COHEN: Fixing The Nation’s Leaky Waterworks

COMPETITIVE BIDDING AND INNOVATIVE MATERIALS CAN SAVE BILLIONS

Here’s a novel idea: Why not unleash the creative talents of America’s best scientists and engineers, and allow the products and technologies they develop to compete in addressing the nation’s most pressing infrastructure problem? By allowing competitive bidding to determine the future of our underground water and wastewater systems, we can confront head-on one of our most vexing public health problems. To do so will condemn millions of Americans to a future of unsafe and unaffordable water.

First, let’s look at the scope of the problem.

Our vast underground water networks are in a deplorable state of disrepair. America is dotted with towns, large and small alike, that are served by leaking, corroded pipes. The magnitude of the problem is staggering. In a 2010 report, the U.S. Conference of Mayors predicted that over the 20 years from 2009 through 2028, $3.8 trillion will have to be spent rehabilitating the nation’s water and wastewater systems. According to the U.S. Environmental Protection Agency (EPA), underground pipes account for some 60 percent, or $2.28 trillion, of that total.

Widespread corrosion in metallic pipes is the primary cause of an estimated 300,000 water-main breaks in North America every year. Hundreds occur every day. Through the first 10 months of this year alone, Syracuse, N.Y., alone has recorded 284 water-main breaks.

Gregory M. Baird, former chief financial officer for Aurora Water, Colorado’s third-largest water utility, calculates that leaking underground pipes lose 2.6 trillion gallons of water every year, or 17 percent of all water pumped in the United States. Timothy Ford, a microbiologist and water researcher at Montana State University, argues that as pipes corrode and break, not only does water escape, but diseases enter the system. These corroded pipes then pose a serious threat to public health. If conditions are allowed to persist, the clean, affordable water families and businesses have come to take for granted will be supplanted by dirty, expensive water that can be the breeding ground for bacteria.

Because water systems are capital-intensive operations, when jurisdictions fail to raise sufficient funds to cover the cost of rehabilitating their underground water networks, repairs are put off, decay accelerates, and upgrades require even more funds. This vicious cycle is playing out all across the country.

With thousands of miles of corroded pipes already beyond their life expectancy, rehabilitation of the nation’s water networks is not simply an option; it is a necessity. How can governments, facing ballooning deficits in a sluggish economy, raise the sums required to restore the integrity of their water systems?

Until recently, the federal government, through the EPA-administered State Revolving Funds, was able to pick up some of the slack by providing capitalization grants to states to upgrade local water systems. However, the State Revolving Funds have not kept pace with the deterioration of water networks, and, given Washington’s own deficit problems, the federal “helping hand” will only get smaller and smaller.
With the feds' coffers all but empty, the growing financial pressure under which state and local governments will be operating in the decades to come will require new ways of doing things. Leaking, rupturing underground water pipes are not just a sign of physical decay; their presence is a blemish on those governments that have allowed these conditions to persist for decades.

In fact, many municipalities are doing themselves and their taxpayers a grave disservice by having procurement policies that effectively exclude certain materials and technologies from consideration in water-infrastructure projects. By narrowing the choices municipal asset managers have, these antiquated procurement policies raise the cost of rehabilitating underground water networks. Among the cities limiting competitive bidding for water and wastewater systems are Atlanta, Boston, Chicago, Cincinnati, Detroit, Los Angeles, New York, Philadelphia and Phoenix.

That's right, Detroit, home to the largest municipal bankruptcy in U.S. history, adds to its physical woes by eschewing open competition in upgrading its underground water system.

By contrast, other cities have opened up their bidding process to allow pipes made of polyvinyl chloride (PVC), ductile iron and other materials to slug it out in the spirit of "may the best technology win."

These cities include Charlotte, N.C.; Cleveland; Denver; Fargo, N.D.; Houston; Indianapolis; Jacksonville, Fla.; Las Vegas; Louisville, Ky.; Oakland, Calif.; San Antonio; and San Diego.

Groups as diverse as the U.S. Conference of Mayors, the American Legislative Exchange Council and the National Taxpayers Union support competitive bidding in confronting the crisis beneath our feet. They recognize one simple fact: Securing a safe and affordable water supply begins with procurement reform.

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