Quick Messages and Selling Points on Raising Rates and Financial Performance for your Board and Public Presentations

NC AWWA-WEA Finance and Management Committee Seminar
February 19, 2014
Greensboro, NC

Dedicated to enhancing the ability of governments and other organizations to provide environmental programs and services in fair, effective, and financially sustainable ways through
• Applied Research
• Teaching
• Program Design and Partnerships
Objectives

Review

• Useful resources
• Key messages and supporting analysis
• Key performance indicators

What staff considers when setting rates

- Will rates provide sufficient cost recovery?
- Are we following the applicable laws?
- Are we allocating the costs to the right customers?
- Will our customers understand these rates?
- Will our customers be able to pay these rates?
- What exactly does this include?
- Will revenues be resilient to changing water demands?
- Do these rates send the right signals to our customers, based on our objectives?
- Will revenues be resilient to changing water demands?
...and then there are the questions from the public and from the Board

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why are you raising rates (again)?</td>
</tr>
<tr>
<td>Can't you just cut costs?</td>
</tr>
<tr>
<td>What happened to the revenues from the last rate increase?</td>
</tr>
<tr>
<td>Are you operating efficiently?</td>
</tr>
<tr>
<td>Are you financially managing the utility well?</td>
</tr>
<tr>
<td>What happens if we don't raise rates (fully)?</td>
</tr>
<tr>
<td>How much are other utilities charging?</td>
</tr>
<tr>
<td>Are we the only ones?</td>
</tr>
<tr>
<td>What happened to the revenues from the last rate increase?</td>
</tr>
<tr>
<td>Can customers afford these rates?</td>
</tr>
<tr>
<td>Are taxes and other charges also rising?</td>
</tr>
<tr>
<td>Are we the only ones?</td>
</tr>
</tbody>
</table>

Get some data! Be prepared to answer questions with facts.

Resources include (but not limited to...
Your income statement!

And your C.I.P. or Asset Management Plan!

Basically, your own internal financial records.

Useful Resources

NCLM & EFC’s annual “Water & Wastewater Rates and Rate Structures in North Carolina” report.

A complete “State of Rates in NC”. Answers many FAQs about rates, rate structure designs, how rates have changed, affordability, and financial sustainability in NC.

Available at http://efc.sog.unc.edu (Programs / Drinking Water / NC Water & Wastewater Rates & Rate Structures)
Useful Resources

NCLM & EFC’s annual “Water & Wastewater Rates and Rate Structures in North Carolina” tables of data.

Data on >500 NC utilities’ rates and rate structure designs.

Available at http://efc.sog.unc.edu (Programs / Drinking Water / NC Water & Wastewater Rates & Rate Structures)

Useful Resources

EFC’s NC Water & Wastewater Rates Dashboard
http://efc.sog.unc.edu/ Find it in Resources / Tools
Benchmark your rates and your financial performance
Useful Resources

The Local Government Commission’s County & Municipal Fiscal Analysis Tool
Available at https://www.nctreasurer.com/slgt/Pages/Fiscal-Analysis-Tool.aspx

Create a pdf dashboard of eight financial performance indicators & compare your ratios to up to 5 other counties or municipalities.

Useful Resources


Report describes trends in revenues, costs and rates, as well as factors influencing revenues, and strategies that utilities across the country are using to increase the resiliency of their revenues.

NC is heavily featured in the report.

Available for WRF members at http://www.waterf.org/Pages/Projects.aspx?PID=4366
Defining a Resilient Model for Water Utilities

What are some quick messages that you can take away from some of these resources?
Key messages with comparative, factual data

- Costs are rising
- Demands are decreasing...for many
- Many utilities in NC are not financially sustainable
- You are not alone in requesting rate increases
- Your Board is not alone in granting them
- There are benefits to raising rates more frequently (and slowly) over time rather than postpone needed rate increases
- Most utilities are raising rates faster than CPI

Nationally, O&M costs alone are higher now than they have been in the past few years

In North Carolina, O&M expenses are also rising among all local government utilities (FY1997-2011)

Average Operating Expenses Excluding Depreciation

Fiscal Year

Data obtained by the Local Government Commission analyzed by the Environmental Finance Center.

Utilities are taking on more debt

Long-term debt for 192 water and combined utilities from 2003-2012

Data analyzed by the Environmental Finance Center at the University of North Carolina, Chapel Hill. Data source: Moody’s rating agency. The same group of utilities is used each year, and only utilities with debt data available for at least ten years were used.

Average residential demand is declining in NC

Source: https://efc.web.unc.edu/2012/05/24/residential-water-use-is-declining-in-north-carolina/

Average residential demand is declining in NC

Source: https://efc.web.unc.edu/2012/05/24/residential-water-use-is-declining-in-north-carolina/
Revenues from rates are sometimes not sufficient to pay expenses in NC

Local Government-Owned Water and Wastewater Utilities’ Cost Recovery in FY 2013

- Operating revenues < operating expenditures (11%)
- Operating revenues < operating expenditures + principal + interest on long-term debt (19%)
- Operating revenues > operating expenditures + principal + interest on long-term debt (71%)

Depreciation is not included in operating expenditures. Data obtained from the Local Government Commission, analyzed by the Environmental Finance Center at UNC.

n = 448 (FY 2013)

... which is especially true for smaller water systems

Local Government-Owned Water and Wastewater Utilities’ Cost Recovery in FY 2013

- Operating revenues < operating expenditures (11%)
- Operating revenues < operating expenditures + principal + interest on long-term debt (19%)
- Operating revenues > operating expenditures + principal + interest on long-term debt (71%)

<table>
<thead>
<tr>
<th>Number of service connections</th>
<th># of utilities</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1,000</td>
<td>177</td>
<td>16%</td>
<td>21%</td>
<td>63%</td>
</tr>
<tr>
<td>1,000 - 10,000</td>
<td>185</td>
<td>5%</td>
<td>19%</td>
<td>76%</td>
</tr>
<tr>
<td>&gt; 10,000</td>
<td>48</td>
<td>0%</td>
<td>6%</td>
<td>94%</td>
</tr>
</tbody>
</table>

n = 410 (FY 2013, with SDWIS number of connections)
Nearly half of NC utilities raise rates each year

Percent of Rate Structures that Increased Residential Rates between 2012 and 2013

In fact, this has been the case in NC for several years now


Majority of NC utilities **review** rates every year (even if not raise them)


Even during the recession, most Boards in NC approved requested rate increases

It’s rare for utilities in NC to keep rates unchanged for years

As of January 2013

Source: NCLM/EFC’s annual “Water & Wastewater Rates and Rate Structures in North Carolina” (2013). Available at http://efc.sog.unc.edu (Programs / Drinking Water / NC Water & Wastewater Rates & Rate Structures)
Utilities that don’t raise rates frequently tend to face higher rate increases when they do.

Average rate adjustment by frequency of raising rates

And even then, they fall way behind utilities that raise rates slowly but more frequently.

Average 5-year cumulative rate increase by frequency of rate adjustments

Data analyzed by the Environmental Finance Center at the University of North Carolina, Chapel Hill and Raffels Financial Consultants, Inc. Rate change data were known for five consecutive years for all utilities in the cohorts of each state. Data sources: Annual rates surveys conducted by GEMA/ERFC (2008-2010), NEMA/ERFC (2009-2010), OH-ERFC (2006-2010), TX Municipal League (2008-2012), and the Wisconsin Public Service Commission (2008-2012).

Utilities with higher cumulative rate increases tended to have higher credit ratings (= lower interest rates)


… which translate into substantial savings (financial repercussions of covering debt)

Cost savings from interest rate differences due to credit rating

<table>
<thead>
<tr>
<th>Principal</th>
<th>Credit Rating</th>
<th>Interest Rate (2009)</th>
<th>Interest Rate (2013)</th>
<th>Principal + Interest After 1 year (at 2009 rate)</th>
<th>Principal + Interest After 1 year (at 2013 rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$40,000,000</td>
<td>AA</td>
<td>0.049</td>
<td>0.0275</td>
<td>$41,960,000</td>
<td>$41,100,000</td>
</tr>
<tr>
<td>$40,000,000</td>
<td>BAA</td>
<td>0.074</td>
<td>0.039</td>
<td>$42,960,000</td>
<td>$41,560,000</td>
</tr>
</tbody>
</table>

Cost Savings in 1 year: $1,000,000 $460,000

Most utilities in NC are raising rates faster than CPI

Cumulative bill increases


Cumulative bill increases for 1,961 utilities in six states compared to regional CPI

How much did utilities raise rates between 2012 and 2013 in NC?

Median increase to monthly bill for 5,000 gallons:
- $1.60 water
- $1.91 sewer

Median increase to monthly bill for 5,000 gallons:
- 5.7% water
- 5.3% sewer

Source: NCLM/EFC’s annual “Water & Wastewater Rates and Rate Structures in North Carolina” (2013). Available at http://efc.sog.unc.edu (Programs / Drinking Water / NC Water & Wastewater Rates & Rate Structures)

But do you present numbers to the Board (and customers)? Bullet points? Tables? Graphs? Visualizations? Something else?

What about benchmarking rates as well?
Comparing rates…

What’s wrong with it?

- Poor sample selection (number, types of systems)
- Comparing only one bill amount
- Comparing nothing besides rates
  - pressure to keep rates low …
  - … regardless of financial condition of utility
  - ignores customers’ ability to pay
  - ignores price signals and utility’s policies
**Solution:** provide more information?

**Rate Table 1:** FY10-10 Water Rate Structure for Residential Customers

<table>
<thead>
<tr>
<th>Utility / Base Structure</th>
<th>Service Population</th>
<th>Billing Period</th>
<th>Base Charge</th>
<th>Tiered Charge</th>
<th>Water Rate Structure</th>
<th>Number of Electrons</th>
<th>Rate Block (Water Rate/Capacity)</th>
<th>Consolidated SIM (Difference at 1,000 Gallons)</th>
<th>Consolidated SIM (Difference at 15,000 Gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident</td>
<td>4,105</td>
<td>Monthly</td>
<td>9</td>
<td>$8.05</td>
<td>$20.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Non-Resident</td>
<td>4,105</td>
<td>Monthly</td>
<td>9</td>
<td>$8.05</td>
<td>$20.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Single Family Home</td>
<td>1,000</td>
<td>Monthly</td>
<td>9</td>
<td>$8.05</td>
<td>$20.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Multi-Family Home</td>
<td>1,000</td>
<td>Monthly</td>
<td>9</td>
<td>$8.05</td>
<td>$20.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
</tr>
</tbody>
</table>

**Rate Table 2:** FY10-10 Monthly-Equivalent RESIDENTIAL WATER Bills at Various Consumption Levels (includes Base Charges)

<table>
<thead>
<tr>
<th>Utility / Base Structure</th>
<th>Service Population</th>
<th>Billing Period</th>
<th>Base Charge</th>
<th>Tiered Charge</th>
<th>Water Rate Structure</th>
<th>Number of Electrons</th>
<th>Rate Block (Water Rate/Capacity)</th>
<th>Consolidated SIM (Difference at 1,000 Gallons)</th>
<th>Consolidated SIM (Difference at 15,000 Gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident</td>
<td>4,105</td>
<td>Monthly</td>
<td>9</td>
<td>$8.05</td>
<td>$20.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Non-Resident</td>
<td>4,105</td>
<td>Monthly</td>
<td>9</td>
<td>$8.05</td>
<td>$20.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Single Family Home</td>
<td>1,000</td>
<td>Monthly</td>
<td>9</td>
<td>$8.05</td>
<td>$20.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Multi-Family Home</td>
<td>1,000</td>
<td>Monthly</td>
<td>9</td>
<td>$8.05</td>
<td>$20.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
</tr>
</tbody>
</table>

185 pages of wonderful tables, full of data you can use!

**The Dashboard**

EFC’s NC Water & Wastewater Rates Dashboard

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

**We'll learn from this dashboard we have comparably low cost recovery.**
Acknowledgement

- Public Water Supply Section (Division of Water Resources, NC DENR)
- Water Research Foundation
- U.S. Environmental Protection Agency

Mary Tiger  
mwtiger@sog.unc.edu  
919-843-4958

Shadi Eskaf  
eskaf@sog.unc.edu  
919-962-2785

Environmental Finance Center at the University of North Carolina  
School of Government, Knapp-Sanders Building  
CB #3330  
Chapel Hill, NC 27599-3330  
USA