Smart Management for
Small Water Systems

Setting the Right Rates for Your Water System

McHenry, IL
September 29, 2017

UNC ENVIRONMENTAL FINANCE CENTER

EFCN environmental finance center network

American Water Works Association

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

Housekeeping

About the 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 Smart Management for Small Water Systems Program

This program is offered free of charge to all who are interested. The Program Team will conduct activities in every state, territory, and the Navajo Nation. All small drinking water systems are eligible to receive free training and technical assistance.

What We Offer

Individualized technical assistance, workshops, small group support, webinars, eLearning, online tools & resources, blogs

Small Systems Program Team

- Environmental Finance Center at The University of North Carolina at Chapel Hill
- Environmental Finance Center at Wichita State University
- EFC West
- New England Environmental Finance Center at the University of Southern Maine
- Southwest Environmental Finance Center at the University of New Mexico
- Syracuse University Environmental Finance Center
- Environmental Finance Center at the University of Maryland
- American Water Works Association (AWWA)

UNC Environmental Finance Center

Wichita State University Hugo Wall School of Public Affairs Environmental Finance Center

EFCWest Environmental Finance Center West

New England Environmental Finance Center

Southwest Environmental Finance Center

Environmental Finance Center Syracuse University

University of Maryland Environmental Finance Center

American Water Works Association

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

Quick Introductions

1. Name?
2. Organization?
3. Responsibility?
4. Details on your water system
5. What are you most proud of at your water system?
6. What is your biggest issue?

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

Agenda

- Rate setting objectives
- Calculating costs for your water system
- Setting rates that cover the full cost of operations
- Achieving other system objectives

Rate Setting Objectives

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Session Objectives

- Understand common types of rate setting objectives
- Learn how to match rate structure elements with rate setting objectives

Why are rates so important?

Let’s hear from an expert

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

dc water is life

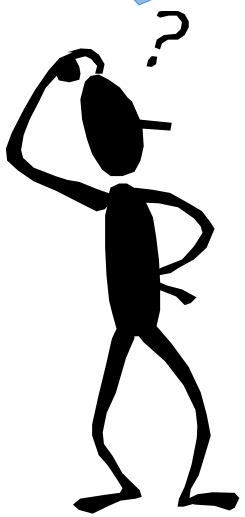
The WATER VALUES PODCAST With Dave McGimpsey
Water Utilities | Treatment | Resources | Reuse

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

Rates 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...

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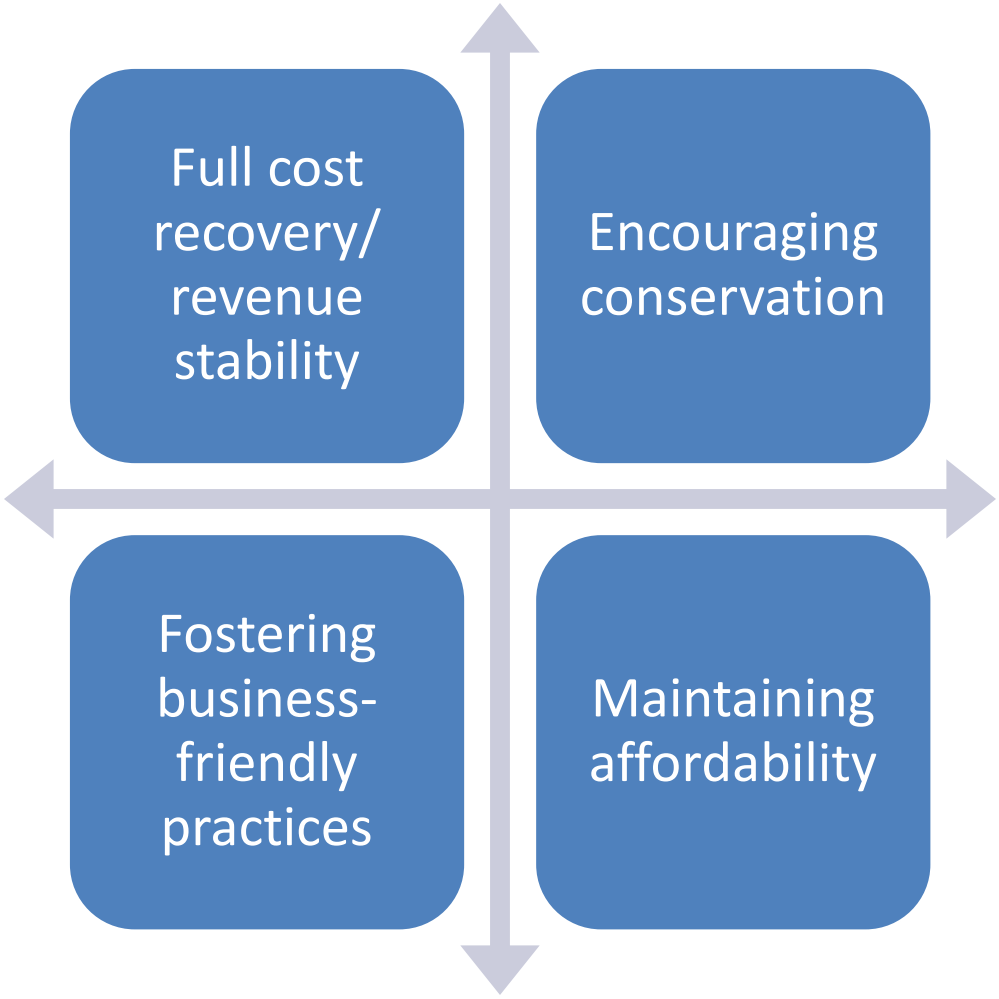
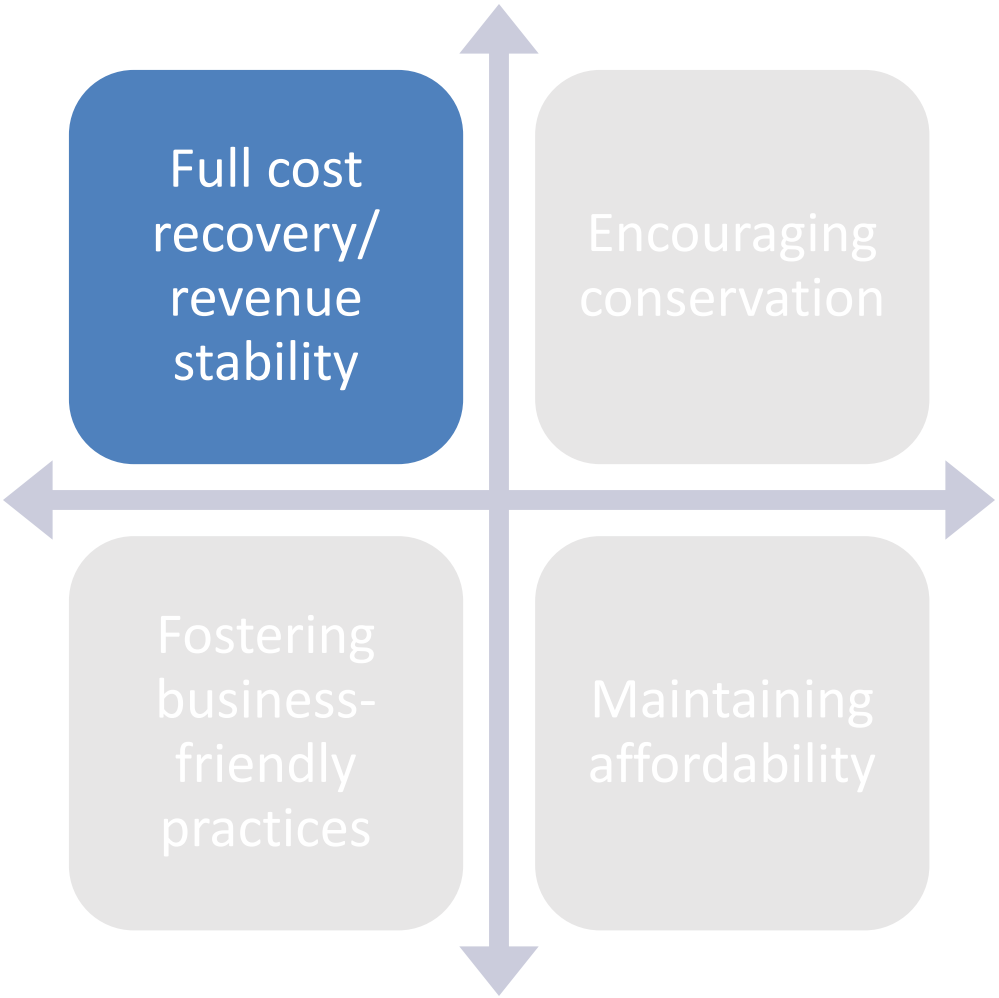
Rate Setting Objectives

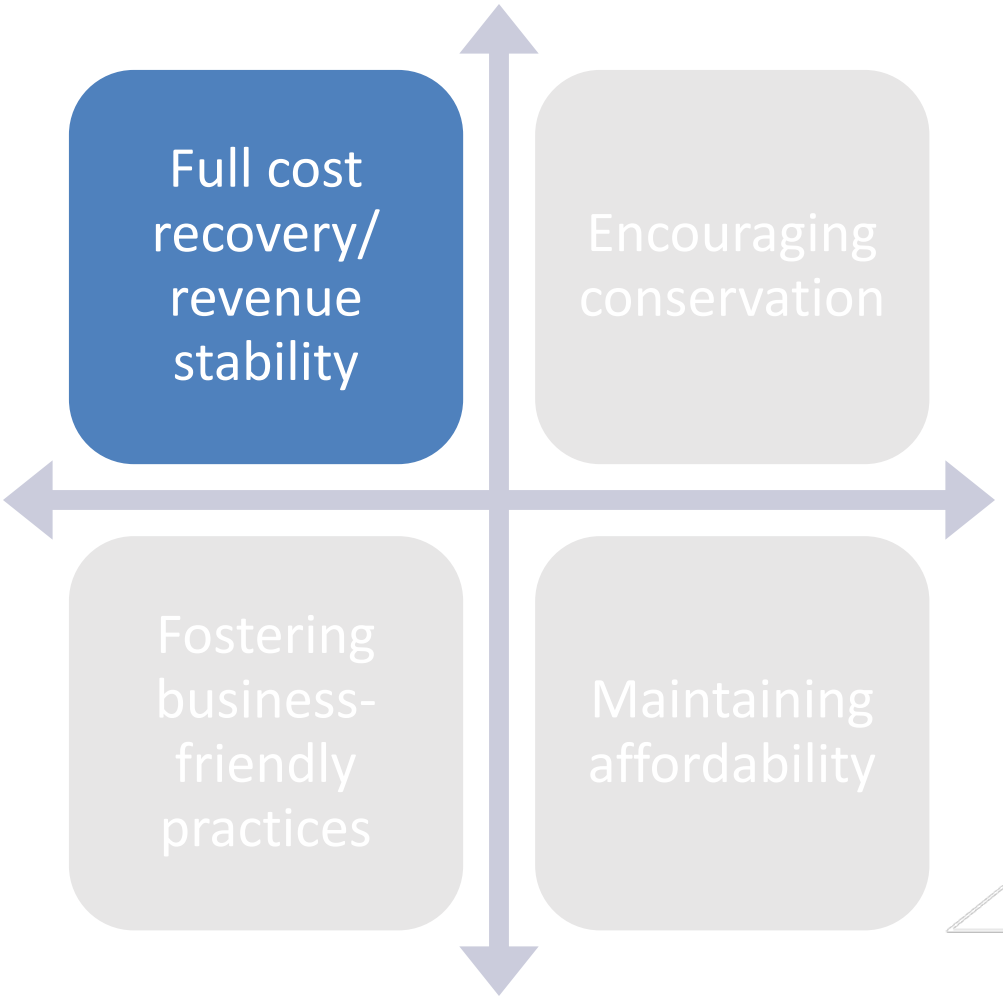




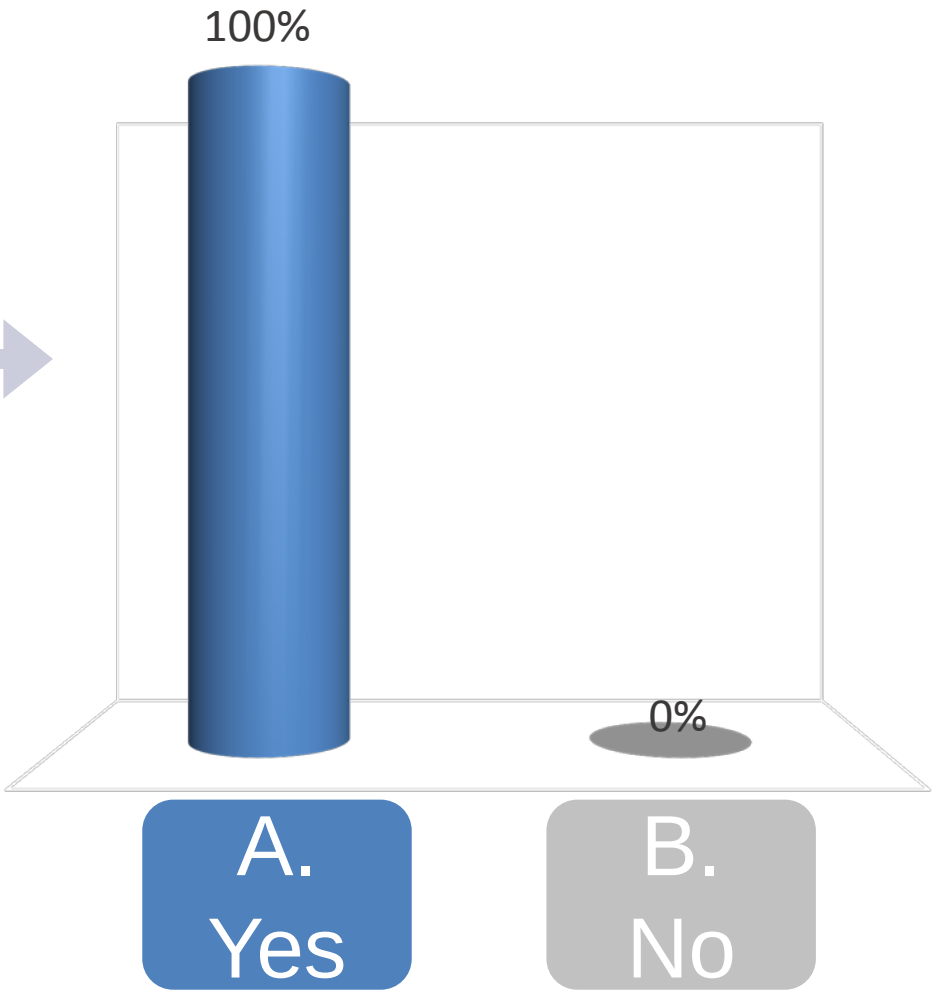
Bring in enough revenue to cover the full cost of running the water system:

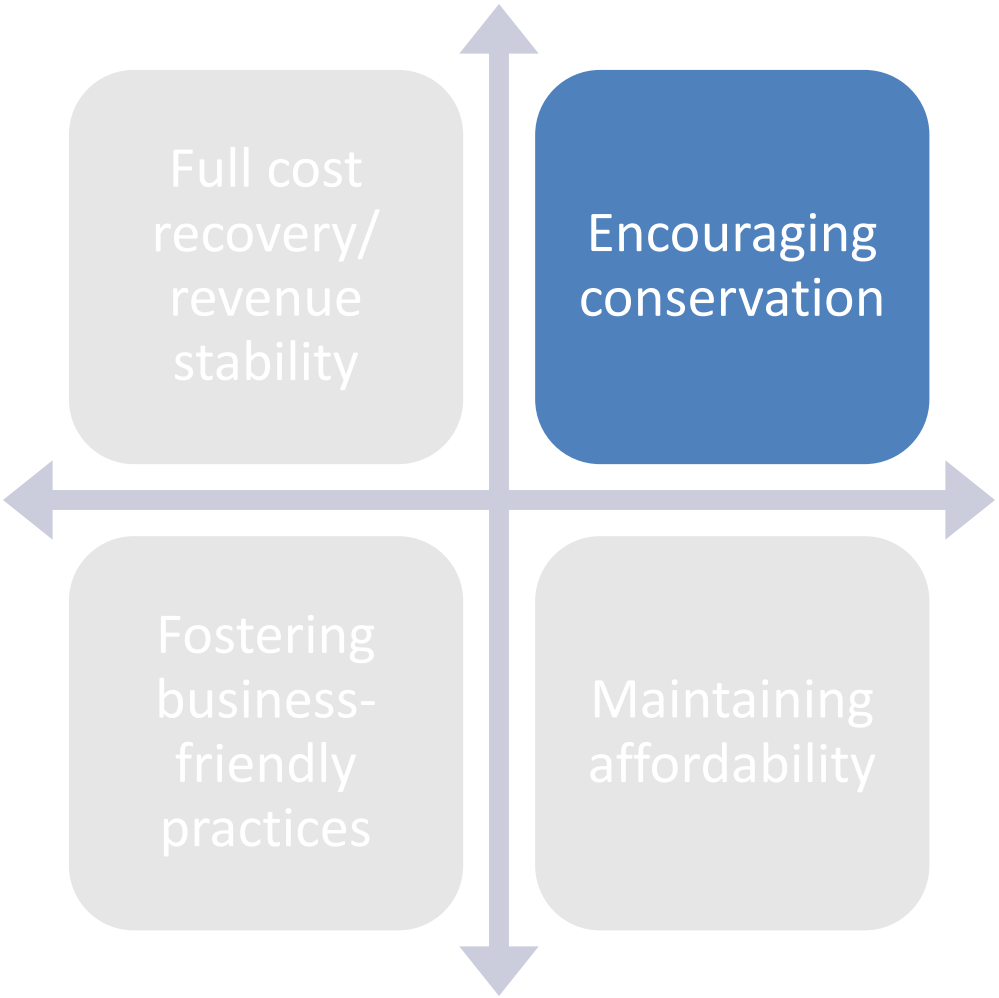
- O&M
- Capital needs
- Debt service

Why do this?



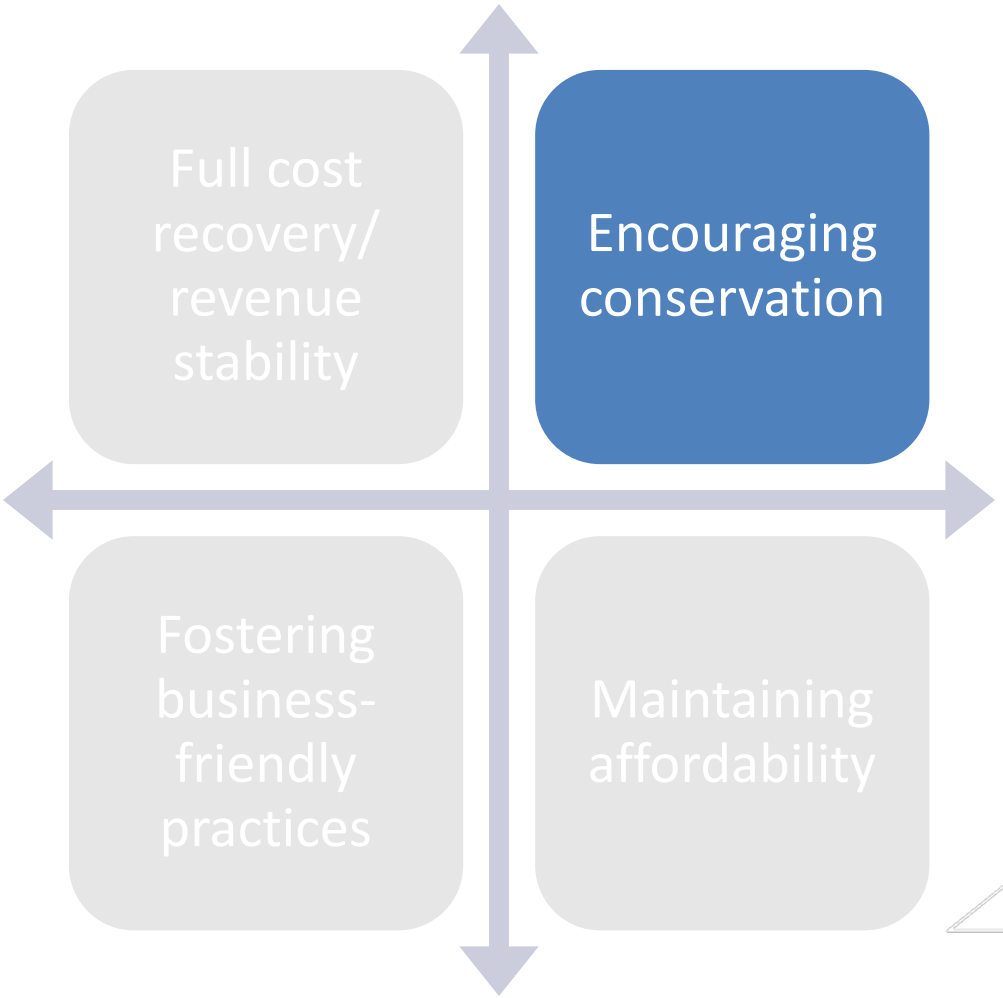
Important to your water system?





Use pricing to encourage customers to reduce their water consumption

Why do this?



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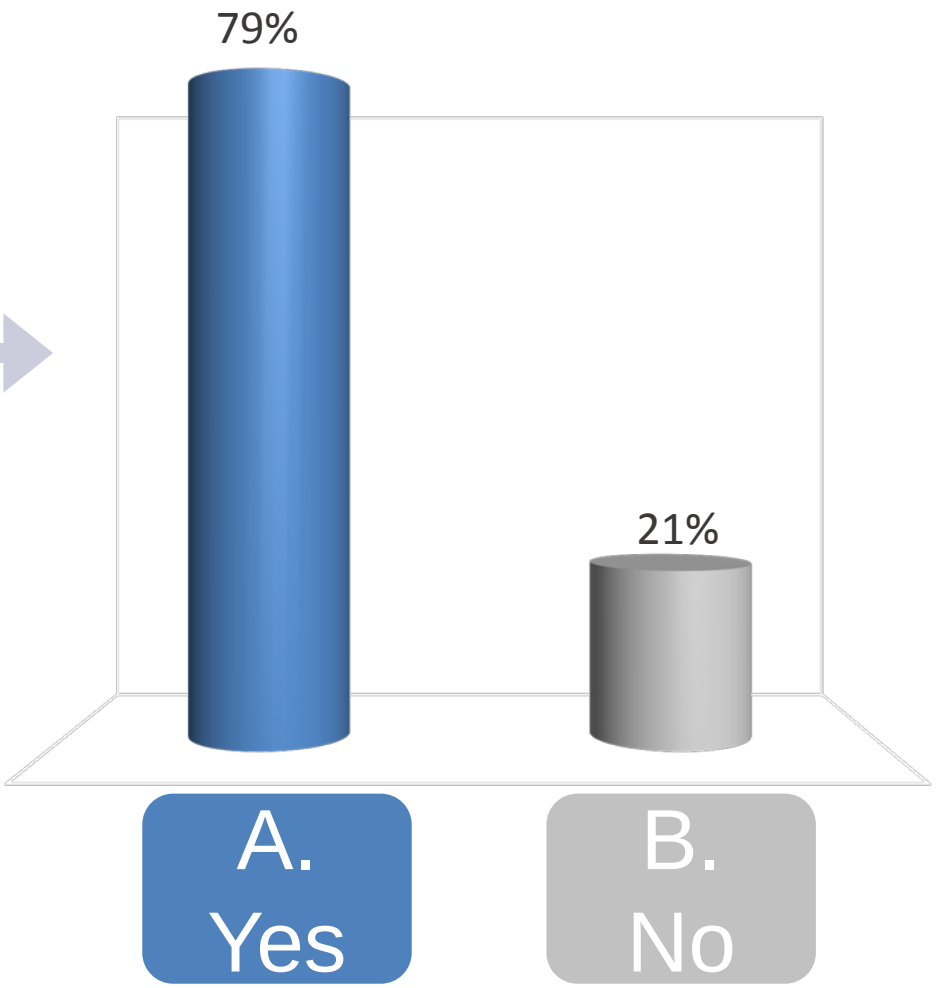
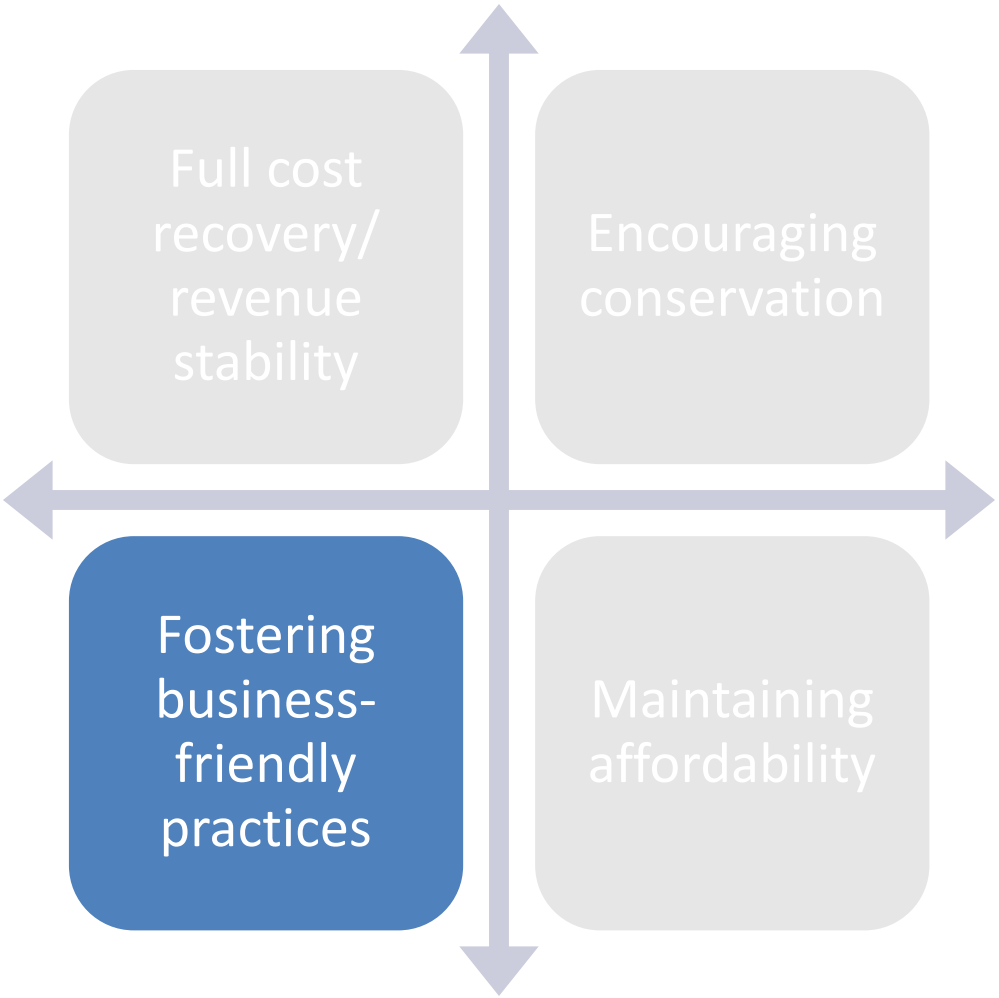




Use pricing to encourage businesses and agriculture to locate to your community or stay in your community

Why do this?

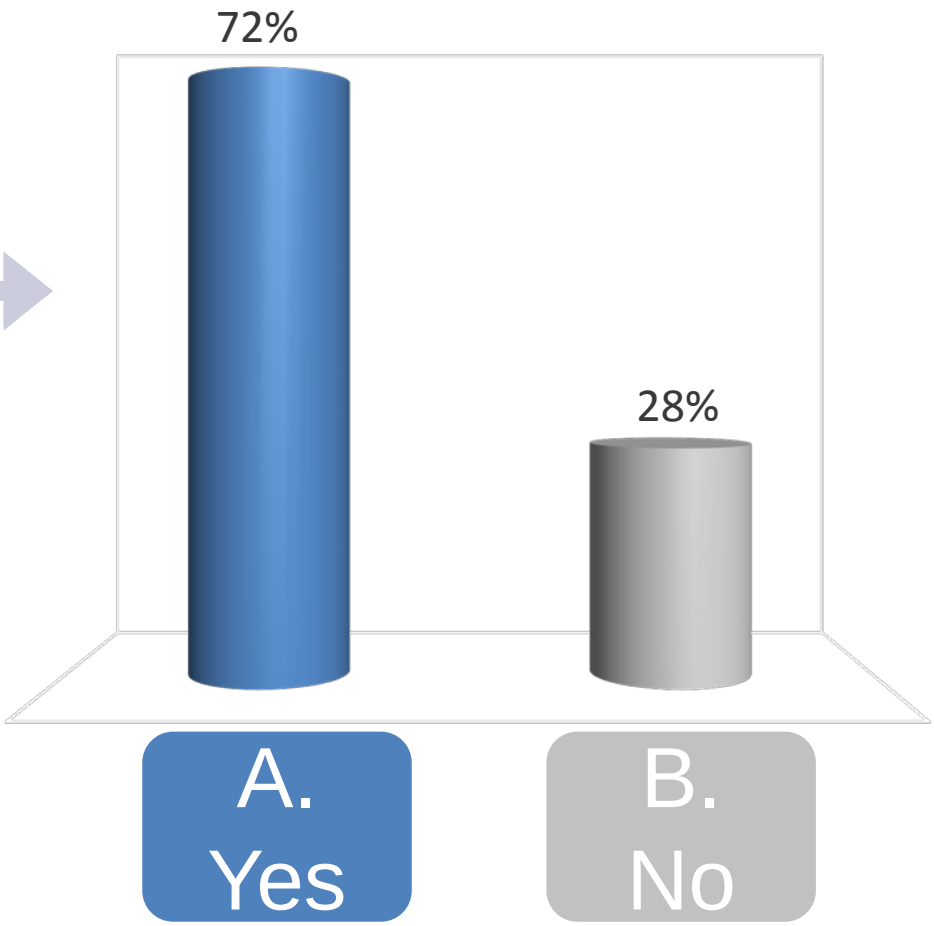
Full cost recovery/ revenue stability

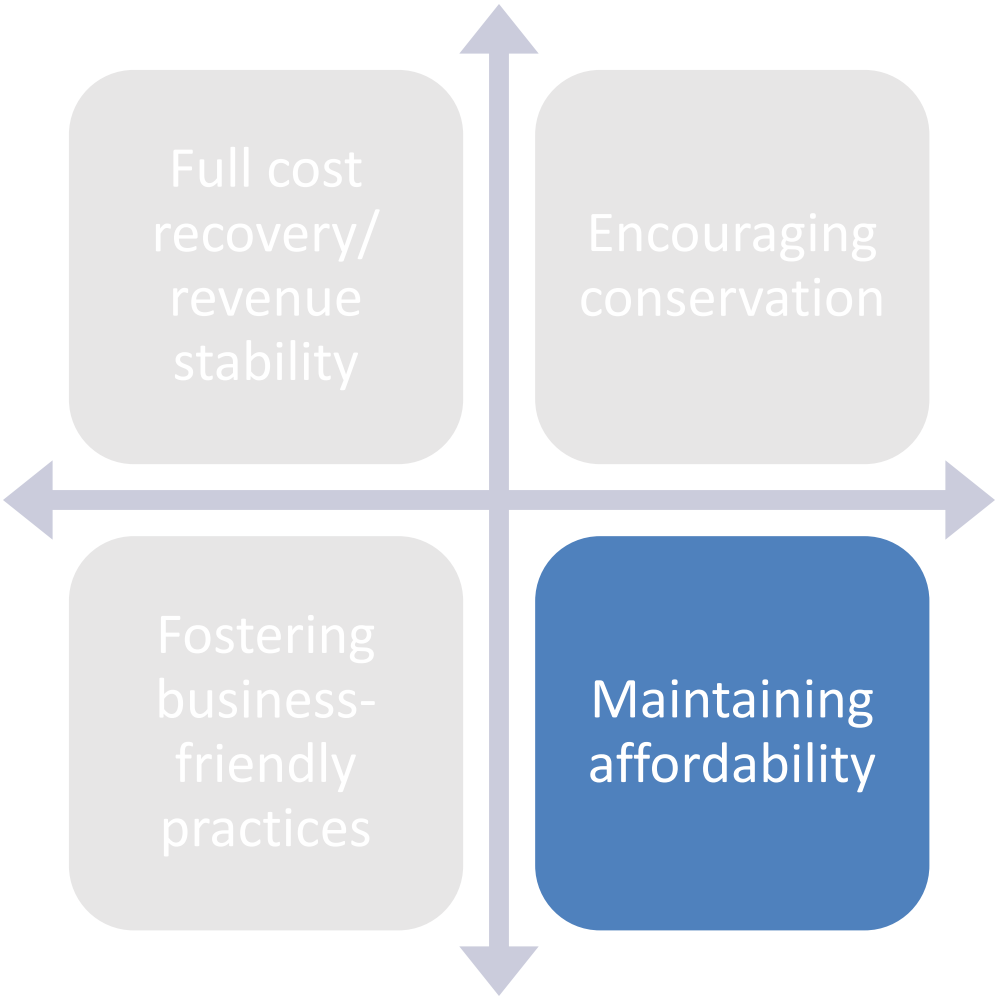
Encouraging conservation

Fostering business-friendly practices

Maintaining affordability

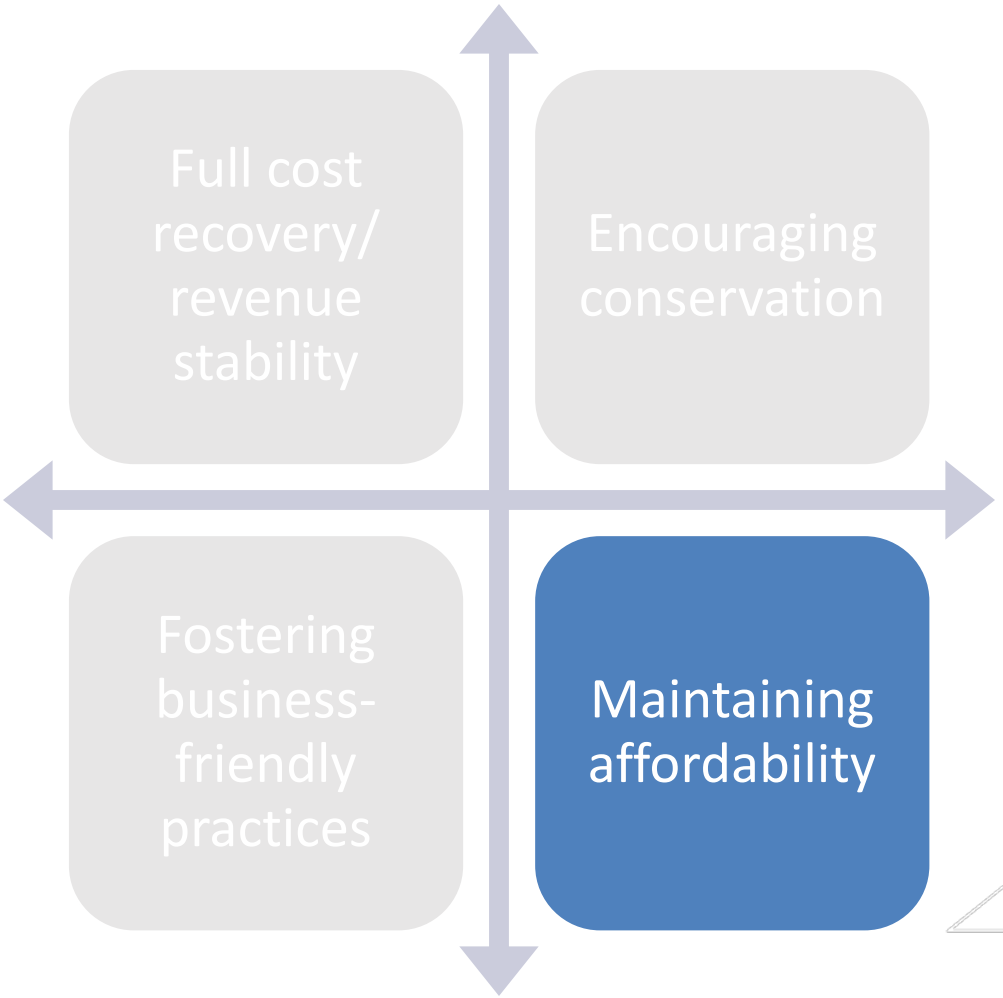
Important to your water system?





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

Why do this?



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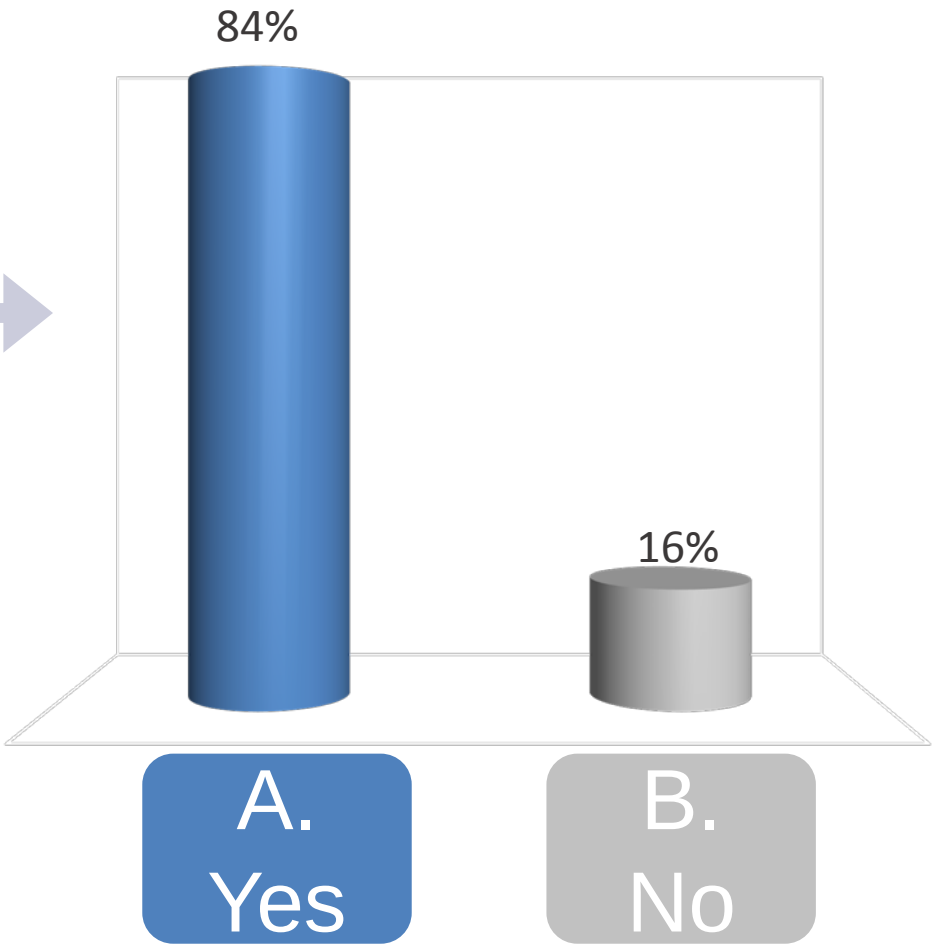
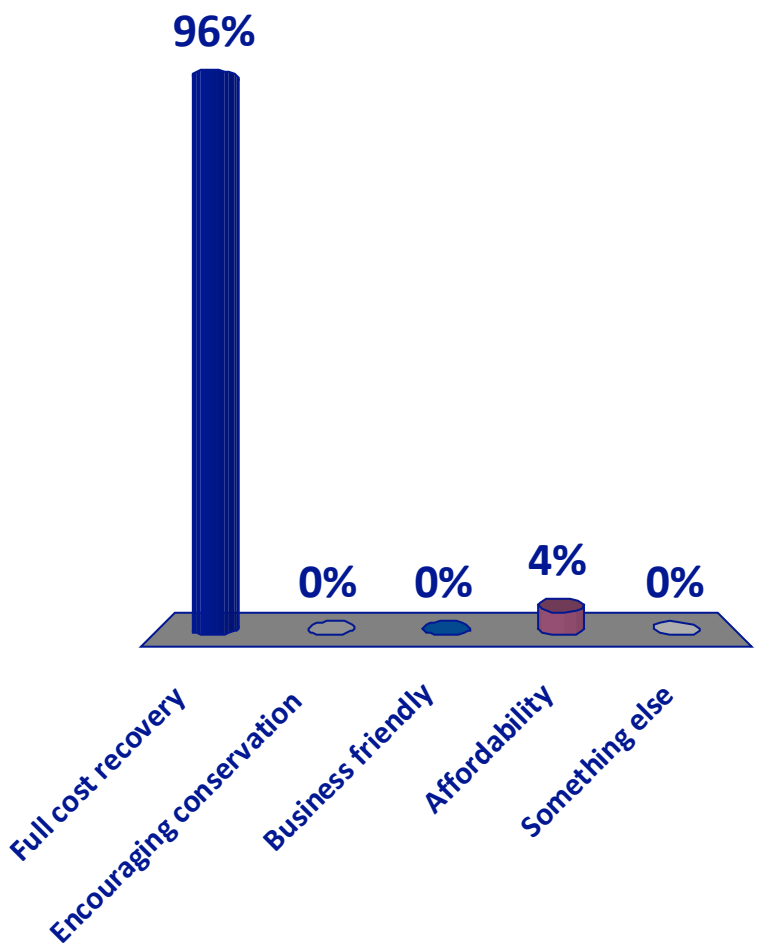


Other objectives?

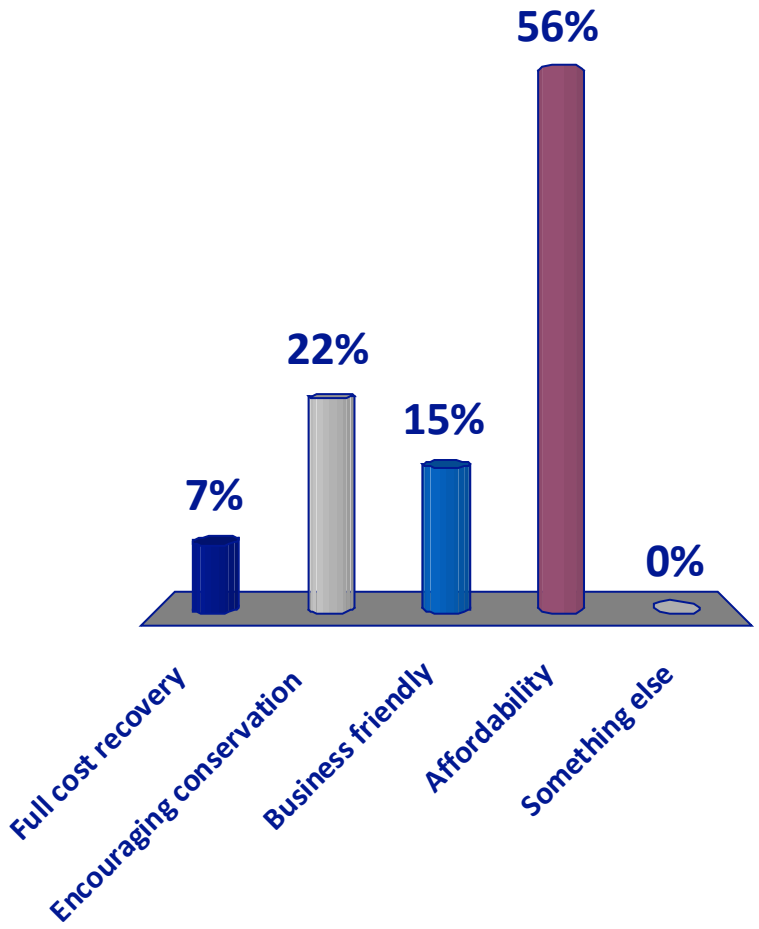
What is your #1 objective?

A. Full cost recovery
B. Encouraging conservation
C. Business friendly
D. Affordability
E. Something else

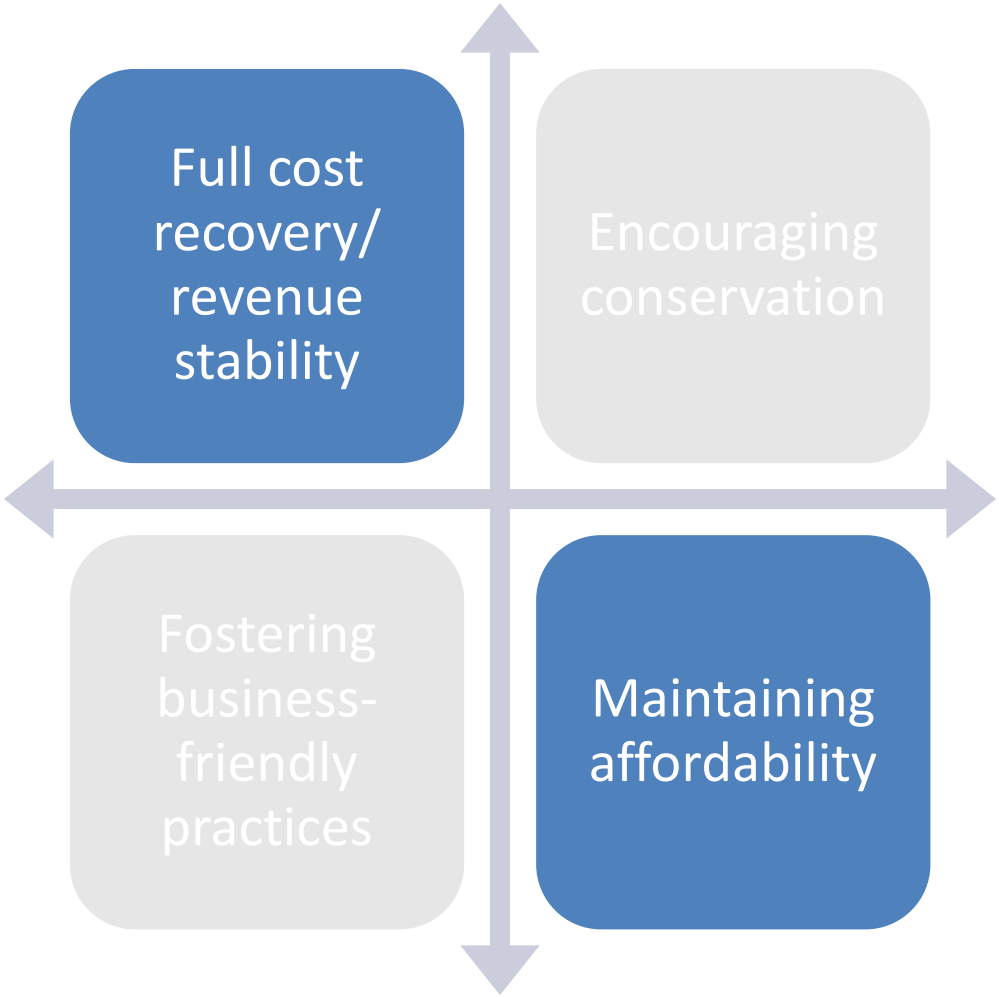


What is your #2 objective?

A. Full cost recovery
B. Encouraging conservation
C. Business friendly
D. Affordability
E. Something else



Competing Objectives



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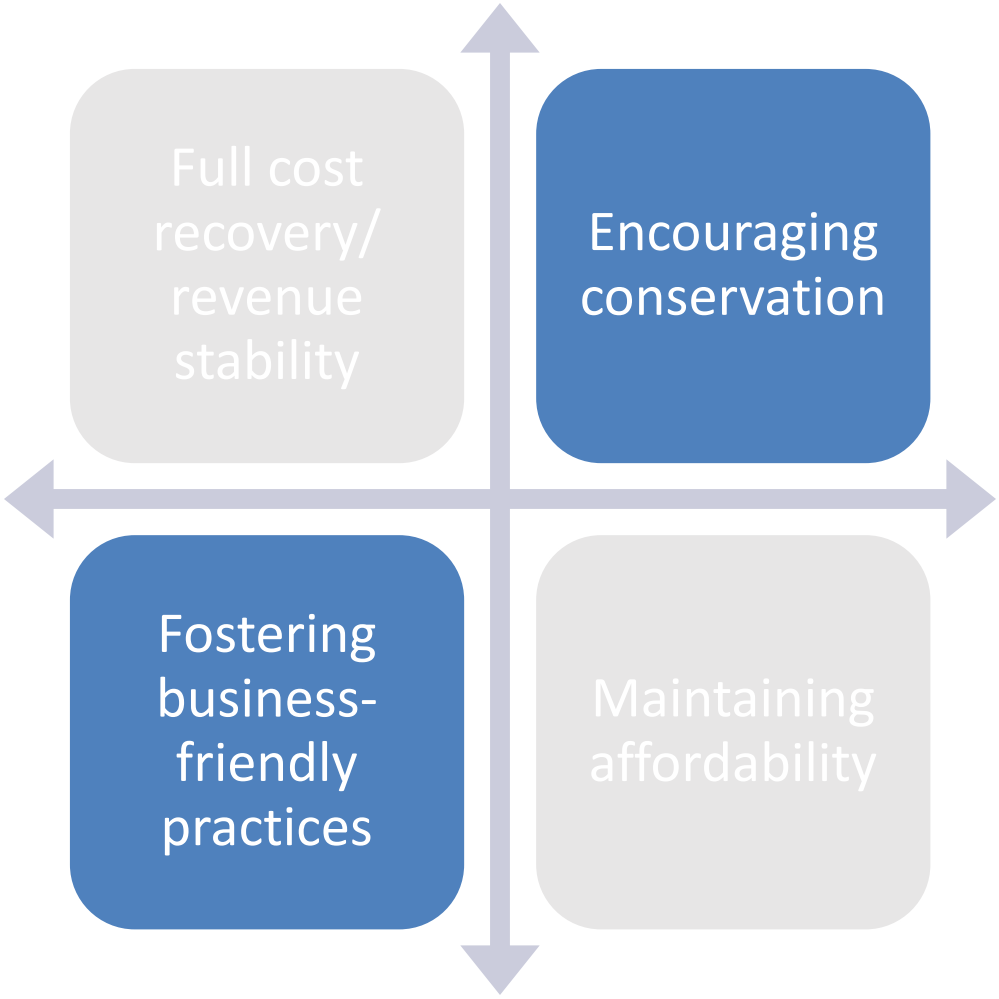

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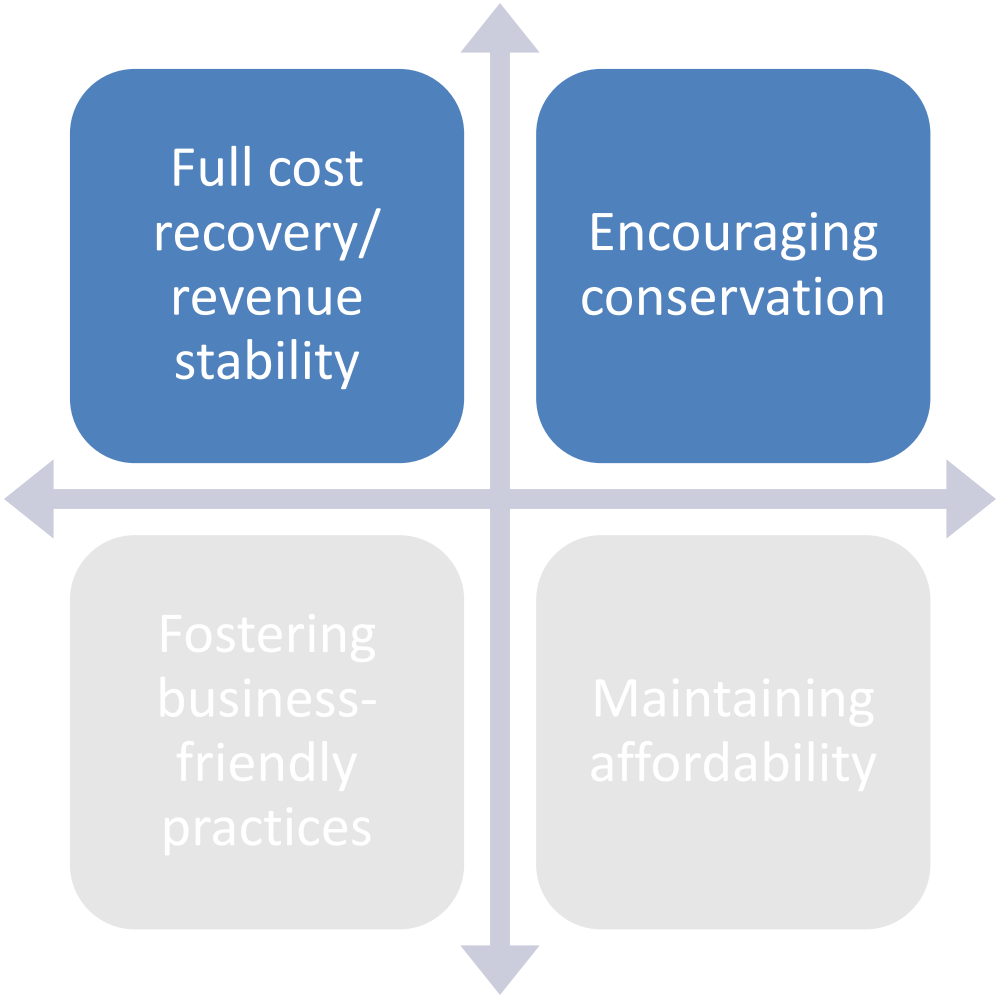


Rate Setting Objectives

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

Exercise:

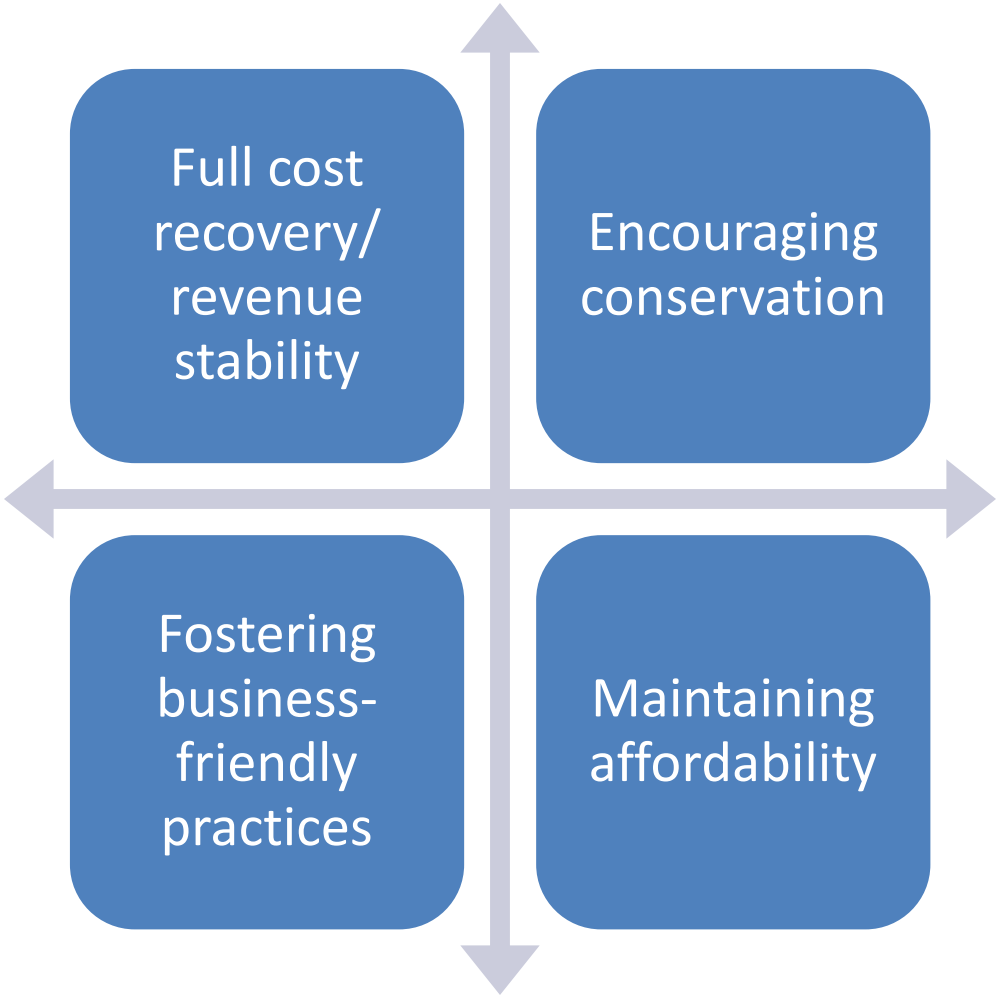
Matching rate setting objectives and rate structures with the circumstances of small water systems

Scenario 1

Rural county with customers disbursed over a very large geographic area

- Income levels match state/federal MHI
- Almost all residential
- Population steady
- Water supply is plentiful, and it rains a lot
- Only 10 percent of customers use more than 10,000 gallons per month

Which Rate Setting Objectives?



Rate structures for all customers

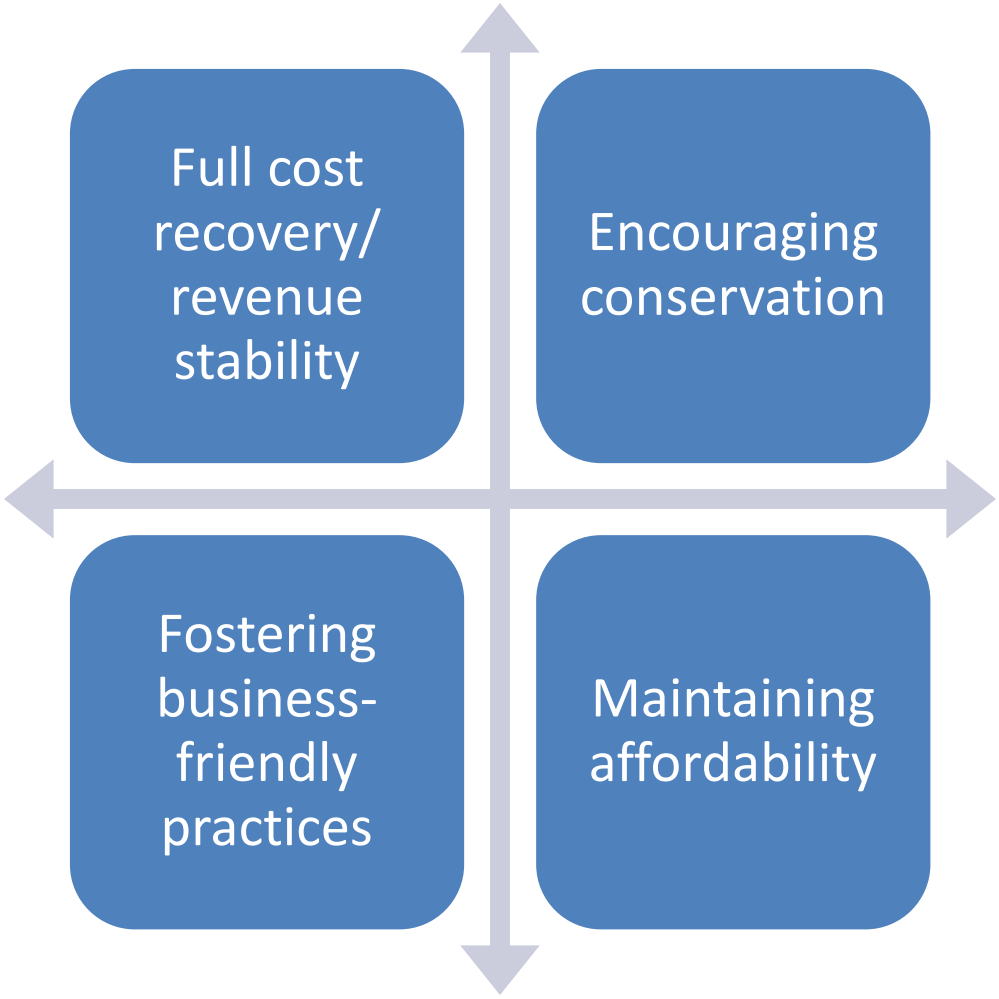
1. Flat charge for unlimited use
2. Increasing block
3. Decreasing block with large first block
4. High base charge, low uniform
5. Low base charge, high uniform

Scenario 2

Small town

- 25% of customers under poverty line
- Mix of residential and commercial customers with one light industrial account
- Water supply is plentiful, and it rains a lot. For each account, usage is fairly stable month to month.

Which Rate Setting Objectives?



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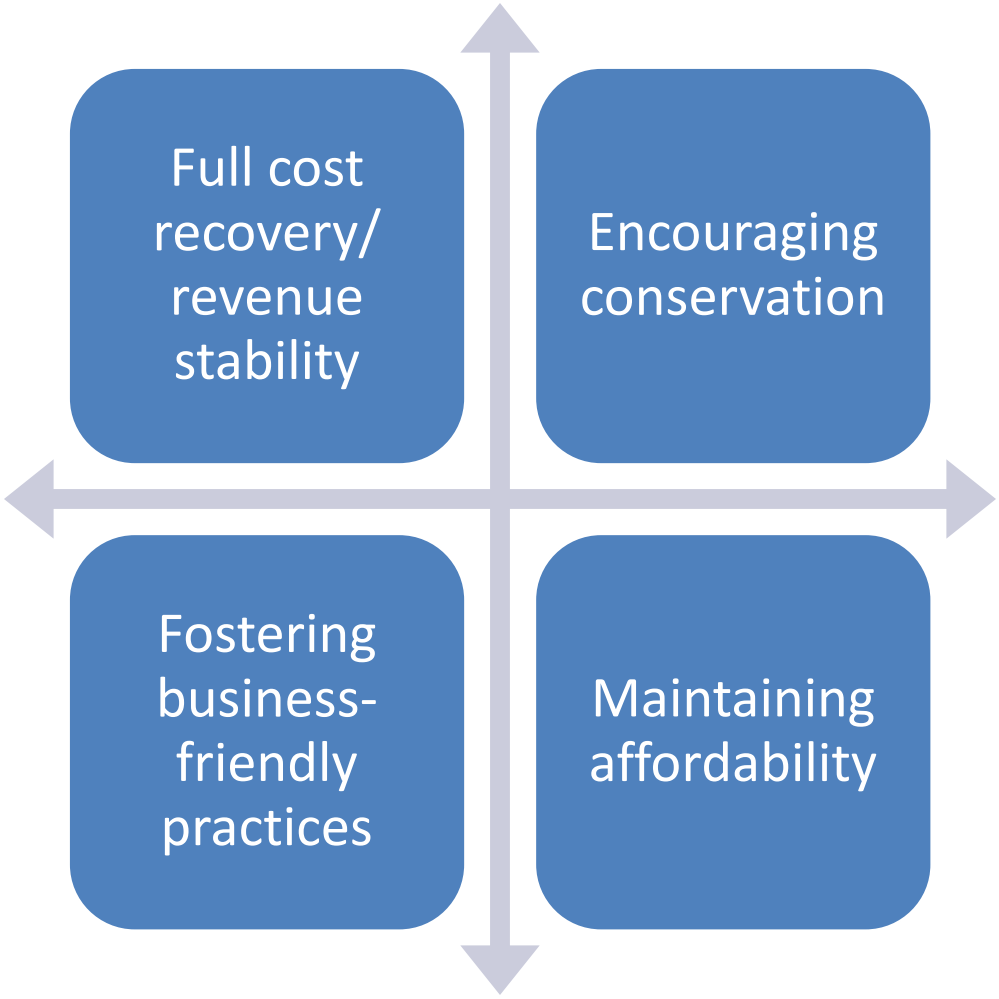
Scenario 3

Municipal system with high growth

- Mix of townhouses, single family residential households, and small business customers
- Peak demands are reaching 90% of supply capacity
- County has experienced two droughts in last 10 years and implemented mandatory restrictions
- Affluent community with lots of single family households with large lot sizes irrigating lawns

Which Rate Setting Objectives?



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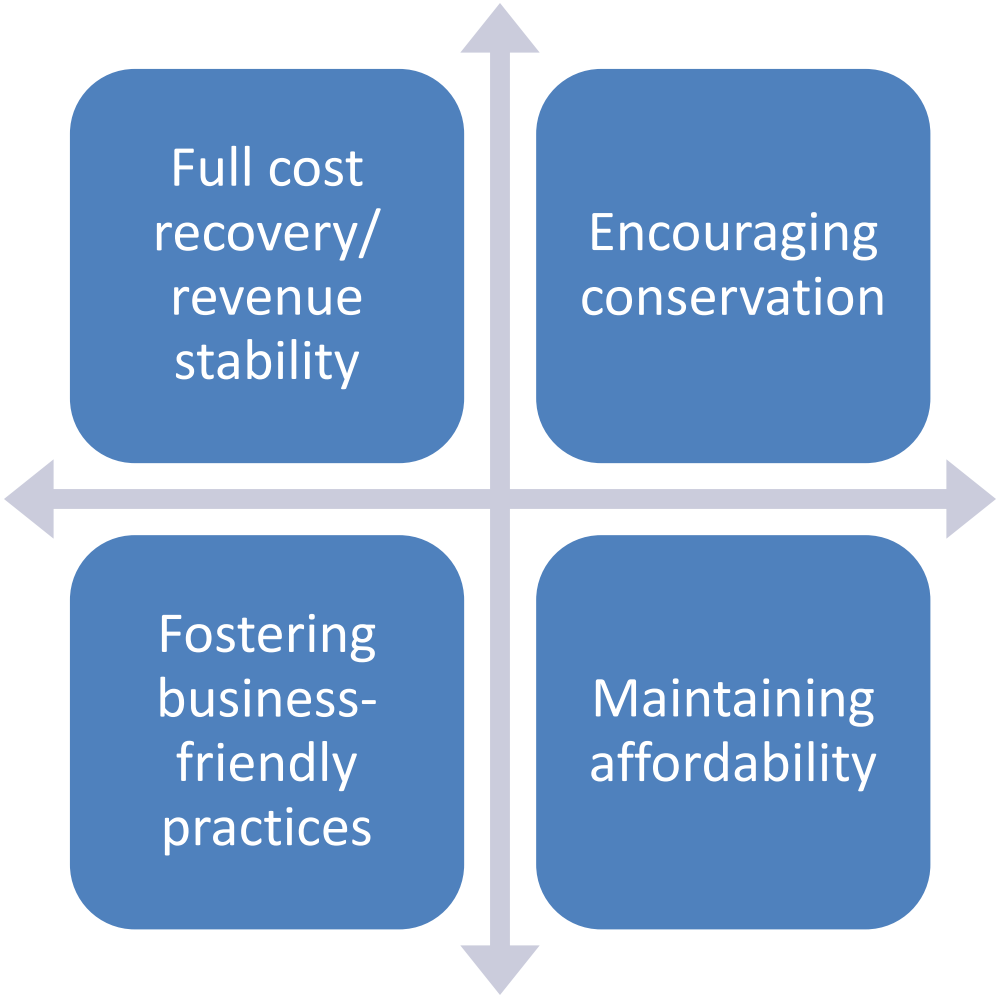
Scenario 4

- Town that has recently lost their only two industrial customers which had accounted for 40 percent of total demand
- After industrial customers left, most of the recently unemployed departed, leading to a population decline of 15 percent.
- Significant rate increases over the past few years have lowered average water use
- Remaining customers are mostly residential with average household incomes

Which Rate Setting Objectives?



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