grants each year, it was not enough to solve the wastewater problem as Congress had intended. Many local governments, especially small communities, were at the bottom of a long list of communities applying for grant assistance. By 1980, EPA estimated that governments would have to spend $119 billion to meet the needs of all eligible sewage facilities in the country. If stormwater collection and treatment systems were included, EPA estimated that another $112 billion would be required (U.S. EPA, January 1981).

The federal budget concerns of the 1980s caused Congress to look carefully at the relatively large outlays of the Construction Grants Program. At the same time, the grant program was criticized because the availability of "free" money caused local governments to undervalue less capital-intensive, and sometimes more appropriate, solutions to meeting their wastewater treatment needs.

Furthermore, responsibility for paying for the facilities was removed from the primary beneficiaries, as federal dollars were paying for a large percentage of local wastewater treatment facilities. As a result, local governments were underinvesting in operation and maintenance. They did not have the same incentives to protect their investment as if local funds had paid for plants. In fact, this large-scale underinvestment was confirmed in a 1981 report by the U.S. General Accounting Office (U.S. General Accounting Office, 1981). GAO's report indicated that half of the municipal treatment plants studied were not charging users enough to cover operation and maintenance costs. Only eight percent of the plants were setting aside funds for plant replacement. Furthermore, sixty-three percent of plants surveyed indicated that they would request additional funding from the federal government for plant replacement.

Creation of the State Revolving Loan Program

In the 1987 amendments to the Clean Water Act, Congress decided to create a permanent source of funding at the state level to pay for construction of wastewater treatment plants. The Construction Grants Program would phase Out over four years, to be replaced by State Revolving Funds. The SRFs are authorized to provide various types of loan assistance to local governments. Uses of the funds are expanded from those authorized in the Construction Grant Program to include estuary protection and non-point source pollution control, in addition to financing construction of wastewater treatment facilities.

Recognizing the continued importance of the federal role in ensuring adequate wastewater treatment, Congress authorized federal capitalization grants of $8.4 billion until 1994. States are required to contribute a 20 percent match for each capitalization grant awarded. The local financial obligation is larger than under the Construction Grants Program as they must repay assistance offered through the SRF. However, interest rates are subsidized and costs eligible for assistance are expanded from those authorized under the Construction Grants Program.

Congress restricted the use of the federal capitalization grants to ensure that secondary treatment requirements of the Clean Water Act were met as a priority. In addition, reporting and monitoring requirements were added to the authorizing legislation to protect the federal investment and to ensure the financial integrity of the SRFs. The two most important reporting requirements are the Intended Use Plan and Annual Report. States must submit an Intended Use Plan each year outlining how the funds will be used, leveraging plans, and other important details about projects to be funded. At the end of the year, states must submit Annual Reports with information on how the money was actually used and the financial status of the fund.

EPA has attempted to reduce the burden of reporting on the states by requiring a one-time administrative agreement, setting forth the general operating procedures of the fund. The agreements do not have to be revised each year unless states change the general structure of their programs.

Congress intended states to develop programs to meet their own needs with a minimum of intervention by the federal government. As a result, EPA will have a different role vis a vis state and local governments than it had in the Construction Grants Program. EPA's objective is to act as a facilitator of state programs. The agency has provided a range of guidance documents and training seminars for states, to assist in program development and financial management. After 1994, when the capitalization grants end, EPA's role will diminish further.

Establishment of State Revolving Funds

States are slowly developing their State Revolving Loan Fund Programs. While many states had similar programs in place before the 1987 Clean Water Act, others were less experienced in administering a revolving loan program. Most states have received two or more capitalization grants; one state, Tennessee, has received four grants. At the end of Fiscal Year 1990, all 50 states and Puerto Rico had received at least one capitalization grant. However, many state programs are not in final form. States created SRF frameworks in order to secure capitalization grants but plan to implement details of the program' over time.

One reason for the slow start in implementing programs is that it was necessary for states to market the SRFs to local governments that were accustomed to the idea of federal grant subsidies. States had to convince communities that their only option for EPA subsidies henceforth was loan assistance. Some states have offered additional special incentives to cities to encourage their application for SRF assistance. To improve their loan portfolio for leveraging purposes, for example, states may offer low interest rates to financially strong cities so that they will participate in the SRF Program.

EPA expects that the flexible statutory and regulatory framework will result in state programs uniquely structured to meet needs faced by particular states. In fact, as states have begun to finalize their programs, important differences have emerged. For example, financial strategies differ based on demands for resources. States with large investment needs, such as New York, have implemented aggressive plans to leverage additional money for the fund by issuing bonds secured by the federal capitalization grants. Other states that do not have a large demand for wastewater treatment investment, including several mid-Western states, do not plan to leverage additional resources.

In contrast to the diversity in the structure of SRFs, trends in the use of funds have emerged, both in the types of projects funded and the communities that receive assistance. First, very few states have offered assistance for non-point source pollution projects and none for estuary protection. Washington is one of the few states that has established a "set-aside" policy for non-point and estuary projects to ensure that a minimum percentage of SRF resources are spent for these needs. While many states plan to devote SRF resources to these needs at some point in the future, wastewater treatment needs in most states far surpass needs identified in the areas of non-point source pollution and estuary protection. However, it is likely that states underestimate non-point and estuary needs. These programs are new and the extent of problems facing states is not clear. In addition, non-point and estuary pollution have been difficult to address due to the lack of focus on non-point pollution sources in the past. Non-point sources are significant contributors to estuary pollution problems. As a result, states are more likely to direct the fund towards wastewater treatment facilities. While SRFs are presented by EPA as an important source of funding for non-point and estuary protection projects, it may be necessary to examine alternatives to help meet these needs.

A second issue that has been raised regarding the use of funds is that a disproportionate number of the communities receiving assistance are large cities, given the percentage of all cities that are large nationally. This may be due, in part, to the fact that SRFs are limited to providing loan assistance. States cannot provide grants through the SRFs. As with any loan, communities that are most able to repay are most competitive for the limited SRF resources. Reinforcing this situation is the need for states that leverage to establish an attractive loan portfolio so that they can issue bonds at the most favorable rates. Providing loan assistance to marginally qualified communities can damage states' ability to leverage funds in the bond market. In addition to the increased potential for loan defaults, the subsidy to less advantaged communities might have to be higher, thereby reducing the rate at which the fund "revolves" or replenishes. Finally, Congress established a 20-year limit on loan terms, which has an important impact on user charges. The 20-year loan term reduces the ability of less advantaged communities to qualify for assistance and is considered low in comparison with 28-30 year loan terms that exist for some state assistance programs for wastewater treatment facilities.

The "small community problem" in securing finance for wastewater treatment facilities is not a new one. Under the Construction Grants Program, small towns received many fewer grants than they should have, given their number and population. In many cases, this is because small communities could not raise enough money to cover their share of the construction costs. In 1981, EPA reported that communities under 5,000 were particularly affected by a disparity in grant awards based on community size (U.S. EPA, January 198 1). The communities under 5,000 received only *55* percent of the grants awarded even though they represented 80 percent of all communities. Furthermore, they received only 12 percent of the dollar value of all awards, although they contained 31 percent of the national population.

The cumulative health and environmental impacts on small communities of the unbalanced distribution of federal subsidies is not well understood. However, the disparity could be worsened under the SRF Program due to the potential bias in the loan program toward providing assistance to wealthier communities.

Other Factors Affecting the Ability of SRFs to Meet Needs

Several other factors will affect the success of SRFs. Some of these factors raise issues that relate to the statutory and regulatory framework for SRFs and others deal with broader concerns.

Statutory and regulatory issues that affect the SRF deal primarily with requirements that increase state administrative costs or project costs for local governments. Among these are requirements applicable to all projects that receive federal funds, such as applying Davis-Bacon wage provisions to treatment works construction. Other requirements are specific to the Clean Water Act and have been carried forward from the Construction Grants Program, such as requiring that applicants for assistance study opportunities for using innovative and alternative treatment technologies.

States argue that these requirements increase costs unnecessarily, precluding less advantaged communities from receiving SRF assistance and requiring states to offer higher subsidies to offset the costs of federal requirements. States view SRFs as their own and argue that they should be allowed to develop programs to meet their particular needs without federal intervention. On the other hand, the federal investment in the SRFs and broader interest in maintaining their financial integrity support the view that led Congress to place certain restrictions on the use of funds. Most of the restrictions, in fact, are tied to the capitalization grants and not to state contributions or to interest earned on the fund.

Another statutory requirement that affects the ability of SRFs to meet wastewater needs is the limitation on offering assistance to treatment works

that are publicly-owned. Therefore, privately-owned wastewater treatment plants are not eligible for the same subsidies as publicly-owned plants. This restriction and the disincentives to private investment that were introduced in the Tax Reform Act of 1986, such as lengthened depreciation schedules, reduce incentives for private companies to invest in wastewater treatment plants. While private operation and maintenance of plants is allowed as a condition of the assistance, even partial private ownership of a plant disqualifies them from SRF assistance. This is particularly discouraging given the vast investment needs that currently exist and raises questions regarding the ability to meet secondary treatment requirements of plants that are currently owned by private companies.

The Broader Context for Financing Under the Clean Water Act

The ability of states and local governments to meet the new financial responsibilities associated with the move from Construction Grants to SRFs can only be understood in the context of overall trends in environmental spending. Increasing demands on state and local resources will mean that demands for wastewater investment will have to compete with a growing number of other demands for environmental expenditures.

EPA examined trends in spending by each level of government, and found that, if current trends continue, EPA's share of total environmental expenditures will fall from 18 percent in 1981 to 8 percent in 2000 (U.S. EPA, May 1990). While this study projected that states' share of environmental expenditures will stay about the same overall, a study of state expenditures indicates large funding shortfalls for water quality programs (U.S. EPA, October 1989). In the area of water quality management, including expenditures associated with the Safe Drinking Water Act and the Clean Water Act, EPA's Office of Water estimated a state funding shortfall which increases yearly and will reach approximately $409 million in 1992.

The state shortfall is partially due to the fact that EPA grants to states have decreased. In 1982, EPA grants made up 49 percent of state expenditures for water quality programs, but by 1986, had fallen to 33 percent of state budgets for these programs (U.S. EPA, May 1990). Two factors indicate a more serious state financing problem. First, these data do not include the impacts of phasing out the Construction Grant Program. Second, EPA grants as a percentage of state budgets have decreased in other program areas as well. For hazardous and solid waste programs, for example, EPA grants fell from 76 percent of state budgets in 1982 to 40 percent in 1986.

The impact of increased financial demands on the ability of local governments to meet waste-water investment needs is also important. If local governments cannot meet the local share of costs for wastewater treatment plant construction, SRF funds will not be used or will only be used by a small group of wealthier communities. EPA's study of expenditures for each level of government projects that local governments' share of total environmental spending will increase from 76 percent in 1981, to 87 percent in 2000. In constant dollars, local government expenditures on the environment will rise from $26.3 billion in 1981 to $53.7 billion in 2000.

Summary

Establishment of the SRF Program has met one of Congress' principal objectives in amending the financing procedures in the Clean Water Act, reducing the federal responsibility for wastewater treatment plant construction. From an efficiency perspective, local investment decisions will probably improve as a result of the move from grants to loans. Local governments have a greater incentive to adequately operate and maintain their facilities, if the pressure on user charges is not too great. Also, less capital-intensive solutions to wastewater treatment needs may be sought where appropriate. However, the success of SRFs in meeting authorized needs depends on a number of factors, internal and external to the fund. Some of the limita-

tions identified may argue for a more flexible statutory framework and others suggest the need for a comprehensive examination of state and local financial responsibilities for environmental protection.

Moving to SRFs does not resolve the fundamental problem for governments in providing wastewater treatment facilities; vast investment needs are competing for increasingly limited resources. Creation of a state funding mechanism shifts the ultimate financial responsibility from Congress to state legislatures. Therefore, the success of the SRFs will depend, in large part, on the ability of states to meet the financial demands associated with SRFs and on the ability of local governments to meet the increased financing responsibilities.

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