# Response to Public Input for 30% Design, Pensacola Bay Living Shoreline Project

# **Background and Context**

The Pensacola Bay Living Shoreline project is a multi-phase, multi-stakeholder project to restore and protect approximately three (3) miles of shoreline in Pensacola, FL at three (3) different sites: White Island (Site A), NAS Eastern Shore (Site B) and NAS Sherman Inlet (Site C).

The planning, engineering design, environmental compliance, and regulatory permitting for this living shoreline project are being managed by Escambia County with funds from two grants. One grant is linked to the RESTORE Act of 2012 and the other is a State of Florida Department of Economic Opportunity Defense Infrastructure Grant Agreement. Project partners include the Florida Department of Environmental Protection (FDEP), Escambia County, and the Pensacola Naval Air Station.

Volkert, Inc. was selected as the project engineer in 2018.

Stakeholder input from surveys, public involvement meetings and other venues informed both the conceptual designs for the project as well as the 30% Designs, which were completed in August, 2020.

## **Response to Comments, 30% Design Phase**

On August 18, 2020, Escambia County and the project team made available a prerecorded slide presentation to present the 30% design drawings and next steps for the Pensacola Bay Living Shoreline project. Public Input on the designs were accepted until September 27, 2020. Escambia County appreciates the feedback received and has categorized input based on the nature of the comment, and responses from Escambia County and the project team were compiled similarly. Note: The 30% designs were developed and input received prior to Hurricane Sally, which significantly altered conditions at all 3 project sites. Response to comments are based on the feedback received on current designs, but the project team recognizes that additional adjustments may be needed based on post-hurricane site conditions.

# Use of Sediment Sources As Fill Material (White Island)

### Summary of Comments:

- Four (4) commenters expressed support for the utilization of existing potential sources of sediment from nearby areas for White Island (Site A), including at Bayou Grande and Bayou Davenport.
- One commenter noted that dredging Bayou Davenport as a sediment source could provide a secondary benefit to water quality.
- > One commenter expressed opposition to utilizing upland sand sources for the project.
- One commenter expressed a desire to utilize sand from the west side of White Island to the east side of the Island.

One commenter expressed concern about the potential for project sand to wash over into Bayou Davenport, resulting in impeded flow and water quality concerns.

### Response:

Construction of project features such as shoreline nourishment and marsh establishment will require substantial amounts of fill material which must be obtained from appropriate borrow sites. Required quantities of material for all three sites may range from 500,000 to 1,000,000 cubic yards depending on the specific final design features. Potential sources of fill materials under consideration include locations near the project sites as well as upland sites.

No decisions have been made regarding site locations for borrow material, as additional testing and data collection activities will need to occur. Additional data needs include updated topographic/bathymetric surveys and additional geotechnical work to determine the adequacy of potential borrow sites. If the additional information indicates these sites cannot provide sufficient quantities of suitable material then the project site design may need to be adjusted or additional borrow sites must be identified. Initial geotechnical investigations to indicate that borrow material around White Island may be a viable source from a materials perspective.

All fill material would be subjected to testing for physical and chemical characteristics to determine suitability as required by the US Army Corps of Engineers (USACE) and FDEP permitting process.

### **Recreational/Public Access at White Island**

#### **Summary of Comments:**

- A number of commenters expressed general support for the project, with specific comments related to preserving recreational access at the White Island Site (Site A).
- > Three (3) commenters voiced support for maintaining public access.
- Two commenters expressed concerns that the project would result in the conversion of the island from beach and dune to marsh habitat, which was perceived as a detriment to recreational use of White Island, with one commenter expressing opposition to the project for this reason. In a related comment, one commenter suggested the use of submerged aquatic vegetation as well as emergent grasses at White Island, to support the preservation of recreational access.

#### Response:

Based on previous public input, efforts were made in the design process to create a stable project area to provide both significant habitat benefits as well as the preservation of managed recreational access to the site. The selected design alternative for White Island includes approximately 46 acres of intertidal marsh and 17 acres of sandy shoreline and upland habitat, stabilized using 4170 feet of reef/breakwater structures. In this concept, White Island is enhanced/restored in its present-day location (note: 30% designs were completed prior to Hurricane Sally and may need refinement to account for recent changes) and the intertidal marsh complex is constructed to the east. The western-most extent of the restored White Island would be just slightly west of its present-day location but expanded eastward to approximately the location of the old railroad embankment. A small tidal channel would separate a restored White Island from an expanded Rock Island. White Island would consist mainly of beach, dune, and upland habitat with minimal marsh fringe. The expanded Rock Island would be primarily marsh habitat. No structures are proposed for stabilizing White Island or Rock Island. However, a mixture of low-elevation rock breakwaters, rock piles, and subtidal rock reefs would be constructed to serve as finfish habitat and wave attenuation for the new intertidal marsh complex.

The sand fill used to reestablish White Island will create a suitable island volume, conditions for different vegetation types, and dune features on the island's interior. Pathways will separate these constructed dune features to accommodate recreational uses and access. White Island would be accessible from all sides by shallow draft water craft. Also, small tidal creeks separate marsh cells, providing the necessary tidal drainage, increasing the length of marsh edge, and offering managed access opportunities for kayaks and stand-up paddleboards: additional opportunities for recreation that are not currently present at the site. It should be noted that White Island has had, and still has to a lesser degree, some intertidal marsh fringe habitat. These types of habitats would be recreated in a few places on White Island, but most of the island will be sandy beach and dune habitat with salt tolerant dune grass species.

## **Other Comments Received**

**Comment:** One commenter expressed support for prioritizing the Sherman Inlet and NAS Eastern Shore Sites.

**Response:** Escambia County is actively seeking funding for the construction elements at all three sites. Sequencing of construction activities will depend on the availability and authorized uses for grant or other funding sources.

**Comment:** One comment was received that suggested that all rock materials at the White Island site be submerged to reduce the potential for bird pollution. A second commenter stated that the rocks should be used as depicted in the design documents, and that height should not be a critical factor.

**Response:** The size and orientation of the rocks that will be utilized in the project will be selected based on the site characteristics and project goals. For example, breakwaters will be designed to account for sea level rise over the life of the project and to provide wave attenuation benefits. Subtidal reefs will be submerged with dual goals of wave attenuation and habitat enhancement.

# Conclusion

Escambia County appreciates the input received to date, which will be incorporated into the project design moving forward. Next steps for the project include an assessment of any changes needed to the project elements based on the impacts from Hurricane Sally, the determination of sediment borrow sites, sediment transport and shoreline change modeling, hydrodynamic modeling, regulatory compliance and environmental permitting, and finalization of designs.

For more information on the project, visit www.myescambia.com or contact Matt Posner, RESTORE Program Manager at mjposner@myescambia.com.