Duval County Shore Protection Project

What is this project about?
The Duval County Shore Protection Project will place sand on nearly 8.5 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 risk of future damages from tropical storms and hurricanes

Where is the renourishment project starting? Construction will start in the south along the Duval/St. Johns County line and move northward, through Jacksonville and Neptune and Atlantic beaches into portions of Hanna Park.

How long will the beach renourishment project take? From start to finish, it's expected to take a minimum of about 3 months to complete - weather dependent. The project's completion is set for winter 2018. However, the contractor has a total of 330 days to complete the work.

What are the working hours for the project? 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, operations should move an average of about 500 feet down the beach each day. Work delays will occur when work crews encounter mechanical problems or bad weather. No one expects the active construction area to stay in any single area longer than five days.

How much sand will get placed on the beach by the project?
The construction will place 850,000 cubic yards of sand on about 8.5 miles of eroded beaches, including Jacksonville, Neptune and Atlantic beaches through a portion of Hanna Park.

Where does the sand come from?
The contractor will excavate sand from offshore borrow areas located in federal waters offshore of Duval County.

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.

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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 renourishment project. Public access over the dredging pipes will occur roughly every 300 to 400 feet. The work should proceed about 500 feet – or one to two city blocks – along the shore each day.

Can I still get to the ocean?
The contractor will build pedestrian crossovers over the pipeline in intervals no greater than 500 feet to enable public access to the ocean, but extreme caution is advised.

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

Will other parking access points get shut down?
We may close other access points on a temporary basis.

Will vibration monitoring occur along the beach front for existing structures?
Yes. 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

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 of seas oats will take place by the City of Jacksonville once construction is complete.

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 does not need maintenance over time, simply because projects are done in areas that are eroding and that erosion does not stop simply 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 tropical weather, then that reduces the time period; however, the accelerated loss of sand means that property was protected.

How is the beach project constructed?

The contractor will locate a cutterhead or hydraulic dredge about seven miles off the coastline. The dredge will excavate sand, mix it with salt water and pump it to the beach via pipeline. The contractor will clearly mark the pipeline 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, which is designed to separate the sand and water, and direct it 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. Contactor will mark off this area with caution tape and/or construction fencing. As construction progresses, the pipeline will extend along the beach. To enable access to the water, the contractor will build pedestrian crossovers over the pipe. The crossovers are sand ramps about 12 feet wide, placed over the pipeline in intervals roughly 500 feet apart; the pipeline is 3 feet in diameter or less. Construction activity will occur every day once the project starts and continue around the clock, operations permitting. The active construction area is expected to move along the beach an average of 500 feet per day, and should take about two months to fully complete.

Why is more sand being placed on the beach? Wasn't a project recently completed in this area?

The last renourishment project was completed in 2016. Since that time, the area was impacted by Hurricane Irma. The purpose of this beach project is to bring the area back to its full design template and is 100 percent federally funded. The City of Jacksonville fully funded an additional $1.7 million to renourish portions of dunes from St. Johns County to Atlantic Beach and up to Hanna Park as part of the restoration project. Dune work will include repairs to existing dunes, new construction of dunes, and vegetation repairs and planting.

How can I get information about the renourishment project?

Information is available on the City of Jacksonville Beach web page - www.jacksonvillebeach.org and on the Army Corps of Engineers website at www.saj.usace.army.mil. You may also call the U.S. Army Corps of Engineers at 904-232-1381 or Jacksonville Beach Public Works Department at 904- 247-6211. Media requests for information are directed to 904-232-1630.