

# Greater New Orleans Hurricane & Storm Damage Risk Reduction System

Col. Robert A. Sinkler, Commander  
Hurricane Protection Office

Holy Trinity Greek Orthodox Cathedral  
Thursday, Jan. 21, 2010

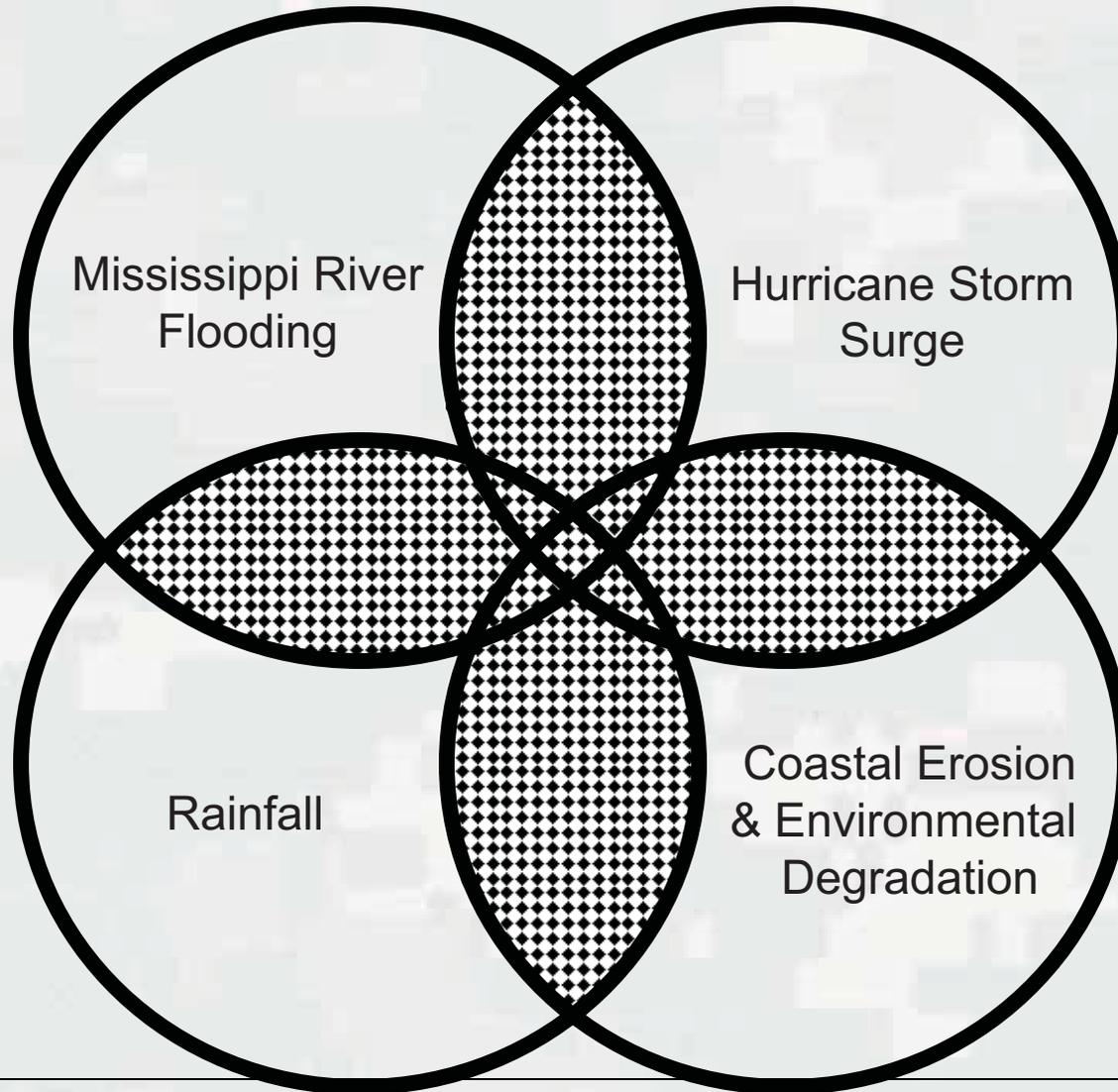


US Army Corps of Engineers  
**BUILDING STRONG**<sup>®</sup>



# The Four Major New Orleans Flood Risks

*Separate, but overlapping or related interagency systems or programs to address each!*

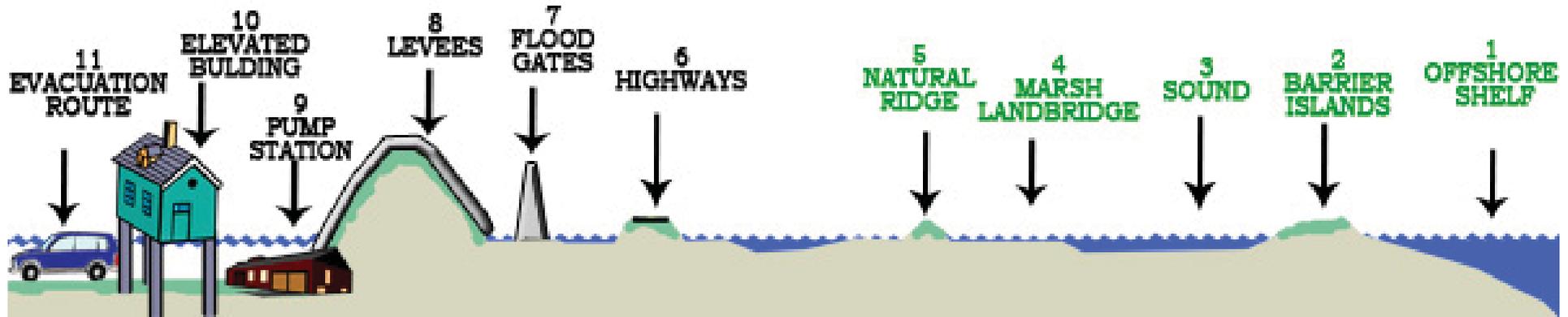


*Working  
Draft*





# Multiple Lines of Defense



(Graphic from [www.mlods.org](http://www.mlods.org))

## *Elements include:*

- Coastal restoration/protection
- Structural measures
- Non-structural features





# **Hurricane Protection Office Area of Responsibility**

*Includes areas severely damaged by Hurricane Katrina in 2005*

# Orleans Metro Phase II – 3 of 5 contracts awarded

Raise approximately **6 miles** of levees and replace / strengthen **1.5 miles** of existing floodwalls; improve all road crossings / gates from 17th St. Canal to west side of IHNC / modify existing floodgate at Bayou St. John.

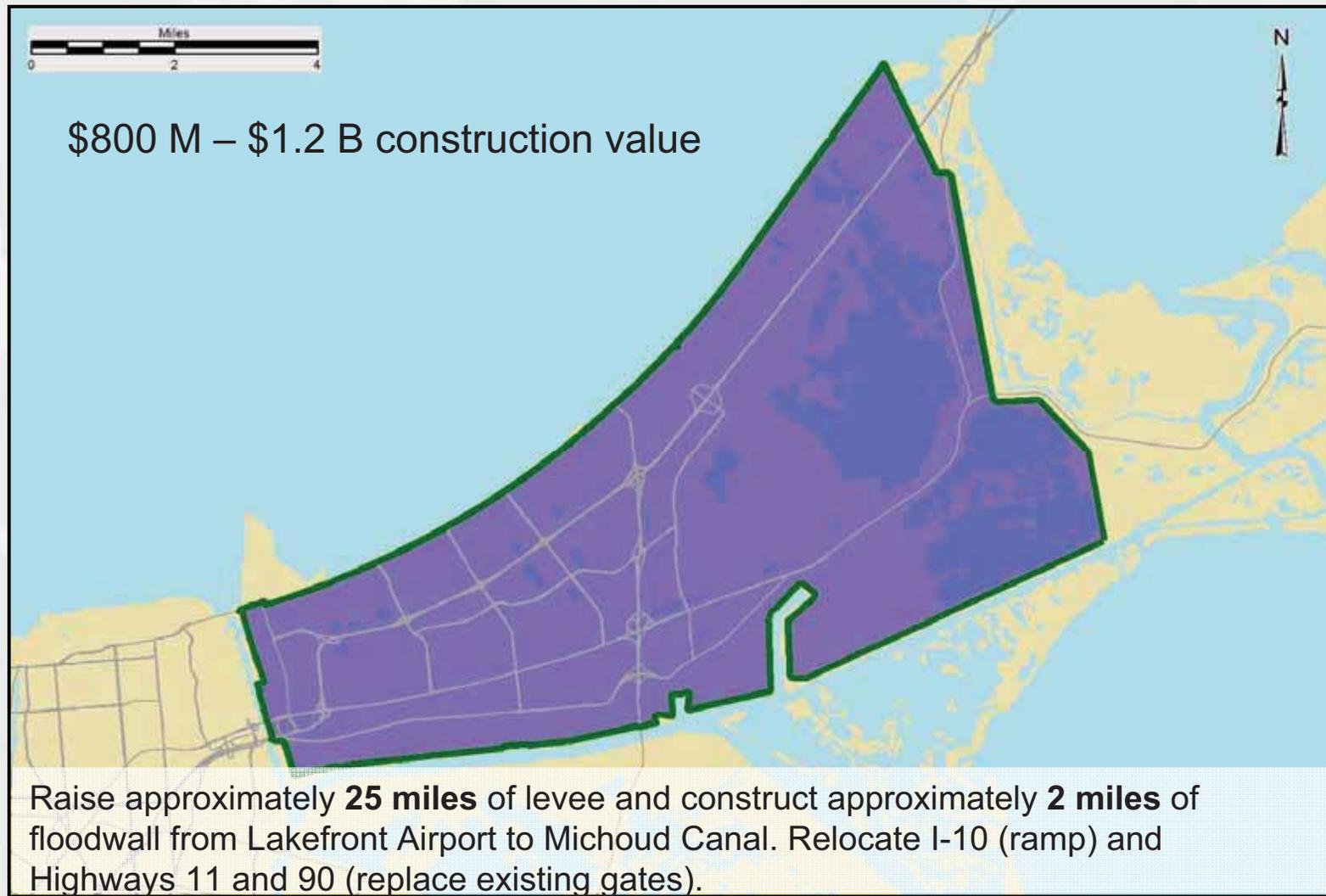


Phase 1 Construction - *100% complete*

100-year level of risk reduction - *More than 90% complete*

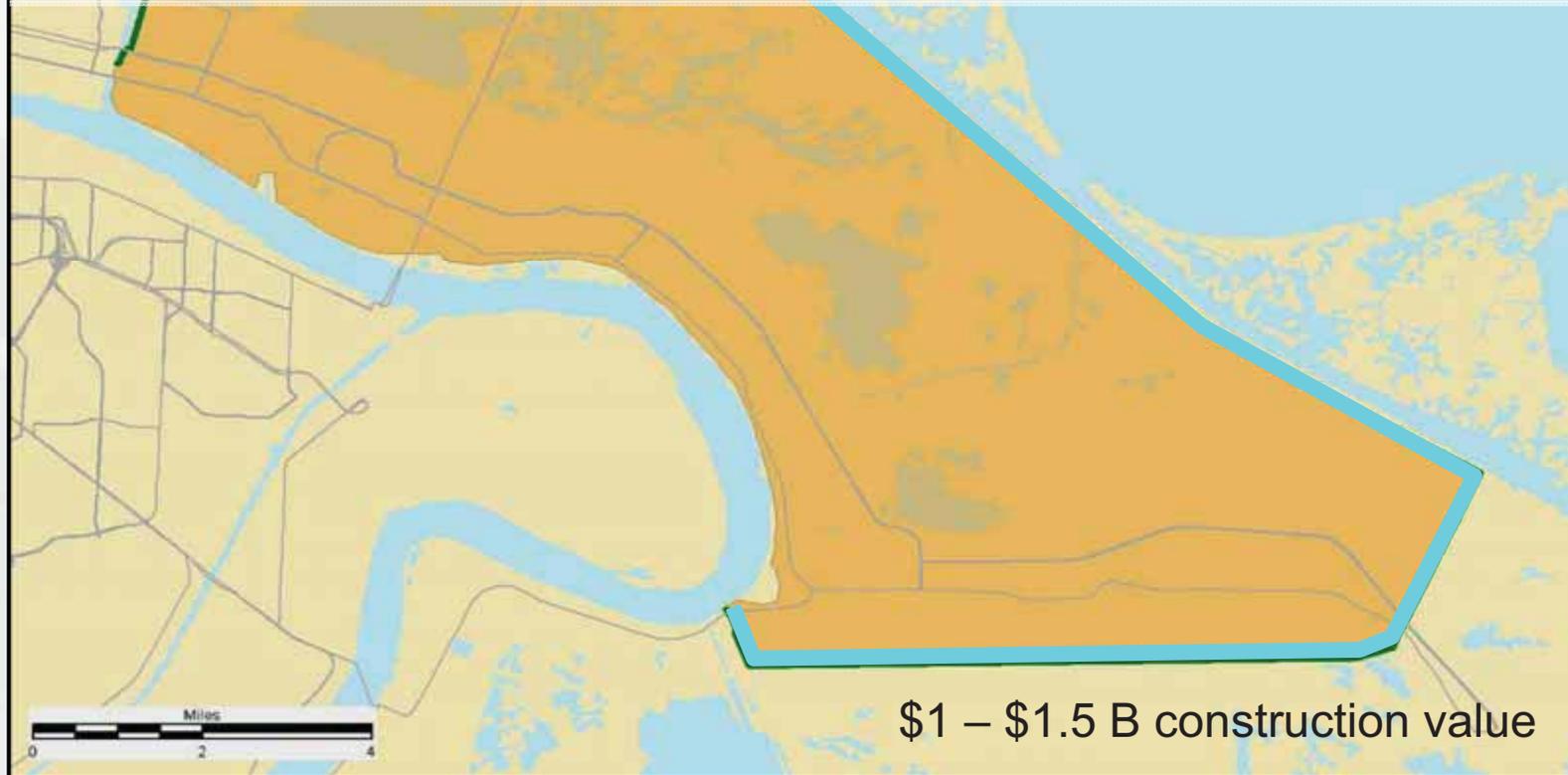


# New Orleans East – 5 of 12 contracts awarded



# St. Bernard Parish – 4 of 7 contracts awarded

Construct approximately **23 miles** of floodwall from Bayou Bienvenue to Caernarvon (raising from 20 to 29 feet and, in some places, to 31.5 feet). Construct new sector gate at Bayou Dupre. Add floodgates across Highway 46 and replace floodgate at Bayou Road. Construct floodwall and sector gate across Caernarvon Canal and along the Freshwater Diversion Channel back to Highway 39.



# Permanent Canal Closures & Pumps

Community Involvement Meeting #2

Thursday, Jan. 21, 2010



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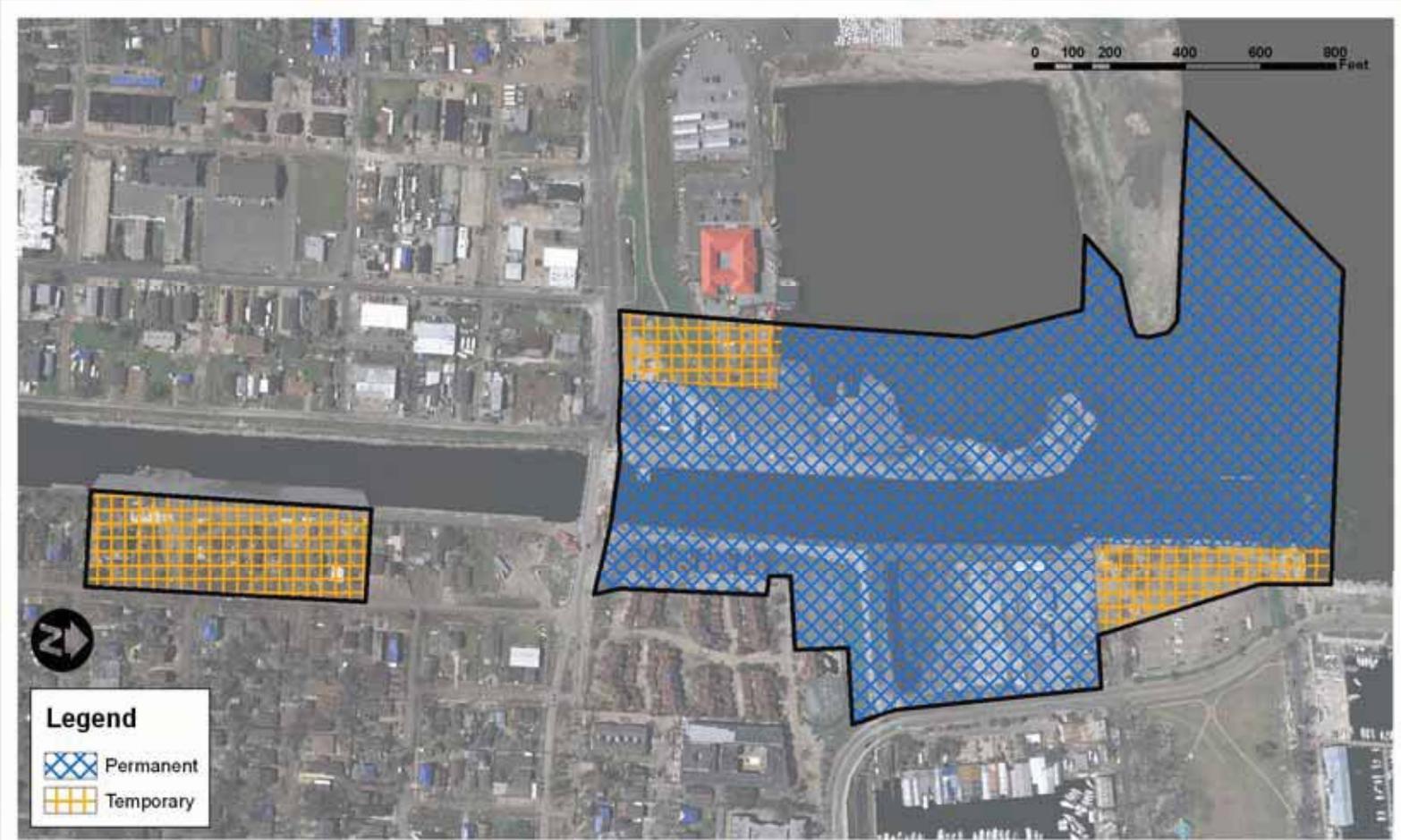


# The Public Involvement Process for the Permanent Pump Stations Draft Request For Proposal (RFP)

## Series of Three Meetings:

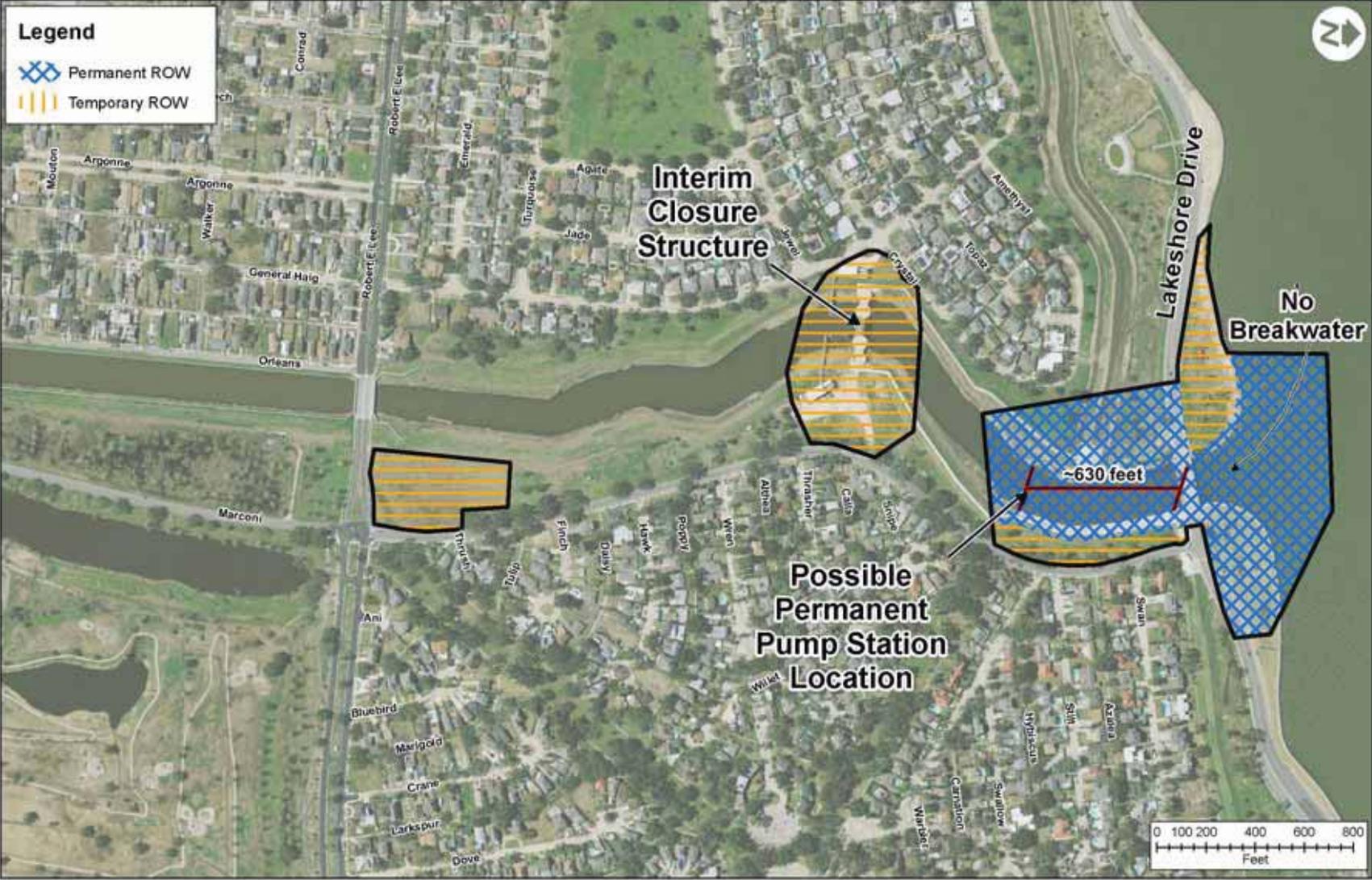
- **1<sup>st</sup> Meeting – Present the Draft RFP Phase II**
  - ❖ Meeting held November 19, 2009
  - ❖ Overview of the project and the Design-Build process
  - ❖ Review content of RFP Phase II
  - ❖ Comment period November 19, 2009 – January 30, 2010
  
- **2<sup>nd</sup> Meeting – Workshop for additional public comments on the Draft RFP Phase II**
  - ❖ Main purpose will be to receive comments
  - ❖ Break out into small groups
  
- **3<sup>rd</sup> Meeting – Respond to comments on the Draft RFP Phase II**

# 17<sup>th</sup> Street Canal Selected Maximum Footprint





# Selected Orleans Avenue Footprint



# Project Schedule

Original	Projected	Milestone
<b>30 Jun 2009</b>		<b>IER Decision Record Signed</b>
<b>24 Aug 2009</b>		<b>PDD Approved</b>
<b>19 Nov 2009</b>		<b>Meeting # 1 Community Involvement</b>
<b>21 Jan 2010</b>		<b>Meeting # 2 Community Involvement</b>
<b>14 Aug 2009</b>	<b>2 Feb 2010*</b>	<b>Project Partnership Agreement</b>
Aug 2009	Feb 2010	Issue Synopsis
Sep 2009	Feb 2010	Issue Design-Build Phase I Request for Proposal
Oct 2009	Mar 2010	Evaluate Phase I Request for Proposal
Nov 2009	Apr 2010	Form and approve Short List
Nov 2009	May 2010	Issue Draft Phase II RFP for Review by Short List
Jan 2010	Aug 2010	Issue Design-Build Phase II Request for Proposal
Aug 2010	Mar 2011	Award Design-Build Contract
Dec 2013	Jul 2014	Est. Construction Completion

\*This schedule is tentative and based on the execution of the PPA by 2 February 2010.



# Areas of Public Interest within the Draft Request for Proposal

## RFP Phase II Document Structure

- General Requirements – Section 3.1 (page 10)
  - Barrier Height
  - 100 Year Still Water Lake Elevation, Design wave height and period
  - Design Life of Facilities and Equipment
  - Pump Station pumping capacities – Match S&WB Drainage Capacity, Both Present and Future Planned Capacity
- ❖ Operating Criteria – Section 3.2 (page 19)
- ❖ Pump Station General Design Criteria – Section 3.3 (page 21)
  - Possible Future Conditions Requirements (Adaptability)



# Areas of Public Interest within the Draft Request for Proposal

## RFP Phase II Document Structure (Cont.)

- Applicable General Criteria – Section 4.0 (page 29)
  - ❖ Industry
  - ❖ Corps
- Technical Criteria – Section 5.0 (page 35)
  - ❖ Structural
    - Water (Surge Barrier) Closure Structure
    - Wind Loads for all structures
  - ❖ Mechanical
    - Types of Gates
    - Types of Pumps (including Concrete Volute)
    - Power Generators
    - Electrical Systems



# Areas of Public Interest within the Draft Request for Proposal

## RFP Phase II Document Structure (Cont.)

- Architectural – Section 5.4 (page 40)
  - ❖ Aesthetics
    - Building Height (less than 45 feet)
    - Minimize Facility Footprint
- Environmental – Section 5.14 and 5.6.7 (pages 57 & 78)
  - ❖ Noise during operation (City Ordinance)
  - ❖ Air Quality (Compliant with Clean Air Act and other Local & Regional Air Quality Regulations)
- Construction Related Criteria – Section 5.15 (page 78)
  - ❖ Traffic Control & Construction Access
  - ❖ Noise/vibration during construction (monitor to comply with local codes and standards)
  - ❖ Work hours/shifts
  - ❖ Site Security during construction



# Public Concerns Addressed

## Permanent Pump Stations

<i>PUBLIC ISSUES SUMMARY</i>				
No.	ISSUE	SOURCE	ACTION	LOCATION
1	Height of Permanent Pump Station	Public Meeting Number 1	RFP 2, Building Height Limited to 45' or less	Article 5.4.1
2	Make Permanent Pump Station Adaptable for Future Conditions	Sewerage & Water Board of New Orleans	Design Must Include Adaptability Feature such as lower sump, structure sized for future equipment, site layout designed for expandable generator bldg and fuel storage.	Article 2.1, 2, c., also in Articles 3.0, 3.1, 3.3, 3.4, 5.3.4, and 5.11.3
3	Reduce Disturbances Due to Construction	Various Public Meetings	Construction Related Criteria	Article 5.15
4	Reduce The Footprint Of The Permanent Pump Stations	Various Public Meetings	Language has been added to the RFP	Article 5.4.2

# Public Concerns Addressed

## Permanent Pump Stations

<i>PUBLIC ISSUES SUMMARY</i>				
No.	ISSUE	SOURCE	ACTION	LOCATION
5	Pump Station Fuel to Be Able to Run 5 days 24/7	Sewerage & Water Board of New Orleans	On Site Tankage to be sized to hold fuel for 5 days of operation at full power	Article 3.3, 3, I.
6	Allow Concrete Volute Pumps	Various Public Meetings	RFP language written so not to exclude any type of pump.	To be added to language in Article 5.6.4
7	Reduce the Visual Impact of The New Pump Stations	Various Public Meetings	Requirement to provide PPS facilities that are Aesthetically Compatible with the surrounding architecture at each site.	Article 5.4
8	Keep The Public Informed About The Project	Various Public Meetings	Design-Builder Must Provide A Full time Community Relations Professional	Article 2.5

# Public Concerns Addressed

## Permanent Pump Stations

<i>PUBLIC ISSUES SUMMARY</i>				
No.	ISSUE	SOURCE	ACTION	LOCATION
9	Limit Generator Noise	Various Public Meetings and Sewerage & Water Board of New Orleans	Change noise level limit from 80dB to 70dB in the RFP	To be changed in Article 5.6.7, #6
10	Electric Drives Required	Sewerage & Water Board of New Orleans	RFP Changed to Require Electric Drivers and exclude diesel drives	To be in Article 3.3, 3, c. include addition of Article 5.10.2.13 and deletion of requirements in Article 5.6.10
11	Pump Station Personnel	Sewerage & Water Board of New Orleans	Living Space changed from a minimum of 5 to a minimum of 12 Personnel	To be changed in Article 3.3, 3, b.
12	Requirement to place Generators in a Separate Storm Proof Building	Sewerage & Water Board of New Orleans	A single Storm Proof Building Will Be Constructed to house diesel generators	Article 3.3, 4, c.

# Public Concerns Addressed

## Permanent Pump Stations

<i>PUBLIC ISSUES SUMMARY</i>				
No.	ISSUE	SOURCE	ACTION	LOCATION
13	Increase Pump Station capacity to S&WB Future Requirements	Sewerage & Water Board of New Orleans	Capacity to match current and planned S&WB capacities	Article 3.1, #13
14	Bridge Crane in Pump Station	Sewerage & Water Board of New Orleans	Bridge Crane Required	Article 3.3, 3, g.
15	Require Bridge Crane in Generator Building	Sewerage & Water Board of New Orleans	Bridge Crane Requirement Added to RFP	To be added in Article 3.3, 3, g.
16	Include Provisions for Adding Dry Weather Flow Pumps Later	Sewerage & Water Board of New Orleans	Designer Will Provide Empty Bays for Future Dry Weather Pumps	Article 3.3, 2, m., v.

# Public Concerns Addressed

## Permanent Pump Stations

<i>PUBLIC ISSUES SUMMARY</i>				
No.	ISSUE	SOURCE	ACTION	LOCATION
17	Provide Procedure and any Special Equipment for Silt Removal	Sewerage & Water Board of New Orleans	Design Builder To Provide A Method to Remove Silt, To Include any Special Equipment	Article 3.3, 2, f. to be modified
18	Make Fuel Management Easier	Sewerage & Water Board of New Orleans	Design Builder Will Provide Fuel Management Plan	To be added to Article 3.3, 3, I.
19	Use Low Maintenance Landscaping	Sewerage & Water Board of New Orleans	Change wording to “Low Maintenance” Landscaping	To be changed in Article 5.1, #8



# Public Concerns Addressed

## Permanent Pump Stations

<i>PUBLIC ISSUES SUMMARY</i>				
No.	ISSUE	SOURCE	ACTION	LOCATION
21	Prohibit Butterfly Valves	Sewerage & Water Board of New Orleans	Prohibit use of Butterfly Valves	To be removed from Article 5.6.5, Table 5.6-2
22	Connect The New Pump Stations To The S&WB Network	Sewerage & Water Board of New Orleans	Design Builder Required To Provide a radio system to interface with S&WB existing radio system	To be added to Article 5.8.10



# Project Delivery Team

U.S. Army  
Corps of Engineers

Community Members

Coastal Protection &  
Restoration Authority of LA

Sewerage & Water  
Board of New Orleans

Jefferson Parish  
Department of Drainage

Southeast Louisiana Flood  
Protection Authority - East

Orleans Levee District

East Jeff. Levee District

Regional Planning  
Commission



# Upcoming Public Meetings

## *Open House 6 p.m. - Presentation 6:30 p.m.*

**Tuesday, Jan. 26, 2009**

New Orleans East Construction Update  
St. Maria Goretti Catholic Church  
7300 Crowder Blvd.  
New Orleans, LA 70127

**Wednesday, Jan. 27, 2010**

IER 11 Tier 2 Pontchartrain – Seabrook  
St. Gabriel the Archangel Church Parish Hall  
5010 Piety Dr.  
New Orleans, LA 70126

**Thursday, Jan. 28, 2010**

West Return Floodwall Construction  
Kenner City Pavilion  
3800 E. Loyola Ave.  
Kenner, LA 70065

**Monday, Feb. 22, 2010**

Violet Freshwater Diversion Neighborhood Meeting  
W. Smith Elementary School  
6701 E. St. Bernard Hwy  
Violet, LA 70092

**Tuesday, Feb. 23, 2010**

Coastal Restoration Town Hall Meeting  
Lake Charles Lake Charles Civic Association  
900 Lakeshore Dr.  
Lake Charles, LA 70601

**Wednesday, Feb. 24, 2010**

Coastal Restoration Town Hall Meeting  
Morgan City St. Mary Parish AARP Building  
4014 Chennault St.  
Morgan City, LA 70380



# Currently Available for Public Review

- **IER 11 Tier 2 Pontchartrain**
  - ▶ Public review period extended and will close at midnight on Jan. 27, 2010



# Web-based Resources

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

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

**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 30 Public Comment Period 8/14 - 9/12
- Federal Register Notice of EPA's Modification of the 1985 Clean Water Act Section 404(c) Final Determination for Bayou aux Carpes is now available (7/28)
- East Baton Rouge EA #431 Drafts Public Comment Period 7/22 - 8/20
- Draft IER 29 Public Comment Period 7/22 - 8/20
- The Decision Record for IER 5 has been signed by the District Commander (June 30, 2009)
- The Decision Record for IERS 1 has been signed by the District Commander (June 29, 2009)

**Upcoming**

- 09/12/2009 - Public Meeting (Plaquemines Parish Federal Levees (St. Jude to Venice))
- 09/12/2009 - Public Meeting (Plaquemines Parish Federal Levees (St. Jude to Venice))

**Newly Available**

**NEW >>** NOLA Environmental Basic Data Viewer

- 03 Sept 09 Public Meeting Presentation Plaquemines Parish Pump Stations; GIWW West Closure Complex
- News Release 02 September 09 Corps to discuss upcoming Belle Chasse construction

**FEATURED PROJECT**

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

**US Army Corps of Engineers**  
Team New Orleans  
**BUILDING STRONG**

ABOUT US SERVICES BUSINESS CAREERS REFERENCES PRESS ROOM CONTACT US LINKS

Google Custom Search Search

**Pump Stations**  
Operating an improved system... Pumping plays a critical role in preventing flooding from any significant rainfall event. The Corps ensures that pumps are outfitted to remain operable during and after future storm events.

**PUBLIC INFORMATION**

**6** Hurricane & Storm Damage Risk Reduction  
How the Corps is reducing risk >>

**Public Meetings**  
8/26/09 - New Orleans, LA >>  
8/31/09 - New Orleans, LA >>  
9/2/09 - New Orleans, LA >>

Pre-Proposal Conference - 8/14/09 >>

Building a Stronger Corps - A Snapshot of How the Corps is Applying Lessons Learned from Katrina >>  
Nola Environmental  
Find meeting presentations & more >>

**FEATURED VIDEOS**

**Inner Harbor Navigation Canal**  
Reduces risk to New Orleans East, Metro New Orleans, the 9th Ward & St. Bernard from storm surge. Watch >>

**Seabrook Floodgate**  
Three construction site alternatives are presented in this video for a navigable surge barrier planned for the IHNC area near the... Watch >>

**TOP HEADLINES**

**ASK THE CORPS**

The Corps wants to hear from you!  
Q. Where can I find information related to bidding on contracts advertised by the Corps?  
A. For more information on Corps contracts and registering your business, please click here.

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

Corps revises London Ave. Outfall Canal ICS operating procedures  
RSS (What is RSS?)

Last updated 09/09/2009 DISCLAIMER PUBLIC INQUIRIES PRIVACY AND SECURITY EO1A INFORMATION QUALITY ACT ACCESSIBILITY

**CONSTRUCTION IMPACTS HOTLINE**  
**877-427-0345**



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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>



# Small Group Sessions

- **Please be respectful of your fellow attendees and allow each group member to speak.**
- **Please speak one at a time.**
- **All comments and suggestions made tonight will be given consideration.**
- **Each group's input will become a part of the meeting summary.**
- **The Corps is here to LISTEN to you, we will help clarify information.**
- **The entire Statement of Work (Section 1010) is available online at [www.nolaenvironmental.gov](http://www.nolaenvironmental.gov).**
- **Written comments on the draft RFP will be accepted through Jan. 30, 2010. Postage paid comment cards are available at the sign in tables.**

