



THE NATIONAL WILDLIFE FEDERATION'S RECOMMENDED PROJECTS

Pensacola Bay

FOURTEEN HUNDRED SPECIES OF PLANTS AND ANIMALS have been documented within the Pensacola Bay system. The bay is also an important driver of the regional economy. However, the bay is affected by numerous stressors. In the 1960s and 70s, the bay received large industrial discharges of toxins and pollutants and some of these pollutants remain in the system today. Roughly 20 percent of the segments in the Florida portion of the Pensacola Bay watershed are considered “impaired” under the Clean Water Act.

Pensacola Bay is fed by three major rivers – the Escambia, the Blackwater and the Yellow – as well as smaller tributaries. Bayou Chico, which discharges directly into Pensacola Bay and the Gulf of Mexico, is the only water body in the Pensacola Bay system that has a Basin Management Action Plan established, which identifies steps to reduce pollution. Given its influence on the larger system, Bayou Chico and its tributaries are a priority for restoration. Pensacola Bay once had a viable commercial

oyster fishery but today oyster reefs in the bay have declined by more than 70 percent and are largely closed to harvest. Restoring oyster reefs will provide habitat, stabilize shorelines and improve water quality and clarity. Marshes, wetlands and seagrass beds stabilize coastlines, trap and filter pollutants and provide habitat for fish and wildlife. However, these habitats are in decline. Since the 1960s, seagrass coverage has declined by nearly half while wetlands have declined by nearly three-quarters in some areas.

PENSACOLA BAY

Recommended Projects

COASTAL WETLANDS

Jones Swamp Wetland Preserve Restoration

The 1,300 acres of the Jones Swamp Wetland Preserve is one of the last significant wildlife corridors in the greater Pensacola area.

Urbanization in the area threatens the preserve's ability to support wildlife and public recreation. While Escambia County has led efforts to improve the health of the watershed in recent years, Bayou Chico and Jones Creek remain listed as "impaired" under section 303(d) of the Clean Water Act.

The proposed project will develop and implement a comprehensive management plan for the Jones Swamp Wetland Preserve. Full implementation of the plan will include fire management, invasive species control, wetland restoration, riparian buffer expansion, wildlife habitat improvements, wetland restoration, public access, trail construction, and a public education program. This project is scalable depending on funding availability. The project will benefit wildlife, water quality, and recreational opportunities.

PROJECT COST: \$1,034,000

LEAD ORGANIZATION: Escambia County

PARTNERS: Florida Department of Environmental Protection

Additional Benefits:

- + Acres Supporting Recreation: **1,300**
- + Potential Population Benefiting: **11,300**
- + Socially Vulnerable Population Benefiting: **7,600**

HABITAT PROTECTION

Shoal River Buffer Project

The Shoal River Buffer Florida Forever project is a "fee simple" acquisition of 2,097 acres in eastern Okaloosa County, divided into two parcels east and west of the Shoal River. The acquisition would protect 1,768 acres of rare species habitat, 2,062 acres of ecological greenways, 1,419 acres of surface waters, and 1,443 acres of functional wetlands. Black bears, alligator snapping turtles, sweet pitcher plants and hairy indigo have all been documented on the properties.

The Shoal River is an Outstanding Florida Water. Acquiring this property would help protect the water quality of the Shoal River drainage area, provide long-term benefits to imperiled species, and support outdoor recreation opportunities. The property includes upland hardwood forest, sandhills, mesic/wet flatwoods, floodplain forest, basin swamp, and blackwater streams.

PROJECT COST: \$3,841,849

LEAD ORGANIZATION: Florida Fish & Wildlife Conservation Commission

PARTNERS: Okaloosa County, Florida Department of Environmental Protection, Northwest Florida Water Management District

Additional Benefits:

- + Socially Vulnerable Population Benefiting: **16,900**
- + Acres Supporting Recreation: **2,100**
- + Critical Facilities in Vicinity: **25**



OYSTER REEFS & SHORELINES

NAS Pensacola and Escambia County Living Shorelines

This living shoreline project will improve water quality and restore coastal marsh and seagrass beds in west Pensacola Bay. The project includes 24,800 linear feet of rock and oyster reef breakwater, which will support an estimated 205 acres of fringe emergent marsh and seagrass beds. The project will benefit many wildlife species, including shorebirds, wading birds, and migratory birds as well as economically important species such as spotted trout, red drum, black drum, mangrove snapper, gag grouper, spot, croaker, mullet, blue crab, stone crab, and shrimp.

The living shoreline will also help prevent further erosion along the west shore of Pensacola Bay and will improve water quality and decrease turbidity. Specifically, the project will help protect NAS Pensacola from erosion and storm surge.

PROJECT COST: \$14,000,000

LEAD ORGANIZATION: Escambia County

PARTNERS: Florida Department of Environmental Protection

Additional Benefits:

- + Potential Population Benefiting: **11,200**
- + Socially Vulnerable Population Benefiting: **4,400**
- + Critical Facilities in Vicinity: **3**

HYDROLOGIC RESTORATION

Bayou Chico Restoration, Phase II:

Bayou Chico has been on the 303(d) List of Impaired Waters since the list's inception in 1971, longer than any other body of water in the United States. Other complimentary efforts—already underway—include stream restoration, stormwater treatment, and efforts to benefit nearby living shoreline projects.

The Gulf Coast Ecosystem Restoration Council has already funded the planning, design, and permitting of the Bayou Chico contaminated sediment removal proposal. Phase II will implement this effort, which includes removing enriched nutrients, metals, and other pollutants from the bayou, thus preventing the re-suspension of the contaminated sediments. Additional long term goals of this project include improved benthic habitat and biological activity, improved circulation, a decrease in turbidity, and improved conditions for establishing seagrasses.

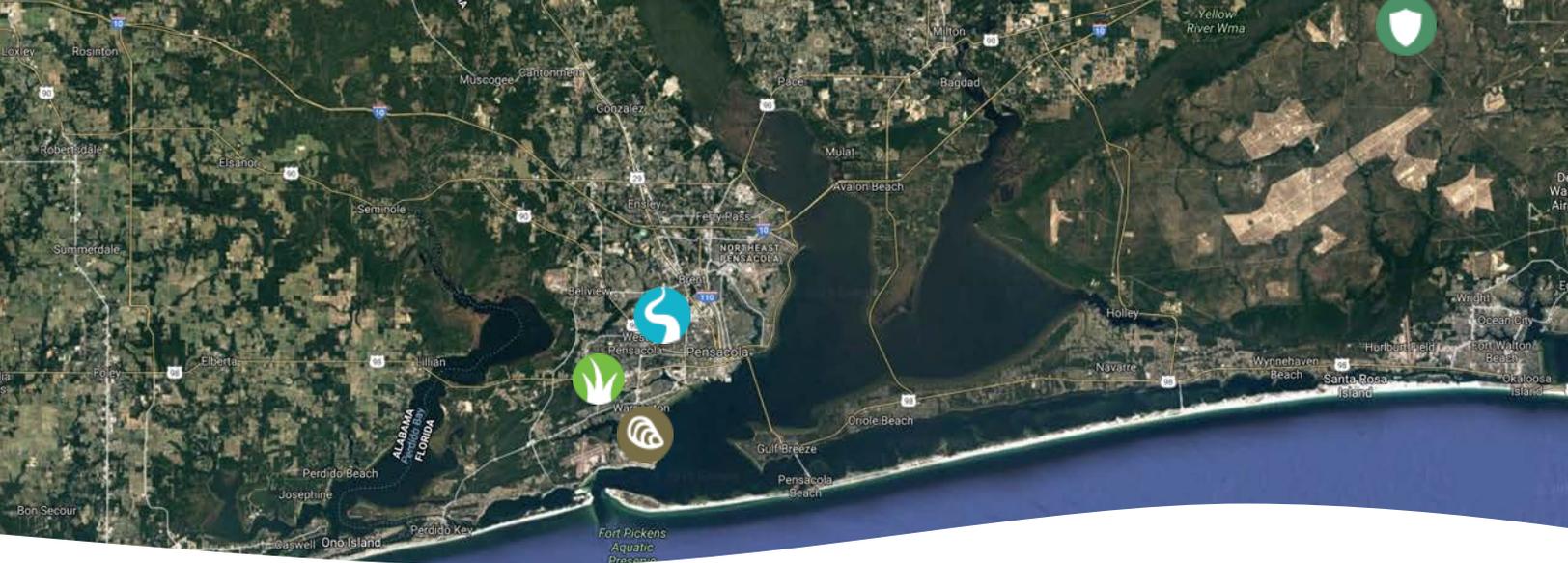
PROJECT COST: \$22,696,050

LEAD ORGANIZATION: Escambia County

PARTNERS: Florida Department of Environmental Protection

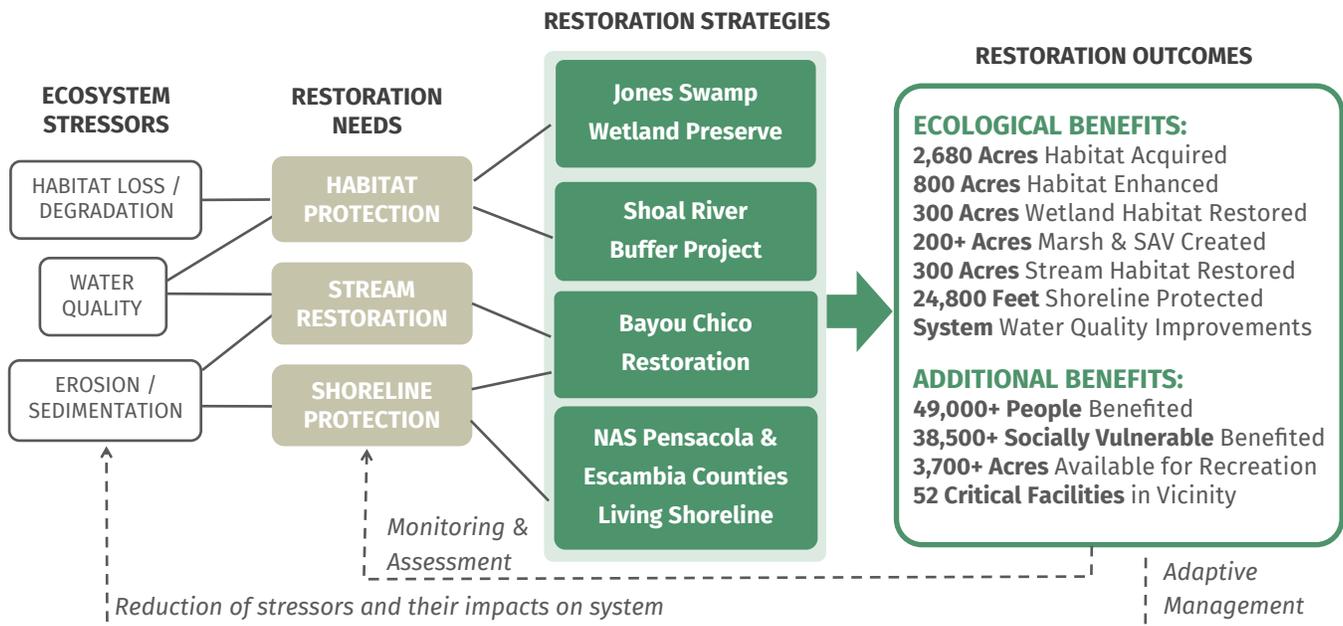
Additional Benefits:

- + Acres Supporting Recreational Fishing & Tourism: **310**
- + Socially Vulnerable Population Benefited: **9,700**
- + Critical Facilities in Vicinity: **18**



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 Pensacola Bay and demonstrates the benefits that the suite of restoration projects could collectively achieve.



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