

Coastal Restoration in Louisiana

***Town Hall Meetings
February 2010***



US Army Corps of Engineers
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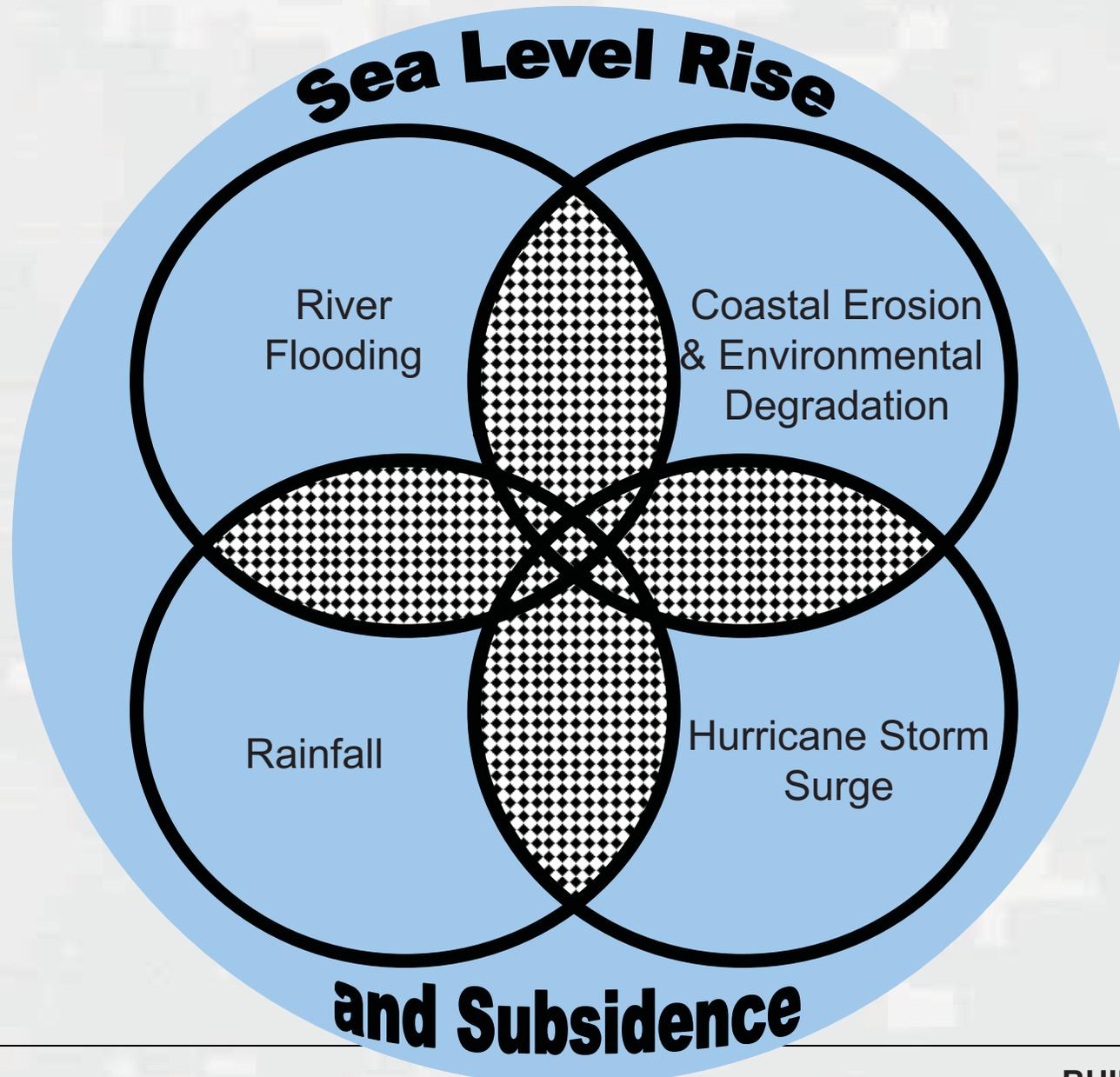


USACE New Orleans Mission

- Public safety is the Corps' #1 priority
- Flood risk management mission
- Navigation mission
- Ecosystem restoration mission
 - New Orleans District is engaged in ecosystem restoration
 - To date constructed:
 - 25,000 acres of land through beneficial use of dredged material
 - 4 Mississippi River diversions
 - More than 25 miles of shoreline protection



The Four Major Flood Risks in Coastal LA



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Coastal Restoration Efforts

- New Orleans District is actively engaged in ecosystem restoration and planning
 - Coastal Wetlands Planning, Protection and Restoration Act
 - Beneficial Use of Dredged Material
 - Louisiana Coastal Area (LCA)
 - Louisiana Coastal Protection & Restoration (LACPR)
 - MRGO Ecosystem Restoration
 - Southwest Coastal Louisiana
 - Freshwater diversions and river management
- All efforts focus on environmental sustainability and balance of interests



Coastal Louisiana's Importance to the Nation

- Coastal Louisiana is a vital economic resource for the Nation
 - Produces \$67 billion in oil & gas annually
 - Ranks 1st in the country in crude oil
 - Ranks 2nd in the country in natural gas production
 - Commercial fishing comprises about 1/4 of the Nation's total fishing industry
- Louisiana's coastal zone is home to ports that carried over 467 million tons of waterborne commerce (2008 data)
- Resources are threatened by disappearance of Louisiana's coastal ecosystems
- Loss of wetlands increases storm surge risk
- ***Above all, protecting coastal Louisiana is about protecting the people, the culture, and a way of life that is uniquely Louisiana***

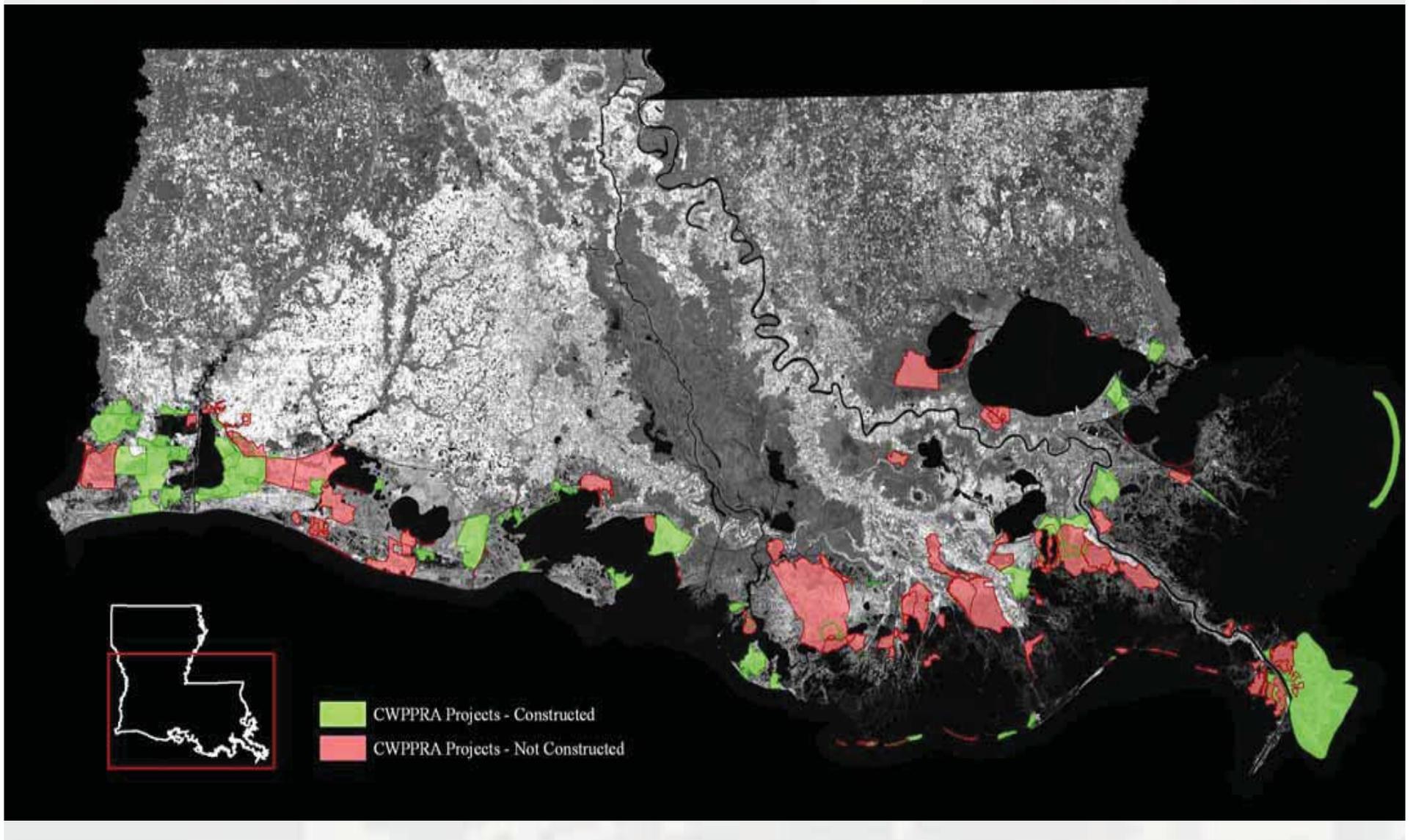


Integrated Water Resources Management

- Complex National Problem
- Shared responsibility between Corps, Federal Partners, the States of LA and MS, and local governments
- Teamwork to derive and implement nationally beneficial solutions
- New perspective on land and water management requiring difficult decisions and tradeoffs
- Emphasis on efficiencies to achieve more within existing resources



Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)

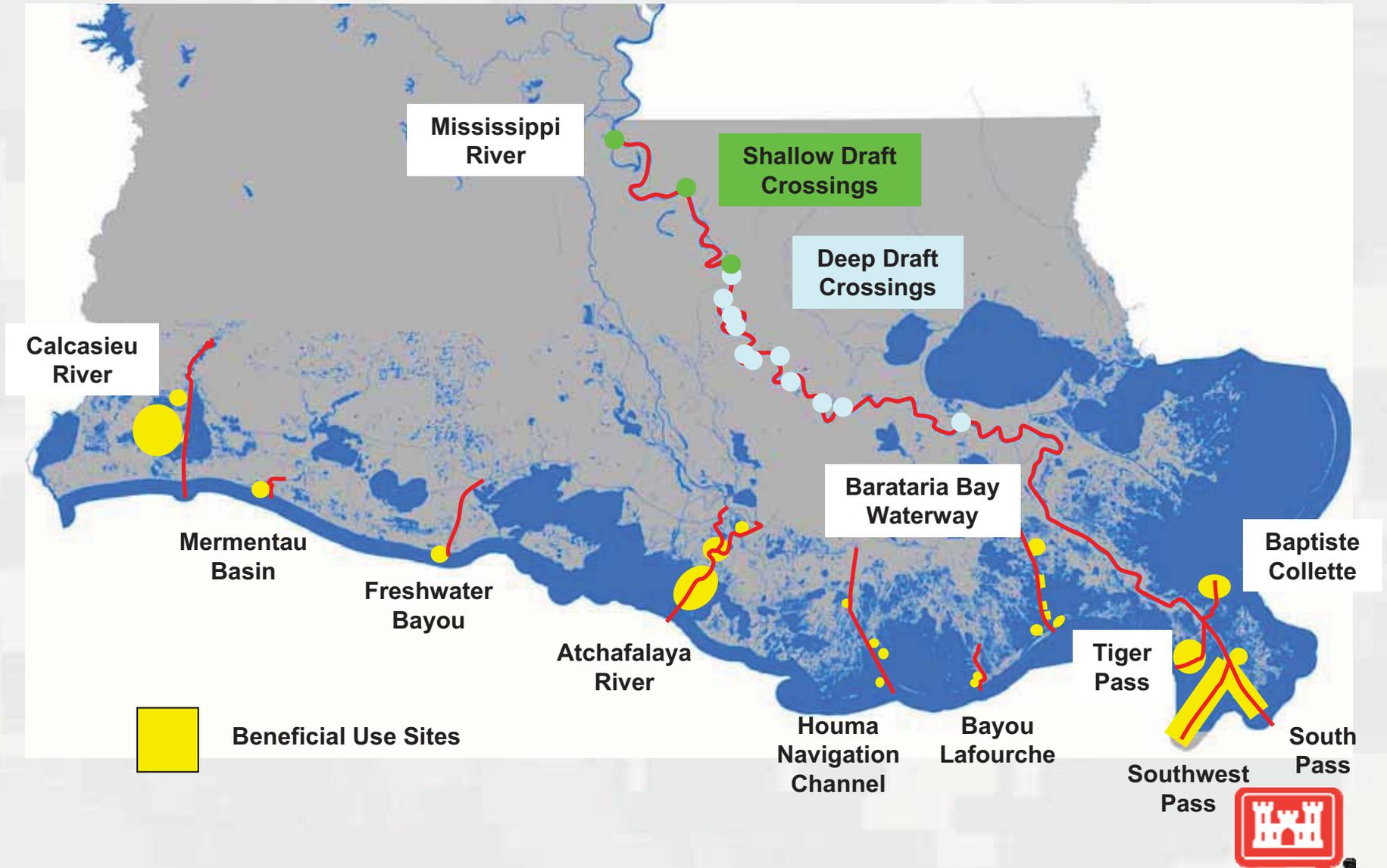


CWPPRA Current Status

- 144 projects in various stages of implementation
 - ▶ Includes planning, engineering and design (E&D), construction, and post construction operations and maintenance
- 82 projects constructed
- 15 projects currently under construction
- 47 projects are in E&D phase and scheduled for construction in FY10 or later



Beneficial Use of Dredged Material



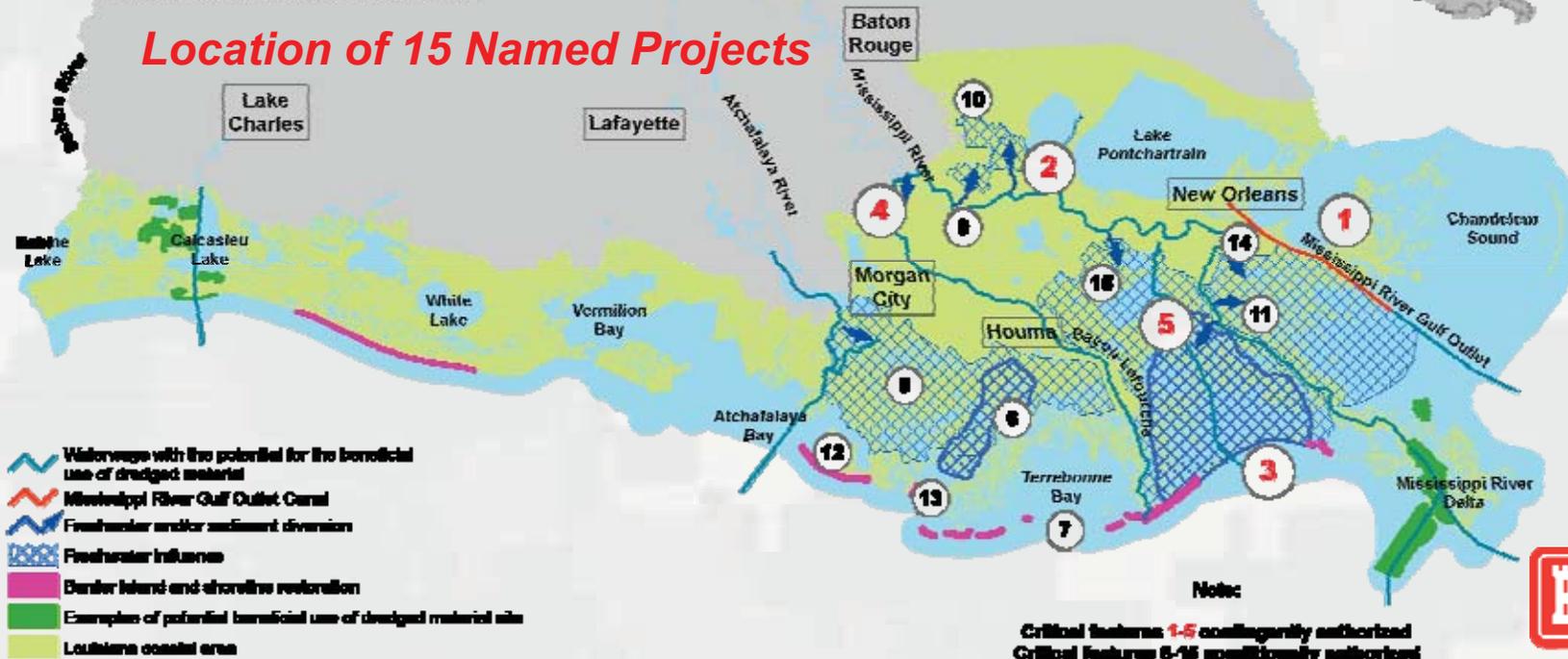
Louisiana Coastal Area (LCA)

Louisiana Coastal Area Ecosystem Restoration WRDA 2007 Title VII

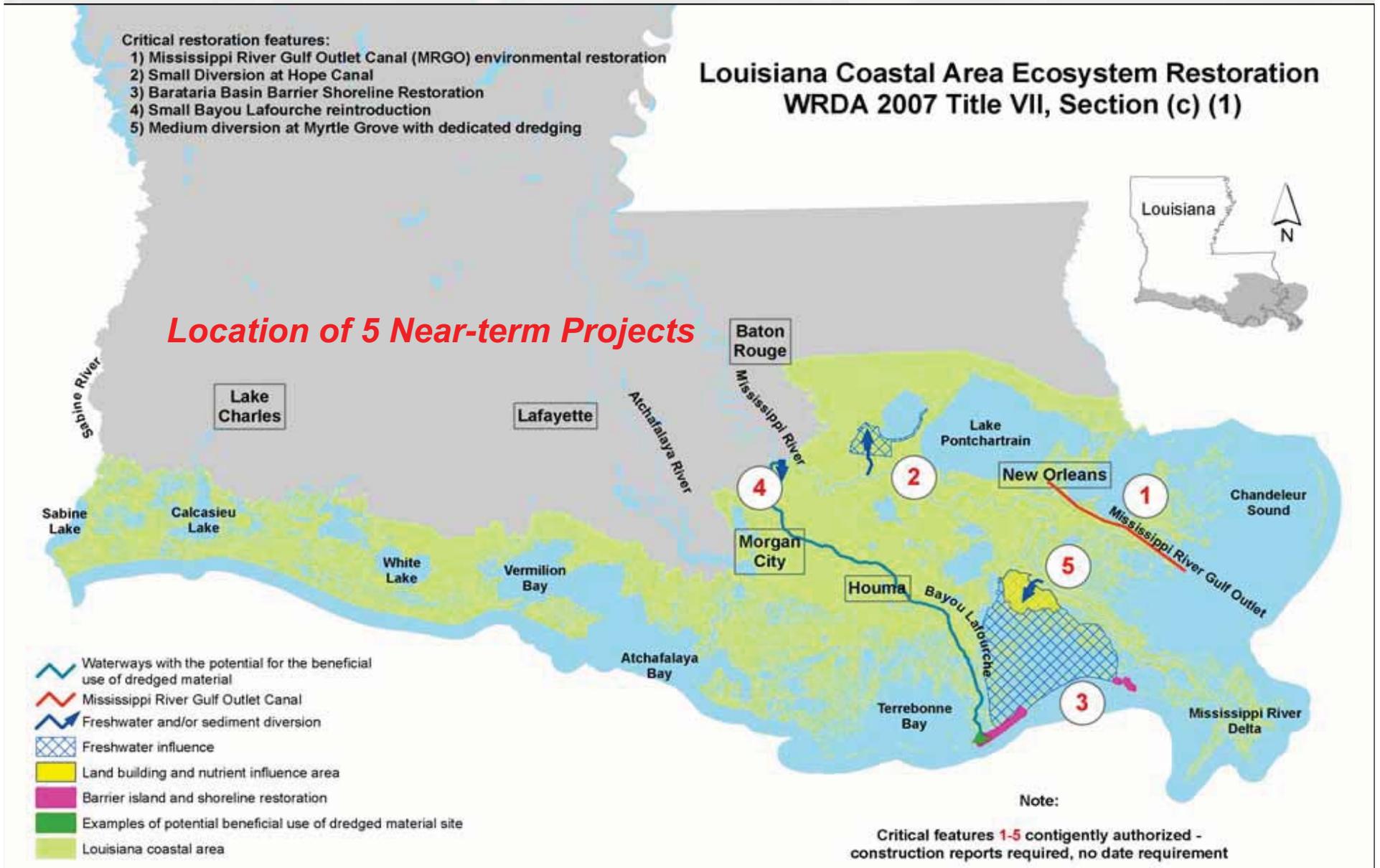
Critical restoration features:

- 1) Mississippi River Gulf Outlet Canal (MRGO) environmental restoration
- 2) Small Diversion at Hope Canal
- 3) Barataria Basin Barrier Shoreline Restoration
- 4) Small Bayou Lafourche reintroduction
- 5) Medium diversion at Myrtle Grove with dedicated dredging
- 6) Multipurpose operation of the Houma Navigation Lock
- 7) Terrebonne Basin Barrier Shoreline Restoration
- 8) Convey Atchafalaya River water to northern Terrebonne marshes
- 9) Small Diversion at Convent/Blind River
- 10) Atchafalaya River Diversion Canal Modification
- 11) Medium Diversion at White Ditch
- 12) Gulf Shoreline at Point Au Fer Island
- 13) Land bridge between Caillou Lake and the Gulf of Mexico
- 14) Modification to the Caernarvon diversion
- 15) Modification to Davis Pond diversion

Location of 15 Named Projects



LCA: 5 Near-Term Projects



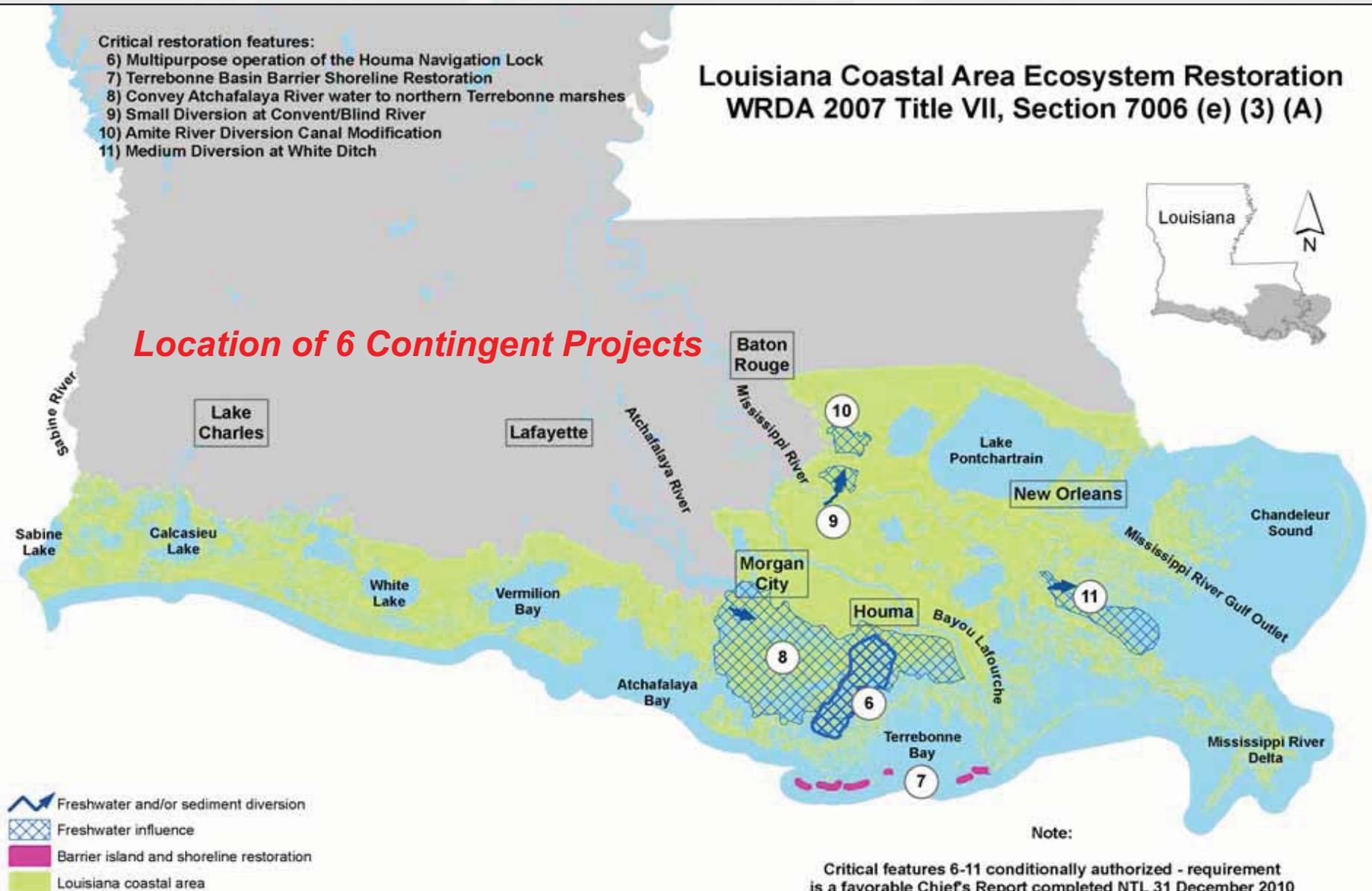
LCA: 6 Contingent Projects

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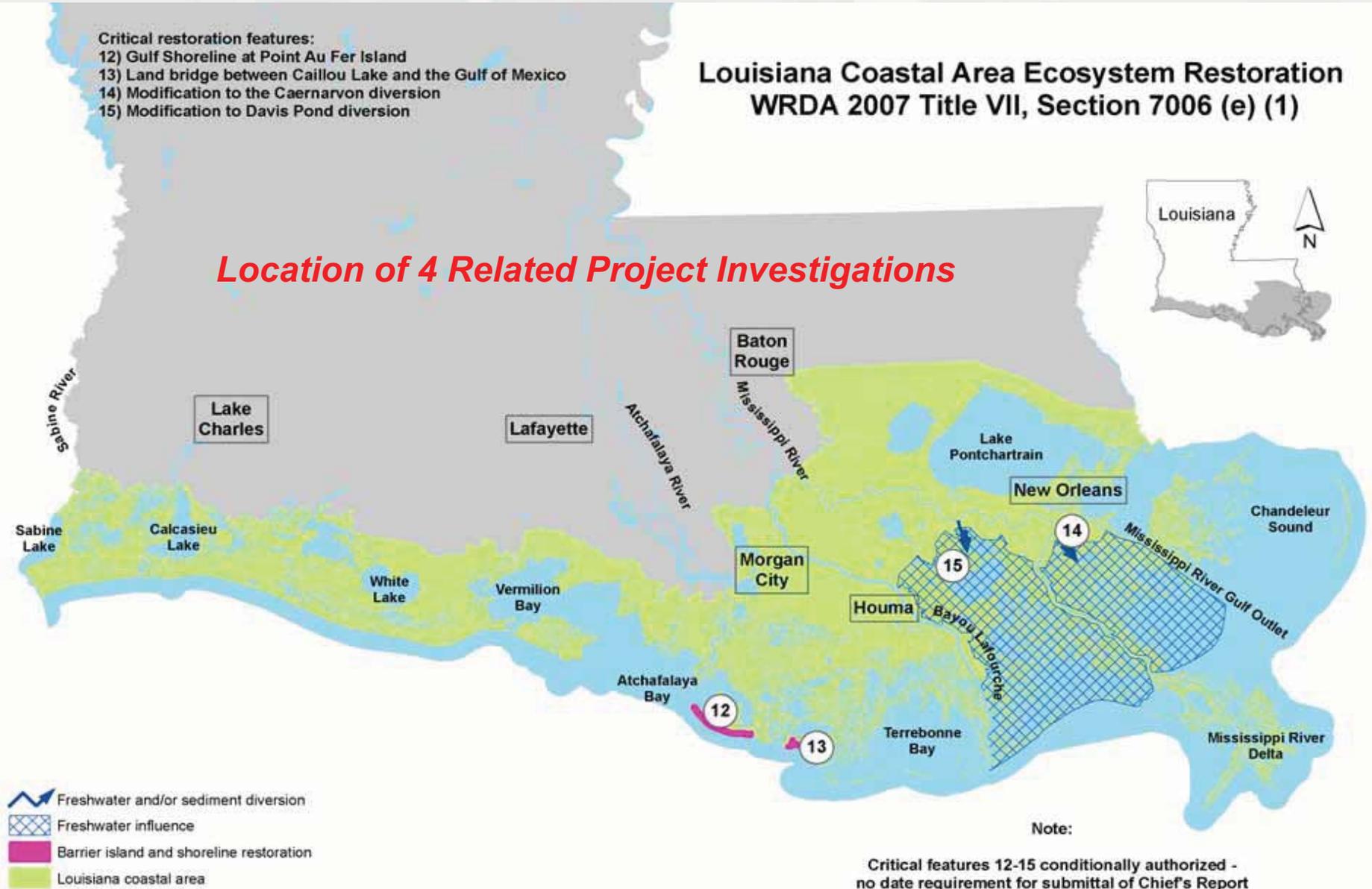
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Louisiana Coastal Area Ecosystem Restoration WRDA 2007 Title VII, Section 7006 (e) (3) (A)

Location of 6 Contingent Projects



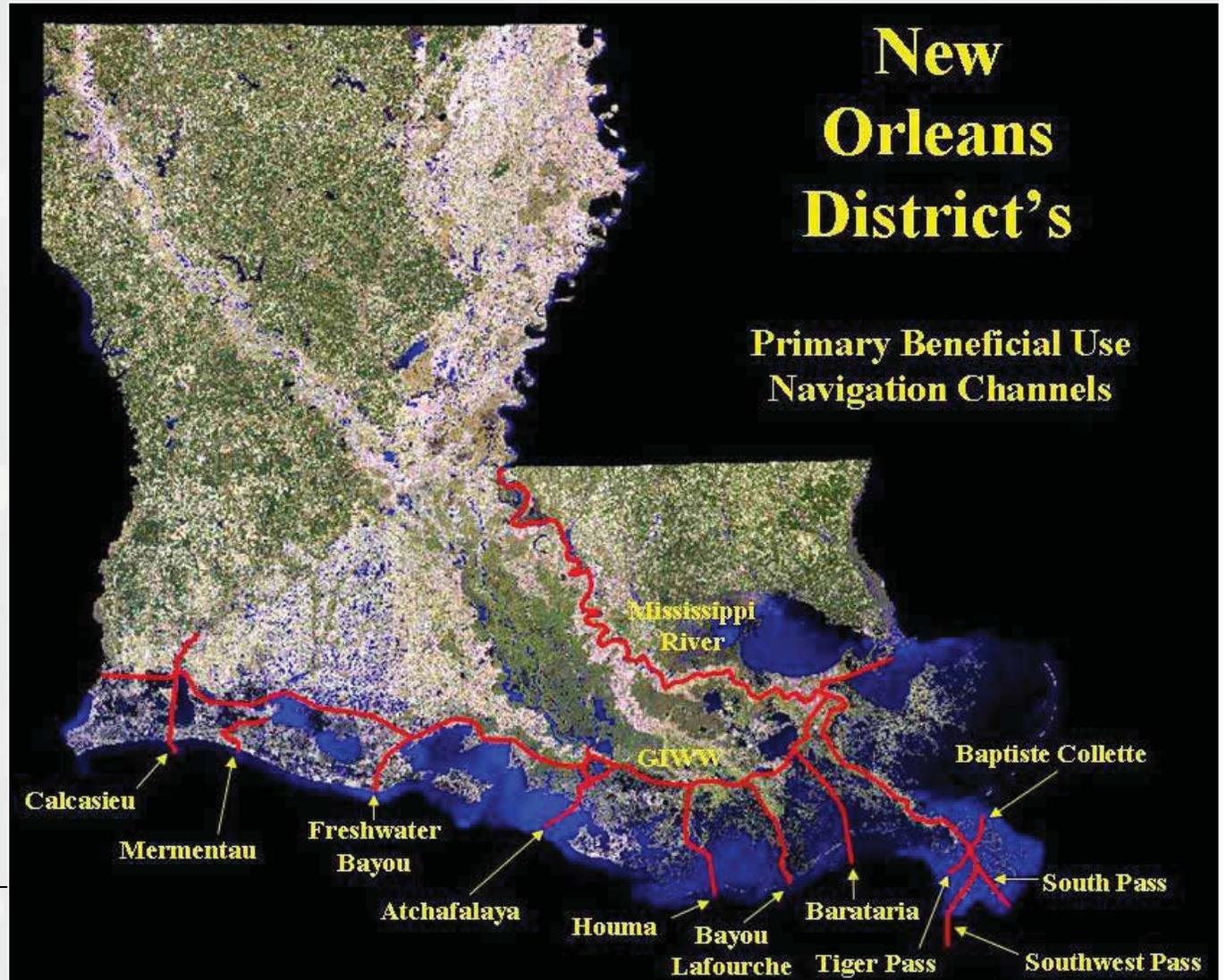
LCA: 4 Related Project Investigations



LCA: BUDMAT Program

A program for the beneficial use of dredged material from Federally-maintained waterways in coastal Louisiana.

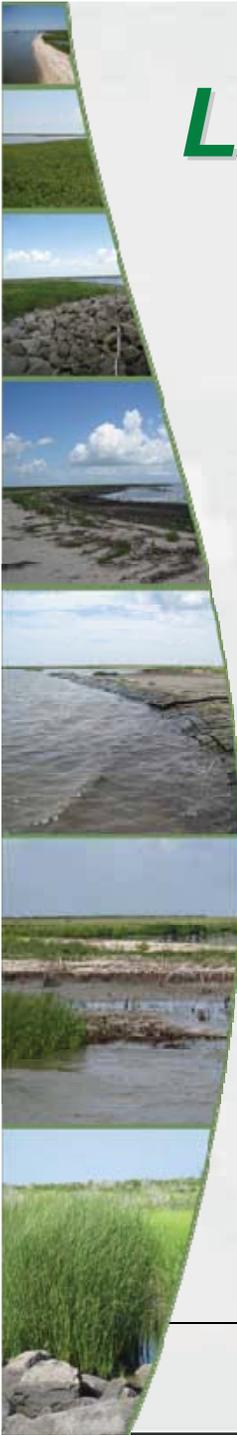
- First construction scheduled for FY11
- Project identification underway
- Funds for construction are subject to annual appropriations



LCA: BUDMAT – Section 204

- List of projects ideally suited to meet BUDMAT objectives and schedule
- Includes projects currently being studied under the Continuing Authorities Program (Section 204)
- Projects, subject to approval and cost share negotiations with the State, are:
 - ▶ Atchafalaya River, Shell Island Pass
 - ▶ Calcasieu River, Mile 5 to 14
 - ▶ Houma Navigation Canal, Wine Island
 - ▶ Houma Navigation Canal, Cat Island Pass
 - ▶ Barataria Bay, Bar Channel

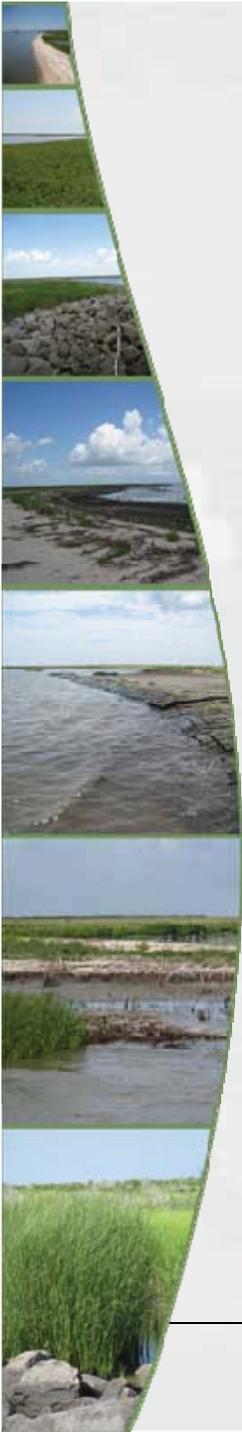




LA Coastal Protection & Restoration

- LACPR identified a variety of alternatives for increased levels of risk reduction
- Focus on five planning units across the Louisiana coast
- Plans include one or more of three types of risk reduction measures:
 - structural
 - nonstructural
 - coastal restoration





Lake Charles Projects In Your Area



Clear Marais Bank Protection



- CWPPRA Project
- Construction completed in 1997
- Shoreline protection to prevent erosion from marine traffic

- Located on GIWW ten miles northwest of Hackberry, LA in Calcasieu Parish



South White Lake Shoreline Protection

- CWPPRA Project in White Lake, Vermilion Parish
- Construction completed August 2006



NG STRONG®

Southwest LA Gulf Shoreline Nourishment and Protection

- CWPPRA Project
- In engineering & design phase



- Located along Mermentau Basin in Cameron and Vermilion parishes
- Includes sediment deposit along shoreline

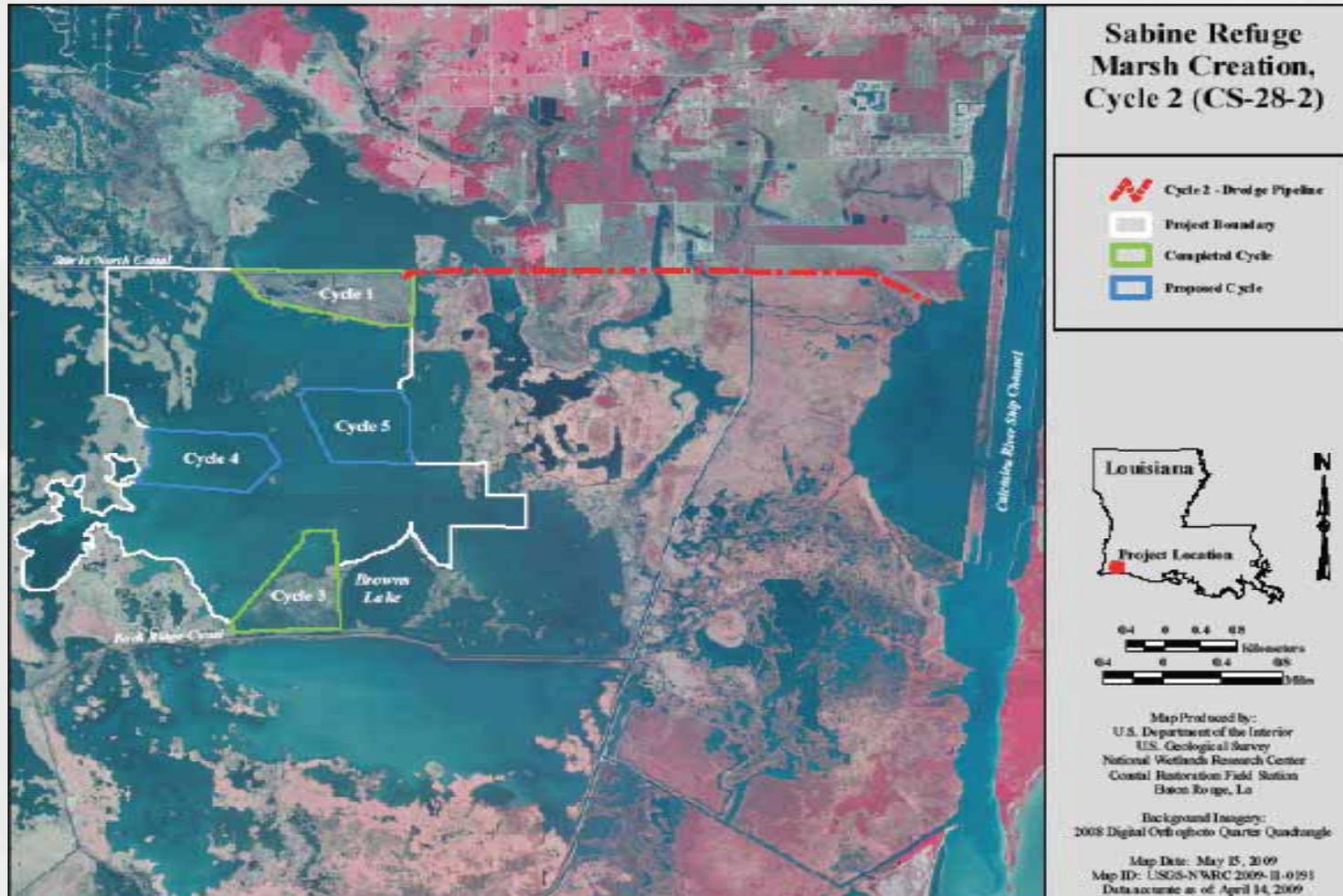


Sabine Refuge Marsh Creation Cycle One



- CWPPRA Project in Cameron Parish, LA
- Construction completed February 2002
- Cycle 2, installation of a permanent sediment delivery pipeline

Sabine Refuge Marsh Creation Permanent Pipeline, Cycle Two



Sabine Refuge Marsh Creation Permanent Pipeline, Cycle Two



Calcasieu River and Pass

Beneficial Use of Dredged Material Project

Dredging Frequency

Inland - Annually
Bar - Annually

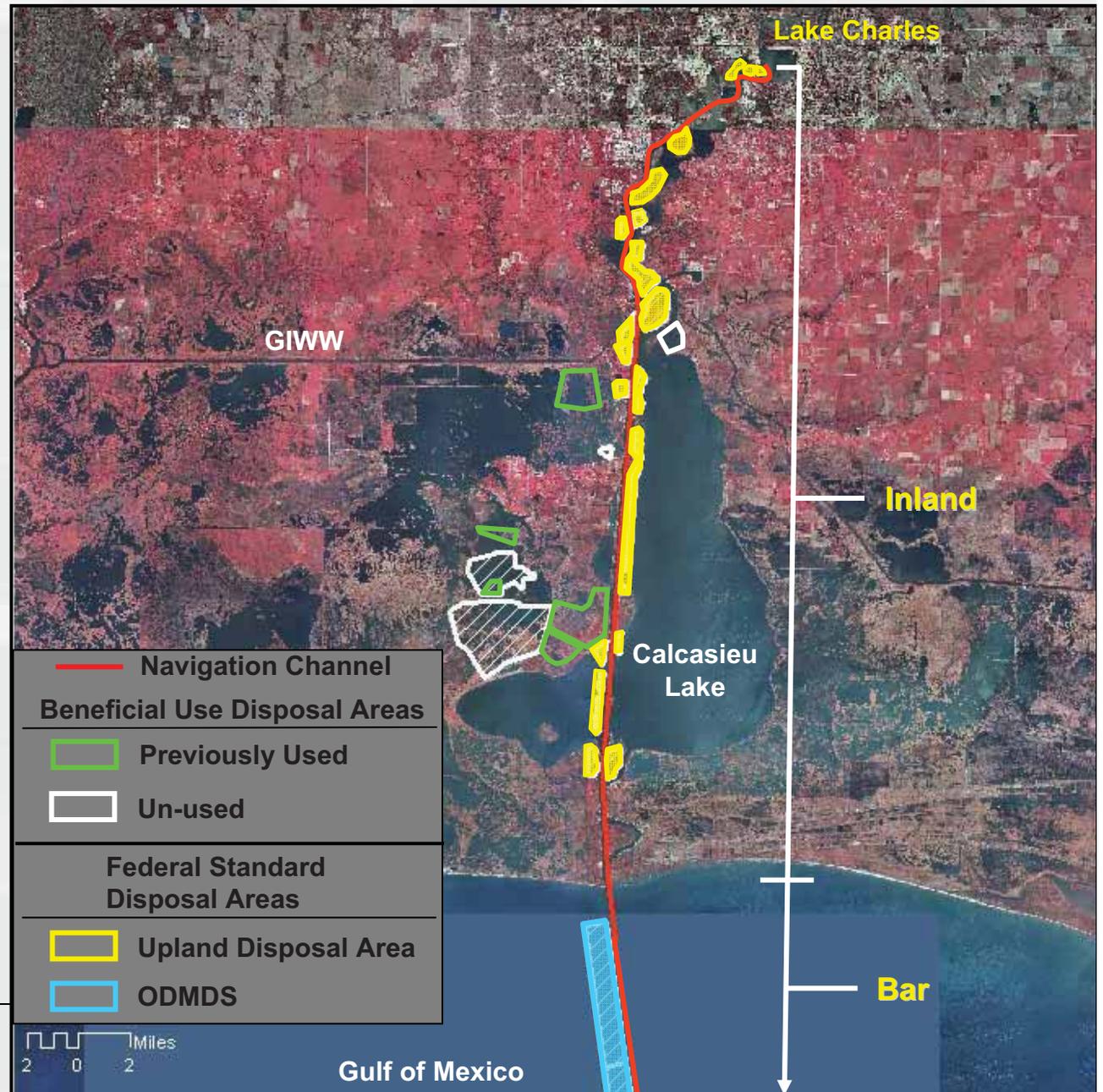
Cubic Yards

Inland - 4,000,000
Bar - 7,000,000

Grain Size

Inland
12% Sand 35% Silt 53% Clay

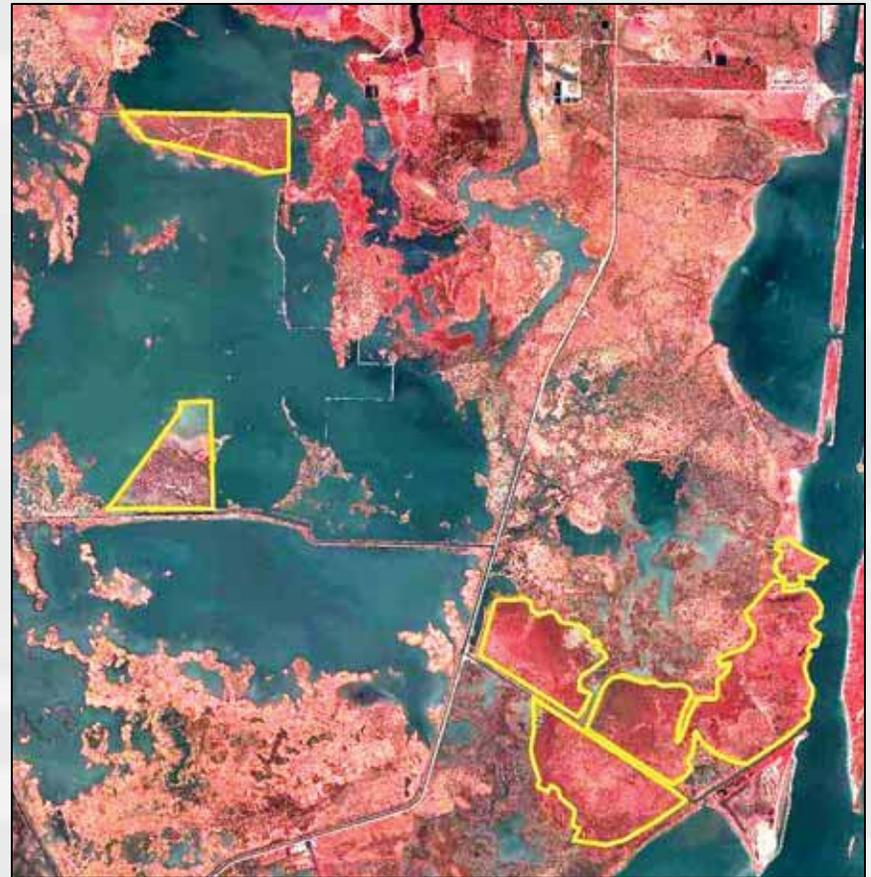
Bar
9% Sand 45% Silt 46% Clay



Beneficial Use of Dredged Material
Calcasieu River and Pass
Sabine National Wildlife Refuge



FY 1992



FY 2008



Southwest Coastal Feasibility Analysis Area

