

Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS)

Environmental Mitigation

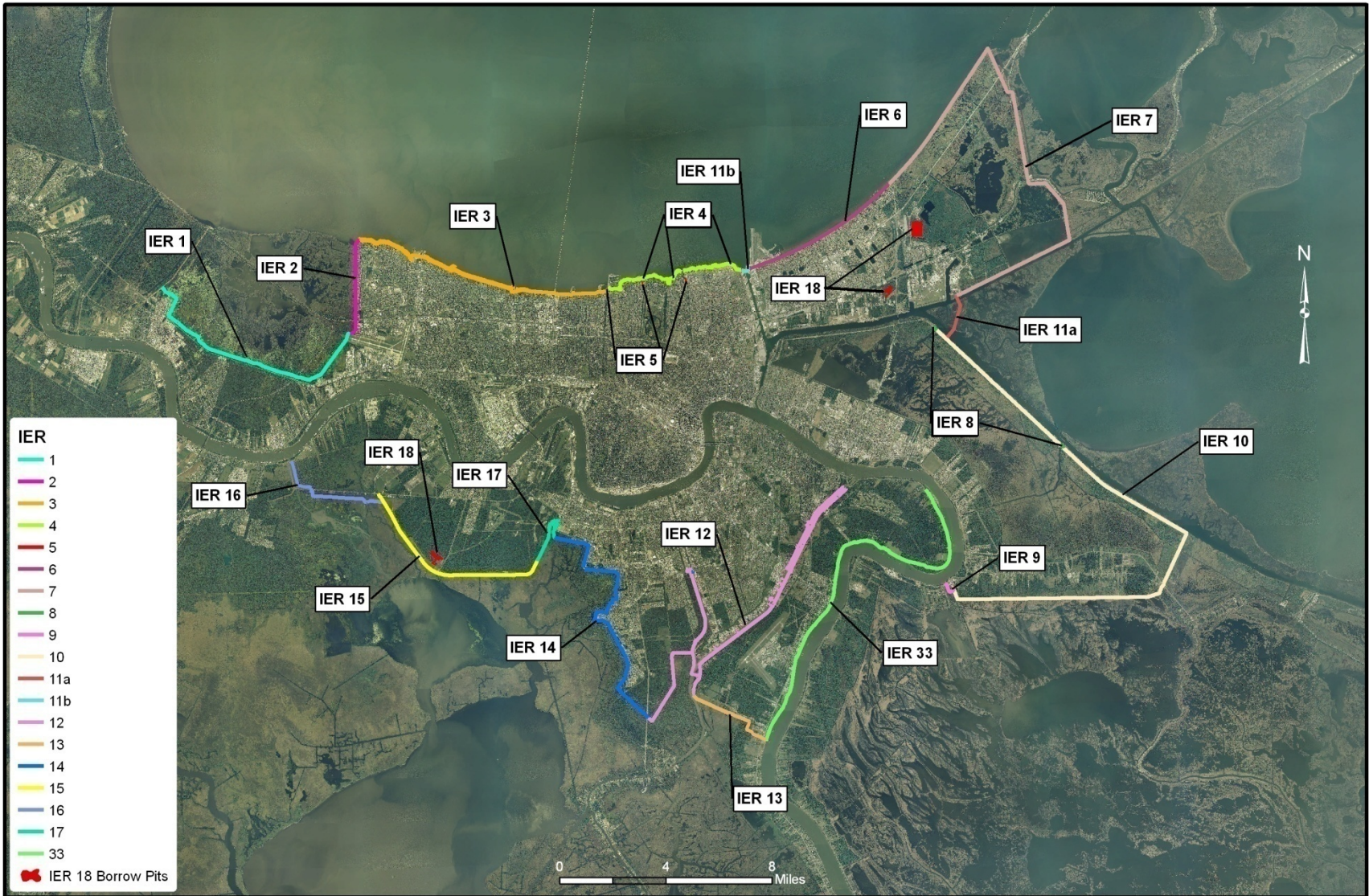
25 September 2014



US Army Corps of Engineers
BUILDING STRONG®



Individual Environmental Report Projects



Current working LPV & WBV HSDRRS Impacts

Habitat Type	LPV ¹ (HSDRRS) (acres)	WBV ² (HSDRRS) (acres)	Total Impacts (acres)
Bottomland Hardwood Wet	278	148	426
Bottomland Hardwood Dry	268	369	637
Swamp	198	256	454
Fresh Marsh	39	148	187
Intermediate Marsh	148	0	148
Brackish Marsh	251	0	251
Total	1,182	1,116	2,103

¹ Impacts include outstanding mitigation for TFG impacts

² Impacts include outstanding mitigation in EA 437 and 439



NEPA Compliance and Implementation

- **Programmatic Individual Environmental Report (PIER)**
- **Implement Mitigation Bank TSP (contingent upon cost / availability)**
- **Tiered Individual Environmental Reports (TIERs)**
- **Implement TSMP covered in each TIER following TIER approval**



LPV Recommended Mitigation Plan Alternative in PIER 36



Job No. EGIS-2010-065

0 5 10 Miles

Map Created: 28 Feb 2012

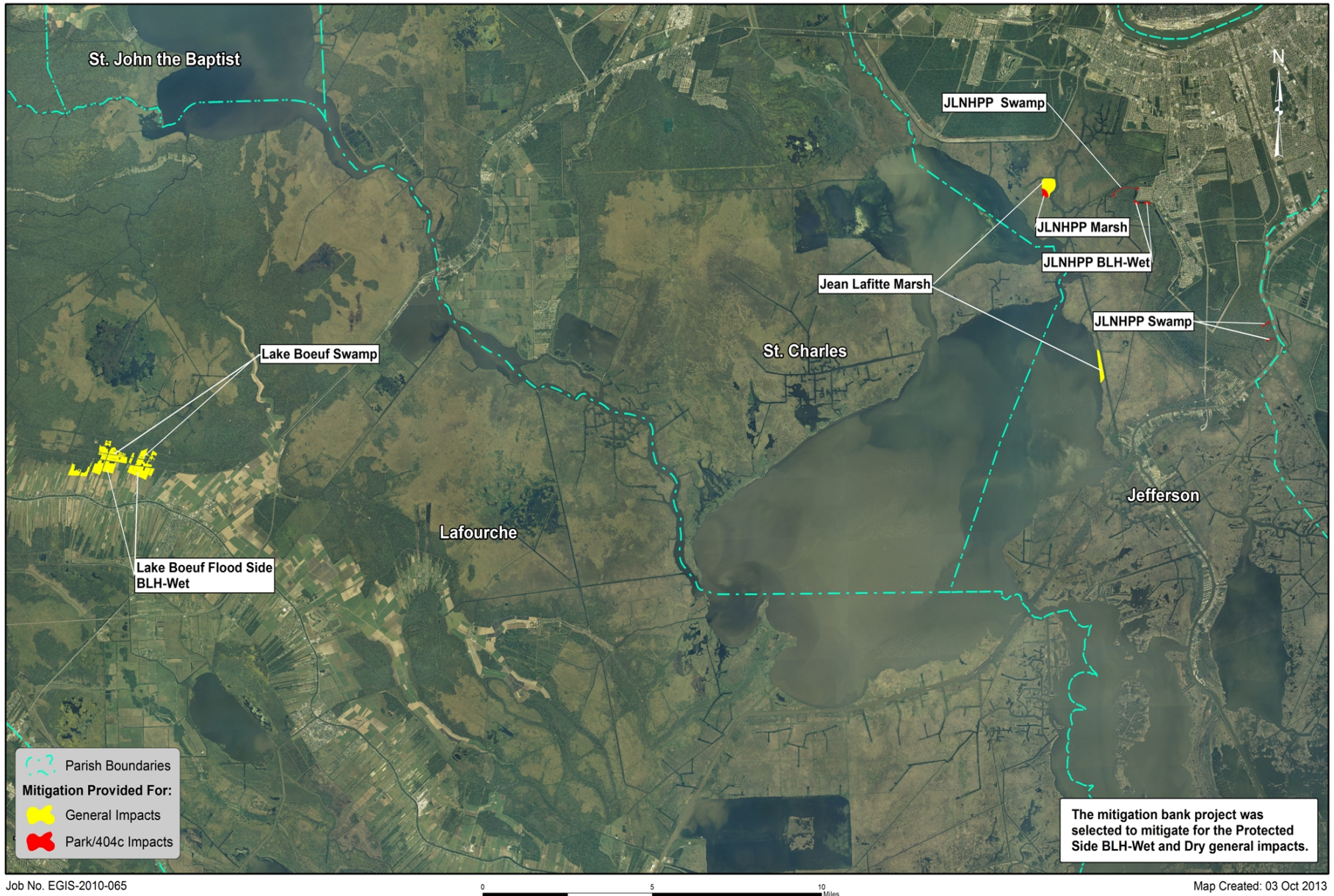
Bayou Sauvage Brackish Marsh Project & Reformulated Refuge Intermediate Marsh Project-Turtle Bayou



Reformulated Refuge BLH-Wet Project - New Zydeco Ridge



WBV Recommended Mitigation Plan Alternative in PIER 37



Job No. EGIS-2010-065

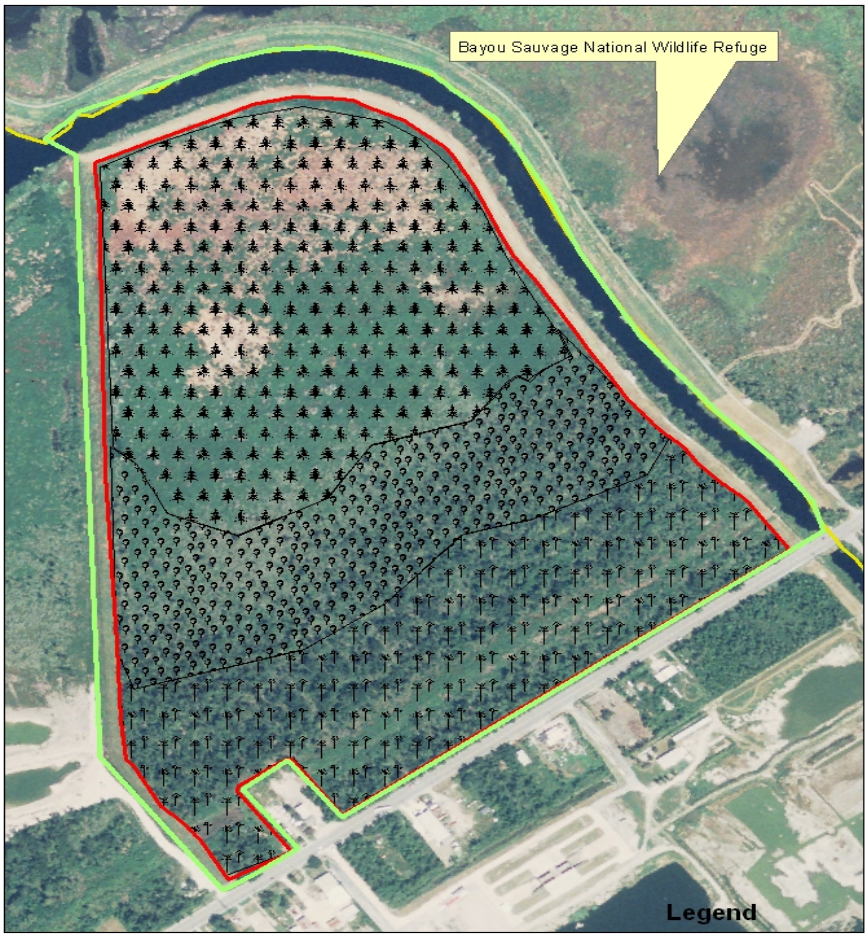
Other CEMVN Mitigation Projects

- **Task Force Guardian:** Mitigation for New Orleans East and Walker Road borrow pit impacts, 57.5 acres of BLH wet - Bayou Sauvage Mitigation Project
- **Task Force Unwatering:** Mitigation for impacts incurred for repairing the Braithwaite/Scarsdale breaches, 21.3 acres of marsh - Big Mar Mitigation Project
- **LPV Original Construction:** Mitigation for impacts incurred during the construction of the LPV HPS, 1,300 acres of marsh - Manchac Wildlife Management Area Mitigation
- **WBV Original Construction:** Mitigation for impacts incurred during the construction of the LPV HPS, 724 acres of BLH and swamp – WBV Previously Authorized Mitigation
- **Terrebonne NFL:** Mitigation for impacts incurred during repair and improvement of existing non-Federal levees impacted by recent hurricanes, 51.6 acres of marsh and 12.1 acres of BLH – Terrebonne NFL Mitigation Project



BAYOU SAUVAGE MITIGATION PROJECT

Proposed Bayou Sauvage Mitigation Area and Sub-area



Aerial Image: 2007 (sid/DAW)



- Legend**
- Acquisition_Boundary
 - Mitigation_Area
 - Subarea 1
 - Subarea 2
 - Subarea 3

Status:

Engineering and Design:

Project is under construction

Real Estate:

Complete

Environmental Compliance:

NEPA compliance achieved under EA 433.

Project features:

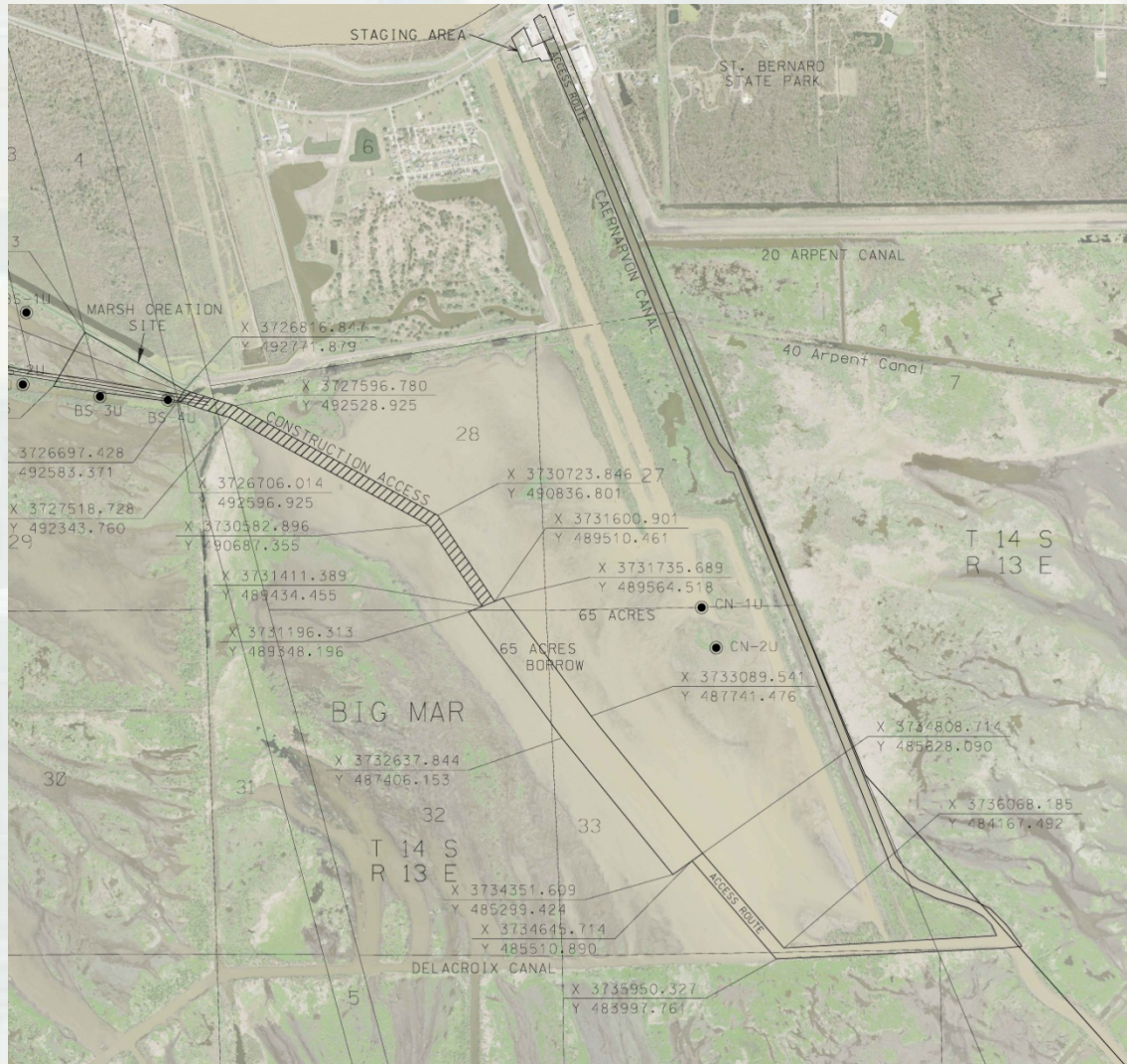
Project area broken into 3 sub-basins for appropriate reforestation and invasive species control as per existing elevations.

Water control structure at the northwestern corner of the project area to control water levels.

EM: Elizabeth Behrens



BIG MAR MITIGATION PROJECT



Status:

Engineering and Design:

Design complete

Environmental Compliance:

NEPA compliance achieved under SEA 433a

Real Estate:

Acquisition Phase

Project features:

Project involves obtaining dredged material from the open water in Big Mar and placing it in a 24 acre site to the northwest of Big Mar for marsh creation.

EM: Tammy Gilmore



MANCHAC WMA MITIGATION



Status:

Engineering and Design:

Project is under construction

Environmental Compliance:

Supplemental EA 500a
public review TBA

Real Estate:

Complete

Project features:

Retention dike on Lake
Pontchartrain shoreline.

Existing non-continuous
breakwaters linked to
provide continuous
breakwaters (2 cells).

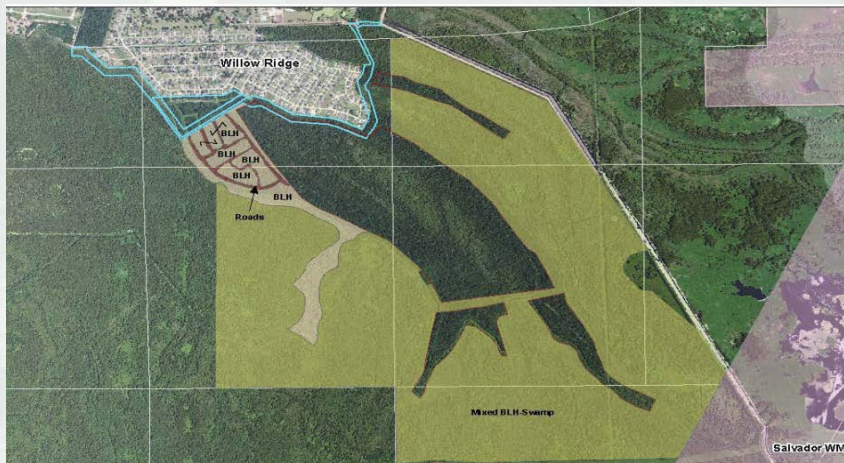
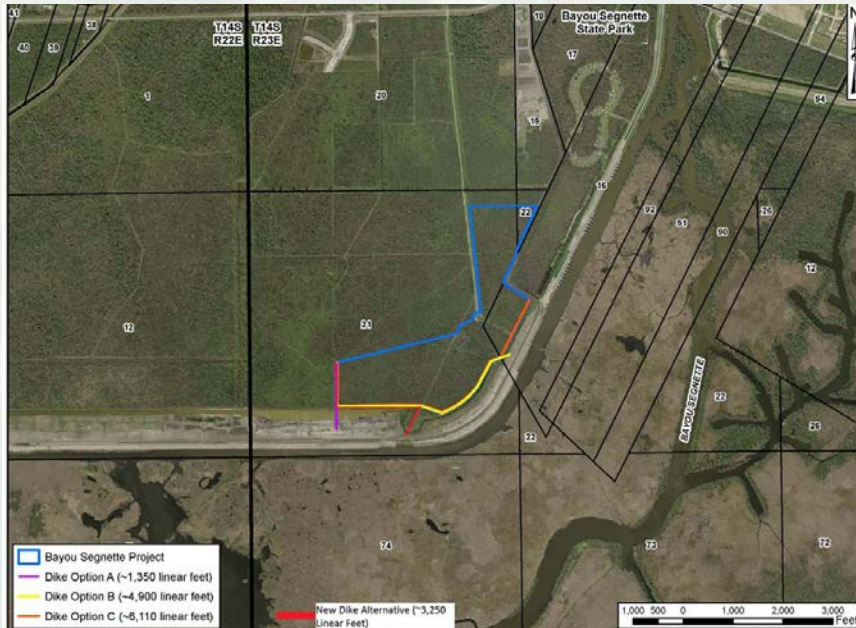
Marsh Creation from lake
borrow sources.

Fish dips will be constructed
if they haven't naturally
occurred after marsh
establishment complete.

EM: Nathan Dayan



WBV PREVIOUSLY AUTHORIZED MITIGATION



Status:

Engineering and Design:

P&S completed

Environmental Compliance:

NEPA compliance achieved under SEA 498

Real Estate:

Acquisition Phase

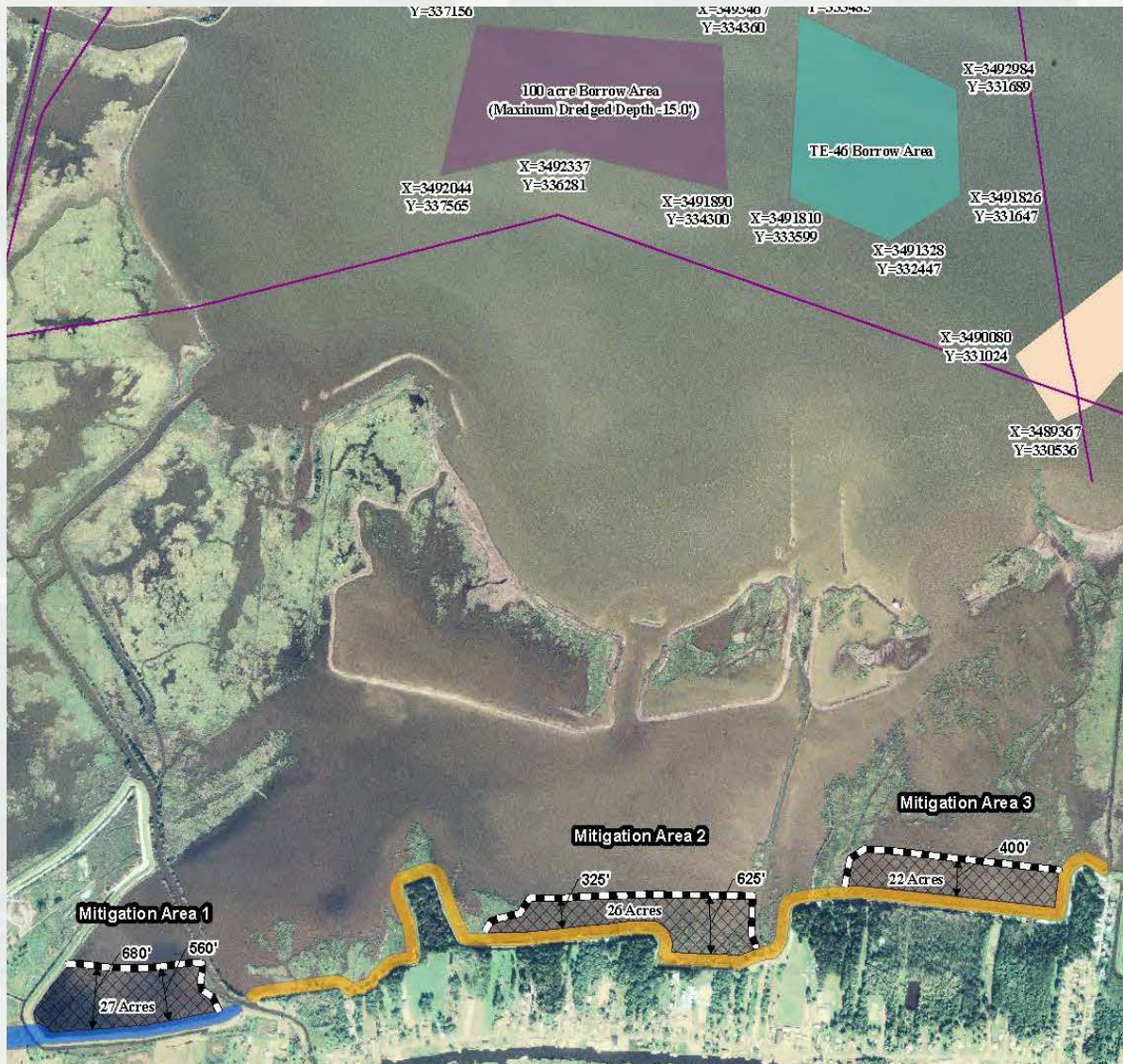
Project features:

- Water Retention Dike
- Eradication of Invasive Species
- BLH Planting
- Feral Pig Exclusion Fencing
- Preservation

EM: Nathan Dayan



TERREBONNE NFL MITIGATION



Status:

Engineering and Design:

Project is under construction

Environmental Compliance:

NEPA compliance achieved under EA 450

Real Estate:

Complete

Project features:

Project involves obtaining dredged material from Lake Boudreaux and placing it in 3 sites for a total of 74 acres of marsh creation.

EM: Elizabeth Behrens

