COUNCIL OF INFRASTRUCTURE FINANCING AUTHORITIES

A NATIONAL NON-PROFIT ASSOCIATION REPRESENTING PUBLIC INFRASTRUCTURE FINANCING AGENCIES

SRF Leveraging: The Decision to Leverage or Not

November 12, 2014

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SRF Leveraging: The Decision to Leverage or Not

Panelists

Moderator	
Tom Liu Managing Director Bank of America Merrill Lynch 646-743-1361 thomas.liu@baml.com	▪ Manager, Water and Wastewater/SRF Group ▪ 25 years of SRF experience ▪ Served as senior manager on 176 SRF transaction totaling over $17 billion of SRF financings for 24 SRF programs in the nation
Panelists	
Jeremy McVeety Program and Policy Coordinator Infrastructure Finance Authority Business Oregon 212-553-4836 Jeremy.mcveety@oregon.gov	▪ Program & Policy Coordinator for the Safe Drinking Water Revolving Loan Fund ▪ Joined Business Oregon Infrastructure Finance in 2007
Kevin Bryant Water Revolving Fund Finance Manager Division of Administration Illinois EPA Kevin.Bryant@illinois.gov	▪ In current role as Water Revolving Fund Finance Manager he is responsible for managing accounting of loan programs, coordination with Illinois Finance Authority on issuance and reporting and preparation of financial statements ▪ Previously he served as Post Construction Unit Manager and managed the cash management and Grant Accounting Unit
Gary Bingenheimer Acting Manager Infrastructure Financial Assistance Section Illinois EPA Gary.bingenheimer@illinois.gov	▪ Joined the Illinois EPA in 1996 and spent 8 years in the Agency's Bureau of Water-Wastewater Permitting Section ▪ Spent 8 years as manager of the Pre-Construction Unit ▪ Licensed professional engineer in State of Illinois
Diana Hamilton President and Founder Sycamore Advisors dhamilton@sycamoreadvisors.com	▪ 25 years of investment banking and finance experience ▪ Previously director of Public Finance for the State of Indiana overseeing issuance of over $1.9 billion; Responsible for State Revolving Funds and public pension funds ▪ Served as chair of the Indiana Transportation Finance Authority

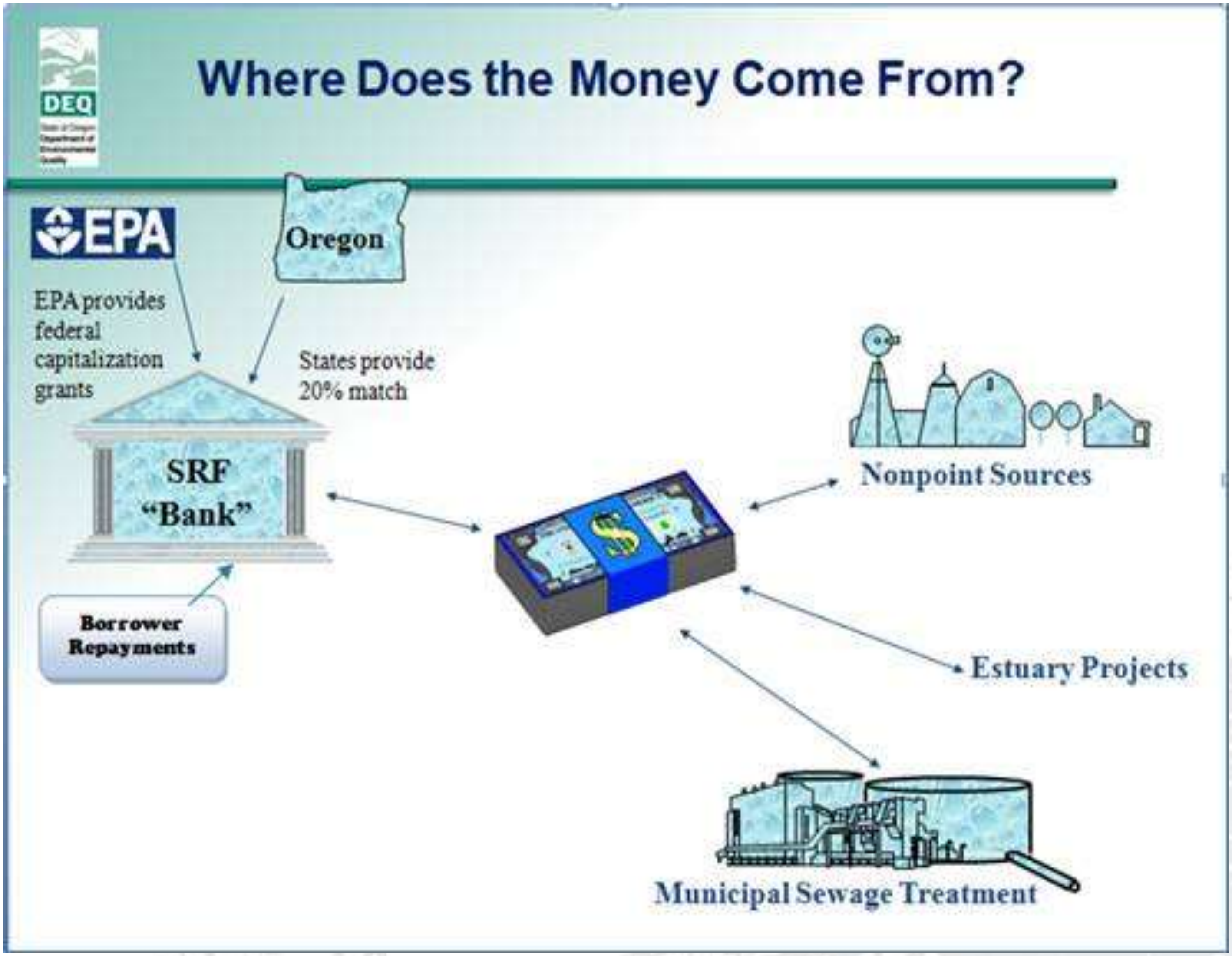
Oregon SDWRLF

2014 CIFA SRF Workshop – The Decision to Leverage

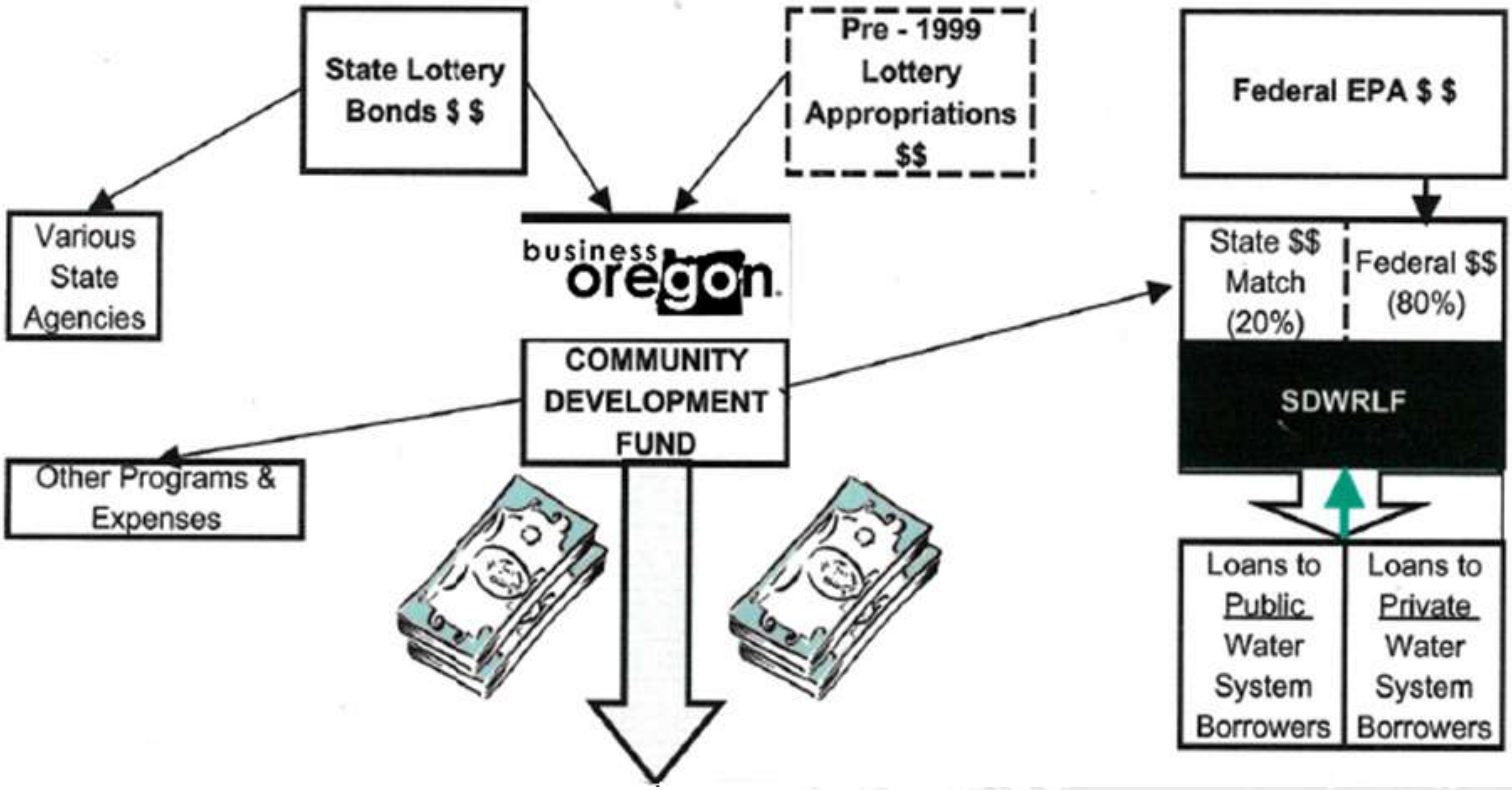
Jeremy McVeety

November 2014

CWSRF Flow of Funds



Flow of Funds



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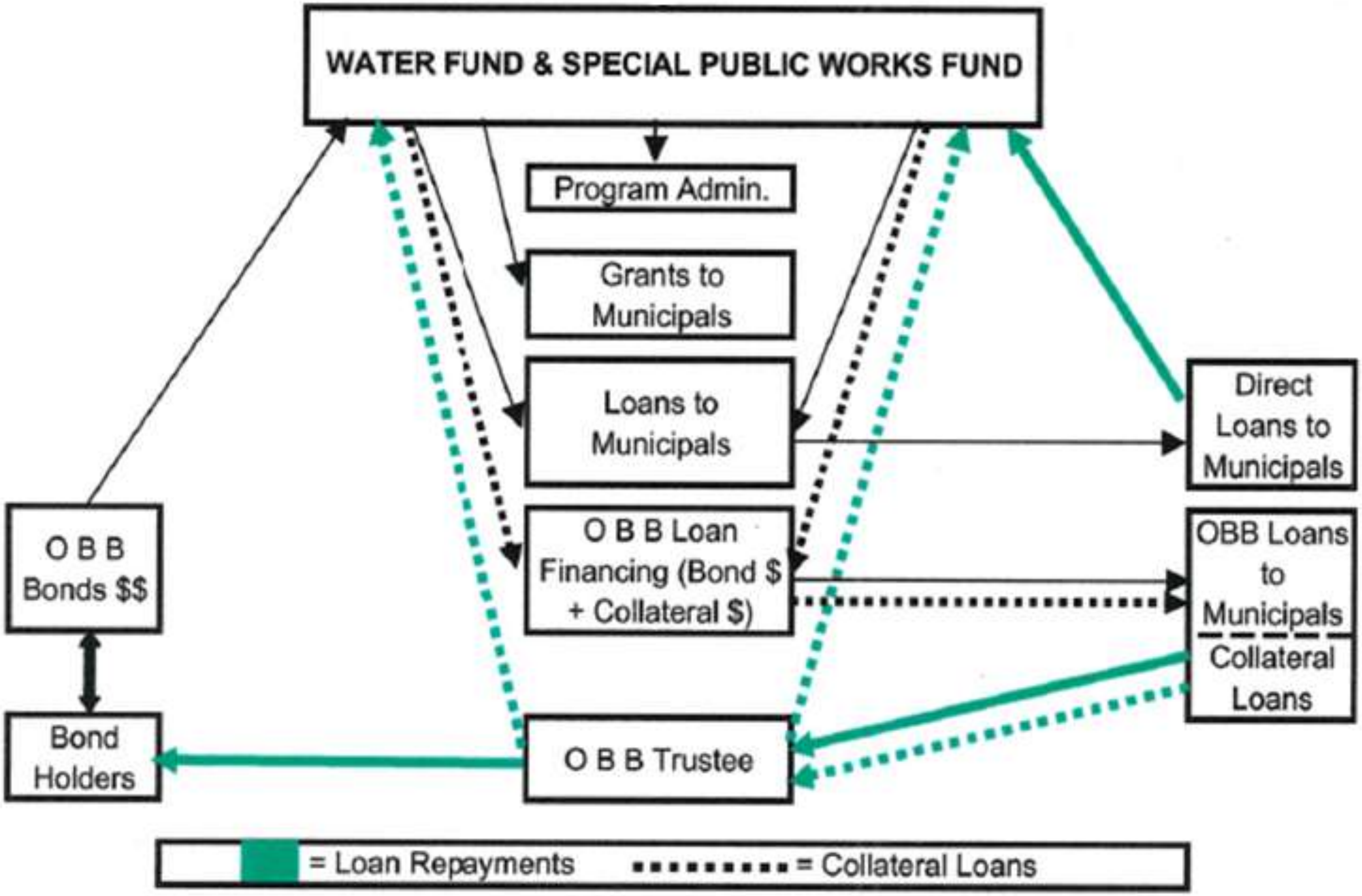
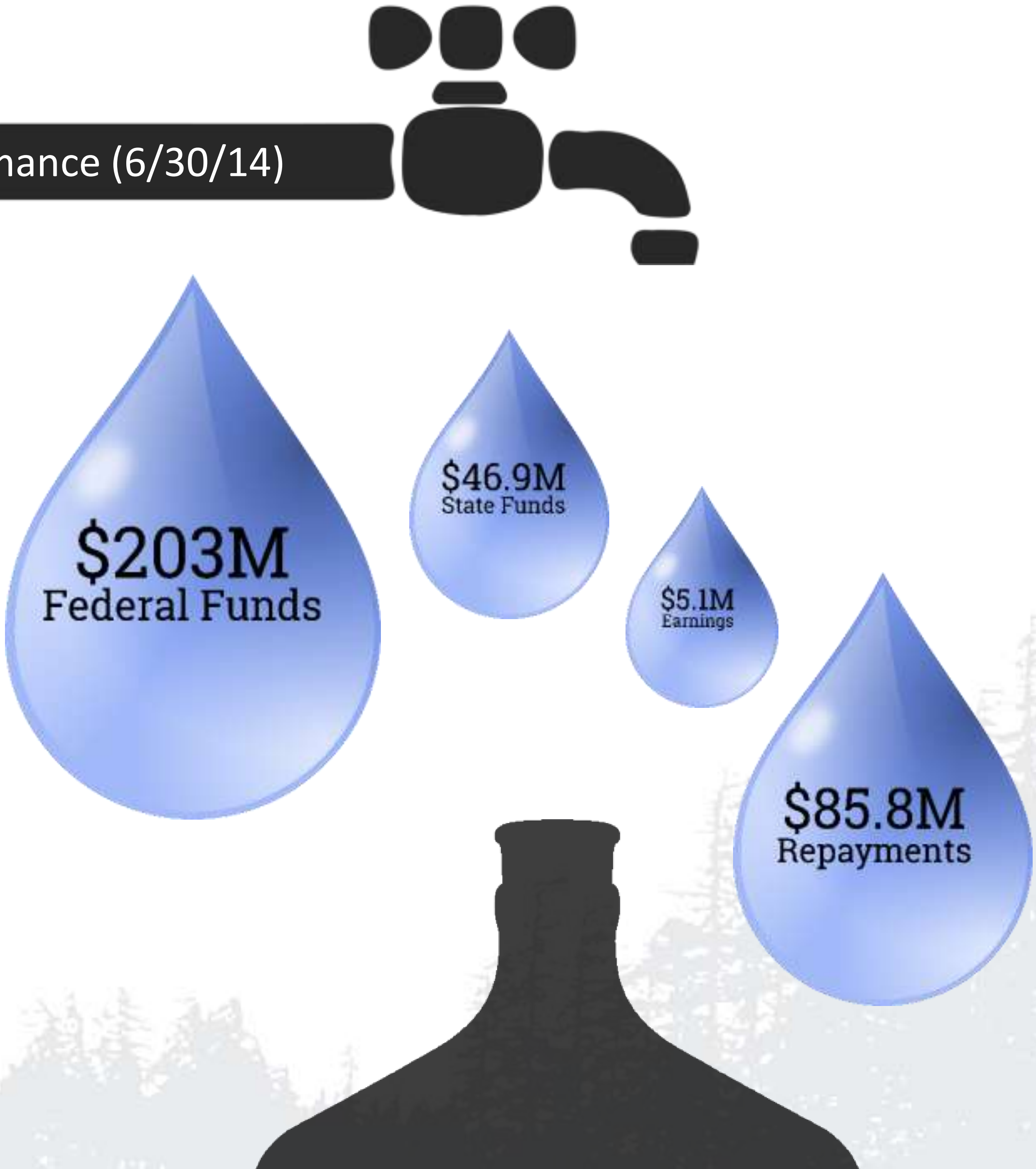
Oregon Bond Bank



Source of Funds

SDWRLF Performance (6/30/14)



SDWRLF Funding Summary from 1997 -2014

	Total	Range	Avg
Early Years (1997-2009)	$171.4MM	$45K-$6.7MM	$1.8MM
ARRA Era (2009-2012)	$39.5MM	$186K-$6.5MM	$2.3MM
Recent Years (2010-2014)	$86.7MM	$20K-$8MM	$3MM

	DAC	Add Sub	Small
Early Years (1997-2009)	31	$6.7MM	90%
ARRA Era (2009-2012)	3	$21.6MM	65%
Recent Years (2010-2014)	8	$13.4MM	72%

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Future of the Program

- Continued Small and Disadvantaged focus
- Demand driven policy change
- Collaboration and Joint Funding
- Federal policy change
- Planning for Sustainability and Resiliency

Illinois Water Revolving Loan Program

2013 Bond Issuance Decision

Gary Bingenheimer

Kevin Bryant

Illinois Environmental Protection Agency

Bureau of Water

Infrastructure Financial Assistance Section

11/24/2014

Clean Water Initiative

* Governor Quinn announced in the fall of 2012 a $1 Billion initiative to expand funding for wastewater and drinking water projects in Illinois. Commitment was expanded to $2 Billion in January 2014 and storm water added.

* Money will be available through the two existing IEPA SRF loan programs in partnership with the Illinois Finance Authority

* Standard IEPA SRF loan program rules, project eligibility and interest rates apply.

Clean Water Initiative - Why??

* Infrastructure needs staggering
* SRF loan program interest/demand strong and growing
* Attractive financing through established loan programs
* Provide funding to communities at reduced interest rates
* Reducing financial impact to citizens of Illinois while improving infrastructure, improving environment and creating jobs

Clean Water Initiative - Why??

* Current "Pipeline" of projects (Planning Reports in house under review or imminent)

* Drinking Water Loan Program - $525,000,000

* Wastewater Loan Program - $1,200,000,000

Historical Funding - Combined WPCLP & PWSLP Loan Programs

* 2008 – 32 Loans - $175 M
* 2009 – 150 Loans - $582 M (ARRA 16 months)
* 2010 – 41 Loans - $289 M (4 months)
* 2011 – 100 Loans - $532 M
* 2012 – 62 Loans - $260 M
* 2013 – 49 Loans - $462
* 2014 – 82 Loans - $700 M
* 2015 – 80 Loans - $800 M Projected

Loan Program Funding Sources Example FY2015 Example Wastewater Loan Program

- Federal Cap Grant - $64,000,000

- State Match (20% of Grant) - $12,800,000

- Future Bond Proceeds - $343,200,000

- Fund Equity - $80,000,000

Total: $500,000,000

Loan Program Funding Sources Example FY2015 Example Drinking Water Loan Program

- Federal Cap Grant - $38,000,000

- State Match (20% of Grant) - $7,600,000

- Future Bond Proceeds - $134,400,000

- Fund Equity - $120,000,000

Total: $300,000,000

IEPA SRF Loan Program Funding

- Without proceeds from the sale of revenue bonds, as cash flow modeling indicates to support loan commitments, future levels of funding would be vastly reduced.

- Increased user charges to citizens of Illinois
- Continued decline in infrastructure
- Negative impacts to environment

Previous Bonds

2002 - $150 Million Issuance
2004 - $130 Million Issuance

- Both of these Bonds were structured to require reserves funded at ½ of the outstanding debt.

- Both Issuances sold at a premium and resulted in the following amounts being available for the Loan Program:

  - 2002 - $84,054,000 ($56 million Clean Water and $28 million Drinking Water)
  - 2004 - $70,756,511 ($43.5 million Clean Water and $27.2 million Drinking Water)

Illinois EPA State Revolving Fund the Move Towards Leveraging

- At the end of State Fiscal Year 2010 the program assessed it's large cash balance in the Revolving Loan Fund at the request of Agency Management.
- The Clean Water Loan Cash Balance was 326 million.
- The Drinking Water Loan Cash Balance was 46 million.
- We did a basic cash flow of all outstanding loan commitments in each program, all available federal grants, state match and one years repayments after debt service.

Illinois EPA State Revolving Fund the Move Towards Leveraging

- - Our analysis showed that if we liquidated all federal grants/state match and paid out all of our current loan commitments, the Clean Water Loan Fund would have a cash balance of $274 million and the Drinking Water Loan Fund would have a Balance of $133.5 million.
- - This process started our program in the direction of moving away from previous model of determining our annual funding levels.
- - A decision was made to increase the size of both programs in fiscal year 2011 and to work toward using cash flow modeling and leveraging to expand the program.

Illinois EPA State Revolving Fund the Move Towards Leveraging

- - Other factors in decision to Leverage:
  - - State Match Issues
    - Historically provided by Illinois selling Bonds outside of the Revolving Loan Fund
    - Difficult for the Program to obtain these funds in a timely manner in the current environment resulting in ULO issues with USEPA
    - Leveraging for State Match within the Fund allows the Program to control the timing of State Match

Illinois EPA State Revolving Fund the Move Towards Leveraging

- - Other factors in decision to Leverage:
  - - New Bond Structure was Positive
    - No longer require reserves of ½ of outstanding bond debt
    - We refinanced our previous bonds in the 2013 Issuance
    - When the previous bonds were paid, all reserves were released to the program
    - New Structure allows for flexibility in the program when we leverage in the future
    - The interest rate environment was very positive resulting in a refund savings

2013 Clean Water Initiative Bond Sale

* Issued through Illinois Finance Authority
* Open Indenture Structure
* Cash Flow Model
* Use of a Pledged Equity Fund
* Ability to issue both Leveraged and State Match Bonds
* Allows for Cross-Collateralization between Clean Water and Drinking Water Bonds

2013 Clean Water Initiative Bond Sale

- Quality of our Loan Programs
- Large Diverse Pool of Pledged Loans (1.75 Billion in Receivables across 402 different borrowers)
- Top 10 Borrowers only represented less than 40% of the Pledged Loans
- 10 year Bond
- All resulted in AAA ratings from both Fitch Ratings and Standard and Poor's
- $141,700,000 Issuance
- Premium of $16,874,821

2013 Clean Water Initiative Bond Sale

* Net Interest Cost of the Bonds are 1.894%
* We realized a Cash Flow Savings of $8.4 million from refinancing the previous bonds
* Access to the $58.6 of State Match allowed us to access $292.6 million in our 2011-2013 federal grants
* Refinancing our previous Bonds allowed the release of just under $50 million that remained in our reserve accounts
* In the future, the program working with IFA now controls the timing of our State Match

Illinois Leveraging Looking Into the Future

* The program implemented a new accounting system and an Excel Cash Flow Tool both developed by Northbridge Environmental Management Consultants
* Loan Grant Tracking System (LGTS) -Microsoft Access Data Base full General Ledger Accounting System
* FOCUS Cash Flow (Excel Spreadsheet) will be used to help Agency management with Financial Planning and Leveraging Decisions

When to Consider Bond Leveraging

Funding Alternatives

Current Scenarios	Strategy
Borrower Demand is Less than Available Monies	Direct Loan Funding Program
Borrower Demand is Equal to Available Monies	Direct Loan Funding Program or Leveraging Program
Borrower Demand is Greater than Available Monies	Leveraging Program

When to Consider Bond Leveraging

Key Financial Requirements

- No loss of Federal/State equity (CWSRF: No grants; DWSRF: Loan forgiveness OK)
- Funds Available in Perpetuity

Income Statement: Retained Earnings = Revenue – Expenses ≥ Zero (but not necessarily every year)

Balance Sheet: Net Asset = Total Assets – Total Liabilities must be ≥ federal funds + state match

- **Example 1: Cash $120 received from fed/state and loaned @ 0% interest, assume no investment earnings**

  <u>At Year End</u>

  - Retained Earnings = Loan interest income $0 – bond interest expense $0 = $0 (OK)
  - Net Asset = Loans receivable $120 – Liabilities $0 = $120 = federal funds + state match (OK)

- **Example 2: Cash $120 received from fed/state and loaned @ 2%; interest earned $2.40 (retained earnings), assume no investment earnings**

  <u>At Year End</u>

  - Retained Earnings = Loan interest income $2.40 – bond interest expense $0 = $2.40
  - Net Asset = Loans receivable $120 + Cash $2.40 – liabilities $0 = $122.40 > federal + state match (OK)

- **Example 3: Cash $120 received from fed/state; bonds issued $50 (@5%) and all loaned @ 0% interest, assume no investment earnings**

  <u>At Year End</u>

  - Retained Earnings = Loan interest income $0 – bond interest expense $2.25 = -$2.25 (Not OK, but…)
  - Net Asset = Loans receivable $170 – bonds payable $50 - interest payable $2.25 = $117.75 < federal/state match of $120 (Not OK)

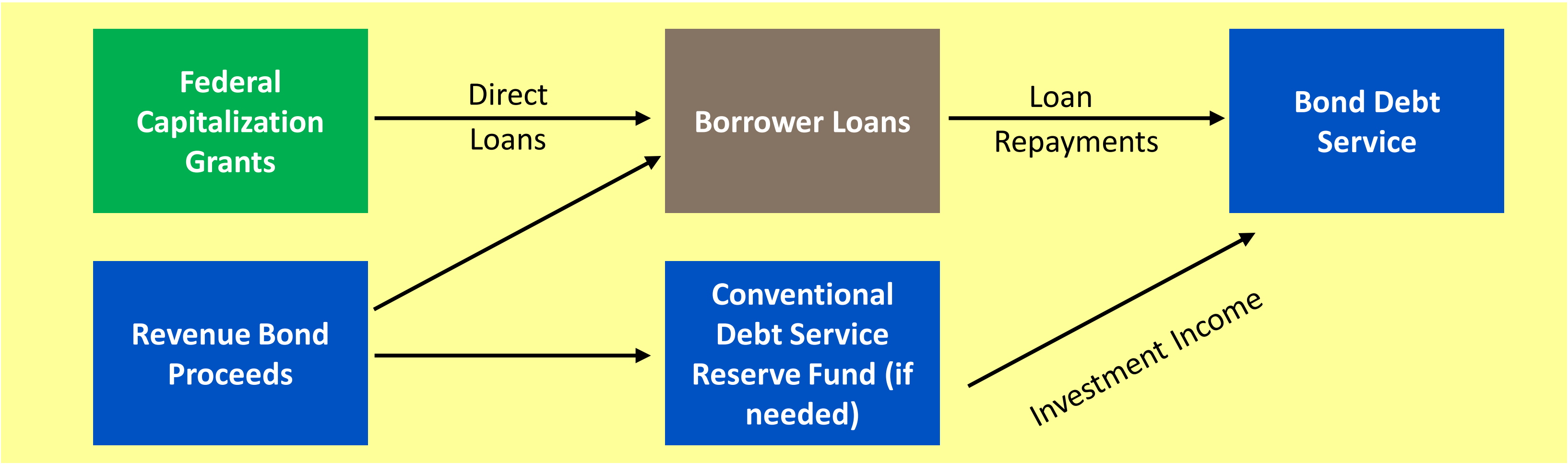
How to Leverage

Leveraging Structure Alternatives

Cashflow Model	Reserve Fund Model	"Hybrid" Model

- There are generally three leveraging models used by SRF programs to finance borrower needs
  - **Cashflow Model**: relies upon using borrower loan repayments as the primary source of security for the underlying bonds
  - **Reserve Model**: relies upon an overfunded reserve and the bond-funded borrower loan repayments as the primary source of security for the underlying bonds
  - **Hybrid Model**: relies upon the combination of borrower loan repayments (from direct loans and bond-funded loans) as well as an overfunded reserve as the primary source of security for the bonds

How to Leverage
Cashflow Model



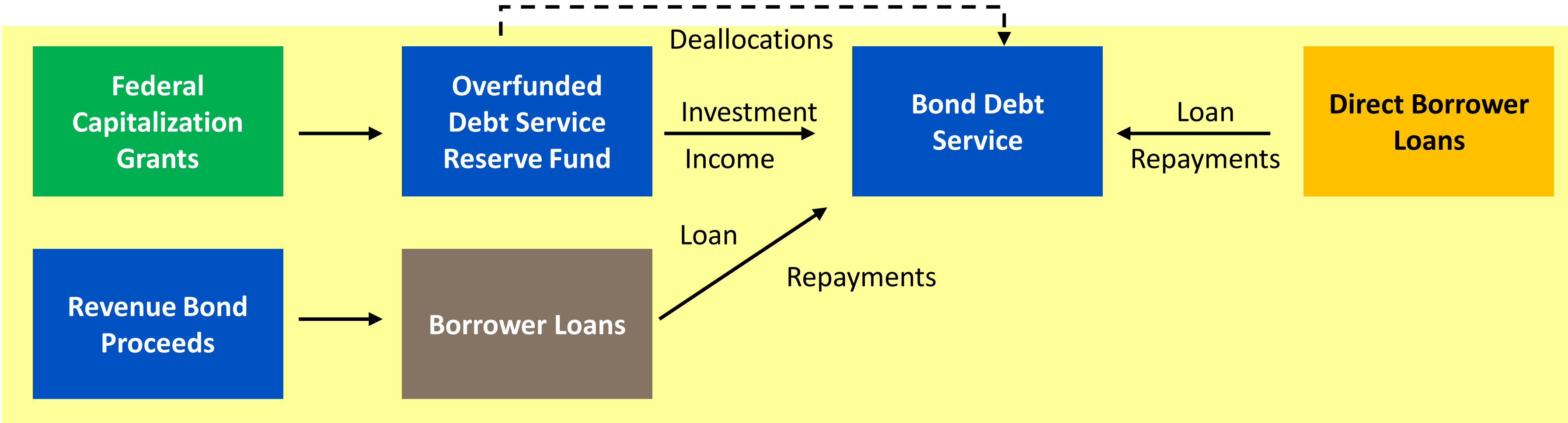
- The Cashflow Model leverages borrower loan repayments funded from federal capitalization grants and bonding as the primary source of monies for borrower loans
  - First, the SRF makes direct loans with federal capitalization grants
  - Second, additional loans (i.e., leveraged loans) are funded from a revenue bond issue; the revenue bond issue is secured from the borrower loan repayments from both the direct loans as well as the leveraged loans. All or a portion of principal and interest repayments from the existing direct loans can be pledged to debt service of a bond issue
- Revenue available for debt service payment include:
  - Pledged borrower loan repayments from existing and new direct loans (which can result in excess coverage)
  - Interest income from a conventional debt service reserve fund, if necessary
- Loan subsidy made up by over-collateralization of loan repayments – loans rate(s) can be lower than bond rate or a blend of market rate loans and zero percent loans

How to Leverage

Leveraging Structure Comparison

	ADVANTAGES	DISADVANTAGES
CASHFLOW MODEL	◆ Decreases current bonding needs; federal capitalization monies currently disbursed as loans to borrowers ◆ Maximizes use of federal capitalization monies (if loan demand is large and/or predictable) ◆ Flow of funds can be relatively simpler	◆ Increases future bonding needs since loan repayments are the only source of future funding ◆ May require immediate disbursement of federal capitalization grants as loans to maintain coverage levels ◆ Requires additional non-bond equity (i.e. federal cap grants or state match appropriations) to create loan over collateralization to make up loan subsidy ◆ In default scenarios, can only access "excess coverage" from pledged monies over time
RESERVE FUND MODEL	◆ Decreases future bond needs (future funding achieved through reserve fund de-allocations and loan repayments) ◆ In default scenarios, can access entire reserve balance immediately ◆ Achieves most liquid form of security (large reserves) with rating agencies and bondholders	◆ Requires monies (such as federal capitalization grants, etc.) to fund the debt service reserve fund ◆ Requires more bonding upfront since bond proceeds fund loans ◆ Requires more oversight of SRF investments which help make up the subsidy ◆ Flow of funds can be relatively more complex

How to Leverage
"Hybrid" Model



- The Hybrid Model utilizes elements of Cashflow and Reserve Fund Models
  - Bond proceeds are primary source of loans to meet initial loan demand
  - Additional security / overcollateralization derived from existing direct loans and overfunded debt service reserve fund
  - Federal capitalization grant monies are deposited into an overfunded debt service reserve fund or used to fund borrower direct loans
- Revenues available for debt service:
  - Borrower loan repayments from existing direct loans <u>and</u> bond funded loans
  - Interest income from overfunded reserve fund
  - Principal from the overfunded reserve fund (in the event of default)
- ***To achieve maximum flexibility, a "Hybrid" Model can be created in which an issuer can specify future financings to be either a Reserve Fund financing or a Cashflow financing***

How to Leverage

Programmatic/Financing Issue Checklist

- Source of State Match
- Loan Repayment Obligation and Enforcement Mechanisms
- Legal Requirements – reserve fund requirements, debt service coverages, additional bonds test
- Number of Borrowers and Credit Composition
- Program Management
- Flow of Funds
- Amount and Timing of Federal Capitalization Grant Monies – amount needed for leveraging verses set asides, federal transfer provisions
- Cross-Collateralization Provisions
- Loan Rate Policies
- Leveraging Capacity Analysis

How to Leverage
Example Loan Capacity

Leveraging vs. Direct Loans

Loan Interest Rate 2.50%; Market Interest Rate 3.50%

Leveraging Ratio: Total $/(Federal & State $) = ~ 2.00