



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
WASHINGTON, D.C. 20460

OFFICE OF  
WATER

DWSRF 03-02

February 25, 2003

**MEMORANDUM**

**SUBJECT:** Implementation of DWSRF Financial Indicators

**TO:** DWSRF Program Managers  
Regions I - X

**FROM:** Charles Job, Chief /s/  
Infrastructure Branch

The purpose of this memo is to present a balanced suite of Drinking Water SRF financial indicators developed through the State/EPA SRF Workgroup. The indicators have been incorporated in the Drinking Water SRF National Information Management System (DWNIMS) 2002 reports and will be reported annually to measure the progress of the DWSRF program. Some indicators may be included as GPRA measures, if appropriate. The indicators may also be used to facilitate discussions on annual state reviews by DWSRF regional coordinators. In general, these financial indicators serve as tools to help your staff understand and assess the State programs in your Region.

It is critical to look at these indicators as a complete set, as they each represent different aspects of the DWSRF program. A detailed description of each indicator is attached. All of the indicators can be calculated using data from DWNIMS.

**Development of the Indicators**

In the Spring of 2002, the State/EPA SRF Workgroup established a subgroup to develop a suite of financial indicators for the DWSRF program. Representatives from Colorado, Florida, Texas, Region 2, Region 3, Region 4, Region 6, Region 7, Region 9, and DW and CW SRF Headquarters participated on the subgroup. The subgroup examined multiple drafts of proposed financial indicators, consisting of existing CWSRF financial indicators and additional indicators considered potentially applicable to the DWSRF program. In two conference calls, the subgroup

discussed how each indicator was calculated, evaluated the appropriateness of each indicator for the DWSRF program, and narrowed the proposed indicators to seven.

Similar to the CWSRF approach, a balanced suite of financial indicators was developed to reflect the different goals and aspects of the DWSRF program. The subgroup agreed that “the goal of the DWSRF financial indicators is to show the progress of the program in funding the maximum amount of assistance to achieve public health objectives as timely as possible and providing a subsidy to ensure affordability, while sustaining the ability of the DWSRF Fund to revolve over time.” Using this goal statement and the CWSRF financial indicators as a guide, the subgroup developed the final set of financial indicators to measure the progress of the DWSRF program.

The suite of financial indicators developed by the subgroup was presented to the State/EPA SRF Workgroup for review in May of 2002. The final set of indicators reflects comments received from EPA regions and states. A final suite of seven indicators (A through G) was developed:

- A. Assistance Provided as a Percentage of Funds Available for Projects (Fund Utilization)
- B. Return on Federal Investments (ROFI)
- C. Disbursements as a Percentage of Assistance Provided
- D. Net Return after Forgiving Principal
- E. Net Return on Contributed Capital
- F. Set-Aside Spending Rate
- G. Estimated Additional DWSRF Assistance Provided Due to Leveraging

## **Use of Indicators**

The financial indicators will be used to highlight the progress of the national DWSRF program. As part of the 2004 budget planning process, we were tasked to identify outcome oriented measures for the Agency’s accountability reporting under GPRA. Due to a limitation on the number of measures that may be included, only two of the seven financial indicators were proposed. The *Return on Federal Investments* and the *Fund Utilization Rate* were recommended as performance measures in the Agency’s Strategic Plan for the DWSRF program.

On a state-by-state basis, the financial indicators can be useful in evaluating State programs. As part of the annual State reviews, each year’s financial indicator results should be discussed with States and an analysis and discussion of the indicators may be included in the Program Evaluation Report (PER). The discussion in the PER should incorporate any clarifications or explanations that were discussed with State program managers. Headquarters will also incorporate an analysis and discussion of the financial indicators into the annual Regional Review process.

The indicators, like performance measures, have their limitations. When using the indicators to examine State programs, please consider the following points:

- The financial indicators provide a top level assessment that may flag potential issues for more detailed discussion or analysis of DWSRF programs.
- No one indicator can fairly and completely assess a program. The indicators should be

used as a suite, not individually. It is important to consider all the indicators together to gain a comprehensive picture of a state's progress.

- Because every State program is fairly unique in structure and circumstances, State-to-State comparisons can be meaningless. Regional staff should exercise extreme caution before comparing a State's indicators with National or another State's numbers. A year-to-year comparison for an individual State may be the most useful comparison to note possible trends.
- Instead of drawing firm conclusions based on the numbers, the results from these financial indicators should facilitate further dialogue with the States about their programs.

## **Conclusion**

These financial indicators can be useful in assessing the financial progress and performance of the DWSRF program. As potential annual performance measures, they offer an outcome-oriented way of reporting to stakeholders our continued success with the national DWSRF program. As evaluation tools for the Regions, they provide a good starting point for dialogue with individual states about the financial progress of their programs. If you or any of the states in your Region have any questions or comments regarding these financial indicators and their use, please contact Vinh Nguyen in my office at (202) 564-4631.

## **Attachment**

cc: DWSRF Regional Coordinators  
State/EPA SRF Financial Indicators Subgroup  
George Ames, OWM

## DWSRF FINANCIAL INDICATORS DEFINITIONS

February 2003

The following suite of financial indicators was developed through the State/EPA SRF Workgroup. The financial indicators can be useful in assessing various aspects of the DWSRF program. The indicators were developed as a complete suite in order to provide a balanced approach to understanding DWSRF performance. They reflect the different financial objectives of the DWSRF program and provide broad indicators of how the DWSRF program is meeting them. The goal of the DWSRF financial indicators is to show the progress of the program in funding the maximum amount of assistance to achieve public health objectives as timely as possible and providing a subsidy to ensure affordability, while sustaining the ability of the DWSRF Fund to revolve over time.

The final suite of DWSRF financial indicators will be updated with data from DWNIMS and reported annually to measure the progress of the DWSRF program. The indicators are computed using DWNIMS data and their reliability is dependent upon the accuracy of the data provided by States. The indicators may also be used to facilitate discussions on annual State reviews by DWSRF regional coordinators. Some indicators may be included as GPRA measures, if appropriate.

The final seven DWSRF indicators are:

- a. Assistance Provided as a Percentage of Funds Available for Projects (Fund Utilization)
- b. Return on Federal Investments (ROFI)
- c. Disbursements as a Percentage of Assistance Provided
- d. Net Return after Forgiving Principal
- e. Net Return on Contributed Capital
- f. Set-Aside Spending Rate
- g. Estimated Additional DWSRF Assistance Provided Due to Leveraging

These seven financial indicators are discussed in greater detail below.

### ***A. Assistance Provided as a Percentage of Funds Available for Projects (Fund Utilization)***

Also known as the *fund utilization rate*, this indicator shows how many dollars of assistance were provided for each dollar made available for projects. It estimates how quickly funds are committed to finance DWSRF projects. It is calculated by dividing cumulative assistance provided in the form of executed loans by cumulative funds available for projects. The value of this indicator can range from 0% to 100% and over 100% for some states which have an aggressive cash flow management strategy. Under an aggressive approach, states enter into loan agreements in an amount greater than funds made available for projects by taking advantage of the lag between the signing of loan agreement and the disbursement of funds to borrowers as construction activities occur and the flow of funds expected in future years.

*Fund Utilization Rate = Cumulative DWSRF Assistance Provided / Cumulative Funds Available*

The calculation for funds available includes only funds made available for projects, including net transfers and excluding amounts reserved for set-asides. Because this indicator measures all funds signed into loans against all funds made available for projects (the numerator and denominator include both non-federal and federal funds), it is equitable to leveraged and non-leveraged programs.

$$\begin{aligned} \text{Cumulative Funds Available} = & \text{Cumulative Federal Capitalization Grants Awarded} \\ & + \text{Cumulative State Match Deposited} \\ & + \text{Cumulative Net Transfers with CWSRF} \\ & - \text{Cumulative Net Amount Reserved for Set-Asides} \\ & + \text{Net Funds Provided by Leveraged Bonds}^1 \\ & + \text{Net Loan Principal Repayments}^2 \\ & + \text{Net Interest Earnings after Repaying Match Bonds}^3 \end{aligned}$$

## ***B. Return on Federal Investment (ROFI)***

This indicator shows how many dollars of assistance were disbursed to eligible borrowers for each federal dollar drawn from the Treasury for projects. It is expressed as a percentage and calculated by dividing cumulative assistance disbursed by cumulative federal cash draws for projects and administrative set-aside expenses. Unlike other set-aside expenses, administrative set-aside expenses were not deducted from federal cash draws to be consistent with the comparable CWSRF indicator.

$$\text{ROFI} = \frac{\text{Cumulative DWSRF Assistance Disbursed}}{\text{Cumulative Federal Cash Draws for Projects}}^4$$

The *return on federal investment* indicator will vary among DWSRF programs. Leveraged states may have significantly higher ROFI than non-leveraged states because bond proceeds provide additional funds available for projects, and thus, disbursements. For this reason, ROFI rates are calculated for non-leveraged and leveraged states to further explain the national rate.

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<sup>1</sup>**Net Leveraged Bonds** = Cumulative Net Leveraged Bonds Issued - Debt Service Reserve - DWSRF Funds used for Refunding

<sup>2</sup>**Net Loan Principal Repayments** = Cumulative Loan Principal Repaid - Cumulative Leveraged Bond Principal Repaid

<sup>3</sup>**Net Interest Earnings after Repaying Match Bonds** = Interest Payments from Loans + Interest Earnings from Investments - Net Bond Interest Paid

<sup>4</sup>**Cumulative Federal Cash Draws for Projects** = Cumulative Federal Cash Draws - Set Aside Expenses for Technical Assistance, SSTA, SPM and LA

The type of loans or projects funded and disbursement timing are among other factors affecting ROFI. In general, the ROFI should be greater than 120%. If states take set-aside funds, in addition to the administrative set-aside, the minimum value of ROFI should increase.

### ***C. Loan Disbursements as a Percentage of Assistance Provided (Disbursement Rate)***

While the *fund utilization* indicator shows the speed in which funds made available for projects are signed into loans, the *disbursement rate* shows the speed in which signed loans are disbursed to systems. It estimates the speed at which projects are proceeding toward completion, assuming a strong correlation between loan disbursements and construction progress. Refinancing loans will increase the value of this indicator by inflating the numerator with faster (or even immediate) disbursements. The *disbursement rate* is calculated by dividing cumulative loan disbursements by cumulative assistance provided. The value of this indicator ranges from 0% to no more than 100%.

$$\text{Disbursement Rate} = \frac{\text{Cumulative DWSRF Assistance Disbursed}}{\text{Cumulative DWSRF Assistance Provided}}$$

### ***D. Net Return after Forgiving Principal***

This indicator shows the net earnings of the DWSRF Funds after match bonds are repaid and loan principal is forgiven. The net interest earnings are first calculated by subtracting net bond interest expenses paid from total revenues (interest payments from loans and interest earnings from investments). Then, match bond principal repaid and loan principal forgiven are subtracted from the net interest earnings to yield the net return of the Fund.

$$\begin{aligned} \text{Net Return/(Loss) after Forgiving Principal} = & \text{Interest Payments from Loans} \\ & + \text{Interest Earnings from Investments} \\ & - \text{Net Bond Interest Paid} \\ & - \text{DWSRF Funds Used for Refunding} \\ & - \text{Match Bond Principal Repaid} \\ & - \text{Loan Principal Forgiven} \end{aligned}$$

The *net return* indicator shows how well DWSRF Funds are maintaining their invested or contributed capital. Because the state match is considered part of contributed capital of the Fund, the amount repaid on borrowed match is included in the net return calculation to show the net effect on contributed capital.

Because the DWSRF program can provide principal forgiveness subsidies to systems in disadvantaged communities, the debt forgiveness expense needs consideration in the calculation of net return. In the net return calculation, the whole amount of principal that will be forgiven from the loan is subtracted as an expense. This approach implies that the total amount of principal is forgiven immediately, even if in reality it is forgiven over the term of the loan. This approach was chosen to reflect the typical method of forgiving loan principal in some states and to simplify calculations. Currently in DWNIMS, the total amount of loan principal forgiven is reported (up-

front) in the reporting period that the loan is executed. The recognition of principal forgiveness at time of loan execution takes advantage of available DWNIMS data without having to resort to complicated calculations that could dilute the value of the indicator.

The indicator is expressed in dollar amounts. A positive value, or *net return*, indicates that revenues of the fund are meeting expenses after match bonds are repaid and loan principal is forgiven. Conversely, a negative value, or *net loss*, shows that expenses are exceeding revenues after match bonds are repaid and loan principal is forgiven. Since a net return will increase the value of the Fund beyond the invested/contributed capital, a positive value (or a zero value) implies that the Fund is maintaining its invested/contributed capital.

Net losses can result for some states after principal is forgiven. Net losses imply that there are not enough interest earnings from loans and investments in the Fund to absorb expenses, including loan principal forgiven. Although a negative number may look unattractive financially, it represents a programmatic choice by a state to address affordability within the DWSRF program by forgiving loan principal. If interest revenues increase proportionately greater than loan principal forgiveness, net losses will likely decrease over time. Due to the conservative nature of the recognition of loan principal forgiveness in the net return calculation, firm conclusions about net losses should not be made without a detailed analysis of a State's overall DWSRF program.

#### ***E. Net Return on Contributed Capital***

This indicator gives context to the *net return* indicator by comparing the net return of the Fund to the dollar amount of invested or contributed capital. It is calculated by dividing net return by cumulative contributed capital and expressed as a percentage. For the purpose of this indicator, the invested or contributed capital, the denominator, is the sum of awarded grant dollars deposited (total federal draws less total set-aside expenses) and total match deposited into the Fund.

$$\text{Net Return on Contributed Capital} = \frac{\text{Net Return After Forgiving Principal}}{\text{Net Grant Dollars Deposited}^5 + \text{Match Deposited}}$$

This indicator shows the net return on invested/contributed capital after repaying state match bonds and forgiving loan principal. It estimates the Fund's growth relative to the invested/contributed capital. Although the indicator is usually a positive value, a negative percentage will occur if there is a net loss.

#### ***F. Set-Aside Spending Rate***

This indicator shows the spending rate of the set-aside funds. It is calculated by dividing the amount of set-asides awarded by set-aside expenses. Expressed as a percentage, this indicator estimates the speed at which the set-aside funds are spent. The value of this indicator ranges from

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<sup>5</sup>**Net Grant Dollars Deposited** = Cumulative Federal Cash Draws - Cumulative Set-Aside Expenses

0% to 100%.

*Set-Aside Spending Rate = Cumulative Set-Aside Expenses / Cumulative Amount Awarded for Set-Asides*

***G. Estimated Additional DWSRF Assistance Provided Due To Leveraging***

This indicator estimates the additional dollar of assistance provided by issuing bonds by showing the dollar of assistance provided after funds from leveraged bonds are subtracted. It is calculated by subtracting funds available without leveraging from cumulative assistance provided to get the amount of assistance provided from funds made available with leveraged bonds. Funds available without leveraged bonds are calculated by subtracting net funds provided by leveraged bonds from total funds made available for projects. This indicator is expressed in dollar amounts.

*Estimated Additional Assistance Provided Due to Leveraged Bonds = Cumulative DWSRF Assistance Provided - Cumulative Funds Available Without Leveraged Bonds<sup>6</sup>*

This indicator is calculated for leveraged states only. Although the value of this indicator should be greater than \$0, some leveraged states may have negative amounts if the amount of assistance provided has not exceeded the non-leveraged funds made available for projects. A zero or negative value implies that no additional loans were made as a result of leveraging. In other words, these states have not "tapped" into funds made available from leveraged bonds. Firm conclusions about zero or negative values for this indicator should not be made without a detailed analysis of a State's leveraging program and the timing of funds provided by leveraging bonds.

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<sup>6</sup>**Cumulative Funds Available Without Leveraged Bonds** = Cumulative Funds Available for Projects - Net Funds Provided by Leveraged Bonds