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Statement for the Record of

The American Society of Civil Engineers

on

"Proposals for a Water Resources Development Act of 2022: Stakeholder Priorities"

Subcommittee on Water Resources and Environment
Committee on Transportation and Infrastructure

U.S. House of Representatives

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Introduction

The American Society of Civil Engineers (ASCE)[1] appreciates the opportunity to submit our position on the importance of long-term, strategic investment in our nation's water resources infrastructure systems. We also want to thank the House Committee on Transportation & Infrastructure 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 2022 to find ways to further improve our nation's vital water resources infrastructure systems.

While the passage of the Infrastructure Investment and Jobs Act provides a much needed down payment to revitalize the nation's water resources infrastructure, that legislation does not negate the need for passing a WRDA bill in 2022. Our water resources infrastructure systems are critical to our nation's economy, public safety, and the preservation and enhancement of our environmental resources. Our levees, dams, and other water infrastructure systems protect hundreds of communities, provide valuable services, 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 coupled with a generations-long underinvestment, a large and growing investment gap has emerged; this gap must be closed if we hope to both repair and modernize our water resources infrastructure systems to be competitive in the 21st century.

ASCE's *2021 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, safety, and welfare. Every four years, ASCE publishes the *Infrastructure Report Card,* which grades 17 major infrastructure categories using a simple A to F school report card format. Last March, ASCE released its *2021 Infrastructure Report Card*[2], giving the nation's overall infrastructure a grade of "C-," and identified an investment gap of $2.2 trillion. While the overall GPA increased into the "C" range for the first time since ASCE began grading the nation's infrastructure in 1998, much of critical water resources infrastructure remains in the "D" range. In the 2021 Report Card, dams and levees each received a "D,", while inland waterways received a "D+". The nation's ports remain a bright spot in the Report Card, with a grade of "B-" in 2021.

To further raise these grades, ASCE urges Congress to prioritize the repair, replacement, and modernization of our existing infrastructure, with a focus on resilience. ASCE also urges Congress to ensure long-term, consistent investment in our infrastructure systems by passing authorization legislation like WRDA every other year.

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[1] ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 150,000 civil engineers individually in private practice, government, industry, and academia who are dedicated to the advancement of the science and profession of civil engineering. ASCE is a non-profit educational and professional society organized under Part 1.501(c) (3) of the Internal Revenue Code. www.asce.org,

[2] https://www.infrastructurereportcard.org/

Dam Safety

The nation's more than 91,000 dams provide a wide range services and functions including water storage, flood control, power generation, and irrigation. Most dams are designed for a life span of 50 to 100 years and the average age of the nation's dams is roughly 57 years old. By 2030, 7 out of 10 dams in the United States will exceed 50 years of age. Additionally, many of the dams in the United States were not designed to account for the severe changes in weather and increased precipitation levels brought on by climate change.

ASCE's 2021 Report Card gave the nation's dams a "D" grade. Furthermore, the Association of State Dam Safety Officials (ASDSO) estimates that the total cost of rehabilitating just the nation's non-federal dams is more than $66 billion. Investment in dam safety is critical to rehabilitate existing dams that pose significant threats to communities throughout the country, support the missions and activities of state dam safety programs, and protect against the loss of life and destruction of property that would result from dam failure. These efforts are greatly supported by programs such as the National Dam Safety Program and the High Hazard Potential Dam Rehabilitation (HHPDR) Grant Program. ASCE applauds Congress for making technical improvements to the HHPDR program in WRDA 2020. These technical changes better clarified technical terms and eligibility requirements, allowing the program to operate more effectively in the future. **It is now critical that WRDA 2022 further support needed resources for federal dam safety programs, as well as needed reforms to expand the number of dams eligible for federal funds and protect communities.**

Levee Safety

In the United States, nearly 17 million people live or work behind a levee. The National Levee Database contains nearly 30,000 miles of levees around the country, and current estimates identify up to another 10,000 additional miles of levees outside of the jurisdiction of the U.S. Army Corps of Engineers (Corps).

Every state relies on levees to protect communities from flooding. However, the average age of the nation's levees is over 50 years old, with many built using less rigorous standards than those used today. Much like the nation's dams, the risk to the nation's levees is further exacerbated by increasingly severe weather patterns and heavier rainfall brought on by climate change. For moderate to high-risk levees in the Corps' portfolio, ASCE estimates that approximately $21 billion is required to make necessary improvements. This is of great concern given the fact that even well-maintained levees can be breached by water seeping underneath them. To address these concerns, the National Levee Safety Program, authorized in 2014, is tasked with establishing national levee safety guidelines, and establishing a levee rehabilitation program to support needed repairs for the nation's levees. Unfortunately, since the establishment of the National Levee Safety Program, Congress has appropriated far less than the $79 million authorized, with FY 2021 appropriations totaling just $15 million.

Ports

The country's more than 300 coastal and inland ports serve as significant economic drivers and places of employment. The past two years have demonstrated the critical role these facilities play in a functioning supply chain. Ports and port tenants plan to spend $163 billion between 2021 and 2025, concentrating on investments related to capacity and efficiency.[3] However, there is a funding gap of over $12 billion for waterside infrastructure such as dredging over the next 10 years, with additional billions needed for landside infrastructure.

Ports earned a "B-" on ASCE's 2021 Report Card for America's Infrastructure, which recognized the positive measures included for ports in the 2020 WRDA legislation. Specifically, WRDA 2020 included full utilization of the $10 billion balance in the Harbor Maintenance Trust Fund (HMTF) by allowing $500 million to be appropriated in FY 2021, with an increase of $100 million annually until it is fully expended by 2030. The full expenditure of the HMTF was a long-time ASCE priority and ASCE was pleased to see Congress finally address this issue in the last bill.

Inland Waterways

As the nation's "water highway", the country's inland waterway network spans 12,000 miles and serves an important purpose in the movement of a variety of goods, such as agricultural products. This infrastructure, which includes locks, dams, and navigation channels, has benefited from recent boosts in federal investment and an increase in user fees. However, the system still reports a $6.8 billion backlog in construction projects and ongoing lock closures[4], which harm the industries that rely on waterways to transport goods.

Inland waterways, on which about 830 million tons of cargo are moved annually, earned a "D+" on the Report Card. As with ports, WRDA 2020 included measures that ASCE considered positive for inland waterways. ASCE appreciated the adjustment of the Inland Waterways Trust Fund's (IWTF) cost share from 50% general revenue - 50% IWTF to 65% - 35% for construction and rehabilitation projects. The IWTF, which finances construction and rehabilitation efforts, is supported by a 29-cents per gallon tax on barge fuel.

U.S. Army Corps Project Financing

The Water Infrastructure Financing and Innovation Act (WIFIA) was authorized under the 2014 WRDA bill to support the development of water infrastructure projects and encourage increased private investment. Through the Corps Water Infrastructure Finance Program (CWIFP), the Corps is authorized to provide direct loans, which allows it to support non-federal projects for flood damage reduction, hurricane and storm damage reduction, environmental restoration, coastal or inland harbor navigation improvement, or inland and intercoastal waterways navigation improvement.

[3] https://infrastructurereportcard.org/wp-content/uploads/2017/01/Ports-2021.pdf

[4] https://infrastructurereportcard.org/wp-content/uploads/2020/12/Inland-Waterways-2021.pdf

Many of these types of projects involve both a federal and non-federal component or cost share. Because CWIFP projects are intended for non-federal projects, many would not be eligible for financing by the Corps. This exclusion limits the number of worthwhile projects that are critical to states and communities. **Extending eligibility would support the development of many more vital water infrastructure projects.**

Proposed Solutions

WRDA provides a unique opportunity to take necessary action to strengthen the nation's infrastructure. A biennial WRDA cycle provides federal agencies and communities throughout the country with the predictability to plan and make progress on infrastructure projects. To ensure the safety and extend the life of critical infrastructure such as dams and levees, and support more water infrastructure projects, we urge Congress to support the following priorities:

- Maintain a bipartisan two-year cycle and pass a Water Resources Development Act for 2022. This is critical in order to provide predictability to federal agencies for planning and review of projects and priorities and to be better able to respond to increasingly unpredictable threats such as climate change. This is also essential for the civil engineering community which relies on support from Congress, the Corps, and other agencies to ensure design, development, and construction of critical infrastructure moves forward in a timely and efficient manner. This helps to ensure infrastructure remains resilient in the face of increasingly evolving challenges, and that communities have access to needed services and protection from potential hazards.

- Support inclusion of the Twenty-First Century Dams Act, which provides increased funding authorizations and needed reforms for critical dam safety programs. ASCE has worked with legislators and a diverse coalition of industry stakeholders in support of this critical legislation which focuses on needed investments for retrofitting, rehabilitation, and removal activities for the nation's dams. ASCE worked closely with these stakeholders to secure a needed down payment for dam safety in IIJA through provisions originally written into the Twenty-First Century Dams Act. It is critical for Congress to build on this down payment by supporting the inclusion of the following in this year's WRDA:

    - Reauthorizing the National Dam Safety Program for an additional five years at a funding level of $43,000,000 per year, and remove requirements that states may not receive funds in excess of 50 percent of the cost of implementing state dam safety programs, which will support states with smaller state programs;

    - Increasing the authorized annual funding level for the HHPDR Program by $40,000,000 for a total of $100,000,000 per year;

    - Expanding eligibility criteria for the HHPDR program by removing the "unacceptable risk to the public" threshold to ensure hundreds more dams worthy of these funds are not excluded; and

- Establishing a new definition for "small underserved communities" and ensure that these communities are exempt from the program's non-federal cost share requirements. This definition reflects communities that own a dam or could be significantly impacted by dam failure and do not have sufficient resources to meet the law's cost sharing requirement. Many of these communities fall in downstream failure inundation areas, and this provision will help ensure that they are not placed at a greater risk of disaster caused by a dam failure.

- Fully and more equitably fund the National Levee Safety Program at the FY 2023 authorized level of $79 million and reauthorize the program beyond its FY 2024 expiration. The National Levee Safety Program is comprised of several key components:

  - Committee on Levee Safety which is a voting body comprised of experts and officials from state, local, regional and tribal governments, as well as the private sector to provide advice and recommendation on implementation of the overall program;[5]
  - National Levee Safety Guidelines which provide a national resource of best practices to ensure more consistent improvements to the reliability, resiliency, and overall safety of levees nationwide;[6]
  - National Levee Database which provides an authoritative online inventory of the nation's levee systems, as well as a valuable tool for decision making regarding levees;[7]
  - Implementation Support which identifies different types of assistance, including financial and technical, to encourage greater participation in the National Levee Safety Program[8]
  - Levee Safety Action Classification which provides stakeholders with a tool to better identify and prioritize levee systems based on risks and potential hazard such levee systems pose to communities in the event of levee failure.[9]
  - Public Education and Awareness projects which are designed to enhance the public's understanding of, and support for levee safety programs.[10]

  In recent years, much of the federal funding for the National Levee Safety Program has focused on the National Levee Database. While this is a critical component, it is essential that funding be provided in a manner which ensures all components of the program receive

[5] https://damsafety.org/levee-safety

[6]https://usace-cwbi-prod-il2-nld2-docs.s3-us-gov-west-1.amazonaws.com/8327284c-f748-4aa4-998b-506450b6cd09/NLSPfactsheet_Guideline_FINAL122021.pdf

[7] https://levees.sec.usace.army.mil/#/help/getting-started

[8] https://usace-cwbi-prod-il2-nld2-docs.s3-us-gov-west-1.amazonaws.com/36a12d72-2c9d-4838-b3a3-7b76f2577a3e/NLSPfactsheet_Implementation_FINAL122021.pdf

[9] https://www.mvn.usace.army.mil/LSAC/

[10] https://uscode.house.gov/view.xhtml?path=/prelim@title33/chapter46&edition=prelim

the resources that are needed to better implement the National Levee Safety Program overall.

- Amend WIFIA to include the following definition of non-federal programs in order to expand eligibility for CWIFP project financing:
    - Non-Federal Project- the term Non-federal project means any project for flood damage reduction, hurricane and storm damage reduction, environmental restoration, coastal or inland harbor navigation improvement, or inland and intercoastal waterways navigation improvement that is undertaken by a non-federal entity as a separable project or a part of the non-federal share of a federally authorized project for flood damage reduction, hurricane storm damage reduction, environmental restoration, coastal or inland harbor navigation improvement, or inland and intercoastal waterways navigation.

- Continue to allow for the use of the unspent balance of the HMTF and spend down this balance on port projects.

- Ensure the full use of the IWTF continues to be appropriated.

In conclusion, ASCE believes our nation must prioritize the investment needs of our water resources infrastructure systems to ensure public safety, a strong economy, and the protection of our environmental resources. The Infrastructure Investment and Jobs Act provided a critical funding boost for dam safety, ports, and other infrastructure assets. However, long-term, reliable federal funding is key 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 infrastructure systems investment needs.