



August 19, 2020

The Honorable John Barrasso
Chairman
Committee on Environment and Public Works
U.S. Senate
Washington, D.C. 20510

The Honorable Tom Carper
Ranking Member
Committee on Environment and Public Works
U.S. Senate
Washington, D.C. 20510

RE: Support for Smart Water Technology Adoption

Dear Chairman Barrasso and Ranking Member Carper:

We write to seek your support for legislation to help restore the nation’s economy that has been devastated by COVID-19, while invigorating progress in protecting public health. As the country struggles to replace century-old water and wastewater infrastructure that is past its useful life, it makes sense to invest in the most current technologies and systems and build the most cost-effective systems to address the problems we face today and into the future. Specifically, we urge you to provide direct federal assistance to the water sector to leverage smart water technologies to deliver improved public health, environmental protection and a robust economy as part of water resources legislation as the committee works with its House counterparts on the America’s Water Infrastructure Act and Drinking Water Infrastructure Act.

Chairman Barrasso
Ranking Member Carper
August 19, 2020
Page Two

Since the enactment of the Clean Water Act and the Safe Drinking Water Act, the financing gap between infrastructure investment needs and resources has grown exponentially as documented by the U.S. Environmental Protection Agency's *Clean Watersheds Needs Survey* and *Drinking Water Infrastructure Needs Survey*, as well as various stakeholders' evaluation of the state of the nation's water infrastructure. The American Society of Civil Engineers' *Infrastructure Report Card* highlights the challenges faced by our water infrastructure, detailing that our drinking water infrastructure is rated at D and wastewater infrastructure at D+. We can address these situations and improve the protection of the public's health through the modernization of our water and wastewater infrastructure.

In a period of economic and technological transitions, we have the chance to capitalize on the capabilities and benefits of the immense advances in the accessibility to sensor technology, advanced metering infrastructure and cloud computing power and capacity to allow our drinking water, wastewater, irrigation and water recycling utilities to leapfrog decades of underinvestment. We believe a national infrastructure policy that taps into this capability would deliver a new and improved way of conducting the water sector's business and stretch limited infrastructure capital resources. We can address affordability, improve public health, protect our environment, and provide for a resilient water sector capable of meeting future challenges by integrating smart water technologies with the next generation of water infrastructure programs.

This integration can be realized through the establishment of a federal assistance program that assists water, wastewater and water recycling agency managers' efforts to design and construct projects using a smart water infrastructure portfolio. This portfolio could include:

- Digital Information:
 - Water delivery services can be made more efficient by creating data management systems that better inform water managers to understand demand and supply needs upon which the storage, treatment, and conveyance of water is tuned, relying on the findings of such data to justify decisions.
 - Wastewater collection and management of wastewater flows can be fine-tuned to leverage the existing infrastructure to improve capacity management from collection systems and reduce capital investments.
 - Intelligent data management can ensure that water recycling treatment systems operate as designed, and alert managers about when there is a need for operational changes.
- Smart Technologies:
 - Improved resiliency to respond to changing local and regional climate conditions can be achieved by relying upon technologies that will improve the efficiency of physical operations leading to reduced water losses and the reuse of wastewater flows.

Chairman Barrasso
Ranking Member Carper
August 19, 2020
Page Three

- Deployment of technologies that deliver real-time data and allow for interactive decisionmaking, water, wastewater and water recycling managers can implement actions that would minimize potential system disruptions and enhance decisions that deliver economic efficiencies that address affordability needs for the delivery of services and improved public health.
- System automation and remote monitoring of water, wastewater and water recycling systems' performance can deliver operational changes to improve operations management to address traditional and emerging needs, including pandemics, climate impacts, and natural disasters.
- Improved asset management and longer infrastructure lifecycles can be achieved through the use of smart technologies that can provide critical information to better inform water operators, on a real-time basis, on how to modify management practices to improve the performance of existing water distribution and wastewater conveyance and treatment systems.

As Congress considers water resources legislation, we strongly urge that any response commits to rebuilding our nation's water infrastructure with incentives to adopt smart water technologies. This focus will help to ensure that all Americans have access to affordable, safe, and reliable water supplies and waste and stormwater management and treatment systems that are resilient to the challenges of today and tomorrow.

Sincerely yours,

American Society of Civil Engineers
American Water Works Association
Association of California Water Agencies
Association of Metropolitan Water Agencies
California Association of Sanitation Agencies
National Association of Clean Water Agencies
National Water Resources Association
Rural Communities Assistance Partnership
U.S. Water Alliance
Water & Wastewater Equipment Manufacturers Association
Water Environment Federation
Water Research Foundation
WateReuse Association
Western Urban Water Coalition