

Pensacola Beach Dune Restoration

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE I

PROJECT DESCRIPTION

This project restored an area of beach where oiling and the extensive use of all-terrain equipment had inhibited plant growth and prevented the natural seaward expansion of dunes. Primary dunes are the first line of natural defense for coastal Florida to prevent the loss of wildlife and property due to storms, oil spills and other threats. The restoration location is from the Western boundary of Pensacola Beach (7.5 miles east of Pensacola Pass) and progressed approximately 8.1 miles east. This restoration project consisted of planting appropriate dune vegetation approximately 40 feet seaward of existing dunes allowing for a living shoreline.



Figure 1: (Left) Contractors adding protective snow fences. (Right) Contractors planting new sea oats.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

Total Funding Allocated: \$644,487

Status: Complete

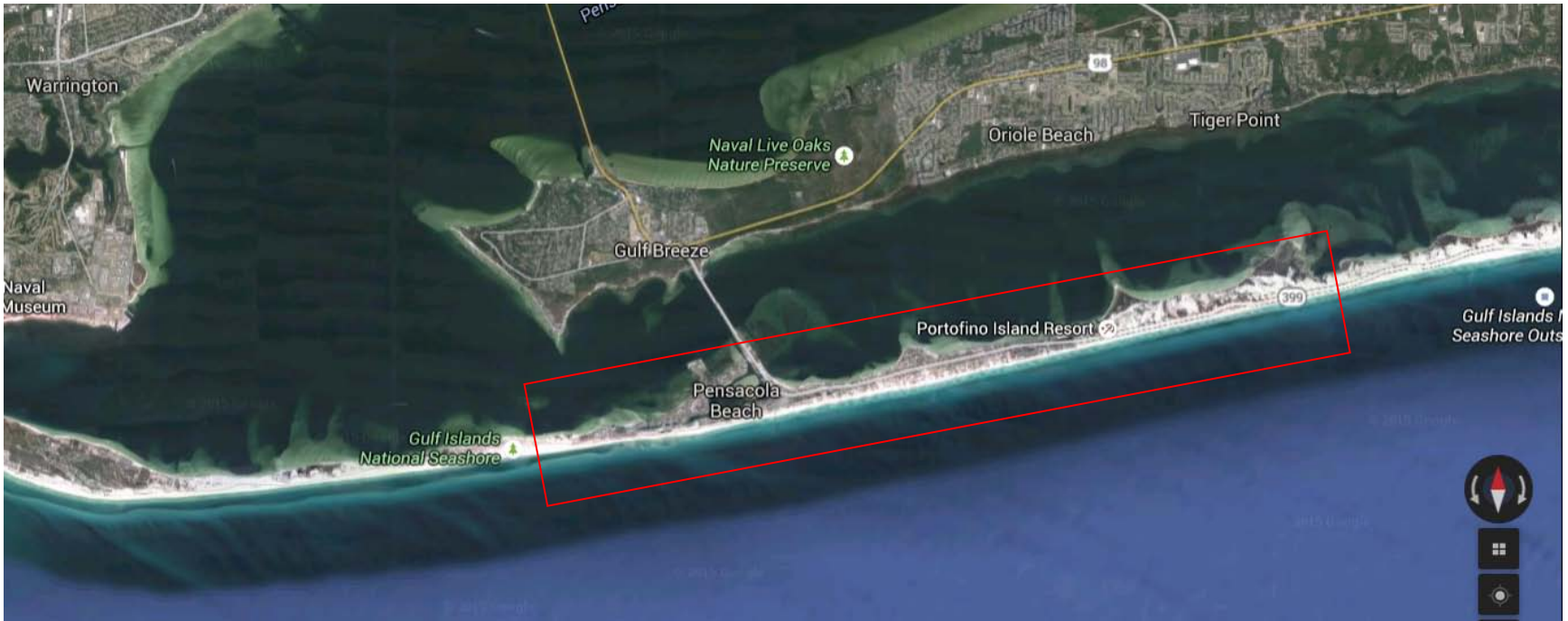
BEFORE



AFTER



PENSACOLA BEACH DUNE RESTORATION





Mahogany Mill Boat Ramp

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE I

PROJECT DESCRIPTION

This project provides boaters enhanced access to public waterways within Pensacola Bay and offshore areas and addresses the reduced quality and quantity of recreational activities (e.g., boating and fishing) in Florida attributable to the Deepwater Horizon Oil Spill and response activities. Mahogany Mill Public Boat Ramp is a newly constructed boat ramp and park that provides many environmental benefits and improved access to Pensacola Bay.

The Mahogany Mill Boat Ramp site had long been associated with pollution and contaminants. It was built using various eco-friendly materials on a 2.82 acre parcel that features a public boat ramp with multiple lanes, public gazebo, portable toilet facility, various sized parking spaces to accommodate a wide range of water craft, a tie down area, sanitary pump-out station and an educational kiosk. The project also included the reconstruction of Mahogany Mill Road with drainage improvements and sidewalks for the public access to the site.



Figure 1: (Bottom & Top) Construction beginning at the boat ramp.

During the planning and design phases, constituents were able to incorporate the plan to install a living shoreline project as an educational tool, as well as a valuable enhancement to the Bayou Chico watershed system.



Figure 2: (Top) Ribbon cutting ceremony at the completion of the boat ramp. (Bottom) The boat ramp's entry sign displaying all of the partners in this project.

Living shorelines enhance estuarine habitat, stabilize sediment and improve water quality. The oyster reefs that create the living shoreline will be placed along 100 linear feet of the western bank of Bayou Chico in between the recently constructed public boat ramp at Mahogany Mill and Harborview Marina. The oyster reefs will be constructed out of recycled oyster shells that have been collected from local restaurants, weathered and pre-bagged for deployment. The reef structures are designed to provide substrate for live oysters to settle and grow, as well as habitat for a variety of marine and near shore organisms. The oyster reefs also provide protection for the shoreline so intertidal grasses can grow. The oyster reef installation along this stretch of bayou shoreline is the first

stage of a permitted living shoreline project, which will eventually include the installation of native, salt-tolerant, intertidal vegetation.



Figure 3: (Bottom & Top) Volunteers and State workers construct the oyster reef.

Escambia County recently received the 2015 Partners for Environmental Progress (PEP) Environmental Stewardship Award for its Mahogany Mill Boat Ramp project. The award, which has been given out annually since 2005, helps recognize innovative environmental best practices on the Gulf Coast in manufacturing, construction, engineering, conservation or restoration.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

Status: Complete

Total Funding Allocated (For all four boat ramps: Mahogany Mill, Perdido River, Galvez Landing, and Navy Point: \$4,422,768

BEFORE



AFTER



MAHOGANY MILL BOAT RAMP



Galvez Landing Boat Ramp

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE I

PROJECT DESCRIPTION

This project provides boaters enhanced access to public waterways within Perdido Bay and offshore areas and addressed the reduced quality and quantity of recreational activities (e.g., boating and fishing) in Florida attributable to the Deepwater Horizon Oil Spill and response activities. Galvez Landing Public Boat Ramp consisted of replacing and extending damaged piers to provide better access to Perdido Bay.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

Total Funding Allocated (For all four boat ramps: Mahogany Mill, Perdido River, Galvez Landing, and Navy Point): \$4,422,768
Status: Complete



Figure 1: (Top) Construction of the boat ramp. (Bottom) Completion of the ramp.

PROJECT DETAILS

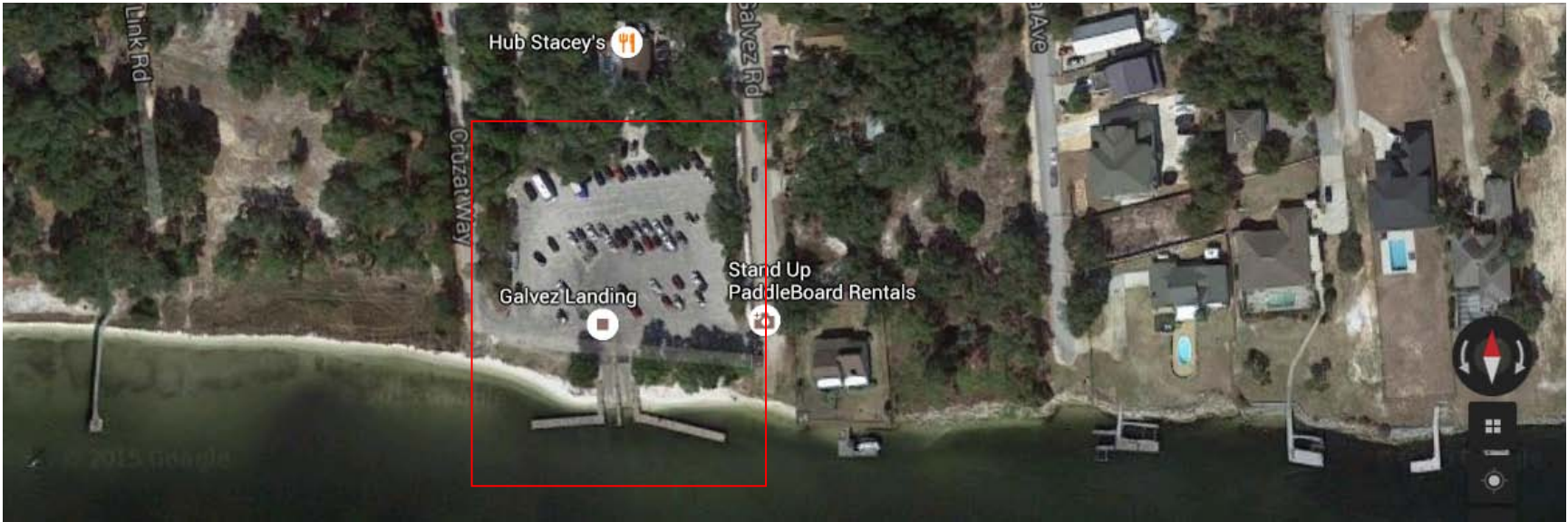
BEFORE



AFTER



GALVEZ LANDING BOAT RAMP





Navy Point Boat Ramp

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE I

PROJECT DESCRIPTION

This project provides boaters enhanced access to public waterways within Pensacola Bay and offshore areas and addresses the reduced quality and quantity of recreational activities (e.g., boating and fishing) in Florida attributable to the Deepwater Horizon Oil Spill and response activities. Navy Point Park Public Boat Ramp was restored with new docks to provide better access to Pensacola Bay.



Figure 1: (Bottom & Top) Construction beginning at the boat ramp.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

Total Funding Allocated (For all four boat ramps: Mahogany Mill, Perdido River, Galvez

Landing, and Navy Point: \$4,422,768

Status: Complete

AFTER



NAVY POINT BOAT RAMP



Wilson B. Robertson Boat Ramp

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE I

PROJECT DESCRIPTION

This project provides boaters enhanced access to public waterways within Perdido Bay and offshore areas. The boat ramp area, which sits on a 4.8 acre parcel near the Perdido River, features two boat ramp launch lanes, an ADA compliant dock, a paddle craft launch, 31 parking spaces for vehicles with trailers and a covered picnic table. The boat ramp recognizes Vice Chairman and District 1 Commissioner Wilson B. Robertson for his years of service and dedication to Escambia County. The Perdido River Boat Ramp began construction on February 10th 2015

and was completed on February 11th 2016. It is located north side of Old Highway 90 on the Perdido River. Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

Total Funding Allocated (For all four boat ramps: Mahogany Mill, Perdido River, Galvez Landing, and Navy Point: \$4,422,768)

Status: Complete

Contractors: Hatch Mott MacDonald, Wetland Sciences Inc. and Roads Inc



WILSON B. ROBERTSON BOAT RAMP





Enhanced Management of Avian Breeding Habitat Injured by Response Activities in the Florida Panhandle, Alabama, and Mississippi

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) – PHASE II

PROJECT DESCRIPTION

The Enhanced Management of Avian Breeding Habitat Injured by Response Activities in the Florida Panhandle, Alabama, and Mississippi project will reduce disturbance to nesting and foraging habitat for beach-nesting birds in the project areas. The project involves three tasks: (1) Placing symbolic fencing (signs and posts connected with rope) around sensitive nesting sites of beach-nesting birds to indicate the site as off-limits to people, pets, and other sources of disturbance; (2) Increasing predator control to reduce disturbance and loss of eggs, chicks, and adult beach-nesting birds at nesting sites; and (3) Increasing surveillance and monitoring of posted nesting sites to minimize disturbance to nesting

habitat in posted areas. The project would be implemented in the following Florida counties: Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, and Franklin. In Alabama, the project would be implemented on Bon Secour NWR in Baldwin and Mobile Counties. In Mississippi, the project would be implemented on GUIS - Mississippi District.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

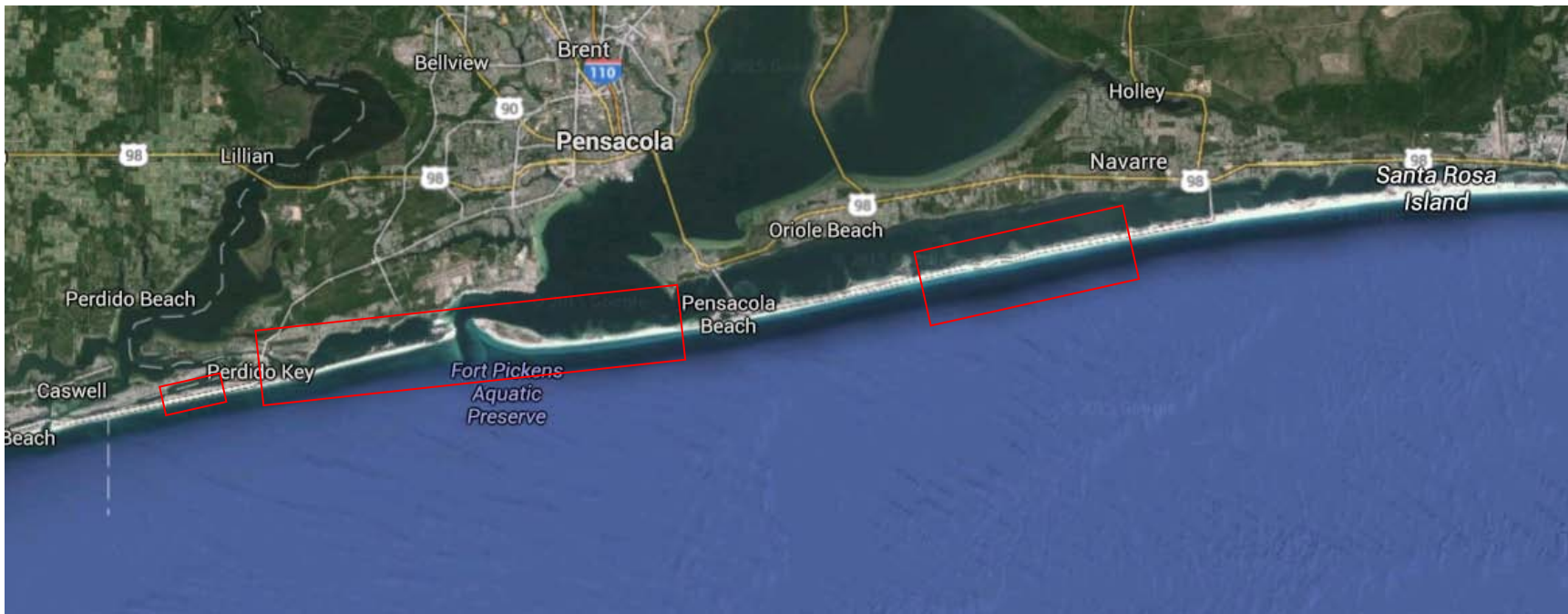
Total Funding Allocated: \$4,420,320

Estimate Benefitting Escambia County:
\$210,461.43

Status: Implementation



ENHANCED MANAGEMENT OF AVIAN BREEDING HABITAT INJURED BY RESPONSE ACTIVITIES





Improving Habitat Injured by Spill Response Restoring the Night Sky

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE II

PROJECT DESCRIPTION

The Improving Habitat Injured by Spill Response: Restoring the Night Sky project will reduce disturbance to nesting habitat for loggerhead sea turtles in Alabama and Florida. The project involves multiple tasks: (1) Site-specific surveys of existing light sources for each targeted beach; (2) Coordination with site managers on development of plans to eliminate, retrofit, or replace existing light fixtures on the property or to otherwise decrease the amount of light reaching the loggerhead sea turtle nesting beach; (3) Retrofitting streetlights and parking lot lights; (4) Increased efforts by local governments to ensure compliance with local lighting ordinances; and (5) A public awareness

campaign including educational materials and revision of the FWC Lighting Technical Manual to include Best Available Technology (Witherington and Martin, 2000).

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

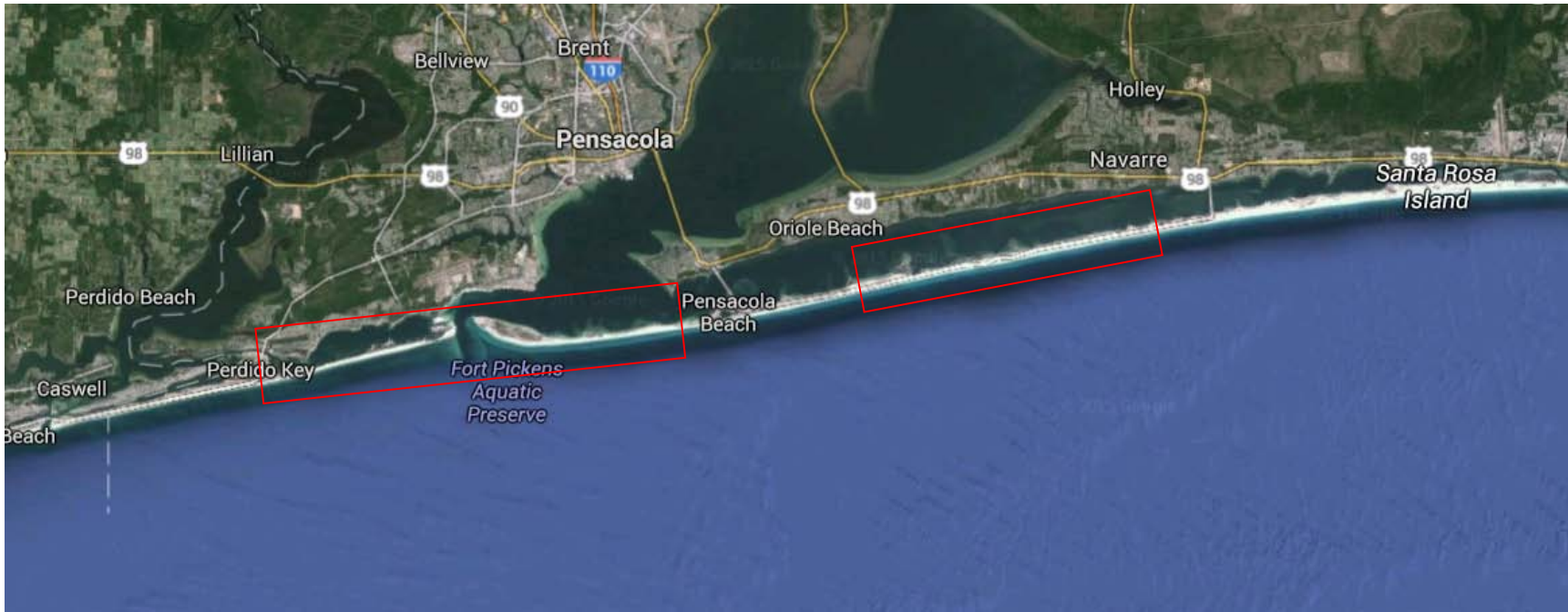
Total Funding Allocated: \$4,321,165

Estimate Benefitting Escambia County:
\$480,129.44

Status: Implementation



IMPROVING HABITAT INJURED BY SPILL RESPONSE RESTORING THE NIGHT SKY



Perdido Key Dune Restoration

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) – PHASE III

PROJECT DESCRIPTION

The proposed project will restore appropriate dune vegetation to approximately 20 acres of degraded beach dune habitat in Perdido Key, Florida, including habitat used by the federally endangered Perdido Key Beach Mouse. The project takes place approximately 2.2 miles east of Perdido Pass at the Alabama/Florida state line and extends approximately 6 miles to the east. The project will consist of planting appropriate dune vegetation (e.g., sea oats, panic grasses, cord grasses, sea purslane, beach elder) approximately 20 – 60' seaward of the existing primary dune to provide a buffer to the primary

dune and enhance dune habitats. In addition, gaps in existing dunes within the project area will be re-vegetated to provide a continuous dune structure. All plants will be previously isolated and propagated cuttings from vegetation already found at the site to ensure appropriate genetic stock.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

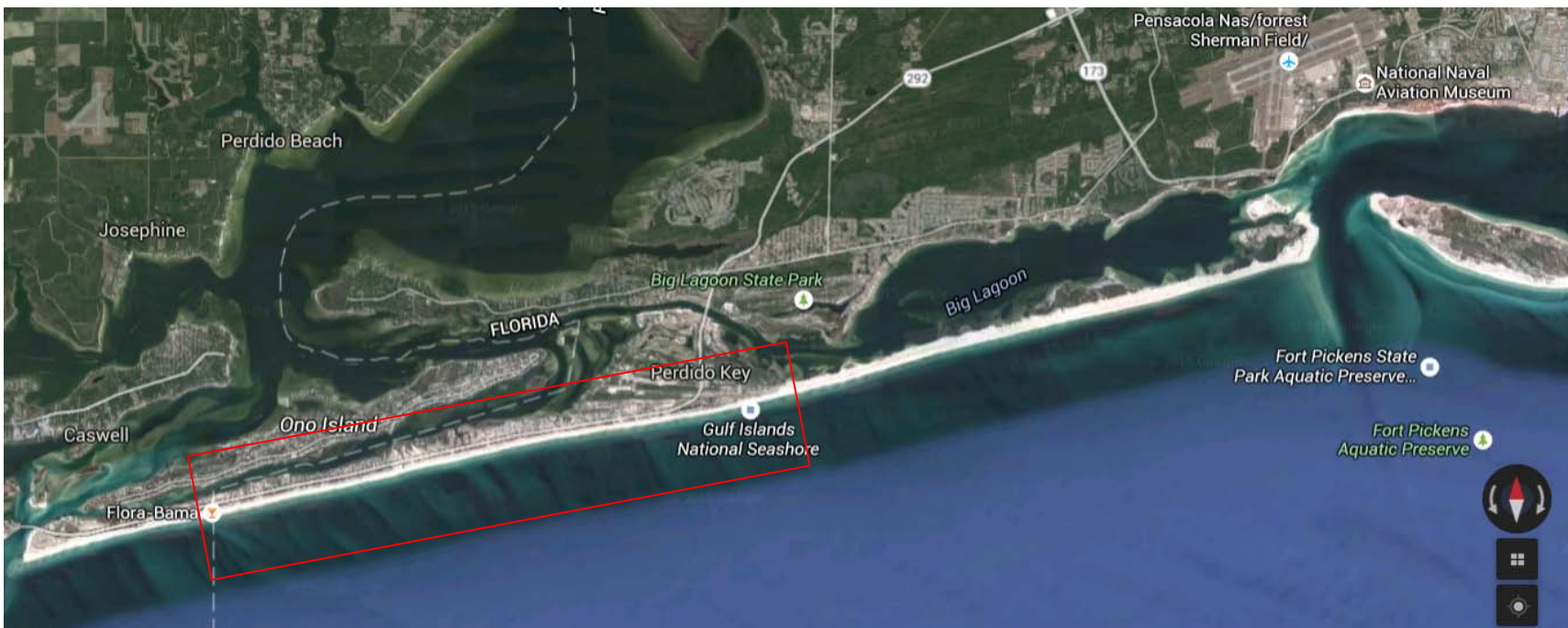
Total Funding Allocated: \$611,234.00

Status: Planning

BEFORE



PERDIDO KEY DUNE RESTORATION



Pensacola Bay Living Shoreline

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE III

PROJECT DESCRIPTION

Under Phase III of early restoration, the Florida Department of Environmental Protection (FDEP) is partnering with the National Oceanic and Atmospheric Administration (NOAA) on the Florida Pensacola Bay Living Shoreline Project. This project will help to compensate the public for impacts to salt marsh habitats and benthic secondary productivity along Florida's Panhandle resulting from the Deepwater Horizon oil spill and associated response activities. This project will create and restore approximately nineteen (18.8) acres of salt marsh habitat and four (4) acres oyster reefs on City of Pensacola-owned submerged lands. This project consists of implementing living shorelines techniques (construction of breakwaters and creation of salt marsh) at two (2) neighboring sites, Project GreenShores (PGS) Site II and

Sanders Beach. PGS Site II is located immediately west of Muscogee Wharf in downtown Pensacola and will complete the construction of the third breakwater structure at this site. The Sanders Beach site is three (3) miles to the west, near the mouth of Bayou Chico. Breakwaters will be constructed at both sites to protect the created salt marsh habitat and to promote reef development for bivalves and other invertebrates. For more information visit <http://www.gulfspillrestoration.noaa.gov/restoration/early-restoration/early-restoration-projects-atlas/?1858555>.

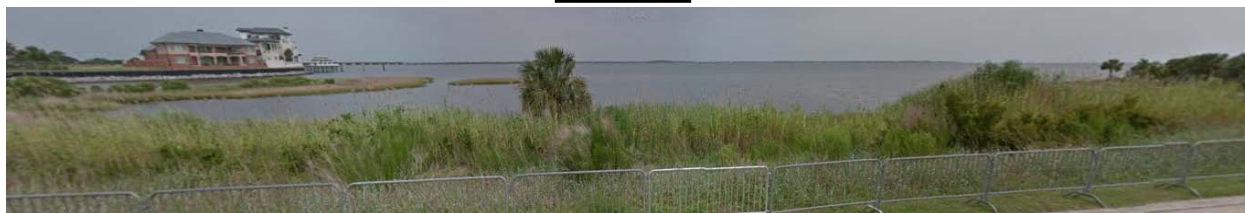
PROJECT DETAILS

Total Funding Allocated: \$10,828,063

Status: Planning and Design (30% plans to be complete in April 2016, construction out for bid in fall 2016)

Contractors: HDR Engineers

BEFORE







Big Lagoon Boat Ramp

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE III

PROJECT DESCRIPTION

The Big Lagoon State Park Ramp Improvement Project will enhance an existing boat ramp and surrounding facilities. The improvements include adding an additional lane to the boat ramp, expanding boat trailer parking, and improving traffic circulation at the boat ramp at the Big Lagoon State Park. Furthermore, a new restroom facility will be constructed and

connected to the Emerald Coast Utility Authority (ECUA) regional sanitary sewer collection system.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

Total Funding Allocated: \$1,483,020

Status: Complete



BIG LAGOON BOAT RAMP





Bob Sikes Pier – Trail Restoration

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) – PHASE III

PROJECT DESCRIPTION

This project will improve access to a fishing pier in the Pensacola area in Escambia County as well as enhancing the quality of the experience for its recreational users. The improvements include: 1) adding solar-powered lighting to illuminate dark areas along the pier; 2) completing a series of minor pier and rail modifications to generally improve the pier's safety; 3) renovating and rehabilitating designated parking areas to improve parking efficiency of visitors and to improve traffic flow leading into and within the pier parking lot; 4) adding an entrance sign and informational/educational signage for pier users

(e.g., proper actions to take if a sea turtle should be hooked while fishing); 5) widening and enhancing half mile section of multipurpose (bicycle/pedestrian) access trail that connects the fishing pier to other recreational and commercial areas on the beach; and 6) aesthetic improvements to the parking area, parking access road and multipurpose trail leading to Bob Sikes Pier.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

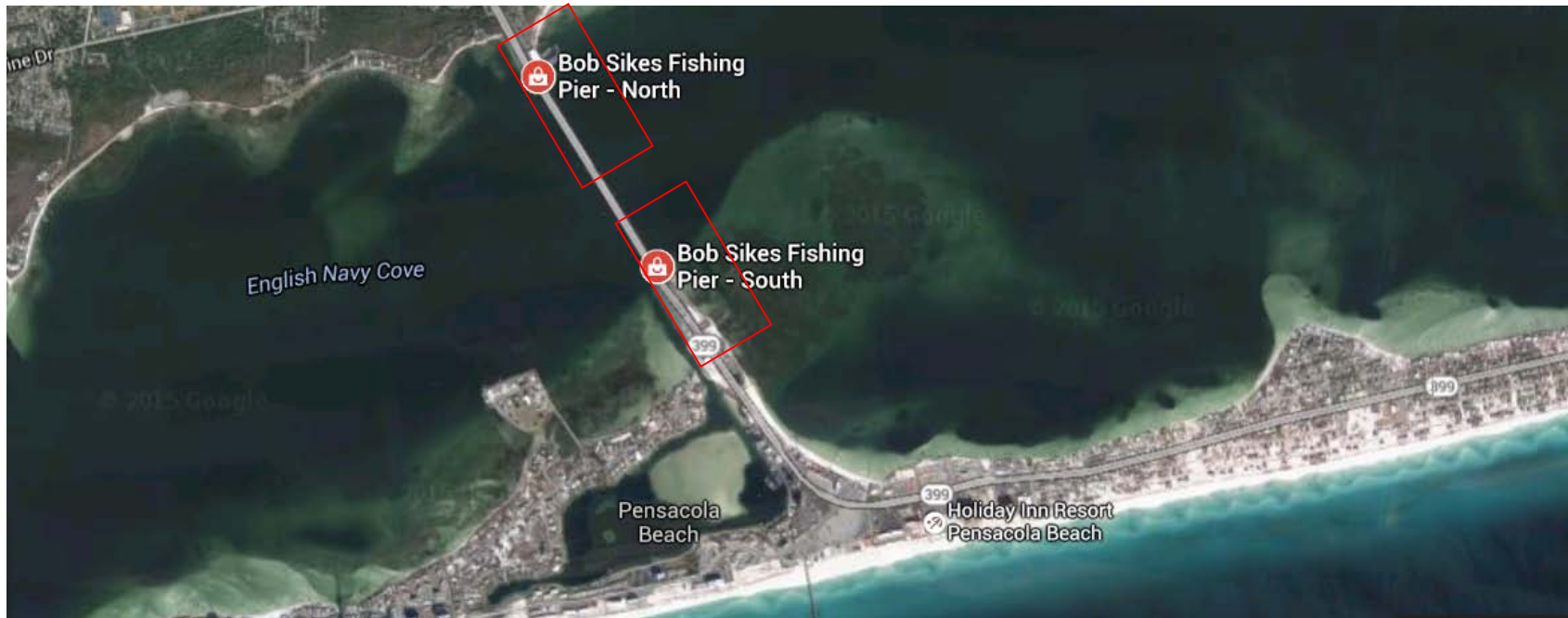
PROJECT DETAILS

Total Funding Allocated: \$1,023,990

Status: Planning & Design



BOB SIKES PIER – TRAIL RESTORATION



Northwest Florida Artificial Reef Creation

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE III

PROJECT DESCRIPTION

This project involves creating artificial reefs in Escambia, Santa Rosa, Okaloosa, Walton, and Bay Counties. These improvements include emplacing artificial reefs units at different depths across the participating counties in permitted areas within State waters in the Gulf of Mexico. Escambia County plans to begin construction in summer of 2016 and complete the project by 2018. The modules will be made of prefabricated concrete and

will be placed in four of the permitted reef sites for Escambia County: Nearshore West, Nearshore East, Casino, and Escambia Southeast.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

Total Funding Allocated: \$11,463,587

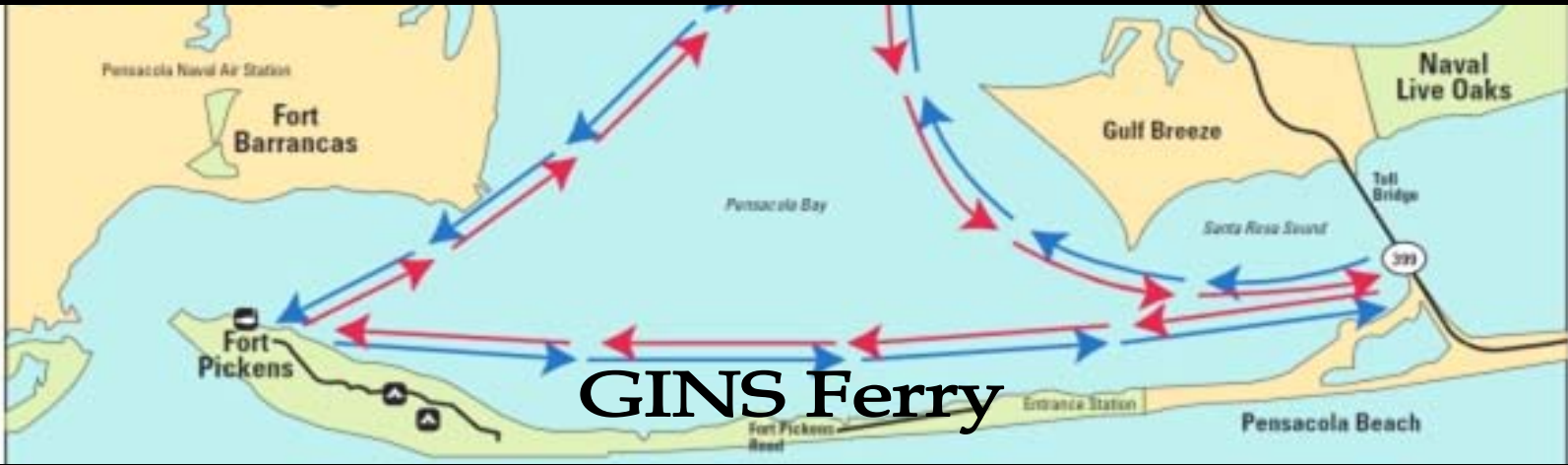
Escambia County Portion: \$2,701,795.15

Status: Planning & Design



FLORIDA ARTIFICIAL REEF CREATION





GINS Ferry

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE III

PROJECT DESCRIPTION

This project will fund the purchase of up to three ferries to be used to ferry visitors (no automobiles) between the City of Pensacola, Pensacola Beach, and the Fort Pickens area of Gulf Islands National Seashore in Florida. The City of Pensacola and Santa Rosa Island are also building landings for the ferry. Atkins will be doing the planning and design for the City Landing while the Santa Rosa Island in still unknown.

Source:

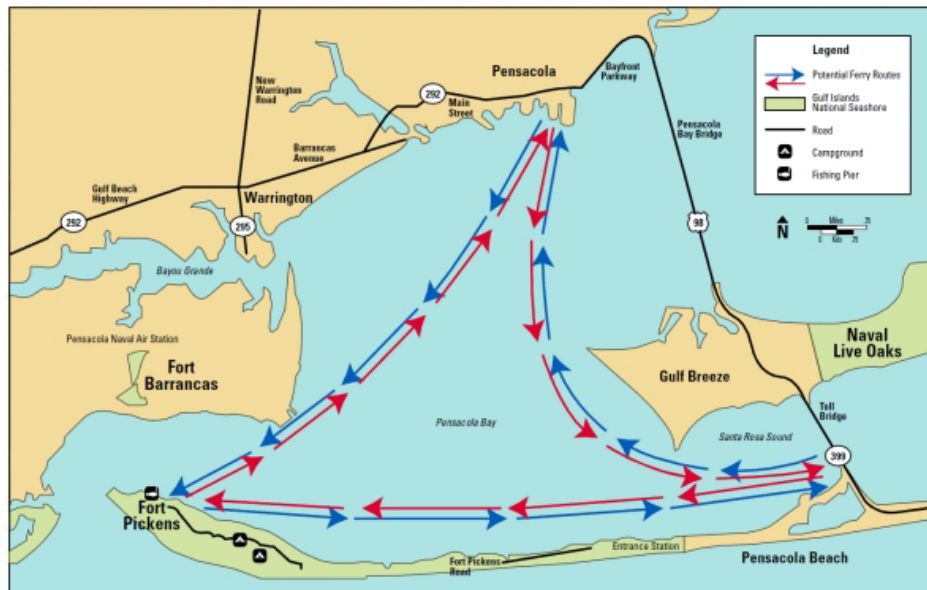
<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

Total Funding Allocated: \$4,020,000

Status: Planning & Design

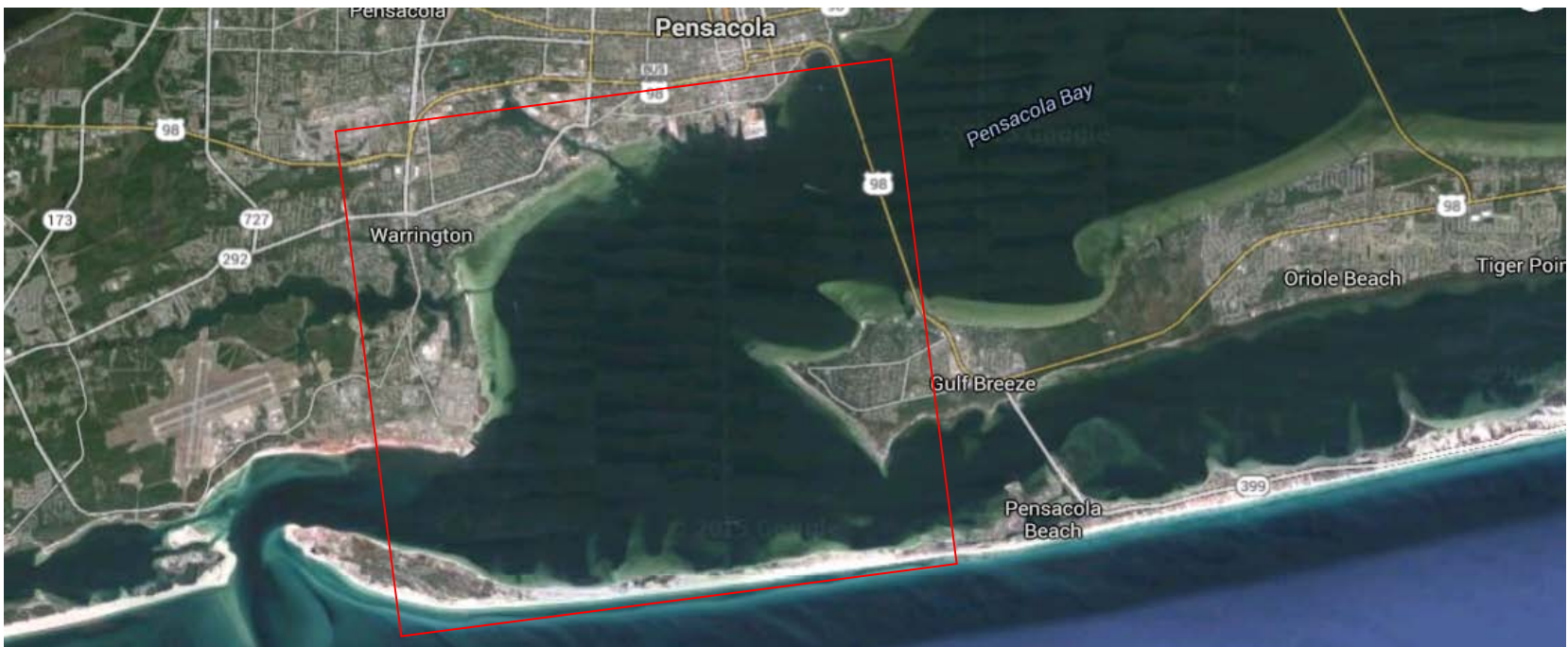
Contractors: All American Marine Seattle



Proposed Gulf Islands National Seashore Ferry Purchase and Service Project ferry routes and destinations



GULF ISLAND NATIONAL SEASHORE FERRY





GINNS Beach Enhancement

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE III

PROJECT DESCRIPTION

This project involves removing fragments of asphalt and road-base material (limestone aggregate and some chunks of clay) that have been scattered widely over some or all of 2,041 acres and 14 linear miles of the Fort Pickens, Santa Rosa, and Perdido Key areas of the Florida District of Gulf Islands National Seashore. There is also a small, two-mile-long area on the Gulf side of the Fort Pickens area where sections of the old road and some miscellaneous chunks of concrete may be removed from the intertidal and subtidal zones. Fragments and materials range in shape and size from large slabs down to brick- and pea-size. These materials originated from roads damaged during several storms and hurricanes. Debris removal methods will involve primarily mechanized equipment, supplemented by small crews using hand tools. The

majority of materials are expected to be less than six inches deep, although slabs several feet deep may be found. Approximately 10% of the total area to be mechanically cleaned contains vegetation that will be destroyed in the cleanup process. Re-planting these areas with like numbers and like species of plants is part of this project. Cleanup activities are expected to take up to four years, and re-planting up to three years, making the total project duration approximately five years (there would be two years of overlap).

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

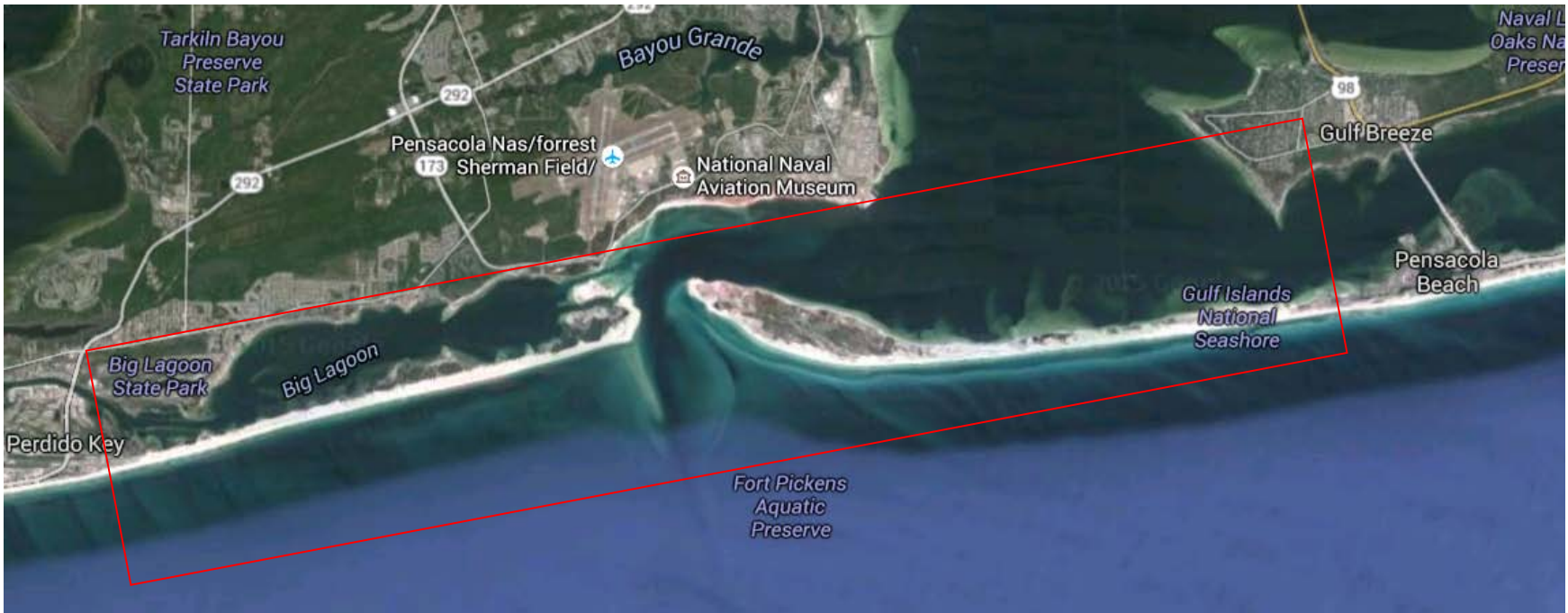
PROJECT DETAILS

Total Funding Allocated: \$10,836,055

Status: Implementation (Project Manager hired in July 2015)



GULF ISLAND NATIONAL SEASHORE BEACH ENHANCEMENT





NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE III

PROJECT DESCRIPTION

This project involves constructing and operating a saltwater sportfish hatchery in Pensacola, Florida. The hatchery fish will be released into high quality inshore habitats throughout the Northern Gulf Coast in Florida. Escambia County Natural Resource Management staff is involved in the planning & design. The goal of this project is to release five million juvenile fish per year throughout

the panhandle. The species are not yet determined.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

PROJECT DETAILS

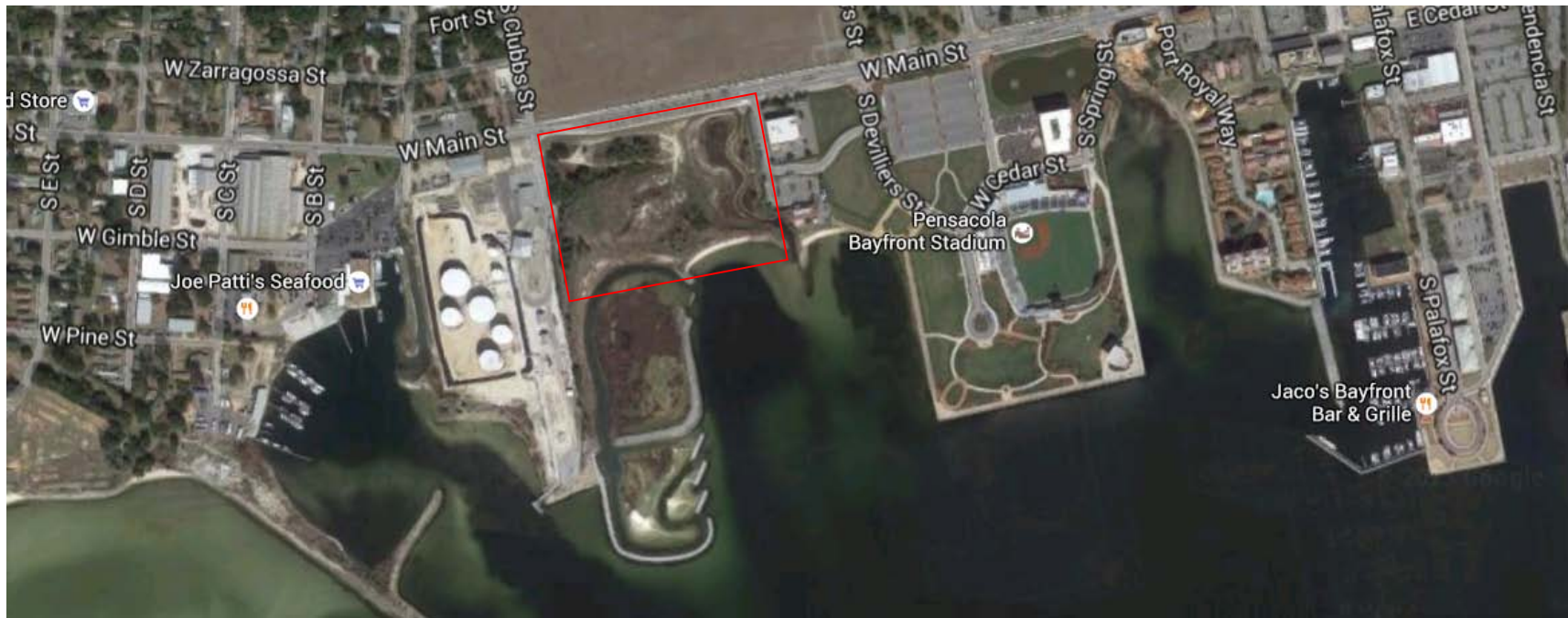
Total Funding Allocated: \$18,793,500

Status: Planning & Design (Estimated design will take 1 year)

Contractors: Baskerville-Donovan



FISH HATCHERY





Perdido Key Boardwalk Improvements

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE III

PROJECT DESCRIPTION

This project will improve a number of existing boardwalks in Perdido Key State Park in Escambia County. The improvements include removing and replacing six existing boardwalks leading to the beach from two public access areas.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

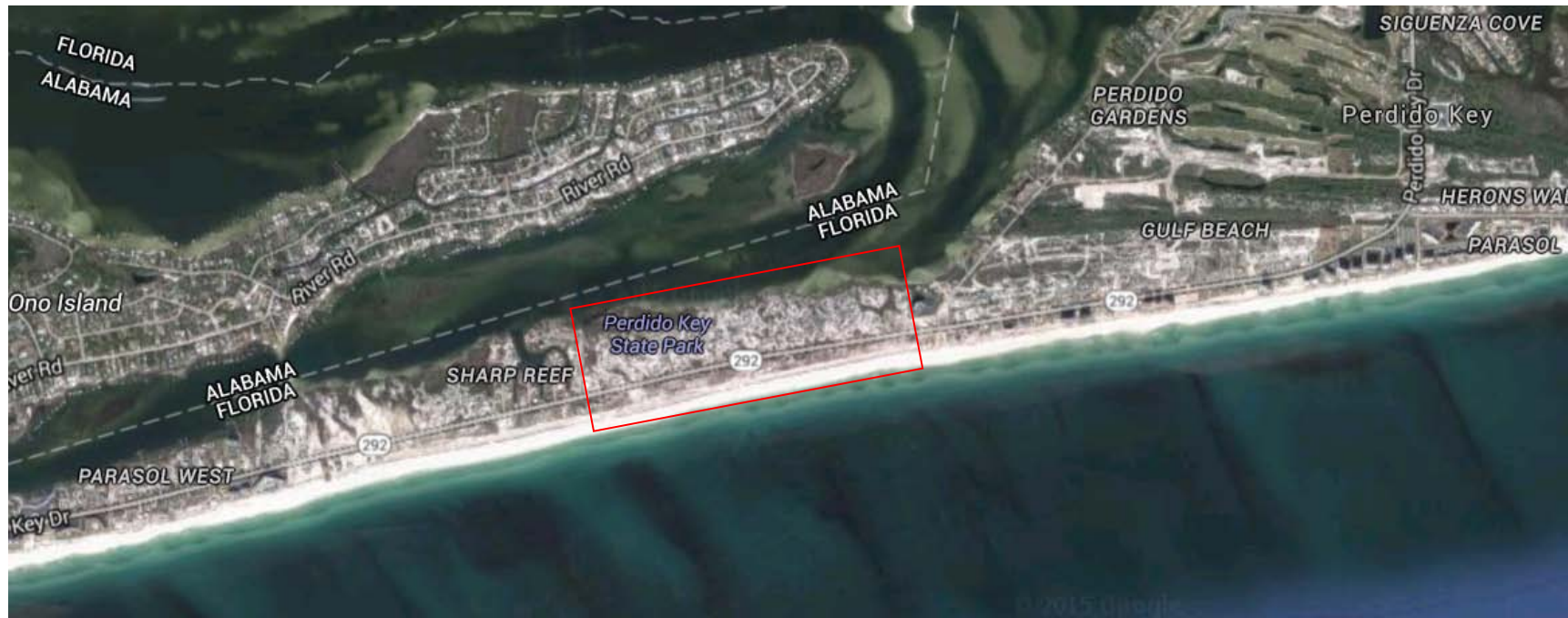
PROJECT DETAILS

Total Funding Allocated: \$588,500

Status: Planning & Design



PERDIDO KEY BOARDWALK IMPROVEMENTS





Northwest Florida Scallop

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE III

PROJECT DESCRIPTION

This project will be implemented in Bay County and In Escambia and Santa Rosa counties and possibly Okaloosa and Walton counties. Ideally by implementing this project, scallop populations in the targeted locations could be eventually increased to self-sustaining levels to support recreational harvests. Scallop populations in Gulf and Franklin counties may be enhanced if deemed appropriate to reduce the risk of collapse in currently harvested areas.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

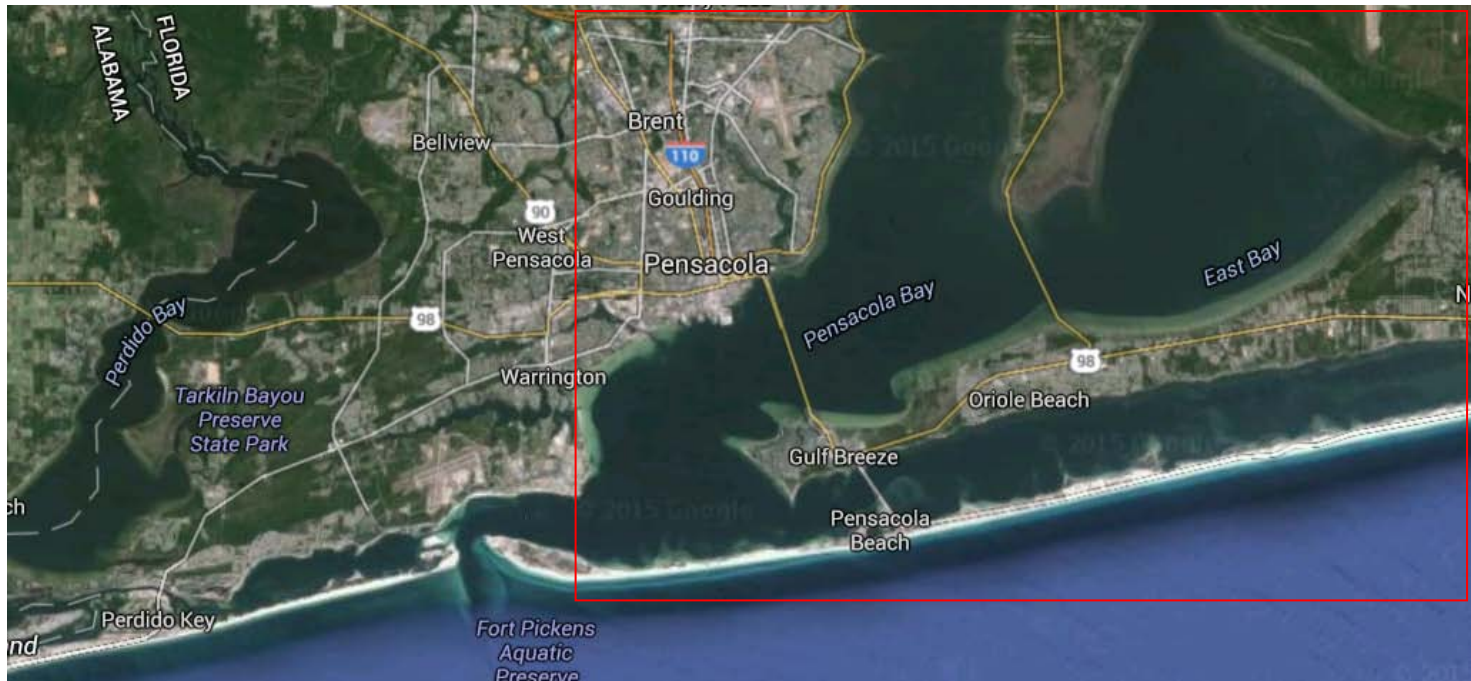
PROJECT DETAILS

Total Funding Allocated: \$2,890,250

Estimated Portion Benefiting Escambia County:
\$722,562.50

Status: Implementation

NORTHWEST FLORIDA SCALLOP RESTORATION





Northwest Florida Oyster Clutch

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE III

PROJECT DESCRIPTION

This project, which would take place in Escambia, Santa Rosa, Bay, and Franklin counties will place cultch material for the settling of oyster larvae and oyster colonization in three Florida Bays. The bays include Pensacola and St. Andrews Bay which will include placing 12,000 cubic yards of material over 60 acres in each bay system. Apalachicola Bay will include placing 18,000 cubic yards of material over a 90 acre area.

Pensacola Bay: This component will enhance and improve the oyster populations in Pensacola Bay in Escambia and Santa Rosa Counties. The improvements include the placement of approximately 12,000 cubic yards of suitable cultch material over an approximately 60-acre area in the Pensacola Bay system of existing or previously constructed oyster bars for the settling of native oyster larvae and oyster colonization.

Planning Activities

» Engineering and Design (In Progress) FDACS worked with local stakeholders and agency representatives to determine preliminary sites for cultch placement in Pensacola Bay.

» Public Submittal of Bid Packages and Contract Award (Complete: 07/2015) The Florida Department of Environmental Protection (FDEP) executed an agreement with the Florida Department of Agriculture and Consumer Services (FDACS) to implement the placement of cultch in Pensacola Bay.

Source:

<http://www.restoration.noaa.gov/dwh/storymap/>

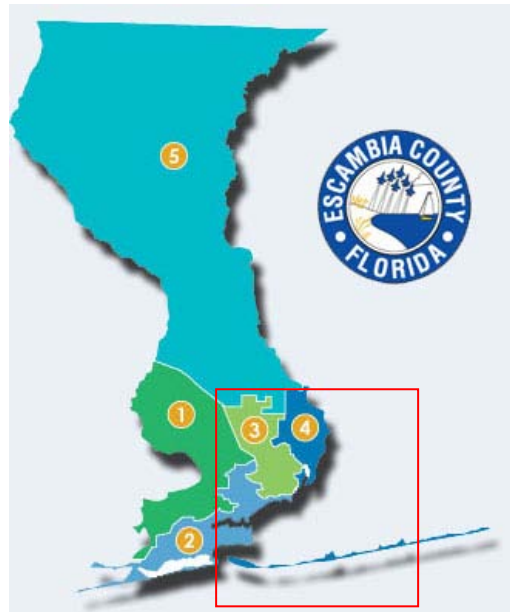
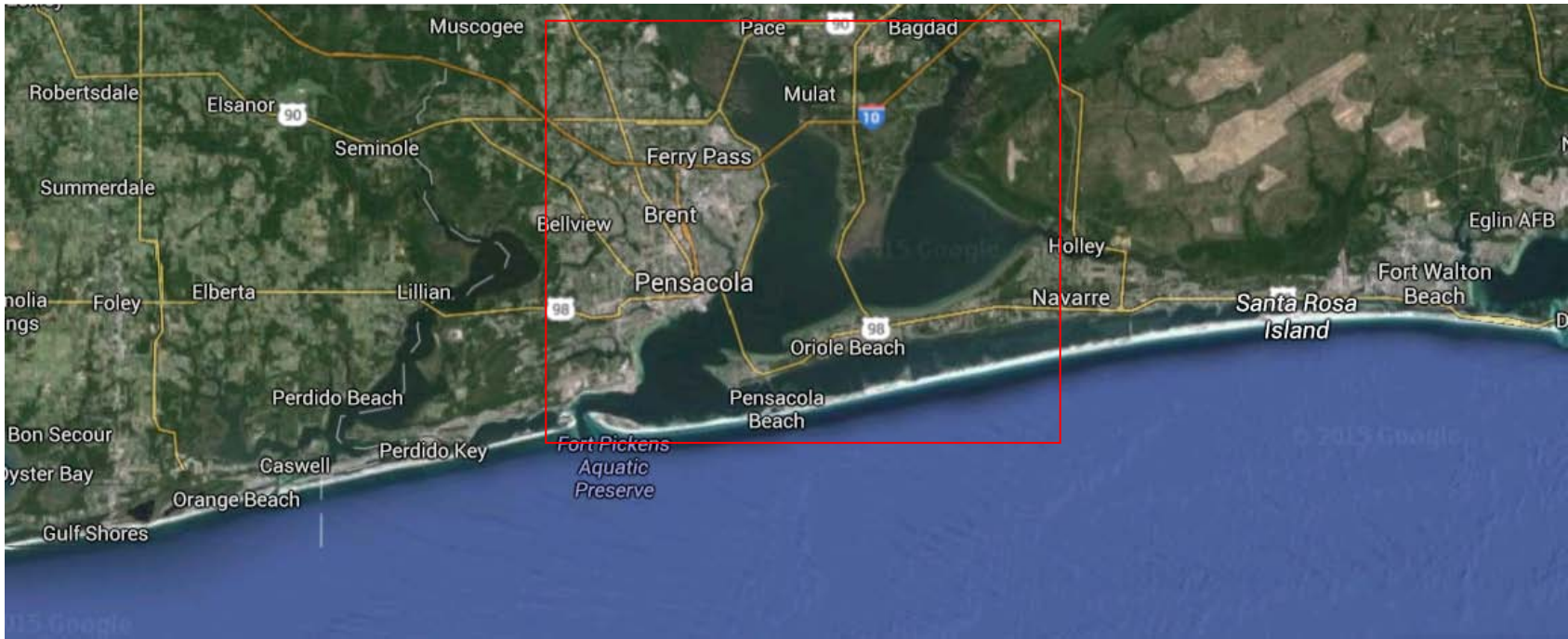
PROJECT DETAILS

Total Funding Allocated: \$5,370,596

Status: Planning & Design



NORTHWEST FLORIDA OYSTER CLUTCH





Innerarity Point Park

NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) - PHASE V

PROJECT DESCRIPTION

The Innerarity Point Park component involves the acquisition of a 3.38-acre parcel and the building of a public park on the property. The property includes 265 linear feet of frontage along the Old River, which flows between Innerarity Point and Perdido Key out to Perdido Bay. The Florida Trustees and The Trust for Public Land (TPL) will purchase this coastal parcel and build a public park on the property to enhance the public's access to the surrounding natural resources and increase recreational opportunities. Once all the improvements to the property are completed, TPL will donate the property to Escambia County to be operated by the County as a public park. The proposed infrastructure includes an accessible boardwalk, dock and paddle craft launch, a "treehouse"

overlook, a deck with bench seating, several 2-4 picnic pavilions, two playgrounds, restrooms with rinse off areas, and a pervious concrete parking area. Submerged Aquatic Vegetation, Marsh will be considered during dock design and construction as appropriate. An area on the landward side of the beach would undergo invasive species removal and subsequent planting with native shoreline vegetation.

Source:

<http://www.gulfspillrestoration.noaa.gov/restoration-planning/phase-v/>

PROJECT DETAILS

Total Funding Allocated: \$10,836,055

Status: Planning & Design



INNERARITY POINT PARK

