Communicating the Value of Water: Rate Setting and Affordability Issues

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

• Teaching and Outreach
• Direct Technical Assistance
• Applied Research
• Tool Development
Importance of Safe Drinking Water

- Public health
- Fire protection
- Livable communities
- Quality of life
- Economic development
Who Provides Water Service?

- Local Governments
- Mobile Home Parks
- HOAs and Condos
- Apartments
- Private Water Companies
Funding Local Government Services

General Government: Taxes

Enterprise Funds: Rates & Fees
Pricing Water

Jeff Hughes

The Painful Art of Setting Water and Sewer Rates

- An increase in mergers and acquisitions
- Almost $8 billion in assets and more than $1 billion in annual revenues
- Changing regulations, affecting the bottom line
- A backlog in capital investment needs
- Interruptions in supplies that hurt revenues
- Loss of major customers
- Innovative pricing and customer-relations strategies
- Sagging revenues

Typically, these increases fall on governing boards that were chosen not as business or technical experts but as representatives of their constituents on a broad range of matters.

The drought of 2002 brought two types of water stories to the headlines: (1) the struggles of many communities to maintain their water supplies and (2) the financial difficulties of many communities due to decreased sales. The response to the first type of circumstance was immediate and significant: an executive order requiring conservation, and statewide initiatives to examine current supplies. The response to the second type of circumstance has been less obvious and less pronounced.

Table 1). These numbers are impressive. However, the projected numbers are staggering. According to a study by the North Carolina Rural Economic Development Center, the state will need more than $11 billion in investments to meet its capital needs for water and sewer infrastructure over the next twenty years.

In North Carolina, as throughout the country, numerous water and sewer enterprises owned by local governments benefited from the federal government’s ambitious construction grants program of the 1970s (for the patterns of federal wastewater funding from 1970 to 2000, see Figure 1). Many local government officials fondly remember those days of
Historically, We Have Undercharged for Water

Operating Costs

Capital Costs
Infrastructure Funding Reality

Spending on capital infrastructure for water and wastewater utilities has increasingly been provided by state and local governments while federal spending on capital infrastructure declined since the 1980s. Over 90% of capital spending occurs by state and local governments.

Graphed by the Environmental Finance Center at the University of North Carolina, Chapel Hill. Source: Congressional Budget Office supplemental data for the Public Spending on Transportation and Water Infrastructure, 1956 to 2014 report (March 2015). Displays public spending on supply systems for distributing potable water as well as wastewater and sewage treatment systems and plants. Real spending is shown after adjusting nominal spending to their 2014 dollar equivalent using infrastructure-specific price indexes.
Drinking Water is Capital Intensive
Rising Costs for Drinking Water

Aging Infrastructure

Cost of Compliance

New Technology
Water Rates Are Rising

Exhibit 1. Long-term trends in the Consumer Price Index (CPI) for utilities (1913-2014). The index is set to 100 for 1982-1984 except for telephone and wireless services, where the index is set to 100 for 1997. Year (*) indicates start of series.
Affordability is a Growing Issue of Concern

Can individual customers afford to pay their water bills? Can water systems afford to comply with regulations and provide reliable service?
Who is Vulnerable?

- Low income customers from any water system
- Small systems
- Communities losing population
- Communities losing industry
What Can the State Do?

- Variances
- Low-interest loans, grants and principal forgiveness for disadvantaged communities
- Financial support for cost-reduction and affordability programs at the water system level
What Can Water Systems do?

- Reduce Costs Overall
- Aid to Individual Customers
- Pricing Strategies
Navigating Legal Pathways to Rate-Funded Customer Assistance Programs

A guide for Water and Wastewater Utilities

Alabama

Water and wastewater utilities in Alabama fall under several state setting regulatory systems.

Commission-Regulated Utilities

The Alabama Public Service Commission (APSC) regulates water and wastewater companies in Alabama. Under Ala. Code § 37-1-19, the APSC does not have the authority to regulate government-owned utilities, furthering Ala. Code § 37-1-1. Utilities serving less than 1,000 customers and purchasing water from a non-commission-regulated utility9 can choose to exempt from APSC regulation and instead file under that utility’s municipal authority.

Ala. Code § 37-1-81 states that commission-regulated utilities need to file rate schedules with the APSC before changing rates. In addition, Ala. Code § 37-1-80 states that commission-regulated utilities must charge “reasonable and just” rates. Alabama follows the “rule of reason” when determining what is just and reasonable, with the rule of thumb to determine if the rate is fair, being “the valuation placed on the utility property”9. Ala. Code § 37-1-80 decides rates set by the APSC to be “principally just and reasonable.”4 Furthermore, when the APSC finds rates to be unjust and unreasonable, Ala. Code § 37-1-97 gives the power to adjust them to just and reasonable.

Thus, commission-regulated utilities would likely need specific approval, in the form of an APSC order, to charge rates to be used to fund a low-income customer assistance program (CAP).

Noncommission-Regulated Utilities

Municipalities, including cities and towns, have the right to operate and maintain rates for water utilities.20 They act subject to an APSC regulation and thus can set their own water and wastewater rates.20 For wastewater rates, under Ala. Code § 31-30-121, “all such charges shall be uniform for the same type, class, and amount of use or service by or from the sewer system.” This code also lists factors that can be used to set rates, but does not mention socio-economic factors.20

Based on the limits laid out above, noncommission regulated water utilities appear to have very broad-spectrum setting authority that could be used to implement low-income CAPs funded by rate revenues. On the other hand, because of the aforementioned specific statutory limitations, wastewater utilities might face legal challenges of using rate revenues to fund low-income CAPs, but such programs would face fewer obstacles to programs using income-indexed rates or discounts.

State Population (2019): 4,863,300
Median Annual Household Income (2019): $46,623
Poverty Rate (2019): 18.0%

Typical Annual Water and Wastewater Expenditures (2018): $773

Alabama has 556 community water systems (CWS), of which 17 are privately-owned and 466 serve populations of 1,000 or fewer people. Alabama has 59 publicly-owned treatment works facilities (POTWS), of which 26 treat 1,000 or less customers. In 2019, the average expenditure per water system was $3,548,084, which is served by government-owned CWS and $2,482,995 are served by POTWS. Estimated Long-Term Water and Wastewater Infrastructure Needs: $3.0 Billion

Source: U.S. Census Bureau; 2018 Population Estimates; U.S. EPA; American Community Survey 2018; Alabama, 2018; APSC; U.S. Environmental Protection Agency, 2018; U.S. EPA; Drinking Water Information; National Water Survey 2015; Case Western Reserve University, 2018

https://efc.sog.unc.edu/pathways-to-rate-funded-customer-assistance
Systems Not Regulated by Utility Commissions
Systems Regulated by Utility Commissions