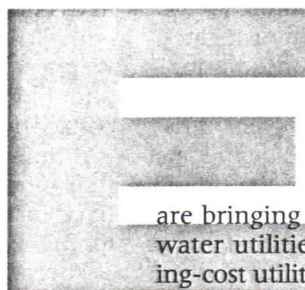




# Water affordability and alternatives to service disconnection

*Utilities are finding ways to continue service for ratepayers who have difficulty paying their water bills.*

**Janice A. Beecher**



Escalating water and wastewater rates are bringing affordability issues to the forefront for water utilities. Water supply is recognized as a rising-cost utility industry for three reasons: the need to comply with the requirements of federal drinking water standards under the Safe Drinking Water Act,

the need to replace an aging water supply infrastructure, and the need to meet growing demand for water.<sup>1</sup> Parallel forces can be found to affect the wastewater treatment and stormwater management industries. The

Rising costs and rising water bills are inevitable. For customers, the problem of water affordability may result in increased arrearages, late payments, disconnection notices, and service terminations. Utilities, under increasing pressure to respond to affordability and disconnection problems, generally prefer assistance-oriented programs in cooperation with social agencies over rate structure modifications. In this article the author reviews available options including financial counseling, arrearage forgiveness, payment discounts, income-based payments, lifeline rates, targeted conservation, disconnection moratoria, and flow restriction.

This article is adapted from *Alternatives to Utility Service Disconnection*, a multiutility report by R.E. Burns et al published in 1994 by the National Regulatory Research Institute of Columbus, Ohio.



**TABLE 1** National survey of monthly water charges\*

Water Rate	1986	1988	1990	1992	Increase 1986-92	Change percent
Lowest	\$2.84	\$3.02	\$3.66	\$4.63	+\$1.79	+63
Average	9.41	9.95	11.16	12.35	+2.94	+31
Highest	21.95	21.30	22.95	32.17	+10.22	+47

\*Source: reference 2. Monthly charges are for residential customers at 1,000 cu ft (7,480 gal); the average is based on summer rates where seasonal rates apply.

implications for consumers make it all the more important that utilities seek out least-cost alternatives for meeting revenue requirements.

Although measures are available to help mitigate rising costs, the reality for many water utilities and their customers is that rising costs and rising water bills are inevitable. Smaller systems, which cannot take advantage of economies of scale, will be hit particularly hard. Many have other viability problems associated with their size, including inadequate rate structures. These systems may need especially substantial rate increases.

The problem of affordability is partly exacerbated by the lack of funding for federally mandated standards. However, not all water utility costs can be attributed to water treatment or regulatory standards for treatment.<sup>2</sup> Therefore, to blame the affordability problem on federal mandates alone is not justifiable.

Some water systems may have had inadequate rates even before their costs increased. Interestingly, even the highest tier of rates still is experiencing substantial increases (Table 1). Some analysts project that rising costs will cause water rates for the rest of the 1990s to double (at least), with a continued trend toward increasing-block rates, more uniform rates, and more seasonal rates.<sup>3</sup> Although conservation-oriented rate structures can be economically justified, they can appear to exacerbate the problem of rising water bills. Thus, some utilities are considering rate discounts and other forms of assistance for the elderly and low-income populations (Table 2).

For customers, the problem of water affordability may result in increased arrearages, late payments, disconnection notices, and service terminations. Affordability affects utilities in terms of expenses associated with credit, collection, and disconnection activities; revenue stability and working capital needs; and bad debt or uncollectible accounts that other customers must cover.<sup>4</sup> Other ramifications of the affordability issue are also becoming apparent. If customers cannot afford to pay for water service, potential lenders may question the utility's financial viability and ability to meet debt obligations.<sup>5</sup> Moreover, service disconnections can present a public relations nightmare for utilities, particularly because they supply essential services. Increasingly, problems of bad debt also extend to nonresidential utility customers. Financial distress and bankruptcies in the commercial and industrial sectors can leave utilities holding the

bag.<sup>6</sup> However, the larger issue of affordability is primarily a concern with respect to low-income residential consumers.

### Water rates expected to rise

Because water is essential to life, water delivery is sometimes considered an absolutely essential service. Historically,

water service was not particularly expensive; compared with other utility bills, the water bill was not the one consumers had difficulty paying. This situation may change dramatically over the next decade.

Mounting evidence suggests rising water prices exceed both average income growth and the general rate of price increases. Affordability will continue to be a problem for both utilities and their customers.<sup>7</sup> For low-income customers, paying more for basic water service means going without other, more discretionary products and services. Thus, rising water prices can contribute to a deterioration in the quality of life for low-income utility customers.

Regarding affordable water service, consumer advocates are paying particular attention to the interests of the low-income population, including families receiving public assistance, older Americans on fixed incomes, and people with health problems or disabilities.<sup>4,8</sup> Recent rate proceedings in cities across the nation reflect the growing concern of these advocates for their constituencies. A report issued by the National Consumer Law Center (NCLC) in December 1991 estimated that more than 100,000 households in eastern Massachusetts could not afford their water bills.<sup>9</sup> In addition, annual water and wastewater bills were projected to rise to more than \$1,600 by 2000. Should this projection materialize, water and sewer costs would nearly equal the cost of home heating. Without federal relief, this cost escalation will further burden poverty-stricken citizens and those on fixed incomes and could become a contributing factor in the spread of homelessness in the United States.<sup>4</sup>

Urban low-income populations generally do not have water-guzzling lawns, swimming pools, or air conditioning. However, poor housing conditions can insinuate the presence of plumbing fixtures and appliances that waste water. Not all low-income renters must pay their water bills directly. Higher utility costs are sometimes reflected in higher rents, but this may not be an adequate price signal to guide consumption decisions. Some advocates for low-income utility customers argue that the way to address the affordability problem is through expanded federal funding for meeting federally mandated standards.<sup>10</sup>

Thousands of the nation's water systems, many of which are smaller, privately owned systems, fall under the jurisdiction of state public utility commissions.<sup>11</sup> Given dramatically rising costs, some commissions may need to revisit their jurisdiction



helping those in need, particularly when it comes to life's essentials. Many water utilities already reflect this philosophy. Programs that help customers afford water service and avoid disconnection can help utilities cope effectively with the impact of rising costs in their service areas.

### Acknowledgment

The author appreciates the invaluable research assistance provided by John D. Stanford and the insightful comments and suggestions provided by Scott J. Rubin.

### References

1. BEECHER, J.A.; MANN, P.C.; & STANFORD, J.D. Meeting Water Utility Revenue Requirements: Financing and Ratemaking Alternatives. National Regulatory Research Institute, Columbus, Ohio (1993).
2. DUKE, E.M. & MONTOYA, A.C. Trends in Water Pricing: Results of Ernst & Young's National Rate Surveys. *Jour. AWWA*, 85:5:55 (May 1993).
3. RUSSELL, D.F. & WOODCOCK, C.P.N. What Will Water Rates be Like in the 1990s? *Jour. AWWA*, 84:9:68 (Sept. 1992).
4. SAUNDERS, M. Water and Sewer Rates—The Emerging Crisis for the Poor. Proc. National Regulatory Research Institute Biennial Regulatory Information Conf., Columbus, Ohio (1992).
5. WOODCOCK, C.P.N. National Trends in Water Pricing. Proc. 1993 AWWA Annual Conf., San Antonio, Texas.
6. HAMBERG, G.L. Water/Sewer Utilities as Candy Shoppes: A Primer to Reduce Your Bad Debt Expenses. *Aquafacts* (Winter 1993–94).
7. RUBIN, S.J. Are Water Rates Becoming Unaffordable? *Jour. AWWA*, 86:2:79 (Feb. 1994).
8. Comments of the National Consumer Law Center Inc. on Senate Bill 1547—To Reauthorize and Amend the Safe Drinking Water Act Before the Senate Committee on Environment and Public Works. Washington, D.C. (Nov. 5, 1993).
9. The Impact of Rising Water and Sewer Rates on the Poor: The Case of Eastern Massachusetts. National Consumer Law Center, Boston, Mass. (1991).
10. Cause for Concern: America's Clean Water Funding Crisis. National Water Education Council, Boston, Mass. (1992).
11. BEECHER, J.A. ET AL. Revenue Effects of Water Conservation and Conservation Pricing: Issues and Practices. National Regulatory Research Institute, Columbus, Ohio (in progress).
12. LIHEAP (Low Income Home Energy Assistance Program) Report to Congress for Fiscal Year 1990. US Dept. of Health and Human Services, Washington, D.C. (1991).
13. DAY, M.D. Is Water Affordability a Pricing Priority? Proc. 1993 AWWA Annual Conf., San Antonio, Texas.
14. RUBIN, S.J. Personal communication. (July 1994).
15. Bureau of Consumer Services, Pennsylvania Public Utility Commission, Harrisburg, Pa. (May 4, 1993).
16. COLTON, R.D. A Cost-Based Response to Low-Income Energy Problems. *Public Utilities Fortnightly* (Mar. 1, 1991).
17. BEECHER, J.A.; MANN, P.C.; & LANDERS, J.R. Cost Allocation and Rate Design for Water Utilities. National Regulatory Research Institute, Columbus, Ohio (1990).
18. Alternative Rates (M34). AWWA, Denver, Colo. (1992).
19. AMATETTI, E.J. Managing the Financial Condition of a Utility. *Jour. AWWA*, 86:4:184 (Apr. 1994).
20. Massachusetts Acts of 1989, Chapter 275, Section 15, Boston, Mass.
21. Massachusetts Dept. of Public Utilities Order 92-101, Boston, Mass. (Dec. 14, 1992).
22. LENT, T. Philadelphia Water Department Conservation Pilot: Final Evaluation. Energy Coordinating Agency of Philadelphia, Philadelphia, Pa. (Feb. 6, 1989).
23. SATTERTHWAITE, K. Personal comm. (Jan. 27, 1994).
24. Water Board Water and Sewer Rate Schedule, New York, N.Y. (July 1, 1993).
25. REYNOLDS, E. & ROBISCHON, J. Personal communication (Jan. 1994).
26. MILLER, M. ET AL. Final Report on the Investigation of Uncollectible Balances, Docket No. I-900002. Bureau of Consumer Services, Div. of Consumer Res., Pennsylvania Public Utility Commission, Harrisburg, Pa. (1992).
27. PENNY, R. Personal communication (Feb. 1994).
28. SMELTZER, D.P. Personal communication (Feb. 1994).
29. Bridgeport Hydraulic Co./Aquarion 1994 Legislative Program (handout via telefax, Mar. 18, 1994).
30. BINGAMAN, L. Personal communication (Feb. 1994).
31. Colton, R.D. Personal communication (Jan. 1994).



**About the author:** Janice A. Beecher is a senior research specialist at the National Regulatory Research Institute (NRRI) and adjunct associate professor in the School of Public Policy and Management at Ohio State University, 1080 Carmack Road, Columbus, OH 43210. She has worked 10 years in the field of public utility economics and regulation. She is a member of AWWA and its rates and charges and conservation committees and is on the water subcommittee of the National Association of Regulatory Utility Commissioners. Beecher's work has been published previously by JOURNAL AWWA and by NRRI. She has a BA degree from Elmhurst College, Elmhurst, Ill., and MA and PhD degrees from Northwestern University in Evanston, Ill.