West Bank & Vicinity
General Reevaluation Report

Public Information Meeting for the Draft Report

New Orleans District
January 21, 2020

“The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation.”
PUBLIC INFORMATION MEETING

Agenda
- FAQs
- Corps Study Process
- Project Background
- Alternatives Considered
- Tentatively Selected Plan
- Next Steps: Project Schedule
- Public Comment Period

Information Posters & Tables

Submitting Comments
- Email: CEMVN-WBVGRR@usace.army.mil
- Court Reporter available tonight
FAQS

• Does the HSDRRS currently provide the 1% level of risk reduction?
• Why weren’t the levees/floodwalls built higher to begin with?
• Why didn’t this study begin until 2018 when the need for future levee lifts was always known?
• Why is the study important?
• When would construction begin?
MEETING PURPOSE / WHAT WE NEED FROM YOU

• Inform the public
  – Provide background on study
  – Discuss alternatives evaluated
  – Present “Tentatively Selected Plan”

• Solicit your input
  – Issues and concerns
  – Formulation and evaluation of alternatives
  – Tentatively Selected Plan
CORPS STUDY PROCESS

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<td>Feasibility Analysis of Selected Plan</td>
<td>Final Report</td>
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- **Scoping**
  - Data gathering
  - Request public input on study area issues for consideration

- **Alternative Evaluation & Analysis**
  - Evaluate alternatives
  - Recommend a plan
  - Draft report / National Environmental Policy Act (NEPA) document
  - Opportunity for public review & comment

- **Feasibility Analysis of Selected Plan**
  - Additional design refinements & analysis
  - Finalize report and release for public review

- **Final Report**
  - Send final report to Congress for approval and funding

**Current Stage**
AGENCY PARTNERSHIP & COORDINATION

Non-Federal Sponsor
Coastal Protection and Restoration Authority (CPRA)

Permitting & Advisory Agencies
HURRICANE STORM DAMAGE RISK REDUCTION SYSTEM
PROJECT AREA – West Bank & VICINITY

- Starts at the MRL in Ama in St. Charles Parish and ends at the MRL in Oakville in Plaquemines Parish
- Originally authorized by the Flood Control Act of 1965
- Approximately 75 miles of levees and floodwalls
WHY ARE WE HERE?

Today, the system provides the 1% level of risk reduction authorized by Congress and the Corps is fully confident it will perform as designed and continue to do so for several years without additional lifts.

The need for future levee lifts has always been known, but was not authorized along with the system’s initial construction.
TERMS & DEFINITIONS

Sea Level Rise + Subsidence = Relative Sea Level Rise

Sea level rise
1.3-3.6 ft./50-year

Subsidence
1.5-4.75 ft./50-year

Compaction/Settlement of levee

*Note: Because of the age of the levees, the topography, bathymetry, and other factors, the levee settlement rates are not equal across the system.
### Study Overview

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**Effects of settlement, subsidence, and sea level rise**

- Original Levee Height
- Levee Height after settlement
- Levee Height after settlement and subsidence

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Sea Level Rise

Original Ground

Original Water Height
Many earthen levee systems, including the HSDRRS levees, require future lifts to account for levee consolidation, land subsidence and sea level rise and maintain their authorized design elevation over time.
WHY CONSTRUCT IN LIFTS?

Multiple Lift vs. Single Lift Construction Compared

Current Methodology - Multiple Lifts
Lake Cataouache Levee Enlargement

Quantity: 4.15M cy
Est. Cost: $166M (Construction Only)

3rd Lift (El. 16.5') - 2031
2nd Lift (El. 14.5') - 2017
1st Lift (El. 13.5') - 2011

A Single Lift Scenario
Lake Cataouache Levee Enlargement

Quantity: 10.5M cy
Est. Cost: $420M (Construction Only)
Impacts:
- Right of Way
- Mitigation
- Closing of Waterway
- Filling in Existing Borrow Pit

Multiple Lift vs. Single Lift Construction Compared
Study Purpose

• The study will reevaluate the performance of the WBV project given the combined effects of consolidation, settlement, subsidence, sea level rise, and new datum over time.

Study Area Problems

• Increased risk of overtopping of WBV levees during hurricane and tropical storm events.

• Increased risk to life safety and storm-related economic damages.

Study Objectives

• Reduce economic damages and risk of life loss due to hurricane and tropical storm damage.
PLAN FORMULATION PROCESS

Measure Identification
- Utilized existing infrastructure, existing reports, and subject matter expertise
- Structural, Non-Structural, Natural and Nature Based Solutions

Measure Screening
- 13 measures identified
- Evaluated using professional judgment, existing data, cost/benefit, meets objectives
- 4 measures screened from further analysis

Alternative Formulation
- 6 formulation strategies
- 4 screened from further analysis

Final Array
2 Final
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<td><strong>MEASURES</strong></td>
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<td>Structural</td>
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<td>• Surge Barrier</td>
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<td>• New floodwalls</td>
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<td>• Interior drainage improvements</td>
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<td>• Add armoring at the flood side</td>
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<td>• Wave berms</td>
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<td>Non-Structural</td>
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<td>• Risk Communication</td>
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<td>• Buyouts</td>
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<td>• Flood-proofing</td>
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### ALTERNATIVES CONSIDERED

- **No Action Alternative**
- **Alternative 1:** System Levee Lifts to the Projected 1% AEP Event at 2057
- **Alternative 2:** System Levee Lifts to the Projected 1% AEP Event at 2073
- **Alternative 3:** System Levee Lifts at 2073 that Maximize Benefits
- **Alternative 4:** Selective Levee Lifts
- **Alternative 5:** Non-Structural
- **Alternative 6:** Sponsor Plan
EVALUATION OF ALTERNATIVES

- Hydrology & hydraulics modeling
- Cost estimates
- Economic benefits (damages reduced)
- Environmental impacts (mitigation)
- Real estate considerations
- Reductions in life safety risk
- Reduction in risk to critical infrastructure
TENTATIVELY SELECTED PLAN

- 82 miles of levee lifts and 1 mile of floodwall modifications/replacements along existing WBV alignment
- Estimated total cost: ~$613 million
**NEXT STEPS**

- **Final General Reevaluation Report**
  - Response to public comments included
  - Refined design based on additional analysis
  - Final plan sent to Congress

- **Congressional Authorization & Appropriation**
  - Congress approves construction through a Water Resources Development Act
  - Funding occurs separately through federal and state budgeting processes

- **Design Phase**
  - Additional survey and data collection to support design refinement

- **Construction (Phased)**
  - Construction contracts awarded and managed by the Corps
HOW TO COMMENT

Send your comments by February 7, 2020

Mail:
U.S. Army Corps of Engineers, New Orleans District
C/O Mr. Bradley Drouant, P.E.
CEMVN-PMO-L, Room 361
7400 Leake Avenue
New Orleans, LA 70118

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CEMVN-WBVGRR@usace.army.mil

A Court Reporter is available tonight to accept verbal comments
PLACEHOLDER FOR FAQS