TESTIMONY BY THE HONORABLE JOHN BEL EDWARDS GOVERNOR, STATE OF LOUISIANA TO THE U.S. SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE ON Examining Shoreline and Riverbank Restoration in the Face of Climate Change February 23, 2022

Mr. Chairman, thank you for the opportunity to testify today in the great state of Delaware alongside my friend and colleague, Governor Carney. Your Committee's focus on restoring shorelines and riverbanks to address climate change resonates with me, as we strive in Louisiana to save our coast from its land loss crisis.

Additionally, I am grateful that you and your colleagues passed a disaster supplemental to help us recover from Hurricanes Ida, Laura, and Delta, as well as the bipartisan Infrastructure Investment and Jobs Act. This funding has given Louisiana a historic opportunity to make significant progress for our coast.

In Louisiana, we depend upon a close partnership with the U.S. Army Corps of Engineers (the Corps). Our economy and environment rely on the Corps successfully achieving its mission to promote navigation, provide flood control, and restore aquatic ecosystems. Coastal and riverine areas show the need to manage for all three interdependent objectives as impacts related to climate change become increasingly apparent.

I commend the Committee for considering how to improve the synergy between the Corps mission and the need to restore our nation's shorelines and riverbank ecosystems. I endorse the heightened focus on these coastal issues and encourage the Corps to elevate its commitment to coastal protection and restoration.

LOUISIANA: A COASTAL STATE WITH A LAND LOSS CRISIS

Louisiana was built largely by the movement of the Mississippi River, with its boundary shores established alongside the Gulf of Mexico. South Louisiana is the delta of the Mississippi

River, as its distributaries spread out the collected soils from across a drainage basin that now covers 31 states and two Canadian provinces.

Yet the Mississippi River no longer sustains our coastal landscapes. Since 1930, Louisiana has lost 2000 square miles of coastal wetlands, a land mass the size of Delaware.

This loss began following the Great Flood of 1927, when Congress charged the Corps with ensuing navigation and providing flood control. The Corps has succeeded, but interventions such as levees unfortunately keep the Mississippi River sediment trapped until it spills off into the Gulf of Mexico, providing no land-sustaining benefit to the coast.

We continue to lose an average of a football field of coastal wetlands every 100 minutes. But we are making real progress. If it were not for recent hurricanes, our state was poised to build more land that it was losing for the first time since the River was leveed.

With each acre converted to open water, our vibrant ecosystems shrink, our infrastructure becomes more exposed, our communities face heighted risk, and our natural carbon sinks lose their capacity to offset greenhouse gas emissions. Every day the importance of restoring our coastal and riverine ecosystems becomes more evident.

Coastal land loss is an immediate, existential threat to Louisiana and climate change will only intensify the impact. While sediment starvation and subsidence have been major drivers of historic land loss, sea level rise from climate change will become a dominant cause of coastal wetland loss in the near future, magnified by more frequent, intense storms.

LOUISIANA: A MODEL OF INTEGRATED PROTECTION AND RESTORATION

For decades, coastal land loss was a slow moving catastrophe left unaddressed. It took the devastating hurricane season of 2005, with Hurricanes Katrina and Rita, to galvanize the state into action. We did so by creating the Coastal Protection and Restoration Authority (CPRA) to be the single state entity charged with integrating hurricane protection and coastal wetland restoration. Louisiana recognized that protecting communities and coastal ecosystems go hand in hand.

Strategic planning is foundational for integrating protection and restoration. CPRA develops, with significant input from the public and stakeholders, a science-based Coastal Master Plan for the protection and restoration of our coastal wetlands. This Comprehensive Master Plan

for a Sustainable Coast was first adopted by the Louisiana State Legislature in 2007 and is now updated every six years. Every update has been adopted by our state legislature with unanimous support. The Coastal Master Plan calls for coastal protection and restoration projects over 50 years at a projected cost of \$50 billion. I am proud to say that we are now committing over a billion a year on projects to improve our coast.

The coastal restoration that Louisiana achieves through our Coastal Master Plan projects will provide significant benefits to the nation. Restored coastal wetlands will provide additional protection to communities inland through the reduction of storm surges. These areas can operate as carbon sinks, which recent studies suggest can store more soil carbon than forests. The healthy marshes also provide habitat for migratory birds and nursing grounds for fisheries.

RECONNECTING THE RIVER TO LOUISIANA

Reconnecting the Mississippi River in order to harness the sustaining, land-building power of its sediment is a cornerstone principle of the Coastal Master Plan. We are making historic progress on these large-scale restoration endeavors. CPRA is in the final year of federal permitting for the \$2 billion Mid-Barataria Sediment Diversion Project that would reconnect the Mississippi River to the Barataria Bay estuary, which has the highest rates of land loss in South Louisiana. This project is a critical component in our recovery from the *Deepwater Horizon* oil spill. The state has entered the federal permitting process for a similar project on the east bank of the Mississippi River, the Mid-Breton Sediment Diversion Project.

Even with this support, getting to the decision point has been a challenge. Fortunately, these projects were the first large-scale ecosystem restoration projects to be added to the Federal Permitting Improvement Steering Council (FPISC) permitting dashboard. Through this venue, the project has been supported by three consecutive presidential administrations. One way this Committee could help would be to encourage federal agencies, such as the Corps, EPA, and the Council on Environmental Quality, to ensure timely decision-making. We cannot afford delays. These restoration projects are designed to improve the overall environment and the sooner they are constructed, the sooner our coastal communities can experience their benefits.

LOUISIANA PROJECTS THAT INTEGRATE PROTECTION AND RESTORATION

After Hurricane Katrina, Louisiana greatly benefitted from federal investments in the hurricane risk reduction system (also known as HSDRRS) which provides hurricane protection and resiliency to the Greater New Orleans area. Your Committee heard how valuable the investment proved to be after Hurricane Ida made landfall as one of the strongest storms to ever hit Louisiana's coast. HSDRRS performed well, withstanding the storm and preventing billions of dollars in property damage. The strengthened system protected hundreds of thousands of people from the worst impacts of the storm. This was the first major test of HSDRRS since it was built, and it performed as it was intended to. I am also proud to hear that Lt. Gen. Spellmon testified to this Committee that a key element of the success of HSDRRS during Hurricane Ida was the presence of a number of complementary restoration projects constructed by the state.

I encourage the Corps to seek additional opportunities to connect ecosystem restoration projects with protection projects. Granting credit to restoration projects within the same area of protection projects that require mitigation achieves this goal. One such example in Louisiana would be the use of the Maurepas Swamp Freshwater Diversion project as mitigation for the West Shore Lake Pontchartrain hurricane protection system. The Maurepas Swamp project, funded through RESTORE Act dollars, will reestablish the connection between the freshwater and sediment in the Mississippi River and adjacent swampland to sustain 45,000 acres of swamp. The project would provide in-basin mitigation while optimizing cost savings and reducing risk to the West Shore Lake Pontchartrain system once constructed.

I would be remiss not to mention another project in Louisiana that meets the dual objective of community protection and coastal restoration: the Morganza to the Gulf Hurricane Protection project. Thankfully, the Biden Administration and Assistant Secretary of the Army for Civil Works Michael Connor dedicated \$378 million to the project from the Infrastructure Investment and Jobs Act. This complements over \$500 million in state and local funds dedicated to beginning construction prior to significant federal participation. When fully constructed, the Morganza project will protect over 200,000 residents, sustain over 1,700 square miles of marsh, and secure an area vital to America's economic interests and the nation's energy transition.

The Morganza project has a unique design to maximize protection to surrounding coastal wetlands. As a "leaky levee," the system will only be closed when facing severe storms. The

design allows over half a million acres in vegetated coastal wetlands within the Barataria-Terrebonne estuary to be sustained through the natural ebb and flow of the tide. The system is in a large part self-mitigating, as initial studies indicated that the wetlands within the system performed better than those outside. Furthermore, the communities in the study area are truly on the front lines of climate change as they face the highest relative sea level rise in the nation at over three feet per 100 years. I encourage the Corps to account for these factors as it evaluates future spending plans.

Through our Coastal Master Plan, Louisiana has articulated a clear, widely-supported vision for a more sustainable coast. I am hopeful that the Corps will work closely with us to achieve it.

THE LOUISIANA CLIMATE ACTION PLAN

Louisiana is no longer just reacting to disasters; we are taking action. In August 2020, I issued an executive order that established the goal of net zero greenhouse gas (GHG) emissions by 2050 and established a Climate Initiatives Task Force to develop a Climate Action Plan for Louisiana. Through this task force, we engaged those in academia, industry, the private sectors, local and state government, environmental and community justice roles, and the public. Over the course of 49 public meetings, the group developed a plan for our energy producing state to achieve net zero GHG emissions by 2050 while maintaining economic competitiveness. The plan spans the entire economy and incorporates vital considerations like improving public health and quality of life, promoting a more equitable society, strengthening the economy and workforce, conserving natural resources, and adapting to a changing climate. Our plan calls for continued emphasis on restoring and protecting our wetlands through nature-based solutions, which can naturally sequester carbon dioxide while reducing storm surge and enhancing vital ecosystems.

Earlier this month, the Climate Task Force I established completed its work and submitted the state's first-ever Climate Action Plan, a balanced and implementable plan that charts a comprehensive pathway to net zero. The plan received unanimous backing from members of the Task Force, and it is the first climate action plan created by any state in the Deep South. A copy of the Executive Summary of our Climate Action Plan is attached to this testimony.

LOUISIANA RECOMMENDATIONS FOR SPECIFIC FEDERAL ACTIONS AND CHANGES IN FEDERAL POLICY, INCLUDING THE SHORRE ACT

Mr. Chairman, this is the overarching view of the challenges Louisiana faces from major environmental threats and how we are responding to them. Alignment with the Corps on this strategy is crucial.

I commend you, Senator Cassidy, Representative Blunt Rochester, and Representative Graves for introducing the Shoreline Health Oversight, Restoration, Resilience, and Enhancement Act, known as the SHORRE Act. The bill would apply the urgency Louisiana has to address the challenges along our shores and rivers nationwide.

The SHORRE Act supports Louisiana by prioritizing the Louisiana Coastal Area projects, authorizing Upper Barataria Basin Risk Reduction System, and approving important modifications to the Lake Pontchartrain and Vicinity project and the West Bank and Vicinity project. I am grateful to see that the SHORRE Act supports the longstanding position of the state and Congress that the Mississippi River Gulf Outlet should be restored at full federal expense. For too long this major restoration project has been at a standstill due to the Corps interpretation of federal statute.

The SHORRE Act could facilitate greater synergy between the Corps and the state by allowing the Corps to select appropriate state projects to be credited as mitigation. I encourage the Committee to look for even more avenues for the Corps to properly recognize state efforts for crediting purposes, including by extending existing authorities.

Furthermore, I appreciate the bill's direction to the Corps to provide leadership to conduct the Lower Mississippi River Comprehensive Management Study. The study would allow the Corps to use the best available science to manage the river in a way that meets the navigation, flood control, and ecosystem needs. These determinations are vitally important for Louisiana as the furthest downstream state. It would also jumpstart key Coastal Master Plan projects like the Ama sediment diversion and the Union freshwater diversion that could provide multiple benefits, including reducing the need to operate flood control structures like the Bonnet Carré Spillway. I hope the Committee can ensure that the study is completed on time, as it would be appropriate to finish the study by 2027, the 100th anniversary of the Great Flood of 1927.

ADDRESSING RESTORATION ON PRIVATELY HELD COASTAL LANDS

Nearly three quarters of Louisiana's coastal lands are held in private ownership. Louisiana cannot solve its coastal land loss crisis without engaging with willing landowners to find restoration solutions that work for their goals. Fortunately, many of the property owners value our efforts to save the coast. They want to be helpful. Some are even offering to provide land at no cost to the state as they have done for over thirty years for state and Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) program projects.

However, Corps practice often prevents these agreements, despite guidance documents and statutory provisions that would allow otherwise. The Corps requires that full fee title be obtained over private land before a federal investment in wetlands protection or restoration can be made. Full title is harder and costlier to obtain, sometimes so much so that the project no longer can meet the cost benefit ratio necessary to move forward. This barrier blocks many worthwhile endeavors from going forward.

In such situations, Louisiana has been able to obtain conservation easements and other such agreements that are easier to obtain and less costly than full fee title to these lands. We have found that these agreements, which are widely used throughout the nation in land conservation situations, provide more than adequate protection of the state's investments. These agreements allow us flexibility to engage cooperatively with private landowners in public-private partnerships for land use. These agreements should not only assure the restoration and conservation of the land, but also allow the continuation of traditional co-existing, non-destructive, and profitable uses of the land. Landowners would still be able to fish, hunt, trap, farm oysters, manage alligators and other wildlife, and conduct ecotourism. We should encourage friendly relationships with private landowners to maintain the traditional symbiotic working coast relationship that the citizens of coastal Louisiana have shared with the lands and waters of the state for well over three centuries.

Given our experience and urgent need, I ask that Congress direct the Corps, when working with the state of Louisiana on coastal wetlands protection and restoration projects, to make agreements with landowners that are less than full fee title. Ideally, this program in Louisiana could be a demonstration project to show that allowing less than fee title interests to apply could spur much greater activity and results on coastal restoration and protection.

INCREASING COASTAL FUNDING TO STATES

Funding is paramount to achieving our restoration goals. Revenue shared from the Gulf of Mexico Energy Security Act (GOMESA) has been an essential funding source for coastal restoration and protection in Louisiana. In fact, our state's constitution dedicates all such funds to coastal restoration and protection. However, for years we have received a very limited amount of funds compared to the total revenue collected.

I implore members of the Committee and across Congress to allow the Gulf States to access a fair share of the GOMESA revenues from energy development to save our coastal ecosystems. In Louisiana, this energy production has also contributed to significant land loss. As it stands, the state receives funding through GOMESA that addresses many coastal needs, but the available funding will not be adequate to meet the scale of the challenges. This legislation makes long overdue improvements to GOMESA and, for the first time ever, would establish revenue sharing for offshore wind production. Offshore wind is something that Louisiana is strongly pursuing, just like Delaware is under Governor Carney's leadership.

Should Congress adopt the S.2130, the Reinvesting in Shoreline Economics and Ecosystems Act of 2020, as introduced by Senator Whitehouse and Senator Cassidy, then Louisiana would have a fighting chance to address these problems. While this bill is in the jurisdiction of the Senate Energy and Natural Resources Committee, this Committee could assist by clarifying that the Corps can accept GOMESA funds as the non-federal sponsor's cost share.

CONCLUSION

Mr. Chairman, Louisiana has developed an ecosystem restoration program that is as comprehensive and forward thinking as any other such plan in the world. We are attempting to restore a coastal ecosystem where over two million people live and where billions of dollars of industrial investment and critical infrastructure exist. The importance of our working coast to our state and the country cannot be overstated. We must restore and protect it.

Ensuring that the Corps has the authority and direction to increase its focus on coastal, shoreline, and riverine ecosystems is of the utmost importance to the overall sustainability of the State of Louisiana.

Thank you for the opportunity to be here today. I look forward to answering any questions from the committee.