



## Mobile Bay National Estuary Program Project Implementation Committee

May 19, 2022, 1:00 pm – 3:00 pm

Virtual Meeting



### Agenda

#### Meeting Objectives:

- a) Provide update on activities related to the Mississippi Sound.
- b) Other project status updates

#### 1. Welcome and Introductions

PIC Co-Chairs:

- Judy Haner, The Nature Conservancy  
Patric Harper, U.S. Fish & Wildlife Service

#### 2. Review and Approval of Minutes

#### 3. Old Business

- a) Management Conference Committee Status Updates

#### 4. New Business

- a) Mississippi Sound Project Updates
  - a. Mobile County Updates – Matthew Jones, Mobile County
  - b. Dauphin Island WMP, West End Economic Study, and West End Bird Plan – Chris Warn, Environmental Science Associates
  - c. Alabama Department of Conservation and Natural Resources Updates – Jeremiah Kolb, ADCNR
  - d. U.S. Army Corps of Engineers Updates – David Newell, USACE
  - e. The Nature Conservancy Updates – Mary Kate Brown, TNC
- b) Watershed Planning and Project Implementation Update
- c) Off-cycle topical meeting – next topic or destination?
- d) Next meeting **August 11**

#### 5. Adjourn



## Welcome!

Please put your name, organization, and email in the chat box to sign in.

Please note: This meeting is being recorded!

This presentation provides minutes of the May 19, 2022, Project Implementation Committee. Additional notes are added as needed.

Attendees: Aubrey Bianco, Don Blancher, Mary Kate Brown, Karina Calhoun, Ashley Campbell, John Curry, Jay Estes, Walter Ernest, Carl Ferraro, Leslie Gahagan, April Griffin, Judy Haner, Patric Harper, Jason Herrmann, Matthew Jones, Jeremiah Kolb, Nicole Love, Brian Mabry, Shannon McGlynn, David Newell, Autumn Nitz, Chris Oberholster, Chris Plymale, Melissa Pringle, Ray Richardson, Sam St. John, Suzanne Sweetser, Lee Walters, Chris Warn, Courtney Weatherby, Anna Yancy, Lee Yokel

MBNEP Staff: Bethany Hudson, Jason Kudulis, Marti Messick, Christian Miller, Roberta

Swann

## Project Implementation Committee Agenda



### Welcome and Call to Order:

Co-Chairs: Judy Haner, The Nature Conservancy,  
& Patric Harper, U.S. Fish and Wildlife Service

### **Review and approval of March 2022 minutes**

### Old Business: Management Conference Committee Updates

### New Business:

- Mississippi Sound Project Updates
- MBNEP Watershed Planning and Project Implementation Updates
- Off-cycle Topical Meeting
- Next Meeting August 11



The meeting was called to order at 1:02pm.

Minutes from the March 2022 meeting were distributed for review prior to the meeting. Don Blancher motioned to accept the minutes; Carl Ferraro seconded the motion.

Old Business: MBNEP staff provided updates for the other Management Conference committees.

- Business Resource: The committee issued their first loan from the Coastal Alabama Fisheries Fund. A meeting was held in Coden with nearly 60 oystermen to share the program and recruit additional applicants. One dozen applications were received following the meeting. The Oysters Alabama website traffic is increasing ([www.oystersalabama.com](http://www.oystersalabama.com)) – they met with Sweet Grown Alabama about possible inclusion on their platform.
- Besides the BRC, the other Management Conference committees are meeting after the May 19th PIC. Updates from those meetings will be provided at the August PIC meeting.

### New Business:

Presentations focused on monitoring, planning, and restoration activities in the Mississippi Sound. This continues our theme of focusing on different geographic sectors around coastal Alabama. Slides from presentations follow and supplemental notes are included as needed.



## Project Implementation Committee Agenda



- Mississippi Sound Project Updates
  - Mobile County Updates – Matthew Jones, Mobile County
  - Dauphin Island WMP, West End Economic Study, and West End Bird Plan – Chris Warn, Environmental Science Associates
  - Alabama Department of Conservation and Natural Resources Updates – Jeremiah Kolb, ADCNR
  - U.S. Army Corps of Engineers Updates – David Newell, USACE
  - The Nature Conservancy Updates – Mary Kate Brown, TNC

# Dauphin Island Causeway

## Status Update:

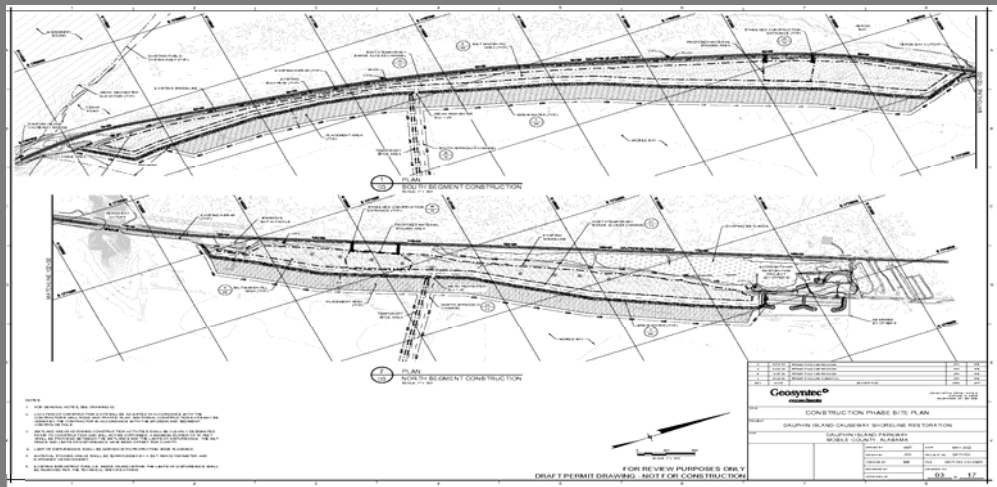
- Design
  - Mobile County is working with the USACE to directly place dredged material from the Mobile Ship Channel at the project site
  - Engineering and Design plans are being updated to accommodate hydraulic placement of the material
- Permitting
  - USACE permit will be submitted this week



Mobile County updates provided by Matthew Jones.

The project is 3.3-mile shoreline restoration project that spans from Bayfront Park to Cedar Point Pier. Will restore about 100 acres of marsh. Material will be delivered by direct placement from USACE dredging activities.

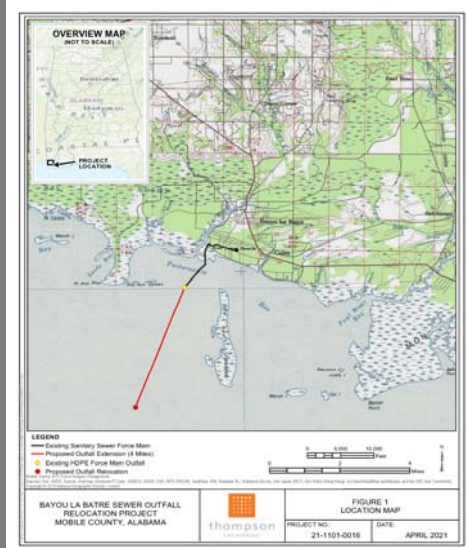
# Dauphin Island Causeway





# Extension of Effluent Force Main from Bayou La Batre WWTF

- Engineering Team
  - Thompson Engineering
- Purpose
  - Extend the Bayou La Batre Outfall line from 1 mile offshore to approximately 5 miles to enhance water quality
- Funding
  - RESTORE ACT



## Extension of Effluent Force Main from Bayou La Batre WWTF

### **Status:**

- Design
  - Nearing Completion
- Permitting
  - USACE Permit has been issued
  - ADEM NPDES Permit Application has been submitted



# Redevelop Bayou La Batre City Docks

- Engineering Team
  - Moffat and Nichol
- Purpose
  - The purpose of this project is to redevelop the City Docks. This new vision will serve as a public space and meeting place for festivals and area residents to enjoy.
- Funding
  - RESTORE



Rendering of Bayou La Batre City Docks (top) and Lightning Pier as constructed (bottom)



Public access enhancement - new boat launch and dock facility will be a great improvement.

# Redevelop Bayou La Batre City Docks

- Design Status
  - Feasibility Study and Economic Analysis was completed in May 2021.
  - Mobile County submitted a grant amendment in July 2021
  - Mobile County received fully executed subaward from ADCNR in March 2022 to begin the Engineering, Design, and Permitting
  - Mobile County issued a NTP to Moffat and Nichol on 4/11/22





## Dauphin Island West End Bird Conservation and Management Plan

## Dauphin Island Watershed Management Plan

## Dauphin Island Fiscal Impact Analysis

MBNEP PIC Meeting

May 19, 2022



Chris Warn provided Dauphin Island updates. Environmental Science Associates is managing these three projects for the Town of Dauphin Island, Mobile County, and the MBNEP.

# Dauphin Island West End Bird Conservation and Management Plan



Source: Pixabay

© P. J. 2011

MBNEP PIC Meeting

May 19, 2022



## Project Overview

- **Project Purpose**
  - Develop a management plan for restoring and/or enhancing target bird species and their associated habitats consistent with the requirements of the Alabama Trustee Implementation Group Restoration Plan III and Environmental Assessment: Provide and Enhance Recreational Opportunities; and Birds.
- **Project Background**
  - NRDA Funded
  - Acquisition complete - approximately 838 acres of privately-owned beach/dune habitat at the west end of Dauphin Island.
  - Site provides critical foraging habitat for Wilson's plover, snowy plover, reddish egret, American oystercatcher, least tern, and other coastal bird species.
  - Public ownership will help facilitate the protection and management of its habitats for the benefit of bird species injured by the DWH oil spill.

Still in the early stages of this planning effort. Now that the West End of Dauphin Island is under public ownership this plan will help protect and manage these fragile barrier island habitats.

## Project Elements

- **Public Outreach and Education**
- **Data Inventory and Synthesis**
  - Compile and Assess Information
  - Identify Data Gaps and Collect Additional Data
  - Validate Habitat Suitability and Quality
  - Identify Critical issues and Areas
- **Development of Management and Restoration Actions**
  - Habitat Protection, Restoration, Management, Monitoring, and Policy Recommendations
  - Best Management Practices
  - Nuisance and Predator Species Control and Management Program
- **Develop Final West End Dauphin Island Bird Conservation and Management Plan**



## Project Schedule & Status

- **Public Outreach and Education (*ongoing*)**
  - Dauphin Island open house meeting Nov. 8, 2021
  - Established Technical Advisory Committee (TAC)
- **Data Inventory and Synthesis (*Completion in JUL 2022*)**
  - Compile and Assess Information
  - Identify Data Gaps and Collect Additional Data
  - Validate Habitat Suitability and Quality
  - Identify Critical issues and Areas
- **Development of Management and Restoration Actions (*AUG 2022 to JAN 2023*)**
- **Develop Final West End Dauphin Island Bird Conservation and Management Plan (*APR 2023*)**
  - *Draft plan outline for TAC review*



## Dauphin Island Watershed Management Plan

## Dauphin Island Fiscal Impact Analysis

MBNEP PIC Meeting

May 19, 2022



## Six common values most important to those living in Coastal Alabama



**Access:** To the water and open spaces for recreation and vistas.



**Beaches and Shorelines:** Protection, economy, beauty.



**Fish and Wildlife:** Habitats, abundance, livelihoods.



**Heritage and Culture:** Promoting our area's historic identity and protecting this legacy for future generations.



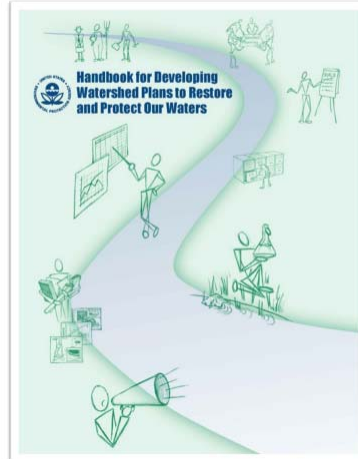
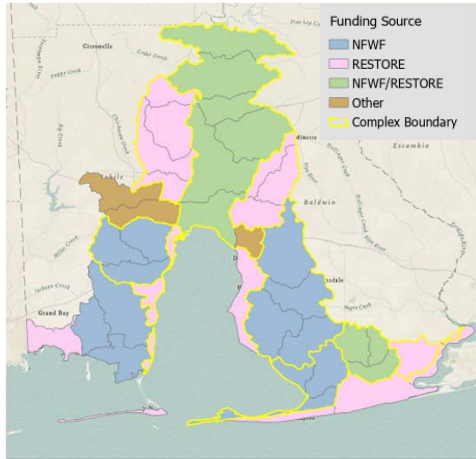
**Resilience:** Protecting the capacity of human and natural physical systems to rebound from unforeseen events.



**Water Quality:** Whether drinkable, fishable, or swimmable, the public places high value on quality rivers, creeks, and bays.

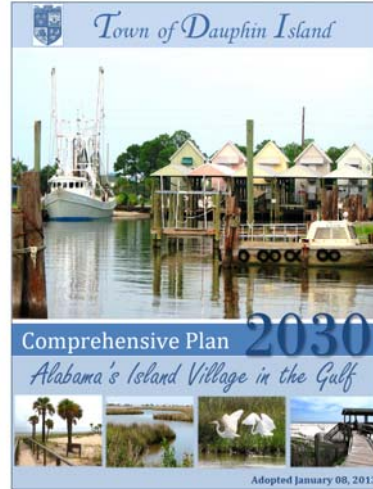
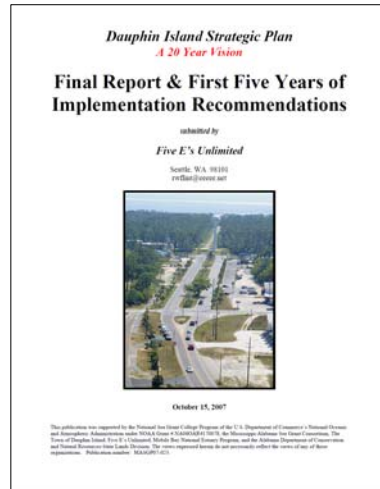
MBNEP Comprehensive Conservation Management Plan values – key to every watershed management plan.

## The Methodology – Watershed Management Approach



Source: EPA.gov

## Continuity With Existing Plans



Weaving this watershed management plan with existing plans.

## Build on Existing Efforts

- Recently Completed, Ongoing, Planned, and Proposed Projects (~50)



There is an abundance of activity and information in process or planned for Dauphin Island – this is an interactive map to stay up to date.

## Project Schedule & Status

- Public Outreach and Stakeholder Engagement (*ongoing*)
- Watershed Characterization and Conditions (*completed*)
- Climate Vulnerability Assessment (*completed*)
- Identification of Critical Areas and Issues (*completed*)
- Management Measures (*in progress*)
- Implementation Strategies (*JUN 2022*)
- Regulatory Review and Financing Alternatives (*JUL 2022*)
- Develop Final Watershed Management Plan (*SEP 2022*)

Activities started in 2021.

## Critical Issues & Areas

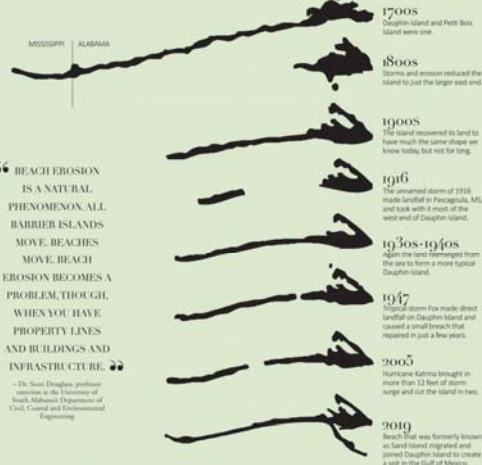
- Erosion of Island's culture and heritage
- Economic impacts of non-declared storms
- Shoreline erosion, loss, and breaching potential
- Sea level rise and increased storm intensity and frequency
- Island-wide flooding
- Dune and habitat loss
- Invasive species
- Development
- Aging or inadequate infrastructure

Tourism and construction continue to increase as well.



### DAUPHIN ISLAND'S CHANGING LAND

A snapshot of the many phases of our barrier island



“BEACH EROSION IS A NATURAL PHENOMENON. ALL BARRIER ISLANDS MOVE. BEACHES MOVE. BEACH EROSION BECOMES A PROBLEM, THOUGH, WHEN YOU HAVE PROPERTY LINES AND BUILDINGS AND INFRASTRUCTURE.”

- Dr. Tom Daughlin, professor emeritus at the University of South Alabama (Department of Civil, Coastal and Environmental Engineering)

#### BUILDING A BEACH

**\$6.8 MILLION**  
Spent on beach restoration in 2016, adding 320,000 cubic yards of sand to a one-mile stretch of beach on the east end of the island, replacing about 10 years' worth of beach erosion.

**\$3.6 MILLION**  
Money from a 2014 BP oil spill settlement through the National Fish and Wildlife Foundation funded a study for restorative efforts all along Dauphin Island's shoreline.

**3.5 MILLION CUBIC YARDS OF SAND**  
The town of Dauphin Island hopes to pump this sand onto more than 4 miles of shoreline on the west end.

**WORKING TO CREATE**  
Wider sandy beaches (100 feet on east end, 200 feet on west end), higher sand dunes, increased native vegetation, and improved storm protection for the existing homes and public infrastructure.



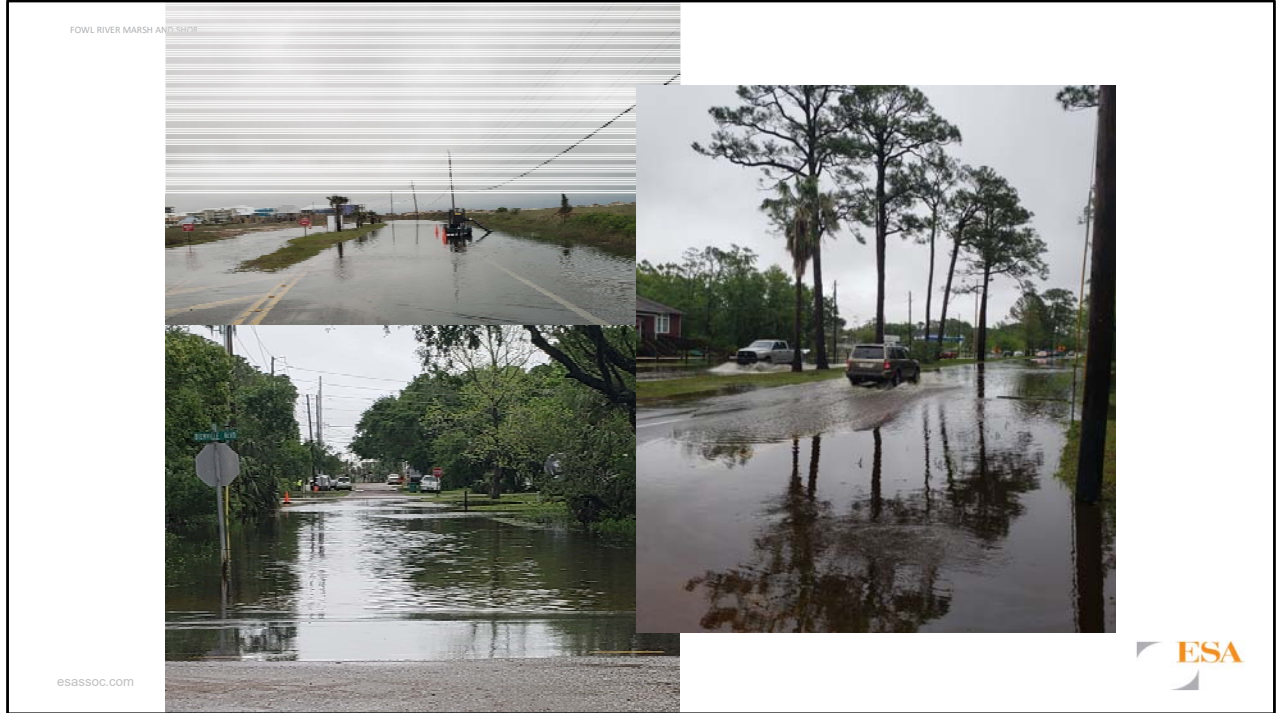


May 2021 was not a named storm or a tropical system. It was a multiday south wind event. Sunny day flood events and king tide flooding continue to cause impacts.

## Fiscal Impact Analysis

(King and Jenkins 2022)

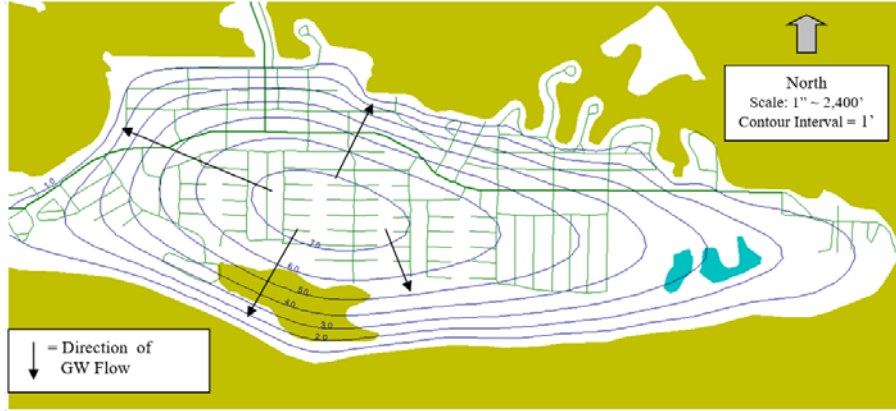
- **Fiscal impact of potential storm damage**
  - between \$19,000 and \$142,000 in property tax revenues at current sea levels
  - up to \$189,000 at higher sea levels due to the loss of homes
- **100-year storm event, 83% of homes lost are expected to be on the west end under existing conditions.**
- **Average developed parcel value of the west end exceeds those of the middle and east end, the loss of west end homes is expected to have an outweighed impact on the Town's resources.**
- **100-year storm would impact lodging tax revenues**
  - between \$115,000 (existing conditions) and \$893,000 (with 6.6 ft of sea-level rise) in lost annual revenue
  - majority of lost lodging tax revenue comes from impacts on the west end
- **West end generates significant revenues including most of the lodging tax revenues, this does not offset the cost of maintaining the West End and providing public services to the properties after an extreme storm event.**
- **Most property on the Island is not owned by Island residents, and not owned for personal use, especially on the West End.**



Non tropical event flooding. Rainfall and groundwater. See next slide.

# Groundwater Flooding

Typical Representation of the Potentiometric Surface of the Water-Table Aquifer



FOWL RIVER MARSH AP

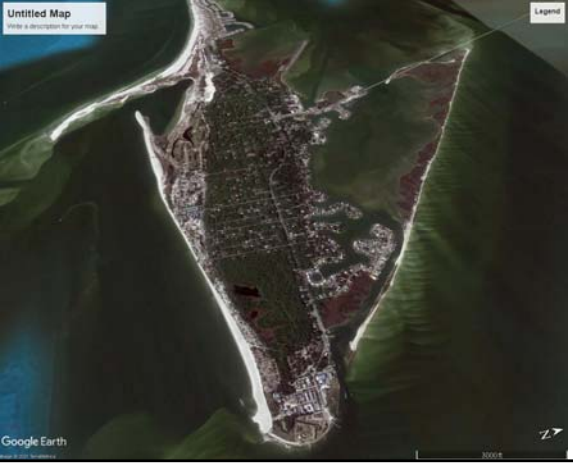


Source: History Museum of Mobile

"Build your house in a wetland, and you've got a hobby for the rest of your life. You will be fighting that water forever."

- Ed Perry, USFWS

Source: <https://www.nwf.org/Magazines/National-Wildlife/1998/Caution-Building-in-a-Wetland-Can-Be-Hazardous-to-Your-House>



Untitled Map

Google Earth

esassoc.com



FOWL RIVER MARSH AND

## Dunes



From Roland Harper, 1940

esassoc.com



## Management Measures



- Retain – the culture and heritage of Dauphin Island
- Revitalize – underutilized assets
- Restore – and preserve natural systems (dunes and marshes)
- Reinforce, rebuild, replace, relocate – aging or inadequate infrastructure
- Retention – of stormwater through green and gray infrastructure
- Renourish – beaches and shorelines
- Resist – storm surge through engineered and natural solutions
- Reduce – vulnerability to storm events
- Resilient – implement programs and policies to strengthen resiliency
- Reconsider – existing policies
- Rethink – how development occurs on the Island
- Retreat – from unsustainable areas
- Reserve – areas for habitat migration
- Reinvent – approaches and solutions
- Reimagine – what a future Dauphin Island could look like

A question was asked about the Fiscal Impact Analysis – has that been common with the other watershed management plan activities, who led the effort, who paid for it? A similar analysis has not been completed with other WMPs. MBNEP contracted with the economists. This was brought about because of the sensitive nature and set of circumstances surrounding Dauphin Island. COVID has impacted the timeline as well as a lack of information, so it was longer than expected to complete.





Jeremiah Kolb with ADCNR provided updates on the State's projects in the Mississippi Sound.

## Project Location



- Located along the northeastern portion of Point aux Pins within Portersville Bay in Mobile County, Alabama.

© 2022 [FlyTheCoast](#)

## Project Overview

- Funded under the Deepwater Horizon Oil Spill Early Restoration.
- The breakwater installation began on June 30, 2020 and was completed by November 3, 2020.
- Plan
  - Deploy breakwaters

© 2022 [FlyTheCoast](#)



## Project Goals

- To reduce the rate of erosion through the reduction of wave height and energy.
- To enhance and support the benthic secondary productivity, including, but not limited to, bivalve mollusks, annelid worms, shrimp, crabs, and small forage fishes.

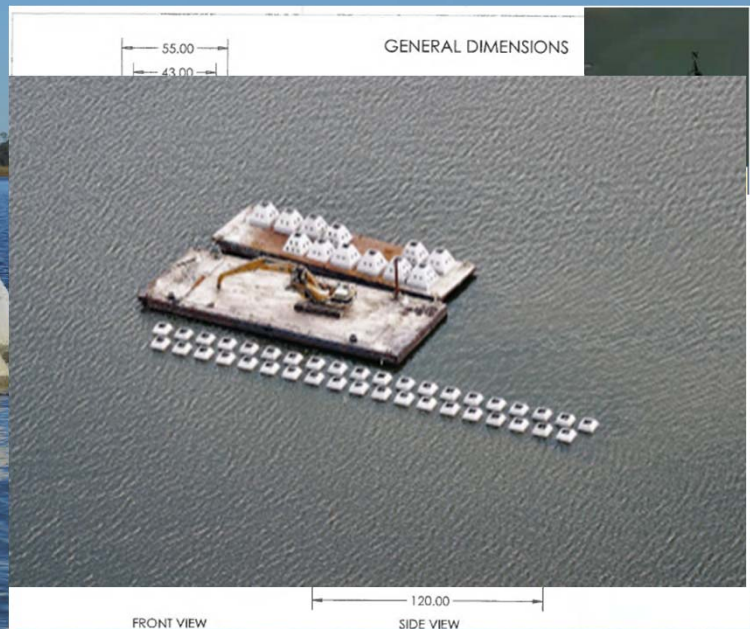


© 2022 FlyTheCoast

# Breakwaters

- Total project length over  $\frac{3}{4}$  of a mile
- The breakwater complex is made up of 15 breakwater segments for a total of 585 Wave Attenuating Units (WAUs) (i.e., 39 WAUs per segment).

© 2022 FlyTheCoast



Breakwaters are a four-sided pyramid. 10' at base, six and a half feet high, and nearly five feet at the peak.

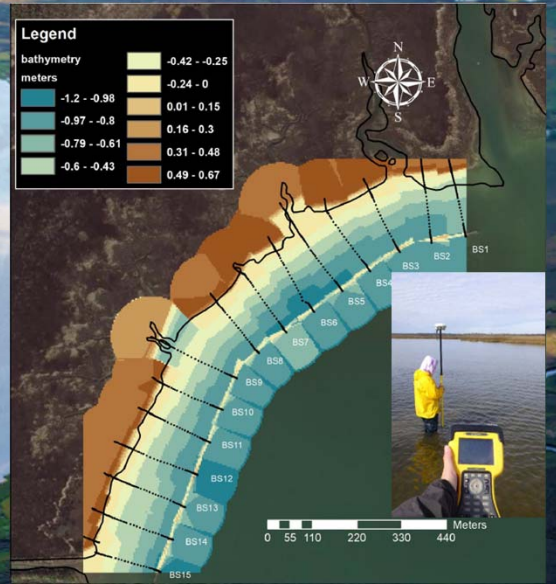


# Marsh Edge Position Monitoring

The breakwaters are expected to minimize the erosion rate to protect the existing salt marsh habitat.

- Method: Conduct bathymetric/topographic survey of cross-shore profiles at the center of each breakwater segment.
- Performance: Over years 1-5, the average shoreline erosion loss is less than the calculated average loss per year in the Project Area.

© 2022 FlyTheCoast



Stantec is undertaking the monitoring. Year 1 elevation and marsh edge position collected Trimble Real Time Kinematic (RTK) Rover 8 global navigation satellite system GPS receiver with real-time location corrections from a reference station located at the Dauphin Island Sea Lab coupled to a Trimble TSC2 controller unit (TSC2). This unit is capable of 0.79- 1.97 in (2-5 cm) accuracy both horizontally and vertically.

# Invertebrate Monitoring

- Invertebrate Epifauna  
(Percent Cover and Dominant sp.)
  - Epifauna averaging around 26% coverage
  - Dominant - Bay barnacle
- Invertebrate Infauna  
(Density and Dominant sp.)
  - Infauna averaging around 1 g/m<sup>2</sup>
  - Dominant - marine worms and soft bodied crabs



## Next Steps

The next four years of monitoring will help determine the value of the breakwaters to the Point aux Pins shoreline and benthic community.

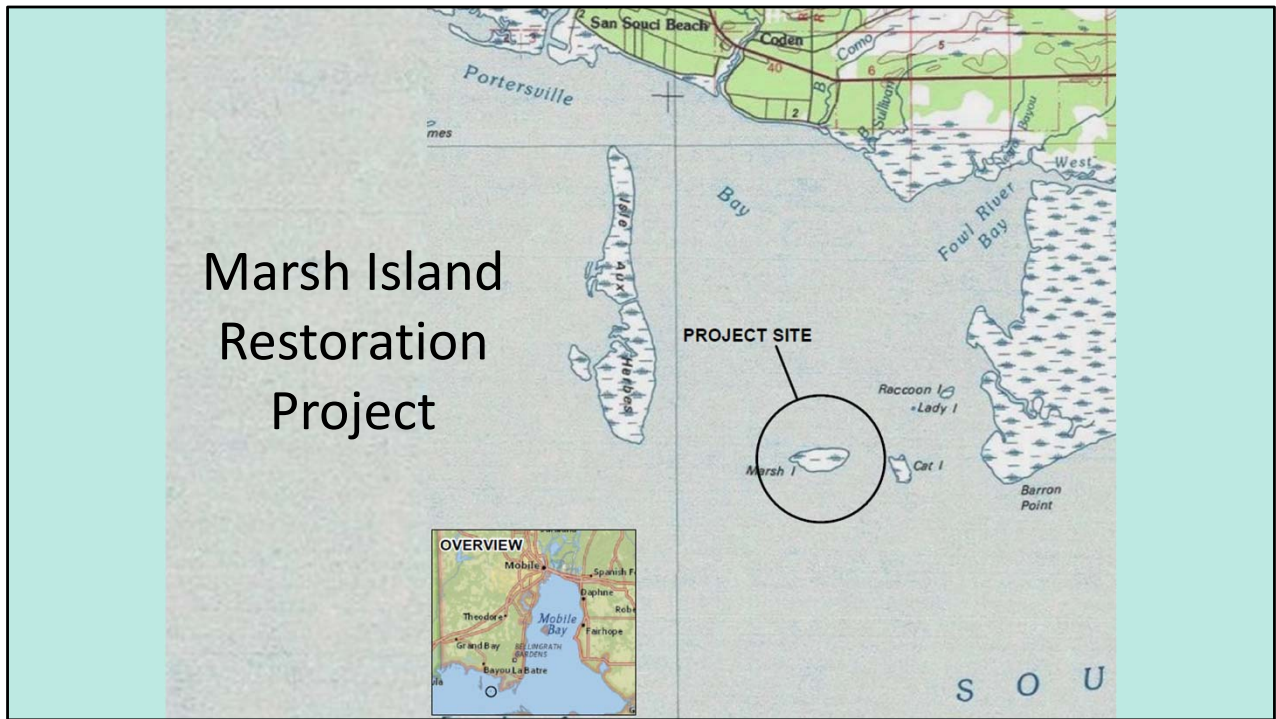
© 2022 [FlyTheCoast](#)

Project has performed well to date considering two storms impacting the area. Monitoring moving forward will continue to help determine success.





Good conversation on the use of geogrid to aid settlement and the various bottom materials found at different completed and planned shoreline restoration projects.



DWH-NRDA Early Restoration

## History of Marsh Island

- Marsh Island is a state-owned island located in the Portersville Bay Portion of the Mississippi Sound, in south Mobile County, AL
- The island is estimated to have lost over 100 acres of its aerial extent since 1900.

Marsh Island

## Project Timeline and Plan

- Funded under the Deepwater Horizon Oil Spill Early Restoration.
- Project commenced in April 2016
- Complete in November 2017
- Plan
  - Restore marsh
  - Deploy breakwaters
  - Plant vegetation

Habitat service debits and restoration credits are typically expressed in terms of discounted service acre years (DSAYs) to account for changes over time and potential differences between the injury and restoration implementation (NOAA [2000](#)). A DSAY is the present-value quantum of total services provided by a single acre of habitat over 1 year.



**Marsh Island Project Goals**

- Restore 50 acres of Salt Marsh
- Protect the remnants of Marsh Island
- Create approximately 5,000 linear feet of tidal creeks

Marsh Island

Habitat service debits and restoration credits are typically expressed in terms of discounted service acre years (DSAYs) to account for changes over time and potential differences between the injury and restoration implementation (NOAA [2000](#)). A DSAY is the present-value quantum of total services provided by a single acre of habitat over 1 year.





Prior to restoration 25% of the current footprint remained.

The east side of the restoration has held up better because more clay was used in this area – sand on the west side. Showing some erosion and plans are to adaptatively manage.

Dredge totaled 482,353 cubic yards



© 2022 [FlyTheCoast](http://www.flythecoast.com)

## Taking Shape



© 2022 FlyTheCoast



## Breakwaters

- OysterBreak™  
Shoreline  
Protection
  - 58 breakwater  
segments which  
includes 928 rings  
deployed



## Marsh Plantings

### smooth cordgrass

(62,600 smooth cordgrass)

- Planted up to +1' elevations along tidal channels

### black needlerush

(184,330 black needlerush)

- Planted +1-2' elevations

### saltmeadow cordgrass

(11,930 saltmeadow cordgrass)

- planted +2' elevations



Seventeen vascular plant sp. noted during 2020, including shoreline sea purslane, seashore paspalum, bitter beach grass, salt grass.

Non-native – common dog fennel, oldfield broomsedge, Bermuda grass.

There was some initial mortality after planting but good results with no adaptive management needed.

## 5-Year Monitoring

- Marsh Elevation
- Spatial Extent
- Erosional Effects on Adjacent Shorelines
- Survival of Plantings
- Plant Density and sp. Composition
- Undesirable sp.

© 2022 [FlyTheCoast](#)

Currently in last year of monitoring.



## Next Steps

- Adaptive Management
  - Due to steady shoreline erosion on the west/northwest side of the island, ADCNR has selected to move forward with the development of a design to stabilize the shoreline and protect bird nesting habitat.
  - Includes:
    - Additional breakwaters
    - Addition of shell/pebble beach

© 2022 [FlyTheCoast](#)

In process. Expect a design in 2023 with additional permitting needs likely.





What is causing erosion on the northwest side? Large fetch at the island and the amount of sandy material placed in the area are likely culprits. Addition of shell and pebble beach are management actions to correct.



# COASTAL RESILIENCY PROGRAM

## WHAT WE DO...



- LIVING SHORELINES
- WETLANDS
- BEACH AND DUNES
- BARRIER ISLANDS
- SEAWALLS
- BREAKWATERS



Ship Island Barrier Island Restoration, MS



Saltmarsh restoration, Bayou Caddy, MS

## OUR PROJECTS...

### MISSISSIPPI

- MsCIP- \$1.5B Auth / \$562M Current Funded Projects:
  - Forrest Heights Levee - \$20M
  - Deer Island Ecosystem Restoration - \$35M
  - Barrier Island Monitoring Plan - \$15M
- 2022 IIJA MsCIP Funded Projects
  - Bayou Cumbest - \$22.7M
  - Admiral Island - \$19.4M
  - Franklin Creek - \$1.6M
  - Turkey Creek - \$6.1M
  - Dantzler - \$2.0M
  - SAV Pilot Program - \$802K
  - Beach And Dune Restoration - \$20.8M
  - Waveland Floodproofing - \$4.0M

### ALABAMA

- Alabama Coastal Comprehensive Plan – \$1M
- Little Dauphin Island Restoration Study –NFWF (\$1.4M)

### FLORIDA

- Panama City Beach Renourishment - \$35M
- Okaloosa CSRSM Study
- South Atlantic Coastal Study (SACS) – Regional Watershed Study managed by SAD

*Working Today to Build a Better Tomorrow*

David Newell with the U.S. Army Corps of Engineers provided an overview of projects in the Coastal Resiliency Program. Opportunities for beneficial use in coastal Alabama continue to increase and the Corps is very active in the Mississippi Sound, both AL and MS waters.



# MOBILE HARBOR, ALABAMA

53



### Description/Scope:

The GRR report examined the costs and benefits as well as the environmental impacts of modifying the dimensions of the existing Federal project within its authorized limits. The purpose of the study was to determine improvements for safety and efficiency of harbor users. Vessels are experiencing delays leaving and arriving at port facilities and inefficiencies have increased as the volume of cargo has grown and larger vessels call on the port to handle the increased cargo.

Phase 1 construction awarded 30 Sep 20 and completed 19 Oct 20. Phase 3 awarded 21 Apr 2021 (70% complete). Phase 4 scheduled for award Apr 2022. Total of 6 construction phases over four-year duration (\$366M).



MILESTONES		
Scheduled Date	Description	Actual
02-Jul-20	Receive Permit/Certifications	14-Jul-20
18-Jun-20	Executed PPA	17 Jun 20
28-Sep-20	Award Phase 1	28-Sep-20
31-Dec-20	NTP Phase 1	1-Dec-20
17-May-21	Award Phase 3	21-Apr-21
Apr 2022	Award Phase 4	

### Status / Challenges / Way Ahead

#### Status:

- Construction fully funded in FY20 Work Plan (\$274.3M)
- Executed PPA 17 Jun 20
- Awarded Phase 1 28 Sep 20 (\$8.3M to Great Lakes Dredging) - Complete
- Awarded Phase 3 (2<sup>nd</sup> Contract) 21 Apr 21 – 70% complete
- Advertised Phase 4 on 29 Apr 22

#### Challenges:

- Resolution on W&T Offshore pipeline bundles #1, and #9
- Beneficial Use MOA with Mobile County, NEP, and DISL

#### Way Ahead:

- Resolution/Removal of pipeline bundles #1 and #9 prior to Phase 2 Commencement

*Working Today to Build a Better Tomorrow*

53

Opportunities for beneficial use in coastal Alabama continue to increase. The turning basin has a lot of suitable material for beneficial use. Time is running out if you do not have a permit and request in. Slated for DI Causeway and Deer River but may have some additional to share.

Bid closing for Phase IV closes this month.





## CLAIBORNE/MILLERS FERRY L&D FISH PASSAGE, ALABAMA

54



### Description/Scope:

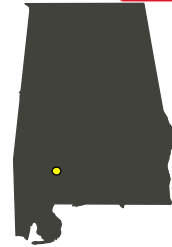
The study will investigate fish passage opportunities at Claiborne and Millers Ferry project sites with the goal of reconnecting migratory fish species with over 230 miles of river habitat. From the TNC's 1998 Rivers of Life: Critical Watersheds for Protecting Freshwater Biodiversity - " Although at-risk freshwater species are distributed throughout the United States, two particular regions include 35 percent of all vulnerable and imperiled fish and mussel species (161 of 465 species): the Tennessee-Cumberland River basins (including Tennessee and parts of six other states) and the Mobile River basin (including most of Alabama, parts of Georgia and Mississippi, and a bit of Tennessee).



Miller's Ferry L&D



Claiborne L&D



### Status / Challenges / Way Ahead

#### Status:

- Signed Vertical Team Alignment Memo (for AMM) submitted to SAD 21 Mar 22
- Section 1002 (90 Day) Letter submitted to Sponsor 24 Mar 22
- PDT development of Post AMM Final Array of Alternatives underway
- Draft PMP routing for comments in SAM

#### Challenges:

- Funded in FY22 President's Budget - \$600K

#### Way Ahead:

- Development of detailed tasks for project schedule continues

MILESTONES		
Date	Description	Actual
30-Nov-21	Execute FCSA	23-Nov-21 (A)
24-Feb-22	Alternatives Milestone	24-Feb-22 (A)
1-Mar-23	TSP Milestone	-
1-Sep-23	Agency Decision Milestone	-
7-Mar-24	Final Report Submittal to MSC	-
11-Nov-24	Chief's Report	-

*Working Today to Build a Better Tomorrow*

Unique project outside of Mississippi Sound but has ripple effect on this area. Working with TNC.

A year out from a tentatively selected plan for this area. Considering dam removal but a lot of modeling and work still to be done.



# LITTLE DAUPHIN ISLAND RESTORATION ASSESSMENT

55



### Description/Scope:

This is a new study funded by the National Fish and Wildlife Foundation (NFWF) from the Gulf Environmental Benefit Fund (GEBF) to evaluate ecosystem restoration options for Little Dauphin Island, make a recommendation, conduct all required environmental compliance documentation, and prepare contract plans and specifications for implementation.

Total Study Cost: \$1,424,567



MILESTONES		
Schedule Date	Description	Actual
	ASA(CW) signed MOA	11-Aug-20
23-Oct-20	Receive Funds from NFWF to Start Study	27-Oct-20
31-May-22	Identify Recommended Plan	
7-Nov-22	Final Report / Plans & Specs Complete	

### Status / Challenges / Way Ahead

#### Status:

- Agreement was signed by NFWF and the ASA(CW) 11 Aug 20.
- Received funds to initiate the effort 27 Oct 20.
- Executed the Interagency Agreement with the USGS for sediment transport modeling support. This effort is now well underway.
- Awarded contract to conduct sediment tracer study and first round of tracers were deployed in Jul. First round sediment tracer sample collection completed in late Sep.
- Executed the modification to the scope of work to incorporate an assessment of the breach at Pass Drury. Submitted FY22 funds request on in Aug and received funds in Sep.

#### Challenges:

- None

#### Way Ahead:

- Continue to manage the PDT and ongoing study efforts.

*Working Today to Build a Better Tomorrow*

Pass Drury continues to require maintenance issue. Some pull to leave open and close – evaluating options to best manage this area long-term.



# ALABAMA COASTAL COMPREHENSIVE PLAN

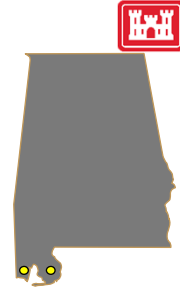
56

### Description/Scope:

The Alabama Coastal Resiliency Program is preparing a comprehensive plan to provide framework for State decision making that:

- Identifies the public's social, economic, and environmental visions (i.e., "values") for Mobile and Baldwin Counties
- Highlights existing plans and strategies that support those visions
- Identifies areas vulnerable to sea level change and coastal storms and characterizes the resilience of the area (i.e., the ability to prepare and plan for, absorb, recover from, and successfully adapt to adverse events).
- Identifies opportunities to further develop the capacity for resilience within our coastal community

Total Study Cost: \$1M



### Status / Challenges / Way Ahead

#### Status:

- Team is making good progress on the final web viewer. Goal is to wrap it up by the end of May.

#### Challenges:

- Issue with in-house resource availability has been resolved. No other challenges to report at this time.

#### Way Ahead:

- Wrap it up!

MILESTONES		
Schedule Date	Description	Actual
	MOA signed	25-Apr-14
	Interagency Agreement signed	03-Jun-14
	Phase 3 Risk and Adaptability Assessment initiated	27-Sep-18
31-Jul-21	Draft Report Completion	
31-Aug-21	Final Report Completion	

*Working Today to Build a Better Tomorrow*

The website for the ACCP will be a great resource that all partners will be able to benefit from. It is almost ready to go live.



## ALABAMA BARRIER ISLAND RESTORATION ASSESSMENT

57



### Description/Scope:

Collaborative effort between the USACE, USGS, and State of Alabama to investigate viable and sustainable restoration options that protect and restore the resources of Dauphin Island. Study is being funded through the NFWF Gulf Environmental Benefit Fund (i.e. the settlement funds from the BP oil spill).

Total Study Cost: \$4,197,600



### MILESTONES

Schedule Date	Description	Actual
	ASA(CW) signed MOA	30-Apr-15
	Interim Report Released to Public by ADCNR	06-Sep-17
Dec-19	Draft Report Completion	22-Jan-20
May-20	Final Report Completion	15-May-20

### Status / Challenges / Way Ahead

#### Status:

- Released the final report on 15 May 20.
- Held a virtual public meeting on 9 Jun 20 to present the means, methods, and results of the study. Taking public comments until 26 Jun 20 and scheduled to respond to all comments by 1 Aug 20. Accepted public comments until 26 June 20 and the team prepared the final responses to all comments received. These were posted to the project website (<https://gom.usgs.gov/DauphinIsland/Reports.aspx>) on 19 August 20.
- Currently working with NFWF on a modification to the study agreement to pay for the continued storage and maintenance of all the web products for the next 10 years with the remaining money from the study (approximately \$150k).

#### Challenges:

- None

#### Way Ahead:

- Execute modification to pay for the continued storage and maintenance of the web products.

**Working Today to Build a Better Tomorrow**

Merging shoreline efforts with dredge work will be an avenue for low-cost beneficial material.



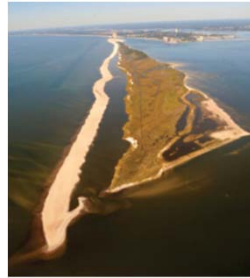
## DEER ISLAND, MISSISSIPPI

58

### Description/Scope:

The Ecosystem Restoration of Deer Island will include features that will ensure future protection of the island by extending the breakwater structure known as Katrina Key to softened the effects of normal wave erosion, extension of the southern sand beach/dune system to protect the marsh/tidal forest to the limits of the project. Overall, the project is intended to rebuild the island to its historical footprint so that the island may provide its historical hydrological, ecological and sociological benefits to the Biloxi area.

The Deer Island Ecosystem Restoration Project is located in Harrison County Mississippi at the mouth of Biloxi Bay. The island is a feature of the Mississippi Coastal Improvement Program (MsCIP) as signed by the September 12, 2009 Chief's Report and as authorized by PL 111-32 Title IV



MILESTONES		
Schedule Date	Description	Actual
3-Feb-21	Kick Off	3-Feb-21
6-Feb-23	VE	
14-Feb-23	65%/Design Alternatives	
23-Mar-23	100% Complete	
1-May-23	DQC	
23-Jun-23	ATR	
24-July-23	RTA	
4-Dec-23	Award	

### Status / Challenges / Way Ahead

#### Status:

- Cultural Survey Contract awarded on Feb 15, 2022
- Topographic and Bathymetric survey completed on March 4, 2022
- Vibracores completed Jan 21, 2022. Split Spoon Sampling (SPT) scheduled for completion Mar 31, 2022
- Design Team has identified preliminary design alternatives
- Sea level rise scenarios have been identified for design and performance analysis
- Execute PPA due to NFS reasonability to perform O&M – Agreement to be in place by July 24, 2023

#### Challenges:

- High winds and low tides have delayed the Survey and Geotech

#### Way Ahead:

- Actively manage the team to ensure progress.
- Draft Agreement with DMR in 2023

**Working Today to Build a Better Tomorrow**

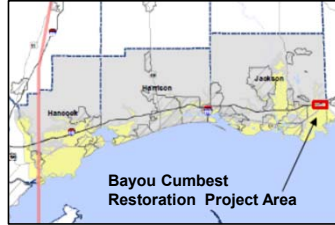


# BAYOU CUMBEST ECOSYSTEM RESTORATION



### Description/Scope:

The Bayou Cumbest restoration project is located in the extreme southeastern portion of Jackson County near Mississippi Sound. The area or zone where water meets land can be described in various terms – it is a buffer area, the land-water interface, or an ecotone – an area where the terrestrial ecosystem transitions into aquatic ecosystems. Critical habitats exist in this ecotone, including emergent tidal marshes, that serve as vital breeding areas, nursery grounds, and areas where much of the massive amounts of organic carbon needed to fuel aquatic food chains are produced. The project restores a total of approximately 148 acres which include 110 acres of emergent tidal marsh and 38 acres of scrub-shrub habitat. These are areas where sediments, nutrients, and even contaminants eroded from the uplands can be detained before entering the aquatic system and energy from the water, through waves, tides, and surges can be captured and mitigated before impinging upon the upland.



Milestones		
Schedule Date	Description	Actual
	Execute Design Agreement	

### Status / Challenges / Way Ahead / Funding

#### Status:

- Execution of Design Agreement.

#### Challenges:

- NA

#### Way Ahead:

- Execute agreement. Receive funds. Design Start.

*Working Today to Build a Better Tomorrow*



# FRANKLIN CREEK ECOSYSTEM RESTORATION



### Description/Scope:

The Franklin Creek Restoration Project is located in eastern Jackson County, Mississippi near the Mississippi - Alabama state line. The project restores approximately 149 acres of degraded wet pine savanna habitat identified by the USFWS as having high value for native species.

Project fully restores direct nodal connection between coast and wet pine savanna habitat and restores historic hydrology, through removal of roadbeds and culverts; fully restores geomorphic site conditions by re-establishment of the natural hydrologic flow regime; removes current barriers to overland flows which occurred naturally prior to development; facilitates material deposition and diminishes surface erosion. The habitat ecosystem functions also support neo-tropical migrant birds that utilize the Mississippi flyway corridor.



Milestones		
Schedule Date	Description	Actual
	Execute Design Agreement	

### Status / Challenges / Way Ahead / Funding

#### Status:

- Execution of Design Agreement.

#### Challenges:

- NA

#### Way Ahead:

- Execute agreement. Receive funds. Design Start.

*Working Today to Build a Better Tomorrow*



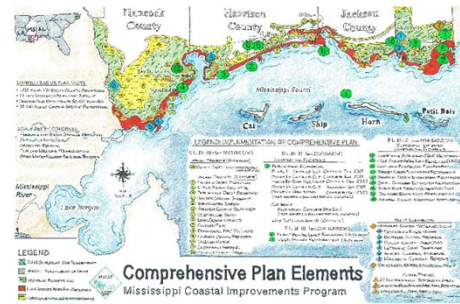
# COAST WIDE BEACH AND DUNE ECOSYSTEM RESTORATION

61



### Description/Scope:

This project element consists of beach and dune improvements to approximately 30 miles of the 60 miles of existing beaches on the mainland coast. These improvements would include construction of 60-foot wide vegetated dune fields approximately 50 feet seaward of the existing seawalls. These beach and dune areas are critical to nesting and resting shorebirds such as the State listed least tern and the threatened piping plover. In addition to the ecological benefits, the dunes would provide incidental hurricane and storm damage risk reduction benefits particularly during smaller storm events, tropical storms, and lower energy hurricanes. In accordance with the provisions of WRDA 1986, as amended, cost sharing would be 65-percent Federal and 35-percent non-Federal. Post-implementation monitoring of this ecosystem restoration element is projected to be conducted for no more than five years.



Milestones		
Schedule Date	Description	Actual
	Execute Design Agreement	

### Status / Challenges / Way Ahead / Funding

- Status:**
- Execution of Design Agreement.
- Challenges:**
- NA
- Way Ahead:**
- Execute agreement. Receive funds. Design Start.

*Working Today to Build a Better Tomorrow*

Mississippi specific.

Question: Regarding deepening and widening of the channel what percentage of that material could be used for beneficial use? Entire project is about 25M cubic yards and about 20% is the estimate for beneficial use. Around 1M cubic yards from the turning basin project is slated for two coastal projects under design and funded for construction (Deer and DI Causeway).

Breach at Drury Pass – is that temporary repair completely filling in the breach or leaving the channel? Likely to fill it entirely at this time. The natural pass wants to be there and the natural process that it provides are beneficial but also maintaining the adjacent channel has to be considered. Ultimately, it may be a compromise to get both desirables.

Corps is wanting to use material for beneficial where it makes sense and is planned properly. Where those opportunities exist, they would be happy to meet and discuss in more detail.

Check out more on the ACCP - <https://www.sam.usace.army.mil/Missions/Program-and-Project-Management/Alabama-Coastal-Comprehensive-Plan/>  
 MsCIP - <https://www.sam.usace.army.mil/Missions/Program-and-Project->



Management/Civil-Projects/MsCIP/

# MS Sound Updates from The Nature Conservancy

## WHAT'S HAPPENING?

- Lightning Point Update
- Coffee Island Update
- Bayou La Batre Stormwater



Aerial view of Lightning Point in May 2021  
Photo by Sam St. John, FlytheCoast.com

Mary Kate Brown with The Nature Conservancy shared an update on completed and planned activities in and around Bayou La Batre and the Mississippi Sound.



Funded through GOMESA the fishing platform is complete. Cost increases limited options, but a nice option was still constructed. Wheelchair accessible.

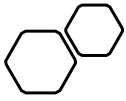
## LIGHTNING POINT UPDATE: REVETMENT REPAIRS COMPLETE!

- **Shoreline Stabilization Extension** – approximately 466 LF of rock riprap revetment west of existing articulated concrete block mattress revetment.
- **ACB Mattress Stabilization** –repair erosion around existing ACB mattress revetment, place rock riprap in a perimeter trench around the existing concrete anchor slab.
- **2/7/2022 staging, 02/14/2022 Start and completed by 03/09/2022**

Photo Credits: TNC



Completed just before active tropical season in 2020. Performed well during Hurricane Zeta but the surge scoured the slope/revetment. Some adaptive management/retrofitting was recommended as a long-term solution to this susceptible area on the project.



## LIGHTNING POINT UPDATE: PUBLIC ACCESS AMENITIES (almost) COMPLETE!

- **Bicentennial Sculpture**—Sculpture showcases the historical and cultural importance of Bayou La Batre's fishing community.
- **Property Bollard Installation** – Procision Restoration, LLC and Alabama Power came together to install a new property line using existing and used power poles.
- **Pavilion and Picnic Tables** – 20' x 20' pavilion built by Procision Restoration and new picnic tables installed.
- **Coming soon.....** Two benches funded by PEP Mobile.

Photo Credits: Mike Dumas/TNC; Beth Thomas/AL Power





LIGHTNING POINT  
RECENT  
RECOGNITIONS



Photo Credits: Mike Dumas/TNC; Jeanne Allen/EPA

Governor visited in April 2022 to celebrate a ribbon cutting for the project (post-COVID).

Awarded an EPA 1<sup>st</sup> Place Gulf Guardian Partner Award!

## Coffee Island Adaptive Management

- TNC is working with Volkert and ADCNR on implementing improvements to the Coffee Island ARRA reefs.
- Preliminary engineering and designs are complete
- Next steps: Find FUNDING and begin PERMITTING

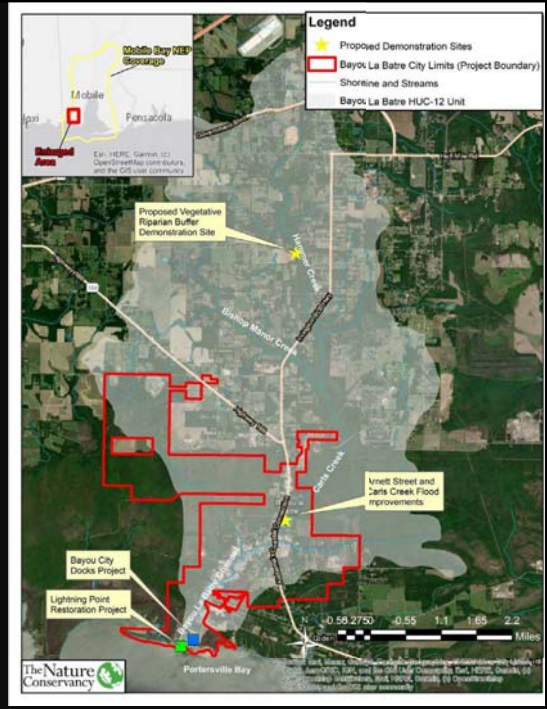


Used three different reef technologies at different heights – a pilot study of sorts.

Ten years of monitoring have produced data to support adaptive management of reef locations that need some additional help.

# EPA GOM Funded Bayou La Batre Stormwater Infrastructure Mapping & Demo

- Project consists of stormwater infrastructure mapping, green infrastructure demonstration projects, water quality monitoring
- DISL and Alma Bryant HS will be conducting the WQ monitoring
- Next steps:
  - Develop RFP for Engineering Firm to assist with stormwater infrastructure mapping (ETA mid-summer or earlier)
  - Kickoff meeting with City of Bayou La Batre and key stakeholders



Just kicking off. Will release an RFP in the coming months.



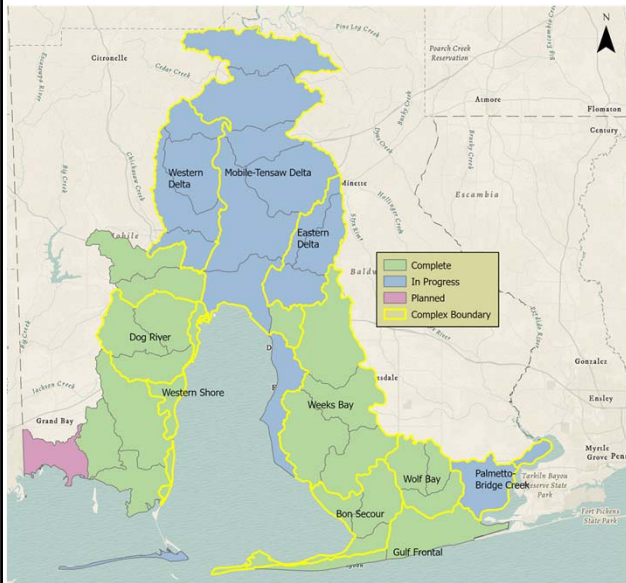


Wilson Plover have been seen in Alabama but not noted to nest here – hoping that some will begin to make a home at Lightning Point.

Questions: USA is conducting a two-year study to do some water quality monitoring for oyster activity – is that something you all are tying into with your work at Coffee Island.

Has post-construction monitoring been initiated at Lightning Point? Yes, third year in 2022 come September – DISL is doing habitat monitoring, Moffit and Nichols did first construction surveys in 2021. Can share they reports to anyone interested.

# Watershed Planning Update



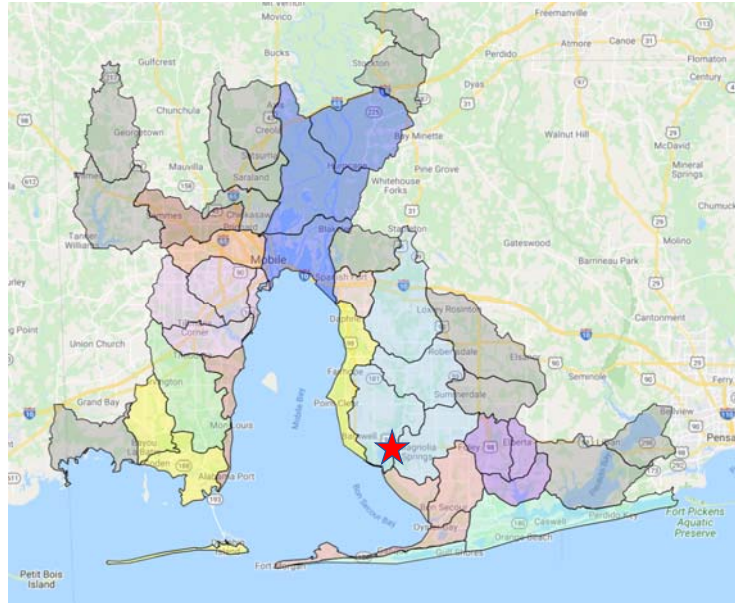
Watershed	Status
Western Shore	Complete
Gulf Frontal	Complete
D'Olive Update	Complete
MTA Delta	In progress – Final Summer '22
Eastern Shore	In progress – Final Summer '22
Dauphin Island	In progress – Final Summer '22
Perdido	In Progress
Western Delta	In Progress
Eastern Delta	In Progress
Grand Bay	On Deck

Trying to get three wrapped up this summer – as with most projects, COVID has slowed the process.

Western/Eastern Delta just getting started.

Should be able to start the final plan, Grand Bay, this year.

## Lower Fish River Restoration



## Lower Fish River Restoration



### Project Lead:

- Mobile Bay National Estuary Program

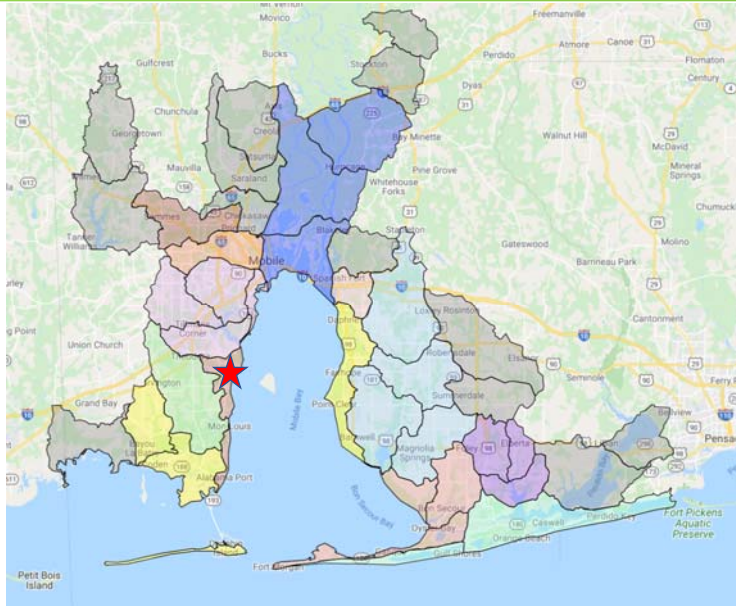
### Project Funding:

- NFWF GEBF
- Marlow project ~50% complete.
- Magnolia River Watershed – E&D and landowner access underway for three projects.

- Three segments in Magnolia River under engineering and design. Working to secure landowner agreements and submit a proposal for construction funding.
- Construction at Marlow started in March.



## Deer River Marsh and Shoreline Stabilization



### **Project Lead:**

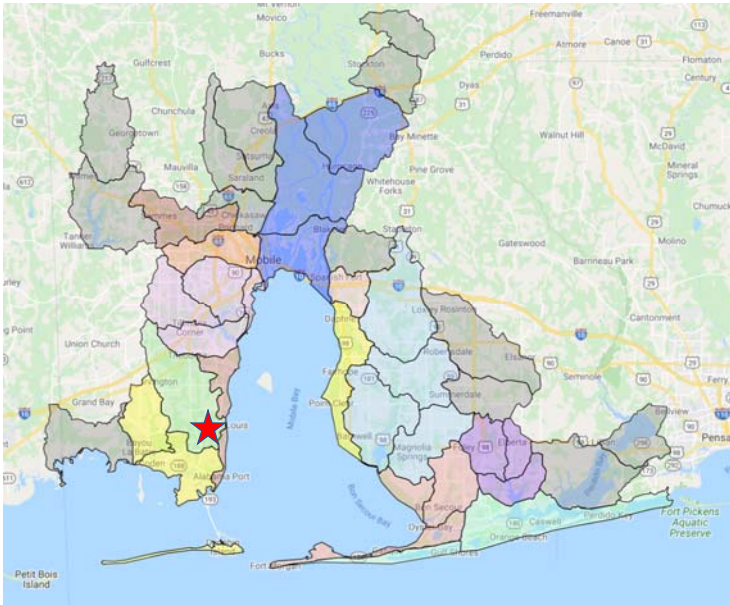
- Mobile Bay National Estuary Program

### **Project Funding:**

- NFWF GEBF
- Additional data collection and permit modification proposed.

Waiting on permitting to come through. 60% design in hand. Shooting for winter 2022 construction permit pending.

## Fowl River Spits



### Project Lead:

- Mobile Bay National Estuary Program

### Project Funding:

- NFWF GEBF
- Permit review
- 60% design
- Prequalification strategy

- 60% design to be delivered in April.
- Working on an outreach plan to roll out the project in the community.

## D'Olive Watershed Restoration



### **Project Lead:**

- Mobile Bay National Estuary Program

### **Project Funding:**

- NFWF GEBF/ADEM 319
- Two projects (~1,500 LF & 272 LF)
- Canterbury construction wrapping up.
- Pine Run community meeting and landowner access.

- Working through landowner agreements and community meetings in D'Olive for Pine Run.
- Canterbury project is wrapping up. These are likely the last two NFWF GEBF funded D'Olive projects.

## Project Implementation Committee Agenda



### Welcome and Call to Order:

Co-Chairs: Judy Haner, The Nature Conservancy,  
& Patric Harper, U.S. Fish and Wildlife Service  
Review and approval of March 2022 minutes

Old Business: Management Conference Committee  
Updates

### New Business:

- ~~Mississippi Sound Project Updates~~
- ~~MBNEP Watershed Planning and Project Implementation Updates~~
- **Off-cycle Topical Meeting – D’Olive April 13, next destination?**
- **Next Meeting August 11**



Held a D’Olive Site Tour April 13. Committee members visited multiple sites at different stages of post-construction – topics included: causes, restoration strategies, and working with landowners. Committee will schedule another field trip after the summer heat winds down.

Motion to adjourn was made by Mary Kate Brown, seconded by Jeremiah Kolb. Meeting was adjourned at 2:48pm.