



Ibis Isle

A Lake Worth Lagoon Restoration Project

Lake Worth Lagoon

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

Project Location

- Located on the east side of Lake Worth Lagoon, between Southern Boulevard Bridge and Lake Worth Bridge, in the Town of Palm Beach.

The Problem

- Organic (muck) sediment has accumulated over time, resulting in poor water quality and reduced habitat value.

The Solution

- Cap muck sediment with sand, stabilize the slope with limestone rock, and plant native vegetation.

Benefits

- Increased food and nursery habitat for fish and other aquatic species.
- Increased abundance and diversity of invertebrates, which benefits wading birds and fish.
- Long-term water quality benefits to Lake Worth Lagoon.



Aerial view of the project



Electric conveyor system transporting sand



Sand shooter placing sand



Muck sediments that were capped with sand



More wading birds and shorebirds utilizing the area



Habitat includes cordgrass, mangroves and oysters

Project Overview

- Restored 8.3 acres of intertidal habitat in the Lake Worth Lagoon.
- Utilized the *Sand Transfer System*, consisting of an electric conveyor and sand shooter, to place approximately 40,000 cubic yards of sand, which capped and contained muck sediments.
- Graded the fill to wetland elevations and created 2,700 linear feet of flushing channels to maintain water quality throughout the project area.
- Placed 1,500 tons of limestone rock along the perimeter of the project to stabilize the sand cap and create 0.8 acre of oyster reef.
- Planting consisted of: 80,000 plugs of cordgrass (*Spartina alterniflora*) and 14,000 red mangrove (*Rhizophora mangle*) seedlings.
- Mangroves were collected and planted by volunteers, including students from the Palm Beach Maritime Academy, Lyons Creek Middle School, and Palm Beach Community College.
- The project was completed in February 2010.

Project Partners

Palm Beach County, Town of Palm Beach, South Florida Water Management District, and Florida Department of Environmental Protection.



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