The Rate-Setting Process: Lessons Learned from MA Water Suppliers’ Experiences

Project Team:
DER – Michelle Craddock, Kate Bentsen
DCR – Anne Carroll, Sara Cohen
Raftelis Financial Consultants – Dave Fox
Woodcock & Associates – Chris Woodcock
Amy Vickers & Associates – Amy Vickers
Project Goals

Support PWS and Water Districts trying to restructure water rates to meet all or some of the following goals:

• Recover all costs
• Distribute costs fairly
• Protect affordability
• Encourage water use efficiency and conservation
Part 1: Online Survey

- Sent survey to MA PWS email list in August 2017
- Survey was open until end of September 2017
- Responses were anonymously recorded, except when supplier chose to identify themselves for further follow-up
- Received 114 responses (36% response rate)
What is the political structure of your water supply system?

- **Municipal**: 65
- **District**: 38
- **Commission**: 7
- **Private/Investor-Owned**: 3
- **Enterprise Fund**: 1

![Bar chart showing the distribution of political structures](chart.png)

![Pie chart showing the distribution of political structures](pie_chart.png)
In the last 5 years, have you or your department conducted any rate studies or analyses?

- Yes: 90
- No: 24
If No, did not conduct a rate study: Which of the following factors contributed to your system not conducting a rate study (check all that apply)?

- Your current rates are meeting all your goals (17)
- There is too little political will/appetite for rate restructuring (5)
- You have lacked the time or financial resources (2)
- You have lacked the data or technical tools (1)
If Yes, conducted a rate study:
Did the studies or analyses lead you to conclude a rate adjustment was needed?

If Yes, rate adjustment was needed:
Have you attempted to design new rates, based on the results of the rate study?
If Yes, attempted to design new rates:
Have you attempted to address any of the following goals in revising your rates? (check all that apply)
If Yes, attempted to design new rates: Did any of the following present obstacles to your rate-setting process? (check all that apply)

- Lack of support from your rate-payers for your efforts (21)
- Lack of political will among town officials to back your efforts (14)
- No obstacles reported (13)
- Lack of technical resources or tools necessary to meet your rate-setting goals (8)
- Lack of sufficient data to support your rate-setting goals (6)
If Yes, attempted to design new rates: Were you able to implement the rates you hoped for?

- Yes: (73)
- Not yet, but working on it: (10)
- No: (1)

[Pie chart showing the distribution of responses]

- Yes: Blue
- Not yet, but working on it: Green
- No: Red
If Yes, implemented new rates:
Did the rates face political or public pressure to have them revoked?

Have the rates achieved your goals?
Has the recent drought in MA affected rates or rate attitudes in your community? (check all that apply)

- The drought has not affected rates or rate attitudes in your community (82)
- The drought is likely to increase support for a rate adjustment in your community (9)
- You will need to adjust your rates as a result of the recent drought (6)
- The drought is likely to decrease support for a rate adjustment in your community (6)
- You are considering incorporating a “drought rate” or “scarcity rate” into your rate structure that would charge more for water use during times of severe stress on your sources (2)
Survey Results: Take-Home Messages

- Most suppliers have conducted a rate study within the past five years, which led to a revision of rates.
  - Most of these revised rates did not face pressure for revocation once implemented.
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  • Most of these revised rates did not face pressure for revocation once implemented.
• The most common goals for revising rates were to increase revenue to meet operating costs or capital needs and improve revenue stability.
• The most common obstacles were lack of support from rate-payers and lack of political will.
Survey Results: Take-Home Messages

• Most suppliers have conducted a rate study within the past five years, which led to a revision of rates.
  • Most of these revised rates did not face pressure for revocation once implemented.
• The most common goals for revising rates were to increase revenue to meet operating costs or capital needs and improve revenue stability.
• The most common obstacles were lack of support from rate-payers and lack of political will.
• Most suppliers felt the recent drought did not affect attitudes towards rates in their communities.
Part 2: Case Studies

- Interviewed 7 water providers
- List of prepared questions used as guidance but interviews were free-flowing and focused on aspects most significant to each utility
- Interviewees included politicians, water commissioners, department directors, superintendents, finance directors, billing and IT staff, engineers, and environmental analysts
Interviewees

- Suppliers in Middlesex, Bristol, Barnstable, and Hampden county
- Served 5,500 to 28,500 people
- 3 Water Districts, 4 Town Departments
- Budgets from $0.8 to $5.2 million
- All have fixed charges with inclining block rates (2 also use taxation)
- Rates approved by mayor, water commissioners, select board
Rate-Setting Processes & Goals

Rate setting process varied widely from highly structured, multi-step processes to very informal, rapid processes.

Goals included:

• Financial sufficiency
• Revenue stability
• Conservation
• Customer affordability
• Economic development
Key Lessons Learned

Most water suppliers in MA share common challenges in their communities – rate setting tools and strategies can help them overcome these challenges

• Communication
• Financial Planning
• Data Management
• Governance
Communication

• Routine, inclusive, and transparent communication, both internally and externally, was a crucial factor in rate-setting success.
• Good internal communication reduces surprises and silos across departments, and strengthens the utility’s message around rates.
• Good external communication helps build trust in the utility, fosters understanding of the resources needed to maintain a water system, and creates support for sustainable rates.
Internal Communications - Points of Guidance

• **Involve all utility departments in rate setting via ‘all hands on deck’ meetings** to establish unified rate-setting goals

• **Set clear internal priorities** with specific costs and timelines and include both urgent and non-urgent capital projects
External Communications - Points of Guidance

- **Communicate frequently** with governing body that decides rates and give operational and financial status updates.

- **Use data and figures** to communicate trends that necessitate rate increases

- **Communicate frequently with customers** to build good will and understanding about rate increases
Financial Planning

• Suppliers who engaged in rigorous financial planning avoided surprises and were better able to address potential revenue deficiencies through informed rate increases.

• Suppliers who developed multi-year plans were more confident in their financial projections and better able to communicate financial needs and justify rates to stakeholders and water commissioners.
Financial Planning – Points of Guidance

• Create short and long term financial plans that include O&M expenses, debt service payments, reserve fund contributions, and capital improvement costs

• Set prices that recover the full cost of water service from each class of water user – ensures equity and helps identify which parts of system are most costly

• Maintain reserve fund and regularly contribute to them – reduces need for abrupt rate increase
Data Management

• High-quality data (electronic, detailed, multi-year records) on customer water use, operational expenses, infrastructure maintenance, etc. can help suppliers better understand and anticipate changes in their system.

• Good data can also help suppliers assess how drought, seasonal variation, and pricing changes will affect consumption and revenues.
Data Management – Points of Guidance

• **Analyze water consumption data** to identify trends and understand impact on revenue

• **Use computer-based rate-setting models** that incorporate population, consumption, capital funding plans, current and future revenue requirements

• **Meter monthly or more frequently** to improve consumption and revenue projections
Governance

- Water suppliers operate under a variety of different organizational structures, which can influence their autonomy in financial planning and rate setting.
- Those that operate as a water district have a very high level of autonomy and fiscal independence while those that function as a municipal department have less autonomy and may face more political limitations.
- Within any structure, there are steps suppliers can take to increase their ability to control financial planning and rate setting.
Governance – Points of Guidance

• **Create an enterprise fund** or equivalent to facilitate financial planning and calculate the true cost of water

• **Establish direct and frequent communication** with governing bodies to build trust and confidence in financial management decisions

• **Incorporate as a water district**, where feasible, to increase financial independence and autonomy in rate setting
Key Findings Warranting Further Examination

• Balancing water conservation and revenue needs
  ‘At least half of summer irrigation users could cut their water use in half, but water commissioners like the revenue from irrigation demand’

• Water demand elasticity and the effectiveness of price signals
Next Steps

• Financing Sustainable Water workshop on 11/14/18 in Sharon, MA
• Presented by Alliance for Water Efficiency, hosted by DER and DCR

Conference agenda and registration at:
Questions?

Survey results, full report, 2-page summary flier, and additional resources at:

https://www.mass.gov/service-details/water-rates