

CBP3 Sustainable Stormwater Infrastructure Summit

“Achieving Sustainable Stormwater Infrastructure and Economic Prosperity through Smart Financing and Public-Private Partnerships: The Leveraging Power of SRF.”

Philadelphia, PA

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Premise of the Presentation

The Federally Sponsored State Revolving Funds (the “SRFs”) are currently the most powerful tool in the water infrastructure marketplace. The inherent value of the SRFs is not simply a function of the long history of successful lending activity since 1989 (over \$130 billion in lending between the Clean Water and Drinking Water SRFs). It is also a function of growing balance sheet strength that offers SRF administrators and stakeholders (present and future) to (a) expand the use of available financial assistance products and (b) expand utilization of the financial assets of the programs.

SRFs and their stakeholders are not yet capitalizing on this potential particularly as available SRF financial assistance tools might be used to stimulate environmental marketplaces that leverage public and private capital in new ways.

What The Presentation Will Cover

- A Review of SRF Basics (focus on the Clean Water SRF)
- SRF Financial Strength and what it Implies for Leveraging Financial Resources in New Ways
- Looking at New Product Opportunities (Thinking anew about SRF lending, investment and guarantee authority)
- Closing Thoughts; What it means for meeting the Nation's Clean and Safe Drinking Water Goals

State Revolving Fund (“SRF”) Basics I

A Vehicle to Deliver Least-Cost Financial Assistance

The Clean Water and Safe Drinking Water Acts (Sections 603(d)) and 1452(f), respectively, allow:

- Loans or Purchases of Local Obligations funded from Federal and State Equity Investment or Proceeds of SRF Bonds
- Equity to be Used as Security for SRF Bonds
- Financial Guarantees of Loans or Bonds
- Investment of Fund Balances

State Revolving Fund (“SRF”) Basics II

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
- 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
 - Urban NPS accounts for \$359 million

SRF Basics - Most Recent Clean Water Needs Estimates

Latest Needs Survey (2008) Indicated:

Wastewater	\$192.2 billion
CSO Correction	63.3
Stormwater Management	<u>42.2</u> (\$17.4 billion for Green Inf.)
Subtotal	<u>\$298.1</u> billion

Additional Needs:

NPS	\$22.8 billion
Decentralized Systems	<u>23.9</u>
Subtotal	<u>\$46.7</u> billion
Total	<u>\$333.8</u> billion

[2012 Survey Not Yet Released]

SRF Basics - CW Financial Assistance Versus Needs

Cumulative SRF Financial Assistance Versus Current Needs (1988-2014):

	<u>Financial Assistance</u>	<u>Needs</u>	<u>As a Percentage of Need</u>
Wastewater	\$89.1	\$192.2 billion	46.3%
CSO Correction	10.7	63.3	17.0
Stormwater Management	<u>1.0/.36</u>	<u>42.2</u> (\$17.4 billion for Green Inf.)	2.0(2.0)
Subtotal	<u>\$101.1</u>	<u>\$298.1</u> billion	

Additional Needs:

NPS		\$22.8 billion	
Decentralized Systems		<u>23.9</u>	
Subtotal	<u>\$4.3</u>	<u>\$46.7</u> billion	<u>9.2</u>
Total	105.4	\$333.8 billion	31.6%

SRF Financial Strength and the New Leveraging Opportunities it Presents

The SRF Balance Sheet and Credit

	<u>Clean Water</u>	<u>Drinking Water</u>
• Equity Invested:	\$54 billion	\$12 billion
• Retained Earnings:	\$4 billion	\$1 billion
• Cash Balances as SFYs 2014:	\$8-9 billion	????
• FFY 2014 Financial Assistance:	\$6 billion	
• Master Financing Indentures that Serve Multiple Borrowers are Rated triple-A		
• Leveraging is Limited by Financial Assistance Subsidy Targets providing Excess Credit Capacity that can be Leveraged		

What Can We Do With Strong Cash Balances and Excess Credit Capacity?

We Can Build New Financial Assistance Product Lines

- In a 2014 report, the USEPA Financial Advisory Board determine that the CWSRF could provide meaningful guarantee capacity that could be used to support nascent environmental finance markets
- Modelling provided minimal estimates of between \$6 and \$28 billion in guarantee capacity based on:
 - A subordinate lien on loan repayments and bond reserve releases;
 - 75% of loans are leveraged and 25% are funded directly from equity
 - The weighted loan portfolio broken down by credit quality is as follows:

- Double-A	7.5%
- Single-A	40.25%
- Triple-B	42.50%
- Non-rated	8.75%
 - 100% of guaranteed loans are all non-investment grade
 - Triple-A guarantee loan capacity is estimated based on 5 to 20 year terms
- One or more additional pledges more than doubles guarantee capacity. These include:
 - A loss reserve funded from non-SRF resources
 - A pledge of program equity “to the extent available”
 - A cross pledge of financial resources between SRF programs
 - Securing bank LOCs collateralized by assumed recoveries of defaulted loan payments

Rating Agency Criteria

Default and Recovery Assumptions

- Moody's analysis is based on cashflow breakeven (i.e., for a given rating, what portfolio size can be supported based on SRF recycled cashflows);
- S&P and Fitch analyses assume criteria driven default rates based on a double-B rated GI portfolio.
 - S&P divides the assumed default rate by 4 to arrive at an annual default rate for a four year stress period;
 - Fitch also looks at defaults over four year periods for the first, middle and final four years of the portfolio's scheduled debt service.
- Stress analysis is sensitive to portfolio average life and interest rate assumptions

What Is the Leveraging Power of SRF Cashflows?

Based on Prior 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

What Is the Leveraging Power of SRF Cashflows?

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

Designing SRF Guarantee Product Capability

New York Case Study

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

1. Crafted a new Master Financing Indenture in 2010 to maximize flexibility;
 - Put excess credit capacity to work by reducing minimum reserve or coverage requirements - allowing the SRFs to fund market rate loans from senior bond proceeds(a de-facto guarantee for local government SRF recipients);
 - Created 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, SRF program equity was pledged 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 thus maxing support for guarantees; and
5. Established security and credit underwriting standards to mitigate risks from any new asset classes.

Designing SRF Guarantee Product Capability

Program Considerations

Does an SRF Guarantee Product Add Credit Risk That Can Jeopardize Future Funding Capacity?

- Anytime leverage is increased credit risk will increase as well - putting program equity and future funding capacity at greater risk
- Likely impact of losses on traditional loan capacity is mitigated by stable and growing cash balances
- Key is effective management of credit risk to minimize risk of loss. This can be achieved by:
 1. Designing security features that protects the program such as a credit design that limits any credit fallout related to untested asset classes (i.e., the use of subordination)
 2. Adopting strong loan security features (e.g., for private parties PACE, on-bill financing or minimum credit scores)
 3. Adopting loan underwriting standards; and
 4. Secure non-SRF resources to fund initial loss reserves.

Designing SRF Guarantee Product Capability

Strategic Guarantee Applications

What Types of NPS Projects Qualify as SRF Eligible?

Examples include:

- Public or privately owned storm water projects.
- Projects that deliver Ecosystem Services
- Water conservation (e.g., efficient irrigation methods)
- 319 Plan projects that prevent the emission of air pollutants such as mercury and nitrogen that impair water quality are eligible
 - *In 2013, the NY SRF guaranteed a third-party transaction that funded commercial and residential energy efficiency projects having established a causal link between atmospheric deposition from the project beneficiaries' dependence on fossil fuels)*
 - *Residential loans benefitted from annual interest cost savings of about 2%.*

Mixing Lending with the Guarantee to Support Community Based P3s

- In the absence of commercial lenders, SRFs can provide capital to originate loans to project owners or developers.
- Loans can be funded from available project dollars as SRF eligible loans or as non-program investments (some states may need to amend investment eligibility)
- Taking advantage of sizeable SRF cash balances, in most states loans or investments can be warehoused directly on the SRF balance sheet without jeopardizing fund availability for higher priority wastewater projects
- Periodic sale of loans to the market can be secured by the SRF guarantee assuring market access at minimal cost which should substantially improve project economics. An SRF commitment would be established prior to loan origination and would limit takeout financing to loans that conform to SRF requirements, including underwriting and security criteria

Other SRF Product Opportunities Supported by Strong Balance Sheets

- Position SRFs to Respond to Disaster by pre-positioning a Disaster Recovery Lending mechanism. Both NY and NJ established short term lending vehicles to provide funds to communities well in advance of FEMA reimbursement in response to Hurricanes Irene and Sandy, respectively.
 - NY used its Administrative Fee Account to provide emergency loans that did not need conform to SRF requirements which provided the seed capital needed to meet SRF prerequisites. The short term disaster recovery loans subsequently refinanced the emergency loans
 - Disaster Recovery Loans were funded from the cash balances of the program and did not compete directly with regularly scheduled projects listed on the annual Intended Use Plan
 - In NY and NJ loan origination does not occur until FEMA eligibility is established
- Strong SRF cash balances present opportunities for SRF administrators to think more in terms of social impact investing. An example is the need for pre-development assistance. Investment authority can provide a window for SRF administrators to provide funds needed to develop project plans and designs and satisfy the prerequisites necessary to move projects to the funding starting line.

Select SRF Reports

USEPA Financial Advisory Board

“Utilizing SRF Funding for Green Infrastructure Projects,” January 2014;

“SRF Investment Function: Current Status and Prospects for Enhancing SRF Sustainability,” February 2011; and

“Relative Benefits of Direct & Leveraged Loans in SRF Programs,” August 2008.

See: www2.epa.gov/efab/envirofinance/publications#srfs

Concluding Thoughts/ Questions ??????

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