

# The Source

UTILITY ENTERPRISE MANAGEMENT

A publication of Advanced Engineering and Environmental Services, Inc.



September/October 2004

## DWSRF Reserve Requirements

**T**he Safe Drinking Water Act, as amended in 1996, established the Drinking Water State Revolving Fund (DWSRF) to finance drinking water infrastructure improvements. The DWSRF is utilized by many utilities due to low program interest rates. As part of the loan agreement, however, utilities must meet fairly aggressive reserve requirements.

The DWSRF program requires the establishment of a fully funded reserve account within five years of the loan inception, as compared to funding reserves over the life of the bond for revenue bonds. The reserve provides some security for the lender in the event the recipient defaults on the loan. Many communities build this account with deposits of 20 percent of the total requirement each year for the first five years. The required reserve account must be funded in an amount equal to the smallest of one of the following calculations:

1. 10 percent of the total loan amount (par)
2. The maximum annual principal and interest debt payment
3. 125 percent of average annual debt service

The second option is the most common basis for the reserve. The reserve account is controlled by the loan recipient, but must be held until the debt is paid off. It can be used to make the final debt payment, as well as for other utility funding needs once the debt is retired. ■

**T**he successful operation of a utility is multi-faceted, consisting of planning, operations, maintenance, asset management, and financial issues. This article addresses the topic of debt service coverage covenants, why they are important, and how utilities can use existing coverage requirements to help plan for future capitalization.

Whether financing through a loan or bond, taking on debt involves utilities budgeting for annual principal and interest payments, funding a dedicated reserve account, and meeting required coverage covenants. As a result, debt service is a primary variable affecting the rate structure of utilities. In turn, the financial coverage requirement assures that the utility is financially stable and capable of meeting its annual debt service payment.

## Coverage Covenants and Capitalization

Debt service coverage requirements require a utility to meet a minimum revenue level over and above expenses. For example, the coverage covenant applied to Drinking Water State Revolving Fund (DWSRF) loan recipients requires that after operating and maintenance expenses, net annual revenues must equal at least 120 percent of the annual debt service payments for principal and interest (see "Calculating Debt Service Coverage Ratios" in this issue). The goal of the DWSRF coverage requirement is that it forces the utility to target a 20 percent "profit" with respect to the annual debt service. The surplus amount resulting from the financial coverage can then be used to fund the reserve requirement (see "DWSRF Reserve Requirements" in this issue).

Coverage requirements vary depending upon the debt vehicle, although they typically range from 120 to 150 percent. In each case, however, the revenues in excess of those required to make the principal and interest payments may be used to fund reserves. Once the reserve is met, the additional revenue generated creates an opportunity to invest in the system without taking on new debt.

Opportunities for investment include capitalization through rates (a capital project or portion of a project completed in any one year funded through the rate cash flow of the utility), further reserve funding, or possible transfer out of the utility (obviously an undesirable option for the utility, but common in some municipalities). The most common use would be for rate-funded capital, such as water main replacement, a valve or hydrant replacement program, sewer rehabilitation, lift station rehabilitation, small capital improvement projects, or a capital contribution towards a major project.

Debt service requirements can be onerous. As you prepare your 2005-2006 budgets, keep in mind that as your debt reserves are funded, revenue generated by your coverage requirements will be available as you budget for your future capital improvement and reserve funding needs. In the end, reserve funds and revenues in excess of those needed to fund debt service belong to the utility. Prudent planning will ensure that these funds are spent wisely. ■

# The Source

UTILITY ENTERPRISE MANAGEMENT

A publication of Advanced Engineering and Environmental Services, Inc.

If you have any questions concerning the contents of this newsletter, please contact Sheryl Smith at 701.746.8087 or [Sheryl.Smith@ae2s.com](mailto:Sheryl.Smith@ae2s.com)

## Drinking Water Funding

**T**he North Dakota Department of Health is seeking project information for development of the fiscal year 2005 (FY05) DWSRF Intended Use Plan (IUP). If you have a project not presently on the list for which you are interested in pursuing DWSRF assistance, you can download the questionnaire to rank projects for potential funding assistance at <http://www.health.state.nd.us/ndhd/environ/mf/index.htm>.

If you are already listed, you must provide a written update that includes a detailed project description and cost estimate, the amount of DWSRF funds needed, and the anticipated construction start date.

The deadline for receipt of project questionnaires and updates is October 31, 2004. AE2S is currently working with clients to provide new and updated information for the FY05 DWSRF IUP. If you would like assistance with this task, contact Miranda Kleven at 701.746.8087 or [Miranda.Kleven@ae2s.com](mailto:Miranda.Kleven@ae2s.com). ■

## Calculating Debt Service Coverage Ratios

**R**ating agencies calculate coverage ratios to determine the ratings of revenue bonds issued. The ratings are determined by the total "debt service", or how many times the cash specifically available to pay interest and principal payments on the utility's bond issues could cover those payments. The higher the debt service ratio, the safer the bond is considered by outside investors. As an example:

Let's assume we have budgeted operating revenues of \$7,500,000 and have budgeted \$5,000,000 in operating expenses, not including depreciation. We expect to generate \$250,000 in interest earnings, and we will receive pledged revenues from other city funds that will equal \$300,000. Adding these up, our total net revenue budget is \$3,050,000.

Let's also assume that our debt service for this year is expected to be \$2,000,000. Our debt service coverage ratio would be  $\$3,050,000/\$2,000,000$  or 1.525. We would have sufficient money to meet a typical debt service coverage of 152.5 percent or less.

The debt service coverage requirement is a minimum, however, and having a higher coverage ratio provides several benefits. A higher ratio provides a cushion against fluctuations in utility revenues, which can be significant depending on weather patterns and other variables. In addition, bond rating agencies and the bond market typically rate utilities as superior if the bond coverage ratio is relatively high. In turn, a higher bond rating reduces overall debt service costs for the utility by reducing the amount of interest at which debt can be issued by the utility in any given year. ■

[www.ae2s.com](http://www.ae2s.com)

Offices in:  
Grand Forks, ND  
Bismarck, ND  
Williston, ND  
Moorhead, MN  
Brainerd, MN

Advanced Engineering and  
Environmental Services, Inc. (AE2S)  
2016 Washington Street South  
Grand Forks, ND 58201

Copyright AE2S September/October 2004

The Source