

**PALM BEACH COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES MANAGEMENT**

**ENVIRONMENTAL ENHANCEMENT & RESTORATION DIVISION**

*December 2008 Status Report*

**Happy Holidays!**

**Public Outreach Workshop: Fishing for Answers in the Lake Worth Lagoon:**

ERM's Public Outreach staff put together a mini-workshop, "Fishing for Answers in the Lake Worth Lagoon." Presentations by ERM and FWC staff provided an overview Lagoon history, current habitat resources and conditions, manatee protection, and current restoration efforts. The workshop was well attended by US Coast Guard staff, US Coast Guard Auxiliary members, local law enforcement, and FWC staff.

**Lake Worth Lagoon Seagrass Monitoring:**

Bimonthly monitoring of five sites over the next three years in cooperation with the SFWMD will expand current seagrass data and help quantify the relationships that exist between freshwater discharges and seagrass distribution.

**South Cove:**

Work continues with the County Attorney in preparation for the upcoming Administrative Hearing.

**Lake Worth Lagoon Oysters:**

The State of Florida has been monitoring three oyster reefs in the lagoon since 2005. This past year, PBC expanded the monitoring to three additional sites, including the artificial reefs at Snook Island Natural Area. The effort indicated high recruitment periods in

June and August at Snook Island, and in September at Ibis Isles.

**Jupiter/Carlin Structures**

The County's consultant continued to work on Model Setup, Calibration & Validation, but encountered some difficulty developing good model agreement between measured and modeled results. The consultant reworked some of the model parameters to achieve better agreement and as a result the draft report will not be submitted until January.

**Jupiter/Carlin Renourishment**

A cultural resource survey of the borrow area located off Singer Island is underway. A draft report of the survey results is expected in the beginning of January.

ERM received notice that the U.S. Army Corps of Engineers Center of Expertise (PCX) recommended the use of the Beach-fx economic model in preparation of the required Section 934 Report. The County has requested approval to once again utilize the SDM (Storm Damage Model), thereby saving a year of construction delays as well as a significant and unnecessary expense.

**South Palm Beach**

Now that a permit for dune restoration is in place, work can begin on dune restoration along Lantana Municipal Beach and South Palm Beach. Mobilization of equipment will begin January 5 & the project is expected to continue through the first week of February.

**Juno Beach Renourishment**

A \$12.23m contract with Great Lakes Dock & Dredge Co. of Chicago for the dredging and placement of nearly 1m cubic yards of sand will be considered by the BCC on January 13. The tentative construction start date is early February and work must be completed by April 30. See [www.pbcgov.org/erm/coastal/shoreline/pdf/Juno-Renourishment\\_12-23-08.pdf](http://www.pbcgov.org/erm/coastal/shoreline/pdf/Juno-Renourishment_12-23-08.pdf) for more information.



**Hopper Dredge Liberty Island**

Work on a mitigation reef for the project is underway off Riviera Beach. Representatives from FEMA recently

toured the project site as part of the assessment of impacts related to Tropical Storm Fay.

**Singer Island Erosion Control**

A draft pre and post construction hardbottom and segmented breakwater monitoring plan is under review. A contingency plan for mitigation of potential downdrift erosion is being finalized after mapping of historic shoreline migration and discussion with DEP

staff. An Erosion Control Line survey was submitted to DEP for review. The line, if approved, will fix the boundary between public and private property along the beach within the project area. The projected date for a public hearing on the action is February 3rd.

### South Lake Worth Inlet

Bids were opened for the Sand Transfer Plant Construction/Jetty Rehab/Bird Island Seawall Construction Projects. Board of County Commissioners consideration of the contract is scheduled for February 3 and construction is anticipated to begin February 10.

The City of Boynton Beach's Inlet Committee met on December 12 to rank the alternative options provided by their consultant for widening and or deepening the inlet. Results showed the "status quo" ranked highest.

FDEP is providing additional cost-sharing of \$238,925 for design and permitting, construction, and monitoring for the South Lake Worth Inlet Management Plan. The grant amendment goes to the Board on January 13.

### Ocean Ridge Shoreline Protection

State and Federal permits for the Project require post-construction monitoring and the construction of a mitigation reef to offset impacts to nearshore hardbottom. FDEP is providing cost-sharing of \$492,302 in a grant that goes to the Board on January 13, 2009.

A draft report of the 3-year (final) post-construction biological monitoring was sent to FDEP for review.

### Ibis Isles Habitat Enhancement:

Staff is making progress towards a final design for the project, which will be presented to local residents and permitting agencies by the end of January. The modified design includes the placement of sand and riprap along the eastern shoreline to create approximately 2.7 acres of Spartina, 2.4 acres of mangroves, and 1.21 acres of oyster habitat.

### Damage at the Breaker's Reef:

A popular fishing and diving reef off Palm Beach was damaged by as yet unknown means in November. Over a one acre area of

the Breaker's Reef, at a depth of 60 feet, large barrel sponges were sliced off and gorgonians, such as sea fans, were detached. Fifty hard corals were dislodged or broken. Staff assisted FDEP with their site assessments and will assist the group selected by the FDEP in their remedial efforts.

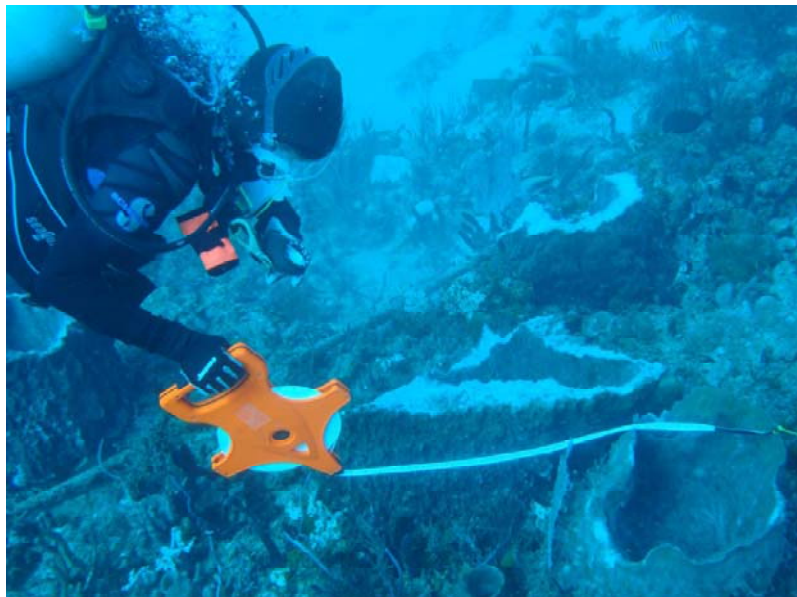
### Reef Monitoring and Management

The Reef Research Team surveyed two areas of Gulfstream Reef to document the staghorn coral, *Acropora cervicornis*, colonies reported by local divers. This coral has recently been listed as a "threatened" species by the Endangered Species Act.



Staghorn Coral on Gulfstream Reef. Photo by Palm Beach County Reef Rescue.

For more information on Palm Beach County environmental enhancement & restoration projects, please visit: <http://www.co.palm-beach.fl.us/erm/>



Damage at Breakers Reef