Credit Suisse
2016 Conservation Finance Conference

US EPA Sponsored Funding Programs

EPA
Water Infrastructure and Resiliency Finance Center

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US EPA Infrastructure Funding Programs

Clean Water and Drinking Water State Revolving Funds (“SRFs”)

- EPA oversees two federally sponsored financial assistance programs
- Projects eligible for financial assistance include publicly owned treatment works and public and privately owned water related projects ranging from drinking water treatment, non-point source remediation , including source water protection
- SRFs have been capitalized from federal appropriations and 20% state matching contributions and retained earnings since 1989. Total capitalization approximates $58 billion
- SRFs are authorized by federal law to provide financial assistance by making loans, purchasing debt obligations, securitizing financings and providing financial guarantees

US EPA Infrastructure Funding Programs: Clean Water SRF in Synch w Conservation Finance

Non-Point Source Projects Are SRF Eligible provided watersheds, estuaries and project categories are identified in state 319 and 320 plans

Project examples include:

- Projects that deliver Ecosystem Services, including source water protection
- Water conservation (e.g., efficient irrigation methods)
- Projects that prevent the emission of air pollutants such as mercury and nitrogen that impair water quality

US EPA Infrastructure Funding Programs: Funding Priority for Projects

CW Financial Assistance Based on Corrective Impacts on Water Quality

Order of Project Priority Tends to Follow:

- **Consent Decrees**
- **Relative Beneficial Impact on Water Bodies**
- **Financial Assistance has largely been limited to loans and purchased obligations. Historically this has resulted in**
    - Point Source projects receiving $101.1 billion or 96%; and
    - Non-point Sources (“NPS”) $4.3 billion or 4% of financial assistance, respectively
- **A few states dedicate funds for NPS**

Extending SRF Program Reach by Tapping Additional Financial Capacity

Are SRF Resources Sufficient to Lend Greater Support For Eligible Projects that Promote Conservation?

- Master Financing Indentures that Serve Multiple Borrowers are Rated Triple-A
- Leveraging is Limited by Financial Assistance Subsidy Targets producing Excess Credit Capacity that can be Leveraged
- Nationally, Clean Water SRF cashflow is in excess of $2 billion
- Clean Water SRF Cash Balances as SFYs 2014 was $8-9 billion underscoring substantial float that can backstop new credit mechanisms

SRFs Can Add Financial Product Lines Without Undermining Loan Capacity

There is Enormous Untapped Guarantee Capacity that can Support Underserved Project Categories

- **In a 2014 report, the USEPA Financial Advisory Board determined that the CWSRF could provide meaningful guarantee capacity that could be used to support nascent environmental finance markets**

- **Modelling provided minimal estimates, at the triple-A level, of between $6 and $28 billion in guarantee capacity by applying rating agency criteria to an average SRF loan portfolio based on:**

  - A subordinate lien on loan repayments and bond reserve releases;
  - 75% of loans are leveraged and 25% are funded directly from equity
  - A weighted loan portfolio of Single A credit quality
  - **100% of guaranteed loans are non-investment grade**
  - Triple-A guarantee loan capacity is estimated based on 5 ($6 billion) to 20 year terms ($28 billion)

- **One or more additional pledges more than doubles guarantee capacity. These include:**
  - A loss reserve funded from non-SRF resources (such as PRI dollars)
  - A pledge of program equity "to the extent available"
  - A cross pledge of financial resources between the CW and DWSRF programs
  - Securing bank LOCs collateralized by assumed recoveries of defaulted loan payments

Recycled Cashflows Can Secure Financial Guarantees

Based on Prior Slide Assumptions $1 of Cashflow (net of Bond Debt Service) Yields Triple-A Capacity as Follows:

Terms	Capacity Based on Rating Criteria			With LOCs secured by Recoveries		
	Moody's	S&P	Fitch	Moody's	S&P	Fitch
5			$9.10			$15.08
7	$2.92	$4.73		$5.85	$9.17	
10	$3.92	$5.40	$9.62	$7.85	$10.46	$15.93
20	$6.25	$6.76	$9.08	$12.51	$13.09	$15.03

Recycled Cashflows Can Secure Financial Guarantees

Based on $1 of Cashflow (net of Bond Debt Service) Yields Capacity as Follows Where Guaranteed Loans are Minimum Investment Grade:

Terms	Capacity Based on Rating Criteria			With LOCs Secured by Recoveries		
	Moody's	S&P	Fitch	Moody's	S&P	Fitch
5			$30.94			$51.24
7	$2.92	$9.49		$5.85	$18.37	
10	$3.92	$9.90	$23.90	$7.85	$19.17	$39.58
20	$6.25	$9.96	$15.76	$12.51	$19.29	$26.10

A Recent Example: NewYork SRF's New Indenture

<u>How NY Maximized the Value of the Guarantee w/o Undermining Existing Credit Strength</u>

1. **Crafted a new Master Financing Indenture to maximize flexibility;**
   - Create a subordinate bond indenture to secure third-party guarantees
   - Pledge all loan repayments first to senior bondholders and second to subordinate bondholders

2. **Subject to availability, pledged SRF program equity on a pro-rata basis to both the senior and subordinate indentures;**

3. **Continued to cross-pledge CW and DWSRF assets within the indenture but extended the cross-pledge to available CW and DW dollars in the equity accounts;**

4. **Limited the equity pledge to the new indenture; and**

5. **Established security and credit underwriting standards to mitigate risks from any new asset classes.**

A Recent Example: NewYork SRF's Use of the Guarantee

$24 Million New York State Energy Research and Development Authority Residential Energy Efficiency Financing Revenue Bonds, Series 2013A (Federally Taxable), SRF Guaranteed

- The third-party guarantee of the NYSERDA bonds supported lending to commercial and residential energy efficiency projects based on a causal link between atmospheric deposition and the project beneficiaries' dependence on fossil fuels
- Unsecured residential loans benefitted from annual interest cost savings of about 2%. Loss reserve funded from Regional Greenhouse Gas Initiative revenues covered first loss.
- Transaction assured market access and superior pricing
- Bonds were rated Aaa/AAA/AAA by Moody's, S&P and Fitch, respectively

Takeaways for Conservation Finance Practitioners

- Project(s) must have links to water quality improvement;
- Work to align projects with project categories identified on state 319 and 320 plans (national estuaries);
- Funding availability will track project priorities established by the state.
  - At minimum conservation projects, with water quality links, would be eligible for guarantee support
  - Some states may need to revise state statutes to adopt federal guarantee language
- All states have capacity to support triple-A rated guarantees
- Consult with SRF Administrators about your project financing needs

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