



John's Island Oyster Reef Project

A Lake Worth Lagoon Restoration Project

Lake Worth Lagoon

- Largest estuary in Palm Beach County.
- 20 miles long, stretching from North Palm Beach to Ocean Ridge.
- Separated from the ocean by Singer Island and Palm Beach Island.
- Two permanent, man-made inlets.

Project Location

- John's Island, a restored and Audubon managed island owned by the Town of Palm Beach, in the Lagoon at the mouth of the C-51 Canal.

The Problem

- Discharge from the C-51 Canal has created a "dead zone" on the lagoon bottom, resulting in an area devoid of seagrass.

The Solution

- Use rock to create a substrate suitable for oyster spat settlement.

Benefits

- Oysters filter up to 50 gallons of water per day resulting in improved water quality.
- Oyster reefs provide habitat and food sources for sheepshead and other fish, oyster catchers and other birds, and mammals such as raccoons.

Project Plan



Oyster Reef



Oyster Catchers



Project Overview

- Place rock within a 9-acre area surrounding the island to provide a foundation for oyster reef construction.
- Phase I - Place 7,500 tons of rock within a 5-acre section along the island's eastern shore.
- Use limestone rock 1 to 2 feet in diameter and no greater than one rock layer high.
- Orient rock placement to maintain good water flows. Water currents are important in carrying food and oxygen to the newly established oysters.
- Provide open space between the reef areas and create an edge for wildlife utilization.
- Areas where rock will be placed is generally shallow, approximately 1 foot at low tide, and will require specialized equipment to transport and place materials during construction.
- Natural recruitment of oysters is expected to begin within a year after the rock is placed.
- Work is expected to be completed in the summer of 2009.
- Phase I projected cost: \$730,000.
- Future plans include constructing an additional 4 acres of oyster reef during Phase II of the project.

Project Partners

PBC Department of Environmental Resources Management, Florida Department of Environmental Protection, Florida Inland Navigation District, Town of Palm Beach



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Published July 2009