Environmental Financial Advisory Board

Cross-Collateralization Issues Affecting the State Revolving Fund Program

Comments on the Safe Drinking Water Act Guidance

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SDWA GUIDANCE AND CROSS-COLLATERALIZATION ISSUES

The Environmental Financial Advisory Board respectfully offers the following comments to the Office of Water in the spirit of encouraging greater flexibility and efficiency in its guidance for the Safe Drinking Water Act State Revolving Fund Program.

OVERVIEW

The Safe Drinking Water Act (SDWA) provides that published guidance contain provisions to assist in meeting key objectives, including *"to ensure that each State commits and expends funds allotted to the State . . . as efficiently as possible in accordance with this title and applicable State laws."*

SDWA State Revolving Fund (SRF) guidance must recognize that, in order to maximize available funding, each state will need flexibility to implement the SRF in ways which best meet local needs. Nothing provides a clearer testimony of this fact than the different security structures used by the 25 leveraged and related Clean Water Act (CWA) SRF issuers across the country.

Implementation of CWA SRFs has varied because of the diversity of needs and issues faced by each state. For example, while the SRF programs in Massachusetts, Connecticut, New York, Colorado, Alabama, Arizona, Rhode Island, Michigan, Minnesota and Missouri all follow a "Reserve Fund" leverage model, the financial characteristics of each program vary substantially. The same can be said for the states that follow "Blended Rate" or "Cash Flow" leveraging approaches such as Arkansas, Ohio, Arizona, Maryland, North Dakota, Texas and South Dakota. The factors that will ultimately influence financial structure will include the composition of each State's loan portfolio, the targeted loan rate and method of providing loan subsidies, state law and the form of state match, among others.

It is critical that we learn from and build upon the experience of CWA SRFs nationwide. This experience points towards the federal-state partnership that has developed, first through the CWA SRF and now with the SDWA SRF, as a way of financing environmental mandates. A cornerstone of this partnership has been trusting states to manage the financial aspects of SRFs in the most prudent fashion. The vast amount of administrative discretion allowed to the states in the management of the CWA SRF has been the single most important factor in the success of that program.

For states pursuing joint management of the two SRFs, flexibility with respect to cross-collateralization between the CWA SRF and the SDWA SRF is critical. Cross-collateralization is defined as having the ability to use CWA SRF corpus or loans to act as security for SDWA SRF loans and vice versa within the context of jointly-managed programs. Cross-collateralization does not mean that funds authorized for one purpose will ultimately be used for an unauthorized purpose. The inability to cross-collateralize could result in added management costs — something meant to be avoided by the joint management provisions of the SDWA — as well as increased borrowing costs, *not only with* respect to the SDWA SRF, but potentially with respect to the existing CWA SRF.

INTRODUCTION TO LEVERAGE, BOND POOLS AND INDENTURES

There are three basic approaches a state can take in the administration of its state revolving fund: the direct loan approach, the reserve fund leveraged approach, and the cash flow or blended rate leveraged approach. As the name implies, the direct loan approach is simply a loan program based on the pool of revenues derived from the lending of federal SRF capitalization grants and the state match. Though leveraging, an SRF sells bonds today to enhance finding capacity beyond that which would be derived from a direct lending approach. Leveraging benefits a state whose local governments have current needs which are greater than the SRF funds presently available. (For additional information on SRF leveraging, see Guide to State Revolving funds, 1996 Edition, Merrill Lynch and Co. by Christopher Mauro, CFA.)

Under reserve fund leveraging, capitalization dollars are invested in a large reserve fund which provides subsidy income to borrowers and security to bondholders. Blended rate leveraging is accomplished through the funding of loans from bonds which are secured and subsidized by a direct loan component of the SRF.

With bond issuance or leveraging, SRFs enter into contracts with bondholders - usually called Trust agreements, Resolutions or Indentures - which bind the issuer to certain covenants. These contracts govern the way in which repayments from SRF loan pools are recaptured to meet bond debt service payments and in which SRF collateral is established as additional security to protect bondholders from loan defaults. Cross-collateralization - meaning the ability to use loan repayments or reserves from Borrower A as security for Borrower B and vice versa - is a key security feature of existing SRF bonds.

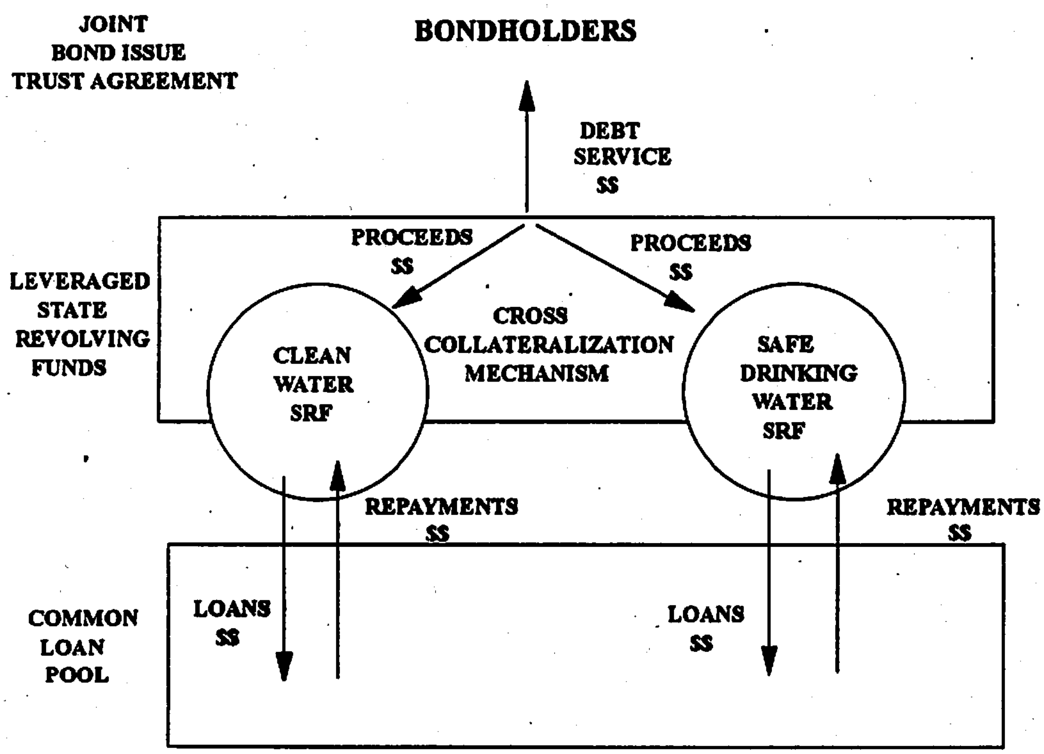
CROSS-COLLATERALIZATION IS CONSISTENT WITH OTHER PROVISIONS OF THE ACT AND CONFERENCE REPORT

In recognition of the importance of cross-collateralization to the efficient management of the SDWA SRF, the Conference Report states that:

> *"States are allowed to jointly manage the corpus of the new drinking water State loan fund with other revolving loan funds. The requirement that the funds be used solely for purposes that meet the objectives of the Safe Drinking Water Act does not preclude bond pooling arrangements, including cross-collateralization, provided that revenues from the bonds are allocated to the purposes of the Safe Drinking Water Act in the same portion as the funds are used as security for the bonds."*

The Act recognizes that combined management of the SDWA SRF with other revolving funds, including the CWA SRF, will help ensure that states commit and expend funds in an efficient fashion. This is particularly true for states which leverage their funds. By not having to reinvent the wheel with respect to security structures and loan repayment monitoring mechanisms, both the SDWA and CWA SRFs win as fixed expenses are kept to a minimum and are shared by a greater number of participants. For certain SRFs, cross-collateralization will be essential from a security structure perceptive.

In its transferability provisions, the SDWA recognizes that giving states the ability to transfer moneys between the CWA and the SDWA up to a predetermined amount will be of benefit to the state in helping finance its environmental needs. The transferability provisions of the Act would permit the use of CWA SRF moneys to cure SDWA loan defaults and vice versa up to the amount subject to transfer. Cross-collateralization is a moderate alternative in comparison with asset transfers because it does not involve the initial transfer of funds from one SRF to another. Further, even in the unlikely event that capital from one SRF is used to cure a default on a loan generated by the other SRF, mechanisms can easily be implemented to assure the timely reimbursement of the SRF, as discussed later in the "Management of the Cross-Collateralization Mechanism." Figure A is a generalized diagram of the cross-collateralization concept.



THE CROSS-COLLATERALIZATION CONCEPT
FIGURE A

THE IMPACT OF CROSS-COLLATERALIZATION ON LOAN CAPACITY FOR CWA AND SDWA SRFS IS MEANINGFUL

Rating agency criteria has evolved over the past six years for measuring SRF bond credit quality. The criteria was advanced in response to the high levels of collateral and diversification developed by leveraged CWA SRFs. As a result, most SRF bonds are now rated in one of the two highest rating components will in turn affect funding capacity for a leveraged SRF.

For those states that leverage or are looking to leverage their SRFs, the flexibility to implement the SDWA SRF in a fashion which is consistent with the credit characteristics of existing CWA SRFs is important. In the rating process, key structural SRF components include the size of a pool, the number of borrowers and the level of reserves and collateral in a pool. Each of these structural components will in turn affect funding capacity for a leveraged SRF.

1. Diversification Enhances Funding Capacity for Leveraged SRFs

The diversity and size of a pool is a key determinant of an SRF's ability to use its capital efficiently to fund loans. Diversity is viewed as broadening the programmatic strength of an SRF, thereby allowing that SRF to spread the benefits of a program to a wider group of borrowers. With smaller pools, the ability to fund borrowers is more constrained. For example, at least one rating agency (Standard & Poor's) evaluates pools smaller than 10 borrowers according to the weakest link, i.e. the weakest borrower in the pool. A pool being rated based on a "weak link" approach would in essence be limited to including the strongest credits in the program in order to ensure strong ratings and enhance the marketability of a leveraged issue. With larger pools, these issues become less relevant because diversity makes the pool less sensitive to any single borrower. Standard & Poor's criteria stipulates that pools with fewer than 20 borrowers must provide 100% collateral on non-rated credits as well as collateral levels for all other borrowers which are 25% to 50% greater than those for larger pools. One SRF administrator estimates that diversity in his state's CWA SRF program has allowed it to fund $15-20 million in loans which would otherwise not have received funding.

Another rating factor and therefore a determinant of funding capacity is concentration, or the presence of single borrowers responsible for more than 10% of a portfolio. Concentration penalties are assigned such that, in order for an SRF to achieve ratings higher that those of the concentrated borrower, 100% collateral must be reserved for those borrowers rated below the target program rating. For example, according to certain rating criteria, an SRF program targeting AA ratings for its leveraged bonds must reserve 100% collateral for any borrower rated below AA which constitutes 10% or more of the loan portfolio. Clearly, the smaller the program, the larger the probability that concentration will be a factor and the greater the need to limit funding of certain loans to manage single borrower exposure.

For those states which currently leverage their CWA SRFs and are planning to leverage the SDWA SFR, it is likely that bond issues will be sold jointly in order to reduce costs of issuance. Without cross-collateralization, SDWA SRF portfolios would need to initially fund only the strongest credits in the state in order not to be viewed as "start-ups" lacking the diversity of their CWA SRF counterparts. Cross-collateralization benefits therefore run both ways as the CWA SRF benefits from greater diversity, lower concentrations and increased ability to fund borrowers which were being "managed" into the program in order to reduce their concentration impact on the program.

2. Quality Spreads from Rating Differentials Affect Funding Capacity

Ratings affect funding capacity in a similar way as diversification and collateral requirements. The higher the ratings, the larger the dollar amount of loans that can be generated by a leveraged SRF. For SRFs with fixed loan rates, the higher the rating, the lower the interest rate on the bonds and the lower the subsidy needed from program earnings to "buy down" the rate on a loan. Higher ratings therefore free up program resources for additional loans, which corresponds to the admonitions of Congress that SDWA SRFs pursue efficiency in the management and expenditure of funds. As discussed in the previous section, cross-collateralization between CWA SRF loans and SDWA SRF loans will help SDWA SRFs benefit from the stability of seasoned and diversified CWA loan portfolios, will assist in maintaining the already high ratings achieved by CWA SRFs and will help maximize funding for both programs in compliance with CWA and SDWA regulations.

Without cross-collateralization, the bond rating of a single issue funding both types of SRF loans will trend towards the lowest of the CWA SRF or SDWA SRF evaluated on a stand-alone basis rather than that of a stronger, more diversified whole. The following table shows an example of how the ability to cross-collateralize or the lack thereof will affect funding for an SRF targeting 3% loan rates for each program in a 6% market rate environment given certain ratings assumptions.

Leveraged Bond Funding Scenarios

Assumptions	CWA/ SDWA Cross-Collateralized	CWA/SDWA Non-Cross-Collateralized
Combined FY 97 Grant Amount (Millions)	$120	$120
Target Loan Rate	3.00%	3.00%
Reserves to Meet Subsidy	50%	50%
Bond Ratings	Aaa/AAA	Aa/A
Bond Yield Spread between Ratings	----	.15%
Combined SRF Funding (Millions)	$240	$234

The above analysis assumes that a sufficient amount of reserves are used as security for the bonds to produce a 3% loan rate. The yield premium of 15 basis points that will be demanded by buyers of the lower rated, non-cross-collateralized bond issue will result in a direct reduction in the combined funding capacity of both SRFs of $6 million, or 5% of the combined capitalization moneys. The 15 basis point differential assumed above, while accurate under current market conditions, would be understated in an environment of wider "quality" spreads. It would also be understated if the non-collateralized SRF ratings were lower than those assumed in our analysis because of concentration penalties or other rating factors such as a "weak link" approach to the rating of the jointly-managed program. The next table provides a sensitivity analysis showing how wider spreads could affect funding between the cross-collateralized and non-cross-collateralized bond issues.

<u>Reduction in Funding from Leveraging per $120 Million in Capitalization Grants</u>

Spread to Higher Rated Structure	Reduced Funding Amount
.15%	(5,714,286)
.20%	(7,500,000)
.25%	(9,230,769)
.30%	(10,909,091)
.35%	(12,537,313)

MANAGEMENT OF THE CROSS-COLLATERALIZATION MECHANISM

It is important to emphasize that cross-collateralization can take place without jeopardizing the use of capitalization grants to fund those projects for which they were originally intended. States can benefit from cross-collateralization while at the same time ensuring compliance with CWA and SDWA project funding thresholds by implementing: (I) simple accounting mechanisms to ensure that the percentage of project types funded meet original capitalization grant proportions; and (ii) mechanisms to ensure replenishment of one SRF from repayment moneys or new capitalization grants destined for another SRF in order to maintain appropriate funding levels in each program.

With respect to the cross-collateralization mechanism itself and the accounting mechanisms used to track CWA and SDWA grants, each state should be given the flexibility to implement whichever structure provides the best fit. Although the low default incidence of SRF loans makes it unlikely that cross-collateralization will result in CWA SRF moneys beings used to cure SDWA loan defaults and vice versa, SRF administrators are actively thinking about mechanisms to ensure compliance with fund use requirements. For example, an administrator of a leveraged "reserve model" CWA SRF intends to implement cross-collateralization in a way which would force releases from CWA-funded reserves to be used first to cure CWA loan defaults before tapping SDWA moneys for that purpose. The same would hold for SDWA loan defaults with respect to SDWA and CWA-funded reserves.

SRF administrators are experienced in the financial management of complex structures and are best equipped to develop an approach to monitoring loan repayments, reserve fund flows and cross-collateralization of jointly-managed CWA and SDWA SRFs. SRF managers are widely acknowledged in the industry, particularly rating agencies and investors, for the control systems they have implemented to manage SRFs and the credit review processes that have been established to evaluate borrower repayment obligations.

CONCLUSION

The experience of the CWA SRF clearly points to the fact that states have the managerial capabilities to ensure compliance with federal requirements within the vast amount of administrative discretion granted to them under the CWA. This discretion has resulted in efficiently-managed structures nationwide which have met the individual environmental needs of the states.

The Environmental Financial Advisory Board strongly encourages EPA and state management efforts that maximize available funding for environmental projects under both the SDWA SRF and CWA SRF programs in compliance with the respective authorizing Acts. The ability to cross-collateralize is an option which should be made available to states as a management tool to maximize funding. Not doing so would be a missed opportunity. The Board is supported in this view by the Council of Infrastructure Financing Authorities, the principal association representing the State Revolving Funds.