MEMORANDUM

To: Tom Harmer, Town Manager

From: Isaac Brownman, Director Public Works

Report date: May 27, 2022

Meeting date: June 6, 2022

Subject: Beach Conditions Update, Greer Island Spit Management,

and Discussion Regarding Public Beach Access

Recommended Action

None, informational only.

Background

The Town of Longboat Key conducted major segments of beach re-nourishment and also north end structural stabilization projects in 2021. It was a very successful nourishment cycle that was completed ahead of schedule and under budget. 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.

Dr. Albert Browder, Ph.D., P.E. with Olsen Associates, the Town's Coastal Engineer, will provide some initial post-construction observations. A formal post-construction beach profile survey (which is a requirement of our permit) will be conducted over the Summer.

There are two additional projects still to be initiated: the 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 New Pass Groin Structure Tightening project is under permit review. Once complete, final construction documents can be prepared for bidding with a target construction start timeframe of Fall / Winter 2022.

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 beach compatible sand for this initial dredge. The Town is targeting initiating the first management dredge by the end of the calendar year, pending budget and contractor availability. Final construction plans and development of bid documents are underway.

Due to current channel conditions and the anticipated start of the Spit Management Plan dredge, the Town is also preparing for an additional short-term cut and stockpile of the area adjacent to the existing private dock to help restore channel access to the lagoon. A contractor has been selected and the initial pre-construction meeting was held. The target timeframe to initiated the work is late June 2022.

Regarding Public Beach Access in the Gulfside Road area, Town staff will review the December 13, 2021 Uninterrupted Public Beach Access discussion as it relates to engineering and other public beach access options. The staff has completed its review of additional beach access options and Dr. Albert Brower will be available to answer any engineering related questions.

The Beach Management Plan will be updated as we get closer to the next major re-nourishment cycle. From a beach financial model standpoint, the next major nourishment cycle is anticipated to occur in FY29.

Staff Recommendation

None, informational only.

Attachments

PowerPoint Presentation (Available from Town Clerk's Office)

End of Agenda Item