



U.S. ARMY CORPS OF ENGINEERS  
HURRICANE PROTECTION SYSTEM

NEW ORLEANS DISTRICT

AND THE



US Army Corps  
of Engineers®  
New Orleans District

# *Lake Pontchartrain and Vicinity Hurricane Protection System*

## *100-year Level of Protection Projects*

*September 25, 2007*

# *National Environmental Policy Act*

## *“NEPA”*

- ◆ **Required for all major federal actions**
- ◆ **Analyze potential impacts to the human 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**

# *Lake Pontchartrain and Vicinity Hurricane Protection System*

## ◆ New Orleans Lakefront

- IER 4: Lakefront Levees and Floodwalls
- IER 5: Outfall Canal Closures and Permanent Pump Stations

## ◆ Multi-basin

- IER 11: Improved Protection on the Inner Harbor Navigation Canal

## ◆ New Orleans East

- IER 6: Levees and Floodwalls, IHNC to Paris Road
- IER 7: Levees and Floodwalls, Paris Road to Michoud Canal

## ◆ St. Bernard Parish

- IER 8: Bayou Bienvenue and Dupre Control Structures
- IER 9: Caernarvon Floodwall
- IER 10: Chalmette Loop Levees

# ***New Orleans Lakefront Levees & Floodwalls IER #4***

## **◆ Alternatives:**

- **No Action**

- **Raise homes and businesses**

- **Modify existing hurricane protection system**

  - **Existing alignment levee straddle**

  - **Flood side levee shift**

  - **Protected side levee shift**

    - ◆ **Alternative scales:**

      - **Increase levee height**

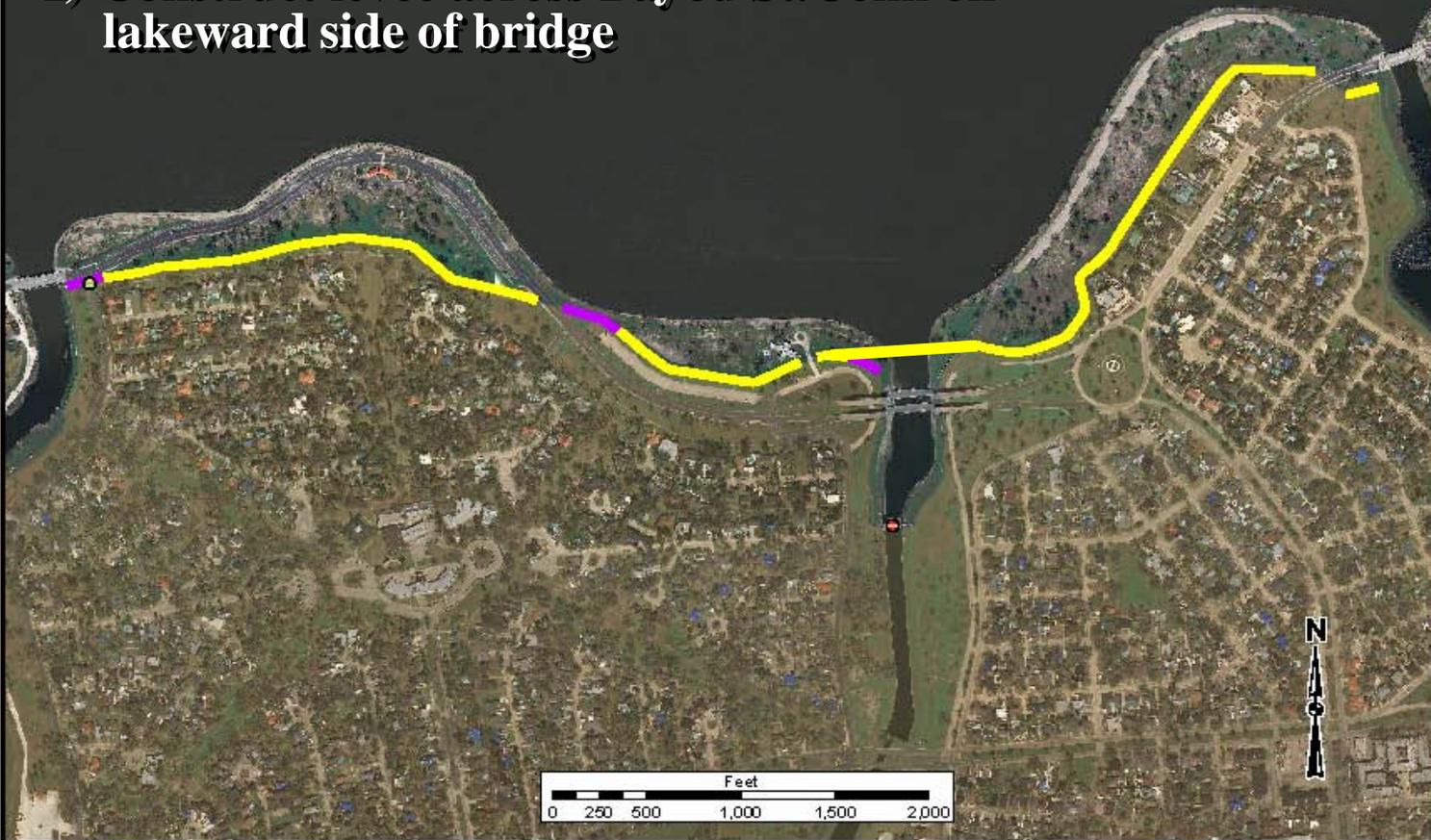
      - **Increase levee height using deep soil mixing**

      - **Replace levee with floodwall**

      - **Add floodwall to levee base**

**Additional alternatives being considered:**

- 1) Modify the Bayou St. John sector gate structure, floodwalls and levees along Bayou St. John.**
- 2) Construct levee across Bayou St. John on lakeward side of bridge**



U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
MISSISSIPPI VALLEY DIVISION

**Map Legend**

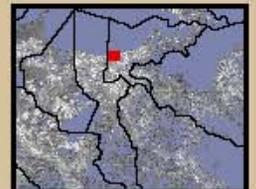
- Canal Floodgate
- Inland Floodgate
- Railroad Floodgate
- Rose Floodgate
- Pump Station
- Federal Hurricane Flood-wall
- Federal Hurricane Flood-wall
- Federal Hurricane Levee
- Federal Hurricane Levee and Flood-wall
- Inland Protection Levee
- Federal Hurricane Levee
- Federal Hurricane Levee and Flood-wall
- Federal Hurricane Levee
- Federal Hurricane Levee and Flood-wall
- Federal Hurricane Levee and Flood-wall
- Federal Flood-wall
- Local Drainage Levee, Local Hurricane Levee
- Local Hurricane Levee and Flood-wall
- Local Levee, Federal Flood
- Rose Levee
- Parish Boundary

**PROJECT STATISTICS**  
 Total Length: 7121'  
 Federal Hurricane Levee: 6479'  
 Federal Levee and Floodwall: 668'  
 Structure Gaps: 6:573'  
 Authorized Grade: 18.0'  
 100-Year Grade: 18.5'-20.5'  
 Existing Elevation: 16.5'-20.0'  
 Est. Cost (Millions): Phase 1 - \$9.1,  
 Phase 2 - \$46.0

**AREA MAP**



**REGION MAP**



# *Outfall Canal Closures and Permanent Pump Stations IER #5*



# ***Purpose and Need***

**To protect the City of New Orleans and Jefferson Parish from storm surge-induced flooding through the 17th Street, Orleans Avenue, and London Avenue Canals, while not impeding the ability of the area's internal drainage system to function.**

## ***Alternatives***

- 1) No Action**
- 2) Elevate homes and businesses**
- 3) Pontchartrain Barrier System**
- 4) Improve Parallel Protection**
- 5) Canal Closure and Pumps**

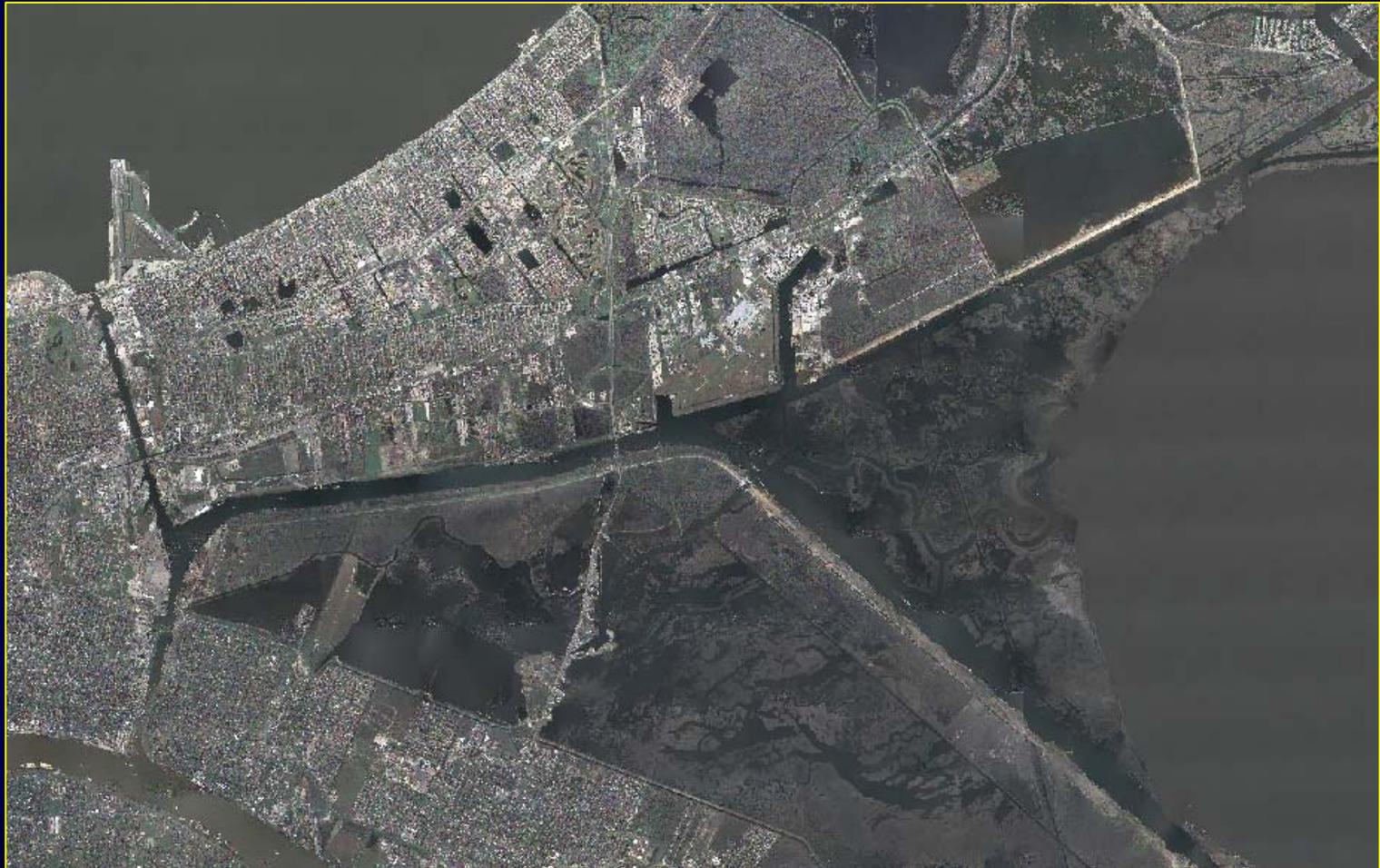
## ***Alternative 4: Improve Parallel Protection***

- **Upgrade floodwalls along canals to provide 100-year flood protection**
- **Variations of this alternative include:**
  - **Concrete-lined canals**
  - **Improved existing S&WB pump station capacity**
  - **Removal of ICS pumps only, keep ICS gates in place**

# ***Alternative 5: Canal Closure and Pumping***

- **Provides gated pump stations at or near the lake**
- **Possible variations of this alternative include:**
  - **New permanent pump stations to operate in series with existing S&WB pump stations**
  - **Convert ICS to permanent**
  - **New permanent pump stations and lowered canals to operate in place of existing S&WB pump stations**
  - **Pressurized system/Box culvert**
- **Could also include various interior drainage system improvements to reduce required pumping capacity at permanent pump stations**

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





**1. No Action**

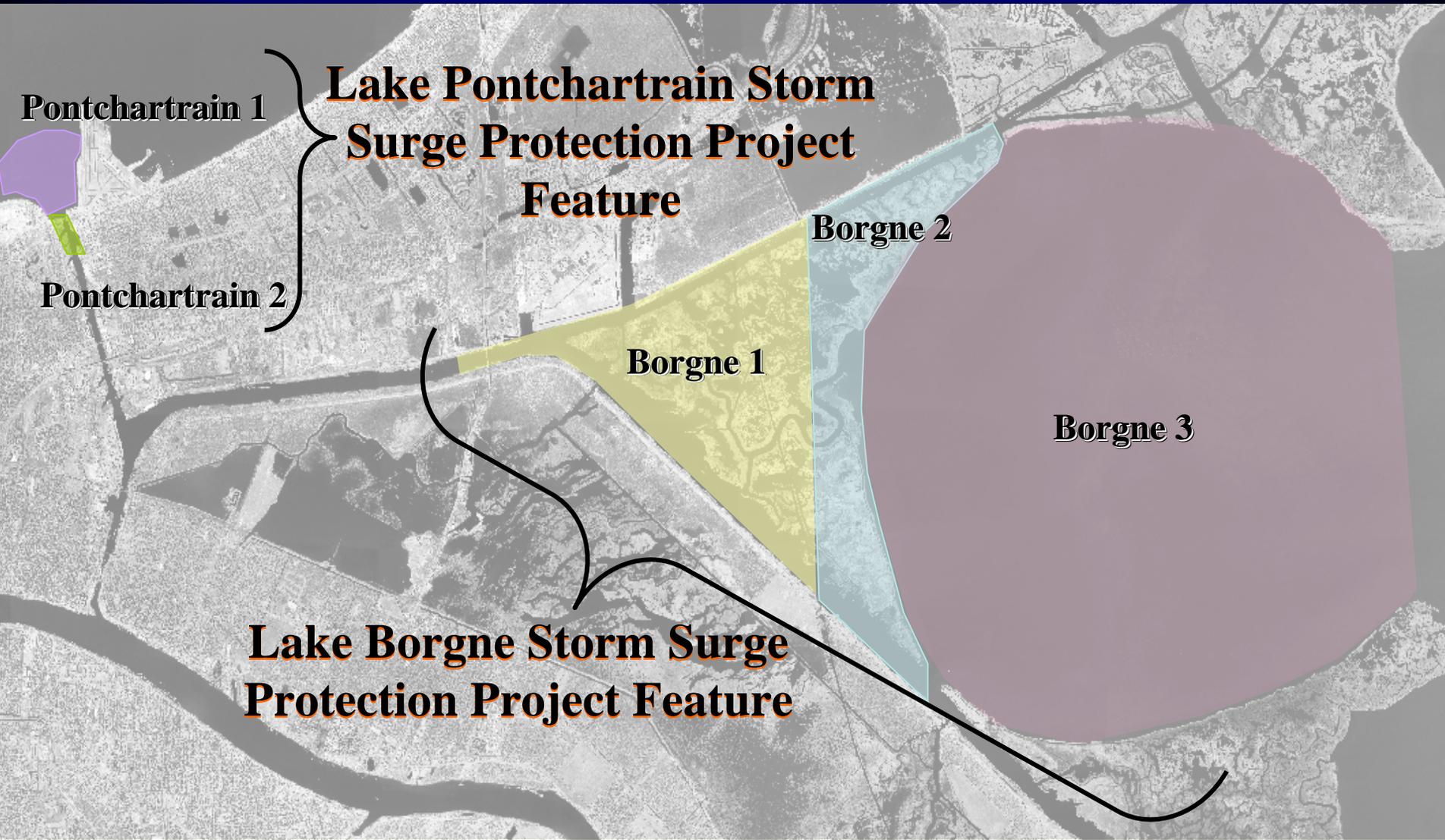
**2. Raise buildings in flood zone**

**3. Raise levees and floodwalls**

**4. Construct channel and/or water body structures**

**5. Construct wetlands**

# *Alternative 4: Project Features and Location Ranges*



# ***Alternatives and Preliminary Impacts to Significant Resources***

## **No Action: Bring to authorized grade**

**Socio economic impacts: lack of adequate hurricane protection would result in flooding from some hurricanes.**

## **Non-structural: Raise buildings.**

**Socio economic impacts: damages to buildings would be reduced but study area would be subject to flooding**

## **Raise levees and floodwalls to 100 year flood protection level**

**Possible HTRW contamination and water quality impacts from sediment disturbance and construction activities, must maintain navigation so footprint would impact businesses and adjacent households, tree removals.**

## **Construct channel and/or water body structures for storm surge protection**

**Various acreages of wetland and habitat impacts, salinity changes, shoreline erosion, short-term construction impacts to water quality, fisheries impacts, T&E impacts, tree removals.**

## **Construct wetlands**

**Socio economic, impacts to flow and corresponding impacts to wetlands, salinity, sedimentation, fisheries impacts, short-term construction impacts to water quality, T&E impacts.**

# *Opportunities for Public Input*

## *Summary*

- ☞ **Monthly Public Meetings throughout New Orleans Metro Area**
  - **Make sure to sign in tonight to get on our meeting notification mailing list**
- ☞ **Comments can be submitted at any time at [www.nolaenvironmental.gov](http://www.nolaenvironmental.gov)**
- ☞ **Individual Environmental Reports (IER) 30-day Public Review**

- **IER 4: New Orleans Lakefront Levees**
  - » **Begins December 23, 2007**
- **IER 5: Outfall Canal Protection**
  - » **Begins March 1, 2008**
- **IER 6: New Orleans East, IHNC to Paris Rd.**
  - » **Begins December 1, 2007**
- **IER 7: New Orleans East, Paris Rd. to Michoud Canal**
  - » **Begins December 1, 2007**
- **IER 8: Bayou Bienvenue & Bayou Dupre Control Structures**
  - » **Begins November 21, 2007**
- **IER 9: Caernarvon Floodwall**
  - » **Begins November 21, 2007**
- **IER 10: Chalmette Loop Levees**
  - » **Begins December 15, 2007**
- **IER 11: Improved Protection on IHNC**
  - » **Begins January 15, 2008**

**Questions and comments regarding Hurricane Protection Projects  
should be addressed to:**

**Gib Owen**

**PM-RS**

**P.O. Box 60267**

**New Orleans, LA 70160-0267**

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

**Telephone: 504-862-1337**

**Your comments are welcome anytime now until the close  
of the IER Public Review Period**



## 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](#)

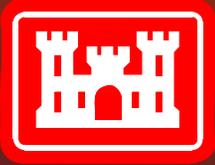
Welcome to NOLA Environmental! This site has been set up to share with the public the efforts being made by the U.S. Army Corps of Engineers and other Federal and state agencies in south Louisiana regarding the environmental compliance for proposed Federal and state Hurricane Protection Projects. Additional 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. [\[Learn More\]](#)

#### UPCOMING EVENTS:

[Public Meeting](#): July 26, 2007 7:00 pm, St. Charles Sub Basin ~ Ramada Inn 100 James Drive St. Rose, LA 70087

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



**US Army Corps  
of Engineers**®  
New Orleans District



# *Discussion*

