

Protecting our Natural Environment

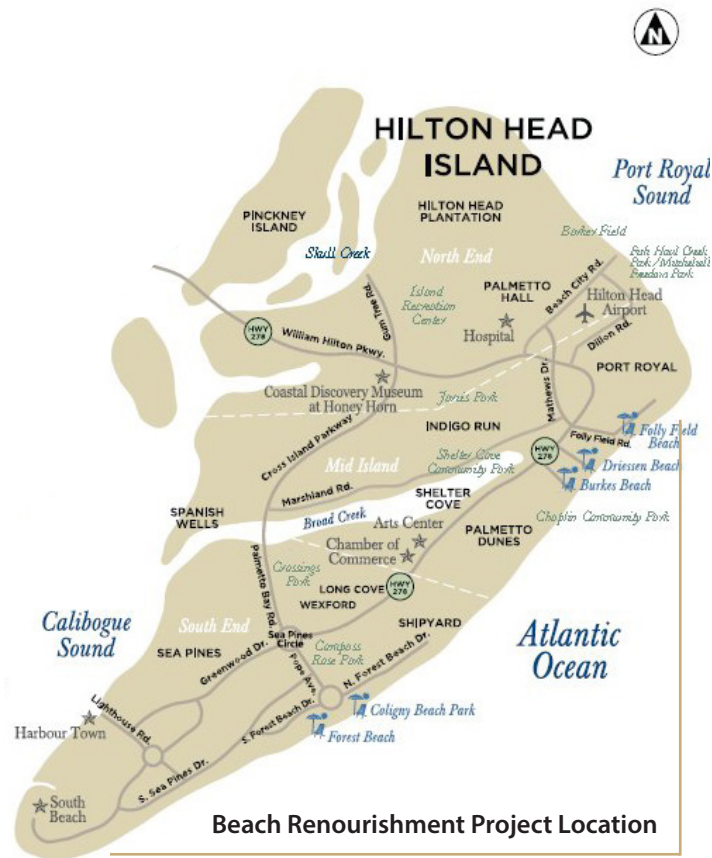
Hilton Head Island is home to over 40,000 permanent residents who live and do business here. It's also home to endangered sea turtles and a myriad of magnificent birds and other wildlife and marine life. Hilton Head Island is a relaxing vacation destination for over 2.6 million annual visitors.



Like most beaches, Hilton Head Island constantly faces the inevitable forces of erosion. The hilly sand dunes studded with sea oats provide limited natural protection. Unlike most beach communities, the Town of Hilton Head Island has taken a proactive approach to manage beach erosion by independently funding an ongoing beach management program, which includes periodic renourishment to ensure a stable shoreline.

In order to preserve our beautiful Island and to continue to provide our visitors with a unique wide stretch of sandy shoreline, a beach renourishment project will take place in our 2016 off-season. The project is sponsored and funded by the Town of Hilton Head Island. The project engineer is Olsen Associates, Inc. of Jacksonville, FL, and the project contractor is Weeks Marine Inc., of Covington, LA.

For more information about the 2016 Town of Hilton Head Island beach renourishment project, please visit www.hiltonheadislandsc.gov.



Beach Renourishment Project Location

The beach renourishment project starts March 2016 and concludes by end of June 2016.



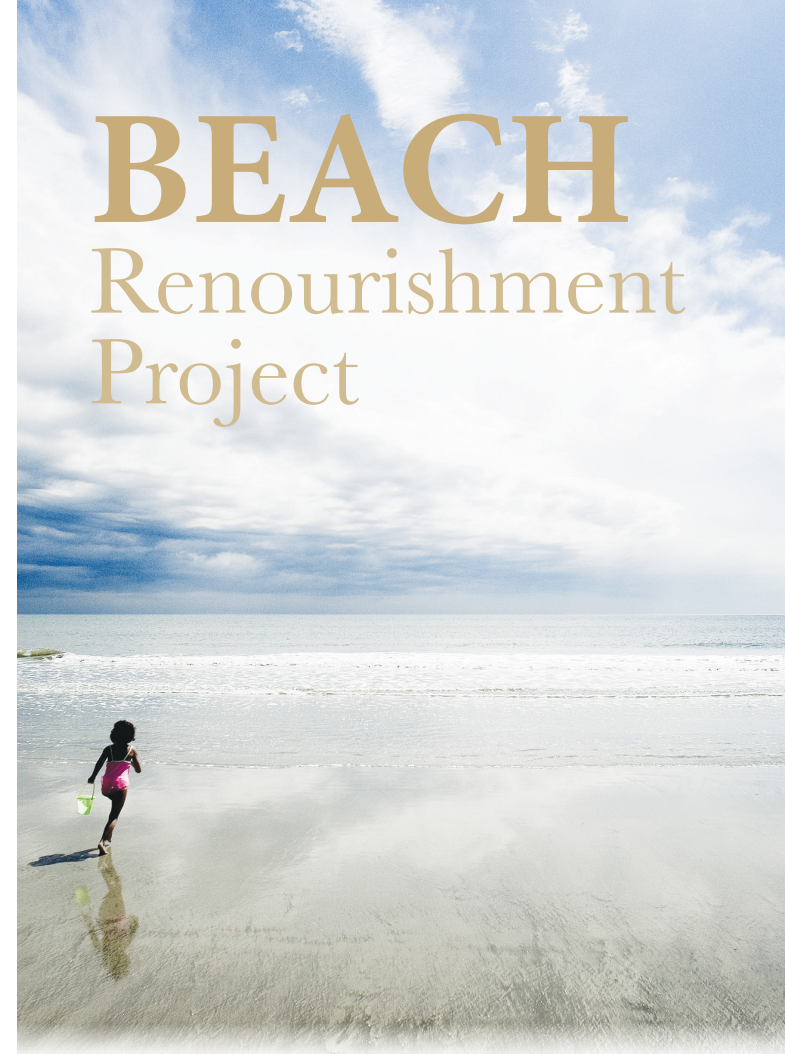
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BEACH Renourishment Project



PROTECTING & Sustaining Our Beaches

Hilton Head Island



Beach Renourishment Q&A

Q. Why is beach renourishment important?

A. Beach renourishment is an environmentally sensitive and educational opportunity that benefits both residents and visitors to the Island. A wider beach ensures a protected and sustained natural environment for the endangered sea turtles and sea birds that make their homes or nest on our beaches.

A wider beach provides extended storm protection for oceanfront homes, villas and businesses. A wider beach also maintains the recreational berm that allows beachgoers to spread out, play paddle ball, ride bikes and bask in the sun.

Q. Why is beach renourishment needed on Hilton Head Island?

A. Hilton Head Island is the second-largest barrier island on the East Coast. Most beach erosion on Hilton Head Island is a naturally occurring phenomenon. Geologically, the Island is a transgressive, relic coastal barrier, which has migrated landward over the last several centuries. Beach sand moves from the center of the Island toward its end. The ultimate fate of this sand is dictated by Port Royal Sound to the north and Calibogue Sound to the south. The daily ebb and flow of water through these two tidal inlets moves sand on and off the adjacent shorelines and continually affects the configuration of the inlets' tidal shoals.

Q. How often is beach renourishment needed?

A. This will be our third large beach renourishment since the original project in 1990. A beach renourishment is necessary every seven to ten years, depending on storms and weather conditions. Beginning in March 2016 and contracted to be completed by the end of June 2016, this project will expand and build up the beach from South Forest Beach to the Folly, north of Palmetto Dunes.

Q. What is the beach renourishment process?

A. Before the large dredge begins, coastal engineers will conduct a "sand search" to locate a grade of sand that is the same size, color and texture of the existing beach. The shoreline will be evaluated and sand will be placed only where needed.



Photo by Town of Hilton Head Island

Sand is dredged from off shore and pumped onto the beach through miles of pipeline.

- A dredge will be contracted and will excavate from two offshore borrow sites, Bay Point Shoals and Barrett Shoals.
- New sand is pumped through an extensive pipeline, running both under and above water that dumps the sand from the shoals directly onto the beach.
- Once the sandy-watery mixture is dumped onto shore, the water runs back out into the ocean.
- Bulldozers and other heavy construction machinery construct the elevation and form the beach with new sand.
- Active sites are 1,000' sections at any given point. This site will be closed for a time but temporary beach access ramps will accommodate visitors to the beach. As soon as a section is built up, it is immediately re-opened.

Q. What equipment will be used during this process?

A. The process will use a dredge, a booster pump, and many miles of pipeline, through which the sand will be pumped, along with attendant tug boats and barges. The land based equipment includes numerous bulldozers to shape the new sand, survey equipment, and support vessels to quantify the material that is placed.

Q. How much sand will be moved onto the beaches?

- A.** The \$20.7 million project includes three principle parts:
1. Placement of about 1.1 million cubic yards of sand along 5.3 miles of Atlantic shorefront – from just South of Coligny Circle to the Folly, just North of Palmetto Dunes.
 2. Placement of about 600,000 cubic yards of sand along 7,000' of the Port Royal Sound shoreline.
 3. Placement of about 360,000 cubic yards of sand along 5,000' of Atlantic shorefront at South Beach.

Q. How will beach renourishment affect beach goers?

A. Although certain inconveniences are unavoidable, the project will be conducted as quickly and efficiently as possible. Construction will take place 24 hours a day, and the active site will be about 1,000' along the shoreline. This site will be closed for a time but temporary beach access ramps will accommodate visitors. As soon as the section has been built up, the equipment will slide down the beach and the newly renourished section will be immediately accessible. As with previous projects, the nourishment sand will be excavated by hydraulic dredge from two offshore shoal features. The dredge picks up small amounts of shell and mud with the sand. For that reason, newly-placed sand, at first, often appears quite dark. Within a few days, however, the sun oxidizes the non-sandy material and the beach eventually turns as light as it was before the project.



Q. What happens after the beach renourishment project is complete?

A. Beach renourishment is an ongoing process. The American Coastal Coalition named Hilton Head Island the Top Restored Beach for 2003. The award recognized that the beach renourishment on Hilton Head Island "has proven itself over a significant period of time." There are 52 beach monitoring stations that the Town of Hilton Head Island uses regularly to judge how much sand remains from the most recent beach renourishment project, and aerial photos are taken annually to monitor how the coastline changes.