

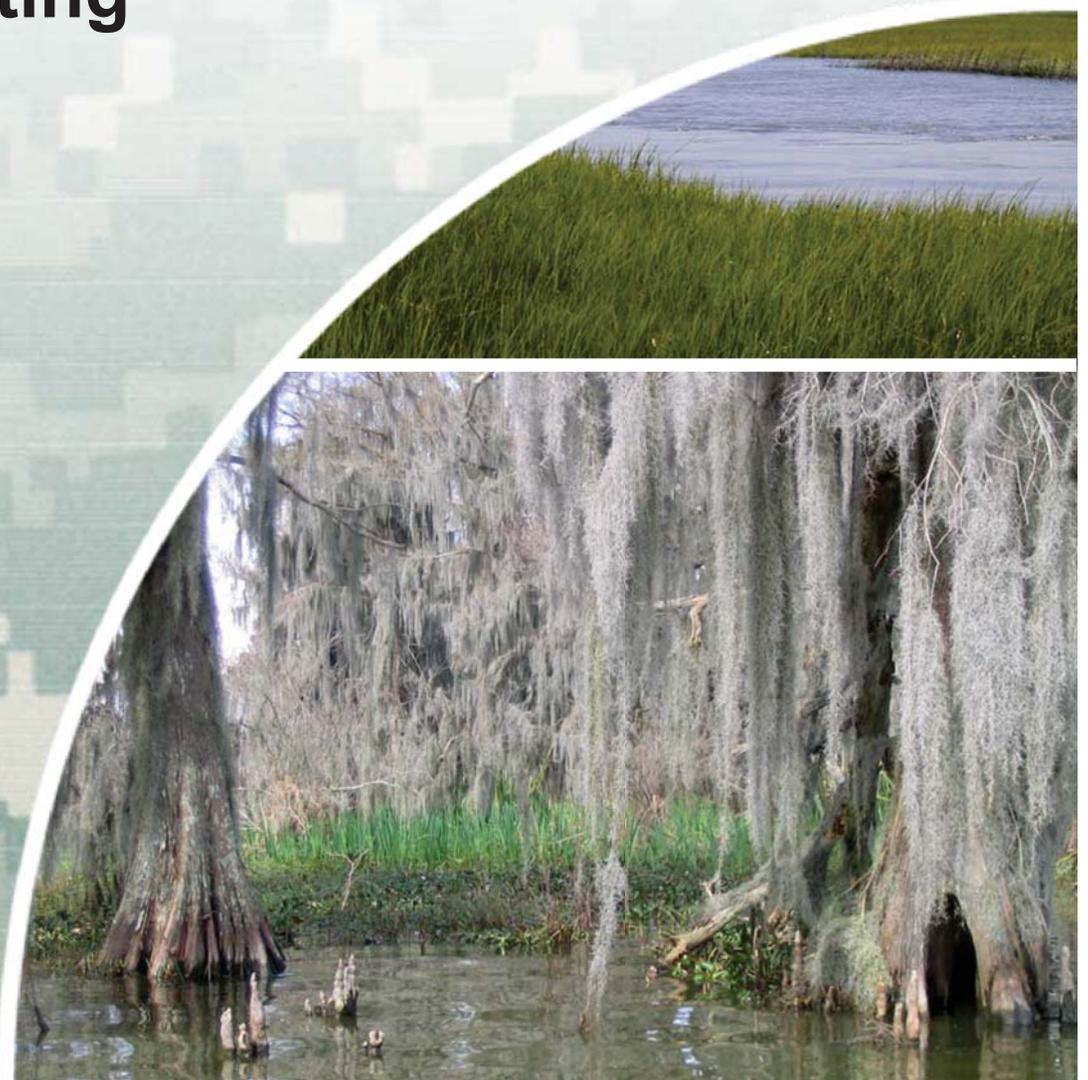
Greater New Orleans Hurricane and Storm Damage Risk Reduction System Mitigation Public Meeting

Westwego Ernest Tassin
Senior Center
May 17, 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.

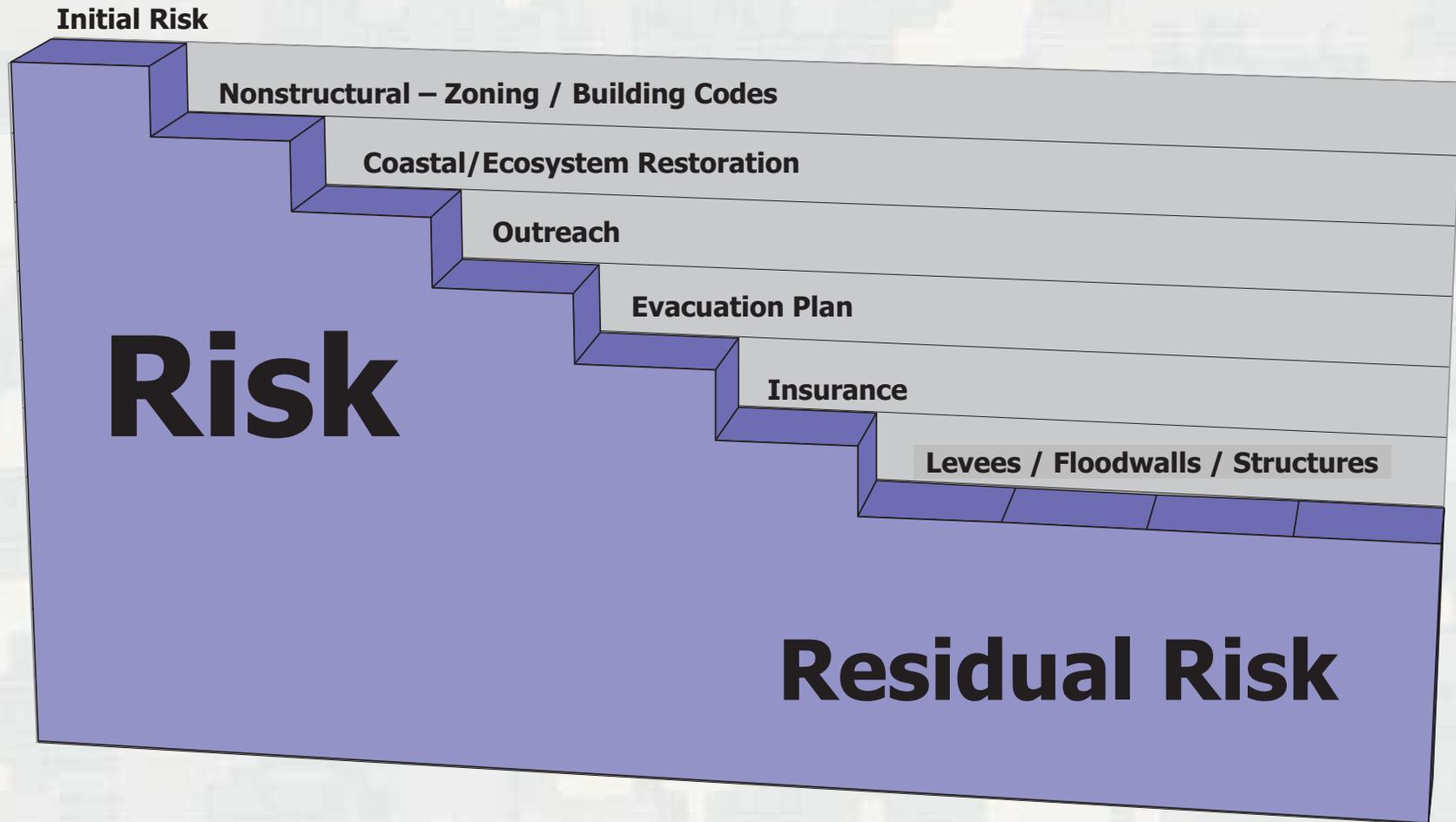


Meeting Agenda

- **Impacts generated by construction of the following HSDRRS projects:**
 - Harvey to Westwego Levee
 - Lake Cataouatche Levee
 - Western Tie In Levee
 - Company Canal Floodwall
- **Mitigation Program Objectives**
- **Feedback Session**
 - Where and how should mitigation occur?



Risk – Shared Responsibility



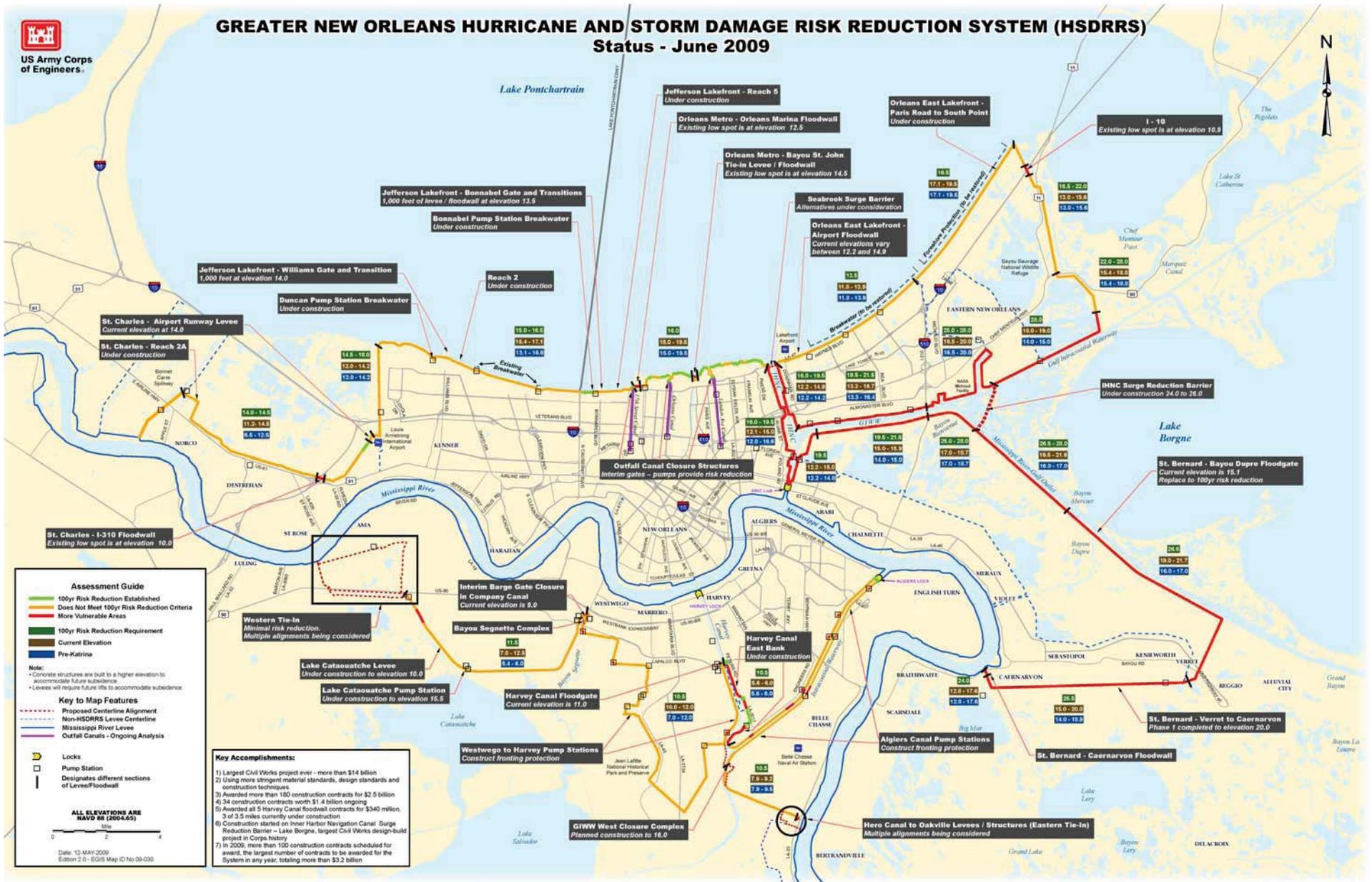
National Environmental Policy Act (NEPA)

- **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!**





GREATER NEW ORLEANS HURRICANE AND STORM DAMAGE RISK REDUCTION SYSTEM (HSDRRS) Status - June 2009



Individual Environmental Report: Project Areas



Westbank & Vicinity



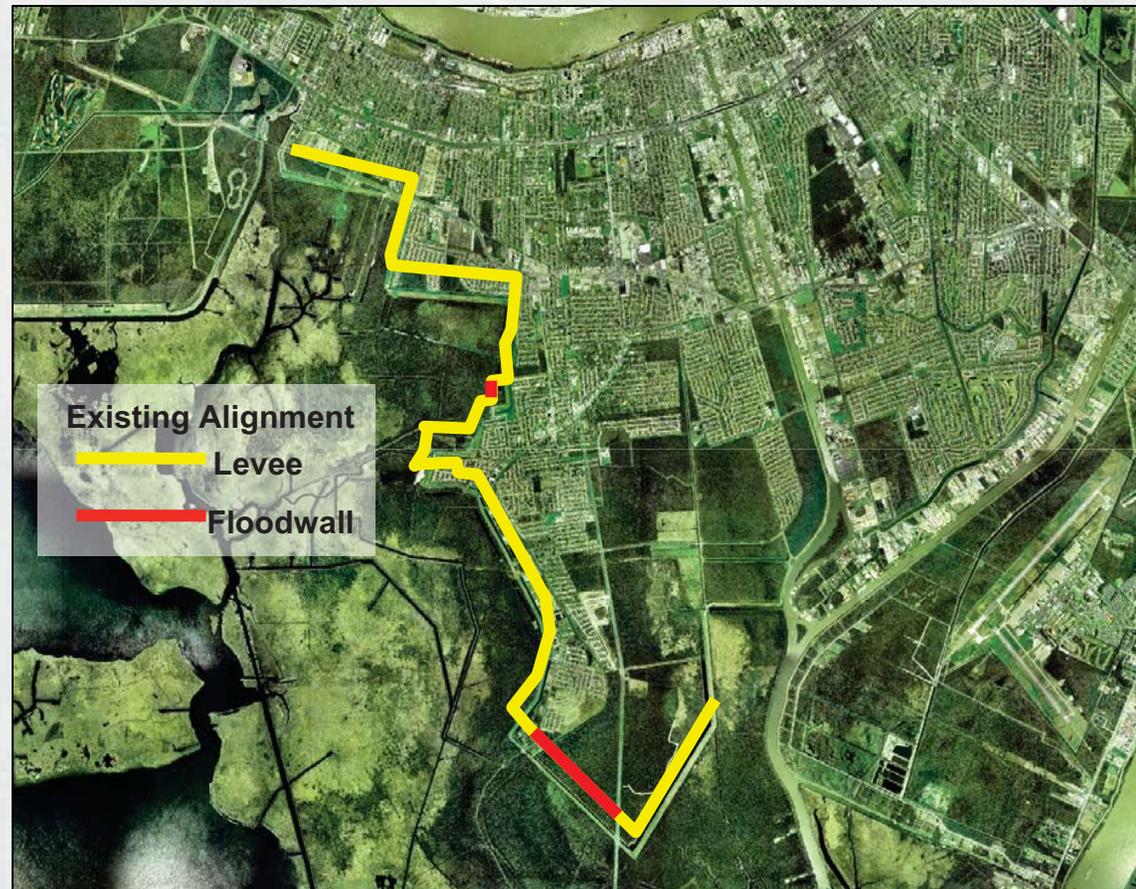
Harvey to Westwego Levees and Floodwalls

Individual Environmental Report 14

- Construction began Fall 2009
- Five of eight contracts in this area are under construction

Plan is to:

- Raise earthen levees along the current alignment to elevation 10.5 ft
- Shift current earthen levee alignment to the flood side
- Replace existing I-walls with T-walls



Harvey to Westwego Levees and Floodwalls

Individual Environmental Report 14 Impacts – Current Working Estimate

Habitat Type	Quantity (acres)	Quality (AAHUs*)
Bottomland Hardwood Wet	90.50	67.17
Bottomland Hardwood Dry	0	0
Swamp	71.5	41.02
Marshlands	0	0

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



Lake Cataouatche Levee

Individual Environmental Report 15

- Construction began May 2009
- Three of four contracts in this area are under construction

Plan is to:

- Raise earthen levees to 14.5 ft
- Enlarge earthen levee northward
- Add fronting protection floodwall for Lake Cataouatche Pump Station



Lake Cataouatche Levee

Individual Environmental Report 15 Impacts – Current Working Estimate

Habitat Type	Quantity (acres)	Quality (AAHUs*)
Bottomland Hardwood Wet	27.1	7.35
Bottomland Hardwood Dry	0	0
Swamp	0	0
Marshlands	0	0

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



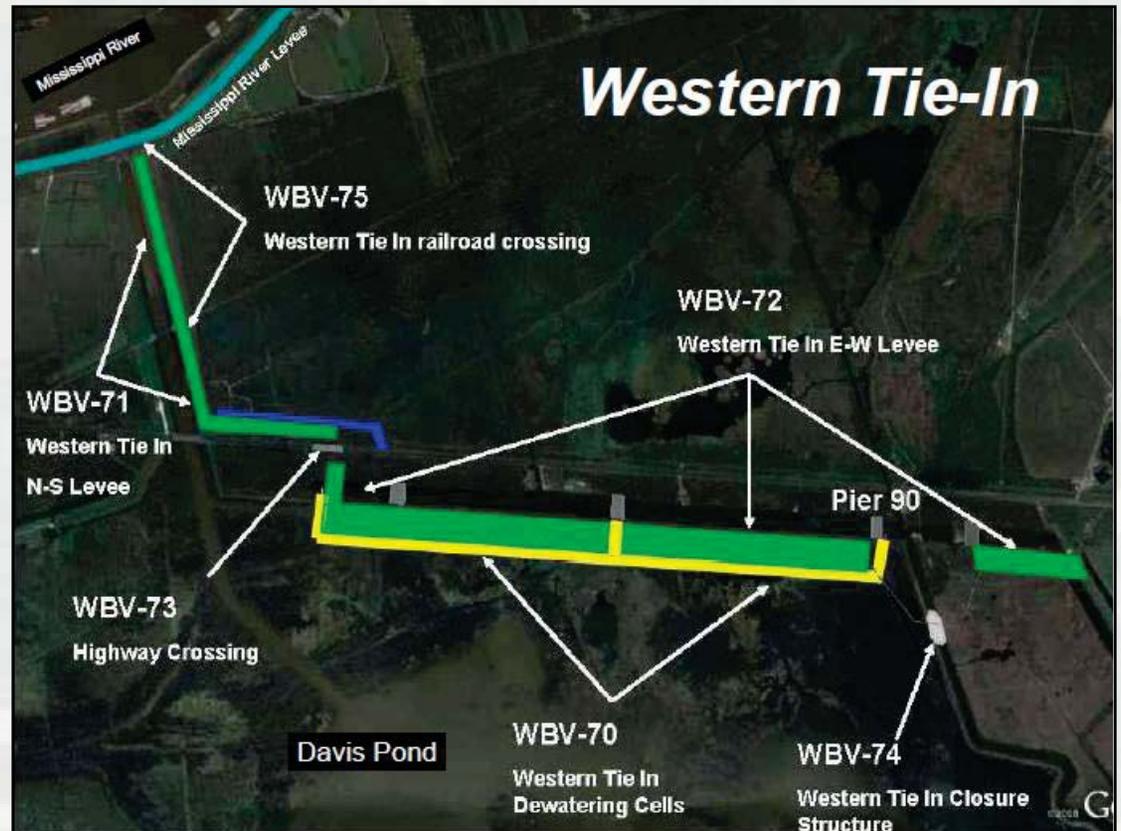
Western Tie-In

Individual Environmental Report 16

- Construction began October 2009
- One contract is complete. Three of the remaining six contracts have been awarded.

Plan is to:

- Build earthen levees along the current Davis Pond Guide Levee alignment to elevation 15.5 ft
- Construct bridge over floodwall (elevation 15.5) at HWY 90
- Construct two roller gates across two railroads & an earthen ramp at HWY LA 18
- Construct a sector gate across Bayou Verret



Western Tie-In

Individual Environmental Report 16 Impacts – Current Working Estimate

Habitat Type	Quantity (acres)	Quality (AAHUs*)
Bottomland Hardwood Wet	78.6	36.2
Bottomland Hardwood Dry	0	0
Swamp	0	0
Marshlands	137.8	66.3

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



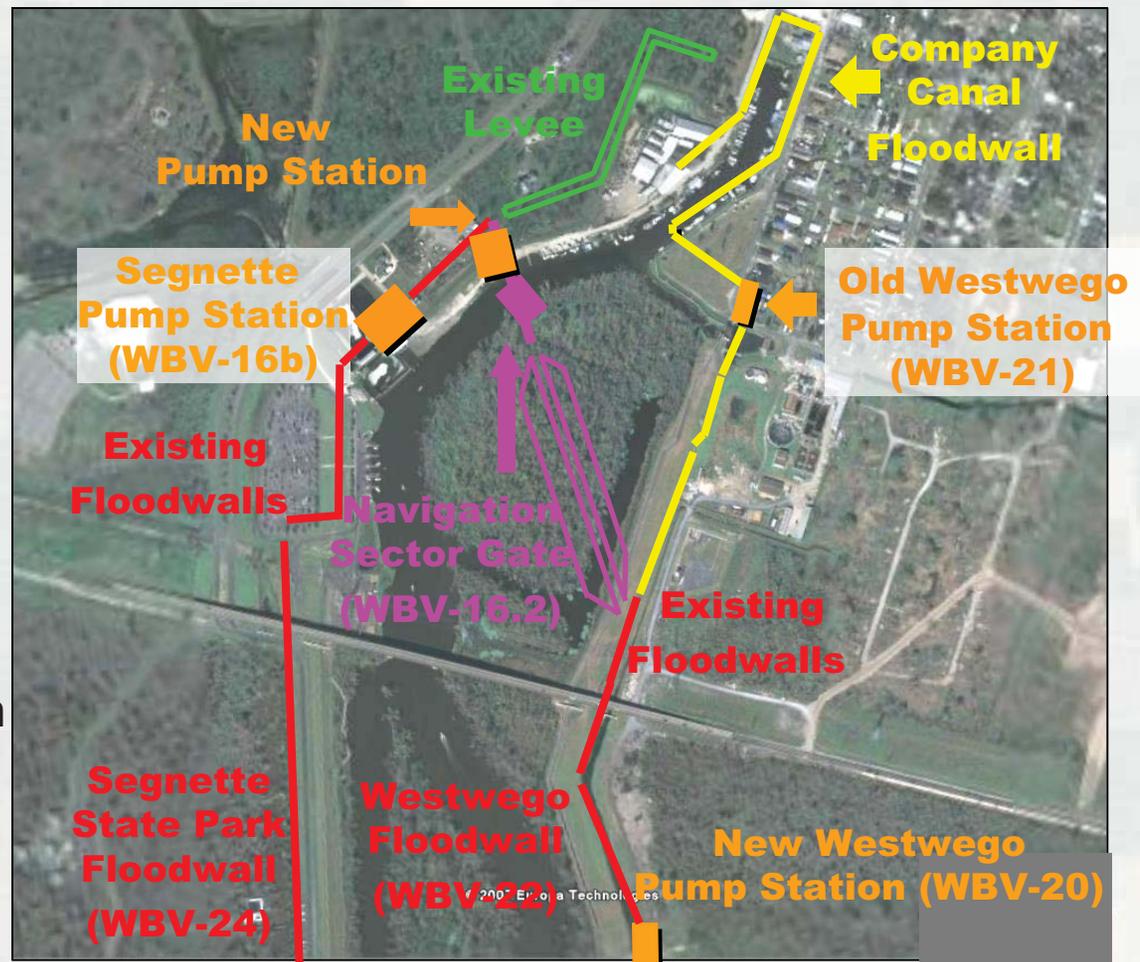
Bayou Segnette Complex

Individual Environmental Report 17

- Construction began in October 2009
- All six contracts awarded

Plan is to:

- Raise to elevation 14 ft
- Eliminate the Company Canal Floodwall from the system
- Construct a navigable Sector Gate, a Pump Station and replace floodwalls



Company Canal Floodwall

Individual Environmental Report 17 Impacts – Current Working Estimate

Habitat Type	Quantity (acres)	Quality (AAHUs*)
Bottomland Hardwood Wet	5.5	2.7
Bottomland Hardwood Dry	0	0
Swamp	19	17.09
Marshlands	0	0

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



Mitigation

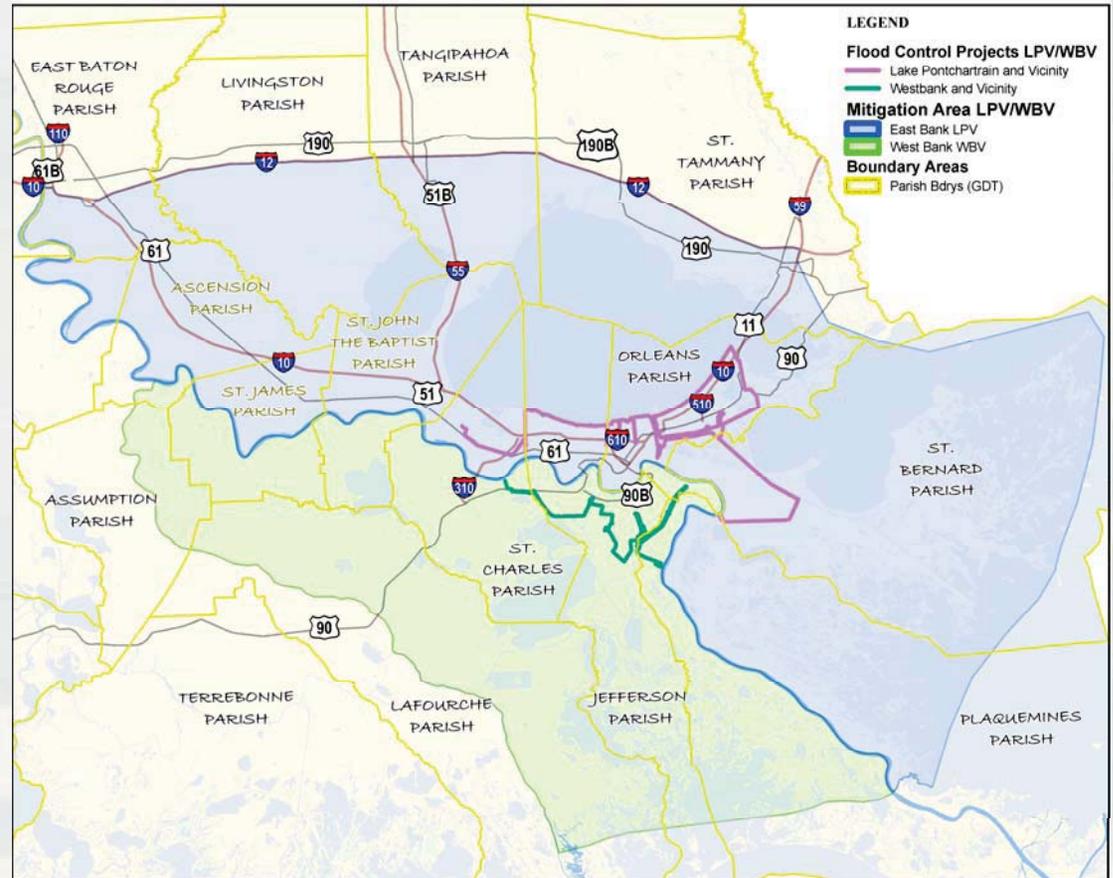
- **Avoid impacts to natural resources**
- **Minimize impacts to the greatest extent possible**
- **Compensate for unavoidable impacts**
- **Mitigation plans will be discussed in environmental documents**
- **Mitigation is funded**



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



Impact types

- **Direct**
- **Indirect**
- **Cumulative**



As an example, construction of the GIWW West Closure Complex will generate each type of impact.



Affected Habitats



Bottomland Hardwoods



Salt Marsh



Brackish Marsh



Swamp



Intermediate Marsh



Fresh Marsh



Total WBV Impacts

West Bank & Vicinity Projects

Original Construction and HSDRRS – Current Working Estimate

Habitat Type	Quantity (acres)	Quality (AAHUs*)
Bottomland Hardwood Wet	1887.70	1067.55
Bottomland Hardwood Dry	29.90	10.62
Swamp	204.65	124.88
Marshlands	137.80	66.30

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



Total LPV Impacts

Lake Pontchartrain & Vicinity Projects

HSDRRS – Current Working Estimate

Habitat Type	Quantity (acres)	Quality (AAHUs*)
Bottomland Hardwood Wet	473.59	227.51
Bottomland Hardwood Dry	236.00	73.44
Swamp	113.71	70.81
Marshlands	1006.39	497.53

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



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)



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

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

NOLA Environmental
NEW ORLEANS, LOUISIANA
Environmental Compliance Data Bank
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 - 5/4
- 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

PUBLIC INFORMATION

Floodwall

Building them 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 (HSDRRS) by 2012. To this end, the Corps is using valuable lessons learned to construct more resilient levees and floodwalls.

[Go to page 1 >>](#)

TOP HEADLINES

- [Department of Justice asks on whether it](#)
- [Case: Missouri environmental document for](#)
- [Says to speed up work on WaterBark and](#)
- [Case: Bankruptcy trustee says](#)

ASK THE CORPS

The Corps wants to hear from you!

Q: Do you have information on the closing of Industrial Lock 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 askusace@usace.army.mil

FEATURED VIDEOS

- [Meet Closure Complex](#)
- [Hurricane & Storm Damage Risk Reduction Centers](#)

[Home](#) | [Contact Us](#) | [Sitemap](#) | [FOIA](#)

HOME | DISCLAIMER | PUBLIC INQUIRY | EMERGENCY 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.

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.

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, 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

- **Wednesday May 19 6:00 pm – NP Trist Middle School, Meraux**
- **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!



(Supplemental Slides)



Laws Regulating Mitigation

- National Environmental Policy Act
- Clean Water Act
- Fish and Wildlife Coordination Act
- Water Resources Development Acts of 1986, 1990, 2007
- Executive Order No. 11990 – Protection of Wetlands
- Louisiana Coastal Zone Management laws



Environmental Impact Determinations

- Construction rights-of-way are mapped (includes borrow, access, and placement)
- PDTs seek opportunities to avoid or minimize impacts
- Wetlands and other habitats to be impacted are identified (acres)
- An interagency team assesses habitat impacts and determines compensatory mitigation needs (average annual habitat units)
- Unavoidable impacts are disclosed in PDDs and IERs
- Mitigation plans are developed through Mitigation PDDs and IERs
- Comprehensive Environmental Document (CED) summarizes all impacts and all mitigation plans



Mitigation Strategies

- Mitigation Banks
- In-Lieu-Fee Programs
- Mitigation Projects
 - ▶ restoration
 - ▶ establishment
 - ▶ enhancement
 - ▶ preservation
- Combination



Compensatory Mitigation Planning

- *Open process involving sponsors, public, and resource agencies*
- *Use existing information and coastal plans to the extent possible*
- *Seek opportunities for larger scale projects*
- *Plans will be released for public comment and input*
- *Compensatory mitigation projects will be constructed through local sponsor partnerships*



Construction Projects to be Mitigated

- ▶ WBV Pre-Katrina
- ▶ WBV Post Katrina (does not include MRL)
- ▶ LPV Post-Katrina (does not include TFU/TFG or MRL)
- ▶ LPV IHNC
- ▶ Associated Borrow Impacts



Current Working Impacts—**UPDATE/** Instead of “bank” reference
LPV & WBV

East Bank	Habitat Type	Acres	AAHUs	Acres w/ ratio
	BLH Wet	272	126	815
	BLH Non-wet	236	73	1,416
	Swamp	114	71	341
	Marsh	761	387	761
West Bank	Habitat Type	Acres	AAHUs	Acres w/ ratio
	BLH Wet	2,159	1,194	6,478
	BLH Non-wet	30	11	179
	Swamp	205	125	614
	Marsh	138	66	138



Council on Environmental Quality

National Environmental Policy Act Regulations

40 CFR 1508.20 Mitigation.

"Mitigation" includes:

- ✓ *Avoiding* the impact altogether by not taking a certain action or parts of an action.
- ✓ *Minimizing* impacts by limiting the degree or magnitude of the action and its implementation.
- ✓ *Rectifying* the impact by repairing, rehabilitating, or restoring the affected environment.
- ✓ *Reducing or eliminating* the impact over time by preservation and maintenance operations during the life of the action.
- ❑ *Compensating* for the impact by replacing or providing substitute resources or environments.



Public Involvement To Date

- NGO Quarterly Meetings
- Interagency Monthly Meetings
- IER Periodic Public Meetings
- NEPA Alternative Arrangements Public Notice
- Parent IER Development & Documentation of Impacts
- Public Web Site (www.nolaenvironmental.gov)
- Pop Up Ads on www.nola.com
- Comprehensive Environmental Document Public Meeting
- Mitigation Workshop (August 2009)



Future Public Involvement

- Continue Current Involvement Efforts
 - NGO Quarterly Meetings
 - Interagency Monthly Meetings
 - IER Periodic Public Meetings
 - Web Site (www.nolaenvironmental.gov)
- Mitigation IER Development (Periodic Meetings, Public Review Period)
- **Geographic Stakeholder Meetings?**
- Periodic Non-Federal Sponsor Meetings
- Agency participation on mitigation project delivery teams
- Comprehensive Environmental Document Development (Public Review Periods)



Additional Information

- Contact USACE Senior Plan Formulator
 - ▶ Gregory Miller (504) 862-2310
- Contact USACE Environmental Team Coordinator
 - ▶ Elizabeth Behrens (504) 862-2025

<http://www.nolaenvironmental.gov/>

