



It is one of the great ironies of America. In the most capitalist, free-market nation in the world, most citizens receive their water and wastewater services from government entities. Contrast this with the United Kingdom, where almost all water services are provided by private systems.

While more than half of drinking water utilities in the United States are privately owned (National Association of Water Companies, 2008), they provide only 13 percent of Americans with their drinking water. And about 3 percent of Americans get wastewater services from the 20 percent of wastewater utilities that are privately owned.

IT TAKES TWO

Private water services take two forms. The first is investor-owned utilities (IOUs) which are regulated by state public utility commissions. In other words, an IOU owns and operates the system in its entirety as a for-profit enterprise subject to economic regulation.

The other form is the public-private partnership in which a private company manages a municipal system under contract or license with the community, including provisions relating to the public work force. More than 1,300 government entities, usually municipalities, contract with private companies to provide water and/or wastewater services. While still very small relative to the government-owned and operated sector, the private water industry has been making steady gains. According to the 11th annual report from *Public Works Financing*, the market for services has grown 5 to 12 percent since 2000, as measured by total dollar value, and outsourcing of water operations to the private sector increased 4.3 percent.

The National Association of Water Companies esti-



mates the private drinking water business at \$4.3 billion per year and the PPP or contract management business at \$1.7 billion per year.

Since private water utilities are both dependent on customer satisfaction and are for-profit businesses, they have the necessary incentives to maintain water rates and investments at a level adequate to maintain excellent service and the long-term integrity of their infrastructure. Moreover, they have occasionally faced local pressure resulting from a variety of complaints, usually due to resistance to rate increases.

Adequate pricing, rate structures, and investments are truly distinguishing characteristics between government-owned and operated systems and private ones. Elected officials raising water rates amounts to a political, rather than a business decision—a veritable root canal during an election year.

It is no accident that the water sector, which is dominated by government control, is suffering from a severe lack of investment and deteriorating infrastructure. The Environmental Protection Agency (EPA) estimates an investment "gap" over 20 years of more than \$220 billion dollars for capital needs alone, assuming rates remained steady which, fortunately, they will not (U.S. Environmental Protection Agency, 2002).

An August 2002 General Accountability Office (GAO) report (U.S. General Accounting Office, 2002) on drinking water and wastewater utilities indicated that 29 percent and 41 percent, respectively, were not generating enough revenue from user rates and other local revenue sources to cover their full cost of service. Roughly one-third of the utilities deferred maintenance because of insufficient funding, had 20 percent or more of their pipelines nearing the end of their useful life, and lacked the basic plans for managing their capital assets.

During my tenure as Assistant Administrator for Water at the EPA, we calculated that American households spent an average of \$707 annually on soft drinks and noncarbonated beverages compared to an average of \$474 per year on water and wastewater charges. (Mehan, 2003)¹ Basically, American households are paying only 0.5–0.6 percent of income, on average, for water and sewer bills (Congressional Budget Office, 2002).

PUBLIC-PRIVATE PARTNERSHIPS

Mark Strauss, president of American Water Enterprises, a private water company, has made the connection between the utilization of public ownership and private operations and closing the water infrastructure investment gap. (Strauss, 2008, 14–18). Strauss recognizes that many communities lack experience and expertise to design or implement capital upgrades or renewals. But private water companies' very business is upgrading infrastructure, thereby accumulating skills, resources, specialized knowledge and staff—all of which could be accessible to communities as needed. "Through partnerships, municipalities gain affordable access to such expertise," says Strauss (Strauss, 2008, 18).

Strauss also believes these partnerships can help communities "by bridging the capital gap." A private utility can offer lower costs through better management, modern metering techniques, leak detection technologies, access to capital, emergency response, and overall cost effectiveness.

Indeed, just such a partnership saved Buffalo, New York, \$21 million. And in Seattle, the Tolt Water Treatment plant under American Water's management has saved 40 percent of previous costs.



Strauss is a great believer in the concession model, which grants communities access to funds that a private utility anticipates it can save. "Partnerships have been shown to save approximately 20 percent a year in operations," claims Strauss. "So a water system that costs a town \$1 million to operate may only cost a water utility \$800,000" (Strauss, 2008, 17).

A private company can offer a town a lump sum of money, up front, which it can use for other purposes such as roads, schools, or pensions.

"Public-private partnerships offer one of the most viable ways in which cities, towns and communities can access the industry expertise and capital of the private sector," says Strauss (Strauss, 2008, 18).

In Washington most of the activity on water infrastructure is a drive by the municipal systems for a new trust fund to support a variety of infrastructure investments. Two big obstacles, however, make this a difficult case to make even in a changing political climate. First, a number of the municipal-oriented water associations do not agree among themselves on a source of a dedicated stream of revenue for such a trust fund. The obvious choice would be water or wastewater, by volume, but that would defeat their own purposes by putting the costs back on local rate payers, circulating the dollars through Washington, and back out to a different community with a heavy discount. Given the Democratic majority's commitment to "pay-go" rules, this is a stumbling block.

The other obstacle is the crushing truth that the federal government is broke. The General Accounting Office shows that demographic trends and rising health costs yield a structural deficit, which will require either cutting federal spending by 60 percent, or raising taxes to a

level twice that of today's, to balance the budget in 2040 (Walker 2008a, 9).

No wonder that David M. Walker, Comptroller General of the United States, says we are facing "an explosion of debt" and "unprecedented fiscal risks" (Walker, 2008b, 2).

RAISE THE CAP

A more modest effort, one that would benefit private companies in the water sector, with no harm to municipal systems, is an attempt to raise the state cap on private activity bonds (PABs). This would be one small blow on behalf of making more private equity available for water and wastewater needs. It would level the playing field for financing critical water infrastructure based on the public purpose intended, not a particular ownership or management structure.

Based on the outcome of removing solid waste facilities from the volume cap in 1986, removing PABs for public purpose drinking water and wastewater facilities from the state volume cap would produce an additional \$1 to \$2 billion in water infrastructure investment annually at first, potentially increasing to \$5 to \$6 billion annually as the PPP industry matures. Unfortunately, there is not much political steam behind this proposal either, but a new administration might take up the cause.

The American water sector is primarily a governmental operation, but private companies are providing needed services, expertise, and capital while injecting healthy competition into the social and economic marketplace. The nation will, hopefully, enjoy even greater benefits from the private provision of water and wastewater services in the years ahead.



NOTE

1. For a detailed calculation, see U.S. General Accounting Office (2002).

REFERENCES

Congressional Budget Office. 2002, Future Investments in Drinking Water and Wastewater Infrastructure. ISBN 0-16-01243-3. November.

Mehan, G. Tracy III. 2003. Investing in America's water infrastructure. Keynote address to the Schwab Capital Markets' Global Water Conference, Washington, D.C., April 15. http://www.epa.gov/water/speeches/041503tm.html.

National Association of Water Companies. 2008. Jan. 8. http://www.nawc.org/about/about-a.htm.

Strauss, Mark. 2008. Partnering to build better infrastructure. Water & Wastes Digest, Oct. 7.

U.S. Environmental Protection Agency. 2002. Clean Water and Drinking Water Infrastructure Gap Analysis. September. http://www.epa.gov/waterinfrastructure/infrastructuregap.html.

U.S. General Accounting Office. 2002. Water Infrastructure: Information on Financing, Capital Planning, and Privatization. GAO-02-764. August. http://www.gao.gov/new.items/d02764.pdf.

Walker, David M. 2008a. Saving our future requires tough choices.

Presentation to the Forum Club of the Palm Beaches. Feb. 21. U.S.

Government Accountability Office, GAO-527CG. http://www.gao.gov/cghome/d07527cg.pdf.

Walker, David M. 2008b. Transforming government to meet the demands of the 21st century. Presentations to The Federal Midwest Human Resources Council and the Chicago Federal Executive Board. Aug. 7. U.S. Government Accountability Office, GAO-07-1188CG. http://www.gao.gov/cghome/d071188cg.pdf.



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Policy Push—Water Services

PERMIT PRIVATE EQUITY

Congress should pass, and the President should sign, an amendment to the Internal Revenue Code to remove private activity bonds for public purpose drinking water and wastewater facilities from state volume caps, which set ceilings on the maximum amount of these bonds issued within a state. This would accelerate and increase overall investment in water infrastructure through public-private partnerships and permit private equity as an additional source of capital for water projects.

