

BEACH EROSION STUDY ON MANASOTA KEY NORTH

History

Between 2001 and 2003 Charlotte County, in partnership with Sarasota County, completed a regional study of beach erosion that included the Manasota Key Planning Area. This study examined the critical erosion along the Manasota Key Planning Area shoreline from Florida Department of Environmental Protection (FDEP) reference monument (R-monument) R-168 in Sarasota County to R-21 in Charlotte County, developed conceptual beach restoration plans to address the erosion processes, conducted extensive stakeholder coordination, and developed funding strategies to pay for the restoration plans. Funding for the 2001-03 study was provided by Charlotte County (West Coast Inland Navigation District funds), Sarasota County, and FDEP.

Current Situation

Most recently, the Charlotte County stakeholders, including residents and businesses along the north end of Manasota Key extending from the County line to south of Chadwick Beach Park, have brought to the attention of the County Commissioners, Administrators, and staff that their erosion problem has become so severe that their shoreline armoring is failing. Accordingly, Charlotte County has embarked on a new Beach Erosion Study (Study) to update the 2001-03 study elements that pertain to the Charlotte County segment of Manasota Key.

Scope of Work

The scope of work for the Study includes:

- conduct existing conditions surveys of beach profiles and nearshore hardbottom resources,
- perform erosion analysis to examine 2001-15 shoreline/volume changes within Study Area,
- develop conceptual restoration plans following 2001-03 study premise,
- estimate volume and renourishment interval to maintain stable beach,
- perform conceptual environmental assessment of potential impacts to nearshore hardbottom resources from restoring and maintaining stable beach and qualify potential mitigation features to offset these impacts,
- evaluate permit feasibility of restoration measures,
- develop order of magnitude project costs,
- evaluate long-term funding strategies,
- conduct stakeholder meetings to share information and assess funding options, and
- investigate opportunity for Charlotte and Sarasota Counties to partner on a regional approach.

Status

The majority of the scope of work has been completed and the draft report has been submitted to the County by their consultant. Three restoration alternatives have been developed including conceptual design templates, renourishment needs, mitigation features, and costs. Stakeholder meetings are underway including the Joint Meeting between the Sarasota/Charlotte Boards of County Commissioners (11/3/15), November Beaches and Shores Committee Meeting (11/5/2015), and Manasota Key residents (TBD). The results of the stakeholder meetings will be summarized and added to the report. Order of magnitude costs range from \$8.3 - \$9.1 Million per mile for the three alternatives. Plan scalars along with incremental costs are under development in recognition of funding challenges. These scalars may yield cost reductions on the order of 21% to 28%. The anticipated timeline for design and permitting is 30 months. Steps to advance the Study to a restoration project will also be outlined in the final report expected December 2015.

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