

**Statement for the Record of**

**The American Society of Civil Engineers**

**on**

**“Building Back Better: The Urgent Need for Investment in  
America’s Wastewater Infrastructure”**

**United States House of Representatives**

**Committee on Transportation & Infrastructure Subcommittee on  
Water Resources & Environment**

**February 23, 2021**

## **Introduction**

The American Society of Civil Engineers (ASCE) appreciates the opportunity to submit our position on the importance of long-term, strategic investment in our nation's water infrastructure systems. ASCE also thanks the U.S. House of Representatives Transportation and Infrastructure Subcommittee on Water Resources and Environment for holding a hearing on this critical issue. ASCE is eager to work with the Subcommittee in the 117<sup>th</sup> Congress to reauthorize the Clean Water State Revolving Fund. With millions of new users expected to be connected to centralized wastewater treatment centers in the coming years, our nation's wastewater systems will continue to be tested.

As we prepare for the year ahead, ASCE urges Congress to prioritize our nation's water infrastructure by developing legislation that not only makes critical investments, but creates jobs, protects public safety and acts as an economic recovery tool. Investment in our nation's wastewater systems should be included in any broad infrastructure package that is considered.

### **ASCE's 2017 Infrastructure Report Card**

Infrastructure is the foundation that connects the nation's businesses, communities, and people, serves as the backbone to the U.S. economy, and is vital to the nation's public health and welfare. Every four years, ASCE publishes the *Infrastructure Report Card*, which grades the nation's major infrastructure categories using a simple A to F school report card format. The Report Card examines the current infrastructure needs and conditions, assigning grades and making recommendations to raise them.

ASCE's *2017 Infrastructure Report Card* rated the overall condition of the nation's infrastructure a cumulative grade of "D+" across sixteen categories, with an investment gap of \$2 trillion. The Report Card gave our nation's wastewater infrastructure category a grade of "D+," while our nation's drinking water infrastructure category received a grade of "D." **On March 3, 2021 ASCE will release the *2021 Report Card for America's Infrastructure*. The 2021 Report Card will grade 17 categories of the nation's infrastructure, with stormwater being added for the first time.**

Nearly 240 million Americans – 76% of the population – rely on the nation's 14,748 treatment plants for wastewater sanitation. There are over 800,000 miles of public sewers and 500,000 miles of private lateral sewers connecting private property to public sewer lines. Each of these conveyance systems is susceptible to failure, blockages, and overflows.

As cities continue to experience population growth and rural households switch from septic systems to public sewers, pressure on existing centralized systems will require billions of dollars in investment to meet federal regulatory requirements. Over the next two decades, it is estimated that more than 56 million new users will be connected to centralized wastewater systems, which will require the construction of 532 new systems by 2032 to

meet future demand. The U.S. Environmental Protection Agency (EPA)<sup>1</sup> estimates that over the course of the next 20 years, \$271 billion will be needed for wastewater infrastructure.

Unfortunately, the COVID-19 pandemic has made a difficult situation worse. A sizable portion of our existing infrastructure systems are supported with user-generated revenue streams. With the onset of the pandemic, commercial water use is down and municipal and state budgets are buckling under unprecedented demands, meaning less support is available for parks, schools, and other publicly-owned infrastructure, precisely at the time we should be investing.

Therefore, ASCE believes that Congress should make infrastructure investment a centerpiece of its immediate response and long-term economic recovery strategy. Now is the time to renew, modernize, and invest in our infrastructure to maintain our international competitiveness.

### **Investment Shortfalls Total Billions of Dollars**

A well-maintained public drinking water and wastewater infrastructure is critical for public health, strong businesses, and clean waters and aquifers. However, funding both capital projects and operations and maintenance (O&M) is difficult because the public often does not appreciate the modern convenience of wastewater and drinking water treatment, making it difficult to convey the need for water rate increases. Furthermore, capital spending has not kept pace with needs. If these trends continue, the funding gap will only widen, resulting in leaking pipes, source water pollution, and increases in the cost of O&M.

Despite increased efficiency methods and sustainable practices, there is a growing gap between the capital needed to maintain drinking water and wastewater infrastructure and the actual investments made. To estimate this gap and quantify the failure to invest in our water infrastructure, last year ASCE, in conjunction with the Value of Water, released *The Economic Benefits of Investing in Water Infrastructure: How Failure to Act would Affect the U.S. Economic Recovery*.

This economic study analyzed the impact of current water infrastructure investment trends on America's GDP, jobs, personal income, and businesses and found that the U.S. had an investment gap of \$81 billion in 2019 alone, with \$129 billion in capital needs but only \$48 billion in investments. Furthermore, despite the growing need for water infrastructure, the federal government's share of capital investment has fallen from 31 percent in 1997 to a mere four percent in 2017. This underinvestment, will cause our infrastructure to further degrade, resulting in a loss of 636,000 jobs annually and \$2.9 trillion in GDP by 2039.

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<sup>1</sup> Environmental Protection Agency, [Clean Water Needs Survey, 2012 Report to Congress](#), December 2016.

If as a nation we invested an additional \$964 billion over the next 10 years or approximately \$96 billion annually across all levels of government and the private sector to our water infrastructure needs, the benefits would be immense and include:

- \$732 billion in business sales would be protected. . The economic gains from more reliable and efficient water systems would build over time; most would accrue in the second decade as households and businesses reap the benefits of improved water reliability.
- The investment would protect 333,000 jobs and household disposable income would rise by more than \$2,000 per household.
- Of these new jobs protected, 26 percent would be in manufacturing and professional services stimulated by the boost in infrastructure spending.

### **Solutions**

Fortunately, Congress has provided some federal funding options that could help close the funding gap needed for drinking water and wastewater infrastructure if appropriated. Certainly, federal funding is not the only answer; since the mid-1970s, money from local and state governments has represented an increasing percentage – nearly 95% – of public drinking water and wastewater investment. However, cities and towns across the country report that complying with federal wastewater and stormwater regulations represent some of their costliest capital infrastructure projects.

As some water systems have become privatized, private capital has become another financing mechanism. Regardless of whether a water system is publicly or privately owned or managed, households and businesses still ultimately foot the bill. Therefore, care must be taken to ensure that rates are set at levels sufficient to maintain and upgrade infrastructure while not increased so much that low-income residents would face financial hardship. ASCE was pleased to see the creation of the Low-Income Household Drinking Water and Wastewater Emergency Assistance Program under the fiscal year 2021 appropriations package. Providing \$638 million to the Department of Health and Human Services for grants to states in order to assist low-income households pay for their drinking water and wastewater utilities will prove vital to families that struggle to pay their water bill. We look forward to working with Congress to ensure that this program continues to receive sufficient funding going forward.

Next, the federal government funds many infrastructure categories, and of all of these, water services receive less than 5%. However, the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) – both authorized by Congress several decades ago – play a vital role in providing much-needed support for investments in state and local drinking and wastewater infrastructure.

In the past 30 years, the federal government has loaned \$42 billion to all 50 states, the District of Columbia, and Puerto Rico through the CWSRF, which has given states the ability to fund over \$126 billion in wastewater infrastructure system improvements – all through low-interest financing. Every dollar provided by the federal government is

matched at 20 percent by the state.

Likewise, the DWSRF program provides low-interest loans to state and local infrastructure projects. The EPA provides an allotment of funding for each state, and like the CWSRF, each state provides a 20 percent match. Since the program's inception, \$35.4 billion of low-interest loans have been allocated. ASCE was pleased that the DWSRF was reauthorized at increasing funding levels in the America's Water Infrastructure Act of 2018 (P.L. 115 – 270, Sec. 2023) and urges Congress to reauthorize the CWSRF at increasing funding levels, as well.

ASCE believes that our nation's elected leaders need to act quickly to address the growing gap in wastewater infrastructure investment. We urge Congress to:

1. Renew the federal commitment to water infrastructure by reinvigorating the CWSRF program through permanent reauthorization and tripling the amount of annual authorization and appropriations.
2. Fully fund the WIFIA program at no less than the FY21 enacted level of \$65 million.
3. Eliminate the state cap on private activity bonds for water infrastructure projects to bring an estimated \$6 billion to \$7 billion annually in new private financing to bear on the problem.
4. Create legislation to allow Public Private Partnerships (P3) as one of many methods of financing water infrastructure improvements. ASCE supports the use of P3 project delivery methods to enhance federal, state and local resources when the public interest is protected.
6. Preserve tax exempt municipal bond financing, which provides communities with low-cost access to capital for drinking water and wastewater infrastructure upgrades.
7. Support green infrastructure solutions, which provide co-benefits such as water and quality improvement, aesthetic value to communities, and cost competitiveness.
5. Create legislation to establish a dedicated source of revenue for drinking water and wastewater infrastructure projects that would provide a stable, long-term basis for financing for these critical systems.

Finally, ASCE believes our nation must prioritize the investment needs of our wastewater and drinking water infrastructure to ensure public health, a strong economy, and clean and safe water sources. Strategic, robust, and sustained investments in these water infrastructure systems from a variety of mechanisms must be made quickly if we hope to close the growing funding gap. ASCE thanks the Subcommittee for holding this hearing

and bringing attention to this critical matter. We look forward to working with you to find solutions to our nation's wastewater infrastructure investment needs.