

America's Water Infrastructure Act of 2018 Hearing

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Committee on Environment and Public Works

U.S. Senate

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2018 President of the American Society of Civil Engineers

\*On behalf of the American Society of Civil Engineers

**Introduction**

Ms. Kristina Swallow, P.E. is the current president of the American Society of Civil Engineers (ASCE). She is a civil engineering leader with more than 20 years of professional practice in water resources, transportation, and land development as a consultant, small business owner, and with city government. In addition to many other roles within ASCE, she also served as ASCE's AAAS (American Association for the Advancement of Science) Congressional Fellow and as a Legislative Aide, working on transportation policy issues for three years for U.S. Senator Tom Udall of New Mexico.

Ms. Swallow holds a Bachelor of Science in Civil Engineering from the University of Arizona, as well as a Master of Science in Engineering from the University of Nevada, Las Vegas.

ASCE appreciates the opportunity to discuss the importance of long-term, strategic investment in our nation's water resources systems. We also want to thank the U.S. Senate Committee on Environment and Public Works for your efforts to keep the Water Resources and Development Act on a biennial authorization cycle. ASCE is eager to work with the Committee in 2018 to find ways to further improve our nation's vital water resources systems.

**ASCE's 2017 Infrastructure Report Card and 2016 Economic Study, Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future**

Infrastructure is the foundation that connects the nation's businesses, communities, and people, serves as the backbone to the U.S. economy, and is critical to the nation's public health and welfare. Every four years, ASCE prepares a comprehensive assessment of the nation's 16 major infrastructure categories in its *Infrastructure Report Card*. Using a simple, familiar A to F school report card format, the Report Card examines current infrastructure conditions and needs, assigning grades and making policy recommendations to raise the grades.

ASCE's 2017 *Infrastructure Report Card*<sup>1</sup> gave our nation's cumulative infrastructure grade a grade of "D+" and determined that there is an investment gap of \$2 trillion over the next 10 years. Additionally, ASCE's 2016 economic study, *Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future*<sup>2</sup>, found that our nation's deteriorating infrastructure and growing investment deficit has a cascading effect on our nation's economy, impacting business productivity, gross domestic product (GDP), employment, personal income, and international competitiveness; in fact, our failure to act by 2025 carries an enormous economic cost to the tune of nearly \$4 trillion in lost GDP, which will result in a loss of 2.5 million jobs in 2025.

The economic consequences of our nation's infrastructure deficiencies also extend to families' disposable incomes, with each household in the U.S. losing \$3,400 each year through 2025; if left unaddressed, the loss will grow to an average of \$5,100 annually from 2026 to 2040. It is possible to close the infrastructure investment gap and avoid the economic consequences caused by this deficit, but it will require sustained and robust investment.

Our nation's water resources systems are crucial to our nation's economy, public safety, and the preservation and enhancement of our environmental resources. Our levees, dams, inland waterways, and ports protect hundreds of communities, support millions of American jobs, and generate trillions of dollars of economic activity. However, many of these infrastructure assets have reached the end of their design life, and the investment gap must be closed if we hope to both repair and modernize our water resources systems to be competitive in the 21<sup>st</sup> century.

## **Water Resources Systems**

### **Dams & Levees**

Our nation's 90,580 dams and over 30,000 miles of levees are critical components of risk reduction and protect communities, critical infrastructure, and trillions of dollars in property. However, it is estimated that \$80 billion is needed in the next 10 years to

<sup>1</sup> <https://www.infrastructurereportcard.org/>

<sup>2</sup> <https://www.infrastructurereportcard.org/wp-content/uploads/2016/10/ASCE-Failure-to-Act-2016-FINAL.pdf>

maintain and improve the nation's levees, while the Association of State Dam Safety Officials estimates the cost of rehabilitating our nation's federal and non-federal dams to exceed \$64 billion. Included in this is the U.S. Army Corps of Engineers' (USACE) estimate that more than \$25 billion will be required to address dam deficiencies for Corps-owned dams; at the current rate of investment, these repairs would take over 50 years to complete.

Investment is needed to rehabilitate deficient dams and to complete the national inventory of levees outside of the USACE's authority. ASCE supported the Water Resources Reform and Development Act (WRRDA) of 2014's reauthorization of the National Dam Safety Program and the Water Infrastructure Improvements for the Nation (WIIN) Act's authorization of the High Hazard Potential Dam Rehabilitation Program. We are, however, concerned that the National Dam Safety Program consistently receives only a portion of its annual \$13.9 million appropriations, while the High Hazard Potential Dam Rehabilitation Program has yet to receive any appropriations. Likewise, WRRDA 2014 created a new National Levee Safety Program to promote consistent safety standards, create levee safety guidelines, and provide funding assistance to states for establishing participating levee safety programs, yet it has received no funding other than funding for the levee inventory.

### Ports

The nation's 926 ports support over 23.1 million jobs and are responsible for \$4.6 trillion in economic activity. In fact, our ports serve as the gateway through which 99 percent of America's overseas trade passes. To remain competitive in the global market and to accommodate larger vessels, ports have been investing in their facilities and plan to spend over \$154 billion from 2016 to 2020 on expansion, modernization, and repair. However, ports are contending with larger container ships and do not always have adequate access to the user-fee funded Harbor Maintenance Trust Fund (HMTF), which would help these facilities prepare for larger vessels. Underinvestment in our nation's ports has resulted in, by some accounts, a 25 percent decrease in port productivity in the past ten years.

ASCE supported the provision in WRRDA 2014 designed to encourage the use of the HMTF revenues for its designated purpose. The HMTF's balance currently sits at over \$9 billion, but full appropriations of these funds have not yet occurred. Once fully funded, it will take five years of complete HMTF funding to dredge and restore channel depths and widths. ASCE urges the Committee to continue implementing the WRRDA 2014 agreement and increasing expenditures accordingly.

### Inland Waterways

The USACE operates and maintains a vast network of 25,000 miles of inland waterways and 239 locks that support half a million jobs, deliver more than 600 million tons of cargo annually, and are the nation's connection to inland and ocean ports and international markets. Barge transport is the most fuel-efficient mode of the transportation of goods, but with a majority of locks and dams reaching well beyond their

50-year design life and thus requiring frequent shutdowns for maintenance and repairs, nearly half of all vessels traveling through our inland waterways experience delays.

ASCE supported the 2015 increase of the Inland Waterways Trust Fund user tax, and although recent increases in investment have resulted in some improvement in the projected completion date of many inland waterway lock and dam rehabilitation projects, funding must continue at a higher and more consistent level to meet the large backlog of needs.

ASCE also championed Section 5014 of WRRDA 2014, which authorizes the USACE to enter agreements with non-federal interests, including private entities, to finance construction of at least 15 authorized water resources development projects. We were pleased that President Trump's infrastructure proposal included several provisions to remove barriers to implementation of this program. Alternative financing and delivery mechanisms are an important new resourcing tool that can help the USACE meet the growing needs of our nation's inland waterways infrastructure.

ASCE was pleased that WRRDA 2014 authorized a new water infrastructure financing mechanism, the Water Infrastructure Finance and Innovation Act (WIFIA), to be administered by the USACE and the U.S. Environmental Protection Agency (EPA). The WIFIA concept is modeled after a similar transportation project assistance program, the wildly successful Transportation Infrastructure Finance and Innovation Act (TIFIA). Under this program, the USACE is authorized to provide WIFIA support for an array of projects, including environmental damage reduction projects, hurricane and storm damage reduction projects, flood damage reduction projects, coastal or inland harbor navigation improvement projects, and/or inland and intracoastal waterways navigation projects.

ASCE's 2016 economic study found that from 2026 through 2040, the average annual investment gap for waterside improvements, including dredging and lock and dam repair, is expected to be \$1.9 billion, which will result in an economic loss of \$2.8 trillion of GDP and 1.2 million fewer jobs in 2040 than would otherwise be expected with modernized water resources systems in place.

### **America's Water Infrastructure Act of 2018 – WRDA 2018 – Solutions**

We are pleased with many of the provisions that have been included in America's Water Infrastructure Act of 2018, or WRDA 2018, including reauthorization of the National Dam Safety Program and the National Levee Safety Program.

We are also pleased with the bill's important alternative financing and delivery mechanisms, including a reauthorization of the WIFIA program, and we urge the USACE to continue its implementation of the WIFIA program.

Additionally, we support the provision that allows the USACE to retain user fees at recreation facilities for the use of operation, maintenance, and management at the site

where the fee is collected, and we urge the Committee to follow in the Administration's lead by authorizing new user fee collection and retention under the Section 5014 pilot program of WRRDA 2014.

We are disappointed that the bill does not include S. 2364, the Securing Required Funds for Water Infrastructure Now (SRF WIN) Act, a bill designed to help tackle our nation's water resources infrastructure investment deficit. 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. By 2025, the disparity between needed and anticipated funding for drinking water and wastewater systems will be \$105 billion.

The SRF WIN Act is an innovative new financing mechanism that blends the most successful parts of the State Revolving Funds and WIFIA to create a program that gives State Infrastructure Financing Authorities access to WIFIA loans for drinking water and wastewater infrastructure. This program would offer a new and efficient tool to leverage limited federal resources and stimulate additional investment in our nation's infrastructure while safeguarding against any cuts to the existing State Revolving Funds and WIFIA program. We encourage the Committee to include this new program in WRDA 2018 and look forward to working with you on this important new water resources financing mechanism.

Finally, ASCE urges Congress to act quickly to address the widening investment gap for water resources systems. We ask Congress to:

- Pass a Water Resources Development Act this year, to continue the two-year cycle;
- In line with the President's infrastructure proposal, give the USACE contract authority for projects to avoid the stop-and-start of construction currently occurring because of the annual appropriations process;
- Fully utilize alternative financing and delivery methods, such as public-private partnerships, when appropriate, including implementation of both the USACE's WIFIA program and Section 5014 of WRRDA 2014, and;
- Fully appropriate funds for existing federal infrastructure programs that have been authorized, including:
  - the WIFIA program at \$175 million over five years;
  - the High Hazard Potential Dam Rehabilitation Program at \$445 million over ten years;
  - the National Dam Safety Program at \$13.9 million annually;
  - the National Levee Safety Program at \$79 million annually, and;
  - the Harbor Maintenance Trust Fund at the full amount of fees collected to be allocated for its intended purpose.

The projects funded by these programs have already proven to be successful; providing more funding to existing programs rather than creating new programs will reduce overhead costs and startup time while still allowing for significant and noticeable improvements across our nation's water resources systems.

In conclusion, ASCE believes our nation must prioritize the investment needs of our water resources systems to ensure public safety, a strong economy, and the protection of our environmental resources. Strategic, robust, and sustained investments, through long-term, reliable federal funding, as well as through the utilization of financing mechanisms, must be made quickly if we hope to close the growing funding gap and restore America's world-class infrastructure. We thank you for holding this hearing and look forward to working with the Committee to find solutions to our nation's water resources investment needs.