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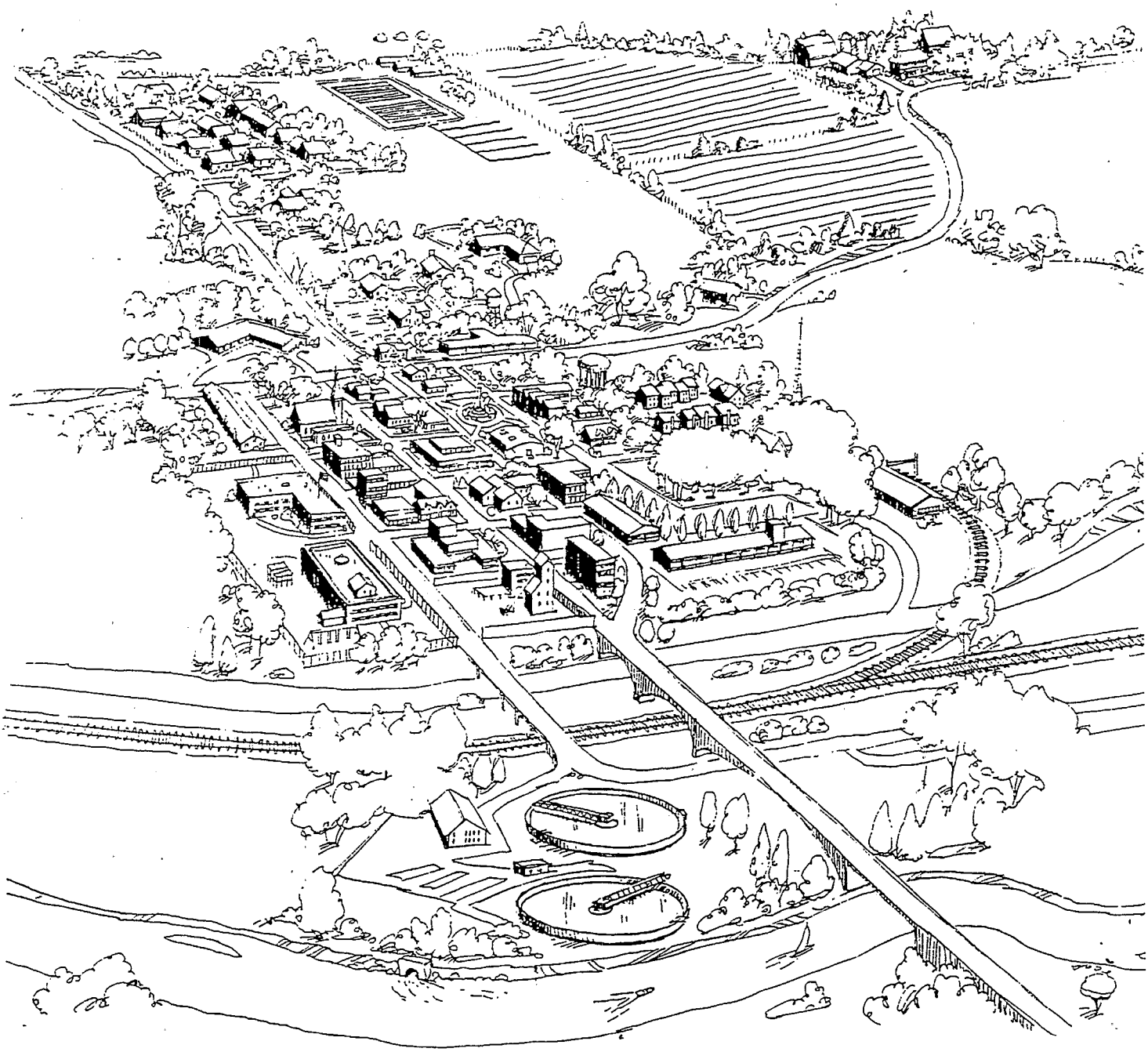
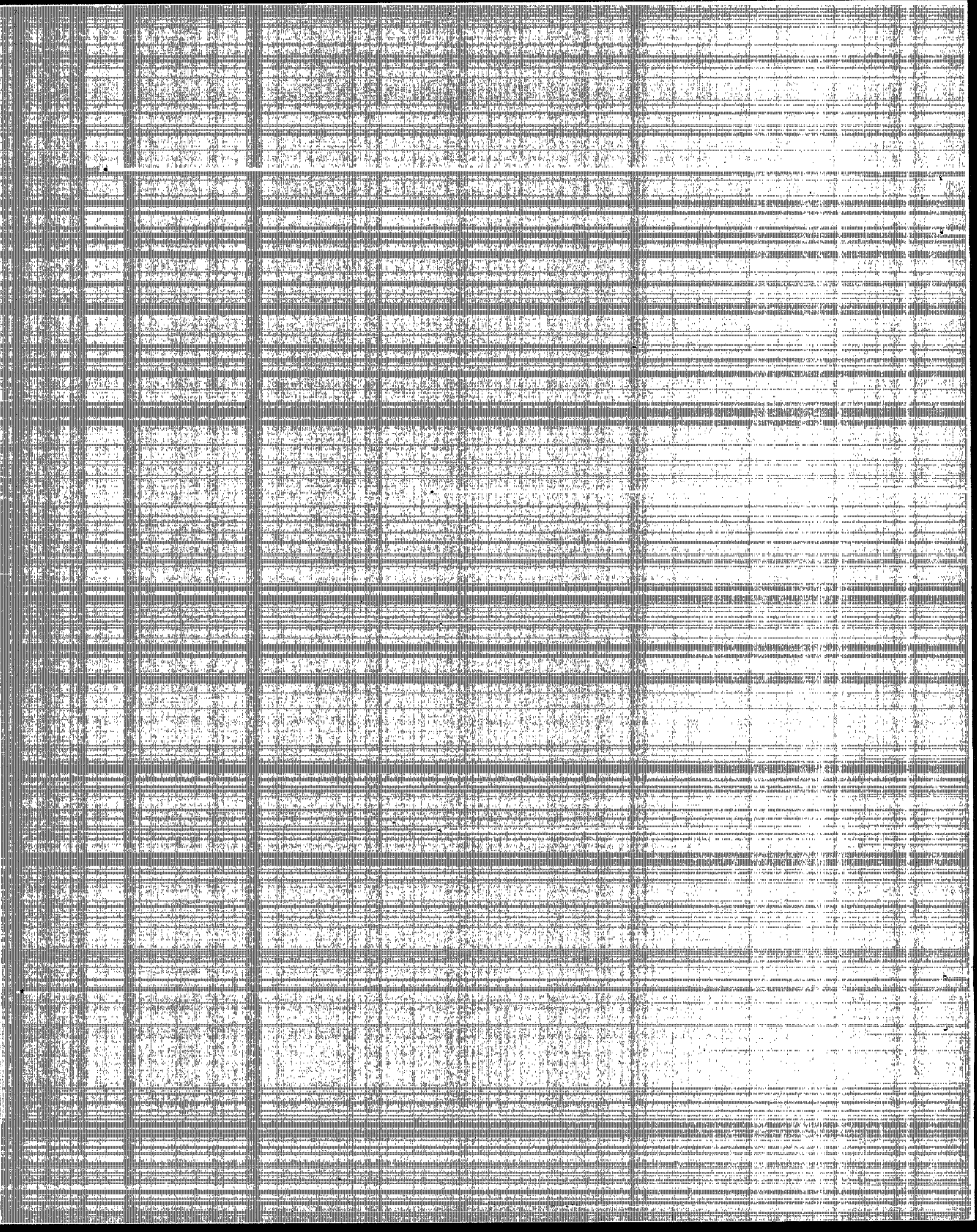
Funding Of Expanded Uses Activities By State Revolving Fund Programs

Examples And Program Recommendations





FUNDING OF EXPANDED USES ACTIVITIES BY STATE REVOLVING FUND PROGRAMS:

Examples and Program Recommendations

August, 1990

U.S. Environmental Protection Agency
Office of Water
Office of Municipal Pollution Control

Washington, DC

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Michael J. Quigley, Director
Office of Municipal Pollution Control

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I. INTRODUCTION

The nation's rivers, lakes, estuaries, and ground water resources are facing increased pressure from nonpoint pollution sources, including but not limited to impacts from agricultural activity, urban runoff, and silviculture. According to the National Conference of State Legislatures, nonpoint source (NPS) pollution is a principal cause of water quality degradation in three-fourths of the nation's lakes, two-thirds of the rivers, and one-half of the coastal estuaries.

Recognizing the need to direct more attention and resources to this "category" of pollution sources, Congress, in 1987, added a new section (Section 319) to the Clean Water Act (CWA) that addresses NPS pollution to ground water, surface water, wetlands and estuarine water resources. In addition, the 1987 amendments added a new section (Section 320) to the CWA establishing the National Estuary Program (NEP) to address both point and nonpoint sources of pollution in the nation's major estuaries.

While there are currently a number of Federal programs that provide funding for NPS controls, the majority of nonpoint source control costs will be the responsibility of the States, local governments, and private individuals. Appendix A contains a list of EPA Guidances relating to the funding of these activities. For example, States can use up to 20 percent of their allotment under the existing Construction Grant Program for NPS and ground water activities called for under Section 319, and a State also must set aside one percent of its construction grant allotment or $100,000, whichever is greater, for NPS planning activities. Funds are also available as a reserve for marine combined sewer overflows and estuaries.

Sections 319(h) and (i) authorize grants to assist States in implementing NPS management plans and in carrying out ground water protection activities which advance a State toward implementation of a comprehensive NPS control program. Section 320 authorizes grants to assist NEP management conferences in the development of estuary Comprehensive Conservation and Management Plans (CCMPs). In addition to these grants, Congress has also made available, through Title VI of the CWA, funding for implementation of State water control activities through establishment of State Revolving Loan Funds (SRFs).

The SRFs were designed primarily to allow for the orderly phase-out of the Construction Grants Program, through which Congress had been providing money to the States for the construction of municipal wastewater facilities. Congress also intended for SRFs to address broader water quality needs. Accordingly, SRF money can also be used, after specific conditions have been met, to support the implementation of NPS, ground water, wetlands (to the extent that activities are part of approved NPS Management Programs or are incorporated into National Estuary

Program plans) and estuarine water quality management activities. These additional activities are referred to as "expanded uses" of the SRF.

Some aspects of storm water management are incorporated into NPS programs and, therefore, are eligible for SRF assistance as Section 319 activities. However, storm water may also contribute to point source discharges, particularly combined sewer overflows (CSOs). Increased attention is being given to the issuance of NPDES permits for "diffuse" point sources related to storm water and CSO problems. The local cost to construct facilities to meet the permits conditions may be quite high. Many communities may look to SRFs for funding assistance.

Although facilities to alleviate CSO problems are included in the definition of Section 212 facilities, funding under Title II was limited by Section 201(g)(1). But States could use up to 20 percent of their Title II allotments for otherwise ineligible Section 212 facilities. Congress included this funding eligibility restriction in Title VI of the CWA. Therefore, States may use up to 20 percent of the amount of the Federal capitalization grants to provide assistance for CSO abatement activities. This provision does not limit use of State contributions or repayment amounts.

Because CSO abatement projects meet the definition of Section 212, for the purposes of this booklet, they are not considered to be expanded uses. However, because of the potential relationships among point and nonpoint discharges related to CSO abatement and storm water management, State SRF and water quality management managers should closely coordinate the development of abatement control and funding strategies.

To date, most States have generally not taken advantage of their funding flexibility to provide SRF assistance for expanded uses activities. However, in FY 1990 an increasing number of States have included expanded uses activities as part of their SRF programs. The purpose of this booklet is to help encourage increased use of the SRF program for these NPS activities. The guidebook is intended for use by SRF program managers, State managers for various NPS activities (including ground water, wetlands, and estuary management), estuary managers, local communities, and public interest groups that are interested in seeing these activities funded.

SRF managers, on both the State and Regional level, need to be cognizant of the potential for the SRF to help address expanded uses needs. Local managers and interested citizens need to: (1) become aware of how the SRF process works; (2) learn to identify the types of activities that might be appropriate for SRF funding; and (3) understand how to get these projects into the SRF system.

Structure of the Booklet

The next section of the guidebook will include a brief description of the SRF program and its history, including a discussion of the types of assistance that can be provided for expanded uses activities and a description of who would be eligible for these funds.

Following this discussion, the booklet will raise and address a number of commonly asked questions about the SRF program and its applicability to expanded uses activities. Among the issues to be discussed in this section are the availability of other NPS funds, the administrative steps necessary to get a project on the SRF funding list, the characteristics of those programs that are best suited to the SRF program, and steps that can be taken to encourage SRF funding of expanded uses activities.

The last section of the guidebook includes a discussion of a number of programs that could be eligible for participation in State SRF programs. First priority was given to the identification of actual projects which might be representative of potential SRF funded activities. To supplement real life examples, prototype projects were developed to illustrate SRF funding considerations. An effort was made to demonstrate a variety of expanded uses activities and funding approaches.

The Office of Municipal Pollution Control (OMPC) coordinated with Office of Ground Water Protection (OGWP), Office of Water Regulation and Standards (OWRS), Office of Marine and Estuarine Protection (OMEP), and the Office of Wetlands Protection (OWP) to identify potential example projects. OMPC staff have also contacted Regional SRF and NPS coordinators and many State NPS coordinators.

It is important to emphasize that these projects (and in some cases proposed projects) have been chosen for inclusion in this document not because they are making use of SRF funds now, but because they and other similar programs could, under the right circumstances, do so. The primary purpose for inclusion of this section is to encourage State and local officials to think about possibilities for using the SRF program to fund expanded uses activities.

II. THE SRF PROGRAM

Since 1972, Federal funding for State water quality activities has been provided under Title II (referred to as the Construction Grants Program) of the Clean Water Act (CWA). In 1987, Congress established the State Revolving Fund (SRF) Program (Title VI of the CWA). In lieu of grants for specific wastewater construction projects, the Federal government contribution to the SRF program is in the form of a capitalization grant which is combined with the required State match of 20%, when States establish their SRFs. As shown in Figure 1, the State then makes this money available through loans or other forms of assistance to local agencies for use in particular projects. The loans must be repaid to the Fund. The money can then be reused by the SRF to provide further assistance.

Title VI requires recipients to identify a dedicated repayment source. This requirement poses a potential problem for use of the SRF monies for expanded uses activities. In many cases, potential revenue sources may not be clearly identifiable for NPS and related activities. However, as will be discussed later, this does not pose an insurmountable burden. In several instances, specific dedicated revenues can be derived directly from an activity associated with the pollution source.

For example, land owners who benefit from erosion and flood control programs could be billed for development of a storm water management system. A State could levy a tax on the sales or use of fertilizers and pesticides; the tax revenues generated could support the administration of a program to control surface and ground water pollution attributable to the use of fertilizers and pesticides. Similarly, farmers could pay rent for use of equipment designed to reduce erosion. These monies could be used to repay a portion or all of the loan used to purchase the equipment or establish the storm water management system.

Monies used to repay SRF loans do not have to be generated directly from activities supported by the SRF. For example, money raised by a general purpose fee or tax could be used to repay loans to the Fund. In this way, municipalities that might have difficulty raising funds from the pollution control activity could receive money from the SRF and then repay it from unrelated sources.

Eligible Activities for SRF Funding

SRF assistance (loans, loan guarantees, bond insurance, or refinancing of existing debt) can be used for construction of wastewater treatment plants, implementation of approved State NPS Management Programs and ground water strategies under Section 319 of the Clean Water Act and development and implementation of estuary conservation and management plans under Section 320. This booklet focuses on NPS and estuarine activities.

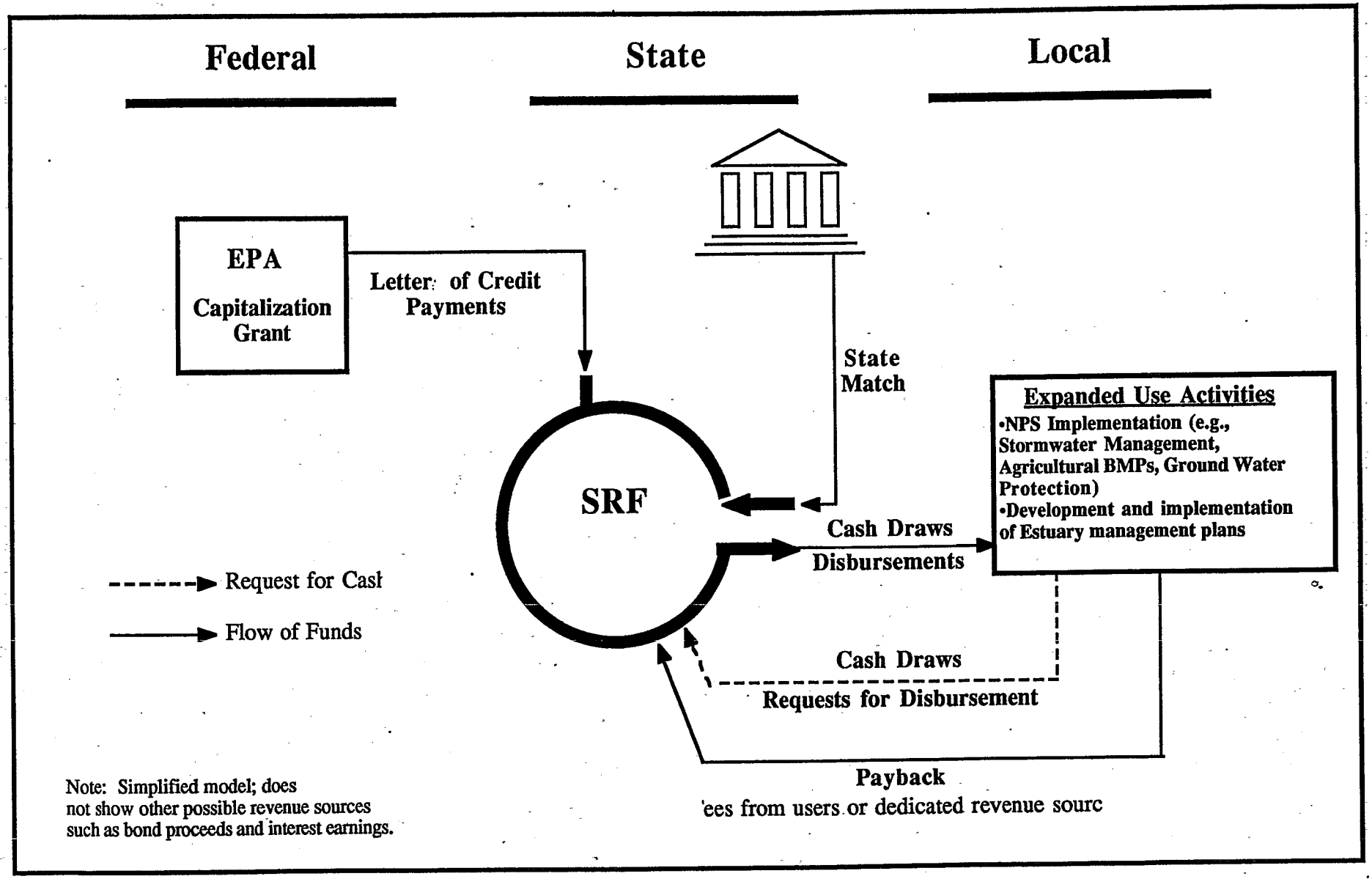
Section 319 calls for the development of State NPS assessments and management programs. The management programs list specific activities for controlling nonpoint sources of pollution and identify responsible implementing agencies and potential/available funding sources. SRF monies may be used to implement Section 319 activities that are identified in approved State NPS management programs. Implementation may include activities such as installation of best management practices, education, demonstration programs, technical assistance, training, regulatory development, and enforcement. Education is one of the most important functions of NPS programs because the general public has little understanding of the relationship between individual activities and water pollution. Such education efforts are essential to pollution prevention efforts.

In implementing NPS management programs, each State should continue to refine the estimated costs of implementing activities and identify likely funding sources, including potential money from the State SRF. States may choose to partially fund an activity through a loan from the SRF and also use monies available from a Section 319 Federal grant or other source.

Section 320 provides for the establishment of management conferences to deal with the complex issues associated with estuary management. SRF funds may be used for development of Comprehensive Conservation and Management Plans (CCMP) and implementation of estuary management activities identified in the CCMPs. In addition to these plans, activities that assist in preventing pollution of estuaries may be funded as Section 319 activities if included in the approved State NPS management programs. State wetlands managers should be given an opportunity to review proposed SRF funding of Section 319 and 320 activities because wetlands also require protection from NPS pollution. Many CCMPs developed under Section 320 will include wetland protection, restoration, and management activities.

Figure 1

Cash Flow Through SRF To Expanded Uses



Types of Available Assistance

States can provide funds to local communities or other entities as loans, loan guarantees, bond insurance, or through re-financing of existing debt. As a practical matter, it seems likely that support for expanded uses activities will take the form of loans to towns, counties, conservation districts, and other public agencies. If provided for in the approved State NPS Management Program, funding for certain activities may be available to private parties (e.g., farmers). States can make the loans attractive by offering them at below market interest rates and for up to twenty years.

How Does an SRF Program Work?

This discussion is not intended to substitute for more detailed guidance on the operation of an SRF. Moreover, it will not address questions concerning the establishment of an SRF and all the work needed legislatively and administratively to put a program into place. Rather, this guidebook presumes that a State has an SRF program in place. For more detail on establishing an SRF, refer to the "Initial Guidance for State Revolving Funds," published by the U.S. EPA Office of Municipal Pollution Control in January 1988 and the Interim Final Regulations issued in March, 1990.

Intended Use Plan

Federal capitalization grants are authorized through FY 1994. In order to receive a Federal capitalization grant, States must develop an annual Intended Use Plan (IUP). The IUP lists the projects and activities to which the State expects to provide assistance and a description of the type of assistance that will be provided. To be eligible for funding from the SRF, expanded uses activities must be included in the IUP.

While the specifics of the process differ among the States, each State prepares a draft IUP and then provides an opportunity for public review and comment prior to finalization of the IUP. For those interested in seeing that a particular activity receive money from the SRF, an essential early step is the inclusion of the activity in the IUP that is submitted to EPA.

First Use Requirement

As noted above, Congress developed the SRF program to replace the existing Construction Grants Program. The construction grants program placed emphasis on the funding of projects necessary to meet the "enforceable requirements" of the CWA. As part of this effort, EPA issued a National Municipal Policy (NMP) which in part resulted in the preparation by the States of a list of projects most important to meeting water quality objectives. To continue this initiative, Congress included the "first use provision" in Title VI.

Before money from an SRF can be used for expanded uses (Sections 319 and 320) activities or other projects allowed under Section 201(g)(1) (including combined sewer overflow abatement measures), the State must indicate that it has met the "first use" requirement. The State must certify that publicly-owned treatment works (POTWs) that have been identified as part of the NMP universe either: a) are in compliance, or b) are on an enforceable schedule, or c) have an enforcement action filed, or d) have a funding commitment during or prior to the first year covered by the IUP.

Even before the first use requirement is met, States may use their own monies in excess of the 20% State match and any other SRF funds that don't come from the capitalization grant or repayments of the first round of loans awarded under the grant. For the majority of States, the first use requirement has been met or will be met in the first or second year of SRF operations. Therefore this requirement does not pose a serious impediment to the use of the SRF for expanded uses activities.

Equivalency Requirements

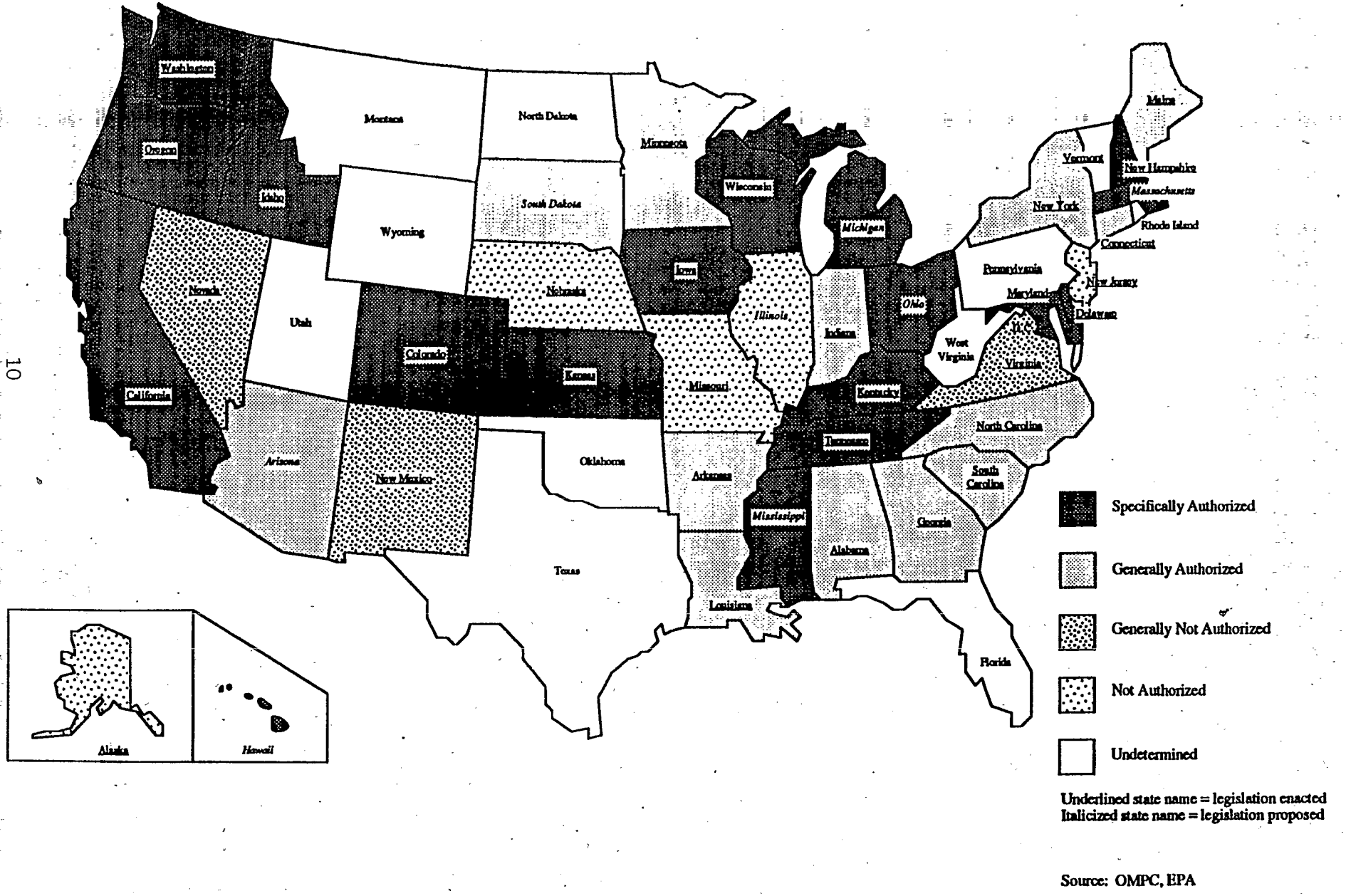
In Title VI, Congress carried over sixteen provisions previously associated with the Construction Grants Program to the SRF Program. These requirements apply to some projects that are funded from the SRF in an amount equal to the Federal capitalization grant. These requirements do not apply to expanded uses activities (Sections 319 and 320), unless they also meet the definition of a treatment work under Section 212 and if the State wishes to count the activities toward meeting its equivalency commitment. The State must assure that the equivalency requirements are met to the extent that Section 212 projects receive funding assistance from the SRF. Anyone interested in funding an activity should check with the State SRF coordinator to determine if the specific activity needs to meet the 16 equivalency requirements.

Legislative Status of State Programs

State laws that establish the Revolving Funds may outline permitted activities of the fund, including describing types of projects and activities to which funding may be provided. Some statutes include very specific language pertaining to permitted uses whereas other State legislation provides a more general description of fund purposes. In the case of expanded uses activities, State legislation may: (1) specifically authorize funding (e.g., cite Sections 319 and 320 of the CWA or list NPS and ground water activities as eligible), (2) generally authorize "water quality management activities" (or similar references), or (3) exclude funding by limiting funding to wastewater projects. In most instances (31 of 38 cases), State enabling legislation contains language which either specifically authorizes or appears to authorize the assistance of expanded uses activities. In five States, such authorization is specifically withheld while in three others it has probably been withheld. For eleven other programs the legislative status was undetermined as of January 1990. Until there is a change in the law for these States, they will not be able to fund expanded uses activities with the SRF. (See Figure 2)

Figure 2

LEGISLATIVE STATUS OF ELIGIBILTY OF EXPANDED USES FOR SRF FUNDING



Source: OMPC, EPA

III. COMMONLY ASKED QUESTIONS ABOUT THE SRF PROGRAM AND EXPANDED USES

1) Isn't the SRF just a substitute program for the Construction Grants program and as such, shouldn't it be used just for establishment of wastewater treatment facilities?

While the SRFs are designed to meet community needs for wastewater treatment facilities, they are more than that. In establishing the SRFs, Congress intended both to allow the continued development of wastewater treatment facilities and also to provide States with an ongoing resource base to fund point and nonpoint source management projects and activities into the future. In developing their Intended Use Plans, many States have demonstrated a short-term bias for point source projects. However, as the first use requirement is met and other water needs become better understood, States will be more likely to support SRF projects and activities that address NPS, ground water, wetlands and estuarine concerns. Some States have already begun to make major commitments toward such use of their SRFs.

Some funds are available under Title II (the Construction Grants Program) for NPS management activities. Section 201(g)(1)(B) authorizes States to use the Governor's 20 percent discretionary fund for Sections 319 and 320 purposes. Through the end of 1989, four States had used this authority and received grants under 201(g)(1)(B): Delaware, South Dakota, Colorado, and California. Grants also have been awarded, primarily for NPS program development and demonstration watershed projects, under Section 205(j)(5), which permits a State to use 1 percent of its Title II allotment (up to $100,000) on NPS activities.

2) Aren't there other existing Federal programs to support NPS or Section 320 programs? Shouldn't they be used in lieu of SRF monies?

Other CWA financing programs could potentially provide money for State expanded uses activities. A summary of these programs, including those from Title II referred to in question (1) above, that provide funding opportunities for expanded uses activities is included in Appendix B. Appendices A and B come from "Funding of Nonpoint Source, Ground Water, Estuary, and Wetlands Activities Under Titles II, III and VI of the Clean Water Act," prepared by OMPC. Funds are also available from other Federal programs, such as those administered by the U.S. Department of Agriculture, U.S. Department of the Interior, National Oceanic and Atmospheric Administration, and the U.S. Geological Survey. The availability of these alternate sources does not, however, restrict the relevance of using SRF funds for these purposes.

Congress clearly decided, in developing the SRF program, that States should have the prerogative to use the revolving loan fund for expanded uses. In addition, while funds were authorized in the 1987 Water Quality Act to provide grants for Section 319 activities, Congress did not appropriate money for Section 319 until FY 1990. In addition, Section 320 grants are restricted to development of CCMPs and cannot be used to fund plan implementation.

3) **In order to qualify for receipt of a SRF loan, a municipality or other local source must identify a dedicated repayment source. How can a municipality make this guarantee when so much of this activity is taking place on private land? Moreover, these expanded uses programs often do not have identifiable "users" or "benefactors" from whom the loan repayment can be generated. How do you charge people for an improved wetland or reduced run-off from agricultural land?**

The ability to identify dedicated revenue streams continues to concern those interested in fostering SRF funding of expanded uses activities. While an activity (such as instituting a best management practice on a farm or installing a storm water management system) may take place largely on private land, a local municipality or other governmental entity can act as the organization to receive the SRF loan and guarantee its payback. The responsibility for repayment may also rest directly with individuals receiving SRF assistance. The dedicated repayment source may include an existing unencumbered revenue source (e.g., farm earnings) or collateral (e.g., mortgages, liens). In certain instances, local cooperatives, farming or drainage districts can be established for this purpose. Moreover, revenue sources can often be identified to help repay loans for the expanded uses activities. While it is generally thought that the revenues needed to repay a loan would be generated by the users (such as those who send water through treatment facilities), it is very important to note that the dedicated revenue source need not be generated by the activity to which the loan, or other assistance, is provided.

In some instances an affected party can be readily identified and a fee for the specific benefits accrued from the use of the loan can be received. For example, developers and land owners may be assessed a fee for the infrastructure costs and maintenance costs associated with the establishment of a storm water management system. Homeowners who borrow money to fix aging septic tanks can pay back the loan and farmers can pay a rental for use of specially purchased no-till drilling equipment.

Figure 3

VARIOUS FUNDING MECHANISMS AVAILABLE TO REPAY SRF LOANS

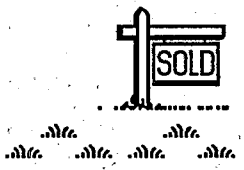
Payments from identifiable users for:

equipment or computer rental

use of stormwater or agriculture run-off system

repayments or loans to the remedial actions on septic tanks or underground storage tanks.

Special fees and taxes on gasoline, fuel, land, mineral extraction, cigarettes, pollutants, (e.g., sale or application of fertilizers and pesticides),etc.



Fees on land purchases, permit applications, registrations, or facilities such as underground storage tanks.

General tax revenue. A municipality might dedicate a portion of tax receipts to pay the loan.

Fines and Penalties.

In other circumstances, the loans can be repaid from other revenues. For example, in Maryland, a local community is using the SRF to generate the matching portion of a grant designed to clean up a lake suffering from eutrophication caused largely by agricultural activities and urban runoff. The community is pledging to repay the loan from general revenues. In other instances a State or municipality could raise money to pay back the SRF through a special fee or tax.

For example, the State of Wyoming intends to fund portions of its underground storage tank (UST) program with money from the SRF. The SRF will loan money to one account which will be available to assist in remediation activities. The loan will then be repaid from a separate account that is established with a tank registration fee, a contribution from the State's General Fund, and a tax on gasoline and special fuels. The SRF then is being used to support UST activities. The repayment is only indirectly related to the users. This represents just one example of how State and local communities might take advantage of the lower rate and readily available SRF monies to fund expanded uses activities, while collecting revenue from a variety of sources to repay the loan.

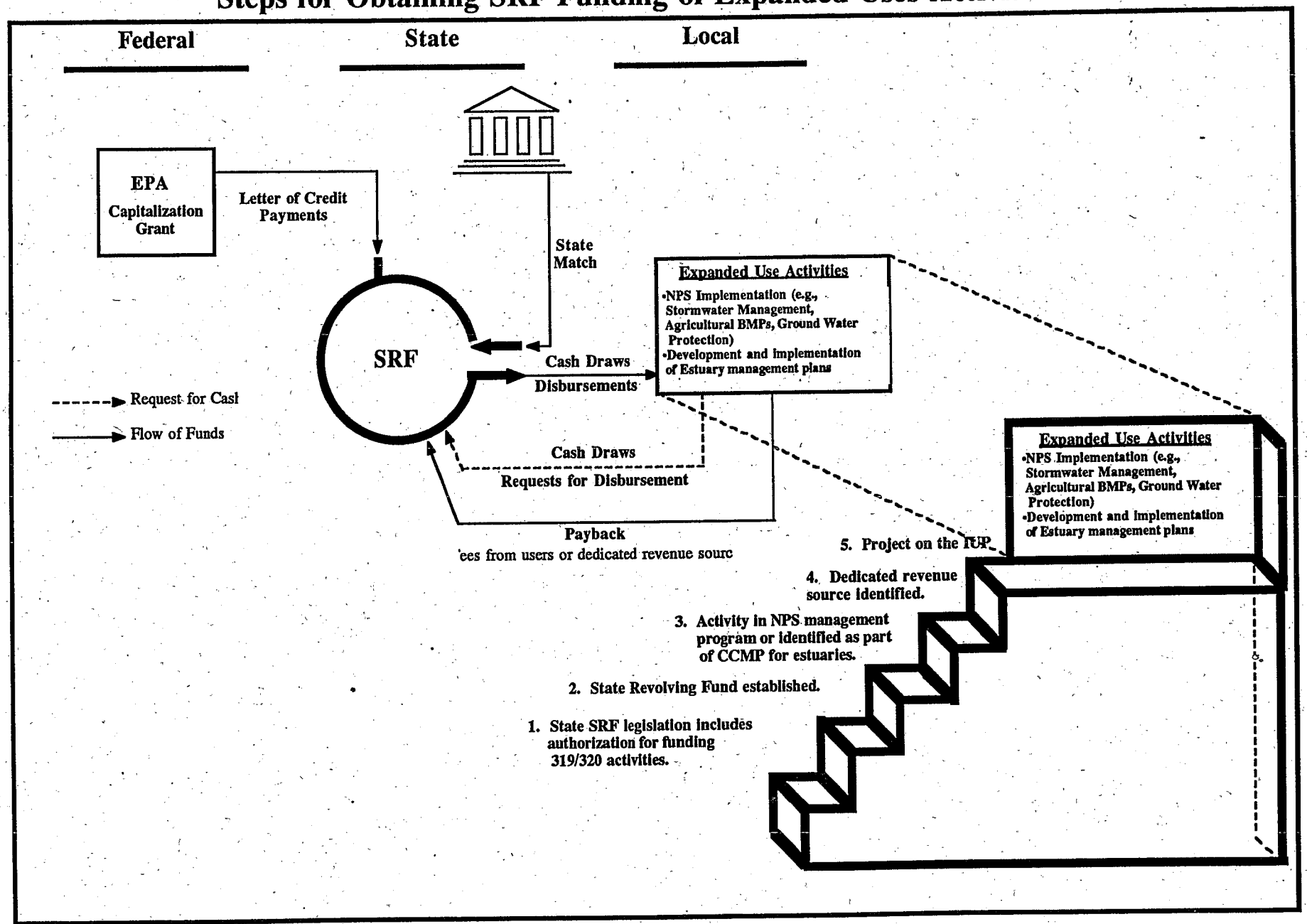
There is a great deal already written on the availability and relative utility of various alternative financing tools that governmental entities can employ to help raise revenues. The Office of Marine and Estuarine Protection and the Office of Policy Planning and Evaluation at EPA published, in September 1988, a document entitled "Financing Marine and Estuarine Programs: A Guide to Resources," that includes a financial primer outlining many of these tools, including income taxes, property taxes, user fees, commodity taxes, debt acquisition, and others. Figure 3 illustrates some of the ways that local municipalities or other governmental units could raise monies to pay back a SRF loan.

4) How can an expanded uses activity get funded through a State SRF?

For purposes of this discussion, we will presume that the State has an SRF program in place and that the enabling legislation establishing the State program either generally or specifically authorizes the use of SRF funds for expanded uses activities. At the present time, 31 States and territories have either general or specific authority to use SRF monies for Section 319/320 program activities (see Figure 2). Clearly, where this situation does not exist, those interested in funding NPS and related activities should work to get an SRF program established and, where necessary, work with the State legislatures to amend the law to allow the use of SRF monies for expanded uses activities.

Figure 4

Steps for Obtaining SRF Funding of Expanded Uses Activities



The "steps" needed to obtain SRF funding of expanded uses activities are shown in Figure 4. In order to be eligible for use of SRF funds, a NPS project must be included in the State's NPS management program, which identifies specific activities to be undertaken to address problems identified in the State NPS Assessment Report. SRF funds can be used for the implementation of the NPS Management Program, including activities such as education, training, demonstration programs, regulatory development and implementation, enforcement and similar activities. As noted earlier, States identify likely funding sources for the proposed activities within their plans, including those that might receive assistance from the SRF. Naturally, for activities to be fully or partially funded from the SRF, localities would also have to identify potential sources of revenue for repayment of the loan or related assistance.

In addition to NPS and ground water activities identified in a State's NPS Management Program, the SRF can also be used for wetland and estuarine protection. First, many of the actions described in the NPS Management Program may impact estuaries and wetlands. In Delaware, for example, a proposed agricultural run-off containment system will have clear positive impacts on the estuaries into which the run-off from these areas currently flows. Construction of POTWs can also directly effect estuarine management, but these activities are not the focus of this guidebook.

Second, the SRF can be used to fund development and implementation of actions that are part of a Comprehensive Conservation and Management Plan (CCMP) for an estuary with a management conference convened under the NEP (Section 320).

At the present time there are 17 nationally designated estuaries in the NEP. Once designated, an estuary is eligible for SRF funds for a number of CCMP activities, providing of course, that the money is repaid. Among the activities that could be undertaken to protect an National Estuary Program (NEP) estuary are land acquisition, habitat enhancement, sediment detoxification, monitoring and enforcement, education, training, and technical assistance.

Once an activity has been identified as a candidate for funding from the SRF, it has to be listed on the Intended Use Plan (IUP). Each State must complete an IUP including a list of eligible projects and activities, the type of assistance that is proposed for the various projects, and other information assuring compliance of the SRF with other laws and the stated goals of the program. Assuming that the State successfully negotiates its grant agreement with the Regional EPA office, and that the State has met its first use requirement, it may then make loan commitments for the projects identified in the IUP.

5) What are the characteristics of expanded uses activities that are best suited for the SRF?

Expanded uses activities which may most appropriately receive SRF assistance will often require some form of capital outlay either for construction (as in the development of a storm water management or animal waste management system) or for purchase of equipment such as no-till farming equipment or computers to assist in a program to minimize pesticide and herbicide applications. Additionally, appropriate activities would ideally provide a revenue stream that could be used to repay the loan.

However, some of the potentially most cost-effective NPS activities include education, technical assistance, regulatory development, and certain demonstration programs. These types of activities do not usually generate revenue streams which could be used to repay SRF loans. However, States and local communities may identify general revenues or targeted fees and taxes to support these programs. Some communities have already implemented successful NPS programs using fees and taxes. NPS managers and others interested in fostering expanded uses activity may need to be creative in identifying activities that can effectively use SRF assistance.

Local communities might also find it appropriate to use a low interest loan from the State for a project if it has a cash flow problem. For example, the community of Salisbury, Maryland is using money from the SRF to pay its portion of a match necessary to fund restoration efforts at Johnson Pond. The town has made a commitment to repay the loan. The SRF could be used to provide funds for waste management projects where local communities cannot get the needed capital easily, but can repay the loan. Again, the local community need not repay the loan from revenues generated by the activity funded through the SRF. The search for potential revenue sources should be seen as one element of constructing a workable project.

6) Doesn't the appropriation of money for the Section 319 grants make the use of SRF monies for the NPS activities irrelevant?

No. The $40 million FY 1990 appropriation is a positive development for those dealing with NPS problems, but it does not reduce the need for continued funding through the SRF or other means. The Section 319 grants need to be matched on a 40% basis by the States. A zero percent interest loan can (depending on the prevailing interest rate over a long period) equate to a grant with a sizable match. No good estimate is available for the total cost of implementing expanded uses activities. However, the cost likely far exceeds available Federal grant funds. Much remains to be done with regard to preventing and controlling nonpoint source pollution. Therefore, SRFs may play an important role in providing financial assistance.

7) What can be done to encourage SRFs to fund expanded uses activities?

There must be greater communication among those individuals and communities interested in addressing NPS and ground water problems and managing the nation's estuaries and individuals involved in managing the SRFs. To help facilitate this interaction, the State and Regional EPA coordinators for SRF, NPS, and ground water are listed in Appendix C. Historically, many SRF program managers have been involved more directly in responding to point source pollution needs and dealing with the Construction Grants program. These individuals should bring others into the SRF process, especially to identify expanded uses activities that could be included on the State's IUP. The use of SRF monies for expanded uses activities should not pose a threat to the continued effort to address point source problems. Similarly, those interested in NPS and estuary activities should take a more active role in learning how the SRF operates so that they can identify appropriate activities, get them into the IUPs, and then see that they receive support.

IV. EXAMPLES OF POTENTIAL SRF FUNDING OF EXPANDED USES ACTIVITIES

This section includes a number of examples of activities that could be funded, in part or whole, by an SRF program. The key points of the programs are noted on Figure 5. The list was prepared based on contacts with NPS coordinators in the EPA Regional Offices and States. While there was generally a high level of interest in learning of such programs, few States had actual examples to offer. This reflects in part the newness of the program. While few projects are currently receiving SRF monies, the potential exists for SRFs to make significant contributions to the nation's efforts to manage nonpoint sources of water pollution.

The following is not an exhaustive list of the potential expanded uses applications of SRF monies. Rather, it represents current activities that could be assisted by the SRF. NPS managers, local groups, and others interested in addressing NPS problems, hopefully, will use this listing to help spur their own creative efforts. Because several activities serve similar functions, they have been organized according to the type of water management problem they address.

STORM WATER MANAGEMENT

Storm water management systems are the most likely expanded use activities to receive SRF funds. Runoff from storm water has resulted in many problems including increased erosion of valuable soil, increased siltation, flooding, and pollution (from city streets or agricultural fields) into streams or estuaries. Development of a comprehensive storm water management system may include both structural and nonstructural control measures. Generally, a storm water system project has an easily identifiable group of beneficiaries, namely those homeowners, farmers, or developers whose land is serviced by the system, who can contribute fees to pay back a loan used to develop the infrastructure.

Note that not all aspects of storm water management are NPS related. Certain storm water discharges are permitted under Section 402 of the CWA and, therefore, treated as point sources. Construction of facilities for treating such discharges meet the definition of Section 212 treatment works. Such projects may receive SRF assistance subject to Section 201(g)(1) restrictions on the use of the Federal capitalization grant amount. Other storm water management activities may be included as part of the approved State NPS Management Program.

Figure 5
Examples of Potential SRF Funding of Expanded Uses

Program	Potential Use of Funds	Potential Payback Mechanism
Stormwater Management Bellevue, WA Florida and Delaware	Infrastructure, development and maintenance; Education	Fees from developers and land owners
No-till Drilling Pasture Renovation Georgia	Purchase equipment	From farmers who lease purchased equipment
Pesticide Application Demonstration Project Bootheel RC&D Dexter, Missouri	Develop chemical application scheme based on differing soil conditions	From farmers who would benefit from the information
Septic System Treatment Jefferson County, WA	Loans to landowners to upgrade septic systems	From landowners
Leaking Underground Storage Tanks Wyoming	Response to leaking tanks	Tax on gas and diesel fuel
Johnson Pond Restoration Salisbury, Maryland	Provide county Match for Restoration Program	Guaranteed by general fund of county

Storm Water Utility: Bellevue, Washington

The City of Bellevue (approximately 85,000 population) established a storm water management utility to direct activities designed to address problems posed by increasing urbanization and resultant storm water runoff. The utility is charged with the task of managing the drainage system to prevent property damage, maintain the hydrologic balance, and protect water quality. To address the problem, the utility developed a drainage system consisting of a network of pipes, stream channels, and storage facilities including lakes, wetlands, ponds, and detention basins.

The utility is a separate governmental entity raising funds primarily through the imposition of a user fee on landowners. A sliding fee schedule was established based on the intensity of land use of the different areas. Five rate classifications were established, ranging from underdeveloped (not covered with impervious surfaces or without other structures impeding normal hydrology) to developed land (properties with greater than 70% runoff). This system placed the largest burden, appropriately, on those making the largest contribution to the pollution problem. The fee or charge is similar to those made by sewer utilities and thus easily fits into the SRF process. The utility also raises funds through permit fees and additional charges to new developers who benefit from the existence of the already-built management system.

Applicability to the SRF: In Bellevue, the money for capital construction projects was financed through revenue bonds backed by receipts from the charges. In other areas, capital funds could come, in part or whole, from the SRF (except for construction of facilities related to compliance with Section 402 permits). The utility charges could be used to repay the loan. In its early years, the utility placed great emphasis on education, citing the need to inform citizens of the many water quality benefits that could accrue from a system that many saw as a tax on rain. This is consistent with sentiments raised by several NPS managers concerning the need for education to bolster public support for these programs. It may be appropriate to use portions of an SRF loan to establish the utility and its regulatory programs and to produce or purchase educational materials and then repay the fund with user charges.

Contact: Damon Diessner
City of Bellevue
Storm and Surface Water Utility
P.O. Box 90012
Bellevue, WA 98009-9012
(206) 451-4476

Other Storm Water Management Programs

Storm water management programs are a part of many States' response to NPS pollution problems. Florida law, for example, has added storm water management facilities to those that are eligible for SRF loans. The State intends to use SRF funds for these purposes after equivalency requirements have been met. It should be noted, however, that the equivalency requirements do not necessarily limit the amount of funds available for expanded uses activities. These requirements apply only to the extent that the SRF funds Section 212 treatment work projects and if the State chooses to count the activity toward meeting the requirements.

Contact: Eric Livingston
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0782

Delaware has been using money from Section 106 demonstration grants for its NPS programs, but is looking forward to using about $1 million per year from its SRF for nonpoint sources. There are currently three conservation districts in Delaware that can receive SRF loans and ensure their repayment. Included among the potential uses for the SRF monies is the development of a State-wide storm water management program that would be supported by permit fees and user charges. Funding from the SRF would allow the State, conservation districts, and local governments to provide initial staffing to begin the program.

In addition to storm water management, Delaware is also looking to the SRF for support for a number of NPS activities designed to provide increased protection to estuaries. Included among these are animal waste management and educational activities. For the educational program, the State may wish to finance the program, or a part of it, from the SRF, and then refund the program through general appropriations.

Contact: Terry Deputy
Department of Natural Resources
Division of Water Resources
89 Kings Highway
P.O. Box 1401
Dover, DE 19903
(302) 736-5409

Urban Pond Restoration

The restoration of Johnson Pond, a shallow, warm-water pond with a history of eutrophication problems, was the first example of the proposed use of SRF monies to address an "expanded uses" problem and represents an example of waterbody management analogous to implementation of a Section 320 CCMP. The eutrophication plaguing the pond results from high nutrient loadings, especially phosphorous.

The State of Maryland estimates that approximately 76% of the total phosphorous load in Johnson Pond is attributable to nonpoint sources such as agriculture and urban runoff. Of the remaining load, about 12% comes from the Delmar sewage treatment plant and approximately 12% is due to phosphorous release from the lake sediments.

Proposed clean-up activities include the application of an algicide as a short-term solution and, for the long-term, the construction of artificial marshes in the upstream reaches of the pond to retain nutrients before they enter the pond. Other possible activities include: improved storm water management, shoreline erosion control, and dredging of lake sediments. In addition, efforts may be made to enhance the recreational fishing of the pond.

The total project cost for the planned restoration comes to $520,000. Of this, $200,000 is available as a 50/50 grant from the State Small Creeks and Estuaries Restoration program, which has to be matched by the City of Salisbury. The State of Maryland has agreed to loan the city $150,000 from the SRF to meet its match requirement, the balance of the $50,000 to be met with in-kind services. The city will pledge to repay the loan, though the exact mechanism for repayment is not yet set. Of the remaining $120,000, $90,000 may be provided by a 75/25 grant from the Maryland Sediment and Stormwater Administration, with the city providing a $30,000 match.

The funding for this project provides another example of how, with some creative thought, SRF funds can be used to help address nonpoint sources of pollution. In this instance, some capital was needed by the local community to match a State grant. The necessary funds will be made available through the SRF. The city can then, through taxes or other revenue programs, raise the repayment funds over an extended period of time.

Contact: Diana Domotor
Chesapeake Bay and Special Projects Program
Maryland Department of the Environment
2500 Broening Highway
Baltimore, MD 21224
(301) 631-3681

AGRICULTURAL ACTIVITIES

There are a wide range of programs and activities that address agricultural sources of nonpoint pollution which could use SRF monies for implementation. The following examples illustrate activities that could be supported by SRF loans.

No-Till Drilling: Chestatee-Chattahoochee Resource Conservation and Development Council, Georgia

No-tillage drills can be used to seed the soil without plowing and the resultant destruction of existing vegetation. In the absence of other protective measures, conventional tilling may dramatically increase erosion and can present water quality problems associated with siltation and the accumulation of pesticides or other harmful chemicals. Moreover, use of no-till equipment reduces use of fuel and fertilizer.

While the benefits of no-till are many, initial adoption by small farmers may be impeded by high equipment costs. In Georgia, the Chestatee-Chattahoochee Resource Conservation and Development (RC&D) Council, representing 13 northeast Georgia soil and water conservation districts, received a State grant of $161,000 in 1988 to purchase seven tractors and eight no-till drills. The equipment was rented to landowners for a fee of $12/acre, $7 dollars of which went to the operator and $5 of which went back to the Council for maintenance of equipment. The program was so successful, being used on more than 5,000 acres on approximately 300 farms, that the Georgia Office of Energy Resources issued a grant of $500,000 in 1989 to establish a State-wide program. In December, 1989, 15,000 acres were planted, saving 72,000 tons of soil and 58,500 gallons of fuel.

Applicability to the SRF: While the Georgia program is driven in large part by fuel savings, it is having very beneficial results in reducing erosion and pollution of waterways. In this case, the capital needed to purchase equipment came from a series of State grants. However, some or all of the money could have been provided from an SRF. Fees paid to landowners could be adjusted, then, to help repay the loan as well as provide for maintenance of the vehicles.

Contact: Jerry Boling
RC&D Coordinator
Chestatee-Chattahoochee RC& D Council
126 Washington Street, S.E.
Gainesville, GA 30501
(404) 536-1221

Pesticide Application: Bootheel RC&D Council, Dexter, Missouri

Pesticides and fertilizers are often applied across fields at uniform rates, despite the wide variation of soil types and other conditions that can affect the amount needed to maintain yields. This results not only in the financial loss associated with the purchase and application of unneeded chemicals, but also poses a significant risk to the quality of local ground water and surface water resources. In order to try to address the problem of over application, the Bootheel RC&D Council has put together a project, in cooperation with the Soil Conservation Service (SCS), the University of Missouri Extension Service, and the Missouri Department of Natural Resources (DNR) to develop a detailed series of maps of agricultural land. The maps identify differences in soil types and mixtures, organic matter, fertility, level, and water holding capacity. Based on the maps, the project will make recommendations for varying application levels. In the future, it is hoped that these base maps will be used with computerized spreading machines to allow more efficient chemical application.

While it is not possible to determine precisely how much extra chemical application now reaches ground and surface water supplies, the RC&D did some preliminary analysis to estimate the amount of excess application. Looking at four crops (corn, cotton, bean, and sorghum) and making assumptions about the variability of soils in Missouri, the Council attempted to estimate the difference, on approximately 1.6 million acres, between the uniform application of chemicals and fertilizers to the amount used if application varied by soil. The Council estimated that there would be an over application of fertilizers sufficient to treat an additional 37,000 acres of corn and 72,000 acres of beans. Eliminating this usage would result in savings to farmers of about $1 million per year, without even including the yield loss that currently results from over application on some soils (and under application on others), which could amount to a monetary loss of over $8 million per year.

Funding for the demonstration project will come from several sources. Farmers have agreed to donate $2 per acre ($21,000), two local co-ops have each donated $2,000, the Agronomy Service Bureau (formed by local farmers) contributed $2,000, and local sponsors have secured the use of a computer and office space. The local contribution comes to $54,000, providing the match for a $93,060 60/40 grant from the State of Missouri Division of Environmental Quality. In addition, the SCS will provide detailed soil maps of the 10,500 acres, valued at $21,000.

Applicability to the SRF: Ironically, this specific activity is currently ineligible for use of SRF monies in Missouri because the State of Missouri does not authorize SRF funds for nonpoint source activities. That prohibition notwithstanding, the project does provide an excellent example of a creative way to address NPS problems and one which, in differing circumstances, could make use of the assistance available from a SRF to provide at least a portion of the money needed for the project. The farmers

who directly benefit from application of this analysis to their land, can pay fees (perhaps greater than the current $2/acre) to help repay any loan that was forthcoming from the SRF. Money can be raised to repay a loan just as it was to meet the local match requirements.

Contact: Mike Mick
Bootheel RC&D Coordinator
Bootheel RC&D Council
7 East Market
Dexter, Missouri 63841
(314) 624-7402

Animal Waste Management

As with storm water management systems, most lists of eligible expanded uses activities include those that address problems posed by animal waste on farms. These activities often require some initial capital investment and have an identifiable beneficiary who can be asked to bear at least a portion of the costs associated with the system. As noted earlier, the State of Delaware is considering funding such a program, at least in part, from its SRF.

The State of Utah has in place a revolving loan fund program, the Agricultural Research Development Loan (ARDL), that provides low interest loans for soil and water conservation practices, water quality practices, and emergency conservation measures. The loans are passed through local soil conservation districts which act to distribute the money to individual farmers and ranchers. Among the types of activities that have been funded through these loans are animal waste control projects and irrigation water management.

Applicability to the SRF: The development of management systems to address problems posed by animal waste or irrigation runoff seem especially well suited to the SRF. Low interest loans can be passed through the State to local entities such as Conservation or agricultural districts to individual landowners, who would then be responsible for repayment.

Contact: James A. Paraskeva
Utah Department of Agriculture
Salt Lake City, Utah
(801) 538-7172

GROUND WATER PROTECTION ACTIVITIES

SRFs may fund a variety of ground water management activities. In addition to the specific examples listed below, the SRF could also fund the identification, designation, and protection of wellhead protection areas (WHPA) or Special Area Protection programs. NPS managers and those most interested in ground water protection should work with SRF officials to identify activities that require some up-front capital. Individuals and businesses that live in or near the WHPA could provide some revenue to help repay the loan.

Septic System Assistance and Education Program: Jefferson County, Washington

The repair and replacement of failing septic systems can help reduce pollution to ground water and surface water resources. It is often, however, difficult to get homeowners to take necessary actions due to a number of reasons, including financial limitations. As part of an overall project to address water quality problems in the Quilinen Bay of Puget Sound, Jefferson County, Washington developed an innovative septic assistance program.

The program consists of public education (as always, an important part of any NPS program), problem identification, technical assistance, and financial assistance. The education program helped property owners understand the design, siting, and maintenance of septic systems and also addressed concerns they had about potentially burdensome repair requirements. The County provided technical assistance emphasizing possible low cost methods of system improvement and, where necessary, providing designs for system repair or replacement.

The County provided financial assistance to landowners in a number of ways. First, the technical assistance described above was provided free of charge. Moreover, the program provided loans, which, when repaid, were placed into a revolving loan fund. The program, which provided deferred payment two percent loans that did not accrue interest for five years, was very well received by residents.

Applicability to SRF: One of the major hurdles to gaining public participation in this septic improvement program was the availability of funding for needed repairs. With clearly identified recipients and beneficiaries, low interest loans could be provided through an SRF and the local entity to landowners, who would provide the needed revenue stream to repay the loan. Although the immediate threat in this case was to surface water resources, similar efforts could be undertaken where ground water

pollution from leaking septic tanks is a problem. This type of capital intensive NPS program is ideally suited to the SRF program.

Contact: Mr. David Goldsmith
Director
Jefferson County Planning and Building Department
P.O. Box 1220
Port Townsend, WA 98368
(206) 385-9140

Underground Storage Tank Program: Wyoming SRF

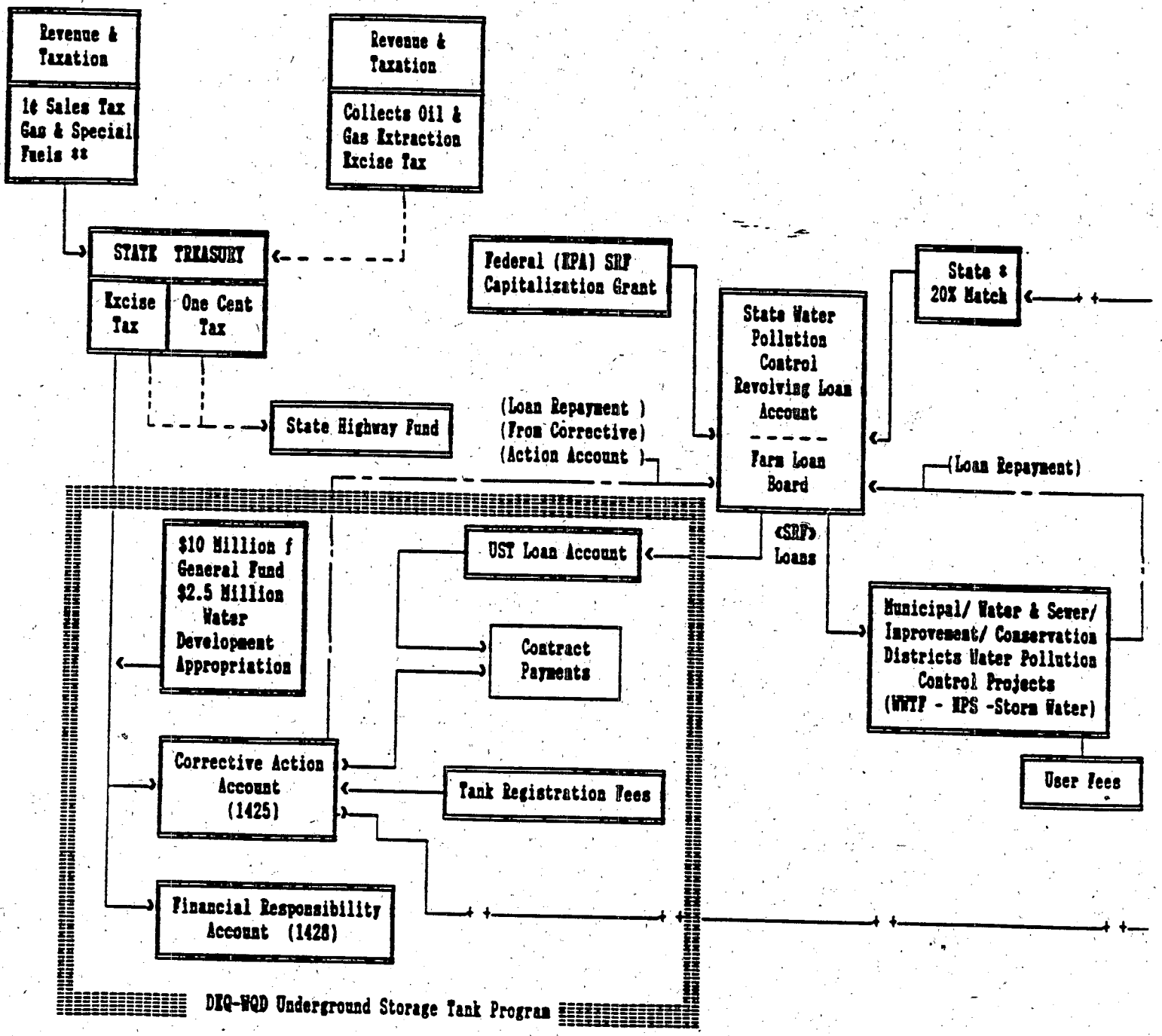
The State of Wyoming has decided to use funds available through the SRF for a program addressing the problems posed to ground water resources by leaking underground storage tanks. Use of the SRF for this purpose became possible when the State and the U.S. Environmental Protection Agency agreed to allow discharges from leaking underground storage tanks to be considered as a nonpoint source of pollution. As shown in Figure 6 (provided by the State of Wyoming), SRF monies would be deposited in the UST Loan Account to be used for Corrective Action Account projects. To be eligible for use of the fund, a tank owner or operator would have to pay a tank fee, conduct a site assessment, and take corrective action if contamination is found.

The payback to the SRF would come from a one-cent tax now being assessed on all gasoline and diesel fuel sales and which is currently collected in the Corrective Action Account. This represents an excellent example of the use of a dedicated tax to repay the SRF loan.

As of March, 1990, the legislation necessary to establish the SRF and to allow for the flow of monies as outlined in Figure 6 has been introduced, but has yet to be finalized by the Wyoming State legislature. The State currently anticipates that up to $47 million will be available in the UST loan account by October 1993.

Contact: Mike Hackett
Wyoming Water Quality Division
Herschler Building
4th Floor West
Cheyenne, WY 82002
(307) 777-6351

Figure 6
PROPOSED WYOMING STATE REVOLVING LOAN FUND UNDERGROUND STORAGE TANK PROGRAM



‡‡ Revenue & Taxation collects 1¢ per gallon sales tax on all gas and special fuels used in Wyoming. Collection ceases on the 1st day of 3rd month when the $10 million is repaid to the General Fund, $2.5 million is repaid to Water Development Fund, and the amount in both the Corrective Action Account and the Financial Responsibility Account each exceed $10 million. Tax is re-instated 1st day of the 3 month when either account falls below $4 million.

‡ State Match from the Corrective Action Account and $10 Million General Fund $2.5 Million Water Development Appropriation.

f After the effective date of the bill this Fund is transferred to the Corrective Action Account.

V. SUMMARY AND CONCLUSIONS

It is clear that nonpoint sources of pollution continue to pose a major threat to the nation's estuaries, wetlands and other surface and ground water resources. Responding to this threat will require that resource managers at the local, State, and Federal level employ creative remedies and seek out financing from as many sources as possible. There are numerous State and Federal grant programs available. Effective NPS managers should also take advantage of the loans or other similar assistance that can be obtained from State Revolving Loan Funds.

Use of this funding resource will require that NPS and other water quality managers at the State and local level become more familiar with the SRF program, the people involved in its administration, and the steps needed to get their activities included in the IUP and, therefore, make them eligible for SRF support. In addition, SRF managers at the State level will have to take a more active role in bringing the NPS people into the SRF process.

There are significant opportunities for the SRF program to assist efforts to control nonpoint sources of pollution. Loans can be used for minimizing the impacts of storm water or irrigation runoff, critical estuarine habitat identification, equipment purchase, educational assistance, or a host of other activities. In many cases, local governments do not have immediate access to needed funds for an activity, but could repay a low interest SRF loan through tax revenues, fees, or some other source. There are several potential avenues by which funds can be raised to repay the loans.

The monies available through the SRF can be an important component of States' efforts to address a range of water quality problems. Given the scope of the problems facing water quality managers and the relative lack of funds with which to address them, States and local communities should aggressively pursue the use of the SRF to fund expanded uses activities.

APPENDIX A

GUIDANCES RELATING TO FUNDING OF EXPANDED USES

As of August 1990

- EPA Ground Water Protection Strategy, OW,1984.
- Nonpoint Source Guidance, OWRS, Dec. 1987.
- Guidance for Management of Section 205(j)(i) and Section 604(b) Funds During Fiscal Years 1988-1990, OWRS, Aug. 1987.
- Initial Guidance for State Revolving Funds, OMPC, Jan. 1988.
- The National Estuary Program and Interim Final Guidance on the Contents of a Governor's Nomination, OMEP, April 1988.
- Identifying and Prioritizing Enforcement Cases at Class V Wells and Available Enforcement Options, ODW, April 1988.
- FY 1989 State Project Priority List Guidance, OMPC, April 1988.
- Section 205(j)(5) funding for NPS Development and Implementation, OWRS, June 1988.
- Guidance on Nonpoint Source Grants Management Issues, OWRS, July 1988.
- Clean Water Act Funding Sources and Their Uses for the Implementation of State Nonpoint Source Management, OWRS, August 1988.
- Discussion Paper on Alternative Financing Mechanisms for State Water Programs, OW, January 1989.
- Use of 205(j)(5) Funds to Implement NPS Management, OWRS, February 1989.
- Funding of Nonpoint Source, Ground Water, Estuary, and Wetlands Activities Under Titles II, III, and VI of the Clean Water Act, OMPC, May 1989.
- Guidance for State Ground Water Strategy Grant Work Program Under Section 106 of the Clean Water Act, OGWP, issued annually.
- Funding Ground-Water Protection: A Quick Reference to Grants Available Under the Clean Water Act, OGWP, June 1989.
- Criteria for Shallow Injection Well Demonstration Projects, ODW, June 1989.
- Financing for Estuary Protection and Restoration Under the Clean Water Act, OMEP, in preparation.
- National Guidance: Wetlands and Nonpoint Source Control Programs, OWRS and OWP, June 1990
- Planning Targets for FY 1990 Nonpoint Source Program Implementation Grants, OW, December 1989
- Award and Management of FY 1990 Section 319(h) Grants, OW, December 1989
- National Combined Sewer Overflow Control Strategy, OWEP, August 1989

APPENDIX B

SUMMARY OF FUNDING OPPORTUNITIES FOR EXPANDED USES UNDER THE CLEAN WATER ACT

TITLE II

201(g)(1)(B)	Grants for development or implementation of NPS activities under Section 319(h) and ground water activities under Section 319(i). May use up to twenty percent of State Title II allotment for Section 320 purposes. To the extent included in the approved State NPS Management Program or State Ground Water Protection Strategy incorporated into the Management Program by reference, wetlands and estuary activities may also be funded. Activities must compete for funding with otherwise ineligible Section 212 wastewater facilities (e.g., collector sewers).
205(j)(1)	Funds reserved for water quality management planning, including planning for State NPS management programs called for under Section 319(b)(1) and ground water planning activities under Section 319(i). (Up to one percent of each State's Title II allotment or $100K, whichever is greater.)
205(j)(5)	Funds are reserved for the award of Section 319 grants to develop and implement NPS assessment reports and State NPS management programs and to support ground water activities under Section 319(i). (Up to one percent of each State's Title II allotment or $100K, whichever is greater.)
205(l)	A national reserve for marine combined sewer overflows (CSOs) and estuaries. One-third of the funds are available to implement Section 320, the National Estuary Program. These funds may be used to convene management conferences, conduct assessments, develop management programs, or implement control measures. Two-thirds of the funds are available to address water quality problems caused by CSOs in marine bays and estuaries. (FYs 89 and 90, 1/2 percent of national Title II appropriation)

TITLE III

319(h)	Grants to assist States in implementing State NPS Management Programs. If included in the Management Program or State Ground Water Protection Strategy which is incorporated into the Management Program by reference, ground water, estuary, and wetlands activities may be funded under Section 319(h). $40M appropriated for FY 1990. Authorizations (for subsections h and i): FY 88, $70M; FYs 89 & 90, $100M; FY 91, $130M.)
319(i)	Grants to assist States in carrying out ground water quality protection activities which advance the State toward implementation of a comprehensive NPS pollution control program. Activities may include research, planning, ground water assessments, demonstration programs, enforcement, technical assistance, education and training to protect the quality of ground water and to prevent contamination of ground water from NPS pollution. (Authorizations (for h and i): FY 88, $70M; FYs 89 & 90, $100M; FY 91, $130M.)
320	Grants to State, interstate and regional water pollution control agencies, State coastal zone management agencies, interstate agencies, or other agencies and organizations to develop estuary conservation and management plans. Activities may include research, surveys, studies, modelling, and other related technical work. (Authorization: $12M annual FY 87 - 91)

TITLE VI

603(c)(2)	SRF funds may be used for implementation of State NPS Management Programs under Section 319 and for development and implementation of a conservation and management plan under Section 320. To the extent that they are included in State NPS Management Programs or estuary conservation and management plans under the provisions of Sections 319 and 320, wetlands activities may be funded by the SRF.

604(b) The only Title VI reserve. Provides funds as grants for water quality management planning under Sections 205(j) and 303(e). (One percent or at least $100K each fiscal year from State Title VI allotment).

ELIGIBLE GRANTEES:

EPA will generally make Section 319 grants to the appropriately designated State lead agency. If a State does not prepare a NPS management program, State-approved local agencies which prepare management plans may receive grants. In addition, the State's NPS management program may passthrough grant funds to entities responsible for implementing activities. Persons may receive NPS funds if related to the costs of demonstration projects.

Under Section 320, EPA can award grants to State agencies, public or nonprofit private agencies, academic institutions, and others. Recipients of Section 320 grants are required to demonstrate that at least 25 percent of the aggregate annual costs of developing a CCMP will be provided by non-Federal members of the NEP management conference.

GRANT/LOAN CONDITIONS:

For implementation grants under Sections 319(h) and (i) and 201(g)(1)(B), the State must have an EPA-approved NPS Assessment Report and NPS Management Program. Section 319(h) and 201(g)(1)(B) implementation grants require a 40 percent State match; Section 319(i) grants require a 50 percent State match. There is no Federal local match requirement. Section 320 grants may receive up to 75 percent Federal share.

APPENDIX C

STATE AND REGIONAL CONTACTS

I. STATE SRF CONTACTS

Region 1

Connecticut:	Robert Norwood	(203) 566-2373
Maine:	Charles King	(207) 289-7800
Massachusetts:	Brian Jeans	(617) 292-5733
New Hampshire:	John R. Bush	(603) 271-2001
Rhode Island:		
Vermont:	William Brierley	(802) 244-8744

Region 2

New Jersey:	Nicholas G. Binder	(609) 292-1820
New York:	Fred Esmond	(518) 457-6252
Puerto Rico:	Orlando Diaz Rodrigo	(809) 722-4170

Region 3

Delaware:	Roy Parikh	(302) 736-5081
Maryland:	Ken McElroy	(301) 631-3117
Pennsylvania:	Stu Gansell	(717) 787-3481
Virginia:	Donald Wampler	(804) 367-0993
West Virginia:	Mike Johnson	(304) 348-0641

Region 4

Alabama:	Truman Green	(205) 271-7800
Florida:	Don Berryhill	(904) 488-8163
Georgia:	Verona Barnes	(404) 656-4708
Kentucky:	William Gatewood	(502) 564-3410
Mississippi:	Mark Smith	(601) 961-5171
North Carolina:	Coy M. Batten	(919) 773-6900
South Carolina:	Jim Joy	(803) 734-5300
Tennessee:	Evan Davis	(615) 741-6038

Region 5

Illinois:	James B. Park	(217) 782-2027
Indiana:	James Cagnina	(317) 232-8631
Michigan:	Thomas L. Kamppinen	(517) 373-4718
Minnesota:	Terry Kuhlman	(812) 296-4704
Ohio:	Greg Smith	(614) 644-2826
Wisconsin:	Roger Larson	(608) 266-2666

Region 6

Arkansas:	Tonie Patterson	(501) 562-8910
Louisiana:	William B. DeVille	(504) 342-0067
New Mexico:	David Hanna	(505) 827-2812
Oklahoma:	Paul Hodge	(405) 271-7342
Texas:	George Green	(512) 463-8489

Region 7

Iowa:	Wayne Farrand	(515) 281-8877
Kansas:	Rod Geisler	(913) 296-5527
Missouri:	Ed Knight	(314) 751-5626
Nebraska:	Rick Bay	(402) 471-4200

Region 8

Colorado:	Debby English	(303) 331-4574
Montana:	Scott Anderson	(406) 444-2406
North Dakota:	Jeff Hauge	(701) 244-2354
South Dakota:	Mark Steichen	(605) 773-4216
Utah:	Walter Baker	(801) 538-6164
Wyoming:	Mike Hackett	(307) 777-7781

Region 9

Arizona:	William H. Shafer	(602) 257-2220
California:	James W. Baetge	(916) 445-3085
Hawaii:	George Woolworth	(808) 543-8285
Nevada:	James B. Williams	(702) 687-5870

Region 10

Alaska:	Dick Marcum	(907) 465-2610
Idaho:	Robert Braun	(208) 334-5855
Oregon:	Maggie Conley	(503) 229-5257
Washington:	Dan Filip	(206) 459-6061

II. NON-POINT SOURCE COORDINATORS BY STATE

Region 1

Connecticut:	Fred Banach	(203) 566-2588
Maine:	Ronald Dyer	(207) 289-3901
Massachusetts:	Eben Chesebrough	(617) 727-0437
New Hampshire:	E. Ann Poole	(603) 271-3503
Rhode Island:	Elizabeth Scott	(401) 277-3434
Vermont:	Stephen Syz	(802) 244-6951

Region 2

New York:	Philip DeGaetano	(518) 457-3656
New Jersey:	George Horzepa	(609) 633-7021
Puerto Rico:	Thomas Rivera	

Region 3

D. C.:	James R. Collier	(202) 767-7370
Delaware:	Richard Bennett	(302) 736-5409
Maryland:	Molly Cannon	(301) 631-3552
Pennsylvania:	Glenn Rider	(717) 787-2666
Virginia:	William D. Brannon	

Region 4

Alabama:	Tim Forester	(205) 271-7839
Florida:	Eric H. Livingston	(904) 488-0732
Georgia:	Jim Chandler	(404) 656-4905
Kentucky:	Maureen Merkler	(502) 564-3410
Mississippi:	Robert Seyfarth	(601) 961-5160
North Carolina:	Beth McGee	(919) 733-5083
South Carolina:	Doug Fabel	(803) 734-5228
Tennessee:	Andrew N. Barrass	(615) 741-0638

Region 5

Illinois:	Richard J. Mollahan	(217) 782-3362
Indiana:	James K. Ray	(317) 243-5145
Michigan:	Steve Eldredge	(517) 335-4177
Minnesota:	Wayne P. Anderson	(612) 296-7323
Ohio:	Carl A. Wilhelm	(614) 644-2131
Wisconsin:	Michael Llewelyn	(608) 266-9254

Region 6

Arkansas:	Lamar Janes	(501) 562-7444
Louisiana:	Barbara Romanowsky	(504) 342-6369
New Mexico:	Jim Piatt	(505) 827-2828
Oklahoma:	John Hassle	(405) 521-4829
Texas:	Ralf Evans	(512) 463-8447

Region 7

Iowa:	Ubbo Agena	(515) 281-6402
Kansas:	Donald Snethen	(913) 296-5567
Missouri:	Betty Ganon	(314) 751-7144
Nebraska:	Don Zaroban	(402) 471-4700

Region 8

Colorado:	Greg Parsons	(303) 331-4756
Montana:	Jack Thomas	(406) 444-2406
North Dakota:	Daniel Stewart	(701) 224-2354
South Dakota:	Duane Murphy	(605) 773-4216
Utah:	Roy Gunnell	(801) 538-6146
Wyoming:	Beth Pratt	(307) 777-7079

Region 9

Arizona:	Carol Russell	(602) 392-4066
California:	Stan Martinson	(916) 322-6576
Hawaii:	Brian J.J. Choy	(808) 543-8335
Nevada:	James Cooper	(702) 885-4670

Region 10

Alaska:	David C. Sturdevant	(907) 465-2653
Idaho:	Al E. Murrey	(208) 334-5860
Oregon:	Bruce Sutherland	(503) 229-6035
Washington:	Richard Wallace	(206) 438-7069

III. GROUND WATER PROTECTION COORDINATORS BY STATE

Region 1

Connecticut:	Dept. of Envir. Prot.	(203) 566-3245
Maine:	State Planning Office	(207) 289-3261
Massachusetts:	Dept. of Envr. Qual. Eng.	(617) 292-5770
New Hampshire:	Dept. of Env. Services	(603) 271-3503
Rhode Island:	Dept. of Env. Mgt.	(401) 277-2771
Vermont:	Div of Env. Health	(802) 863-7220

Region 2

New York:	Dept. of Env. Conserv.	(518) 457-6674
New Jersey:	Div. of Water Resources	(609) 292-7219
Puerto Rico:	Env. Quality Board	(809) 725-5140
Virgin Islands:	Dept. of Plg. & Nat. Res.	(809) 774-3320

Region 3

Delaware:	Div. of Water Resources	(302) 736-4793
Maryland:	Dept. of the Env.	(301) 631-3625
Pennsylvania:	Dept. of Env. Resources	(717) 787-5028
Virginia:	Water Control Board	(804) 257-6384

Region 4

Alabama:	Dept. of Env. Mgt.	(205) 271-7700
Florida:	Dept. of Env. Reg.	(904) 488-3601
Georgia:	Dept. of Nat. Resources	(404) 656-3500
Kentucky:	Division of Water	(502) 564-3410
Mississippi:	Bur. of Poll. Control	(601) 961-5171
North Carolina:	Div. of Env. Mgt.	(919) 733-7015
South Carolina:	Dept. of Health & Env.	(803) 734-5310
Tennessee:	Office of Water Mgt.	(615) 741-3657
West Virginia:	Env. Engineering Div.	(304) 348-2981

Region 5

Illinois:	IL Env. Prot. Agency	(217) 782-9540
Indiana:	Dept. of Env. Mgt.	(317) 232-8595
Michigan:	Dept. of Nat. Resources	(517) 373-1947
	Dept. of Public Health	(517) 335-8318
Minnesota:	Div. of Env. Health	(612) 623-5320
Ohio:	Div. of Ground Water Mgt.	(614) 481-7183
Wisconsin:	Div. of Env. Standards	(608) 267-7651

Region 6

Arkansas:	Dept. of Health	(501) 661-2623
Louisiana:	Dept. of Env. Quality	(504) 342-7015
New Mexico:	Env. Improvement Div.	(505) 827-2919
Oklahoma:	Dept. of Pollution Cont.	
Texas:	Texas Water Commission	(512) 463-7830

Region 7

Iowa:	Env. Protection Div.	(515) 281-5211
Kansas:	Dept. of Health & Env.	(913) 862-9360
Missouri:	Dept. of Nat. Resources	(314) 751-5331
Nebraska:	Water Quality Div.	(402) 471-2186

Region 8

Colorado:	Dept. of Health	(303) 332-4534
Montana:	Dept. of Health & Env.	(406) 444-2544
North Dakota:	Env. Health Section	(701) 224-2200
South Dakota:	Div. of Env. Quality	(605) 773-5047
Utah:	Bur. of Water Poll. Con.	(801) 538-6146
Wyoming:	Water Quality Div.	(307) 777-7781

Region 9

Arizona:	Dept. of Health Services	(602) 257-2300
California:	State Water Res. Con. Bd.	(916) 445-1553
Hawaii:	Dept. of Health	(808) 548-2235
Nevada:	Div. of Env. Protection	(702) 885-4670

Region 10

Alaska:	Dept. of Env. Conserv.	(907) 465-2600
Idaho:	Dept. of Health & Welfare	(208) 334-5867
Oregon:	Dept. of Env. Quality	(503) 229-6295
Washington:	Dept. of Soc. & Health	(206) 753-7039

IV. REGIONAL STATE REVOLVING FUND COORDINATORS

Guy St. Andre
Water Management Division
EPA Region I
JFK Federal Building
Boston, MA 02203
FTS 835-3571
(617) 565-3571

Pat Harvey
Water Management Division
EPA Region II
26 Federal Plaza
New York, NY 10278
FTS 264-8958
(212) 264-8958

Les Reed
Water Management Division
EPA Region III
841 Chestnut Street
Philadelphia, PA 19107
FTS 597-8821
(215) 597-8821

Connie Chandler
Water Management Division
EPA Region IV
345 Courtland Street, NE
Atlanta, GA 30365
FTS 257-3633
(404) 347-3633

Gene Wojcik
Water Management Division
EPA Region V
230 S. Dearborn Street
Chicago, IL 60604
FTS 886-0174
(312) 886-0174

George Horvath
Water Management Division
EPA Region VI
1445 Ross Avenue, 12th Floor
Dallas, TX 75202-2733
FTS 255-7120
(214) 655-7120

Rosalie Minor
Water Management Division
EPA Region VII
726 Minnesota Avenue
Kansas City, KS 66101
FTS 551-7437
(913) 551-7437

Jack Rychecky
Water Management Division
EPA Region VIII
999 18th Street
Denver, CO 80202-2413
FTS 330-1551
(303) 293-1551

Juanita Licata
Water Management Division
EPA Region IX
1235 Mission Street
San Francisco, CA 94105
FTS 465-2131
(415) 472-2131

Jim Werntz
Water Management Division
EPA Region X
1200 Sixth Avenue
Seattle, WA 98101
FTS 399-2634
(206) 442-2634

V. REGIONAL NONPOINT SOURCE COORDINATORS

Nancy Sullivan
Water Management Division
EPA Region I
JFK Federal Building
Boston, MA 02203
FTS 835-3546
(617) 565-3546

Tony Dore
Water Management Division
EPA Region II
26 Federal Plaza
New York, NY 10278
FTS 264-2059
(212) 264-2059

Hank Zygmunt
Water Management Division
EPA Region III
841 Chestnut Street
Philadelphia, PA 19107
FTS 597-3429
(215) 597-3429

Beverly Ethridge
Water Management Division
EPA Region IV
345 Courtland Street, NE
Atlanta, GA 30365
FTS 257-3429
(404) 347-2126

Tom Davenport
Water Management Division
EPA Region V
230 S. Dearborn Street
Chicago, IL 60604
FTS 886-0209
(312) 886-0209

Susan Alexander
Water Management Division
EPA Region VI
1445 Ross Avenue, 12th Floor
Dallas, TX 75202-2733
FTS 255-7140
(214) 655-7140

Julie Elfving
Water Management Division
EPA Region VII
726 Minnesota Avenue
Kansas City, KS 66101
FTS 757-2817
(913) 236-2817

Roger Dean
Water Management Division
EPA Region VIII
999 18th Street
Denver, CO 80202-2413
FTS 564-1517
(303) 293-1517

Jovita Pajarillo
Water Management Division
EPA Region IX
215 Fremont Street
San Francisco, CA 94105
FTS 454-0894
(415) 974-0894

Elbert Moore
Water Management Division
EPA Region X
1200 Sixth Avenue
Seattle, WA 98101
FTS 399-4181
(206) 442-4181

VI. REGIONAL GROUND WATER COORDINATORS

Robert Mendoza
Water Management Division
EPA Region I
JFK Federal Building
Boston, MA 02203
FTS 835-3600
(617) 565-3600

John Malleck
Water Management Division
EPA Region II
26 Federal Plaza
New York, NY 10278
FTS 264-5635
(212) 264-5635

Stuart Kerzner
Water Management Division
EPA Region III
841 Chestnut Street
Philadelphia, PA 19107
FTS 597-8826
(215) 597-8826

Ron Mikulak
Water Management Division
EPA Region IV
345 Courtland Street, NE
Atlanta, GA 30365
FTS 257-3866
(404) 347-3866

Jerri-Anne Garl
Water Management Division
EPA Region V
230 S. Dearborn Street
Chicago, IL 60604
FTS 886-1490
(312) 886-1490

Erlece Allen
Water Management Division
EPA Region VI
1445 Ross Avenue, 12th Floor
Dallas, TX 75202-2733
FTS 255-6446
(214) 655-6446

Don Toensing
Water Management Division
EPA Region VII
726 Minnesota Avenue
Kansas City, KS 66101
FTS 551-7033
(913) 236-2970

James Dunn
Water Management Division
EPA Region VIII
999 18th Street
Denver, CO 80202-2413
FTS 330-1796
(303) 293-1796

Doris Betuel
Water Management Division
EPA Region IX
215 Fremont Street
San Francisco, CA 94105
FTS 465-2098

William Mullen
Water Management Division
EPA Region X
1200 Sixth Avenue
Seattle, WA 98101
FTS 399-1216
(206) 442-1216

VII. REGIONAL WETLANDS COORDINATORS

Wetlands Protection Section
Water Management Division
EPA Region I
JFK Federal Building
Boston, MA 02203
FTS 835-4421
(617) 565-4421

Wetlands Section
Water Management Division
EPA Region II
26 Federal Plaza
New York, NY 10278
FTS 264-5170
(212) 264-5170

Wetlands & Marine Policy Section
Water Management Division
EPA Region III
841 Chestnut Street
Philadelphia, PA 19107
FTS 597-9301
(215) 597-9301

Wetlands Planning Unit
Water Management Division
EPA Region IV
345 Courtland Street, NE
Atlanta, GA 30365
FTS 257-2126
(404) 347-2126

Wetlands Protection Section
Water Management Division
EPA Region V
230 S. Dearborn Street
Chicago, IL 60604
FTS 353-2079
(312) 353-2079

Technical Assistance Section Water
Management Division
EPA Region VI
1445 Ross Avenue, 12th Floor
Dallas, TX 75202-2733
FTS 255-2263
(214) 655-2263

Wetlands Protection Section
Water Management Division
EPA Region VII
726 Minnesota Avenue
Kansas City, KS 66101
FTS 551-7573
(913) 551-7573

Water Quality Requirements Section
Water Management Division
EPA Region VIII
999 18th Street
Denver, CO 80202-2413
FTS 330-1575
(303) 293-1575

Wetlands Section
Water Management Division
EPA Region IX
215 Fremont Street
San Francisco, CA 94105
FTS 465-2180
(415) 744-2180

Water Resources Assmt. Section
Water Management Division
EPA Region X
1200 Sixth Avenue
Seattle, WA 98101
FTS 399-1412
(206) 442-1412

VIII. EPA REGIONAL AND STATE NATIONAL ESTUARY PROGRAM CONTACTS

Region 1

Buzzards Bay, MA	EPA	Carol Kilbridge	(617) 565-3514
	MA	Joseph Costa	(508) 746-3600
Casco Bay, ME	EPA	Mark Smith	(617) 565-3514
Long Island Sound, NY/CT	EPA	Susan Beede	(617) 565-3550
	EPA	Mark Tedesco	(212) 264-5170
	CT	Paul Stacey	(203) 566-7049
	NY	Karen Chytalo	(519) 751-7900
Massachusetts Bays, MA	EPA	Matt Liebman	(617) 565-3514
Narragansett Bay, RI	EPA	Katrina Kipp	(617) 565-3523
	RI	Caroline Karp	(401) 277-3165

Region 2

New York - New Jersey Harbor, NY/NJ	EPA	Seth Ausubel	(212) 264-5170
	NY	Karen Chytalo	(519) 751-7900
	NJ	Mary Gastrich	(609) 633-7020

Region 3

Delaware Estuary, DE/NJ	EPA	Barbara Finazzo	(212) 264-5170
	EPA	Marria O'Malley	(301) 266-9180
	NJ	Mary Gastrich	(609) 633-7020
	PA	William Johnson	(717) 783-9500
	DE	Marjorie Crofts	(302) 736-4590
Delaware Inland Bays, DE	EPA	Krista Mendelman	(215) 597-3360
	DE	John Schneider	(302) 736-4590

Region 4

Albemarle-Pamlico Sounds, NC	EPA	Ted Bisterfeld	(404) 347-2126
	NC	Robert Holman	(919) 733-0314
Indian River Lagoon, FL	EPA	Carol Tappas	(404) 347-2126
Sarasota Bay, FL	EPA	Rhonda Evans	(404) 347-2126
	FL	Mark Alderson	(813) 388-3318
Tampa Bay, FL	EPA	Rhonda Evans	(404) 347-2126

Region 6

Barataria-Terrebonne Estuary, LA	EPA	Barbara Keeler	(214) 655-6680
Galveston Bay, TX	EPA	Ken Teague	(214) 655-2100
	TX	Frank Shipley	(713) 488-9495

Region 9

San Francisco Bay, CA	EPA	Amy Zimpfer	(415) 464-7990
Santa Monica Bay, CA	EPA	Paul Jones	(415) 974-9812
	CA	Catherine Tyrrell	(213) 620-4038

Region 10

Puget Sound, WA	EPA	Jack Gakstatter	(206) 442-0966