Lighter, F. stand, P. Grahmay, One. semilarity, W. white B. sod, AD. editorization for genuine, income on models, with research, and anomalie, no every, vix of Color while underse software/see indicated. Bargue G. one, M. tenes, S. spoor, C. G. Cased Interface.

mark, S. annel, S. general, Dr. shalls, P. publiker, Sy. specific, G. elege, B. stream, Go coverd, On some Standards vehices of send of collarse age group, Inc. Son. Adv. davk, R. Soft, ga, genes, the Innerse, A load of send the diverse of control of collarse college and collarse held below.

Pensacola Bay Living Shoreline Project

White Island NAS Eastern Shore Sherman Inlet

Note: Presentation given by Escambia County at a February 25, 2019 Davenport Bayou / Star Lake neighborhood meeting. The purpose of The meeting was to obtain additional input from local stakeholders prior to developing the conceptual project design. Escambia County's participation was at the request of meeting organizers.



What is a Living Shoreline?

"Living shorelines" are a different approach to shoreline stabilization patterned on the natural environment. Projects replace typical shoreline armoring such as bulkheads, seawalls, and riprap by incorporating natural materials such as oyster reefs, emergent marsh vegetation, submerged aquatic vegetation, and sand or other substrate.

Typical Living Shoreline Project Benefits

- Water Quality Improvement
- Riparian Habitat Protection or Enhancement
- Fisheries Habitat Creation or Enhancement
- Maintenance of Other Important Functions Provided by Natural Shoreline Ecosystems (e.g. sediment capture, nutrient cycling, biodiversity, wave attenuation, etc.)
- Shoreline Stabilization
- Recreational Opportunities (e.g. fishing, bird watching, etc.)



Typical Shoreline Stabilization





Design, permitting, and construction of a Large-scale, multi-phase, living shoreline project (White Island, NAS East Shore, and Sherman Inlet)

- Construction of 24,800 linear feet of rock and oyster reef breakwater
- Creation of 205 acres of emergent marsh and submerged aquatic vegetation (SAV) habitat

Project Goals...

- Restore, enhance, and protect fish & wildlife habitat
- Restore, improve, and protect water resources
- Protect and restore living coastal and marine resources
- Restore and enhance natural processes and shorelines
- Promote community resilience

Project Locations



Project Funding...

Design, Engineering, & Permitting

- Gulf Coast Ecosystem Restoration Council Grant (RESTORE Pot 2)
- Florida Defense Infrastructure Grant

Construction & Project Implementation

- Not secured yet, but...
- GCERC Funded Priorities List cycle 3 is a likely source
- White Island already identified as GCERC FPL Tier II project

Project Timeline...

Gulf Oil Spill (2010)

- Project selection for GCERC Funded Priorities List (2015)
- Execution of funding agreement between GCERC & Florida Department of Environmental Protection (2016)
- Execution of funding agreement between FDEP & Escambia County (2017)
- Project Scope Development & Selection of Design Firm (2017/2018)
- Public Involvement (2018/2019)
- Design, Engineering, & Permitting (2019)
- Secure funding for construction (2019)
- Construction (TBD)



SOUTH COAST ENGINEERS

Engineering for the Coast





Volkert, Inc. (Prime)



- South Coast Engineering (Coastal Engineering)
- Moffatt & Nichol (Planning & Monitoring)
- McKim & Creed (fka Jehle-Halstead, Inc.) (Survey & Stormwater Modeling)
- Rowe Engineering & Surveying, Inc.(Bathymetric Survey)
- Southern Earth Sciences, Inc. (Geotechnical Engineering)







moffatt & nichol

Stakeholder Input

Structured

Unstructured







1. Were you already aware of this project prior to learning about this meeting?

2. Have you taken the online county survey?

myescambia.com/open-government/projects/project-details/nas-pensacola-bay-living-shoreline-project





- 3. Which of the three project sites is of most interest to you?
- 4. Which of the three project sites is of least interest to you?





White Island Project Site

- What do you currently enjoy <u>most</u> about White Island?
 Pick two:
 - A) Birding
 B) Fishing
 C) Boating
 D) Swimming / Snorkeling
 E) Canoeing / Kayaking
 F) Camping
 G) Sunbathing / Reading
 H) Scenic View



White Island Project Site

6. What are the most important aspects of the proposed project?

Pick two:

A) Recreational Opportunities
B) Fish & Wildlife Habitat
C) Aesthetics / Scenic View
D) Water Quality

E) Shoreline ProtectionF) Public SafetyG) Dredging*

White Island Project Site

7. Could the project still be considered a success if only your top priority is <u>not</u> addressed to your satisfaction?

A) Recreational Opportunities **B) Fish & Wildlife Habitat C)** Aesthetics / Scenic View **D) Water Quality E) Shoreline Protection** F) Public Safety G) Dredging*



"I spent years on the Road To Success, but I was driving in the wrong direction."

Offshore Breakwater

Most living shoreline projects include an offshore breakwater component. Breakwaters provide fish & wildlife habitat, but just as importantly, breakwaters serve to create calm conditions necessary to create stable conditions necessary to protect exis/fing resources and establish submerged and emergent vegetation.





8. Do you support the construction of an offshore breakwater for the White Island project site if required to assure project success?





Project will <u>not</u> include "dredging," but additional sandy substrate <u>may</u> be required in order to construct certain aspects of the design.

If necessary, project will evaluate potential sources of sandy substrate.

Recovery of sandy substrate in support of project implementation



9. Do you support recovery of sandy substrate if required for this project?



"dredging"

J??

Open Discussion for Questions or Comments



Matt Posner, RESTORE Program Manager Natural Resources Management Department (850) 595-0820 mjposner@myescambia.com

brent wipf, Division Manager Natural Resources Management Department (850) 595-3445 bawipf@myescambia.com