



Financial Management for Small Water Systems: Planning for the Next 5 Years and Beyond

Cullman, AL
February 25th, 2020



UNC
ENVIRONMENTAL
FINANCE CENTER



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



Workshop Objectives

- Learn how to plan for and finance your water system now and into the future
- Discover tips to gain support from your Board for financial plans for your system
- Provide forum for sharing finance and management perspectives, ideas, and experiences



Housekeeping and Introductions



Water Operator CEUs

If you need a CEU certificate, you will need to confirm the following on the roster today before you leave:

- Is your name spelled correctly?
- Did you provide an email address UNIQUE TO YOU? A unique email address is required to receive your certificate.
- Did you provide your water system operator number?

Within 30 days of the training, you will receive an email with instructions to print your certificate. Emails from EFCN may be blocked or go to your Junk mail. To avoid this issue, add Smallsystem@syr.edu to your email Contacts or check your Junk mail frequently.

EFCN will apply to the water operator state licensing agency for CEU preapproval when applicable. You may be awarded CEUs by your agency. It is your responsibility to confirm with the agency that training meets relevancy criteria established for your license type as some agencies may not apply CEUs to your license if the training topic is not relevant to your position.

EFCN follows the IACET Standard of CEU calculation.

0.1 CEU = 1 Contact Hour or 1 Professional Development Hour

Questions? Please contact Smallsystem@syr.edu



Stephen Lapp
Environmental Finance
Center
The University of North
Carolina at Chapel Hill
919-962-6203
slapp@sog.unc.edu

Austin Thompson
Environmental Finance
Center
The University of North
Carolina at Chapel Hill
919-962-5795
Thompson@sog.unc.edu



Environmental Finance Center Network (EFCN)

The Environmental Finance Center Network (EFCN) is a university-based organization creating innovative solutions to the difficult how-to-pay issues of environmental protection and improvement. The EFCN works with the public and private sectors to promote sustainable environmental solutions while bolstering efforts to manage costs.

The Environmental Finance Center Network helping small water systems

- Environmental Finance Center at The University of North Carolina at Chapel Hill
- Southwest Environmental Finance Center at the University of New Mexico
- Syracuse University Environmental Finance Center
- Environmental Finance Center at Wichita State University
- EFC West
- Environmental Finance Center at the University of Maryland
- New England Environmental Finance Center at the University of Southern Maine
- Great Lakes Environmental Infrastructure Center
- Government Finance Officers Association (GFOA)
- National Association of Development Organizations (NADO)

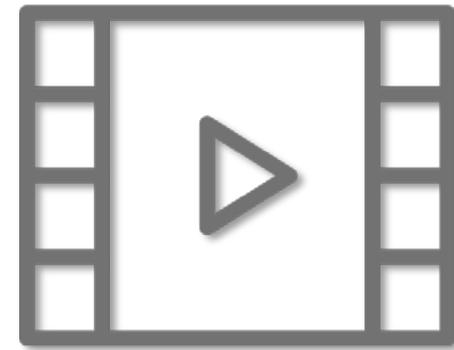
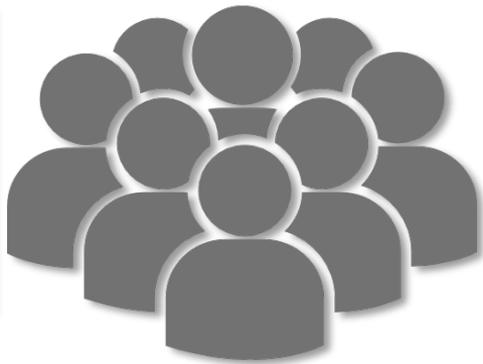
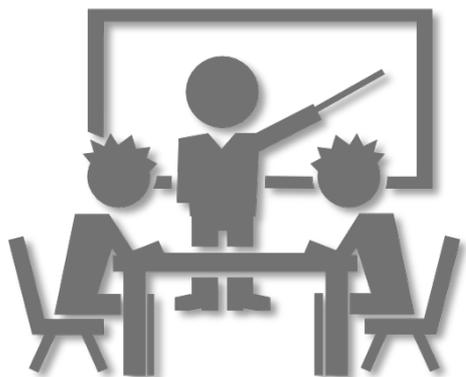




Smart Management for
Small Water Systems

Smart Management for Small Water Systems Program

FREE



Areas of Expertise



Asset Management



Rate Setting and Fiscal Planning



Leadership Through Decision-making and Communication



Water Loss Reduction



Energy Management Planning



Accessing Infrastructure Financing Programs



Workforce Development



Water Conservation Finance and Management



Collaborating with Other Water Systems



Resiliency Planning



Managing Drought



This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement A18-0408-001 to the University of North Carolina at Chapel Hill. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does the EPA endorse trade names or recommend the use of commercial products mentioned in this document.



SCHOOL OF GOVERNMENT

Environmental Finance Center



*Supporting fair, effective,
and financially sustainable
delivery of environmental
programs through:*

- Applied Research
- Program Design and Evaluation
- Teaching and Outreach
- Advising
- Policy Analysis

How you pay for it matters

Environmentalfinance.org





Introductions

1. Name, organization, title?
2. Details on your water system
3. What are you most proud of at your water system?
4. What is your biggest issue?



Polling

1. Take out your phone
2. Open a web browser (Safari, Chrome, etc.)
 - *Not* your Google or other search app
3. In the address bar, type in and go to <http://pollev.com/austinthomps954>
 - Do *not* search for it, but go straight to the webpage
4. The webpage will change when I launch the poll in the next slide

What organization do you work for?

Local government
water system

Non-governmental
water system

State agency

Assistance provider
/ consultant

Other

How many people do you serve?

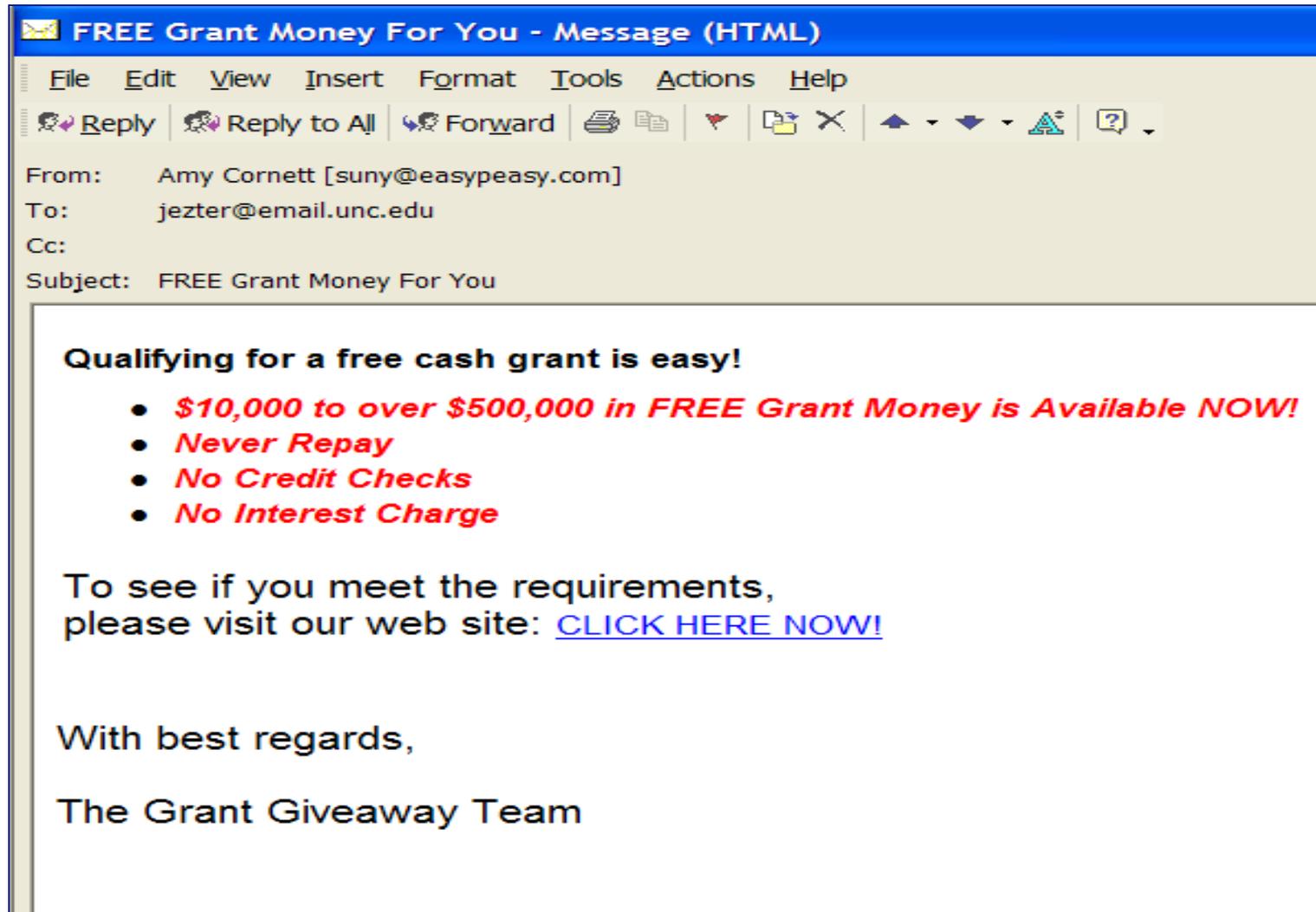
- Up to 500
- 501 to 3,000
- 3,001 to 10,000
- More than 10,000
- I don't work at a water system.



Workshop Agenda

- Basics of water system finance
- Designing appropriate rate structures
- Assessing financial performance
- Long-term financial planning
- Effective communication with the Board
- Funding programs

Topics not covered



The image shows a screenshot of an email client window. The title bar reads "FREE Grant Money For You - Message (HTML)". The menu bar includes "File", "Edit", "View", "Insert", "Format", "Tools", "Actions", and "Help". The toolbar contains icons for "Reply", "Reply to All", "Forward", "Print", "Delete", "Move", "Copy", "Paste", "Undo", "Redo", and "Help". The email header information is as follows:

From: Amy Cornett [suny@easypeasy.com]
To: jezter@email.unc.edu
Cc:
Subject: FREE Grant Money For You

The main body of the email contains the following text:

Qualifying for a free cash grant is easy!

- ***\$10,000 to over \$500,000 in FREE Grant Money is Available NOW!***
- ***Never Repay***
- ***No Credit Checks***
- ***No Interest Charge***

To see if you meet the requirements,
please visit our web site: [CLICK HERE NOW!](#)

With best regards,

The Grant Giveaway Team



Basics of Water System Finance



Session Objectives

- Learn how to think about your water system as a financial entity
- Define some basic financial concepts
- Identify what might be missing in budgets



What does your water system do?



Water systems can serve multiple purposes

- 1) System serves an important **environmental and health purpose** -- protecting community's water resources and supplying community with highest quality drinking water.
- 2) System serves an important **public service** – providing community with basic services that everyone in the community can afford.
- 3) System serves as a well managed **public enterprise** – putting into practice forward-thinking sustainable business practices.

Which purpose(s) motivate you the most?

Select all that apply

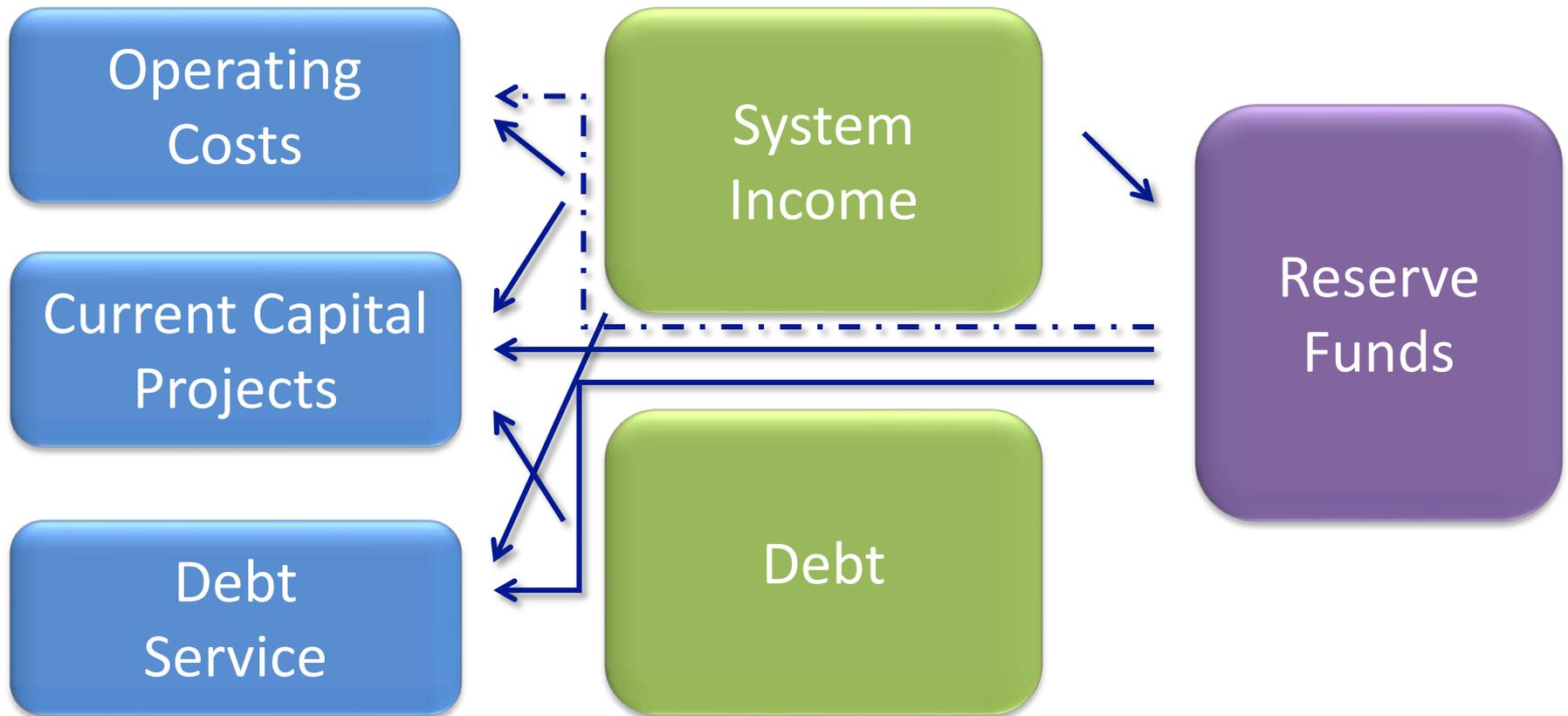
Public health

Public service

Public enterprise

Something else

Water System Finance Diagram





Three Types of Costs

- **Operating Costs**—what you need to run the system day in and day out
- **Capital Costs**—rehabilitation and replacement of existing infrastructure and new infrastructure
- **Debt Service**—what you owe on loans and bonds



Two Types of Revenues

- **System Income**—Money from rates, tap fees, system development charges, grants, penalties, other sources
 - Note: To be a pure enterprise fund, not taxes (unless explicitly permitted in some States).
- **Debt**—Money from bonds and loans



Many Types of Reserve Funds

- **Capital Reserve Fund**—Infrastructure rehabilitation and replacement
- **Repair Fund**—Known, ongoing maintenance issues
- **Emergency Fund**—Unknown, unanticipated maintenance issues
- **Rainy Day Fund**—Unexpected revenue shortfalls



How Much Do You Need In Your Reserves?

- It depends...
- Enough to cover your costs if you had no revenue for two months?
- Enough to pay for your most expensive piece of equipment?
- Enough to cover the projects in your capital improvement plan?



Annual Budget

- All costs become part of the annual budget for the water system
- Budgeted expenses determine the budgeted (targeted) revenues for the upcoming year
- The budget is crucial in determining appropriate rates, so must be both *accurate* and *complete*
 - Some budgets may be missing important expenses

Irvindale Budget Expenses

	Account	Budget
19	30-810-01 W/S PROF. SERVICES	\$500.00
20	30-810-02 TOWN MANAGER SALARY	\$28,499.99
21	30-810-03 W/S EMPLOYEE SALARY	\$57,200.00
22	30-810-04 CLERK SALARY	\$37,251.88
23	30-810-05 FICA EXPENSE	\$8,703.00
24	30-810-06 W/S EMPLOYMENT TAX	\$975.00
25	30-810-07 W/S OVERTIME	\$4,500.00
26	30-810-08 MERIT BONUS	\$3,000.00
27	30-810-09 HOLIDAY/EMPLOYEE APREC	\$1,200.00
28	30-810-10 POSTAGE	\$2,700.00
29	30-810-11 Office Supplies/Repairs	\$4,700.00
30	30-810-12 PHONE	\$3,400.00
31	30-810-13 W/S UTILITES	\$30,000.00
32	30-810-14 TRAINING	\$2,400.00
33	30-810-15 Employee Screening	\$105.00
34	30-810-16 MAINT/REPAIR:SYST-EQUIP	\$30,000.00
35	30-810-17 Mayor Salary	\$1,800.00
36	30-810-18 Board Salary	\$10,500.00
37	30-810-20 W/S UNIFORMS	\$2,000.00
38	30-810-30 GAS AND OIL FOR VEHICLES	\$4,500.00
39	30-810-31 TIRES FOR VEHICLES	\$600.00
40	30-810-32 REPAIRS TO VEHICLES	\$1,000.00
41	30-810-33 SUPPLIES & MATERIALS	\$3,000.00
42	30-810-34 CHEMICALS AND SALT	\$20,000.00
43	30-810-45 CONTRACTED SERVICES	\$36,500.00
44	30-810-46 STATE PERMITS	\$1,700.00
45	30-810-48 DUES/SUBSCRIPTIONS	\$1,500.00
46	30-810-50 DEPRECIATION	\$0.00
47	30-810-54 INSURANCE	\$13,608.00
48	30-810-55 HOSPITAL INSURANCE	\$22,443.00
49	30-810-57 MISC EXPENSE	\$500.00
50	30-810-60 W/S - LGERS	\$9,272.00
51	30-810-70 WATER STUDY EXPENSES	\$24,000.00
52	30-810-74 Online Payments SVC	\$1,600.00
53	30-810-75 ARRA LOAN PRINCIPAL	\$8,875.00
54	30-810-76 PURCHASE WATER BILL	\$2,400.00
55	30-810-79 Banking Fees	\$500.00
56	30-810-89 CAPITAL OUTLAY NEW EQUIP	\$0.00
57	30-810-90 TRANSFER TO OTHER FUND	\$0.00
58	30-810-95 FINES AND PENALTIES	\$1,500.00
		\$382,932.87

What catches
your attention?

Anything
surprise you?





Costs that may be overlooked in budgets

- Indirect costs of running the system (shared management costs, shared facility costs, etc.)
- Capital-related costs (debt service, **depreciation**, sinking fund transfers, pay as you go capital expenditures)
- Retirement/pension