



US Army Corps
of Engineers®

Regional Sediment Management Program

Tampa Bay Region RSM

Description

The Tampa Bay Region RSM effort is a continuation of past RSM work and FY12 project work. Efforts thus far have contributed to enhanced understanding of barrier island and inlet linkages resulting in actions and proposed adaptive management for multiple federal projects. FY13 efforts are directed at *integrating existing knowledge* of the regional inlet/shoreline system using CMS models developed by SAJ in FY11/1. FY13 efforts are also directed at *developing mutual regional sediment management strategies* with the Florida Department of Environmental Protection (FDEP) by coordinating Corps findings with the FDEP's RSM Plans for the Southwest Florida coast. Navigation O&M cost savings can be realized, as preliminary data suggest, from using the navigation passes as sediment sources for shore protection (SPP) projects in SW Florida, thus providing consistent placement zones for O&M material on a regional scale. Reduction in Navigation O&M costs, improved nearshore placement permitting, and benefit to adjacent beaches are the goals. Funds for the overall effort would be leveraged between RSM, O&M, and project funds. Navigation and coastal stakeholders will directly benefit.

Issue/Challenges

Preliminary findings including 2004 and 2010 JABLTX data suggest that a large percentage (as much as 80%) of offshore sediments mined since 1993 and used for beach nourishment ultimately reside in the passes fronting Sarasota Bay. It is proposed that this trend is examined more thoroughly and verified with additional measured data. Expected outcomes may suggest that continued dredging and placement of offshore sediments may actually hinder navigation and it would be more efficient to determine methods for managing sediment exchange between the inlet complexes and adjacent beaches. Whereas these management strategies are beneficial between navigation O&M and SPP, their implementation is of significant risk to the balance of the physical system between inlets and adjacent shorelines.

Expected Products

- Sediment Budget/Inlet Sink Method for Manatee and Sarasota Counties
- The Inlet Sink Method for Pinellas County and inner shelf sources/sinks
- CMS as an engineering tool to determine the Connectivity of Passes within the Sarasota Bay System Technical Note
- Longboat Pass / Egmont Key Nearshore Placement Technical Note

Potential Users

USACE, ERDC, Florida Department of Environmental Protection (FDEP), Florida Inland Navigation District (FIND), local navigation and HSDR sponsors, other stakeholders within study area.

Projected Benefits

This effort furthers understanding of inlet/barrier island connectivity with the major purpose of linking navigation projects to regional coastal systems for maximum beneficial use of dredged material. It also furthers ERDC nearshore berm research.

Points of Contact

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Leveraging Opportunities

RSM funds will be leveraged with current O&M funds to complete this work. ERDC is receiving separate funding to conduct research on nearshore placement.

Participating Partners

USACE-SAD-SAJ, ERDC, local sponsors, FIND, University of South Florida (USF)