

R1-PO-01

LaBranche Central Marsh Creation Project

PPL-21 LaBranche Central Marsh Creation Project

Coast 2050 Strategy: Coastwide Common Strategies: Dedicated Dredging for Wetlands Creation, Vegetative Planting, and Maintain or Restore Ridge Functions; Region 1 regional ecosystem strategies: Dedicated delivery of sediment for marsh creation; Region 1 mapping unit strategies: Dedicated Dredging

Project Location: Region 1, Pontchartrain Basin, St. Charles Parish, bounded to the North by the railroad running parallel to I-10, to the west by the marsh fringe just east of Bayou LaBranche, to the south by Bayou Traverse and to the east by marsh fringe west of a pipeline canal.

Problem: Dredging of access/flotation canals for construction of I-10 resulted in increased salinity & altered hydrology that exacerbated conversion of wetland vegetation into shallow open water bodies.

Goals: Primary goal is to restore marsh that converted to shallow open water. Project implementation would result in an increase of fisheries and wildlife habitat, acreage, and diversity along with improving water quality. The proposed project would provide a protective wetland buffer to the railroad and I-10, the region's primary westward hurricane evacuation route, and complement hurricane protection measures in the area.

Proposed Solution: Proposed solution consists of the creation of \pm 750 acres of emergent wetlands and the nourishment of \pm 150 acres of existing wetlands using dedicated dredging from Lake Pontchartrain. In addition, 10,000 linear ft of tidal creek will be created by TY3. The marsh creation area would have a target elevation the same as average healthy marsh. It is proposed to place the dredge material in the target area with the use of retention dikes along the edge of the project area. If degradation of the containment dikes has not occurred naturally by TY3, gapping of the dikes will be mechanically performed. Vegetative plantings would be utilized in the areas designated to be emergent marsh. Either $\frac{1}{4}$ of the area would be planted at full density or $\frac{1}{4}$ the density would be planted over the entire acreage. Successful wetland restoration in the immediate area (PO-17 constructed in 1994) clearly demonstrates the ability for these wetlands to be restored using material from a sustainable borrow area (outlet end of Bonnet Carre Spillway). Engineering monitoring surveys of the marsh creation area and borrow area are planned as well.

Project Benefits: This project would benefit 900 acres of intermediate marsh and open water. The project is expected to last well beyond the 20-year project life. Please note that PO-17 has not required the expenditure of any funds for maintenance during its 17-year existence.

Project Cost: The estimated construction cost plus 25% contingency for this project is approximately \$26,000,000.

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Lake Pontchartrain

Kenner

LaBranche Wetlands

Bonnef Carre Spillway

Norco

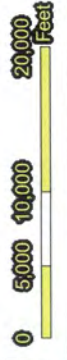
Mississippi River

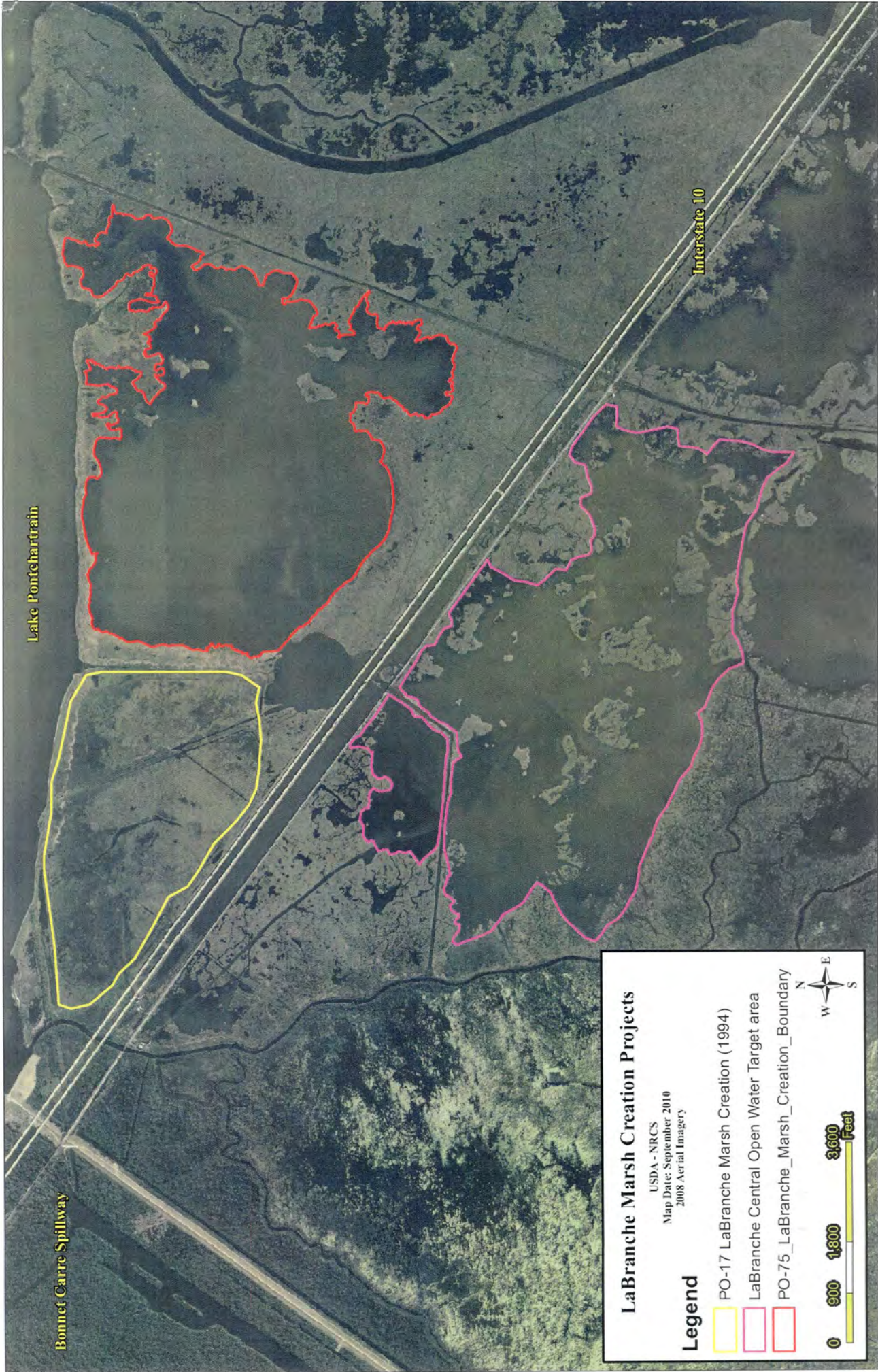
LaBranche Central Marsh Creation Project
(Located in St. Charles Parish)
Vicinity Map

USDA - NRCS
Map Date: September 2010
2008 Aerial Imagery

Legend

LaBranche Central Open Water Target area





Lake Pontchartrain




Bonnet Carre Spillway

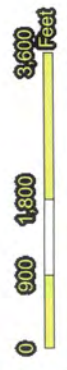
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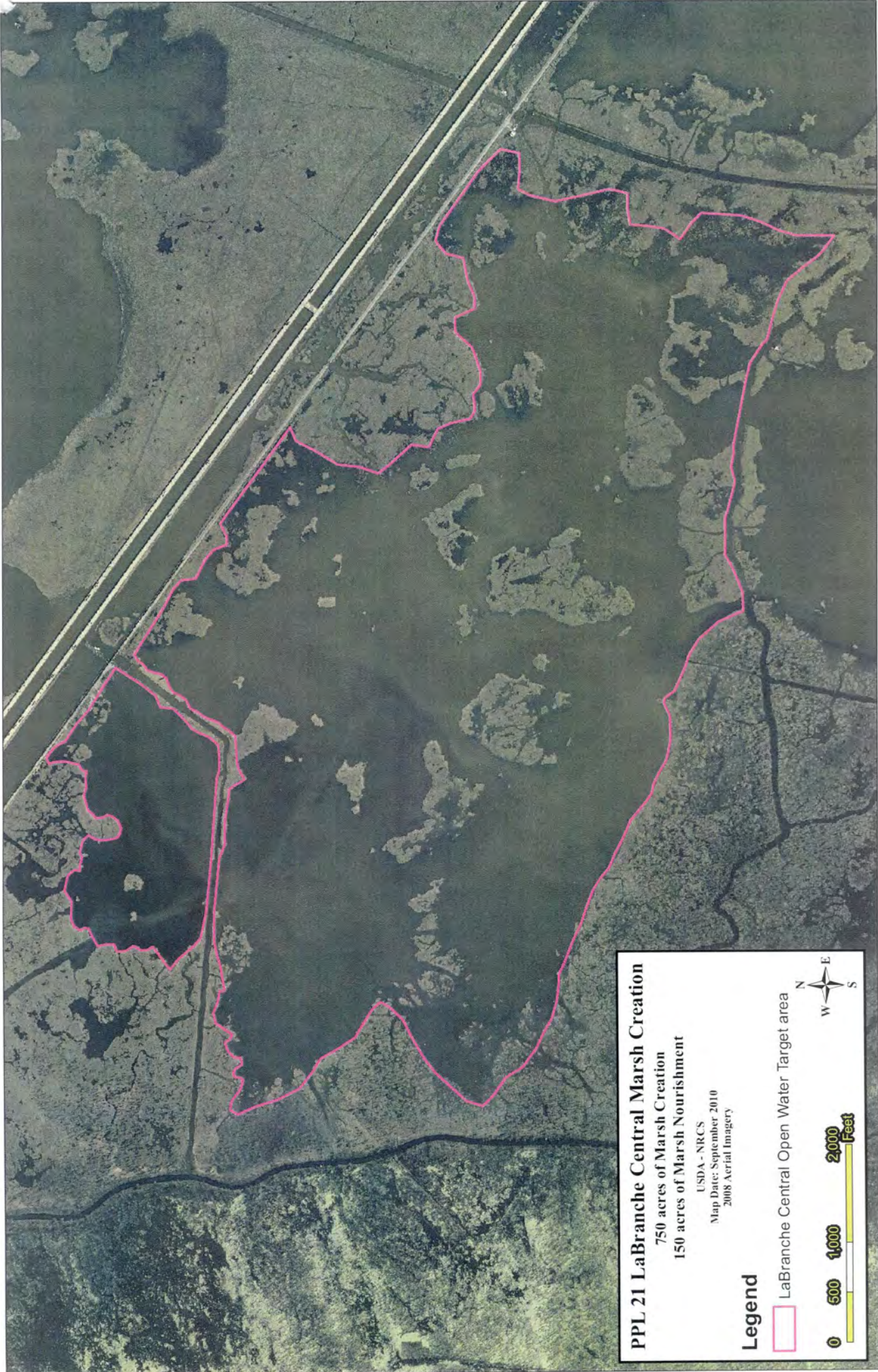
LaBranche Marsh Creation Projects

USDA - NRCS
Map Date: September 2010
2008 Aerial Imagery

Legend

-  PO-17 LaBranche Marsh Creation (1994)
-  LaBranche Central Open Water Target area
-  PO-75_LaBranche_Marsh_Creation_Boundary





PPL 21 LaBranche Central Marsh Creation
750 acres of Marsh Creation
150 acres of Marsh Nourishment

USDA - NRCS
Map Date: September 2010
2008 Aerial Imagery

Legend

-  LaBranche Central Open Water Target area

0 500 1000 2000 Feet

