

Mississippi River Delta Restoration, Corps-State Relations and WRDA Crediting

James B. Tripp

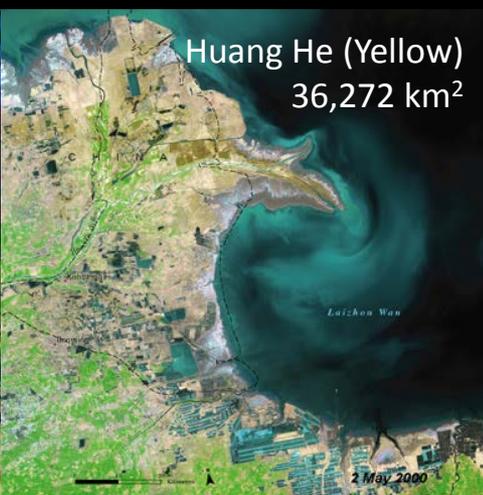
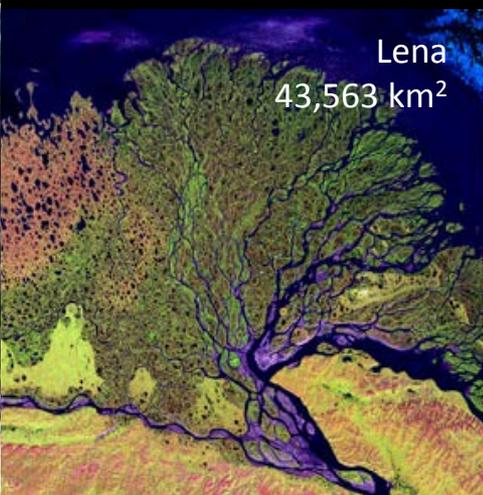
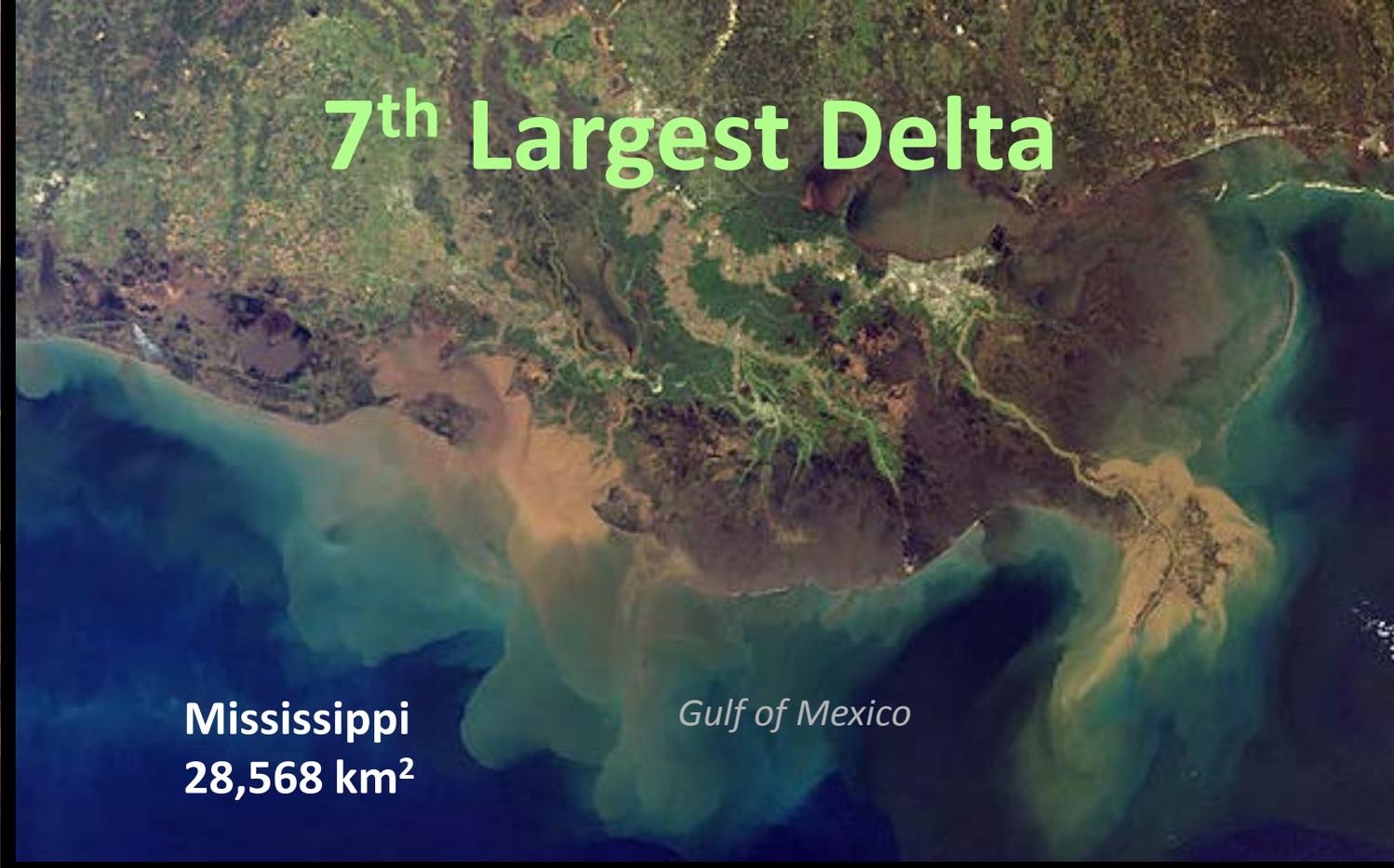
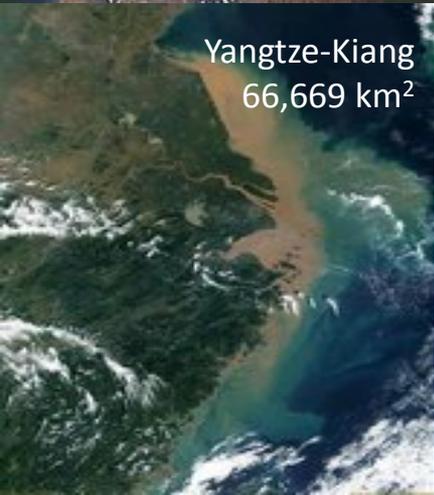
NCER 2016
April 19, 2016



Mississippi River Basin: Third-Largest Watershed in the World

- Mississippi-Missouri: Fourth-longest river on Earth
- Drains 41% of U.S.
- Parts of 31 states, 2 Canadian provinces in 1.84 million sq. mile watershed





7th Largest Delta

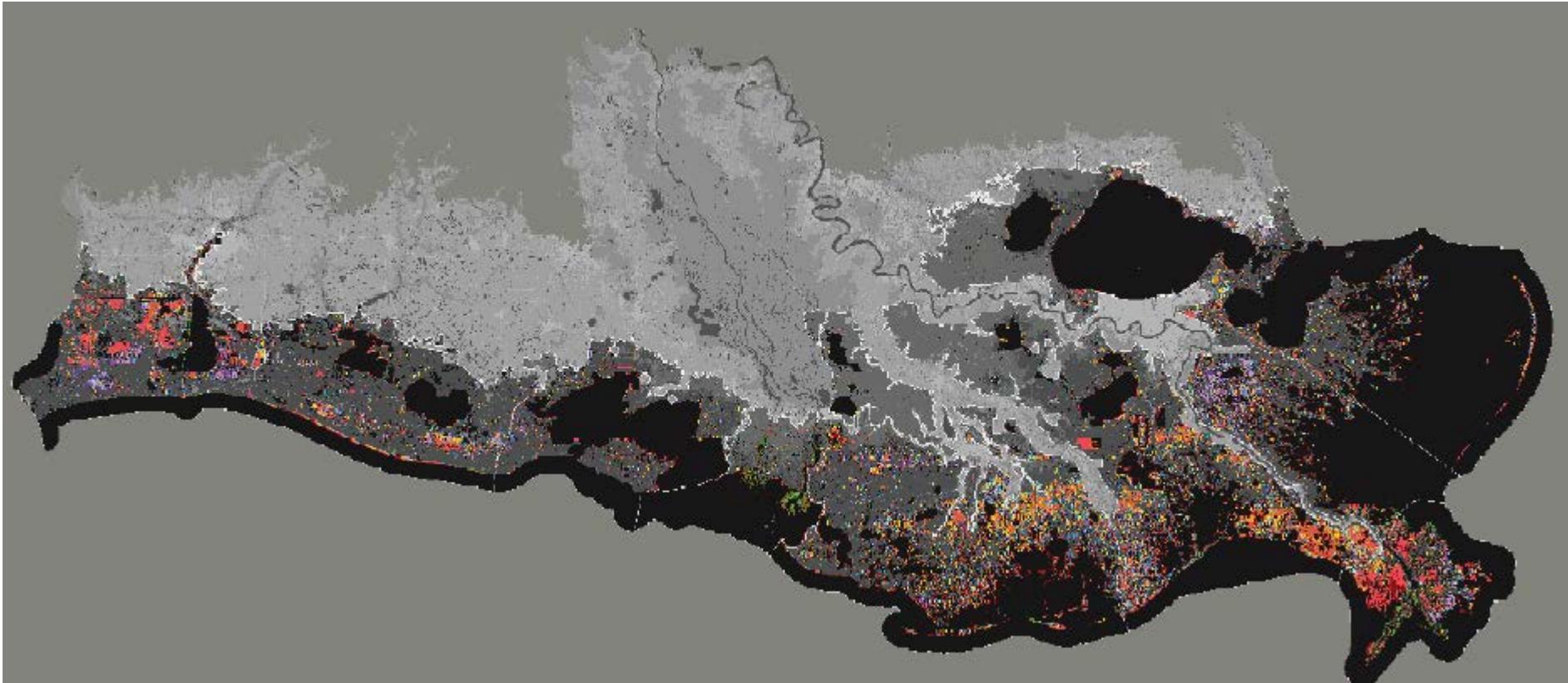
Major rivers discharging to the U.S. Gulf of Mexico Coast Ranked by Discharge

If you consider total inflow of U.S. rivers into the Gulf of Mexico, the Mississippi and Atchafalaya together account for between 80 and 90 percent of all freshwater delivered to the U.S. Gulf (Strauss et al. 2009).

River Name	Mouth Location	Mean Discharge (10 ³ ft ³ /s)	Drainage Area (10 ³ mi ²)
Mississippi	Louisiana	426	1150
Atchafalaya	Louisiana	225	95
Mobile	Alabama	67	45
Pearl	Mississippi	30	
Apalachicola	Florida	20	2.6
Pascagoula	Mississippi	5.5	
Brazos	Texas	3.6	46
Colorado	Texas	3.0	42
Rio Grande	Texas/Mexico	1.5	336

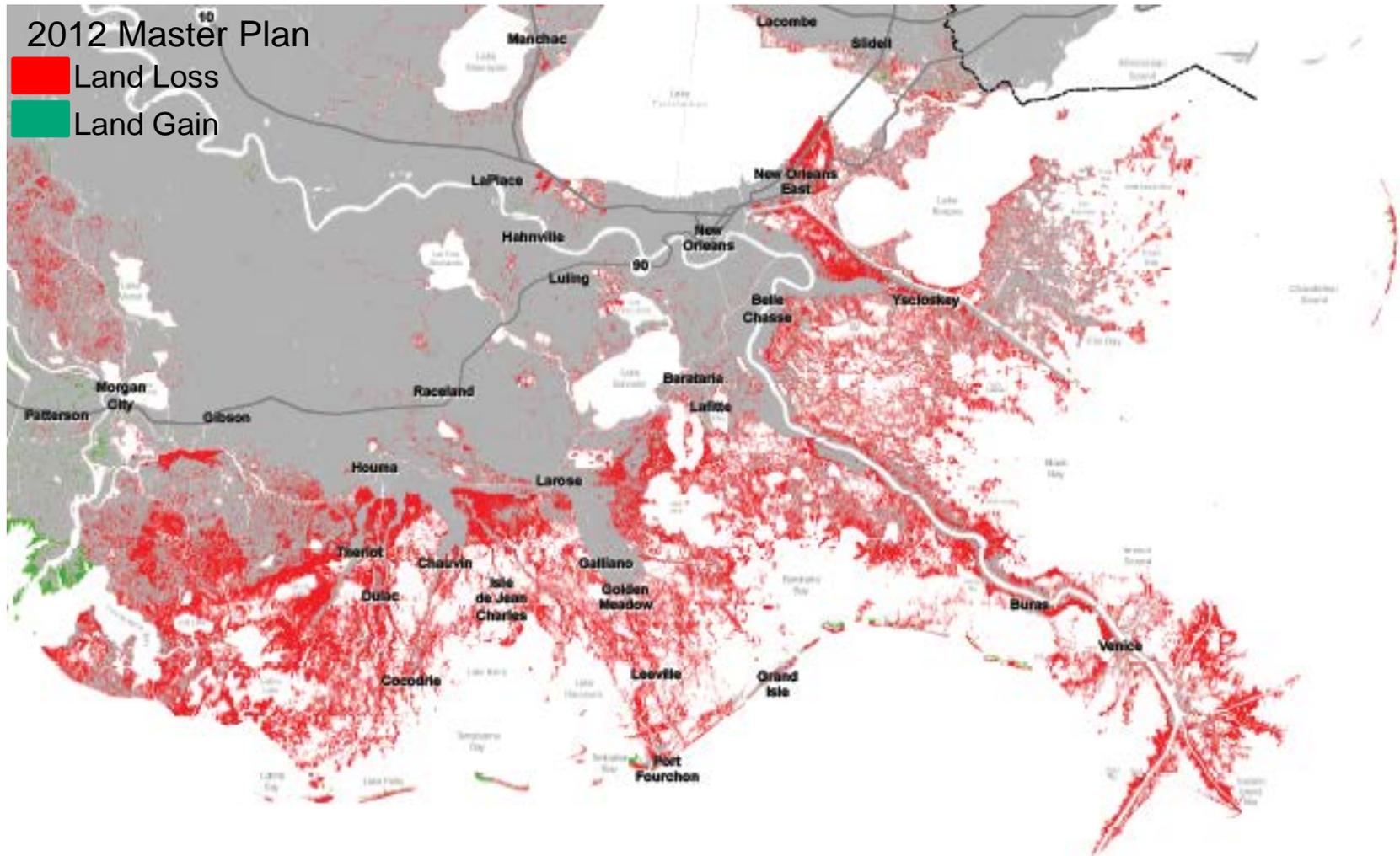
(Kammerer 1990, with additions from the USGS, <http://pubs.usgs.gov/of/1987/ofr87-242/>).
Source: Dr. Paul Kemp, National Audubon Society.

Land Loss in Coastal Louisiana: 1,900 mi² between 1932-2010



USGS Land Area Change in Coastal Louisiana 1932-2010

Predicted Land Change Next 50 Years in Southeast Louisiana



Projection Assumes ~ 1.6 ft of Sea Level Rise

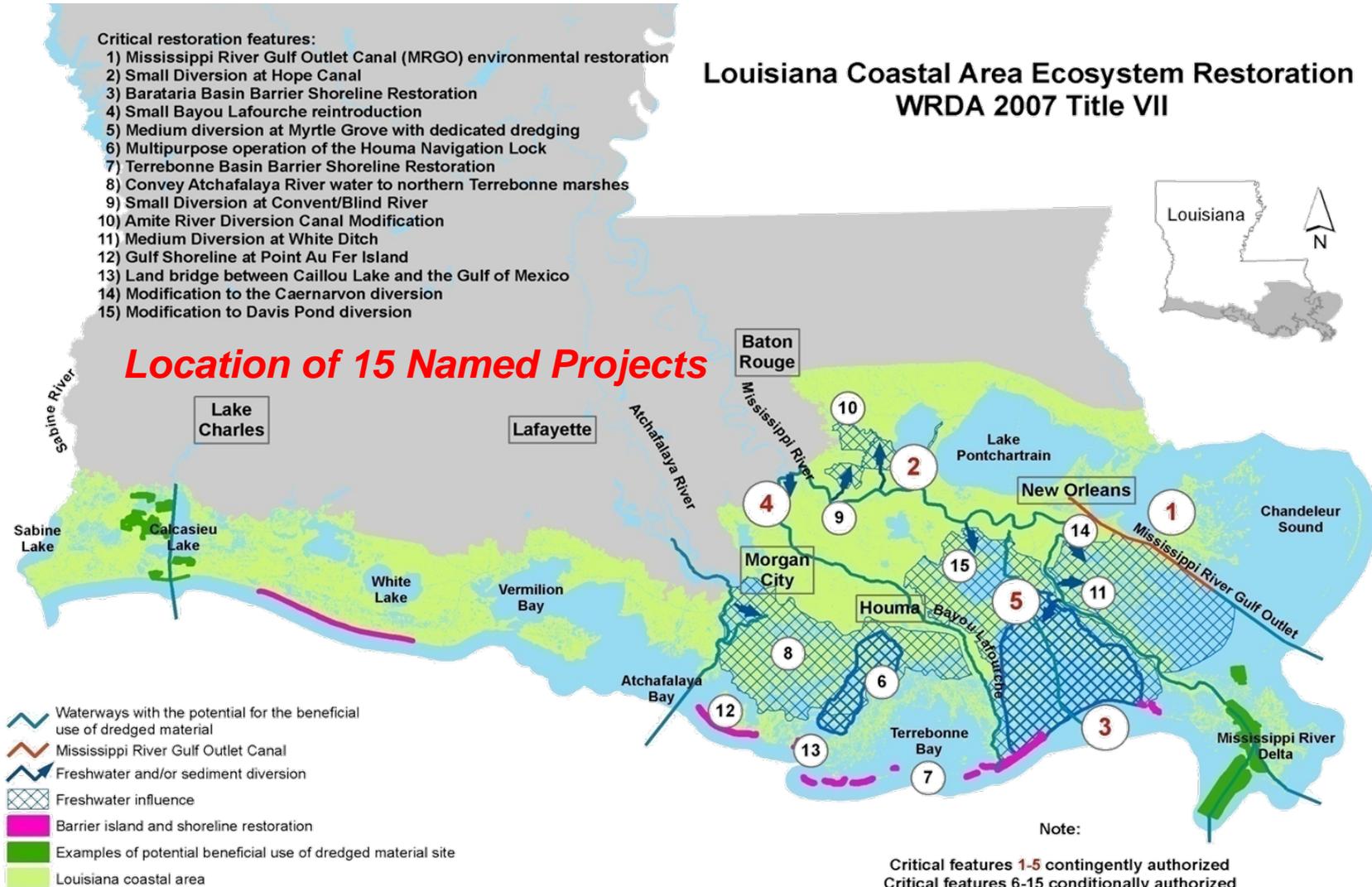
Louisiana Coastal Area (LCA) Near-Term Plan

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) Amite 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

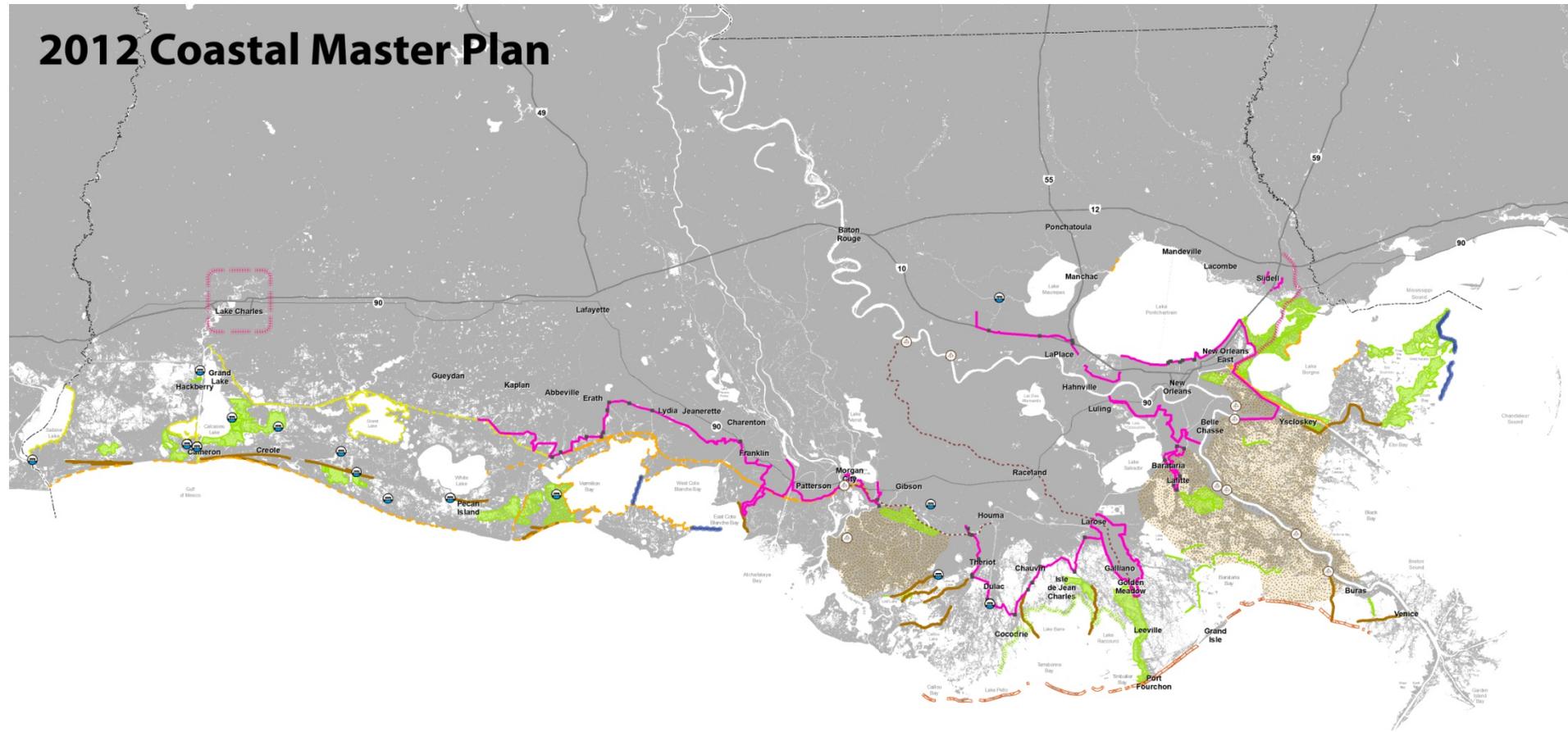
Location of 15 Named Projects



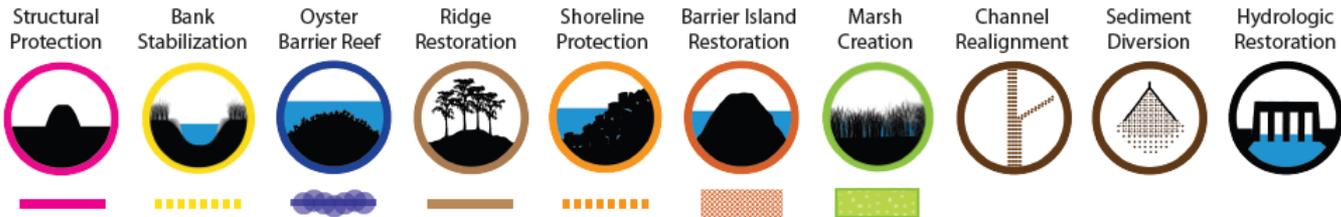
Note:

Critical features 1-5 contingently authorized
Critical features 6-15 conditionally authorized

2012 Coastal Master Plan



Project Types Included:



Projects for Further Planning:

- Lake Pontchartrain Barrier
- Lake Charles Protection
- Terrebonne Bay Rim Marsh Creation
- Channel Realignment (Not Shown)