

Terrebonne & Barataria Restoration Initiatives

Presented to the CPRA by:
Terrebonne Parish Consolidated Government
Lafourche Parish Government
Restore or Retreat

Strategy Development

- **Proven Techniques**

- Rebuilding Critical Landforms
- Bolstering Shorelines
- Restoring Natural Processes
- Oil-spill response projects- Emergency, etc.

- **Programmatic Category**

- Federally authorized- CWPPRA, LCA, etc.
- State-only- Funding provided via CIAP or Surplus
- Promising Concepts- Further development required
- Multipurpose Use

Strategy Application

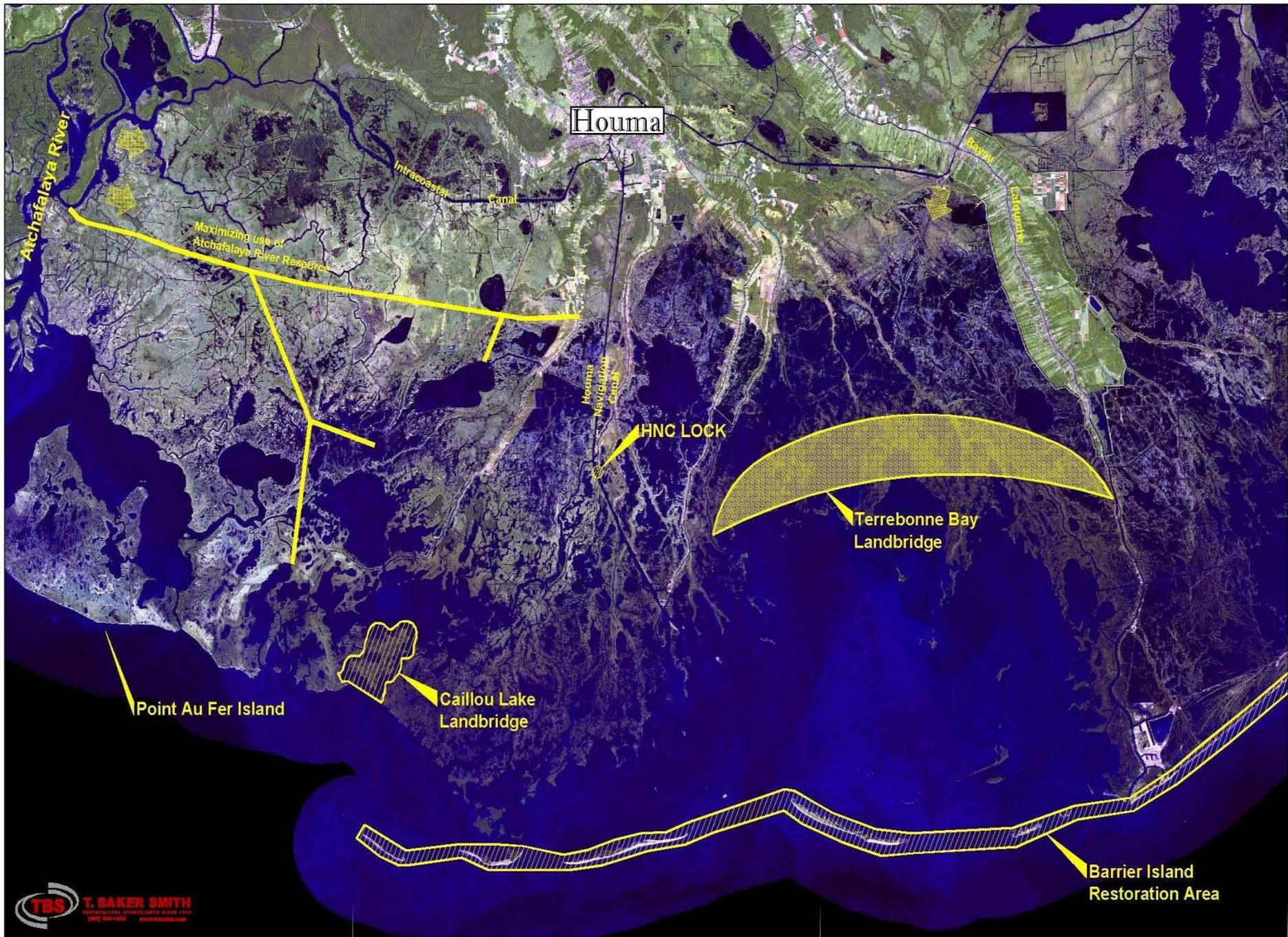
- **Terrebonne Basin**

- Maximizing Use of Atchafalaya River Resources: Freshwater and Sediment
- Multipurpose Use of the HNC Lock
- Terrebonne Basin Barrier Shoreline with Whiskey Island
- Perimeter Landbridges
 - Bayou Terrebonne to Bayou Lafourche Marsh Rim Restoration
 - Calliou Lake Landbridge

- **Barataria Basin**

- Tri-Parish Long Distance Sediment Pipeline
- Bayou Lafourche Freshwater Reintroduction
- Bayou L'Ours Ridge
- Barataria Basin Barrier Shoreline/Caminada Headland
- Maximizing Use of MS River Resources

Terrebonne Basin



Houma

Atchafalaya River

Intracoastal Canal

Maximizing use of Atchafalaya River Resources

Houma Navigation Canal

HNC LOCK

Terrebonne Bay Landbridge

Point Au Fer Island

Caillou Lake Landbridge

Barrier Island Restoration Area

Maximizing Use of Atchafalaya Resources

Long Distance Sediment Pipeline

- **Technique:** Rebuilding Critical Landforms
- **Programmatic Category:** Promising Concepts
- **Cost:** \$570 million
 - Committed: \$ 0
 - Near-term Need: \$50 m

Convey Atchafalaya River Water into N Terrebonne Marshes

- **Technique:** Restoring Natural Processes
- **Programmatic Category:** Modified LCA
- **Cost:** \$350 million (LCA)
 - Committed: \$0
 - Near-term Need: \$ 5 m

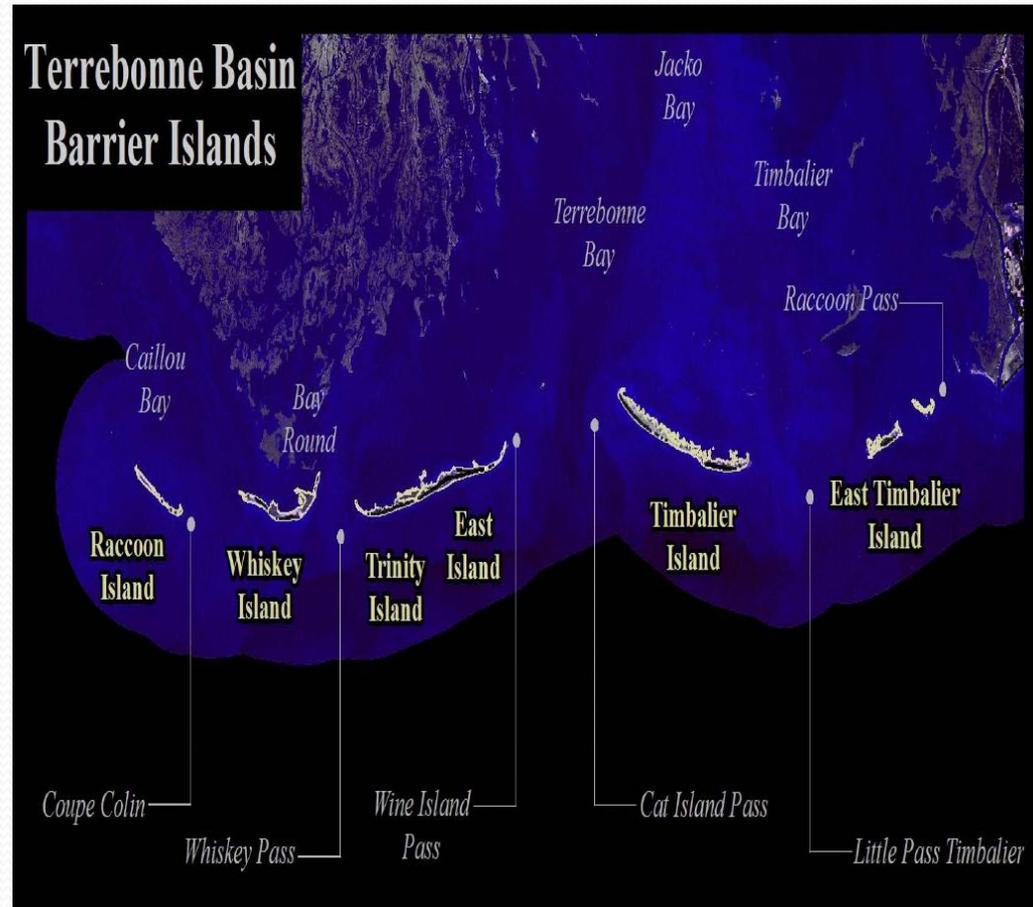
Multipurpose Use of the HNC Lock

- **Technique:** Restoring Natural Processes
- **Programmatic Category:** LCA and Multipurpose
- **Total Cost for HNC Lock-** \$447.4 million
 - Committed: \$ 8 m
 - Near Term Need: \$10 m



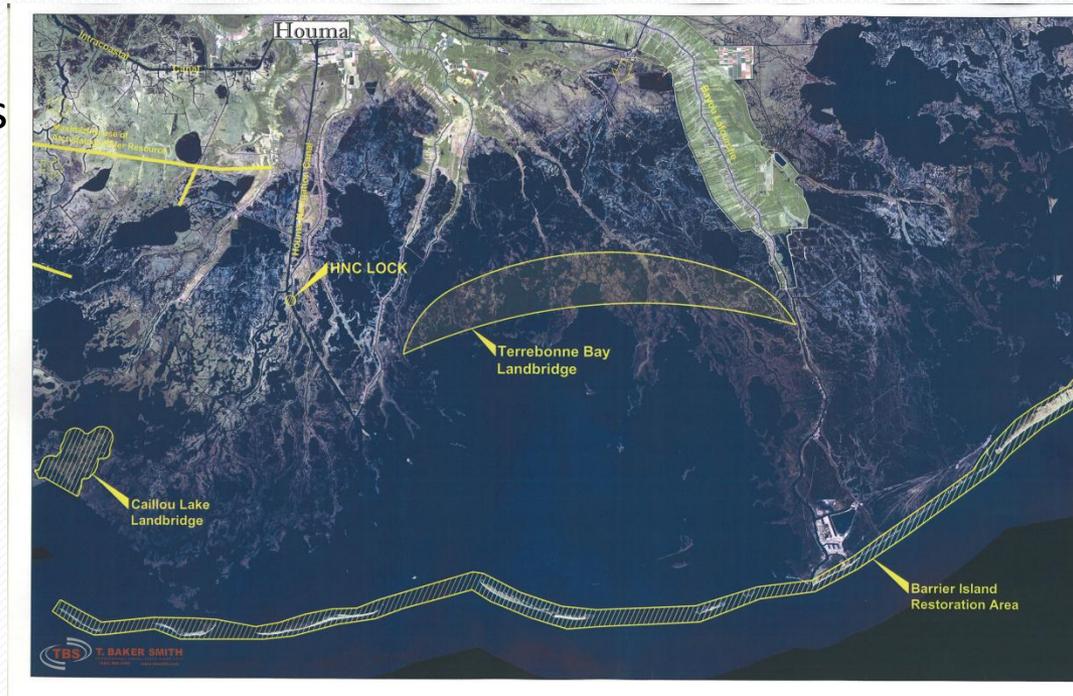
Terrebonne Basin Barrier Shoreline

- Inclusion of Ship Shoal
Whiskey Island West Flank
Restoration
- **Technique:** Bolstering
Shorelines
- **Programmatic Category:**
Modified LCA, CWPPRA
- **Cost:** \$460 million
 - Committed: \$ 0 m
 - Near Term Need: \$ 15 m



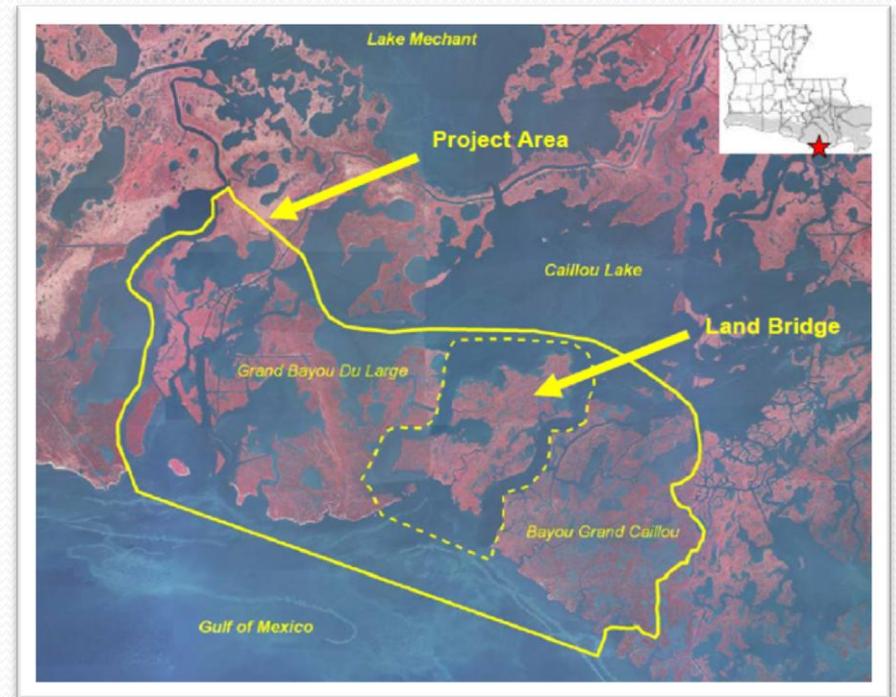
Terrebonne Bay Landbridge

- **Technique:** Rebuilding Critical Landforms and Oil Spill Impact
- **Programmatic Category:** CWPPRA and Promising Concepts
- **Cost:** \$140 million+
 - Committed: \$5.9 million
 - Near-term Need: \$5 million
- Includes, but not limited to:
 - Madison Bay Marsh Creation \$35 million (CWPPRA PPL 16)
 - Terrebonne Bay Marsh Creation \$25 million (CWPPRA PPL 20)
 - Lake Tambour Marsh Creation \$17.5 million (CWPPRA PPL 21)



Landbridge Between Caillou Lake & the Gulf of Mexico

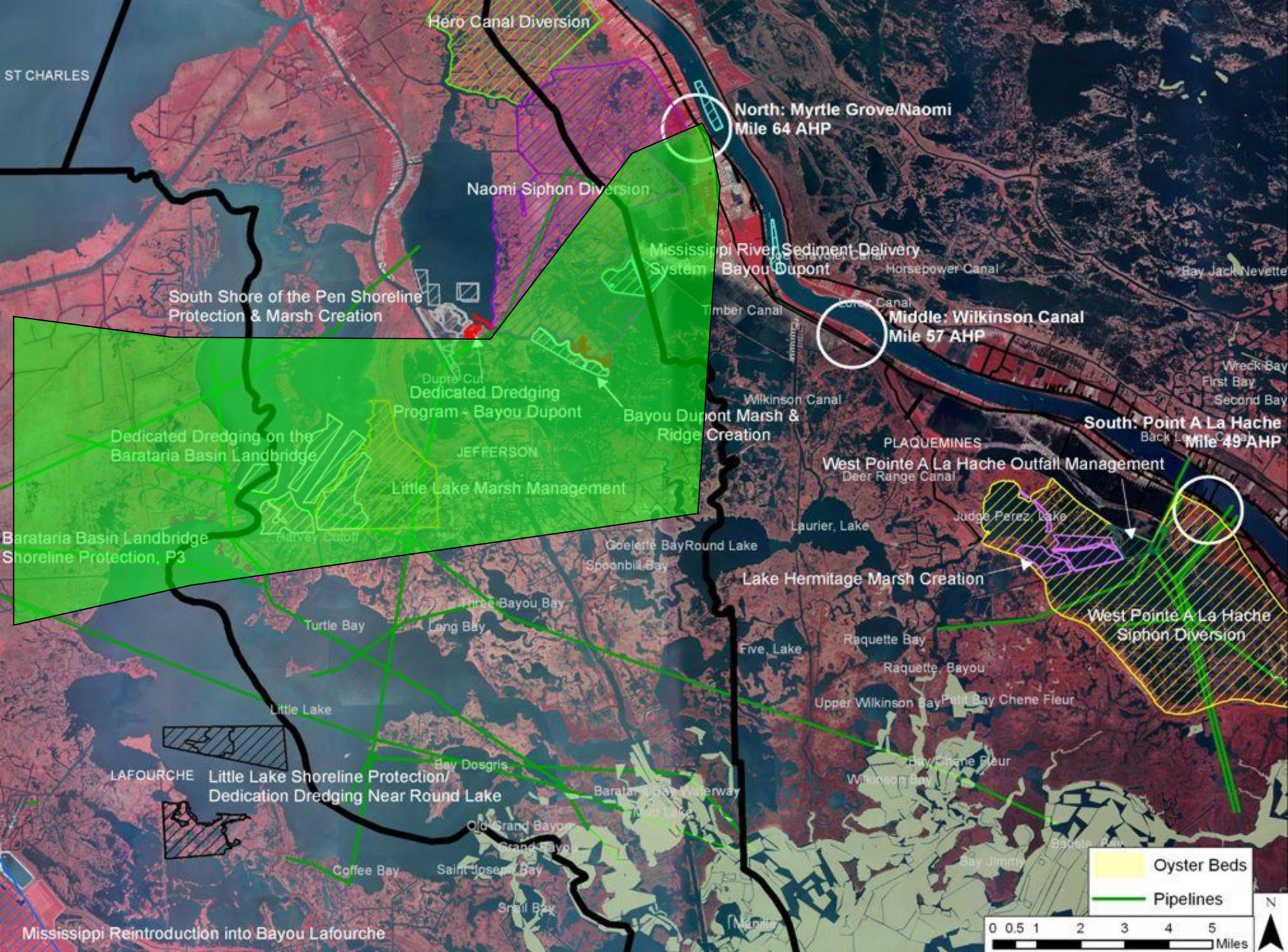
- **Technique:** Rebuilding Critical Landforms
- **Programmatic Category:** LCA & Promising Concepts
- **Cost:** \$62.6 million
 - Committed: \$ 0 m
 - Near Term Need: \$ 6.3 m



Barataria Basin

Tri-Parish Long Distance Sediment Pipeline

- **Technique:** Rebuilding Critical Landforms and Oil Spill Impact
- **Programmatic Category:** State/CIAP and Promising Concepts
- **Cost:** \$388 million (Phase 2)
 - Committed: \$66 million (Phase 1- Surplus and CIAP)
 - Near Term Need: \$22 million



ST CHARLES

Hero Canal Diversion

North: Myrtle Grove/Naomi
Mile 64 AHP

Naomi Siphon Diversion

Mississippi River Sediment Delivery
System - Bayou Dupont

South Shore of the Pen Shoreline
Protection & Marsh Creation

Middle: Wilkinson Canal
Mile 57 AHP

Dupre Cut
Dedicated Dredging
Program - Bayou Dupont

Bayou Dupont Marsh &
Ridge Creation

South: Point A La Hache
Mile 49 AHP

Dedicated Dredging on the
Barataria Basin Landbridge

Little Lake Marsh Management

West Pointe A La Hache Outfall Management

Barataria Basin Landbridge
Shoreline Protection, P3

West Pointe A La Hache
Siphon Diversion

Lake Hermitage Marsh Creation

Little Lake Shoreline Protection/
Dedication Dredging Near Round Lake

Mississippi Reintroduction into Bayou Lafourche

Oyster Beds
Pipelines

0 0.5 1 2 3 4 5 Miles



Bayou Lafourche Freshwater Reintroduction

- **Technique:** Restoring Natural Processes
- **Programmatic Category:** Multipurpose Use
- **Cost:** \$175 m
 - Committed: \$20 m (Surplus)
 - Near Term Need: \$ 22.5 m



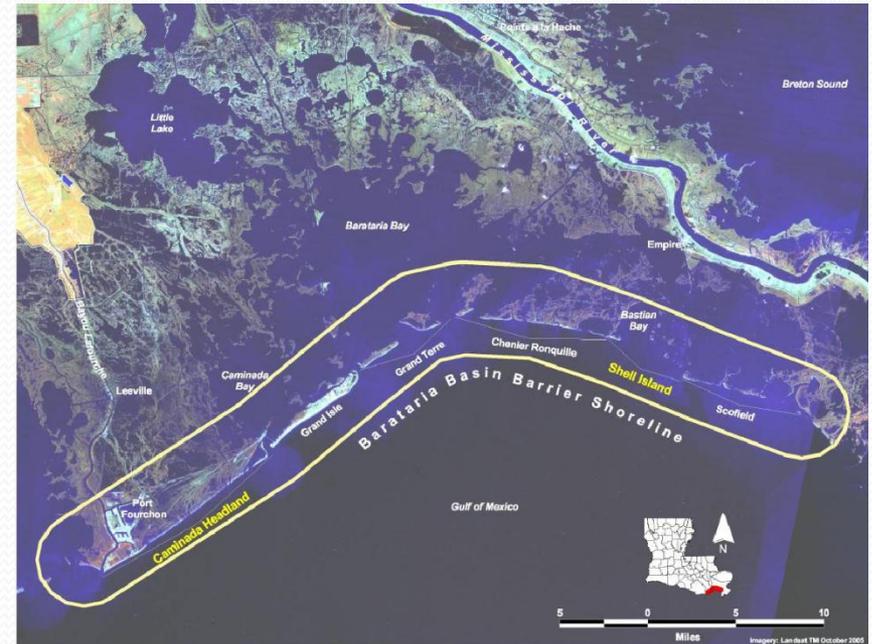
Bayou L'Ours Ridge

- **Technique:** Rebuilding Critical Landforms and Oil Spill Impact
- **Programmatic Category:** CWPPRA (PPL 21)
- **Cost:** \$5 million
 - Committed: \$ 0
 - Near Term Need: \$5 m



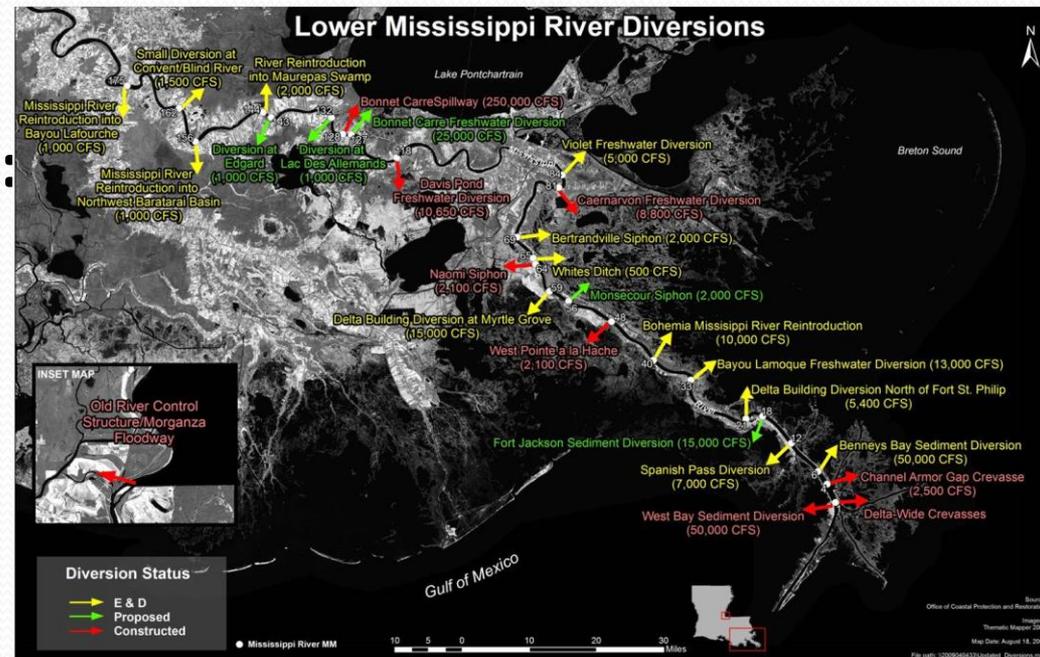
Barataria Basin Barrier Shoreline/Caminada Headland Restoration

- **Technique:** Bolstering Shorelines and Oil Spill Impact
- **Programmatic Category:** LCA
- **Cost:** \$364 million
 - Committed: \$70 million (Surplus and CIAP)
 - Near Term Need: \$70 m



Maximizing Use of MS River Resources

- **Technique:** Restoring Natural Processes
- **Programmatic Category:** Mississippi River Delta Management and Hydrodynamic Study, LCA
- **Cost:** \$25.3 million
 - Committed: \$ 0 m
 - Near Term Need: \$13 m



Conclusion

- The Terrebonne and Barataria Basins have experienced the highest land loss rates in the state, have been hit hard by hurricanes and coastal flooding, and is still being impacted by the 2010 oil spill.
- Each basin has a suite of priority projects at different stages of development, using different techniques, and at various cost levels which could be applied to any future funding scenario, including but not limited to NRDA, emergency funds, surplus, CIAP, etc.