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# Outline

- HPS Mission
- System Repairs / Improvements
- Projects In Your Area
  - IER #6 & #7
  - IER #11 IHNC
- Risk Maps
- Pump Station 15 Update
- Borrow
- Questions



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# HPS Mission

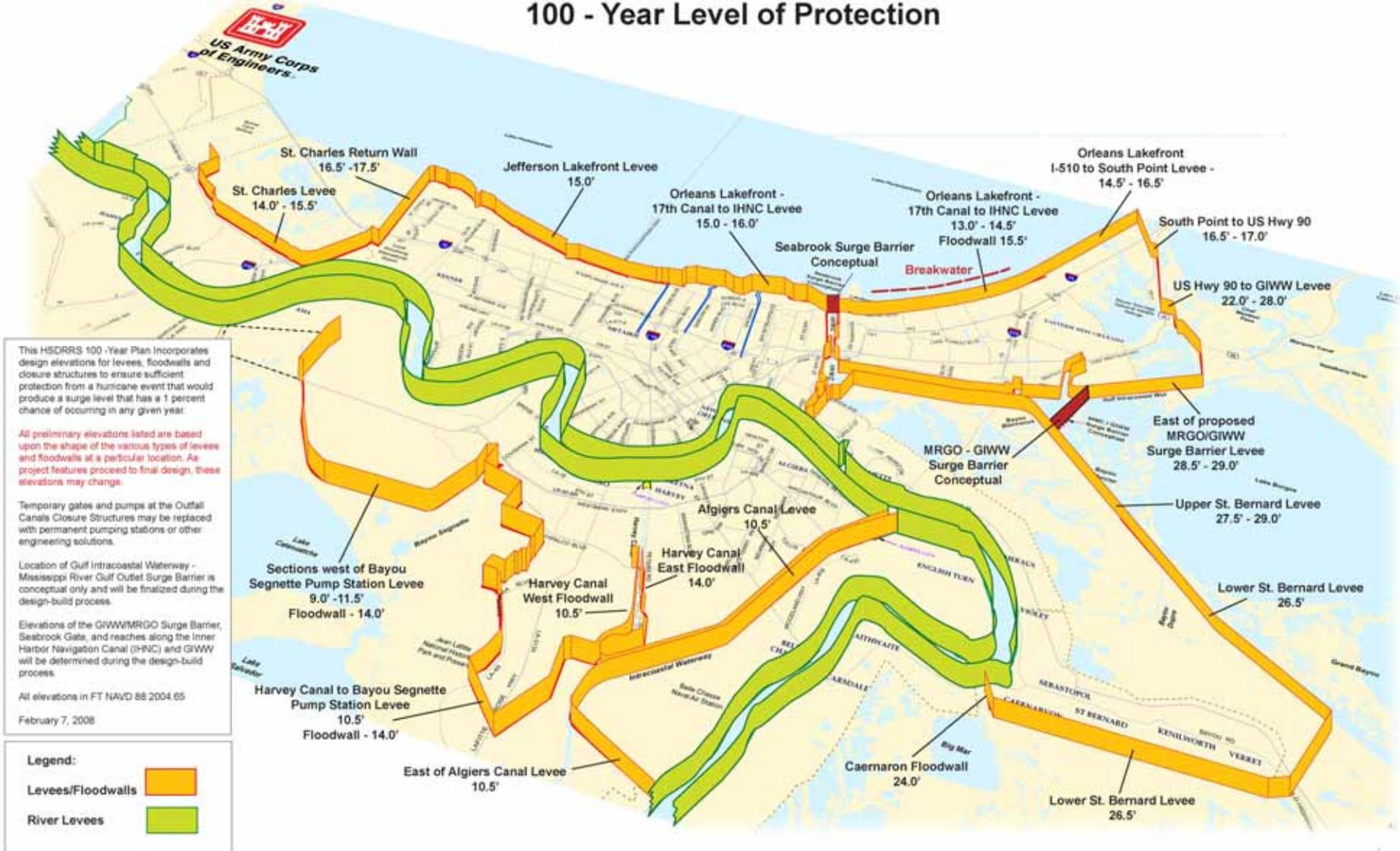
- Repair the damages, making what was there before whole again.
- Strengthen and improve the system and provide 100-year level of protection capable of withstanding the effects of a storm having a 1% chance of occurring each year.
- Study and recommend solutions to provide higher levels of protection; restore and protect coastal wetlands (LaCPR)

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# Greater New Orleans Hurricane and Storm Damage Risk Reduction System 100 - Year Level of Protection





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# System Repair Summary

## Protection Restoration Schedule

- Restore pre-Katrina protection by 1 Jun 06
- 100% complete towards pre-Katrina Protection Restored
- All construction complete end of November 06

## Repaired system

- 2.3 mi new floodwall-22.7 mi new levee
- 195.3 mi scour repair (98 mi MRL completed 17 Mar)
- 3 interim gated closure structures (IGCS)-4 closure structure repairs
- Fully funded at \$800.5M-Construction
- 59 projects by 26 Contractors-90% of work by local contractors -38% by HZ/8(a)
- \$557M in construction activity



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# New Orleans East Repairs

- Repaired over 5 miles damaged earthen levees, including 1.2 miles of severe damages
- Replaced 3000 ft damaged I-Wall with New Concrete L-Wall
- Improve 5.2 miles of I-wall to reduce stick-up to less than 6 feet.
- Replaced old floodgate & walls with New T-wall & floodgate
- Restored 1400 ft of scoured areas at floodwall
- Repair scour on more than 19 miles of levees and floodwalls



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# New Orleans East Repairs



Lakefront Airport Floodwall



CSX Railroad



Citrus Back  
Levee



NO East Back Levee

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# National Environmental Policy Act “NEPA”

- Required for all major Federal actions
- Analyze potential impacts to the human and natural environment and investigate reasonable alternatives
- Analyses documented in Environmental Assessments (EA), Environmental Impact Statements (EIS), or Individual Environmental Reports (IER)
- Public involvement is KEY: We want to hear from you!
- **Goal: more informed decision making through public involvement**



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# New Orleans East Levees IER #6 and IER #7



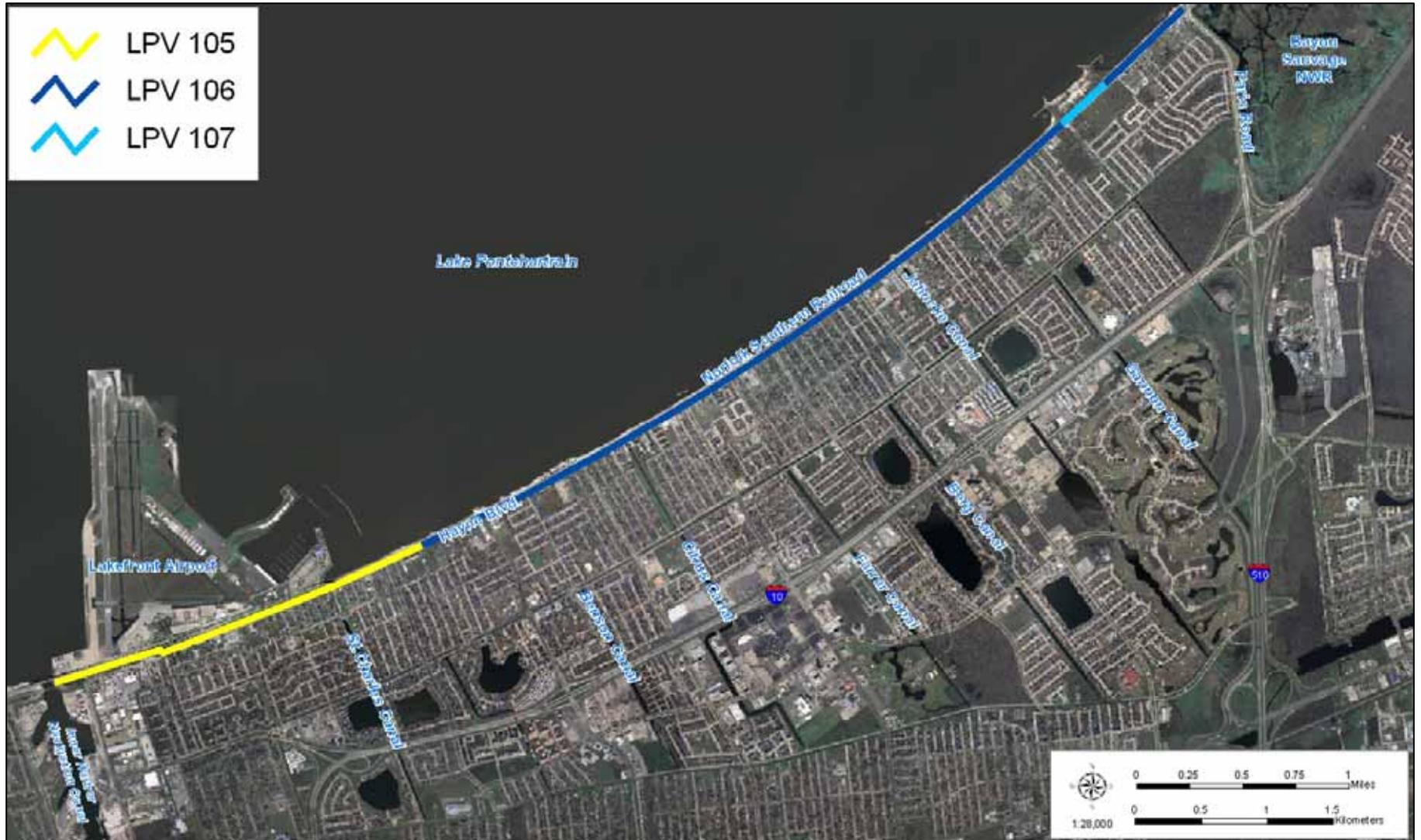
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# IER #6

## Current Alignment





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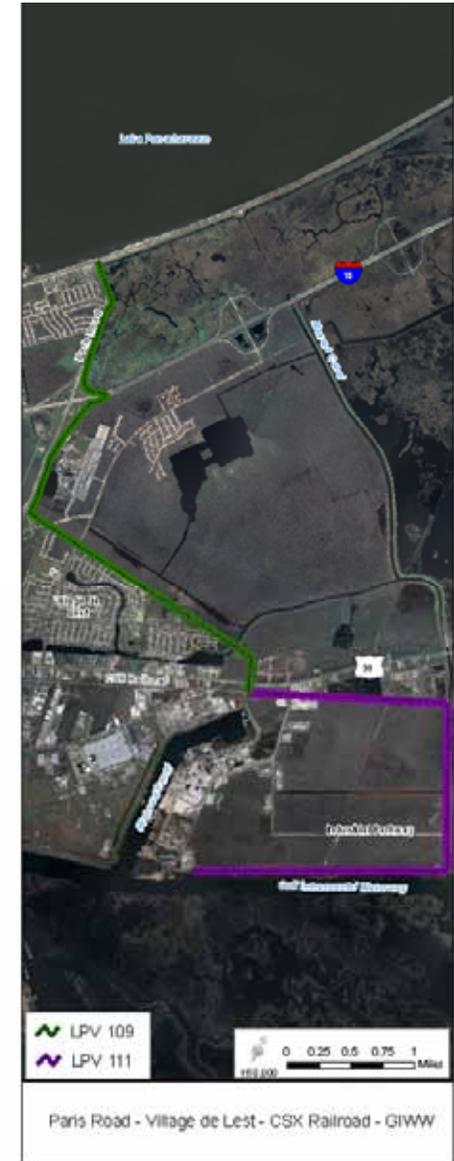
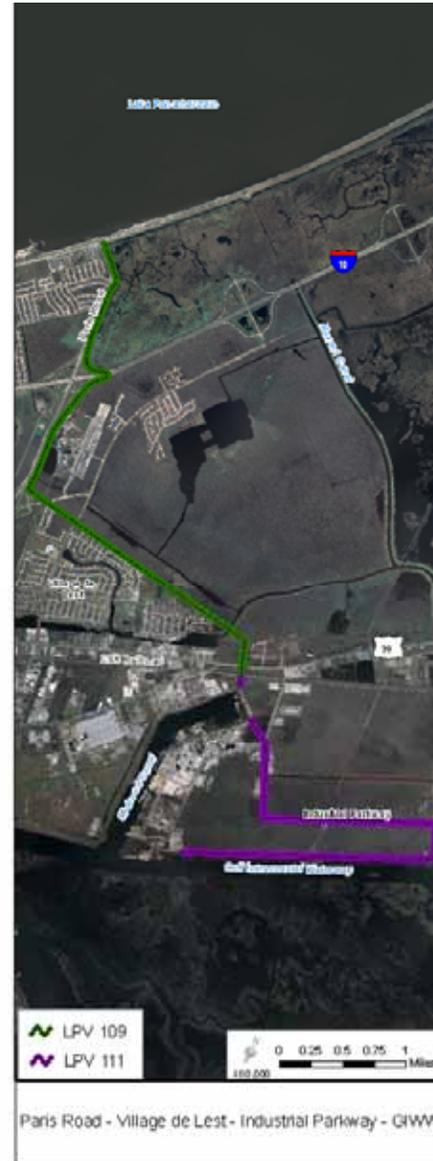
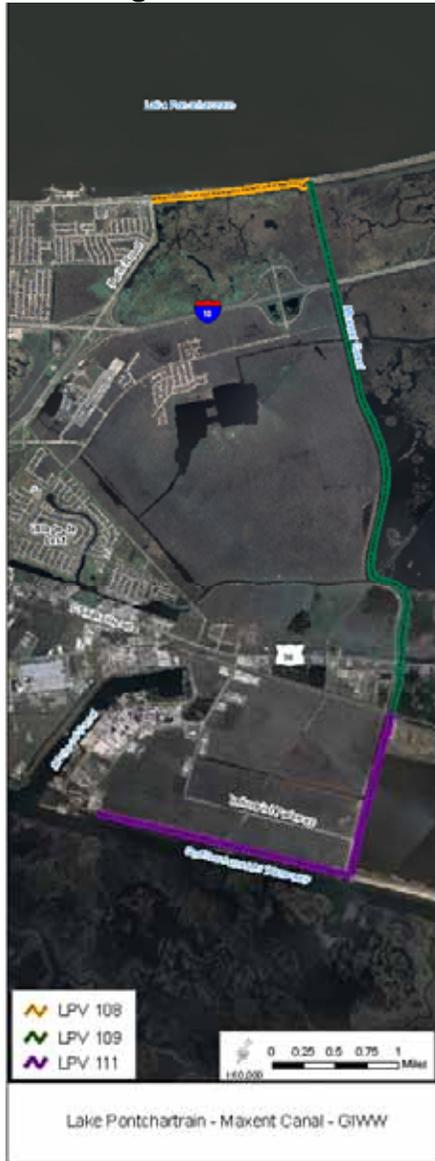
# IER #7 – Current Alignment





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# IER #7 - Alternative Alignments



Anticipated to be released for public review in May '08



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# Upcoming Levee Contracts

## New Orleans East Contracts to be awarded in Summer 2008

- LPV 106: Citrus Lakefront Levee (west of Paris Road) - TBD
- LPV 108: Paris Road to South Point – July
- LPV 109.01: South Point to Gulf Intracoastal Waterway - June
- LPV113: Citrus Back Levee (Michoud Canal to Michoud Slip) - April

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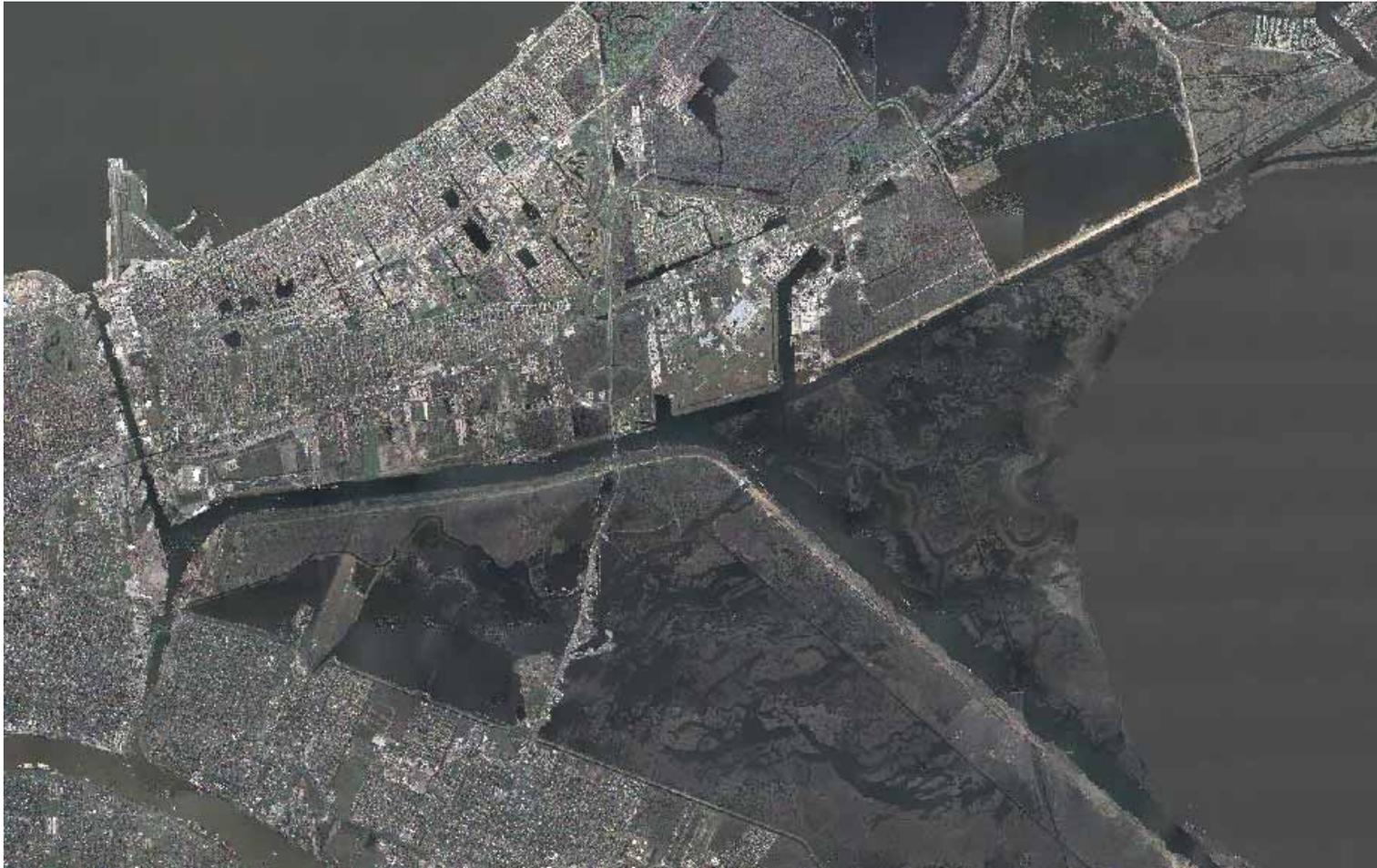
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# Improving Hurricane Protection on the Inner Harbor Navigation Canal IER #11



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# IHNC Surge Protection

*cost \$500 Million to \$1 Billion*



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# IHNC Surge Protection

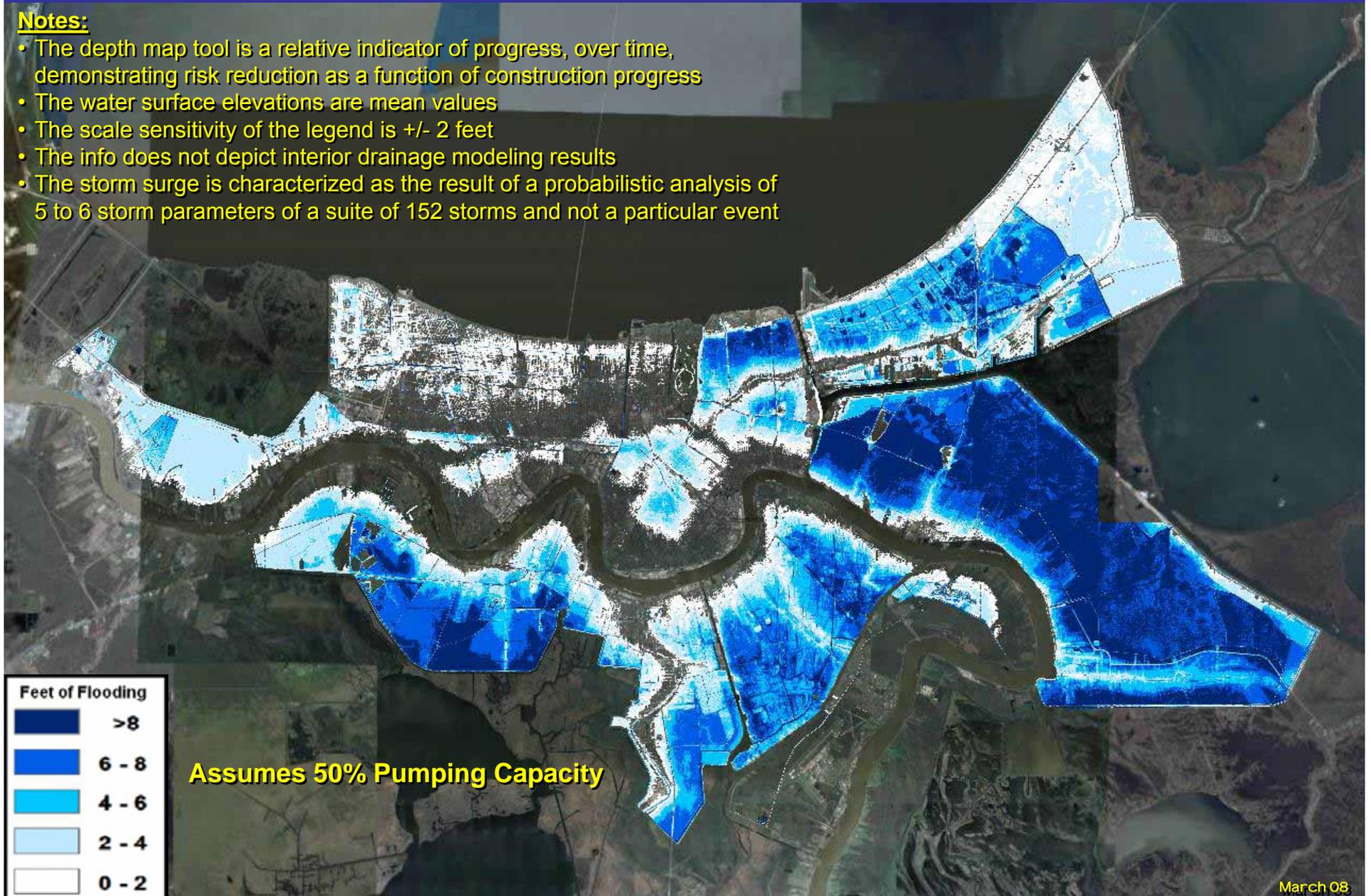
## Schedule

- Public comment period for IER 11 Tier 1 has closed and Col Lee is reviewing the public comments
- Contract proposals are currently under review
- Award design/build contract this month
- Detailed design will be disclosed and analyzed in Tier 2 NEPA documents
- Summer 08 construction begins
- Advance Measures Goal: provide an improved level of protection & reduced risk to the IHNC by 1 June 2009
- June 2011 construction complete

# On June 1, 2007, you had a 1% chance every year of flooding this deep from Hurricanes

## Notes:

- The depth map tool is a relative indicator of progress, over time, demonstrating risk reduction as a function of construction progress
- The water surface elevations are mean values
- The scale sensitivity of the legend is +/- 2 feet
- The info does not depict interior drainage modeling results
- The storm surge is characterized as the result of a probabilistic analysis of 5 to 6 storm parameters of a suite of 152 storms and not a particular event



# With the 100-year level of protection, you have a 1% chance every year of flooding this deep from Hurricanes

## Notes:

- The depth map tool is a relative indicator of progress, over time, demonstrating risk reduction as a function of construction progress
- The water surface elevations are mean values
- The scale sensitivity of the legend is +/- 2 feet
- The info does not depict interior drainage modeling results
- The storm surge is characterized as the result of a probabilistic analysis of 5 to 6 storm parameters of a suite of 152 storms and not a particular event





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# Pump Station 15 Update

**Damage from Katrina is currently being repaired.**

- Before Katrina 3 pumps were operational
- Station is currently operating with one pump.
- Two pumps are being repaired, will be working in approximately 3 weeks.
- Third pump which has been working but not at 100% effectiveness, will be going under extensive repairs.



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# Borrow



9 MARCH 2008

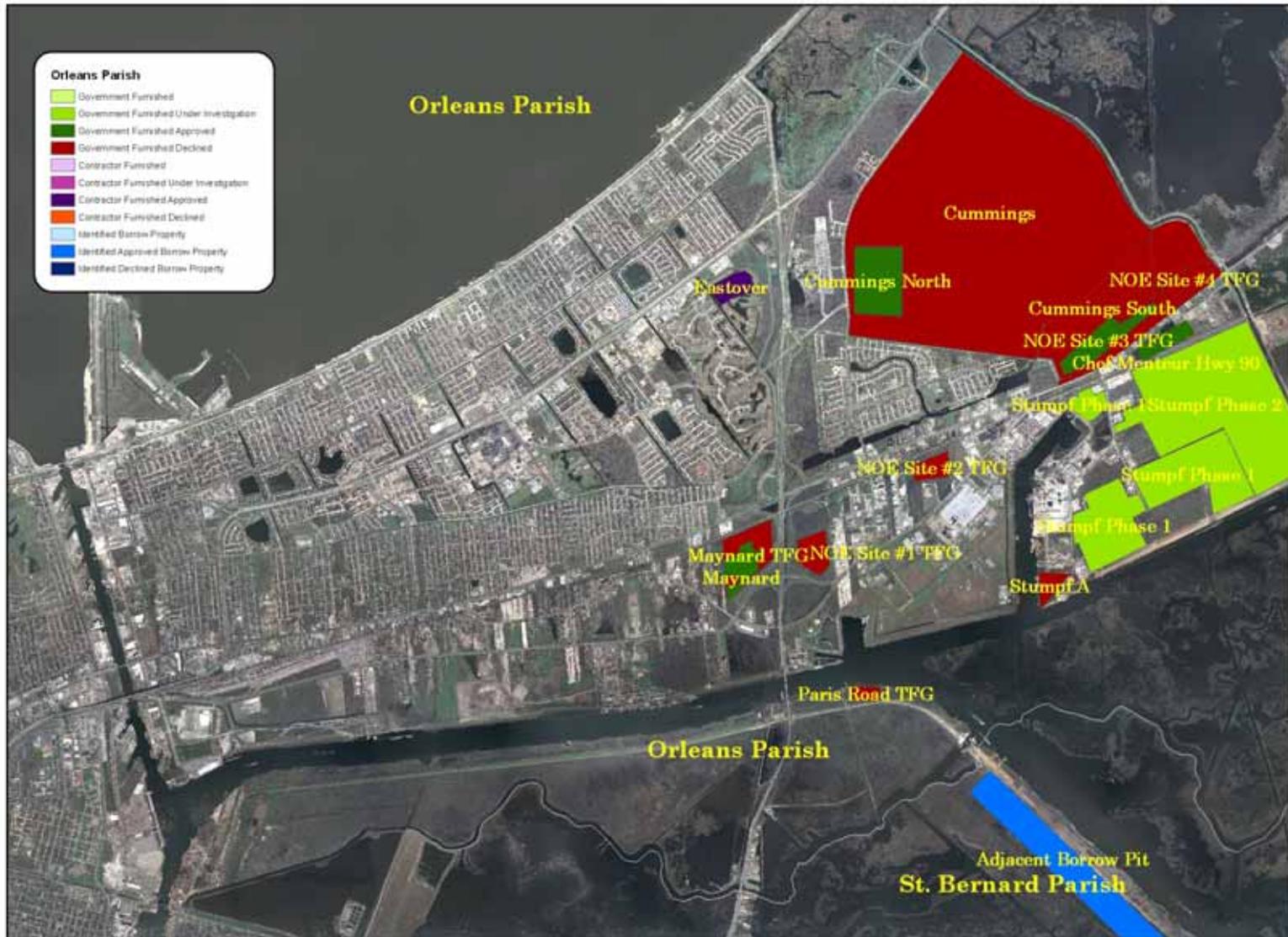


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# Investigated Borrow Sites New Orleans East



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# Neighborhood Borrow Maps: Cummings



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# Neighborhood Borrow Maps: Eastover



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# Neighborhood Borrow Maps: Maynard



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# Neighborhood Borrow Maps: Stumpf



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# Final Thoughts

- NOE receiving advanced protection NOW
- Planning, Designing and Constructing HPS projects is regulated by Law
- We want to hear your thoughts and concerns

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# Opportunities for Public Input

- Monthly Public Meetings throughout New Orleans Metro Area
  - Make sure to sign in tonight to get on our meeting notification mailing list [www.nolaenvironmental.gov](http://www.nolaenvironmental.gov)

- Comments can be submitted at any time at Questions and comments regarding Hurricane Protection Projects should be addressed to:

- Individual Environmental Reports (IER) 30-day Public Review

Gib Owen

PM-RS

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New Orleans, LA 70160-0267

Telephone: 504-862-1337

**E-mail: [mynenvironmental@usace.army.mil](mailto:mynenvironmental@usace.army.mil)**

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**NOLA**  
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NEW ORLEANS, LOUISIANA  
Environmental Compliance Data Bank



[www.nolaenvironmental.gov](http://www.nolaenvironmental.gov)

PROJECTS

MEETINGS

LIBRARY

DATA VIEWER

GET INVOLVED

RELATED LINKS

## Environmental Processes and NEPA Compliance

[What is NEPA?](#)

### FEATURED PROJECT



USACE-MVN Emergency Alternative Arrangements  
West Bank & Vicinity & Lake Pontchartrain & Vicinity  
Hurricane Protection Projects

[USACE NEPA Questions & Answers](#)

[USACE Alternative Arrangements NEPA Process](#)

[USACE Alternative Arrangements NEPA Process Appendix](#)

Welcome to NOLA Environmental! This site has been set up to share with the public the efforts being made by the U.S. Army Corps of Engineers and other Federal and state agencies in south Louisiana regarding the environmental compliance for proposed Federal and state Hurricane Protection Projects. Additional information pertaining to other Federal and state agencies' hurricane recovery efforts in southeast Louisiana will also be posted on the site as it becomes available.

The U.S. Army Corps of Engineers, Mississippi Valley Division, New Orleans District implemented Alternative Arrangements on March 13, 2007 under the provisions of the Council on Environmental Quality Regulations for Implementing the [National Environmental Policy Act](#) (40 CFR § 1506.11). This process was implemented in order to expeditiously complete environmental analysis for the 100-year level of Hurricane and Storm Damage Reduction effort authorized and funded by the Administration and the Congress. The proposed actions are located in southern Louisiana area and relate to the Federal effort to rebuild the Hurricane and Storm Damage Reduction system in the New Orleans Metropolitan area as a result of Hurricanes Katrina and Rita. [Learn More](#)

[IER 18 Government Furnished Borrow Draft Report](#) Public [Comment](#) Period: Oct. 28, 2007 - Dec. 04, 2007

[IER 19 Contractor Furnished Borrow Draft Report](#) Public [Comment](#) Period: Nov. 2, 2007 - Dec. 6, 2007

#### UPCOMING EVENTS: [Public Meetings](#)

[Nov. 29, 2007 7:00 - 9:00 pm \(Open House: 6:00 - 7:00 pm\), Orleans East Bank \(IER 5\)](#)

[Dec. 06, 2007 7:00 - 9:00 pm \(Open House: 6:00 - 7:00 pm\), St. Charles \(IER 1, 2, 3\)](#)

[Dec. 11, 2007 7:00 - 9:00 pm \(Open House: 6:00 - 7:00 pm\), Environmental Justice](#)



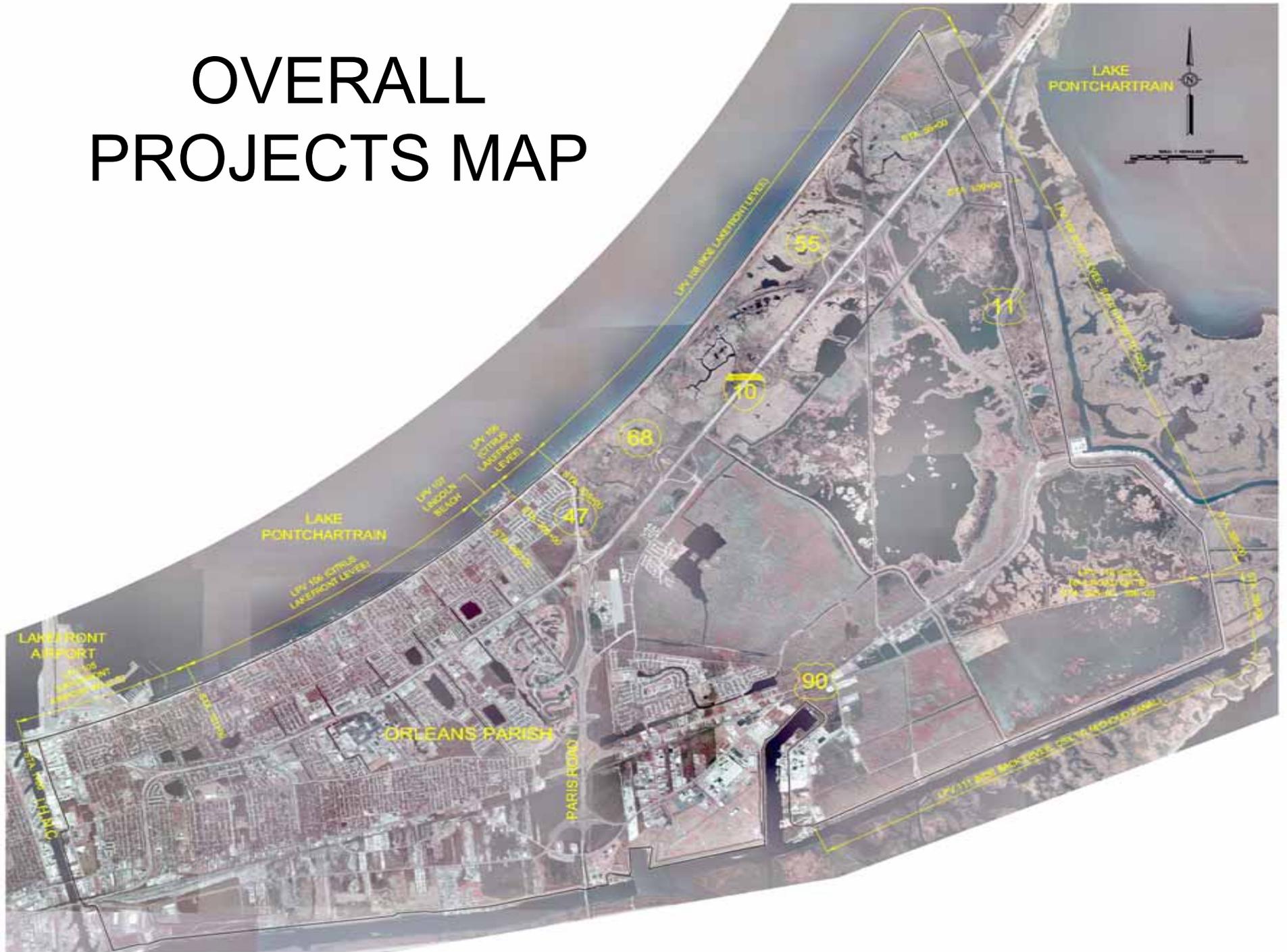


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# Back-up Slides

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# OVERALL PROJECTS MAP





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# Protection Challenges

- No option achievable before Hurricane season 2009
- Raising the walls
  - Constructability challenges
    - Limited Right of Way and room for construction
  - 8.5 miles total of floodwalls and gates
    - 4.2 miles South of I-10 overpass on IHNC
  - Impacts on commercial industry
- Temporary Barge Gate
  - Constructability challenges
    - Akin to permanent structure
  - Potential for NEPA impacts
  - Impacts on navigation
- Constrictions
  - Potential for NEPA impacts
  - Impacts on navigation
  - Real Estate



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- Advertised advance measures with 100-year project solicitation on 26 October 2007
- The amount of protection will be determined after a contractor is selected
- Solution could be part of 100-year structure or a completely separate structure
  - Detailed design will be disclosed and analyzed in Tier 2 NEPA document