

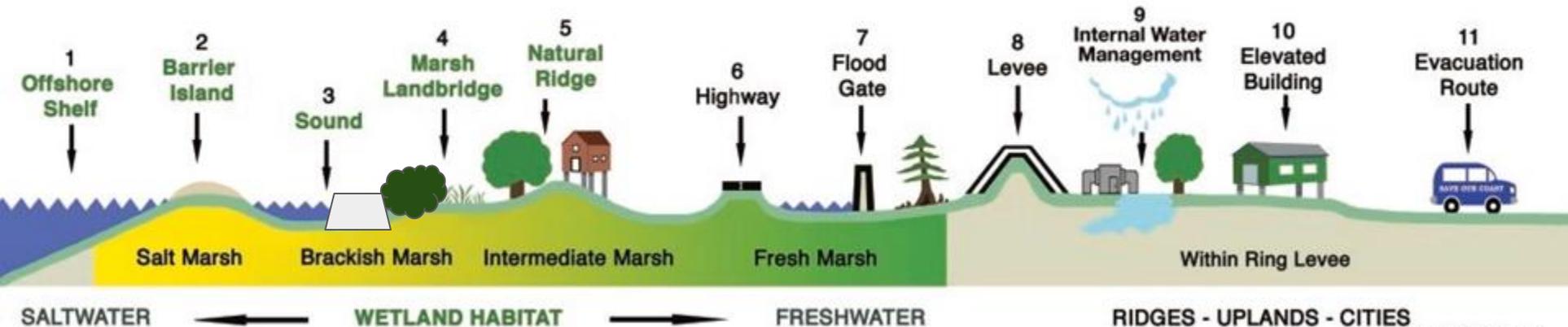
A photograph of a coastal restoration site. In the foreground, there is a body of blue water. The middle ground shows a shoreline with many birds, likely waterfowl, gathered on the ground. Behind the birds is a dense line of vegetation, including tall grasses and several trees with reddish-brown flowers or seed heads. The sky is clear and blue.

**GANBASE**  
**Coastal Restoration Louisiana**

Meraux Foundation  
Blaise Pezold

# Multiple lines of defense

- Uses natural obstructions to slow storm surge
- Uses anthropogenic obstructions to slow storm surge
- Integrates both into a plan to reduce storm surge impacts

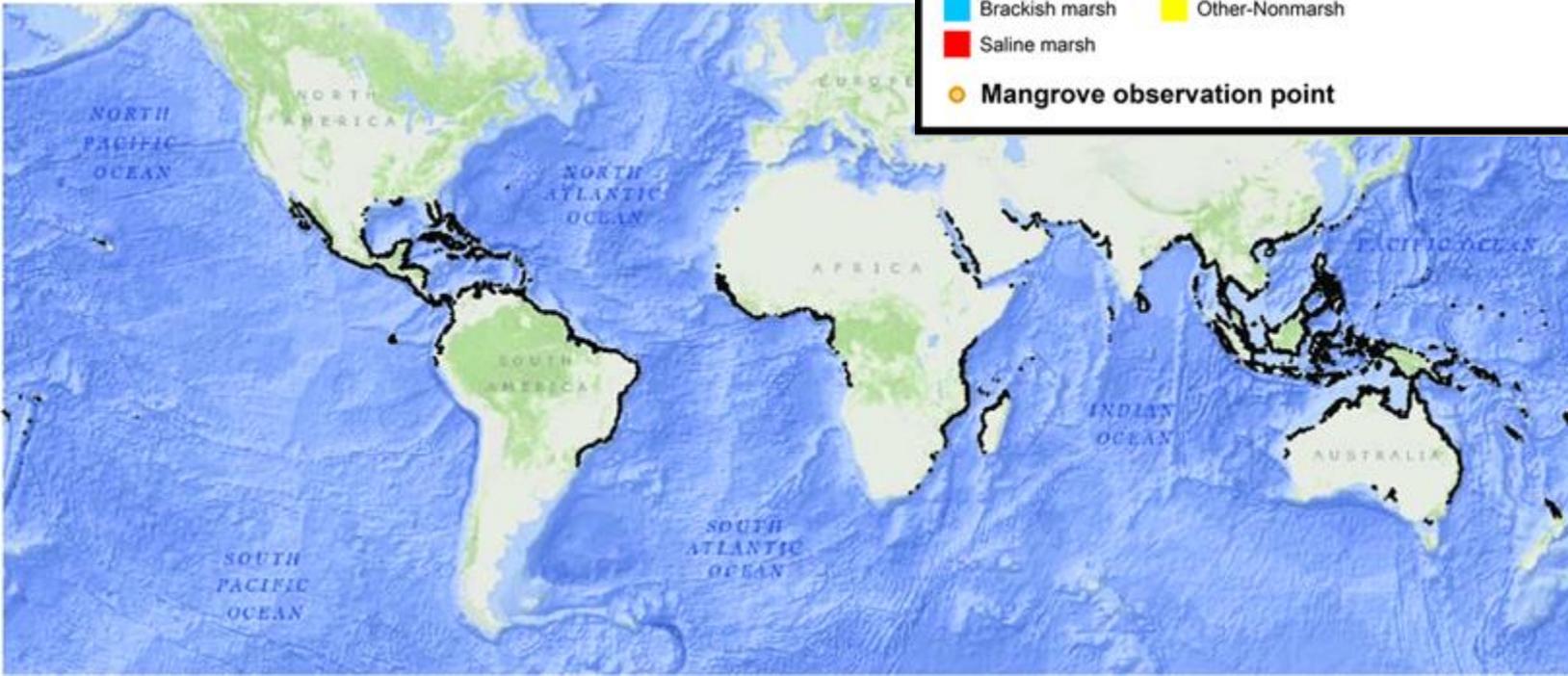
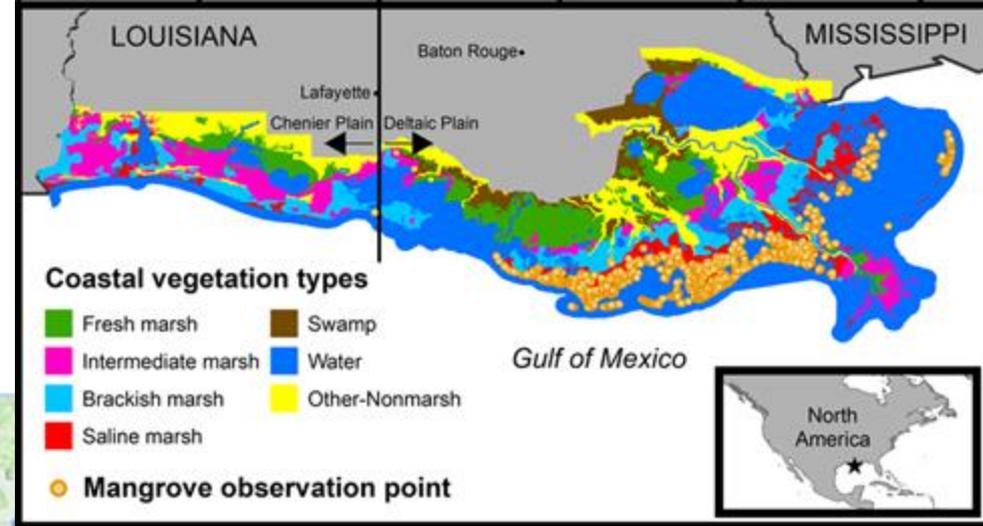




# F R I C T I O N



# Black Mangroves of the North



# Chalmette High School 4H Black Mangrove Project



# 4H Black Mangrove

Planting sites

**Legend**

- 🌿 Black Mangrove 2023, 7,135 ft.
- 🌿 Black Mangrove 2024, 8,715
- 🌿 Black Mangrove Planting 2021
- 🌿 Mangrove Site 2017
- 🌿 Mangrove site 2018
- 🌿 Mangrove site 2019

## Where?



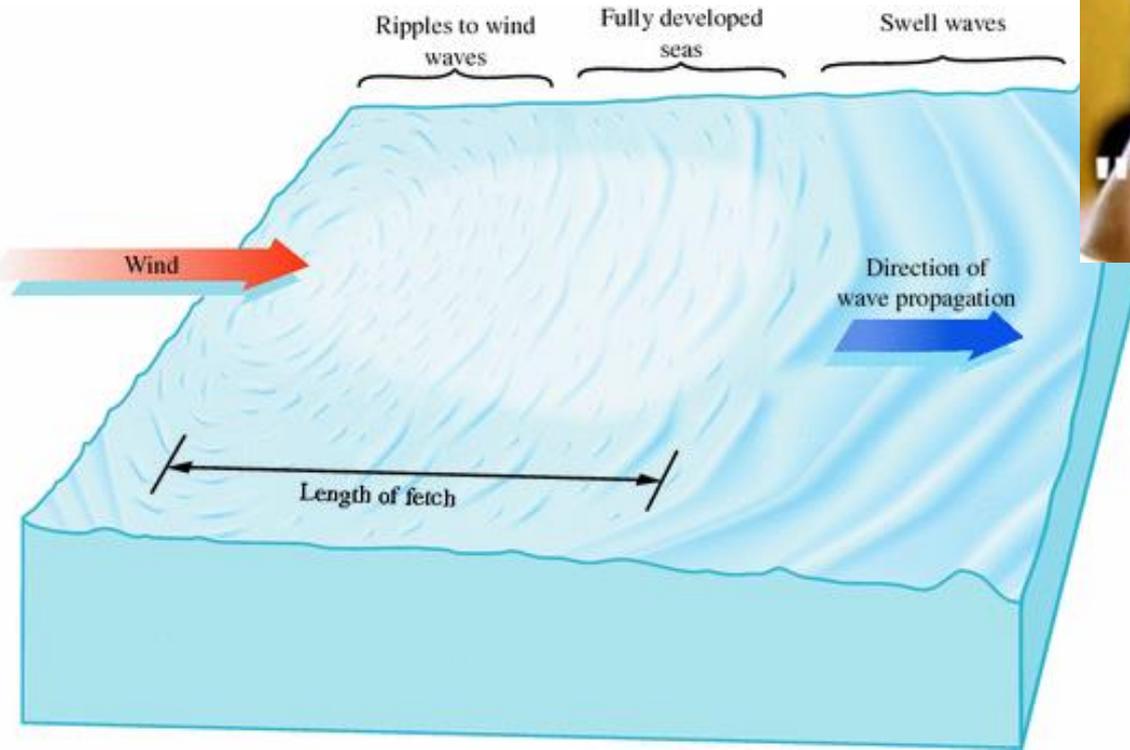
Google Earth

Image © 2023 CNES / Airbus  
Image © 2023 Maxar Technologies



1 mi

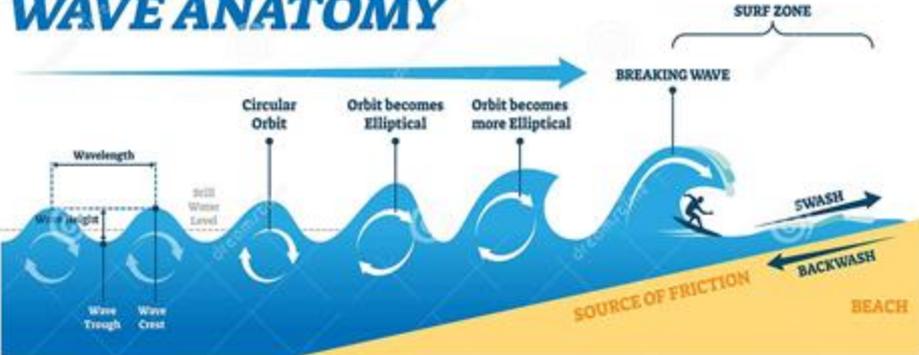
# That's so Fetch



- Wind induced erosion
- Based on length traveled across a water body
- Can be mitigated by vegetation type or armoring

# Large Shallow Lakes= Large waves and High erosion

## WAVE ANATOMY



# CWPPRA (Breaux Act) La.39 Coastwide Vegetation Program



3/2023

Survey

Image © 2023 Maxar Technologies  
Image © 2023 Airbus

Google Earth

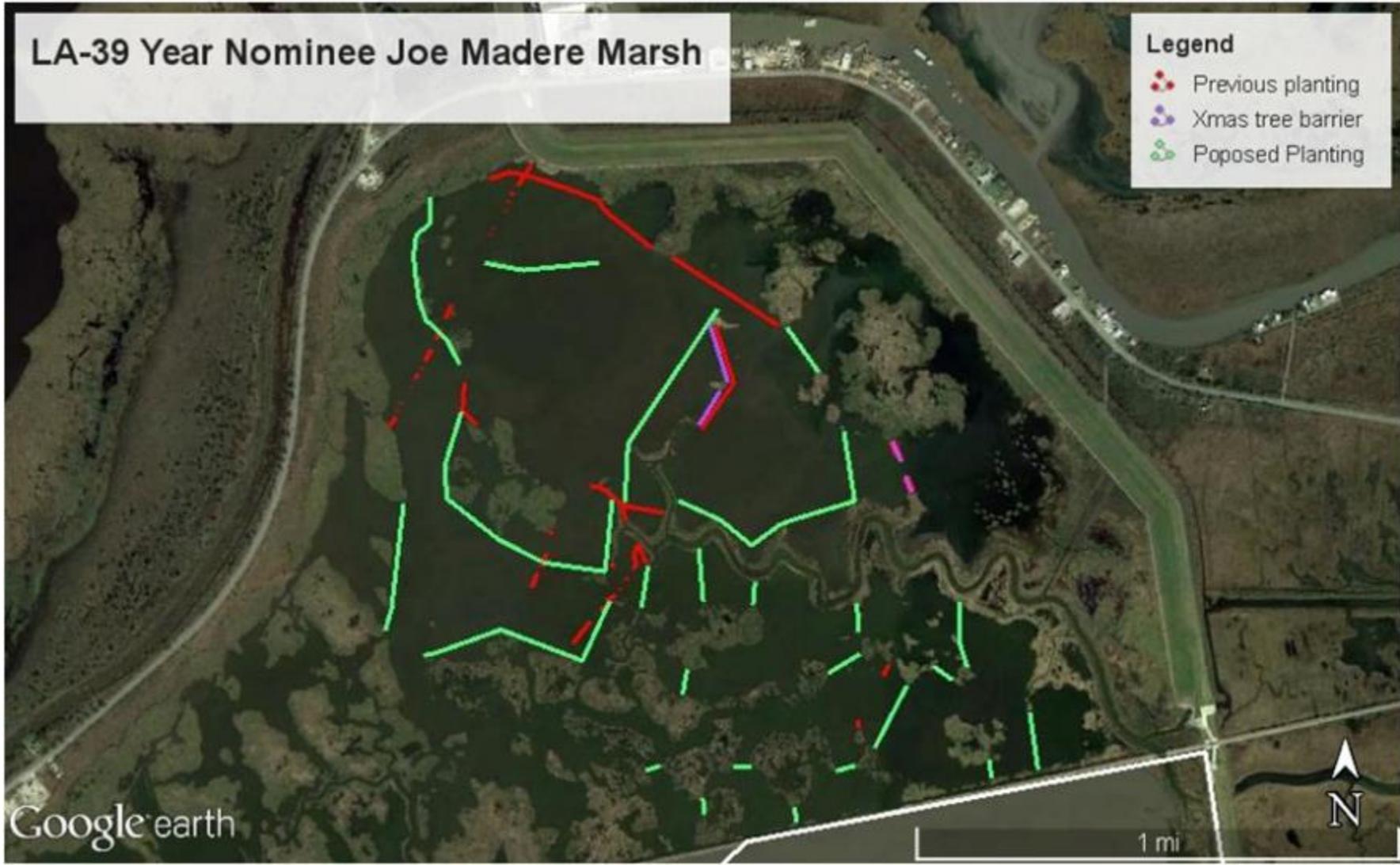
# LA-39 Year Nominee Joe Madere Marsh

## Legend

- Previous planting
- Xmas tree barrier
- Proposed Planting

Google earth

1 mi



Year 8 Joe Madere Marsh  
Preliminary Concept

**Legend**

- Double Row
- Single Row Around Trees
- Single Row Shoreline

~6,780 trade gallon *Schoenoplectus californicus* plants  
~\$80,000



# Growth from 2018-2021



# MRGO/Rock Dam/35 ppt



# The Central Wetlands Unit



# Dreams to reality via teamwork





# The rise of Central Wetlands Reforestation Collective





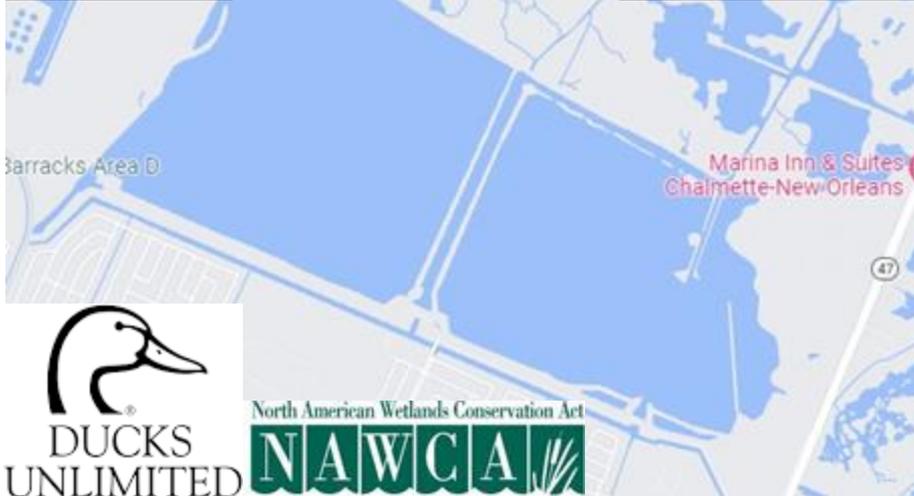
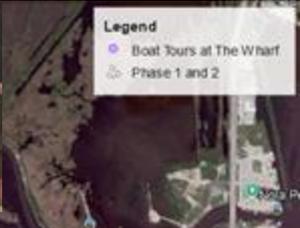
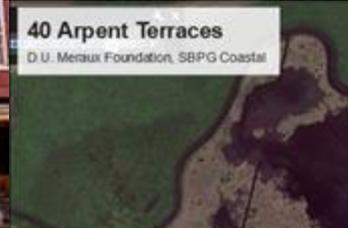
**Central Wetlands Reforestation Collective 2/21/25: Bayou Bienvenue**  
**[Common Ground Relief, Meraux Foundation, CSED]**

 Trees Planted to date: **6,408**

 Grasses Planted to date: **7,000**



1-2 miles wide and 3 ft. depth/Multiple funding sources

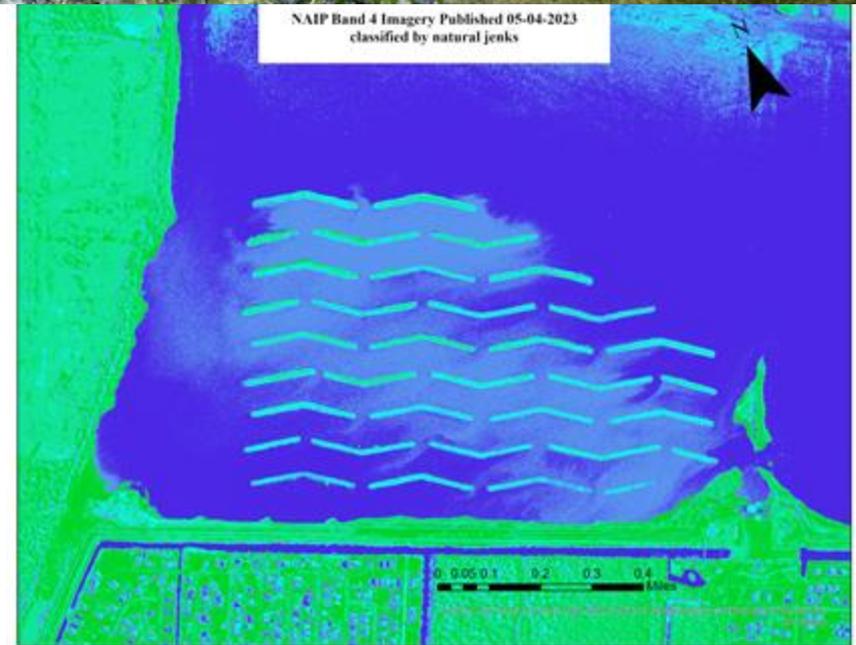
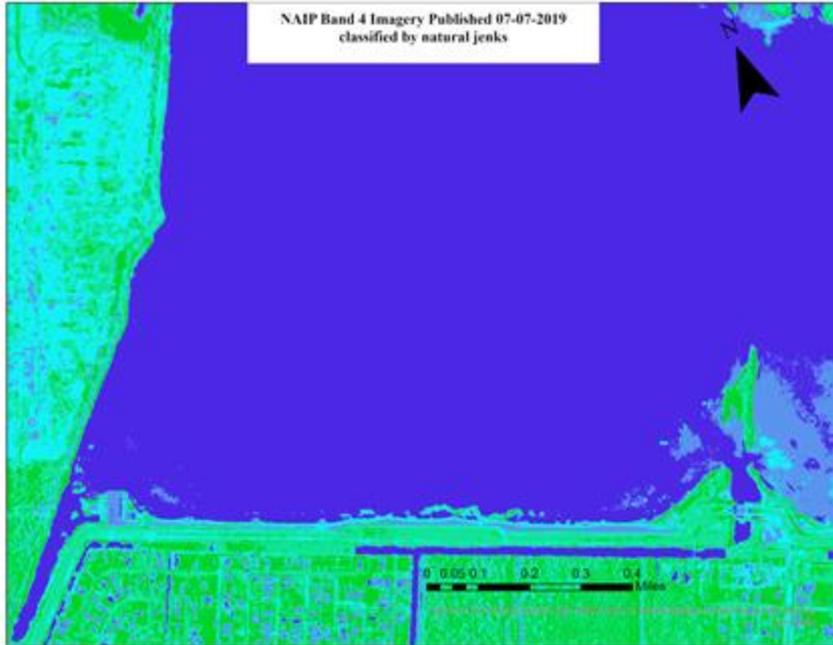


# Construction and goals

- 1 slough grass
- 2 water sedge
- 3 small yellow pond-lily
- 4 clasping leaf pondweed
- 5 spiked water-milfoil
- 6 bulrush
- 7 horsetail
- 8 marsh ragwort



# Submersed Aquatic Vegetation



## Woody plants:



Cypress, Tupelo, Red Maple, Green Ash, Button Bush, Black Willow and Lead Plant

## Grass/Pollinators plants:



Bulrush, Giant Cutgrass, Sawgrass, Bulltongue, Swamp Sunflower, Pickerel Weed, American Lotus, Louisiana Iris

# CWPPRA dredge projects



Map Produced By  
United States Department of Agriculture  
National Wetlands Inventory  
Baton Rouge, LA

Map Scale: 1:50,000  
Map Date: JANUARY 20, 2000

**PPL 33  
BAYOU DUCROS  
MARSH CREATION  
ST BERNARD PARISH, LA**

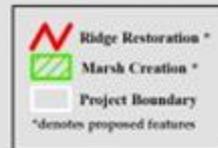
**Legend**

- MARSH\_CREATION\_1\_30\_20
- BAYOU\_AREA\_1\_30\_20
- DREDGE\_PPL\_1\_30\_20 - 10,000 LF

# Bayou La Loutre Ridge Restoration and Marsh Creation



## Bayou La Loutre Ridge Restoration and Marsh Creation (PO-178)



Map Produced by:  
U.S. Department of the Interior  
U.S. Geological Survey  
Wetland and Aquatic Research Center  
Coastal Restoration Assessment Branch  
Baton Rouge, La.

Background Imagery:  
2019 NAIP Photography

Map Date: September 22, 2020  
Map ID: USGS-NWRC 2020-11-0019  
Data accurate as of: September 22, 2020

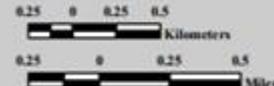
# Reggio Marsh Creation and Hydrological Restoration



## Reggio Marsh Creation and Hydrologic Restoration (BS-43)

-  Canal Plugs \*
-  Marsh Creation/Nourishment \*
-  Project Boundary

\*denotes proposed features



Map Produced by:  
U.S. Department of the Interior  
U.S. Geological Survey  
Wetland and Aquatic Research Center  
Coastal Restoration and Assessment Branch  
Baton Rouge, La.

Background Imagery:  
2018 NAIP

Map Date: February 17, 2021  
Map ID: USGS-NWRC 2021-11-0005  
Data accurate as of: January 15, 2021

# Woodlake Marsh Creation and Terraces



Map Produced By  
United States Department of Agriculture  
Natural Resources Conservation Service  
Baton Rouge, LA

Date Issued: 03/01/2024  
Map Date: JANUARY 26, 2024



PPL 34  
WOOD LAKE  
MARSH CREATION  
AND TERRACES  
ST BERNARD PARISH, LA



#### Legend

- MARSH\_CREATION
- TERRACE\_FIELD
- WETLAND\_AREA
- DRAINAGE\_PIPE\_CORRIDOR

# Reggio West Marsh Creation and Hydrological Restoration



A satellite image of a coastal region, likely the Amazon delta, showing a complex network of rivers and channels. The land is a mix of green and brown, indicating vegetation and exposed earth. The ocean is a deep blue, with a lighter greenish-yellow area near the coast, possibly representing a sediment plume or shallow waters. The word "Questions?" is overlaid in the upper center in a blue, serif font.

Questions?