

# Greater New Orleans Hurricane and Storm Damage Risk Reduction System Mitigation Public Meeting

NP Trist Middle School  
Meraux  
May 19, 2010



US Army Corps of Engineers  
**BUILDING STRONG**®





# Meeting Purpose

## Mitigation Open House & Project Scoping

**Meet one on one with Corps representatives, learn about mitigation, and give us your ideas on how and where to mitigate for unavoidable project induced impacts from the HSDRRS work.**





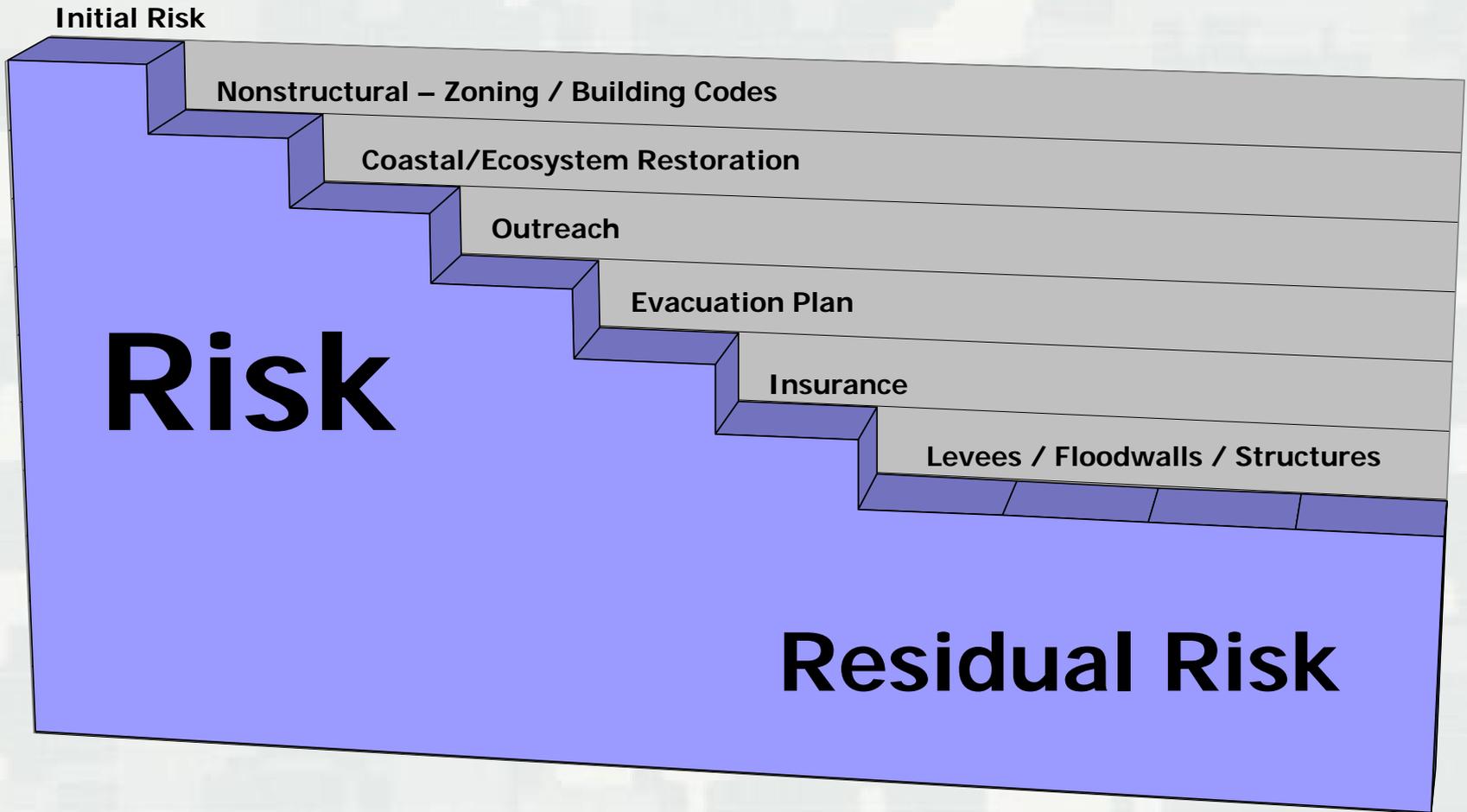
# Meeting Agenda

- **Impacts generated by construction of the following HSDRRS projects:**
  - Bayou Dupre Control Structure
  - Caernarvon Floodwall
  - Chalmette Loop Levee T-Walls
  - Inner Harbor Navigation Canal Surge Barrier – Lake Borgne
- **Mitigation Program Objectives**
- **Feedback Session**
  - **Where and how should mitigation occur?**





# Risk – Shared Responsibility





# National Environmental Policy Act (NEPA)

- **Alternatives for all major federal actions must be analyzed**
- **Impacts to the human and natural environment quantified**
- **Impacts discussed in environmental documents**
- **Public Involvement is KEY. We want to hear from you!**





# Individual Environmental Report: Project Areas



# St. Bernard Parish Hurricane & Storm Damage Risk Reduction System Chalmette Loop Levee

**IHNC Surge Barrier**

Project Elevation: 24' - 26'

**LPV 142**

Project Elevation: 15'

**LPV 145**

Project Elevation: 29' - 32'

**LPV 144**

Project Elevation: 31'

**NP Trist  
Middle School**

**LPV 146**

Project Elevation: 28' - 30'

**LPV 149**

Project Elevation: 26'

**LPV 148**

Project Elevation: 27' - 32'

**LPV 147**

Project Elevation: 30'

## Lake Pontchartrain and Vicinity (LPV) Summary

Completed: LPV 142 – IHNC to Bayou Bienvenue

**IER 8:** LPV 144 – Bayou Dupre Floodgate

**IER 9:** LPV 149 – Caernarvon

**IER 10:**

LPV 145 – Bayou Bienvenue to Bayou Dupre

LPV 146 – Bayou Dupre to Hwy 46

LPV 147 – Hwy 46 Floodgates

LPV 148 – Verret to Caernarvon



# LPV 144 - Bayou Dupre Floodgate

Individual Environmental Report 8

*Under Construction*



# Bayou Dupre Floodgate

## Individual Environmental Report 8 Impacts – Current Working Estimate

Habitat Type	Quantity (acres)	Quality (AAHUs*)
Bottomland Hardwood Wet	0	0
Bottomland Hardwood Dry	0	0
Swamp	0	0
Marshlands	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

\*AAHU (Average Annual Habitat Unit) is a numerical value representing the quality of a habitat





# LPV 149 - Caernarvon Floodwall

Individual Environmental Report 9

*Contract Award – June 2010*



# LPV 149 - Caernarvon Floodwall

Individual Environmental Report 9

*Contract Award – June 2010*



# Caernarvon Floodwall

## Individual Environmental Report 9

### Impacts – Current Working Estimate

Habitat Type	Quantity (acres)	Quality (AAHUs*)
Bottomland Hardwood Wet	1.16	.66
Bottomland Hardwood Dry	10	4.65
Swamp	0	0
Marshlands	1.9	1.2
<b>Total</b>	<b>13.06</b>	<b>6.51</b>

\*AAHU (Average Annual Habitat Unit) is a numerical value representing the quality of a habitat





# LPV 145 - Chalmette Loop Levee

Individual Environmental Report 10 - Bayou Bienvenue to Bayou Dupre  
*Under Construction*





# LPV 145 - Chalmette Loop Levee

Individual Environmental Report 10 - Bayou Bienvenue to Bayou Dupre  
*Under Construction*



# LPV 145 - Chalmette Loop Levee

Individual Environmental Report 10 - Bayou Bienvenue to Bayou Dupre  
*Under Construction*



# LPV 145 - Chalmette Loop Levee

Individual Environmental Report 10 - Bayou Bienvenue to Bayou Dupre  
*Under Construction*



# LPV 146 - Chalmette Loop Levee

Individual Environmental Report 10 - Bayou Dupre to Highway 46  
*Under Construction*



# LPV 146 - Chalmette Loop Levee

Individual Environmental Report 10 – Bayou Dupre to Highway 46  
*Under Construction*



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# LPV 147 - Chalmette Loop Levee

Individual Environmental Report 10 – Highway 46 Floodgates  
*Under Construction*



# LPV 148.02 - Chalmette Loop Levee

Individual Environmental Report 10 – Verrett to Caernarvon

*Under Construction*



# Chalmette Loop Levee

## Individual Environmental Report 10

### Impacts – Current Working Estimate

<b>Habitat Type</b>	<b>Quantity (acres)</b>	<b>Quality (AAHUs*)</b>
Bottomland Hardwood Wet	74	31.66
Bottomland Hardwood Dry	0	0
Swamp	0	0
Marshlands	430	267.25
<b>Total</b>	<b>504</b>	<b>298.91</b>

\*AAHU (Average Annual Habitat Unit) is a numerical value representing the quality of a habitat





# Inner Harbor Navigation Canal – Lake Borgne

## Individual Environmental Report 11



# Inner Harbor Navigation Canal – Lake Borgne

## Individual Environmental Report 11



# Inner Harbor Navigation Canal

## Individual Environmental Report 11 Impacts – Current Working Estimate

Habitat Type	Quantity (acres)	Quality (AAHUs*)
Bottomland Hardwood Wet	15	2.59
Bottomland Hardwood Dry	0	0
Swamp	0	0
Marshlands	122	24.33
<b>Total</b>	<b>137</b>	<b>26.92</b>

\*AAHU (Average Annual Habitat Unit) is a numerical value representing the quality of a habitat





# Mitigation

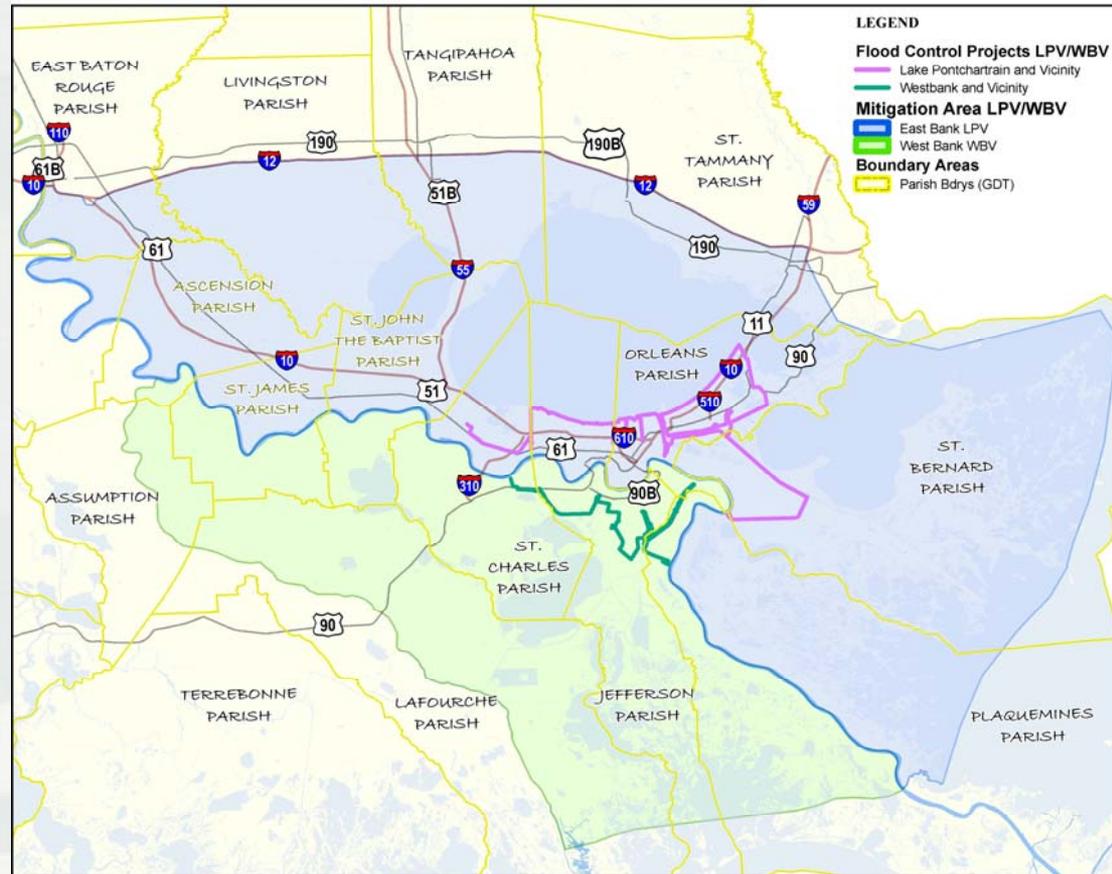
- **Avoid impacts to natural resources**
- **Minimize impacts to the greatest extent possible**
- **Compensate for unavoidable impacts**
- **Mitigation plans will be discussed in environmental documents**
- **Mitigation is funded**



# Mitigation Policies

## Generally mitigation would occur:

- As close as possible to the impact area
- Within the same hydrologic basin (Barataria or Lake Pontchartrain)
- Within same habitat type
  - Replace quantity (acres)
  - Replace quality (AAHUs)
- Before or concurrent with impacts



# Example Mitigation Project

## Terrebonne Parish Non-Federal Levee

- In 2009, USACE constructed a 6.5 mile surge protection levee in Dulac, LA
- To mitigate the levee construction
  - Marshlands are currently under construction
  - Bottomland hardwood credits will be purchased from a mitigation bank



View of Mitigation Cell #2 under construction  
Containment dikes at left, new levee at right.  
(View to southeast)





# Example of Project Impacts

## IHNC Surge Barrier

- **Construction began May 2009**
- **Types of impacts:**
  - **Direct**
  - **Indirect**
  - **Cumulative**





# Affected Habitats



Bottomland Hardwoods



Salt Marsh



Brackish Marsh



Swamp



Intermediate Marsh



Fresh Marsh



# Total LPV Impacts

## Lake Pontchartrain & Vicinity Projects

HSDRRS – Current Working Estimate

<b>Habitat Type</b>	<b>Quantity (acres)</b>	<b>Quality (AAHUs*)</b>
Bottomland Hardwood Wet	473.59	227.51
Bottomland Hardwood Dry	236.00	73.44
Swamp	113.71	70.81
Marshlands	1006.39	497.53
<b>Total</b>	<b>1829.69</b>	<b>869.29</b>

\*AAHU (Average Annual Habitat Unit) is a numerical value representing the quality of a habitat



# Total WBV Impacts

## West Bank & Vicinity Projects

Original Construction and HSDRRS – Current Working Estimate

<b>Habitat Type</b>	<b>Quantity (acres)</b>	<b>Quality (AAHUs*)</b>
Bottomland Hardwood Wet	1887.70	1067.55
Bottomland Hardwood Dry	29.90	10.62
Swamp	204.65	124.88
Marshlands	137.80	66.30
<b>Total</b>	<b>2260.05</b>	<b>1269.35</b>

\*AAHU (Average Annual Habitat Unit) is a numerical value representing the quality of a habitat



# Mitigation Tentative Timeline

- **Initial Public Meetings** May 2010
- **Initial Screening of Measures** Summer 2010
- **Final Screening of Measures** Spring 2011
- **Identify Proposed Mitigation Plan** Summer 2011
- **Release Individual Environmental Reports** Spring 2012
- **Individual Environmental Reports Signed** Spring 2012
- **Design Mitigation Projects** Fall 2012
- **Start Construction** Fall 2013





# ***Opportunities for Public Input***

- Regular public meetings throughout the Hurricane and Storm Damage Risk Reduction System (HSDRRS) Area
- Sign in tonight to get on our meeting notification mailing list!
- Construction Impact Hotline: 1- 877- 427- 0345
- Comments can be submitted at any time at  
[www.nolaenvironmental.gov](http://www.nolaenvironmental.gov)

Questions and comments may be submitted to

Telephone: 504 - 862 - 2201

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



# Resources

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

**NOLA Environmental**  
NEW ORLEANS, LOUISIANA  
Environmental Compliance Data Bank  
[www.nolaenvironmental.gov](http://www.nolaenvironmental.gov)

PROJECTS | MEETINGS | LIBRARY | DATA VIEWER | GET INVOLVED | RELATED LINKS

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 Risk Reduction 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). Learn more...

**Announcements**

- Draft [IER 7 Public Comment Period](#) 5/6 - 6/4
- Draft [IER 13 Comment Period](#) extended to 5/18
- Draft [IER 5 Public Comment Period](#) 5/4 - 4/3
- Draft [IER 16 Public Comment Period](#) 5/1 - 5/30
- Draft [IER 6 Public Comment Period](#) 4/24 - 5/23
- [IER 6 - The Clean Water Act Section 404 Public Notice Comment Period](#) 4/24 - 5/23
- [Orleans Parish Pump Station Stormproofing EA #474 Drafts Public Comment Period](#) 4/17 - 5/23
- [Jefferson Parish Pump Station Stormproofing EA #475 Drafts Public Comment Period](#) 4/14 - 5/20
- Draft [IER 10 Public Comment Period](#) 4/13 - 5/12

[More...](#)

**Upcoming**

- [05/11/2009 - Public Meeting \(IER 8, 9, 10 and borrow\)](#)
- [05/17/2009 - Draft IER 10 Public Comment Period Ends](#)

[More...](#)

**Newly Available**

**NEW** NOLA Environmental Basic Data Viewer

- [News Release 06 May 09 Draft IER 5](#)
- [IER 5 - Phase 2 Final Report: Operating Scenario Analysis](#)

[More...](#)

**FEATURED PROJECT**

USACE-MVN Emergency Alternative Arrangements  
Greater New Orleans  
Hurricane and Storm Damage  
Risk Reduction System Projects

<http://www.mvn.usace.army.mil>

U.S. Army Corps of Engineers New Orleans District - Microsoft Internet Explorer, provided by USACE, New Orleans District

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

Search USACE | Search

**Floodwall:**  
Building flood bigger, stronger, better.  
The U.S. Army Corps of Engineers is working to work speedily to complete the Hurricane and Storm Damage Risk Reduction System (HSDRS) by 2012. To this end, the Corps is using valuable lessons learned to construct more resilient levees and floodwalls.

[Go to project >>](#)

**PUBLIC INFORMATION**

- [Hazardous & Storm Damage Risk Reduction: LEARN MORE about what the Corps is doing to reduce risk. HARBOR](#)
- [Emergency Information: Flood Warnings, Disaster Response, Public Information and More...](#)
- [NOLA Environmental: Did you miss a meeting? No problem! Find presentations, summaries and more...](#)

**TOP HEADLINES**

- [Document re/missa added on YouTube? Thanks](#)
- [CASA MIAMI environmental document for public review](#)
- [Sign to speed update on WaterBank risk reduction website](#)
- [CASA Banker Rejected on Risk and Floodwall](#)

[Print](#) | [Email](#) | [RSS](#)

**ASK THE CORPS**

The Corps wants to hear from you!

**Q:** Do you have information on the closing of Industrial Locks on August 1, 2009 for 60 days?

**A:** Yes, for information regarding the August 1st closing of the lower Harbor Navigation Canal Lock, please visit [http://www.usace.army.mil](#).

Submit questions or comments to [askthecorps@usace.army.mil](mailto:askthecorps@usace.army.mil)

**FEATURED VIDEOS**

- [Meet Closure Complex: Learn more about the alternatives under consideration to reduce risk on the WaterBank. March 25](#)
- [Hazardous & Storm Damage Risk Reduction System: From levees to pumping stations, find out more about system features.](#)

**DISCLAIMER** | **PUBLIC INQUIRY** | **ENERGY AND SECURITY** | **FOIA** | **INFORMATION QUALITY ACT** | **ACCESSIBILITY**





US Army Corps  
of Engineers  
New Orleans District

# Social Web Networking Communities

*and what they mean to you*

## twitter



is an online messaging and social networking system that allows people to share their daily life experiences minute-by-minute, hour-by-hour, and/or day-by-day via their computer or mobile phone. Team New Orleans is joining in and taking on the opportunity to tweet with the public and offer reports on developments, additions, changes, and upcoming public meetings and events that will affect local communities. Check it out by going to [twitter.com/teamneworleans](https://twitter.com/teamneworleans).

Flickr is an online community platform for global photo management and sharing applications via the web. Team New Orleans has become a part of the movement and is using Flickr to visually explain our projects. Check out our photos at

[www.flickr.com/photos/37671998@N05](http://www.flickr.com/photos/37671998@N05).

## flickr



## facebook

is a global social networking Web site that links people from across the world and is currently ranked as the most popular of its kind. Team New Orleans is following in the trend and is using Facebook to update the public about projects, events, activities and public meetings.

Become friends with Team New Orleans by visiting [www.facebook.com](http://www.facebook.com), search New Orleans District.





***Visit the following links to follow us on  
Facebook, Twitter and Flickr:***

**<http://www.facebook.com/people/New-Orleans-District/100000017439096>**

**<http://twitter.com/teamneworleans>**

**<http://www.flickr.com/photos/37671998@N05>**



# Upcoming Mitigation Meetings

- **Monday May 24 6:00 pm – Resurrection of Our Lord Elementary, NOLA**
- **Wednesday May 26 6:00 pm – American Legion Post 366, St. Rose**



# What type of feedback are we looking for tonight?

## Where and how should the Corps mitigate?

- Where should we restore and create habitats?
- Where are large tracks of undeveloped land?
- Which critical natural areas should be preserved?
- Is one mitigation method preferable to another?



# Feedback Session

**Please visit the stations at the back of the room to ask questions about the presentation and share ideas about how the Corps should mitigate.**

**Thank you!**

