## Greater New Orleans Hurricane & Storm Damage Risk Reduction System

# Comprehensive Environmental Document

Scoping Meeting Sept. 2, 2009

US Army Corps of Engineers
7400 Leake Avenue







## **Meeting Purpose**

Conduct a Scoping Meeting to discuss the development of a Comprehensive Environmental Document (CED). The CED will discuss cumulative benefits and impacts of the Hurricane and Storm Damage Risk Reduction System.

## **Meeting Intent**

Provide an opportunity for interested parties to suggest topics to be addressed in the CED.

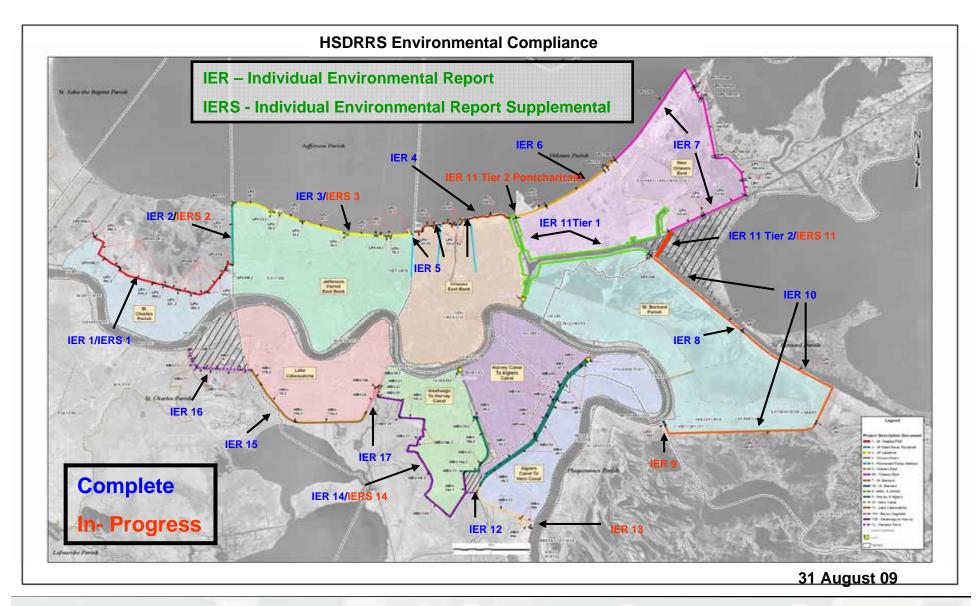


### **Timeline of Events**

- Hurricanes in the summer of 2005 caused major damage to the hurricane risk reduction system in southeast Louisiana.
- In spring 2007 the Army Corps of Engineers implemented alternative arrangements under provisions of the President's Council of Environmental Quality Regulations
  - Implement the National Environmental Policy Act alternative arrangements to expedite the construction of a hurricane and storm damage risk reduction system in the vicinity of New Orleans, Louisiana (HSDRRS)
  - Reduce flood risk and damages caused by a storm event that has a 1 percent chance of occurring each year
  - Justification for implementing alternative arrangements is the potential for severe economic loss to the Nation if the New Orleans area does not recover quickly



### Individual Environmental Report: Project Areas



### **Timeline of Events**

- The overall area for the Hurricane Storm Damage Risk Reduction System was divided into different projects. These individual projects mirror or match the area assessed in the IERs
- Because the IERs are being prepared concurrent with the design process, preliminary engineering designs are used to analyze impacts in the IERs
- If final engineering designs are revised then additional analysis and the preparation of IER Supplementals will be required



#### **Timeline of Events Continued**

- 16 Individual Environmental Reports (IERs) have been completed to describe the impacts of building the system
- 7 IERs have been completed to describe impacts of excavating clay (borrow) and utilizing borrow stockpile sites
- Additional IERs are under development that describe proposed system features, additional borrow areas and mitigation sites
- Supplemental IERs are required as project designs are finalized
  - IER 1 Supplemental has been completed



## Why were Alternative Arrangements Implemented

- To allow the HSDDRS work to be completed and reduce the risk of hurricane damage as quickly as possible.
- To meet the urgent need to provide a 1 percent hurricane risk reduction system
- To complete the environmental analysis in a timeframe consistent with the expedited planning and construction.







## How do Alternative Arrangements differ from standard NEPA process

#### **Traditional NEPA**

Supplemental Environmental Impact Statement (SEIS) - 2

SEIS covers entire project area WBV or LPV

No Real Estate acquired or construction started until all environmental compliance completed

Supplemental Environmental Assessments or SEIS's required for project feature changes

No Comprehensive Document

Preliminary engineering designs are used to analyze the impacts to the human environment of each alternative

Scoping Meeting

**Interagency Meetings** 



#### **Alternative NEPA Arrangements**

Individual Environmental Reports (IER) - 30 plus

IER completed for stand alone reaches within project areas

Real Estate acquired and construction started by IER reach

Supplemental IER required for project feature changes.

Comprehensive Environmental Document

Preliminary engineering designs are used to analyze the impacts to the human environment of each alternative

**Scoping Meetings** 

Interagency meetings

**Public Meetings** 

Web Site - Dedicated to Environmental Process



### Resources

#### www.nolaenvironmental.gov



#### http://www.mvn.usace.army.mil





## Impacts Analyzed in IERs

- Air Quality
- Water Quality
- Terrestrial Habitat
- Aquatic Habitat
- Fish and Wildlife
- Wetlands
- Threatened and Endangered Species
- Recreational Resources
- Aesthetic (Visual) Resources
- Cultural Resources
- Prime and Unique Farmland



Wetlands



Cultural Resources Investigation



## Impacts Analyzed in IERs continued

- Displacement of Population and Housing
- Impacts to Employment, Business and Industry Activity
- Availability of Public Facilities and Services
- Effects on Transportation
- Disruption of Desirable Community and Regional Growth
- Impacts to Tax Revenues and Property Values
- Changes in Community Cohesion
- Environmental Justice
- Hazardous, Toxic and Radioactive Waste



**Transportation Review** 



**HTRW** 



**Transportation Review** 



## Acknowledged Data Gaps

- Transportation Impacts
  - Interim Transportation Report Sept. 09
- Mitigation Impacts
  - Mitigation IERs
- Air Emissions
  - Coordinating with Environmental Protection Agency, Louisiana Department of Environmental Quality, and Regional Planning Commission
- System Cumulative Impacts



## Recommendations

 In addition to what the Corps has described, what else should be included in the Comprehensive Environmental Document?



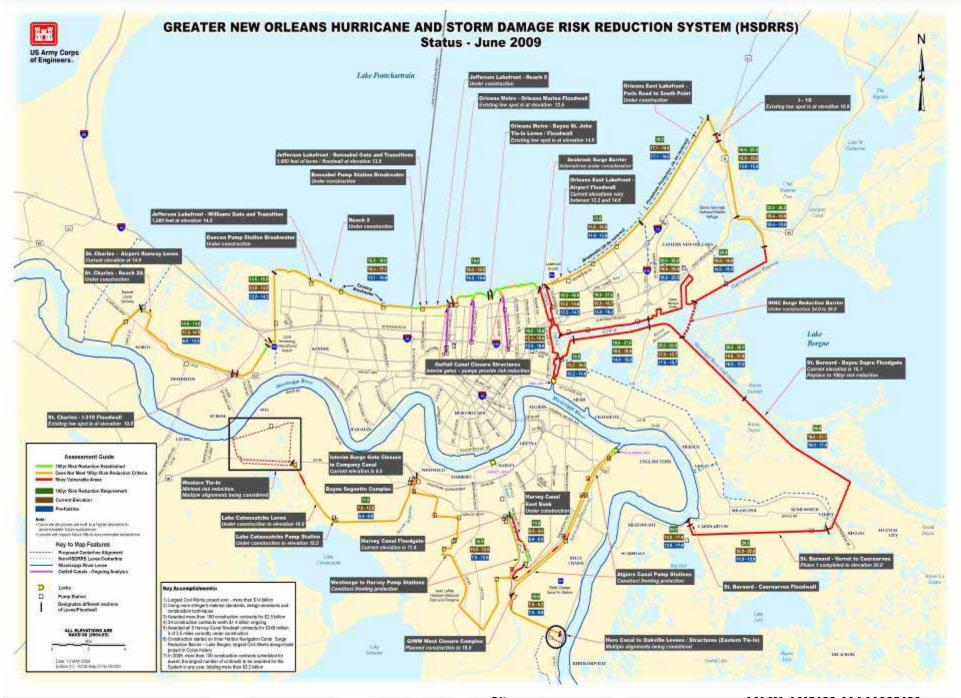
## Thank you



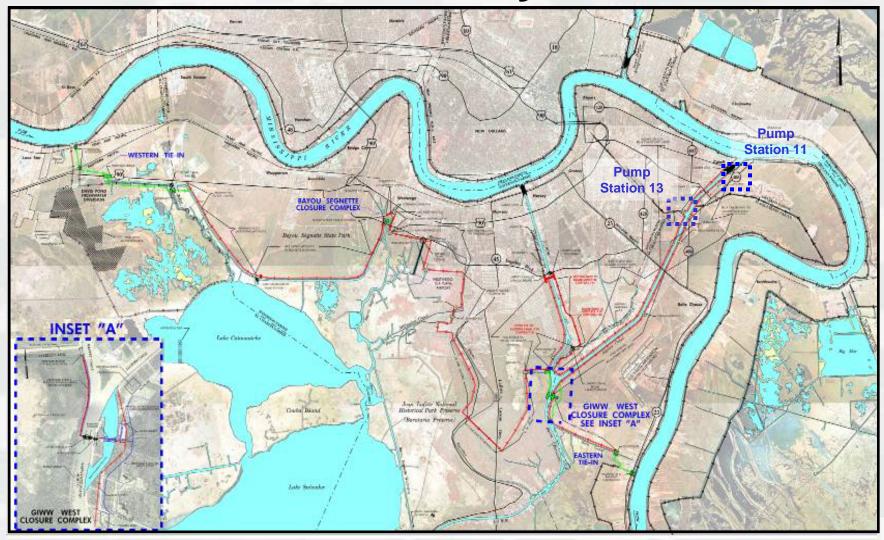
## **Buying Down Risk**

**Initial Risk** Nonstructural - Zoning **Building Codes Outreach Evacuation Plan Insurance** Levees / Floodwalls / Structures Risk Residual Risk



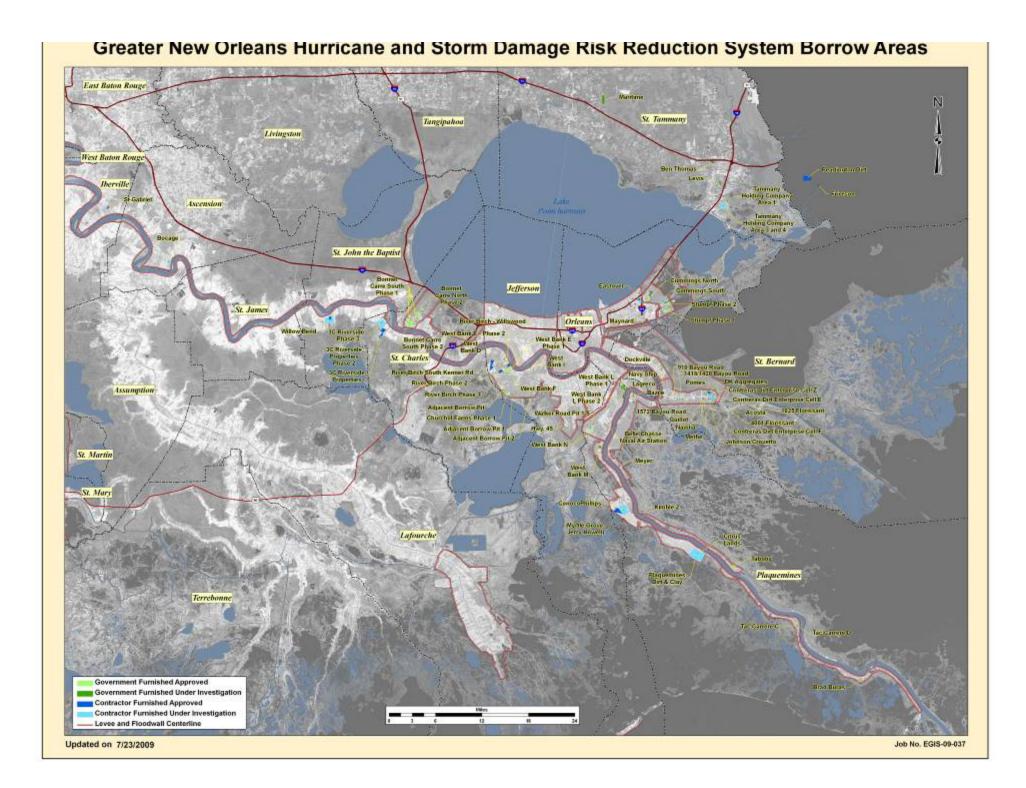


## Westbank and Vicinity Risk Reduction

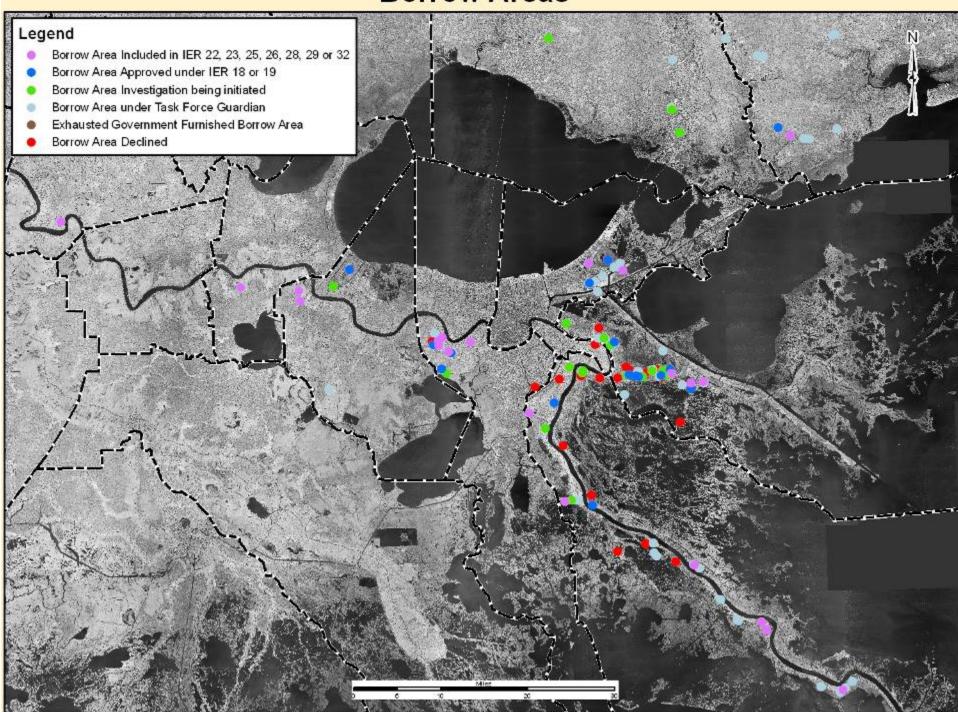


Current or approved alignments
 Proposed or recommended alignments

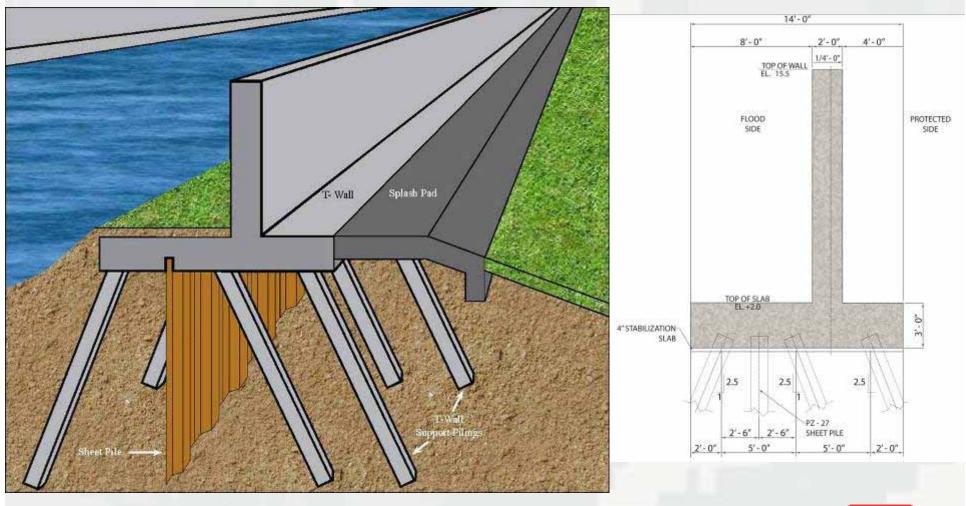




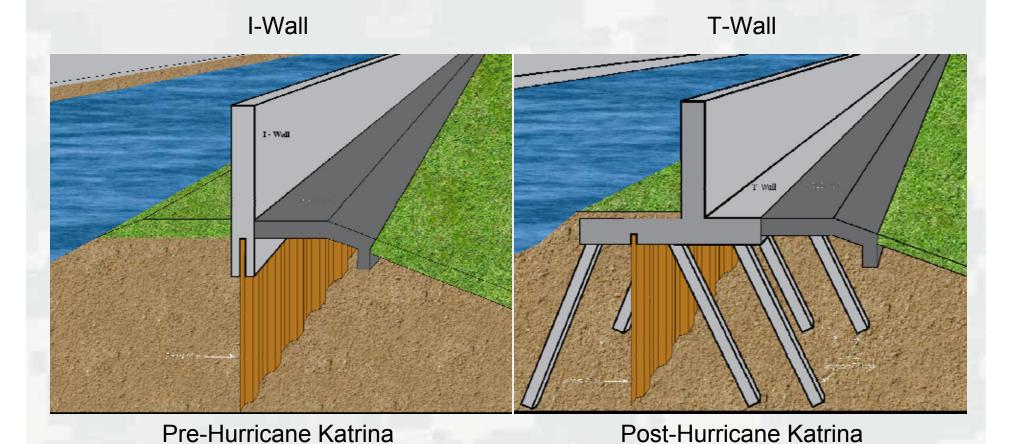
#### DUITUW AICAS



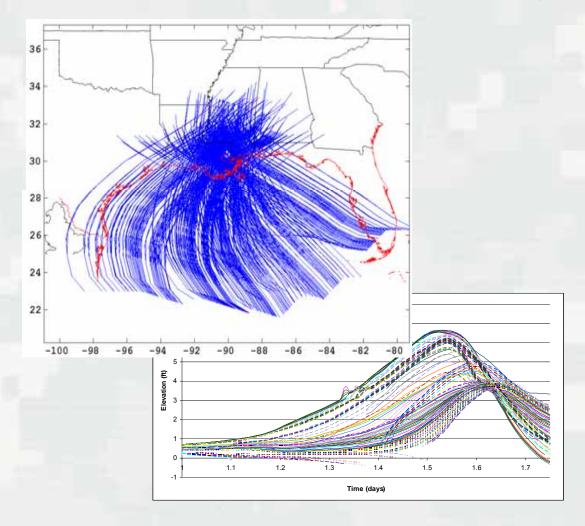
### T- Wall



## Floodwall Improvements



## Hurricane Paths Considered in the Risk Analysis



- · 3 HPS Geometries
  - 。Pre-Katrina
  - 。Current (1 June 07)
  - 。100-year LOP (~2011)
- 152 storm hydrographs
- 350+ features
  - Floodwalls
  - Levees
  - Pumps Stations
- → 62,928 Hurricane
- → Hydrographs

