

August 2008

Status Report



The engineering & design scope of work and FDEP Grant Agreement will be presented to the BCC for approval on September 9. Staff continues to work with the ACOE on the development of the Section 934 report.

Jupiter/Carlin Erosion

Control Project: A second set of ADCP (Acoustic Doppler Profiler)

instruments were deployed off Jupiter Inlet. Field data collected during the first deployment has been processed and the model is being calibrated with the project area's hydrodynamics. Documentation of the natural resources within the project area and the present beach conditions were completed for inclusion within the permit application.

Tropical Storm Fay Update: Wave action changed the shape of the beaches by moving sand from the dry berm out to the nearshore sand bar. The beaches retreated 20-30 feet and lost an average of 2.5 feet in elevation. Post-storm waves have been moving some of that sand along shore and back up to the dry beach, but full recovery is not expected for some areas. Staff toured FEMA and USACOE representatives shortly after the storm. With the loss of sand came a corresponding loss of incubating sea turtle nests. Approximately 20-50% of the remaining nests were lost, which represents 10-20% of the nesting for the entire 2008 season.

South Palm Beach: The final engineering & design scope of work for the erosion control project was submitted to the FDEP for approval before consideration by the BCC. Further dune restoration funding was requested from the FDEP as 4 to 5 feet of vertical beach was lost during the storm and 95% of the winter 2008 dune restoration project has washed out since its construction.



Juno Renourishment: A Biological Opinion from USFWS is in the final stages of review and draft construction contract plans and technical specifications have been completed. 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.

Singer Island Erosion Control Project: The numerical modeling has been completed to determine the anticipated shoreline response to the modified project design (figure). As requested by the permitting agencies, the design modification will help expedite the permitting process by eliminating impacts to the exposed hardbottom in the southern end of the project area. The results of the numerical modeling and hardbottom characterization report have been sent to FWS to initiate drafting the Biological Opinion (BO), a permit requirement. A formal response to DEP Request for Additional

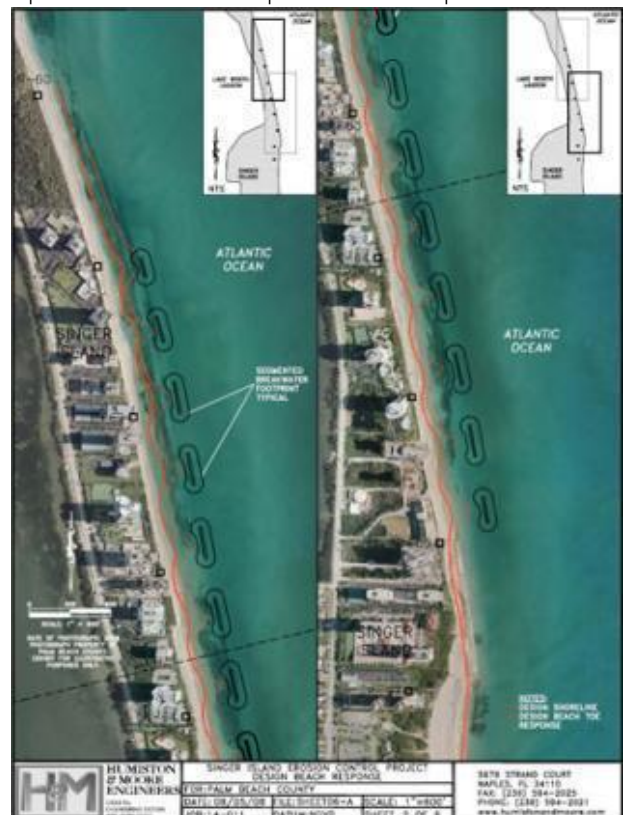
South Lake Worth Inlet: Maintenance

Dredging: A seagrass survey of the impacts from the dredging project showed initial recovery of the seagrass in the impact area. This project was funded by FIND (58%), Palm Beach County (25%), DEP (11%), and the City of Boynton Beach (5%). **Sand Transfer Plant Construction/Jetty**

Rehab/Seawall Reconstruction: 95% construction plans for the modified sand transfer plant are in review. ERM received a completeness letter from DEP for the jetty rehab *de minimus* exemption. The SFWMD issued a permit exemption for the seawall construction at Bird Island. An NWP 3 from the Corps of Engineers is anticipated for the seawall and the jetty work. Funding for this project comes from DEP and Palm Beach County.

Sea Turtle Lighting Compliance: Lighting inspections have been conducted for all of Palm Beach County. Follow-up inspection will be conducted throughout the sea turtle nesting season. An estimated 6,300 disoriented sea turtle hatchlings have been reported so far this season.

Jupiter/Carlin Renourishment:



Information (RAI)#2 was submitted to the permitting agencies. DEP is preparing an amendment to the existing Singer Island grant to encumber the \$4M appropriated in fy07-08 for construction. To date, the City of Riviera Beach has not executed the Interlocal Agreement for the 20% local share. An executed agreement must be received by September 23rd in order to prevent any construction delays once a permit is issued.

Reef Monitoring and Management: The Reef Research Team surveyed Ragg's Reef, Ocean Ridge South, Murphy's Barge II (aka Runaway Barge) and MidReef this month. Ragg's is progressing in the amount of benthic cover growing on the boulders; there are now 3 different genera of grogonians present. White margates were present, an unusual sighting for our county. Murphy's Barge II is still in relatively good condition and home to a myriad of fish, including a large goliath grouper. Staff assisted FFWCC in monitoring local sites for the Florida Reef Resiliency Program sponsored by FDEP and the Southeast Florida Coral Reef Initiative.

Annual Marine Contract: Upon approval by the BCC in September, initial work will include the breakwater projects along the mangrove areas north of the Ocean Avenue Bridge in Ocean Ridge and Boynton Beach and the Juno Beach Nearshore Reef Mitigation to be constructed just north of the City of Riviera Beach's Municipal Beach in 8-12' of water.

Artificial Reef Permitting: Seagrass surveys have been completed for five inshore proposed artificial reef sites. Limited seagrass was found on two of the five sites. USACE and FDEP permits have been issued for 13 offshore sites which encompass about 9,000 acres.



Chain of Lakes Restoration

Project: One of the goals of the project was to restore fisheries and wildlife habitat. While inspecting the project site, staff came upon a young fisherman who had just caught a large mouth bass, which was a good sign that the fisheries are returning to the lake.

Lake Worth Lagoon Initiative (LWLI): Work continued on establishment of the framework for LWLI's Steering Committee, which will consist of an Executive Committee of lead environmental agencies and Committee Chairs representing major areas of emphasis: Water, Habitat, Pollution Prevention and Public Outreach. The LWLI will coordinate local, state and federal agencies' activities that affect the LWL, heighten awareness of LWL's resources and issues and carry out the mission & projects outlined in the LWL Management Plan.

Lake Worth Lagoon Partnership Grant Program (LWLPGP):The LWLPGP Selection Committee will convene on September 5th to allocate \$700,000 in State funds to projects that benefit habitat and water quality in the Lake Worth Lagoon and Chain of Lakes. Vying for funding this fiscal year: (1) Lake Worth 2nd Ave North Outfall Water Quality Improvement: \$210,000; (2) City of WPB Monroe and Monceaux Stormwater Improvements: \$450,000; (3) City of WPB Stub Canal Stormwater Improvements: \$500,000; (4) PBCERM South Cove Restoration Phase II: \$419,600; (5) Golfview Heights/Belvedere Homes Phase I: \$500,000; and (6) PBC

Parks Department Peanut Island Lagoon Enhancement: \$214,000; PBC Parks Department John Prince Park Campground Sewer Project: \$200,000.

Oyster Monitoring: The first quarterly data report showed that oysters at the MacArthur site, while being larger, have lower condition index and reproductive potential compared to the Snook Island and Ibis Island sites. Also, recruitment is limited at the MacArthur site, but the oysters that do settle are similar in size to those at the other sites indicating conditions for early growth are good. The data also showed that the Snook Island site was the most productive site among the three.

South Cove Natural Area: The issuance of FDEP's Consolidated Notice of Intent to Issue Environmental Resource Permit for the South Cove Restoration Project has allowed the adjacent property owners to formally object and file a petition requesting an administrative hearing. If FDEP finds the petition to have substance, a hearing will be required prior to issuance of the permit.

Lake Worth Lagoon Habitat Classification:

The 2007 Project mapped essential fish habitats, specifically seagrasses, mangroves, and oyster reefs. Seagrass beds covered 1,688 acres or 21.74% of the LWL. This is a slight increase of 42 acres over the 2001 calculation. Mangrove habitat continues to expand from 248 acres in 1985, to 264 acres in 2001, and 283 acres in 2007. This 14% increase, mostly in the northern and central portions of the lagoon, are associated with the County's restoration projects; Munyon Island, Peanut Island, John's Island and Snook Islands. In



addition to mangroves and seagrasses, 4.2 acres of oyster reefs and 1.5 acres of spartina wetlands were identified during this large scale mapping project.

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

