

May 2022

## MEMORANDUM

RE: Water Resources Development Act of 2022

### Summary

Our nation's water resources systems are crucial to our 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 in 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.

ASCE's [2021 Report Card for America's Infrastructure](#) gives the nation's infrastructure an overall grade of "C-". While this represents the first time the nation's overall GPA has reached the "C" range since ASCE started grading the nation's infrastructure in 1998, the nation's water infrastructure systems continue to see significant challenges and the nation's [dams](#) and [levees](#) each received a grade of "D" in 2021. According to the Association of State Dam Safety Officials, the nation's more than 92,000 dams require more than \$70 billion worth of repairs, while the nearly 30,000 miles of levees nationwide will require approximately \$80 billion for maintenance and rehabilitation over the next decade. [Inland waterways](#) received a grade of "D+" with a project backlog of approximately \$6.8 billion, causing shipping delays which cost about \$44 million per year. The nation's [ports](#) fared better than most infrastructure categories with an overall grade of "B+". However, there remains a \$12 billion funding gap over the next decade for waterside infrastructure activity such as dredging, and billions is also needed for landside infrastructure.

Ideally, every two years, Congress has passed the Water Resources Development Act (WRDA). WRDA legislation is drafted and debated by the [Senate Environment and Public Works \(EPW\) Committee](#) and the [House Transportation & Infrastructure \(T&I\) Committee](#). Congress has kept this biennial schedule and passed WRDA on a bipartisan basis since 2014.

In May, both [Senate EPW](#) and [House T&I](#) passed their versions of 2022 WRDA legislation on a bipartisan basis. Both the House and Senate are expected to hold final votes on their WRDA bills in June.

The [Senate legislation \(S. 4136\)](#) includes \$24.6 billion for new federal water infrastructure projects, including a \$19 billion coastal barrier project in Texas. Additional highlights include:

- Establishing U.S. policy to protect and restore the nation’s shorelines and riverbanks.
- Adjusting the cost share requirements for the Inland Waterways Trust Fund (IWTF) from 65%-35% to 75%-25% general fund-IWTF.
- Authorizing dredging activity in underserved community harbors.
- Authorizing the U.S. Army Corps of Engineers (USACE) to more actively recruit individuals for careers in science, technology, engineering, and math (STEM).
- Enhancing infrastructure resilience, such as allowing USACE to incorporate resilience measures into federally authorized hurricane or shore protection projects when performing emergency repairs and expressing a sense of Congress that USACE should repair assets damaged by disasters to project design levels at or above the original design.
- Expanding dam and levee safety programs to increase safety and improve resilience.
- Lifts the cap on hazard mitigation projects for disadvantaged and rural communities that may be carried out under previously authorized programs.

For additional background on the Senate’s bill, please see the [section-by-section summary](#) put together Senate EPW.

The [House legislation \(H.R. 7776\)](#) includes authorization for 16 new water infrastructure projects which have been reviewed by USACE, as well as three modifications to previously authorized projects. New project authorizations include the \$19 billion coastal barrier project authorized by the Senate. Additional highlights include:

- Reauthorization of the National Levee Safety Program through FY 2026
- Authorizing USACE to carry out coastal shoreline and riverbank protection and restoration projects, as well as authorization to restore or improve design levels for USACE disaster repair and restoration projects
- Establishment of a low-head dam inventory
- Required assessments of Corps dams and levees
- Authorization of environmental dredging activity

For additional background on the House’s bill, please see the [section-by-section summary](#) put together by House T&I.

## **Water Resources Development Act 2022**

### *Shoreline and Riverbank Restoration Mission*

S. 4136 declares that it is the policy of the United States to protect and restore the nation’s shorelines, riverbanks, and streambanks from the effects of climate change, and authorizes USACE to carry out protection restoration projects at a reduced non-Federal cost share of ten percent for projects implemented in economically disadvantaged communities.

H.R. 7776 also authorizes USACE to carry out protection and restoration projects for shorelines, riverbanks, and streambanks. While the House bill does not explicitly declare U.S. policy to protect shorelines, riverbanks, and streambanks, and does not prioritize projects in economically distressed communities, it does authorize an appropriation of \$40 million for these projects.

**ASCE Position:** ASCE supports conservation of habitat, wetlands, and other coastal resources within coastal zones and effective USACE restoration projects. Activities ASCE supports include those carried out by USACE's Federal Shore Protection Program, which provides design guidance and authorizes federal participation in shore protection studies, restoration projects, and cost sharing. Furthermore, [ASCE supports](#) government policies that anticipate and prepare for the impacts of climate change on the built environment and has policy. ASCE also supports informing policy makers that the impacts of climate change for historically disadvantaged communities should consider social and economic equity and not be based solely on economic benefit to cost ratio.

#### *Adjustment of Cost Share Formula for Inland Waterways Trust Fund (IWTF)*

S. 4136 further adjusts the general fund-Inland Waterways Trust Fund cost share formula from 65%-35% to 75%-25%. WRDA 2020 adjusted the cost share from a 50% - 50% split to the current 65% - 35% split. Inland waterways construction and rehabilitation costs, including for locks, are shared by the federal government through general funds and by users through the IWTF. Operation and maintenance costs for inland waterways are covered in full by the federal government. The IWTF is supported by a 29 cents per gallon tax on barge fuel and cannot exceed expenditures in a given year. In April 2015, this user tax was increased by 9 cents for the first time since 1995 upon the urging of the Inland Waterways Users Board, in order to increase investment in the system.

H.R. 7776 contains no such provision.

**ASCE Position:** ASCE supports further amending the IWTF cost share adjustment for future rehabilitation projects. This will ensure that the IWTF remains available for future projects and will help to reduce the inland waterways project backlog. Previous WRDA bills have changed the cost-share for certain projects, which allowed for more leveraging of funds and increased project efficiency. This precedent proved that making this cost-share change will encourage faster construction and expedite the completion of inland navigation projects.

#### *Authorizes Increased Dredging Activity*

S. 4136 includes provisions to expand USACE dredging activity by authorizing dredging projects in underserved community harbors and authorizes a five-year Inland Waterways Regional Dredge pilot program. The legislation also requires the USACE to develop criteria for the evaluation and ranking of maintenance dredging requirements for small, remote, and subsistence harbors and direct the Corp to develop five-year dredged material management plans.

H.R. 7776 includes a provision to authorize environmental dredging activity to remove contaminated sediment on certain projects, but not the above-mentioned Senate provisions. The House bill also requests USACE submit a report to Congress on the current public and private dredge capacity and availability to meet the nation's dredging needs, as well as a report on the costs and effects of increasing the depths at a harbor.

**ASCE Position:** ASCE supports efforts to enhance investment in dredging activity, which will help to address the \$12 billion waterside infrastructure funding gap. Efforts to address further challenges in underserved harbor communities will also help to enhance economic activity, advance environmental justice, and create new job opportunities.

### STEM Workforce Recruiting

S. 4136 authorizes USACE to carry out activities to expand recruiting efforts to recruit individuals for careers in the science, technology, engineering, and math (STEM) fields and directs the Corps to prioritize recruitment of people located in economically disadvantaged communities, where appropriate.

H.R. 7776 contains no such provision.

**ASCE Position:** ASCE strongly supports the development of the next generation STEM workforce in order to design, build, and maintain infrastructure for the 21<sup>st</sup> century. The 2021 *Report Card for America's Infrastructure* supports technical and career training for “green collar jobs” in order to recruit individuals to effectively manage modern infrastructure systems and develop new tools to improve management of these systems. With the influx of additional funding from the Infrastructure Investment and Jobs Act, it will be critical to grow the pipeline of engineers and address workforce gaps.

### Resilience

S. 4136 includes several provisions to enhance resilience of the nation's water infrastructure and emphasizing the importance of incorporating resilience into design models. This includes:

- Allowing emergency funds to be used to increase resilience measures for federal hurricane and shore protection projects,
- A sense of Congress that post disaster repair and restoration activities should be aimed at repairing assets to the original project design level or above that level if the original project design is out of date.
- Authorizing feasibility studies for projects for flood risk management, coastal storm risk management, ecosystem restoration, navigation, water supply, and recreation, including studies for modifications to existing projects.
- Increasing the maximum additional period for beach nourishment for a water resources development project as a result of a feasibility study from 15 years to 50 years.

H.R. 7776 also contains several provisions supporting resilient water infrastructure including:

- Authorizing USACE to repair or restore a shore protection project or structure beyond the original design level, which is something that ASCE has long advocated for;
- Requiring reports on infrastructure resiliency issues, including an assessment on coastal flooding mitigation modeling and testing capacity, a Government Accountability Office (GAO) study on mitigation activities, and a western infrastructure study to examine ways to improve water management and preparedness for changing hydrological conditions; and
- Allowing tidal and inland flooding to be considered within feasibility studies for coastal storm risk reduction projects.

**ASCE Position:** As climate change continues to increase the intensity and frequency of powerful storms, the nation’s infrastructure will come under increased strain to withstand harsher elements. This will ultimately lead to system failures, costly repairs, and more frequent replacement needs. Both the House and Senate versions of WRDA support and encourage increased investment in and focus resilience measures by allowing them to be more easily incorporated into repair and restoration projects and emphasizing the importance of up-to-date project design levels. Enhancing the climate resilience of the nation’s infrastructure is a top priority for ASCE.

#### Dams and Levees

S. 4136 does not include reauthorizations of the National Levee Safety Program or the National Dam Safety Program, both of which are set to expire at the end of FY 2023. However, H.R. 7776 does include a reauthorization of the National Levee Safety Program through FY 2026, which was a top priority for ASCE during the 2022 WRDA process, along with reauthorization of the National Dam Safety Program (which was also not included in H.R. 7776).

S. 4136 and H.R. 7776 both require USACE to establish a National Low-Head Dam Inventory, which accounts for shorter, man-made dams which stretch across an entire river or stream and can create dangerous currents that force people underwater, threatening public safety. However, while the Senate bill authorizes a \$30 million appropriation for the inventory, the House version contains no such funding.

S. 4136 also amends the Levee Rehabilitation Assistance Program to include an expanded definition of “rehabilitation” to now include improvements to reduce flood risk or increase climate resilience as eligible. The bill also increases the maximum amount of Federal funds a levee rehabilitation project can receive from \$10 million to \$25 million and prioritizes projects in underserved communities.

While H.R. 7776 does not contain these changes to the Levee Rehabilitation Assistance Program, it does require USACE to conduct an assessment of the dam and levees that fall under its purview and authorizes USACE to provide reimbursements to non-federal partners for costs incurred with required electronic inspections of levees.

**ASCE Position:** ASCE strongly supports efforts to reauthorize critical safety programs like the National Dam Safety and is very pleased to see the House take the lead in reauthorizing the

National Levee Safety Program. Congress should act swiftly to ensure that these critical programs do not expire in 2023. These programs support state efforts to regulate dams and levees, perform inspections, and monitor for routine maintenance needs.

While much work remains to be done, ASCE strongly supports efforts the House and Senate bills does make to enhance the safety and resilience of the nation's dams and levees. An accurate inventory of low-head dams nationwide will support public safety and ensure greater awareness of the hazard posed by these structures. Additionally, required assessments of Corps owned dams and levees will allow for needed rehabilitation efforts to be properly catalogued, and referred to the appropriate lawmakers in Congress. ASCE also strongly supports efforts to incorporate resilience measures into current law's definition of rehabilitation activity. This will help to ensure that levees throughout the country are built in a manner which can withstand higher sea and river levels, provide greater flood protection to leveed communities.

ASCE will continue to work with the House Transportation and Infrastructure Committee, as well as the Senate Environment and Public Works Committee to ensure that the authorization for the National Dam Safety Program does not lapse, and will strongly encourage WRDA conferees to include the House's National Levee Safety Program reauthorization in any final conference report.

#### *Expanded Authority for Disadvantaged Community Hazard Mitigation Projects*

S. 4136 lifts the caps for hazard mitigation projects in disadvantaged communities that may be carried out under pilot programs authorized in WRDA 2020. In 2020, WRDA created multiple pilot programs to identify and carry out flood protection, hurricane, and storm damage reduction projects in disadvantaged and rural communities. Under these programs, up to 10 projects may be identified for USACE to implement. WRDA 2022 removes the limitation on the number of projects that may be carried out under these pilot programs.

H.R. 7776 includes a provision requiring USACE to increase outreach to underserved communities about water resources development opportunities, as well as authorizes USACE to waive the cost of technical assistance to economically disadvantaged communities.

**ASCE Position:** ASCE supports and encourages policies which enhance mitigation efforts against natural and man-made hazards. This includes incorporating resilience and sustainability as fundamental performance criterion, improvement of warning systems against impending hazards, and other activities which support hazard mitigation, emergency preparedness, and disaster response and recovery. ASCE also supports ensuring that sufficient funding is available at all levels for research, development, and enforcement of standards that emphasize such mitigation activities.

#### *Research*

Both S. 4136 and H.R. 7776 contain provisions expanding the basic research and development capabilities of USACE in order to better support the mission of the agency. This expansion

includes pathways to establish research and development federal funding streams for Corps research activity. The Senate's bill explicitly establishes such an account and authorizes an \$85 million appropriation for said account over the next five years. The House bill also authorizes the carrying out of demonstration projects within USACE.

**ASCE Position:** ASCE strongly supports basic and applied research and development along with demonstration and commercialization programs in civil engineering. Significant investment in research and development will facilitate a durable, secure, sustainable, and resilient infrastructure that will meet the needs of the 21<sup>st</sup> century.

### **Further Action**

ASCE is pleased the Senate is moving swiftly to pass WRDA 2022 on schedule. The bill expected to be considered on the Senate floor by early June at the latest. The House is expected to release its version of WRDA in the coming weeks, but it is unclear when the House Transportation & Infrastructure Committee will mark up the legislation, or when the full House will vote on final passage. ASCE will continue working with both Senate EPW and House T&I, as well as Members of Congress to ensure final passage of WRDA 2022 this year.

*For questions, please contact the ASCE Government Relations team.*

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