



# Beyond Rates: Other Finance Strategies

Columbia, South Carolina  
Thursday, May 12, 2016

This program is made possible under a cooperative agreement with EPA.



[www.efc.sog.unc.edu](http://www.efc.sog.unc.edu)



UNC  
ENVIRONMENTAL  
FINANCE CENTER



# Session Objectives

- Learn about other common sources of water system revenue and controlling costs
- Understand the debt market
- Discuss available loan and grant programs



# Options for controlling O&M costs

1. Perform a water audit (EPA style)
2. Find and reduce leaks
3. Efficiency and accuracy of your meter reading, billing and collections
4. Replace water meters (meters become less accurate after 10-15 years)
5. Ensure that power rates are most appropriate for your water system



# Options for controlling O&M costs

6. Install energy efficient equipment or modify operations to lower energy use
7. Track expenses over time and look for different vendors or labs if costs grow too quickly
8. Share resources between departments
9. Partner with another water system
10. Another option: transfer the assets of the water system



# Types of Revenue

- Rates
- Period charges
- Assessments
- One-time fees
- Innovative funding sources (services)
- Debt (commercial and subsidized)



# Periodic Charges

- Deposits on new accounts
- Penalties for late payment
- Cutoff/reconnection fees
- Meter re-reading fees



# Assessments

- A recurrent charge to a sub-group of the population
- The sub-group receives benefits from an environmental service or improvement not enjoyed by others in the area
- Close cost/benefit relationship → equity



# Tap & System Development Fees

- One-time charges to new users
- Typically assessed when building permits are issued
- Close cost/benefit relationship → equity



# Innovative Funding Sources

- For example, rent out your water tower for cellphone receivers or put ads on the tower itself





# Grants

They exist! But they are extremely competitive and limited. The era of large grants is likely not returning before your water assets age out.



# Grants Aren't Completely Free Money

- Application for the grant can be expensive – staff time and money
- Applications can take months to process
- Often lots of strings attached
- Often require a percentage match
- Lots of competition
- Difficult to sustain



# The Debt Market

- Why Borrow?
- Water infrastructure has a long useful life. You may wish to amortize the loan over the life of the equipment so that the people who benefit from the system pay for it



# When You Need Cash Now: The Debt Market

- Lenders will look at your creditworthiness, your ability to repay the debt, in determining whether to loan to you and your interest rate



# The Debt Market

- Two types—Loans and Bonds
  - Loans are universally available
  - Bonds are typically only available to large systems with significant revenues and managerial capacity



# Loans

- Typically from a bank
- Can be from a government-sponsored program such as the Drinking Water State Revolving Fund



# Bonds

- A written promise to repay borrowed money (on a definite schedule and usually at a fixed rate of interest for the life of the bond)
- Different types exist:
  - General Obligation (GO)
  - Revenue



# Common Debt Options

## Advantage

## Disadvantage

### G.O. Bonds:

Low Relative Interest Cost;  
Lower Issuance Cost

Referendum Required  
(Politically Sensitive); Lower  
Structuring Flexibility

### Revenue Bonds:

Greater Flexibility (Term,  
Amortization); No  
Referendum; Advantageous  
for Self Supporting Systems

Higher Issuance Cost  
Higher Relative Interest Cost;  
Feasibility Study

### Installment Purchase/Certi- ficate of Participation

No Referendum; Lower Cost  
of Issuance for Private  
Placements

Secured by asset, Placement,  
limits future options



# Subsidized Loan & Grant Programs

- RIA
- DHEC
- USDA
- EDA
- SC Department of Commerce

See matrix with contacts and information at

<http://efcnetwork.org/resources/funding-sources-by-state/>

<http://www.efc.sog.unc.edu/>

- Tools
- Rates Dashboards
- Blog posts (<http://efc.web.unc.edu>)
- Guidebooks
- Technical Assistance
- Courses
- Videos

**Mission Statement**  
 We work to enhance the ability of government organizations to provide environmental programs and services in fair, effective and financially sustainable ways.

**Upcoming Events**

- EcoStream: Southeast Stream Restoration Conference  
 Monday, November 17, 2014
- WEBINAR: Energy Management Systems and the NYSERDA Model  
 Tuesday, December 2, 2014
- Environmental Public-Private Partnerships  
 Tuesday, December 9, 2014

**Latest News**

- **New Video Series Highlights Crisis Utilities**  
 A new series of educational videos produced by the Environmental Finance Center at UNC Chapel Hill, with support from the Water Research Foundation, offers an engaging, accessible, and easily shareable resource on financial management topics designed specifically for water utility governing boards. The WaterCrisis Video Series addresses challenges faced by water utilities using eye catching visualizations and easy to understand explanations of concepts that can otherwise be daunting.
- **The EFC Awarded \$2M for its Smart Management for Small Water Systems Project**  
 To improve the country's smallest water systems - those serving fewer than 10,000 people - the U.S. Environmental Protection Agency (EPA) awarded \$2 million to the Environmental Finance Center at the University of North Carolina at Chapel Hill.

**Featured Work**

- **Arizona Water and Wastewater Rates and Rate Structures**  
 The Environmental Finance Center and the Water Infrastructure Finance Authority of Arizona conducted a water and wastewater rates survey of over 400 utilities in the state of Arizona. We used this data to create a summary report, interactive Rates Dashboard, and other resources to assist utilities and their stakeholders in analyzing and benchmarking their current rates and financial condition.
- **Smart Management for Small Water Systems**  
 Through the Smart Management for Small Water Systems project, the EFC works to improve the financial and managerial capabilities of the nation's smallest, most plentiful, and neediest public water systems - those serving fewer than 10,000 people.
- **Water & Wastewater Residential Rates Affordability Assessment Tool**  
 The EFC's new easy-to-use Excel tool guides a utility to assess the relative affordability of its water and wastewater rates on its residential customers using

**Tweets**



# Smart Management for Small Water Systems

under a Cooperative Agreement with the US EPA

<http://efcnetwork.org>

- The EFCN (including the EFC at the UNC School of Government) will provide free trainings, webinars, tools and direct assistance to small water systems serving fewer than 10,000 people on:
  - Asset Management
  - Water Loss Reduction
  - Water System Collaboration
  - **Fiscal Planning and Rate Setting**
  - Energy Management
  - Funding Coordination, and
  - Managerial and Financial Leadership
- **Free in-depth (multi-day or multi-hour) assistance available. Sign up at <http://efcnetwork.org/assistance/request-assistance/>**





# Acknowledgement



This workshop was provided for free to small water systems under a cooperative agreement with the U.S. EPA, and assisted by the AWWA (South Carolina Section). We would also like to thank our guest speakers, and RIA and DHEC for assisting in organizing and promoting this workshop.



# Get Your Credits!

## All

- Complete and return evaluation form

## Seeking C.E.U.s?

- Sign out (time)
- Expect your certificate to arrive **by email within 30 days**. AWWA headquarters will email certificates from [educationservices@awwa.org](mailto:educationservices@awwa.org). Add it to your email safe list, or check your inbox and Junk mail frequently.



# Thank You!

Shadi Eskaf  
Senior Project Director  
Environmental Finance Center  
University of North Carolina  
919-962-2785  
[eskaf@sog.unc.edu](mailto:eskaf@sog.unc.edu)

David Tucker  
Project Director  
Environmental Finance Center  
University of North Carolina  
919-966-4199  
[drtucker@sog.unc.edu](mailto:drtucker@sog.unc.edu)



[www.efc.sog.unc.edu](http://www.efc.sog.unc.edu)



UNC  
ENVIRONMENTAL FINANCE CENTER