Smart Management for Small Water Systems

Rates and Finance Workshop for Small Water Systems

09/21/17| St. George, UT

www.efcnetwork.org

UNC ENVIRONMENTAL FINANCE CENTER

EFCN environmental finance center network

American Water Works Association

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

Background

Applying for a grant or a loan?

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

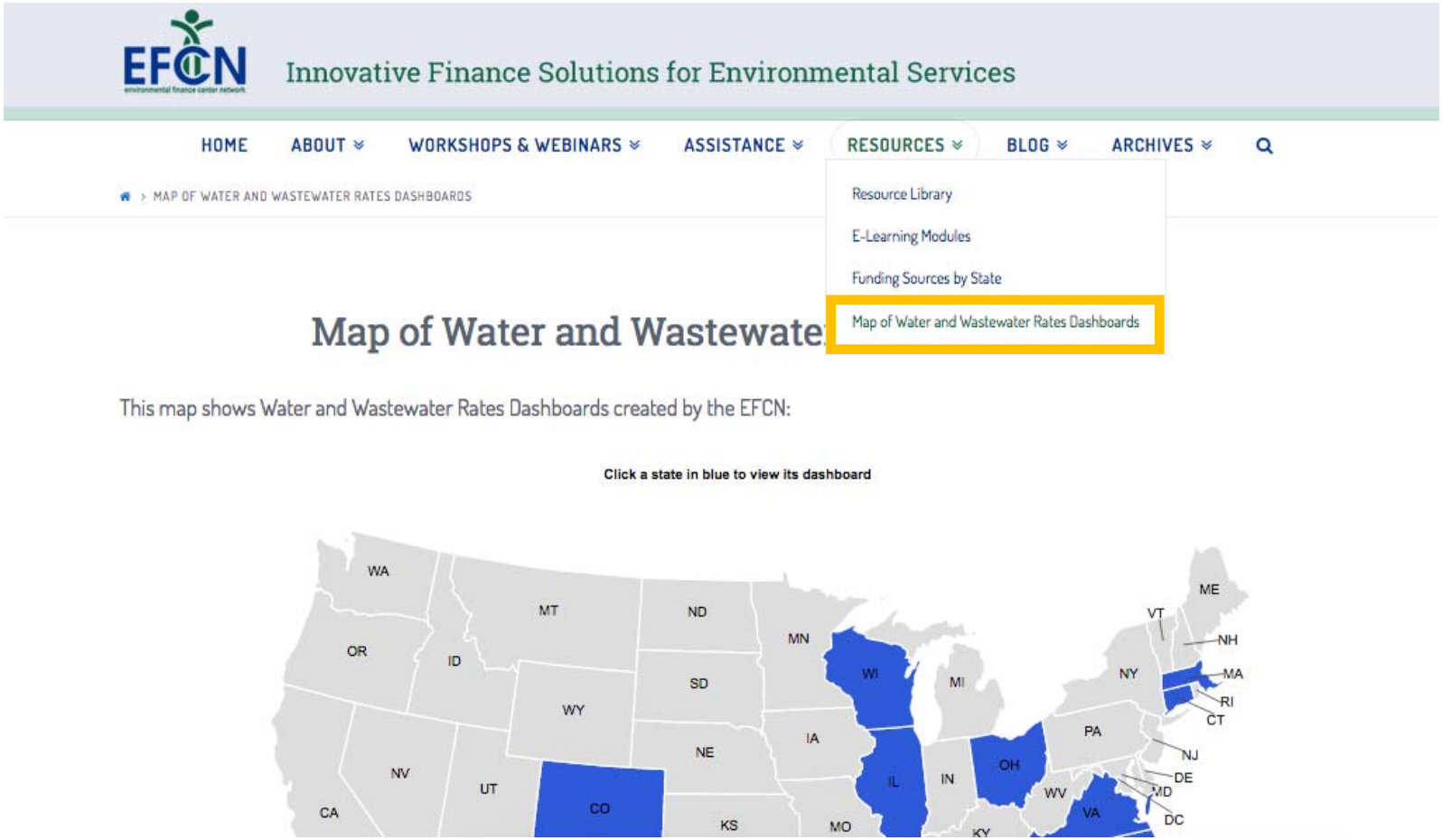
When You Need Cash Now: The Debt Market

- Lenders will look at your creditworthiness, your ability to repay the debt, in determining whether to loan to you and your interest rate
- Certain best practices can increase your chances of funding

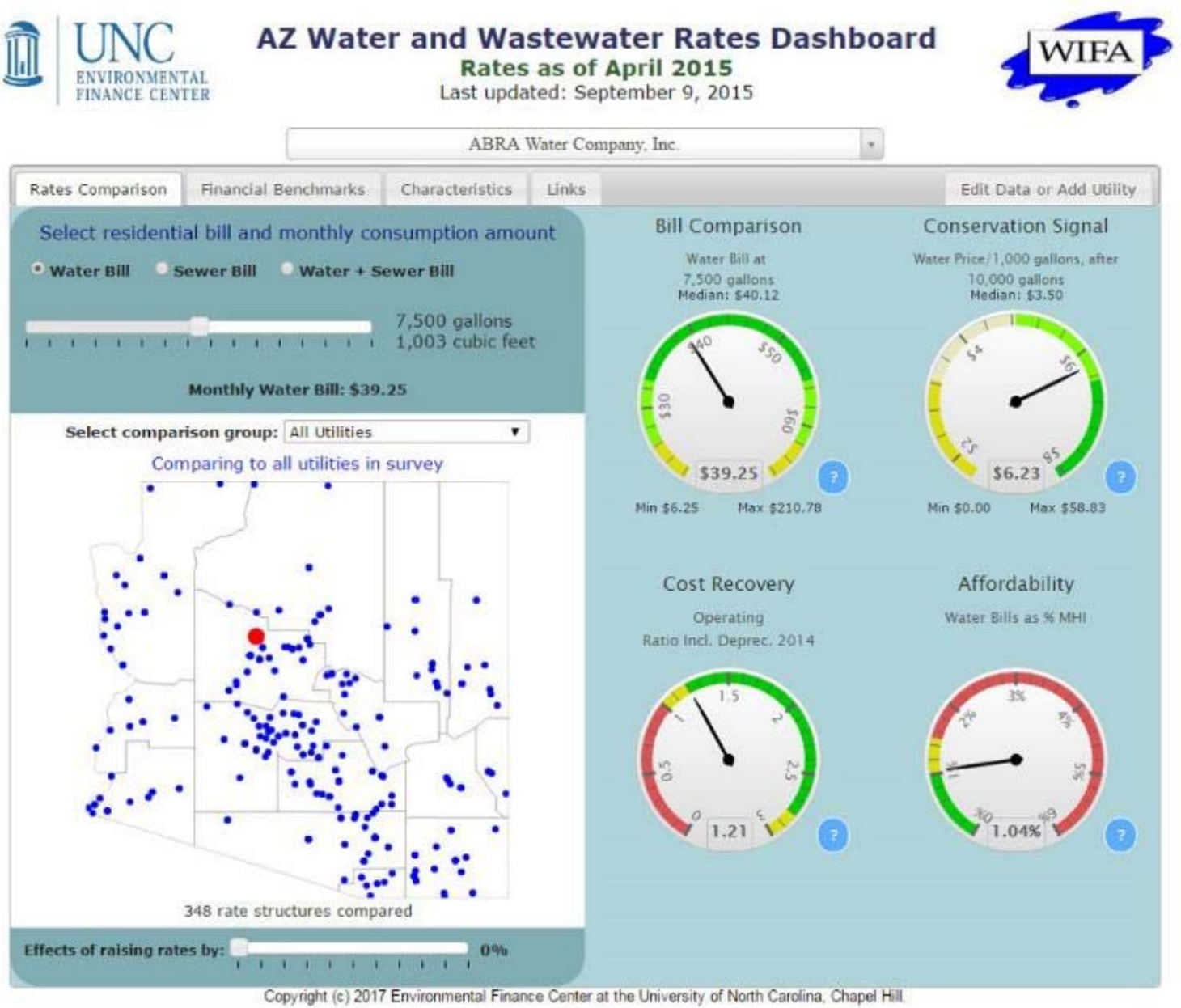
Using Metrics from a Rates Dashboard

Rates Dashboards

Select “Map of Water and Wastewater Rates Dashboards” under the Resources Tab, and click on any state in blue to view its dashboard.



Example Dashboard:



Example Dashboard:

UNC ENVIRONMENTAL FINANCE CENTER

AZ Water and Wastewater Rates Dashboard

Rates as of April 2015

Last updated: September 9, 2015

WIFA

ABRA Water Company, Inc.

Rates Comparison | Financial Benchmarks | Characteristics | Links | Edit Data or Add Utility

Select service provided. (Display will not change if the utility has a combined water and sewer enterprise fund.)

Water Bill **Sewer Bill** **Water + Sewer Bill**

Ability to cover expenditures and debt service

Op. Rev. / Op. Expend.

Debt Service Coverage Ratio

Measures of liquidity

Days Cash on Hand

Cost Recovery

Operating Ratio (Incl. Dep.)

Benchmarking

Can You Sleep at Night?

Is your system self sufficient?	Operating Ratio
Are you able to cover your debt service after paying for your day to day operations?	Debt Service Coverage Ratio
If your customers stop paying their bills, how long can you maintain operations?	Days Cash on Hand
Can your system meet its short term obligations?	Current Ratio
How much of your system's expected life has already run out?	Asset Depreciation

Whiteboard Video: Financial Benchmarking for Water Utilities

http://www.waterrf.org/Pages/Projects.aspx?PID=4366

Quick Review of Key Financial Indicators

Operating Ratio

Current Ratio

Debt Service Coverage Ratio

Days of Cash on Hand

Asset Depreciation

Is your system self-sufficient?

Operating Ratio

$$\frac{\text{OPERATING REVENUES}}{\text{OPERATING EXPENSES}}$$

Include or Exclude

DEPRECIATION

ANNUAL COST OF WEAR AND TEAR ON THE SYSTEM

Read more: http://efc.web.unc.edu/2015/02/27/operating-ratio/

Are you able to cover your debt service after paying for your day to day operations?

Debt Service Coverage Ratio

$$\frac{\text{OPERATING REVENUES} - \text{OPERATING EXPENSES (EXCLUDING DEPRECIATION)}}{\text{PRINCIPAL} + \text{INTEREST PAYMENTS ON LONG TERM DEBT}}$$

Read more: http://efc.web.unc.edu/2015/04/23/debt-service-coverage-ratio/

Debt Service Coverage Ratio

$$\frac{\text{OPERATING REVENUES} - \text{OPERATING EXPENSES (EXCLUDING DEPRECIATION)}}{\text{PRINCIPAL} + \text{INTEREST PAYMENTS ON LONG TERM DEBT}} > 1.2$$

Read more: http://efc.web.unc.edu/2015/04/23/debt-service-coverage-ratio/

Can your system meet its short term obligations?

Current Ratio

$$\frac{\text{UNRESTRICTED CURRENT ASSETS EXCLUDING INVENTORIES AND PREPAID ITEMS}}{\text{CURRENT LIABILITIES}}$$

Read more: http://efc.web.unc.edu/2015/10/01/key-indicator-current-ratio/

If your customers stop paying their bills, how long can you maintain operations?

Days Cash on Hand

UNRESTRICTED CASH AND INVESTMENTS

OPERATING EXPENSES EXCLUDING DEPRECIATION & AMORTIZATION / 365

Read more: http://efc.web.unc.edu/2015/06/24/days-cash-on-hand/

How much of your system's expected life has already run out?

Asset Depreciation

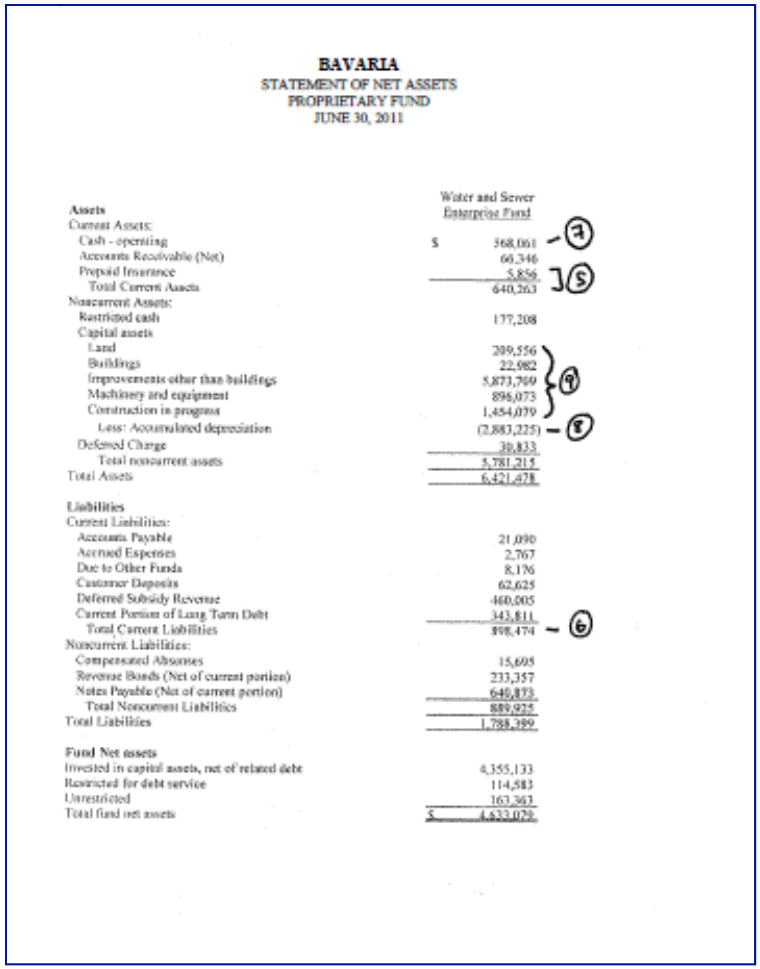
$$= \frac{Accumulated\ Depreciation}{Gross\ Plant\ and\ Equipment}$$

Caveat: this indicator is only as accurate as your depreciation schedule, and even then historic pricing is likely to distort the results.

Where Do We Get Started?

- Local governments: audited financial statements

- Non-governments: balance sheets, shareholder reports, annual reports, etc.



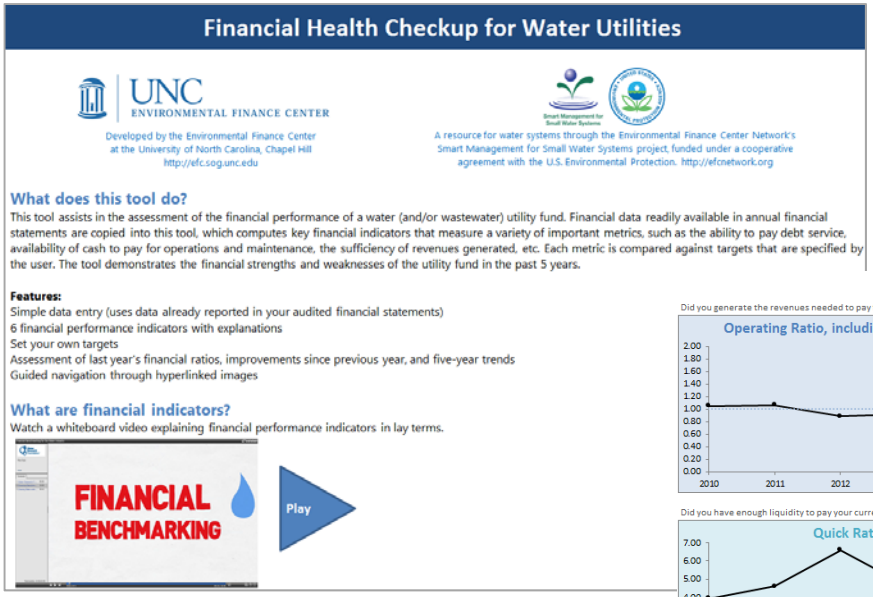
BAVARIA
STATEMENT OF NET ASSETS
PROPRIETARY FUND
JUNE 30, 2011

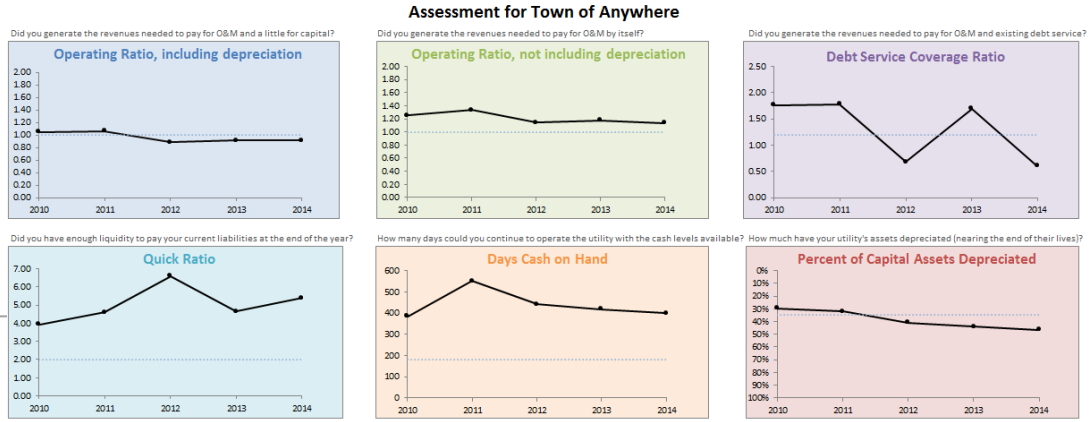
	Water and Sewer Enterprise Fund
Assets	
Current Assets:	
Cash - operating	$ 368,061
Accounts Receivable (Net)	66,346
Prepaid Insurance	5,856
Total Current Assets	640,263
Noncurrent Assets:	
Restricted cash	177,208
Capital assets	
Land	209,556
Buildings	22,982
Improvements other than buildings	5,873,769
Machinery and equipment	896,073
Construction in progress	1,454,039
Less: Accumulated depreciation	(2,883,225)
Deferred Charge	30,833
Total noncurrent assets	5,781,215
Total Assets	6,421,478
Liabilities	
Current Liabilities:	
Accounts Payable	21,090
Accrued Expenses	2,767
Due to Other Funds	8,176
Customer Deposits	62,625
Deferred Subsidy Revenue	460,005
Current Portion of Long Term Debt	343,811
Total Current Liabilities	898,474
Noncurrent Liabilities:	
Compensated Absences	15,605
Revenue Bonds (Net of current portion)	233,357
Notes Payable (Net of current portion)	640,873
Total Noncurrent Liabilities	889,925
Total Liabilities	1,788,399
Fund Net assets	
Invested in capital assets, net of related debt	4,355,133
Restricted for debt service	114,583
Unrestricted	163,363
Total fund net assets	$ 4,633,079

Financial Health Checkup for Water Utilities

http://efc.sog.unc.edu or http://efcnetwork.org

Find the most up-to-date version in Resources / Tools





Excel®- based tool

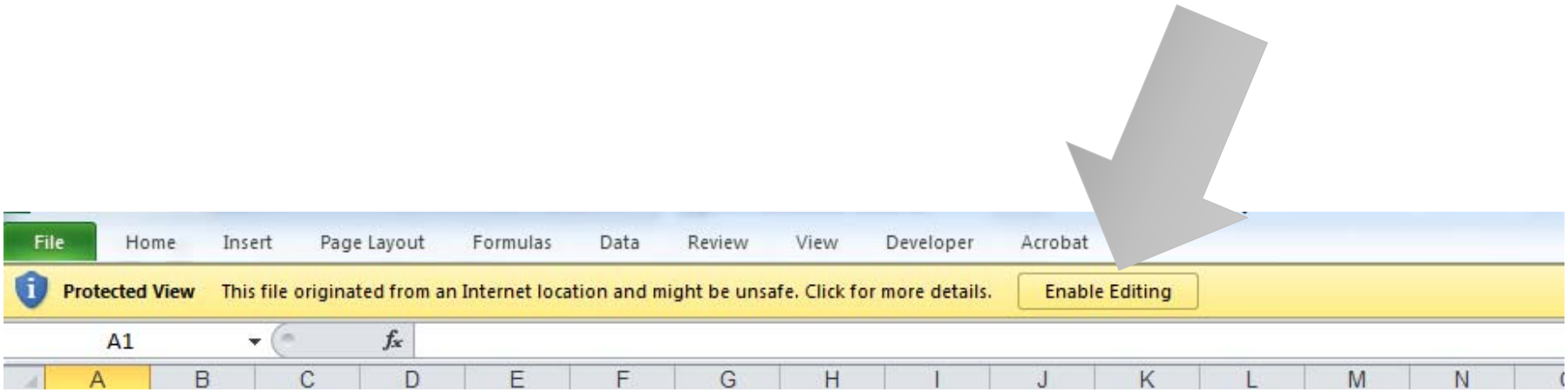
Free to use

Created by the Environmental Finance Center at the University of North Carolina, Chapel Hill's School of Government

A resource for water systems from the EFCN's Smart Management for Small Water Systems project

funded under a cooperative agreement with the U.S. E.P.A.

Tip: when you first use this file after downloading from our website, click on “Enable Editing” at the top



Why Care About This?

- Funders and ratings agencies care about this
- As you think about the future needs of your system, you have to know where you are starting from

So....

- Now that we know where we are, let's decide where we are going…

- How do we estimate the future costs and revenues?