



# Financial Management for Water & Wastewater Funding Program Applicants

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# Best Resource: EFCNetwork.org

The screenshot shows the EFCNetwork.org website. At the top, there is a subscription bar with the text "Enter your email to subscribe..." and a green "Sign Me Up" button. Below this is the EFCN logo, which consists of a stylized green figure with arms raised above the letters "EFCN", with the text "environmental finance center network" underneath. To the right of the logo is the tagline "Innovative Finance Solutions for Environmental Services". A navigation menu follows with links: HOME, ABOUT, WORKSHOPS & WEBINARS, ASSISTANCE, RESOURCES, BLOG, ARCHIVES, and a search icon. The main content area features a large banner with a background image of hands drawing on a blueprint. On the left of the banner is a small logo for "Smart Management for Small Water Systems" and the text "Smart Management for Small Water Systems: Improving small water systems through sustainable finance and management". Below the banner are three smaller images: a woman presenting in a meeting, a blue icon of a globe with water droplets, and hands holding a document with a bar chart.



# Webinar Objectives

- Learn about the project priority list
- Understand your system's financial position
- Discuss how to raise appropriate revenues



# Project Priority List





# Minnesota Funding Acronyms

DW

Drinking Water

CW

Clean Water  
*(Wastewater and  
Stormwater)*



# Minnesota Funding Acronyms

PPL

Project Priority List

IUP

Intended Use Plan  
*(list of ranked projects  
that are ready for  
funding)*



# Minnesota Funding Acronyms

## MDH

MN Department of Health



## MPCA

MN Pollution Control Agency





# Minnesota Funding Acronyms

## PFA

MN Public Facilities  
Authority



## DEED

MN Department of  
Employment and  
Economic Development







# Minnesota Funding Acronyms

SRF

State Revolving Funds  
(*infrastructure loans*)

PSIG

Point Source Implementation  
Grant

SCDP

Small Cities Development Program

WIF

Wastewater Infrastructure Fund  
(affordability grants)

RD

USDA Rural Development





# PPL = Minnesota Priority Lists for Water Infrastructure Projects

- PPLs identify cities seeking funding for wastewater and drinking water infrastructure projects over the next five years



# PPL = Minnesota Priority Lists for Water Infrastructure Projects

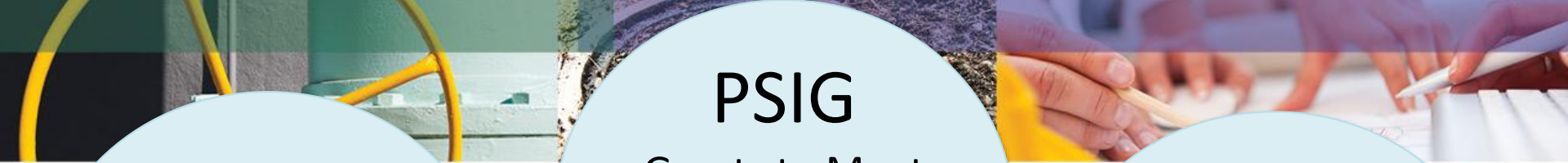
- Cities submit PPL requests to MPCA (clean water) and MDH (drinking water) as first step in funding process
  - Clean Water PPL Deadline (to MPCA) – first Friday in March
  - Drinking Water PPL deadline (to MDH) – first Friday in May
  - CW & DW IUP Deadline (to PFA) – first Friday in June



# PPL = Minnesota Priority Lists for Water Infrastructure Projects

- State grant and loan funding follows PPL priorities
  - RD and SCDP also consider PPL priorities
  - PPL lists used by state and federal agencies to coordinate funding
- Score and rank
  - Based on Public Health and Environmental Impacts





**CW &  
DW SRF**

Low Interest  
Loans

**PSIG**

Grants to Meet  
More Stringent  
Pollutant Limits

**WIF**

Affordability  
Based Grants

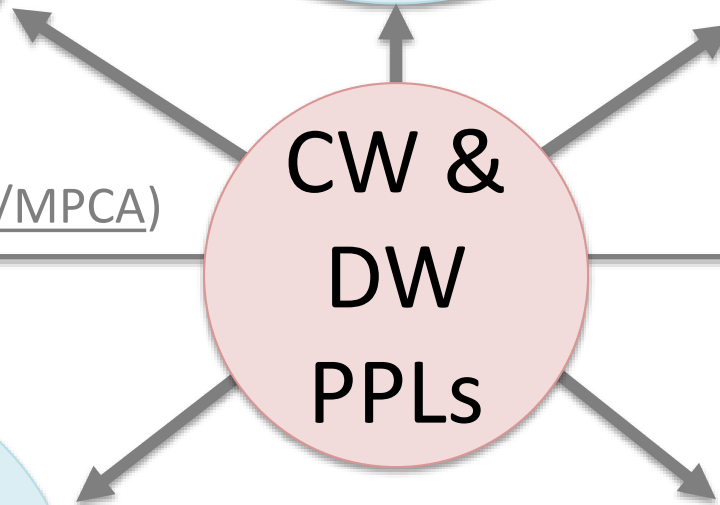
**CW &  
DW  
PPLs**

**USDA RD**

Loans &  
Grants

**SCDP**

Block Grants  
Administered  
by DEED



State Funding (PFA/MDH/MPCA)

Federal Funding



Minnesota Pollution Control Agency

[www.pca.state.mn.us](http://www.pca.state.mn.us)

## Minnesota community options for water infrastructure financing

Managing wastewater, stormwater and drinking water supplies is important for the health and safety of any community. It can also make a difference to a community's growth potential and environmental value, in terms of attracting new businesses, new residents and additional visitors. Achieving solutions is a complicated journey, requiring several steps to reach the destination. This flyer addresses one of the major steps – financing. Following is an outline of financing options for public entities. Use this matrix as a guide for researching financial options. Examine the requirements for each program and see if your entity qualifies. If so, contacting the funding agency is the first step toward an affordable solution that protects health and safety while enhancing your community.

Program	Objective	Applicant	Uses	Population	Terms/conditions
 <b>MINNESOTA</b> PUBLIC FACILITIES AUTHORITY	<b>Minnesota Public Facilities Authority</b> Becky Sabie, PFA Program Coordinator 651-259-7470 <a href="mailto:Rebecca.Sabie@state.mn.us">Rebecca.Sabie@state.mn.us</a> <a href="http://mn.gov/deed/government/public-facilities/funds-programs/">http://mn.gov/deed/government/public-facilities/funds-programs/</a>				
 <b>Minnesota Pollution Control Agency</b>	<b>Minnesota Pollution Control Agency</b> Bill Dunn CWRF Program Coordinator 651-757-2324 <a href="mailto:bill.dunn@state.mn.us">bill.dunn@state.mn.us</a> <a href="http://www.pca.state.mn.us/ppi">www.pca.state.mn.us/ppi</a>				
<b>Clean Water Revolving Fund (CWRF)</b> Minn. R. ch. 7077, Minn. Stat. § 446A.07 and 116.16	<b>Loans</b> for municipal wastewater and stormwater projects.	Cities, counties, townships, sanitary districts. Projects must be listed on the Minnesota Pollution Control Agency (MPCA) project priority list (PPL) and Public Facilities Authority (PFA) Intended Use Plan.	Build, repair and improve public wastewater or stormwater systems.	No cap or minimum.	Below market interest rates, repayment period is 20 years and, in some cases, 30 years.

Minnesota Pollution Control Agency  
 651-296-6300 | 800-657-3864 or use your preferred relay service | [Info.pca@state.mn.us](mailto:Info.pca@state.mn.us)

December 2016 | wq-wwtp2-42  
 Available in alternative formats



# Understanding Your Water System's Financial Position



# 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 of  
Cash on Hand

Can your system meet its short term obligations?

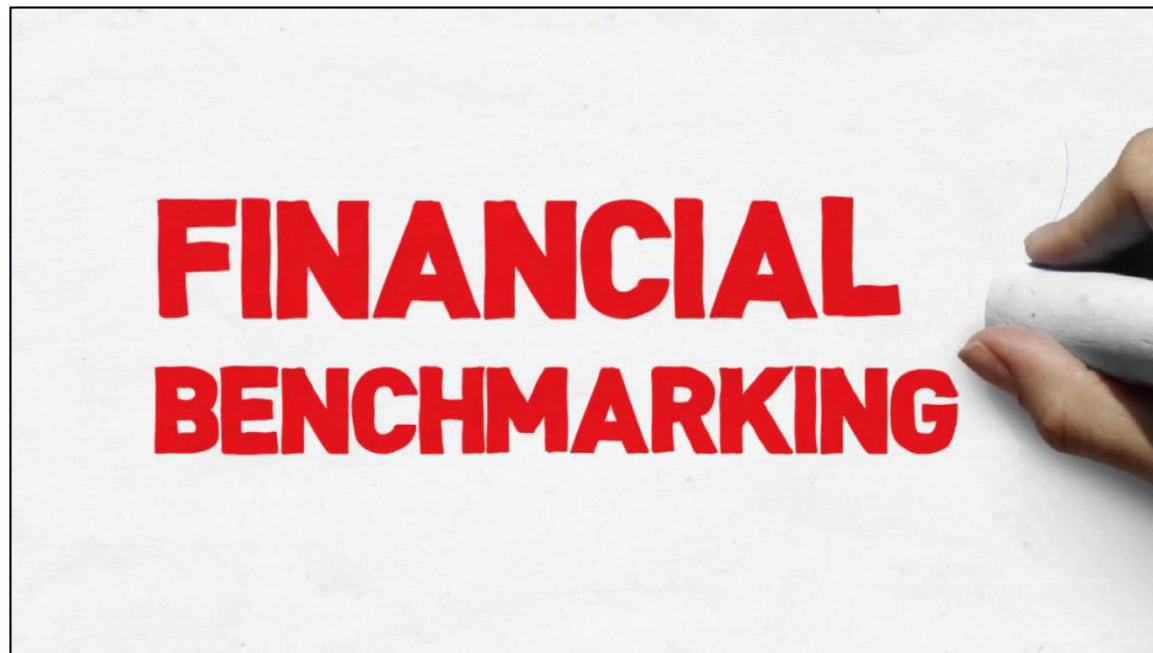
Current  
Ratio





# Whiteboard Video: Financial Benchmarking

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





# Operating Ratio

**OPERATING REVENUES**



**OPERATING EXPENSES**





# Operating Ratio

## DEPRECIATION

ANNUAL COST OF WEAR  
AND TEAR ON THE SYSTEM





# What is Depreciation?

- Loss of value of an asset not restored by current maintenance
- An economic fact for any water system
- From both physical factors and functional or non-physical factors





<https://www.youtube.com/watch?v=d8A7MJXFV1U&t=1115s>

Infrastructure Wears Out



7:20 / 1:03:02  
www.efcnetwork.org

Webinar: Demystifying Depreciation and How to Make Use of It



# Operating Revenues

---

Operating Expenses  
incl. Depreciation

> 1 ✓



# Debt Service Coverage Ratio

**OPERATING REVENUES – OPERATING EXPENSES**  
(EXCLUDING DEPRECIATION)

---

**PRINCIPAL + INTEREST PAYMENTS**  
ON LONG TERM DEBT





# Debt Service Coverage Ratio

- Minnesota SRF borrowers are required to issue a General Obligation Revenue Note to secure the SRF loan
- State law requires 105% revenue coverage for G.O. debt





# Debt Service Coverage Ratio

OPERATING REVENUES – OPERATING EXPENSES  
(EXCLUDING DEPRECIATION)

---

PRINCIPAL + INTEREST PAYMENTS  
ON LONG TERM DEBT

>1.05



# Days Cash on Hand

**UNRESTRICTED CASH AND INVESTMENTS**

---

**OPERATING EXPENSES EXCLUDING  
DEPRECIATION & AMORTIZATION / 365**



# Days Cash on Hand



Generally in  
MN, 3 months  
of cash on  
hand plus 1  
year of debt  
service





# Current Ratio

UNRESTRICTED CURRENT ASSETS  
EXCLUDING INVENTORIES AND  
PREPAID ITEMS

---

CURRENT LIABILITIES





# Current Ratio

$\geq 1$  ✓



# An Example

## Town of Mayberry

- Actual numbers from an average small town community water system

# Operating Ratio – Mayberry

STATEMENT OF REVENUES, EXPENSES, AND CHARGES IN NET ASSETS  
 PROPRIETARY FUNDS  
 FOR THE YEAR ENDED DECEMBER 31, 2010

\$444,231

Operating Revenues (1)

1a.

=

0.87

\$511,448

Operating Expenses (including depreciation) (2)

Other supplies and expense

Depreciation

Total operating expenses

Operating income (loss)

142,483	
511,448	-0
(67,217)	

NONOPERATING REVENUES (EXPENSES)

# Operating Ratio – Mayberry

STATEMENT OF REVENUES, EXPENSES, AND CHARGES IN NET ASSETS  
 PROPRIETARY FUNDS  
 FOR THE YEAR ENDED DECEMBER 31, 2010

1b.

\$444,231

Operating Revenues (1)

=

1.20

\$368,985

Operating Expenses (excluding depreciation) (2-3)

Other supplies and expense  
 Depreciation  
 Total operating expenses  
 Operating income (loss)

142,463  
 511,448  
 (67,217)

NONOPERATING REVENUES (EXPENSES)



# STATEMENT OF CASH FLOWS PROPRIETARY FUNDS FOR THE YEAR ENDED DECEMBER 31, 2010

## CASH FLOWS FROM OPERATING ACTIVITIES

Receipts from customers

OE  
Enterprise Funds  
Water and Sewer  
- Dep \$142,748  
\$2437,947  
\$142,763

\$444,231

\$368,985

Operating Revenues (1)

Operating Expenses (2-3)  
(excluding depreciation)

2.

0.89

\$84,783

Principal & Interest on Long-Term Debt (4)

Purchases of capital assets  
Principal paid on capital debt  
Interest paid on capital debt  
Net cash (used) by capital and  
related financing activities

( 49,655)  
( 35,128)

(124,624)

The accompanying notes are an integral part

# Days of Cash on Hand – Mayberry

## STATEMENT OF REVENUES, EXPENSES, AND CHARGES IN NET ASSETS PROPRIETARY FUNDS FOR THE YEAR ENDED DECEMBER 31, 2010

### Enterprise Funds

\$107,706

Unrestricted Cash & Cash Equivalents (5)

3.

=

107

\$368,985

/ 365

Operating Expenses (excluding depreciation) (2-3)

Other supplies and expense

Depreciation

Total operating expenses

Operating income (loss)

NONOPERATING REVENUES (EXPENSES)

126,202

142,463

511,448

(67,217)

(3)

(2)

(2)

(2)

Unrestricted  
Total net assets

DECEMBER 31, 2010

Enterprise Funds  
Water and Sewer

ASSETS

Current assets

Cash

Restricted cash

107,706

176,424

\$107,706

+

\$41,870

Unrestricted Cash &  
Cash Equivalents (5)

Receivables, net (6)

4.

=

1.38

\$108,390

Current Liabilities (7)

LIABILITIES

Current liabilities

Accounts payable

Customer deposits

Bonds payable current

Total current liabilities

\$ 9,311

44,229

54,850

108,390

Noncurrent liabilities

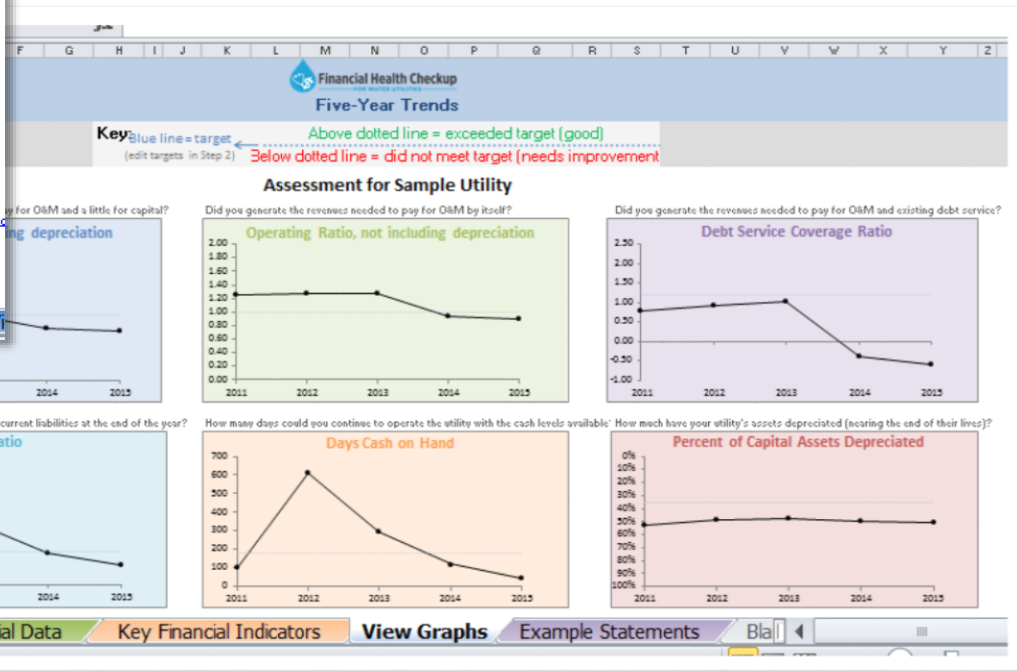
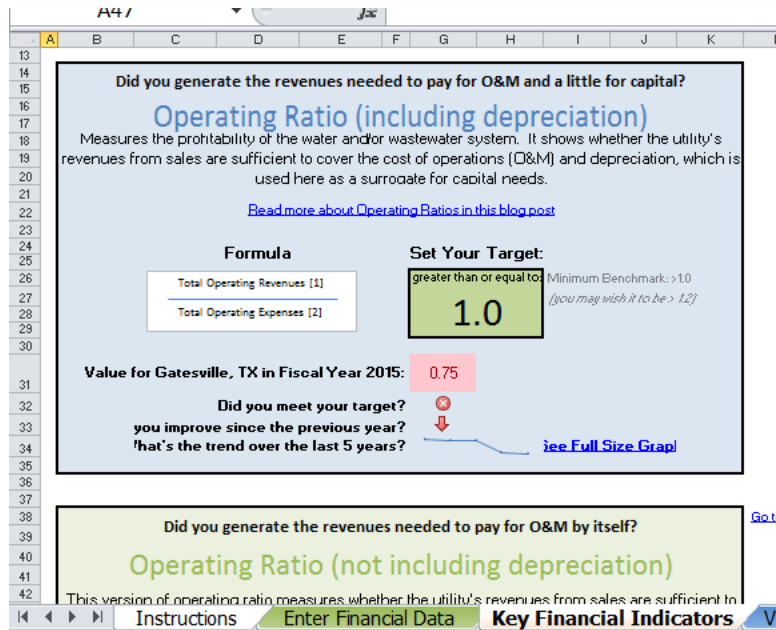
Bonds, notes and loans payable

828,452

Total noncurrent liabilities

828,452

# Financial Health Checkup Tool







# Raising Appropriate Revenues



# How to Pay for Capital Improvements

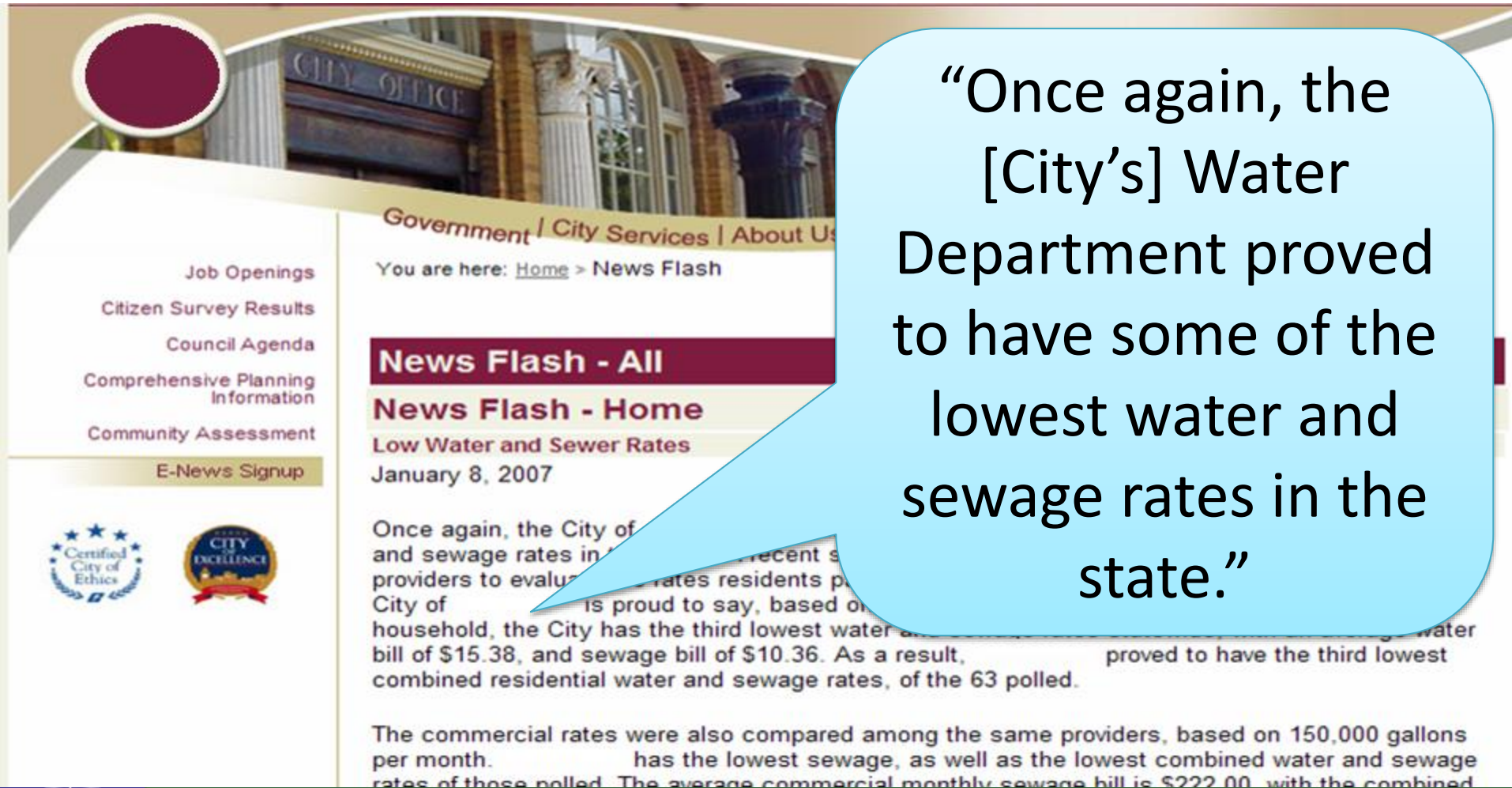
- Pay as you go (current receipts)
- Save in advance and pay (reserve funds)
- Pay later (someone loans you money)
- ~~Grants (let someone else pay)~~



# “Full Cost Pricing”

- Operations & maintenance expenditures
- Taxes and accounting costs
- Contingencies for emergencies
- Principal and interest on long-term debt
- Reserves for capital improvement
- Source water protection

# Systems Love Low Rates, but...



The screenshot shows a city website with a navigation menu on the left and a news flash on the right. The navigation menu includes links for Job Openings, Citizen Survey Results, Council Agenda, Comprehensive Planning Information, Community Assessment, and E-News Signup. Below the menu are two circular logos: 'Certified City of Ethics' and 'CITY EXCELLENCE'. The news flash is titled 'News Flash - All' and 'News Flash - Home', with the subtitle 'Low Water and Sewer Rates' and the date 'January 8, 2007'. The main text of the news flash states: 'Once again, the City of [City's] and sewage rates in [City's] recent survey of providers to evaluate rates residents pay. [City's] is proud to say, based on [City's] household, the City has the third lowest water and sewage bill of \$15.38, and sewage bill of \$10.36. As a result, [City's] proved to have the third lowest combined residential water and sewage rates, of the 63 polled.' The text continues with: 'The commercial rates were also compared among the same providers, based on 150,000 gallons per month. [City's] has the lowest sewage, as well as the lowest combined water and sewage rates of those polled. The average commercial monthly sewage bill is \$222.00, with the combined'.

Government | City Services | About Us

You are here: [Home](#) > News Flash

**News Flash - All**

**News Flash - Home**

**Low Water and Sewer Rates**

January 8, 2007

Once again, the City of [City's] and sewage rates in [City's] recent survey of providers to evaluate rates residents pay. [City's] is proud to say, based on [City's] household, the City has the third lowest water and sewage bill of \$15.38, and sewage bill of \$10.36. As a result, [City's] proved to have the third lowest combined residential water and sewage rates, of the 63 polled.

The commercial rates were also compared among the same providers, based on 150,000 gallons per month. [City's] has the lowest sewage, as well as the lowest combined water and sewage rates of those polled. The average commercial monthly sewage bill is \$222.00, with the combined

“Once again, the [City’s] Water Department proved to have some of the lowest water and sewage rates in the state.”





# Non-Recurring Revenues

- Penalties
- Cellphone & radio receivers on the tank
- Ads on the tank
- Tap or connection fees
- System development charges
- Grants

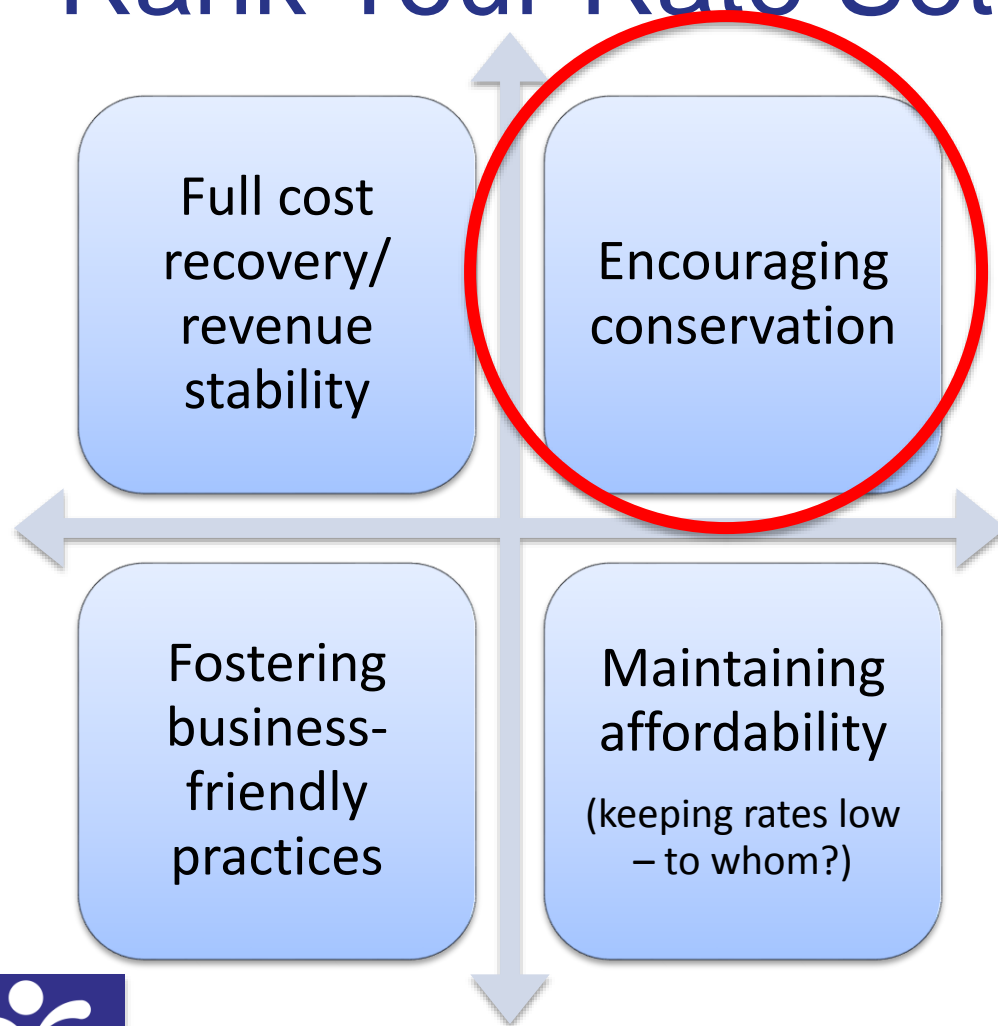


But most of your revenue  
comes from your rates

How do we get the rates “right?”



# Rank Your Rate Setting Objectives



Conservation  
will always be  
a priority in  
Minnesota  
due to water  
supply  
planning  
requirements

s on the  
when  
or selecting  
ture design.



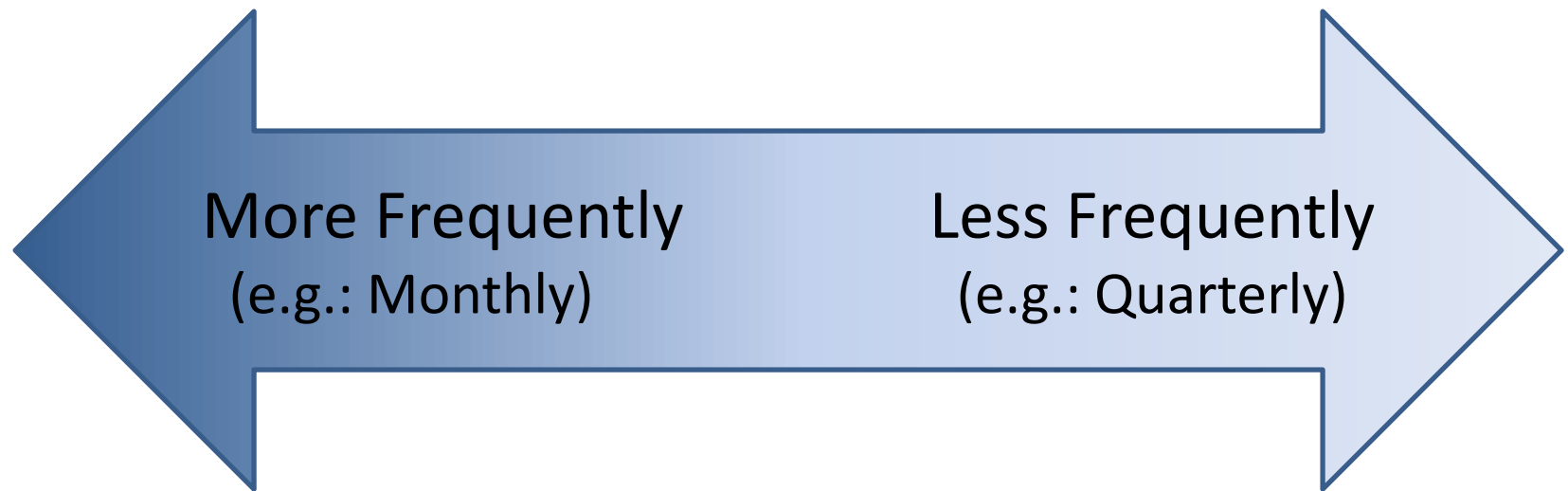
# Customer Classes/Distinctions

- One rate structure for all
- Separate structures based on customer class
- Different base charge based on meter size
- Inside/Outside customers
- Negotiated rate with large customers





# Billing Period

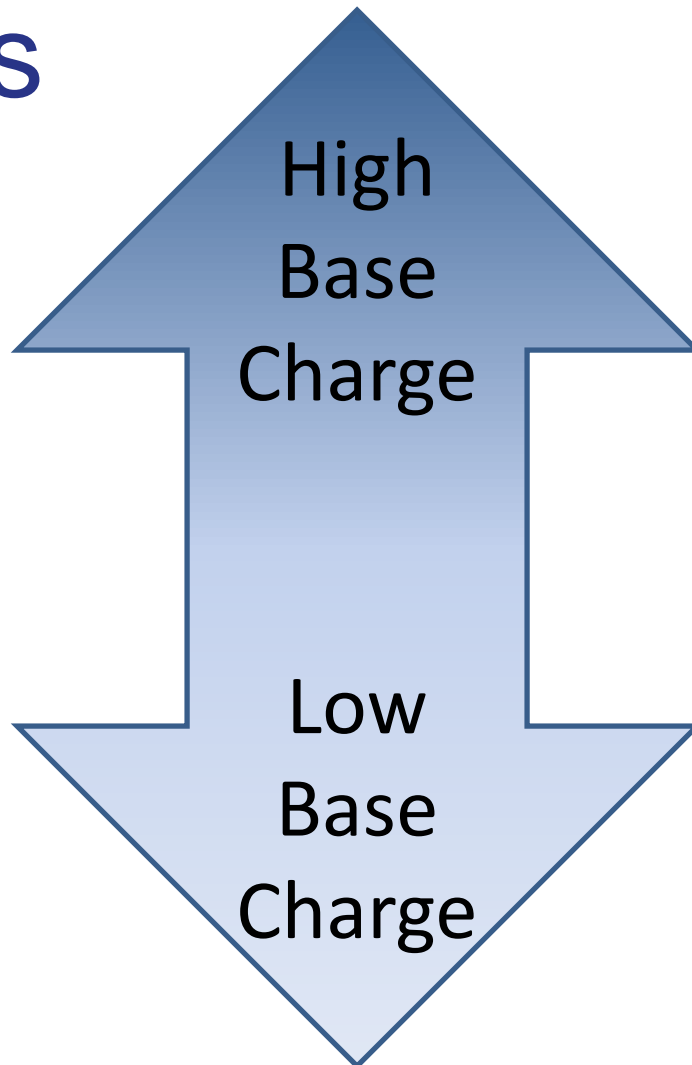


*Suggestion: Use a monthly billing period if you can afford it*



# Base Charges

*Suggestion:  
Smaller utilities  
should lean  
towards higher  
base charges*





# Consumption Allowance with Base Charge

Do not  
include any  
(0 gallons)

Include some  
amount  
(e.g. 1,000 gal/mo)

Include high  
amount  
(e.g. 3,000 gal/mo)

*Suggestion: For systems with low base charges, do not include any consumption allowance. For systems with high base charges but wish to encourage conservation, keep consumption allowance low, if any.*



# Increasing Block Designs

For block rate structures to be effective:

- Correct number of blocks
- Where the blocks should end/start
- Significant rate differentials between blocks
- Read meters punctually
- Think about large families





# Frequency of Rate Changes

- Always review your rates annually (recommended)
- Review your financial health indicators annually, and then review your rates if any of the indicators reflect poor financing
- Raise rates each year automatically based on inflation



# Frequency of Rate Changes

- *Important: Avoid maintaining low rates at the expense of your utility's financial health. It will either lead to a sudden, massive rate increase in the future or to failing systems and endangering public health.*

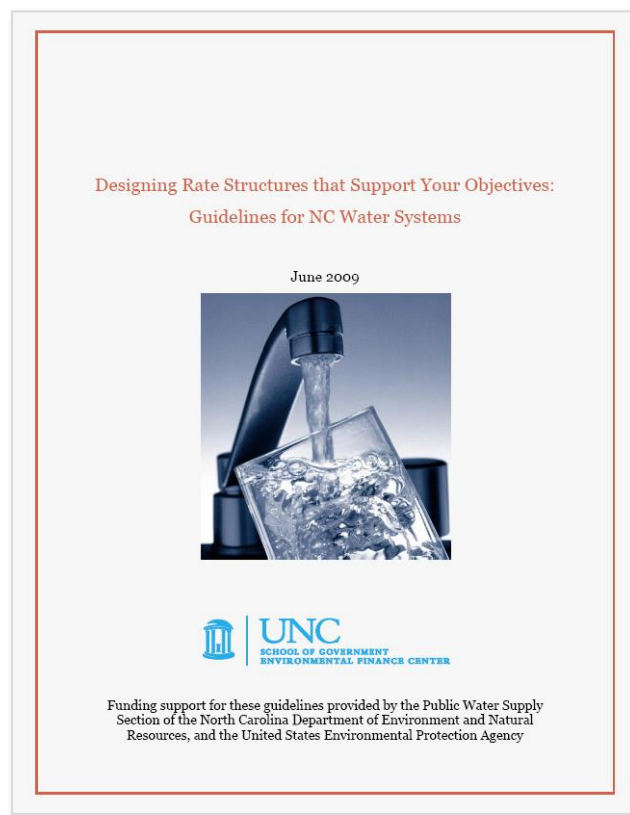


# Designing Rate Structures That Support Your Objectives

Free guide  
written for  
system  
managers

Available at:

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





# A few questions...





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