



EXECUTIVE SUMMARY

In 2010, the Deepwater Horizon oil spill (DWH) had a negative impact on the Gulf Coast's habitats and resources. The Mississippi Department of Environmental Quality (MDEQ) was selected by the Governor to be the sole trustee to lead the effort for coastal restoration in Mississippi. MDEQ, with the support of many partners, is working toward restoring the health and ensuring the sustainability of Mississippi's coastal and marine resources, as well as promoting an ecological, economic, and social climate that can adapt and recover from the DWH incident.

As a result of criminal charges from the DWH oil spill, the responsible parties were fined \$2.544 billion which was earmarked for natural resource restoration in the five Gulf states. Mississippi will receive \$356 million for projects focused on restoring habitat and resources impacted by the spill. The National Fish and Wildlife Foundation (NFWF) was named the administrator of these funds. These funds have an ecosystem restoration focus to support projects that remedy harm natural resources where there has been injury to, or destruction of, loss of, or loss of use of those resources resulting from the oil spill. The Gulf Environmental Benefit Fund (GEBF) has broad overarching objectives to: 1) restore and maintain ecological functions of coastal habitats; 2) restore and maintain the ecological integrity of priority bays and estuaries; and 3) replenish and protect living resources.

As a part of the effort to invest in projects that have lasting impacts, NFWF GEBF supported the development of an ecosystem restoration plan for the Mississippi Coast. In April 2014, NFWF GEBF awarded a \$3.6 million dollar grant to MDEQ to fund the Mississippi Coastal Restoration Plan. The main goal of this singular planning effort is to:
"Create a plan that would result in a coordinated, systematic, and transparent process for sustainable ecological restoration in Mississippi, that will direct funds associated with the GEBF, and be applicable to informing ecological restoration funding associated with the RESTORE Act."

IN DEVELOPMENT OF THE PLAN, THERE WERE THREE PRIMARY GOALS:

- 1 To meaningfully engage individuals and organizational stakeholders (e.g., government, academia, non-government) in a transparent and inclusive plan development process;
- 2 To develop the Mississippi Comprehensive Ecosystem Restoration Tool (MCERT), a science-based tool for identifying and examining ecological resources and threats for improved restoration planning and project sustainability; and
- 3 To establish program objectives and a decision-making process for projects based on the above goals to promote the long-term vitality and sustainability of all of Mississippi's coastal habitats and resources.

In order to address these goals, MDEQ undertook an extraordinary data collection and stakeholder engagement effort to understand the Mississippi landscape, and the restoration priorities of the Mississippi Public. To support these priorities, and to be able to support these ideas with science, the Mississippi Comprehensive Ecosystem Restoration Tool (MCERT) and the Decision Support System (DSS) were developed.

MCERT is a set of science-based spatial models that will help guide science and existing data into restoration efforts and actions that can be turned into projects. MCERT is comprised of four models: landscape conservation, water resources, watershed characteristics, and marine restoration planning. These models provide valuable information about environmental resources, stressors, and threats to an area of interest. MCERT was developed to assimilate data across the applicable habitat types, model their interactions, and be able to visually display the outcome of potential restoration efforts. Furthermore, MCERT also provides a spatial visualization to the DSS.

The DSS is a linear thought process that allows MDEQ to make informed, science-based decisions for enhancing, protecting, or restoring the ecological integrity of Coastal Mississippi. The DSS funnels decisions through three screening levels: Program/Objective Level, Restoration Action Level, and Project Level. As one moves through the DSS, foundational, root causes, as well as relevant information are evaluated to ensure that a project will be successful and sustainable in implementation. As projects are implemented, and new data is made available for MCERT, the DSS helps produce groups of projects that result in coordinated science-based restoration at scales that change the condition of Mississippi's coastal lands, water, and marine resources and habitats.

NFWF funding will be focused under three overarching restoration programs: Land Resources, Coastal and Marine Living Resources, and Water Resources. The Land Resources Program focuses on the need to conserve and manage priority lands, including lands already under protection. The Coastal and Marine Living Resources Program will help Mississippi achieve the stated vision to enhance, stabilize, and sustain populations of ecologically and

commercially/recreationally important species at sustainable levels. The Water Resources Program will help Mississippi restore and enhance the ecological and hydrological integrity of water resources, including improved water quality and quantity to our coastal bays and estuaries and coastal rivers and streams.

The Mississippi Coastal Restoration Plan is a community-driven, science-based product that provides an opportunity for an iterative planning process to optimize coastal and marine restoration. This plan will help guide decision-making for investments in coastal restoration in Mississippi. The Mississippi Coastal Restoration Plan is only a portion of ecological restoration efforts in Mississippi. MDEQ has worked diligently with NFWF, the Natural Resource Damage Assessment, and the RESTORE Act to develop projects to “Make Mississippi Whole” and will endeavor to continue to leverage and coordinate these restoration efforts. Following this, MDEQ has set forth principal tenets that will guide restoration. These are 1) thinking long-term, 2) being transparent, 3) being flexible to maintain momentum, 4) learning from outcomes, and 5) leveraging everything. From an overarching perspective regardless of what projects get funded the Mississippi Coastal Restoration Plan follows a simple paradigm where ecosystem benefits will accrue downstream. Through investments in land conservation and water resources across the coastal landscape commensurate increases of ecosystem function, ecological integrity, and connectivity will occur in our marine systems. By supplying and ensuring sustainable and resilient water quality and quantity through these upstream investments MDEQ is enhancing, stabilizing, and sustaining living marine resources in perpetuity.

This plan is the first draft of the broader articulation of how MDEQ plans to invest in coastal restoration. The plan will be updated on an annual basis as we learn from projects, hear from the invested stakeholders about changing environmental priorities, and as we complete restoration objectives. It is imperative that we continue to assimilate data, adaptively manage the tool and plan, and continue to hear from the stakeholders of Mississippi in order to ensure that Mississippi's plan is on the forefront of restoration for the state.