Smart Management for Small Water Systems

www.efcnetwork.org

Rate Setting

Georgia Rural Water Association – Annual Conference

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May 20th, 2013

Jekyll Island, GA

Outline

- Introduction
- Types of Rate Structures
- Setting User Rates

INTRODUCTION

Environmental Finance Center Network

- What is the EFCN?
  - 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.

Regional EFCs

- Region 1: New England Environmental Finance Center at University of Southern Maine
- Region 2: Environmental Finance Center at Syracuse University
- Region 3: Environmental Finance Center at University of Maryland, College Park
- Region 4: Environmental Finance Center at University of North Carolina at Chapel Hill
  Environmental Finance Center at University of Louisville
- Region 5: Great Lakes Environmental Finance Center at Cleveland State University
- Region 6: New Mexico Environmental Finance Center at the New Mexico Institute of Mining and Technology
- Region 7: Environmental Finance Center at Wichita State University
- Region 8: New Mexico Environmental Finance Center at the New Mexico Institute of Mining and Technology (Branch office)
- Region 9: Environmental Finance Center at Dominican University of California
- Region 10: Environmental Finance Center at Boise State University

UNC ENVIRONMENTAL FINANCE CENTER

Dedicated to enhancing the ability of governments and organizations to provide environmental programs and services in fair, effective and financially sustainable ways

Managerial/Financial Capacity Project

- Asset Management
- Water Loss
- Collaboration and Partnerships
- **Fiscal Planning and Rate Setting**
- Energy Efficiency Audits
- Access to Funding Sources
- Leadership Training

User Rates

- Charged regularly to all customers: industrial, commercial and residential
- Customers' bills relate to their consumption (usually)
- Utilities can develop rates based on their expected costs
- Example – water/sewer/stormwater utility fees

TYPES OF RATE STRUCTURES

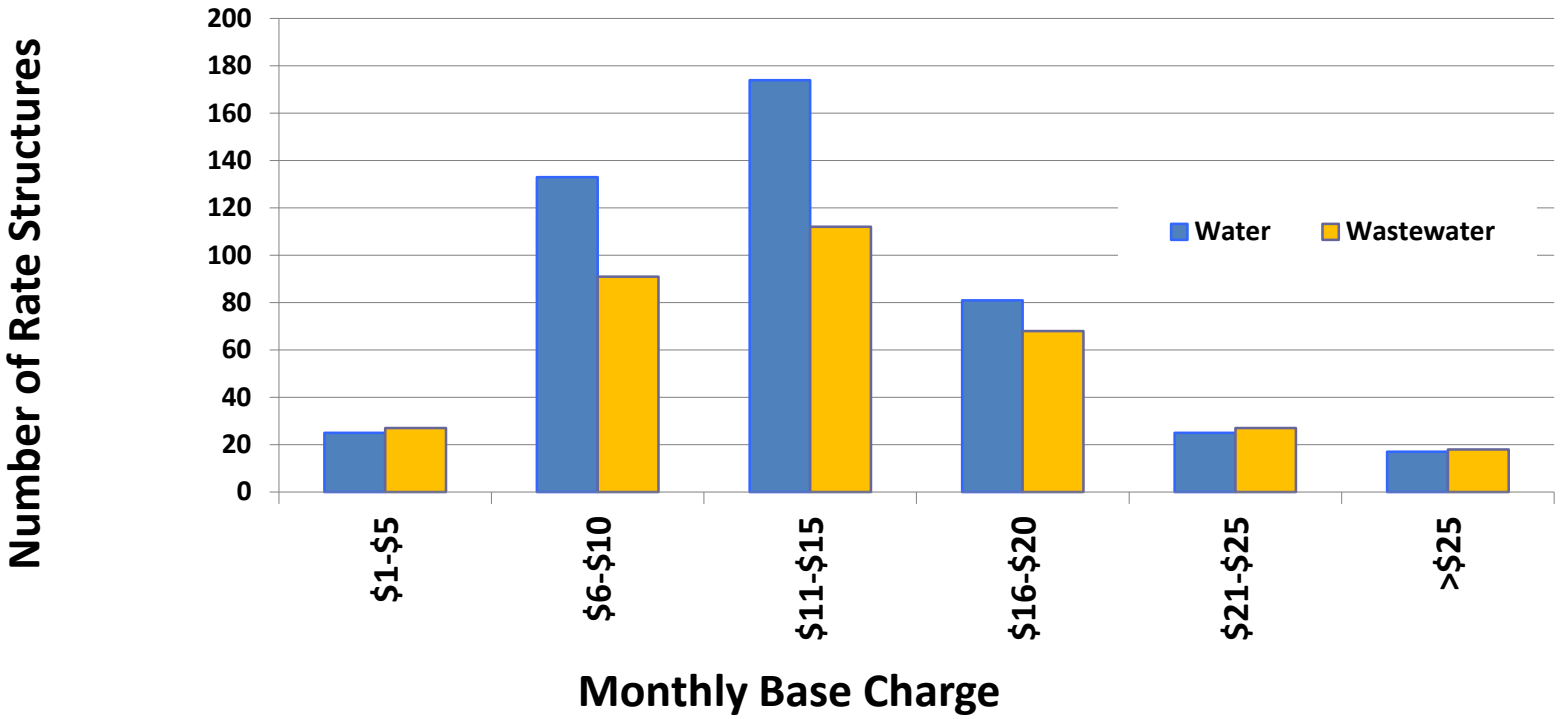
Water Rates Lingo

- Base Charge/Fixed Charge vs.
- Volumetric Charge

- Flat fee
- Uniform Rate
- Increasing Block Rate
- Decreasing Block Rate

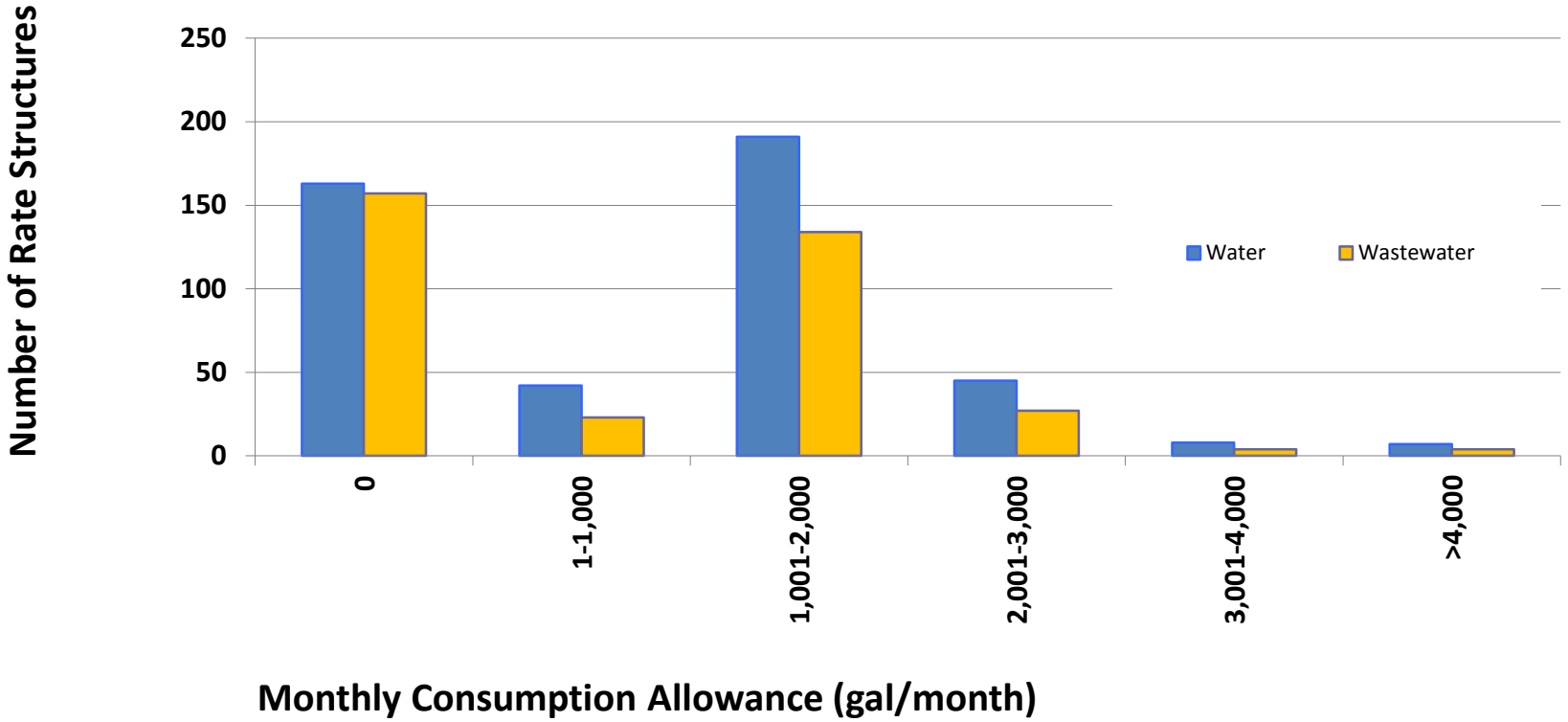
- "Special Rates": Seasonal; Budget Based; *Peak Set Base?*

Monthly Base Charges for Residential Customers among 455 Water and 343 Wastewater Rate Structures



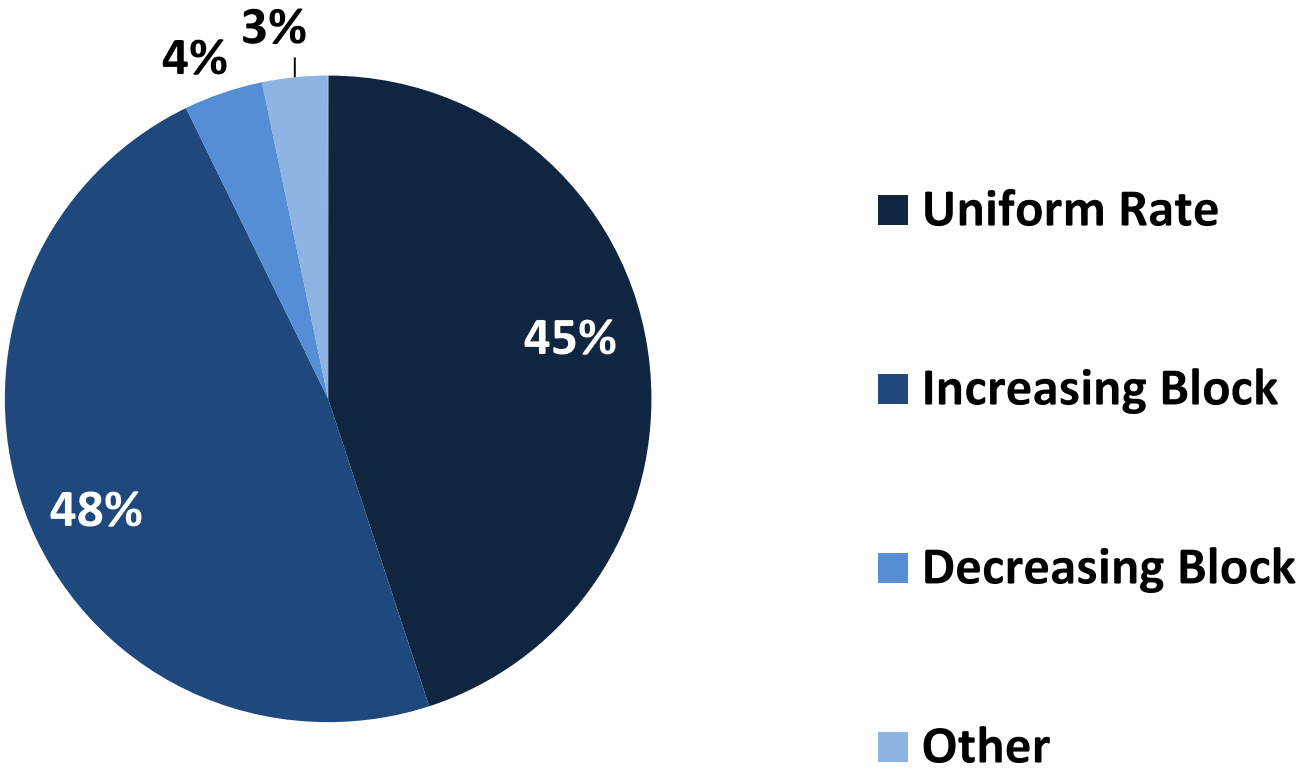
Source: Water and Sewer Rates and Rate Structures in Georgia September 2012, by GEFA/EFC

Consumption included with Base Charge for Residential Customers among 455 Water and 343 Wastewater Rate Structures



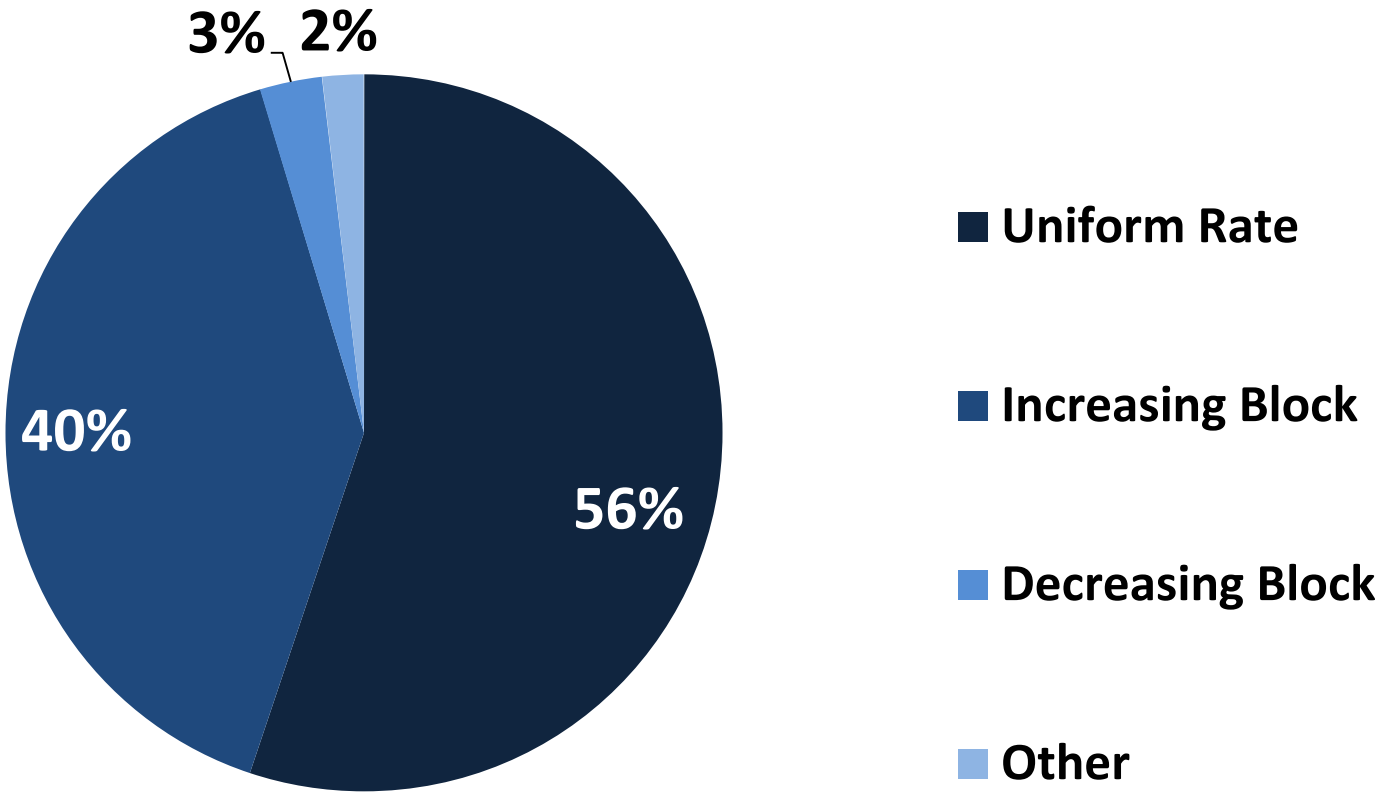
Source: Water and Sewer Rates and Rate Structures in Georgia September 2012, by GEFA/EFC

Residential Water Rate Structures (n = 456)



Source: Water and Sewer Rates and Rate Structures in Georgia September 2012, by GEFA/EFC

Commercial-Specific Water Rate Structures (n = 214)

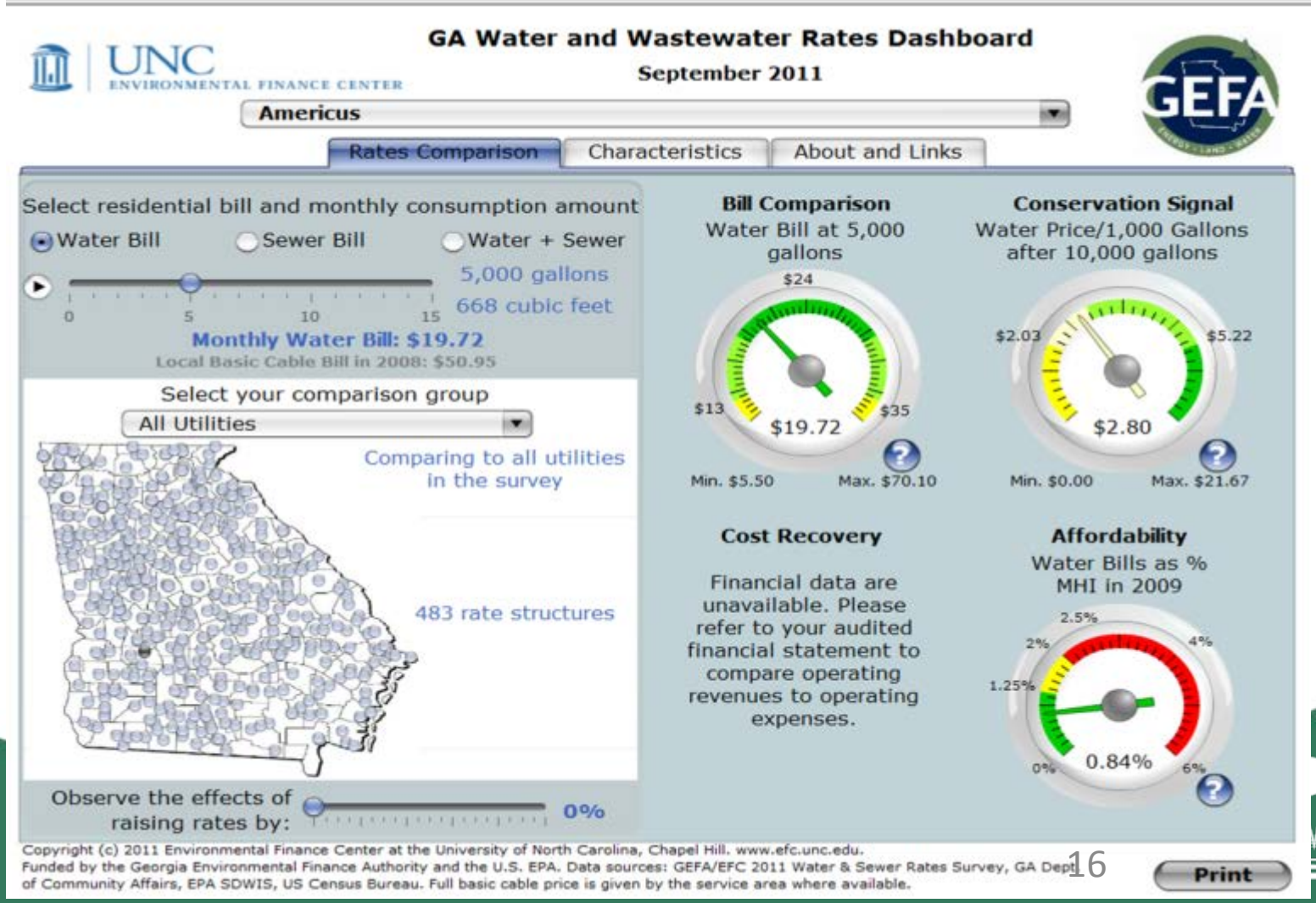


Source: Water and Sewer Rates and Rate Structures in Georgia September 2012, by GEFA/EFC

GA Water and Sewer Rates Dashboard

http://efc.unc.edu/ga/rates.html

A free interactive online tool



SETTING USER RATES

What Goes Into Reviewing Rates for the Next Year?

Will it provide sufficient cost recovery?

What exactly does this include?

Are we following State law?

Are we allocating the costs to the right customers?

Do these rates send the right signals to our customers, based on our objectives?

Will our customers understand these rates?

Will our customers be able to pay these rates?

Basic Principles

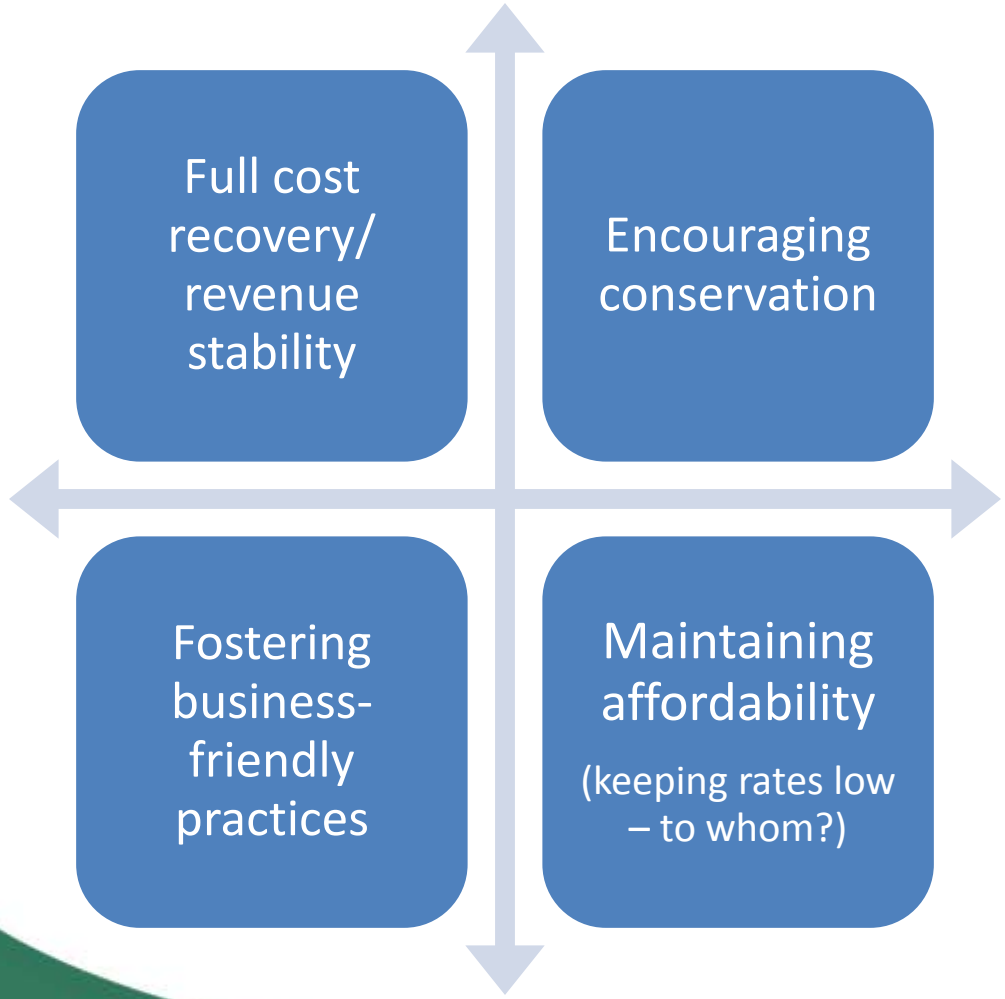
- Aim at full cost pricing
- Set equitable rates
- Share rate structure with customers
- Rate should be easy to understand
- Rates should be examined annually
- Consider fixed costs vs. variable costs
- Allow for reserve account(s)
- *Promote water conservation?*
- *Promote economic development?*

Understanding Your Utility and Served Community

- What is the make up of your served community?

  Have a lot of large families? What is the community's ability to pay? Is it a seasonal community? Does demand vary greatly in the summer? Does a large fraction of your revenues come from a small number of customers?
- Do you anticipate any large capital expenses in the next few years? Check/create your C.I.P. and asset management plan.
- Do you have any debt service payment requirements?
- Do you expect to meet demands comfortably (in case there is a drought)?
- Rank your utility's rate setting objectives

Before You Begin:
Rank Your Utility's Rate Setting Objectives



1. _____
2. _____
3. _____
4. _____

Refer to this list and focus on the highest ranked objectives when following the guidelines for selecting the appropriate rate structure design.

Guidelines: Elements of Rate Structure Designs

1. Customer classes/distinction
2. Billing period
3. Base charge
4. Consumption allowance included with base charge
5. Volumetric rate structure
6. (If applicable) Number of blocks, block sizes and rate differentials
7. (Optional) Temporal adjustments
8. Frequency of rate changes

Scenario: Rural Water Utility With Naturally High Costs and Excess Capacity, Wants to Maintain Affordability

1. Customer class: possibly create separate residential class
2. Billing period: use monthly
3. Base charge: if majority of customers use little water, charge fair base charge and include allowance. Otherwise, low base charge, and shift high rates to high volume users
4. Consumption allowance: if including, set at a lifeline amount (~2,000 gallons/month)
5. Volumetric rate structure: probably use uniform
6. (If applicable) Block design: if using, first block at least 4,000 GPM, depending on your customers' consumption
7. (Optional) Temporal adjustments: none
8. Frequency of rate changes: annual

Note: Set up a customer assistance program: efc.unc.edu/tools.htm#customer_assistance.

Pricing Out Your Rate Structure (References)

Use any of several reference documents with step by step instructions on calculating projected costs, revenues and rates:

- AWWA (2000). *Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices, M1*
- U.S. Environmental Protection Agency (2006). *Setting Small Drinking Water System Rates for a Sustainable Future: One of the Simple Tools for Effective Performance (STEP) Guide Series*. EPA 816-R-05-006. Office of Water, Washington DC. 62 pages http://www.epa.gov/waterinfrastructure/pdfs/final_ratesetting_guide.pdf

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