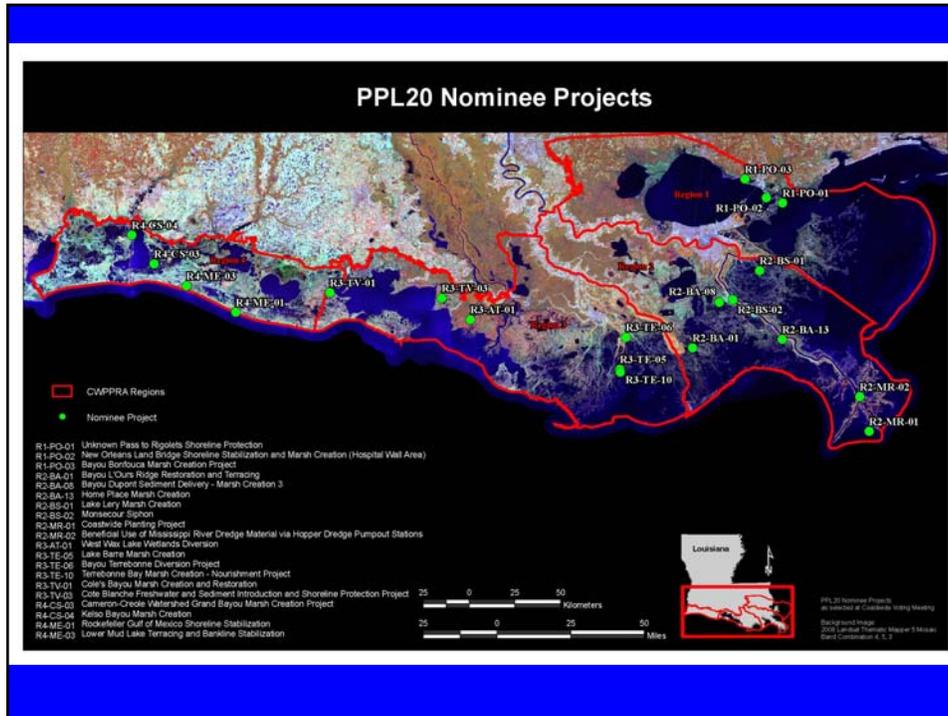


# CWPPRA Priority Project List 20 Candidate Project Evaluation Results



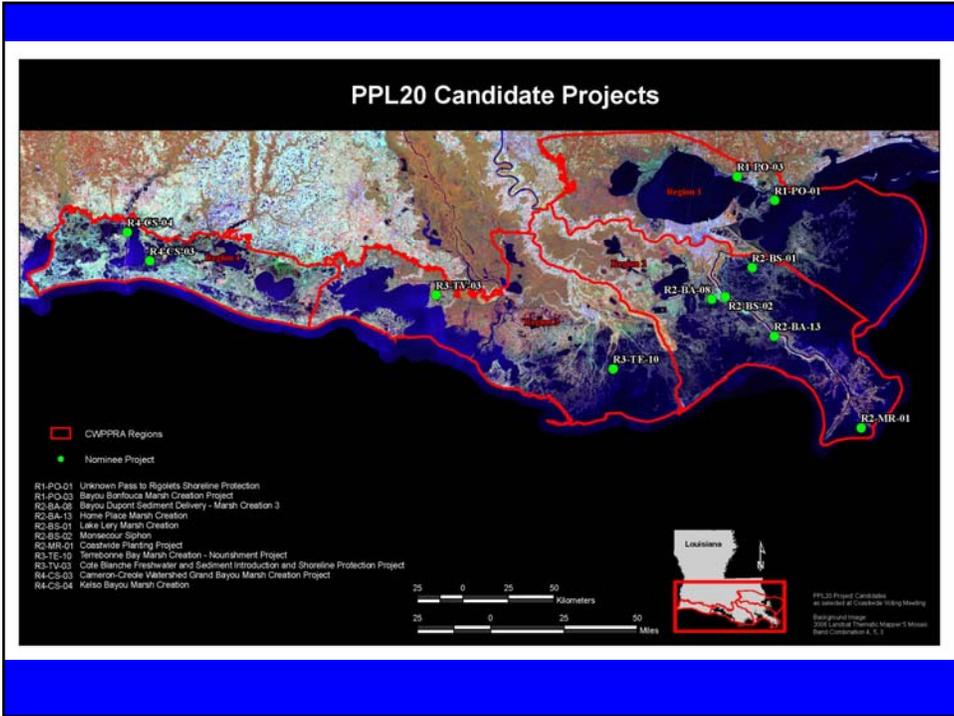
## Overview of Project Nomination Process

- Regional Planning Team meetings were held January 26-28, 2010 (Rockefeller Refuge, Morgan City, and New Orleans) for each Coast 2050 region to accept project ideas from the public and government participants.
- Regional Planning Teams voted on February 24, 2010 at a Coastwide Voting Meeting to select 20 nominee projects and four demonstration projects.
- The Technical Committee selected 11 candidate projects and 3 demo candidates for detailed evaluation on April 20, 2010.



## Project Evaluation Procedures

- Interagency site visits were conducted with landowners and local governments.
- The Environmental Workgroup conducted Wetland Value Assessments (WVA) to estimate wetland benefits.
- The Engineering Workgroup reviewed project designs and cost estimates for each candidate and demonstration project.
- The demonstration projects were also evaluated by the Environmental and Engineering Workgroups.
- The Economics Workgroup developed fully funded costs for engineering and design, construction, and 20 years of operations, maintenance, and monitoring for each project.



# Region 1

## Unknown Pass to Rigolets Shoreline Protection

## Bayou Bonfouca Marsh Creation

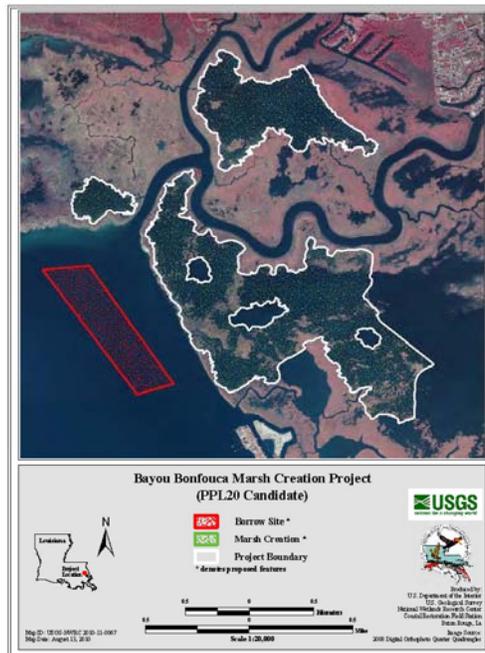
# Unknown Pass to Rigolets Shoreline Protection

- Located in Orleans Parish, East Orleans Landbridge, northwest shoreline of Lake Borgne
- 22,062 feet of rock revetment from Unknown Pass to The Rigolets
- Approximately 39 net acres protected over the 20-year project life
- The total fully funded cost is \$27,367,360.



## Bayou Bonfouca Marsh Creation

- Located in St. Tammany Parish, adjacent to Bayou Bonfouca, portions within Big Branch Marsh National Wildlife Refuge
- Hydraulically dredged material from Lake Pontchartrain would be used to create/nourish 575 acres of marsh
- Tidal creeks would be constructed to provide tidal connectivity and access for marine organisms; some historical ponds would not be filled
- Approximately 424 net acres created over the 20-year project life
- The total fully funded cost is \$23,875,866.



# Region 2

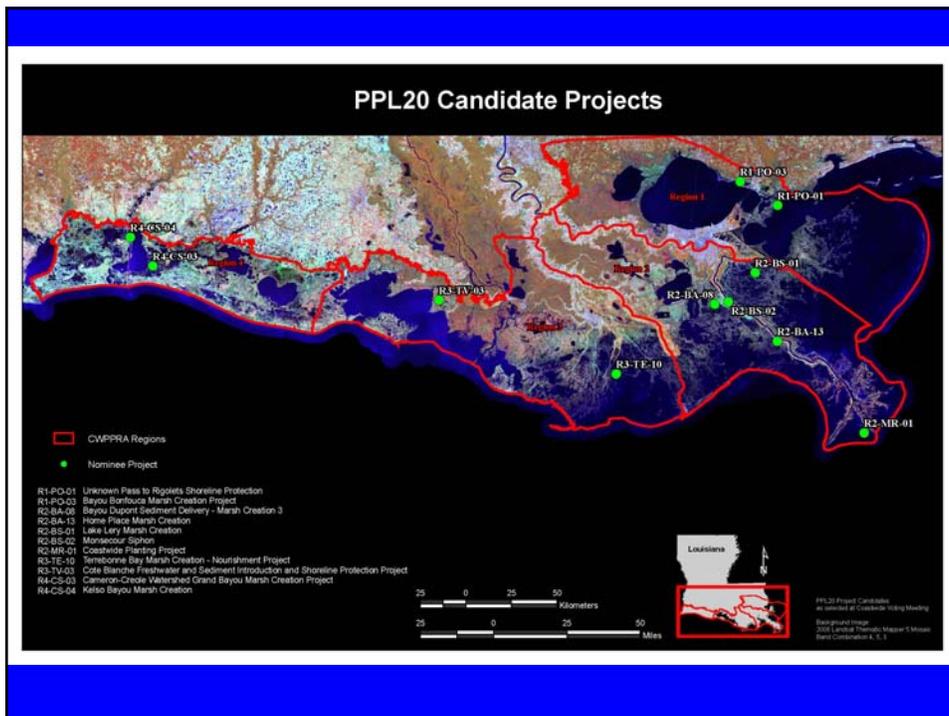
Lake Lery Shoreline Marsh Creation

Monsecour Siphon

Coastwide Planting

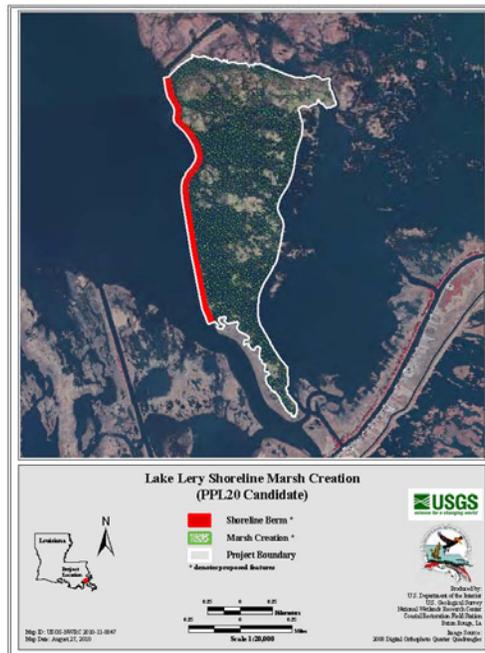
Bayou Dupont Sediment Delivery-Marsh Creation 3

Homeplace Marsh Creation



## Lake Lery Shoreline Marsh Creation

- Located in St. Bernard Parish, within the Caernarvon outfall area, eastern shoreline of Lake Lery
- Sediments would be hydraulically dredged in Lake Lery to create and nourish 400 acres of marsh
- Restore 20 acres of shoreline berm along 1.3 miles of the eastern Lake Lery shoreline
- Approximately 282 net acres created over the 20-year project life
- The total fully funded cost is \$26,649,040.



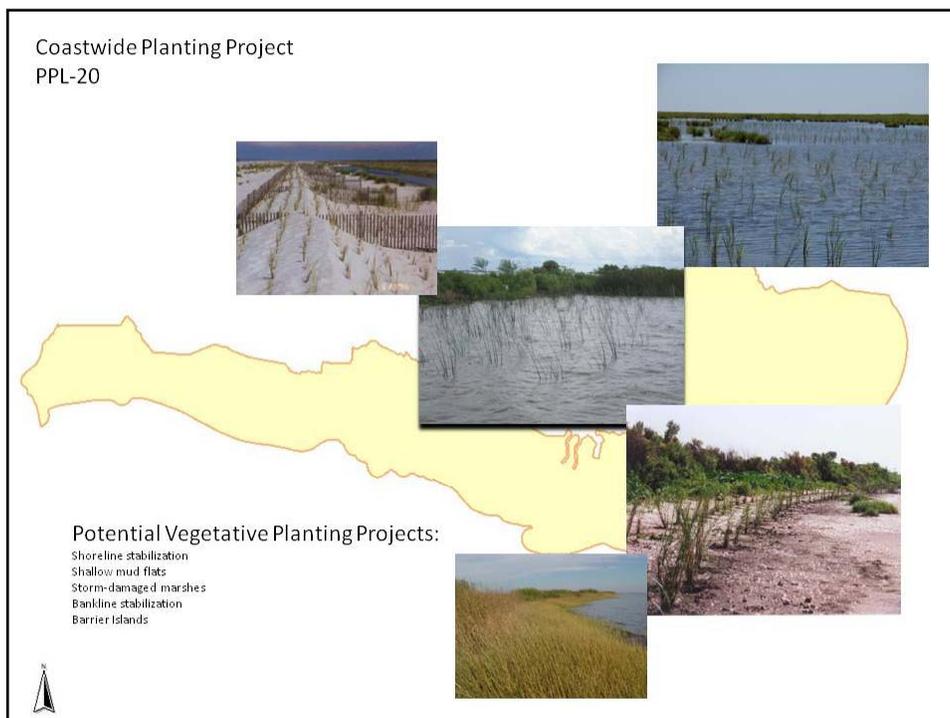
## Monsecour Siphon

- Located in Plaquemines Parish, east bank of the Mississippi River, north of Phoenix, LA, west of River aux Chenes
- Diverts water from the Mississippi River via a 2,000 cfs (1,145 cfs average) siphon
- May include some outfall management features such as plugs and spoil bank gapping for water distribution
- Approximately 825 net acres created/protected over the 20-year project life
- The total fully funded cost is \$10,563,670.



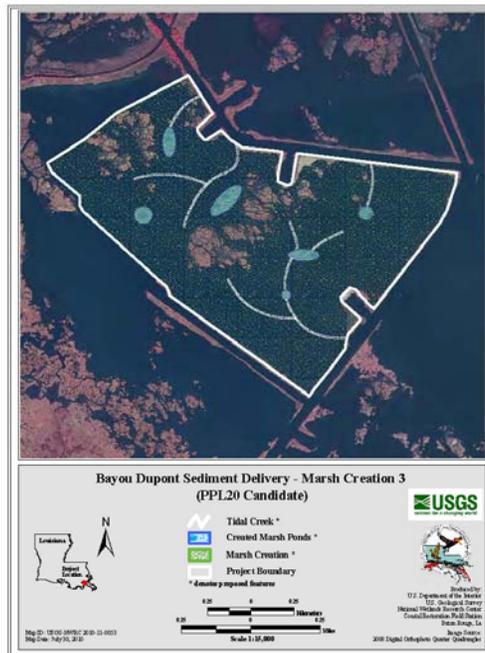
## Coastwide Planting

- Projects could be located anywhere along the coast
- Provides an annual mechanism for vegetative planting projects to target specific areas of need following storms or other damaging events
- Funded for 10 years; shoreline (40,000 ft/yr) and interior (90 ac/yr) plantings
- Approximately 779 net acres protected over the 20-year project life
- The total fully funded cost is \$11,611,059.



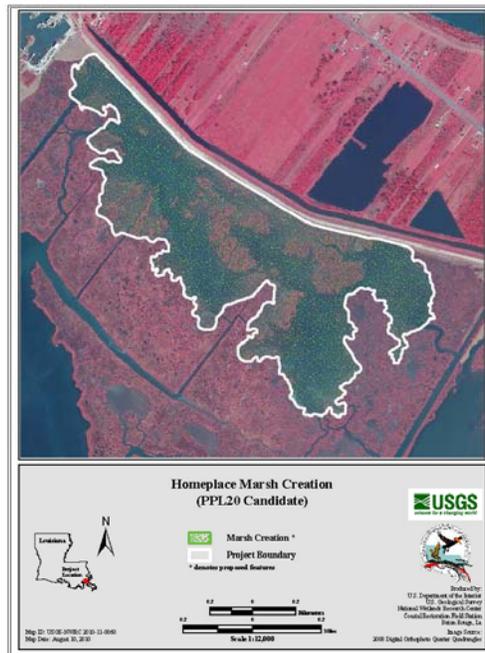
## Bayou Dupont Sediment Delivery - Marsh Creation 3

- Plaquemines and Jefferson Parishes, adjacent to the PPL12 Bayou Dupont Sediment Delivery Project
- Hydraulically dredged sediments from the Miss. River will be utilized to create/nourish 522 acres of marsh
- Ponds and tidal creeks for estuarine organism access
- Approximately 436 net acres created over the 20-year project life
- The total fully funded cost is \$39,530,119.



## Homeplace Marsh Creation

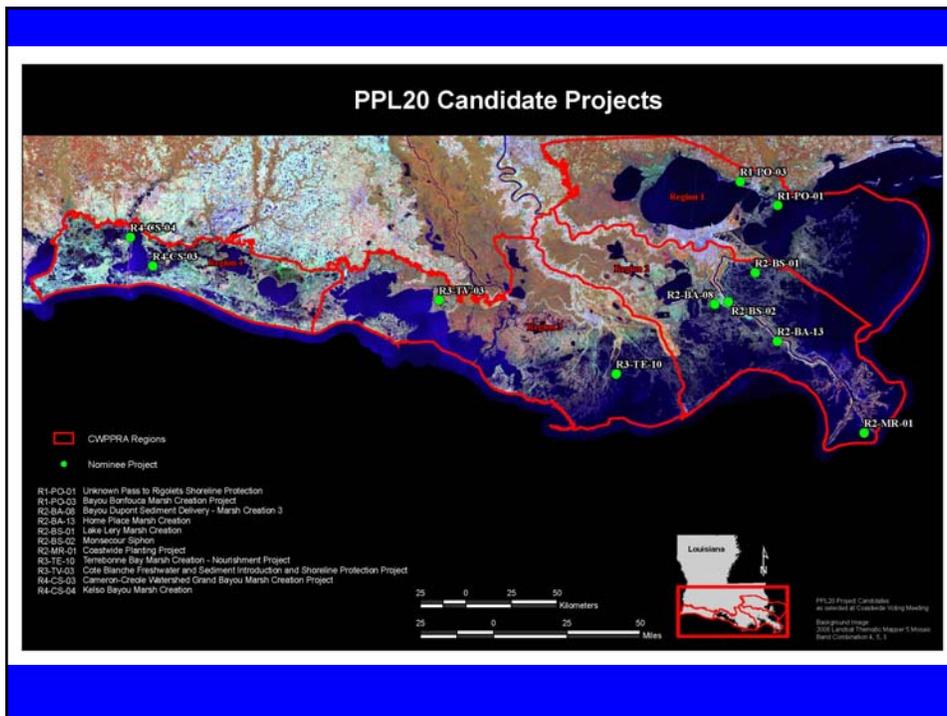
- Plaquemines Parish, near Homeplace, west of the hurricane protection levee
- Hydraulically dredged sediments from the Miss. River will be utilized to create/nourish 240 acres of marsh
- Platform will be planted with appropriate marsh vegetation
- Approximately 202 net acres created over the 20-year project life
- The total fully funded cost is \$20,156,135.



# Region 3

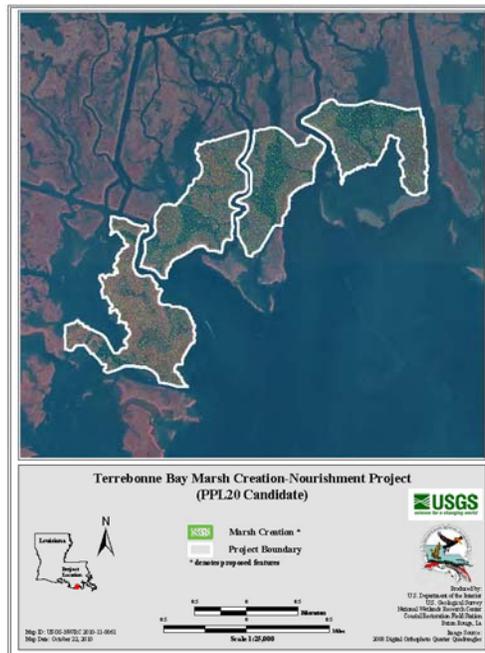
## Terrebonne Bay Marsh Creation-Nourishment

### Cote Blanche Freshwater and Sediment Introduction and Shoreline Protection



## Terrebonne Bay Marsh Creation-Nourishment

- Terrebonne Parish, east of Bayou Terrebonne, northwestern Lake Barre shoreline
- Hydraulically dredged sediment from Lake Barre would be utilized to create/nourish 664 acres of marsh
- Rebuild an elevated berm along the northwestern Lake Barre shoreline
- Approximately 353 net acres created over the 20-year project life
- The total fully funded cost is \$27,414,401.



# Cote Blanche Freshwater and Sediment Introduction and Shoreline Protection

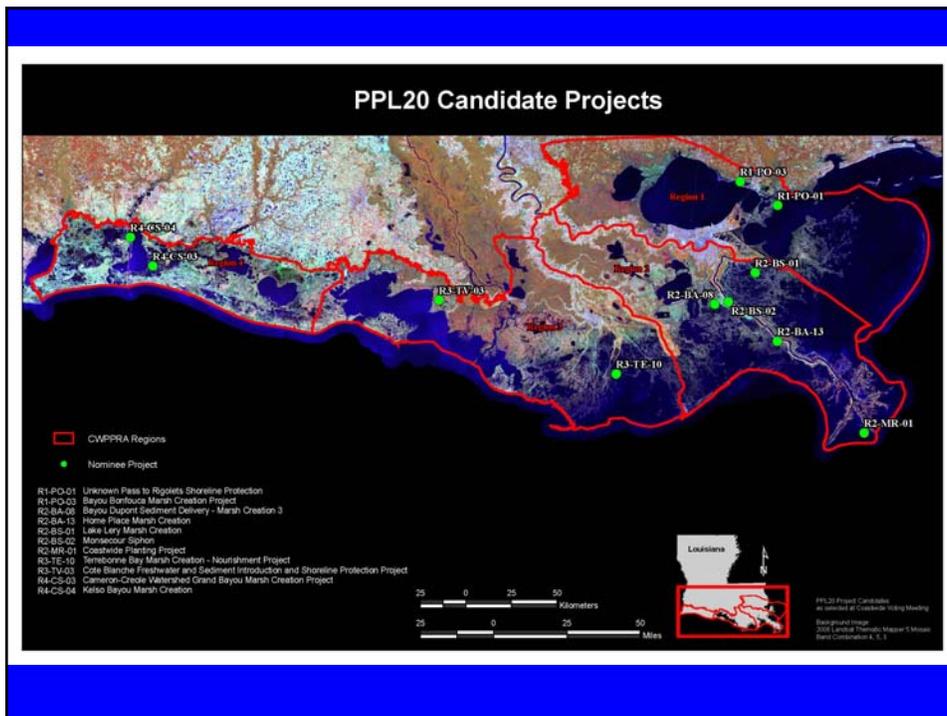
- St. Mary Parish, within the TV-4 Cote Blanche Hydrologic Restoration Project
- Channel improvements to increase flows from the GIWW; net flow increase of 930 cfs
- 27,150 feet of shoreline protection along the northern shoreline of East Cote Blanche Bay
- Approximately 763 net acres created/protected over the 20-year project life
- The total fully funded cost is \$33,380,676.



# Region 4

## Cameron-Creole Watershed Grand Bayou Marsh Creation

### Kelso Bayou Marsh Creation





## Kelso Bayou Marsh Creation

- Cameron Parish, adjacent to Kelso Bayou and LA Highway 27
- Piggy-backed with maintenance dredging of the Calcasieu Ship Channel to create/nourish 319 acres of marsh
- 3,200 feet of bank protection at the mouth of Kelso Bayou; rock armoring on the channel bottom to prevent further scouring
- Approximately 274 net acres created/protected over the 20-year project life
- The total fully funded cost is \$16,632,765.



## Demonstration Projects

- Contain technology that has not been fully developed for routine application in coastal Louisiana or in certain regions of the coastal zone.
- Contain new technology which can be transferred to other areas of the coastal zone.
- Are unique and are not duplicative in nature.

## Demonstration Projects

- Demonstration Projects were nominated at the 4 Regional Planning Team meetings.
- Four demonstration nominees were selected at the February 24, 2010 Coastwide Voting Meeting.
- The Technical Committee selected 3 candidate demos on April 20, 2010.

## Proposed Demonstration Projects

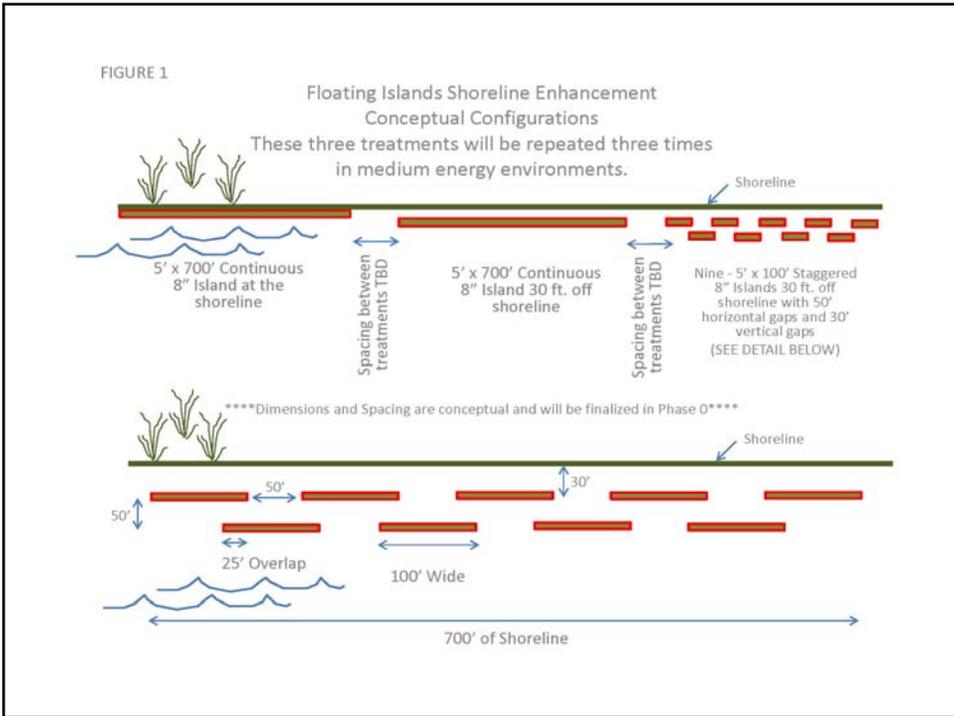
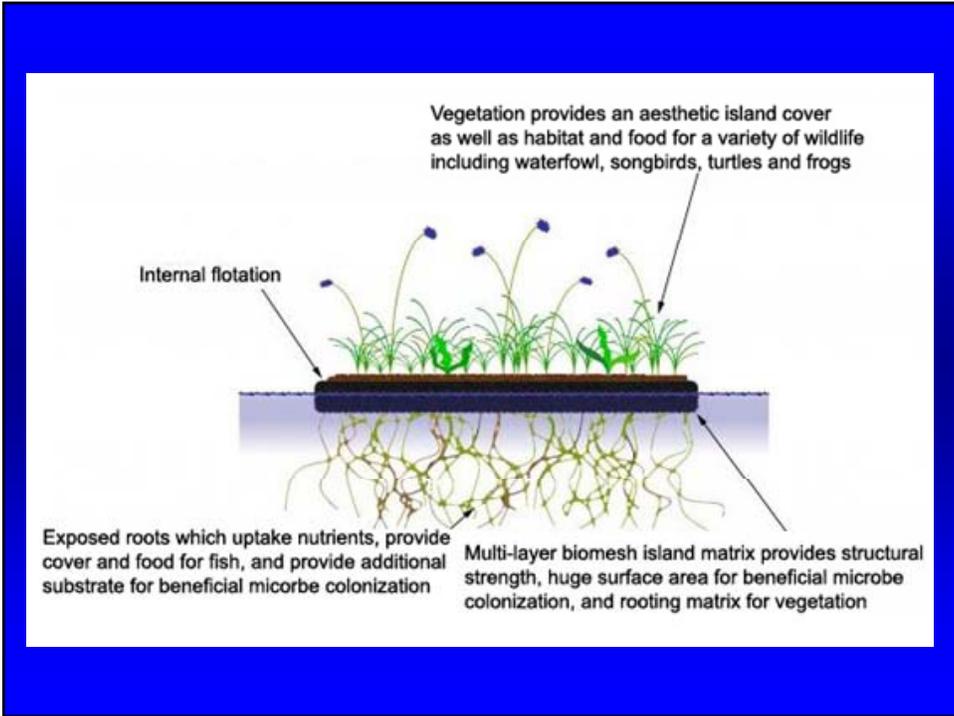
Floating Islands

EcoSystems Wave Attenuator

Wave Suppressor Sediment Collection  
System (Wave Robber)

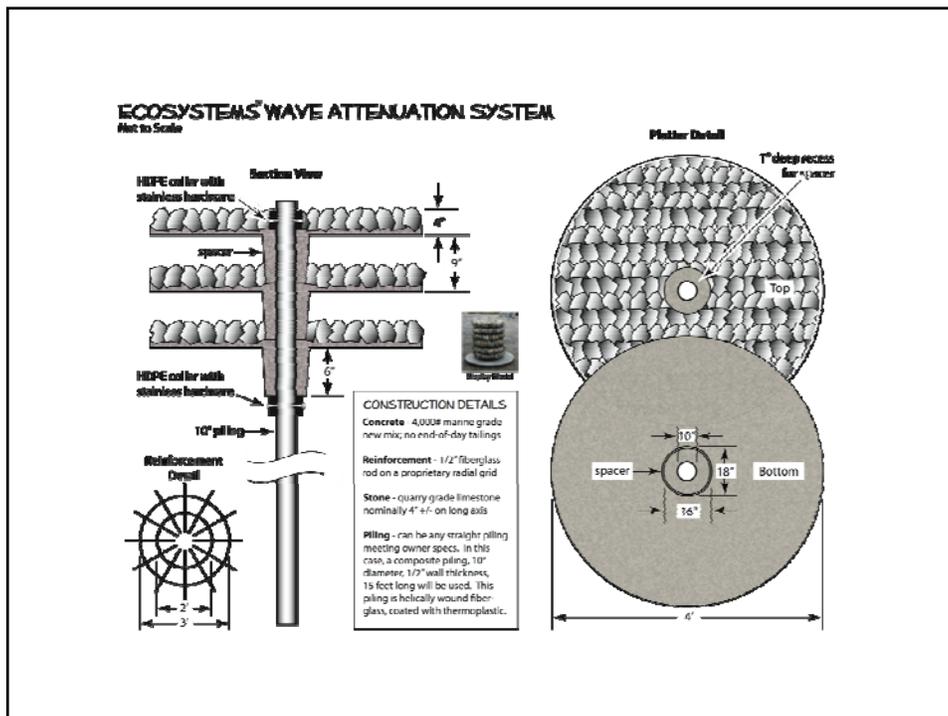
### Floating Islands

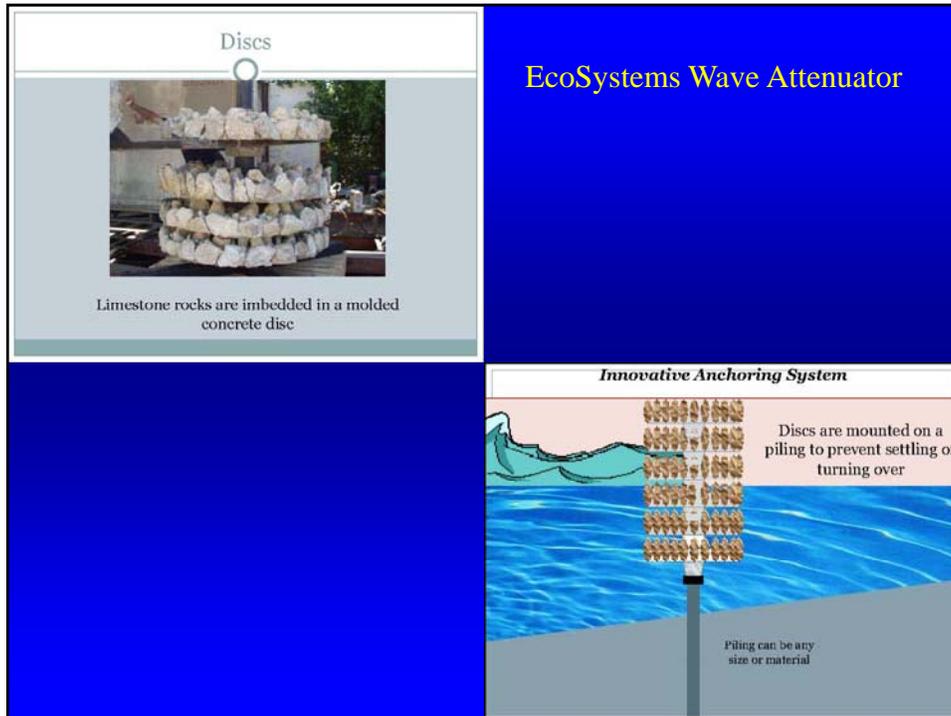
- Goal: Determine the effectiveness of vegetated floating islands to reduce erosion of interior marsh shorelines.
- Features: Floating Islands are constructed from recycled plastic adhered by marine foam. Marsh vegetation suited to a floating environment is “planted” on the islands. Units are anchored into the soil. Different mat sizes and shoreline configurations will be evaluated. Shoreline surveys will determine shoreline movement as well as accretion rates behind the structure. The product will be evaluated as a low-cost option for shoreline protection and vegetative re-establishment along interior marsh shorelines.
- Cost: The total fully funded cost is \$1,977,995.



# EcoSystems Wave Attenuator

- Goal: Determine the effectiveness of the EcoSystems Wave Attenuator in reducing shoreline erosion at sites where conditions limit or preclude traditional methods (e.g., rock).
- Features: The EcoSystems Wave Attenuator consists of concrete discs with imbedded limestone. Several discs are mounted on a piling which is driven into the ground in front of an eroding shoreline. Several rows of pilings can be placed to maximize wave dissipation. Shoreline surveys will determine shoreline movement behind the structure. This product will be evaluated as an alternative to rock dikes or other types of shoreline protection.
- Cost: The total fully funded cost is \$2,345,866.

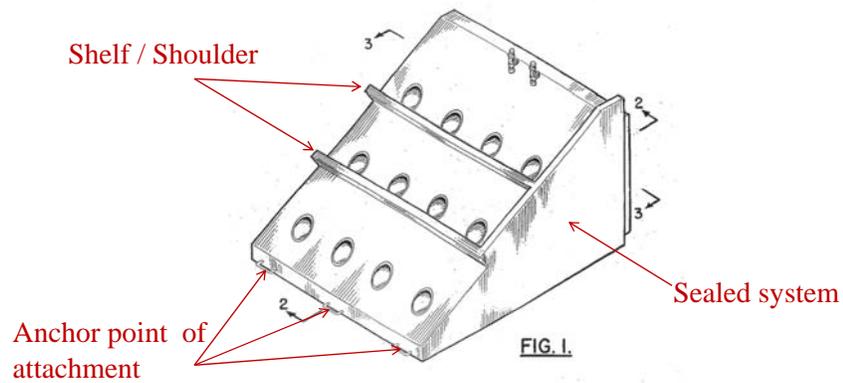




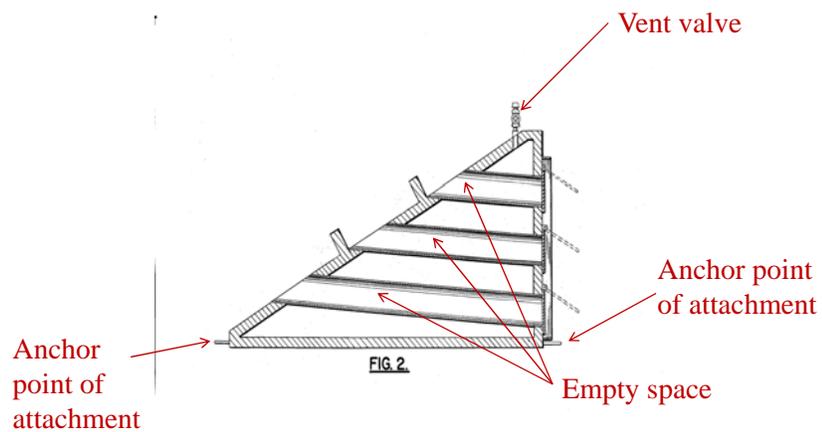
## Wave Suppressor Sediment Collection System (Wave Robber)

- Goal: Determine the effectiveness of the Wave Robber System in reducing shoreline erosion at sites where conditions limit or preclude traditional methods (e.g., rock).
- Features: The Wave Robber System is comprised of individual units constructed from high density polyethylene plastic. Units can be sized to fit the application. For a 3ft water depth, units would be 6ft tall, 12ft deep, and 10ft wide. Each unit is anchored into the soil. This project would place 50 Wave Robber units along 3 shorelines with two different spacing patterns at each site. Shoreline surveys will determine shoreline movement behind the structure and accretion rates. This product will be evaluated as an alternative to rock dikes or other types of shoreline protection.
- Cost: The total fully funded cost is \$1,718,192.

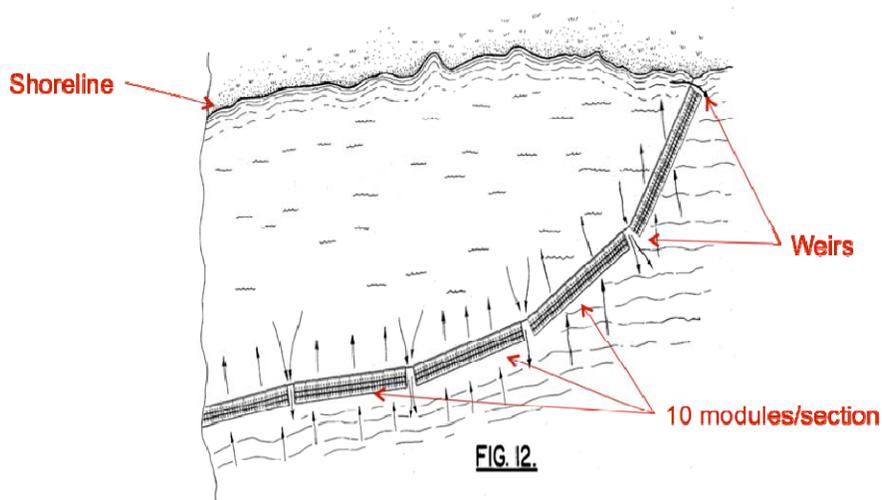
# Wave Suppressor Sediment Collection System



## Cross Section



## Conceptual Configuration



Written Comments Should be Mailed  
to the CWPPRA Task Force  
(Deadline: November 25, 2010)

Colonel Edward Fleming  
District Engineer, New Orleans  
U.S. Army Corps of Engineers  
P.O. Box 60267  
New Orleans, Louisiana 70160  
Or Fax to 504-862-1892  
Attn: Melanie Goodman  
Email: [Melanie.L.Goodman@usace.army.mil](mailto:Melanie.L.Goodman@usace.army.mil)