



THE NATIONAL WILDLIFE FEDERATION'S RECOMMENDED PROJECTS

Mobile & Perdido Bays

MOBILE BAY IS FED BY SIX DIFFERENT RIVERS – most importantly the Mobile and the Tensaw Rivers – and is the fourth largest estuary in the United States by volume. The Mobile-Tensaw Delta, at the northern tip of the estuary, benefits from hundreds of thousands of acres of bottomland hardwood forests in its watershed and the delta is widely recognized as one of the most biodiverse places in the country.

During wet months, fresh water flowing out of the estuary can be measured as far as 50 miles out in the Gulf. During drier times, salt water can reach as far as 80 miles upstream, bringing saltwater species with it. Mobile Bay faces many serious environmental challenges. More than half of Alabama's coastal wetlands were lost by 1980. Storms, saltwater intrusion, sea level rise and continued human activities mean that the bay is still losing wetlands at a rapid rate. The bay now has less than a third of the seagrass beds it did in

1940. Oyster reefs have declined significantly as well, but a lack of baseline data makes it difficult to state exactly how much. Urbanization, altered hydrology and invasive species have harmed water quality, changed salinities, increased sediment loads and reduced biodiversity. The neighboring Perdido Bay watershed covers over 1,100 square miles of northwest Florida and southern Alabama, with the Perdido River forming the state line. The watershed faces challenges from pollution, loss of seagrass beds, and increased sediment loads.

MOBILE & PERDIDO BAYS

Recommended Projects

HABITAT PROTECTION

Perdido River Protection, Restoration, & Enhancement

This project includes three components to address the Perdido River and Bay, which forms the boundary between Alabama and Florida: 1) land acquisition to protect habitat and water quality; 2) restoration of wildlife habitat and natural river flow patterns; and 3) creation of additional recreational opportunities. Specifically, this project would expand the boundary of a current preserve into Alabama, restore longleaf pine forests and wetlands to improve water quality in the river, improve the river's hydrology, and facilitate low-impact recreation. This is a multi-state project and could serve as model for future interstate cooperation on large-scale restoration projects.

PROJECT COST: \$14,220,000

LEAD ORGANIZATION: The Nature Conservancy

PARTNERS: USFWS, NRCS, FDEP, NFWFMD, ADCNR, FL Sea Grant, Escambia County, Baldwin County, Westervelt Ecological Services.

Additional Benefits:

- + **800** Acres Available for Recreation
- + **14,400** Potential Population Benefited
- + **2** Critical Facilities in Vicinity

HABITAT PROTECTION

Wolf Bay Wetland Nature Preserve Acquisition

This project would acquire the Wolf Bay Nature Preserve Tract. These 569 acres within the Alabama Coastal Area have been designated as a Geographic Area of Particular Concern, a Gulf Ecological Management Site, and an Outstanding Alabama Water. The acquisition would include 458 acres of wetlands and 111 acres of uplands. The property supports 147 species and natural communities such as wet flatwood bog, southern coastal plain, floodplain forests, and tidal herbaceous vegetation including black needlerush. The site is under significant development pressure. Management, conservation and restoration activities could occur with the acquisition of this parcel.

PROJECT COST: \$3,000,000

LEAD ORGANIZATION: Alabama Forest Resource Center

PARTNERS: Wolf Bay Water Watch, Weeks Bay Foundation

Additional Benefits:

- + **1,000+** Tons/Year Carbon Storage
- + **6** Critical Facilities in Vicinity



HYDROLOGIC RESTORATION

Mobile Causeway Hydrologic Restoration – Justin’s Bay

The Mobile Causeway, built in the late 1920s, restricts the natural hydrologic connection between the Mobile-Tensaw Delta and Mobile Bay. The causeway has profoundly altered the hydrology, water quality, salinity, and ecological function of the system—harming finfish, shellfish and other wildlife in the bay and in the delta.

The project proposes to elevate the causeway at Justin's Bay, restoring tidal exchange in the Mobile-Tensaw Delta by re-connecting it to Mobile Bay. This project addresses several goals in Alabama's Wildlife Action Plan, complements other restoration efforts in Mobile Bay, and aligns with the Mobile Bay National Estuary Program Comprehensive Conservation Management Plan.

PROJECT COST: \$17,325,000

LEAD ORGANIZATION: Alabama Department of Conservation and Natural Resources

PARTNERS: Mobile Baykeeper, Alabama Department of Transportation, The Nature Conservancy - Alabama

Additional Benefits:

- + **1,300+** Acres Available for Recreation
- + **3,000+** Tons/Year Carbon Storage



COASTAL WETLANDS

Oyster Bay Wetlands Preservation and Enhancement

This project would protect and provide public access to 350 acres of wetlands and marsh in Oyster Bay. These wetlands consist primarily of black needlerush and salt grass, with some sloughs interspersed throughout the marsh, and pine flatwoods located to the east. Oyster Bay and its wetlands serve as an important nursery area for economically important fish and shellfish such as white shrimp, brown shrimp, blue crab, redfish, spotted sea trout, and others. The marsh area also provides habitat for resident and migrating birds and other wildlife. The project would also restore 10 acres of drainage systems entering the wetlands, which have become compromised by siltation from upstream development and invasive plant species.

PROJECT COST: \$8,021,180

LEAD ORGANIZATION: City of Gulf Shores

PARTNERS: Erie Hall Meyer Charitable Fund

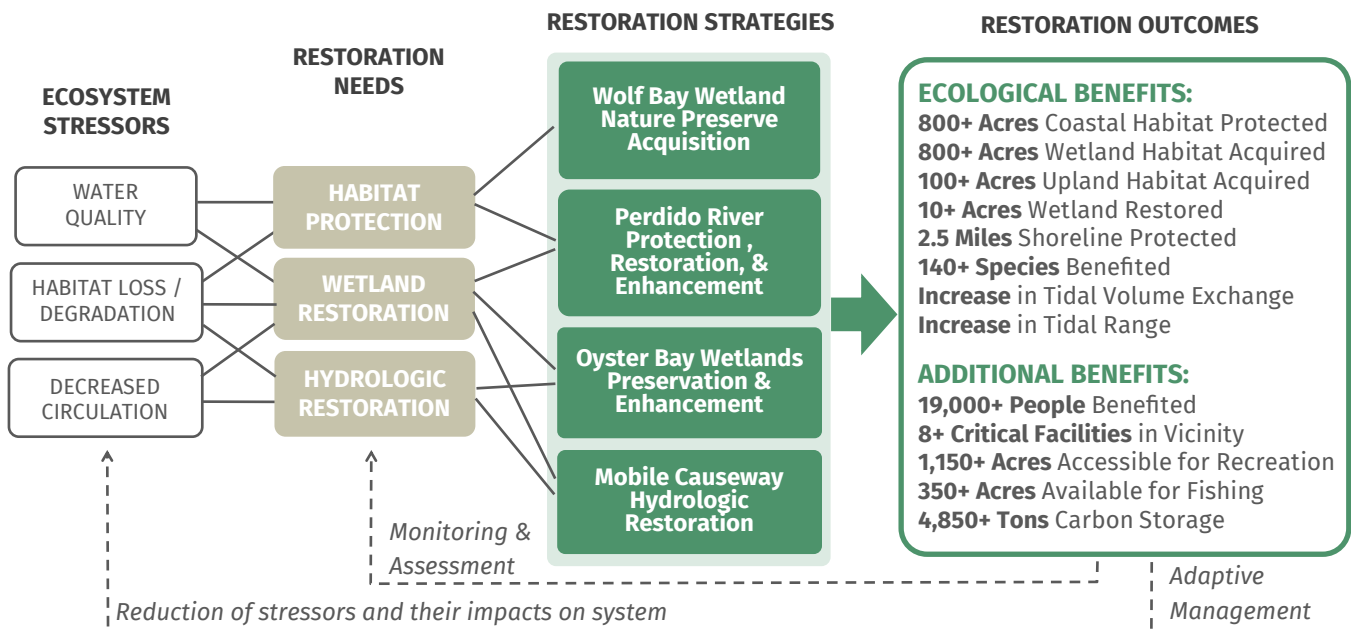
Additional Benefits:

- + **350** Acres Supporting Recreation
- + **5,000** Potential Population Benefited
- + **800** Tons/Year Carbon Storage



Our Approach to Project Evaluation

The National Wildlife Federation’s Gulf of Mexico Restoration Program developed a science-based and systematic approach to evaluate estuarine restoration needs. This approach assesses critical stressors, identifies focal areas, determines restoration needs, and establishes restoration targets to make recommendations. The diagram below illustrates the application of this process for Mobile and Perdido Bays and demonstrates the benefits that the suite of restoration projects could collectively achieve.



Ryan Fikes, STAFF SCIENTIST
 GULF RESTORATION PROGRAM
 FikesR@nwf.org | (361) 792-4334

Amanda Fuller, DEPUTY DIRECTOR
 GULF RESTORATION PROGRAM
 FullerA@nwf.org | (512) 610-7773