

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
ENVIRONMENTAL FINANCIAL ADVISORY BOARD**

June 25, 2001

Honorable Christine Todd Whitman  
Administrator  
U. S. Environmental Protection Agency  
Washington, D.C. 20460-0001

Dear Administrator Whitman:

We are pleased to provide you with the enclosed report of the Environmental Financial Advisory Board (EFAB), *Environmental State Revolving Funds: Developing a Model to Expand the Scope of the SRF.*<sup>@</sup> Its principal author is Stephen Mahfood, Director, Missouri Department of Natural Resources and member of EFAB's Public Finance Workgroup, chaired by Sonia Toledo, Managing Director, Public Finance Department, Lehman Brothers.

The report examines the idea of providing states the flexibility to expand their Drinking Water and Clean Water State Revolving Fund (SRF) programs to cover projects in all environmental media, to, in effect, create a single Environmental State Revolving Fund (ESRF). In the report, EFAB finds the idea worthy of further consideration and suggests that EPA involve interested parties in a thorough examination of this promising concept.

The Board has periodically considered the multi-media ESRF concept over a number of years. In pursuing this broader concept, EFAB wishes to recognize the ongoing, innovative work of the Office of Water and its State partners in expanding the eligibilities of the existing Drinking Water and Clean Water SRF Programs. Even with this important innovation, EFAB believes that the expansion of eligibilities in existing programs is nearing regulatory limits at the same time more environmental needs than ever before require financing. Indeed, the significant benefits gained to date from increased flexibility in the SRF programs argue well for examining more expansive multi-media options.

If ESRFs were to become a reality, the Board believes strongly that such program be built upon the successful platform of the current SRF programs rather than create a wholly new institution. An ESRF expansion could best occur by allowing states the option of adopting ESRF programs that could fund environmental projects in all media. Each state should have the choice. Those states choosing to adopt the broader approach of the ESRF would gain the ability to flexibly prioritize and fund different environmental projects. Greater use of comparative risk analysis would introduce greater efficiencies in the timing, development, and selection of projects.

With respect to funding, EFAB believes that with expansion of project eligibility comes a concomitantly strong justifications for a significant increase in federal funding to support the ESRF program. After an appropriate time when full capitalization is achieved and/or when sufficient funds revolve through lending activities, the ESRFs could stand as self-sustaining environmental banks. At the same time, the broad ESRF authorities also provide opportunities for collaborative efforts that can access federal and state funding from a variety of sources.

The Board recognizes that many SRF expansion options are possible and understands that different groups have particular interests. To help share information among interested parties and build support for moving the debate on crafting an ESRF model forward, EFAB suggests an ongoing consultation with organizations with significant interest in many of these issues, such as the Council of Infrastructure Financing Authorities, Association of Metropolitan Sewerage Agencies, Association of Metropolitan Water Agencies, Association of State and Interstate Water Pollution Control Administrators, Association of State Drinking Water Administrators, Association of State and Territorial Solid Waste Management Officials, the Environmental Council of the States, and other key environmental organizations.

The Board is prepared to assist in such a process anyway that it can consistent with its charter. We hope that you will find the report constructive and useful and are, of course, available to discuss its findings and recommendations.

Sincerely,

/s/

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Robert O. Lenna  
Chair

/s/

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A. Stanley Meiburg  
Executive Director

Enclosure

cc: Linda Fisher, Deputy Administrator  
Diane Regas, Acting Assistant Administrator, Office of Water  
Michael W. S. Ryan, Deputy Chief Financial Officer  
Joseph L. Dillon, Acting Comptroller

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**Environmental State Revolving Funds: Developing a Model To  
Expand the Scope of the SRF**

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# FINAL REPORT

This report has not been reviewed for approval by the U.S. Environmental Protection Agency; and hence, the views and opinion expressed in the report do not necessarily represent those of the Agency or any other agencies in the Federal Government.

*June 2001*

*Printed on Recycled Paper*

## **Environmental State Revolving Funds: Developing a Model To Expand the Scope of the State Revolving Funds**

### Introduction

The federal Water Quality Act of 1987 made provision for the establishment of state revolving loan programs, with the purpose of providing financial assistance for municipal sewage and certain other water pollution control programs. The intention was to supplant the traditional matching grant program with a revolving loan program, thus moving the United States towards a system of sustainable finance. In the 1996 amendments of the federal Safe Drinking Water Act, an additional revolving loan program was established to finance various drinking water projects. As these programs have been developed, project priority has generally been driven by the need for compliance with state or federally mandated standards. These programs are capitalized with annual appropriations; EPA provides capitalization grants to each state to create and sustain a State Revolving Fund (SRF).

The loans disbursed from the SRF are limited to specified eligible investments only. Projects that may be defined as ineligible according to federal rules may be worthy environmental

projects from a state's perspective. Nonetheless, because of the statutory definition of "eligible" uses, the benefits of participation in these loan programs are denied to such projects. Although the SRF programs were not originally intended to fund every clean water need, examples of projects ineligible for program participation, but of significant environmental benefit, can be found throughout the United States.

At the outset, the Board wishes to clearly recognize the critical role played by EPA's Office of Wastewater Management in promoting greater flexibility in the use of SRF financial assistance. For example, SRF loans in certain cases are now made for brownfields site remediation and nonpoint source best management practices on private property. This office has advocated SRF adoption of integrated priority systems to better direct funding to the most pressing water quality problems. Their support for flexibility and the gradual expansion of SRF eligibilities, along with present statutory limitations, all lend support to the further consideration of maximizing the potential of this highly successful financial mechanism, which is the focus of this report.

Environmental quality involves complex and inter-related issues of water, air and land. In many instances, providing financing for a specific project, such as a wastewater treatment plant, may provide only narrowly defined or focused relief for a water quality problem covering a larger geographic area. Issues of population, economic development, land use, geology, etc., vary widely from state to state and region to region, affecting where and how financial resources can provide the highest benefit.

Significant environmental benefits could be achieved in many states by evolving authorizing the evolution of the current State Revolving Fund (SRF) to a comprehensive environmental SRF (ESRF). An ESRF could undertake a much broader range of environmental financing, not necessarily infrastructure or facility based, but which substantially benefits water quality. Possible projects could include solid waste projects, brownfields and landfill remediation, removal of leaking underground storage tanks and site restoration, and a wider range of non-point source projects, just to name a few.

## Discussion

Several states have programs that could be considered ESRFs, due to the evolution over time of the types of projects financed. The Ohio Water Development Authority (the "Authority") serves as a very good example for an ESRF structure. The Authority has other programs unrelated to issuance of its Water Quality Bonds. Its Community Assistance Program provides financing to governmental agencies undertaking wastewater and water supply projects at extended terms and below market rates to alleviate undue hardship for qualifying borrowers. In 1991, the Authority developed the Solid Waste Financing Program to provide financing for governmental agencies to implement solid waste management plans. Eligible projects include materials recovery and composting facilities, transfer stations, landfills and incinerators.

In 1994, the Ohio General Assembly enacted legislation to establish a Voluntary Action Program to encourage and facilitate the remediation of property contaminated by petroleum or hazardous

substances. The Authority has the power to make loans to finance voluntary actions, which includes measures that may be taken to identify and address potential sources of such property contamination. In 1995, the Authority established an Economic Development Loan Program for the purpose of making loans to governmental agencies for water and wastewater improvement projects recommended and requested by the Ohio Department of Development based upon expected economic development benefits.

In addition, the Authority is authorized to engage in research and development with respect to wastewater, water management facilities, solid waste facilities, and energy resource development facilities, and has established a grant program for qualifying R&D projects meeting certain guidelines. Grants are subject to available funds and recommendation by the director of a department of state government which is responsible for applicable oversight. Priority is given to projects that have statewide environmental and/or natural resource applications.

Key to the Ohio program's success is the flexibility to fund the various programs the state deems important. Because the Authority's initial funding was a grant from the State many years ago, few restrictions are placed on how it can be employed. This is very different from how the current-day federal clean water and drinking water programs are structured, with numerous restrictions on the eligible uses, particularly with respect to financing. For example, Ohio makes surpluses from one program available to another. This flexibility not only enables programs to be developed quickly to address various needs but also enhances financing flexibility by allowing the surplus from one program to secure that of another.

The Ohio Water Development Authority model as a template for the concept of an ESRF could be expanded moderately or greatly as desired. Eligible projects could include wastewater, nonpoint sources, landfill and land protection, stormwater, wetlands and habitat protection, and interrelated projects within specific watersheds, all as an overall approach to improving water quality. Expansion to projects dealing with underground storage tanks, landfill closures, brownfields, agricultural waste and animal feed lots could be easily considered. Specific air quality issues, as they relate to water quality, could be addressed through emission control financing and development of alternative energy sources as opposed to burning fossil fuels.

The benefits of this approach would be significant. Most states have fully developed SRF procedures, which could be readily expanded to encompass additional projects qualifying for financing. Expansion of an existing program, instead of developing additional stand-alone programs, would provide administrative efficiencies, resulting in less administrative costs for states and borrowers. The increased pace of project funding would provide environmental benefits sooner. Administration could be structured to facilitate improved access for borrowers. Analysis and funding of an increased scope of eligible projects would provide greater awareness of broad environmental issues. Finally, greater flexibility would allow states to address specific environmental problems more effectively.

### Challenges

Consideration of an ESRF model poses certain issues that must be discussed and addressed at various levels. States that have expanded the types of projects financed and financing tools utilized have already addressed many of these issues, which undoubtedly include public policy, managerial, administrative and technical capability, financial and funding capacity, and legislative and legal issues.

### **Public Policy Issues**

Is it sound policy, from both the federal and state perspectives, to allow states the option of evolving their SRF programs into an ESRF? Would an ESRF be more efficient and effective financing mechanism to deliver financial assistance in meeting environmental needs? Would an ESRF be more equitable on a state-by-state basis in allowing state flexibility to address its water quality issues?

### **Management and Administration Issues**

By its nature, an ESRF could be more complex, and management of the programs could be more involved. Consideration must be given to the challenge of dealing with new issues such as land acquisition, conservation easements, and possible projects which cross state lines or EPA regional boundaries, to mention a few. Some states may lack experience in dealing with grassroots or community based groups, or private businesses and thus may not reach out to include those participants. A broader range of projects could mean a larger administrative burden in staff time, range of knowledge and technical expertise, and expenses. Some states may need to devote more resources to the development of partnerships with other organizations and state agencies in order to move toward an ESRF model.

A significant issue would be development of applicable models to evaluate and prioritize a broader base of environmental projects. It may be necessary to obtain relevant technical data, such as environmental and health reports, in formats which vary from those currently available or that are unavailable. It would be necessary to develop innovative approaches to methods of ranking a wider range of eligible projects, some of which may not be compliance-driven, and resulting priority lists.

### **Funding Capacity/Financial Issues**

Although development and use of the ESRF would be at an individual state's discretion, the adequacy of present funding levels is a consideration in the further development of the ESRF concept. Some states presently fully utilize all available federal monies and state match, and have additional demand, based on the present eligible uses. Recent studies (see below) indicate that there is still a significant gap in funding capacity to meet present infrastructure improvement needs.

The program administration effects of smaller projects and private borrowers, as well as projects that are not compliance-driven, have already been referenced. Such projects might also impact program solvency or present other risks. It may be necessary to develop innovative financing mechanisms, such as SRF block loans or block grants to interrelated projects. Short-term interest free loans for planning, design and construction, or for technical assistance to disadvantaged communities are possible. Pooling funding sources and exploration of partnerships

among state and federal agencies should be considered as well. Several states, such as Missouri, have developed interagency commissions to review communities' water and wastewater needs, in order to obtain maximum utilization of all sources of available funding.

The issues surrounding loans to private companies and individuals are significant. Expanding to an ESRF model and broadening the scope of possible borrowers could involve a significant increase of eligible private borrowers, as was the case with the inception of the Drinking Water program, for which private water companies are eligible participants. Although eligible, private companies may be all but excluded from the program due to lack of an allocation under the respective state's private activity volume cap. Solutions range from increasing the formula for computation of each state's volume cap, to the exclusion of public purpose projects undertaken by an ESRF.

### **Legislative/Legal Issues**

Finally, some states could face legislative hurdles. From a practical standpoint, the simplest and most timely approach to the development of an ESRF model would be to base it upon existing federal legislation. At the state level, some states are constitutionally constrained from lending to private entities. Although a number of states have found innovative ways to make funds available in such instances, others may need legislation to authorize loans and grants to private, non-profit, or individual borrowers. In addition, some states may be tempted, during any legislative process to mirror the scope of a broadened federal program, to add restrictive criteria in order to avoid funding certain projects which are sensitive in that state.

Crucial to the development of a model environmental SRF is an analysis of the willingness to proceed at both state and federal levels. As is the case in the development of many other programs, most administrative, management and technical issues may be overcome through a process of analysis and definition of the problem, and providing additional resources. If, however, the participants do not want to move forward, there will be no meaningful resolution of easily resolved management issues.

From a state's perspective, the state must be willing to fund a broadened range of projects and to accept the resulting administrative and technical burden. Some states might need to enact or modify legislation, in order to fund certain types of borrowers. Additional state match could be required should funding capacity be increased.

### **EPA's Role**

From the federal perspective, EPA flexibility is crucial to the development of an ESRF model, as it demonstrates the willingness at a federal level. Although many SRFs are good examples of successful collaborative efforts of state and federal governments, personnel, and financial resources, there continue to be conflicting viewpoints on oversight and management of these programs. States have developed various leveraging structures and subsidy levels to tailor SRF programs to meet their specific needs. Recently, many states have addressed issues of cross collateralization and transferability of funds. Although attempts to customize programs are sometimes met with resistance at a federal level, the fact that some states have received approval

to finance projects relating to leaking underground storage tanks and brownfields remediation provides a ray of optimism.

Other issues that relate to the willingness to proceed at a federal level are:

- \$ PA acknowledgment of the ability of Clean Water and Drinking Water Revolving Funds to finance certain non-point source projects, such as solid waste, to cross-collateralize and transfer between funds, and to finance land protection;
- \$ Federal willingness to address issues relating to private activity volume caps and other related tax issues;
- \$ EPA acceptance of diverse financing and bond leveraging techniques, and development of incentives to encourage broader funding approaches, such as longer loan terms, removal of administrative burdens, less restrictive set-asides and more state flexibility;
- \$ Willingness to develop potential alternatives to the present population-based allocations and to the innovative approaches to development of priority lists;
- \$ Ability to enter into partnerships with other federal agencies which may provide monies for like projects;
  
- \$ Overall willingness of EPA to increase flexibility and improve cross-regional cooperation.

### Findings

The Environmental Financial Advisory Board (EFAB) has periodically considered the ESRF concept since 1995. In the process, the Board has prepared several outlines and draft papers and the two related documents mentioned below. Based upon this earlier work and this report, the Board offers the following findings:

n The EPA's Office of Water has undertaken three major interrelated water quality initiatives in the last two years, each of which would benefit from the existence of an ESRF. The Clean Water Action Plan calls for the development of watershed restoration strategies that take a comprehensive view of water quality problems in a given watershed and specify measures to deal with them. An ESRF would be well positioned to help finance implementation of these measures. Importantly, it would encourage programmatic actions that pay for themselves or that have other reliable sources of funding support.

The July 2000 publication of the Final Total Maximum Daily Load (TMDL) Rule requires the preparation of implementation plans that contain reasonable assurances defining specific management measures for meeting clean water goals. Reasonable assurances for nonpoint and other [than point] sources include a test that among other things demonstrates that there is adequate funding for the measures and that they will be implemented through reliable and effective delivery mechanisms. Again, an ESRF would be an exceptionally effective funding mechanism to assure the success of TMDL implementation plans. The inherent flexibilities offered by the ESRF concept allow and facilitate the customization of timely financial assistance packages in watersheds to more efficiently meet water quality goals.

The Office of Water has launched a wide ranging analysis of the need to increase investments in water infrastructure replacement, rehabilitation, and upgrades and increase expenditures for operation and maintenance of existing systems. Preliminary results are disturbing, suggesting that major deficits exist in both capital and O&M spending. The **AGap Analysis** has suggested that a multi-dimensional financial and non financial approach will be necessary to deal with the implications of the Gap. An ESRF would play an important role as it would have the authorities to provide loans, credit enhancements, and grants to the capital measures necessary to maintain current water quality and those measures required to meet new goals.

The Board has prepared two previous documents for the Office of Water on the Clean Water Action Plan and the Gap Analysis, each recommending further evaluation of the ESRF concept. EFAB believes that both initiatives and the TMDL rule make a strong collective argument for advancing the ESRF concept.

n The SRF programs have been evolving constantly since they were first established. Future expansion of SRF eligibility seems likely to continue through administrative interpretations and perhaps legislative change. The ESRF concept is a natural outgrowth of this evolution and is an exciting concept that deserves further evaluation and consideration.

n In the Board's view it would be preferable to guide these changes through a comprehensive vision based on a broad-based consensus of the public policy and environmental goals for SRF programs of the future.

n The Board believes that an ESRF should be optional to the states, placing emphasis on state flexibility to prioritize and fund environmental projects. An ESRF would be more complex to administer than the current SRF programs, therefore, greater flexibility should be permitted states in allocation of SRF funds to pay for administrative costs.

n An ESRF program should build on the successful platform of the current SRF programs, rather than create a new program or programs. The states have technical and managerial knowledge in place, and could provide one-stop shopping to a variety of borrowers seeking financing for eligible environmental projects.

n Current federal tax law issues, including arbitrage rebate, tax credit bonds, other tax incentives, and allocation availability for private water companies have significant effects on the efficiency and effectiveness of the SRF programs. Consideration of these effects, and possible changes to the tax code, should be an integral part of further examination of the ESRF concept.

n The Board believes that with the expansion of project eligibilities comes a concomitantly strong justification for a significant increase in federal funding to support the ESRF program. After an appropriate time when full capitalization is achieved and/or when sufficient funds revolve through lending activities, the ESRFs could stand as self-sustaining environmental banks. At the same time, the broad ESRF authorities also provide opportunities for collaborative efforts that can access federal and state funding from a variety of sources.

Based on these findings and the longstanding experience it has had with the SRF programs, EFAB has voted to endorse the ESRF concept. The Board further believes the ESRF concept warrants a careful evaluation by EPA.

Recommendation:

EFAB recommends that the EPA undertake a thorough examination of the ESRF concept, giving special emphasis to the issues and findings in this report.

Clearly, many options are possible, and thus it would help inform and move the debate forward if attention were given to crafting an ESRF model that garners the most support from all or most stakeholders. In that spirit, EFAB suggests an ongoing consultation with organizations possessing significant knowledge of many of these issues, such as the Council of Infrastructure Financing Authorities, Association of Metropolitan Sewerage Agencies, Association of Metropolitan Water Agencies, Association of State and Interstate Water Pollution Control Administrators, Association of State Drinking Water Administrators, Association of State and Territorial Solid Waste Management Officials, the Environmental Council of the States, and other key environmental organizations.

EFAB is prepared to assist in anyway it can consistent with its charter. The Board, of course, is available to discuss this report and its recommendation.