

# MISSISSIPPI RESTORATION SUMMIT 2019



MISSISSIPPI DEPARTMENT OF  
ENVIRONMENTAL QUALITY

Chris Wells

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MDEQ

# RESTORATION SUMMIT PURPOSE

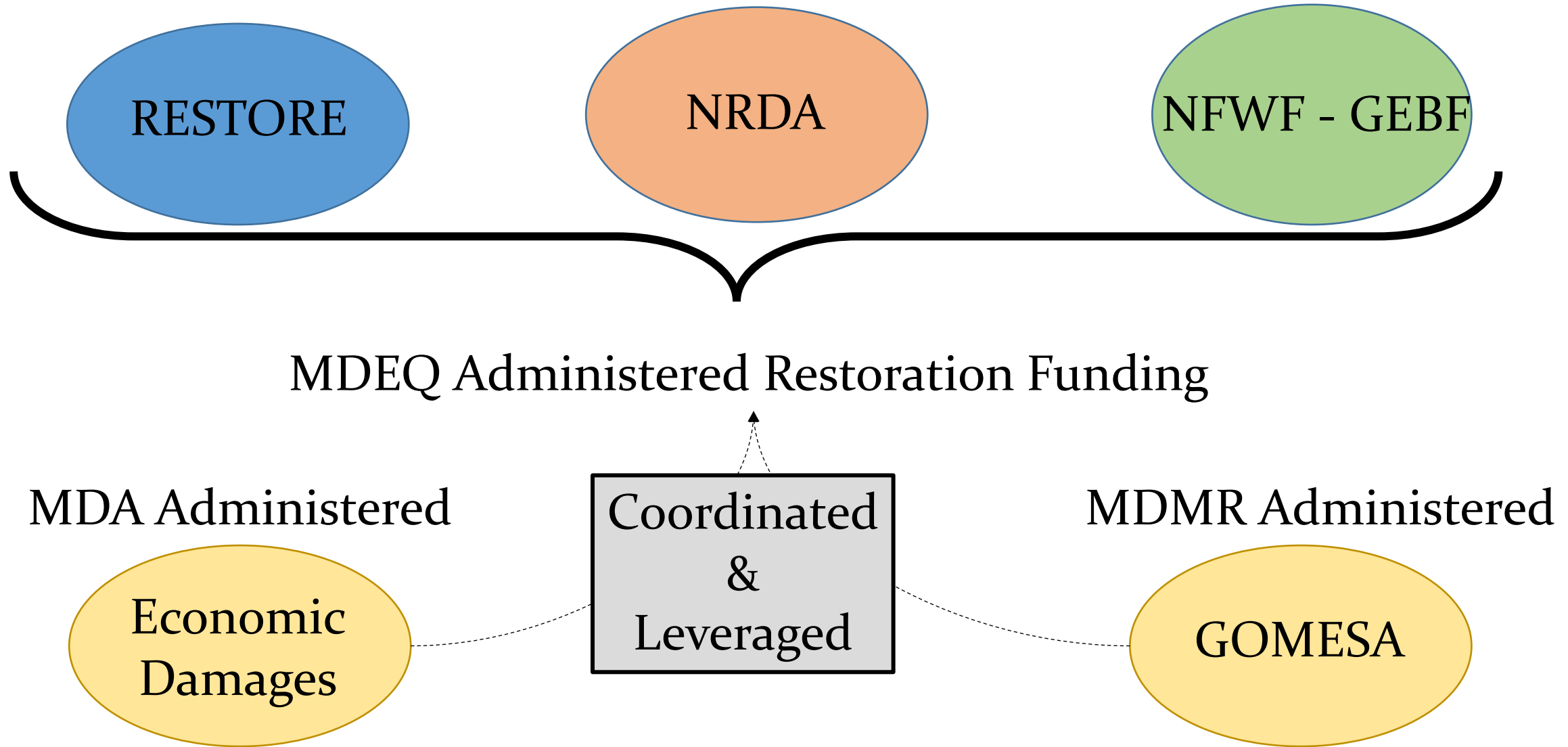
The Restoration Summit was created for the following purposes:

- Have a single venue in which all new restoration projects are announced for the coming year
- Have an opportunity to provide the coastal community an update on restoration projects being implemented
- Create a means to solicit community feedback, input, and suggestions on restoration projects and priorities



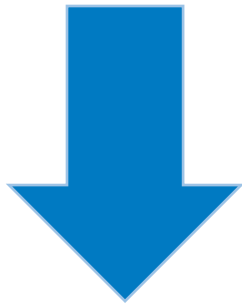


# RESTORATION FUNDING STREAMS



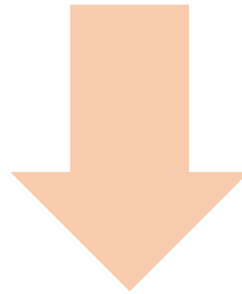
# RESTORATION FUNDING STREAMS (MDEQ)

RESTORE



Civil Settlement;  
Ecological and Economic;  
5 buckets;  
Restore Council and  
Treasury involved

NRDA



Civil Settlement;  
Funding by resource;  
Work through TIG;  
Ecological focus

NFWF  
GEBF

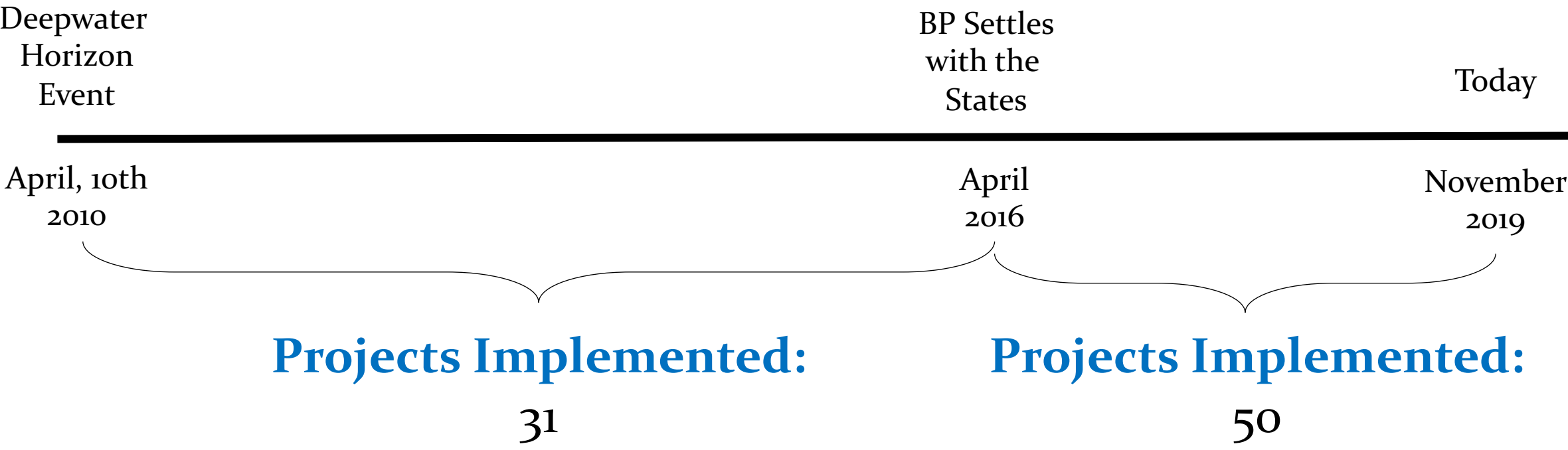


Criminal Settlement;  
Plea Agreement;  
Damage to Resources affected  
by Spill;  
Ecological focus

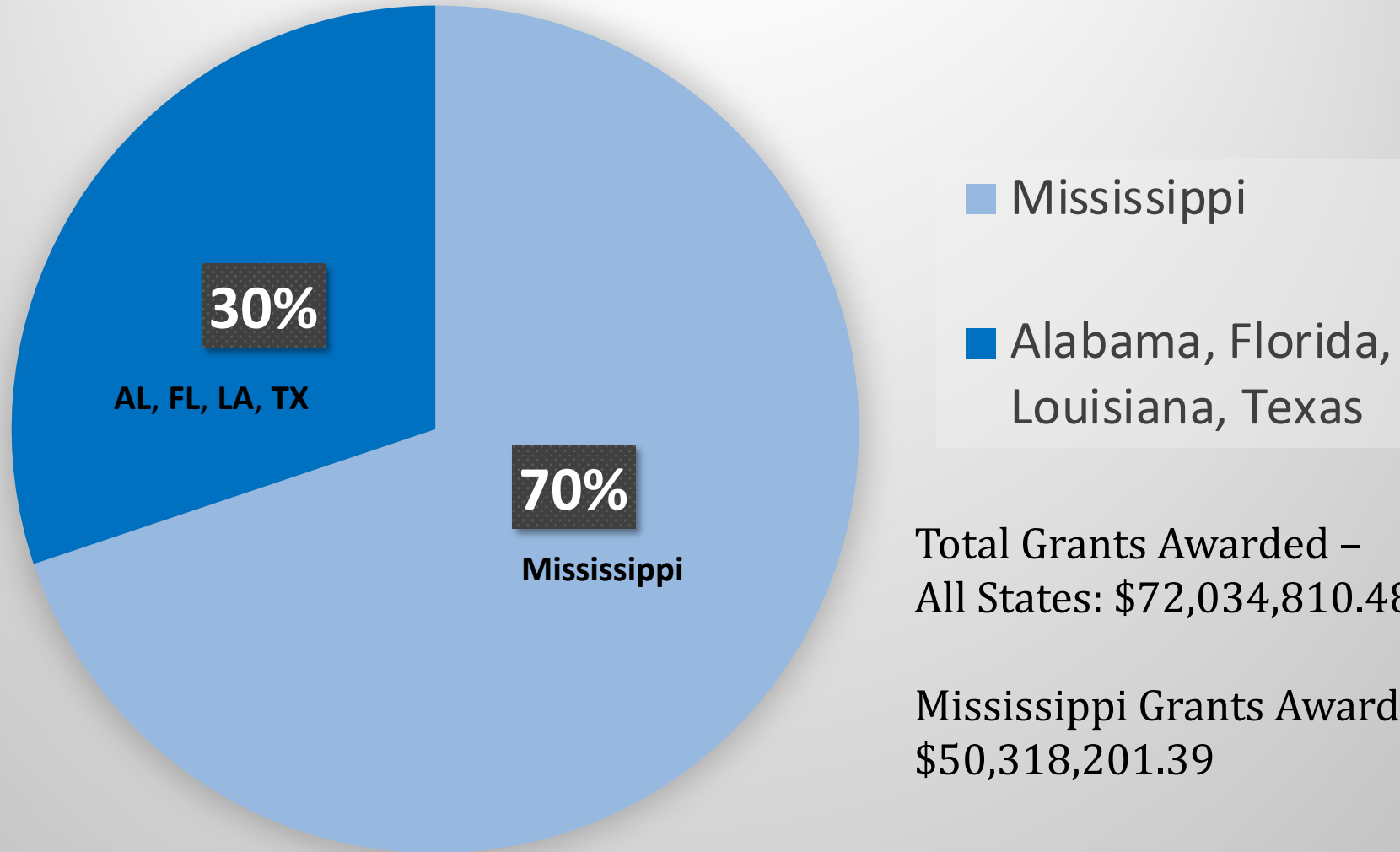
# ACCOMPLISHMENTS TO DATE



# RESTORATION TIMELINE



## Total Grants Awarded to All States– Bucket 1 (Through August 2017)



Total Grants Awarded –  
All States: \$72,034,810.48

Mississippi Grants Awarded:  
\$50,318,201.39

# ACCOMPLISHMENTS NFWF GEBF – ROUND ISLAND

## BU Marsh Creation Project -Round Island:

- 220 acres
- 2019 by the numbers:
  - New Mississippi high count for Wilson's plover – 61
  - Nesting species – 10
  - 2 hatched Snowy Plovers banded and found in Alabama (Dauphin IS. and Bon Secour)





# ACCOMPLISHMENTS NFWF GEBF – ROUND ISLAND – FALL 2016





# ACCOMPLISHMENTS NFWF GEBF ROUND ISLAND – SPRING 2017





# ACCOMPLISHMENTS NFWF GEBF ROUND ISLAND - 2019





# ACCOMPLISHMENTS INFINITY SCIENCE CENTER

## Infinity Science Center

- Complete – June 30<sup>th</sup> 2018
- 3D theater, Biome boardwalk
- 11 new exhibits; refurbishment of Xspherience theater





# ACCOMPLISHMENTS HANCOCK MARSH LIVING SHORELINE

## Hancock Marsh Living Shoreline

- 6 miles of living shoreline have been constructed
- 46 acres of oyster reef constructed
- Remaining component 46 acres of marsh





# ACCOMPLISHMENTS

## HANCOCK MARSH LIVING SHORELINE

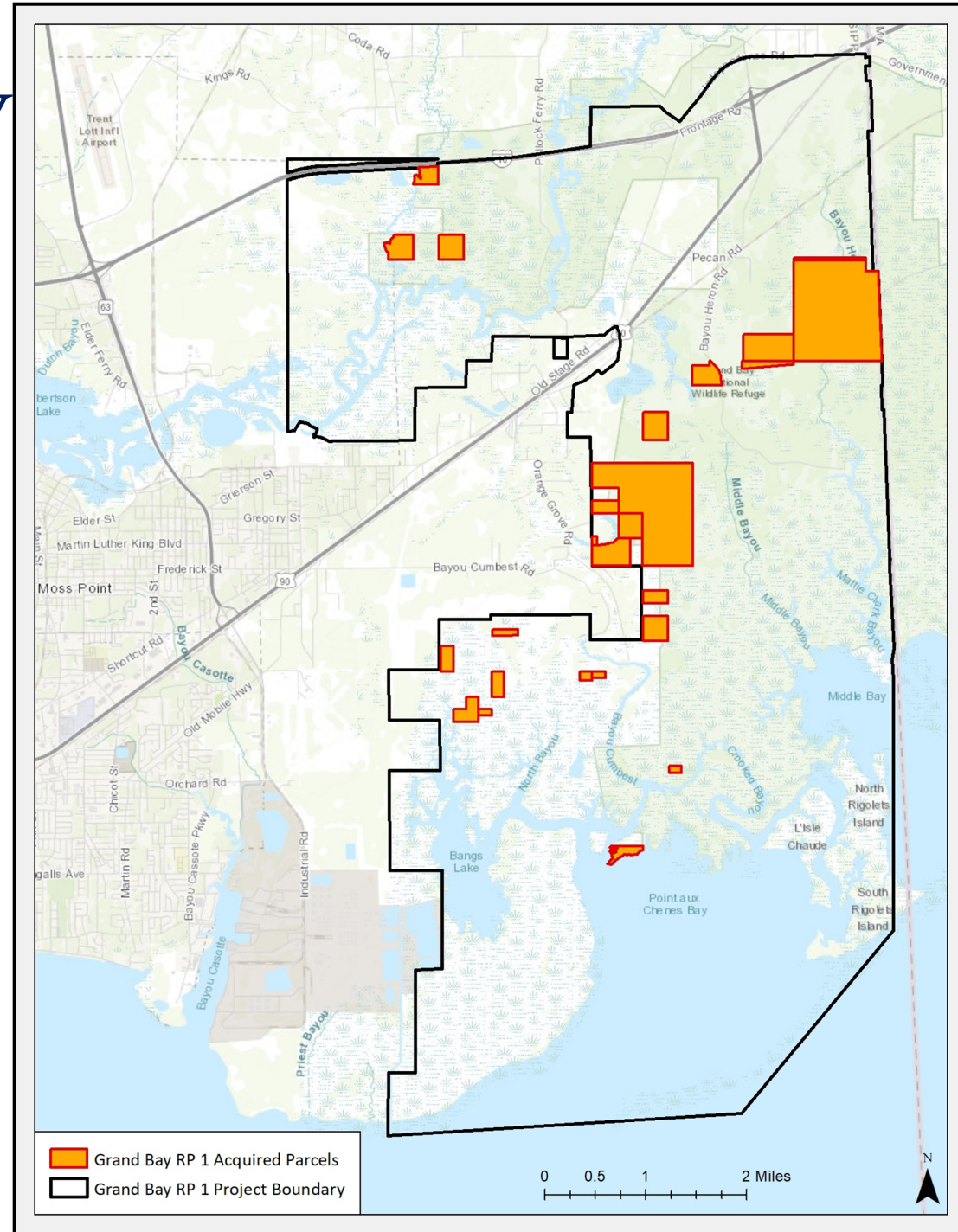




# ACCOMPLISHMENTS GRAND BAY

## Grand Bay Land Acquisition and habitat Management

- Funded under NRDA Long Term Plan I
- Project Partners: MDEQ, DOI, MDMR, USFWS
- Over 1,500 acres acquired
- Invasive Species management





# ACCOMPLISHMENTS GRAND BAY

## Invasive Species Management /Monitoring

- 110 acres of Timber Stand Improvement
- 127 acres of Prescribed Burns
- 4 miles of fire lanes
- 9 Long Term Monitoring Plots
- 1 year Vegetation and Avian Monitoring





# ACCOMPLISHMENTS WILLIAM CAREY PHARMACY SCHOOL

## William Carey Pharmacy School at Tradition

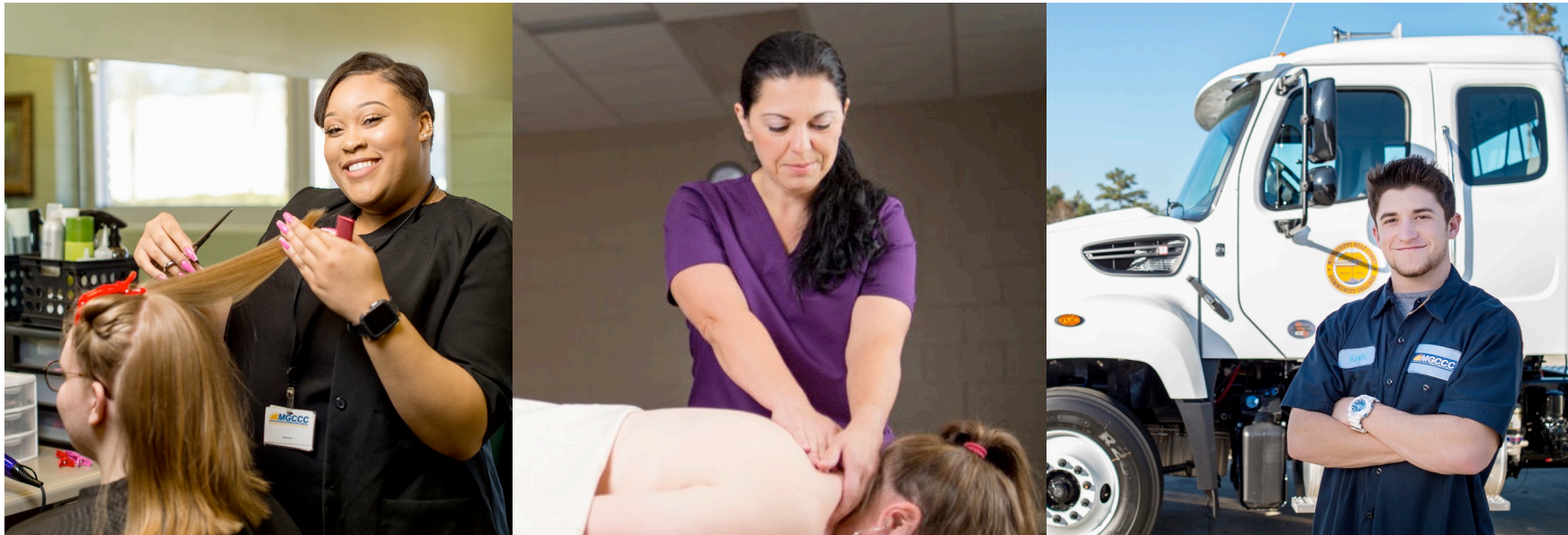
- Received RESTORE Funding on 2016 MIP
- 58 enrolled in first year
- 52 enrolled in second year
- First class to graduate in 2021



# ACCOMPLISHMENTS MISSISSIPPI GULF COAST COMMUNITY COLLEGE

Workforce training:

- 245 enrolled in work-ready program
- 184 enrolled in industry specific training program





# ACCOMPLISHMENTS AQUARIUM

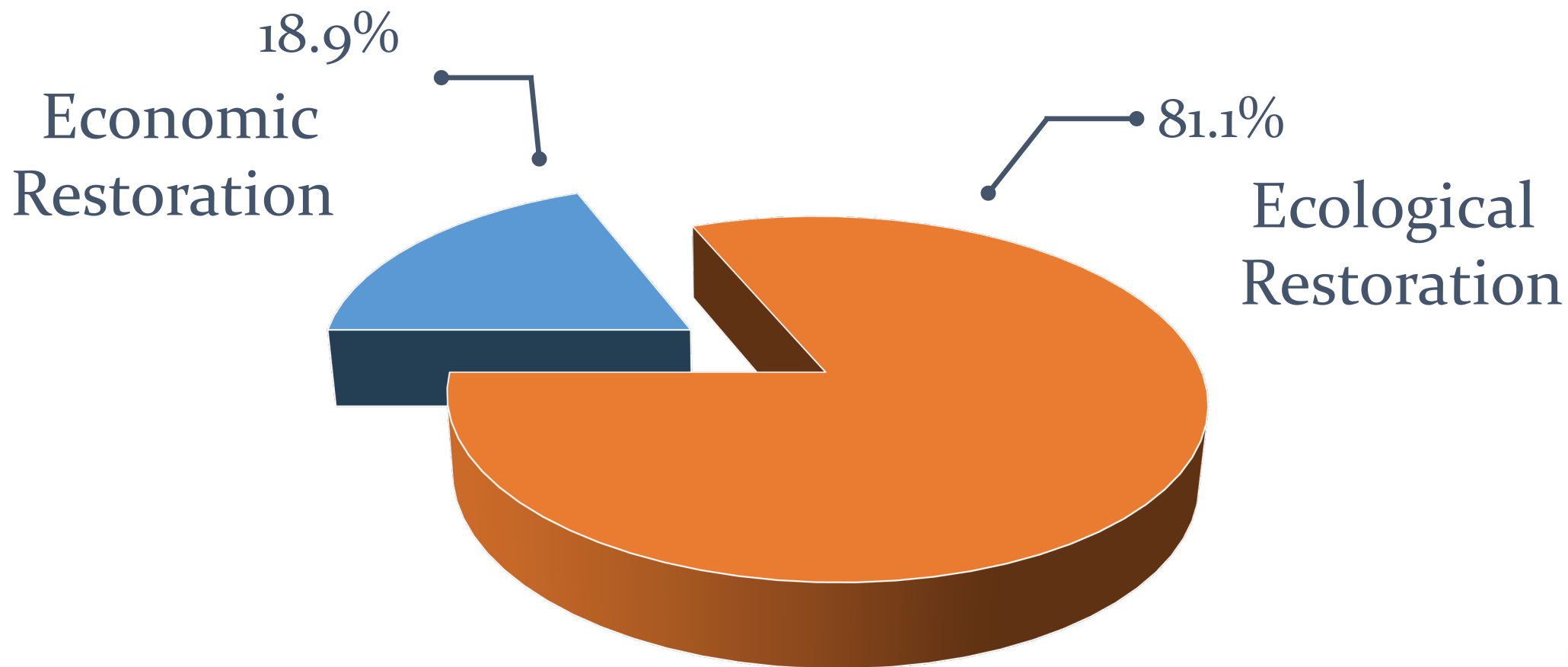
## Mississippi Aquarium – Gulfport

- 1 Million gallons of fresh and salt water
- 12 animal habitats
- Will be the home to over 70 species of aquatic creatures



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# RESTORATION FUNDING





# RESTORATION ECOLOGICAL PRIORITIES

Conserve and  
Restore Coastal  
Lands

Protect Water  
Resources

BENEFITS

BENEFITS

BENEFITS

Sustaining Coastal and Marine Resources



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# WATER QUALITY 101



VS.

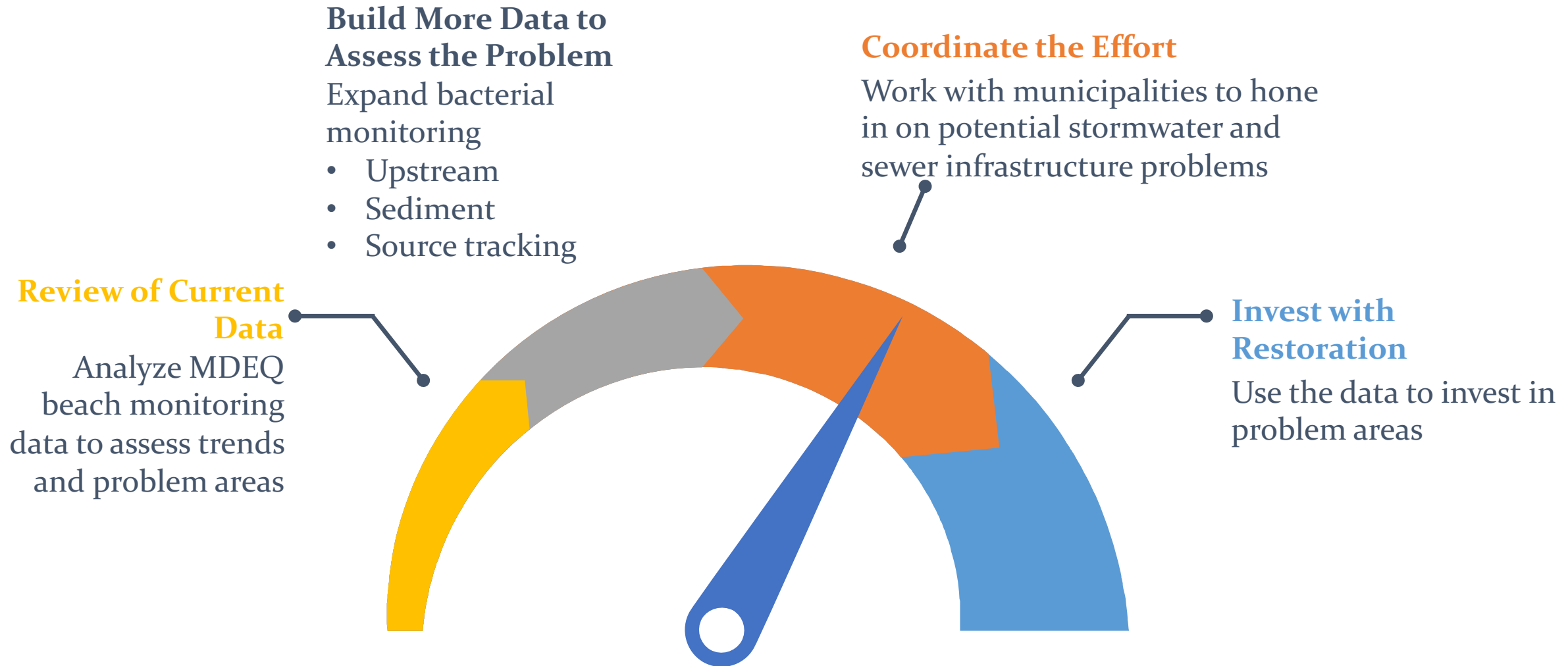


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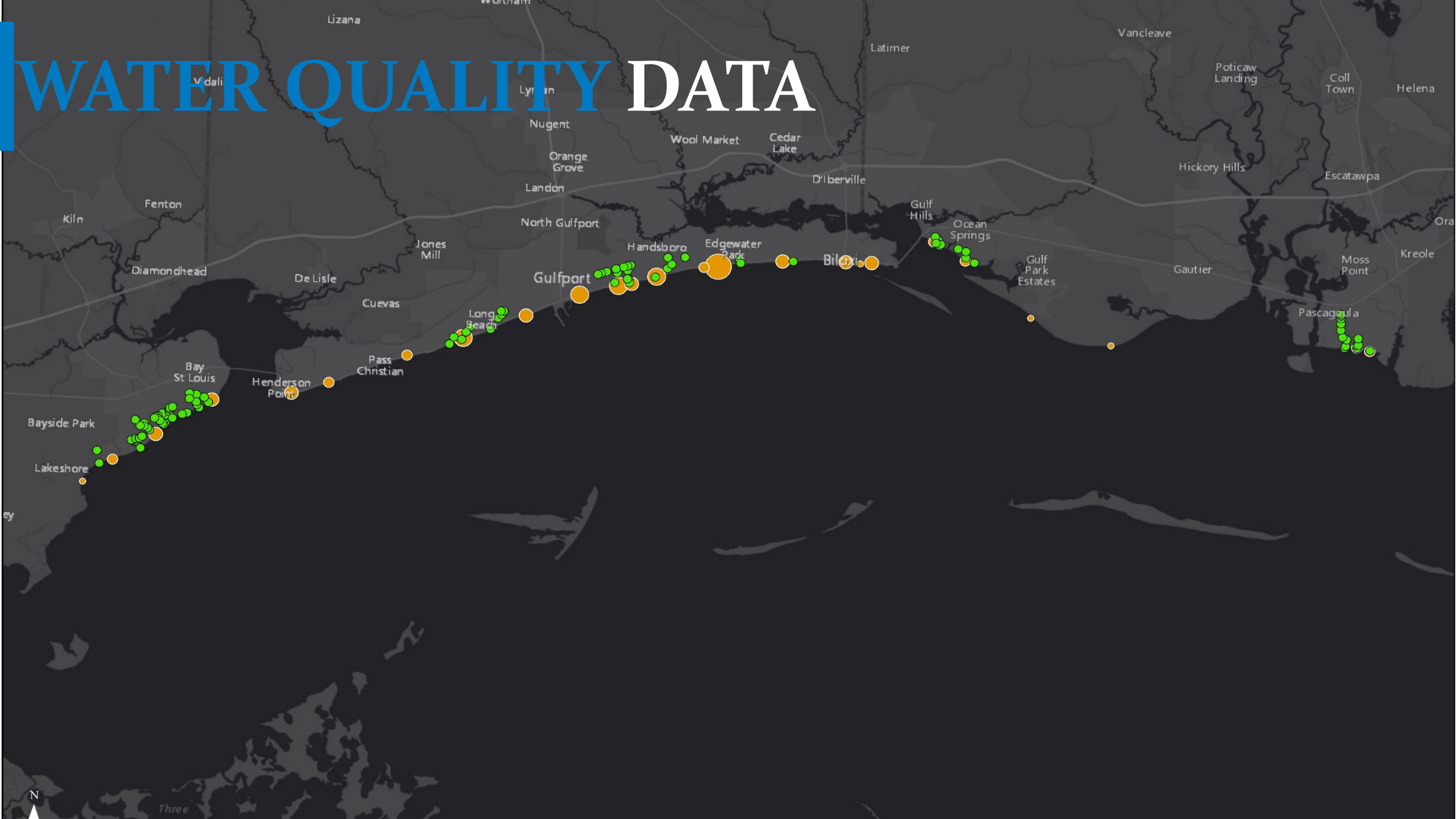
# WATER QUALITY 101



# PROCESS TO ACHIEVE IN-SHORE WATER QUALITY GOAL

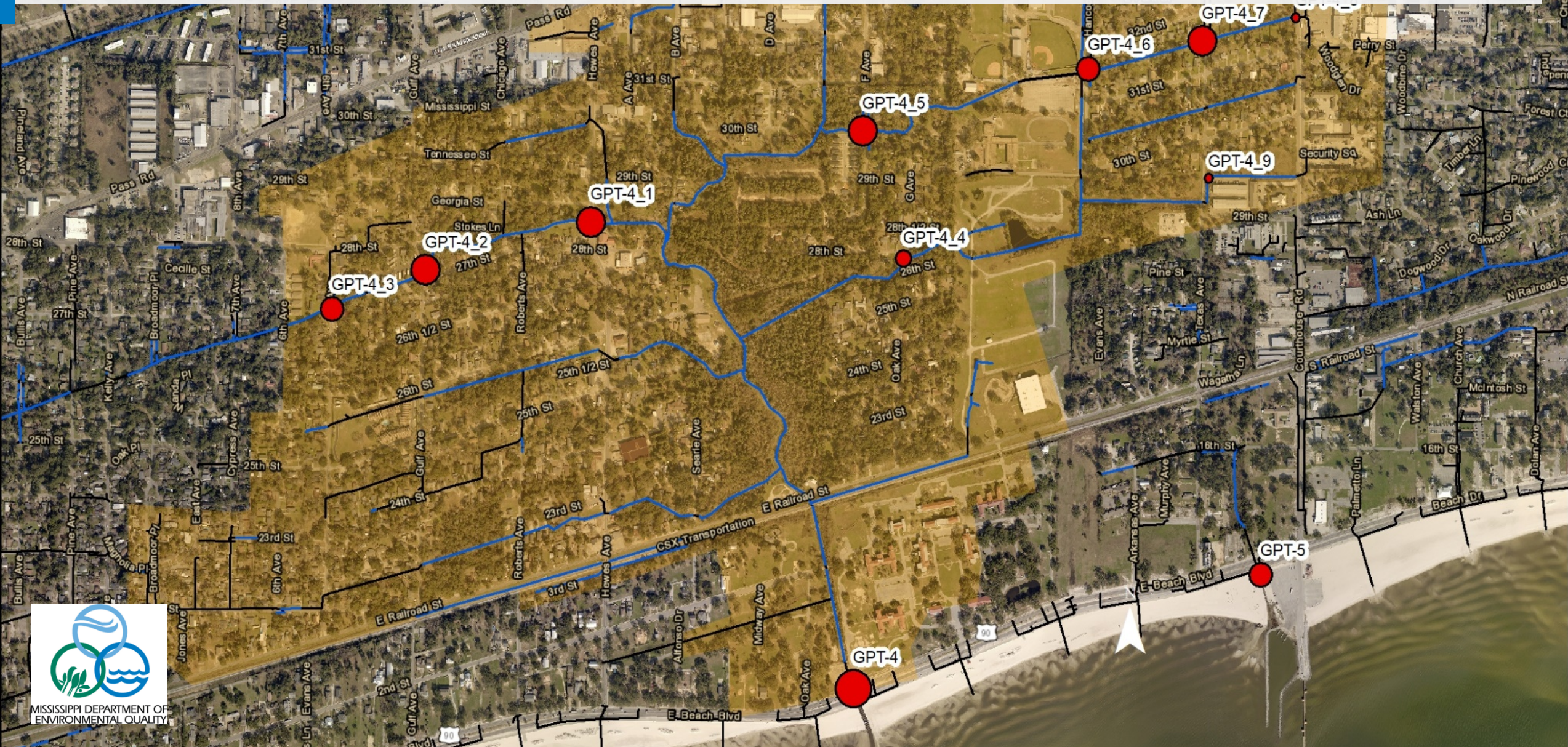


# WATER QUALITY DATA





# WATER QUALITY EXAMPLE – COFFEE CREEK





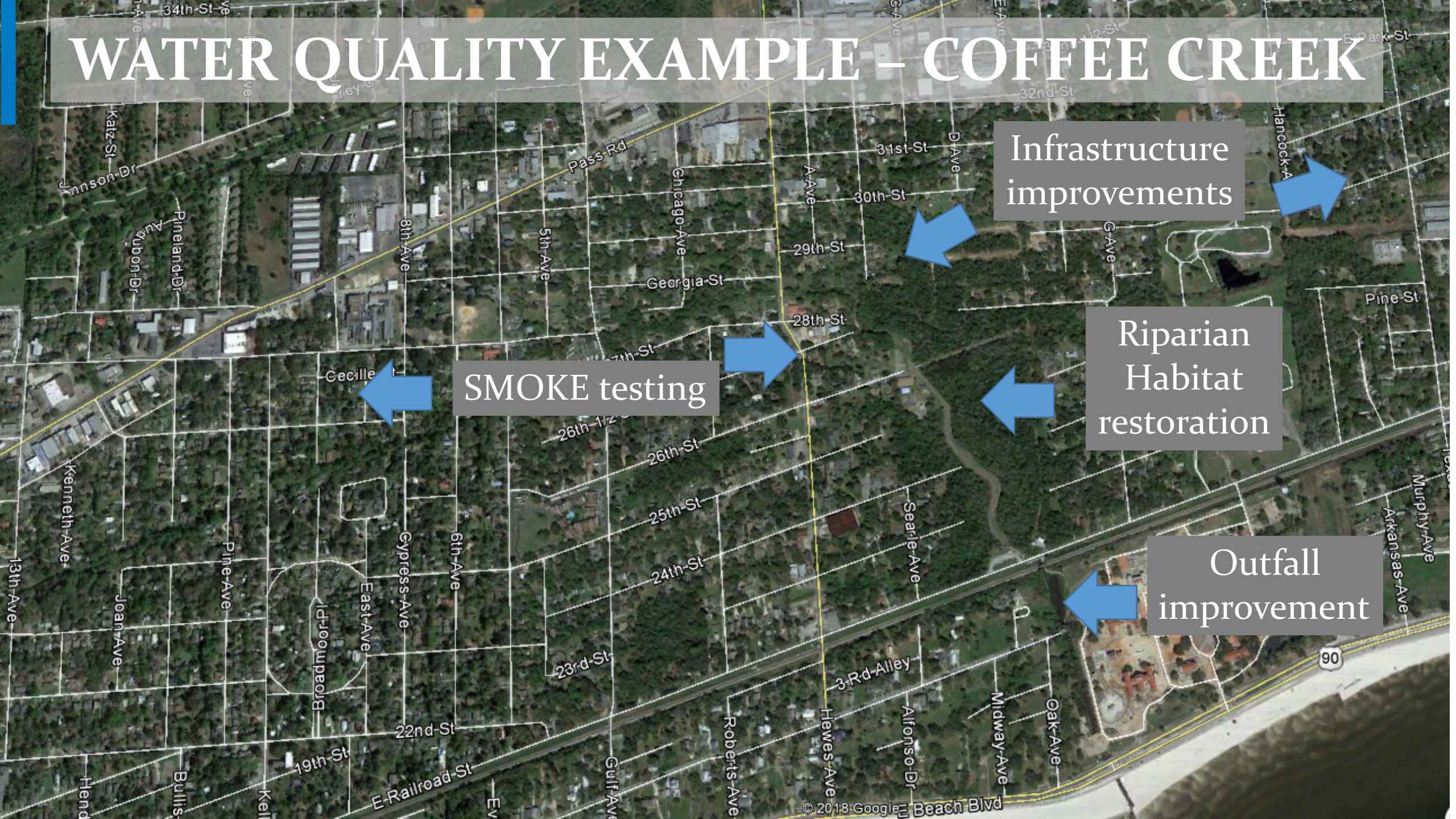
# WATER QUALITY EXAMPLE – COFFEE CREEK

Infrastructure improvements

SMOKE testing

Riparian Habitat restoration

Outfall improvement





# WATER QUALITY EXAMPLE – COFFEE CREEK

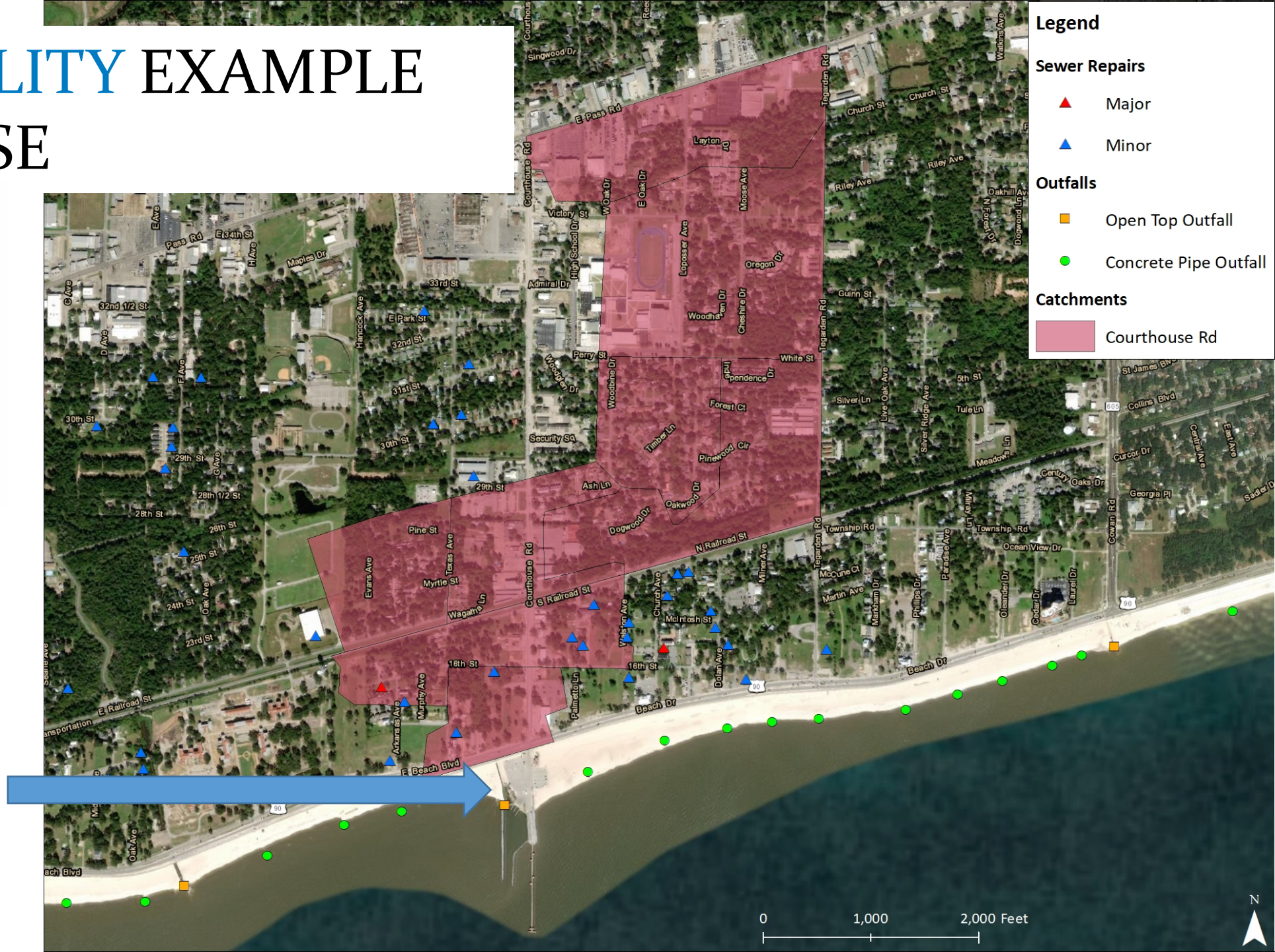




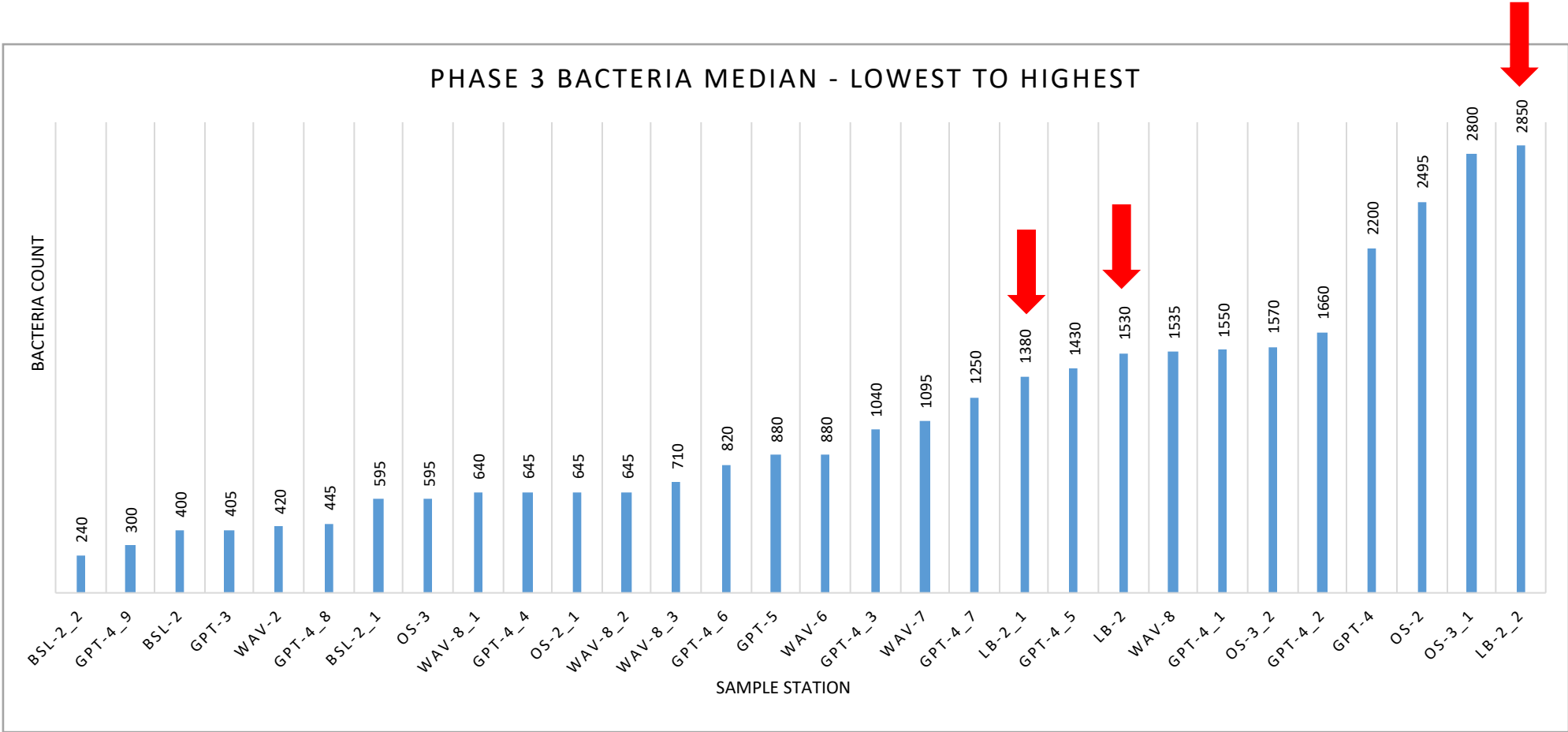
# WATER QUALITY EXAMPLE COURTHOUSE



RESTORE  
Implementation  
Of Outfall  
Challenge Ideas

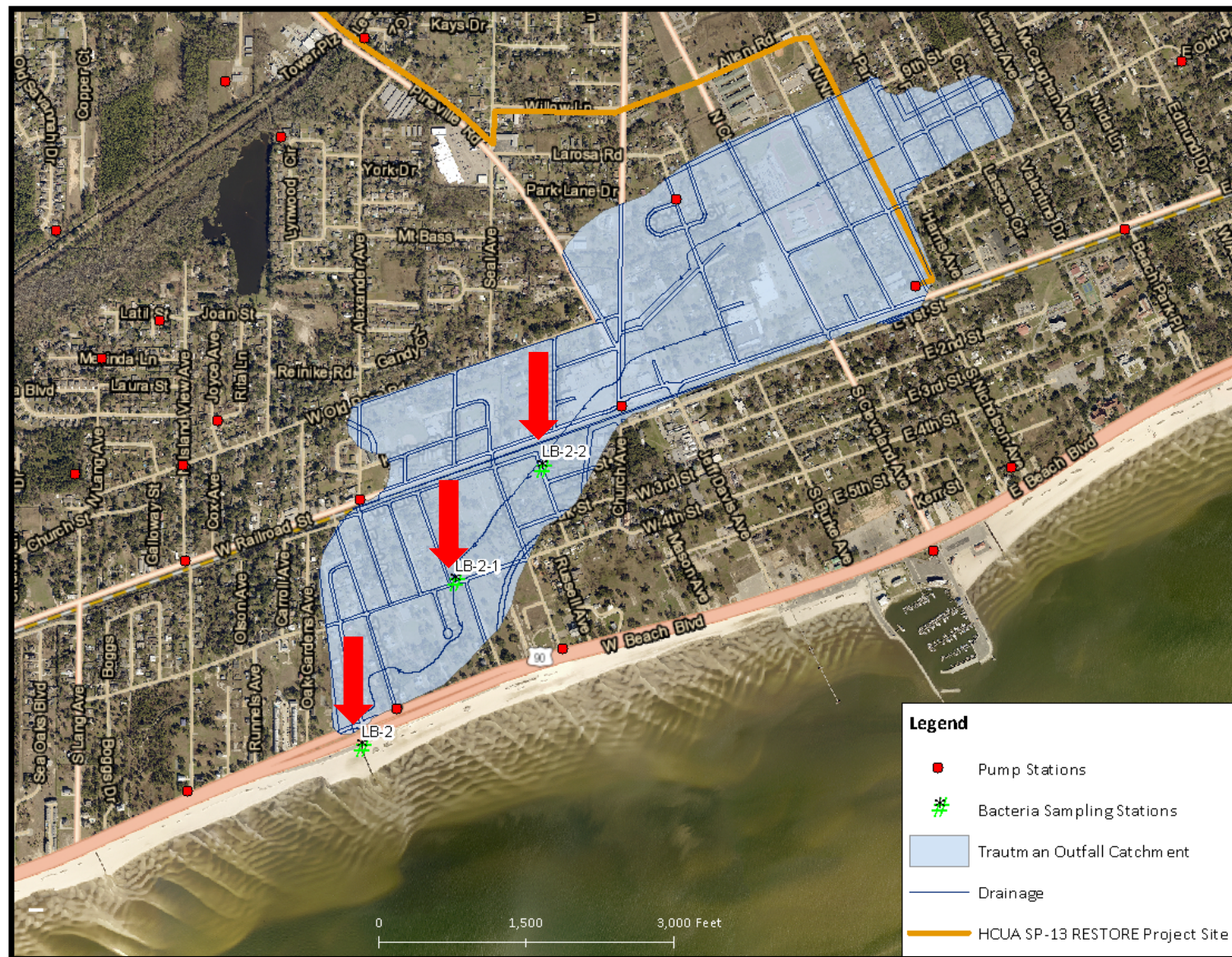


# WATER QUALITY EXAMPLE – LONG BEACH





# WATER QUALITY EXAMPLE – LONG BEACH



# 2019 MISSISSIPPI NEW PROJECTS



# Mississippi Restoration Funding Summary

**\$1.35 Billion**

**Total Settlement Payments Over 15 Years**  
(RESTORE Act, National Fish and Wildlife Foundation, Natural Resource Damage Assessment)

**\$511 Million**

**Total Projects Announced to Date**

**\$53.2  
Million**

**2019 New Projects Announcement**

# **BUCKET 1 NEW PROJECTS**

**\$19.00 million RESTORE Act funding**

**8 Projects Total**

**2 Existing project amendments**

**6 New projects from Go Coast 2020  
recommendations**





# NEW PROJECT BUCKET 1 – WATER QUALITY IMPROVEMENT PROGRAM

## Location:

Coast Wide

## Funding Amount:

\$1,000,000 (*additional funding*)

## Info:

- Total: \$68 million (Bucket 1 and 3)
- Existing projects in all 3 Coastal Counties
- Further water quality improvements in reducing bacterial pollution



# NEW PROJECT BUCKET 1 – USM OYSTER HATCHERY AND RESEARCH CENTER

## Location:

Jackson County

## Funding Amount:

\$4,000,000 (*additional funding*)

## Info:

- Total RESTORE Funding: \$9.7 million
- Oyster larvae production and research to support oyster restoration efforts





# NEW PROJECT BUCKET 1 – BUCCANEER STATE PARK

## Location:

Hancock County

## Funding Amount:

\$1,000,000

## Info:

- Enhance park as regional ecotourism and family recreational attraction
- Implementation of one or more park improvements related to the masterplan to increase tourism.



PC: MDWFP

# NEW PROJECT BUCKET 1

## BILOXI POINT CADET MARINA UPGRADES

### Location:

Harrison County

### Funding Amount:

\$3,000,000

### Info:

- Infrastructure improvements to modernize Point Cadet Marina
- Grow recreational/sports tourism like the Billfish Classic and support East Biloxi redevelopment



PC: Sun Herald



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# NEW PROJECT BUCKET 1 – MGCCC CENTER FOR SECURITY AND EMERGING TECHNOLOGIES

## **Location:**

Harrison County

## **Funding Amount:**

\$3,000,000

## **Info:**

- Construction of workforce training center focused on high-tech information systems technologies (Cybersecurity, Coding, Simulation, emerging technologies)



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# NEW PROJECT BUCKET 1 – USM OCEAN ENTERPRISE ENTREPRENEURSHIP PROGRAM

## Location:

Harrison County

## Funding Amount:

\$1,000,000

## Info:

- Support the Ocean Enterprise vision to grow the Blue Economy and establish the MS Gulf Coast as national leader in ocean science and technology development
- New combined degree program in Ocean Engineering and Business to foster Blue Economy entrepreneurship



*Architectural Rendering*



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# NEW PROJECT BUCKET 1 – MOSS POINT I-10 COMMERCIAL CORRIDOR IMPROVEMENTS

## Location:

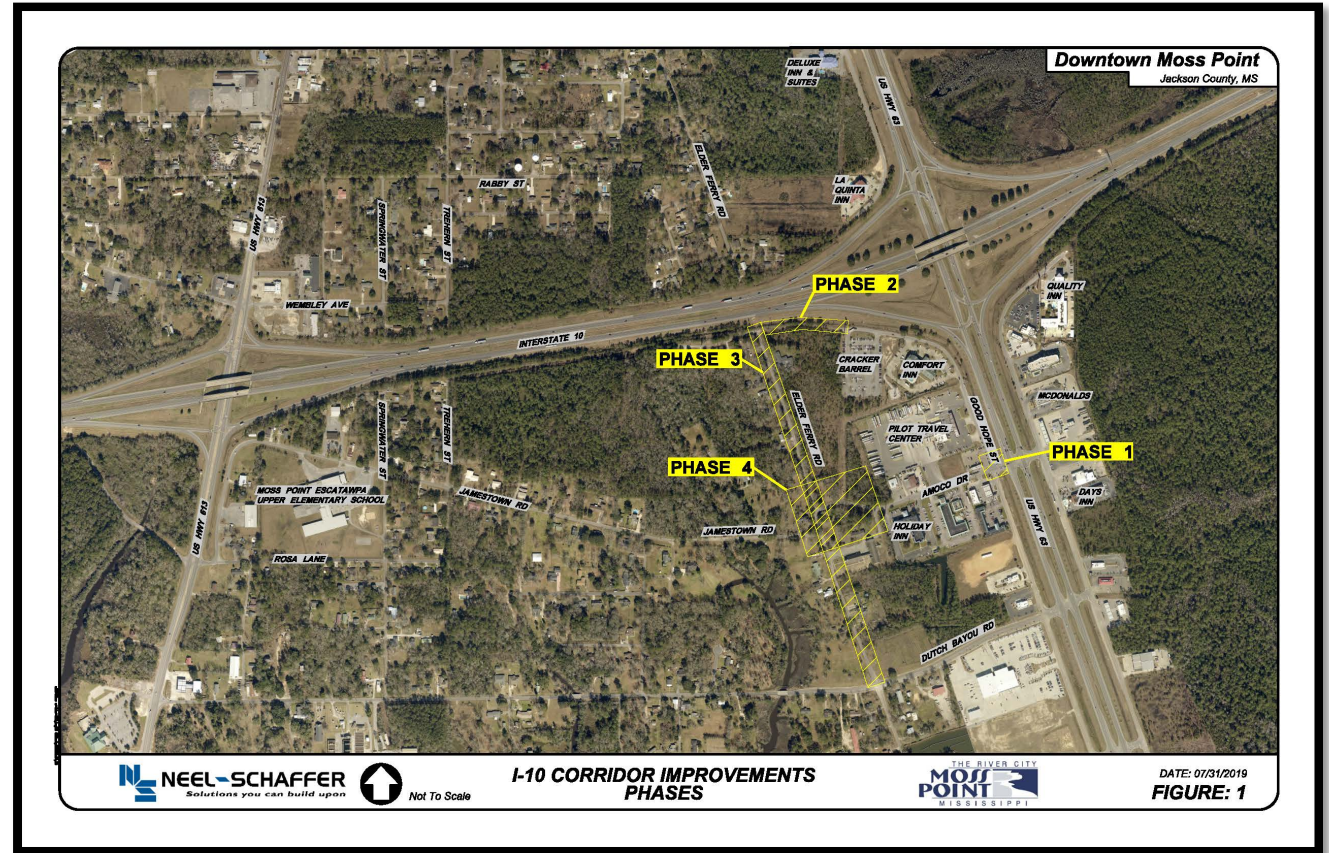
Jackson County

## Funding Amount:

\$3,000,000

## Info:

- Enhancing access to existing businesses and supporting additional commercial development in Moss Point
- Transportation network improvements to support economic growth



# NEW PROJECT BUCKET 1 – MSU NORTHERN GULF AQUATIC FOOD RESEARCH CENTER

## Location:

Jackson / Harrison County

## Funding Amount:

\$3,000,000

## Info:

- Construction of Analytical Lab for testing seafood safety and quality assurance.
- Overall Goal - Research Center to support commercial seafood industry growth (processing, value-added products development)





# BUCKET <sub>3</sub> NEW PROJECTS

**\$18.6m RESTORE Act Funding**

**2 existing projects**

**1 new project**



# EXISTING PROJECT BUCKET 3 BU PROGRAM FOR MARSH CREATION AND RESTORATION

**Location:**  
Coast Wide

**ADD funding to EXISTING  
PROJECT:**

\$7,000,000 (*Additional funding*)

- Total: \$19,000,000
- Capitalize on dredge material to accelerate marsh creation and restoration
- Leverage RESTORE B2 and NFWF BU efforts to maximize marsh creation



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# EXISTING PROJECT BUCKET 3

## WATER QUALITY IMPROVEMENT PROGRAM

### Location:

Coast Wide

### Add Funding to existing project:

\$7,000,000 (*additional funding*)

### Info:

- Total: \$68 million (Bucket 1 and 3)
- Existing projects in all 3 Coastal Counties
- Further water quality improvements in reducing bacterial pollution



# NEW PROJECT BUCKET 3

## MISSISSIPPI BEACHFRONT RESILIENCE

**Location:**  
Coast Wide

**Funding Amount:**  
\$5,000,000

- Restore dune formation along the Mississippi Gulf Coast
- Enhance Boardwalk construction to mitigate sand migration
- Primary purpose: provide resilience to beach, road infrastructure by reducing further beach erosion





# NFWF NEW PROJECTS

**±\$15.69 million NFWF-GEBA funding**

**6 projects total**

**1 existing project**



# NEW PROJECT NFWF GEBF – REEF PHASE III AND IV

## Location:

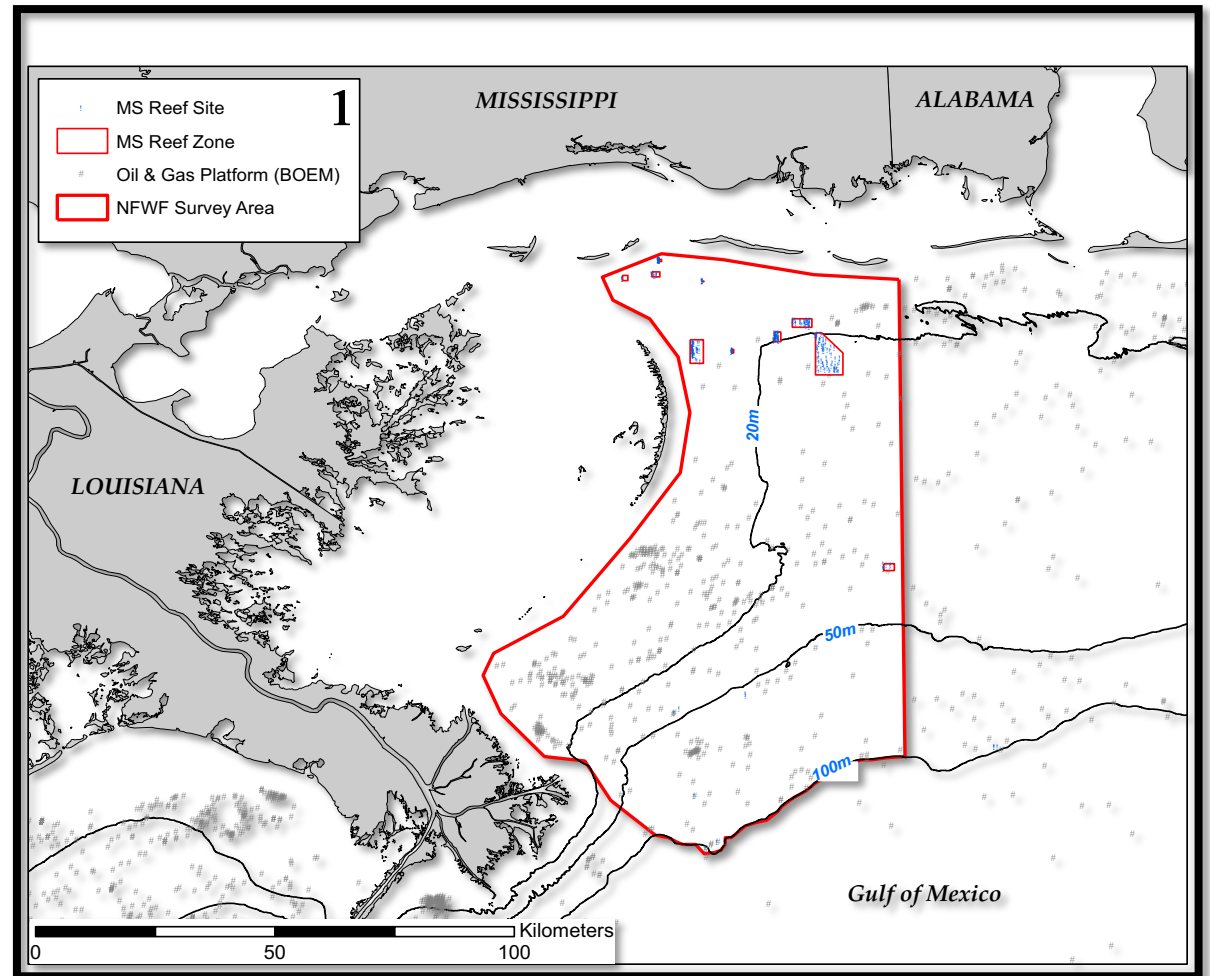
Off-shore

## Addition to an EXISTING PROJECT

## Funding Amount:

\$5.96 million (Two Phases)

- Total Project Cost: \$12.9 million
- Project partner: USM and MDMR
- Primary purpose: better understanding of the off-shore reef fishery





# NEW PROJECT NFWF GEBF – PILOT OYSTER CULTCH

## Location:

Western Mississippi Sound

## Funding Amount:

\$3.39 million

- Project partner: MDMR
- Primary purpose: implement pilot cultch plants to understand oyster survival for future large scale oyster restoration



PC: North Carolina Oyster BluePrint



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# NEW PROJECT NFWF GEBF APPLE SNAILS

## Location:

Jackson County, Mississippi

## Funding Amount:

\$836,000

- Project partner: MDMR
- Primary purpose: control population of apple snails in and around Pascagoula River Coastal Preserve



PC: Al.com



PC: Naturetime



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# NEW PROJECT NFWF GEBF– TNC ST LOUIS REEF

## Location:

Jackson County

## Funding Amount:

\$2.8 million

- Project Implementer: TNC
- Primary purpose: restore and enhance the St. Louis Bay TNC oyster reef with a resilient oyster reef habitat



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# NEW PROJECT NFWF GEBF – INGALLS ARTIFICIAL REEF

## Location:

Jackson County + Offshore Reefs

## Funding Amount:

\$2.2 million

- Project Implementer: MDMR
- Primary purpose: deploy reef materials in new and existing off-shore artificial reefs to increase and enhance off-shore reef habitat



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# **NRDA TRUSTEE IMPLEMENTATION GROUP (MS TIG) UPDATE**



# NRDA MS TIG UPDATE

## Members of the MS TIG





# NRDA MS TIG UPDATE – RESTORATION PLAN #2

## NRDA Restoration Types Included in RP#2:

- Oysters
- Wetland Coastal Nearshore Habitats



# NRDA MS TIG UPDATE – OYSTERS

## RP II/EA-Proposed Reasonable Range of Alternatives- Oysters

Alternative A: Oyster Spawning Reefs in Western Mississippi

Alternative B: Oyster Spawning Reefs in Eastern Mississippi

Alternative C: Oyster Spawning Reefs in Mississippi (Alternative A + B)

Alternative D: Mississippi Oyster Gardening Program

Alternative E: No Action



# NRDA MS TIG UPDATE – WCNH

## RP II/EA-Proposed Reasonable Range of Alternatives-WCNH

Alternative A: Wolf River Coastal Preserves Habitat Management – Dupont and Bell's Ferry Tracts

Alternative B: Hancock County Coastal Preserves Habitat Management – Wachovia Tract

Alternative C: Pascagoula River Coastal Preserves Habitat Management-Dantzler Tract

Alternative D: No Action

# NRDA MS TIG UPDATE – NEXT STEPS

The MS TIG is in the process of Drafting Restoration Plan 2 to propose for public review and comment.

For current updates sign up for updates at:

<https://www.mdeq.ms.gov/restoration/contact/>



# ROUND TABLE DISCUSSION



THANK YOU