States and Systems Gear Up for DWSRF

by P.J. Cameon
Water Sense Associate Editor

State officials are actively working to develop their new drinking water state revolving fund (DWSRF) programs, with several nearly ready to submit applications for federal funding, or “capitalization” grants.

Each state has the opportunity to set up a revolving fund to help finance drinking water projects. The U.S. Environmental Protection Agency (EPA) is making grants available to help states capitalize, or start up, their revolving funds. These new funds are similar to the existing clean water SRFs for wastewater projects.

States will help finance water projects using their DWSRF money. As more capitalization money enters the funds and as systems begin repaying their debts, more money will be available to finance other projects. Many states already operate similar drinking water funds using limited state funding.

Jamie Bourne, project manager of EPA’s DWSRF program, said many states are still developing priority lists to determine which projects will receive DWSRF assistance. States are also determining how their capitalization grants will be divided between project funding and eligible “set-aside” activities.

While state officials develop their individual DWSRFs, local officials in need of funding Continuing the page 8

When Natural Disasters Strike: Is your water system prepared?

by Jeremy Canody
NDWC Contributing Writer

When more than 30 inches of rain fell in eastern Texas in the fall of 1994, floodwaters devastated low-lying subdivisions, businesses, and streets. Thousands were forced from their homes, and water utilities in the region were disabled for more than a week.

As a result, these water systems were left with submerged booster pumps and badly damaged electrical and chemical feed systems. In some cases, water tanks were pulled from their foundations by the raging waters.

When a natural disaster strikes, an unprepared water system is no more immune from destruction than any other structure. However, preventive measures can be taken—both economically and structurally—to ensure that a water system minimizes the amount of damage inflicted by any future tornadoes, hurricanes, fires, floods, earthquakes, and other natural disasters.

Returning a water system to normal operation is essential to protecting public health and aiding the community’s recovery process.

Preparing for Natural Disasters

Since natural disasters usually offer little or no advance warning, it is important that water systems be prepared for nature’s destructive forces. And though some regions of the Continued on page 11

Residents of Hamilton, Illinois, initiate a sandbagging effort to save the community’s wastewater treatment plant from being submerged by the rising waters of the Mississippi River. Photo courtesy of the Illinois Rural Water Association
RUS Loan, Grant Programs May Be Simplified

The U.S. Department of Agriculture’s Rural Utilities Service (RUS) is considering changes that would simplify the application process for its loan and grant programs for water and wastewater projects.

The proposed changes, which could go into effect sometime this spring, include eliminating the pre-application process and simplifying language in the regulations. Additionally, the loan and the grant programs’ regulations, which until now have been published separately, would be combined into one set of regulations.

“We took a fresh look at the program, trying to find ways to streamline the process and make it work better,” said Jerry Cooper, an RUS loan specialist. “We’ve also looked at giving state-level RUS officials more discretion in implementing the program.”

Cooper said the pre-application process currently takes about 45 days to complete. Removing it will help shorten the application process, he said, but he added that communities may not see funding any quicker because of the existing backlog of funding requests.

The simplified language in the program regulations would allow communities to better identify for themselves what information they need to submit or what criteria they need to meet to qualify for funding, Cooper explained.

Other proposed changes include:
• changing the percentage of grant funding available to certain communities, and
• adopting the 1996 Farm Bill engineer requirement for project design (which states that communities must go through a competitive bidding process before hiring an outside engineer for project design).

More information on the proposed changes to the RUS regulations—once they are finalized—will be provided in future issues of Water Sense.

The revised regulations also will be available from the RUS Internet Web site at http://www.usda.gov/rus/home/home.htm.

More Funds Available from RUS

Rural Utilities Service (RUS) will be able to help more small and rural communities build and repair water and wastewater systems with an increased appropriation from Congress for the current fiscal year.

RUS can provide more than $739 million in loans and just over $500 million in grants during fiscal year 1997, which began October 1, 1996. By contrast, during fiscal year 1996 nearly $547 million was available for loans, and nearly $365 million was available for grants.

The increased funding should help reduce the existing backlog in RUS funding requests.

Information on applying for RUS loans and grants is available from state and local Rural Development offices. For the number of your state’s Rural Development office, call the National Drinking Water Clearinghouse at (800) 624-8301 or (304) 293-4191.

Water 2000 Information Is Now Online

People interested in learning more about the Water 2000 initiative can now get information via computer from an Internet Web site.

Located at http://www.usda.gov/rus/watr2000/index.htm, the Web site contains an overview of the U.S. Department of Agriculture’s (USDA) initiative to provide safe, affordable drinking water to every home in the U.S. by the year 2000.

Through its water and wastewater loan and grant programs, the USDA’s Rural Utilities Service (RUS) provides financial assistance to communities with populations of 10,000 or less to fund drinking water projects. In 1996, $70 million in RUS loans and grants was appropriated for Water 2000 activities, funding 54 projects in 35 states. “Descriptions of these 54 communities may be found on the Water 2000 Web site,” said Bart Handford, assistant to RUS Deputy Administrator

John Romano. “Users may simply click on states in the U.S. map provided to find which communities received funding and what projects the funding will be used for.”

The Web site also allows users to download Water 2000: A Plan for Action. This plan sets forth guidelines for RUS to build a national partnership with state governments, foundations, banks, corporations, and nonprofit organizations to attract private financial and technical resources.

For more information about Water 2000 or the Web site, call Handford at (202) 720-1261 or e-mail him at bhandford@rus.usda.gov.

People without Internet access may contact the National Drinking Water Clearinghouse at (800) 624-8301 or (304) 293-4191 for a listing and descriptions of Water 2000 projects.
Mansfield Succeeds Schwartz at RUS


Schwartz had headed RUS’s Water and Waste Programs since 1985, overseeing the federal government’s major source of funding for rural and small community drinking water and wastewater projects.

Schwartz’s leadership in rural community development spanned nearly 30 years. He began working with the Farmers Home Administration (FmHA) in his native area of central Pennsylvania in 1966, and joined the national office in 1978. During Schwartz’s tenure at RUS, his division established the National Drinking Water Clearinghouse.

A former dairy farmer, Schwartz holds a degree in agricultural engineering from Penn State University. After playing a role in cleaning the nation’s water, his plans for the immediate future include “going fishing.”

Mansfield began his rural development career in his home state of Vermont with the state Department of Water Resources. In 1971, he moved to the FmHA, where he first served as the engineer for much of New England, and then ran the agency’s Community Programs operations in New York from 1977 to 1991.

Following USDA’s 1991 reorganization eliminating FmHA and creating the Rural Development Administration (RDA), Mansfield directed RDA’s Northeast Regional Office. Most recently, he led the formation of the New York Rural Development Council as its executive director.

Mansfield is a registered professional engineer, with degrees from Tufts University and the University of Vermont. A commercial pilot and avid runner and cyclist, he has written five books on sports and fitness topics.

We will include more about Mansfield and his plans for RUS’s water and wastewater programs in the next issue of Water Sense.

Drinking Water Teleconference Scheduled

An interactive teleconference designed to help communities prevent pollution of their drinking water supplies will be held March 19 at downlink sites across the nation.

Tools for Drinking Water Protection: A Community Call to Action is a live, 90-minute video workshop that will address such issues as how to organize public education and awareness efforts, how to establish water quality monitoring programs, and where communities can turn for help.

The teleconference, sponsored by the League of Women Voters Education Fund (LWVEF) and the U.S. Environmental Protection Agency, will have three experts available to answer questions about local options communities can use to protect drinking water. The workshop also will include pretaped video case studies to illustrate strategies that can be adopted at the local level.

More than 300 downlink sites have been confirmed, including the National Drinking Water Clearinghouse’s facility at West Virginia University.

LWVEF has developed a Web site at http://www.drinkingwater.org that provides information about the teleconference.

For more information about downlink sites in your area or about coordinating your own downlink site, contact Bonnie Burgess, assistant project manager, at (202) 429-1965 or via e-mail at 75457.246@compuserve.com.

Two of Three RUS Loan Rates Decrease

Two of the three interest rates for Rural Utilities Service (RUS) water and wastewater loans have decreased slightly this quarter.

The poverty rate remains unchanged.

RUS issues loans at one of three interest rates, according to community qualification criteria. The rates for the second quarter of fiscal year 1997 apply to all loans issued from January 1 through March 31, 1997. These rates are:

- **poverty line rate:** 4.500 percent (unchanged from the previous quarter);
- **intermediate rate:** 5.000 percent (down .125 from the previous quarter);
- **market rate:** 5.500 percent (down .250 from the previous quarter).

RUS loans are administered through local or state Rural Development offices, which can provide specific information concerning RUS loans and applications.

For the number of your state Rural Development office, contact the National Drinking Water Clearinghouse at (800) 624-8301 or (304) 293-4191.

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Issuing Bonds: Getting Through the Process

By P.J. Cameron
Water Sense Associate Editor

Editor’s Note: As explained below, there are many variations to the bond-issuing process. While this article offers broad advice and information, the experts quoted focus primarily on their experiences and the process in their own states. The bond-issuing process may differ in your state.

How exactly does a small community go about issuing bonds for a drinking water project?

There are countless variations on the process depending on—among other factors—state and local laws, the amount being financed, and who the bond purchasers will be.

For instance, a community might determine its financial need and negotiate with a local bank that agrees to purchase the entire bond issue. A community might also hire a bond underwriter who will purchase the bond issue and resell the bonds to investors. And many types of federal financial assistance, such as Rural Utilities Service (RUS) loans, actually involve the exchange of bonds for funding.

System officials also might arrange funding through a bond bank, a state agency, or other organization that issues bonds on behalf of communities. (Bond banks will be covered in the Spring 1997 Water Sense.)

Since there are many variations in issuing bonds, it’s difficult to detail a step-by-step process that will fit all situations. However, there also are many similarities among bond transactions and certain cautions that apply to most situations.

Setting the Project’s Scope

A water project may be identified as part of a capital improvement plan or the expected addition of a new subdivision, according to Robb McCracken, program manager for the Montana Department of Commerce. Projects also are undertaken in response to the current or imminent failure of some part of the water system or a deficiency or violation identified by government regulators.

McCracken’s office recommends that system officials undertake a systematic study of their problem or need, followed by a review of all possible solutions to the problem and the estimated cost of each solution.

Once this process is completed, and a construction project is identified and the costs estimated, system officials are prepared to seek financing. State or federal government assistance, in the form of grants or low-interest loans, may be available to fund at least a portion of the project.

The government agency providing the assistance may require that the debt be issued in the form of bonds. Additionally, the amount of government financing available generally will not be enough to completely fund the planned project, meaning that other funding sources—such as bonds—will be required as well.

Outside Financial Expertise Needed

If system officials realize they will likely need to issue bonds, they should hire an outside financial expert to guide them.

In West Virginia, for instance, this initial guidance should come from a bond counsel, according to Vincent A. Collins, a bond counsel based in Clarksburg, West Virginia.

Collins, who primarily works with municipalities in his state, explained that a bond counsel should be used for all but the simplest bond issues.

The bond counsel, an attorney with expert knowledge of bond procedures and related state and federal regulations, will recommend whether system officials should pursue a bond issue or some other funding options. If bonds are in order, the bond counsel will suggest what types of bonds may legally be issued and provide advice on the relative merits of the different types of bonds that may be considered.

The bond counsel also can suggest whether an underwriter is needed to “package” and sell the bonds.

In David K. Shupe’s experience, this initial advice usually comes from a financial advisor, or an underwriter serving the role of a financial advisor. Shupe, a financial advisor with the Kansas Rural Water Finance Authority (KRWFA), works primarily with rural water districts in his state.

When involved in a bond issue, according to Shupe, a financial advisor performs many of the tasks that Collins performs as a bond counsel. However, he stressed that there are some legal functions that should be handled only by a bond counsel.

Where To Find Experts

One of the best ways to get information about prospective bond counsels or financial advisors is by word-of-mouth, according to Shupe. He said system officials should check with mayors of neighboring communities, or ask prospective counsels and advisors for the names of similar size communities they have worked with in the past.

The system’s staff attorney should be involved in the process, as well.

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The Bond Buyer’s Municipal Marketplace, popularly known as “The Redbook,” (see page 7 for ordering information) lists all bond counsels and underwriters by state.

State offices of the National Rural Water Association also may offer some advice on finding financial help. While most state Rural Water Association offices do not have a financial advisor available, they can inform water system officials of other sources of assistance.

Both Collins and Shupe stressed that communities should check references before hiring a bond counsel or financial advisor.

“Look at their experience in financing similar projects,” Shupe said. “Then look at the fees they are charging.”

Collins said a bond counsel’s fees can vary greatly depending on the type of financing arranged, but he added that most states’ ethics codes require bond counsels to enter into an agreement with the community on the fee to be charged and the scope of the services to be provided. Maintaining good relations (which translates into good word-of-mouth to other communities) is another incentive for bond counsels to provide good value and expert advice.

The financial expert will do most of the work in preparing a bond issue, but system officials should be aware of the process—as well as various bond features and their implications—and should plan to be involved in all major decisions. (See article on page 7.)

**Issuing Bonds—Key Steps**

Below are some general steps in the bond-issuing process. Keep in mind, however, that there are many variations to the process based on state laws, the type of entity (town government, rural water district, county) seeking funds, and the type of bond being used (general obligation or revenue).

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>Identify project; explore funding</td>
<td>First calculate exactly how much the project will cost and what, if any, government assistance is available. Later steps will help determine if a bond issue is the most advantageous route to round out financing.</td>
</tr>
<tr>
<td>Hire professional financial advisor</td>
<td>This professional, whether a bond counsel or financial advisor, will help the system determine whether bonds or some other type of loan should be used to finance the project debt.</td>
</tr>
<tr>
<td>Hire underwriter</td>
<td>An underwriter, to handle bond transactions, can be selected via a bidding process or through a negotiated deal with a single underwriter.</td>
</tr>
<tr>
<td>Determine amount of bond issue</td>
<td>This is calculated by adding the amount needed to complete project funding and the “soft costs,” or expenses associated with the bond issue.</td>
</tr>
<tr>
<td>Develop bond proposal; hold public hearing</td>
<td>Public hearings may be required at certain points in the process. But even if not legally required, a public education or approval effort should be undertaken.</td>
</tr>
<tr>
<td>Issue bonds; receive money</td>
<td>A bond issue can be purchased entirely by a single investor, or an underwriter can line up multiple investors.</td>
</tr>
<tr>
<td>Repay bond debt</td>
<td>Most systems will pay debt on a monthly basis to a principal and interest account. On a regular basis, typically every six months, money is paid from this account to the bondholders or to an intermediary who, in turn, pays the bondholders.</td>
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Issuing Bonds: Getting Through the Process

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project and all estimated “soft costs” associated with the bond process, which can include the financial advisor’s fee, the bond counsel’s fee, printing of the bonds, rating agency fees, bond insurance premiums, amounts needed to fund the “debt service reserve account,” and other related fees and expenses.

The bond counsel will help draft any resolutions or ordinances system officials need to approve during the bond issuing process.

If GO bonds are used, the bond counsel will advise system officials of any special elections that will be needed to obtain required voter approval. The bond counsel also will render an opinion of validity of the bond issue and, where appropriate, confirm that the issue meets all requirements for tax-exempt status. The system will be able to issue bonds at a lower interest rate if the investors who buy these bonds will not be required to pay federal income tax (and sometimes state income tax) on the interest payments they receive.

Working with a Single Investor

A relatively simple approach to a bond issue is to arrange for a single purchaser or investor. This single investor is likely to be a local bank or a government agency, particularly when the agency requires that its assistance be structured through bonds.

RUS, for example, frequently loans money for small systems by purchasing revenue bonds issued by the municipality. RUS requires that municipalities issuing these bonds hire bond counsel, but it doesn’t require that an underwriter be involved.

While Shupe said an underwriter is usually not needed when a single buyer is involved, he stressed that a bond counsel or financial advisor is still required to make sure the arrangement is advantageous to the system and that proper procedures are followed in preparing and issuing the bonds.

Shupe said local banks are frequently invited to invest in bond issues, but he could recall only one instance of a local bank buying an entire issue.

Underwriters: Linking Multiple Investors

An underwriter is not always needed for a bond issue, but when the bonds are sold to multiple investors and when the arrangement is complicated, an underwriter is generally needed to arrange the most beneficial package for the system. In addition to arranging the bond purchase, the underwriter recommends appropriate bond features—such as the maturity date, fixed versus variable interest rate, and the repayment schedule—to fit the situation.

The underwriter keeps a small percentage of the bond proceeds as his or her fee. This is called the underwriter’s discount.

System officials can often negotiate with an underwriter for the best deal. The best deal usually includes both a low interest rate on the bonds and a low underwriter’s discount.

System officials also can, with the bond counsel’s help, ask underwriters to submit bids. Collins said a system is likely to get a slightly better deal by having underwriters submit bids, but arranging the bid can be a complicated process.

Shupe made a rough analogy between a system selecting a bond underwriter and a family selecting a mortgage company to finance a new home. He said home buyers need to consider the mortgage interest rates offered by various lenders as well as the fee—or points—each lender charges to arrange financing.

Similarly, community officials have to weigh the proposed interest rate against the underwriter’s discount.

Just as with a mortgage, a minute difference in the interest rate can have a significant impact on repayment. Shupe gave the example of a system that arranged a small bond issue—approximately $740,000. An analysis of the bids showed the total amount of debt repayment for each varied widely. The total repayment under the best option was $60,000 less than the repayment under the least attractive option.

Bond Proceeds and Repayment

Once the bond sale is completed and the bonds are exchanged for their purchase price, the underwriter—if one is used—retains his or her discount, and the remaining funds are then usually deposited in a bank selected by the system. The money is often forwarded electronically via federal wire to the system’s bank account.

Funds are then repaid either directly to the investors—as is usually the case with a single investor—or to an intermediary who arranges payments.

As long as the funds are repaid according to schedule, the system usually has no further contact with the bond counsel, underwriter, or investors.

However, when an assistance organization such as KRWFA is involved in the transaction, various controls may be in place.

For instance, KRWFA no longer gives the community a lump sum payment after a bond sale. Continued on next page
"We now have a voucher system in place to make sure the systems truly do what they said they were going to do with those funds," Shupe said. With the voucher system, bond proceeds are sent directly to contractors upon completion of their work.

KRWFA also requires a separate reserve account to be used in case the system cannot meet a bond payment. This reserve requirement could equal as much as 10 percent of the principal amount of the bond issue. Money for this reserve account can come from either bond proceeds or other water system income.

Collins added that a bond counsel usually has no legal responsibility to assist a community after the bond transaction is completed. But he said bond counsel will usually help out with questions or other matters following completion of the transaction.

For the number of your state Rural Water Association office, contact the National Drinking Water Clearinghouse at (800) 624-8301 or (304) 293-4191.

Guide Available

The Bond Buyer’s Municipal Marketplace can be purchased from Thomson Financial Publishing by calling (800) 321-3373. The book, published semi-annually, is sold for $210, with discounts offered for multiple purchases. Copies also may be available at some university libraries or other larger libraries.

Bond Features Can Be Customized

Even with a bond counsel and underwriter on board, community officials still should be aware of how their bond sale is arranged and what "features" the bond contains. These features affect how soon bond debt can be retired, how the debt is repaid, and how interest is calculated.

- Bonds can be callable, meaning they can be repaid before the maturity date, or they can be non-callable. Callable bonds give communities more flexibility with future financial decisions, while non-callable bonds will bear slightly lower interest rates. The sooner the call date—the first day the system can repay the debt—the potentially higher the bond’s interest rate.

A bond with a term of 20 years or longer often will have a 10-year call date, according to Vincent A. Collins, a bond counsel based in Clarksburg, West Virginia. Collins said that, in his experience, 10 years is a good balance between long-term flexibility and a slightly higher interest rate.

The flexibility to call a bond can make a big difference down the road.

David K. Shupe, a financial advisor with the Kansas Rural Water Finance Authority, gave the example of community officials who issued long-term bonds in 1988 at what was then a typical fixed interest rate of approximately 8 percent, but the bond is non-callable. Recently, community officials realized that because they were locked into that 8 percent interest, they couldn’t take advantage of lower rates that became available.

- As mentioned in the Fall 1996 issue of Water Sense, there are many variations on bond repayment.

A community can simply make regularly scheduled interest payments until a bond matures and then pay off the principal. These payments, usually made semi-annually, are called coupon payments. In the past, bonds were issued with coupons attached; bond holders would mail in a coupon to receive payments. Today it is more common for the payments to be made automatically and electronically to the bond holder.

Coupon payments also can include a portion of the principal in addition to interest, while some bond arrangements, called zero-coupons, have no regular payments—simply a lump-sum payment at the end of the bond’s term.

Collins said underwriters can advise community officials on what type of coupon payments should be arranged.

- Another bond feature is the type of interest rate: fixed or variable. As with other types of debt, a fixed rate requires the community to pay the same rate of interest for the entire term, while variable rates fluctuate with some predetermined index. The advantage of a fixed-rate bond, according to Shupe, is that it allows officials to know in advance exactly how much to budget for coupon payments. A variable-rate bond generally starts out at a rate lower than a comparable fixed-rate bond, but is subject to rising rates and may end up being more expensive than the fixed-rate bond.

- A bond issue also can carry a rating, which is an indication of the financial soundness of the issuing community. A rating, determined by one of a handful of national firms, impacts the bond’s interest rate. However, smaller bond issues may be unrated. (Ratings will be discussed in the Spring 1997 Water Sense. Bond insurance also will be discussed in that issue.)

Communities should check these bond features before any deal is finalized. The best mix of these features depends on the issuing community’s needs and priorities.
**States and Systems Gear Up for DWSRF**

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should be educating themselves on the purpose of the new program and how to apply.

“Systems should start talking with their state officials now if they haven’t already,” Bourne said. This will ensure their needs for funding are at least being considered.

**Money Allocated to States**

Federal funding for the DWSRF program was a significant new feature of the Safe Drinking Water Act (SDWA) Amendments of 1996. The purpose of the program is to help drinking water systems finance infrastructure projects needed to encourage better public health protection and to ensure greater compliance with SDWA provisions.

Nearly $1.3 billion was appropriated for fiscal year 1997. A small portion of the appropriation was set aside to provide grants to Indian Tribes and Alaskan Native Villages. Another small portion was allotted to the District of Columbia and U.S. territories.

The remaining money is being allocated to the states based on an existing EPA formula that takes into account each state’s population, area, and number and types of water systems.

Funding after fiscal year 1997 will be divided among states based on the Drinking Water Infrastructure Needs Survey: First Report to Congress, which estimates how much all water systems would have to spend to be able to comply with federal drinking water regulations (see article on page 10). The needs survey, when released in February, is expected to demonstrate a need for funding well in excess of the amount appropriated for the DWSRFs.

EPA, in its interim guidance on the DWSRF program, states that several types of projects and activities are not eligible for funding. These restrictions, Bourne said, include projects primarily intended to serve future growth or that are related more to quantity than quality issues. Final guidance on the DWSRF program is expected by March (also see article on page 10).

**One State’s Response**

Colorado is one state that is prepared for federal restrictions on the types of projects that can be funded with DWSRF money.

As in other western states, many systems in Colorado rely on dams and associated water rights for their water supplies. However, projects involving dams, reservoirs, and water rights may not be eligible for DWSRF funding, a matter of contention with some officials in that part of the country.

Debbie English, program administrator with Colorado Water Quality Control, explained that her state already has a drinking water revolving fund in place. She said this state fund was established in 1995 in anticipation of the federal DWSRF.

English said requests for projects involving dams and water rights will be considered from other state funding sources.

Bourne praised the arrangement in Colorado, adding that it helps fund many worthwhile projects while reserving DWSRF funding for projects with clearer public health–related concerns.

**Funds Offer Substantial Savings**

In addition to being part of a new funding source, the loans available through the DWSRFs will offer a “fairly substantial savings” over some other sources for funding water projects, said Robert Lenna, executive director of the Maine Municipal Bond Bank.

The savings Lenna mentioned result in lower debt-service payments for projects, making them more affordable to the systems and ultimately to the systems’ customers through lower rates.

Lenna said he estimates the average interest rate for a DWSRF loan will be in the range of 3–4 percent, although some will be as low as 1 percent and others as high as 6 percent.

“That rate would average 2–3 percent below the rate applied to tax-exempt bonds the past few years,” Lenna explained. “When compared to a commercial loan, the interest rate savings would probably be even higher.”

Additionally, he explained that whereas DWSRF funding will be available for up to 20 years at fixed rates (30 years in some cases), commercial financing generally doesn’t extend that long, especially at fixed interest rates.

When DWSRF assistance for small communities is considered, the savings could be even greater. The assistance for small communities includes loans at even lower interest rates as well as various “set-asides.”

**Balancing Set-Asides**

Lenna explained that the DWSRF program could amount to a significant amount of funding. The SDWA reauthorization states that Congress could appropriate as much as $9.6 billion for the program through fiscal year 2003.

The format of the DWSRF program allows individual states to make some important decisions about how the federal dollars are used. One such decision is choosing a balance between addressing...
DWSRF Assistance for Small Communities

The drinking water state revolving funds (DWSRFs) will provide more than just financial assistance for water projects. There are several set-asides and other provisions to assist water systems, especially small systems. The chart below represents a simplified version of how DWSRF funding will be distributed, with an emphasis placed on items that are primarily geared toward small systems.

Federal Appropriation
Money appropriated by Congress each year. For the current fiscal year, nearly $1.3 billion is available.

Capitalization Grant
Each state’s share of the federal funds.

State funding pool for drinking water projects. This funding pool consists of the state’s capitalization grant minus state set-asides. It also includes matching funds (at least 20 percent) from the state. From the pool, states are to reserve 15 percent of the DWSRF funding for small systems. This guarantees that small systems get a share of the financing available in each state.

States can also reserve up to 30 percent for assistance to “disadvantaged” systems, many of which are small systems.

National set-asides are funds taken from the federal appropriation. Several are earmarked to help small communities.

• A 1.5 percent set-aside will be used to provide grants for water projects to benefit Indian Tribes and Native Alaskan Villages.

• In future years, a set-aside of up to 2 percent can be used to fund technical assistance efforts for systems serving fewer than 10,000 people.

• One provision of the 1996 SDWA reauthorization requires that all water system operators be certified. Set-asides in future years will reimburse systems serving fewer than 3,300 people for training costs associated with federal requirements.

State set-asides are allowed for several purposes. Some of these purposes are general, such as fund administration, while others are especially geared toward small communities.

• States can set aside up to 10 percent of their capitalization grants to help community water systems, especially small systems, boost their technical, managerial, and financial capabilities (capacity development).

• States also can set aside up to 2 percent of their capitalization grants to provide technical assistance to small communities.
Continued from page 8

the immediate needs of “disadvantaged” systems and having a larger amount of funding to meet long-term needs for all systems.

Each state may set aside up to 30 percent of its DWSRF funding to assist small water systems by providing subsidized loans.

States also can set aside a portion of their DWSRF funding to provide technical assistance and other help to small communities.

Use of these set-asides would result in less money available for project loans, which would result in a reduced level of loan repayments to the fund. That, in turn, would mean less money available to finance future projects.

Lenna said the immediate need to help small and disadvantaged systems is fairly clear, but it’s also important to generate a longer-term strategy for dealing with drinking water needs. He said a strong revolving fund should be part of any long-term strategy.

“Whether or not individual states take a lot of money out of their lending programs [to fund set-asides] will be a very interesting decision over the next few years,” Lenna said.

Bourne stressed that set-asides can be used for some important projects that are preventive and thereby may reduce the level of future infrastructure needs.

“There’s a need for states to balance the short-term objectives of preventive goals of set-asides with the long-term goal of creating a viable revolving program to meet drinking water needs,” Bourne said. “We’re not suggesting any target—just that the states should fund a balance that best meets their needs.”

Bourne said that hypothetically as much as 31 percent of a state’s capitalization grant could be used as one-time assistance, but he said such a high percentage is unlikely.

System officials with questions about the new fund should contact the DWSRF coordinator in their state. For the telephone number, contact the National Drinking Water Clearinghouse at (800) 624-8301 or (304) 293-4191. $
Is your water system prepared?

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country are more prone to certain types of natural disasters, no place on earth is disaster-free, so water officials everywhere should expect the unexpected.

For this reason alone, water systems should develop an emergency response plan to prepare for natural disasters, limit damage, and expedite recovery.

In earthquake-prone California, the East Bay Municipal Utility District, which serves the San Francisco area, has proposed spending $189 million to upgrade an existing emergency water system that was originally built after the 1906 earthquake.

To mitigate earthquake damage to the city’s water system in the future, the district is reinforcing reservoirs, pumping plants, and other equipment. In areas where water distribution lines cross over fault zones, automatic shut-off valves are being installed to prevent flooding and water loss. These preparation efforts are expected to save an estimated $1.2 billion when the next earthquake strikes the Bay area.

Emergency management plans such as these cost money, oftentimes millions of dollars. Many small water facilities simply do not have the resources to take such elaborate preventive measures.

There are, however, agencies at the local, state, and federal levels that can help water facilities of all sizes prepare for and recover from natural disasters.

In Florida, for example, the Florida Rural Water Association (FRWA) and the state Department of Environmental Protection offer emergency preparedness technical assistance to small water and wastewater facilities and provide assistance in restoration efforts following hurricanes or other natural disasters. In addition, the state deploys a Rapid Impact Assessment Team (RIAT) in the aftermath of a disaster to address the victims’ immediate needs, such as food, water, and shelter. The RIAT also quickly assesses any infrastructure damage and losses. The RIAT or a utility then contacts the FRWA which sends a technical assistance team to make repairs to improve or restore service.

“It’s important for these utilities to plan ahead [for natural disasters] because these systems can’t be put on hold following a disaster,” said Gary Williams, FRWA executive director. He explained that rapid water system recovery is critical because when a disaster area is evacuated, authorities can’t let residents back into the area until utilities are restored.

“Emergencies can’t be prevented, but in many cases you can control the amount of damage experienced by the system by having an emergency preparedness plan in action,” Williams said.

What Small Water Systems Can Do

There are several measures all water systems can take to lessen the impact of disaster.

Some of the more important measures include having an emergency preparedness guide for your utility and your customers and making sure you have adequate financial reserves for general repairs and equipment replacement. Systems should also make sure there are plenty of repair parts available and that all emergency back-up equipment functions properly.

More specifically, FRWA recommends that water utilities:

• establish emergency lines of communication;
• provide for an emergency power source;
• waterproof sensitive electrical components;
• have extra chemicals on hand for plant start-up;
• protect office records, electronic equipment, computers, etc.; and
• make sure all elevated storage tanks and reservoirs are filled to capacity and are secure.

Keeping good records is one of the most important emergency preparations a water system can make. This will help the system’s efforts in assessing damage and evaluating restoration costs. Videos and photographs are excellent tools to inventory assets before a disaster and to document damage afterward.

Depending on where your water system is located and what type of disaster it’s likely to face, the system will have to customize its emergency management plan to meet the system’s most immediate needs before and after a natural disaster. Organizations such as the Federal Emergency Management Association (FEMA) and the American Water Works Association have created emergency management manuals for designing emergency preparedness plans for water systems.

Paying for Losses

Water systems must be financially prepared in the wake of a natural disaster to ensure that service will be restored quickly and safely. Some small water utilities, especially those without disaster insurance, emergency reserves, or financial reimbursement from disaster-relief funds, may struggle to restore service following a natural disaster.

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Is your water system prepared?

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There are a variety of financial reimbursement opportunities available to disaster-stricken water systems. The majority of this financial assistance comes in the form of loans—although sometimes grants are available—and most list specific requirements that applicants must meet before qualifying for assistance. All or a portion of the costs resulting from a disaster may be eligible for local, state, and/or federal disaster-relief funding, but only if those costs are clearly identified by the applicant.

Factors such as whether a system is public or private, whether it is insured, the system’s size, and whether an official federal disaster has been declared can all determine the type of financial assistance and the amount of money that can be provided.

Since financial reimbursement from disaster relief funds can take up to a year to receive, water systems should maintain repair and replacement funds that can be tapped after an emergency. Although sometimes difficult, reserving funds should be an integral part of every water system’s emergency preparedness effort.

Financial Help May Be Available

As a general rule, emergency operations, including financial assistance, will begin at the level of government most appropriate to provide an effective response. At the local level, some counties, particularly in disaster-prone areas, have established emergency reserve funds for homeowners, small businesses, and small government utilities.

Bud Crawford, a water/wastewater specialist with the Georgia Rural Water Association, said there are several financial options available to small water systems at the state level as well. In addition to state emergency funds created within state legislatures, water systems should soon have access to funding from the new drinking water state revolving funds (see article on page 1).

Funding also may be available from the Housing and Urban Development Community Development Block Grants (CDBG) program, and emergency money may be tapped through each state’s Economic Development Administration office. He added that some states, including Georgia, even offer discretionary funding or similar monies to local and state agencies in need of emergency funds.

Crawford said that with assistance from the CDBG program, several small towns in Missouri that suffered four major floods in 1993 were able to relocate many of their homes, businesses, and municipal utilities to higher ground. He added that the CDBG program helped with a large portion of infrastructure reconstruction, including water and sewer systems, throughout the Midwest in 1993.

According to FEMA, much of what the federal government provides to small water/wastewater facilities are low-interest loans through the Small Business Administration and low-interest loans and grants through the U.S. Department of Agriculture’s Rural Utilities Service (RUS). These funds can be used to repair and replace damaged property not covered by insurance.

For the most part, water systems become eligible for federal assistance if they are located in a county or area that has been declared a federal disaster area; suffer sufficient property damage or loss; and do not have sufficient income, insurance, or other cash resources readily available to cover the cost of damages. Even with reserve funds, systems may not be able to cover all expenses.

Williams mentioned that it can take “anywhere from three weeks up to a year” for a system to receive a check from some funding organizations.

Where To Go for Help

In the event of an emergency, there are several emergency assistance organizations and agencies that are able to help your water system prepare for, respond to, and recover from a natural disaster. Many of these organizations will appear on the scene following a natural disaster.

• Local government plays a key role in emergency management. Emergencies involving a

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Water mains throughout the community of Marshall, North Carolina, broke following severe flooding in the area.

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Water mains throughout the community of Marshall, North Carolina, broke following severe flooding in the area.

Assistance Available Before and After a Disaster

For the phone number of your state’s Rural Water Association, the Small Business Association disaster office in your area, and the other agencies mentioned in this article, contact the National Drinking Water Clearinghouse (NDWC) at (800) 624-8301 or (304) 293-4191.

Rural Utilities Service loans and grants are handled through state Rural Development offices. For the number of your state’s Rural Development office, call the NDWC. In addition, you may want to contact:

- the Federal Emergency Management Association Disaster Recovery Center at (800) 462-9029;
- the Salvation Army at (703) 684-5521 to get the number of your regional office for emergency disaster services; and
- the American Red Cross, via a local chapter office.

Disaster information also can be found on the Internet at http://www.redcross.org.

The role of state governments in emergency management somewhat parallels the role of the federal government. Each state has an emergency management office that operates on federal funding provided by FEMA. These emergency management offices work in conjunction with their regional FEMA offices to provide emergency education, training, and assistance to community emergency training staff.

- At the federal level, FEMA is the primary agency for emergency management. FEMA shares its emergency management responsibilities with states and local governments. There are regional offices that work jointly with 27 federal partners capable of responding to any kind of natural disaster. Virtually all interaction with FEMA following a natural disaster will be done through the regional offices.

Federal assistance is supplemental to that of state and local governments and is available upon approval of a request by the governor to the appropriate federal agency or to the president. For example, FEMA responds to an emergency only when a presidential declaration appears to be imminent.

- There are several non-governmental emergency response organizations that can quickly mobilize and assist in disaster situations. The National Rural Water Association and its state Rural Water Associations, the American Red Cross, and the Salvation Army should all play integral roles in any emergency management plan and appear on the scene of a natural disaster at the governor’s request.

Some of the services these organizations provide include clearing debris; restoring power and utilities; providing food, shelter, and clothing; offering technical assistance; providing emergency preparedness courses and literature; and providing emergency loans and grants following a natural disaster.

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**Before You Look for Funding Questionnaire Can Help You Get Started**

Once you’ve determined that you need to fix a water or sewer problem in your community, how do you get started on the solution? More specifically, what information do you need before you approach funding sources or others who offer technical or financial assistance?

The following questionnaire may help. Based on forms developed by the New York State Legislative Commission on Rural Resources and the New York State Environmental Facilities Corporation, this checklist contains many of the preliminary questions that funding agencies and technical assistance providers will ask.

It’s designed as a tool to help public officials or community leaders clarify their thinking about a proposed project and gather basic financial information, says the Legislative Commission’s Diane Hill. She edited New York state’s Guide to Financial and Technical Assistance Programs for Rural Community Water and Sewer Infrastructure Development, which includes a version of this questionnaire.

“People like it,” says Hill. “They find it useful to collect their thoughts about what they’re doing. Part-time town supervisors and mayors can sit with the town council and say this is what we have, what we know—now let’s go to the funders.”

The following questionnaire is intended only as a starting point. You will need to contact funding and regulatory agencies in your state to obtain the appropriate application forms and procedures for programs to which you want to apply. $
11. Is the proposed project in response to a compliance order? Yes _____ No _____  
   If yes, which agency issued the order? ____________________________________________  
   Describe the order briefly, including any deadlines imposed: _________________________
                                                                                         
12. Briefly describe any work already done for this project (e.g., feasibility studies, preliminary engineering surveys, planning, design, or construction): ____________________________________________________
                                                                                         
13. Will land acquisition be necessary? Yes _____ No _____  
   If yes, describe briefly: __________________________________________________________
                                                                                         
14. Is there a job retention/job creation likelihood associated with this project? Yes _____ No _____  
   If yes, describe. Are there other community benefits? ________________________________
                                                                                         
15. What is the median household income for the service area, if known? ___________________  
   Percentage of low/moderate income households, if known: _____________________________  
   Source of income data (i.e., census, income survey, other): ____________________________
                                                                                         
16. List any outstanding debts with state, federal, or private financing sources (or attach relevant financial statements):

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<thead>
<tr>
<th>Debt Amount</th>
<th>Annual Cost</th>
<th>Debt Expiry Date</th>
<th>Financing Organization</th>
<th>Project Type</th>
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17. Does the community have a fee/rate structure in place for sewer and/or water consumption?  
   a) List monthly rates for a typical household (if relevant, list monthly base rate and/or cost per additional 1,000 gallons):  
      Water: ____________________ Sewer: ____________________  
   b) Does this cover all expenses, or do property or general taxes cover some expenses? _________

18. Will the municipality(ies) be capable of performing some of the necessary survey, engineering, and construction work, or will it be necessary to contract out the entire project?  
   Contract out _____ Some self-help (describe briefly): ________________________________
                                                                                         
19. Is formation of a special district envisioned? Yes _____ No _____  
   If yes, give status: _______________________________________________________________  
                                                                                         
20. Have any public discussions, hearings, information sessions, or brainstorming sessions been held within the community? Yes _____ No _____  
   If yes, describe: _________________________________________________________________  
                                                                                         
21. What contacts, if any, have been made so far to reach out for financial or technical assistance?  
   No contacts_____ Some contacts _____ (describe): ______________________________________
On Tap Focuses on SDWA Reauthorization

The National Drinking Water Clearinghouse (NDWC) has devoted the entire issue of its Winter 1996 On Tap newsletter to the Safe Drinking Water Act (SDWA) reauthorization of 1996 and its implications for small systems.

The newsletter simplifies and explains the SDWA, and includes comments from several experts in the drinking water field about how the SDWA will impact small systems. On Tap also looks at the new drinking water state revolving fund created by the SDWA and asks financial authorities to provide insight into how the fund will help small communities. The newsletter includes a list of dates detailing when new SDWA regulations become effective, a glossary of commonly used terms, and a number of sources to turn to for more information about the SDWA reauthorization.

This issue contains a wealth of information that you’ll want to keep as a resource.

If you would like to receive a free copy of the Winter 1996 issue of On Tap, or for a free subscription, call the NDWC at (800) 624-8301 or (304) 293-4191. Request item #OnTap20.

Hiring Consultants Topic of Latest Pipeline

Choosing a consultant for a water or wastewater project is one of the most important decisions a community can make. But for many small communities, selecting a consultant can be difficult. Small communities often have no technical professionals on staff, and the community leaders planning the project may have little or no experience working with consultants.

Small communities planning to hire a consultant will find the Winter 1997 issue of the newsletter Pipeline full of helpful information. Published by the National Small Flows Clearinghouse (NSFC), Pipeline is written for the general public and examines small community wastewater topics (though some issues are relevant to drinking water projects as well). This issue offers ideas for hiring a technical consultant—such as a consulting engineer, geologist, or soil scientist—who has the appropriate background and experience, and who is willing to work with the community to achieve its goals.

Topics in this issue include what steps communities can take before hiring a consultant, how to begin the search, what to include in a request for proposals, how to screen proposals and interview candidates, and how to involve the public in the process.

To request a free copy of the Winter 1997 issue of Pipeline, or for a free subscription, call the NSFC at (800) 624-8301 or (304) 293-4191. Request item #SFPIPL08.