

State of Florida

Pensacola Bay Watershed Restoration

The Pensacola Bay Watershed headwaters are in southern Alabama, and the bay itself lies in northwestern Florida, in Escambia and Santa Rosa counties and adjacent to the State of Alabama and the City of Pensacola. The Pensacola Bay estuary covers 144 square miles and comprises five interconnected arms or large embayments: Pensacola Bay, Escambia Bay, Blackwater Bay, East Bay, and Santa Rosa Sound. Tidal fluctuations and flushing of the estuary are limited. Railroad and highway bridges also limit mixing between the waters of the upper and lower parts of the bay. Water exits the estuary through a narrow pass at the mouth of Pensacola Bay. This proposal would improve water quality and restore habitats in the watershed. The five projects are:

1. Pensacola East Bay Living Shoreline Project – Phase I (\$4,884,750)
2. Pensacola Bay Living Shoreline – Phase I (\$1,795,950)
3. Pensacola Beach Reclaimed Water System (\$2,925,000)
4. Beach Haven – Joint Stormwater & Wastewater Improvement Project - Phase II (\$5,967,000)
5. Bayou Chico Contaminated Sediment Removal - Planning, Design, and Permitting (\$356,850)

There are two living shoreline projects to restore lost oyster habitat. The wastewater reuse project would eventually make hundreds of thousands of gallons of reclaimed water available every day for irrigation on Santa Rosa Island. Each gallon of reclaimed water results in a corresponding reduction of the wastewater discharge into the Santa Rosa Sound. Continued expansion of this reclaimed water system will remove one of the last remaining point source wastewater discharges in the watershed and, at the same time, conserve potable water resources. The proposal also includes two projects in the heavily impacted Bayou Chico watershed, a combination stormwater/septic tank replacement project and an aggressive plan to remove contaminated sediment. All these projects would advance the goals in a variety of restoration plans already adopted for the Pensacola Bay watershed. This proposal leverages and builds upon the more than \$30 million in projects currently funded by the *Deepwater Horizon* Natural Resource Damage Assessment (NRDA) and National Fish and Wildlife Foundation (NFWF) funding sources that address water quality and habitat restoration in this watershed. It also leverages more than \$25 million in local funds invested in Bayou Chico. Requested funding amount: \$15,929,550.

State of Florida

Apalachicola Bay Watershed Restoration

Apalachicola Bay, located in the panhandle of Florida, lies at the terminus of the Apalachicola-Chattahoochee-Flint River system and is one of the most undeveloped and productive estuaries in the United States. Because of their importance, ecologically and economically, the river and bay have been designated in recognition of their status as environmentally sensitive resources, including: a National Estuarine Research Reserve, an Outstanding Florida Water, a Florida Aquatic Preserve, a Class II Shellfish Approved Waters, and an International Man and the Biosphere Program waterbody. This proposal includes six projects that will collectively replenish and protect coastal and marine resources by restoring key coastal habitats. In addition, the projects will restore water resources by reducing excessive nutrients, which will mitigate adverse impacts resulting from freshwater flow reductions and will also remediate local, historical alterations that, heretofore, the River and Bay ecosystem has been able to tolerate. These actions in turn will revitalize the local economy, which depends on oystering and other marine-based products as well as tourism, and promote resilience and sustainability of local communities throughout the Apalachicola Bay Watershed. These communities are defined by their oysterman families, who built the industry in the early twentieth century and are struggling to continue this heritage. Shellfish harvesting connects these communities to the Gulf, and oystermen continue to pass their skills on to the next generation. The six projects are:

1. Lower Apalachicola River Basin Restoration – Tate’s Hell State Forest (\$8,084,700)
2. Hydrological Restoration of the Apalachicola River and Box-R Wildlife Management Areas (\$7,642,383)
3. Money Bayou Wetlands Restoration (\$1,174,169)
4. Marsh and Oyster Reef Restoration at the Apalachicola National Estuarine Research Reserve (\$2,340,000)
5. Apalachicola Watershed Agriculture Water Quality Improvement (\$2,219,856)
6. Apalachicola Bay Oyster Restoration (\$4,680,000)

Three of the projects would improve the quality, quantity and timing of fresh water flows to the hydrologically impacted Apalachicola Bay watershed. A fourth project would construct over one mile of living shorelines within the Apalachicola National Estuarine Research Reserve, using trained volunteers to assist in the activities associated with this restoration. A fifth would provide cost share funds to landowners to implement Florida Department of Agriculture and Consumer Services and United States Department of Agriculture Natural Resources Conservation Service water-quality-focused best management practices to improve the quality of discharge from agricultural operations to tributary streams and groundwater that drain to the Apalachicola River. The sixth project includes an expansion of the *Deepwater Horizon* NRDA Phase III early restoration oyster population rebuilding project that will restore more acres of natural oyster reefs through the addition of suitable substrate to support successful oyster spat settlement, and ultimately to provide adult oysters. These projects all leverage or build upon more than \$12 million in projects for the Bay that will be implemented with other Deepwater Horizon funding and Federal Disaster Assistance funds. Requested funding amount: \$26,141, 107.

State of Florida

Suwannee River Watershed Restoration

This proposal includes three projects that, collectively, will help restore and protect water quality, water supplies and habitat in the Suwannee River Watershed. It is one of Florida's least populated areas and, for that reason, remains more biologically diverse and healthier than many other watersheds. The proposal will also replenish living marine resources; and revitalize the local Gulf Coast economy—and the communities that depend on those natural resources and that economy—and set them on a more sustainable, resilient footing for the future. The three projects are:

1. Restoring Resilience to Oyster Reefs in the Big Bend of Florida's Gulf Coast (\$5,181,697)
2. Lower Suwannee & Gulf Watershed Conservation Easement (\$4,000,000)
3. Suwannee River Partnership Irrigation Water Enhancement Program (\$2,884,000)

Each project extends the benefits of projects and programs already proven successful in the watershed. They will accomplish these ends by restoring water resources, reducing excessive nutrients, and replenishing and protecting coastal and marine resources through conservation of coastal lands and restoration of oyster reef habitat—and in doing so, will achieve the complete set of Council goals and objectives. These actions in turn will help revitalize the local Gulf Coast economy, which depends on oystering and other marine-based products as well as tourism and silviculture, and promote the resilience and sustainability of local communities throughout the watershed. They leverage other resources and build on past investments in the region to extend their impact. Requested funding amount: \$12,065,697.

State of Florida

Tampa Bay Watershed Restoration

Tampa Bay is the largest open-water estuary in Florida at nearly 400 square miles. The bay contains more than 200 fish species, including snook, redfish, and spotted sea trout. Its mangrove-blanketed islands support among the most diverse waterbird nesting colonies in North America, annually hosting 40,000 pairs of 25 different species. However, Tampa Bay has extensive areas of impaired waterbodies (those not meeting water quality standards), which have adversely affected coastal habitats. This proposal's five projects collectively will restore and protect habitat and water resources; replenish living marine resources; and revitalize the local economy—and the communities that depend on those resources and that economy—and set them on a sustainable, resilient footing. The five projects are:

1. Robinson Preserve Restoration (\$1,755,000)
2. River Tower Shoreline Restoration and Stormwater Treatment (\$1,755,000)
3. Palm River Restoration Project Phase II, East McKay Bay (\$585,000)
4. Edward W. Chance Reserve Hydrologic Restoration (\$204,750)
5. Alafia Bank Bird Sanctuary Living Shorelines (\$2,647,710)

Each project extends the benefits of projects and programs already proven successful in the watershed. They will accomplish these ends by restoring shoreline habitat, creating and enhancing upland habitat, and providing stormwater treatment to reduce pollutant impacts on critical water resources—and in doing so, will achieve the complete set of Council goals and objectives. These actions in turn will invigorate the diverse Tampa Bay economy, which depends on its expansive coastal environment to attract and sustain its year-round community and a thriving tourist industry. The significance of funding projects in this area is that the state and local governments have already invested millions in projects aimed at improving Tampa Bay. Requested funding amount: \$6,947,460.

State of Florida

Northwest Florida Watershed

Northwest Florida's major riverine-estuarine watersheds encompass 16 Florida counties, including the entirety of Florida's eight counties disproportionately affected by the Deepwater Horizon oil spill. Seven of the eight watersheds are interstate in character, and the overall drainage area extends over portions of 86 counties in Alabama and Georgia. This region encompasses a series of estuaries, including Perdido, Pensacola, Choctawhatchee, St. Andrew, St. Joseph, Apalachicola, Ochlockonee, and Apalachee bays and Santa Rosa Sound. These waterbodies support significant habitat diversity and productivity and include extensive seagrass communities, shellfish beds, and salt marshes, among other habitat types. The region also supports a series of unique coastal dune lakes and other endemic habitats. These resources and their watershed functions provide an array of important public benefits and help define the character and economies of the surrounding communities. This proposal will accomplish high priority near-term restoration and protection actions benefitting the region's estuaries and coastal watersheds while building an enduring foundation for continuing cooperation to protect and further restore watershed resources. These actions will directly enhance water quality, aquatic ecosystems, and associated wetland and riparian habitats within and along the northern Gulf of Mexico. This proposal includes four major components:

- 1) Comprehensive updates to watershed management plans for each of the region's major estuarine/riverine watersheds (\$645,000);
- 2) Design and permitting of identified priority projects (\$3,000,000);
- 3) Project implementation (\$12,000,000); and
- 4) Project monitoring (\$1,200,000).

Implementation will include urban stormwater retrofits and best management practices; restoration and enhancement of wetland, riparian, and floodplain habitats and functions; public outreach and engagement; and associated monitoring. The updated watershed plans will also assist in identifying and prioritizing needed improvements to wastewater treatment and management. An ongoing community-based watershed planning process will continue, building upon recent efforts of The Nature Conservancy and regional stakeholders to establish holistic watershed-based initiatives and identify priority issues and project options. This proposal leverages and builds upon the more than \$175 million in projects currently funded through other Deepwater Horizon funding sources that address water quality, habitat restoration, wildlife recovery and lost recreational uses (coastal resiliency) in the Panhandle. Requested funding amount: \$16,845,000.

State of Alabama

Alabama Barrier Island Restoration Through Beneficial Use of Dredged Sediments

Building upon prior activities, the State of Alabama proposes that RESTORE funds be provided to the United States Army, Corps of Engineers, Mobile District to allow the placement of additional sandy material from the Sand Island Beneficial Use Area (SIBUA) into the local littoral transport system. Placement of sandy material into the Sand Island/Pelican Island complex will help maintain a sediment transport complex in a manner that will reestablish the flow of sand on to the western region of Dauphin Island and enhance restoration of valuable habitat. The project will enhance utilization of navigation maintenance sediment and contribute to maximizing use of dredge material for effective and sustainable coastal restoration.

Secondarily, the project activities also further goals to Restore and Revitalize the Gulf Economy, Replenish and Protect Living Coastal and Marine Resources, and Enhance Community Resiliency. For example, strategically placing the material will direct littoral sediment to the beaches of Dauphin Island, reduce damaging effects of hurricanes and severe storms to properties and environmental resources along the coastal region, help to stabilize or restore the shoreline, and provide numerous ecological benefits to barrier island species such as piping plovers, terns, gulls, sea turtles and similar species. Implementation of this project would occur in two phases. The first phase will involve feeding the Sand Island/Pelican Island complex using dredged material from the SIBUA; requested funding for this phase is \$6 million. The second phase placement strategy would be the same as described for the first phase but would beneficially utilize material directly from maintenance dredging of the Mobile bar channel; requested funding for this phase is \$12 million. Requested funding amount: \$18,500,000.

State of Alabama

Gulf of Mexico Alliance (GOMA) Gulf-wide Restoration Coordination and Support

Alabama proposes to utilize RESTORE funding to sustain and ensure stable funding for the well-established gulf-wide coordination efforts of the Gulf of Mexico Alliance (GOMA). GOMA is a regional partnership that includes State and Federal agencies, academia, business & industry, non-governmental conservation organizations, and private citizens. Funding is specifically sought to support two ongoing efforts of GOMA: 1) general coordination (\$2,887,500) and 2) the efforts of GOMA's Habitat Conservation and Restoration Team (HCRT) (\$5,925,000). The proposed project provides programmatic support for GOMA's collaborative partnership to conduct coordination so priorities can be aligned, duplication of efforts will be minimized and leveraging of opportunities can be identified. Further, GOMA proposes to utilize project funds to complete and sustain the "DWH Project Tracker," a centralized directory of projects funded by Deepwater Horizon based restoration sources. GOMA's HCRT proposes to implement a Regional Sediment Management and Beneficial Use of Dredged Materials Program to support small-scale beneficial use projects in all the Gulf States by providing financial support to those associated with habitat restoration, while also enhancing the implementation of an existing community-based, small-scale restoration program. The HCRT will also support the establishment of an online geospatial decision-making tool to support local and regional beneficial use and habitat restoration projects. Requested funding amount: \$8,262,500.

State of Alabama

Coastal Alabama Comprehensive Watershed Restoration Planning Project

With the publication of its updated Comprehensive Conservation and Management Plan (CCMP) in 2013, the Mobile Bay National Estuary Program (MBNEP) adopted a protocol of watershed management planning at the 12-digit Hydrologic Unit Code (HUC) scale to guide science-based project implementation in Alabama's coastal watersheds. Utilizing significant community and stakeholder input, the MBNEP's 20-member Science Advisory Committee and 30-member Project Implementation Committee systematically targeted and prioritized the order in which 31 coastal and intertidal watersheds were identified for the development of standardized comprehensive watershed management plans. To date, funding has been secured and watershed management plan development is underway or has been completed in 5 priority watersheds in the MBNEP Program Area. Seven additional priority watersheds, as well as implementation of specific habitat and water quality projects is also underway with funding from NFWF's Gulf Environmental Benefit Fund. The watershed management planning process, tied with the stakeholder-driven NEP framework, is proving to be a strong foundation to support targeted, efficient ecosystem restoration. It is expected that certain efficiencies can be achieved by completing all of the remaining watershed plans in a similar timeframe. MBNEP staff and committee structures are in place to monitor plan development and ensure quality and consistency of each effort. The Council-Selected Restoration Component of funding through the RESTORE Act provides a unique opportunity to complete the watershed planning component of the remaining 19 priority watersheds in Coastal Alabama. Requested funding amount: \$4,342,500.

State of Alabama

Alabama Living Shorelines Restoration and Monitoring Project

Alabama seeks RESTORE Council funds to build upon existing living shoreline successes in the state while also advancing the science behind this type of work. Specifically, the project seeks to: 1) complete final design and install living shoreline techniques covered under the Alabama general permit at a highly visible location ideally suited for public outreach (Boggy Point Boat Ramp in Orange Beach, Baldwin County, AL); 2) complete final design, engineering, permit modifications (if needed) and implementation of living shorelines techniques to augment existing work at Point aux Pins in Mississippi Sound (Mobile County, AL); 3) conduct living shoreline planning, design, and permitting work to augment existing permitted shoreline restoration efforts on Coffee Island in Mississippi Sound (Mobile County AL); and 4) implement a comprehensive living shoreline monitoring program that includes data collection and synthesis for at least nine existing projects in Alabama. Project partners will also engage in extensive public outreach about living shorelines and will make results available to landowners, regulatory agencies, and coastal decision makers to support adaptive management of shoreline restoration efforts. Requested funding amount: \$10,250,000.

State of Alabama

Alabama Submerged Aquatic Vegetation Restoration and Monitoring Project

The Alabama Submerged Aquatic Vegetation Restoration and Monitoring Project seeks to utilize RESTORE Act funds to further the State's comprehensive efforts to sustain and restore Submerged Aquatic Vegetation (SAV or seagrass) in coastal Alabama. These efforts advance the goals and objectives of the Comprehensive Conservation and Management Plan (CCMP) of the Mobile Bay National Estuary Program (MBNEP 2014) and supports ongoing efforts of the NOAA funded Alabama Coastal Zone Management Program. Alabama proposes the development of a model SAV restoration and monitoring program that is foundational in nature and can be applied Gulfwide. Specific project components include:

- Lower Perdido Bay Sea Grass Protection and Restoration: RESTORE funds will be used to add additional bird stakes to the area; additional navigational signage advising the public of the boundaries of no-motor zones and the presence of sea grasses; and educational signage describing the importance of SAVs.
- Upper Mobile Bay and the lower Mobile/Tensaw River Delta SAV Restoration Project: SAV seeds (particularly *Vallisneria* sp.) will be collected in order to be sown in areas known to historically have *Vallisneria* present.
- Submerged Aquatic Vegetation Monitoring Program: In 2014, the National Fish and Wildlife Foundation announced that Gulf Environmental Benefit Funds will be awarded to update SAV maps in Alabama. Alabama seeks to leverage this effort to collect 2 additional SAV measurements over the next 5-7 years, each 2-3 years apart. In each case, aerial imagery will be analyzed to determine SAV coverage and create a GIS shapefile of SAV coverage, with species composition noted for each polygon. Imagery acquisition, imagery analysis and field work to ground-truth SAV species and coverage will be conducted in accordance with NOAA protocols in order to maintain data consistency between collections. A report on SAV coverage, species composition and status & trends will be developed from each monitoring event.

Requested funding amount: \$875,000.

State of Mississippi

Strategic Land Protection, Conservation, and Enhancement of Priority Gulf Coast Landscapes

This proposal aims to address the focus areas of habitat and water quality, by foundationally investing in strategic land protection, conservation and enhancement on priority Gulf Coast landscapes. This proposal's objectives are the following:

1. Protect priority lands, through fee-simple and conservation easement programs throughout the Gulf of Mexico.
2. Establish a Gulf-wide conservation enrollment assistance program that provides funds to assist with due diligence and monitoring support for voluntary donations of fee simple or conservation easements.
3. Create a strategic conservation landscape assessment framework for future land acquisition prioritization through collaborative conservation planning and design.
4. Utilize monitoring to understand effects of land conservation on habitat characteristics.
5. Undertake education and outreach activities to describe the values of land protection for habitat, water quality improvement and for securing the future of the Gulf of Mexico.

These five objectives integrate across the Gulf to promote foundational and sustainable mechanisms for restoring the Gulf of Mexico. This Gulf-wide proposal, will utilize several mechanisms to protect, conserve, and enhance habitat across the Gulf. Multiple integrative objectives will lead to priority area protection, strategic, multi-agency, foundational planning for further securing the Gulf of Mexico, and help understand the impact of land conservation efforts on the habitat characteristics of the ecosystem. Though focused on acquiring land from willing sellers using two methods of fee simple acquisition and conservation easements, this proposal will also look to invest in paying for due diligence for land trusts across the Gulf to increase acreage enrolled. This proposal also significantly invests in outreach and education through the respective SeaGrants towards connecting habitat conservation and water quality. Requested funding amount: \$103,467,437.

State of Mississippi

Enhancing opportunities for beneficial use of dredge sediments

Synergistically linking sediment management and habitat creation helps address habitat loss through sustainable resource management of sediment being dredged. This Gulf-wide proposal aims to provide funding to multiple Gulf states towards beneficial use of dredge sediments (BU). The proposal will provide funding towards planning, engineering and design, and permitting of sites to receive BU within Texas, Alabama, and Mississippi. The proposal's main purpose is to get sites construction ready so that a significant amount of habitat can be created when additional funds become available. There is a significant need for planning prior to establishing a BU site. Planning requires the identification of BU sites, appropriate prioritization of site selection using environmental characteristics of bathymetry, wave climate, prevailing winds, as well as logistical considerations to accessibility and proximity to dredge sediments. Planning also then allows containment options to be considered based on the environment (as appropriate). Engineering and design is required for both the containment as well as the habitat that will be created. Once designed and sited, permits will need to be acquired through the respective permitting authorities. Once all of these steps are completed containment can be constructed to create the site that will receive BU. Requested funding amount: \$6,180,000.

State of Mississippi

The Mississippi Sound Estuarine Program: A programmatic vision for bridging coastal restoration

Mississippi is the only Gulf state that currently does not have a National Estuarine Program (NEP) nor any other comprehensive estuarine like program. This proposal aims to provide funding to establish a Mississippi Sound Estuarine Program (MSEP). The program would geographically encompass the Pearl River on the west to the Escatawpa River in the east. The proposal would initially fund the strategic development of a restoration action plan, and initial coordination efforts that would look across all current funding horizons (National Fish and Wildlife Foundation, Natural Resource Damage Assessment, and RESTORE), leverage existing efforts (Mississippi Comprehensive Ecosystem Restoration Tool) and provide an avenue of strategic coordination of coastal restoration investment. The proposal has the following objectives:

1. Develop a strategic comprehensive restoration action plan for sustainable coastal restoration with input from all the respective state, federal, NGO, and CBO organizations within the Mississippi Gulf Coast, as well as adjacent states.
2. Convene advisory teams that will be charged with respective engagement roles towards sustainable restoration and the finalization and adoption of the MSEP structural framework
3. Initiate a coordinated and collaborative effort to create a coupled river – to Mississippi Sound hydrodynamic model as a foundation for sustainable coastal restoration.
4. Host annual restoration planning discussions that would highlight coastal restoration specific work in the MSEP area of interest and the Mississippi Sound
5. Create and project 10 year funding strategy for MSEP

Funding such a program is not only necessary for systemically guiding the restoration of the Mississippi Gulf Coast, it is vital as a bridge program between Louisiana and Alabama. Ecologically it is a bridge between blue water and upland restoration and will allow better decisions to be made as it relates to coastal restoration in the future long after the oil spill funding and for future unforeseen events. Requested funding amount: \$2,270,000.

State of Louisiana

West Grand Terre Beach Nourishment and Stabilization

The objectives of the proposed West Grand Terre Beach Nourishment and Stabilization project are to restore and enhance dune and back barrier marsh habitat to provide storm surge and wave attenuation, thereby addressing the issues of gulf shoreline erosion, diminished storm surge protection, and subsidence of back barrier marshes. This project is estimated to build 12,700 feet of beach and dune with an area of 235 acres. In addition, up to 66 acres of back barrier marsh will be restored and a rock revetment will be constructed to protect the restored marsh. The project will increase the width of the island and maintain shoreline integrity through the introduction of sediment in order to increase island longevity. Louisiana's barrier islands have decreased in land mass by more than 50% over the last 100 Years, with the Barataria/Plaquemines region being one of the most rapidly disappearing areas in Louisiana. The West Grand Terre Beach Nourishment and Stabilization project will be constructed by hydraulically dredging and pumping sediment from offshore deposits near the Quatre Bayou borrow site approximately nine miles to the designated fill sites. Requested funding amount: \$7,259,216.

State of Louisiana

Golden Triangle Marsh Creation

The Golden Triangle Marsh Creation project's objective is to restore and protect wetland, fish, and wildlife habitat and help maintain landscape integrity and enhance community resilience.

The Golden Triangle is a narrow band of brackish marsh directly east of New Orleans between Lake Borgne and the confluence of the Mississippi River Gulf Outlet and the Gulf Intracoastal Waterway. The Golden Triangle Marsh falls within Bayou Sauvage

National Wildlife Refuge acquisition boundary, one of the last remaining marsh areas adjacent to Lakes Pontchartrain and Borgne. The Golden Triangle Marsh Restoration Project will be constructed by hydraulically dredging and pumping sediment from Lake Borgne approximately 16 miles to the designated fill site. The fill site is approximately 600 acres. Lake Borgne is currently the most cost effective borrow site for the project. However, other borrow sources (i.e. Mississippi River, offshore deposits, etc.) may be identified through a comprehensive planning and feasibility effort. Measures of success for this project include wetlands and wildlife habitat restoration, as well as increased environmental education and outreach for the public in nearby New Orleans. Requested funding amount: \$4,347,733.

State of Louisiana

Biloxi Marsh Living Shoreline

The Biloxi Marsh Living Shoreline project is needed to protect, enhance, and restore the Biloxi Marshes which function as an important storm buffer for the city of New Orleans, an important cultural and economic center for the Gulf region, and will provide habitat as well as a variety of eco-system services. The Biloxi Marshes consist of approximately 49,000 hectares of brackish and salt marshes, which have been greatly impacted by shoreline erosion from wind-driven waves. The purpose of this project is to create bioengineered, marsh-fringing oyster reefs to promote the formation of self-sustaining living shoreline protection structures. The project is estimated to create approximately 47,000 feet of oyster barrier reef along the eastern shore of Biloxi Marsh. The Biloxi Marsh Living Shoreline project will be constructed by mechanically placing a manufactured product, or suite of products, just off the shoreline to create a living breakwater structure. A mechanical dredge will be used to provide access and flotation to the project area. The project area is located along the shoreline of Eloi Bay and Eloi Point, near the mouth of Bayou la Loutre. Requested funding amount: \$3,220,460.

State of Louisiana

Lowermost Mississippi River Management

The Lowermost Mississippi River (LMR), defined here as the reach from Baton Rouge to the Gulf of Mexico, is a nationally-significant, multiple use resource. The goal of the Lower Mississippi River Management Program (LMRMP) is to create an integrated, science-based management strategy for the LMR that results in sustaining and restoring wetlands in the ecosystem that is affected by current navigation and flood control systems, and in turn sustaining the LMR navigation and flood control systems through ecosystem restoration.

The Louisiana Coastal Protection and Restoration Authority (CPRA) and the U.S. Army Corps of Engineers (USACE) have recently engaged successfully in the development of the Louisiana Coastal Area Program (LCA) Mississippi River Hydrodynamic and Delta Management Study (MRHDMS). For the first time, a suite of mutually developed predictive models are available (or soon will be) to assess impacts to the river and adjacent basins of ecosystem restoration Projects. The LMRMP is intended to leverage this important work and will initiate the development of an updated Environmental Impact Statement (EIS) for the Mississippi River & Tributaries (MR&T) project. The new EIS will include an evaluation to determine the feasibility of relocating the Saltwater Barrier Sill away from sediment borrow areas used for restoration in the river and the identification of beneficial use opportunities tied to compatible projects in the Comprehensive Master Plan for a Sustainable Coastal Louisiana (Coastal Master Plan). The objective is to create a new river management paradigm where management goals for restoration compliment flood protection and navigation management goals, but all goals are recognized as connected and inter-dependent, and in fact support each other. CPRA will engage the United States Environmental Protection Agency (USEPA) and the USACE as partners to develop a new EIS that will rely heavily on numerical modeling tools developed jointly by CPRA and USACE in the LCA MRHDMS. The LMRMP will result in integrated, science-based, management for the LMR that restores lost wetland habitat and strives to achieve no net loss of wetland habitat in the coastal area affected by the navigation and flood protection programs. The estimated time line is approximately three years for completion of a new EIS. Requested funding amount: \$16,125,000.

State of Louisiana

Mississippi River Reintroduction into Maurepas Swamp

The Mississippi River Reintroduction into Maurepas Swamp project's objective is to restore and enhance the health and sustainability of the Maurepas Swamp through the reintroduction of seasonal Mississippi River inflow. The Maurepas Swamp is one of the largest areas of forested wetlands along the Gulf Coast, and encompasses approximately 57,000 hectares of bald cypress-tupelo swamp southwest of Lake Maurepas. Historically, the swamp received sediment and nutrient inputs from the Mississippi River during seasonal overbank flooding. However, this process has been interrupted by flood control levees, and consequently elevation has decreased to the point where the swamp is almost constantly flooded. In addition to restoring and enhancing a total of 18,300 hectares of forested wetland, this project should provide a number of other benefits including increased habitat productivity, water quality, and community resilience as the Maurepas Swamp represents a significant storm buffer to nearby communities. The Mississippi River Reintroduction into Maurepas Swamp Project consists of the following major components: 1) a gated river intake structure, 2) box culverts through the levee, 3) a sedimentation basin, 4) a conveyance channel, and 5) a drainage pump station. The maximum design flow is 2,000 cubic feet per second. The project will be located near Garyville, LA in St. John the Baptist Parish. Requested funding amount: \$14,190,000.

State of Texas

Bahia Grande Coastal Corridor

The Bahia Grande Coastal Corridor Project (BGCC) will complete the most critical portion of a protected corridor linking the globally significant Laguna Madre region of the South Texas and Northern Mexico Gulf Coast. By acquiring up to approximately 6,000 acres of land using RESTORE Act funds, the project will add to a 105,000-acre corridor of conservation lands that includes the Laguna Atascosa National Wildlife Refuge (NWR), Boca Chica State Park and the Lower Rio Grande Valley NWR. This corridor also connects over 2 million acres of private ranchland located north of Laguna Atascosa NWR with the 1.3 million acre Rio Bravo Protected Area, managed by the Commission Nacional De Areas Naturales Protegidas (CONANP) in Mexico. The Laguna Atascosa NWR currently manages approximately 95,000 acres in Cameron and Willacy counties. The fragmented nature of these refuge tracts is a concern for the Texas Parks and Wildlife Department (TPWD), the United States Fish and Wildlife Service (USFWS), and our many conservation partners, leading to development of a landscape-level strategic plan to emphasize corridor protection and restoration. In addition to linking areas of important wildlife habitat, acquiring more land within the BGCC will help to protect the towns of Port Isabel and Laguna Vista from dust and tropical weather-related flooding, and provide enhanced opportunities for hunting, fishing and wildlife observation. South Texas is a world-renowned birding destination and wildlife-oriented tourism brings millions of dollars to the local economy. Requested funding amount: \$5,500,000-19,095,760.

State of Texas

Matagorda Bay System Priority Landscape Conservation

The Matagorda Bay System on the central Texas Coast includes four major interconnected bays (San Antonio, Espiritu Santo, Matagorda and East Matagorda Bays) and their associated tidal sub-bays and tributaries. This bay system covers 627 square miles of open water, and includes Matagorda Island and West and East Matagorda Peninsulas. In addition to the inherent diversity and productivity of this system, the Matagorda Bay System project area offers unique opportunities to protect coastal habitats on a landscape scale because of its relative lack of human fragmentation and development. As of November, 2014, Texas state and federal fish and wildlife agencies, working with private sector coastal partners, have identified three tracts of land for fee simple acquisition totaling 17,000 acres at a cost of \$36.6 million as strategic conservation priorities. A fourth tract targeted for acquisition of a conservation easement is 10,000 acres valued at \$8 million. The fee simple acquisitions are available from willing sellers at appraised value and include some 28 miles of frontage on the Matagorda Bay System and the Gulf of Mexico. They protect habitat for endangered whooping cranes, piping plovers and sea turtles, as well as a variety of coastal habitats including beaches, dunes, coastal prairie, pothole wetlands and coastal live oak forests.

In addition, conservation of these tracts will protect extensive adjacent seagrass and shellfish beds. They also protect water quality by conserving local estuarine watersheds, filtering runoff and groundwater recharge and preserving local freshwater inflows. The primary goal of the project is to Restore and Conserve Habitat, but will also directly contribute to the protection of water quality and replenishment and living coastal and marine resources. Each acquisition will add to and/or complement existing conservation projects. Requested funding amount: \$6,800,000 - \$44,922,705.

State of Texas

Bayou Greenways 2020 – Clear Creek Riparian Corridor Acquisition

The Bayou Greenways project is ideally suited to receive RESTORE Act funding because it aims to acquire, preserve and restore nearly 4,500 acres of riparian buffer corridors along the major waterways (bayous and creeks) running predominately through Harris County and the City of Houston. These bayous are connected to a region known as the Trinity-San Jacinto Estuary (Galveston Bay) - the largest watershed on the Texas coast. The primary objective of this proposal is to restore and conserve habitat, with secondary goals to restore water quality, replenish and protect living coastal and marine resources, enhance community resilience and restore and revitalize the gulf economy. The project consists of two key steps. First, outright land acquisition of entire parcels along Clear Creek as it makes its way towards Galveston Bay. Second, through a secure funding source already created for the maintenance of the Bayou Greenways project, the Houston Parks Board will provide a net gain by lifting the ecological value of this land through habitat restoration efforts like invasive control and additional native plantings. The Houston Parks Board will also coordinate with Harris County Flood Control on efforts for increased detention to aid in the cleansing of stormwater. Thus, this proposal achieves the goals of habitat protection by purchasing and preserving land in perpetuity as parkland, and habitat restoration through a robust (and already funded) maintenance program. Requested funding amount: \$7,000,000.

State of Texas

Texas Beneficial Use of Dredged Material Project Design Fund Phase 1

Texas proposes the Beneficial Use of Dredged Material (BUDM) Project Design Phase I to provide funding for advance planning for three proposed BUDM projects: (1) Marsh Restoration in the Nelda Stark Unit of TPWD's Lower Neches Wildlife Management Area (WMA) within the Sabine Lake-Neches River Watershed; (2) Marsh Restoration in the Salt Bayou Unit of the J.D. Murphree WMA in the Salt Bayou Watershed; and (3) Marsh Restoration in Pierce Marsh on West Bay in the Galveston Bay Estuary. Texas has a history of successful BUDM projects. Cooperative agreements among Texas natural resource agencies and the USACE are in place through the Texas Coastal Management Program. Good working relationships exist between those agencies, federal natural resource agencies, local governments and the nongovernmental organization (NGO) community. The funding of project design to generate shovel-ready projects will greatly enhance the ongoing shared goal of a thriving and resilient Gulf coastal shoreline. Requested funding amount: \$968,000.

State of Texas

Texas Salt Bayou Freshwater Inflows Restoration: Feasibility Study, Design, Engineering & Permitting

The 60,000 acre Salt Bayou ecosystem in Jefferson County, Texas is the largest contiguous estuarine marsh complex in Texas. The Gulf Intracoastal Waterway (GIWW) bisects the Salt Bayou marsh, in effect creating a freshwater non-tidal marsh north of the GIWW and a brackish to saline tidal marsh to the south. Other factors have also contributed to the increased salinity in the southern marshes. Texas natural resource agencies and local stakeholders have developed the comprehensive Salt Bayou Watershed Restoration Plan. One of the goals of the Salt Bayou Plan is to restore freshwater inflows to the southern portion of the Salt Bayou Watershed. This project will provide the funding needed to design the use of passive inverted siphons to reconnect freshwater inflow from the northern to the southern portions of the marsh. This project would provide funding to complete a needed feasibility study. If the feasibility study finds that siphons can be constructed to provide benefits needed in this area, additional funds from this grant would be used for engineering, design and permitting. The primary goal addressed by this project is to create a shovel-ready freshwater siphon project to restore freshwater inflows and thus restore and conserve habitats in the Salt Bayou System. Upon ultimate construction and the successful lowering of salinities in the lower portion of Salt Bayou marsh, the project will make a significant contribution to restoring the natural resources, ecosystems, wildlife habitats, and coastal wetlands of the Gulf Coast region. Requested funding amount: \$1,500,000.

US Department of the Army

Wetland Creation in West Bay, Louisiana, Using Dredge Material From the Mississippi River Hopper Dredge Disposal Area

The proposed project will create/restore approximately 400 acres of emergent wetlands in the bird's foot delta of the Lower Mississippi River (LMR) by placing an estimated 5.7 million cubic yards (mcy) of sediment at an estimated total cost of \$36.5 million, for an average cost of \$93,000 per acre restored, at an estimated unit price of \$6.41 per cubic yard of material placed.

The proposed project consists of restoring coastal wetland habitat through the placement of dredged material from the Head of Passes Hopper Dredge Disposal Area (HDDA) in the bird's foot delta of the Lower Mississippi River. The primary goal and objective of this project is to Restore Habitat, specifically, to rapidly restore 400 acres of emergent wetlands through the placement of readily available dredge material. The project will enable USACE to improve its utilization of Mississippi River sediment and will contribute to maximizing the use of dredge material for effective and sustainable habitat restoration. The emergent wetlands to be created by the project will, amongst other things, provide a barrier to the progression of saltwater intrusion into freshwater marsh, provide habitat for wildlife and waterfowl, provide higher quality essential fish habitat for recreation and commercially important fish and shellfish species, and support storm surge risk reduction to the Mississippi River and nearby transportation and oil and gas infrastructure. In addition to supporting the primary goals and objective, the project will support most of the remaining Comprehensive Plan goals and objectives. Requested funding amount: \$36,500,000.

US Department of the Army

Wetland Creation in the Pass a Loutre WMA Using Dredge Material from South Pass of the Mississippi River

The proposed project will create/restore approximately 640 acres of emergent wetlands in the bird's foot delta of the Lower Mississippi River by placing an estimated 8.5 million cubic yards (mcy) of sediment at an estimated total cost of \$36 million, for an average cost of nearly \$56,750 per acre restored, at an estimated unit price \$4.27 per cubic yard of material placed. The proposed project consists of restoring coastal ridge and wetland habitat in the bird's foot delta of the Lower Mississippi River through the placement of dredged material from South Pass of the Mississippi River. The primary goal and objective of this project is to Restore Habitat, specifically, to rapidly restore 640 acres of ridges and emergent wetlands through the placement of readily available dredge material. The project will enable USACE to improve its utilization of Mississippi River sediment and will contribute to maximizing the use of dredge material for effective and sustainable habitat restoration. The ridges and emergent wetlands to be created by the project will, amongst other things, provide a barrier to the progression of saltwater intrusion into freshwater marsh, provide habitat for wildlife and waterfowl, provide higher quality essential fish habitat for recreation and commercially important fish and shellfish species, and support storm surge risk reduction to the Mississippi River and nearby transportation and oil and gas infrastructure. In addition to supporting the primary goals and objective, the project will support most of the remaining Comprehensive Plan goals and objectives. Requested funding amount: \$36,000,000.

US Department of the Army

Restoration of Whooping Crane Critical Habitat with Beneficial Use of Dredged Material

The proposed habitat restoration project on the central Texas coast would create/restore 318 acres of tidal emergent marsh habitat for the endangered whooping crane by constructing protection and containment structures and creating marsh with maintenance material from the Gulf Intracoastal Waterway (GIWW) at total estimated cost of \$17 million for an average cost per acre of \$54,000. While the primary goal of the proposed project is to Restore Habitat, it would also support all of the other Plan goals. The project could be implemented at any one of three scales. Scale 1 would provide for completion of protection and containment structures for all three BUS, and the completion of 52 acres of marsh at BUS D at a cost of \$10,944,300. Scale 2 would include all Scale 1 activities plus the creation of marsh at BUS J, resulting in a total of 201 acres completed by Year 13 for a total of \$15,567,800. Scale 3 would include all of Scale 2 plus the creation of marsh at BUS A, resulting in a total of 318 acres by Year 21 for a total of \$17,263,20. Individual cells within each BUS would be completed incrementally. For Scale 3, 16 percent of the total marsh acreage would be complete and contributing to the estuarine system by Year 3, almost 50 percent complete by Year 7, 94 percent complete by Year 15, and 100 percent complete by Year 21. Restoration Council funding would be expended by Year 3 for each scale of construction, as USACE O&M funding (up to \$32,471,200) may be leveraged to fund marsh filling in all years beyond the first year of construction. Requested funding amount: \$17,263,20.

US Department of the Army

Restoration of Deer Island with Beneficial Use of Dredged Material

The primary goal of this project is to restore and conserve habitat by restoring an estimated 40 acres of estuarine tidal marsh by creating a containment structure into which readily available sediment material from the Biloxi Harbor navigation project and potentially smaller private channels would be placed. This project is a significant step toward restoring the ecosystem diversity to regional tidal marsh and open water estuarine habitats and the continuation of an overall restoration of Deer Island (Harrison County, Mississippi) to its pre-1900 footprint. The project will enhance utilization of navigation maintenance sediment and contribute to maximizing use of dredge material for effective and sustainable coastal restoration. The primary objective is to Restore, Enhance, and Protect Habitats by restoring the estuarine marsh through the construction of an earthen containment area and placement of dredge material at a cost of about \$75,000 per acre. RESTORE funds will be utilized to create the containment feature, cost of placement and management of material will be leveraged from Federal and potentially private interests. The project will enhance utilization of navigation maintenance sediment and contribute to maximizing use of dredge material for effective and sustainable coastal restoration. Secondary objectives include: improvement to water quality, providing habitat for living coastal and marine resources. MDMR currently holds a Department of Army permit from USACE Mobile District, Regulatory Division to construct the original containment and emergent tidal marsh feature utilizing the beneficial use of dredged material concept. This permit expires in 2021 but could be renewed if necessary. Once all work is completed under this proposal, the 40 acre site will be able to contain approximately 400,000 cys of locally dredged material. Requested funding amount: \$3,000,000.

US Department of the Army

Beneficial Use of Dredged Material to Create Emergent Tidal Marsh in Upper Mobile Bay

The primary goal of this project is to restore and conserve habitat by creating and restoring an estimated 1,200 acres of estuarine tidal marsh through the placement of readily available sediment material from the Mobile Bay navigation channel, ASPA terminals, and local private dredging activities into the upper Mobile Bay beneficial use (BU) area. This project is a significant step toward enhancing the ecosystem diversity of a region containing extensive open water estuarine habitats and limited tidal marsh. The project will enhance utilization of navigation maintenance sediment and contribute to maximizing use of dredge material for effective and sustainable coastal restoration. The primary objective is to Restore, Enhance, and Protect Habitats by restoring the estuarine marsh through the construction of a semi-submerged containment area and placement of dredge material at a cost of about \$23,000 per acre. RESTORE funds will be utilized to create the containment feature, cost of placement and management of material may be leveraged from Federal and private interests. Secondary objectives include: improvement to water quality, providing habitat for living coastal and marine resources, enhancing community resilience by providing buffer to a main thoroughfare between Mobile and Baldwin Counties, and enhancing the economy of the region by providing cost effective disposal options for the many navigation related industries located along the Mobile River. At the completion of the containment berms and the initial 100-acre marsh, the semi-confined site design will enable the entire site to have full tidal influence and allow marine life conveyance within the site until it is ultimately filled with dredged material and the wetlands are established. The proposed design will provide for tidal channels throughout the wetlands to increase the edge effect of the vegetation and provide for appropriate spawning grounds for native estuarine species. Requested funding amount: \$27,500,000

US Department of the Army

Egmont Key Restoration and Storm Damage Reduction (Tribal Proposal)

This proposed habitat restoration project will nourish the beaches with approximately 676,000 cubic yards of material along the length of the western shoreline of the island and will construct a support structure on the north tip of the island. The fill would be placed to construct a berm height of elevation +6.0 feet NAVD 88. This work will beneficially use dredged material when possible to repair shoreline recession. The project will provide approximately 39 acres of coastal habitat restoration (through fill placement). After the initial nourishment and construction event, the beach will need re-nourishment approximately every seven years. Egmont Key is an island located at the mouth of Tampa Bay on the Gulf of Mexico. Because the island is largely undeveloped, it is an excellent habitat for nesting birds, sea turtles, and other wildlife. The reestablished beach and sand dune system will provide new nesting opportunities for shorebirds, sea turtles, and additional wintering habitat for the endangered piping plover. As a result, the Egmont Key project's primary RESTORE Act goal is to Restore and Conserve Habitat and secondarily Replenish and Protect Living Coastal and Marine Resources. The Egmont Key Restoration and Storm Damage Reduction project will prevent the loss of irreplaceable nationally significant cultural resources vital to the Seminole Tribe of Florida; national historic properties; and other resources important to the regional community. Requested funding amount: \$38,550,000.

US Department of the Army

Cote Blanche Freshwater and Sediment Introduction, and Shoreline Protection Project, St. Mary Parish, Louisiana (Tribal Proposal)

The activities proposed include the planning, engineering, environmental compliance, and design of a project that will restore/protect 763 acres of wetlands in the Teche/Vermilion Basin by increasing freshwater and sediment input from the Gulf Intracoastal Waterway (GIWW) into interior marshes and constructing shoreline protection. Phase I of the project, which consists of planning, engineering, environmental compliance, and design, is estimated to cost \$2.65 million. The project is proposed on behalf of the Chitimacha Tribe of Louisiana and is seeking funding for planning and technical assistance (the planning, engineering, environmental compliance, and design) activities for the Cote Blanche Freshwater and Sediment Introduction and Shoreline Protection Project. The proposed project is located in the Teche/Vermilion Basin in St. Mary Parish, Louisiana. The primary Comprehensive Plan Objective supported by the proposed project is to “Restore, Enhance, and Protect Habitats” by restoring/protecting coastal wetland habitat through the introduction of freshwater and sediment from the GIWW and the placement of shoreline protection features. In addition to supporting the primary objective, the project will support most of the remaining Comprehensive Plan objectives. Requested funding amount: \$2,650,000.

US Department of the Interior

Recovery and Restoration of Deep-water Coral Habitats in the Gulf of Mexico

The principal goal of the proposed research is to support restoration and conservation of deep-sea coral habitats. Understanding long-term recovery and preparing for potential future impacts are fundamental to the basic concept of habitat restoration and protection of ecosystem services.

There is a fundamental need to identify the best methods for monitoring and restoration of deep-sea coral habitats. This study represents the primary restoration phase involving data collection to understand changes and possible recovery to the impacted deep-sea coral communities, locating sources of populations of impacted coral, developing advanced techniques to understand the coral and associated community response, and to develop transplantation techniques for deep-sea corals. This research will initiate the development of a deep-sea component to a GoM-wide observing system that extends from shallow to deep waters (>1500 m). This work will track the success of direct restoration techniques while continuously monitoring the environmental conditions and natural resources over broad temporal and spatial scales. After successful restoration and continued protection from future damage, these coral habitats will provide ecosystem services for decades to come. The proposed work also has broad applications to understanding the GoM-wide ecosystem, making trophic connections from the Gulf-state watersheds to deep-sea environments. Requested funding amount: \$ 11,234,739.

US Department of the Interior

Gulf Coastal Habitat Restoration Program

The primary goal of the Gulf Coastal Habitat Restoration Program (GCHRP) is to restore and conserve the health, diversity, and resilience of key coastal, estuarine, and marine habitats – and the living resources that depend on them. The GCHRP is designed to use existing funding mechanisms and provide crucially needed capacity to focus and synergize on-the-ground implementation of restoration projects throughout the 5 Gulf States. Over the next 5 years, the GCHRP would provide up to \$20 million in direct on-the-ground project funding for conservation actions to those partners who may not have direct access to Deepwater Horizon Spill-related funding sources (e.g., be a NRDA Trustee or RESTORE Council member). The GCHRP is not intended to be another function of the RESTORE Council itself, or to duplicate existing grant or assistance programs but rather complement ongoing work, maintain and grow the vital network of partners in local communities, and bridge the gap between larger watershed and landscape planning and local community-based implementation. A priority of the GCHRP will be to collaborate with other programs focused on finding opportunities to help train a local, highly-skilled restoration workforce. The types of projects expected to be funded can include (but are not limited to) the use of prescribed fire for habitat management; control of invasive or exotic species; restoration of oyster reefs, wetlands, coastal prairie, coastal dune lakes, agricultural fields, colonial rookery islands, riparian habitats, coastal forest ecosystems such as longleaf pine savanna, cypress tupelo and mangrove habitats; living shoreline protection; fish and aquatic passage and barrier removal; beneficial or direct use of dredged material to create marshes or other habitats; transplanting and re-introduction of native plant species; and land conservation, including voluntary easements with landowners or fee-title acquisition. While individual projects may be discrete in construction, this Program will collectively assess success on a broader landscape scale. Requested funding amount: \$26,795,100.

US Department of the Interior

Abandoned Oil and Gas Well Plugging and Site Reclamation

Nineteen (19) U.S. Fish and Wildlife Service (FWS) and National Park Service (NPS) areas in Louisiana and Texas have abandoned oil and gas wells and associated features because in most cases: (1) the abandoned features predated the establishment or expansion of FWS and NPS areas; or (2) operators conducting oil and gas operations in FWS and NPS areas abandoned the operations, and FWS and NPS have exhausted regulatory avenues for operators to take necessary corrective actions and the operations have been determined to be abandoned. Abandoned oil and gas features pose risks to human safety, environmental risks to surface and subsurface resources, and continued habitat loss. Thirty-nine (39) of the 52 projects in this proposal are ready to implement. Compliance would be completed within 1 day to 6 months before implementing the remaining 13 projects. The FWS and NPS propose to enter cooperative agreements with the State Oil and Gas Divisions to implement the majority of projects, particularly for plugging/re-plugging 32 wells and removing surface equipment/debris at 61 sites, before completing site reclamation to restore habitat at the sites. Timeline to complete projects would range from 1 to 3 years, with one project (reclamation of vehicle tracks in wind tidal flats on 3,038 acres in Padre Island National Seashore (TX)) taking up to 6 years to complete. Requested funding amount: \$34,399,245.

US Department of the Interior

Strategic Conservation Assessment of Gulf Coast Landscapes

The Strategic Conservation Assessment of Gulf Coast Landscapes project will be a collaborative effort catalyzed by the Department of the Interior working through a voluntary, science and planning partnership. This work capitalizes on the capacity of the private, state, and federal Landscape Conservation Cooperative (LCC) partnerships in the Gulf Coast Region (GCR), and will be coordinated through a Core Working Group comprised of representatives from Restore Council member organizations and the other partnerships in which they are involved. This approach will facilitate the synthesis of conservation planning in the GCR, providing a strong foundation for identifying conservation needs and priorities. Products from this work include a Conservation Prioritization Tool (CPT) in the first year to evaluate the benefits of individual land conservation projects, and in the second year an initial Gulf-wide Strategic Conservation Assessment (SCA) that will enable end-users to spatially prioritize the GCR to guide landscape-level conservation investments across the Gulf. Advanced analyses in Year 3 will be conducted using Marxan and/or Zonation software to optimize a portfolio of land conservation projects to meet shared priorities and objectives. Engagement with stakeholders from across the GCR will leverage existing efforts, avoid duplication, and ensure the values of local communities and residents are incorporated in all aspects of this project. Total funding for implementing the Strategic Conservation Assessment of Gulf Coast Landscapes is just under \$1.9 million over a 3-year period. Recognizing the vital connection between strategic planning and actual on-the-ground delivery, the work described herein is referenced by the Mississippi Department of Environmental Quality (MDEQ) in a companion proposal that focuses on land conservation in practice (acquisitions and easements). Requested funding amount: \$1,879,378.19.

US Department of the Interior

Adaptive Management and Technical Assistance in Support of Gulf Ecosystem and Economic Restoration

The US Geological Survey proposes a multidisciplinary program utilizing a collaborative approach with multiple partners to provide science-based technical assistance to Council-funded Gulf restoration projects. These projects will benefit from existing technical experts using a structured decision-making process to ensure that proposed and implemented restoration projects are sound and based on the best available scientific expertise and guidance and have the greatest chance to achieve Council goals and priorities. Our approach will be an overarching, adaptive management-based program that will be implemented over three phases in 10 years, and will integrate four critical layers of information in support of Gulf ecologic and economic restoration – adaptive management, monitoring, restoration project sustainability, and valuation of ecosystem services and economic impacts. The objectives of Phase I (this proposal, 3 years) are to: 1) establish a Gulf Restoration Adaptive Management and Technical Assistance Program (GRAMTAP) using an adaptive management framework to help design and execute technically sound and sustainable restoration projects; and 2) deliver local to regional-scale assistance including: guidance for consistent and integrated monitoring practices; tools to assess and increase restoration project sustainability; and valuation of ecosystem services and economic impacts. With this assistance readily available to all restoration projects, the Council can measure restoration impacts and demonstrate progress towards achieving their goals and objectives, as well as make science-based decisions leading to greater certainty and success with subsequent restoration projects.

Requested funding amount: \$8,713,000.

US Department of the Interior

Seminole Tribe of Florida Brighton Reservation Major Surface Water Flows Monitoring (Tribal Proposal)

The Seminole Tribe of Florida (Tribe) proposes to partner with the US Geologic Survey, (USGS) to establish four streamflow and water level monitoring stations in the Seminole Tribe of Florida Brighton Reservation (Brighton) in Glades County, Florida. The new sites would provide an independent and objective determination of major surface water inflows into and out of Brighton Reservation. Surface water flows from Brighton Reservation are a significant contributor of flow volumes and nutrient loading to Lake Okeechobee. Lake Okeechobee is at the center of Florida Everglades restoration, as well as a vital resource for Florida's fresh water supply, wildlife and the environment. This project would quantify surface water flows available to Brighton Reservation. Knowledge of major surface water flow amounts would enhance community resilience to distribute water resources in an informed capacity for the natural environment. The objective of this proposal is to install four (4) water level and streamflow data collection stations on the major inflow sites of the Brighton Reservation: Harney Pond Canal and Indian Prairie Canal (Figure 4). The USGS will operate and maintain equipment. Water quality will be assessed and analyzed utilizing the flow information from the USGS gages. Reporting will be submitted by the Tribe to the US Environmental Protection Agency (EPA) annually for the duration of this project. Requested funding amount: \$1,844,000.

US Department of the Interior

Giving the Land a Voice: Documenting Prechannelization Conditions on Big Cypress Reservation Using LIDAR, Paleontology & Dendrochronology (Tribal Proposal)

The Seminole Tribe of Florida (Tribe) has set aside over 14,000 acres in Big Cypress Reservation to remain in native, undisturbed condition. Additionally, the Tribe has multiple active wetland restoration projects in Big Cypress Reservation. Data representing pre-channelization hydrologic and ecologic condition would assist the Tribe in documenting changes verbalized by members of the Tribe, as well as provide a focused goal for wetland protection and restoration efforts. The Seminole Tribe of Florida proposes to partner with the US Geologic Survey (USGS) to collect and perform multi-proxy analysis (pollen, charcoal, carbon accumulation, and geochronology) of sediment cores from disturbed and undisturbed wetland locations within Big Cypress Reservation. The Seminole Tribe of Florida also proposes to partner with the University of Arkansas (UA) Department of Geosciences Tree Ring Laboratory to perform tree-ring chronologies dendrochronology) on Big Cypress Reservation cypress trees. This project would compare the USGS paleohydrologic information with the UA tree ring information collected in Big Cypress Reservation to cross-reference and calibrate a historical record of hydrologic and ecologic conditions in Big Cypress Reservation. Finally, the Seminole Tribe of Florida recently collaborated with the USGS National Geospatial Technical Operations Center (NGTOC) to collect Light Detection and Ranging (LiDAR) data for Big Cypress Reservation. The Seminole Tribe of Florida proposes to provide to a qualified professional contractor the raw LiDAR data set to create a three dimensional model of Big Cypress Reservation today (post-channelization). A pre-channelization three dimensional model of Big Cypress Reservation will also be developed incorporating historic aeriels. The prechannelization aeriels will be compared with the current LiDAR for reference areas and combined with the data obtained through the pollen study and tree-ring data to create a three dimensional model of Big Cypress Reservation pre-channelization. The model will be used to define and document pre-drainage hydrologic and ecologic conditions in Big Cypress Reservation to fill the data gap of “lack of historical data”. This model will also be used to define and document the post-channelization changes to Big Cypress Reservation to provide the best available science for future Tribe water management operations, protection of existing natural systems, and wetland restoration activities. Requested funding amount: \$790,200

US Department of Commerce

Connecting Coastal Waters: Restoring Coastal Wetland Hydrology

The Connecting Coastal Waters initiative will invest \$17,888,563 over 3 years to restore over 22,000 acres of wetlands and estuarine habitats across the 5 Gulf States. This project will: (1) implement 11 proposed coastal wetland hydrology restoration projects in partnership with each Gulf State; (2) leverage place-based collaborations to achieve measurable benefits for coastal wetlands; and (3) deliver science and tools, including an inventory of coastal wetland hydrology restoration projects. Hydrology is one of the main factors influencing both the location and function of coastal wetlands. Natural hydrology for Gulf Coast wetlands is maintained by freshwater input; however, wetlands along the Gulf Coast have been experiencing significant shifts in hydrology as a result of changes in freshwater drainage patterns and restrictions of tidal flows. For this reason, NOAA will implement Connecting Coastal Waters in partnership with state and local agencies, non-governmental and academic organizations, and industry partners to accomplish the following:

- Restore coastal wetlands degraded by altered hydrology with partners in each Gulf State;
- Inventory coastal wetland hydrology restoration opportunities in each Gulf State to support the development of future coastal wetland hydrology restoration projects;
- Conduct community outreach and stewardship activities, including demonstration workshops and hands-on learning at restoration sites.

NOAA has worked with partners in each state to identify priority hydrology projects, as well as additional hydrology restoration needs to support the proposal of these first 11 projects that meet the goal of restoring coastal wetlands. Requested funding amount: \$ 17,888,563.

US Department of Commerce

Gulf of Mexico Habitat Mapping and Water Quality Monitoring Network

This 5-year mapping and monitoring program will lay the foundation for an integrated network to establish baselines and measure impacts. The network will leverage the breadth of current state, federal, or other regional programs to acquire existing and new habitat and water quality data, ensure quality assurance/quality control, and enhance data sharing and preservation. The network will establish consistent baselines that will effectively detect and track changes at the project level and landscape scale arising from planned activities (conservation, restoration), extreme weather events (storms, cold snaps), climate change/sea level rise, and accidents (ship groundings, oil spills). The monitoring network will be designed in accordance with adaptive management principles to insure strong connections with restoration decision-making and maximize opportunities for learning.

The basic approach to building the Gulf habitat and water quality monitoring network is to: (1) adopt, or construct as needed, a comprehensive inventory of existing habitat and water quality observations and monitoring programs in the Gulf; (2) evaluate the suitability/applicability of each program and its existing and prospective data; (3) coordinate and integrate appropriate existing observations and monitoring systems to form a regional monitoring network with an integrated data management structure; (4) identify information gaps; and (5) strategically supplement and refine observations and monitoring systems to fill the acknowledged gaps with available capabilities and capacity of all the regional partners. Although this proposal is being led by NOAA and USGS, both of whom bring existing resources, capacities, and expertise, the monitoring network will employ a collaborative organizational structure that will incorporate all restoration partners through the development of a monitoring Community of Practice (CoP). Requested funding amount: \$21,401,000.

US Department of Commerce

Gulf of Mexico Habitat Restoration via Conservation Corps Partnerships

NOAA, working with State and Federal partners, will establish a program to implement priority coastal habitat projects across the Gulf Coast through utilization of a Gulf Coast Conservation Corps Program (GCCC Program). The GCCC Program will initially restore approximately 2,000 acres of coastal habitat, at the same time train members (particularly youth, veterans, and displaced workers) in a variety of skills and mobilize paid crews to implement an initial set of seven (7) priority restoration projects located within the five National Estuarine Research Reserves (NERRs) and two National Wildlife Refuges within Louisiana. A variety of coastal habitat will be restored, including: oyster reef, marsh, seagrass, shorelines, long leaf pine forest/savanna, and coastal prairie. These sites will serve as initial locations from which trained crew members could mobilize anywhere within the Gulf, including other federal and state refuges, state parks, reserves, or other conserved lands.

Jobs vary depending upon the scope of the project, but can include operators, machinists, welders, surveyors, and a variety of laborers, scientists, and managers. The primary result of this program and its projects is meaningful habitat restoration, with a secondary result being economic restoration. The program will provide a well-trained, local, and quickly mobilized workforce to implement some of the current and growing volume of restoration projects across the region, as well as provide educational experiences critical for grooming the Gulf's future natural resource stewards. Requested funding amount: \$20,410,000.

US Department of Agriculture

Texas Coast Migratory and Shore Bird Habitat Restoration

This USDA proposal seeks \$15,213,200.00 million from Restore Act funds to support a highly coordinated and leveraged effort with partners to restore and enhance migratory and shore bird habitat restoration along the 621 miles of Texas Coast through habitat restoration on private lands. Requested funds will be leveraged with \$17,781,522.00 million from agency and partner funds to provide for a \$32,994,722.00 million total project cost over 5 years. The expanse of area empties into 8 major significant bays and estuaries along the Gulf of Mexico coastline. It is anticipated that implementing an initiative on this scale will benefit Coastal Texas by providing landowner education, practice implementation, and direct on farm and ranch results and ecotourism that will have a positive impact on habitat restoration and enhancement for migratory and shore birds with added benefit to resident bird species, community resilience, improved water quality and quantity and overall ecosystem health. The Primary Goal will be to Restore/Enhance and Conserve Habitat along the Texas Gulf Coast through a leveraged, partnership effort with private landowners, local organizations, as well as state and federal agencies. Secondary positive effects will be in water quality and economic avenues involving recreational activities. These actions will also assist in providing habitat for several federal and state listed threatened and endangered species and resident bird species. Requested funding amount: \$15,213,200.

US Department of Agriculture

The Apalachicola Project Phase 1: Restoring Apalachicola Bay and Region

This USDA proposal seeks \$15 million to support the highly effective partners of the Apalachicola Regional Stewardship Alliance (ARSA) in initiating Phase I of a longer term, landscape level project to restore the Apalachicola Region, with the primary goal of enhancing both the water quality and quantity of the Apalachicola Bay and its watershed while also improving the nationally significant habitats provided by its wetlands and upland forests alike. USDA requests a Phase 1 (5 year) grant of \$15million to be utilized by its agencies and partners as follows:

Strategy 1 Hydrologic Restoration - \$7million to the Florida Forest Service and Apalachicola National Forest for a) implementing already approved hydrologic restoration of Tate's Hell State Forest and b) development of additional hydrologic assessments and a Decision Support Tool;

Strategy 2 Ecosystem Restoration - \$5million to enable ARSA's Ecosystem Restoration Team with current leadership from The Nature Conservancy to implement a range of ecological improvements including prescribed fire, isolated wetland restoration and invasive species control on the Apalachicola National Forest, two National Wildlife Refuges, multiple state-owned lands, a military installation, and private lands identified in Strategy 3;

Strategy 3 Private Forests - \$3million to the Florida Forest Service to a) mount a targeted social marketing and outreach effort with assistance and a match of \$427,063 from the American Forest Foundation (AFF) to engage and advise private forest landowners in the active management of their lands, and b) to enable the Florida Forest Service as well as the Florida Fish & Wildlife Conservation Commission and the Natural Resource Conservation Service to provide interested forest landowners with additional technical and financial assistance needed for increased forest establishment and stewardship. Requested funding amount: \$15,000,000.

US Department of Agriculture

The Mississippi Gulf Coast Forest Restoration and Conservation Initiative

The Mississippi Gulf Coast Forest Restoration and Conservation Initiative is a collection of regionally scalable projects that; 1) plan and prioritize restoration opportunities, 2) implement restoration projects on public and private lands, and 3) create a foundation for future restoration and conservation projects. Planning and prioritization will be accomplished through development of an ecosystem modeling application. Restoration projects will be implemented throughout the Mississippi coastal plain and will include longleaf pine, coastal savanna, pitcher plant bog, bottomland hardwood forest, and mesic slope forest restoration. These forested ecosystems provide habitat for numerous threatened and endangered plants and animals. Additionally, coastal stream restoration, non-native invasive species control and detection, and updates to existing watershed restoration plan projects are proposed. To complement the effort of agencies and organization's activities, a robust restoration outreach and education program targeting private forestland owners will be developed and implemented along with increases in funding for payments incentives to these landowners to accomplish their restoration conservation implementation goals. This approach involves all ownership classes across the landscape including military installations. The proposed restoration and conservation activities protect the nation's military readiness by facilitating the continuation of training at Camp Shelby. This proposal represents the first phase of a multi-phase landscape scale ecosystem restoration strategy for the Mississippi coastal plain. The Mississippi Gulf Coast Forest Restoration and Conservation Initiative is part of a broader, Gulf-wide effort by the USDA to engage partners and improve management of forested watersheds as a necessary step in restoring the waters and terrestrial habitats of the Gulf. Requested funding amount: \$21,000,000.

US Department of Agriculture

Mobile Bay and Beyond – Watershed Implementation to enhance Marsh, Marine, and Estuarine Ecosystems

This project will restore water quality in select watersheds through installation of conservation practices, primarily on private land. The work in these watersheds will build upon on-going and planned downstream projects, such as NRDA and NFWF Projects. This USDA project will treat the upstream landscapes and improve waters draining to coastal and marine restoration areas.

The implemented conservation practices will reduce sediment, pesticides, nutrients, and fecal coliform entering priority watersheds near the Gulf, improving water quality of fresh, estuarine and marine waters. This project will include installing structures for sediment and erosion control; livestock stream exclusion; stream restoration — such as replanting hardwoods and expanding buffers, sod-based rotation on cropland, precision placement of pesticides, nutrient management, cover crops, hydrologic restoration, and innovative urban/rural interface projects. Even though the primary objective is water quality, a secondary result will be restoration and conservation of habitat, through improved aquatic resources. Implementation can commence immediately upon funding. The USDA-Natural Resources Conservation Service, Soil & Water Conservation Districts, Clean Water Partnership, Auburn University and other partners have the capacity to start work immediately. Each 12 digit HUC watershed will take between 3-5 years for full implementation and treatment. USDA will measure acres treated and will keep a geospatial database of installed practices, including calculations of sediment reduction rates. Requested funding amount: \$6,750,000.

US Department of Agriculture

Coastal Ecosystem Enhancement and Restoration in the Barataria-Terrebonne Basin

The Barataria-Terrebonne National Estuary Program (BTNEP) is a joint effort between the State of Louisiana and the U.S. Environmental Protection Agency to conserve the resources of the Barataria-Terrebonne Estuary. The Barataria-Terrebonne watershed includes 4.2 million acres of land between the Mississippi and Atchafalaya Rivers extending from the Gulf of Mexico north to the old river control structure. This coastal ecosystem enhancement project aims to create an ecosystem scale model for Gulf Coast restoration priorities. The ultimate objective of restoring, protecting, and improving water resources and associated habitat value will be achieved by reducing the nutrient loading into impaired watersheds by (1) redirecting agricultural runoff (from soybean and sugarcane fields) through impounded and natural wetlands; (2) rerouting stormwater through wetlands to reduce pollution in local receiving water bodies (water bodies with established TMDLs); and (3) through coastal restoration and the implementation of native plantings and invasive species removal in marginal lands and impoundments to improve migratory bird habitat. In doing so, this project will restore key habitat functions important for coastal water birds, shorebirds, and commercial and recreational fisheries by reconnecting natural flow regimes from agricultural land and coastal communities to degrading wetlands. Project implementation is projected to substantially contribute to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches and coastal wetlands of the Gulf Coast region. Requested funding amount: \$16,009,788.

US Department of Agriculture

Bayou Dularge Ridge Restoration, Marsh Creation & Hydrologic Restoration Phase 1 (Tribal Proposal)

The project components perform synergistically to provide benefits to over approximately 48,000 acres of wetlands through a combination of hydrologic restoration, marsh creation and ridge restoration. The project location provides a unique opportunity to manage salinity intrusion into a vast area where salinity was historically and naturally moderated through intact land features. By reducing the cross-section of the Grand Pass and restoring the integrity of the land bridge that separates the two large lake systems (Lake Mechant and Caillou Lake), the project will result in 233 net acres from the hydrologic restoration, 282 net acres from the marsh creation and 25 net acres of ridge for a total 540 net acres of total direct benefit over its first 20 years. This project takes a regional ecosystem-based approach to restoration by: 1) Reestablishing historic hydrologic and salinity conditions by reducing the artificial intrusion of Gulf marine waters into the Central Terrebonne marshes via the Grand Pass while enhancing the influence of the Atchafalaya River waters into the area and 2) Creating/restoring a ridge feature and degraded marsh in the landbridge that separates Lake Mechant from Caillou Lake to insure the integrity of the ridge and its important function of sustaining optimal salinity gradients and promoting healthy marsh recovery in the region.

Requested funding amount: \$5,162,084.

US Environmental Protection Agency

Gulf-Wide Pollutant Reduction and Water Quality Initiative: Modeling for a Mexican Emission Control Area

The Gulf is in danger from growing shipping emissions as shipping traffic will increase threefold in the next 15 years. Sulfur and nitrogen emitted from ships deposits to water and results in nutrient and acidification impacts. Though the US has instituted international standards to reduce ship emissions in the US Gulf through an Emission Control Area (ECA), shipping emissions from the Mexican portion of the Gulf will continue to impact the US if Mexico does not also implement an ECA. Mexico would like to have an ECA, but they lack the technical resources to put together the required technical information. With relatively little funding, this project would conduct the modeling needed for Mexico to establish an ECA. It would also assess the water quality and ecosystem impacts to the US Gulf State waters of sulfur and nitrogen from shipping in Mexico, contributing to robust, science-based decision making for restoration in the Gulf. An ECA establishes internationally agreed standards under the International Maritime Organization (IMO) to reduce emissions of sulfur dioxides/particulate matter and nitrogen dioxides from ships operating in coastal waters by more than 80%. Extending the US ECA to Mexico would greatly reduce ship emissions in the Mexican half of the Gulf leading to significant benefits in the US Gulf. Requested funding amount: \$2,000,000.

US Environmental Protection Agency

Gulf National Estuary Program (NEP) and Lake Pontchartrain Basin Restoration Program (LPBRP) Comprehensive Plan Implementation Program

This is a proposal for funding of projects that the seven existing Gulf of Mexico National Estuary Programs (NEPs) and the Lake Pontchartrain Basin Restoration Program (LPBRP) would implement to protect and restore habitat and water quality consistent with established comprehensive management plans. The study areas for these programs cover approximately forty percent of the Gulf of Mexico coast. NEP Comprehensive Conservation and Management Plans (CCMPs) and the Comprehensive Management Plan (CMP) provide goals and objectives as well as specific actions to restore and protect the estuary based on a stakeholder driven process rooted in strong science and are consistent with the Gulf Coast Ecosystem Restoration Council's goals. The NEPs and LPBRP are poised to receive RESTORE funds to implement "shovel ready" projects and have a long track record of proven success. Projects to be undertaken under this proposal will include: implementing nonpoint source best management practices; implementing green infrastructure measures; designing and constructing storm water parks; completing and implementing watershed management plans; protecting critical aquatic, shoreline and upland habitat through easement or purchase; restoring and managing critical aquatic, shoreline and upland habitat through a variety of hydrologic, landscape, vegetation and wildlife management actions; establishing living shoreline habitat; and other water quality and habitat restoration, protection and management techniques. Projects proposed by the NEPs and LPBRP include planning, design, pre- and post- monitoring, and implementation work. Restoration efforts would typically be carried out via public-private partnerships and would address key funding or other programmatic gaps. Requested funding amount: \$16,800,000.

US Environmental Protection Agency

Gulf of Mexico Estuary Program

The U.S. Environmental Protection Agency (EPA) proposes the Gulf Coast Ecosystem Restoration Council (RESTORE Council) provide funding for a Gulf of Mexico Estuary Program (GMEP) that would develop and stand-up place-based estuary programs across all 5 Gulf states. The following estuaries are to be given priority consideration for this program: Lower Laguna Madre (TX); San Antonio/Matagorda Bays (TX); Sabine/Neches (TX); Calcasieu/Mermentau Basin (LA); Atchafalaya/Vermillion (LA); Mississippi Sound (MS); Perdido (AL, FL); Pensacola (FL); Choctawhatchee (FL); St. Andrews (FL); Apalachicola (FL); and Suwannee (FL). The priority estuaries and contributory watersheds identified in this proposal are located adjacent to, but outside of, the study areas of the seven existing Gulf of Mexico National Estuary Programs (NEPs) and the Lake Pontchartrain Basin Restoration Program (LPBRP). For this proposal, EPA estimates 5-12 place-based estuary programs would be developed and stood-up. The actual number of programs is scalable and flexible to meet the desires of the RESTORE Council and funding availability. Once developed and operational, this program would cover approximately 45% of the U.S. Gulf of Mexico coastal zone. These newly established place-based estuary programs would be a superb complement to the existing NEPs and to the LPBRP, which when taken together, would cover approximately 85% of the U.S. Gulf of Mexico coastal zone. Establishing these place-based estuary programs, using a science-based process to develop and implement comprehensive management plans, will help ensure that local programs will be in place to directly address RESTORE Council Comprehensive Plan goals. Requested funding amount: \$11,000,000-\$26,400,000.

US Environmental Protection Agency

US EPA & USGS Joint Proposal for Baseline Flow & Gage Analysis and On-Line Tool Development to Support Bay and Estuary Restoration in Gulf States

The US Geological Survey (USGS) and the US Environmental Protection Agency (EPA) propose a 7 year, \$5.8 million project to conduct a comprehensive assessment of gages and streamflows and development of accessible and easy-to-use online tools for state and local decision-makers to facilitate restoration projects in all five Gulf States and begin a process to install new or restore decommissioned gages. Specifically, the project includes a Regional Streamflow Alteration Assessment:

- Develop a regionally consistent set of streamflow metrics at long-term streamflow gages.
- Develop measures of streamflow alteration at long-term stream gages.
- Estimate trends in streamflow metrics and evaluate potential influences related to climatic and land/water management stressors.
- Predict streamflow alteration at ungaged streams.
- Define the optimal streamgage network for assessing flow alteration. This analysis will be used to identify locations of potential new gages and determine which discontinued gages should be restarted to minimize the uncertainty in the estimation of streamflow alteration metrics.
- Work with state partners to determine the priority for restarting existing or installing new gages.
- Develop an online streamflow alteration mapping tool that can be used at the regional, state, and watershed level to identify areas where streamflow alteration are highest and facilitate the prioritization of restoration actions.

The project also includes a Focused Watershed Study which will then apply these tools in a focused watershed study in one large watershed in the Gulf and develop specific metrics that relate the streamflow regime to freshwater stream and estuarine health. This project will enable water resource managers to evaluate a range of potential management scenarios, such as modifying the release curves for selected reservoirs upstream to evaluate changes in freshwater delivery to an estuary. These tools will be based on the most up-to-date scientific information and will be readily available and accessible to decision-makers. As a foundational project, it is readily scalable to expand to include ground water evaluation, restoration or installation of additional gages, increases of water quality monitoring at gages for creating loads and water quality tracking and to provide direct support for restoration projects. Requested funding amount: \$5,800,000