

# ***MRGO Ecosystem Restoration Violet Freshwater Diversion***

***Neighborhood Meeting  
W. Smith Elementary School***

***22 February 2010***



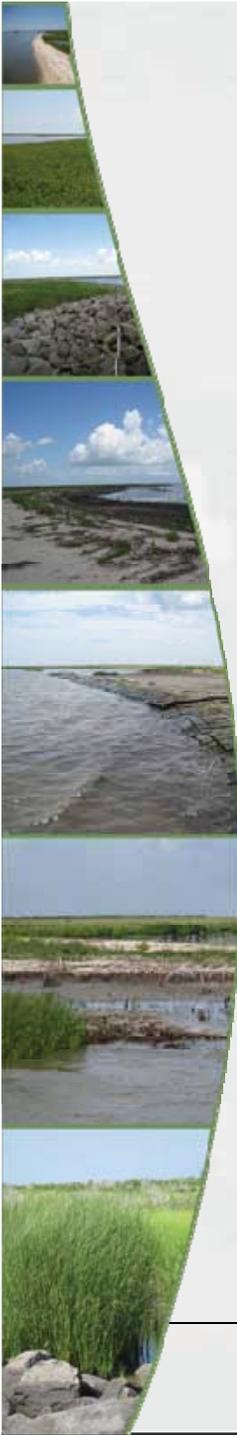
US Army Corps of Engineers  
**BUILDING STRONG®**



# *Tonight's Meeting*

- Welcome
- Introduction to coastal restoration
- MRGO Ecosystem Restoration project
- Violet Freshwater Diversion
  - Diversion locations considered
  - Restoration goals & benefits to ecosystem
  - Community considerations
- Discussion

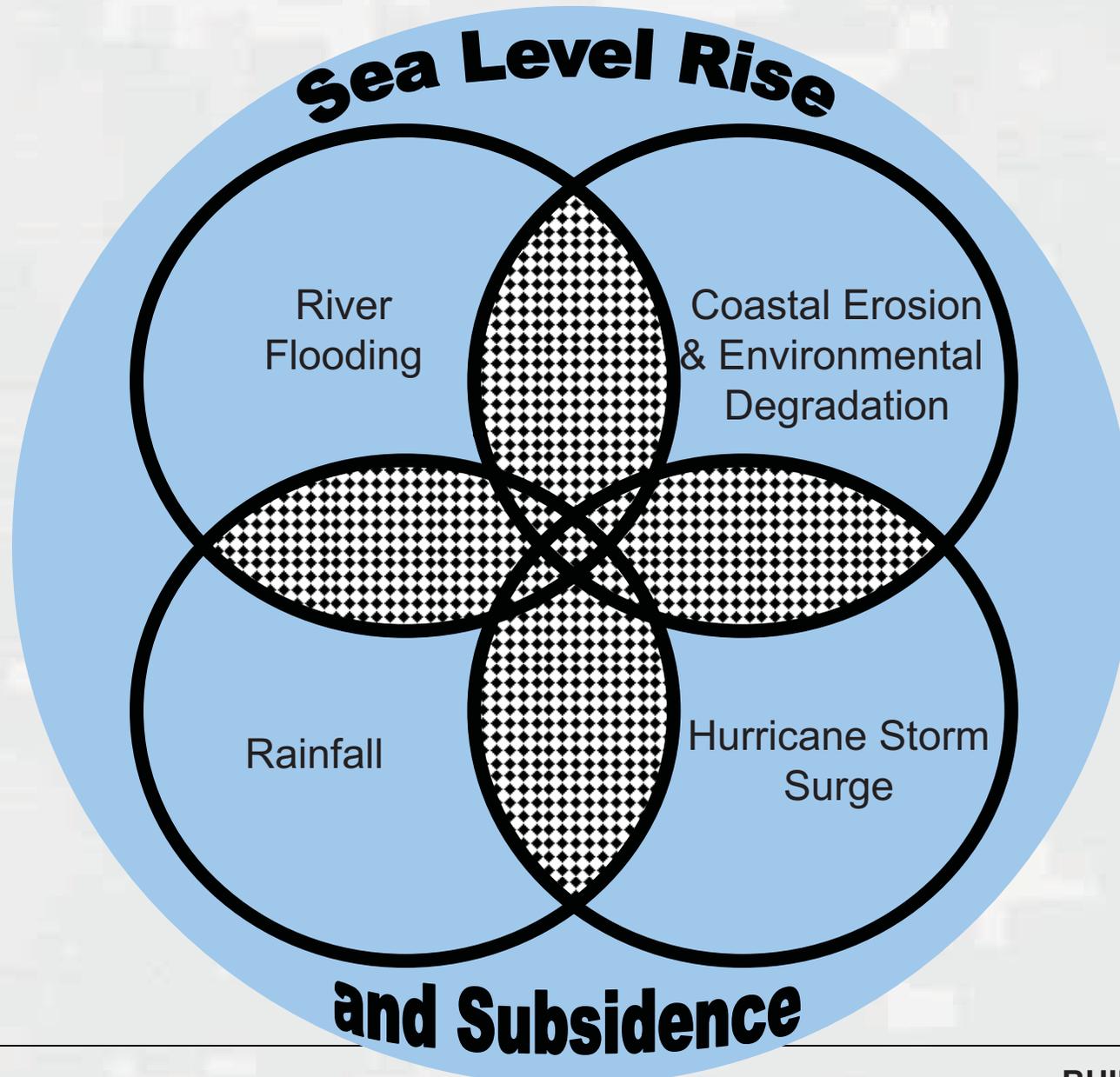


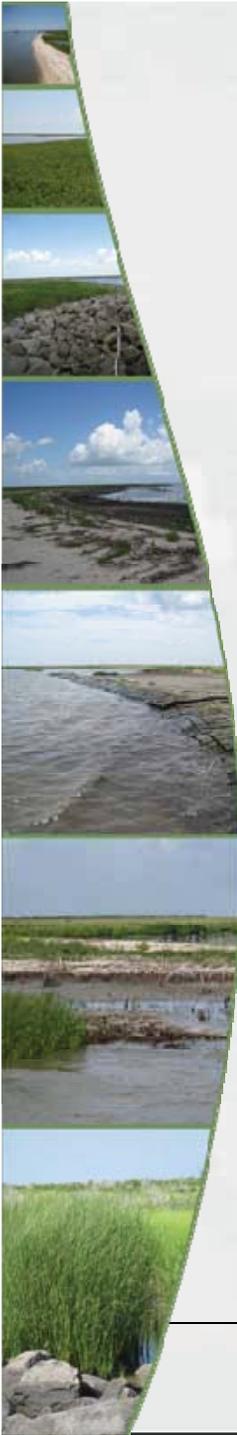


# ***Coastal Restoration in Southeastern Louisiana***



# *The Four Major Flood Risks in Coastal LA*





# ***MRGO Ecosystem Restoration Project Purpose***

- Achieve ecosystem sustainability to the greatest degree possible
- Restore habitat in the Lake Borgne ecosystem and the areas affected by the MRGO navigation channel
- Restore natural features of the ecosystem that will reduce or prevent damage from storm surge

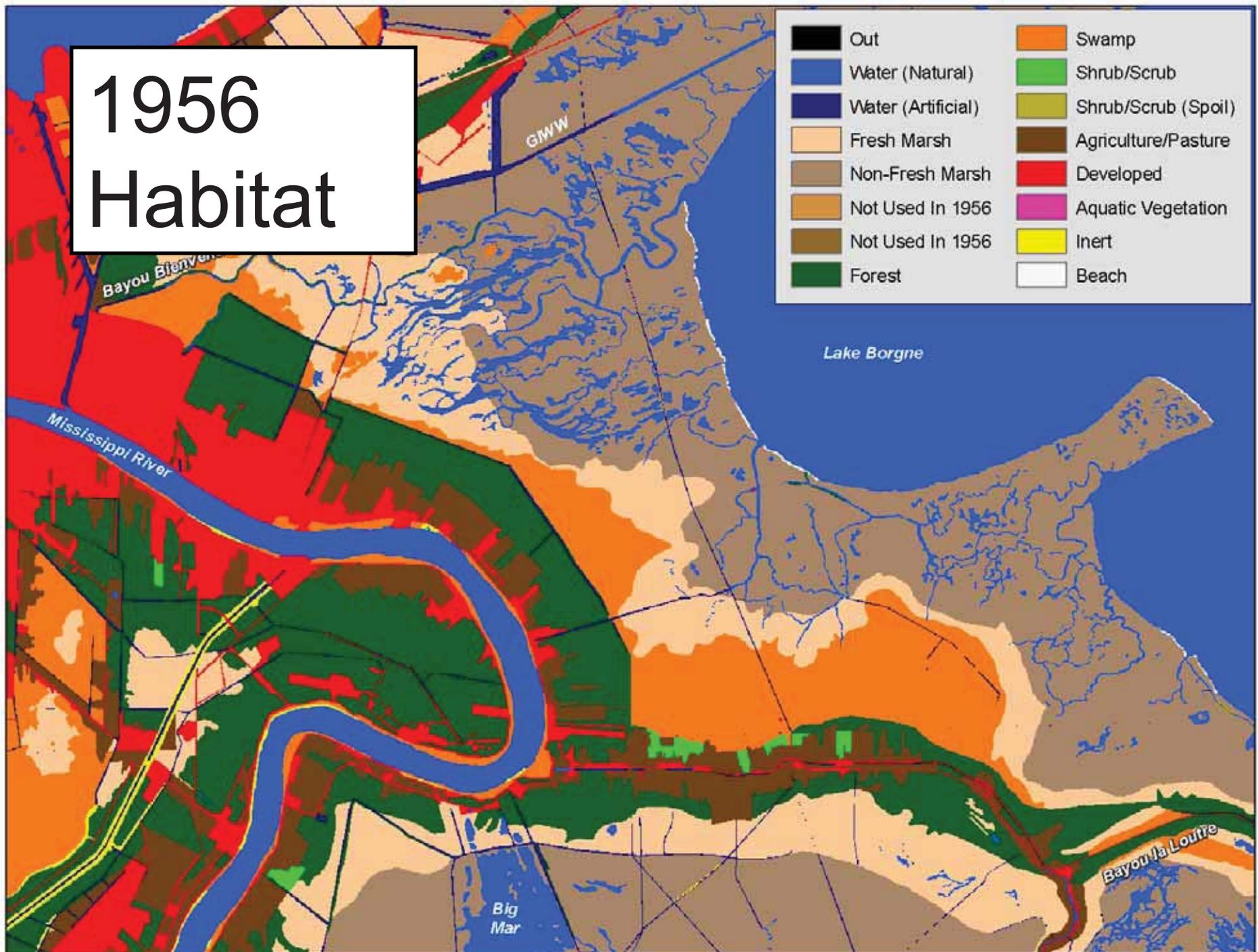


# Mississippi River Gulf Outlet (MRGO) Ecosystem Restoration Planning Sub Units

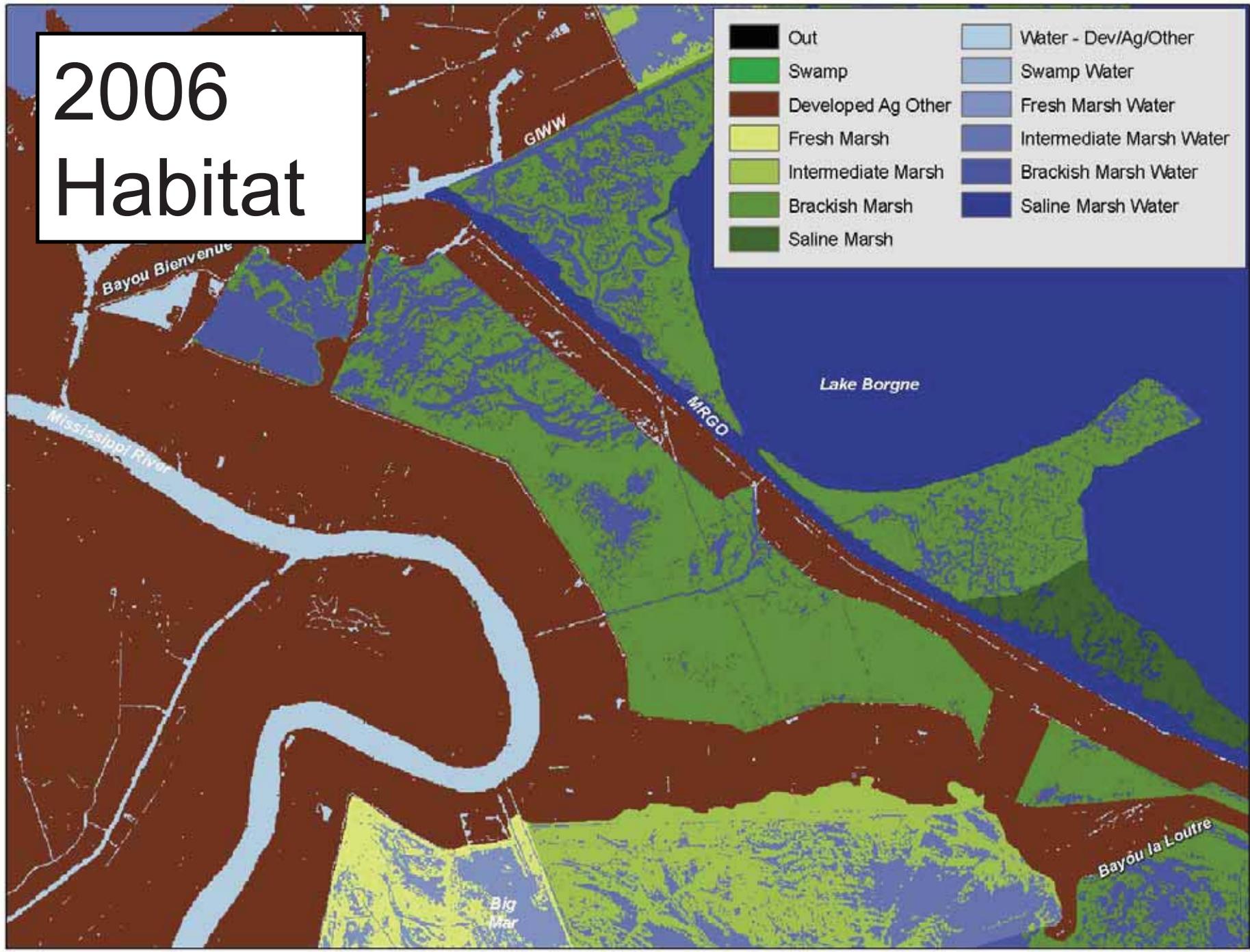
Mississippi River Gulf Outlet Ecosystem Restoration Study  
Study Area and Subunits



# 1956 Habitat



# 2006 Habitat



# *How a Freshwater Diversion Works*

- Structure constructed through river bank
- Introduces freshwater to estuary
- Benefits to ecosystem



# ***What is Salinity?***

- Amount of salt in specific volume of water
- Measured in parts per thousand
- Influences ecosystem function
- Drives habitat type and fisheries



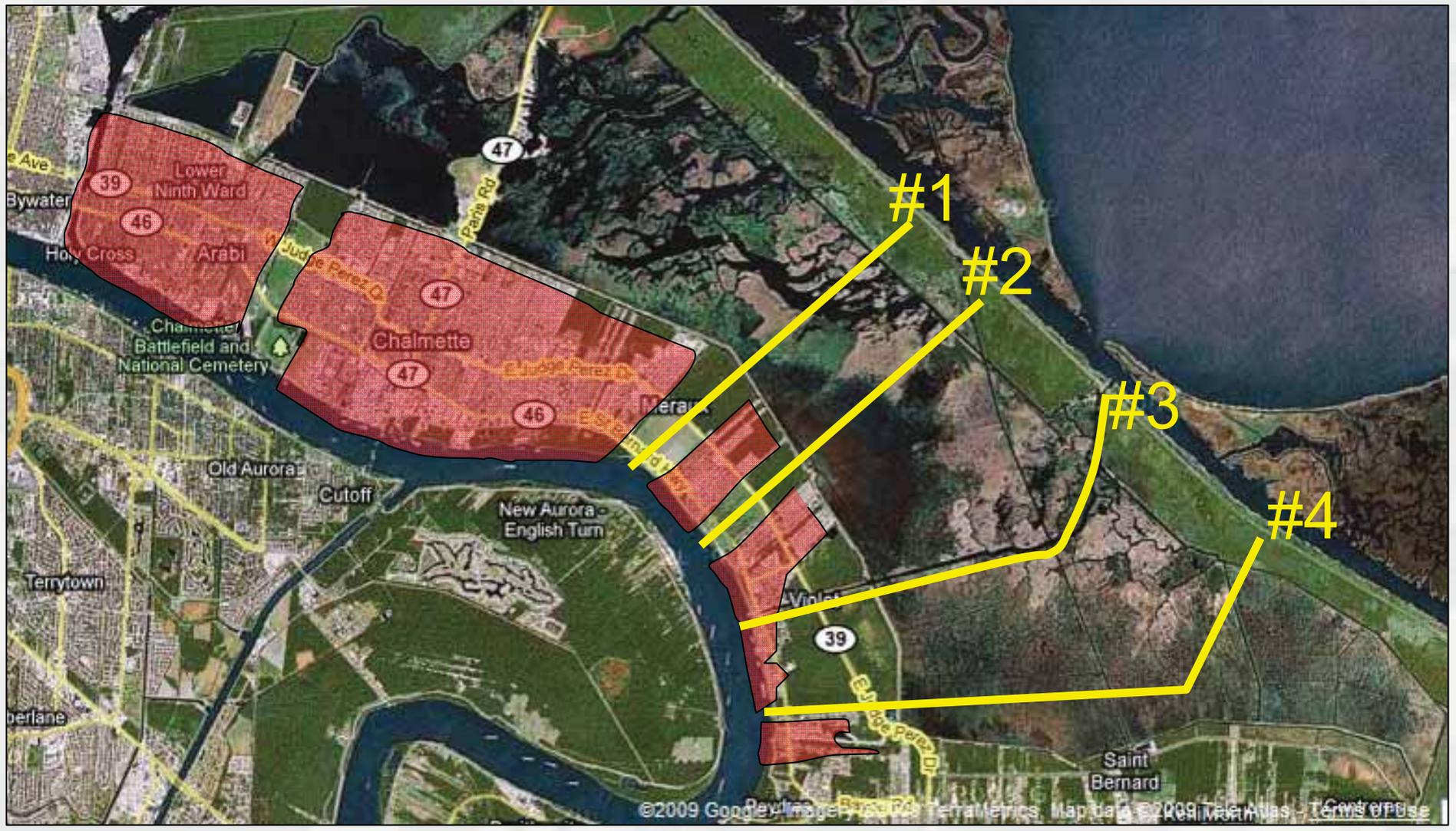
# ***Violet Diversion Goals and Objectives***

- Reduce salinity in Lake Borgne, Biloxi Marsh and western Mississippi Sound
- Create conditions to sustain 9,500 acres of cypress swamp habitat in the Central Wetlands
- Create/nourish fresh/intermediate marsh and brackish marsh in the project area
- Help sustain Biloxi Marsh, an important natural storm surge buffer



# *Violet Freshwater Diversion*

- Multiple potential sites identified
- 4 locations were considered in detail

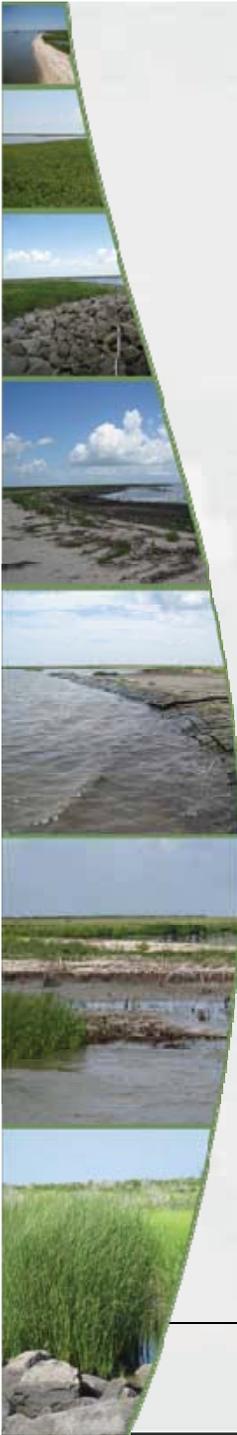


# *Preferred Diversion Location*



Location # 1

View looking northeast from river



## *Anticipated Benefits*

- Reduce salt water intrusion
- Cypress reforestation
- Increased productivity of marsh plants
- Improved fisheries
  - ▶ E.g. oysters, crabs, shrimp
- Improved duck habitat and population
- Improved wetland sustainability



# *Anticipated Impacts*

- Restore historic fisheries
  - ▶ Commercial and recreational species
  
- Lower salinity vegetation in Central Wetlands
  - ▶ Changes in plant community
  - ▶ Swamp development
  
- Water quality
  - ▶ Nutrients
  - ▶ Metals
  - ▶ Temperature
  - ▶ Bacteria



# *Community Considerations*

- Maintain internal drainage
- Maintain risk reduction system
- Temporary limits to recreation access near diversion construction



# *Construction Impacts*

- Construction along Hwy 39 & Hwy 46
  - ▶ By-pass roads required
- Construction activities near communities in Violet
  - ▶ No plans to relocate residences
- Construction duration
  - ▶ 2.5 to 3 years
- Temporary railroad relocation



# *Example of Road Relocations*

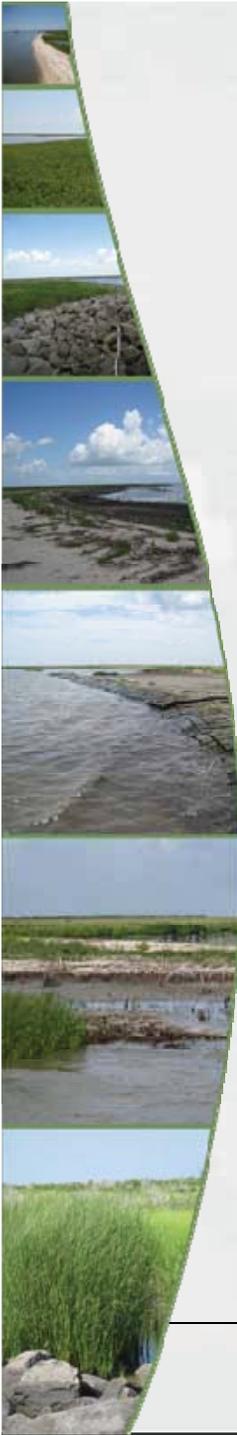


# ***MRGO Project Status***

- Developing feasibility analysis and Environmental Impact Statement to support future construction
- Proposed plans and associated environmental impacts will be published May 2010
- Proposed plan and draft EIS will be available for 45-day public comment period
- Public meetings will be held to discuss proposed plan and collect public comments



# Resources



**US Army Corps of Engineers**  
New Orleans District

## MRGO

MISSISSIPPI RIVER  
GULF OUTLET

ECOSYSTEM RESTORATION  
PLAN FEASIBILITY STUDY

Home | Calendar | Study Teams | Study Products | Reference Documents | Data Viewer | Document Search

### Proposed Projects



Roll over projects to see more data.

Click the play button (▶) below to view a short video about the Schematic Closure Design of the Mississippi River Gulf Outlet.

### MRGO Document Quick Links

- [MRGO History](#)
- [MRGO Fact Sheet](#)
- [MRGO De-authorization Study](#)
- [MRGO Navigation Channel Closure](#)
- [MRGO Ecosystem Restoration Plan Feasibility Study](#)
- [MRGO Closure and Coastal Restoration Fact Sheet \(PDF; 2.92 MB\)](#)

### MRGO Ecosystem Restoration Plan Final Scoping Report

The "MRGO Ecosystem Restoration Plan Final Scoping Report, May 2009" prepared by the US Army Corps of Engineers, New Orleans District is available for review.

The Scoping Report outlines the project background and scoping process and summarizes the key issues identified by members of the public during the initial scoping period. Scoping was initiated on October 2, 2008. Comments received after November 20, 2008 are not included in this report.



A hard copy of the Final scoping report is available upon request. Please contact Ms. Sandra Stiles; US Army Corps of Engineers; Regional Planning and Environmental Division South, New Orleans Environmental Branch; CERPOS-PDN-RS; P.O. Box 60267; New Orleans, Louisiana 70160-0267. Ms. Stiles may also be contacted at (504) 862-1583, by email to [Sandra.S.Stiles@usace.army.mil](mailto:Sandra.S.Stiles@usace.army.mil), or by fax to (504) 862-2000.

[www.mrgo.gov](http://www.mrgo.gov)

