



Pensacola Bay Living Shoreline Project Community Meeting

PENSACOLA, FLORIDA



**The Deepwater Horizon
Oil Spill Trustees**

JULY 18, 2016

DWH Oil Spill

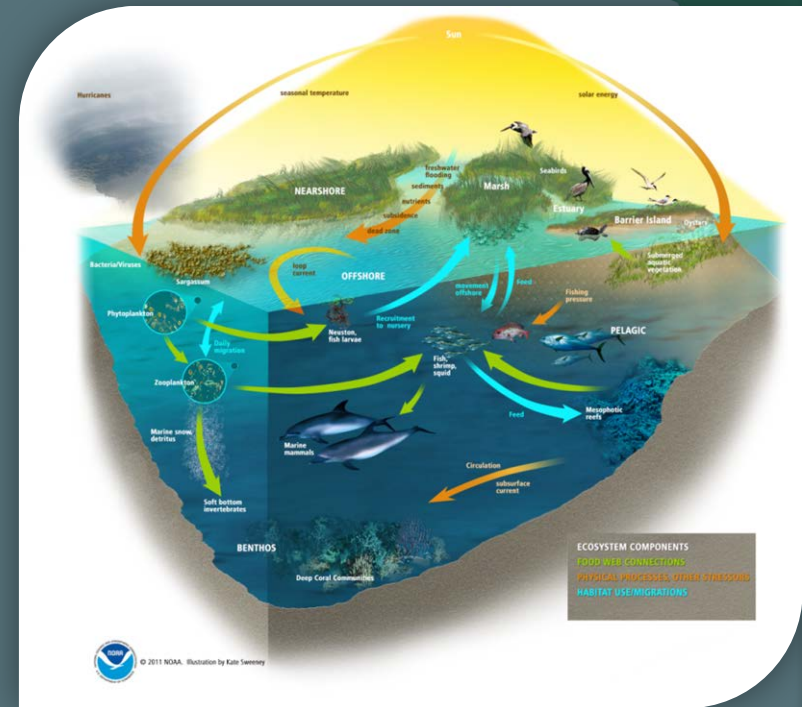
- Largest offshore oil spill in our nation's history.
- More than 1,300 miles of shoreline fouled by oil.
- Oil slicks were observed cumulatively across 43,300 square miles.



Oil Pollution Act of 1990- NRDA Objective: To make the environment and public whole for injuries to natural resources and services resulting from an incident involving a discharge or substantial threat of discharge of oil.

DWH Restoration

- 15+ years, up to \$8.8 billion
 - \$1 billion already committed for early restoration
 - \$7.1 billion to complete restoration over 15+ years
 - Up to an additional \$700 million for adaptive management and unknown conditions

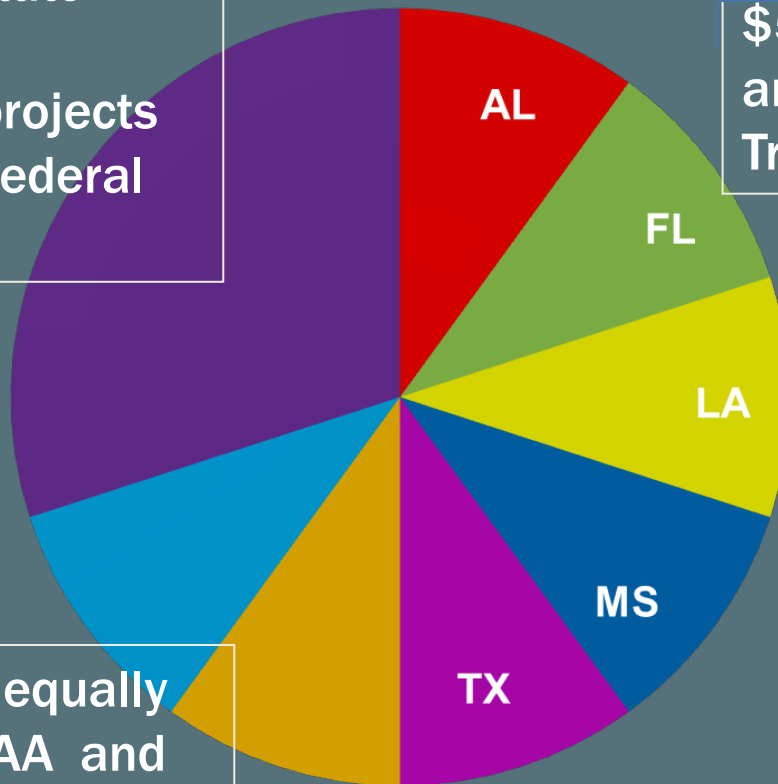


www.gulfspillrestoration.noaa.gov/

Early Restoration \$1 Billion

\$300M for state sponsored restoration projects selected by federal trustees

\$500M split equally among Gulf State Trustees



\$200M split equally between NOAA and DOI

Prior to the BP settlement in 2016, the Trustees released Early Restoration plans for Phases I-V.

Phase III: Early Restoration

Pensacola Bay Living Shoreline Project

Goals

- 18.8 acres of salt marsh habitat
- 4 acres of oyster reef habitat

Two sites

- Sanders Beach
- Project GreenShores Site II (PGS II)
- City of Pensacola owned submerged lands



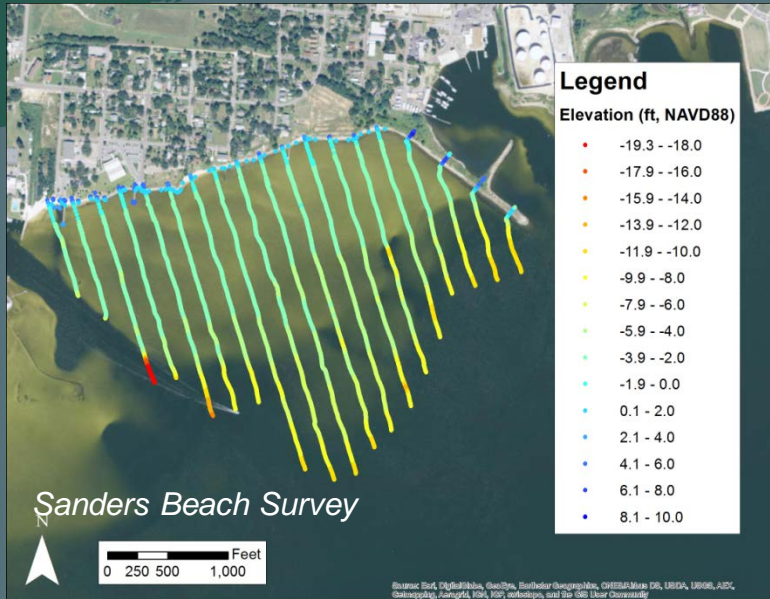
Project Development Process

- Sept 2013: Pensacola workshop for input on living shoreline project at Project GreenShores Site II and Sanders Beach.
- Dec 2013- Feb 2014: DWH Trustees public comment period on Phase III Early Restoration Plan, including proposed Pensacola Bay Living Shoreline Project. Pensacola public meeting held on Feb. 3rd.
- June- Oct 2014: Phase III Early Restoration Plan finalized.
- April 2015: HDR contracted to conduct engineering studies and project design.
- May 2015- June 2016: community discussions continued, pre-design investigations conducted, and conceptual project design and layout developed.

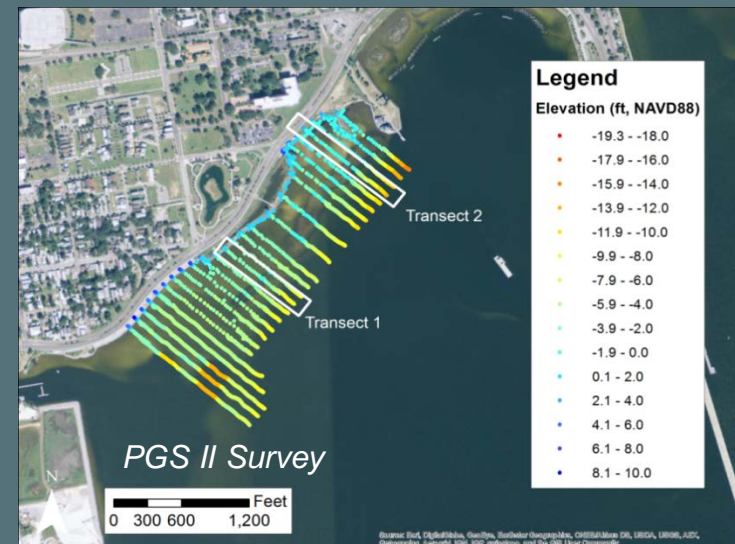
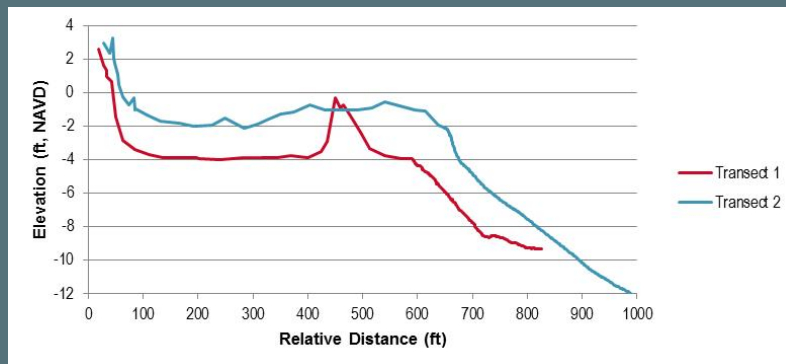
Community Workshop Overview

- This is not another comment period meeting.
- The project team is here to answer your questions and hear your input.
- Following presentation of project studies and the conceptual designs, please view the displays, ask questions, and talk with our project team members in the back of the room.
- If you prefer to write down your input for our team, we have index cards, however, we will not provide written responses.

Pre-Design Investigations



- Bathymetric survey data
- Sanders bay bottom approx. -2 ft to -4 ft NAVD before sloping into bay
- PGS II includes previously constructed submerged wide-crested breakwaters



Pre-Design Investigations



PGS II
SUBMERGED AQUATIC VEGETATION
EXISTING MARSH AREAS

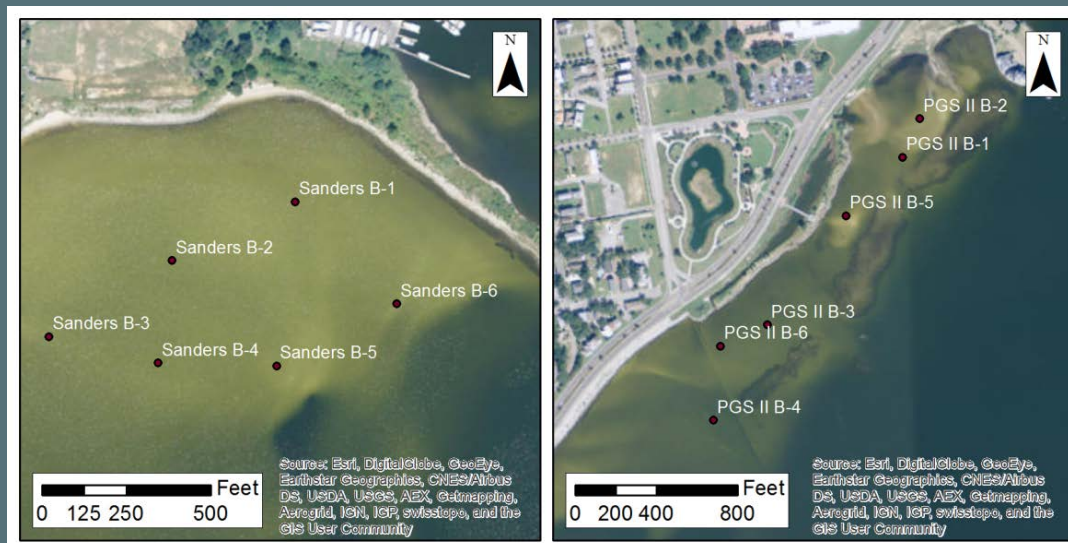
SUBMERGED AQUATIC VEGETATION

- Seagrass and Marsh Surveys
 - No seagrass in proposed living shoreline areas
 - Reference marsh surveyed
- No oil and gas pipelines identified
 - Two abandoned outfalls from former water treatment facility at PGSII
- No known oyster leases
- Determined property ownership within and adjacent to project areas

Pre-Design Investigations

Geotechnical data

- Assessment of subsurface material, slope stability and bearing capacity, and settlement potential
- Sanders Beach - fine, poorly graded sands to depths 10' to 18'
- PGS II - fine to medium, poorly graded sand with some sand and silt throughout



Geotechnical Boring Locations

Pre-Design Investigations

Cultural Resources

- Marine archeological investigations conducted include research, surveys, and dives to assess submerged resources.
- Florida State Historic Preservation Office (SHPO) agreed with determination that living shoreline areas do not contain eligible historic resources.

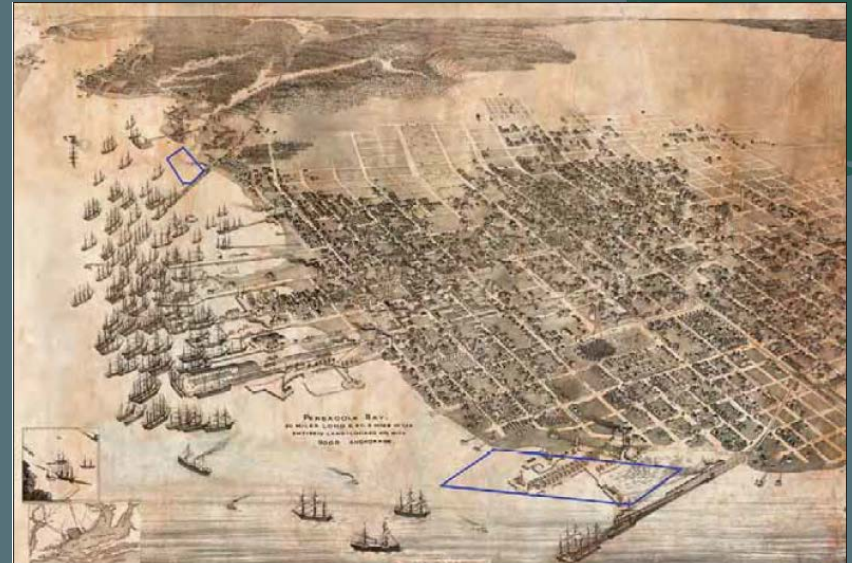


Figure 13. 1896 bird's eye view of Pensacola showing the approximate location of the Pensacola Bay Living Shoreline APE.

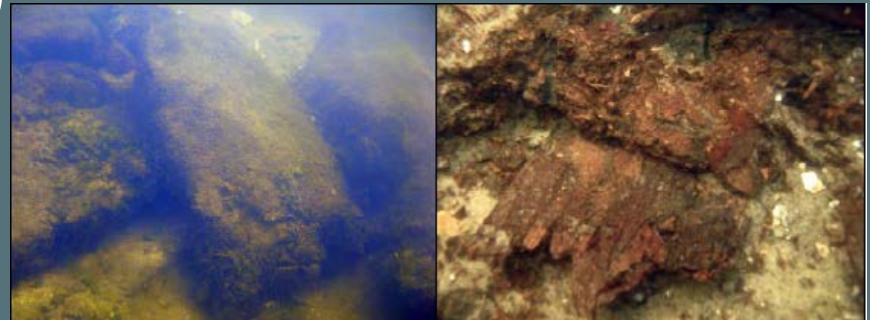
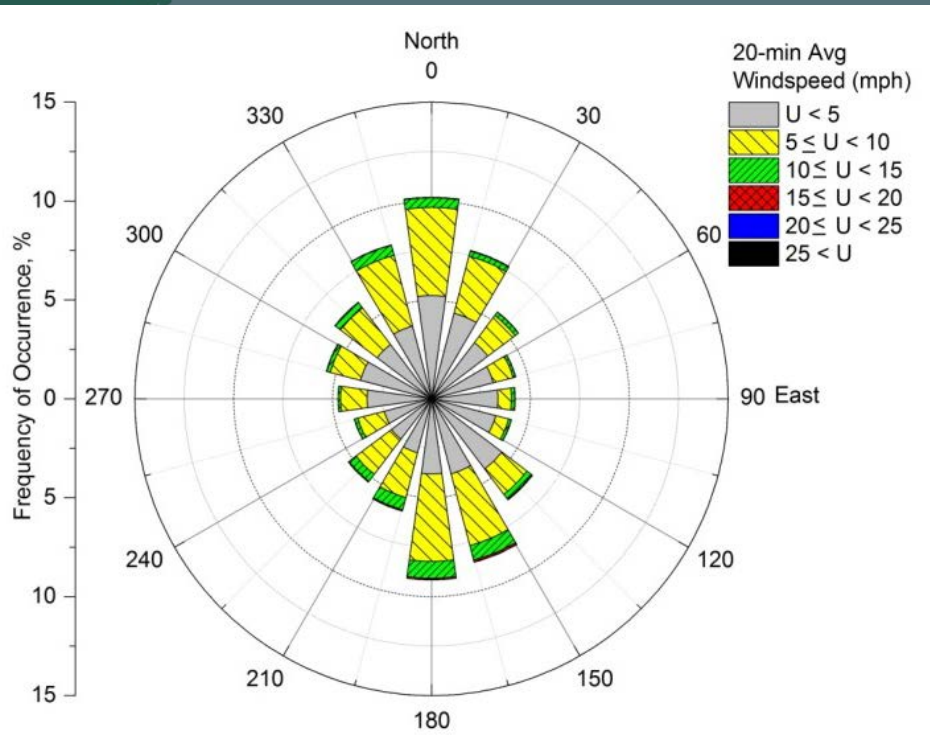


Figure 29. Ballast stone (left) and pine bark (right) from Sonar Feature 03, Muscogee Wharf Area.

Pre-Design Investigations



- Meteorological and oceanographic data
 - Winds
 - Tides
 - Waves
- Storm Conditions
 - Storm wind speeds
 - Surge and return intervals
 - Modeled wave data

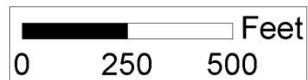
Preliminary Project Design

- Evaluated project goals, site characteristics, current uses, and public comments received from Phase III process.
- Utilized surveys, investigations, and wind and wave information to develop the preliminary design.
- Assessed requirements for breakwater performance, materials, and dimensions.
- Evaluated performance of existing reef structures.
- Assessed requirements for healthy marsh habitat– layout provides suitable elevation and water flow within marsh.

Sanders Beach Layout



Sanders Beach Preliminary Layout



Legend

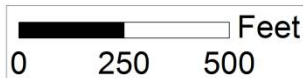
Type

- Breakwater (1,900 Linear Feet, 2.4 Acres)
- Salt Marsh Habitat (17.8 Acres)

PGS II Layout






Project GreenShores Site II
Preliminary Layout

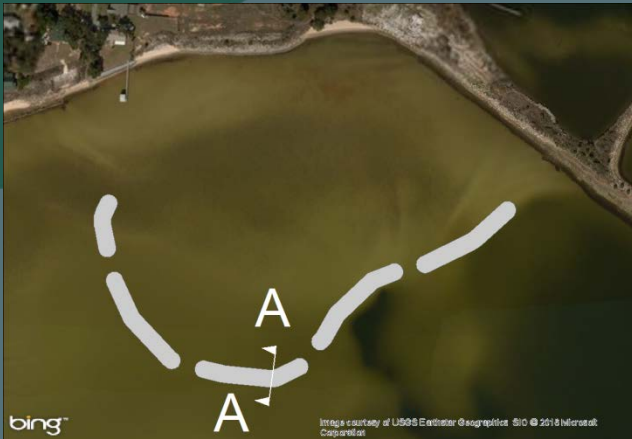


Legend

Type

-  Breakwater (645 Linear Feet, 0.8 Acres)
-  Low-Crested Breakwater (725 Linear Feet, 1.9 Acres)
-  Salt Marsh Habitat (1.1 Acres)

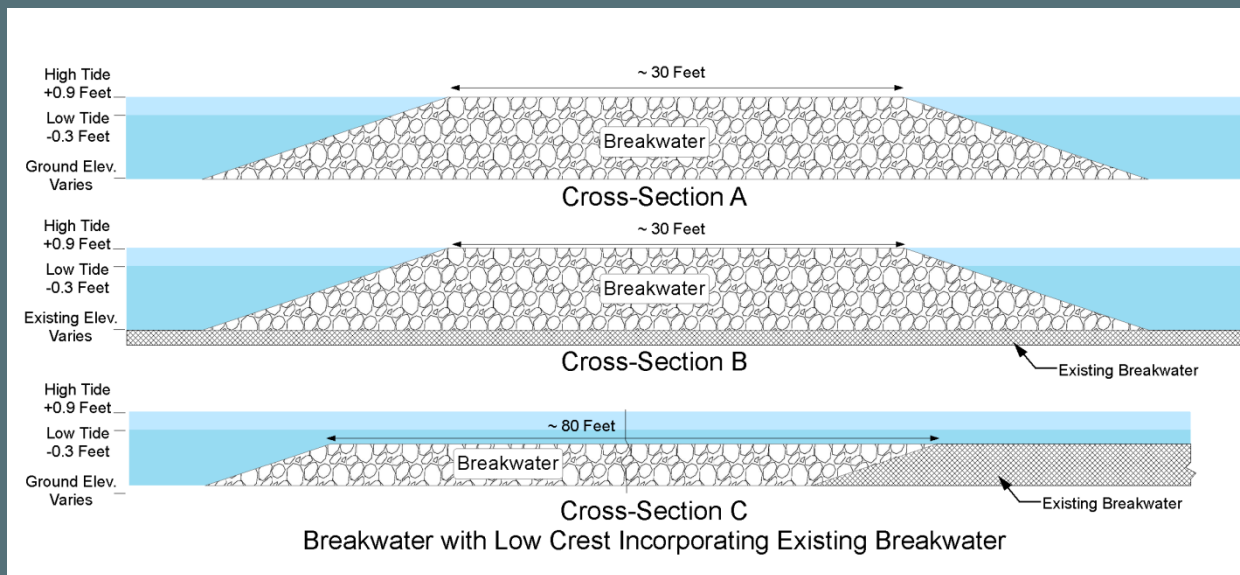
Cross-Sections



Sanders Beach



Project GreenShores II



Upcoming Work

- Review of input received tonight
- Surveys and testing of sediment source areas to build marsh habitat
- Biological surveys
- Complete detailed design
- Permitting process
- Construction Phase – Late 2017

For more information

Project Website:

<http://www.gulfspillrestoration.noaa.gov/florida-pensacola-bay-living-shoreline-project>

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