

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

Environmental Mitigation

Sept 25, 2012

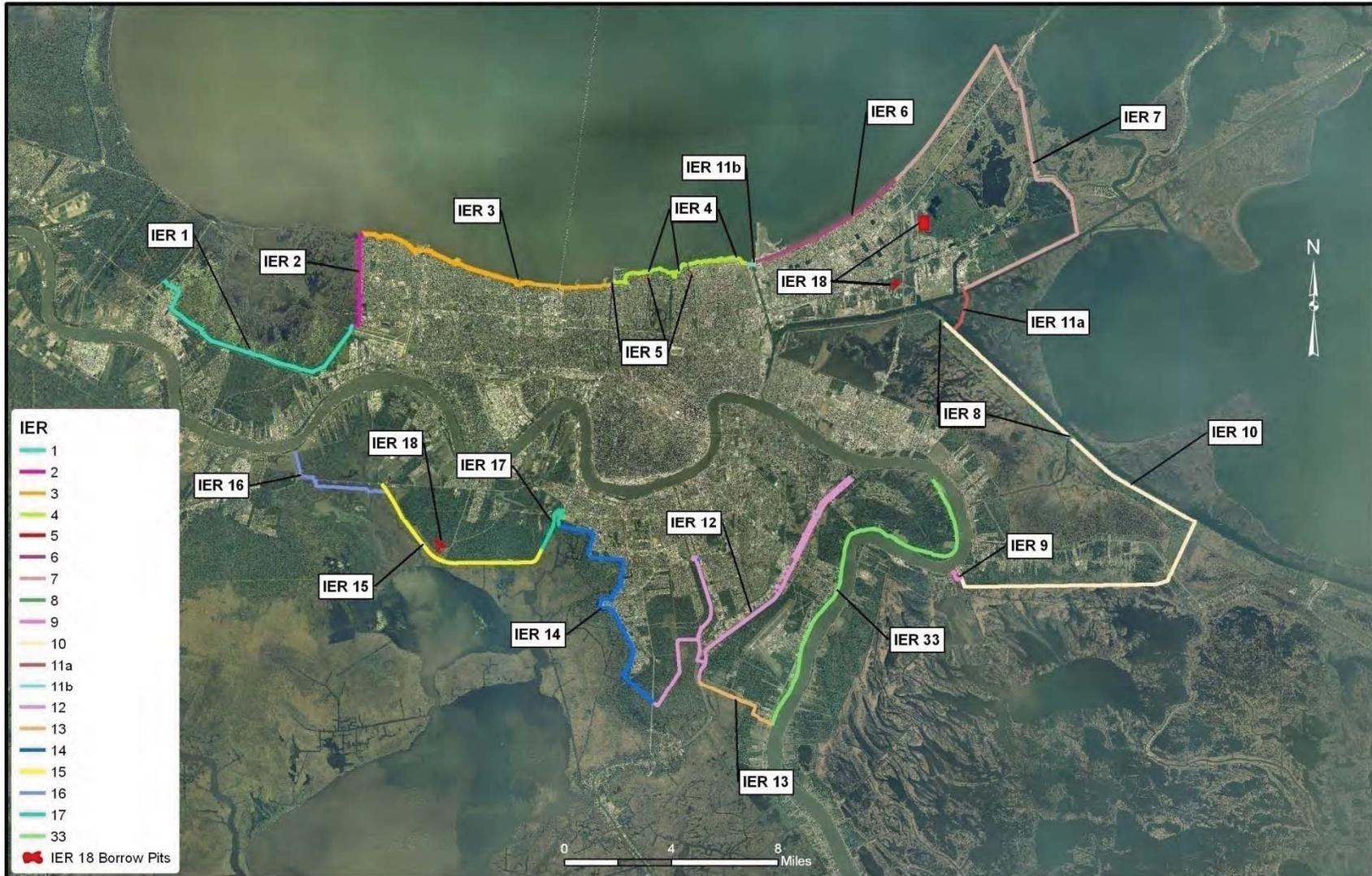


US Army Corps of Engineers
BUILDING STRONG[®]





Individual Environmental Report Projects



Job No. EGIS-2010-065

Map created: 1 Sep 2011

Current working LPV & WBV HSDRRS Impacts

Habitat Type	LPV (HSDRRS) (acres)	WBV ¹ (HSDRRS) (acres)	Total Impacts (acres)
Bottomland Hardwood Wet	352	321	673
Bottomland Hardwood Dry	70	471	541
Swamp	198	279	477
Fresh Marsh	39	147	186
Intermediate Marsh	148	0	148
Brackish Marsh	251	0	251
Total	1,058	1,218	2,277

¹ Impacts include outstanding mitigation in EA 437 and 439



LPV HSDRRS Mitigation Projects (TSP)



Job No. EGIS-2010-065

0 5 10 Miles

Map Created: 28 Feb 2012

Slide 4

crr1

We changed the news release to say "proposed" but now we're switching back to TSP? We can easily change this title.

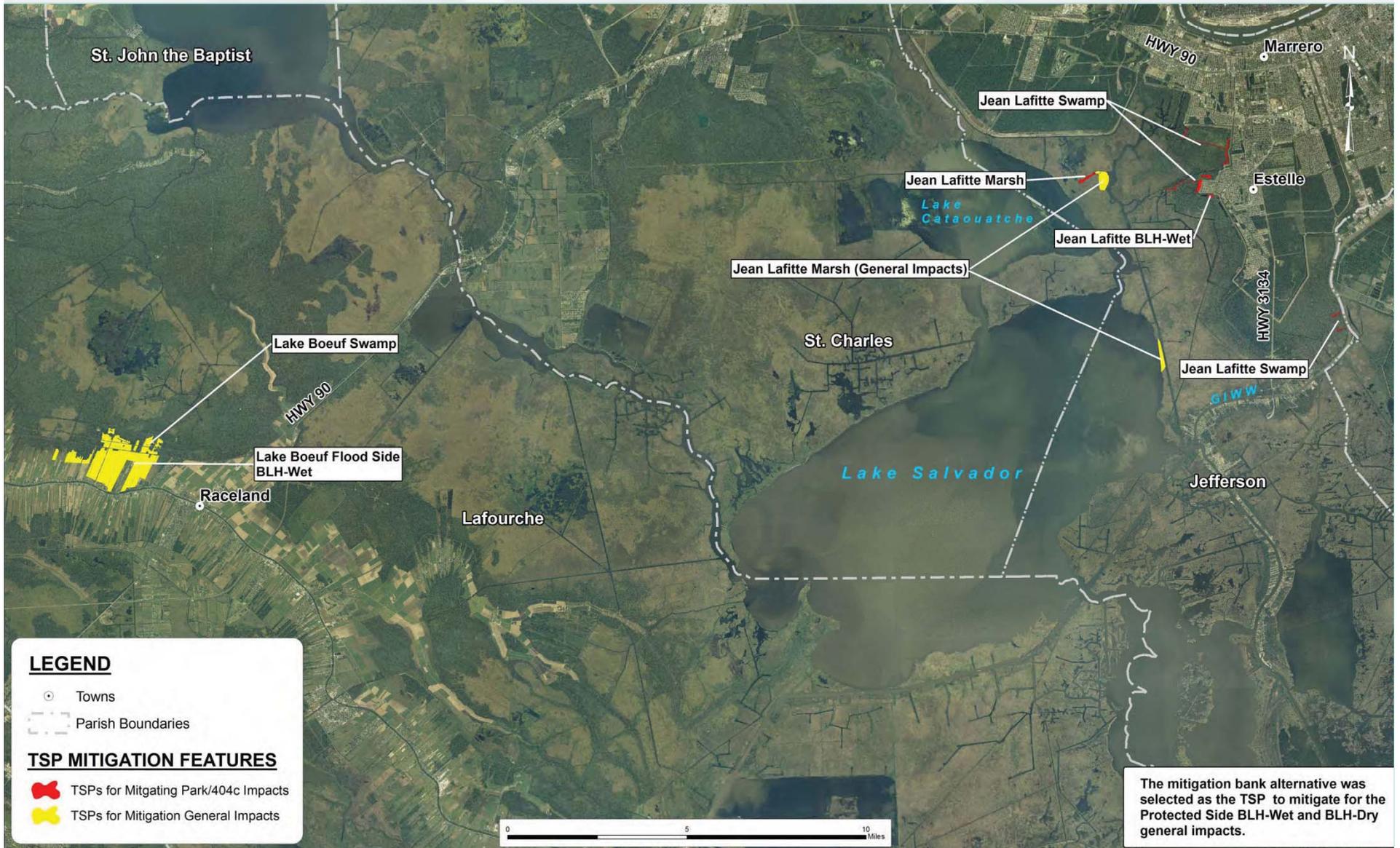
Cheryn Robles, 3/8/2012

crr2

We're not going to discuss the merits of each site? I thought that was the plan? If we dont talk about each site, this is just giviing a general overview? Isn't the point to get specific information about the sites we're proposing? Do we just not have the images yet?

Cheryn Robles, 3/8/2012

WBV Tentatively Selected Plan (TSP)



NEPA Compliance and Implementation

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



LPV Mitigation Tentative Timeline (Pre-construction)

Initiated Study	May 2010	(Completed)
5 Scoping Meetings	May 2010	(Completed)
Initial Screening of Measures	Sep 2010	(Completed)
Project Status Public Meetings	Dec 2010	(Completed)
Refine Measures	Apr 2011	(Completed)
Assemble Alternative Plans	Aug 2011	(Completed)
Identify Proposed Action	Nov 2011	(Completed)
Release Individual Environmental Report	Jan 2013	
Division Approval of Mitigation Plan	June 2013	
Release Tiered Individual Environmental Report(s)	<i>Pending Finalization of Design</i>	



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Public Meeting	Jul 2012	(Completed)
Release Programmatic Individual Environmental Report	May 2013	
Division Decision on Mitigation Plan	Jul 2013	
Release Tiered Individual Environmental Report(s)	<i>Pending Finalization of Design</i>	



Current 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 from impacts incurred during the construction of the LPV HPS, 1,300 acres of marsh - Manchac Wildlife Management Area Shoreline Protection Modification
- **WBV Original Construction:** Mitigation from impacts incurred during the construction of the LPV HPS, 724 acres of BLH and swamp – WBV HPP Implementation of Previously Authorized Mitigation Plans



BAYOU SAUVAGE MITIGATION PROJECT

Status:

Engineering and Design:

Project is under construction

Real Estate:

Complete

Environmental Compliance:

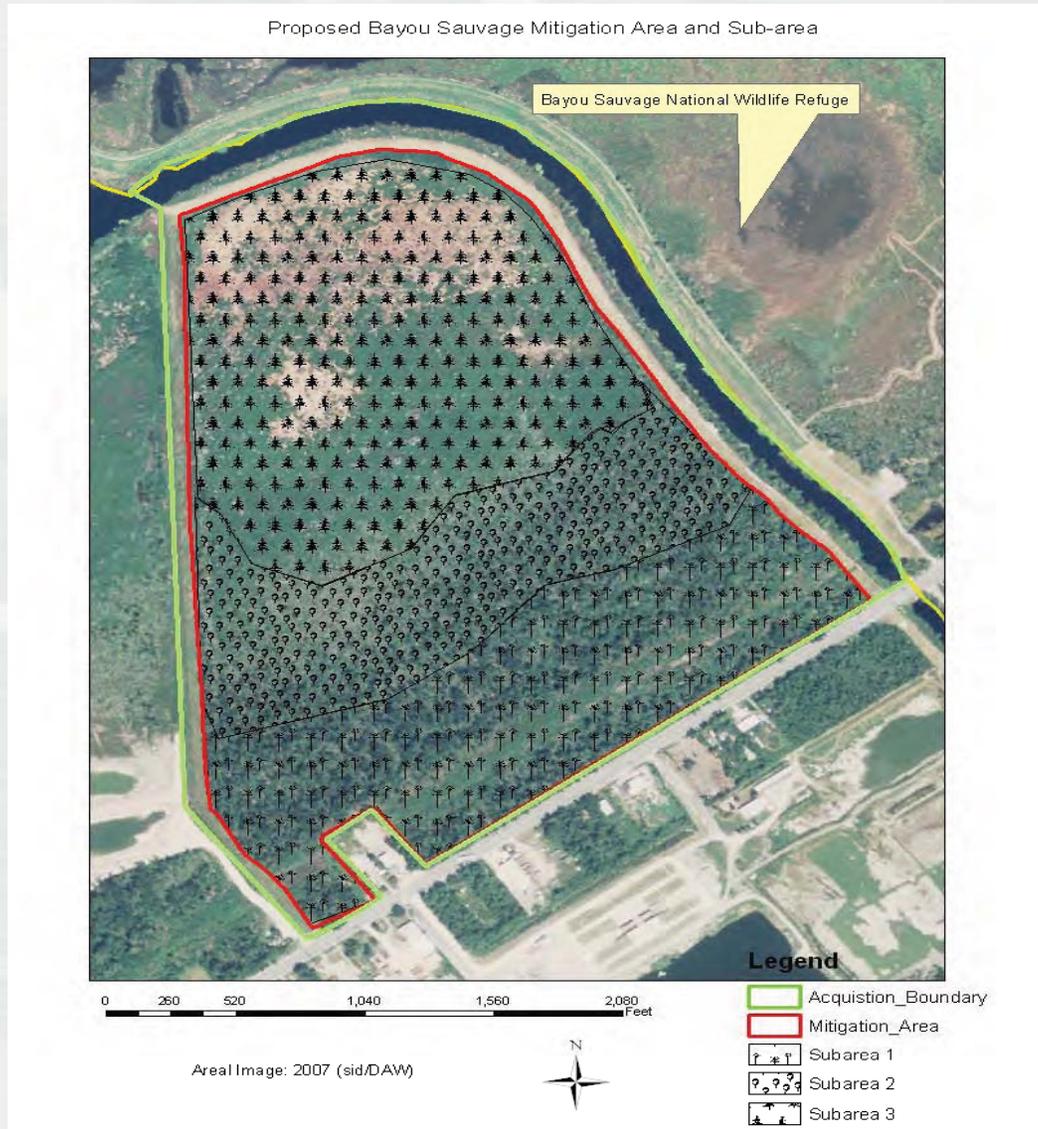
NEPA compliance achieved under EA 433.

Project features:

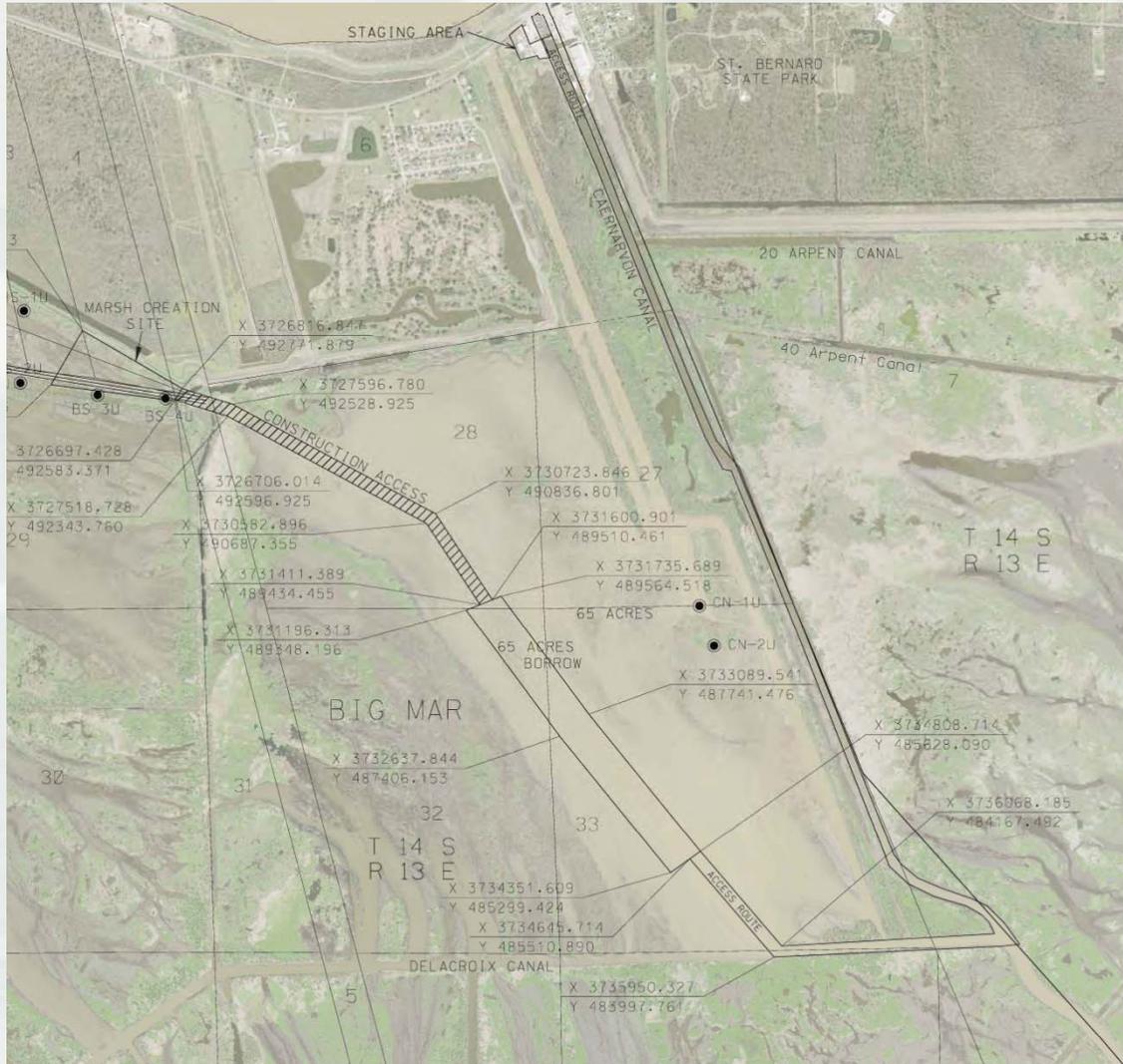
Project area broken into 3 sub-basins for appropriate reforestation and invasive species control as per existing elevations.

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:

Complete

Environmental Compliance:

NEPA compliance
achieved under SEA 433

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



PASS MANCHAC WMA MITIGATION

Status:

Engineering and Design:

Under construction

Environmental Compliance:

NEPA compliance
achieved under EA 500

Real Estate:

Acquisition Phase

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 - Bayou Segnette Project



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

EM: Nathan Dayan



Back Up Slides



Hurricane & Storm Damage Risk Reduction System Mitigation Policies

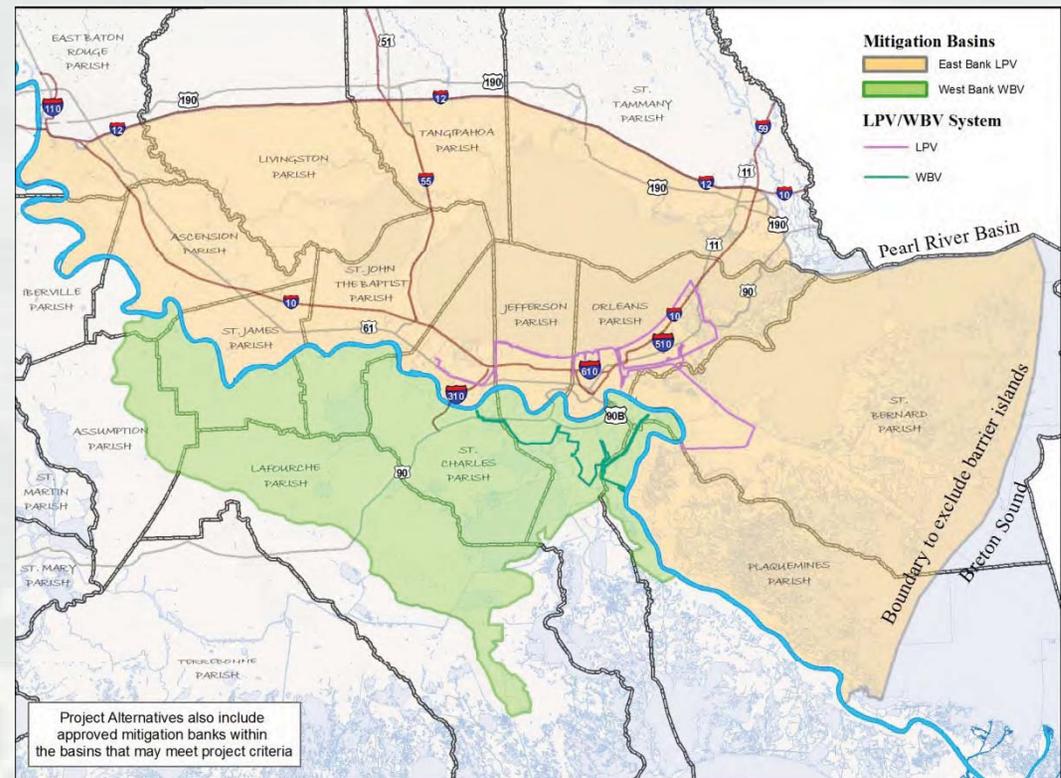
In accordance with Section 2036 of WRDA 2007, mitigation would occur:

- Within the same watershed / hydrologic basin (Barataria or Lake Pontchartrain)
- Mitigate in-kind - within same habitat type
 - Bottomland hardwood
 - Swamp
 - Fresh / Intermediate marsh
 - Brackish marsh

Options under consideration

(not organized in order of priority):

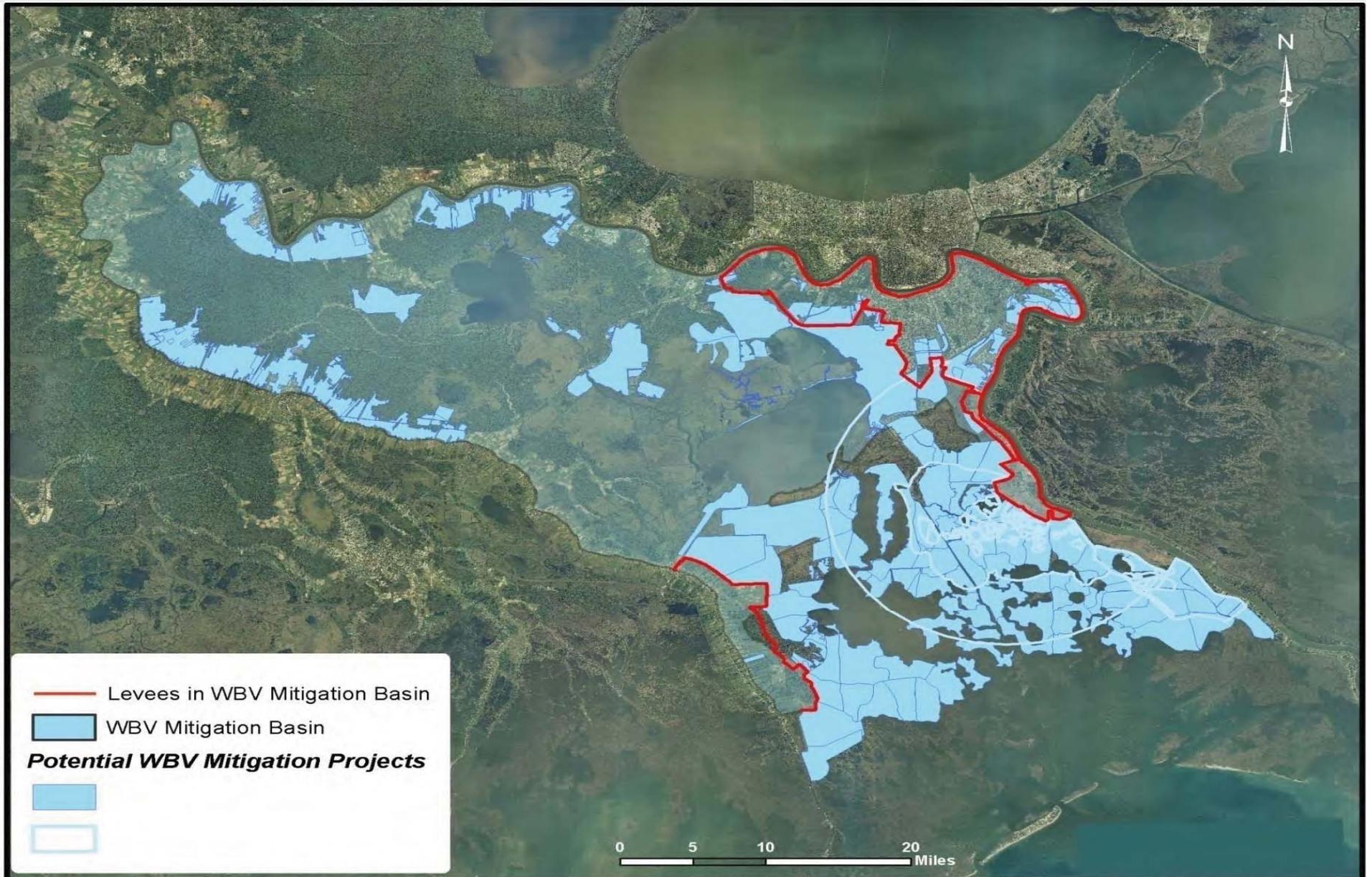
- Corps constructed projects on public lands
- Corps constructed projects on private lands
- Mitigation Banks



Lake Pontchartrain & Vicinity Projects Considered



West Bank & Vicinity Projects Considered

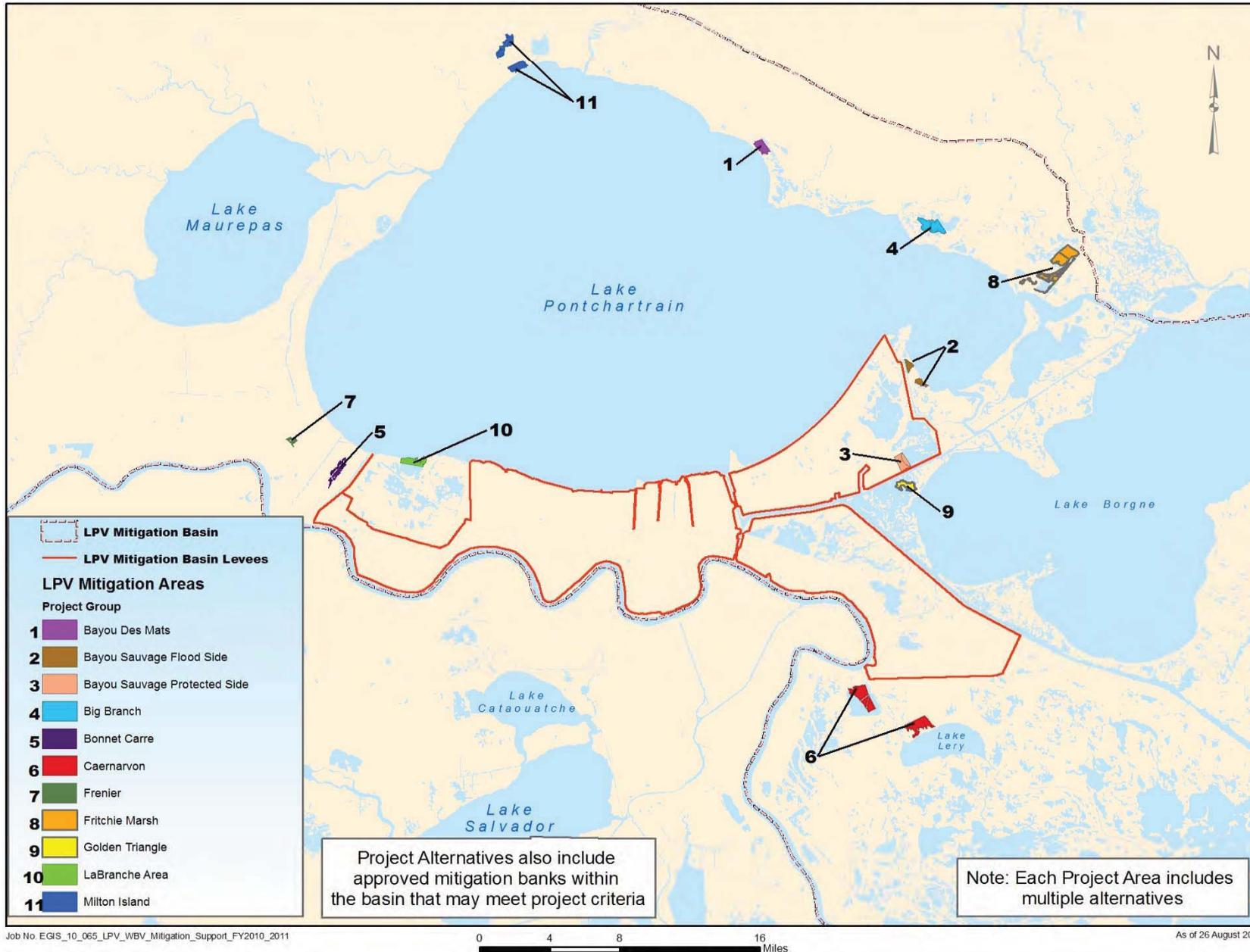


Initial Screening Criteria

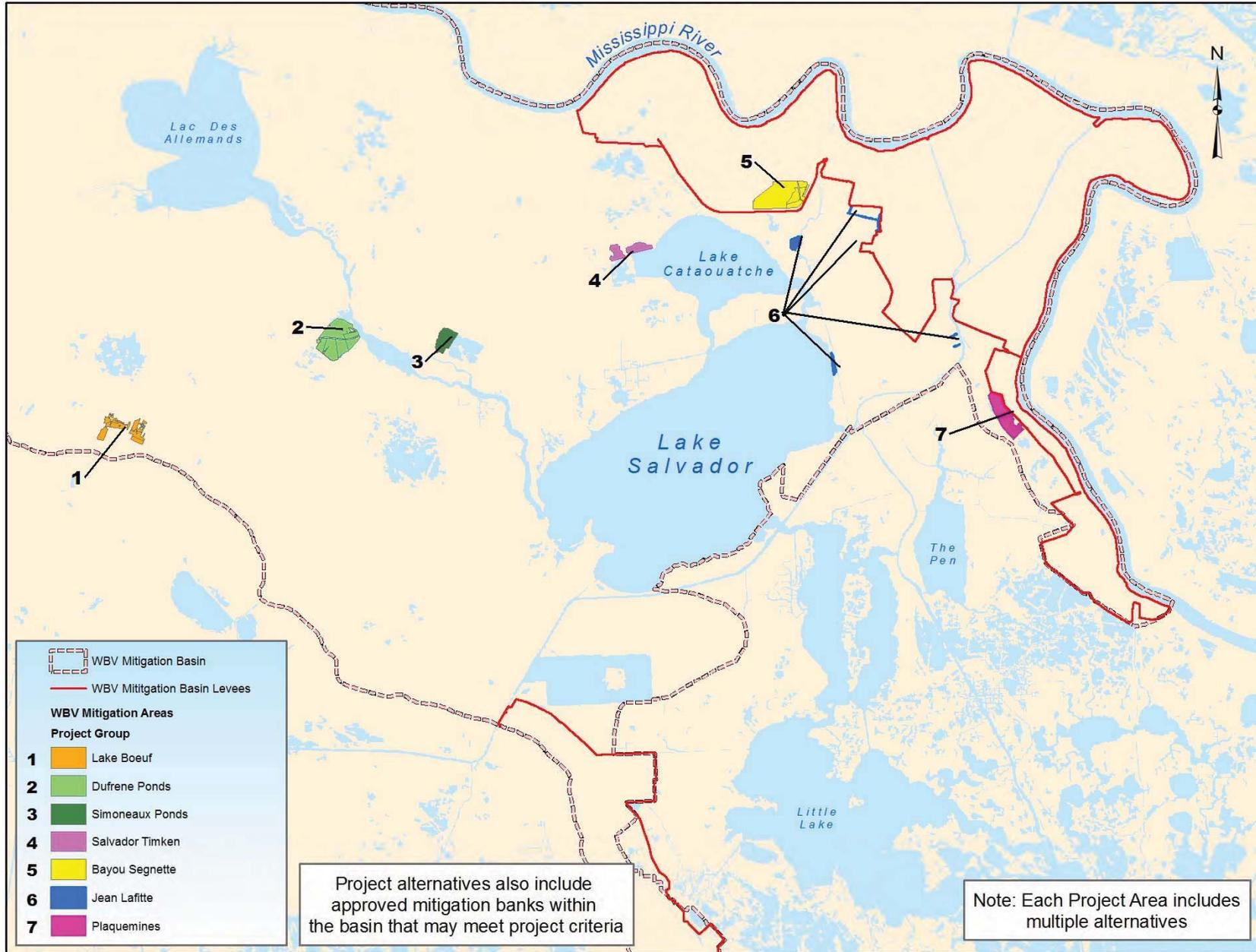
- Compliance with laws, regulations and policies
- Avoid Hazardous Toxic and Radioactive Waste
- Within the Mitigation Basin where the impacts occurred
- Must address 100% of mitigation need in kind by habitat type
- Technically viable (e.g. correct salinity)
- No conflicts with other projects constructed or planned for construction
- Not dependent upon another project
- Can be adjusted to meet mitigation requirement only
- Addresses multiple mitigation requirements in one project area
- Addresses opportunities to expand existing resource-managed areas



LPV Initial Screening Results



WBV Initial Screening Results



Project alternatives also include approved mitigation banks within the basin that may meet project criteria

Note: Each Project Area includes multiple alternatives

Mitigation Plan Selection Criteria

- **Risk & Reliability:**

e.g. Sustainability, Implementability, Uncertainty, Adaptability

- **Environmental:**

Environmental Impacts

- **Watershed & Ecological Site Considerations:**

e.g. Fragmentation, connectivity, habitat linkage, location in watershed, consistency with watershed plans

- **Time:**

Duration to contract award & time to physical construction complete/initial planting

- **Cost Effectiveness:**

Average annual cost per average annual habitat unit

- **Other Cost Considerations:**

Cost included Construction, Engineering & Design, Construction Supervision and Administration, Real Estate, and Operation and Maintenance

