



Smart Management for
Small Water Systems

Setting the Right Rates for Your Water System

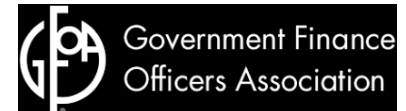
Rutland, VT
6/20/2019



UNC
ENVIRONMENTAL
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NADO
NATIONAL ASSOCIATION OF DEVELOPMENT ORGANIZATIONS
RESEARCH FOUNDATION



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



Workshop Objectives

- Understand common rate setting objectives for water systems
- Learn how to structure rates to meet those objectives
- 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



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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 Small Systems Program Team

- 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)



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WICHITA STATE
UNIVERSITY
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Great Lakes
Environmental
Infrastructure Center
Environmental Finance Center for EPA Region 5



Government Finance
Officers Association

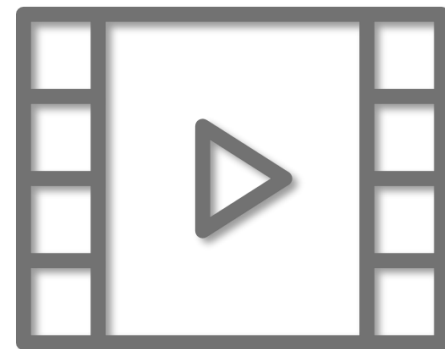
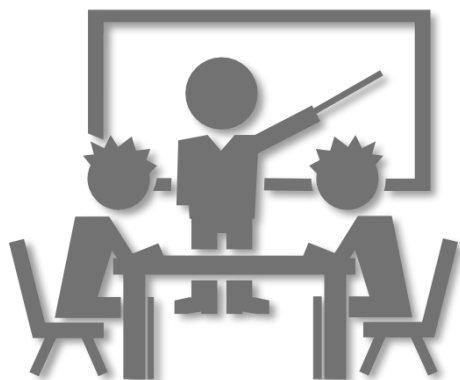




Smart Management for
Small Water Systems

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



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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





Quick 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 the biggest challenge you encounter at your water system?
5. Why are you here?



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

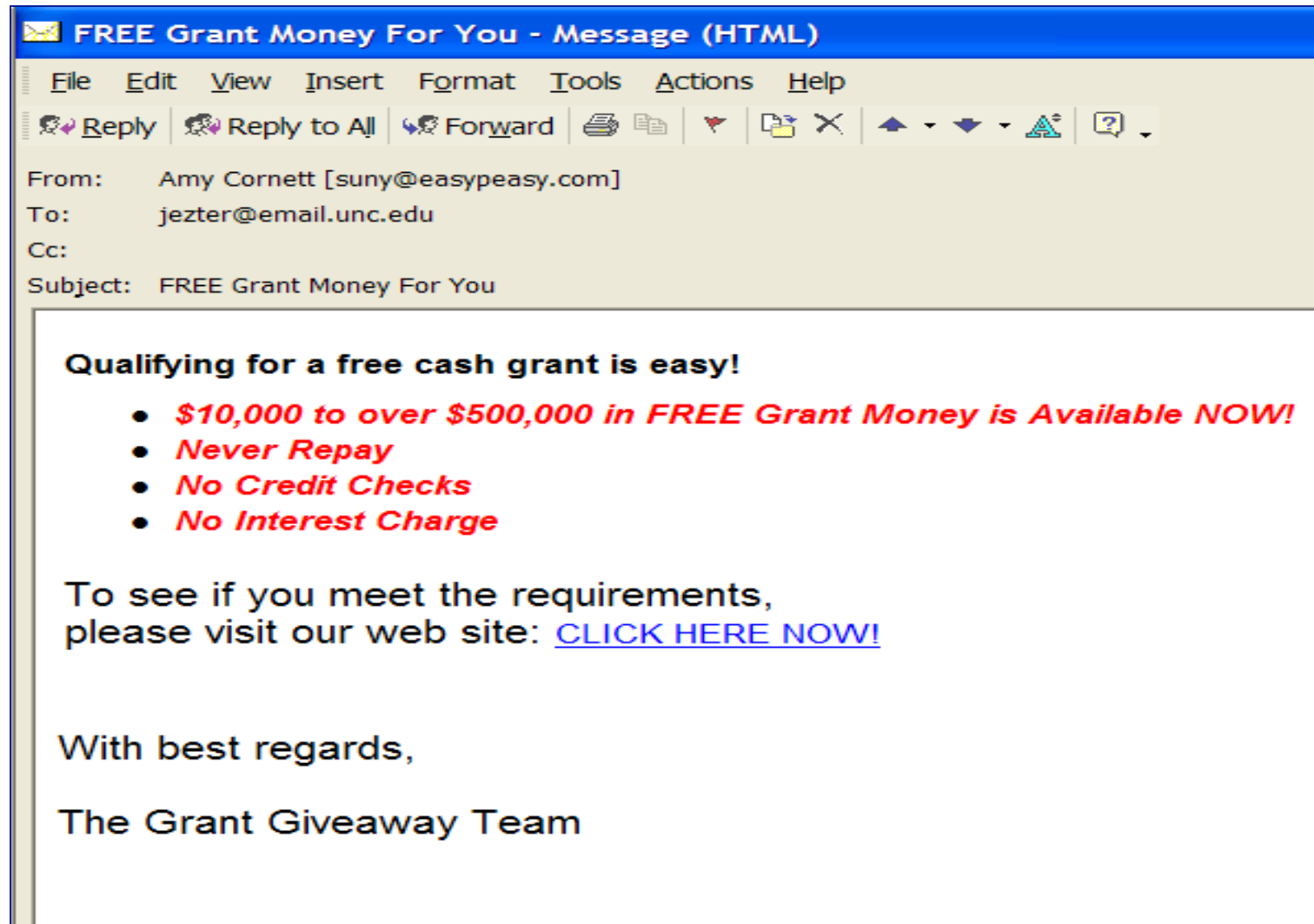
I don't work at
a water system.



Agenda

- A little about infrastructure funding programs
- Rate setting objectives
- Calculating costs for your water system
- Setting rates that cover the full cost of operations
- Achieving other rate objectives
- Using an interactive tool to communicate rates

Topics Not Covered





Funding Programs

Infrastructure Funding Programs



40 Years



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Rate Setting Objectives



Session Objectives

- Introduce “right” rates
- Understand common types of rate setting objectives
- Learn how to match rate structure elements with rate setting objectives



What single word comes to mind
when you hear “water rates”?

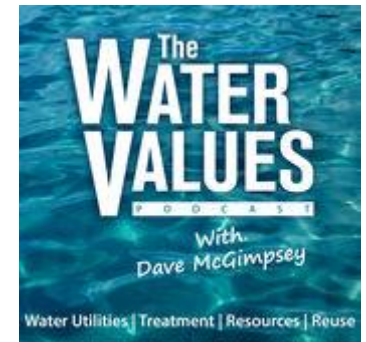


Why are rates so important?

Let's hear from an expert



Dave McGimpsey interviews George Hawkins, former CEO of DC Water, on the Water Values Podcast (Change Leadership episode)



<http://www.podcasts.com/the-water-values-podcast-44/episode/change-leadership-with-dc-water-ceo-george-hawkins>



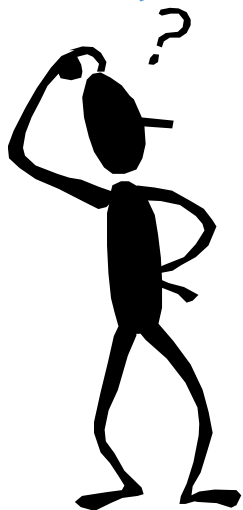


Rate structures are the primary way that we as water systems “communicate” with our customers

Here’s a question we hear often...



Are our
rates right?



It depends...

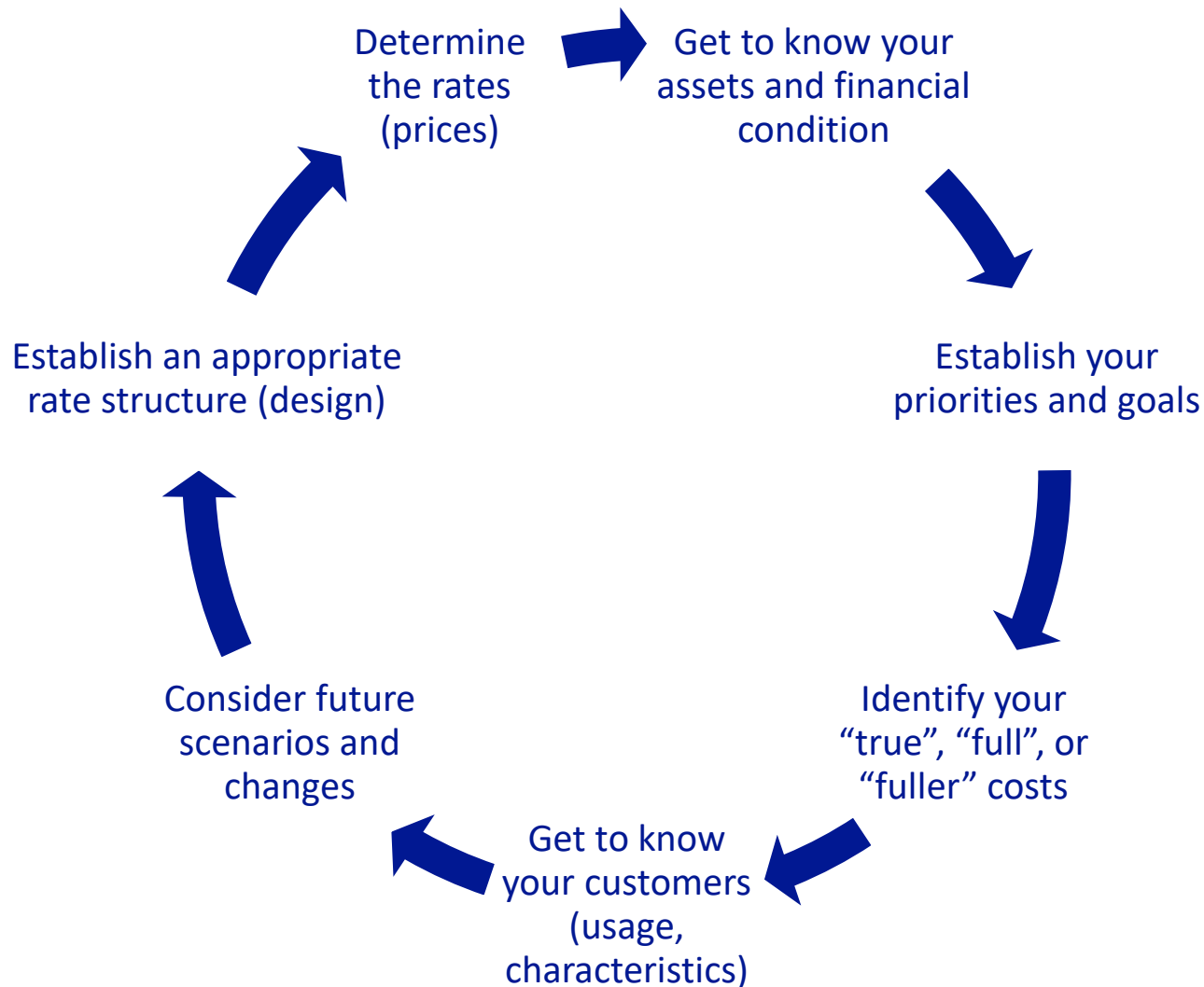




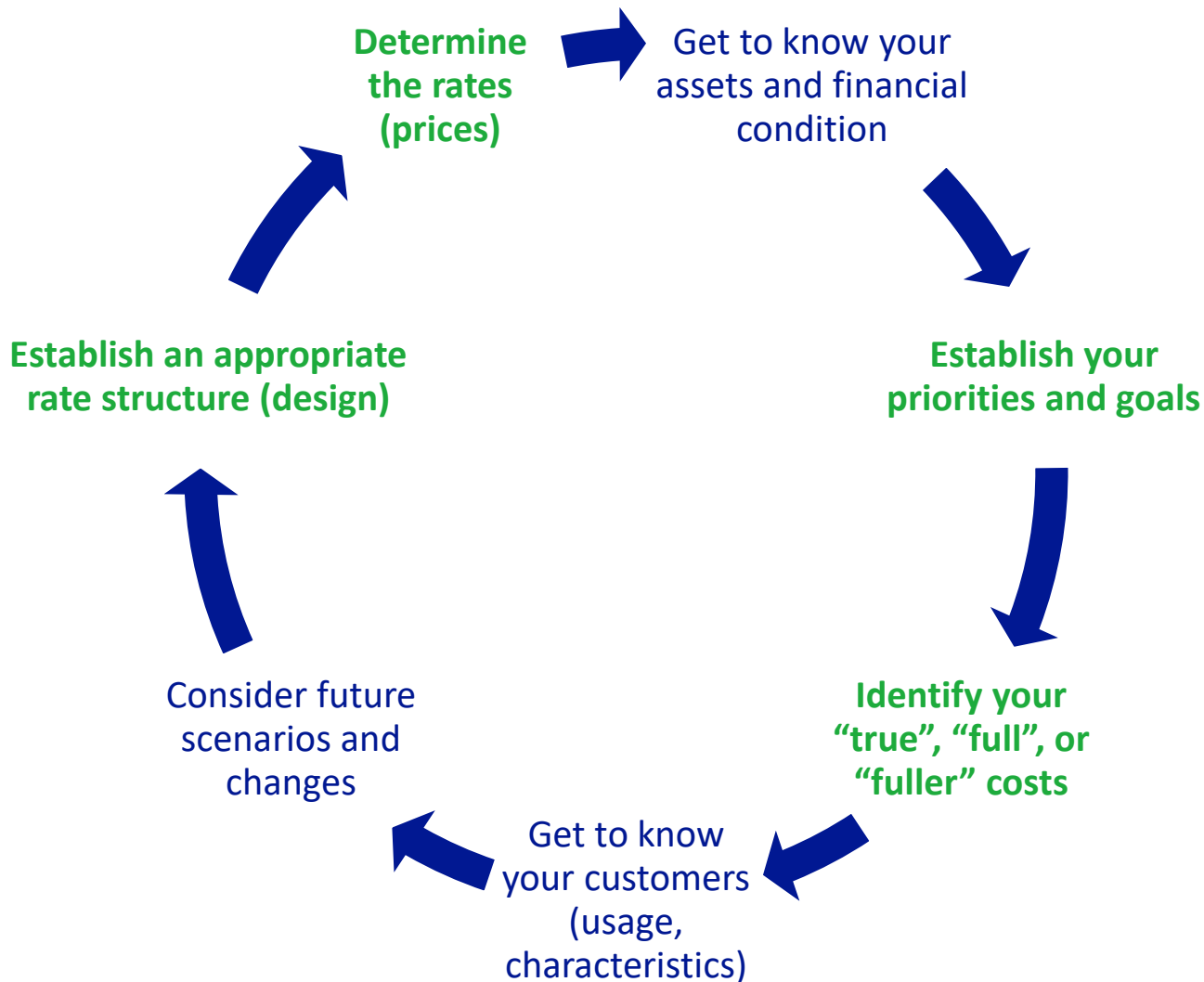
Rates that are “right” can:

- ✓ Provide adequate funds to support public health
- ✓ Provide adequate funds to support environmental protection
- ✓ Support local and state policies and objectives
- ✓ Communicate in a certain way with customers
- ✓ Allocate costs in an intentional and fair way

Path Towards Financial Sustainability



Today we will cover



How happy are you with your water rates?

Not happy. They
need some work!

Meh. They're
okay.

Neutral

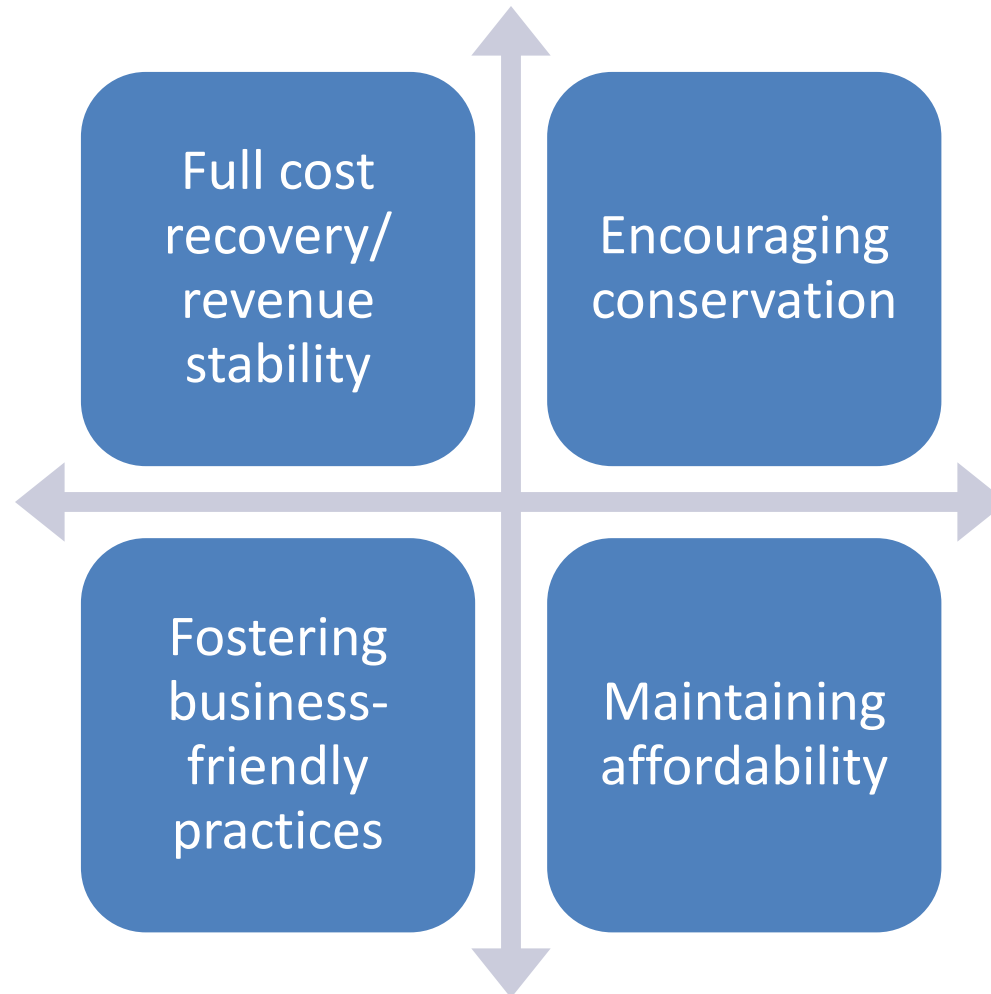
Pretty Happy

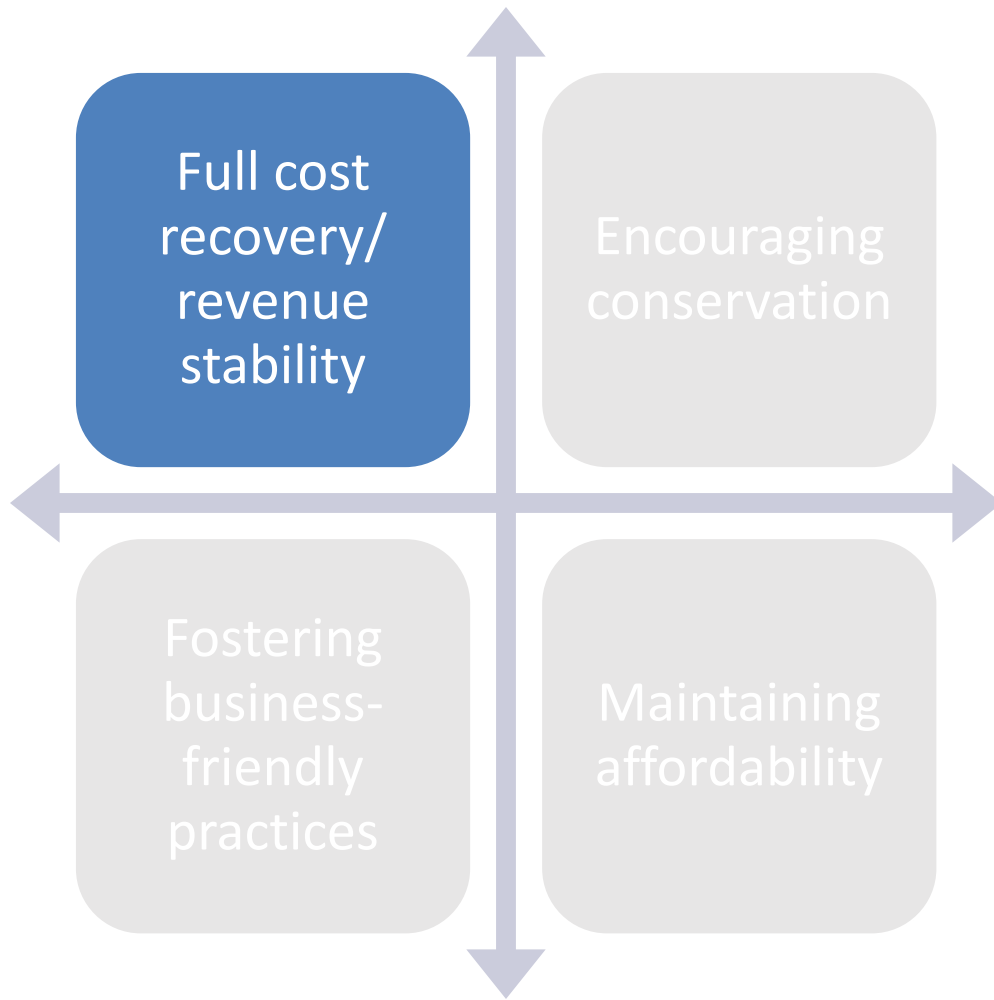
Very Happy

N/A



Water System Objectives





Bring in enough revenue to cover the full cost of running the water system:

- O&M
- Capital needs
- Debt service
- Reserves

How important is full(er) cost recovery to your system?

Very

Somewhat

Not very

Not at all

N/A



Use pricing to encourage customers to reduce their water consumption

Full cost recovery/
revenue stability

Encouraging conservation

Fostering business-friendly practices

Maintaining affordability

How important is encouraging conservation to your system?

Very

Somewhat

Not very

Not at all

Not applicable



Full cost
recovery/
revenue
stability

Encouraging
conservation

Fostering
business-
friendly
practices

Maintaining
affordability

Use pricing to
encourage
businesses and
agriculture to
locate to your
community or
stay in your
community

How important is fostering business-friendly practices to your system?

Very

Somewhat

Not very

Not at all

Not applicable



Full cost
recovery/
revenue
stability

Encouraging
conservation

Fostering
business-
friendly
practices

Maintaining
affordability

Ensure that all
customers in your
water system are
able to afford
enough water to
live on

How important is maintaining affordability to your system?

Very

Somewhat

Not very

Not at all

N/A



What are some other objectives?

- Keep it simple
- Charge seasonal customers fairly
- Maintain steady cash flow
- ?
- ?



So, based on these objectives...

Which of these does your system
prioritize first and foremost?

Which of these is the second most
important objective for your system?

Which of these objectives is MOST important to your system

Assuring adequate cost recovery

Encouraging conservation

Supporting new businesses & business retention

Affordability

Something else

Which of these objectives is the second most important to your water system?

Assuring adequate cost recovery

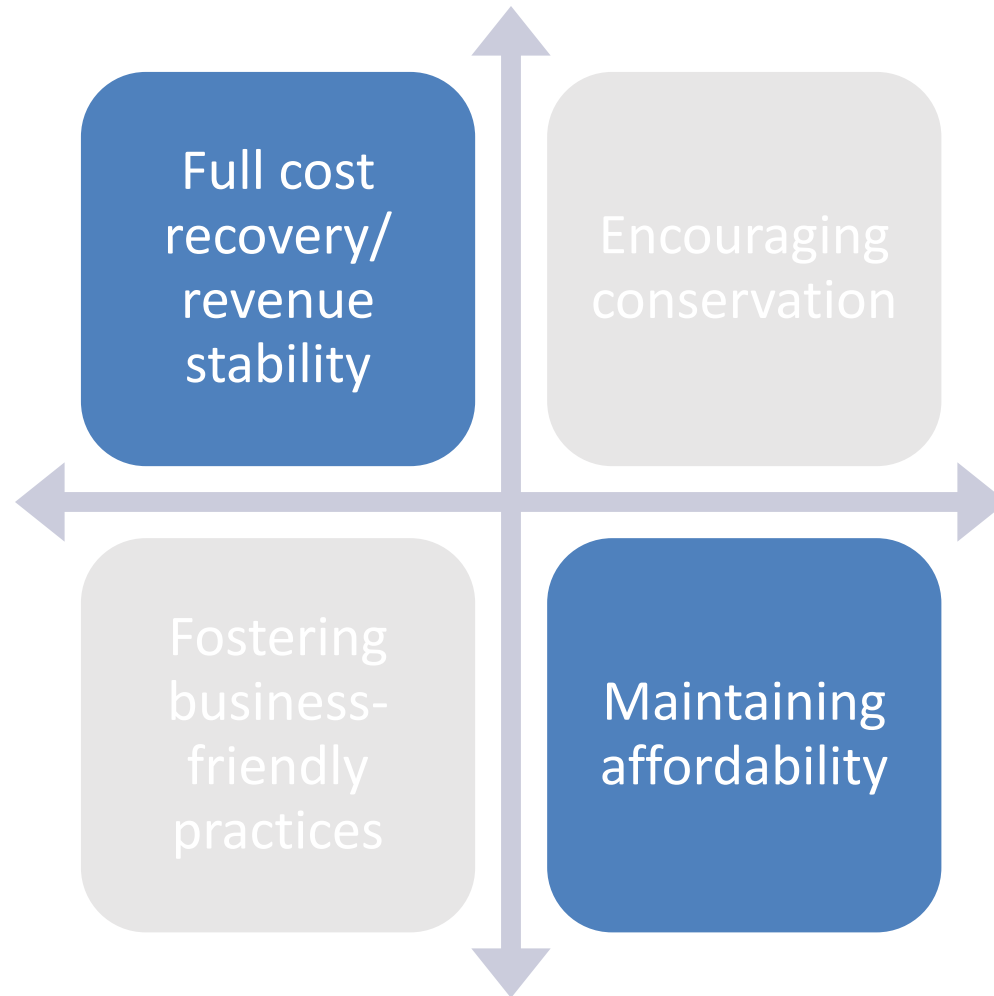
Encouraging conservation

Supporting new businesses & business retention

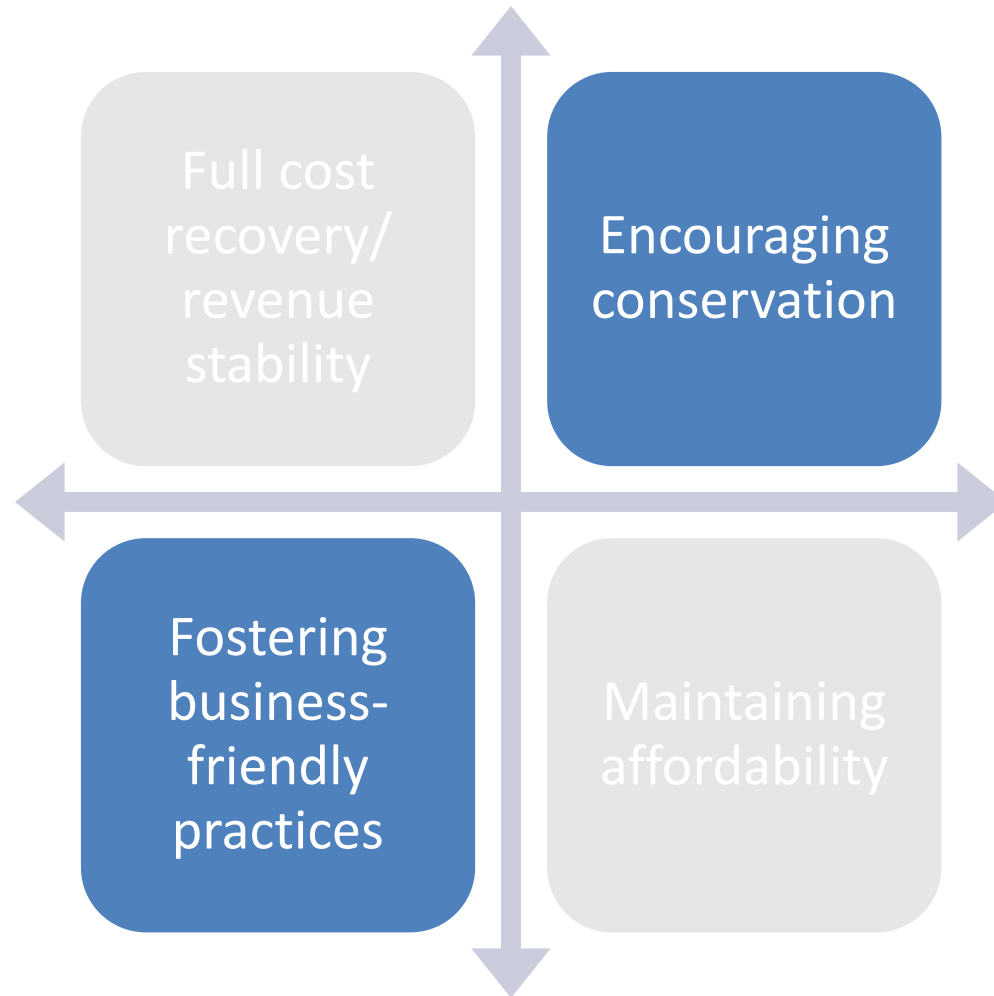
Affordability

Something else

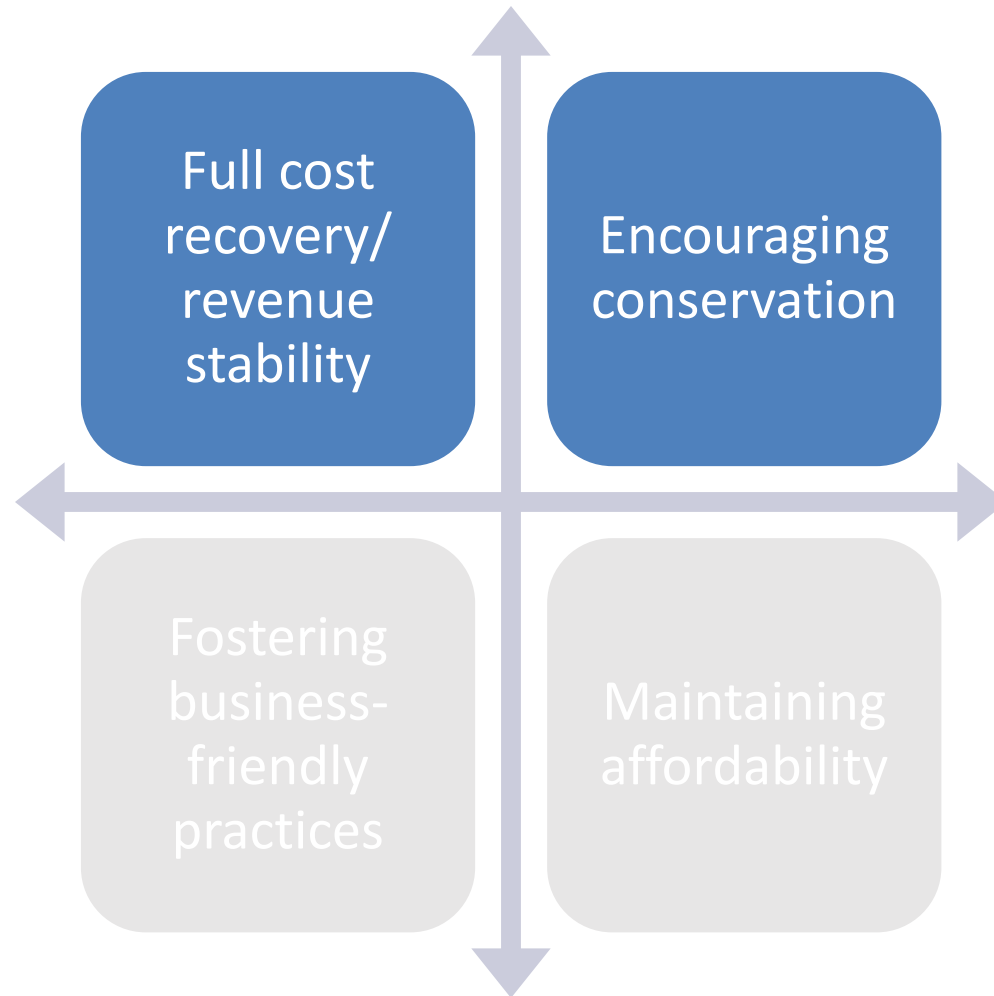
Competing Objectives



Competing Objectives



Competing Objectives





Rate Setting Objectives

Your rate structure is a tool to help you meet your rate setting objectives

- Frequency of billing
- Base charges and allowances
- Volumetric charges

Rate structures in the room today





Rate structures in the room today*

- Billing period: Quarterly
- Base charges: \$39.95 - \$95.00
- Consumption allowances: 0 – 11,500 gallons
- Volumetric rates above consumption allowance:
Uniform
- Separate rate structures: None
- Res. water bill for 1,200 cubic feet or about 16,000 gallons: \$61.91 - \$168.36

*Based on information readily available online for 5 utilities

How frequently do you bill?

Monthly

Bi-monthly

Quarterly

Other

Do you have a base charge?

Yes

No

What is your consumption allowance?

0 Gallons

1,000 Gallons

2,000 Gallons

3,000 Gallons

>3,000 Gallons

What is the structure of your residential volumetric rates?

Fixed Charge

Flat Rate

Increasing Block

Decreasing Block



Exercise:

Matching rate setting objectives
and rate structures with the
circumstances of small water
systems

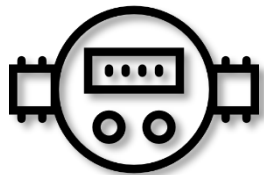


Irvindale, USA Exercise

Small town with a water and wastewater system



Population: 1,100



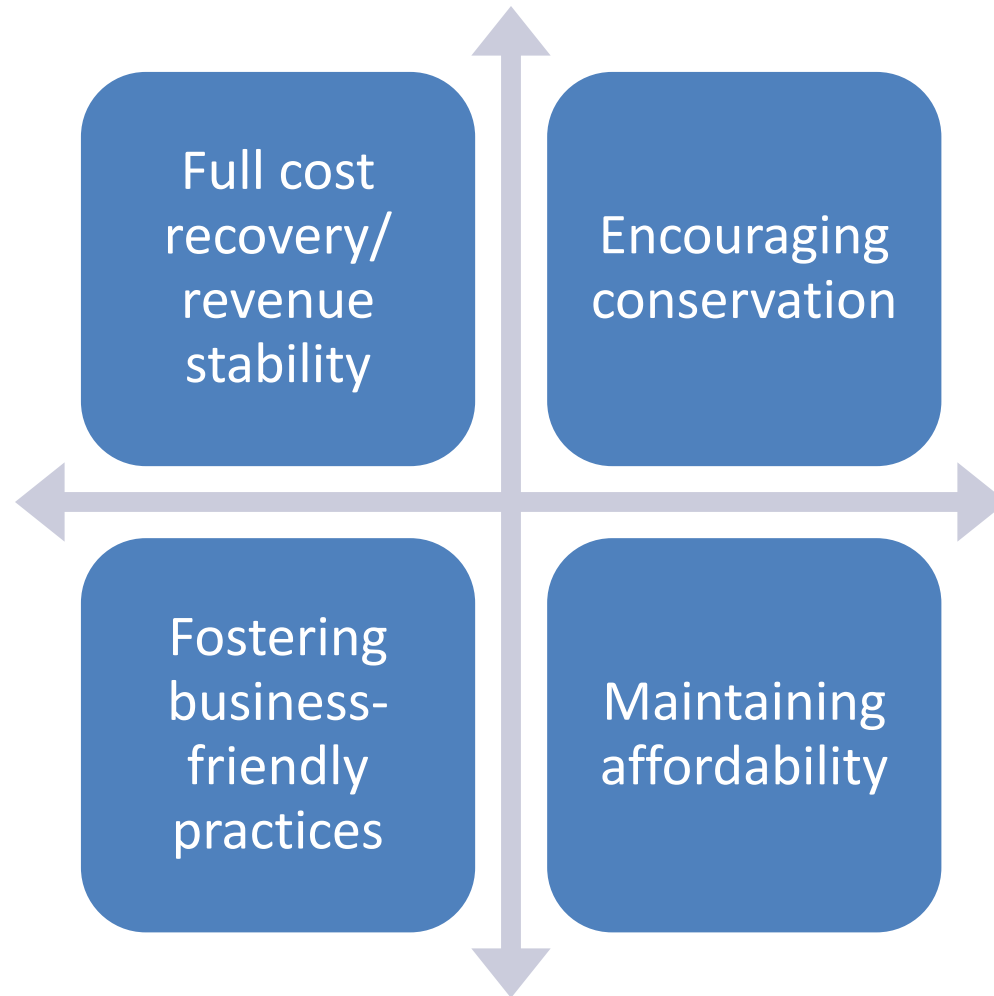
Service Connections: 450



MHI: \$24,432



Which Water System Objectives?





Rate structures for all customers

1. Flat charge for unlimited use
2. Increasing block
3. Decreasing block with large first block
4. High base charge, low uniform
5. Low base charge, high uniform



Next up...

- Costs!