



G. TRACY MEHAN III AND IAN D. GANSLER

# Addressing Affordability as a Necessary Element of Full-Cost Pricing

TO RECONCILE THE NEED TO ADEQUATELY FUND INFRASTRUCTURE WHILE NOT OVERBURDENING THOSE WHO CANNOT AFFORD RATE INCREASES, WATER UTILITIES ARE IMPLEMENTING CUSTOMER ASSISTANCE PROGRAMS.

In its most recent strategic assessment of the water industry, Black & Veatch (2016) observed that “those working in the water industry have realized a truth that is now reaching a broader audience: Water is woefully underpriced.” As readers of *Journal AWWA* will recall, AWWA published its report, *Buried No Longer: Confronting America’s Water Infrastructure Challenge* (AWWA Water Utility Council 2012), identifying a trillion dollars of investments needed for both replacement and expansion of drinking water infrastructure over two-and-a-half decades.

Yet the sector faces a paradox: water is underpriced, but it’s still expensive (Grigg 2016). As the Black & Veatch report (2016) notes, “issues of affordability” have made rate increases problematic in many communities, requiring water utilities to address “challenging social issues around this matter,” thrusting the issue into the political arena as well. This is entirely understandable given that, on average, water rates are increasing several times the rate of inflation, sometimes astronomically, especially in communities under a consent decree to compel an overhaul of their legacy combined sewer overflow systems. It does not matter if the cost drivers come from the wastewater,

Layout imagery by Shutterstock.com artists  
Droganex, Azawer, Macrovector, iStock, Johnwei

drinking water, or stormwater side of the cycle—the ratepayers who bear these costs typically see them as a single water bill, and a rising one at that.

### STAGNANT PERSONAL INCOMES

The challenge of affordability in the face of increasing water rates is even more compelling in light of overall macroeconomic trends in the United States. A recent article by William Galston in *The Wall Street Journal* (Galston 2017) noted that the acting commissioner of the Bureau of Labor Statistics issued a report with some disturbing news for workers: “Over the past year average hourly earnings have risen by 2.5%. Unfortunately, the consumer-price index, a standard measure of inflation, rose by 2.4%, meaning the average worker’s purchasing power hardly grew at all.”

This is no aberration but rather part of a disturbing trend. “Since 2010 hourly wages corrected for inflation have risen barely 0.5% a year,” writes Galston. “The official statistics back up reports that Americans are working harder than ever just to stay even.” While incomes have increased since the Great Recession, it is not due to rising wages. Americans are simply working more hours. “Nearly eight years after the official end of the recession, median household incomes aren’t much higher than they were when the recession began, and they remain a bit lower than in January 2000.” In sum, we are looking at a lost two decades. No wonder water customers, middle-income as well as lower-income, are edgy about the very necessary rate increases that they are experiencing.

The water and wastewater utility sector has realized the humanitarian and political consequences of the distributional impacts of inevitable price increases—i.e., the disproportionate impact on low-income customers, seniors or the disabled—so it must address affordability issues as a necessary component of its drive for more robust and fair rates.

This is an important development, one that must be encouraged if utilities are to cope with a situation that has passed the Dawn of the Replacement Era and is now approaching high noon.

Fortunately, there is a movement in the water sector to adopt affordability or customer assistance programs (CAPs). Gas and electric

Again from the Black & Veatch report (2016), “Water utilities . . . are leveraging a combination of payment and discount plan options.” Of the utilities included in this survey that have deployed programs “to help those in need,” 35.9% use short-term and long-term payment plan options, and 20.7% have adopted low-income

---

The sector faces a paradox: water is underpriced, but it’s still expensive.

---

utilities commonly solicit support for fuel or winter funds for low-income customers usually in partnership with other nonprofits (e.g., the Salvation Army) or other local businesses or media outlets. While perhaps not as common in the water industry, requests for customers to contribute to an equivalent fund for low-income water customers are gaining traction and will likely become more common.

### AFFORDABILITY PROGRAMS ADOPTED BY UTILITIES

The literature provides some guidance to address affordability concerns. AWWA was out in front on affordability issues when it published *Thinking Outside the Bill: A Utility Manager’s Guide to Assisting Low-Income Water Customers* (AWWA Water Utility Council 2014), “a concise guide to affordability” and “a snapshot of tools that utilities may use to help lower-income customers afford their water bills.” In this same vein, a report from the University of North Carolina at Chapel Hill (UNC) describes barriers at the state level that may need to be overcome to establish sustainable and robust programs that fully meet the needs of struggling ratepayers (UNC 2017). (Note that AWWA, along with other water associations, contributed to the financing of the UNC study and report.)

programs with discounts on fixed charges. The rest pursue a variety of other programs such as joint efforts with nonprofits (8.7%) or payment plans with principal forgiveness (5.4%).

In its 2016 report, *Drinking Water and Wastewater Utility Customer Assistance Programs*, the US Environmental Protection Agency (USEPA) conducted a survey of 795 utilities, finding that nearly 30% had some form of CAP (USEPA 2016). The survey found that of 365 identified CAPs, low-income residents were the beneficiaries of the most programs, with seniors, disabled individuals, military, and individuals facing specific hardships also eligible for some programs.

USEPA identified five types of CAPs:

- Bill discount—provides continuous assistance by giving customers a discount on monthly, quarterly, or annual bills. This was the most common type of CAP in the survey.
- Flexible terms—relaxes requirements for bill payment, including waived penalties, lower interest, or more flexible payment timelines.
- Lifeline rate—offers a reduced rate for a set quantity of water per pay period. After that amount has been exceeded, rates increase.
- Temporary assistance—gives customers one-time assistance

to help with an unexpected difficulty. Sometimes a simple courtesy notice that a customer is nearing service termination is enough to avoid a shut-off.

- Water efficiency—helps homes save water by installing low-flow appliances or repairing leaky pipes, thereby reducing water use and saving money.

Funding is often the biggest challenge for a utility in setting up a CAP. The USEPA's review found that nonprofit organizations were the most common source of funding for CAPs. USEPA recommends reaching out to nonprofit charities for utilities with tight budgets. As mentioned previously, some utilities ask customers directly for voluntary contributions, sometimes offering "round-up" programs, allowing customers to automatically round up their bill to the next dollar in order to make a donation. Soliciting donations through fundraising is also an option. Funding CAPs through the regular utility budget or adding a surcharge to customers not facing hardships are much less common funding mechanisms, often because of state-level limitations. Yet where they exist, they have generally been able to fund more comprehensive programs.

The USEPA report highlights several case studies of successful CAPs already in effect. The California Water Service Company (Cal Water), one of the largest private water service companies in the nation, created California's first CAP in 2006. The utility's Low Income Rate Assistance Program (LIRA) is a bill discount program that gives a 50% discount on the fixed portion of the customer's bill. Any customers who qualify for assistance from their local electric utility are automatically enrolled in LIRA, which enrolls about 20% of Cal Water's 478,000 customers. Cal Water also has a bathroom fixture replacement program, which provides new toilets, faucets, and showerheads for any customer enrolled in LIRA.

About 1,500 customers took advantage of the fixture replacement program in 2015.

The San Antonio Water System (SAWS) offers an array of eight distinct CAPs. The largest of its programs is the Affordability Discount Program, which offers a discount of

offers CAPs, where approved by state regulators, through emergency grants and discount payment programs. Again, where approved by state economic regulators (public utility commissions), American Water offers rebates for water-saving appliances, water audits, and even

---

Fortunately, there is a movement in the water sector to adopt affordability or consumer assistance programs.

---

as much as \$15/month to households under 120% of the federal poverty level. The program currently enrolls 18,000 of SAWS's 500,000 account holders, although 42,000 are eligible but not enrolled. SAWS is working to provide additional outreach to eligible households to increase enrollment in the program. SAWS's other programs include efforts to provide courtesy notifications and one-time assistance to customers close to having their service shut off, plumbing assistance to fix leaking pipes, and fee waivers for the elderly, disabled, and domestic violence survivors. The total cost of SAWS's assistance programs was \$3.2 million in 2016, almost 0.5% of its total revenue.

George Hawkins, chief executive officer and general manager of the District of Columbia Water and Sewer Authority, provided an overview of his utility's affordability or customer assistance programs that put to use many tools in the customer assistance toolbox: the first 4 ccf (1 ccf = 748 gal) of water and sewer service free for qualified customers; 50% discounts on stormwater or impervious surface charges; voluntary donations from customers administered by the Urban League; lifeline rates; and lower fees for smaller meters (Hawkins 2017).

American Water, an investor-owned company that owns and manages water and wastewater utilities throughout the country,

free water-saving devices to help customers reduce costs. It has seen a 349% increase in customer enrollment in its California CAP as the result of a ruling by the Utilities Commission. Enrollment has jumped from 5,477 to 19,130 (Duffy 2017).

#### OVERCOMING LEGAL BARRIERS

While there are many options to structure or finance a CAP, depending on the state, the legal barriers may be cumbersome. A new report by the Environmental Finance Center at UNC includes a snapshot summary of these barriers in every state and offers examples and strategies on how utilities can navigate this confusing framework (UNC 2017).

UNC found that states fit into four categories when it comes to statutes surrounding rate-revenue-funded CAPs. There are a small minority of states that either explicitly allow or explicitly prohibit utilities from setting up a CAP, while most states are more ambiguous. Some states have statutes that pose potential challenges to establishing a CAP without an explicit disallowance, while others do not explicitly forbid it but also have no language explicitly supporting it.

Unfortunately, there is little judicial interpretation to clarify this nebulous legal landscape. Many states' statutes require water service rates to be "reasonable," "uniform,"

“nondiscriminatory,” or “just.” Often the intent behind these terms is to require utilities to charge all customers the same rate rather than prohibiting the use of rate revenue to subsidize low-income customers; however, the latter is a side effect. In other cases, affordability programs may have to navigate rules that were established for entirely different purposes. For example, most state constitutions have “gift clauses” prohibiting government entities from giving grants, subsidies, or donations to specific individuals or corporations to ensure public funds are used only to promote public programs and public welfare. Some gift clauses are broad and may present an obstacle for CAPs, while others have exceptions for gifts that serve a public purpose, as CAPs certainly do.

Utilities interested in these programs should carefully review their state laws as they design their programs. National studies such as the UNC and USEPA affordability reports, while helpful in framing the major issues, are not a substitute for a utility seeking its own legal counsel in assessing its situation under relevant state law. Such reports should

*Daryani v. Rich Prairie Sewer & Water* (2006), the court ruled that “perfect equality in establishing a rate system [is not] expected . . . [and the] apportionment of utility rates among different classes of users may only be roughly equal.” Utilities might use this argument that differences in rates based on income are justified, not only because it is socially responsible but because it helps the utility operate more efficiently. However, this is a single case from one state.

Environmental finance expert Michael Curley has opined on the practical benefit of assisting low-income customers: “The benefit to the utility of having discounts or lower rates for low-income customers is the increased likelihood of collecting payment from these customers; the subsidy makes it possible for these customers to pay more of their bills more regularly and promptly” (Curley 2014).

In the face of legal challenges to funding CAP programs, UNC recommends three courses of action if there are statutory barriers to having a CAP. First, if there is strong support for these programs in the

are an “essential cost of running a utility.” Third, if the first two options do not prove successful, utilities should create a CAP without using rate revenue. For example, funding can come through non-profit partnerships, donations, or voluntary bill round-ups.

State laws disallowing or discouraging some types of CAP funding mechanisms may have been drafted with good intentions. Indeed, it seems fair that no one should have to pay more than anyone else for their water. In effect this principle means that too many people will be unable to afford safe water. In states that do not already allow or encourage CAPs, utilities could work with their state legislatures to convey the importance and successes of these programs.

## CONCLUSION

Focusing on the distributional impacts of essential rate increases on ratepayers in need is both a humanitarian and a political imperative—the former because it is the right thing to do and the latter because ignoring these citizens’ concerns generates pushback from the community and elected officials. Affordability programs and CAPs must be viewed as an integral, even necessary, part of the financial plan for every water, wastewater, and stormwater utility. It is all the same ratepayer.

## ABOUT THE AUTHORS



*G. Tracy Mehan III is executive director for government affairs in AWWA's Washington, D.C., office, 1300 Eye*

*St. NW, Washington, DC 20005-3314 USA; [tmehan@awwa.org](mailto:tmehan@awwa.org). Ian D. Gansler was a legislative affairs intern for AWWA, Washington, D.C., at the time this article was written. He can be reached at [igansler29@gmail.com](mailto:igansler29@gmail.com).*

<https://doi.org/10.5942/jawwa.2017.109.0132>

---

Frequent service shut-offs and resolving bad debt from customers who cannot afford their rates can be more expensive for a utility than instituting a CAP and assisting customers in paying their bills.

---

be used as a general introduction to the topic of legal barriers.

Utilities can argue that CAPs are necessary to run their operations when they are facing laws in the gray area. Frequent service shut-offs and resolving bad debt from customers who cannot afford their rates can be more expensive for a utility than instituting a CAP and assisting customers in paying their bills. One of the few cases providing legal precedent on this issue was heard by the Minnesota Court of Appeals. In

state, advocates should work to clarify the statutes and regulations in their state to expressly authorize these programs. Second, stakeholders should carefully review the exact problematic language in their state law and make sure their programs are designed to overcome those limits. For example, in states where the limitation relates to requirements that all customers only pay rates linked to the cost of service, utilities could argue, through a business case, in court if necessary, that CAPs

## REFERENCES

- AWWA Water Utility Council, 2014 (2nd ed.). *Thinking Outside the Bill: A Utility Manager's Guide to Assisting Low-Income Water Customers*. AWWA, Denver.
- AWWA Water Utility Council, 2012. *Buried No Longer: Confronting America's Water Infrastructure Challenge*. AWWA, Denver.
- Black & Veatch, 2016. *2016 Strategic Directions: Water Industry Report*. Black & Veatch, Denver.
- Curley, M., 2014. *Finance Policy for Renewable Energy and a Sustainable Environment*. CRC Press, Boca Raton, Fla. <https://doi.org/10.1201/b16693>.
- Daryani v. Rich Prairie Sewer & Water*, 2006. Sam M. Daryani, et al., Respondents, vs. Rich Prairie Sewer and Water District, Appellant, Morrison County, Minnesota, Defendant. A05-1200, Court of Appeals Unpublished, March 14.
- Duffy, M., 2017. Vice-president, communications and federal affairs, American Water, Voorhees, N.J. Personal communication, February 16.
- Galston, W.A., 2017. An Econ Mystery: Why Did Wages Flatline? *The Wall Street Journal*, [www.wsj.com/articles/an-econ-mystery-why-did-wages-flatline-1494369652](http://www.wsj.com/articles/an-econ-mystery-why-did-wages-flatline-1494369652) (accessed May 11, 2017).
- Grigg, N.S., 2016. Water: Underpriced, Still Expensive. *Water Finance & Management*, December:32.
- Hawkins, G., 2017. Chief executive officer and general manager, District of Columbia Water and Sewer Authority, Washington. Personal communication, March 10.
- UNC (University of North Carolina Environmental Finance Center), 2017. *Navigating Legal Pathways to Rate-Funded Customer Assistance Programs: A Guide for Water and Wastewater Utilities*. UNC, Chapel Hill, N.C.
- USEPA (US Environmental Protection Agency), 2016. *Drinking Water and Wastewater Utility Customer Assistance Programs*. USEPA, Washington.

## AWWA RESOURCES

- Model Water Utility Affordability Programs. Blake, B.L.; Brown, G.A.; & Rothstein, E., 2017. *Journal AWWA*, 109:8:30. Product No. JAW\_0085441.
- 2016 *Water and Wastewater Rate Survey*. AWWA, 2016. Catalog No. 54009-16.
- M1: *Principles of Water Rates, Fees and Charges* (7th ed.). AWWA, 2017. Catalog No. 30001-7E.

These resources have been supplied by *Journal AWWA* staff. For information on these and other AWWA resources, visit [www.awwa.org](http://www.awwa.org).

*Journal AWWA* welcomes comments and feedback at [journal@awwa.org](mailto:journal@awwa.org).