



# West Grand Terre Beach Nourishment and Stabilization



## Project Scope & Elements

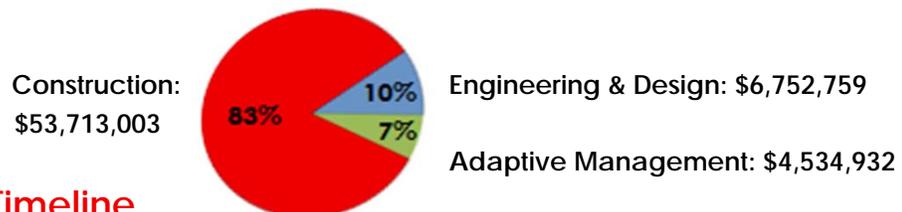
- ▶ The purpose of this project is to restore dune and back barrier marsh habitat on West Grand Terre to provide storm surge and wave attenuation.
- ▶ The project is needed to address gulf shoreline erosion, diminished protection against storm surge, and subsidence of back barrier marshes.
- ▶ The project is estimated to build 12,700 feet of beach and dune with an area of 235 acres using 2,175,000 cubic yards of material. Up to 66 acres of back barrier marsh will be restored using 575,000 cubic yards of material, and a rock revetment will be constructed to protect restored marsh.

## Ecosystem Outcomes & Economic Impacts

- ▶ Improved barrier island integrity will provide storm surge and wave attenuation which will reduce risk to infrastructure.
- ▶ Louisiana's barrier islands are used by threatened and endangered species including 5 species of sea turtles and piping plovers as nesting ground and critical habitat.<sup>1</sup> These islands also serve as importation breeding and nesting habitat for migratory and colonial birds including brown pelicans.<sup>2</sup>
- ▶ The Louisiana Gulf Coast ecosystem supports 14 wintering species of waterfowl and 75% of Louisiana's commercial fish and shellfish species.<sup>3</sup> Beach, dune, and back barrier marsh provide habitat for these commercially and recreationally important species.
- ▶ Sediment input into the barrier island system through dune building increases the resilience of the area to storm and wave impacts.
- ▶ Restoration of West Grand Terre will protect Fort Livingston State Commemorative Area, which was constructed in 1841 and is listed on the National Register of Historical Places.

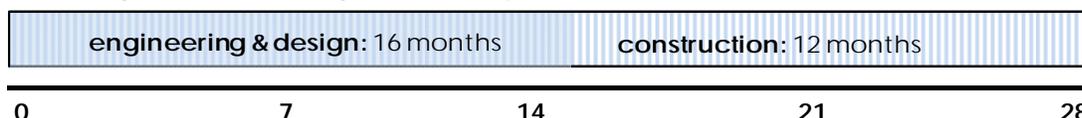
## Cost

**Estimated Total Cost** = **Estimated Project Cost** + **Adaptive Management**  
 \$65,000,694 = \$60,465,762 + \$4,534,932



## Implementation Timeline

- ▶ Contingent on funding availability.



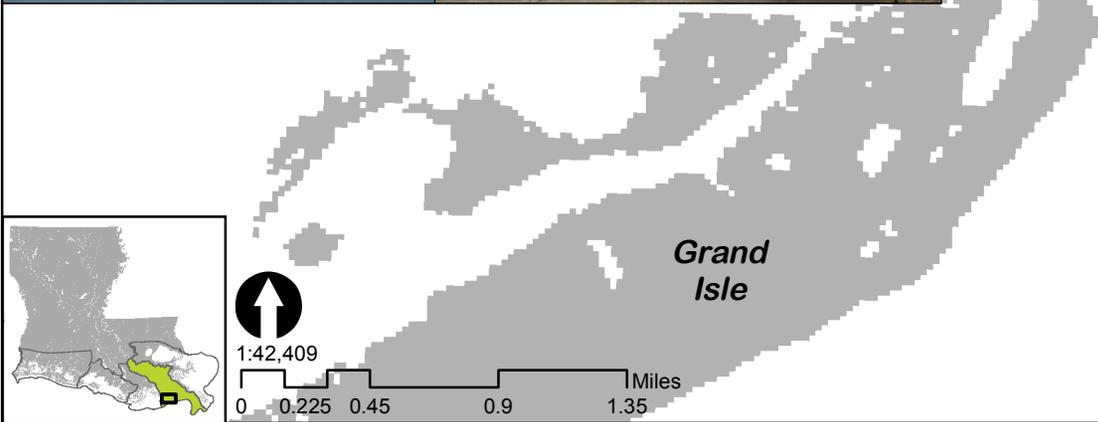
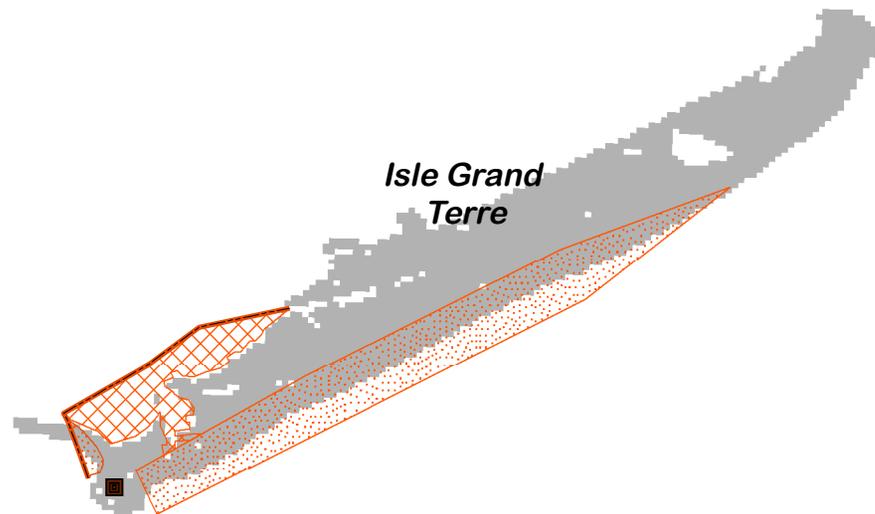
<sup>1</sup> USFWS 2013. [http://www.fws.gov/lafayette/pdf/LA\\_T&E\\_Species\\_List.pdf](http://www.fws.gov/lafayette/pdf/LA_T&E_Species_List.pdf)

<sup>2</sup> USFWS 2013. <http://www.fws.gov/gulfrestoration/gulfbirds.html>

<sup>3</sup> USFWS 2013. [http://www.fws.gov/lafayette/CR\\_Program.html](http://www.fws.gov/lafayette/CR_Program.html)

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Fort Livingston  
State Commemorative Area



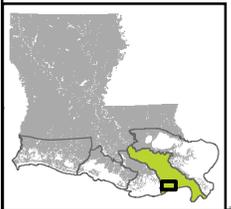
## Legend

- Fort Livingston
- Rock Revetment
- Beach/Dune Nourishment
- Back Barrier Marsh
- Land
- Water



1:42,409

0 0.225 0.45 0.9 1.35 Miles



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