

## **M E M O R A N D U M**

**To:** Tom Harmer, Town Manager  
**From:** Isaac Brownman, Director Public Works  
**Report date:** November 7, 2022  
**Meeting date:** November 14, 2022  
**Subject:** Annual Beach Update

### **Recommended Action**

None, informational only.

### **Background**

As reported in the June 2022 meeting, the Town of Longboat Key conducted major segments of beach re-nourishment and also North end structural stabilization projects in 2021. Five groin structures were constructed on the North end of the island and approximately 1 million cubic yards of sand were placed across the island as outlined in the Beach Management Plan. A formal Year-1 post-construction beach profile survey (which is a requirement of our permit) was conducted in August 2022.

Dr. Albert Browder, Ph.D., P.E. with Olsen Associates, the Town's Coastal Engineer, will provide a summary of the results of the Year-1 survey, including observations made after Hurricane Ian (after the Yr-1 survey). The segments from North to South will be discussed, highlighting impacts from the storm season, the changes experienced through natural processes, and projects associated with each. A summary of the one-year, post project analysis highlights that erosional rates across the island have been significantly reduced. The summary also highlights the movement of sand within the system and describe the areas of higher erosion.

As reported previously, there are two additional projects still to be initiated: New Pass Groin tightening on the very South end of the island and the Greer Island Spit Management Plan on the very North end of the island.

The Greer Island Spit Management Plan is a management strategy to dredge and pull back beach sand that has migrated eastward around Greer Island and East of the Longboat Pass bridge over time. The intent would be to dredge and place this sand back on the North end Gulf shoreline, as needed, and preferably during re-nourishment cycles.

The Spit Management Plan is proposed for a 15-year time period. Florida Department of Environmental Protection, and U.S. Army Corps of Engineers permits for that period have been obtained. The permits allow for the Town to begin dredging at the location consistent with 2006 conditions. Also, a Florida

Department of Transportation permit to work in proximity of the bridge has also been obtained, but will have to be renewed as each project is conducted.

It is estimated that the Greer Island Spit will yield 25,000 to 35,000 cubic yards beach compatible sand for this initial dredge. The Town is working to advertise for construction bids in November/December 2022 and anticipate starting construction on the first management dredge in early 2023, pending budget and contractor availability. Final construction plans and bid documents are currently in final review with Town staff.

A de minimis permit for the New Pass Groin Structure Tightening project was received in October 2022. The requested U.S. Army Corps of Engineers permit, (a simpler Nationwide permit), remains under review at the Tampa office. Construction documents for the project are well underway, and it is anticipated that construction can commence in early 2023.

In the June meeting, significant discussions were held regarding Public Beach Access in the Gulfside Road area. No additional analyses have been performed since that time, but beach conditions have been updated.

Lastly, expected upcoming tasks including typical monitoring tasks required by State and Federal permits for the year-2 post-construction monitoring period. Additionally, the Town plans to conduct a geotechnical sand search in the near future to seek additional sand sources for the future of the beach management program.

**Staff Recommendation**

None, informational only.

**Attachments**

PowerPoint Presentation (Available from Town Clerk's Office)

**End of Agenda Item**