



# Guide to Using EPA's Automated Clearing House for the Drinking Water State Revolving Fund Program



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# I. Introduction

## The Purpose of this Guidebook

The passage of the Safe Drinking Water Act (SDWA) Amendments of 1996 (Pub. L. 104-182) signaled the beginning of a national commitment to protect public health by providing low-cost funding assistance for public drinking water infrastructure. Section 1452 of SDWA establishes a Drinking Water State Revolving Fund (DWSRF) Program and authorizes \$9.6 Billion in capitalization funding through 2003.

SDWA authorizes the Administrator of the U.S. Environmental Protection Agency (EPA) to award capitalization grants to states for use in each state's DWSRF Program. In February 1997, EPA published the DWSRF Program Guidelines (EPA 816-R-97-005) that establish the framework for the DWSRF Program and the capitalization grant award process.

This Guidebook is designed to supplement EPA's DWSRF Program Guidelines by explaining in more detail the process states will use to access grant funds through EPA's Automated Clearing House (ACH) system. The following questions will be addressed:

- What is the EPA ACH?
- How does the ACH work?
- Why is the ACH being used for the DWSRF Program?
- How will a state draw cash from the ACH?

Because a number of terms and phrases have a specific meaning when applied to the ACH process, they are highlighted in the Guidebook and defined in the appendix.

## The EPA Automated Clearing House

The Automated Clearing House is a federal funds transfer system used by all federal agencies, including EPA, to electronically deposit funds into a grant recipient's bank account. The system was initiated in the early 1990s to replace the U.S. Department of the Treasury's *Financial Communication System - Letter of Credit*.

The ACH system continues the federal process that has been in use since the 1960s enabling recipients of federal grants and contracts to draw down cash as needed, based on incurred costs. The federal system to transfer funds has been improved along the way. In 1979, the system was converted to an electronic payment mechanism that linked the federal treasury, the federal reserve and the federal agencies into one network. Through this mechanism, then referred to as the "letter of credit," recipients of federal funds obtained cash from the treasury. The ACH system replaced the letter of credit system, but uses the same basic cash **DISBURSEMENT** process.

The objectives of the ACH are the same as they were for the previous system:

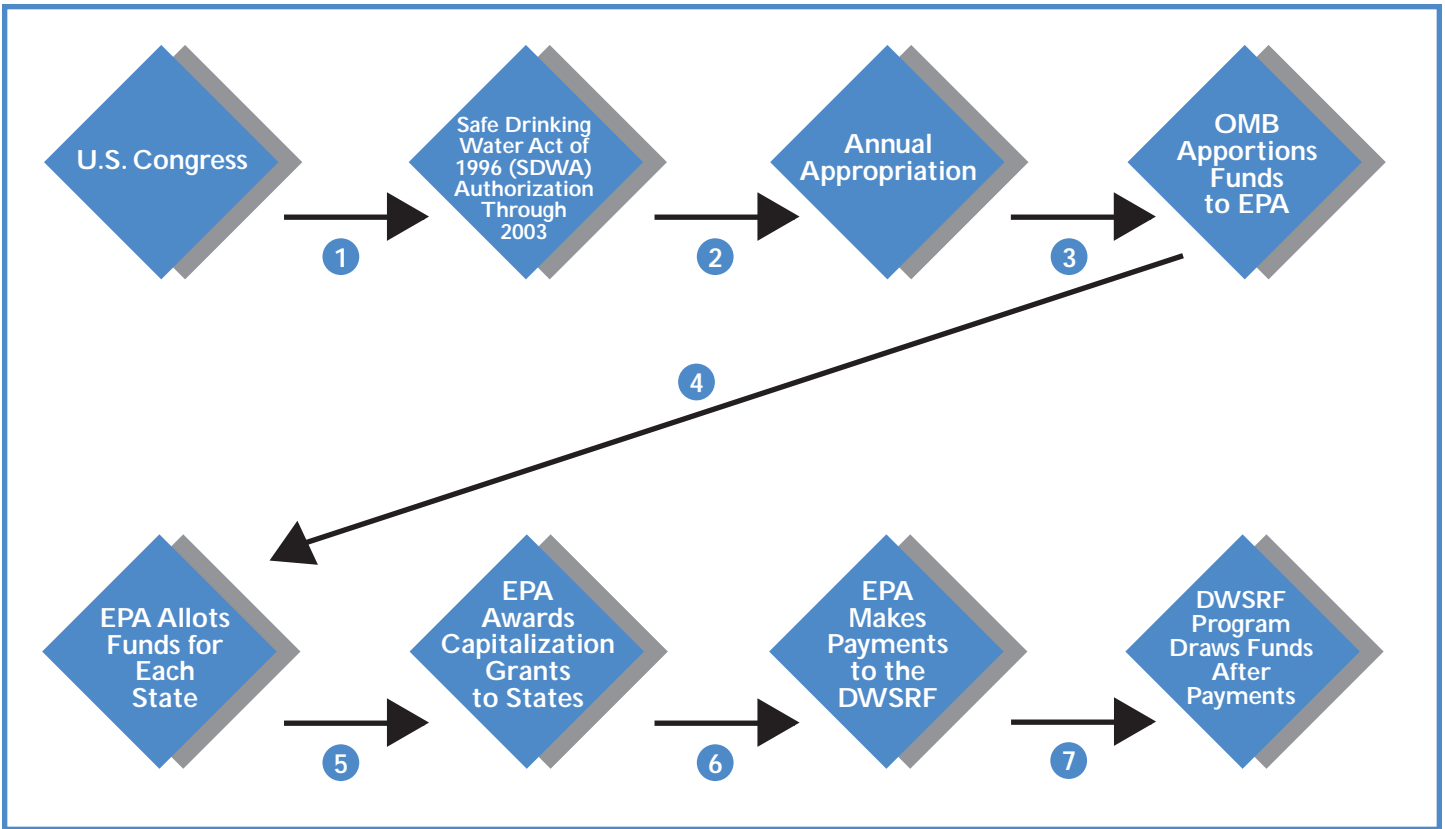
- Ensure efficient federal cash management
- Expedite cash transfers to assistance recipients
- Provide timely and accurate reporting on ACH transactions.

The ACH system is currently in use in the Clean Water State Revolving Fund Program (CWSRF). In Fiscal Year 1996 alone, the ACH processed more than \$1.5 billion in CWSRF **CASH DRAW** requests from states. Since the beginning of the CWSRF program, the ACH system, and previously, the federal letter of credit system, have transferred more than \$8.8 billion in federal funds to states for eligible assistance activities.

## How the Funding Process Works

As shown in Figure 1, the process of transferring federal funds to the DWSRF Program actually began when Congress passed the 1996 Amendments to the Safe Drinking Water Act and authorized funding for the Program. Congress annually appropriates funds for the DWSRF Program, as it does for all of the federal government. The **APPROPRIATION** for federal fiscal year 1997, the first year of the DWSRF Program funding, was \$1.275 billion. Congress appropriated \$725 million in fiscal year 1998 and has authorized an additional \$1.0 billion per year through fiscal year 2003.

Once the funds have been appropriated, the Office of Management and Budget (OMB) apportions budgeted funds to EPA, including the DWSRF Program capitalization funds. EPA



**Figure 1. Transfer of Federal Funds to the DWSRF Program**

then calculates each state and federal territory's ALLOTMENT. For fiscal year 1997 the allotments were made according to the formula used for distributing Public Water System Supervision grants to states as established in SDWA. Funds available from fiscal year 1998 and beyond will be allotted according to the most recent EPA Drinking Water Needs Survey.

Upon approval of the state's grant application, EPA obligates the funds to each state and Puerto Rico in the form of capitalization grants. The District of Columbia and the federal territories receive direct grants for eligible activities.

After awarding a capitalization grant, EPA reserves funds in the federal treasury based upon a PAYMENT schedule developed by the state. As costs are incurred, cash can then be drawn by states and territories through the ACH process to the state's bank. During this process, EPA only reviews the request for account accuracy and to verify that the balance of funds available is sufficient.

As DWSRF Program ASSISTANCE RECIPIENTS incur costs under the DWSRF Program, they submit a request to the state for a cash DISBURSEMENT. The state submits a request to EPA for a cash draw through the ACH to cover the federal share of the incurred costs. The state then disburses cash to the assistance recipient. When the DWSRF Program incurs costs directly, for example, to pay eligible administrative costs, the state submits a similar cash draw request to EPA.

Using the ACH system, EPA submits the request to the federal treasury. No later than the next business day, the federal treasury will deposit the requested amount in the DWSRF Program account within the state's bank. This quick response is possible because cash draw approvals are subject only to account and signature verification and because the balance of undrawn payments in the ACH is accessible for draw-down at the time of the request. EPA does not review the programmatic validity of the request at this time. At a later date when an annual review is performed, the state will be called upon to

demonstrate that cash draws were made in accordance with the cash draw rules outlined in this Guidebook and are supported by appropriate documentation and accounting procedures.

### Why the ACH is Being Used for the DWSRF Program

Through experience with the CWSRF program, EPA recognizes that from the time funds are allotted to the states for the DWSRF program, it may take several years for the funds to be expended. First, states have up to two years after federal funds are allotted to apply for and receive grant awards. Second, states establish a schedule to receive grant payments depending on a state’s expectations for committing the funds to loans and other assistance. Third, states then have up to one year from the time of each grant payment to enter into **BINDING COMMITMENTS** (e.g., loan agreements) with loan recipients for projects identified in the state’s Intended Use Plan. Fourth, many projects have multiyear construction schedules so funds are expended over a period of time. By using the ACH system for the DWSRF program, EPA will ensure that:

- federal cash outlays are managed efficiently - federal funds will be used only when needed to cover eligible costs
- cash disbursements are made quickly to respond to the cash needs of the states and local public water systems

The ACH payment mechanism is tested, proven, and well understood. EPA will make payments through the ACH system based on a schedule negotiated between EPA and the state. EPA will make cash available, as costs are incurred, no later than the next business day following a cash request. This will reduce the impact on the federal budget while ensuring that cash will be provided immediately when requested.

### DWSRF Program Differs From CWSRF Program

While the DWSRF Program is very similar to the CWSRF Program, significant differences require new or modified cash draw procedures. Under SDWA, states may “set aside” up to 31 percent of the federal capitalization funds for activities such as small system technical assistance, state program management support, and source water protection. In this report, the

DWSRF Program refers to activities funded through both the Set-Aside Account and the Fund. The DWSRF Program Guidelines require that set-aside funds be maintained in separate accounts (i.e., Set-Aside Account) from the funds used for loans and other types of capital project assistance (i.e., the Fund). As will be discussed later in this guidebook, the ACH cash draw procedures differ for “set-aside” funds and for loans and other types of Fund assistance. Figure 2 displays the DWSRF program structure.

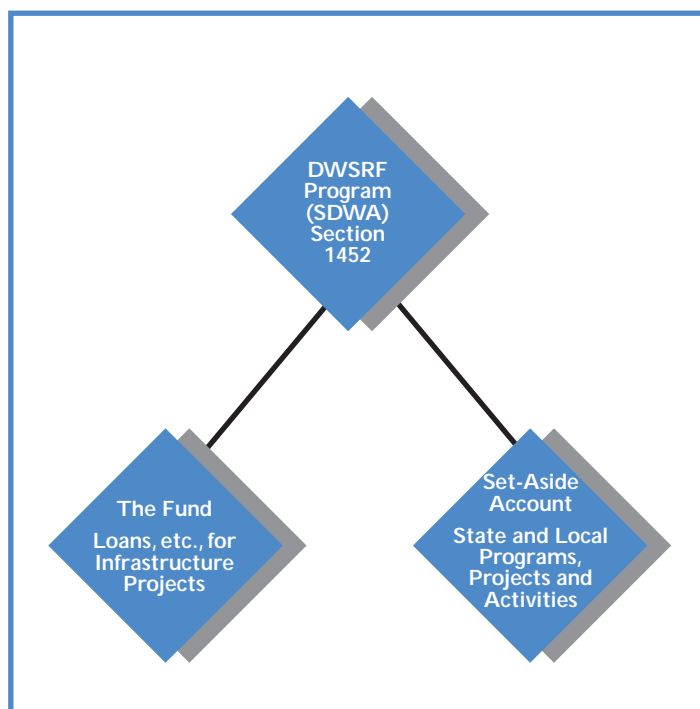


Figure 2. DWSRF Program Structure

## Important Definitions

To understand how the ACH will work with the DWSRF Program, several key terms must be understood.

- **Capitalization Grant Payments**

A payment is an action by EPA to increase the amount of funds available for cash draw through the ACH (i.e., the ceiling). Through payments, the EPA makes funds available to the state for cash draw up to the amount of the capitalization grant. A payment is not a transfer of cash to the state but only an **AUTHORIZATION** making funds available for transfer to the state when a cash draw request is submitted. A payment schedule, indicating the timing and size of the payments to be made, is required as part of the grant agreement between EPA and the state.

- **Binding Commitments**

Binding commitments are legal **agreements** between the state and the local public water system that define the terms for

assistance under the DWSRF. Binding commitments must be made in an amount equal to the amount of each grant payment and associated state match designated for the Fund within one year after the receipt of each grant payment.

- **Cash Draw**

A cash draw is the transfer of cash from EPA through the ACH to the state DWSRF Program. Upon a state request for a cash draw, the Treasury will transfer funds to the DWSRF account established in the state's bank through the ACH. The assistance recipient must first incur a cost, but not necessarily disburse funds for that cost, in order for cash to be drawn.

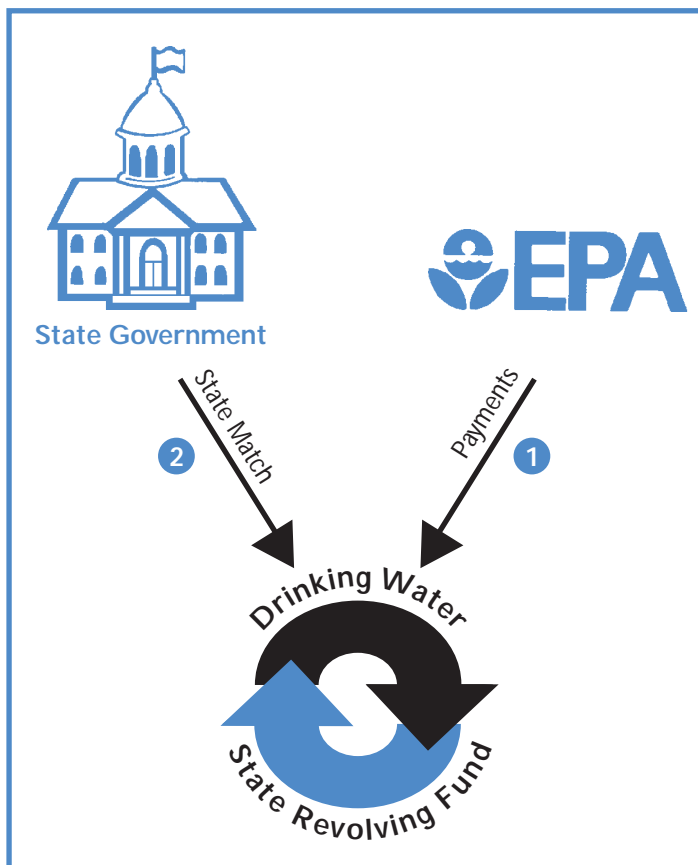
- **Disbursements**

A disbursement is the transfer of cash from the DWSRF Program to the assistance recipient or others. Annually, the state provides EPA with a schedule of estimated disbursements for the upcoming fiscal year, regardless of whether the state submits a capitalization grant application.

## II. Overview of the DWSRF Program ACH Process

### How the Funds Flow

After a state has obtained its grant and selected a bank in which to establish the ACH, it is ready to capitalize its DWSRF Program and provide various forms of financial assistance to public water systems. Based on a negotiated payment schedule, EPA makes payments which increase the amount of capitalization grant funds available for cash draw through the ACH. Except for grants made with fiscal year 1997 appropriations<sup>1</sup>, at the time of a federal payment the state shall provide its match



**Figure 3. EPA Payments and State Match:** (1) EPA makes payments to the DWSRF. (2) At the time of federal payment, the state provides matching funds.

either in cash or through a payment similar in form to the one made by EPA (Figure 3). At the time of each cash draw from the ACH for the Fund, the state shall provide its cash match. Set-asides are drawn only from the federal ACH, not from matching funds.

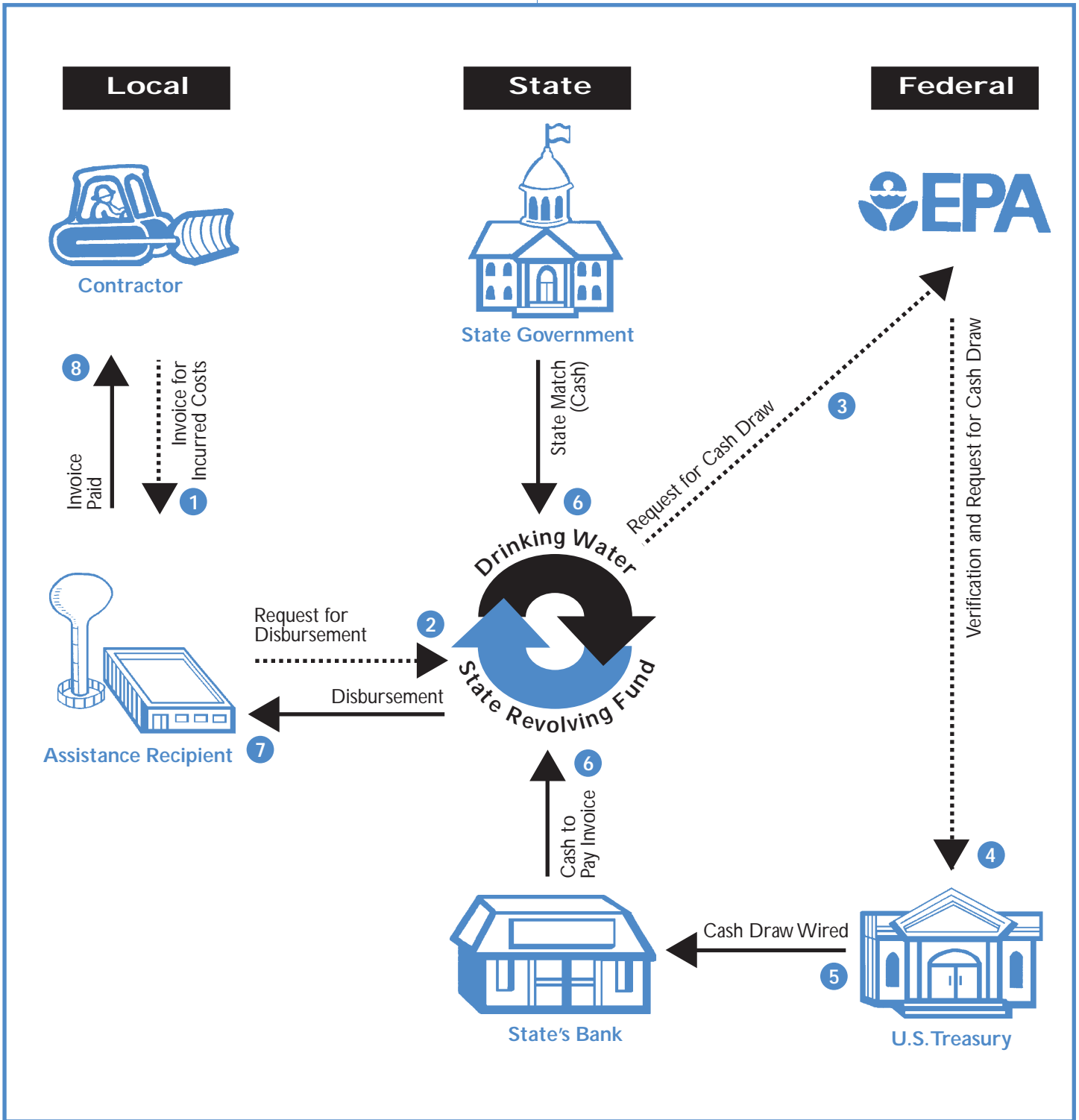
Figure 4 illustrates the cash flow into and out of the DWSRF Program using the ACH. It is important to note that cash will be provided through the ACH to the DWSRF Program no later than the next business day after EPA receives a valid request. Cash draws are virtually automatic, since they are subject only to account and signature verification and a review of the balance of funds accessible for draw down through the ACH at the time of the request.

### General Procedures for DWSRF Program ACH Operations

EPA has developed specific procedures for ACH operations as they apply to the DWSRF Program. These procedures were developed to ensure that the requirements of the DWSRF Program will be met. They are based on the following principles:

- All payments will be made either 8 quarters after the capitalization grant is awarded or 12 quarters after funds are allotted to the state, whichever is earlier (Fund and Set-Aside Accounts)
- Binding commitments must be entered into no later than one year after a payment is received for funds designated for the Fund
- Cash draws from the Fund will not be permitted for a particular project until a state has entered into a binding commitment for that project
- When cash is needed to pay for construction related costs, the ACH can be converted to cash as quickly as those construction costs are incurred
- Cash will be available only up to the level of payments made
- Each form of assistance, such as loans or insurance, has its own set of cash draw rules that reflect the cash flow for the assistance option.
- Cash draws for set-asides will be based on cost incurred under approved workplans.

<sup>1</sup>SDWA allows states to delay providing the state match for fiscal year 1997 funding until September 30, 1999.



**Figure 4. Flow of Cash Through the DWSRF Program:** (1) A contractor or vendor submits an invoice for incurred costs to the recipient of the DWSRF loan. (2) Assistance recipient requests a disbursement from the DWSRF for these costs. (3) DWSRF requests EPA approval for a cash draw from the ACH. (4) EPA verifies the request for a cash draw, and forwards it to the U.S. Treasury. (5) Treasury wires the cash draw to state's bank. (6a) State's bank places the funds in the DWSRF account, and (6b) at the same time, state government must provide state match in cash to the DWSRF (although state may have done so earlier, at the time of payment). (7) DWSRF then disburses the funds to DWSRF loan recipient. (8) Cycle of the ACH process is complete when assistance recipient pays invoice from its contractor or vendor.



The following section describes the general procedures that apply to all forms of assistance.

**Timing of Payments and Cash Draws**

All the payments to the state will be made by the earlier of:

- 8 quarters after the capitalization grant is awarded, or
- 12 quarters after the funds are allotted to the state. The allotment date is the date funds are made available to the states by EPA.

A state must apply for and be awarded the capitalization grant either during the fiscal year the funds are allotted or the next fiscal year. After the grant is awarded, EPA will make payments over a maximum of eight quarters from the grant award, but the number of quarters may be less depending on

the date of the grant award. For example, if a state receives a grant award at the end of the second year of eligibility, there will only be four quarters remaining to receive the payments. As a matter of policy, once a payment is made, EPA will not withdraw that payment.

Consider the examples using the time line in Figure 5 to understand how the number of quarters will be calculated for payments.

The payment schedule, negotiated between EPA and the state, is largely dependent on the state's projected rate of entering into binding commitments and expending set-aside funds. EPA will increase the amount of funds available for cash draw through the ACH according to the schedule of payments

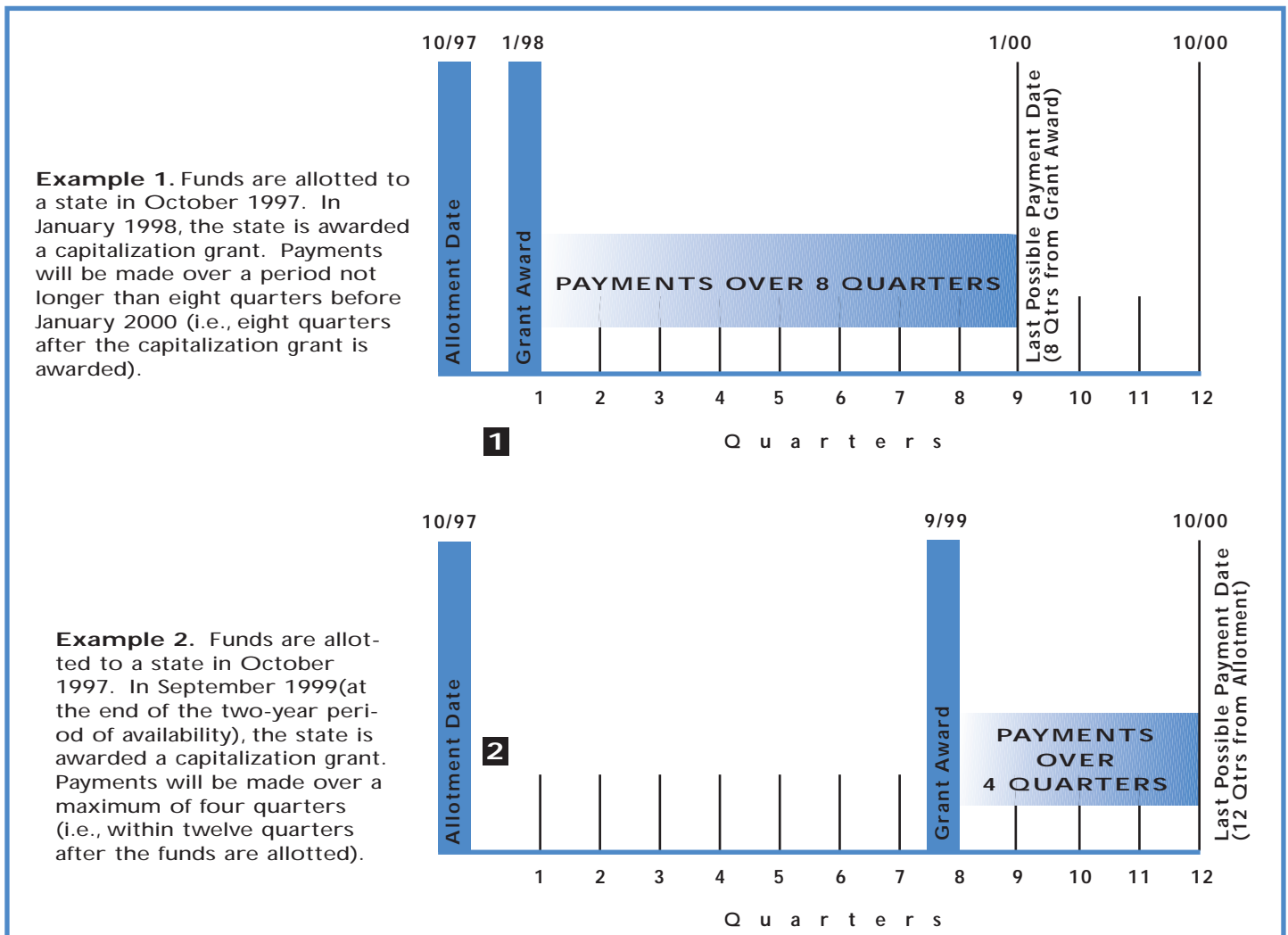


Figure 5. Timing of Payments

contained in the grant agreement negotiated with the state. At the time of a federal payment, the state shall provide its match either in cash or through a payment to its own letter of credit or similar financial arrangement. At the time of each cash draw from the ACH for Fund activities, the state shall provide its cash match.

### **Cash Draw Ratio for Set-Asides**

SDWA requires that state match be deposited only into the Fund for projects. Consequently, the DWSRF Program Guidelines allow states to draw down federal funds for set-aside use without the need to provide a state match in the form of cash into the Fund. As a result, states will use only federal capitalization grant funds for set-aside activities. (Note: There is a separate one-to-one match for the state program management set-aside that is separate from and in addition to the 20 percent matching contribution required for the federal capitalization grant.)

### **Federal and State Cash Draw Proportionality**

The DWSRF Program assistance recipient must first incur a cost, but not necessarily disburse funds for that cost, in order for cash to be drawn through the ACH. When costs are incurred and a bill is submitted to EPA, states may draw federal cash from the ACH in proportion to total funds to be deposited in the Fund. To calculate the correct cash draw ratio, states will need to determine what amount of funds will be used for:

- Set-aside activities - the capitalization grant dollars available for Fund activities will be affected by the level of set-aside funding (up to 31 percent of the grant amount) planned by the state.
- State match - states must provide a minimum of 20 percent of the capitalization grant, but may wish to provide additional state matching funds to increase loan funds available. (Funds in addition to the 20 percent match do not factor into the cash draw ratio.) The match is deposited only in the Fund Account. State match will be drawn down as project activity proceeds and monies for incurred costs are drawn from the Fund account. As a one-time exception, SDWA allows states to delay providing the match associated with fiscal year 1997 funding until September 30, 1999.

The basic ratios that reflect the federal and state proportionality for DWSRF programs are as follows:

$$\begin{aligned} \text{Federal Ratio} &= \frac{\text{Capitalization Grant Dollars Used for Fund Activities}}{\text{Total Dollars Used for Fund Activities}} \\ &= \frac{\text{Capitalization Grant} - \text{Set-Asides}}{\text{Capitalization Grant} - \text{Set-Asides} + \text{State Match}} \end{aligned}$$

$$\begin{aligned} \text{State Ratio} &= \frac{\text{State Match}}{\text{Total Dollars Used for Fund Activities}} \\ &= \frac{\text{State Match}}{\text{Capitalization Grant} - \text{Set-Asides} + \text{State Match}} \end{aligned}$$

The ratios above reflect a DWSRF Program that is not using a **LEVERAGING** approach. States that use leveraging will follow a different computation to determine the proportional federal and state cash draw ratios (Section III, page 25).

### **Grant-Specific Proportionality**

States can choose between two options for determining proportionality: 1) grant-specific cash draw proportionality or 2) rolling average cash draw proportionality. Both use the same basic formulas shown above, but have different time periods covered by the ratio. The states will choose one option for calculating proportionality.

The example in Figure 6 demonstrates the computation of grant-specific federal and state proportionality ratios for non-leveraged DWSRF Programs over a three-year period (three grant awards).

In each of these examples, different federal and state ratios result due to differences in set-aside funding as a percent of the capitalization grant. Funds drawn down to cover invoices associated with each capitalization grant will be drawn according to the ratio for that particular capitalization grant. A state has the option to transfer funds from the Fund to the Set-Aside Account as long as the payment has not yet been made. States may transfer funds from the Set-Aside Account to the Fund at any time. If a state undertakes a transfer, the state would need to recalculate its proportional share ratios.

Year	Cap Grant	State Match	Set-Aside Account	Fund Account			Federal Portion of Cash Draws (A)/(C)	State Portion of Cash Draws (B)/(C)
				(A) Fed.	(B) State	(C) Total		
1	\$100	\$20	\$15	\$85	\$20	\$105	81%	19%
2	\$105	\$21	\$10	\$95	\$21	\$116	82%	18%
3	\$110	\$22	\$30	\$80	\$22	\$102	78%	22%

**Figure 6. Example of Grant-Specific Proportionality Calculation**

**Rolling Average Proportionality**

As an alternative, states may track total undrawn funds (undrawn capitalization grant and state match), and develop federal and state proportionality ratios for all draws, regardless of the grant they are coming from. This approach considers what funds have yet to be drawn from all outstanding grants at the time of a new grant award or at the time of a grant amendment and determines federal and state ratios for cash draw purposes. A state may propose, for EPA approval, other multiperiod methodologies that result in a similar proportionality.

Figure 7 illustrates how rolling average proportionality ratios are developed for a state over a hypothetical three-year period. In the first period, a state receives a \$100 million grant, provides a state match of \$20 million and plans to use set-asides equal to \$15 million. Set-aside costs are covered by federal capitalization grant funds, so the federal cash draw ratio for set-asides is 100 percent. The federal share cash draw ratio for the Fund in the first period is 81 percent and the state match draw ratio is 19 percent. At the beginning of the second period the state would determine the amount of undrawn capitalization grant funds and associated state match funds remaining from the period 1 grant and combine these amounts with new period 2 funding to determine a new total of undrawn capitalization grant and state match funds. This new total would be used to determine the federal and state ratios for second period cash draw requests. All invoices in a given period are drawn according to the ratio for that period, no matter what grant the invoice is associated with.

In the example presented in Figure 7, combining the funds remaining from the first period with a new grant award

(second year) would result in federal and state ratios of 79% percent and 21% percent in period 2, respectively. The second period ratios would be used until a new grant award occurs or a transfer occurs that affects the balance between the state and federal share of dollars being used for Fund activities. (See “Transfers Between the DWSRF Program and

the CWSRF Program,” and “Transfers Between the Fund Account and the Set-Aside Account,” pages 11-13.) For example, if the state determines that fewer dollars are needed for set-asides the state could transfer funds from the Set-Aside Account to the Fund Account. Because this modifies the amount of funding for Fund activities, new federal and state proportionality ratios would need to be developed.

**Delayed Match**

If a state defers deposit of its 1997 matching funds, it must agree to provide the match by September 30, 1999. Through that date, federal cash draws for projects funded with the state’s fiscal year 1997 capitalization grant would cover the total amount of incurred project costs. For federal cash draws made through September 30, 1999, a state must provide a cash deposit into the Fund by that date to comply with proportionality requirements. The cash deposit by the state must be disbursed prior to accessing the federal ACH for additional cash draws for Fund projects after September 30, 1999. Set-aside programs will not be affected by a loss of access to the federal funds for project disbursements; they will continue to access the ACH for incurred costs. For example, assume a state that is awarded a \$100 million capitalization grant is delaying the state match. The state draws \$50 million of the grant by September 30, 1999. The state would be required to deposit and disburse the \$10 million match associated with the \$50 million prior to accessing the ACH for additional cash draws for Fund projects. Invoices for eligible costs would be paid from the \$10 million state match until it is fully disbursed. Once the \$10 million is disbursed and proportionality is achieved, the state would then use the federal and state proportionality ratios that result from the formulas provided in the “Federal and State Cash Draw Proportionality” section above (page 9).

Action	Cap Grant	State Match	Set-Aside Account	Fund Account			Federal Portion of Cash Draws (A)/(C)	State Portion of Cash Draws (B)/(C)
				(A) Fed.	(B) State	(C) Total		
<b>Period 1</b>								
Beginning								
Grant Award	\$100	\$20	\$15	\$85	\$20	\$105	81%	19%
Cash Draws				(\$49)	(\$11)	(\$60)		
Ending Balance				\$36	\$9	\$45		
<b>Period 2</b>								
Beginning				\$36	\$9	\$45		
Grant Award	\$105	\$21	\$30	\$75	\$21	\$96		
Total				\$111	\$30	\$141	79%	21%
Cash Draws				(\$79)	(\$21)	(\$100)		
Ending Balance				\$32	\$9	\$41		
<b>Period 3</b>								
Beginning				\$32	\$9	\$41		
Grant Award	\$110	\$22	\$30	\$80	\$22	\$102		
Total				\$112	\$31	\$143	78%	22%
Cash Draws				(\$86)	(\$24)	(\$110)		
Ending Balance				\$26	\$7	\$33		

**Figure 7. Example of Rolling Average Cash Draw Proportionality Calculation**

If a state chooses to deposit all or a portion of its 1997 deferred state match before September 30, 1999, it must notify EPA and amend its cash draw ratio to include the 1997 match. The state will be required to expend the match associated with cash draws made before the 1997 match was deposited before accessing the ACH for additional cash draws for projects.

**State Overmatch**

Some states may choose to deposit more than the required 20 percent match into the DWSRF. This is referred to as state overmatch. Even though the state is contributing more funding in an overmatch situation, the proportional federal and state cash draw ratio will not change from that described above.

The federal proportional share may exceed that determined by the proportionality calculation when a state is given credit for its match amount as a result of funding activities in prior years (but after July 1, 1993) or for banking excess match in the

DWSRF in prior years and disbursing these amounts prior to drawing cash. If the entire amount of the state’s required match has been disbursed in advance, the federal proportional share would be 100 percent.

**Leveraging**

Where capitalization grants are used to provide an increased amount of assistance through the use of leveraging, special proportionality rules apply. In these cases the federal proportionate share is based on the ratio of the federal grant used as security to the total amount secured. Examples of this calculation are contained in the leveraging section (page 25). This concept

of proportionality was developed to ensure that the state and EPA deposited the required share at the proper time and in the proper amounts.

**Transfers Between the DWSRF Program and the CWSRF Program**

A state may transfer funds between its DWSRF Program and its CWSRF Program (SDWA, section 302). If a state decides to do so, the state may have to calculate new federal and state ratios for its SRF programs.

- If repayments or interest are transferred, the proportionality ratios are unaffected.
- If capitalization grant funds are transferred from the CWSRF to the Drinking Water Set-Aside Account, or vice-versa, the CWSRF Program proportionality ratios change, but the DWSRF Program ratios do not.
- If capitalization grant funds or state match are transferred from the CWSRF to the Drinking Water Fund or vice-versa, both CWSRF and DWSRF proportionality ratios change.

Proportionality ratios are recalculated according to the following formulas<sup>2</sup>:

When capitalization grant funds or state match funds are transferred from one SRF project fund to another, the state must enter into binding commitments for the newly transferred funds. This does not apply to funds transferred to the DWSRF set-asides account.

$$\begin{aligned} \text{Federal Ratio} &= \frac{(\text{Capitalization Grant Dollars for Fund} \pm \text{Federal Dollars Transferred}) - \text{Federal Cash Draws}}{(\text{Total Dollars Used for Fund} \pm \text{Total Dollars Transferred}) - \text{Total Cash Draws}} \\ &= \frac{(\text{Capitalization Grant} - \text{Set-Asides} \pm \text{Federal Dollars Transferred}) - \text{Federal Cash Draws}}{(\text{Capitalization Grant} - \text{Set-Asides} + \text{State Match} \pm \text{Total Dollars Transferred}) - (\text{Federal} + \text{State Cash Draws})} \\ \text{State Ratio} &= \frac{(\text{State Match} \pm \text{State Dollars Transferred}) - \text{State Cash Draws}}{(\text{Total Dollars Used for Fund} \pm \text{Total Dollars Transferred}) - \text{Total Cash Draws}} \\ &= \frac{(\text{State Match} \pm \text{State Dollars Transferred}) - \text{State Cash Draws}}{(\text{Capitalization Grant} - \text{Set-Asides} + \text{State Match} \pm \text{Total Dollars Transferred}) - (\text{Federal} + \text{State Cash Draws})} \end{aligned}$$

<sup>2</sup>These post-transfer proportionality ratios are applicable to the Drinking Water Fund. Proportionality ratios for the CWSRF can be calculated using the same formulas, with the CWSRF replacing the Drinking Water Fund.

## EXAMPLES

**Example 1** - A DWSRF accepts a \$100 million capitalization grant and provides a \$20 million state match. The state plans to use \$15 million for set-asides. Before the state makes any cash draws, it transfers its \$20 million in state match to the CWSRF program. At the same time, the CWSRF transfers \$20 million in capitalization grant funds to the DWSRF program. The federal ratio for the DWSRF is 100%.

DWSRF Federal Ratio

$$= \frac{(\text{Capitalization Grant} - \text{Set-Asides} \pm \text{Federal Dollars Transferred}) - \text{Federal Cash Draws}}{(\text{Capitalization Grant} - \text{Set-Asides} + \text{State Match} \pm \text{Total Dollars Transferred}) - (\text{Federal} + \text{State Cash Draws})}$$

DWSRF federal ratio after transfer of state match to CWSRF

$$\begin{aligned} &= \frac{(\$100 \text{ million} - \$15 \text{ million} \pm \$0) - \$0}{(\$100 \text{ million} - \$15 \text{ million} + \$20 \text{ million} - \$20 \text{ million} \pm \$0) - (\$0 + \$0)} \\ &= 100\% \end{aligned}$$

DWSRF federal ratio after transfer of capitalization grant funds from CWSRF

$$\begin{aligned} &= \frac{(\$100 \text{ million} - \$15 \text{ million} + \$20 \text{ million}) - \$0}{(\$100 \text{ million} - \$15 \text{ million} + \$20 \text{ million} - \$20 \text{ million} + \$20 \text{ million}) - (\$0 - \$0)} \\ &= 100\% \end{aligned}$$

**Example 2** - Again, a DWSRF accepts a \$100 million capitalization grant and provides a \$20 million state match. The state plans to use \$15 million for set-asides. As shown in Figure 6, the federal ratio is 81%. The DWSRF draws \$30 million from the Fund for incurred project construction (\$24.3 million federal; \$5.7 million state). The CWSRF then transfers \$20 million in capitalization grant funds to the DWSRF Fund Account. The new federal ratio for the DWSRF is 85%.

DWSRF Federal Ratio

$$\begin{aligned} &= \frac{(\$100 \text{ million} - \$15 \text{ million} + \$20 \text{ million}) - \$24.3 \text{ million}}{(\$100 \text{ million} - \$15 \text{ million} + \$20 \text{ million} + \$20 \text{ million}) - \$24.3 \text{ million} - \$5.7 \text{ million}} \\ &= 85\% \end{aligned}$$

This guide does not consider the full spectrum of potential transfer structures. States should contact their EPA Regional Coordinator to discuss unique proposals and receive approval.

**Transfers Between the Fund Account and the Set-Aside Account**

A state may transfer funds between the Fund and the Set-Aside Account after the capitalization grant is awarded

through an amendment to the grant agreement. However, while unexpended set-aside funds may be transferred to the Fund at any time, funds from the Fund can only be transferred to the Set-Aside Account if the transfer is accomplished prior to receiving the federal grant payment for the funds the state wishes to transfer. If a transfer occurs, the new federal and state cash draw ratios can be calculated at the time of the transfer using the following formulas:

$$\begin{aligned}
 \text{Federal Ratio} &= \frac{(\text{Capitalization Grant Dollars for Fund} \pm \text{Federal Dollars Transferred}) - \text{Federal Cash Draws}}{(\text{Total Dollars Used for Fund} \pm \text{Total Dollars Transferred}) - \text{Total Cash Draws}} \\
 &= \frac{(\text{Capitalization Grant} - \text{Set-Asides} \pm \text{Federal Dollars Transferred}) - \text{Federal Cash Draws}}{(\text{Capitalization Grant} - \text{Set-Asides} + \text{State Match} \pm \text{Total Dollars Transferred}) - (\text{Federal} + \text{State Cash Draws})} \\
 \text{State Ratio} &= \frac{(\text{State Match} \pm \text{State Dollars Transferred}) - \text{State Cash Draws}}{(\text{Total Dollars Used for Fund} \pm \text{Total Dollars Transferred}) - \text{Total Cash Draws}} \\
 &= \frac{(\text{State Match} \pm \text{State Dollars Transferred}) - \text{State Cash Draws}}{(\text{Capitalization Grant} - \text{Set-Asides} + \text{State Match} \pm \text{Total Dollars Transferred}) - (\text{Federal} + \text{State Cash Draws})}
 \end{aligned}$$

**EXAMPLE**

A DWSRF accepts a \$100 million capitalization grant and provides a \$20 million state match. The state initially plans to use \$15 million for set-asides. As shown in Figure 6, the federal ratio is 81%. The DWSRF draws \$30 million from the Fund for incurred project construction costs (\$24.3 million federal: \$5.7 million state). It then transfers \$2.5 million from the Set-Aside Account to the Fund. The new federal ratio is 82%.

$$\begin{aligned}
 \text{Federal Ratio} &= \frac{(\text{Capitalization Grant} - \text{Set-Asides} \pm \text{Federal Dollars Transferred}) - \text{Federal Cash Draws}}{(\text{Capitalization Grant} - \text{Set-Asides} + \text{State Match} \pm \text{Total Dollars Transferred}) - (\text{Federal} + \text{State Cash Draws})} \\
 &= \frac{(\$100 \text{ million} - \$15 \text{ million} + \$2.5 \text{ million}) - \$24.3 \text{ million}}{(\$100 \text{ million} - \$15 \text{ million} + \$20 \text{ million} + \$2.5 \text{ million}) - (\$24.3 \text{ million} + \$5.7 \text{ million})} \\
 &= 82\%
 \end{aligned}$$

### *Cash Draws for Privately-Owned Systems*

Some states may be legally unable to use state funds for privately-owned systems. If they choose to make DWSRF loans to privately-owned systems, this would impact their ability to meet proportionality.

Two options are provided for states to deal with limitations on funding private entities with state funds.

- **Option 1:** When state funds cannot be used for privately-owned systems, EPA will allow the state to draw 100% Federal funds for invoices from private entities. At the same time the federal funds are drawn to cover the invoice, the state must deposit its proportional match, in cash, into the Fund. Every 18 months, the state must submit documentation that it has met proportionality within the last 6 months of each 18-month period. If a state is unable to document that proportionality has been met during the last 6 months of each 18-month period, state match deposited into the Fund for the purpose of matching 100% federal cash draws for pri-

vate systems must be expended before federal funds when invoices from public systems are submitted.

- **Option 2:** As noted on pages 11-13, states have the option of transferring funds between the CWSRF and DWSRF. In order to avoid difficulties in funding privately-owned systems, a state may transfer state match from the DWSRF to the CWSRF and federal funds from the CWSRF to the DWSRF. As a result, 100% federal funds would be available for projects in the DWSRF. Proportionality ratios would change in the CWSRF as a result of this transfer.

States must deposit delayed FY97 state match, in cash, into the Fund by September 30, 1999. After that date, the state may not access federal funds for projects until the delayed state match has been expended and the state reaches proportionality. Cash draws for federal funds to cover invoices from privately-owned systems are exempt from this requirement. Cash draws for federal funds to cover invoices from publicly-owned systems are not exempt.

## III. Cash Draw Procedures

Based on the general principles and rules presented in Section II, EPA has established specific payment and cash draw rules for set-asides and for Fund activities.

### ACH Process for Set-Asides

Section 1452 of the SDWA authorizes states to provide funding for set-aside activities. These activities include:

- Administration and technical assistance (up to 4 percent of the state allotment)
- State program management (up to 10 percent of the state allotment)
- Technical assistance to small systems (up to 2 percent of the state allotment)
- Assistance to other programs and activities (up to 15 percent of the capitalization grant)

States must establish and maintain an account for set-aside funds that is separate from the DWSRF Fund account. The DWSRF Program Guidelines require that, before cash is drawn through the federal ACH for set-asides, a state must provide detailed workplans describing how the funds will be expended and receive approval for these workplans. Once workplans are approved, states may draw funds through the ACH to fund set-aside activities. The administration and technical assistance set-aside (4 percent of allotment) may not require a workplan unless a state is providing technical or other eligible assistance with the funding in addition to reimbursing the state for DWSRF Program administrative costs.

States may request cash draws through the ACH for the full amount of the incurred cost of eligible set-aside activities. In the case of state payroll expenses, states may draw funds in advance to ensure funds are available to meet personnel expenses. Funds should be drawn no sooner than necessary to meet immediate disbursement needs for administrative costs. For example, a state can make a cash draw for admin-

istration ten days in advance, if the state's financial management system requires ten days to process a cash draw in preparation for meeting payroll.

While the 20 percent match is based on the entire capitalization grant, states are not required to deposit the state match at the time that federal funds are drawn for set-aside activities. The state match must be deposited into the state's DWSRF Fund account by the time the state draws cash through the ACH for Fund activities. The federal and state cash draw ratios presented in Section II of this Guidebook reflect this approach.

Specific requirements have been established for individual set-aside activities. The general process used for accessing capitalization grants for set-aside uses through the ACH is displayed in Figure 8.

### *Administration and Technical Assistance [1452(g)(2)] (up to 4 percent)*

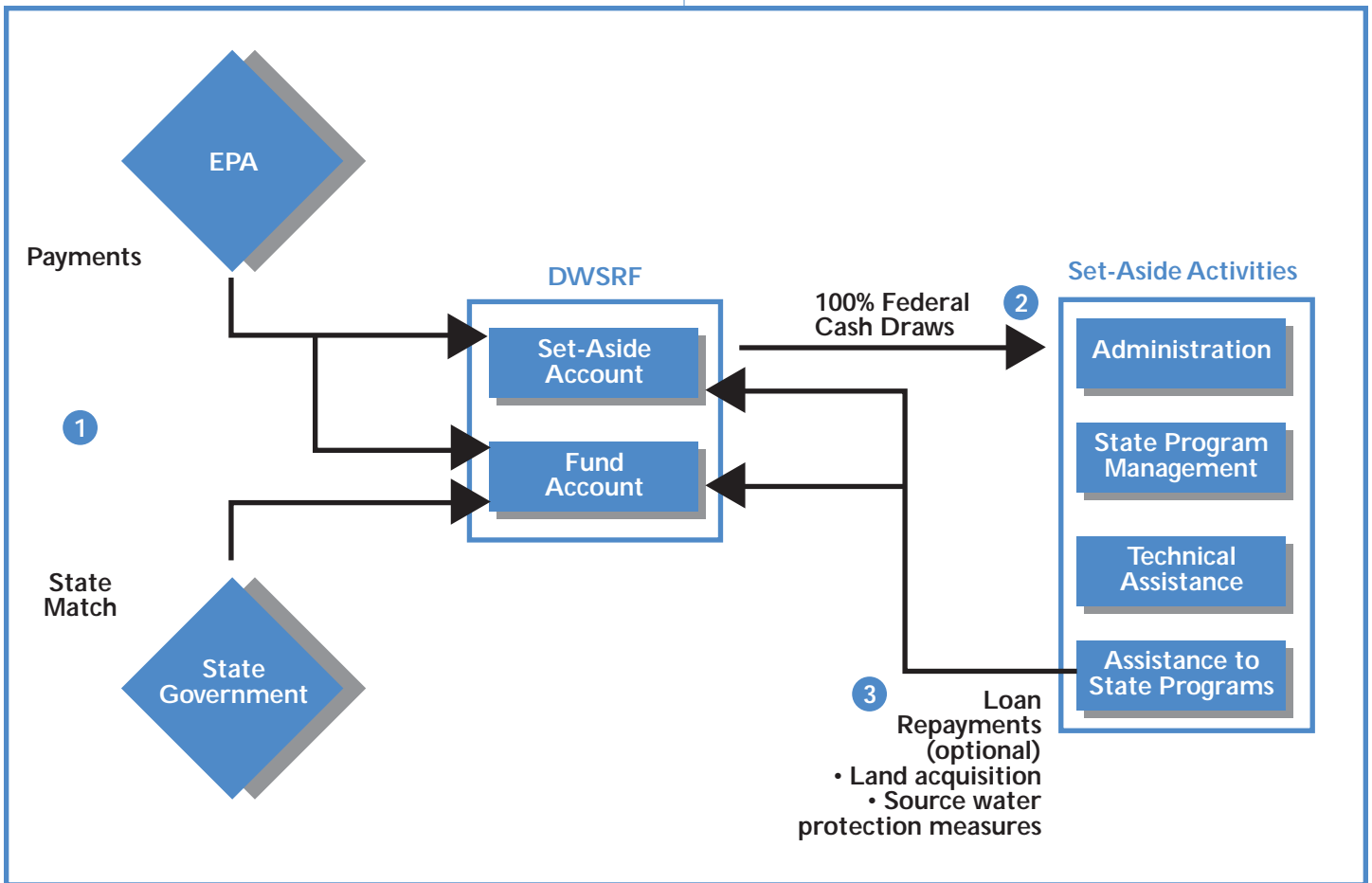
States may use up to four percent of the allotment for costs of administering the programs under SDWA section 1452 and providing technical assistance.

### *State Program Management [1452(g)(2)] (up to 10 percent)*

States may use up to 10 percent of the allotment to manage SDWA-related activities including, for example, administering the state PWSS program and developing and implementing capacity development, operator certification and source water protection programs. SDWA requires that funds used under this set-aside be equally matched with additional state funding. This one-to-one match is separate from and in addition to the 20 percent matching contribution required under section 1452 for the federal capitalization grant.

The one-to-one match requirement does not affect the cash draw procedure for this set-aside. After workplan approval, states may draw federal funds to cover 100 percent of eligible costs under this activity. However, at the end of each year states will need to document compliance with the one-to-one match requirement.





**Figure 8. Cash Draw for Set-Aside Activities:** (1) EPA payments and state match are placed in DWSRF. EPA payments are made to both the Fund Account and the Set-Aside Account according to a payment schedule. State match is deposited into the Fund Account only, and is deposited according to the pace of Fund activity. The timing of state match deposits is not related to set-aside activity. (2) DWSRF makes federal cash draws for 100% of incurred costs for set-aside activities. (3) If set-aside funds are used to provide loans as part of “Assistance to State Programs,” loan repayments may be deposited in either the Fund Account or in the account dedicated to 1452(k)(1) activities.

**Technical Assistance to Small Systems [1452(g)(2)] (up to 2 percent)**

States may use up to two percent of their allotment to provide technical assistance to public water systems serving fewer than 10,000 people. After workplan approval, states may draw funds through the federal ACH to cover 100 percent of costs incurred for eligible activities.

**Assistance to State Programs [1452(k)(1)] (up to 15 percent)**

States may use up to 15 percent of the capitalization grant for assistance including:

- loans to acquire land or conservation easements

- loans to implement source water protection measures or to implement recommendations in source water petitions
- technical and financial assistance to systems for capacity development
- expenditures to delineate and assess source water protection areas
- expenditures to establish and implement wellhead protection programs

No one activity may receive more than 10 percent of the funding for this set-aside. After workplan approval, states may draw funds through the federal ACH to cover 100 percent of invoices submitted for eligible activities.

## ACH Process for Fund Activities

This guidebook provides details on the cash draw process for the DWSRF Fund activities:

- Loans
- Buy or Refinance Existing Debt Obligations
- Guarantees
- Purchase of Insurance for Local Debt
- Revenue or Security for Fund Debt Obligations

These rules are summarized in Figure 9 (following page).

Figure 9: Summary of Payment and Cash Draw Rules

	Payment	Cash Draw
General Rule	<ul style="list-style-type: none"> <li>Starting no sooner than one year before the state enters into binding commitments</li> <li>The sooner of 8 quarters from capitalization grant or 12 quarters from time funds are allotted</li> </ul>	<ul style="list-style-type: none"> <li>Proportionate federal share is equal to the federal portion of the Fund (capitalization grant minus set-asides) divided by the total amount in the Fund (capitalization grant - set-asides+state match). Note: Proportionate federal share is calculated differently for leveraged programs.</li> </ul>
Loans	<ul style="list-style-type: none"> <li>Based on the state's schedule of binding commitments</li> </ul>	<ul style="list-style-type: none"> <li>Proportionate federal share of incurred construction costs</li> <li>Cash may be drawn for eligible incurred prebuilding costs once the loan is made</li> </ul>
Buy or Refinance of Local Debt	<ul style="list-style-type: none"> <li>Only eligible projects for which construction was initiated and debt incurred after July 1, 1993</li> <li>Based on the state's schedule of binding commitments</li> </ul>	<p><b>Constructed Projects:</b></p> <ul style="list-style-type: none"> <li>For eligible incurred prebuilding costs, cash may be drawn once the loan is made.</li> <li>Equal amounts spread over the maximum number of quarters up to the proportionate federal share</li> <li>Privately-owned public water systems not eligible</li> </ul> <p><b>Non-constructed Portions of Projects:</b></p> <ul style="list-style-type: none"> <li>Same as loans - based on proportionate federal share of incurred costs</li> </ul>
Insurance	<ul style="list-style-type: none"> <li>Based on the state's schedule of binding commitments</li> </ul>	<ul style="list-style-type: none"> <li>Proportionate federal share of premiums as they are due.</li> </ul>
Guarantees of Local Debt	<ul style="list-style-type: none"> <li>Based on the state's schedule of binding commitments</li> </ul>	<p><b>Non-default condition:</b></p> <ul style="list-style-type: none"> <li>Draw based on the proportionate federal share of the actual incurred construction cost multiplied by the ratio of the guarantee reserve to the amount guaranteed</li> </ul> <p><b>Default condition:</b></p> <ul style="list-style-type: none"> <li>Immediate. Up to the portion of the federal capitalization grant dedicated to guarantee</li> </ul>
Revenue or security for Fund debt obligations (Leveraging)	<ul style="list-style-type: none"> <li>Based on the state's schedule of binding commitments</li> </ul>	<p><b>Non-default condition:</b></p> <ul style="list-style-type: none"> <li>All Projects - Proportionate federal share of actual incurred costs is calculated as the ratio of the federal debt service reserve to the total debt service reserve, multiplied by the ratio of the total debt service reserve to the net proceeds of local debt, or,</li> <li>Group of Projects - Proportionate federal share of actual incurred costs of identified group of projects with costs equal to federal and state portion of debt service reserve.</li> </ul> <p><b>Default condition:</b></p> <ul style="list-style-type: none"> <li>Immediate, up to the portion of the federal capitalization grant dedicated to security</li> </ul>
Set-asides	<ul style="list-style-type: none"> <li>Payment taken at state discretion, consistent with approved set-aside workplan(s)</li> </ul>	<ul style="list-style-type: none"> <li>No cash draw may occur until detailed workplans are approved by EPA. No match deposit required for set-asides - federal draws may cover 100 percent of incurred costs</li> </ul>

## Loans

The DWSRF Program provides public water systems with a permanent source of funding for important SDWA compliance and public health protection projects. Repayments must begin within one year of project completion. Except in the case of a disadvantaged community loan, recipients must repay the loans over a maximum of twenty years after project completion. Disadvantaged community loans may have repayment terms of up to 30 years. Repayments from the loans will then be recycled into future loans ensuring that the DWSRF will work as a revolving fund into the future. Figure 10 illustrates the flow of loan funds into and out of the DWSRF Program. The state also has the flexibility to provide additional loan subsidies (e.g., loan forgiveness) to those communities that meet the state definition of a disadvantaged community. The use of disadvantaged community assistance does not impact how a state draws funds from the ACH but may reduce fund corpus.

### Payment and Cash Draw Rules

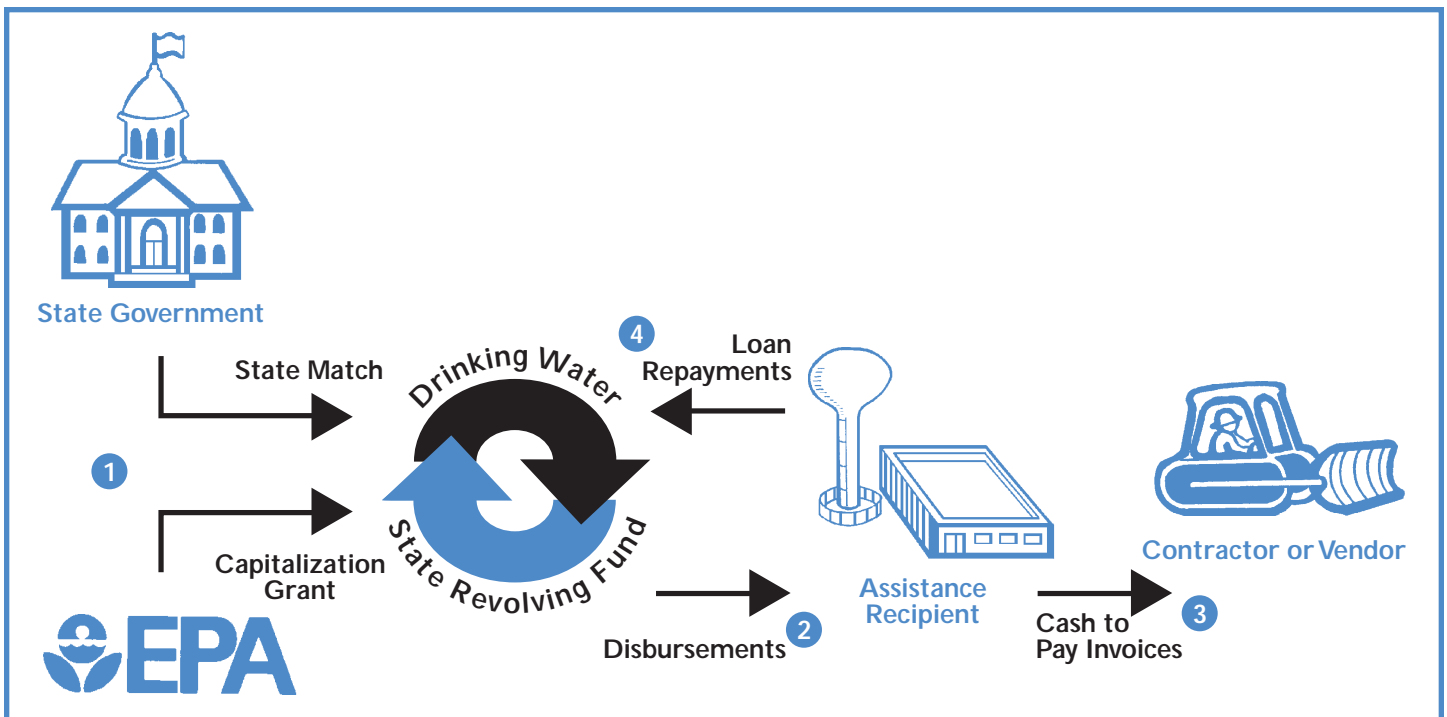
The payments for loans will be based on the state's Schedule

of Binding Commitments. The schedule must demonstrate that the state expects to enter into binding commitments in an amount equal to the amount of each grant payment and associated match designated for the Fund within one year after receipt of each grant payment. A state can renegotiate a payment schedule if it has reason to do so.

The state may draw cash through the ACH when the DWSRF receives a request from a loan recipient, based on **INCURRED COSTS**, including prebuilding costs and building costs. An incurred cost is one that is due and payable or paid. Loan recipients do not have to pay the costs in advance.

Prebuilding costs (such as planning and design), which are costs associated with the scope of the project being built, may be included in the loan agreement. All project costs, including those previously incurred, must have met the appropriate requirements of SDWA section 1452 to be eligible for loans.

The state may draw cash through the ACH for the full amount of incurred prebuilding costs immediately upon entering into a



**Figure 10. DWSRF Loans:** (1) EPA capitalization grant and state match are placed in DWSRF. (2) Funds are disbursed by DWSRF to recipient of DWSRF loan. (3) Assistance recipient uses these funds to pay invoices from contractor or vendor. (4) Assistance recipient repays loan to DWSRF.

loan agreement and receipt of a due and payable, or paid, disbursement request from the loan recipient.

## EXAMPLES

**Example 1** - From a \$100 million capitalization grant, a state plans to use \$15 million for set-aside activities leaving \$85 million of federal funding plus a \$20 million state match totaling \$105 million for loans from the Fund. The federal share of the loan funds is 81 percent (\$85/\$105). The state anticipates entering into **binding commitments** with communities at the following rate:

- First quarter, \$15 million
- Second quarter, \$50 million
- Third quarter, \$40 million

The state will provide its 20 percent match as cash at the same time the cash is drawn for fund projects from the ACH (state is not delaying the fiscal year 1997 match). An EPA **payment schedule** will be negotiated based on 81% of the estimated loans:

- First quarter, \$12.1 million
- Second quarter, \$40.5 million
- Third quarter, \$32.4 million

Once binding commitments are entered into, cash draw requests will be processed as costs are incurred under the loan agreements.

**Example 2** - Amended payment schedule - If this same state actually enters into \$30 million in loans in the first quarter after grant award, the payment schedule will be amended to provide for \$24.3 million instead of \$12.1 million in the first quarter. The second and third quarter schedules would be modified to reflect the expected binding commitments at that time. Cash draws will still be based on actual incurred construction costs.

## Buy or Refinance Existing Debt Obligations

To encourage systems to proceed with construction using their own financing before DWSRF assistance is available, the DWSRF may be used to buy or refinance debt obligations of municipal, intermunicipal, or interstate agencies. The flow of funds is shown in Figure 11.

Only projects for which construction was initiated and debt incurred after July 1, 1993 may be refinanced or have their debt purchased through the DWSRF. Refinancing is allowed for municipal, intermunicipal, or interstate agencies. Private systems are not eligible for refinancing under section 1452.

The intent of this provision is to allow projects to move forward in advance of when Fund assistance is available by offering the prospect of project refinancing at better financial terms at a later date. Projects refinanced must be eligible under the DWSRF Program Guidelines. Where the original debt for a project was in the form of a multipurpose bond incurred for purposes in addition to eligible purposes under section 1452, a Fund may provide refinancing only for the eligible portion of debt, not for the entire debt. For the purpose of refinancing, local debt is interpreted to mean a legally binding financial agreement entered into by a municipal, intermunicipal, or interstate agency that requires repayment.

### Payment Rules

Payments will be based on a state's schedule of binding commitments, following the same rules as the loan program.

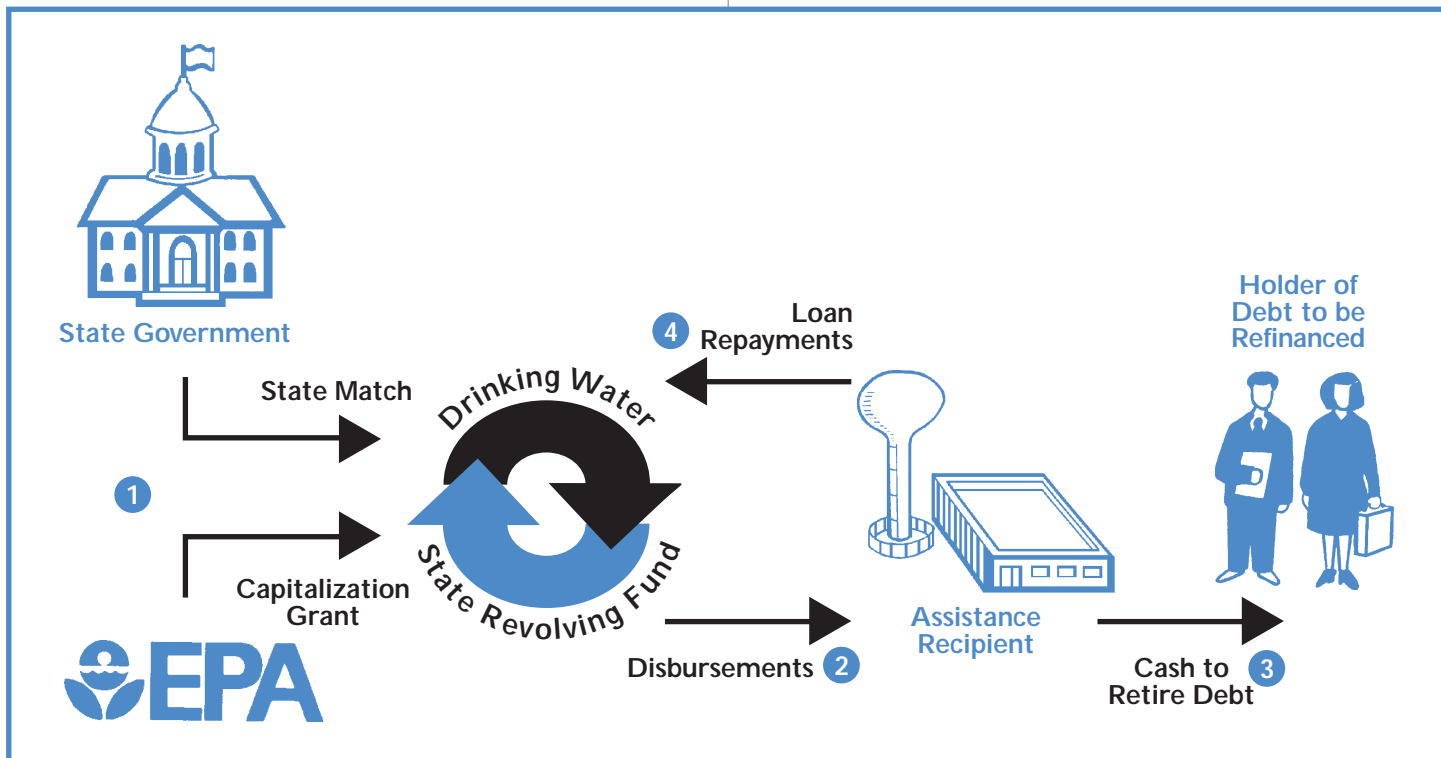
Loans for refinanced projects must be repaid within 20 years of the date the system and DWSRF enter into a binding commitment for the project, or 30 years in the case of disadvantaged communities.

### Cash Draw Rules

For constructed projects, or the completed portion of a project, the rate of cash draw cannot be greater than equal amounts over the maximum number of quarters that payments can be made. For example, if a state receives its fiscal year 1998 grant award (allotted in October 1997) in September 1999, payments will be taken over four quarters to comply with these requirements (see example 2, page 8).

Refinanced project cash draws would occur in equal amounts over four quarters.

The state also has the option to immediately draw cash for up to five percent of each capitalization grant or two million dollars, whichever is greater, to refinance or purchase local debt. Cash draws may be made when a state can immediately apply the funds to a refinanced project. Also, for eligible pre-building costs, cash for the full amount can be drawn through the ACH immediately as noted under the loan cash draw rules. The cash draw can be made up to the portion of the federal capitalization grant dedicated to the refinancing and purchase of local debt.



**Figure 11. Buy or Refinance Existing Debt Obligations:** (1) EPA capitalization grant and state match are placed in DWSRF. (2) Funds are disbursed by DWSRF to recipient of DWSRF loan. (3) Assistance recipient uses funds to retire debt. (4) Assistance recipient repays loan to DWSRF.

**Portions of Projects Not Constructed**

For portions of projects that have not been constructed, the cash draws will work the same as in the loan program; that is, cash draws will be based on the proportionate federal share of incurred construction cost.

**Incremental Disbursement Bonds**

For the purchase of incremental disbursement bonds from local governments, cash draws will be based on a schedule that coincides with the rate at which construction related costs are expected to be incurred for the project.

To understand the application of these rules, consider the following examples on the next page:

## EXAMPLES

**Example 1** - A public water system issued \$50 million in debt on June 1, 1995 and completed construction of an upgrade project in June of 1996. Construction commenced after July 1, 1993. The state's DWSRF can purchase this debt (refinance) to lower user fees. Payments and cash draws for this project will be made based on the federal proportional share (see section II of this report). Cash draws will be made in equal amounts over the maximum number of quarters over which payments can be made. If payments are made on this grant over 8 quarters and the federal draw ratio is 81%, the state can draw \$5.06 million each quarter.

**Example 2** - A public water system issued \$50 million in debt on May 1, 1996 to finance construction of its drinking water facilities and initiated construction in June 1996. The system indicates interest in refinancing the project, submits preapplication information to the state, and is determined to be a high priority project based on SDWA compliance, protection of public health, and affordability considerations. At the time of the loan agreement, the system has spent \$30 million on construction. The DWSRF can be used to refinance or purchase the \$30 million in equal cash draws over the maximum number of quarters over which payments can be made. If payments are made on this grant over 8 quarters and the federal draw ratio is 81%, the state can draw \$3.04 million each quarter for the refinanced portion of the project. The remaining \$20 million will be treated the same as a loan and cash will be drawn as costs are incurred.

**Example 3** - A public water system issued \$50 million in debt on August 1, 1996. At the time of the loan agreement, there has been no construction. Just like a loan, cash can be drawn as costs are incurred.

**Example 4** - A public water system constructed a treatment facility costing \$50 million in 1992 by issuing local revenue bonds. Since the bonds were issued and construction began prior to July 1, 1993, the project may not be refinanced through the DWSRF.

## Purchase of Insurance

The DWSRF may be used to purchase **INSURANCE** to guarantee local debt service payments. The flow of funds is shown in Figure 12.

### Payment Rules

A payment schedule will be negotiated between the state and EPA based on the state's schedule of binding commitments. Binding commitments will reflect the due dates for insurance premiums. Payments may start no more than one year before the state enters into a binding commitment.

### Cash Draw Rules

States may draw on the ACH to obtain cash for the proportionate federal share of insurance premiums as they come due.

## Guarantees

States may use the ACH to guarantee local debt or obligations as shown in Figure 13. Because the federal capitalization grant is being used to fund a contingent liability, there may or may not be actual cash needs. Since cash draws are generally allowed only for incurred costs, cash could not be drawn and funds would not be transferred unless there were an impending

default. Therefore, cash draw procedures were established to cover default and non-default situations as follows:

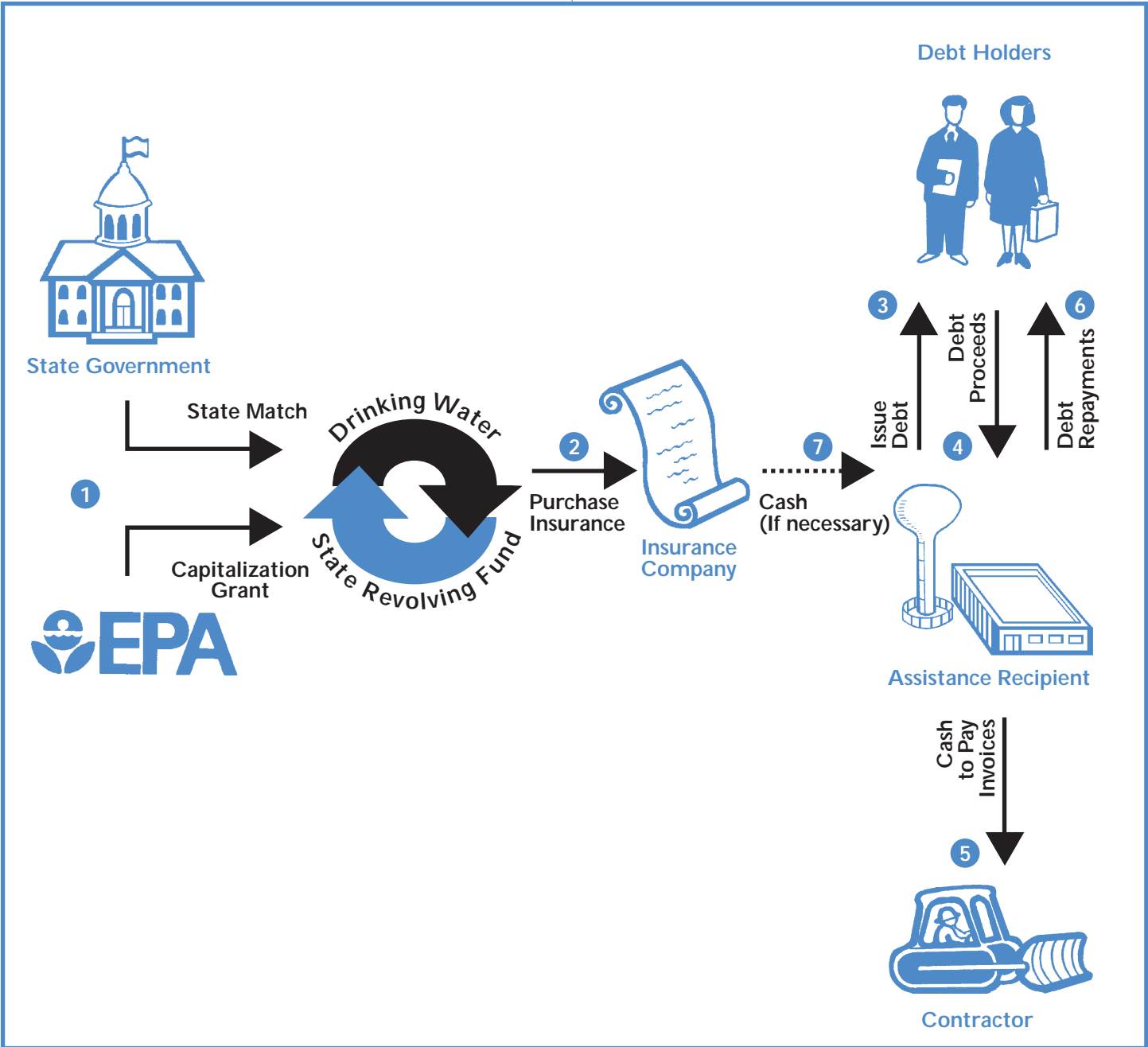
- In case of a non-default, cash is drawn through the ACH to the DWSRF as construction progresses so that the DWSRF will eventually have the cash from the ACH even though the assistance recipient has not received money directly from the DWSRF.
- In case of a default, cash is immediately available up to the portion of the federal capitalization grant pledged as the guarantee, and

### Payment Rules

Payments will be made based on the schedule of binding commitments. States must enter into binding commitments that are equal to the amount of the capitalization grant to be deposited into the Fund and state match within one year of receiving the payment.

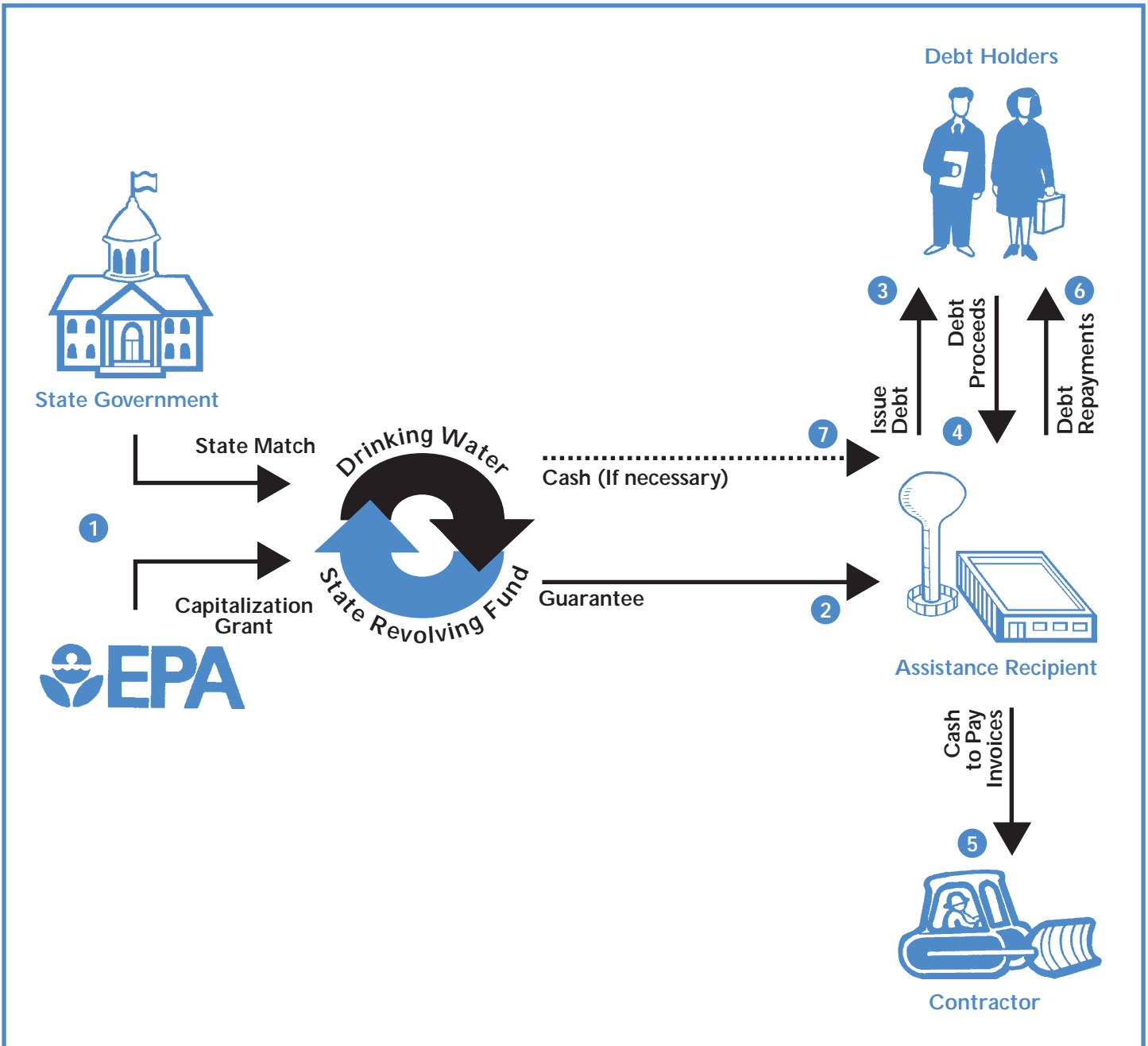
### Cash Draw Rules

In a non-default situation, the rules allow for cash to be drawn even though the state does not need it to correct the default of a local recipient. In a default situation, the rules make cash available to protect the holder of local debt.



**Figure 12. Purchase of Insurance:** (1) EPA capitalization grant and state match are placed in DWSRF. (2) DWSRF purchases insurance to guarantee local debt service payments. (3) Assistance recipient issues debt, and (4) receives proceeds from sale. (5) Assistance recipient uses these funds to pay invoices from contractor or vendor. (6) Assistance recipient repays its debt to debt holders. (7) In the event of default, insurance company provides funds for repayment of debt holders.





**Figure 13. Guarantee Local Debt Obligations:** (1) EPA capitalization grant and state match are placed in DWSRF. (2) DWSRF guarantees local debt or obligations. (3) Assistance recipient issues debt, and (4) receives proceeds from sale. (5) Assistance recipient uses these funds to pay invoices from contractor or vendor. (6) Assistance recipient repays debt to debt holders. (7) In the event of default, DWSRF repays debt holders as guaranteed.

**Non-Default Conditions**

To allow for the conversion of the guarantee portion of the capitalization grant to cash, EPA will negotiate cash draws for the proportionate federal share of the guaranteed reserve. The schedule will be based on the proportionate federal share

of the actual incurred construction cost multiplied by the ratio of the guarantee reserve to the amount guaranteed.

**Default Conditions**

If the guarantee provision is triggered because of an imminent

default in debt service payments on the guaranteed debt, the following procedures will apply:

- The state may request an immediate cash draw up to the total amount of the federal capitalization grant committed to the guarantee.
- If a default results in a reduction but not a complete depletion of the DWSRF guarantee reserve, the state may negotiate a payment and cash draw schedule for the remaining amount of the guarantee, up to the rate based on the non-default rules. (See example below).

## Revenue or Security for Fund Debt Obligations (Leveraging)

States may “leverage” the federal capitalization grant to increase the total amount of funding available. Leveraging is accomplished by using the Fund assets as a source of revenue or security for the payment of the principal and interest on revenue bonds issued by the state. For example, a state may use the federal capitalization grant and state match to establish a debt service reserve fund for bonds issued by the DWSRF. With the security provided by the debt service

### EXAMPLES

A state is planning to provide a guarantee with a portion of its capitalization funding. The state will receive a \$30 million grant. Five million dollars will be used for set-aside activities leaving \$25 million of the capitalization grant and \$6 million from state match for Fund activities. The federal share for cash draws is 81 percent (\$25M/\$31M).

The state wishes to establish a guarantee of 4 million dollars to support the construction of water system infrastructure costing \$48 million. The state will use \$3.24 million in federal funds (81 percent) and \$.76 million of state match (19 percent) for guarantees.

**Payments** - Payments for funds to be used for guarantees are based on the schedule of binding commitments. For example, assuming binding commitments will occur equally over two quarters the payments associated with the \$3.24 million federal guarantee funding would be:

- 1st quarter - \$1.62 million
- 2nd quarter - \$1.62 million

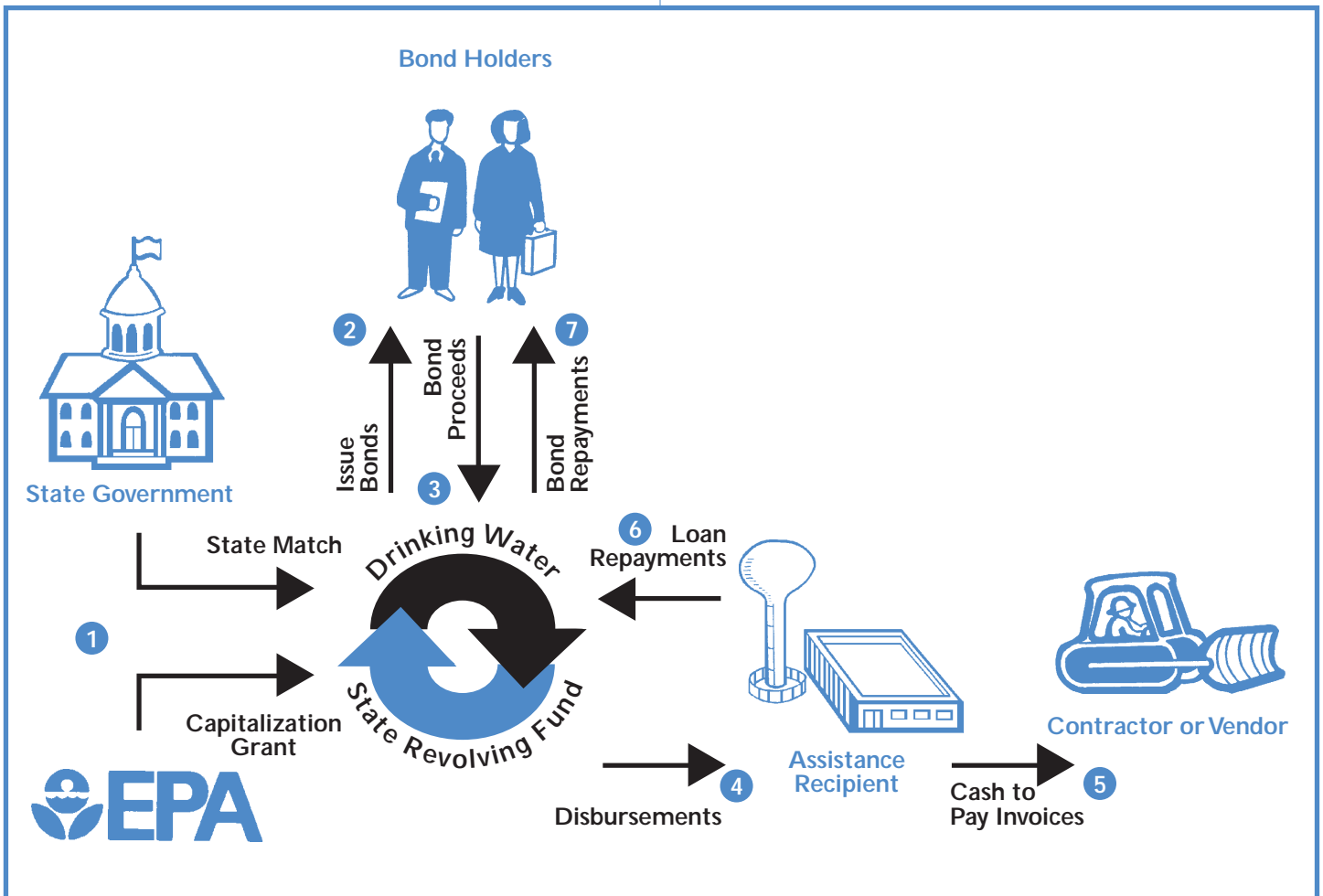
The state will also make its 19 percent match payments to the DWSRF on the same schedule:

- 1st quarter - \$.38 million
- 2nd quarter - \$.38 million

**Cash draws** - Draws through the ACH to the DWSRF are based on the rate at which construction related costs occur. Assuming \$2 million in costs are incurred in the first quarter, the state draws \$.13 million from the ACH which is computed as follows: cost (\$2M) x proportionate federal share (\$25M/\$31M) x ratio of reserve to amount guaranteed (\$4M/\$48M). The associated state match of \$.03M is computed as follows: cost (\$2M) x proportionate state share (\$6M/\$31M) x ratio of reserve to amount guaranteed (\$4M/\$48M). The guarantee fund now contains a total of \$.16M (\$.13 million of federal capitalization and \$.03M of state match).

**Default** - If a default is imminent for a system because it is unable to pay \$1 million in debt service on bonds that the DWSRF has guaranteed, the state would take the following steps:

- Compute the amount needed to bring the guarantee fund to \$1 million (\$1M-\$.16M) or \$.84 million. (\$.16 million is the amount in the guarantee fund)
- Determine the proportionate federal share (\$25M/\$31M x \$.84M) or \$.68 million.
- Determine the proportionate state share (\$6M/\$31M x \$.84M) or \$.16 million.
- Draw \$.68 million through the ACH which, when added to the state's match (\$.16M) and the preexisting amount in the guarantee account of \$.16 million, will provide the \$1 million for debt service on the guaranteed bonds.
- Renegotiate the cash draw schedule with the EPA to receive the remaining \$2.43 million (\$3.24M-\$.13M-\$.68M) based on proportionate federal share of incurred cost (\$25M/\$31M), multiplied by the ratio of the remaining reserve to the remaining amount guaranteed (\$.3M/\$46M).



**Figure 14. Leveraging in the DWSRF:** (1) EPA capitalization grant and state match are placed in DWSRF. (2) DWSRF issues bonds, and (3) receives proceeds from sale. (4) DWSRF disburses funds to DWSRF loan recipients. (5) Assistance recipients use these funds to pay invoices from contractors and/or vendors. (6) Assistance recipients repay loans to DWSRF. (7) DWSRF repays debt to bond holders from repayments or from repayments and interest from debt reserve.

reserve, the state is able to issue bonds in an amount larger than the federal capitalization grant (e.g., 200 percent larger) and finance more projects earlier in the Program. Bond principal and interest payments are funded with DWSRF loan repayments and interest earned on the capitalization grant funds deposited in the debt service reserve fund. The general process that states use to access the funds in a leveraged program is illustrated in Figure 14.

**Payment Rules**

Payments will be made based on the schedule of binding commitments. States must enter into binding commitments

that are equal to the amount of the capitalization grant and associated state match designated for the Fund within one year of receiving the payment. Binding commitments refer to the individual loans with the local recipients, not the security agreement itself.

**Cash Draw Rules**

When a state uses the federal capitalization grant as security for state debt in the form of a debt service reserve, cash draws are not needed to provide disbursements for incurred project costs. These costs are covered by bond proceeds. As bond proceeds are disbursed to cover incurred costs,

funds are drawn through the ACH into the debt service reserve. In this case, the state may draw cash through the ACH according to the following procedures:

### ***Non-Default Conditions***

The state may draw and deposit cash into the debt service reserve, as actual construction costs are incurred, for projects constructed with bond proceeds secured by the federal capitalization grant. Cash draws will be based on the **PROPORTIONATE FEDERAL SHARE** of the incurred construction costs. The proportionate share may be determined in either of two ways:

- **“All Projects Method”** - Assuming the state match is being used in the debt service reserve fund, the federal share cash draw ratio is equal to the ratio of the federal share of the debt service reserve fund (capitalization grant - set-asides) to the total debt service reserve fund, multiplied by the ratio of the total reserve fund (capitalization grant - set-asides + state match) to the net bond proceeds. The state share is equal to the ratio of the state share of the debt service reserve fund to the total debt service reserve fund, multiplied by the ratio of the total reserve fund to the net bond proceeds.

In cases where a state is using only capitalization grant funds for the reserve, the amount of the reserve is equal to the capitalization grant minus set-asides and the state match would be included with the net bond proceeds in this equation.

- **“Group of Projects Method”** - As an alternative, a state can identify a group of public water system projects whose cost is approximately equal to the amount of federal funds plus state match being used as security in the debt service reserve. The state can then draw cash based on the incurred costs for those projects multiplied by the ratio of the federal portion of the debt service reserve fund to the total debt service reserve fund. This method may actually draw federal funds more quickly than the all projects method, depending on the pace of construction of the selected group of projects versus the pace of all project construction.

The examples on page 28 illustrate how these two methods may be used to calculate cash draw ratios for a leveraged DWSRF Program.

### ***Default Conditions***

If the security provision is triggered because of an imminent default in debt service payments, the state may request an immediate cash draw up to that portion of the federal capitalization grant committed to secure the state bonds. If a balance of unused capitalization grant remains after the default is covered, the state must negotiate a revised schedule for the remaining amount.

### ***Aggressive Leveraging***

In a situation where the above cash draw rules would significantly frustrate a state's leveraged program, EPA may allow an exception to these rules and provide for a more accelerated cash draw. A state contemplating aggressive leveraging must meet with Regional and Headquarters staff to explain its leveraging approach as part of its capitalization grant application. EPA Headquarters will make case-by-case determinations to allow exceptions prior to the award of each capitalization grant.

To be eligible for aggressive leveraging, a state must demonstrate the following:

- There are eligible projects ready to proceed in the immediate future with enough cost to justify the amount of the secured bond issue;
- The absence of cash on an accelerated basis will substantially delay these projects;
- If accelerated cash draws are allowed, the Fund will provide substantially more assistance; and
- The long-term viability of the state program to meet water quality needs will be protected.

If these conditions are met, the state and EPA may negotiate an accelerated cash draw schedule. However, in non-default conditions, accelerated cash draws can be made no faster than in equal amounts over the maximum number of quarters that payments can be made.

**Cash Draw Option for Combined Direct Loan/Leveraged Programs**

If a DWSRF Program includes both direct loans and leveraged loans, it can have two cash draw ratios. One, using grant spe-

cific or rolling average proportionality, would apply to the direct loan portion of the program. A second, using either the all projects method or the group of projects method, would apply to the leveraged portion of the program.

**EXAMPLES**

**Example 1** - A DWSRF Program accepts a \$10 million capitalization grant and provides a \$2 million state match. The state plans on using \$1 million for set-asides. The state issues \$24 million of bonds to leverage the program. Using the “all projects” method, if the DWSRF receives a disbursement request of \$1.5 million for incurred construction costs, the state may make a cash draw of \$0.59 million through the ACH based on the all projects method:

Federal Portion of Debt Service Reserve	=	Capitalization Grant - Set-asides
	=	\$10 million - \$1 million = \$9 million
Total Reserve	=	Federal + State Portion
	=	\$9 million + \$2 million = \$11 million
Bond Proceeds	=	\$24 million - \$1 million issuance fees = \$23 million
Federal Cash Draw Ratio	=	$\frac{\text{Federal Portion of Reserve}}{\text{Total Reserve}} \times \frac{\text{Total Reserve}}{\text{Net Bond Proceeds}}$
	=	$\frac{\$9 \text{ million}}{\$11 \text{ million}} \times \frac{\$11 \text{ million}}{\$23 \text{ million}} = 39\%$
Cash Draw	=	\$1.5 million x 39% = \$0.59 million

**Example 2** - The same scenario as above except the state wishes to use the “group of projects” method for cash draws and the disbursement request is for \$1.5 million. For a disbursement request the state would make the same cash draw of \$1.23 million.

Federal Portion of Debt Service Reserve	=	Capitalization Grant - Set-asides
	=	\$10 million - \$1 million = \$9 million
Total Reserve	=	Federal + State Portions
	=	\$9 million + \$2 million = \$11 million
Federal Cash Draw Ratio	=	$\frac{\text{Federal Portion of Reserve}}{\text{Total Reserve}} = \frac{\$9 \text{ million}}{\$11 \text{ million}} = 82\%$
Cash Draw	=	\$1.5 million x 82% = \$1.23 million

# Appendix A

## Glossary of Terminology

### Allotment

Amount available to a state from appropriated funds.

### Appropriation

Statutory authority that allows federal agencies to incur obligations and to make payments out of the Treasury for specific purposes.

### Assistance Recipient

A public water system or other entity which receives assistance under the DWSRF Program.

### Authorization

Legislation which authorizes the appropriation of funds to implement program activities. It does not provide any money, only the appropriation act itself permits the withdrawal of funds from the Treasury.

### Binding Commitments

Binding commitments are legal agreements between the state and the local recipient that define the terms and the timing for assistance under the DWSRF.

### Cash Draw

A cash draw is the transfer of cash through the ACH to the DWSRF Program. Upon a state's request for a cash draw through the ACH, the Treasury will transfer funds to the DWSRF Program account established in the state's bank.

### Construction

The planning, design, and building of eligible facilities.

### Disbursements

A disbursement is the transfer of cash from the DWSRF Program to the assistance recipient or others.

### Guarantee

A promise to provide local debtholders with full and timely payment of principal and interest on the local debt obligation to the limit of the guarantee, in the event of default by the issuer. The DWSRF Program may not, however, grant funds to fund a reserve account for a local debt issue.

### Incurred Cost

Costs that are eligible for disbursement from the DWSRF Program including construction related costs, administrative costs or costs for any of the forms of assistance authorized under SDWA. The DWSRF Program or the assistance recipient must first incur a cost, but not necessarily disburse funds for that cost, in order for cash to be drawn through the ACH.

### Insurance

Bond insurance, available from a number of insurance companies, to guarantee debt service payment of system debt.

### Interest Subsidy

The use of funds to reduce the interest cost on state or local bonds by providing a subsidy for all or part of the interest payment.

### Leveraging

Leveraging refers to the use of the capitalization grant as the security for the repayment of state bonds. Leveraging does not include state financing arrangements in which repayment streams, rather than the capitalization grant, are used as the primary security for the bond issue.

### Loans

An agreement between the DWSRF Program and the local recipient through which the DWSRF provides funds for eligible assistance and the recipient promises to repay the principal sum back to the DWSRF Program over a period not to exceed 20 years, or 30 years in the case of loans to disadvantaged communities. Interest rates must be established at or below market interest rates and may include zero interest loans. Repayments for loans made under 1452(k)(1) may be deposited into the Fund or in a separate account dedicated to 1452(k)(1) activities.

**Obligation**

*The commitment of funds that are allotted to a specific state, through a grant or contract agreement.*

**Payments**

*An action by EPA to increase the amount of funds available for cash draw through the ACH (i.e. the ceiling). Through a payment, the EPA makes funds available to the state up to the amount of the capitalization grant. A payment is not a transfer of cash to the state but only an authorization making funds available for transfer to the state when a cash draw request is submitted. A payment schedule, indicating the timing and size of the payments to be made, will be entered into between EPA and the state. It will be based on the state's projection of binding commitments, the rules for cash draws and the use of the funds.*

**Proportionate Federal Share**

*That portion of incurred costs that represents the federal share, taking into account the requirement that the state provide a 20% match.*

**Purchase of Local Debt**

*A DWSRF may purchase local debt obligations where such debt was incurred and construction was initiated after July 1, 1993. The DWSRF may purchase incremental disbursement bonds from local governments on a schedule that coincides with the rate at which construction related costs are expected to be incurred for that project.*

**Refinancing**

*A DWSRF may refinance local debt obligations of municipal, intermunicipal or interstate agencies at or below market rates, if the initial debt was incurred and construction was initiated after July 1, 1993.*