

Removing the Political Shortage of Water

Brief Analysis No. 659

by H. Sterling Burnett and Ross Wingo

May 14, 2009

About 82 percent of Americans receive drinking water via publicly-owned water systems, according to the Environmental Protection Agency (EPA). Many of these municipal and regional systems operate at a loss, meaning users' fees don't cover the cost of treating and delivering the water. Many water authorities are critically behind on maintenance. They lack the capital to update their water purification and wastewater treatment plants, or to secure additional water supplies to meet expected growth in demand.



Dallas Headquarters:
12770 Coit Road, Suite 800
Dallas, TX 75251
972.386.6272
Fax: 972.386.0924
www.ncpa.org

Washington Office:
601 Pennsylvania Avenue NW,
Suite 900, South Building
Washington, DC 20004
202.220.3082
Fax: 202.220.3096



Experience in other countries shows that privatization could solve these water supply problems.

Problem: Funding Infrastructure. The majority of drinking water supply and treatment facilities and wastewater treatment plants in the United States are owned and operated by the government. According to the EPA, many need to be upgraded or replaced, at an estimated cost of nearly \$350 billion over the next two decades.

These projects cannot be funded from monthly municipal water fees, which don't even cover operating expenses. In 2002, the Government Accountability Office found that 29 percent of drinking water and 41 percent of wastewater systems did not raise enough revenue to cover the cost of water distribution, much less the maintenance of capital equipment. Furthermore, it found that nearly 30 percent of all water systems had deferred water infrastructure projects due to a lack of funds. A 2002 EPA report projected a \$222 billion shortfall in capital spending for needed drinking and wastewater infrastructure renovation between 2000 and 2019.

Problem: Public Health. The U.S. population is expected to grow

to 325 million by 2020. This increase will create new demand for clean water services. Existing water systems must be renovated, and new infrastructure must be built.

In a 2007 congressional hearing, the EPA warned that "numerous treatment facilities that process water and wastewater are in need of upgrading [in order to protect] public health." A National Association of Water Companies (NAWC) survey found that 41 percent of the public water facilities that established public-private partnerships had previously failed to comply with the Federal Safe Drinking Water Act.

Solution: Private Financing. Local governments often contract with private firms to replace infrastructure and provide financing.

For example, a 1993 outbreak of cryptosporidium parasites forced a \$90 million overhaul of Milwaukee's water purification system. In response, the city's Metropolitan Sewerage District contracted with United Water to renovate the infrastructure and temporarily operate the wastewater treatment system. United Water's upgrades came in below cost and the city's water supply exceeded all federal, state and local quality standards. As a result, United Water was allowed to take over the system entirely and saved the district about \$170 million over 10 years.

Private companies also provided capital financing in Buffalo, N.Y. The city saved \$21 million from a public-private agreement. In British Colum-

Removing the Political Shortage of Water

bia, Canada, private firms partnered with local governments to finance C\$5 billion of C\$9 billion in water-related construction costs.

Solution: Preserving Public Health. The NAWC also reports that all the noncomplying facilities in its survey complied with the EPA's water quality standards after they partnered with private firms. Also, the AEI-Brookings Joint Center for Regulatory Studies found that the safety records of private water systems are comparable to public systems, and sometimes better.

Abroad, studies have found operating and infrastructure improvements from privatization have improved water quality. For example, a study from the Universidad Torcuato Di Tella in Buenos Aires, Argentina, found that water privatization reduced child mortality by 8 percent.

Solution: Increased Efficiency. According to the Rio Grande Foundation, a research institute in New Mexico, private systems are more efficient than government-run systems:

- Operating expenses are 21 percent lower for privately run systems than comparable government-run water systems.
- Maintenance costs for privately run water suppliers are on average half that of public water systems.
- Private water companies require less than half as many employees as public water systems and spend one-third less of water sales revenue on employee salaries.

The public officials who manage water systems often receive especially large salaries. For example, the superintendent of the Great Neck Water Authority outside New York City earns more money than the governor of New York. The manager of the Jericho, N.Y., water district receives such

additional benefits as a car and a residence.

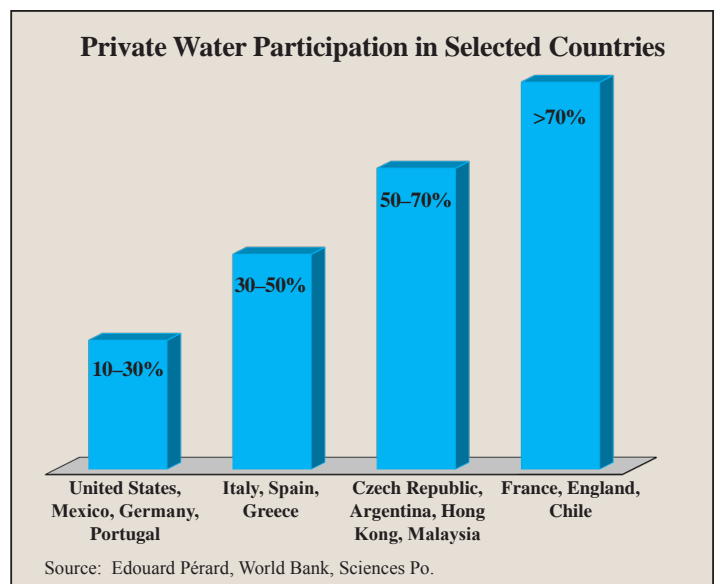
Lower Rates.

Consumers benefit when private suppliers are allowed to manage water supplies:

- Water fees are slightly lower — an average of \$14 less per household per year — in counties where water is provided solely by private companies, according to the AEI-Brookings study.
- The AEI-Brookings study found ratepayers saved about 10 percent or \$33 per year, on average, in counties served by a number of private companies.
- The Rio Grande Foundation found even higher savings, an average of 25 percent, on water rates in areas where a number of private companies provide water and sewage treatment.

Solution: Private Water Companies. In contrast to the United States, private companies dominate the market for water delivery and wastewater treatment in Europe. Private water delivery has long existed in France. In 1782, around the time of the first French Revolution, the Perrier brothers' company began providing clean, running tap water in Paris. In London, private water companies operated for more than 200 years until a nationalization movement in 1903. England privatized water delivery in 1989.

Today, private companies provide drinking water and wastewater services to more than 70 percent of the people in France, England and Chile.



Other countries also depend on private water suppliers to treat and deliver water for large percentages of their populations [see the figure]:

- Private companies provide water for residential use for 30 percent to 50 percent of Greeks, Italians and Spaniards.
- And 50 percent to 70 percent of the people in the Czech Republic, Argentina, Hong Kong and Malaysia get water from private systems.

Conclusion. In order to ensure safe, sufficient and relatively inexpensive water supplies in the future, the U.S. water delivery system must change. Historically, municipal water authorities have been underfunded and many have been unable to keep water delivery systems operating safely and efficiently. The gap between needed resources and investments could grow due to the recession. Accordingly, the move to private financing and private water suppliers already taking place should be encouraged and expedited.

H. Sterling Burnett is a senior fellow and Ross Wingo is a research assistant with the National Center for Policy Analysis.