

West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction Feasibility Study

Non-Governmental Organizations Briefing

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Agenda

- **Project Overview/Schedule**
- **National Environmental Policy Act**
- **Public Comments**
- **Mitigation**



Commitment to the Area



- **National, State and Local Commitment**

- **Public Engagement**

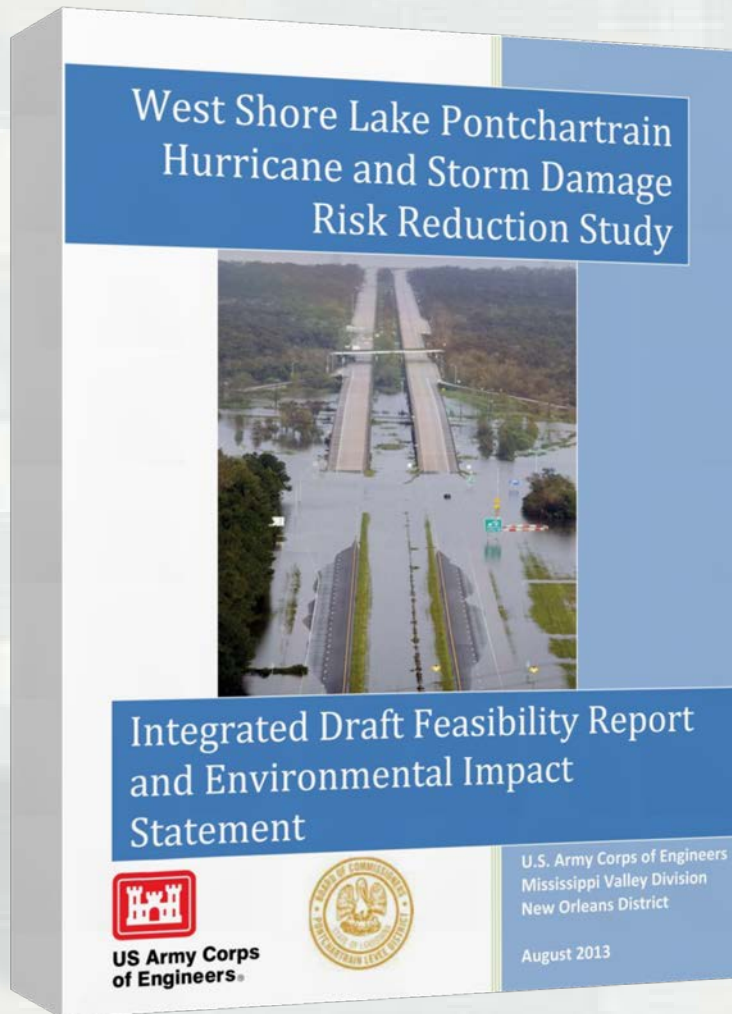


Where We Are Today

1. **Assess Proposed Alternatives**
2. **Identify Draft Plan**
3. **Agency and Public Review**
4. **Evaluate Comments Received**
5. **Formal Selection of a Selected Plan**



Draft Integrated Feasibility Report and Environmental Impact Statement



Presently reviewing comments provided in the August 23rd to October 25th draft EIS comment review period.

- Agency shall assess & consider comments both individually & collectively with the following possible responses
- Make factual correction
- Supplement, improve, or modify analyses
- Modify alternatives
- Develop and evaluate new alternatives
- Explain why comment does not warrant further agency response



Schedule

45-Day Public/Agency Review

Aug. 23 - Oct. 8 2013

**Commander's Decision
On Tentatively Selected Plan**

November 2013

**Feasibility Design of Tentatively
Selected Plan**

Dec 2013 – April 2014

**30-Day State and Agency Review
of Final Report (2nd Public Review)**

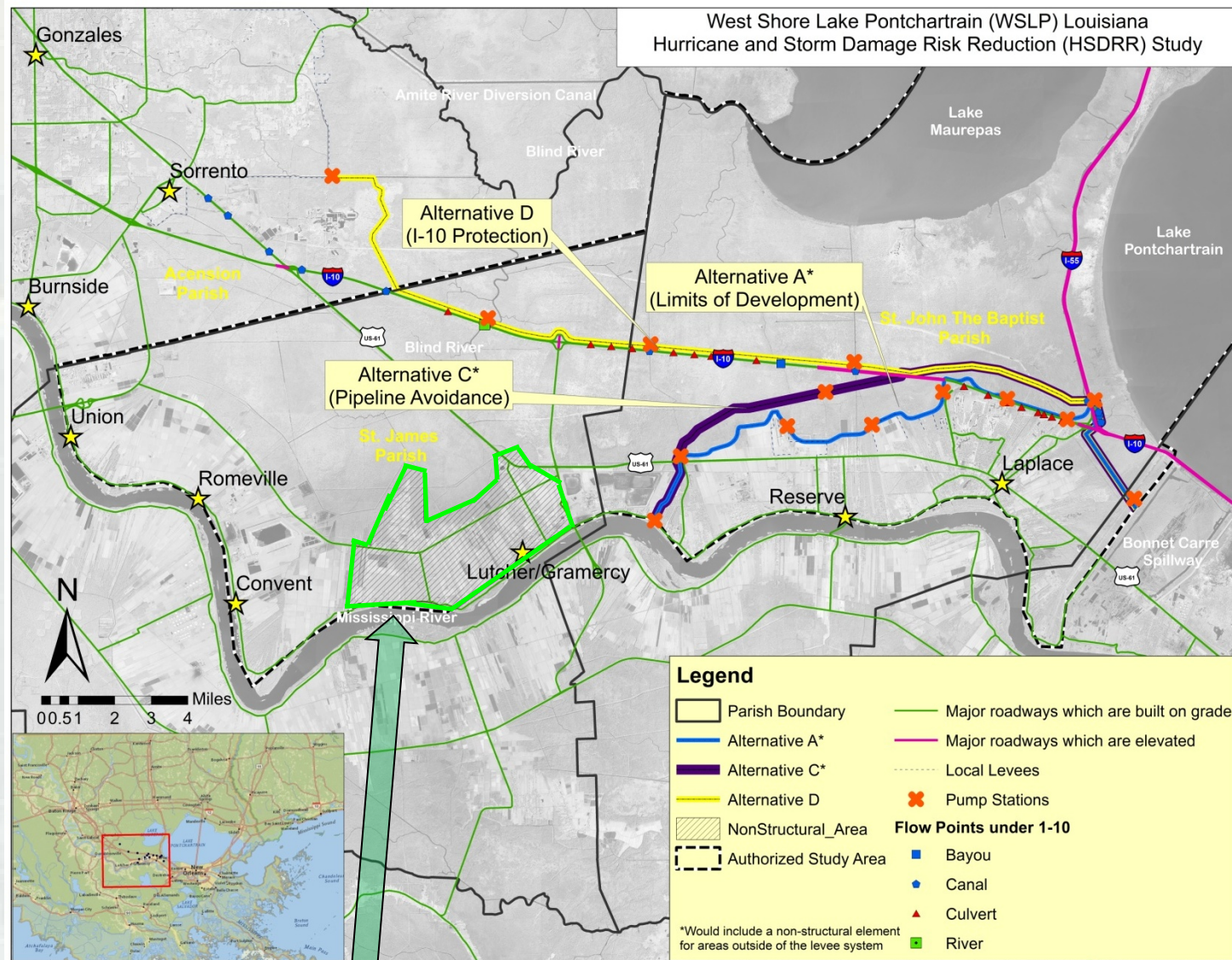
May 2014

**Study Completed-
Chief's Report Signed**

September 2014



Alternative Plans



Highlighted area in St. James depicts nonstructural measures

Comparing and Screening Plans

Alternative A:

- Impacts drainage and 70 pipeline crossings
- Requires 8 pump stations
- Higher O&M
- Immediate inundation of developed areas if levee is overtopped

Alternative C:

- 36 pipeline relocations
- Requires 4 pump stations
- Less residual risk and greater adaptability than Alternative A

***Draft TSP ***

Alternative D:

- Includes 14 pipeline crossings
- Requires 6 pump stations
- Uncertainties in maintaining hydrology
- Environmental impacts to LCA Convent/Blind River project and Maurepas Wildlife Management Area
- Higher annual costs to maintain

Alternative 100-year Level of Risk Reduction	Costs to Implement (\$ millions)	Equivalent Annual Benefits (\$ millions)	Annual Costs (\$ millions)	Benefit-to- Cost Ratio	Annual Net Benefits (\$ millions)
A	887.7	59.9	40.5	1.48	19.4
C	880.9	59.9	36.8	1.63	23.0
D	891.1	59.9	46.7	1.28	13.2

Why Alternative C?

- Economic Decision

- ▶ C has a benefit to cost ratio of 1.65:1 vs. D which has a ratio of 1.28:1
- ▶ The difference in the ratios are based on the implementation costs, and on the cost to maintain the alternative over time
- ▶ D cost nearly \$10M more per year to operate than C (roughly \$500M over the 50 year period of analysis)
- ▶ The additional cost to operate pump stations, water control structures and a longer levee lowers the benefit to cost ratio of D

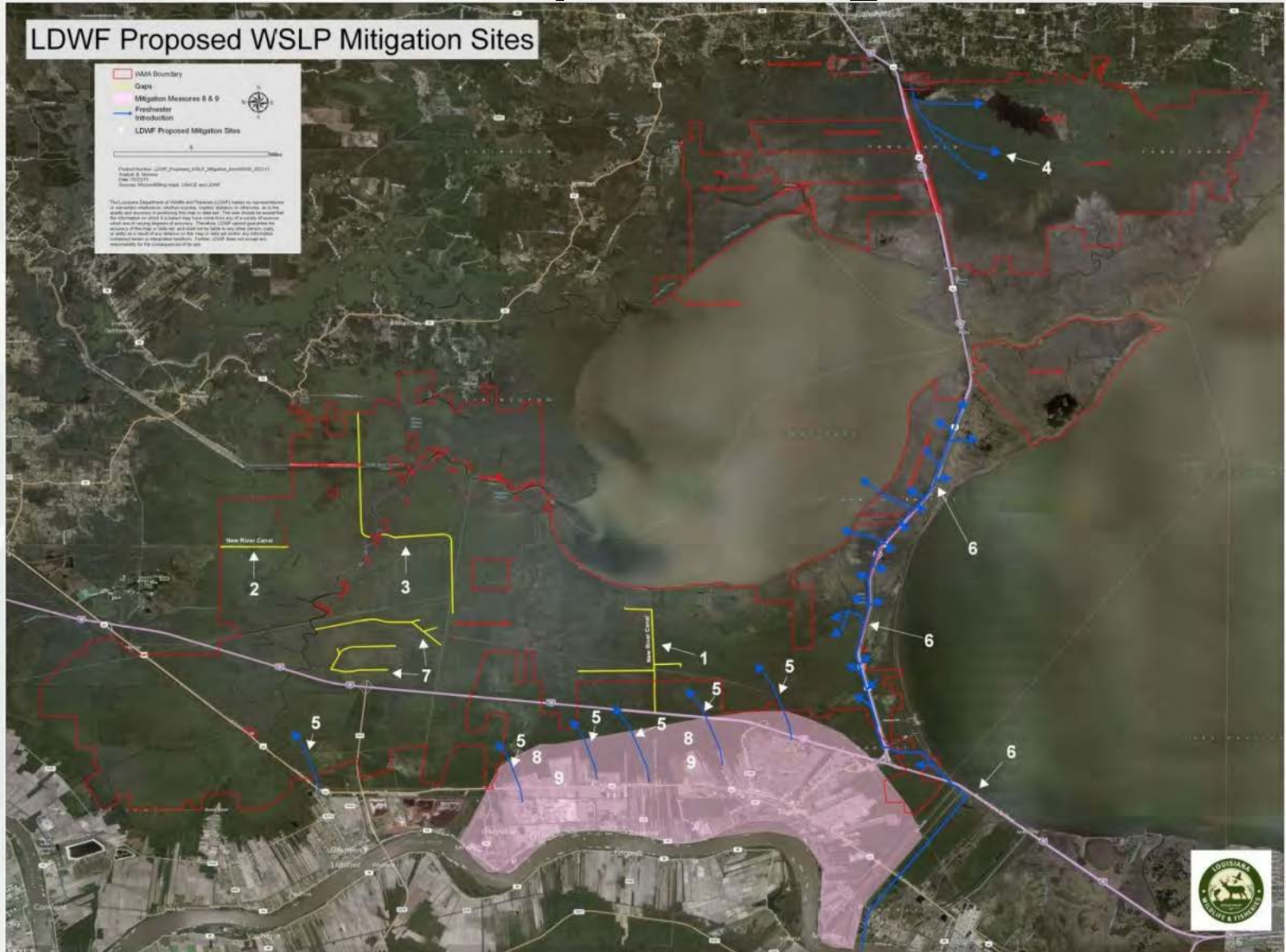


Nonstructural Component for St. James Parish

- Raise or acquire 1,571 structures over time in St. James Parish that are susceptible to a 1% storm in 2070
- Cost-shared 65%-35% with NFS*
- Estimated cost is ~ \$300,000,000
- One time cost to implement non-structural vs. perpetual cost to maintain levee



LDWF Proposed Mitigation





Other Proposed Mitigation Measures

- Breach hydrologic barriers—Re-hydrologic connectivity
 - Vegetative Plantings
- Old railroad beds as ridge habitat and BLH
 - Invasive species control
 - Wastewater introduction
 - Clearing and snagging
 - Channel dredging
 - Dedicated dredging
 - Spray dredging
- Synergistic interaction of mitigation with LCA Small Diversion at Convent Blind River.



Adaptive Management & Monitoring

- An AM&M Plan will be developed for the mitigation plan consistent with the requirements of the WRDA 2007, Section 2036
- The AM&M Plan elements will include:
 - ▶ The organizational structure for the AM&M process
 - ▶ Conceptual Ecological Model
 - ▶ Key project uncertainties
 - ▶ Evaluation of mitigation measures and alternatives as candidates for AM actions
 - ▶ Identification of potential AM actions and description of the monitoring design developed to evaluate progress towards meeting the identified mitigation success criteria



Thank You

Questions?