



# The NATIONAL WILDLIFE FEDERATION'S RECOMMENDED PROJECTS Tampa Bay

THE TAMPA BAY SYSTEM is Florida's largest estuary, covering close to 400 square miles. The bay is fed by numerous waters including Hillsborough River, Palm River, Manatee River, Alafia River, Little Manatee River and Lake Tarpon. Tampa Bay hosts a diverse array of habitats, including oyster beds, seagrass meadows, mangroves and coastal wetlands. These habitats support a robust tourism industry as well as abundant populations of fish, birds and other wildlife, including threatened and endangered species.

The surrounding area is home to over three million residents, putting stress on the bay's ecosystem. In 1990, Tampa Bay was designated an "estuary of national significance" by Congress, creating an avenue for restoration. Significant efforts over the past decades have improved water quality by reducing the nutrients and other forms of pollution in the bay. Seagrass beds have recovered as a result. In 2016, the bay had more overall seagrass coverage than it is thought to have had in 1950. However, a few areas of Tampa Bay have been more challenging to recover. Runoff from urban, residential and agricultural lands remains the largest source of nitrogen – the primary pollutant in the bay. Oyster reefs, which were once widespread in the bay, have significantly declined in number and most of the existing reefs are closed to harvest due to water quality concerns. The National Wildlife Federation supports projects to improve Tampa Bay's habitats and water quality, especially in those areas that have been slow to fully recover.

# TAMPA BAY Recommended Projects

## S HYDROLOGIC RESTORATION Howard Frankland Causeway Circulation Enhancement

The Florida Department of Transportation has included a new span of the Howard Frankland Bridge in its 5-year work plan, and the agency is open to including an opening in the existing western causeway if funding were made available. Modeling results indicate that this opening, while expensive, may be the most cost-effective way to improve water quality in an area of Tampa Bay that is experiencing increasingly frequent harmful algal blooms.

Reducing nutrient pollution throughout the watershed will continue to be crucial for Tampa Bay's overall recovery, but enhancing flushing rates via this opening in the causeway will improve circulation, benefitting water quality and habitats. The project should also increase recreational opportunities and overall quality of life for Tampa Bay residents.

PROJECT COST: \$15,000,000 to \$50,000,000 LEAD ORGANIZATION: Tampa Bay Estuary Program PARTNERS: Florida Department of Transportation

#### **Additional Benefits:**

- + Potential Population Benefiting: 58,500
- + Socially Vulnerable Population Benefiting:
   8,300
- + Acres Supporting Recreation: 51,000

# OYSTER REEFS & SHORELINES McKay Bay Oyster Reef Creation

McKay Bay is near a heavily industrialized area and is one of the few remaining places in Tampa Bay that routinely has poor water quality. Nonetheless as many as 200 different species of birds have been seen in the area and it is also important for numerous fish species. Several projects are currently being implemented that will improve the health of McKay Bay.

This effort is a collaboration between state, private and nonprofit partners to create 16 acres of new oyster reefs along the eastern shoreline of McKay Bay. Other restored oyster reefs in McKay Bay have shown good recruitment and survival, which suggests this area will also be suitable. The project will construct a series of subtidal and intertidal oyster reefs that will benefit water quality, protect shorelines and create habitat.

#### **PROJECT COST:** \$1,740,000

**LEAD ORGANIZATION:** Tampa Bay Watch **PARTNERS:** Port of Tampa Bay, Southwest Florida Water Management District

#### **Additional Benefits:**

- + Acres supporting Recreational and Commercial Fishing: **16**
- + Socially Vulnerable Population Benefiting: **7,000**
- + Critical Facilities in Vicinity: 7

# N HYDROLOGIC RESTORATION Kracker Avenue Fish Farm, Phase II

Phase I of this project, currently underway, consists of restoring more than 300 former fish ponds overgrown with invasive species to create a functioning coastal and freshwater habitat. Phase II will enhance the hydrologic connection to Shultz Preserve by acquiring additional parcels that will allow for more natural flows to the bay.

Phase II will create or restore habitats including mangroves, salt marsh, coastal uplands, as well as lower salinity systems, including a tidal channel and a freshwater lake. The lower salinity habitats will be maintained through the discharge of reclaimed wastewater. The project will benefit Tampa Bay by filtering nutrient pollution from the treated water before it is discharged into the bay.

#### **PROJECT COST:** \$1,500,000

**LEAD ORGANIZATION:** Hillsborough County **PARTNERS:** Southwest Florida Water Management District, Bonefish & Tarpon Trust

#### **Additional Benefits:**

- + Socially Vulnerable Population Benefiting: 2,700
- + Potential Carbon Storage: 30.5 tons/year
- + Critical Facilities in Vicinity: 4

PHOTOS: LEON GIN, DICK FORTUNE, FFWCC, KAILA DRAYTON/NWF



### **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 Tampa Bay and demonstrates the benefits that the suite of restoration projects could collectively achieve.





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