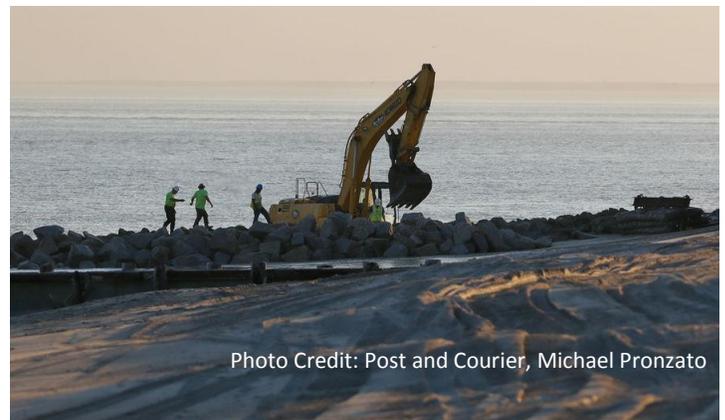


2018 Beach Preservation Project Information



QUICK FACTS

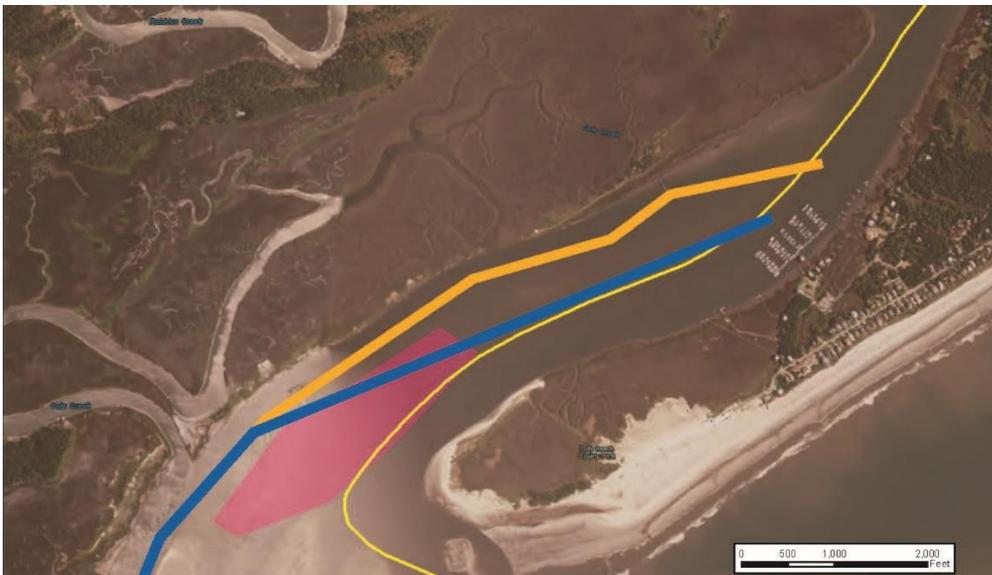
- **Beach Renourishment** to begin July 5 2018
 - U.S. Army Corps of Engineers project
 - Project Area: 8th St. E. to end of E. Ashley Ave.
 - Project Length: 2 miles
 - Cost: \$10,900,000
 - Funding: 100% Federal
 - Sand Source: Folly River
 - Volume: 750,000 cubic yards
 - Contractor: Marinex Construction
 - Bird Key habitat restoration
 - Turtle nesting will be carefully monitored
 - Congress appropriated emergency funds to repair damages from Hurricanes Joaquin and Matthew. Damages were most severe along the northeast end of Folly. Additional funding may become available soon to repair damages to the west end caused by Irma.
- **Groin Rehabilitation** to begin March 2018
 - City of Folly Beach project
 - Project Area: 8th St. E. to 14th St. E.
 - Project Length: 1 mile
 - Cost: \$2,100,000
 - Funding: 50% state/50% City
 - Contractor: Crowder Construction Co.
- **Dune Restoration**: now until Summer 2018
 - Dunes are being restored on the public beach from the west end Folly Beach County Park to 14th St. E. There is not sufficient space on the public beach northeast of 14th St. E. to warrant public dune rehabilitation at this time. Private property owners who want to participate should contact the city.
 - Sand fencing in "V" configurations are being installed now
 - Sea oats and panic grass will be planted in early summer
- Once underway, updates on where active construction is taking place and where it will be next can be found using the interactive map at <https://arcg.is/1CPGD4>, also at <http://www.cityoffollybeach.com/>





WHAT TO EXPECT IN THE RIVER: Beach Renourishment

- The borrow area for the beach renourishment is the Folly River channel from the Sunset Cay Marina out to the Atlantic Ocean (blue line) and an area between Bird Key and the Folly Beach County Park (pink) as shown in the diagram below.
- The contractor's dredge, *The Savannah*, (also pictured below) will operate within this area.
- A floating plastic pipeline will run out of the dredge and attach to a submerged steel pipeline that will run along the river bottom.
- Navigation for vessels will not be impeded by the dredging.
- The pipeline will be marked with buoys and lights.
- The submerged pipeline will run from the dredge up the waterway and cross onto Folly at the Washout.



Folly River Borrow Area shown in blue and pink. Yellow lines will not be dredged.



Marinex Construction's dredge, *The Savannah*



WHAT TO EXPECT ON THE BEACH: Beach Renourishment

- The pipeline will come out of the river at the Washout, run across Ashley Ave., and onto the beach.
- Pumping will begin at the Washout and turn toward the northeast.
- The contractor will close sections of beach (>500' at a time) but most of the beach will remain publicly accessible during construction.
- The active work area will move every 5 to 7 days on average depending on weather.
- The crews will build the beach in one direction (northeast) starting July 5. As sections are completed, sections of the beach will be opened for public access. The pipeline will remain on the beach until construction reaches the Coast Guard property on the northeast end.
- Then, they will remove the pipe from the northeast end and begin building the beach in the other direction (from the Washout to the southwest terminating at 8th St. E.).
- Properties northeast of the Washout should expect construction during the month of July.
- Properties southwest of the Washout should expect construction during the month of August.
- The dredging operations will shut down from time to time due to weather and, less often, equipment delays.
- Work areas are closed to the public. It is an active construction zone, so please keep out. Expect 24-hour, 7-day operations when sea conditions allow.



- Sand ramps will provide access over the pipe to the shoreline.



Groin Rehabilitation Project Explanation

- The groin rehabilitation project aims to hold renourished sand on the beach longer (reduce erosion) between 8th St. E. and 14th St. E.
- This section of beach is located adjacent and to the northeast of 9 groins that were rehabilitated in 1993 in the vicinity of the pier.
- The project will link this healthy beach (2nd St. W. to 7th St. E.) with the region to the northeast (8th to 14th St. E.), which erodes quickly after renourishment.
- The project will increase the sand holding capability of 9 additional groins located between 8th St. E. and 14th St. E.
- This will result in 18 continuous rehabilitated groins extending from southwest of the pier to 14th St. E., just southwest of the Washout.
- This project will NOT reproduce the capped sheetpile groins that exist now near the pier (1st picture below). Rather, the rehabilitated groins will be “low-profile” following the natural grade/slope of the beach (2nd picture and 2 on next page). The existing structures will NOT be lengthened; they will be strengthened.
- Additional armor stone will be added to the existing rock that can be salvaged from the existing groins, and placed in a prism section along the entire length of the structure (along both the existing rock and timber-pile portions).
- NOT THIS:



- THIS:





PHOTOS OF GROINS ON EDISTO BEACH THAT WERE REHABILITATED IN A SIMILAR MANNER TO THIS PROJECT

WHAT TO EXPECT ON THE BEACH: Groin Rehabilitation

- The area in the vicinity of each groin will be closed off for roughly 1 month per groin.
- The contractor will work 7 days a week during daylight hours, and perhaps occasionally during nighttime hours to take advantage of low tides.
- The groin rehabilitation operations will shut down from time to time due to weather and, less often, equipment delays.
- Work areas are closed to the public. It is an active construction zone, so please keep out.

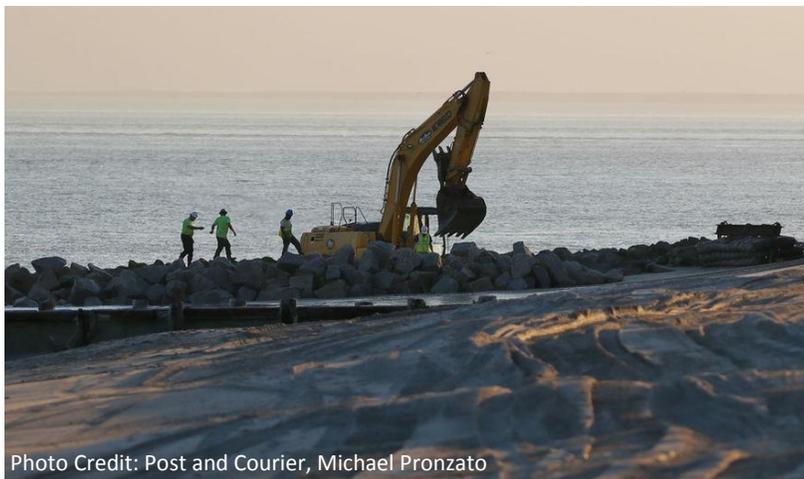
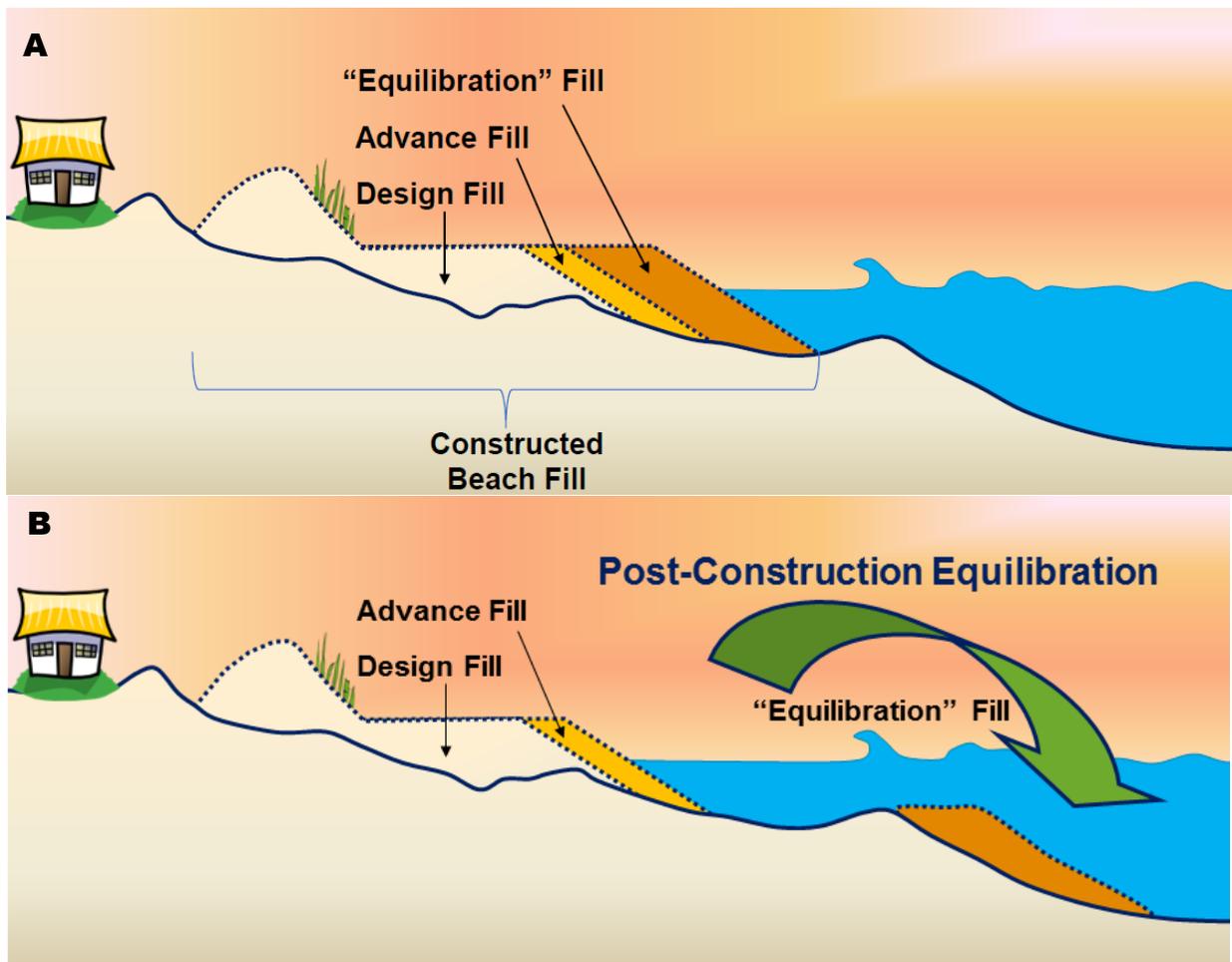


Photo Credit: Post and Courier, Michael Pronzato



WHAT HAPPENS TO THE BEACH AFTER CONSTRUCTION?

- The beach will be constructed abnormally wide because it is well known that the beach will “equilibrate” soon after construction (diagram below). The wide beach that is constructed by the bulldozers will start to narrow immediately. Natural wave action will smooth the beach to a gentler slope, causing the visible beach width to narrow. This process does not involve a loss of sand from the beach, rather a redistribution of sand to the nearshore area and to the sand bar. Like the existing beach, eventually about 2/3 of the new material will be underwater, acting like the foundation of a house supporting the dry beach. Although it will appear that the beach is rapidly eroding after nourishment, this is expected and indicative of the beach transforming from a constructed, designed beach to a natural beach form.
- Again, bulldozers cannot physically place sand in the surf zone. The project has been *designed* to include a volume of sand that the waves and currents will transport offshore to fill in the lower parts of the beach profile. The dry beach appears to erode; however, this sand moves offshore by design, where it is more effective at dampening wave energy.
- For more information on profile equilibration, please see http://asbpa.org/wpv2/wp-content/uploads/2016/03/WhitePaper_85_2_Profile_Eq.pdf





OTHER IMPORTANT INFO

- Sand will naturally begin spreading to the south, “feeding” beaches to the southwest, immediately after construction
- Sand Bleaching: The sand will appear to be darker than natural beach sand at first. This is normal. The darker color is due to the moisture and organic content of the sand. Once it dries and bleaches in the sun, it will lighten to the natural beach sand color.
- You may also notice the development of “drop offs,” also called scarps or escarpments at the high tide line. Scarps are a steep slope separating the high, dry beach berm and lower, wet sand. Typically, these are 1-3 feet high, but can be taller after severe storms. Scarps are also an expected part of the beach renourishment process.

- Don’t be apprehensive about changes on the beach after nourishment, the changes are expected and not a cause for worry. It's just the beach and dune design allowing nature to take its course to reshape into a more sustainable shape -- to make it into a beach that we can enjoy for years to come.