

SOUTH COUNTY BEACH & DUNE RESTORATION PROJECT

Client: St. Lucie County Mosquito Control & Coastal Management, FL



In September 2004, St. Lucie County suffered the impact of both Hurricane Frances and Hurricane Jeanne within a period of 21 days. The U.S. Army Corps of Engineers (USACE) had

completed a *Reconnaissance Study* of the south County beaches, this *Study* concluded that a basis exists for a potential federal project; the USACE subsequently initiated a *Feasibility Study* expected to be completed in 2014. However, local interests requested the County construct an interim non-federal project to protect upland property. This non-federal project was planned, designed and permitted by Coastal Tech; construction is expected to occur in early 2013.

As part of the project planning, design, and permitting, in collaboration with County staff, Coastal Tech:

- held numerous public meetings to engage stakeholders;
- conducted a simplified “NED” analysis of alternatives to formulate the recommended plan;
- provided environmental services to map and characterize existing hardbottom within and surrounding the project area;
- identified hardbottom impacts and negotiated mitigation requirements (1.89 acre mitigation reef) for unavoidable impacts to hardbottom – including communication with the FDEP Deputy Secretary and multiple meetings with the FDEP Division Director, USACE staff, and NMFS staff;
- formulated the design so the project might be constructed using either upland sand sources or offshore sand sources;
- assisted the County with bids for the beach fill and mitigation reef - the low bid for the beach fill (using an offshore sand source) is within 2% of Coastal Tech’s estimates and the low bids for the mitigation reef are about 15% less than Coastal Tech’s estimates,
- assisted the County to formulate a benefits-based *Special Assessment District* to generate the local share of project costs; and
- assisted the County with formulation of a regional project with Martin County – leading to state funding for the project as appropriated by the 2012 Legislature.

The proposed project is designed to place approximately 517,487 cubic yards of sand with native dune vegetation over about 3.4 miles of shoreline. In 2013, Coastal Tech is slated to provide construction supervision and monitoring as required by the permits.

Key Elements

- Conditions Assessment
- Alternatives Screening
- Sand Search
- Preliminary & Final Design
- Numerical Mike21 Modeling
- FDEP/USACE Permitting
- Draft & Final EIS
- Local MSBU Funding
- Mitigation Reef
- Bidding & Construction Phase

Date: 2007-Present

Fees: \$1,271,456.

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