

## **Coastal Management: Treasure Island - Long Key Nourishment**

### **Project Completed - October 20, 2010**

The nourishment of Treasure Island and Long Key (TI/LK) beaches began in late July of 2010. The previous 2006 TI/LK nourishment project was done after the 2005 hurricane season, utilized a total of 270,000 cubic yards of sand, and was completed in about 2 months (August - September). The 2010 project utilized material from two borrow areas: 1) John's Pass to fill Sunshine Beach and Sunset Beach located on Treasure Island, and 2) Blind Pass to fill Upham Beach on the north end of Long Key (St. Pete Beach). The project used:

- 127,260 cubic yards of sand to fill 3,000 feet of shoreline on Sunshine Beach,
- 125,423 cubic yards of sand to fill 4,000 feet of shoreline on Sunset Beach, and
- 159,572 cubic yards of sand to fill 2,000 feet of shoreline on Upham Beach.

The streets that corresponded to the fill limits are indicated on the map below. Work progressed from north to south (Sunshine Beach, to Sunset Beach, and to Upham Beach) over 4 months. Sand was pumped through pipes from the borrow areas to the beaches.

At Treasure Island Beach, the construction contractor provided Americans with Disabilities Act (ADA) accessibility to the water throughout the project. During the project, pipe was laid across the beach at the Treasure Island Beach at 112th Avenue. To allow easy public access to the water, a section of pipe was buried in the sand.

After Upham Beach was nourished, a second contractor mobilized and begin a project to repair damaged geotextile T-Groins originally placed on the north end of Upham Beach by 2006.

See attached reports

# Project Status Report

## TI/LK Nourishment Project

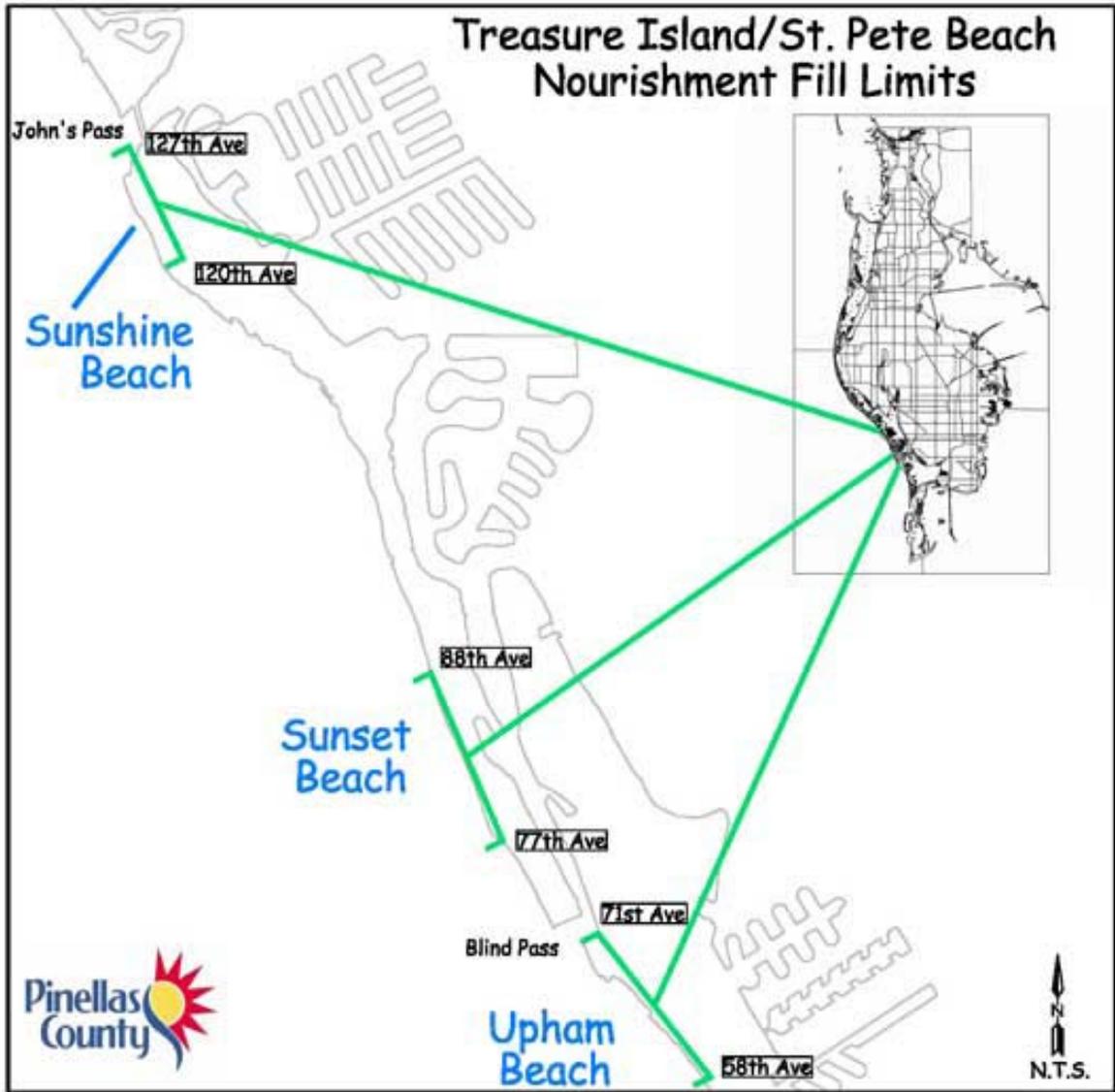
Revised October 20, 2010

### Activity Updates

- October 20, 2010 – Upham Beach was completed at 1 a.m. this morning, a couple of weeks earlier than anticipated. The permitted borrow areas were swept completely clean of all available sand. The contractor has begun demobilizing their boats, barges, and other equipment and they will be off the beaches and moved out of the area by the end of next week. Upham Beach should be clear of pipes and equipment by this Friday (October 22). Within the next few weeks, another contractor is expected to be mobilizing equipment at Upham Beach to begin a 2-3 month job repairing the damaged T-Groin structures.
- October 6, 2010 – The dredger finished dredging inside Blind Pass north of the inlet on October 3 and will be dredging at the mouth -- and slightly westward of inlet mouth -- during the remainder of the project. The filling of Upham Beach is proceeding from the Jetty northward and is currently located in front of the Starlite Towers Condominium.
- September 29, 2010 – The filling of Sunset Beach was completed by September 21, 2010. The Corps officially deemed Sunset Beach complete on September 23 after confirming the sand volumes placed on the Treasure Island beaches met contract requirements. The fill volumes measured on Sunshine and Sunset beaches were 127,260 cubic yards and 125,423 cubic yards, respectively. The pipeline, dredge, and other associated boats and supplies needed for the next phase have been moved to Blind Pass and Upham Beach. **The dredging of Blind Pass and filling of Upham Beach will begin today.**
- September 15, 2010 – The Corps determined, due to lack of available sand, that additional fill cannot be placed on the beach north of 88<sup>th</sup> Street. Demobilization of equipment and pipes from Sunset Beach and Treasure Island is expected to begin by September 23<sup>rd</sup>. The filling of Upham Beach is projected to begin during the first week of October and be completed 4-5 weeks later weather permitting.
- September 14, 2010 – The project is at about 83rd Avenue today. The contractor is expected to complete Sunset Beach to 77th Avenue by Sept 19th. The Corps may issue a change order to the contractor to extend the fill template north of 88<sup>th</sup> Avenue with a limited amount of sand remaining from the Borrow Area. August 31, 2010 – The contractor is finishing up Sunshine Beach today and may start filling Sunset Beach as early as tomorrow beginning at 88<sup>th</sup> Avenue. The sand will be pumped from John's Pass along the beach to Sunset Beach. Some portions of the pipe will be buried to minimize impacts to beach users.
- August 26, 2010 – The project has slowed due to the weather and is currently located at 121<sup>st</sup> Avenue with about 1000 feet more beach to fill before completing Sunshine Beach which is expected within a week. Approximately 87,600 cubic yards of sand has been pumped to Sunshine Beach. Pipe is being laid between Sunshine and Sunset beaches and the booster pump located on the beach at 108<sup>th</sup> Avenue is being prepared for operation. The booster pump and piping will be used to move sand from the dredge near John's Pass to Sunset Beach.

- August 18, 2010 – The project was shut down for 4 days and is currently located at 124<sup>th</sup> Ave. Approximately 55,000 cubic yards of sand has been pumped to Sunshine Beach. About 7-10 working days remain to complete Sunshine Beach.
- August 13, 2010 – The project shut down between 124<sup>th</sup> Ave and 125<sup>th</sup> Ave at 5 pm August 10th due to poor weather. Work is expected to restart August 14 if weather conditions improve. About 40,000 cubic yards of sand has been pumped onto Sunshine Beach to date. Contractor expects to complete Sunshine Beach in 10 more working days and start filling Sunset Beach by late August if there are no further shut downs.
- August 6, 2010 – The project moved about 100 feet south from 127<sup>th</sup> Avenue after the first day of operation which began early evening on August 4. The project work area is expected to move south at about 100 feet each day and should be at or near 126<sup>th</sup> Avenue by Monday or Tuesday next week.
- August 4, 2010 – This morning the Southwind Construction Corp. Dredge is moving to the borrow area located about ¼ mile west of the 127<sup>th</sup> Avenue beach access. Filling at the north end of Sunshine Beach is expected to begin this evening.
- August 2, 2010 - The construction contractor has revised the dredging and beach fill start date and now expect to begin filling Sunshine Beach at 127<sup>th</sup> Avenue on August 4<sup>th</sup> or 5<sup>th</sup>.
- July 27, 2010 – Construction contractor is fusing 500 foot sections of pipe together at 77<sup>th</sup> Avenue and then dragging them north to a staging area at about 108 Avenue near their booster pump. The dredge is expected to arrive at John's Pass by July 29. Later this week, the Corps will be doing pre-construction bathymetric surveys of the borrow areas at John's Pass and profiles of the fill area at Sunshine beach. The public is urged to stay clear of work areas.
- July 19, 2010 – Preconstruction meeting held today. The Notice to Proceed was issued. Mobilization of pipes and other equipment is ongoing at Sunset Beach's 77<sup>th</sup> Avenue parking lot and adjacent beach. A large booster pump has been delivered to Treasure Island Beach at 112th Avenue. The dredging of John's Pass and filling of Sunshine Beach is scheduled to begin August 2.
- July 12, 2010 – County mailed post cards with general project information and the tentative construction schedule to beachfront property owners and occupants along the Treasure Island beaches and Upham Beach
- July 2, 2010 – Contractor begins placing equipment and pipes on Treasure Island for project. Notice to Proceed scheduled for July 19, 2010.
- July 1, 2010 – Construction contract awarded
- June 9, 2010 – Construction project bid opened
- May 10, 2010 – U.S. Army Corps of Engineers (Corps) advertised bid solicitation for beach nourishment construction project contractor
- March 29, 2010 – FDEP Permits issued to dredge sand from John's Pass to fill Sunshine and Sunset beaches (in Treasure Island) and to dredge sand from Blind Pass to fill Upham Beach (in St. Pete Beach on Long Key)

# Treasure Island/St. Pete Beach Nourishment Fill Limits



**Treasure Island & St. Pete Beach (Long Key)**  
**2010 Nourishment**  
**Proposed Project Schedule**  
**Current as of October 20, 2010**

The project schedule is subject to change depending upon weather and other unforeseeable events.

Milestone	Start Month/Week	End Month/Week	Complete (X)
<b>Move dredge and equipment to John's Pass and Sunshine Beach</b>	July / Week 2	July / Week 4	X
<b>Nourish Sunshine Beach (~40-day task)</b>	Aug / Week 1	Aug / Week 4	X
<b>Move equipment from Sunshine Beach to Sunset Beach</b>	Aug / Week 4	Sept / Week 1	X
<b>Nourish Sunset Beach (~30-day task)</b>	Sept / Week 1	Sept / Week 3	X
<b>Move dredge and equipment to Blind Pass and Upham Beach</b>	Sep / Week 3	Sep / Week 4	X
<b>Nourish Upham Beach (~35-day task)</b>	Oct / Week 1	Oct / Week 3	X
<i>Note: A second contractor will repair the existing Upham Beach geotubes</i>	<i>Mid Nov 2010</i>	<i>Feb 2011</i>	



Upham Beach facing northwest (10-20-10)



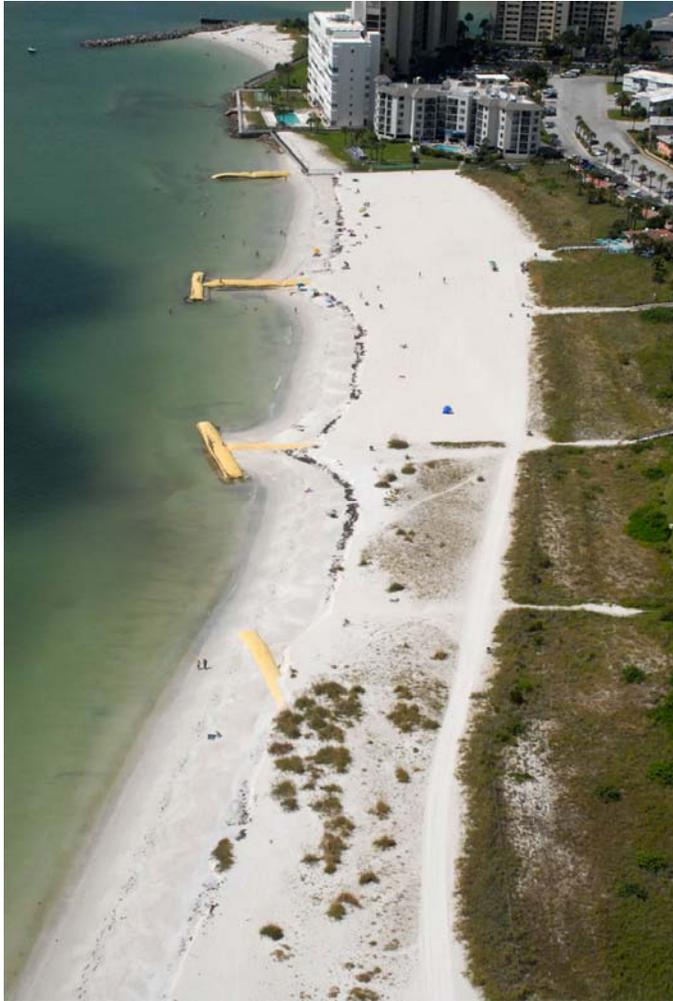
Upham Beach facing west (10-20-10)



Upham Beach facing southwest (10-20-10)



Upham Beach facing south (10-20-10)



Upham Beach S to N (9-15-10)



Upham Beach (9-15-10)



Sunset Beach N to S (9-15-10)



Sunset Beach S to N. (9-15-10)



Sunset Beach S to N (9-1-10)



Sunshine Beach N to S (9-1-10)



Sunset Beach N to S (9-1-10)



Sunset Beach S to N. (9-1-10)



Southwind Construction Corp. Dredge (Wilko) in Blind Pass (9-29-10)

Booster Pump on beach at 112<sup>th</sup> Avenue, Treasure Island



Piping along Sunset Beach at 77<sup>th</sup> Avenue, Treasure Island



Photo date: July 19, 2010

Construction Site at 127<sup>th</sup> Ave, Treasure Island



Pipe Discharging Sand Slurry at 127<sup>th</sup> Ave, Treasure Island



Dredge on Ebb Shoal at John's Pass

