



Smart Management for
Small Water Systems

Utility Rate Setting & Financial Planning Training

Stacey Isaac Berahzer
Macon, GA
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UNC
ENVIRONMENTAL
FINANCE CENTER

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



Assessing and Addressing Affordability Concerns



Session Objectives

- Make the case for affordability as an important utility consideration
- Highlight ways to assess the affordability of water services for your customers
- Introduce approaches to help low income customers pay for their water bills



BACKGROUND



National Affordability Guidelines

- Safe Drinking Water Act established special assistance in those communities that have an average residential bill of over 2% of MHI
- USDA has a program to provide funds for water and sewer systems. Loans are made for projects where the residential water bills are 1.5% of MHI.
- National “Water Affordability Programs” report: affordability programs should be based on a measure of 2% of income for poor households, rather than using MHI.



Making the Case for Considering Affordability

- Altruistic Reasons
- The utility's financial bottom line

When customers have trouble paying their bills, there is a cost to the utility, in the form of:

- Arrearages
- Late payments
- Disconnection notices
- Terminating the service
- Fielding calls from the delinquent customers






THE AFFORDABILITY ASSESSMENT TOOL





On the EFC Website

Go to
<http://efc.sog.unc.edu>
 and search for
 “Affordability Assessment Tool”



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Tool developed by the Environmental Finance Center at the
University of North Carolina, Chapel Hill

Water & Wastewater Rates Affordability Assessment Tool

Interactive Spreadsheet Tool

Version 1.0 (July 22, 2014)

This tool allows users to enter relevant Census data on their service community to help assess the affordability of their water or wastewater rates on their residential customers. The tool also allows for a new rate structure to be entered to see how affordability compares from one rate structure to the next.

In the "Inputs" worksheet, fill in all yellow-colored cells.

Begin data inputs

Data inputs

1) Utility Information
 Name of the utility:
 Select the state, District of Columbia, or Puerto Rico from the dropdown menu:
 Assess affordability of water, wastewater or combined water & wastewater rates?

2) Monthly Charges at [Near] the Average Residential Water Use
 What is the approximate average residential monthly consumption?

River Run Utility

District of Columbia

Water & Wastewater

4,160

gallons/month or

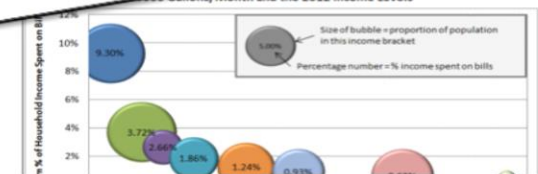
In the "Assessment" worksheet, the tool automatically populates tables and charts to assist you in assessing the affordability of your utility's current and alternative rates for the average customer, low-income customers, and customers of varying ranges of income.

Water & Wastewater Rates Assessed at 5000 Gallons/Month and the 2012 Income Levels

Current rates	Alternative rates
\$77.50	\$84.00
\$930.00	\$1,008.00
\$33.684	
2.76%	2.99%

Monthly water & wastewater bill at 5000 gallons/month
 Annual bills at same level of use
 Median Household Income in 2012 for Carthage

Water & Wastewater % Mill



Size of bubble = proportion of population in this income bracket
 Percentage number = % income spent on bills



Based on the assessment result ...

WHAT IF THERE SEEMS TO BE AN AFFORDABILITY ISSUE?



Concept of Lifeline Rates

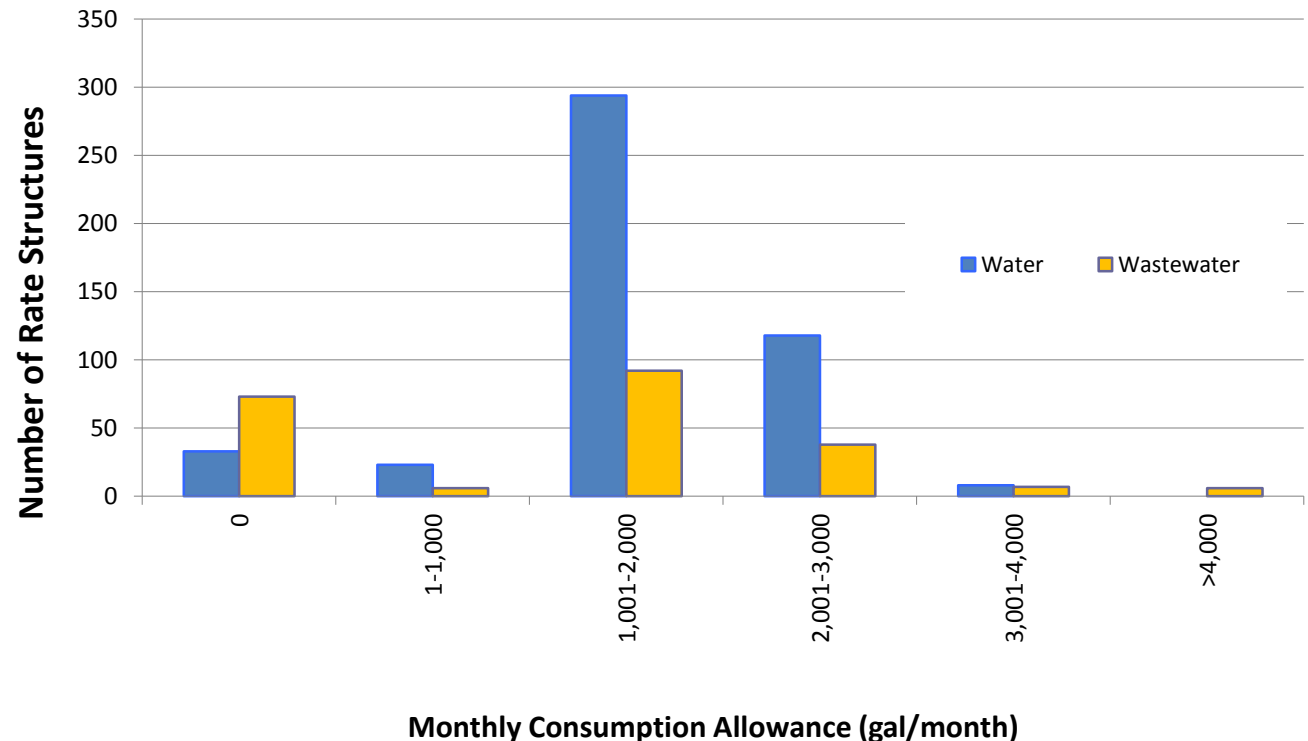
- *“Providing a minimal amount of water, at a reduced cost to all customers, regardless of income level or ability to pay”*
 - Source: AWWA Manual M1
- Often some consumption is included in the base charge





Consumption included with Base Charge for Residential Customers among 474 Water and 217 Wastewater Rate Structures

93% of water and 69% of sewer rate structures include a minimum consumption amount with the base charge



Source: Water and Sewer Rates and Rate Structures in Alabama March 2014, by ADEM/EFC

Other EFC at UNC Resources on Affordability

- Blog:
 - [Touching Down with Affordability of Water and Sewer Bills in Alabama](#)
 - [The Increasing Need to Address Customer Affordability](#)
 - [“Percent MHI” Indicator of Affordability of Residential Rates: Using the U.S. Census Bureau’s Median Household Income Data](#)
 - [Understanding the Financial Position of Households Using the American Community Survey](#)
- Tool - Water Utility Customer Assistance Program Cost Estimation Tool
- Water Research Foundation report - [Defining a Resilient Business Model for Water Utilities](#) – Chapter 4
- Rates dashboard – affordability dial

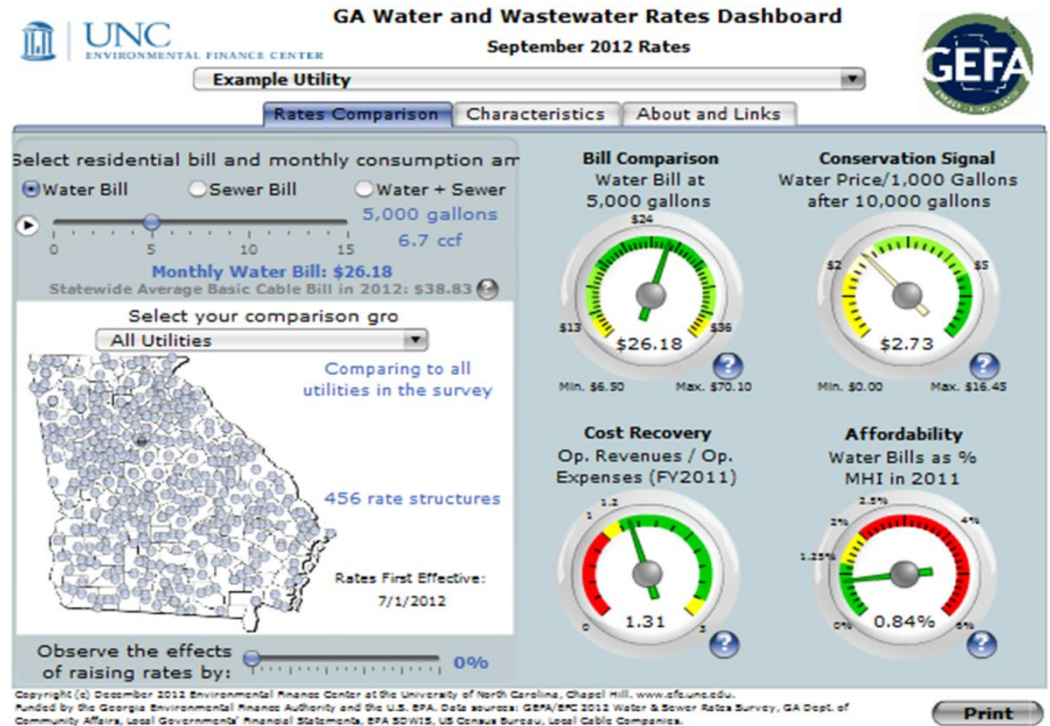




Some dashboards have an Affordability Dial

Example: Georgia Rates Dashboard

On the EFC Website
Go to <http://efc.sog.unc.edu>
and search for “Georgia
Water and Wastewater
Rates Dashboard”



Rates Dashboards

- Created for AL, AZ, CO, GA, NC, TX, VA and OH.
- Free, online, open to the public
- Compares rates against multiple characteristics:
Utility finances; System characteristics; Customer base socioeconomic conditions; Geography; History
- Compare to similar utilities (large samples):
 - All utilities; similar service population; similar water source; using same rate structure; similar customer income; same type of utility; within 50 miles distance





Types of Affordability Programs

Options facing payment-troubled customers

	Percent	Number
Payment plan to allow customer to pay amount over time	76%	231
Customer referral to private, nonutility agency	54%	163
Customer referral to a local gov. agency for assistance	49%	149
Education	35%	105
In-home conservation assistance	25%	76
Special billing arrangements	21%	64
Change in the rate customer is charged	8%	24
Other	8%	24
One-time bill credit from utility funds	3%	8

2010, Best Practices in Customer Payment Assistance Programs, Water Research Foundation #4404



Innovative Funding Sources

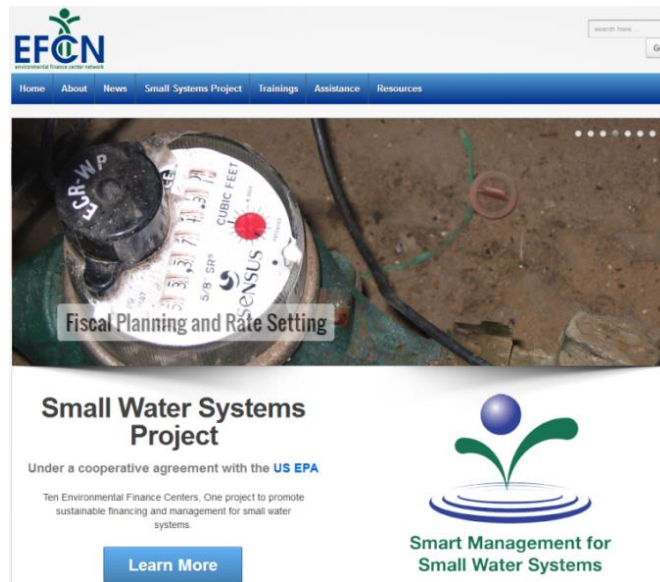
- For example, rent out your water tower for cellphone receivers





Resources

Tools, trainings,
assistance and
resources for small
water systems from the
EFCN



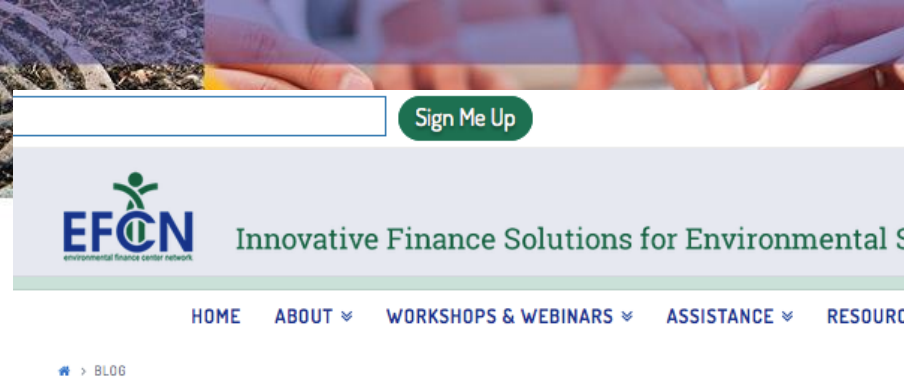
www.efcnetwork.org

Small Systems Blog

Learn more about water finance and management through our Small Systems Blog! Blog posts feature lessons learned from our training and technical assistance, descriptions of available tools, and small systems “success stories.”

Common Blog Topic Areas

- Asset Management
- Energy Management
- Enhancing Regulatory Compliance
- Fiscal Planning & Rate Setting
- Funding Coordination
- Managerial & Financial Leadership
- Water Loss Reduction
- Water System Collaboration



Blog



Magdalena, New Mexico: A Success Story from the Smart Management for Small Water S

Written by: Allison Perch Allison Perch is a Program Coordinator with the Environmental Finance Center. The financial health of its water system is at risk? This is the question that Stephanie Finch, the town clerk and



The Virtuous Cycle: Internal Energy Revolving Funds for Small Water Systems

Written by: David Tucker David Tucker is a Project Director with the Environmental Finance Center at the University of North Carolina. He helps communities pay for energy efficiency and renewable energy, helping cut utility costs? As energy is often the largest v



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View Full Issue The Environmental Finance Center Network has published the third issue in a series of q

efcnetwork.org/small_systems_blog/



Questions?

Stacey Isaac Berahzer
EFC at University of North
Carolina, Georgia Office
770-509-3887
berahzer@unc.edu



A Favor & A Reminder

- Please fill out an evaluation form before you leave
- Contact us anytime for direct technical assistance on any finance and management topic of our project