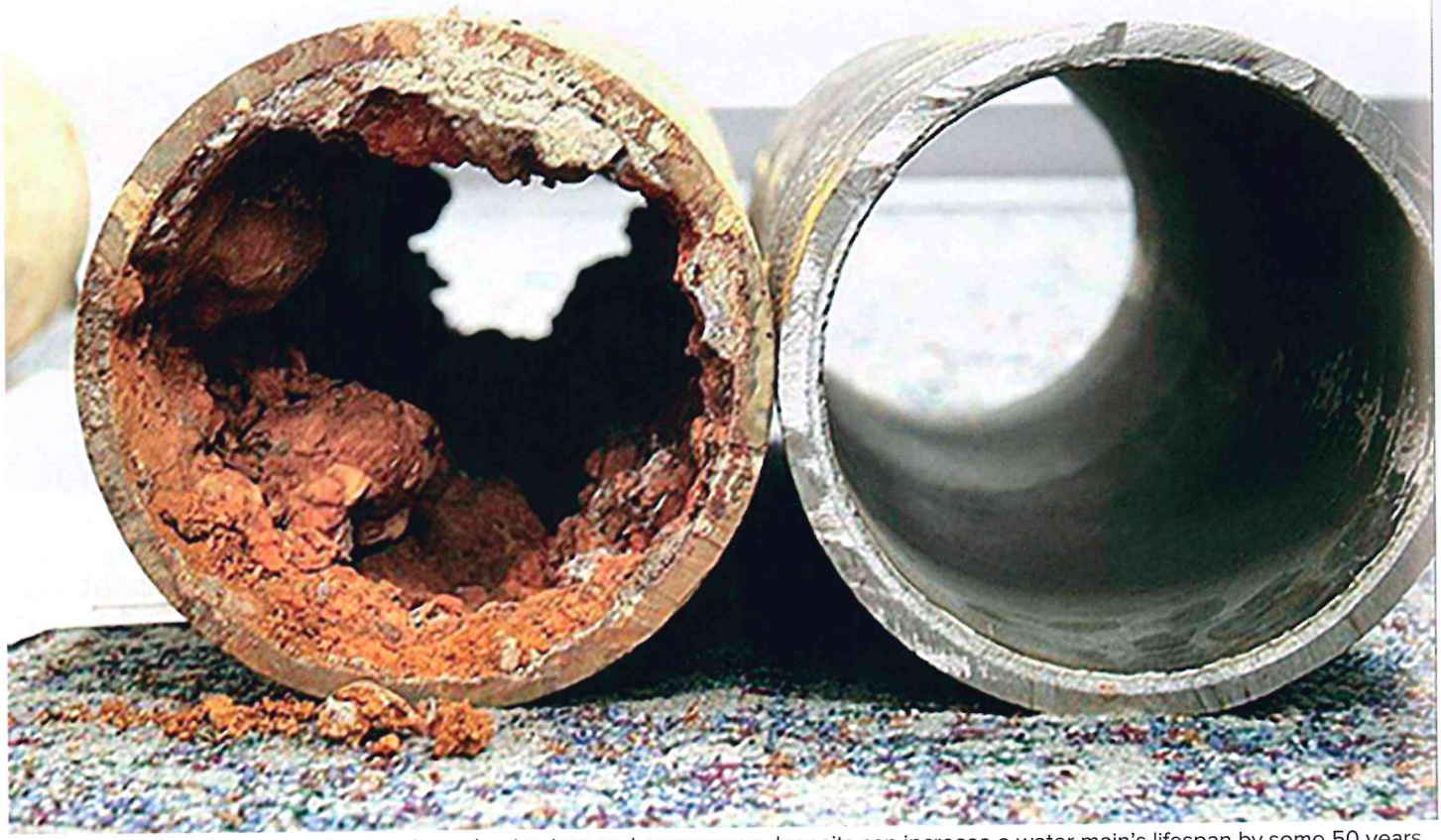
Fixing N.J.'s Water Infrastructure

An investment in the future

By John F. McKeon, Assemblyman, District 27; Co-Chair, Joint Legislative Task Force on Drinking Water Infrastructure



Before and after pipe segments show how clearing iron and manganese deposits can increase a water main's lifespan by some 50 years.

Replacing New Jersey's aging water infrastructure is critical for the economic vitality, environmental health, and quality of life within New Jersey municipalities.

While many get irritated at pothole-marred streets and worry about decaying bridges, we would be equally troubled if we could see into the subterranean world. There are about 60,000 miles of water pipes in our state, which, if laid end to end, would reach California and back 10 times. Because our densely populated areas were settled so long ago, many of the pipes are approaching the end of their useful life. Nearly half were laid in 1920 or earlier.

Due to their age, they have been leaking and bursting with increasing frequency. Depending on the system, some pipes lose about 25 to 30% of treated water before it ever gets to customers. The water delivery system for the City of Hoboken, largely laid during the Civil War, has averaged at least 20 water main breaks a year since 2012. When 1 in 10 people on our planet lack safe access to clean drinking water, there is something immoral about a quarter of our supply being wasted each year to leakage.

About 40% of state residents get their water from systems run by private, for-profit companies such as Suez, which services about 800,000 people in Bergen and Hudson counties.

The majority of residents are serviced by either municipal government agencies or regional water authorities, and many are quite small.

The Cost of Deferred Maintenance

The private utilities, because of their investors, have more access to the capital needed for improvements and repairs. They also are, generally speaking, more open to funding upgrades via their ratepayers. While many customers of municipally owned and operated systems have the advantage of paying much lower rates than private utility customers, these systems are more likely to be hampered by deferred maintenance.

Because systems decline faster as they reach their reasonably expected life span, the longer upgrades get put off, the more it will cost down the road. Emergency repair of a water main can cost three times as much as the cost to replace the same piece of equipment as part of a comprehensive plan. Economists point out that delaying investment in infrastructure hits lower income residents harder later on when systems fail.

"Depending on the system, some pipes lose about 25 to 30% of treated water before it ever gets to customers."

As a former mayor, I know well the constant pressure that local elected officials are under to minimize their residents' financial burden in still uncertain economic times. Local leaders face myriad challenges each and every day. These challenges require constant prioritization and adaptation. Asking residents to pay higher rates for a service that is for the most part dependable is difficult enough. Add in the fact that water systems are buried underground, out of sight, and all the elements of an extremely unconventional proposition are present for municipal governments charged with overseeing their own water authority.

While investor-owned utilities are somewhat better suited to upgrading their systems, even they are still constrained by the fact that a massive infrastructure investment would be an incredibly complex and expensive crusade for even the biggest of private entities to wage alone.

Moreover, their ability to raise their already highe–in comparison to public utility rates is weakened, because water has traditionally been very cheap. The majority of New Jerseyans pay about a penny a gallon for drinking water, with many paying much less than that ratio.

We are lucky to pay so little for something our bodies cannot live without, especially when we consider the costs for non-essential services like basic cable.

Federal Focus

The federal government has historically been the catalyst for widespread infrastructure investments. Though the need for increased infrastructure spending seems to currently be a cause that could garner a lot of support on Capitol Hill, recent trends and competing interests might suggest otherwise.

Over the last 25 years, Congress has shaved funding for water infrastructure projects by 75%. If there is any discernable consensus on an increase in spending at the federal level for infrastructure projects nationwide, speculation has centered solely on reinvestment in the country's transportation network.

Moving Forward in NJ

By the time you read this article, a bicameral, bipartisan group of state lawmakers will have met for the third time to hear testimony on the extent of New Jersey's water infrastructure problem and ways in which the legislature could promote best practices for the future stewardship of water supply systems.

Those in a position to collect data, raise funds, and make improvements should not wait. Many utilities, both private and public, have begun to take steps already.

This action partly stems from recognition of the fact that as global climate change brings more frequent and heavy-handed storms, out-of-date water systems will be stressed like never before. Emergency failures will bring about burdensome costs for repair, substantial inconvenience to commuters, and economic losses to businesses.

Currently, the New Jersey Environmental Infrastructure Trust–the independent finance authority which provides low interest rate financing–provides the best means for funding water infrastructure projects.

The Federal Environmental Protection Agency estimates that New Jersey will require an investment of $7.96 billion by 2027 to continue to provide reliably safe water to the public.

That is a shocking sticker price. However, the state's economic vitality depends on our ability to deliver water safely. Our urban areas and their surrounding towns are growing faster than ever before. These areas will harbor 20% of the state's population and employment growth over the next 30 years.

Of course, this assumes that infrastructure will be able to accommodate these new residents and businesses.

I will work with my colleagues to proactively address the overwhelming costs associated with providing clean water to our communities, and to support the economic viability of our water dependent industries. We invite those with possible solutions and success stories to share them. Together we will ensure the future economic vitality, and environmental integrity of the Garden State.

The Lead Issue

The Joint Legislative Task Force on Drinking Water Infrastructure was created by 2016 concurrent resolution 161, which received overwhelming support from both parties in Trenton. This special panel was born out of the public outcry over the water contamination crisis in Flint, Michigan, and the findings of high levels of toxic lead solder in over 30 Newark school buildings. It is apparent that lead contamination is another issue that will need to be tackled head on.

Lead gets into drinking water as it leaches through the last few feet of water delivery systems—older pipes, which are owned by the individual landowner. Water utilities utilize a compound lining to create a thin barrier between water and pipe. The lining does its job for the most part until the water is run through a building or home with older lead pipes, typically installed decades ago before the material began to degrade and before health experts were aware of how harmful lead can be to the human bloodstream.

The Task Force recommends that questions or concerns about lead leaching in older buildings or homes be immediately directed to the New Jersey Department of Environmental Protection. Even trace amounts of lead can be harmful, particularly to children and the infirm.

As information continues to be collected and specific recommendations are devised, all water utilities should consider taking a comprehensive look at the status of their systems.

Assemblyman John F. McKeon is the Co-Chair of the Joint Legislative Task Force on Drinking Water Infrastructure. He represents the 27th Legislative District. He also serves as Vice-Chair of the Assembly Environment and Solid Waste Committee.