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**Pinellas County**  
FLORIDA

**Environmental**

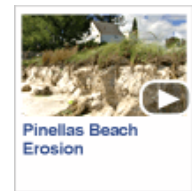
Official Government Website

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## Coastal Management:

### 2012 Sand Key Nourishment Project

The State issued the nourishment project permit July 6, 2011 to the U.S. Army Corps of Engineers (Corps). The construction officially began March 20, 2012 but has been delayed 14 days. Completion is expected by November 2012. The 8.7-mile beach fill project will place 1.25 million cubic yards of sand on 8.7 miles of shoreline and extend from just south of Sand Key Park to North Redington Beach. It will be constructed moving north to south. It will not include the shoreline of Belleair Shore.



#### Project Information Notice:

[Sand Key Information Notice](#)

#### Project Updates:

[Sand Key update](#)

#### Project Schedule:

[Sand Key Mapped Schedule update](#)

(The schedule is an estimate and will be updated periodically)

[Project schedule by location](#)

(This schedule is updated more often than the "Mapped Schedule.")

#### Presentations:

[Public Meeting – Introduction: Public Mtg Intro 3-8-12](#)

[Public Meeting – Construction: Public Mtg Corps 3-8-12](#)

# Notice of Sand Key 2012 Beach Nourishment Project

## Expected Duration: March to October 2012

### PROJECT SUMMARY

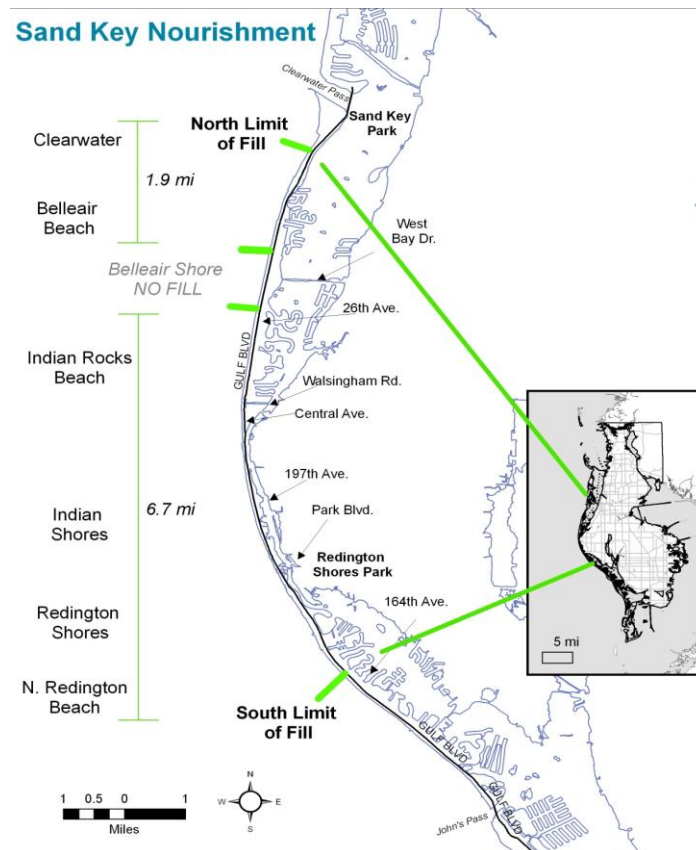
- Project Type – Beach Fill
- Type of Dredge – Hydraulic, 24” cutterhead suction
- Estimated Sand Volume – 1,250,000 cubic yards
- Construction Cost - \$31,539,350
- Construction Contractor – Norfolk Dredging Company
- Construction Notice-to-Proceed - Issued March 20, 2012
- Anticipated Completion – by October 2012

### CONSTRUCTION

- Main staging area – Sand Key Park, Clearwater
- Construction mobilization - March-April 2012
- First sand placement - on northern Sand Key to begin late April or early May 2012
- Active construction area - will move from north to south from Clearwater to N. Redington Beach
- Sand Source - offshore bottom sediments from ~12 miles west of Sand Key Park
- Process:
  - Offshore bottom sand dredged & transported/transferred into a near-shore barge
  - Sand piped from near-shore barge onto beach
  - New sand spread on beach to specific design profile by bulldozers
  - Construction activity on beaches will **operate 24 hours a day**. Expect noise day and night and lights dusk-dawn. Safety backup alarms are exempt from noise regulations.
- The active beach construction area ( ±1000 feet long) will be closed to the public

WEB LINK FOR PROJECT UPDATES: <http://www.pinellascounty.org/environment/coastalMngmt/sandkey.htm>.

Pinellas County contact: Andy Squires (e-mail: [beaches@pinellascounty.org](mailto:beaches@pinellascounty.org))



# 2012 Sand Key Nourishment Project

## Project Overview

- Project Type – Beach Fill (~1,250,000 cubic yards)
- Type of Dredge – Hydraulic Cutter Suction Dredge (24” cutterhead)
- Construction Cost - \$31,539,350
- Construction Administration – U.S. Army Corps of Engineers (Corps)
- Construction Contractor – Norfolk Dredging Company
- Current Status – design complete; notice-to-proceed expected March 2012
- Proposed Completion – between August & October 2012

## Construction Activity

*Note: - Corps issued Notice-to-Proceed to Norfolk Dredging on March 20, 2012.*

- Preliminary offshore and staging area work done March 20 – May 3.*
- Corps notified FDEP construction activity to begin May 3.*
- After some preliminary beach pumping on May 15<sup>th</sup>, effective sand placement operations on northern Sand Key began May 16<sup>th</sup>.*
- Work ceased June 22<sup>nd</sup> to June 26<sup>th</sup> due to Tropical Storm Debby.*
- Sand placement on Indian Rocks Beach began August 2<sup>nd</sup>.*
- Work ceased August 19<sup>th</sup> to September 3<sup>rd</sup> primarily due to TS/Hurricane Isaac that passed well west of Pinellas County.*
- Due to weather and equipment repairs, pumping stopped from September 7 through 12 and September 18 through 22.*
- Sand placement on the north end of Indian Shores began October 4<sup>th</sup>.*
- Project completed November 20, 2012.*

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**November 20, 2012** – Project completed.

**October 29, 2012** – The project remains shut down near 186<sup>th</sup> Avenue. Norfolk Dredging does not expect to resume work until at least Saturday, November 3<sup>rd</sup> due to persistent windy conditions from the west predicted through the next several days.

**October 26, 2012** – The project still shut down near 186<sup>th</sup> Avenue in Indian Shores. Due to persistent high winds forecast through mid next week, the project is not expected to resume until October 31 or November 1 next week. As of October 24<sup>th</sup>, 1,459,920 cubic yards of sand has been pumped to the beaches of Sand Key.

**October 24, 2012** – By October 17<sup>th</sup>, 1,367,769 cubic yards of sand had been pumped to Sand Key beaches. As of October 24<sup>th</sup>, the active project is near 186<sup>th</sup> Avenue close to the southern end of Indian Shores. Work will stop and equipment will be demobilized this afternoon (October

24<sup>th</sup>) due to high winds predicted over the next few days. Based on the current weather forecast, Norfolk dredging expects to be pumping again and moving south by October 29<sup>th</sup>.

**October 8, 2012** – By October 3<sup>rd</sup>, 1,178,165 cubic yards of sand had been pumped to Sand Key with the project at Whitehurst Avenue at the very southern border of Indian Rocks Beach. Due to weather and the need for some mechanical repairs, pumping stopped early October 1<sup>st</sup> and resumed about 3 p.m. October 4<sup>th</sup>. As of October 6<sup>th</sup> the project was moving south along the northern section of Indian Shores.

**September 24, 2012** – Due to weather and mechanical issues Norfolk Dredging was not pumping sand to the beach August 20 through September 2, September 7 through 12, and September 18 through 22. Pumping resumed late September 23<sup>rd</sup> at 5<sup>th</sup> Avenue along Indian Rocks Beach. By September 17<sup>th</sup> 1,072,665 cubic yards of sand have been pumped to Sand Key from 370 scows (barges) full of sand. The Corps estimates about 350,000 cubic yards of additional sand is needed to complete the project. On August 29<sup>th</sup>, 2012 the Corps requested a permit modification from the Florida Department of Environmental Protection (FDEP) to permit the Egmont East Borrow site for use if the existing Area L Borrow site capacity is not sufficient to finish the project. Area L is located about 12 miles west of Clearwater Pass. The Egmont East Borrow site is located just north of Egmont Key on the north side of the shipping channel. The permit modification is under evaluation by FDEP. The project schedule currently shows completion between mid to late November 2012.

**September 4, 2012** – Norfolk Dredging resumed pumping sand about 5 pm on Sept. 3 at 900 Gulf Blvd. along Indian Rocks Beach. Norfolk Dredging has also modified their beach fill route to continue moving south from 900 Gulf Blvd. to 614 Gulf Blvd., and instead of stopping and moving to 42-48 Gulf Blvd. and proceeding northward (the original plan), the new plan is to keep moving south from 900 Gulf Blvd. all the way to 19930 Gulf Blvd. along Indian Shores (the south end of Segment 4). The current schedule is posted on the Sand Key Webpage under “Schedule by Location.”

**August 22, 2012** – Due to recent thunderstorms and the threat of Tropical Storm Isaac, the project was shut down at about R78 (~900 Gulf Blvd) August 19<sup>th</sup> and is not expected to resume until at least August 29<sup>th</sup> or longer if Isaac impacts the area. The Unloader (pumping vessel normally located about 1 mile offshore) and all dredging equipment have been moved to Clearwater Pass. It is possible the dredge may temporally return to the borrow area within a couple of days to load scows (barges) with sand to serve as ballast for the storm. As of today, 971,316 cubic yards of sand have been pumped to Sand Key using 335 scow loads.

**August 13, 2012** – Sand placement at 15<sup>th</sup> Avenue on Indian Rocks Beach began August 2<sup>nd</sup>. The final grading was being completed on Belleair Beach August 3<sup>rd</sup>. A very narrow dry beach along Indian Rocks Beach resulted from Tropical Storm Debby in late June. Due to the narrow beach and public safety concerns, the contractor expects 3-4 consecutive beach access points on Indian Rocks Beach will be closed at any given time. The north portion of Indian Rocks Beach (15<sup>th</sup> Avenue to 26<sup>th</sup> Avenue) is expected to be done by about August 17<sup>th</sup> with the active project area moving northward about 300-400 feet per day. Once the beach is nourished at 26<sup>th</sup> Avenue, the pumping activity will move back to 15<sup>th</sup> Avenue and proceed south. About 1000 feet of Indian Rocks Beach will be closed off to the public around the active work area. As of August 8<sup>th</sup>, 814,000 cubic yards of sand had been pumped to the Sand Key beaches from 278 scows (barges) of material transported from the borrow area site.



**July 16, 2012** - The project is proceeding well and moving south rapidly along Belleair Beach from the Morgan Street Park shoreline area. Norfolk Dredging is expected to complete the Belleair Beach shoreline in about a week or so and then move on to Indian Rocks Beach with initial sand placement at about 15<sup>th</sup> Avenue. The project will then proceed north to the north end of Indian Rocks Beach during late July and early August. Please note that bad weather and equipment problems could alter the schedule. No word yet as to whether Federal Emergency funds will be available to replace sand lost along the Pinellas beaches from tropical storm Debby.

**June 29, 2012** – Norfolk Dredging ceased operations on June 22<sup>nd</sup> due to rough seas and the onset of rough sea conditions. On the morning of June 28<sup>th</sup> Norfolk Dredging began remobilizing for dredging and pumping to the beach and by that evening were placing sand near Dan's Island (1660 Gulf Blvd.) and moving southward. On June 29<sup>th</sup> the Corps' storm damage assessment team arrived at Sand Key to begin their evaluation of beach erosion in the wake of Tropical Storm Debby.

**June 1, 2012** – Due to rough weather and some equipment concerns on June 1, the dredge Charleston was moved from the borrow area to Clearwater Pass. The active project along the beach is located at about 1520 Gulf Blvd. (R-59). The dredge is expected to resume work at the borrow area by June 7<sup>th</sup> or 8<sup>th</sup> depending upon weather.

**May 18, 2012** – The initial pumping of sand to the beach at R-60.25 (1660 Gulf Blvd) began late afternoon on May 15. An electrical problem and a clogged pipe were encountered the first couple of days. Steady pumping should resume today and the active work area is expected to begin building the beach moving northward from 1660 Gulf Blvd. within the next couple of days.

**May 1, 2012** – The Corps notified FDEP as required per permit General Condition 10 that construction activity would officially commence on May 3, 2012.

**April 30, 2012** – The Corps has revised their estimate to May 12-14 for when the first sand placement will occur on northern Sand Key.

**April 13, 2012** – The Corps granted a 14-day extension to the project schedule. Norfolk Dredging Company's dredge is late completing work on the east coast of Florida. Consequently, the dredge will be arriving to the Sand Key area later than originally planned. The Corps released a revised schedule this week showing first sand placement on northern Sand Key to occur May 7, 2012.

**March 20, 2012** – The Notice-to-Proceed was issued by the Corps to Norfolk Dredging on March 20, 2012. Norfolk Dredging has 30 days to provide a revised project schedule. Work over the next few weeks will be at the Sand Key staging area adjacent to Clearwater Pass Channel, along the pipe corridors extending from the shoreline to about a mile or so offshore at five locations along the length of Sand Key, and at the borrow area located about 12 miles west of Sand Key Park. At this time, it is anticipated that the first sand placement will begin in late April or early May (subject to change) along the northern edge of the north tower of Dan's Island located at 1620 Gulf Blvd.

## **Preconstruction Status Reports**

**March 8, 2012** – A Public meeting was held at 6:30 p.m. at the Belleair Beach Community Center. A project overview and construction details including the proposed schedule was presented by County and U.S. Army Corps of Engineers staff. The notice-to-proceed was been delayed and is expected to be issued any day.

**February 24, 2012** – A preconstruction conference was held February 23, 2012 with the dredging contractor, the Army Corps of Engineers, Pinellas County, and regulatory agencies. Project updates from the meeting are summarized below.

- Contract period 220 days (March to October 2012)
- Main Staging Area – Sand Key Park along Clearwater Pass
- Preliminary project schedule (subject to change):
  - a. March-April 2012: Survey and Mobilization
  - b. Project Components (base bid & all options to be constructed)
    - i. Base Bid: Clearwater and Belleair Beach (1310 Gulf Blvd to 1900 Gulf Blvd)
    - ii. Option A: Indian Rocks Beach (2718 Gulf Blvd to 312 Gulf Blvd)
    - iii. Option B: Indian Shores Beach (312 Gulf Blvd to 17980 Gulf Blvd)
    - iv. Option C: Redington Shores & North Redington Beaches (17980 Gulf Blvd to 16850 Gulf Blvd)
  - c. Initial Sand Placement – to begin late April or early May on northern Sand Key (Base Bid Section)
  - d. Estimated Project Duration and Fill Volumes (cubic yards) by Beach Component:
    - i. Base Bid: 80-100 days (700,000 cy)
    - ii. Option A: 30-40 days (245,000 cy)
    - iii. Option B: 30-40 days (121,000 cy)
    - iv. Option C: 10-15 days (60,000 cy)

**February 16, 2012** – The project is on schedule and will officially begin March 1, 2012. **A public meeting will be held at 6:30 p.m., March 8, 2012 at the Belleair Beach Community Center located at 444 Causeway Blvd., Belleair Beach, FL 33786.** Construction related activity on the northern portions of Sand Key is expected during the first two weeks of March. Placement of new sand on the Sand Key beaches in Clearwater should begin later in March or early April.

**October 17, 2011** – The project notice-to-proceed (NTP) is expected to be issued March 1, 2012. The construction contractor will start work within 30 days of NTP.

**September 20, 2011** – The project Notice of Award to Norfolk Dredging Company occurred September 9, 2011 (Contract No. W912EP-11-C-0017) for a project cost of \$31,539,350. The Corps expects to receive a project schedule within the next week or two. At this time, the project start date and schedule are not known. The estimated project duration is not-to-exceed 220 days and could begin as soon as November 2011 or as late as April 2012.

**August 24, 2011** – The Bids for the project were opened August 12, 2011. The apparent low bidder is Norfolk Dredging which has a great deal of experience working Pinellas County beaches. The bid amount for the project in its entirety is \$31,539,350 and is within available funding. Consequently it is anticipated that the Base Bid and all Options will be constructed by August 2012 (see additional information in the July 11, 2011 summary below). Project award is expected no later than September 30, 2011. Until the project is awarded and the construction

contractor submits a project schedule, the project start date will not be known. The estimated project duration is 220 days and could begin as soon as early November 2011 or as late as April 2012.

**July 11, 2011** – The Bid Solicitation was advertised today. Project start slated for April 2012; however, the Corps is considering moving the potential start date to November 2011. Project duration is 181 days after Notice to Proceed.

The project bid items include:

- Base Bid: Clearwater and Belleair Belleair Beach (about 1310 Gulf Blvd to 1900 Gulf Blvd)
- Option A: Indian Rocks Beach (about 2718 Gulf Blvd to 312 Gulf Blvd)
- Option B: Indian Shores Beach (about 312 Gulf Blvd to 17980 Gulf Blvd)
- Option C: Redington Shores & North Redington Beaches (about 17980 Gulf Blvd to 16850 Gulf Blvd)

Assuming the project award amount does not exceed available funding, the entire project (Base Bid plus all options) is expected to be completed in 2012 and will nourish the same shoreline as was completed in the previous 2005-2006 Sand Key project.

The Bid Solicitation can be viewed at:

<https://www.fbo.gov/index?s=opportunity&mode=form&tab=core&id=4983de2cc1084c838fb4ae654a3ae37a&cview=0>

**July 6, 2011** – The State permit for the Sand Key nourishment project was issued today. The permit can be viewed at the following link:

[http://bcs.dep.state.fl.us/env-prmt/pinellas/issued/0238664\\_Sand\\_Key/001-JC%20and%20002-BV/Final%20Orders/](http://bcs.dep.state.fl.us/env-prmt/pinellas/issued/0238664_Sand_Key/001-JC%20and%20002-BV/Final%20Orders/)

**June 23, 2011** - The Corps expects the final State permit for the project to be issued in June 2011, award to a construction contractor on Sept. 30, 2011, **construction notice-to-proceed after October 2011, and project completion by August 2012.**

The project fill area as currently proposed will be essentially the same as in the previous 2005-2006 project:

- e. R56 (1310 Gulf Blvd in Clearwater) to R66 (1900 Gulf Blvd in Belleair Beach),
- f. Note: Belleair Shore does not participate in nourishment; their shoreline will not receive sand,
- g. R71A (2718 Gulf Blvd in Indian Rocks Beach) to R107 (16850 Gulf Blvd in N. Redington Beach).

Assuming the project cost estimates do not exceed the available funding, the work will not be phased and will be done as one project.

**May 2011** - the Corps announced they have enough Fiscal Year 2011 funding, combined with previous year carryover funds, to provide the needed federal cost share for the entire Sand Key nourishment project from Clearwater to North Redington Beach.

**April 14, 2011** - The permit was deemed complete on April 14, 2011 by the Florida Department of Environmental Protection (FDEP). The issues on hardbottom monitoring and allowable silt content have been resolved. The permit is expected to be issued within 90 days (by mid July).

**March-April 2011** - The Corps' latest permit submittal to the State (FDEP) includes a phased approach. The shoreline reaches filled will depend upon available funding. A two-phased approach is anticipated as only about one-half the Federal funds needed for a complete project are available.

**July 2010 to April 2011** - Federal funds available inadequate to nourish the entire Sand Key project area.

**June 2010** - the U.S. Army Corps of Engineers (Corps) requested \$13 million of emergency funds from their headquarters to expedite the Sand Key nourishment project. These emergency funds were not granted.

**Spring 2010** - the County requested an additional \$11.3 million in Federal Funds for FY 2011 to cover the 60% share of the anticipated total project cost of \$35 million. These funds were not received.

**2010** - \$10,657,000 of federal funds were appropriated for the next Sand Key nourishment project.



R-040  
R-041  
R-042  
R-044  
R-045  
R-046  
R-047  
R-049

**Clearwater Beach**  
(R-56 to R-60)  
Volume = 300,000 CY  
Start Date: May 16, 2012  
End Date: June 16, 2012

**Clearwater Beach**

**SEGMENT 1**

**Belleair Beach**

**SEGMENT 2**

Belleair Shores

**Belleair Beach**  
(R-60 to R-66)  
Volume = 400,000 CY  
Start Date: June 17, 2012  
End Date: July 31, 2012

**Indian Rocks Beach**  
(R-71A to R-80)  
Volume = 200,000 CY  
Start Date: Aug. 2, 2012  
End Date: Sep. 16, 2012

**Indian Rocks Beach**

**SEGMENT 3**

**Indian Rocks Beach/  
Indian Shores**  
(R-80 to R-88)  
Volume = 150,000 CY  
Start Date: Sep. 17, 2012  
End Date: Oct. 9, 2012

**SEGMENT 4**

**Indian Shores**

**Indian Shores**  
(R-88 to R-100)  
Volume = 137,000 CY  
Start Date: Oct. 10, 2012  
End Date: Nov 12, 2012

**SEGMENT 5**

**Redington Shores/ North Redington Beach**  
(R-101 to R-107)  
Volume = 60,000 CY  
Start Date : Nov. 10, 2012  
End Date: Nov. 20, 2012  
**ENTIRE PROJECT FILL  
COMPLETED NOV. 20, 2012**

**Redington Shores**

**SEGMENT 6**

**North Redington Beach**

Redington Beach

Madeira Beach

John's Pass

R-130  
R-131  
R-132  
R-134  
R-135  
R-136  
R-137



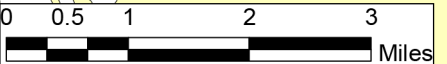
**PINELLAS COUNTY**



**LEGEND**

- Beach Fill Segment Line
- Municipality Boundary Line
- Extent of Fill  
(widths are exaggerated for clarity)

**2012 Sand Key -  
Beach Erosion Control Project**



**2012 Sand Key Nourishment Project**  
**R Monument - Street - Address Reference**

**APPROXIMATE SCHEDULE**  
**SUBJECT TO CHANGE**

**Revised 11-20-12**

**Project Completed 11-20-12**

Filled Locations shown in yellow highlight

Project Completion Location Nov. 20, 2012

Pipe Corridor Locations shown with light blue highlight

R No.	City	Street	SEG	GULF BLVD ADDRESS	DIRECTION OF ACTIVE WORK AREA MOVEMENT	ACTUAL FILL DATE
188 Project Days						
56	CLEARWATER		1	1290 - 1310	END	16-Jun-12
57	CLEARWATER		1	1390	NORTH	15-Jun-12
58	CLEARWATER		1	1460	NORTH	13-Jun-12
59	CLEARWATER		1	1520	NORTH	8-Jun-12
60	CLEARWATER		1/2	1586	NORTH / SOUTH	16-May-12
61	BELLEAIR BEACH		2	1660	SOUTH	29-Jun-12
62	BELLEAIR BEACH		2	3400	SOUTH	6-Jul-12
63	BELLEAIR BEACH		2	2940	SOUTH	12-Jul-12
64	BELLEAIR BEACH	MORGAN DR	2	2500	SOUTH	18-Jul-12
65	BELLEAIR SHORE	23RD ST	2	2250	SOUTH	24-Jul-12
66	BELLEAIR SHORE	19TH ST	2	1900	END	31-Jul-12

67-71 BELLEAIR SHORE NO NOURISHMENT

72	INDIAN ROCKS BEACH	26TH AV	3	2600	END	15-Aug-12
73	INDIAN ROCKS BEACH	23RD AV	3	2300	NORTH	12-Aug-12
74	INDIAN ROCKS BEACH	20TH AV	3	2000	NORTH	10-Aug-12
75	INDIAN ROCKS BEACH	17TH AV	3	1616	NORTH	6-Aug-12
76	INDIAN ROCKS BEACH	15TH AV	3		NORTH / SOUTH	2-Aug-12
77	INDIAN ROCKS BEACH	12TH AV	3		SOUTH	17-Aug-12
78	INDIAN ROCKS BEACH		3	900	SOUTH	4-Sep-12
79	INDIAN ROCKS BEACH	8TH AV	3		SOUTH	14-Sep-12
80	INDIAN ROCKS BEACH		3	614	SOUTH	16-Sep-12
81	INDIAN ROCKS BEACH	5TH AV	4		SOUTH	24-Sep-12
82	INDIAN ROCKS BEACH		4	314	SOUTH	26-Sep-12
83	INDIAN ROCKS BEACH		4	108	SOUTH	28-Sep-12
84	INDIAN ROCKS BEACH	CENTRAL AV	4		SOUTH	30-Sep-12
84.4	INDIAN ROCKS BEACH		4	44-48	SOUTH	2-Oct-12
85	INDIAN ROCKS BEACH		4	20	SOUTH	4-Oct-12
86	INDIAN SHORES		4	20222	SOUTH	6-Oct-12
87	INDIAN SHORES		4	20040	SOUTH	8-Oct-12
88	INDIAN SHORES		4	19930	SOUTH	9-Oct-12
89	INDIAN SHORES		5	19828	SOUTH	10-Oct-12
90	INDIAN SHORES		5	19738	SOUTH	11-Oct-12
91	INDIAN SHORES	197TH AV	5		SOUTH	12-Oct-12
92	INDIAN SHORES		5	19610	SOUTH	13-Oct-12
93	INDIAN SHORES		5	19506	SOUTH	14-Oct-12
94	INDIAN SHORES		5	19418	SOUTH	15-Oct-12
95	INDIAN SHORES		5	19222	SOUTH	17-Oct-12
96	INDIAN SHORES	NEAR PARK BLVD BRDG	5	19010	SOUTH	19-Oct-12
97	INDIAN SHORES		5	18720	SOUTH	21-Oct-12
98	INDIAN SHORES	186TH AV	5		SOUTH	24-Oct-12
99	INDIAN SHORES	SUNCOAST SEABIRD SANCT	5	18328	END	4-Nov-12
100	REDINGTON SHORES		5	18214	END	12-Nov-12

NO NOURISHMENT - BREAKWATER

101	REDINGTON SHORES	180TH AVE W	6	17980	NORTH	12-Nov-12
102	REDINGTON SHORES	CORAL AV	6	17860	NORTH	11-Nov-12
103	REDINGTON SHORES		6	17720	NORTH / SOUTH	10-Nov-12
104	REDINGTON SHORES	175TH TERR DR	6	17500	SOUTH	13-Nov-12
105	N REDINGTON BCH	173RD AV	6	17334	SOUTH	15-Nov-12
106	N REDINGTON BCH	171ST AV	6	17120	SOUTH	17-Nov-12
107	N REDINGTON BCH	169TH AV	6	16800	END	20-Nov-12



# 2012 Sand Key Beach Nourishment

**Andy Squires  
Coastal Manager**

e-mail: [beaches@pinellascounty.org](mailto:beaches@pinellascounty.org)

727/464-4633



# Topics

- 
- An aerial photograph of a coastal city, likely Miami Beach, showing a wide sandy beach, a long pier extending into the turquoise ocean, and a dense line of buildings along the shore. The sky is clear and blue.
- Why Nourish Our Beaches
  - County Managed Beaches
  - Sand Key Nourishment History
  - Funding
  - Project Team
  - USACE Project Presentation

# Why Nourish Our Beaches





# Most Important Reason!

1. Storm Protection
  - Saves Lives
  - Upland Infrastructure
  - Property



# STORM PROTECTION!



**Clearwater, September 1985**

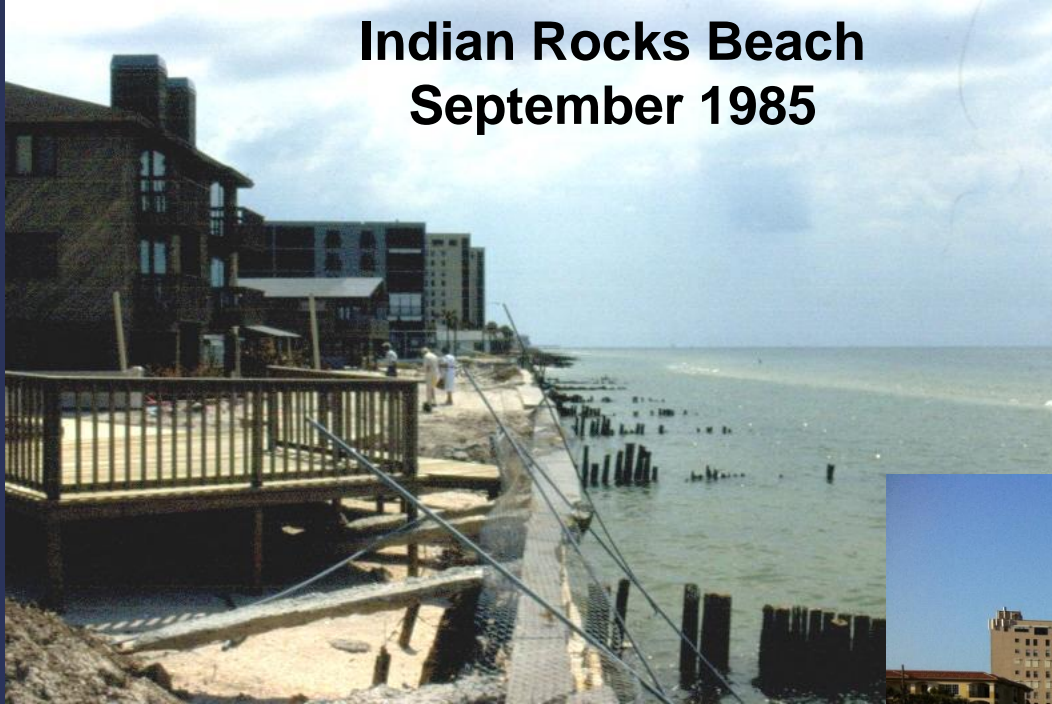


**Clearwater, June 2011**



# STORM PROTECTION!

**Indian Rocks Beach  
September 1985**



**Indian Rocks Beach  
June 2011**



# STORM PROTECTION!

**Indian Shores  
September 1985**

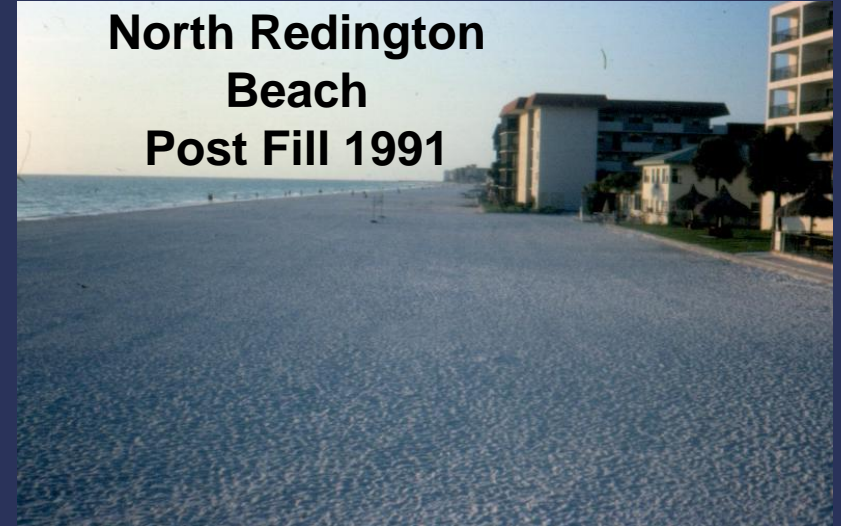


**Indian Shores  
June 2011**





# STORM PROTECTION!





# Economic Benefits!



## 2. Pinellas County Tourism (Data Research Services, Inc. . Analysis for 2009)

- 74.2% of Visitors Come for the Beaches
- \$2.794 B - Total Economic Impact
- Over 35,800 - Jobs Supported
- \$88.4 M - State & Local Taxes Paid

# Another Reason to Nourish Our Beaches...

## 3. Environmental Benefits

- Habitat
  - Marine Turtles
  - Shorebirds



# County Managed Beaches

- Honeymoon Island
- Sand Key
- Treasure Island
  - Sunshine Beach
  - Sunset Beach
- Long Key
  - Upham Beach
  - Pass-a-Grille Beach
- Mullet Key (Ft. DeSoto Park)

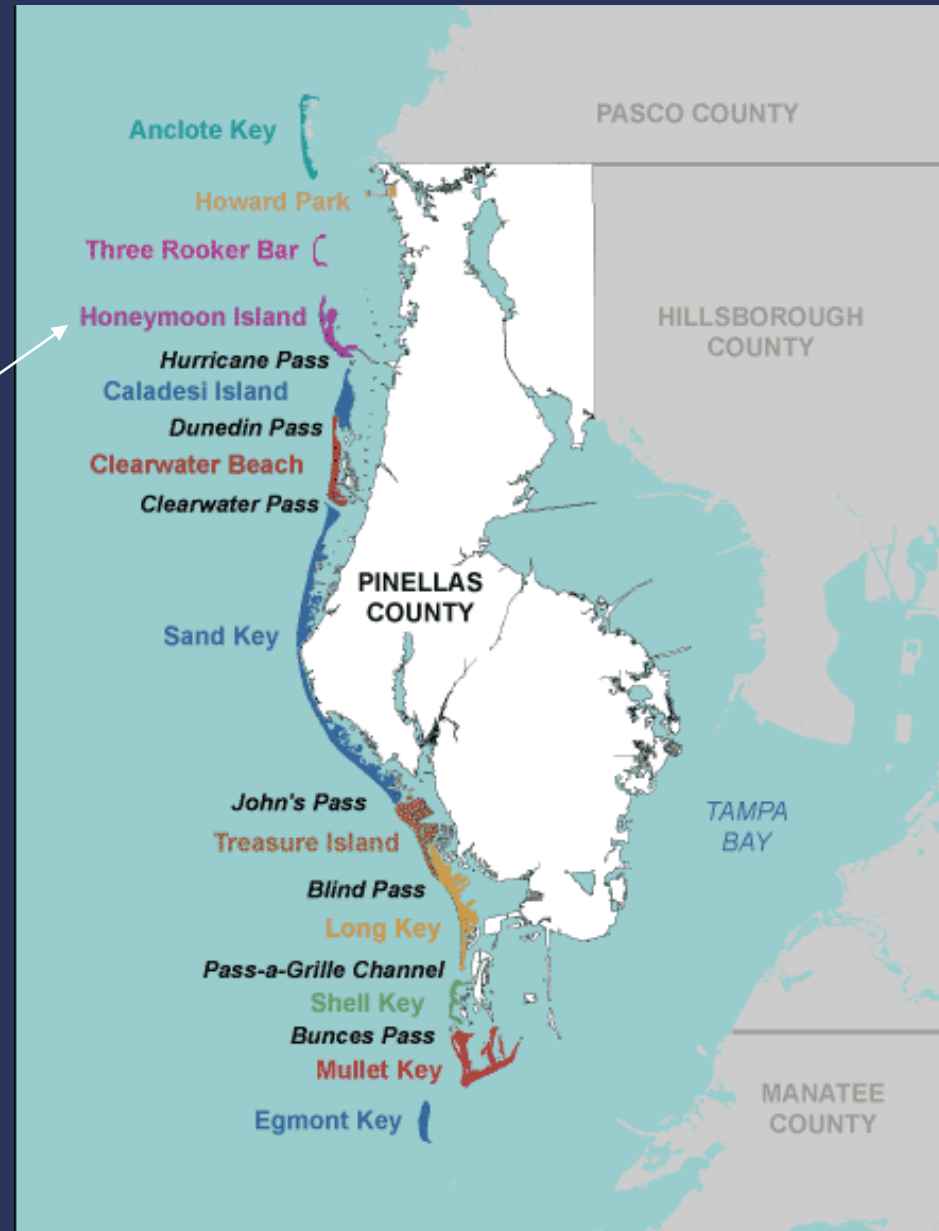


# Non-Federally Authorized Project

## Honeymoon Island

### State Funding

- Construction 100%
- Non-construction 75%  
(design, permitting, etc.)



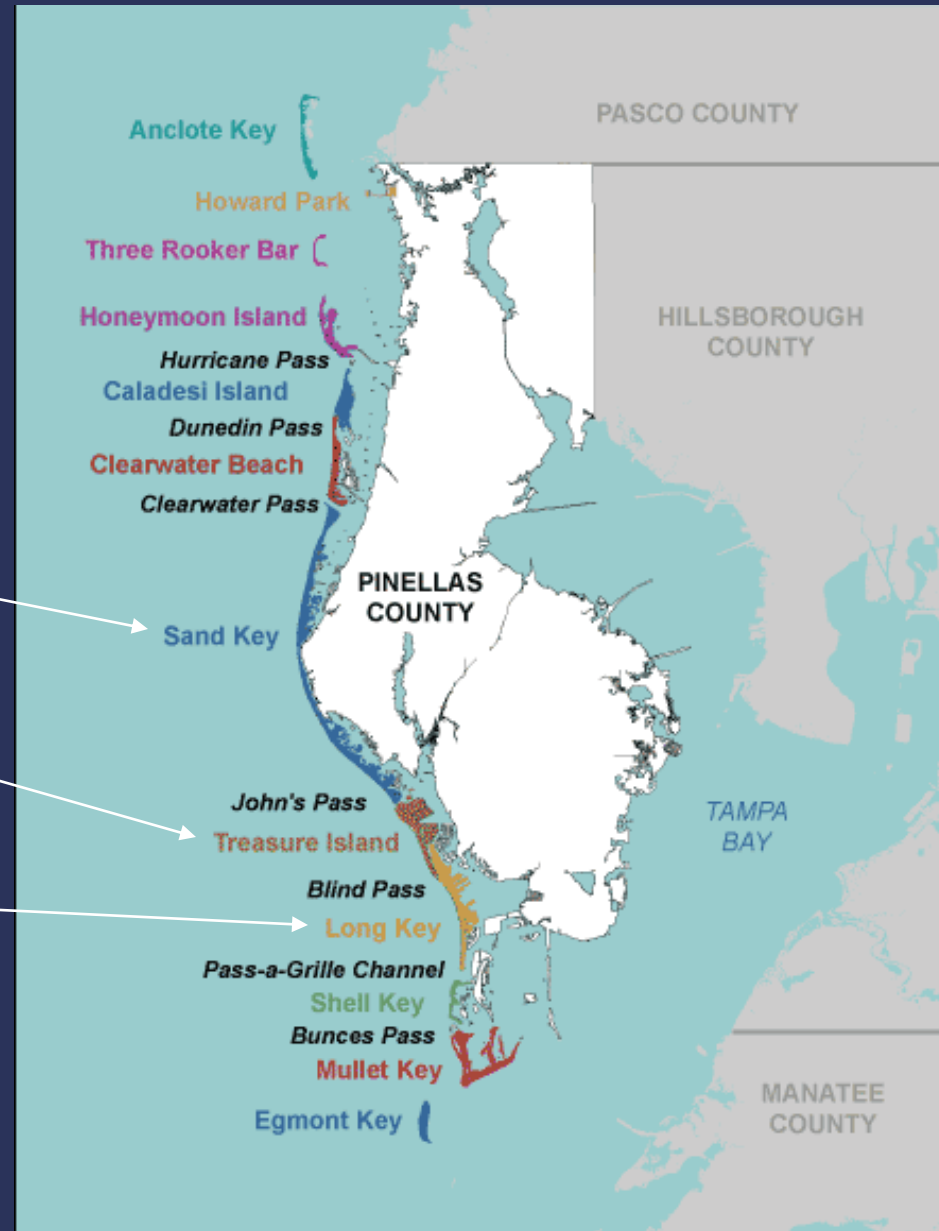
# Federally Authorized Projects

Sand Key

Treasure Island

Long Key

Funding  
~60% Federal  
~20% State  
~20% County



# Sand Key

## Nourishment History

- 1988 (Phase 1)
- 1990 (Phase 2)
- 1992 (Phase 3)
- 1998-99 (Phase 4)
- 2005-2006

Current Nourishment Interval  
5-6 Years

Before and After Photographs

## Before and After Photographs



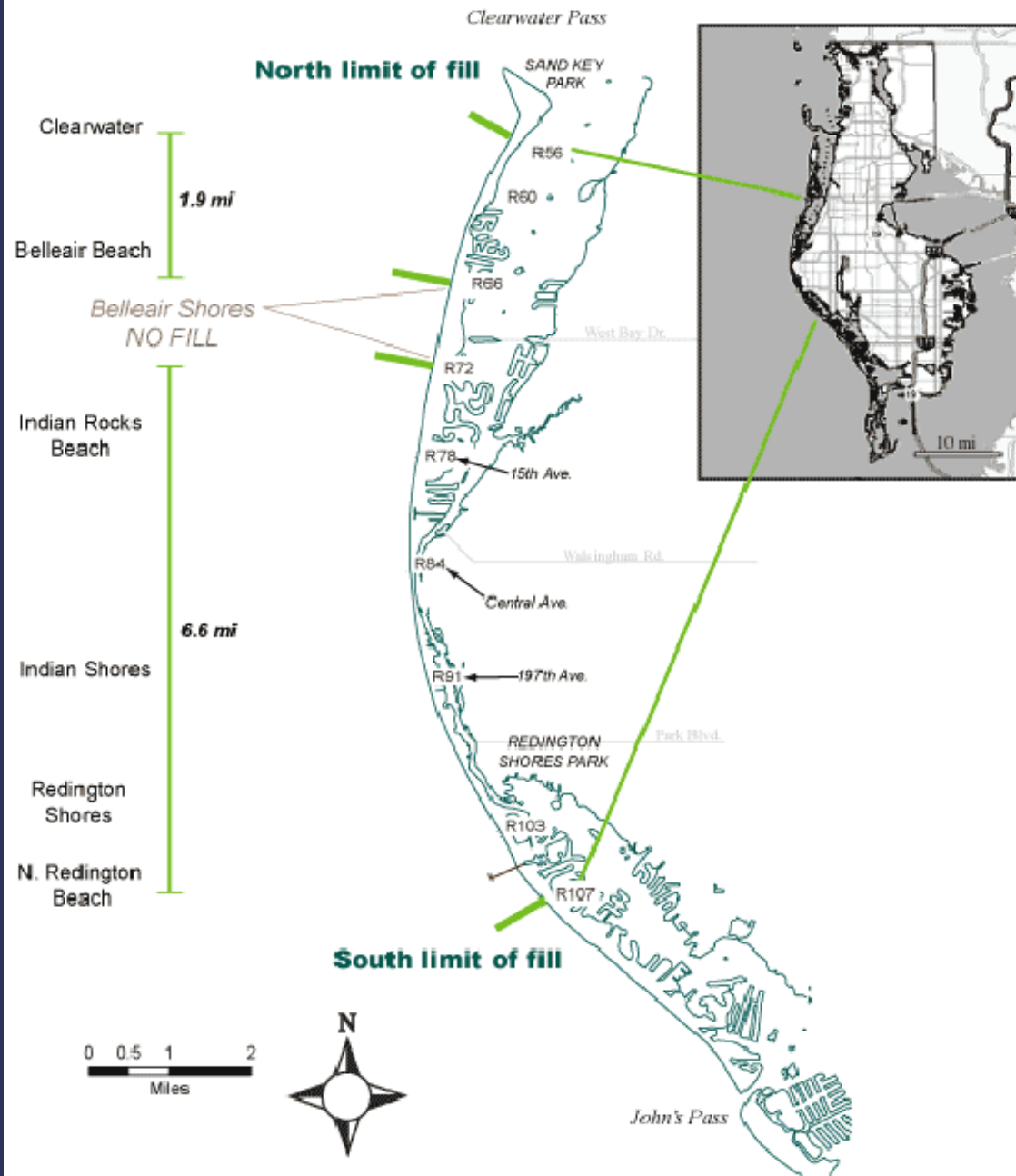
Before the Sand Key Renourishment Project in 1992



After the Sand Key Renourishment Project in 2000

[Close Window](#)

# Sand Key Nourishment Project Area





# Sand Key Phase I - 1988

Redington Shores & N. Redington Beach

- 1.5 miles (R99-R107)
- 300,000 cubic yards of sand
- Sand Source: John's Pass Ebb Shoal
- \$2.6 million

# Sand Key Phase II - 1990

## Indian Rocks Beach

- 2.6 miles (R72-R85)
- 1,300,000 cubic yards of sand
- Sand Source: Egmont Channel Shoal
- \$14.5 million

# Sand Key Phase III - 1992

Indian Shores, Redington Shores &  
North Redington Beach

- 4.2 miles (R85-R107)
- 850,000 cubic yards of sand
- Sand Source: Egmont Channel Shoal
- \$11.7 million

# Sand Key Phase IV – 1998-99

Clearwater to N. Redington Beach  
(excluding Belleair Shore)

- 8.7 miles (R56-R66, R72-R107)
- 2.6 million cubic yards of sand
- Sand Source: Egmont Channel Shoal
- \$24 million

# Sand Key 2005-2006

Clearwater to N. Redington Beach  
(excluding Belleair Shore)

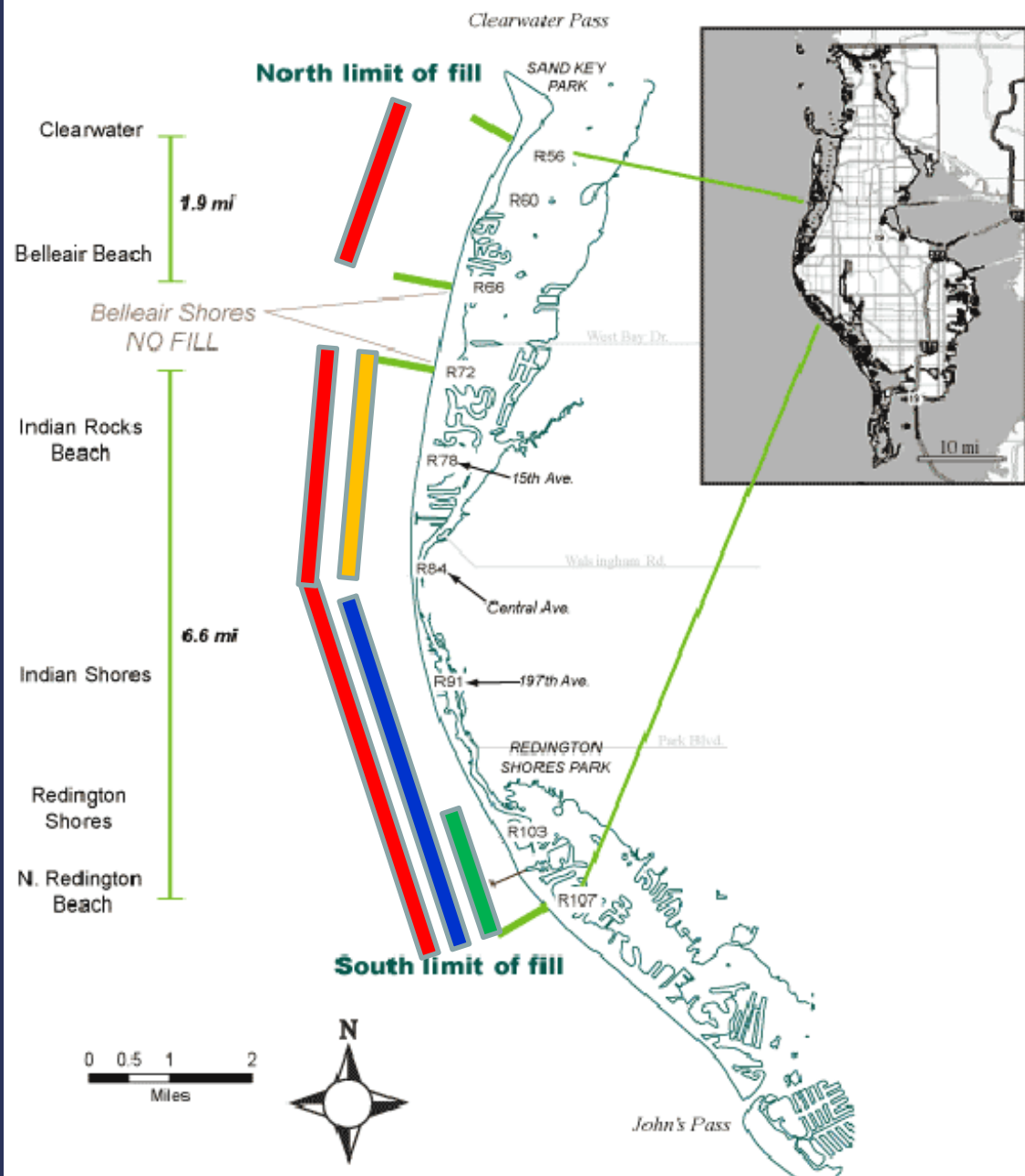
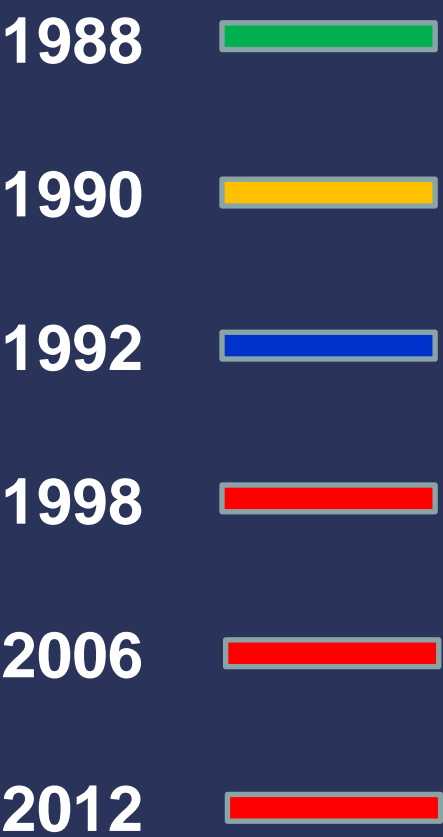
- 8.7 miles R56-R66, R71-R107
- 1.7 million cubic yards of sand
- Sand Source: Egmont Channel Shoal
- \$45 million

# Sand Key 2012

Clearwater to N. Redington Beach  
(excluding Belleair Shore)

- 8.7 miles R56-R66, R71-R107
- 1.3 million cubic yards of sand
- Sand Source: 12-14 miles offshore
- \$31.5 million

# Sand Key Projects 1988-2012

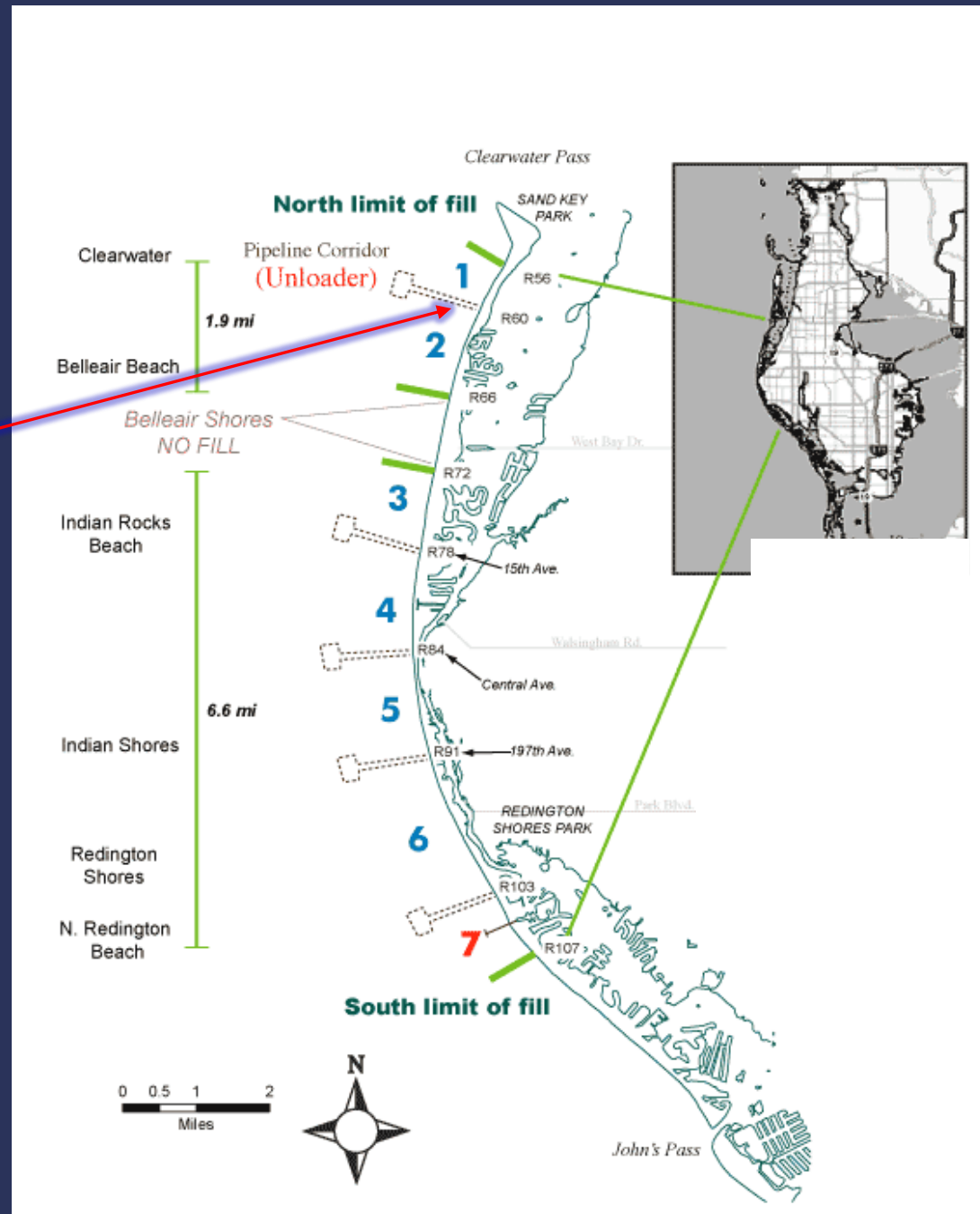




# Sand Key Nourishment

Starting Location  
R60

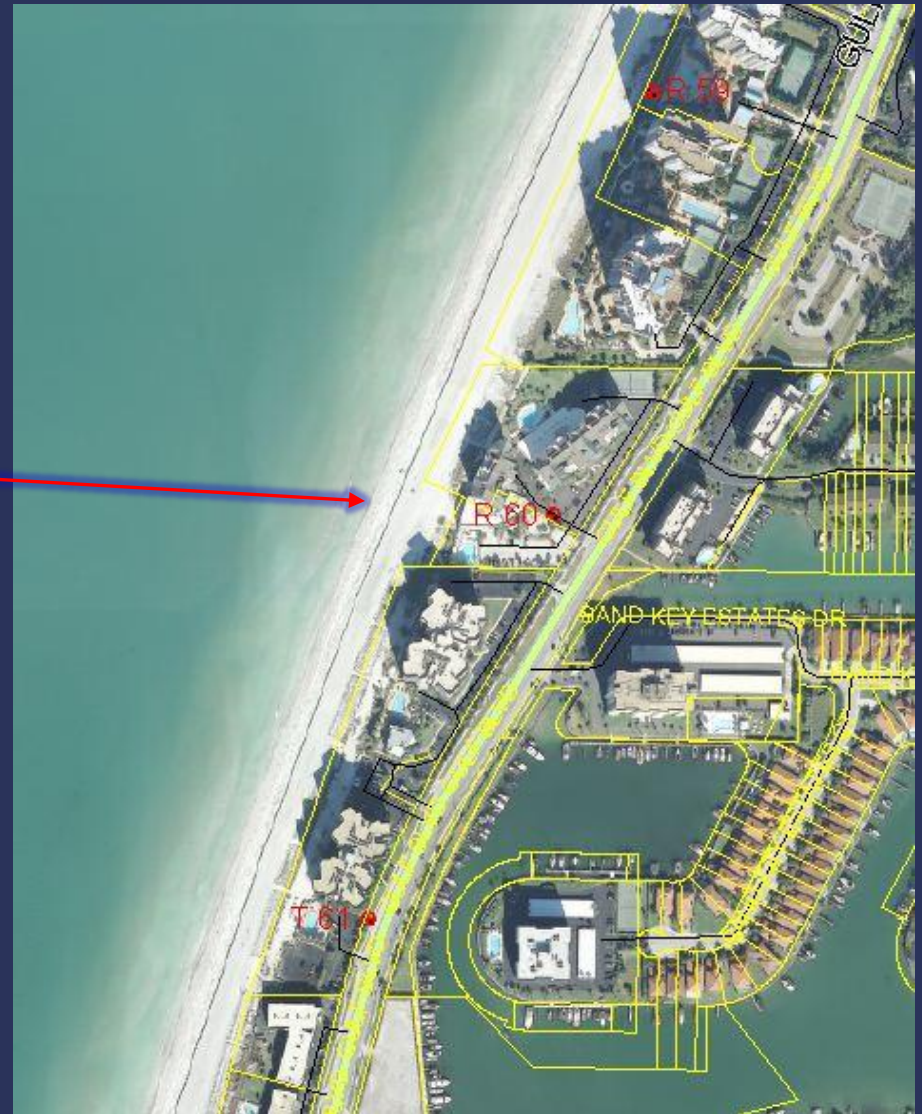
Cabana Club  
1586 Gulf Blvd.



# Sand Key Nourishment

Starting Location  
R60

Cabana Club  
1586 Gulf Blvd.



# Sand Key 2012

## Project Funding

- 62.8% Federal
- 37.2% Non-Federal

# Coastal Management Program Funding from Tourist Development (Bed) Tax



**One-half of Third Penny  
~ \$2 million  
Annual Revenue**

# Sand Key 2012 Project Team

- Pinellas County
  - Local Sponsor
- U.S. Army Corps of Engineers (USACE)
  - design, permitting, construction
- Construction Contractor for USACE
  - Norfolk Dredging



# QUESTIONS

An aerial photograph of a coastal city, likely St. Petersburg, Florida. The image shows a large, crowded beach in the foreground, with many people and umbrellas. Behind the beach is a dense urban area with various buildings, including several tall, modern high-rise apartment or hotel buildings. A long pier extends into the turquoise water. In the background, a large bridge spans a wide body of water, and more city buildings are visible on the distant shore under a clear blue sky.

**Andy Squires, Coastal Manager 727- 464 - 4633**  
e-mail: [beaches@pinellascounty.org](mailto:beaches@pinellascounty.org)

**Web Link to Updates:**  
[www.pinellascounty.org/environment/coastalMngmt/sandkey.htm](http://www.pinellascounty.org/environment/coastalMngmt/sandkey.htm)

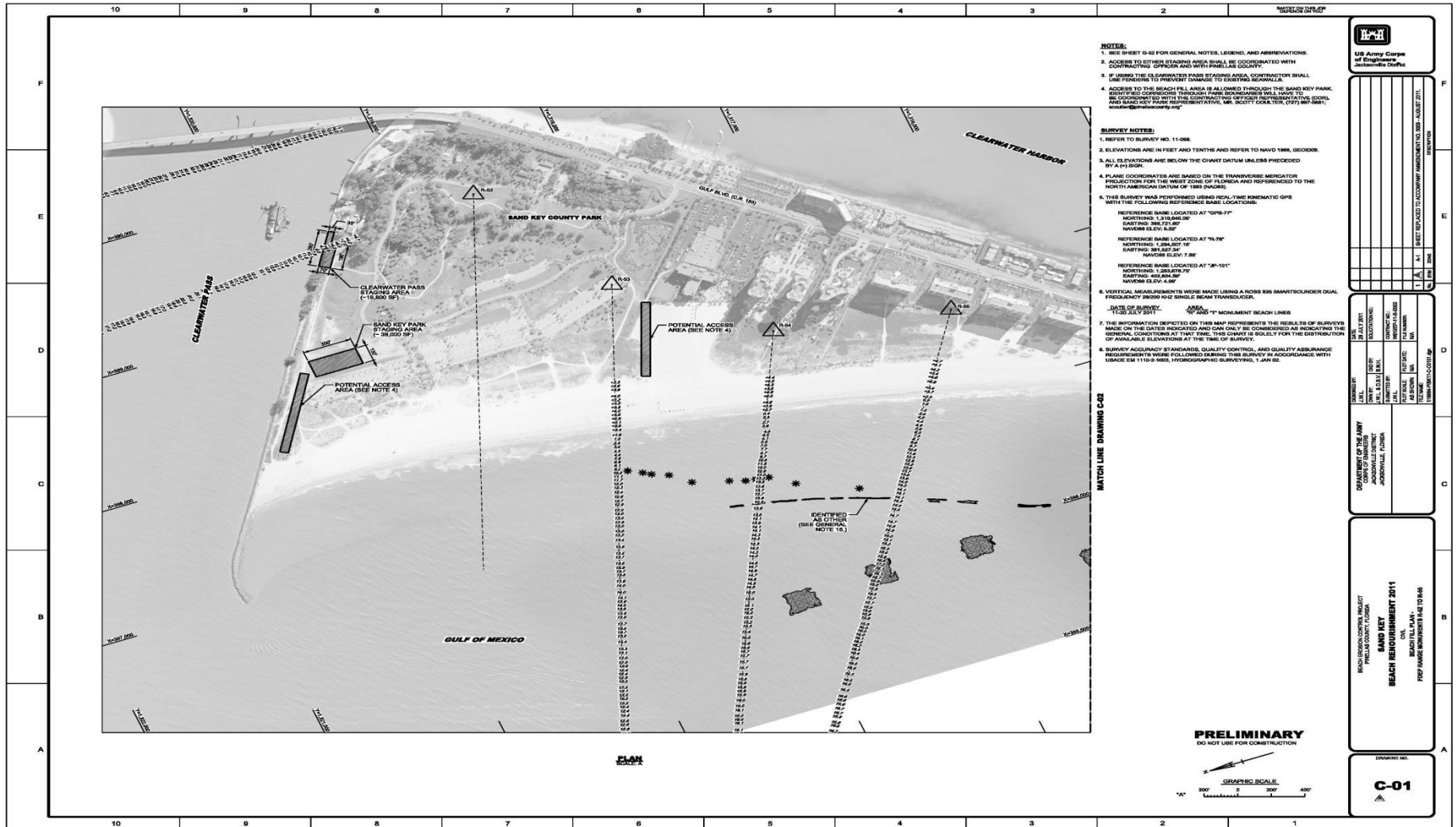


# Order of Work





# Contractor Staging Area



# Contractor Staging Area Aerial



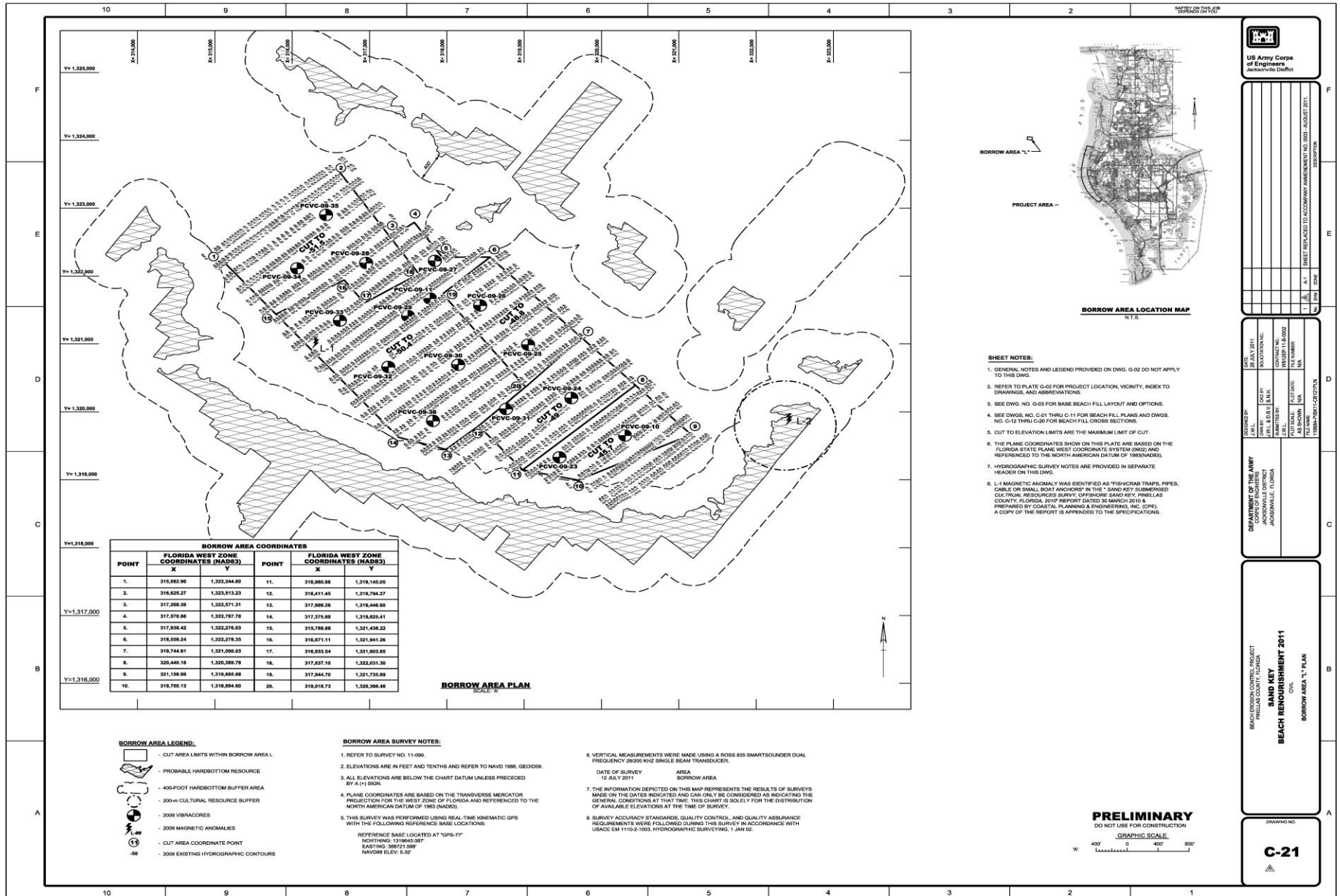
727.520.8181  
www.aerophoto.com

**Belleair Beach - Pinellas County Shore Protection**

Negative # 60308 786  
Date 03.08.06

2/23/2012

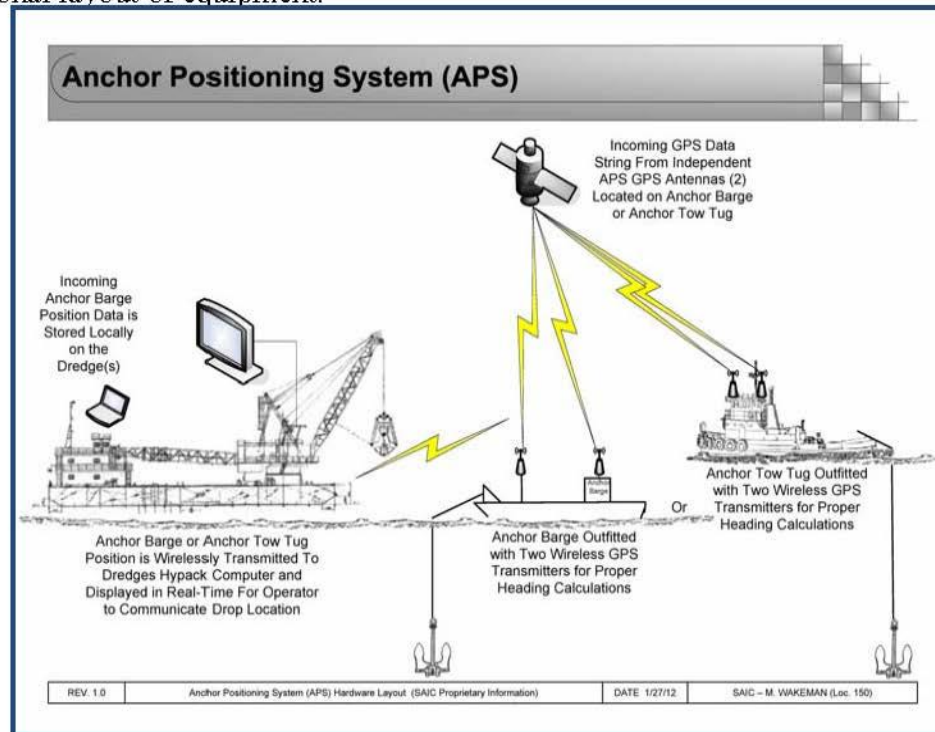
Sand Key Beach Renourishment 2011







The Anchor Positioning System (APS) would utilize two Wireless GPS transmitters located on either the anchor barge or anchor tow tug. Each transmitter would independently send their position to the dredge and tug Hypack computers simultaneously at a 2-second interval. Upon receipt, the dredge computer can apply vessel offsets and heading corrections to properly display the barges or tugs position on the dredge operators screen. When received, incoming anchor barge or anchor tow tug position data will also be stored locally on the dredge. Below is a figure (Fig. 1) of the operational layout of equipment.



[www.Saic.com](http://www.Saic.com)

# Vibration Monitoring Equipment





## **Tiny's International Marine Environmental Services**

**Capt. Richard E. Alboth Jr.**

**P.O. Box 511**

**Cape Canaveral FL 32920**

**Cell Phone 1 321 863 6561**

**EMAIL TINYSMARINE@AOL.COM**

**ONE CALL DOES IT ALL**



RESEARCH 1 IS A 31 FT BY 10.6 BEAM OFFSHORE SHORE CENTER CONSOLE BOAT, WITH TWIN 250 HP YAMAHA O/B NEW IN 2009. TOP SPEED 58 MPH, FUEL 300 GAL

ELECTRONICS 25 WATT ICOM VHF, 40 WATT HAILER, GARMAN 3210/ DGPS / WAAS COLOR CHARTPLOTTER WITH GDL MARINE WEATHER SATELLITE RECEIVER, PLUS GSD 22 COLOR SOUNDER / SONAR WITH A 16,000 WATT TRANSDUCER 5,000 FT MAX DEPTH. 32 MILE 4 KW RADAR, LAPTOP WITH MAPTECH SOFTWARE. ALL EQUIP IS INTERFACED. AND HAS A RDF AN AIS. THIS VESSEL MEETS ALL USCG / USACOE REGS. AND SAFETY . N.M.F.S. and State Approved Endangered Species Observers. Environmental Consulting.

**SALVAGE WORK, TOWING, OFFSHORE FISHING CHARTERS.**

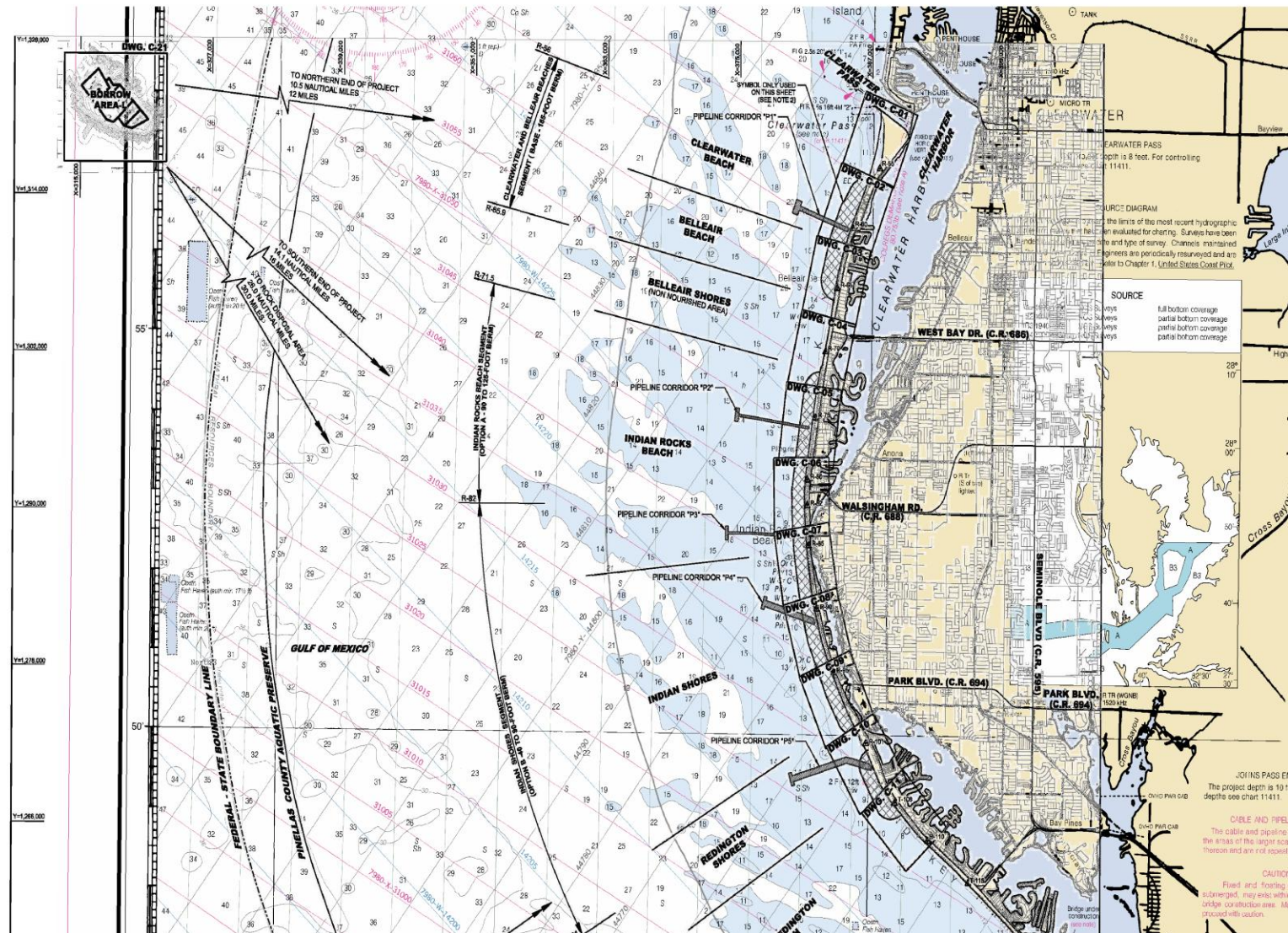
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### **METHODOLOGY**

20 Years Exp. Turbidity Monitoring (Equipment )

Hach Model 2100P Portable Turbidity Meter

Van Dorn 1L Water Sampler with 50 Meters of Calibrated Nylon Line, with a Leaded Collar. Which Provides a Rapid Descent with Minimal Drift. All Testing are performed aboard Research 1. All Turbidity Samples are performed in NTU'S and not to exceed 29 NTU'S over Background. All samples are Analyzed Within 30 Min. from the collection Time. All Turbidity Samples are taken within Compliance of this Contract. Also D06 Portable Dissolved Oxygen Meter will be used. DO samples will be taken as stated in this contract.





# 24" CSD Dredge "Charleston"





# Spider Barge (Fills Scows)



# Spider Barge





# Scows





# Material Barges “SCOWS”





# Tug Towing Scow





# Barge Unloader “Vicksburg”



727.520.8181  
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**Belleair Beach - Pinellas County Shore Protection**

Negative # 51111 032  
Date 11.11.05

2/23/2012

Sand Key Beach Renourishment 2011

16





727.520.8181  
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## Belleair Beach - Pinellas County Shore Protection

Negative # 51212 090

Date 12.12.05

2/23/2012

Sand Key Beach Renourishment 2011

17



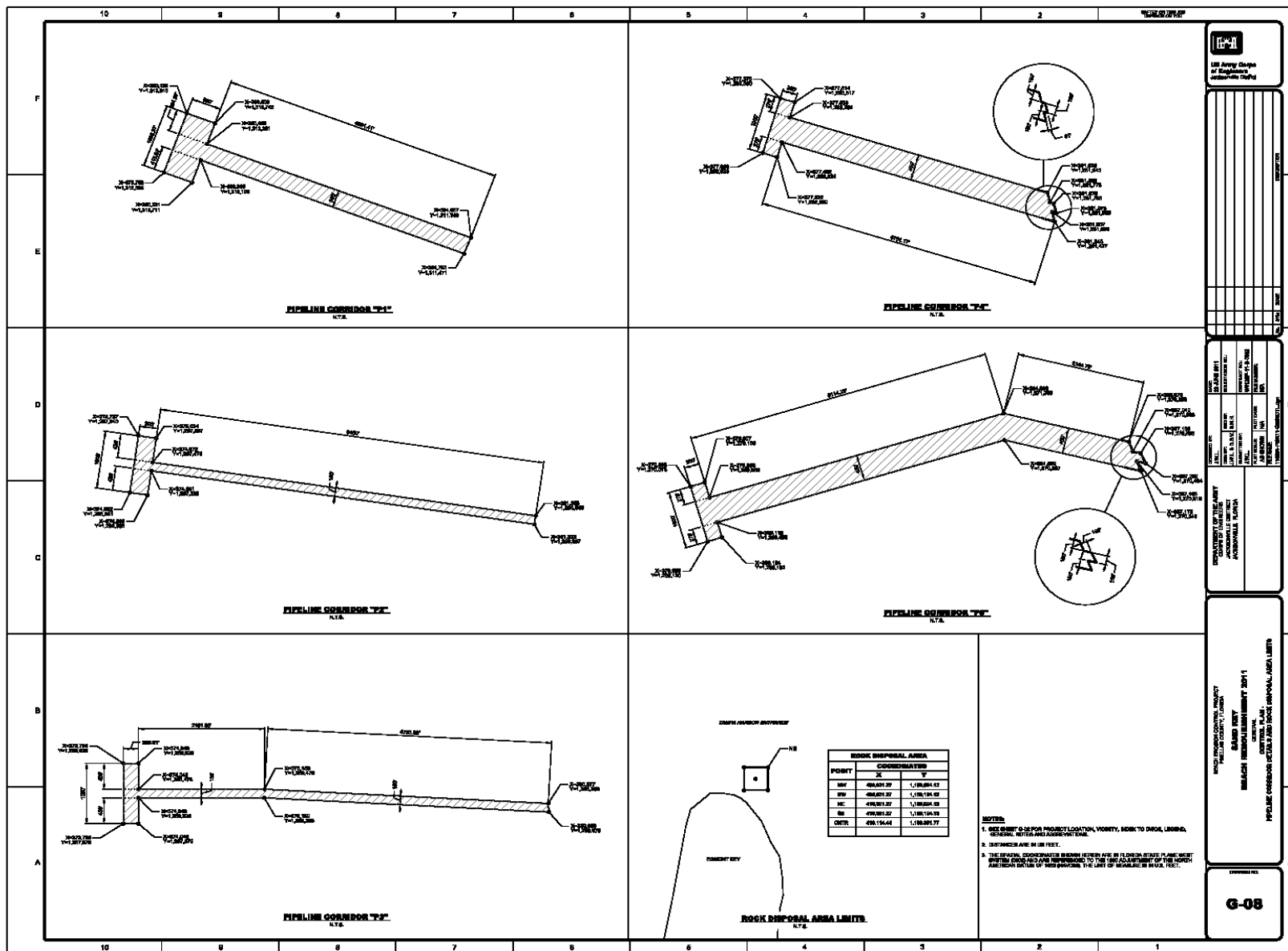










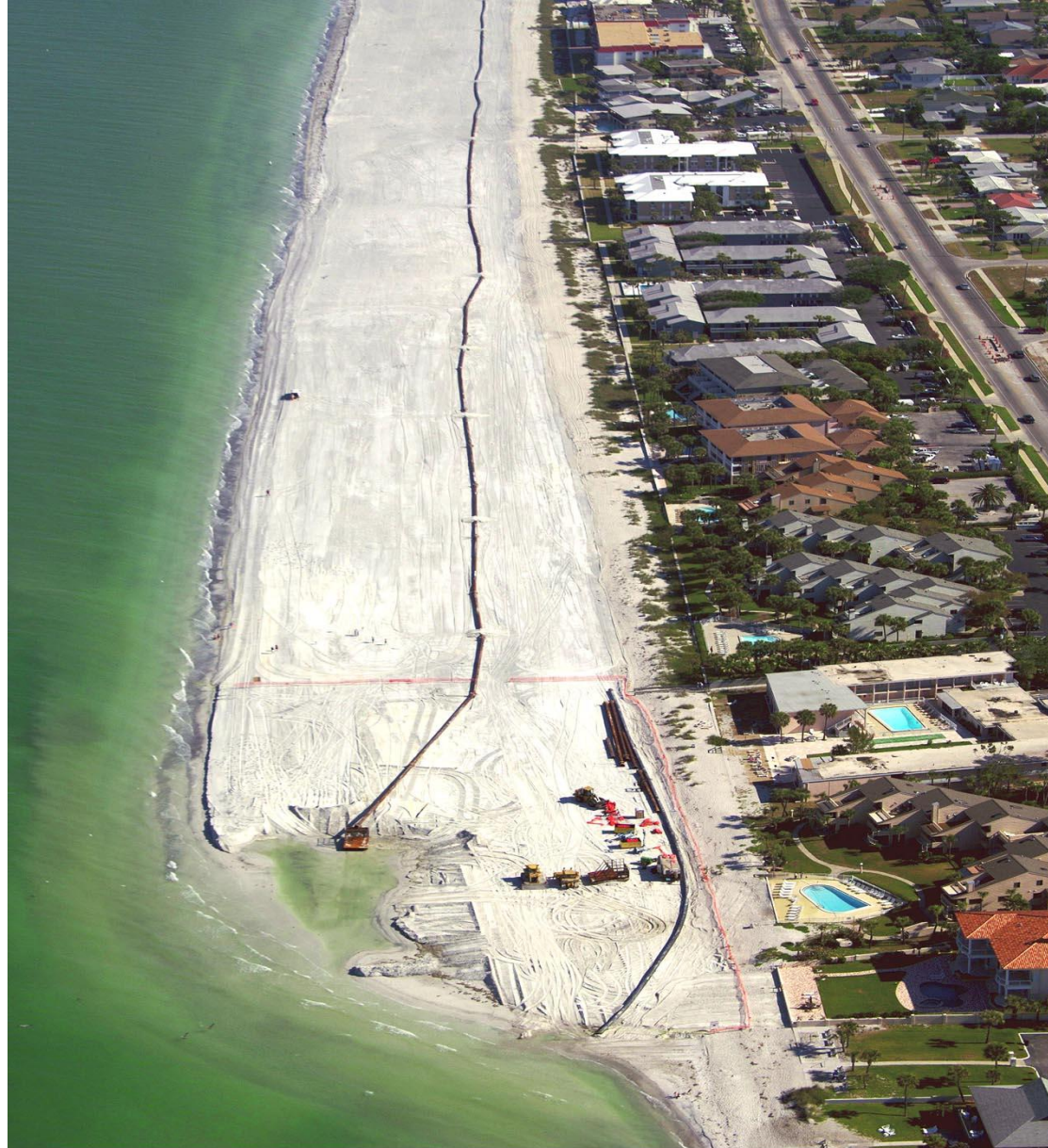












727.520.8181  
www.aerophoto.com

**Belleair Beach - Pinellas County Shore Protection**

Negative # 60407 768  
Date 04.07.06





727.520.8181  
[www.aerophoto.com](http://www.aerophoto.com)

## Belleair Beach - Pinellas County Shore Protection

Negative # 60908 026  
Date 09.08.06

2/23/2012

Sand Key Beach Renourishment 2011

26













# Questions ???