

Reso.

2009-0454

**INTRODUCED BY: VJ St. Pierre
(DEPT. OF PLANNING & ZONING/CZM)**

RESOLUTION NO. 5696

A resolution supporting LaBranche East Marsh Creation Project, PPL-19, located in St. Charles Parish, that has been nominated for funding under Coastal Wetland Planning, Protection and Restoration Act (CWPPRA).

WHEREAS, the St. Charles Parish Council would like too support the efforts of the CWPPRA Task force and its decision making process; and,

WHEREAS, LaBranche East Marsh Creation Project, PPL-19, located in St. Charles Parish, that has been nominated for funding under Coastal Wetland Planning, Protection and Restoration Act; and,

WHEREAS, LaBranche East Marsh Creation Project, PPL-19 is important to the continued restoration of the LaBranche Wetlands in St. Charles Parish.

NOW, THEREFORE, BE IT RESOLVED THAT WE, THE MEMBERS OF THE ST. CHARLES PARISH COUNCIL, do hereby support the LaBranche East Marsh Creation Project, PPL-19, and that a copy of this resolution be forwarded to the CWPPRA Task Force.

The foregoing resolution having been submitted to a vote, the vote thereon was follows:

YEAS: SCHEXNAYDRE, AUTHEMENT, RAYMOND, TASTET, BENEDETTO, HOGAN, COCHRAN, LAMBERT, NUSS
NAYS: NONE
ABSENT: NONE

And the resolution was declared adopted this 16 day of November, 2009, to become effective five (5) days after publication in the Official Journal.

CHAIRMAN: [Signature]
SECRETARY: [Signature]
DLVD/PARISH PRESIDENT: November 17, 2009
APPROVED: ✓ DISAPPROVED: _____

PARISH PRESIDENT: [Signature]
RETD/SECRETARY: November 17, 2009
AT: 2:15 p.m. RECD BY: BGT vb

LaBranche East Marsh Creation Project PPL-19 Candidate Project

Coast 2050 Strategy:

- Coastwide Common Strategies
 - Dedicated Dredging for Wetlands Creation
 - Vegetative Planting
 - 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, between Lake Pontchartrain and I-10, bounded to the west by the Fall Canal and the initial Bayou LaBranche Wetland Creation Project (PO-17) and to the east by a pipeline canal.

Problem:

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

Goals:

The primary goal is to restore the marsh that has been converted to shallow open water. Project implementation would result in an increase of fisheries and wildlife habitat acreage and diversity and improvement of water quality. The proposed project would provide storm buffer protection to I-10, the region's primary westward hurricane evacuation route, and to a lesser degree, the Canadian National Illinois Central Railroad line. Additional wetland storm buffer would complement the U. S. Army Corps of Engineers ongoing and contemplated hurricane protection measures in the area that include raising/enlarging the existing earthen levee and placement of a breakwater structure on the north side of the intersection of I-10 and I-310.

Proposed Solution:

The proposed solution consists of the creation of \pm 729 acres of emergent wetlands, \pm 202 acres of existing marsh will be nourished using dedicated dredging from Lake Pontchartrain. In addition, 10,000 linear feet of tidal creeks will be created by pre-cutting water bottom before dredge material is pumped into the site. 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 low level retention dikes along the edge of the project area allowing overtopping of material to nourish the marsh fringe. The retention dike will have strategically placed gaps to provide additional site specific nourishment and to minimize the TY3 degradation cost. Where the containment crosses existing tidal cuts, the dikes will be degraded to marsh elevation if degradation has not occurred naturally by TY3. Vegetative plantings would be utilized in the areas designated to be emergent marsh. Either $\frac{1}{4}$ of the area will be planted at full density or $\frac{1}{4}$ the density will be planted over the entire acreage. Successful wetland restoration in the immediate area (PO-17) clearly demonstrates the suitability and stability of soil and material availability from a sustainable borrow area (outlet end of Bonnet Carre Spillway). Water depths in the PO-17 borrow area (constructed in 1994) are currently six to ten feet deep. The project includes engineering monitoring surveys of the marsh creation area as well as the borrow area. For the first five years after construction, the project will also monitor water quality the borrow area for parameters such as dissolved oxygen and salinity stratification.

Project Benefits:

This project would benefit 931 acres of intermediate marsh and open water. Approximately 729 acres of marsh would be created and \pm 202 acres of marsh would be nourished 20-year project life. The project provides approximately 722 NET ACRES and 343 AAHU's. The project is expected to last well beyond the 20-year project life.

Constructed in April of 1994, PO-17 has provided more than 14 years of wetland benefits and will likely continue to provide benefits well beyond its 20-year prescribed life expectancy. As with the PO-17 project, the proposed project would not only provide

wildlife and fisheries and water quality benefits, but the restored wetland vegetation would buffer/weaken storm surge, providing additional protection to existing infrastructure including the Lake Pontchartrain and Vicinity Hurricane Protection Levee, I-10, the Canadian National Illinois Central Railroad embankment, aerial electrical lines, and non-essential infrastructure. The rail embankment and the two camps that are located south of PO-17 escaped significant damage from Hurricane Katrina while most of the camps and several portions of the rail embankment to the east were either lost or heavily damaged.

The current project would utilize data and lessons learned from PO-17. For example, the borrow area in the lake, used for PO-17, would be evaluated for re-use in an effort to save time and CWPPRA funding.

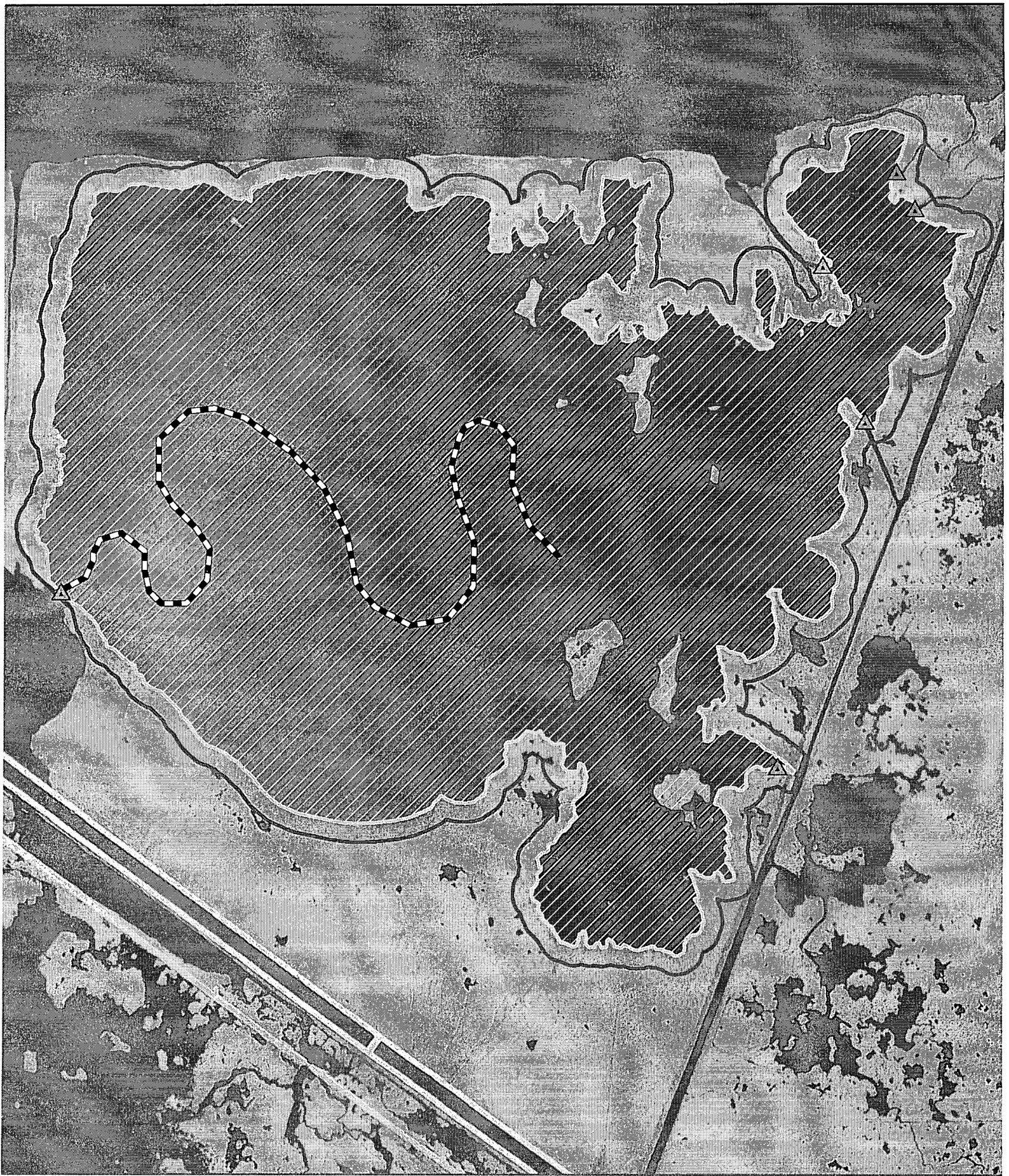
The project area's location north of I-10, makes it highly visible to motorists and would provide a readily discernible example of Louisiana's successful coastal restoration efforts. According to the Louisiana Department of Transportation and Development's Average Daily Traffic Count that was taken in 2005 for this segment of I-10, 54,687 vehicles a day pass this area. Because of its highly visible location near the New Orleans area, the project should be publicized as to its components and benefits.

Project Cost:






The estimated construction cost plus 25% contingency for this project is approximately \$24,914,000. The estimated fully-funded cost range is \$30-\$35 Million.

Preparers of Fact Sheet:

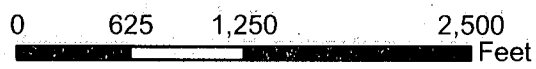
Jason Kroll, NRCS, 225-389-0347, Jason.Kroll@la.usda.gov
Ed Fike, agent for St. Charles Land Syndicate, 225-383-7455 x128,
efike@coastalenv.com



Legend

-  Containment
-  Tidal Creek
-  Nourishment buffer
-  Nourishment
-  LaBranche_Marsh_Creation_Boundary

**LaBranche East Marsh Creation
PPL 19 Candidate**



USDA NRCS
2007 Ortho Imagery
Map Date: 8/6/09
St. Charles Parish, LA