August 2016

# **Duval County Shore Protection Project FREQUENTLY ASKED QUESTIONS**

**US Army Corps of Engineers** 

## What is this project about?

The Duval County Shore Protection Project will place sand on nearly seven miles of eroded beaches, including Jacksonville, Neptune and a portion of Atlantic Beach. This beach renourishment will widen the beach berm between 20 to 60 feet, and raise the elevation of the beach by about 3 to 5 feet. This will help reduce the damages – economic, environmental, infrastructure, human health and safety – of tropical storms and hurricanes.

## Where is the project starting?

Construction will start in the south along the Duval/St. Johns County line and move northward, through Jacksonville and Neptune beaches, to roughly 18<sup>th</sup> Street in Atlantic Beach.

## How long will the beach renourishment take?

From start to finish, it's expected to take a minimum of about 60 days. Project completion is set for November 2016, barring unforeseen events. Construction operations will run 24 hours a day, seven days a week.

### How long might temporary structures stay on one stretch of beach?

During active construction, the work should proceed 500 to 1,000 feet – or two to three city blocks – along the shore each day. Work delays will occur when work crews encounter mechanical problems or bad weather. No one expects the equipment to stay in a single area longer than five days.

# *Is there access to the beach during the project?*

The beach will remain open to residents and visitors outside the work

areas. The contractor expects to temporarily close at least 1,200 feet of the beach at a time during the project. Public access over the dredging pipes will occur roughly every 300 to 400 feet.

## *Will the project affect public parking?*

The project will close the 16th Avenue South public parking area for use in equipment staging throughout construction. The pedestrian walkway will remain open.

*Why are we using this beach access point as a staging area?* This is the widest beach access point and the only one that can readily accommodate equipment entering/exiting the beach.

# *Will other parking access points get shut down?*

We may close other access points on a temporary basis.

# *Why aren't we constructing this project in Winter?*

The weather window is the primary reason. Vessels can't operate off -shore in rough seas.

## Where does the sand come from?

The excavated sand comes from borrow areas located in federal waters offshore of Duval County.

*How much sand will get placed on the beach by the project?* The construction will place about 700,000 cubic yards of sand on



Jacksonville Beach erosion 1962.

nearly seven miles of eroded beaches, including Jacksonville, Neptune and a portion of Atlantic Beach. This is about the same volume that was placed during the last project renourishment in 2011.

## Why does the color of the sand vary?

The newly dredged and placed sand initially looks a little different than the pre-project beach. Beachgoers might notice that the sand is slightly more coarse and gray. However, the new sand meets specific criteria mandated by the State of Florida for Duval County's beaches, including grain size distribution, shell content, and color. Over a period of a few days or weeks, the sun will bleach the sand until it's gradually closer to the color people are used to seeing.

## Were parts of the beach skipped?

Some beaches did not exhibit significant erosion since the last project renourishment in 2011 to justify federal participation in the 2016 renourishment project.



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## **Fast Facts**

- Or The Duval County Shore Protection Project is funded in partnership with the City of Jacksonville, Florida Department of Environmental Protection, and Duval County; 38.4 percent locally and 61.6 percent federally funded.
- ◊ The project was initially constructed from 1978 to 1980.
- ◊ Five principal renourishments have occurred: 1985-87, 1991, 1995, 2005, and 2011.
- ◊ The Corps also periodically used sand dredged from navigation projects to place on local beaches.
- ◊ The 2016 construction project cost is \$13.6 million.
- Index Engineered beaches provide economic stability and also have inherent benefits in restoring critical habitat for shorebird and marine turtle nesting.



## Will vibration monitoring occur along the beach for existing structures?

A local firm is contracted to monitor vibrations from the construction equipment throughout the project.

# What can be done about the noise from the machinery back-up alarms?

Bulldozers will operate 24 hours and the heavy machinery back-up alarms cannot be turned off. The alarms are a safety device required by federal law to protect people from getting hit by machinery when the driver is unable to see directly behind the equipment. The construction noise is a temporary situation, which is also dependent on wind direction and other weather conditions that affect the way sound is carried.



Erosion along Jacksonville Beach.

# *How does this project impact sea turtles?*

Daily early-morning monitoring by state-permitted turtle observers started April 1 to relocate nests to a safe location. This will continue throughout construction. Turtle nesting season runs May 1 through October 31. In addition to caring for sea turtles, another environmental group will start monitoring all local wildlife, including shorebirds, once construction operations start.

When can planting of sea oats and other native vegetation begin?

Planting may take place after the beach fill is completed. A FDEP field permit is necessary for dune planting and can be obtained by calling (877) 314-1329. However, planting or expanding dune vegetation beyond its existing seaward limits is not recommended because the current dune/ vegetation line is already located mostly seaward of its historical, or natural, limit that can be maintained by the beach project.

# How can you tell a project is successful?

Each beach project is engineered to different specifications based on the geography, hydrology and erosion history of the project area. Rare is the project that doesn't need maintenance over time simply because projects are done in areas that are eroding and

that erosion does not stop because more sand is on the beach. Creating more beach protects the upland properties from surf and storms. Also, putting lost sand back into a beach system can make the overall system healthier because there is sufficient sand to allow nature to move it offshore and onshore without endangering roads, buildings and other manmade infrastructure. In the case of Duval County beaches, the project is engineered to last at least five average years. If there are winter storms or harsh tropical worther, then that reduces

tropical weather, then that reduces the time period; however, the accelerated loss of sand means that property was protected.

## How is the project constructed?

The contractor will locate the dredge, Terrapin Island, approximately seven miles off the coastline. The dredge will excavate sand, mix it with salt water and pump it to the beach via a pipeline. The floating or submerged pipeline will be clearly marked in accordance with U.S. Coast Guard regulations. The pipeline laid on the beach has a discharge point that releases the material. Here, the material goes through a spreader designed to separate the sand and water, and direct the water onto the beach. Crews will operate bulldozers to shape the sand and they'll also direct the water flow down the beach. This process enables the new sand time to settle from the water mixture. Heavy construction equipment will then push the material to shape the beach as designed. The active construction area, from the discharge point to about 500 feet down the beach, will be temporarily closed to the public. A crew will mark-off this area with caution tape and/or construction fencing. As construction progresses, the pipeline will extend along the beach.

## Can I still get to the ocean?

To enable public access to the water, the contractor will build pedestrian crossovers over the pipeline in intervals no greater than 500 feet apart.

## What vessels will be off-shore?

The Dredge Terrapin Island, barges and tug boats, will arrive offshore in early September.

# How can I get information about the renourishment project?

For more information about the Duval County Shore Protection Project, go to http://www.saj.usace.army.mil/ <u>Missions/Civil-Works/Shore-</u> <u>Protection/Duval-County/</u> or <u>http://olsen-associates.com/duval/</u>.

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