



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

NEWS RELEASE

April 4, 2009

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SFWMD, Volunteers Team Up to “Plant” Oyster Reef in Estero Bay *Healthy oyster reefs are essential to restoring water quality in estuary*



Fort Myers, FL – Scientists from the South Florida Water Management District (SFWMD), accompanied by graduate students from Florida Gulf Coast University and community volunteers, “planted” a 400-square-meter oyster reef this morning in the Estero Bay State Aquatic and Buffer Preserve.

Restored and improved oyster reefs enhance filtration and help restore the water quality of Estero Bay, which drains 293 square miles of the region’s watershed. An individual oyster can filter 4 to 34 liters of water per hour, removing phytoplankton,

particulates, sediments, pollutants and microorganisms from the water. The filtering process improves light penetration into the water, promoting the growth of underwater vegetation.

Fossil oyster shells, contained in wire-mesh bags prepared by the students, were used as the reef-building materials. District scientists and community volunteers placed the 20- to 30-pound bags around mangrove islands in the bay. Collectively, the bags will form a reef habitat where oyster larvae can settle and grow to adult size.

The District and the students followed the same process when they created another reef in the bay in September.

Within one year, the 400 meters of oyster reef created today are expected to:

- Produce more than 1,000 oysters per square meter.
- Filter at least 10 liters of water and particulates per oyster per hour from the water column. That represents 96 million liters of water per day, or the equivalent of 38 Olympic-sized swimming pools.
- Provide stability to mangroves and shorelines by minimizing the impact of boat wakes.
- Provide food, shelter and habitat to nearly 300 species of invertebrates, fishes and birds.

Over the next one to two years, settlement and growth of the oysters will be monitored, as will the use of the reef by other aquatic organisms. The reef will be compared to natural reefs in Estero Bay as growth and settlement occurs.

In collaboration with other state and federal agencies, District scientists have been involved in adaptive management and oyster reef restoration for the past five years. This project builds on previous restoration efforts by the District and other agencies to maintain and enhance a healthy oyster population in Estero Bay.

The Eastern oyster (*Crassostrea virginica*) is a valued part of the aquatic food chain in Southwest Florida, and oyster beds provide vital habitats for a large number of aquatic organisms. Oysters – and the complex, three-dimensional reef structures they form – support numerous species of invertebrates and fishes, such as mud crab, black drum and crown conch. Oysters themselves are an important fisheries species, and the reefs serve as essential fish habitat for other commercially valuable species.

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About the South Florida Water Management District – [Celebrating 60 Years \(1949-2009\)](#)

The South Florida Water Management District is a regional, governmental agency that oversees the water resources in the southern half of the state – 16 counties from Orlando to the Keys. It is the

oldest and largest of the state's five water management districts. The agency mission is to manage and protect water resources of the region by balancing and improving water quality, flood control, natural systems and water supply. A key initiative is cleanup and restoration of the Everglades.