State Efforts to Protect and Pay for Clean Drinking Water

BY KIM HARGRAVES TYRRELL AND DOUG FARQUHAR

Lead in drinking water systems, harmful algal blooms, stormwater sewer overflows and droughts have put states under increasing pressure to protect drinking water supplies and address faltering infrastructure. The American Society of Civil Engineers (ASCE) found that while water quality remains high for now, rapidly aging infrastructure could lead to costly and dangerous problems with drinking water in the near future. Despite these warnings, states have found that the funding needed to address these issues is inadequate.

Public water systems (as opposed to private systems) are funded primarily through user fees, but tax dollars and federal grants also provide support. Fees are linked to usage, meaning the more water used, the more money the water utility receives, and vice versa, so when consumers conserve water, the utility has less money to support its operations. Many water utilities struggle with how to communicate the value of water to their users, resulting in a growing gap between revenues and the capital necessary to fund larger infrastructure projects.

Maintaining current systems across the U.S. could cost $1 trillion in the next 25 years, according to the American Water Works Association, further stressing water utility budgets and capacity. Federal funds and public-private partnerships can partially address this gap.

Federal Action

Congress established the Drinking Water State Revolving Fund (DWSRF) in 1996 as an amendment to the Safe Drinking Water Act to provide public water systems with the means to finance infrastructure projects. Each year, the Environmental Protection Agency (EPA) awards capitalization grants to each state’s DWSRF. These funds allow states to provide financial assistance, typically a low- or no-interest loan, to eligible public water systems for drinking water projects. Congress appropriates between $800 million and $1 billion annually into the DWSRF. Between FY 1997 and FY 2015, Congress spent nearly $20 billion, funding more than 12,000 projects.

The capitalization grants are based on the Drinking Water Infrastructure Needs Survey and Assessment, administered by the EPA. It measures the needs of systems by state, looking 20 years ahead. To receive funds, states must establish a revolving fund and match the federal government allocation by at least 20 percent. As loans are paid back into the state’s revolving loan fund, the state makes new loans to other recipients, allowing the state’s DWSRF to “revolve” over time. Funding can be used for projects in these categories: treating; transmitting and distributing (pipes); developing, rehabilitating or replacing water sources; storing; creating new systems; and consolidating two or more systems.

The EPA recently unveiled a number of additional plans and programs to further help states address drinking water safety. In November 2016, the agency released the National Drinking Water Action Plan, calling for collaboration from all levels of government, utilities, community organizations and other stakeholders to increase the safety and reliability of drinking water. The plan encompasses six priority areas, one of which is revising the Lead and Copper Rule (LCR) to include best practices on lead service line replacement, and revised guidance for testing for lead in drinking water at schools.

The EPA also created the Water Infrastructure and Resiliency Finance Center in January 2015, offering best practices for funding and completing projects, as well as conducting regional finance forums on innovative uses of state revolving funds.

Lastly, the recently enacted Water Infrastructure Finance and Innovation Act Program (WIFIA) will provide low-interest-rate financing for water and wastewater infrastructure projects.
In the Further Continuing and Security Assistance Appropriations Act of 2017, Congress voted to appropriate $20 million for WIFIA. Initiated as a way to accelerate infrastructure investments, WIFIA works separately from, but in coordination with, the DWSRF programs to provide subsidized financing for large-dollar projects. Eligible projects include, but aren’t limited to, wastewater conveyance and treatment, drinking water treatment and distribution, desalination, aquifer recharge, and water recycling. Acquisition of property, if it is integral to the project or will mitigate its environmental impact, may also be eligible.

NCSL supports federal action on water policy issues, but believes such policy actions should be directed toward strengthening the capacity of the states to act as the integrator and manager of all programs affecting their water resources. This approach engages states and provides them the flexibility to pursue solutions that best meet their respective needs.

**State Action**

State legislatures often struggle with the role they should play in drinking water oversight. In Michigan, where the Flint lead crisis played out as a worst-case-scenario, the Legislature formed a committee to evaluate the issue and propose legislative actions, most of which are still pending, that would prevent a future crisis. One proposal would allow for the use of DWSRF monies to replace residential lead service lines.

States introduced over 400 bills related to water quality and infrastructure investments in 2016. Water source supplies and demands vary by state, so a one-size-fits-all approach isn’t likely to yield the best results. Hence, states have taken a variety of approaches.

- A New York bill would establish the **Clean Water/Clean Air/Green Jobs Bond Act of 2016**. This bond bill totals $5 billion, $2 billion of which would be allocated for water infrastructure projects.
- A 2016 **Pennsylvania law** makes $22 million available for grants or reimbursement for water and sewer projects. This reflects a $19 million increase over the previous year.
- **Tennessee passed a law** in 2015 authorizing the use of green infrastructure in areas that have combined sanitary sewage and storm water systems. The objective is to capture water before it enters the combined sewer system, thus alleviating pressure on overtaxed systems.

Failures in water infrastructure, whether related to aging pipes or contaminated sources, are costly and can have long-term public health impacts. With a renewed emphasis on infrastructure at the federal level, and new funding through programs such as WIFIA, states have an opportunity to take steps to not only prevent a water crisis, but to plan for potential shifts in supply and future demands.

**NCSL Contacts**

**Kim Tyrrell**  
(303) 856-1409

**Doug Farquhar**  
(303) 856-1397

**Kristen Hildreth** (federal)  
(202) 624-3597

---

In the *Further Continuing and Security Assistance Appropriations Act of 2017*, Congress voted to appropriate $20 million for WIFIA. Initiated as a way to accelerate infrastructure investments, WIFIA works separately from, but in coordination with, the DWSRF programs to provide subsidized financing for large-dollar projects. Eligible projects include, but aren’t limited to, wastewater conveyance and treatment, drinking water treatment and distribution, desalination, aquifer recharge, and water recycling. Acquisition of property, if it is integral to the project or will mitigate its environmental impact, may also be eligible.

NCSL supports federal action on water policy issues, but believes such policy actions should be directed toward strengthening the capacity of the states to act as the integrator and manager of all programs affecting their water resources. This approach engages states and provides them the flexibility to pursue solutions that best meet their respective needs.

**State Action**

State legislatures often struggle with the role they should play in drinking water oversight. In Michigan, where the Flint lead crisis played out as a worst-case-scenario, the Legislature formed a committee to evaluate the issue and propose legislative actions, most of which are still pending, that would prevent a future crisis. One proposal would allow for the use of DWSRF monies to replace residential lead service lines.

States introduced over 400 bills related to water quality and infrastructure investments in 2016. Water source supplies and demands vary by state, so a one-size-fits-all approach isn’t likely to yield the best results. Hence, states have taken a variety of approaches.

- A New York bill would establish the **Clean Water/Clean Air/Green Jobs Bond Act of 2016**. This bond bill totals $5 billion, $2 billion of which would be allocated for water infrastructure projects.
- A 2016 **Pennsylvania law** makes $22 million available for grants or reimbursement for water and sewer projects. This reflects a $19 million increase over the previous year.
- **Tennessee passed a law** in 2015 authorizing the use of green infrastructure in areas that have combined sanitary sewage and storm water systems. The objective is to capture water before it enters the combined sewer system, thus alleviating pressure on overtaxed systems.

Failures in water infrastructure, whether related to aging pipes or contaminated sources, are costly and can have long-term public health impacts. With a renewed emphasis on infrastructure at the federal level, and new funding through programs such as WIFIA, states have an opportunity to take steps to not only prevent a water crisis, but to plan for potential shifts in supply and future demands.