

COASTAL STATES ORGANIZATION



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Testimony of Derek Brockbank

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The Coastal States Organization (CSO) appreciates the opportunity to provide testimony to the Senate Environment and Public Works Committee on shoreline restoration in the face of climate change. Since 1970, CSO has served as the collective voice for the nation’s coastal states, commonwealths, and territories on federal legislative, administrative, and policy issues relating to coastal, Great Lakes, and ocean management. CSO’s members, governor-appointed delegates representing thirty-six state and territory coastal management programs, partner with coastal communities, federal agencies, tribal governments, and industry for the safe and effective management, beneficial use, protection, and development of the coastal zone through the federal-state partnership established under the Coastal Zone Management Act (CZMA).¹

CSO members work closely with the U.S. Army Corps of Engineers (USACE) districts to plan, permit, and implement projects in the coastal zone across the three primary USACE mission areas, navigation dredging, flood risk reduction, and aquatic ecosystem restoration, all of which can play a role in shoreline restoration. Under the CZMA federal consistency provisions, state coastal programs may review federal actions in the coastal zone for consistency with the state’s coastal zone management program, necessitating a close working relationship with USACE. CSO members are also often local cost-share sponsors for USACE project work, so act as clients of USACE as well.

On behalf of our members, CSO has worked with USACE to develop and advance policies to better manage resources in the coastal zone. This partnership has included participation and support for regional planning work, including regional coastal studies as well as the National Shoreline Management Study. CSO is also working in collaboration with the Institute for Water Resources at USACE to do an analysis of state and federal regulations on sediment placement which impact the beneficial use of dredged material. CSO also actively participates in USACE initiatives on natural infrastructure, such as Engineering With Nature and SAGE.

Climate change is the defining coastal issue of our time.

Coastal communities face many unprecedented challenges irrespective of the carbon dioxide levels in our atmosphere, from population growth to sediment management and increasing erosion to invasive species to increasing number of commercial uses on the coast. Each of these are likely be exacerbated by the combined coastal impacts of climate change, including sea level rise, increasing intensity of storm and rain events, ocean acidification and increased temperatures. Almost every facet of coastal

¹ 16 U.S.C. § 1451 *et seq.*

management will be impacted by climate change impacts, making climate change the defining coastal issue of our time.

Perhaps the most acute way climate change impacts the coast is in shoreline management and restoration. Along saltwater coasts, rising seas and increasing storm intensity are expanding flood zones, and will increasingly inundate low-lying coastal areas, pushing shorelines inland. Along our freshwater Great Lakes coast, lake levels are fluctuating at unprecedented rates. Recent record high lake levels have pushed Great Lakes shorelines inland. Both freshwater and saltwater coasts have therefore seen increased pressure to restore and/or harden shorelines to keep them in current locations despite rising sea and fluctuating lake levels. Coastal communities are also beginning to look at “managed retreat” or some variation of allowing nature to take its course by moving threatened infrastructure out of harm’s way rather than adding protection. The reality is that both are needed – we cannot just restore *or* retreat; we need to restore *and* retreat. *Determining when and how to restore and when and where to retreat is at the heart of coastal resilience.*

Fortunately, coastal communities and Congress have both made significant strides to address coastal resilience. Many examples of how state coastal zone management programs are using coastal management and planning to improve coastal resilience can be found in the CSO publication “*Coastal Management and Resilience Planning*”² (which we are including for the record), as well as the factsheets developed by CSO for each of the state coastal management programs.³

CSO, together with American Shore & Beach Preservation Association (ASBPA), has developed a series of joint policy recommendations on beach and inlet management in the face of climate change⁴ (also included for the record). These policies address issues of sediment management, permitting, funding, infrastructure development, and research needs to manage and maintain our nation’s shorelines. CSO has been pleased to see Congress enact some of these policies in recent Water Resources Development Acts (WRDAs). We believe some of the policies enacted in 2016, 2018, and 2020 on the beneficial use of dredged material (BUDM) and in support of natural infrastructure, could be transformative in how USACE manages and plans coastal projects. We have yet to see USACE fully implement some of these policies – particularly those included in WRDA 2020 – so have refrained from making additional policy recommendations to Congress on issues like BUDM until we see USACE fully implement what is already written into law.

Additionally, the funding in the Infrastructure Investment and Jobs Act (IIJA), together with funding in other recent supplemental appropriations, has provided USACE an unprecedented opportunity to restore and improve the resilience of the nation’s shorelines. If USACE can strategically coordinate with other federal agencies that received funding in the IIJA and have a coastal mission area, primarily NOAA, and with state coastal management programs, they could begin to restore the nation’s coastlines in ways that fundamentally adapt them to rising seas and changing lake levels and become more resilient to future conditions. But this will mean full consideration of current and impending climate impacts in every part of project implementation from regional planning through to construction.

² [CZM-and-Resilience-Planning-Fact-Sheet.pdf \(coastalstates.org\)](https://www.coastalstates.org/csopublications/#StateFactSheets)

³ <https://www.coastalstates.org/csopublications/#StateFactSheets>

⁴ [Joint Beach and Inlet Management Policy - Coastal States](#)

Congress has enacted strong policies for USACE to follow on coastal restoration and has provided robust funding, and we have seen improvement in USACE’s consideration of climate impacts. However, willingness to use natural infrastructure and a broader perspective on resilience and coastal restoration has still not reached the level of importance that it should for USACE given the magnitude of the challenges from climate change.

Elevating the coastal focus of USACE and supporting local project sponsors through the SHORRE Act.

CSO is pleased to support Shoreline Health Oversight, Restoration, Resilience, and Enhancement (SHORRE) Act. The SHORRE Act significantly improves the USACE capabilities to address coastal enhancement, restoration, and resilience by elevating shoreline and riverbank protection and restoration to a primary mission in carrying out water resource development projects, providing increased flexibility to local project sponsors, and investing in priority regional needs.

Making shoreline restoration a core mission area of USACE

The elevation of protection and restoration of shorelines and riverbanks from erosion and other forces exacerbated by climate change as a primary mission of the USACE will enable both USACE and local partners to better address these emerging coastal hazards and build coastal community resilience. This legislation would enable USACE to implement projects with a primary purpose of shoreline restoration or protection, rather than being a secondary or tertiary purpose for civil works projects. This is particularly important for the many locations where a restored shoreline serves many purposes to the community. Integrated beach, dune and back-bay wetlands systems that use natural and nature-based features can help a community adapt to increasing flood risk (from inundation, storm surge, and greater rain intensity), improve ecological value, and can provide economic stability through recreation and tourism as well as maintaining property tax value. This balanced approach to shoreline restoration and management, might not fit neatly into any of the Corps’ current mission areas, but is essential to a functioning and resilient coast in an era of climate change.

The SHORRE Act seeks to ensure USACE is building projects for future climate conditions not past conditions by ensuring that projects and measures for the protection and restoration of shorelines are formulated to increase their resilience to the impacts of climate change as well as other factors contributing to the vulnerability of coastal communities and ecosystems. **But more could be done.** USACE should work with local communities to identify where vulnerable coastal infrastructure – once damaged – should be rebuilt with added resilience elements, redesigned in a new more resilient method, or relocated (or some combination thereof). This can be accomplished by specifically authorizing the addition of resilience elements to flood control projects that are being re-built using Flood Control and Coastal Emergency (FCCE) funds.

Giving local sponsors increased flexibility

Section 9 of the SHORRE Act provides increased authorizations for USACE in conducting shoreline protection and restoration studies to expand the value of these studies in assisting coastal communities with addressing coastal hazards and community resilience. Specifically, the SHORRE Act authorizes

USACE to assess options to reduce flood risk from individual or compound effects of coastal storms and inundation, waves, and erosion; sea level rise; tides; seasonal variations in water levels; rainfall events; and numerous other drivers of flood risk as part of flood or coastal storm risk management feasibility studies at the request of the local partner.

This authorization is important, but feasibility studies ought to come from – and potentially by prioritized by – broader regional resilience studies, such as the North Atlantic Coastal Comprehensive Study (NACCS) and the South Atlantic Coast Study (SACS). CSO is pleased that USACE has undertaken numerous local and regional resilience studies including the Texas Coastal Study, the New York & New Jersey Harbor and Tributaries Study, and the Miami-Dade Back Bay Study, and is poised to initiate the Great Lakes Resilience Study in FY22. These and future studies must consider the multiple challenges of climate change and maximize multiple benefits through use of natural infrastructure and consideration of infrastructure removal.

The SHORRE Act also improves coastal communities’ ability to address emerging coastal hazards by authorizing several provisions which give local project sponsors increased flexibility in construction projects for shoreline protection and restoration:

- Section 10 authorizes USACE to apply any amounts due to local partners in reimbursement as credits to the local partner share for another eligible project, reducing or eliminating the local partner share for that project.
- Section 12 authorizes USACE to provide the federal share for acquiring land, easements, and rights-of-way for projects in advance of the project rather than as a reimbursement. This removes a significant hurdle for the local partner to provide the funding for these acquisitions up front.
- Section 14 authorizes the USACE to accept the provision of fish and wildlife mitigation measures as the local partner contribution for a project.

Changing funding structures to support coastal communities, with special consideration of economically disadvantaged communities

The SHORRE Act increases the accessibility of shoreline protection and restoration projects for coastal communities by 1) decreasing the local contribution for shoreline and riverine protection and restoration studies to 20%, or 10% for economically disadvantaged communities (Section 3), 2) decreasing the local contribution for structural flood control or hurricane and storm damage reduction to 10% for economically disadvantaged communities (Section 3), and 3) decreasing the local contribution for nonstructural, natural, and nature-based features to 20%, or 10% for economically disadvantaged communities (Section 13).

Considerations for Great Lakes states

The SHORRE Act provides authorizations for regional priorities with two critical authorizations for the Great Lakes States (section 17 and 18). Specifically, the SHORRE Act will significantly enhance the capacity of Great Lakes States to address coastal inundation and erosion caused by lake level rise by authorizing USACE to develop and maintain lake level forecasting models and authorizing advanced

assistance to local communities to address risks of damage from rising water levels at full Federal expense.

The need for longer term assessments

While the SHORRE Act addresses the uncertainty of specific beach projects that have or will imminently reach the end of their 50-year authorization, expiring USACE projects should not rely on a special legislation for moving forward. The USACE needs to recognize that although many of their projects are built for 50-year authorization, the local sponsors' expectation is for these projects to last significantly longer than 50 years. Given the rapidly changing coastal conditions due to climate change, coastal projects are facing a vastly different considerations than when they were authorized.

USACE should be authorized and funded to plan and develop transition pathways for existing coastal projects that are reaching their expiration, and to develop coastal adaptation projects for long-term (50-200 year) sea level rise and lake level change projections. This should be done by USACE, in coordination with states and other federal agencies, by assessing the sustainability of all USACE coastal flood risk, navigation, and ecological restoration projects, *and* developing post-authorization plan. USACE should also use long term inundation projections and a nationwide inventory of sediment needs and availability (based in part on the SAND assessment in the SACS⁵, and the offshore sand inventory developed by BOEM⁶) to prioritize existing and proposed projects based on long term economic viability.

Comprehensively re-thinking BCR.

Finally, the current Benefit Cost Ratio (BCR) analysis that dictates what USACE projects get funded is keeping USACE stuck in 20th century thinking. The BCR has led USACE to build coastal projects that maximize one or just a few benefits – flood risk management, coastal storm risk reduction – all of which have easily quantifiable monetary values while ignoring or under-valuing others that are harder to quantify. The reality of the coast is it is multi-use. A single project can have economic and social impacts far beyond its primary purpose. Resilient coastlines have ecological benefits, social cohesion benefits, public health benefits, even benefits of racial justice (in how access and use are considered) – benefits that are harder to quantify. USACE should be developing and using a process to better quantify and incorporate the value of these benefits

Furthermore, the current BCR also puts USACE in a position of investing in areas of existing wealth. Congress has begun to direct USACE to consider how to build resilient coastal infrastructure for “economically disadvantaged” communities. But this should go beyond pilot projects and reduced cost-share for communities that have been historically marginalized and borne the brunt of poor coastal planning and decision-making (often by USACE). USACE needs to plan projects for a resilient *and equitable* future, not simply rebuild the coastlines of the past in ways that withstand climate impacts.

PR&G

⁵ https://www.sad.usace.army.mil/Portals/60/siteimages/SACS/508%20SAND_FINAL_Report_15Sep_CC.pdf

⁶ <https://www.boem.gov/building-national-offshore-sand-inventory>

Re-evaluating the USACE’s BCR must start with long overdue implementation of the Principles, Requirements and Guidelines for Water and Land Related Resources Implementation Studies (PR&G)⁷. We are pleased to hear that USACE is actively working to develop implementation guidance for the PR&G. While we had hoped to see the guidance by now, we are heartened to hear that it will be out this calendar year. Until we see what USACE is recommending to themselves for greater inclusion of benefits, we find it hard to make more specific recommendations for BCR reform.

Conclusion

I greatly appreciate the opportunity to testify on behalf of CSO before the Environment and Public Works Committee on the critically important topic of shoreline and riverbank restoration in the face of climate change. We are pleased to see the progress made by coastal communities, Congress, USACE, and other federal agencies, and are thrilled with the opportunity to increase the nation’s coastal resilience presented by the IJA. However, we still have a long way to go.

Congress can make an important step by passing the SHORRE Act as part of WRDA 2022. We also encourage Congress to consider other studies and policies that would direct the Corps to improve the nation’s coastal resilience through planning and project development. Finally, we ask Congress to provide oversight and guidance to the Corps in improving their BCR process to make project decisions based on forward thinking values that consider our future climate and principles of equity and justice.

We look forward working with the Committee and USACE on these and other important coastal issues.

Sincerely,



Derek Brockbank
Executive Director

⁷ <https://obamawhitehouse.archives.gov/administration/eop/ceq/initiatives/PandG>