

# Florida Department of Environmental Protection



Division of Water Resource Management

## St. Augustine Port, Waterway & Beach District

### St. Augustine Inlet 2013 draft Inlet Management Plan

March 19, 2013





# Discussion Outline

- Florida Statutes
- Florida Inlets
- St. Augustine Inlet Management 1998 - 2012
- Inlet Management Study 2009 - 2012
- 2013 draft Inlet Management Plan



# Florida Statutes

- Section 161.142, F.S.
  - Legislature's Declaration of Public Policy relating to Improved Navigation Inlets
- Section 161.143, F.S.
  - Inlet Management: Planning, Funding & Implementing Projects to mitigate inlet impacts



# Florida Statutes

- 161.142(1), F.S.
  - Beach Placement of maintenance dredge material
- 161.142(2), F.S.
  - Inlet Bypassing Objective to replace sand
- 161.142(6), F.S.
  - Responsible Entities



# Florida Statutes

- Section 161.143(1), F.S.
  - Project Activities supported by approved plans
  
- Section 161.143(2), F.S.
  - Funding of Inlet Management Projects



# Florida Inlets

- Twenty-one East Coast Inlets
  - Fourteen with adopted Inlet Management Plans
- Inlet Sand Bypassing Objectives:
  - St. Mary's River Entrance 554,000 cy/yr
  - Ponce de Leon Inlet 43,000 cy/yr
  - Canaveral Inlet 156,000 cy/yr
  - Sebastian Inlet 90,000 cy/yr
  - Fort Pierce Inlet 130,000 cy/yr
  - St. Lucie Inlet 185,000 cy/yr



# St. Augustine Inlet

- 1998 adopted Inlet Management Plan
  - based on 1997 Taylor Engineering study
- Strategies
  - Average annual bypassing objective
    - 510,000 cubic yards (Ebb Shoal, Channels & Interior shoals)
  - Restore downdrift beaches and dunes
    - St. Johns County Shore Protection Project
    - Anastasia State Park dune restoration
  - Federal study of inlet structures
  - Comprehensive Monitoring Plan



# St. Augustine Inlet

## Placement Locations & Volumes South of Inlet

Date	Location	Quantity (cu yd)
1999 Navigation	R135-R138	241,000
2000 Navigation	R124-R133	177,000
2001-03 Shore Protection	R132-R151	3,745,000
2003 Navigation	R124-R151	383,000
2005 Shore Protection	R137a-R151	2,790,000
2005 Navigation	R132-R137	205,000
2012 Shore Protection	R139-R151	2,100,000 est.
2012 Navigation	R136-R139	122,000
	<b>TOTAL</b>	<b>9,763,000 cu yd</b>
Equivalent Rate of Bypassing from 1998-2012 (15 yrs)	651,000 cu yd/year	



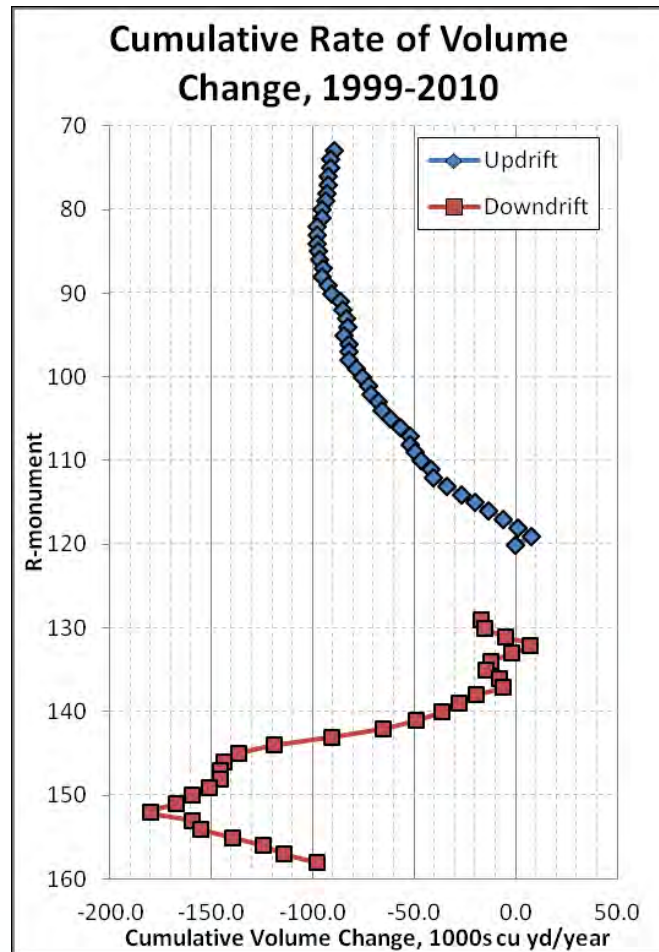
# Inlet Management Study



**USACE,  
2012**



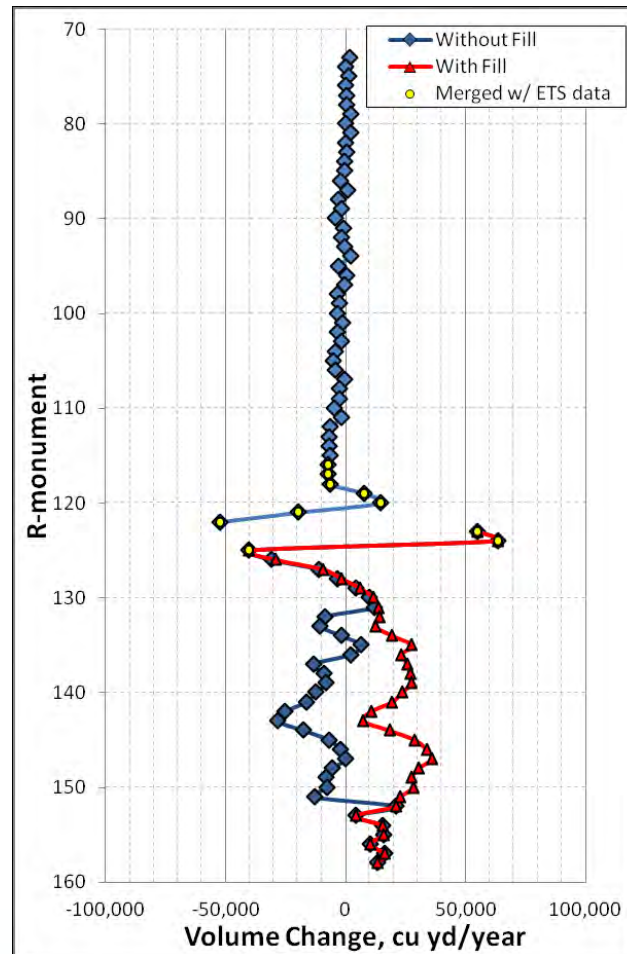
# Inlet Management Study



**USACE, 2012**



# Inlet Management Study



USACE, 2012

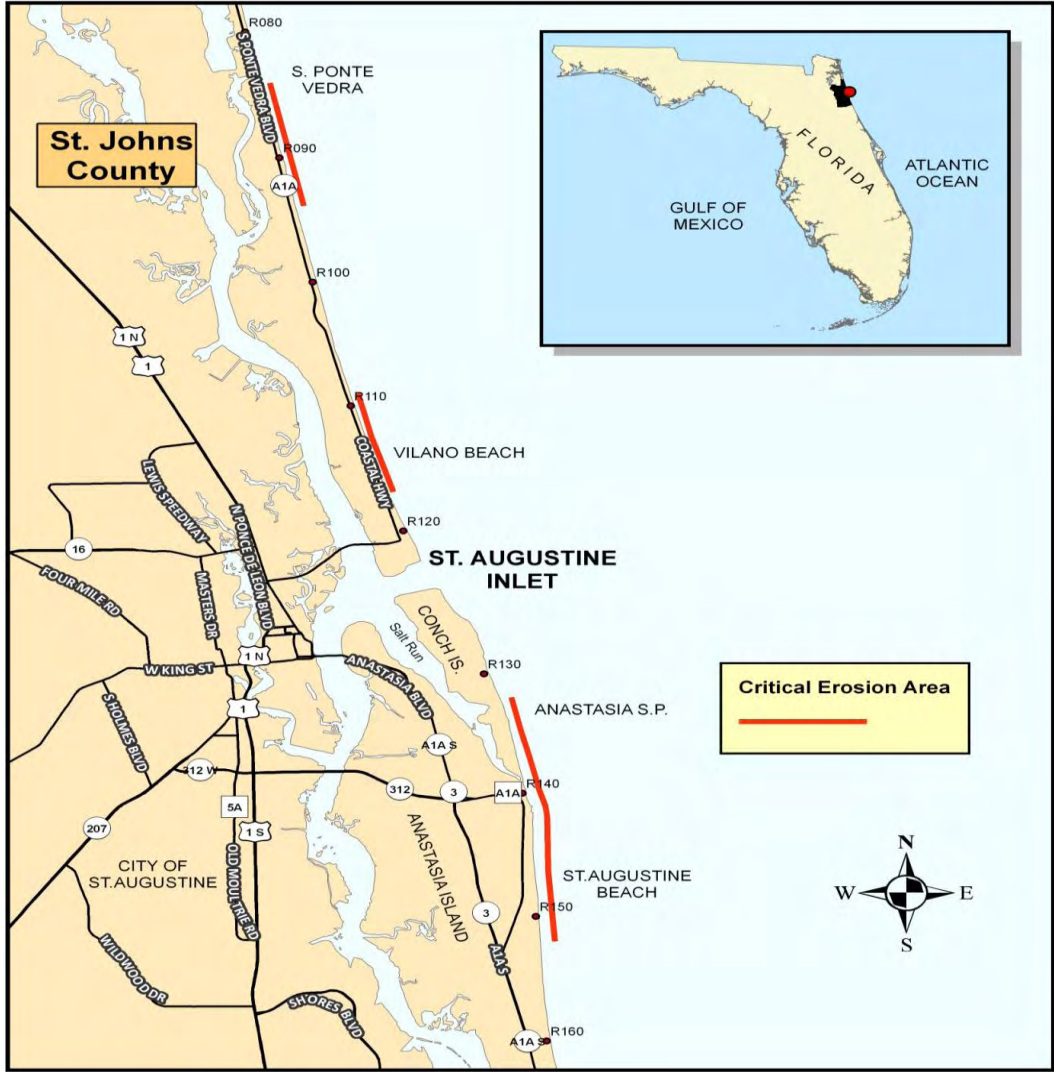


# 2013 draft Inlet Management Plan



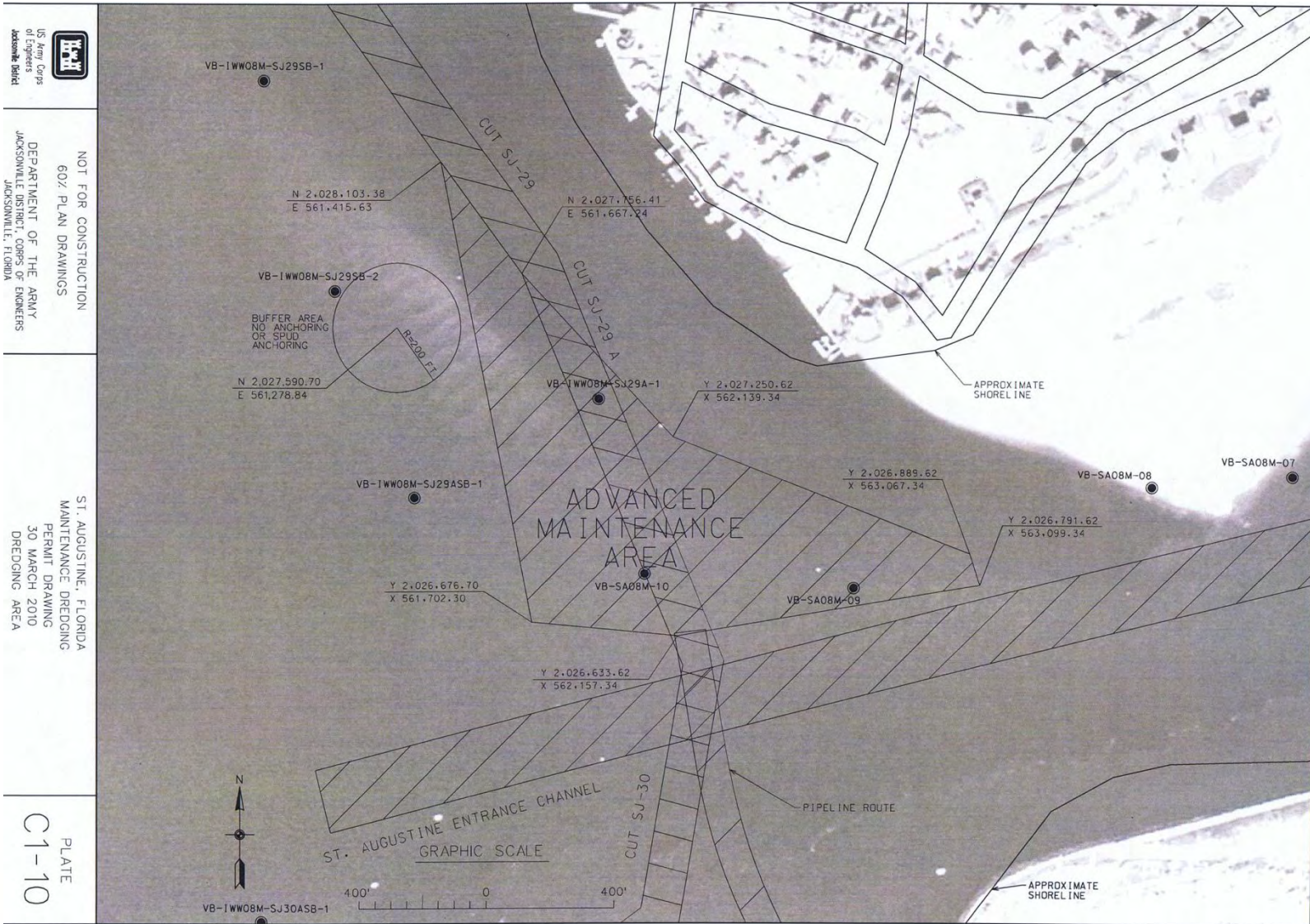


# 2013 draft Inlet Management Plan





# 2013 draft Inlet Management Plan





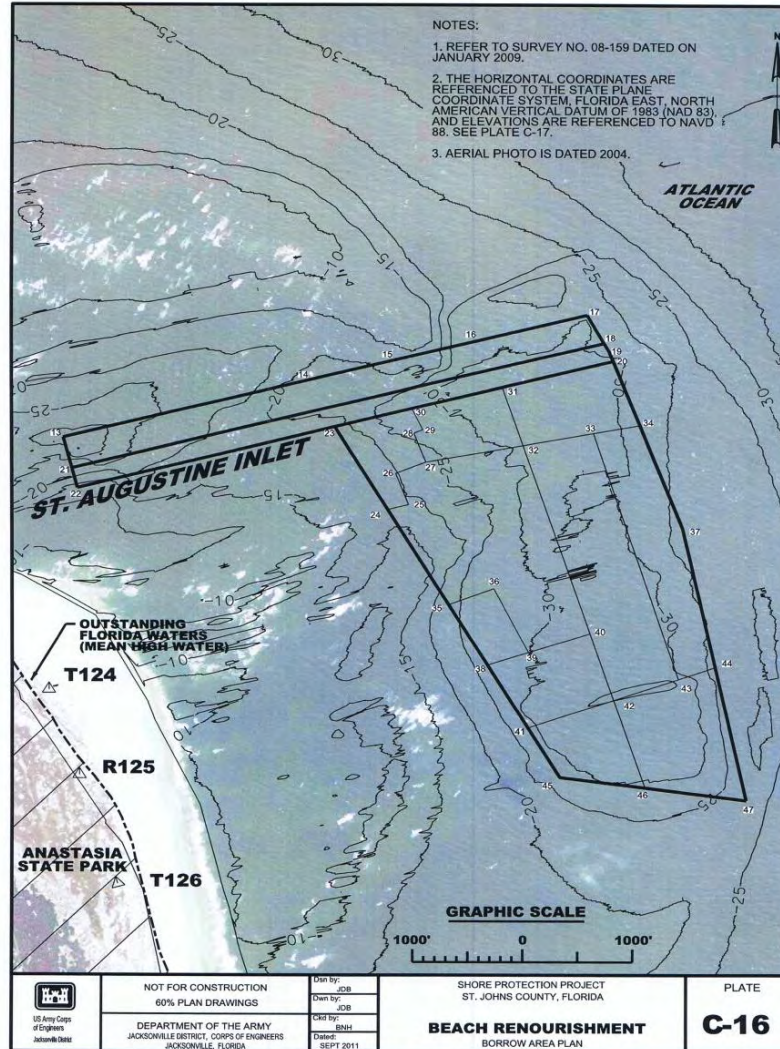
# 2013 draft Inlet Management Plan



Photo date 2006

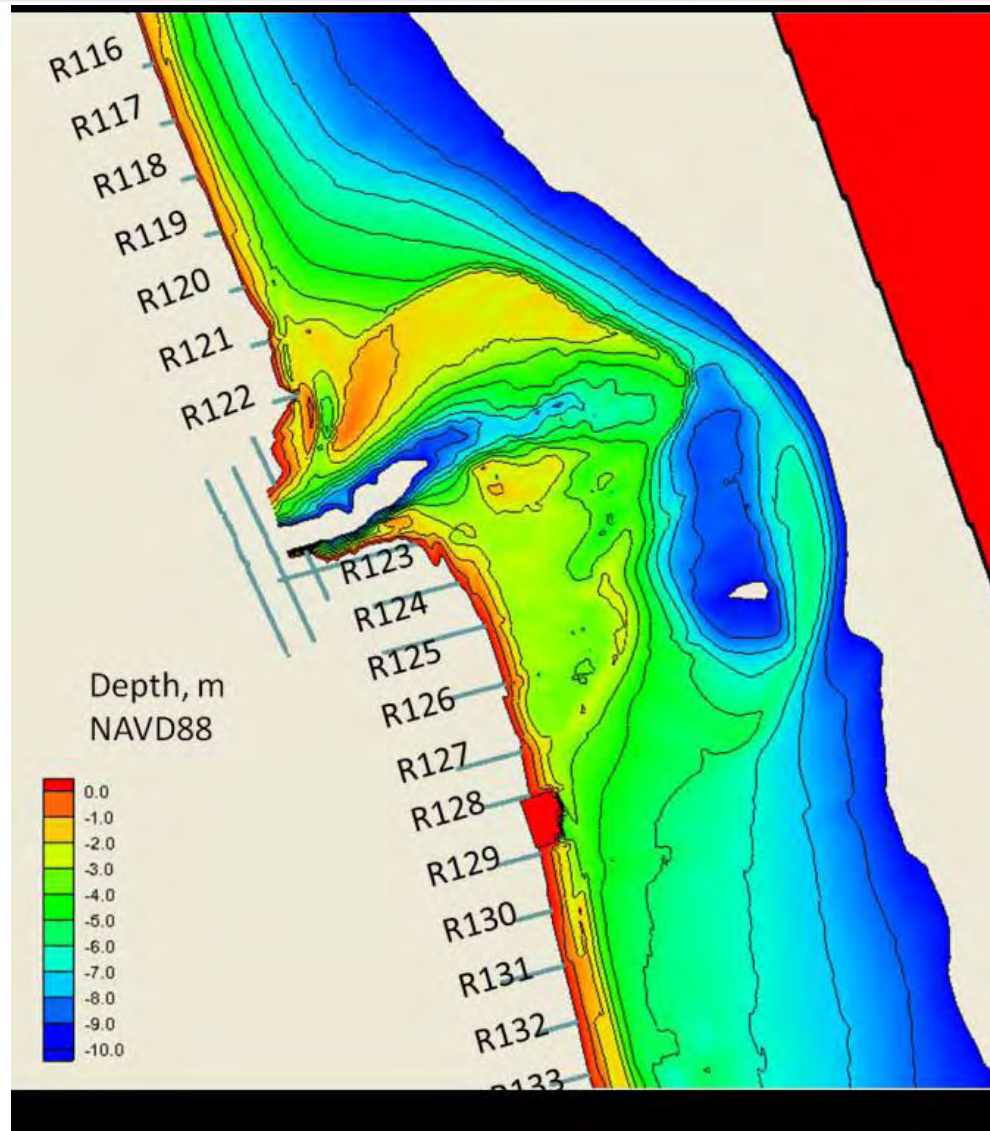


# 2013 draft Inlet Management Plan



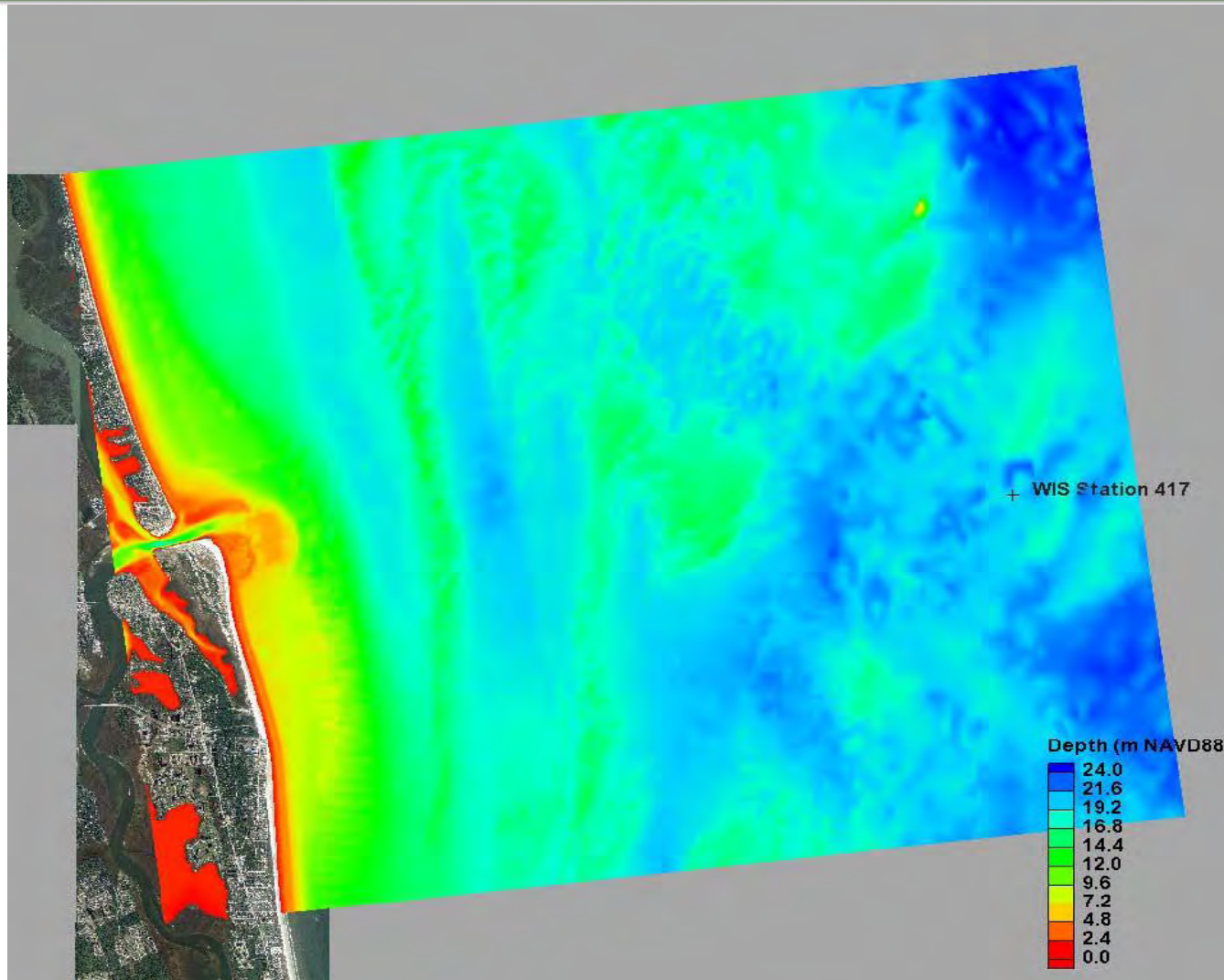


# 2013 draft Inlet Management Plan



**2010 Survey**

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2007 Offshore Bathymetry (PBS&J, 2009)

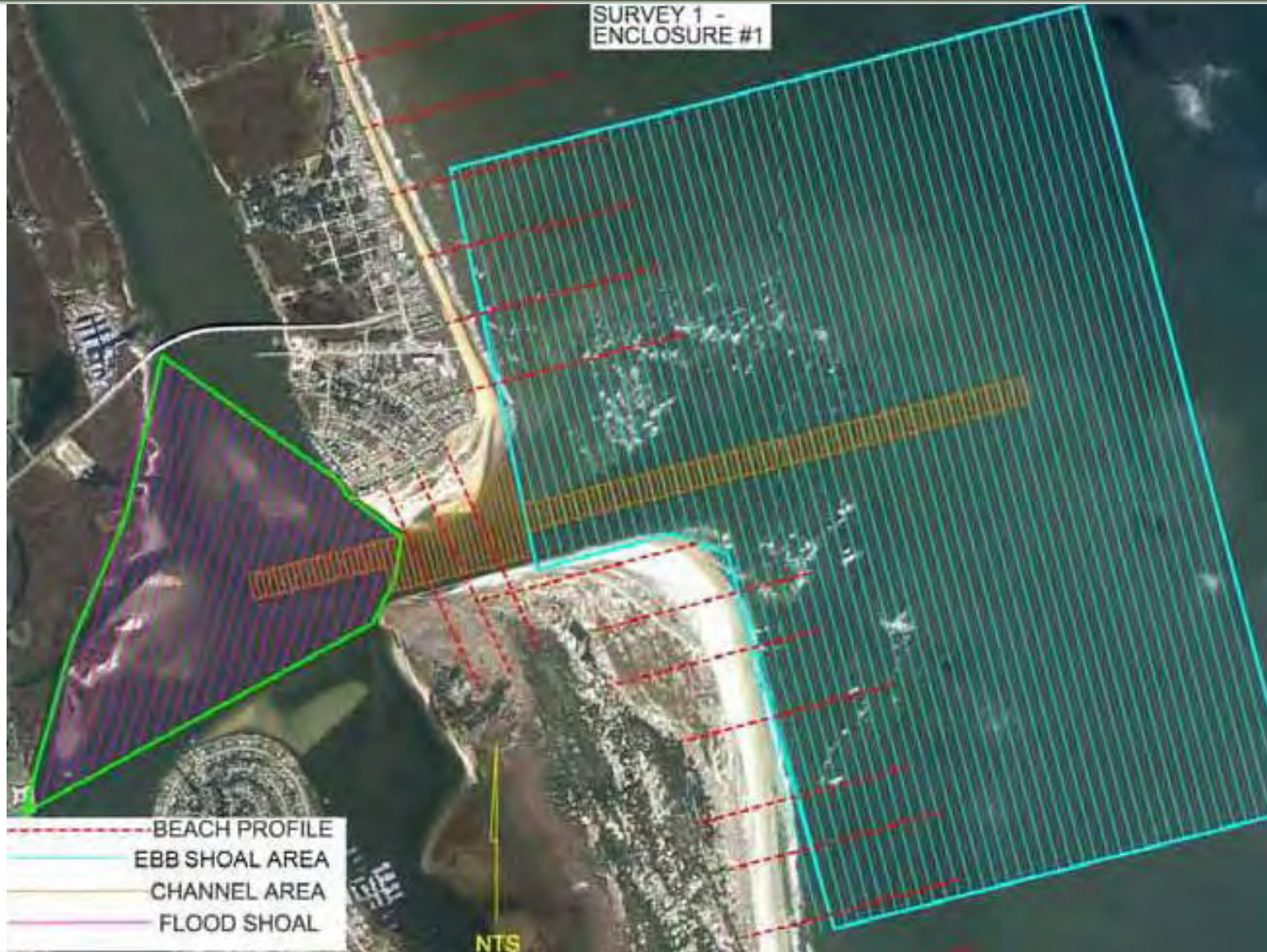


# 2013 draft Inlet Management Plan



Photo date 2005

# 2013 draft Inlet Management Plan





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## Inlet Sediment Budget Update

At least five (5) year period of monitoring data completed at least two years prior to scheduled SPP beach nourishment.

Planned beach nourishment in 2017 will use 2013 Inlet Sediment Budget



# Contacts

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