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."

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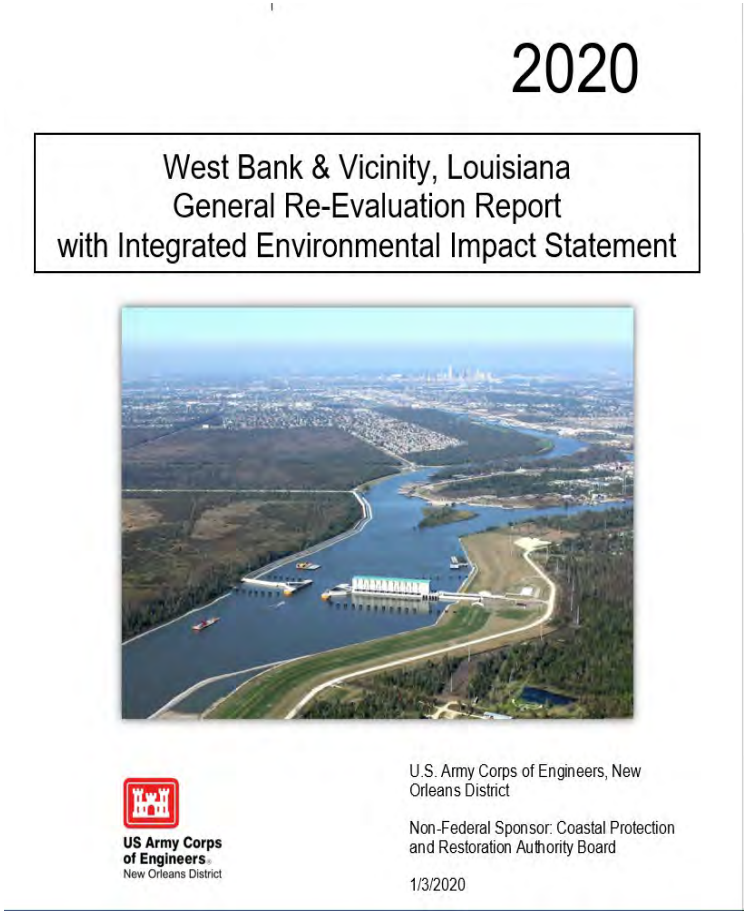
PUBLIC INFORMATION MEETING

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

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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?

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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

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CORPS STUDY PROCESS

Scoping	Alternative Evaluation & Analysis	Feasibility Analysis of Selected Plan	Final Report
• Data gathering • Request public input on study area issues for consideration	• Evaluate alternatives • Recommend a plan • Draft report / National Environmental Policy Act (NEPA) document • Opportunity for public review & comment	• Additional design refinements & analysis • Finalize report and release for public review	• Send final report to Congress for approval and funding

Current Stage

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AGENCY PARTNERSHIP & COORDINATION

Non-Federal Sponsor

Coastal Protection and Restoration Authority (CPRA)

Permitting & Advisory Agencies

LOUISIANA OFFICE of CULTURAL DEVELOPMENT

ARTS · ARCHAEOLOGY · HISTORIC PRESERVATION · CODOFIL

USGS science for a changing world

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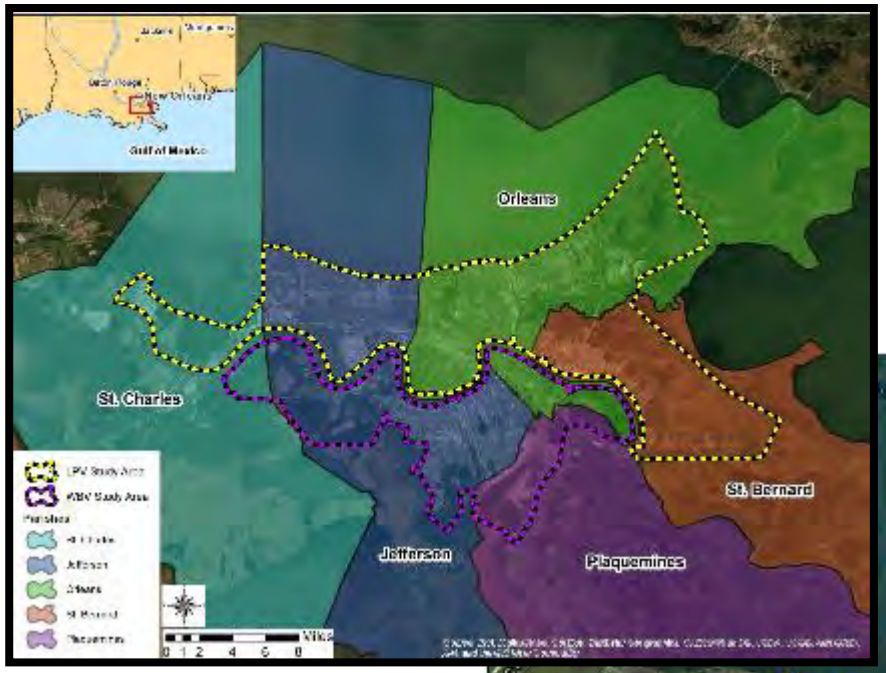
STUDY AREA



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.

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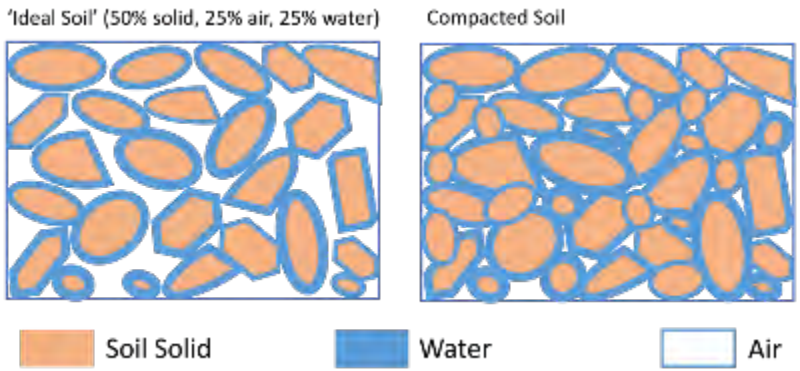
TERMS & DEFINITIONS

Sea Level Rise + Subsidence = Relative Sea Level Rise

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.

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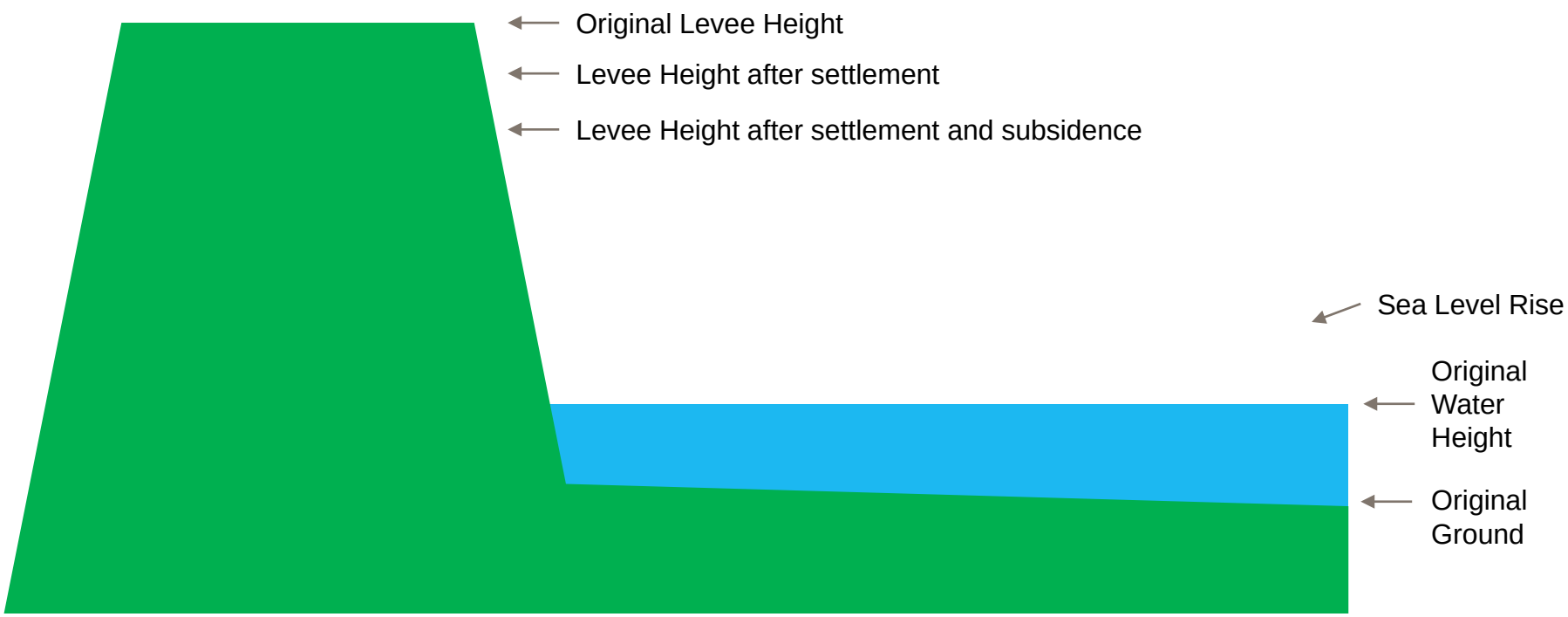
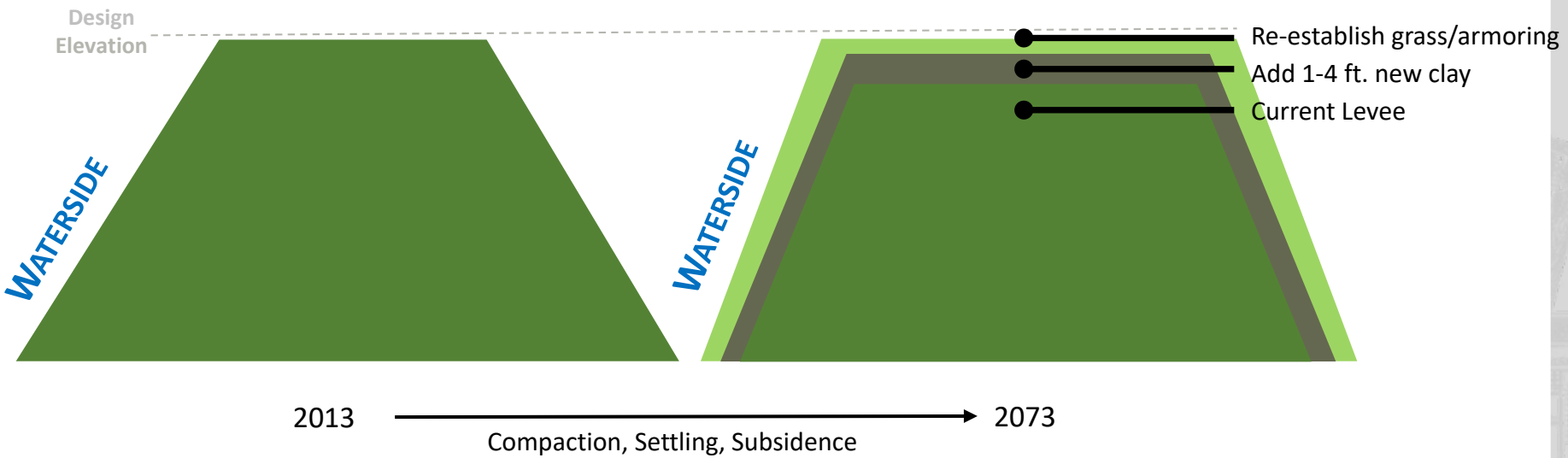
Effects of settlement, subsidence, and sea level rise



MAINTAINING THE DESIGN ELEVATION OVER TIME



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.

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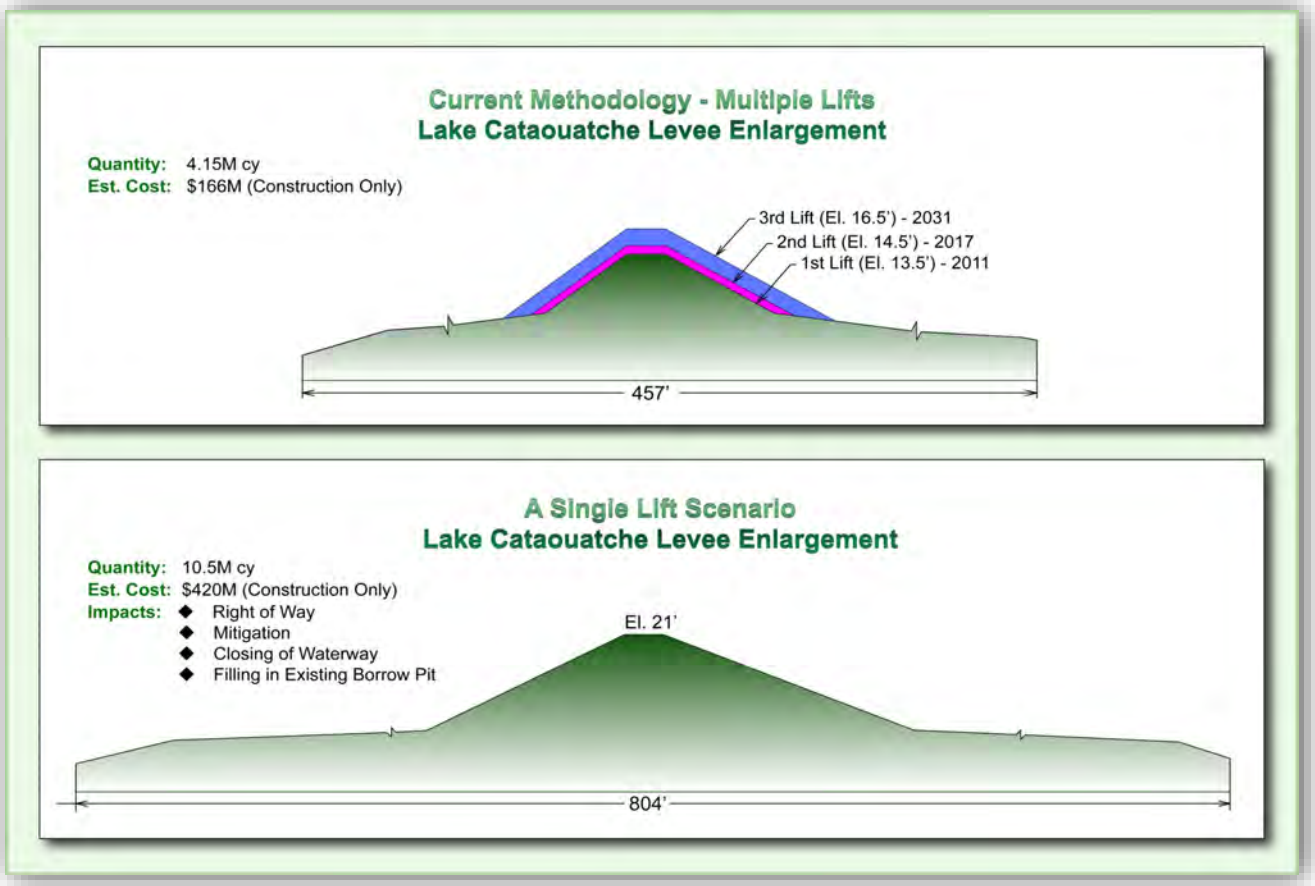
WHY CONSTRUCT IN LIFTS?



Multiple Lift vs. Single Lift Construction Compared

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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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Study Overview	Planning Steps	Path Forward	Comments

MEASURES

Structural

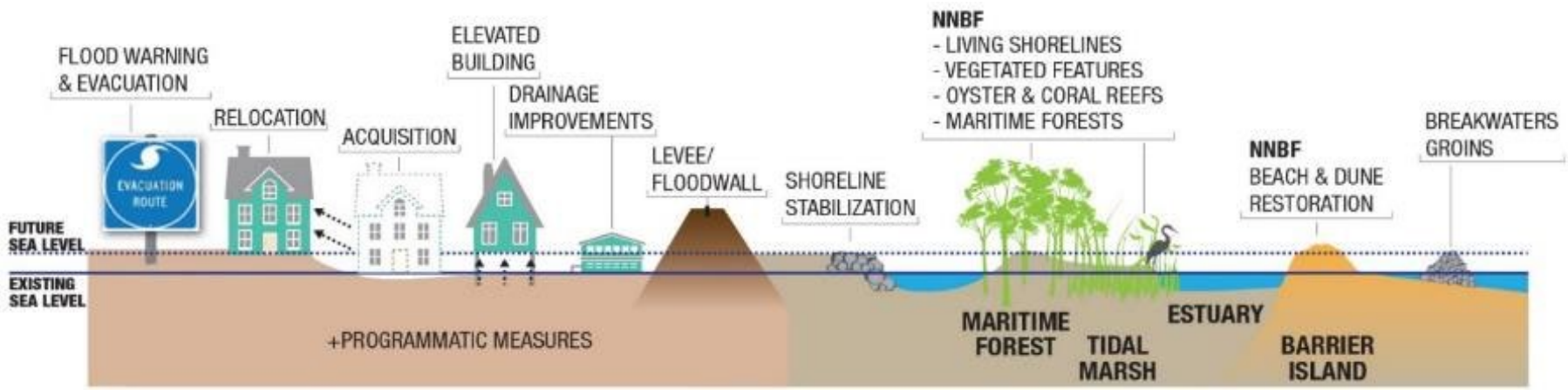
- Levee lift
- Surge Barrier
- New floodwalls
- Breakwaters
- Interior drainage improvements
- Add armoring at the flood side
- Wave berms

Non-Structural

- Risk Communication
- Buyouts
- Flood-proofing
- Elevated buildings

Nature-Based

- Marshes
- Dunes/Beaches
- Living Shoreline

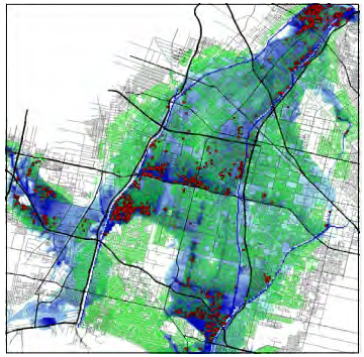


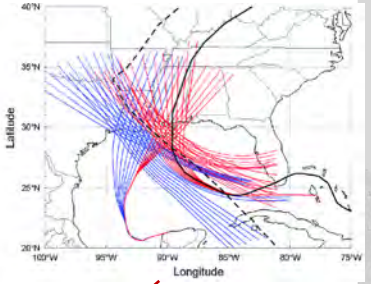
ALTERNATIVES CONSIDERED

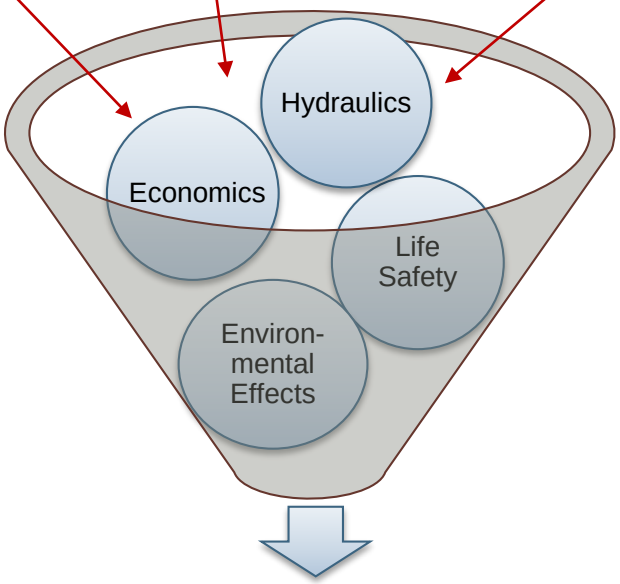
- **No Action Alternative**
- **Alternative 1:** System Levee Lifts to the Projected 1% AEP Event at 2057
- **Alternative 2:** System Levee Lifts to the Projected 1% AEP Event at 2073
- **Alternative 3:** System Levee Lifts at 2073 that Maximize Benefits
- **Alternative 4:** Selective Levee Lifts
- **Alternative 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

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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

Email:

CEMVN-WBVGRR@usace.army.mil

A Court Reporter is available tonight to accept verbal comments

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FREQUENTLY ASKED QUESTIONS

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PLACEHOLDER FOR FAQS