



# Navarre Beach & Dune Restoration Project

Status Report – to be regularly updated

May 20, 2016 Report

## **Work Completed** (May 13 to May 20)...

- Weeks Marine Inc. (Contractor):
  - Continued filling Segment 2 at Beach Colony moving westward,
  - have filled nearly a mile west of Beach Colony,
  - placed approximately 230,000 cubic yards (cy) of sand, (equivalent to approximately 12,800 18 cubic yard dump trucks), bringing the total to over 500,000 cy placed since April 29.
  
- Coastal Tech – G.E.C., Inc. (Engineer):
  - continued daily shorebird and seabird surveys noting nests outside the construction zone which will continue to be monitored,
  - continued with pre-fill and post-fill surveys at 100 ft intervals,
  - continued with field compliance observations of the Contractor and visual sediment compliance checks, and
  - continued to contact property owners whose dune overwalks may be impacted by fill placement by encouraging them to remove the seaward portion of their overwalk prior to dune restoration.

## **Work Planned** (May 21 to May 27)...

- The Contractor will:
  - continue filling Segment 2 with advancement likely to reach the western boundary of the segment approximately 1,000 ft west of Beach Access 7 during the weekend,
  - will use Beach Access 7 as a staging area, closing this area off to the public,
  - move operations to subline two, located just west of Beach Access 10, and begin pumping towards the east.
  
- The Engineer will:
  - continue to monitor for shorebird and seabird nesting and breeding activity,
  - continue field compliance observations of the Contractor, and
  - continue to communicate with property owners, mostly contained to the western end of the project, whose overwalks may warrant removal due to the beach fill and dune restoration.

For live video of existing beach - see: <http://www.navarrebeachlife.com/live-hd-1080-zoom-cam/>

For expected schedule of beach fill placement along a specific segment of beach, see the map below.

## Beach Fill Plan - Expected Schedule



## Project Facts:

- On December 10, 2015, the Santa Rosa County Board of County Commissioners awarded a construction contract to Weeks Marine Inc.
- About 1.3 million cubic yards of sand will be placed from immediately east of the Gulf Islands National Seashore to the eastern limits of the Navarre Beach Marine Park. The Project construction will:
  - make use of the same offshore borrow area used for the initial 2006 restoration project,
  - place sand that looks slightly gray when first placed, but will lighten to near white as the sand dries and is exposed to the sun as occurred in 2006,
  - restore the dune crest to a width of 30 feet with native dune plants,
  - increase the width of the beach berm by 100 to 200 feet, and
  - occur 24 hours per day at 7 days per week until completed.
- The Contractor:
  - estimates about 50 days of dredging and sand placement with completion by mid-June,
  - is using the east portion of the Pier parking lot (see Figure below) and will be using the other beach access point as the project progresses to stage land-based equipment,
  - will use two "Trailing Suction Hopper Dredges" – the "R.N. Weeks" and the "B.E. Lindholm" – to excavate sand from the offshore borrow area, haul the material to a pump-out station and the submerged pipeline near the beach, connect to the pipeline and begin hydraulic placement of the material onto the beach with extension of the pipeline along the beach as construction progresses.
  - will generally place sand from East to West along the beach – averaging about 500 feet per day- the Contractor will specifically place fill in the following sequence:
    - Segment 1 (COMPLETE) – started at the landward end of Pipeline Corridor 1 then moved from West to East to the eastern limits of Segment 1 and the eastern limits of fill;
    - Segment 2 - beginning at the landward end of Pipeline Corridor 1 then moving from East to West to the western limits of Segment 2;
    - Segment 3 – starting at the landward end of Pipeline Corridor 2 then moving from West to East to the eastern limits of Segment 3; and
    - Segment 4 - beginning at the landward end of Pipeline Corridor 2 then moving from East to West to the western limits of Segment 4 and the western limits of fill.

Following completion of sand placement in Navarre Beach, the Contractor has also indicated his intent to use the same two dredges to construct the Pensacola Beach project.

- As required by the permits, seabird and shorebird monitoring began on March 31, 2016 and turtle monitoring began on May 1, 2016 coinciding with the start of Marine Turtle Nesting Season.
- Per the Technical Specifications, permits, and customary construction practices:
  - At any time during construction, up to a 1,000-foot long area of beach (around the pipeline discharge) will not be open to the public. For security, this area will be marked and fenced. Beaches east and west of the pipeline discharge will be open to the public. Sand ramps will be placed over the pipeline to allow beachgoers access to the Gulf.
  - Dredging operations will produce turbidity (cloudiness) in the water. Turbidity levels will be closely monitored and if levels get too high, construction will be temporarily suspended and modified to meet permitted levels.
- The proposed Local Funding Plan includes federal funding from the Federal Emergency Management Agency and state funding from the Florida Department of Environmental Protection. The balance of project funding will come from local sources, including the Santa Rosa County Tourist Development Council, Santa Rosa County, and a municipal services benefit unit (MSBU) by Navarre Beach Leaseholders. The County has fronted the MSBU share of costs to be subsequently repaid to the County via the MSBU. The Santa Rosa County Commission is expected to consider the proposed Local Funding Plan and MSBU for adoption in August 2016.

**For Questions, please contact:**

<b>Name</b>	<b>Title</b>	<b>Affiliation</b>	<b>Phone Number</b>	<b>Email Address</b>
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**Frequently Asked Questions:**

1. What is the approximate number of dump trucks in comparison of each dredge's delivery of sand and for the total project?  
**Answer:** Each dredge load delivers about 140 dump truck loads (assuming an 18 cubic yard dump truck). The entire project volume is estimated at 1.3 million cubic yards which equates to approximately 72,200 dump truck loads (assuming an 18 cubic yard dump truck).
2. How many approximate sand trip deliveries for each dredge in a 24 hour period to the beach?  
**Answer:** Each dredge has been completing 6 to 8 round trips within a 24 hour period.
3. What is the approximate time for each dredge to complete a cycle collecting sand from the borrow area, returning to the beach, distributing the sand onto the beach, and returning back to the borrow area?  
**Answer:** The approximate cycle time for a dredge to fill its hopper at the borrow area, transit to the beach, discharge onto the beach, and then return to the borrow area has been 3 to 4 hours.
4. Will vegetation be added to the areas where sand is added to the berm?  
**Answer:** Vegetation will be added to the dune (not the beach berm) where the dune is being re-constructed.
5. Is it safe to assume the 24/7 work schedule will create a less than desirable sleeping environment in beachfront residences?  
**Answer:** The Contractor is to use the minimum lighting that is necessary and complies with OSHA standards. Nighttime work may be loud enough to be disruptive when directly in front of a property. As the Contractor is expected to move equipment along the beach to construct about 500 feet of beach each day, noise disruption in front of a particular property is expected to be limited to one night. Sleeping with closed windows should substantially diminish any noise during the night.
6. How far in advance of beach closing at my property will I be able to know exactly when it will happen?  
**Answer:** The fact sheet will be updated weekly so everyone is aware of what work is expected in the next week. You should have at least a week's notice.
7. How will the construction be sequenced and what is the general process, both for the dredges and for the shore equipment?  
**Answer:** As described in the Project Facts, the Contractor will generally place sand in four segments from East to West along the beach; the Contractor will specifically place fill in the following sequence:
  - Segment 1 (COMPLETE) – started at the landward end of Pipeline Corridor 1 then moved from West to East to the eastern limits of Segment 1 and the eastern limits of fill;
  - Segment 2 - beginning at the landward end of Pipeline Corridor 1 then moving from East to West to the western limits of Segment 2;
  - Segment 3 – starting at the landward end of Pipeline Corridor 2 then moving from West to East to the eastern limits of Segment 3; and

- Segment 4 - beginning at the landward end of Pipeline Corridor 2 then moving from East to West to the western limits of Segment 4 and the western limits of fill.

The two dredges work in an alternating sequence on the same pipeline. While one dredge is unloading fill at the shoreline, the other dredges material from the borrow area 4 miles away. They then switch, providing a quick succession for unloading material onto the beach. As the material is pumped onto the beach, the Contractor will add "shore pipe" (40-foot lengths of pipe) to extend the pipe discharge point along the beach to fill each segment as described above.

8. Will the Pier parking lot remain open?

**Answer:** As the Contractor continues work in Segments 1 and 2, temporary closures of the Pier parking lot as depicted below should be expected.



9. Why was the nearshore water east of the pier pink on May 4<sup>th</sup>?

**Answer:** Per the Contractor, the pink water was the result of a "velocity test" to calibrate their equipment on the dredge. The test used a non-toxic pink dye which was inserted into the pipeline at the dredge. Then, the amount of time for the dye to reach the beach was measured. Per the Contractor, the test was completed in accordance with industry standards and will not likely be needed again during this project.