



**Department of
Environmental
Resources Management**

**Environmental Enhancement &
Restoration Division**

July 2008

Status Report

Juno Dunes

Hydrologic Project

A new freshwater flow way through the Juno Beach Natural Area south of Donald Ross Road includes a bird island centrally located within the natural area site.



**Peanut Island
Breakwaters**

485 tons of limestone now form three new breakwaters off Peanut Island's shoreline. These structures will provide

shoreline protection and reef habitat.

USACE Seagrass Surveys

Staff completed seagrass surveys for proposed reef sites in the Lake Worth Lagoon, where some grass was found on two of the five sites.

Artificial Reef Program

The USACE issued a ten year artificial reef permit for thirteen offshore artificial reef sites covering over 9,000 acres. The sites are spread along the entire coast of Palm Beach County and encompass a wide range of depths.

Reef Monitoring and Management

The Reef Research Team visited Boynton Corridors and its natural reef comparison site, Delray Ledge, plus Genesis Reef, the EIDSVAG and Tri-County Reefs. There are now 3 species of coral encrusting the Corridors compared to many more species of hard corals and gorgonians present on the older concrete Genesis Reef. On Delray Ledge, over 80 species of fish were recorded. Lots of benthic growth was present on the EIDSVAG as well as on Tri-County Reef. Of interest to note is that the growth of hard corals is more numerous on the north side of Tri-County Reef compared to its south side.

Jupiter/Carlin Beach Renourishment

The engineering & design scope of work and FDEP Grant Agreement will be presented to the BCC for approval on August 19. Under the terms of Agreement, the FDEP will reimburse 50% of the non-federal project costs. Federal reimbursement of 54.71% of the total project will be available after the County and

the U.S. Army Corps of Engineers re-negotiate a new Project Cooperation Agreement (PCA).

Singer Island Erosion Control Project:

The alternative configuration for the segmented breakwater plan has been prepared as requested by the permitting agencies. The revised design reduces the number of breakwater segments from 13 to 11, eliminates the terminal structure and repositions the remaining segments in an effort to reduce the amount of natural hardbottom that may be covered by the beach response to the structures (see figure). If it is determined that the revised design will not result in negative downdrift impacts, the design will be presented as Phase I of the project in order to expedite permitting and the additional elements will be proposed as Phase II, as deemed necessary. Modeling of the new configuration will be available by July 31st and incorporated into the UMAM assessment.



On July 16, the Riviera Beach City Council voted to approve the \$6M local share for the Erosion Control Project. To date, the State has appropriated \$7M with potential for another \$5.9M. Together, these funds represent 60% of the total estimated project cost. The City has postponed a vote for the cost-share on dune restorations until the issue of how to best generate the funds has been resolved.

South Palm Beach

Continued coordination with FDEP will delay the engineering, design and permitting task order going before the BCC until September. July photo monitoring again highlighted an eroded



dune system throughout the Lantana Municipal Beach Park and Town of South Palm Beach.

South Lake Worth Inlet

65% construction plans for the new sand transfer plant & for jetty reconstruction were reviewed with the design team. Seagrass surveys of the impacts from the dredging project, along with the required post-construction survey are being finalized for DEP review.

Ocean Ridge Shore Protection Project

The permit-required 36 month post-construction project performance report and a 36 month post-construction environmental monitoring survey are underway.

NENA trail head at Lake Okeechobee Scenic Trail

Construction on the Northeast Everglades Natural Area (NENA) trail head to the Lake Okeechobee Scenic Trail (LOST) is progressing toward completion in August 2008.

NENA Historic Jupiter-Indiantown Trail, Phase 1

This June the FDOT District IV conducted a field review of the projects submitted for Transportation Enhancement funding this year by the PBC Metropolitan Planning Organization. ERM had applied for \$750,000 to develop the portion of Historic Jupiter-Indiantown Trail and extensive trailhead facilities within Cypress Creek Natural Area and received the good news that this project appeared to be eligible for reimbursement monies in 2011.

Sea Turtle Nesting Update:

After the record low 2007 nesting season, it is encouraging to record an increase in loggerhead nesting; loggerhead nesting is 20-75% higher than during this point last year and 5-25% higher than the 5-year average. Though lower than the record 2007 nesting season, green and leatherback nesting is generally 10-20% higher than the 5-year average. Sea turtle nesting season continues through October 31.

Sea Turtle Lighting Compliance:

Lighting inspections have been conducted for most of Palm Beach County. Follow-up inspection will be conducted throughout the sea turtle nesting season. An estimated 3,500

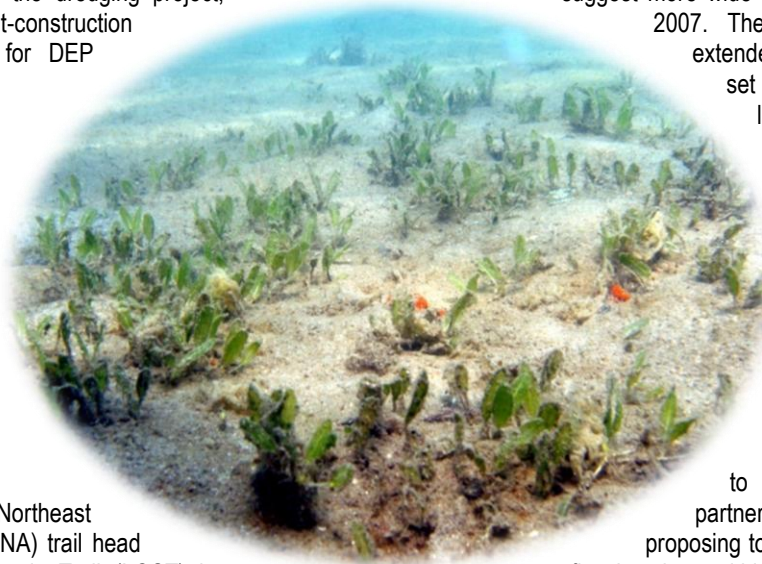
disoriented sea turtle hatchlings have been reported so far this season.

Juno Renourishment:

The response to the FDEP's 4th Request for Additional Information (RAI) was submitted July 18. RAI 1 for the mitigation reef was received July 29, 2008. An August 1st teleconference to discuss the RAI has been scheduled. Construction contract technical specifications and plans are in development. Construction is expected to begin in December 2008. Of the estimated project cost of \$12M, the Federal Emergency Management Agency (FEMA) will contribute \$3M to offset erosion caused by hurricane Frances. FDEP is preparing a funding agreement to cost share up to 50% of the local share of construction costs.

LWL Seagrass Monitoring

Preliminary observations during the fixed transect monitoring suggest more wide spread seagrass cover than in 2007. The width of the grass beds often extended further from the shore and set new all-time records at several locations, including one transect, where seagrasses extended all the way to (and into) the Intracoastal Waterway channel. A detailed analysis of this year's results will be compiled into a report that will compare data from all monitoring years. The South Florida Water Management District continues to strengthen the cooperative partnerships with the County by proposing to monitor seagrass bimonthly at five locations within Lake Worth Lagoon. County and District staff have identified the five two acre monitoring sites.



South Cove Natural Area

FDEP has issued a letter deeming the South Cove Restoration application complete. An Interlocal Agreement with the City of West Palm Beach identifying maintenance & monitoring responsibilities is pending.

Artificial Reef Guidelines and Considerations

Staff is working with Marine Industries Coastal Construction Impacts group of the Southeast Florida Coral Reef Initiative (SEFCRI) on guidelines for planning, construction, management and monitoring of all types of artificial reefs in the region. The project involves representatives from Broward, Dade, Palm Beach and Martin counties under the coordination of FDEP.

International Coral Reef Symposium

ERM environmental analyst Janet Phipps was a contributing author to two major publications issued for the Symposium, *Coral Reefs of the USA* and *The State of Coral Reef Ecosystems of the United States and Pacific*.

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