EFC Leveraging

NYS Environmental Facilities Corporation

October 1, 2021

Two Indentures

New York City

- Single large recipient
- Separate financing Indenture
- Issuances of $250-300 Million annually, plus refundings
- Combined CW & DW

2010 Master Financing Indenture

- Used for all other recipients
- Pooled issuances of $100-150 Million annually, plus refundings

1991 Master Financing Indenture (MFI)

- Structure based on using a reserve model to fund leveraged program
- Bonds were issued to originate loans and federal and state funds were drawn to fund pledged reserves (1/3 requirement)
- Recipient loans were collateralized by recipient bonds pledged to the specific series of related EFC bonds
- Investment earnings on reserves were used to provide interest subsidies that resulted in below market rate financing terms for recipients
- Reserve investments were required to be rated the same as the rating assigned by each rating service to EFC's bonds
- Investments largely consisted of Guaranteed Investment Contracts (GICs)

1991 MFI Updates

<u>1998</u>

- Permit issuance of bonds to fund projects under the DWSRF
- Establish cross-investment with the CWSRF

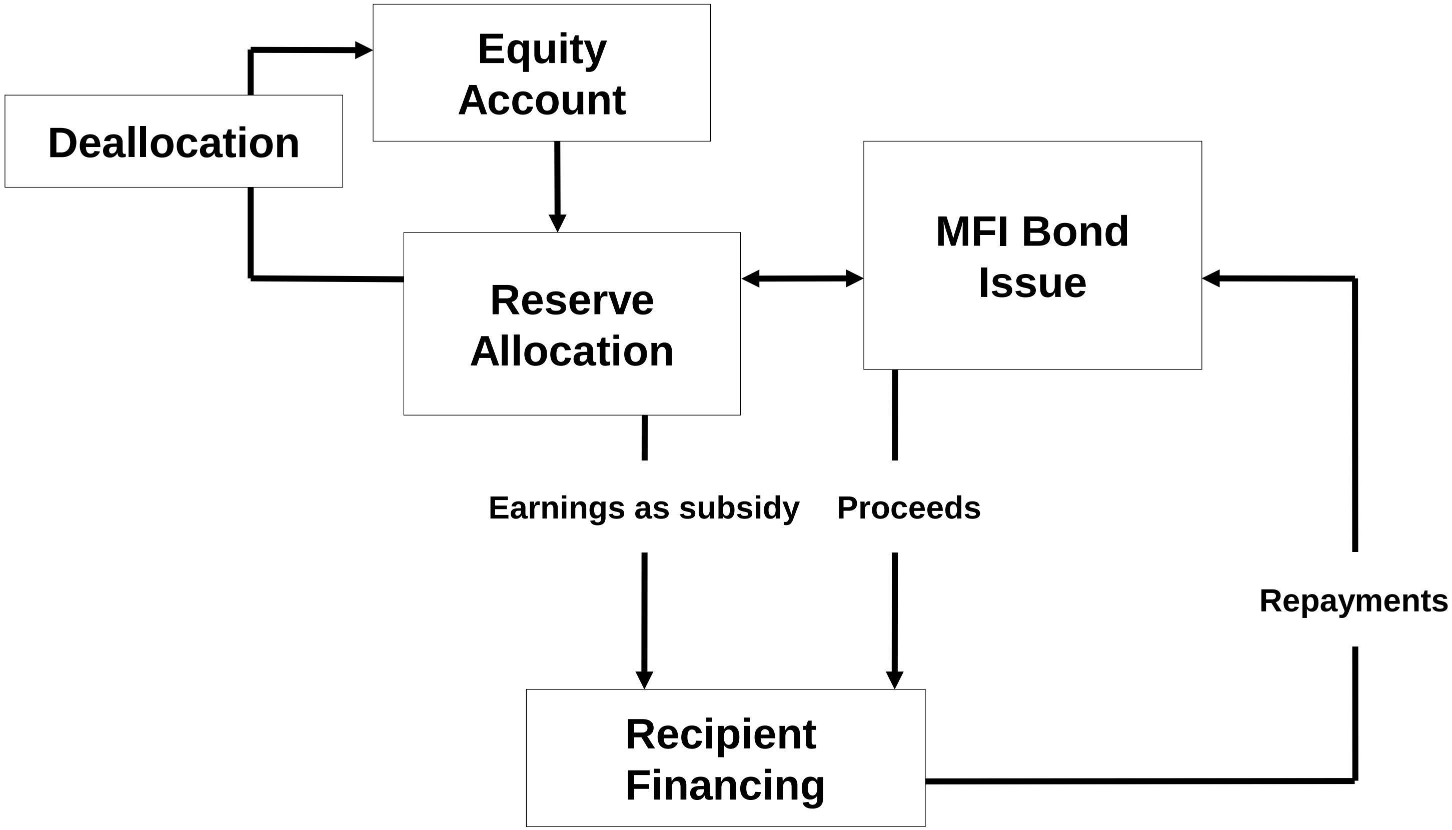
<u>2001</u>

- Authorized to purchase local government obligations with terms up to 30 years

<u>2005</u>

- Redefine the 1/3 reserve requirement as an aggregate as opposed to a per-recipient requirement
  - Allowed for new issuances without additional reserves as accumulated reserves were sufficient

1991 MFI Reserve Model



2010 Master Financing Indenture

Need for a new Indenture

- Financial Crisis of 2007-08 necessitated new flexibility
- Investment providers with the ability to meet EFC's rating and collateral requirements became scarce
- Bids for GICs under market conditions at the time would not meet EFC's tax-exempt cost of funds

Major Indenture Changes

- Pledges program equity
- Pledges cashflows across series for Blend Rate issuances
- Removed aggregate 1/3 recipient balance reserve requirement
- Removed requirement for reserve investments to be rated the same as rating assigned by each rating service to EFC's bonds

Effects of Indenture Changes

- Allows EFC to provide unsubsidized financing at EFC’s market-rate without tying up SRF equity

- Blend Rate funding model can be utilized for recipients with a lower rating than EFC without the recipient purchasing bond insurance

- EFC can issue guarantee financing without tying up SRF equity

2010 MFI vs 1991 MFI

Security			
Features	**2010 MFI**	**1991 MFI**	**Program Benefits/ Risks**
Recipient Financing Principal and Interest Repayments	Reserve Model: Pledged to series debt service (D/S) Blend Rate Model: Pledged across series	Pledged to series debt service	Expanded coverage
Recipient Bonds/Obligations	Funded Recipient Obligations not necessarily pledged. Cash flow from designated recipient bonds (either equity or debt funded) will be pledged instead.	Recipient Obligations funded with Bonds Proceeds are Pledged	Broadens definition of obligations beyond those funded with bond proceeds Recipient obligations can be substituted w/o Trustee consent
Reserve Requirement	None. May be established on a series-by-series basis.	One-third of aggregate recipient financing balances outstanding	Eliminates "one size fits all" reserve requirement Actual collateral levels will, at a minimum, reflect Aaa/AAA rating requirements Capital efficiencies still limited by identifying expected sources of payment and tax implications
Reserve Free Up Lien Sequence	Priority claim for collateralized recipient financings across series	**First Lien:** Recipient financings across series collateralized by pledged reserves **Second Lien:** Amounts required to satisfy series specific collateral/reserve requirements **Third Lien:** Deficiency Reserve Account of the Master Trust Agreement (MTA) then released to NYW Subordinate Bond indenture D/S	Prioritizes coverage of collateralized recipient financings Stress tests demonstrate Aaa/AAA margin of safety for collateralized and guaranteed recipient financings
General Reserve (GR) Requirement	Subject to priority claims, Free up must be retained in amounts necessary to maintain the aggregate series reserve requirement	Free up must be retained in amounts needed to maintain the greater of aggregate series reserve requirements or 1/3 of aggregate recipient principal outstanding	GR is not required to be maintained at excessive levels
Additional Bonds Test (ABT)	Recipient D/S must equal or exceed SRF Bond D/S	Recipient D/S must equal or exceed SRF Bond D/S Aggregate One-Third Reserve Requirement	Creates unlimited capacity to fund uncollateralized and guaranteed recipient obligations

2010 MFI vs 1991 MFI Continued

Security			
Features	**2010 MFI**	**1991 MFI**	**Program Benefits/ Risks**
Program Equity	Subject to Availability: Parity claim to meet missed payment obligations of collateralized and guarantee financings Not available to satisfy GR Requirement	Not Pledged	Adds a deep pocket of credit support that can demonstrate sufficient coverage for SRF obligations and satisfy rating agency Aaa/AAA criteria Subject to availability equity is not subject to arbitrage yield limits
MTA Reserve Free Up and Deficiency Reserve Account (DRA)	Subordinate claim to: MTA Reserve Free-Up and DRA Releases	Parity claim with other MTA Senior Bond Obligations Reserve free up trapped at DRAS level to cover aggregate senior bond reserve deficiencies	New Indenture is subordinate to all outstanding MTA financing indentures
Cross-investment Mechanism	The ability to borrow from the other fund is extended to SRF guarantee obligations	One fund may borrow from the other fund's released reserves if its own monies are depleted. The borrowing is evidenced by a "Repayment Bond" that is repaid from first available monies	Preserves ability manage financings for both programs out of one integrated Financing program

Investment Requirements			
Features	**2010 MFI**	**1991 MFI**	**Program Benefits/ Risks**
Reserve Investment Ratings	No specific rating requirement; will be governed by our investment guidelines	Rating for purpose and non-purpose investments must equal the EFC Bond Rating by each rating service rates EFC's Bonds	Greatly expands investment flexibility Purpose investments not rating restricted

Other Features			
Features	**2010 MFI**	**1991 MFI**	**Program Benefits/ Risks**
Eligible Projects	May be publicly or privately owned	Must be publicly owned	Adds privately owned drinking water and non-point source clean water projects, including land acquisition
Additional federal and state programs	No limit to the number of financing programs that can funded from indenture bonds	May require consent of bondholders	Maximizes new program flexibility
Variable Rate Bonds	Permitted Subject to ABT	Not Permitted	Maximizes funding flexibility Must be hedged by offsetting revenue
Derivative Instruments	Permitted Subject to ABT	Not Permitted	Provides ability to swap liabilities into more efficient markets Presents risk management responsibilities

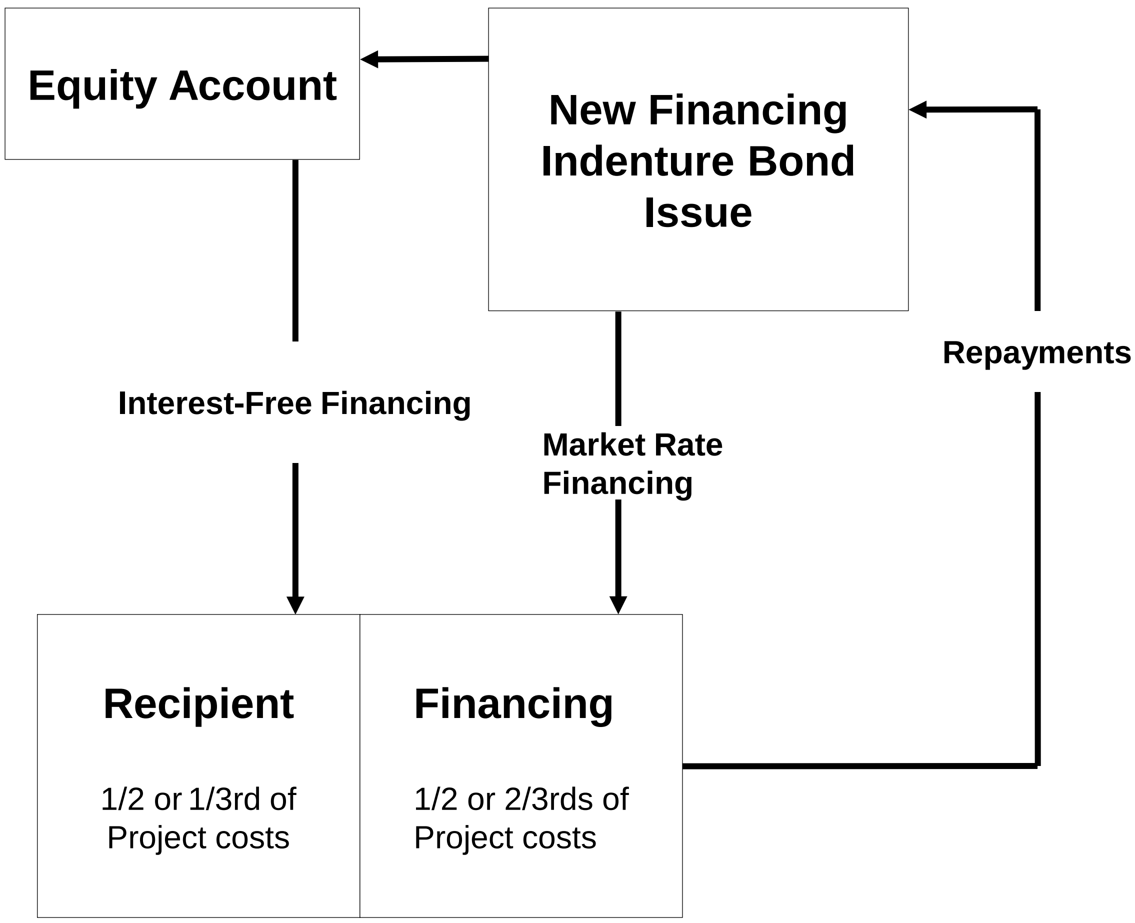
EFC's Current Leveraging Process

- Short-term Grid Notes (~5 year) are funded by SRF equity and drawn on a reimbursement basis
- Once projects are close to completion recipients are targeted for a pooled financing
- EFC issues bonds and purchases recipient bonds simultaneously
- Cashflows from the recipient bonds are structured to match the cashflows of the EFC bonds
- Subsidy is based on the interest expense of EFC's bonds and is currently delivered via a blend rate model
- Recipients ineligible for subsidy can borrow at EFC's market rate

Blend Rate Funding Model

- Subsidized recipient issued bonds are purchased with a combination of EFC issued bonds and SRF equity (50/50% CW, 67/33% DW)
- Interest on recipient bonds is at a rate which matches the yield to maturity of the corresponding
- Equity funded recipient bonds are 100% subsidized
- EFC Bond funded recipient bonds are not subsidized
- The combined pieces lead to recipients paying half or two thirds (for CW and DW respectively) of the interest expense of EFC's bonds

2010 MFI Blend Rate Model



Next Steps

- Modernize operations
  - Rigid procedures from 1991 MFI still exist
  - Flexibility applied to Indenture needs to be implemented operationally
  - Update IT infrastructure

- Monitor market conditions
  - Reserve model may make sense again
  - Look for Guarantee opportunities