

St. Johns County, FL Coastal Storm Risk Management Project South Ponte Vedra and Vilano Beach

FREQUENTLY ASKED QUESTIONS

What is this project about?

The St. Johns County Coastal Storm Risk Management Project will place sand on approximately three miles of critically eroded beaches, including Vilano Beach and a small portion of South Ponte Vedra Beach (Serenata to San Pelayo Ct.) . The project includes a 60-foot wide **extension of** beach berm and dune reconstruction to the 2015 condition with native dune vegetation plantings. The completed project will help reduce future risk and vulnerability for homes, businesses and public infrastructure, while creating potential habitat for sea turtles and shorebirds and recreational area for the public.

Where is the project starting?

Sand placement will likely begin at the southern project limit in Vilano Beach and move northward to approximately Serenata Drive in South Ponte Vedra Beach.

How long will the beach renourishment take?

From start to finish, it's expected to take a minimum of 6 months. Project construction is planned to start in May 2020 with completion estimated around December 2020, barring unforeseen delays. 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 100 to 500 feet 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. The dredge pipe, however, will remain on the beach until filling operations are complete.

Is there access to the beach and ocean during construction?

The beach will remain open to residents and visitors outside the work areas. The contractor expects to temporarily close at least 1,000 to 1,500 feet of the beach at a time during the project. Public access over the dredging pipes will occur roughly every 200'

Will the project affect public parking and beach access?

The project will close the Surfside Park public parking area for use in equipment staging throughout construction. This is the widest beach access point and the only one that can readily accommodate equipment entering/exiting the beach. We may close other beach access points on a temporary basis such as the Usina Ramp near the Reef Restaurant and a small portion of North Beach Park if needed.

Why aren't we constructing this project in winter?

The weather window is the primary reason. Winter sea conditions are typically much rougher than during the summer. Construction vessels have difficulty working in the St. Augustine Inlet during the winter.



Where does the sand come from?

Shoals located in the St. Augustine Inlet.

How much sand will get placed?

Construction will place roughly 1.3 million cubic yards of sand. Renourishments of approximately 900,000 cubic yards are expected every 12 years or so.

Why does the color of the sand vary?

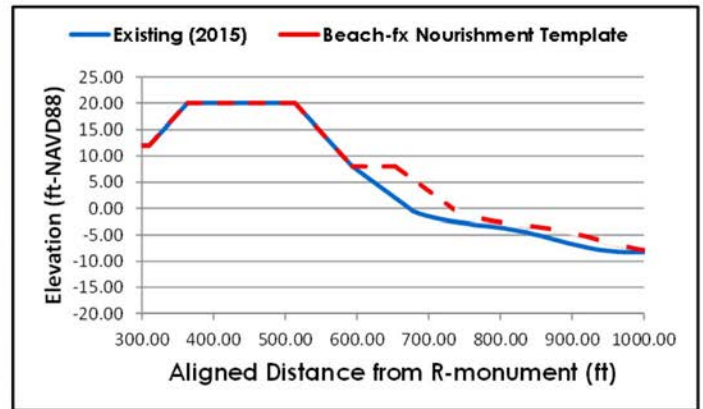
Beachgoers might notice that the newly placed sand may be slightly more coarse and grayer. However, the new sand meets specific criteria mandated by the State of Florida for St. Johns County's beaches, including grain size distribution, shell content, and color. Over a period of a few weeks, the sun will bleach the sand until it's gradually closer to the color of the pre-project beach.

Will parts of the beach be skipped?

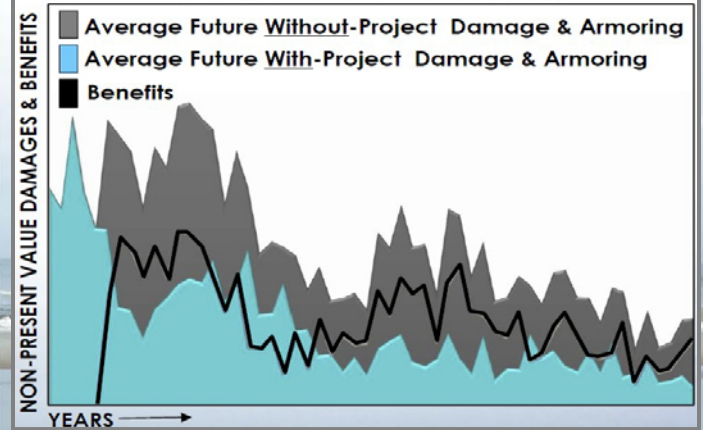
All portions within the federally authorized project area are to be constructed.



PROJECT LOCATION



71% REDUCTION IN DAMAGES (50-year period of analysis)



Current Cost Summary

	Federal Share	Non-Federal Share	Non-Fed Credit for Lands, Easements, ROW	Non-Federal Cash Required	Total Cost
Initial Construction	\$6,084,000	\$20,368,000	(\$1,028,280)	\$19,339,720	\$26,452,000
3 Periodic Events	\$20,929,000	\$97,314,000	\$0	\$97,314,000	\$118,243,000
Total Cost	\$27,013,000	\$117,682,000	(\$1,028,280)	\$116,653,720	\$144,695,000

Fast Facts

- ◇ *The St. Johns County Coastal Storm Risk Management Project is funded by a partnership between the U.S. Government and St. Johns County.*
- ◇ *Project includes initial construction in 2020, followed by a renourishment interval averaging 12 years over the projects 50-year life.*
- ◇ *The additional beach berm and dunes will create over 3 acres of sea turtle and shore bird habitat.*
- ◇ *The 2020 construction project cost is estimated at \$26.5 million.*
- ◇ *Engineered beaches provide benefits to the environment, local tourism and risk reduction to local infrastructure.*



Will vibration monitoring occur along the beach for existing structures?

A firm is contracted to monitor vibrations from the construction equipment throughout the project. Monitoring will take place along beachfront structures throughout the project.

Will there be 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?

Sea turtle nesting season in St. Johns County is between May 1 through October 31. Daily early-morning monitoring by state-permitted turtle observers will start April 1. Any nests deemed to be unfit where they were laid will be relocated to a safe location. This will continue throughout construction. Also during the nesting season, the contractor must adhere to construction restrictions to avoid adversely affecting sea turtles, such as lighting restrictions. Additionally, another environmental group will start monitoring other local wildlife, including shorebirds, once construction operations start.

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

Planting may take place after beach and dune segments are completed. Planting typically begins as beach fill activities are finishing, or soon thereafter. It's important for the public to stay off the dunes, especially during the initial growing season for the newly planted vegetation.



How can you tell if a beach restoration project is successful?

Each beach project is engineered to different specifications based on the geography, hydrology and historical erosion rates of the project area. Beach restoration projects almost always need maintenance over time, simply because they are constructed in areas that are eroding. The erosion does not stop because more sand is on the beach. Creating dunes and a wider beach protects the upland infrastructure from storm surge and wave impacts. In the case of St. Johns County beaches, the project is designed to have an average renourishment interval of 12 years within the 50-year life of the project. This interval could be shorter if there are unusually large or frequent coastal storms such as nor'easters or tropical systems. Shoreline recession and erosion are expected (and designed) to occur during these events. The beach and dune are designed to act as a natural buffer that absorbs the energy of the storms, so the upland infrastructure does not have to.

How is the project constructed?

The contractor will excavate sand from St. Augustine Inlet, mix it with salt water to make a slurry, and pump it to the beach via a pipeline. The floating or submerged pipeline in the inlet 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. Crews will operate bulldozers to direct the slurry

in a way that allows the sand to settle out and the water to flow back to the ocean. Bulldozers will then push the material to shape the beach as designed. The active construction area, encompassing about 1,000 to 1,500 feet, will be temporarily closed to the public. This area will be clearly marked-off with ropes and/or construction fencing. As construction progresses, the pipeline will extend along the beach.

Will the beach stay the same size after construction?

Noticeable shoreline recession will occur immediately following construction. This is by design. Additional sand is placed above the water line to let the waves and currents take it to fill the lower portion of the beach below the water line. This process is called "equilibration". Immediately following construction wave activity will begin to reshape the placed sediment to a more natural shape. Full adjustment of the beach slope typically requires many months or multiple significant wave events.

How can I get information about the renourishment project?

For more information about the St. Johns County Coastal Storm Risk Management Project, go to <https://www.saj.usace.army.mil/Missions/Civil-Works/Shore-Protection/St-Johns/>

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