



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



# **Individual Environmental Report (IER) #5**

## **Outfall Canal Closure Structures**

**May 20, 2009**



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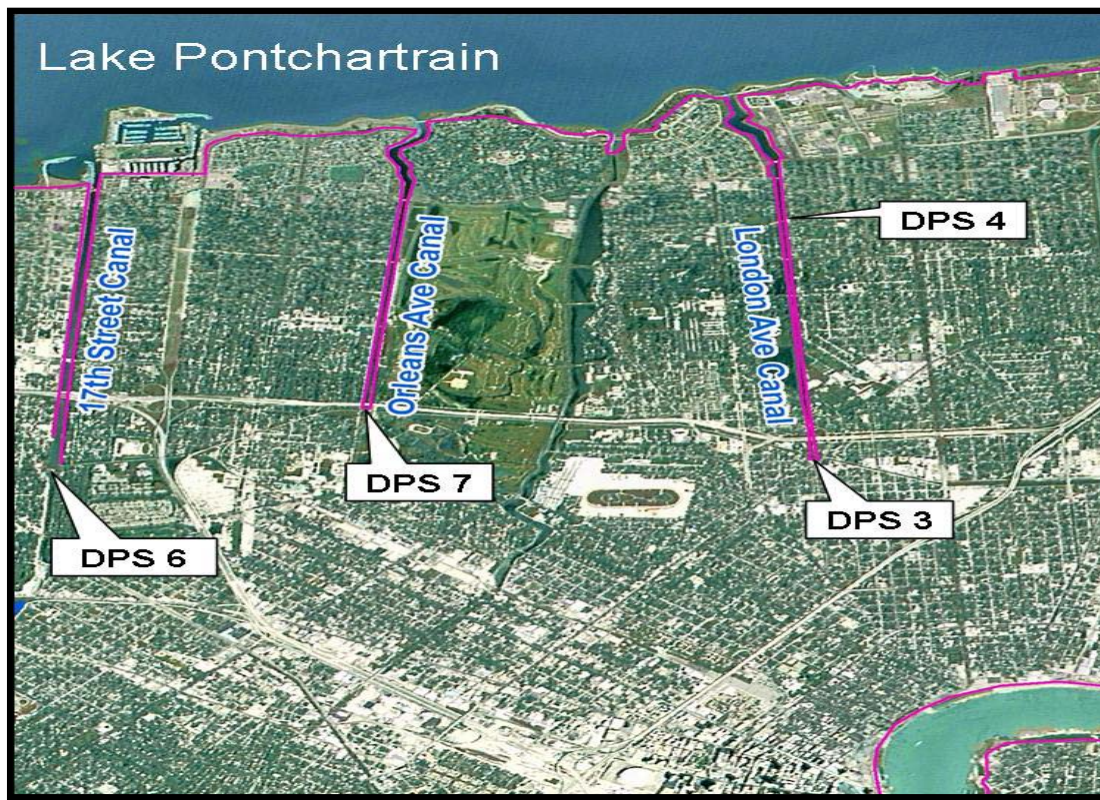


# National Environmental Policy Act (NEPA)

- Required for all major Federal actions
- Analyze potential impacts to the human and natural environment and investigate reasonable alternatives
- Analyses documented in Individual Environmental Reports (IER)
- Public Involvement is KEY! We want to hear from you!
- Goal: more informed decision making through public involvement



## Purpose and Need



Reduce risk to Orleans and Jefferson Parishes from storm surge-induced flooding through the 17th St, Orleans Ave, and London Ave Canals, while not impeding the ability of the area's internal drainage system to remove rainwater.



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# Congressional Authority

## 4th Supplemental

*In June 2006, Congress passed Public Law 109-234 giving the Corps **authorization** and **appropriations** to design and construct **Permanent Pumps** for the outfall canals – specifically, to “...modify the 17th Street, Orleans Avenue, and London Avenue drainage canals and install pumps and closure structures at or near the lakefront...”*



# Outfall Canal Technical Evaluation Report

- May 2007, Congress passed Public Law 110-28 directing the Corps to evaluate the technical advantages and disadvantages of four options for storm surge reduction at the outfall canals
- Completed in August 2007
- Report did not consider environmental impacts, cost or socioeconomic factors



# Outfall Canal Technical Evaluation Report

**Proposed Action: See alternative described in Section 2.3 of IER 5**

## Option 1:

“...operating the new pumping stations (Permanent Pumps) at the mouths of the 17th Street, Orleans Avenue and London Avenue canals in the New Orleans area directed for construction in Public Law 109-234 concurrently or in series with existing Sewerage & Water Board (S&WB) pumping stations serving these canals.”

**Option 2: See alternative described in Section 2.4.4 of IER 5** “...removing the existing Sewerage & Water Board (S&WB) pumping stations and configuring the new pumping stations (Permanent Pumps) and associated canals to handle all needed discharges to the lakefront...”

## Option 2a: See alternative described in Section 2.5.8.2 of IER 5

“...or in combination with discharges directly to the Mississippi River in Jefferson Parish...”



## Permanent Pump Status

- Existing Interim Closure Structures (ICS) have limited project life
- Option 1 is permanent replacement (IER 5 Proposed Action)
- Option 1 is authorized and funded
- Corps Headquarters is currently evaluating the possibility of constructing a modification to Option 1
- Engineering feasibility study of Options 2 and 2a is authorized; funding needed from Congress; 2-3 year timeframe
- Construction of Options 2 or 2a is not authorized nor funded



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# Individual Environmental Report (IER) 5

## Proposed Action

**Proposed Action:** new permanent pump station and closure (i.e. gates) at or near the mouth of the outfall canals operating in series with the existing Sewerage & Water Board (S&WB) pump stations.

**Described in Section: 2.3 of the IER document**

### **Site Location Selection Criteria:**

Based on constructability, risk & reliability, human & environmental impacts.

### **Proposed Site Locations**

17<sup>th</sup> Street Canal: Location A

Orleans Avenue Canal: Location B

London Avenue Canal: Location C





## Features of Common Interest

- Safety
  - 100-year level of risk reduction
- Not impede the ability of the area's internal drainage system to remove rainwater
- Minimize Environmental Impacts
  - Pump station height
    - Lowest profile possible
    - Reduce visibility of auxiliary systems (e.g. generators, fuel tanks, etc.)



## Features of Common Interest (continued)

- Minimize Environmental Impacts (continued)
  - Noise during construction and operations
    - Maintain construction hours in accordance with local ordinances
  - Minimize neighborhood traffic, dust, and congestion
  - Private/public property
    - Smallest possible footprint



## Current Interim Closure Structures (ICS)

- Constructed after Hurricane Katrina
- Provides 100-year level of risk reduction
- Life span
  - 3-5 years originally
  - Extended 5-7 years

*“as long as the permanent facilities proceed according to schedule and a thorough inspection and maintenance program is followed for the temporary facilities, there are no immediate vulnerabilities to catastrophic failures with the hydraulic pumping systems or their supporting systems.”*

Parsons Final Report to DoD IG - Temp Outfall Canal Pumps, 27 Feb 2009



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## Street Level View of Orleans West Side



Interim Closure Structures will be removed in 2014 after Permanent Pump Stations have been constructed and commissioned

**Current view of hydraulic pump platform**



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# Interim Closure Structure (ICS) at 17<sup>th</sup> Street

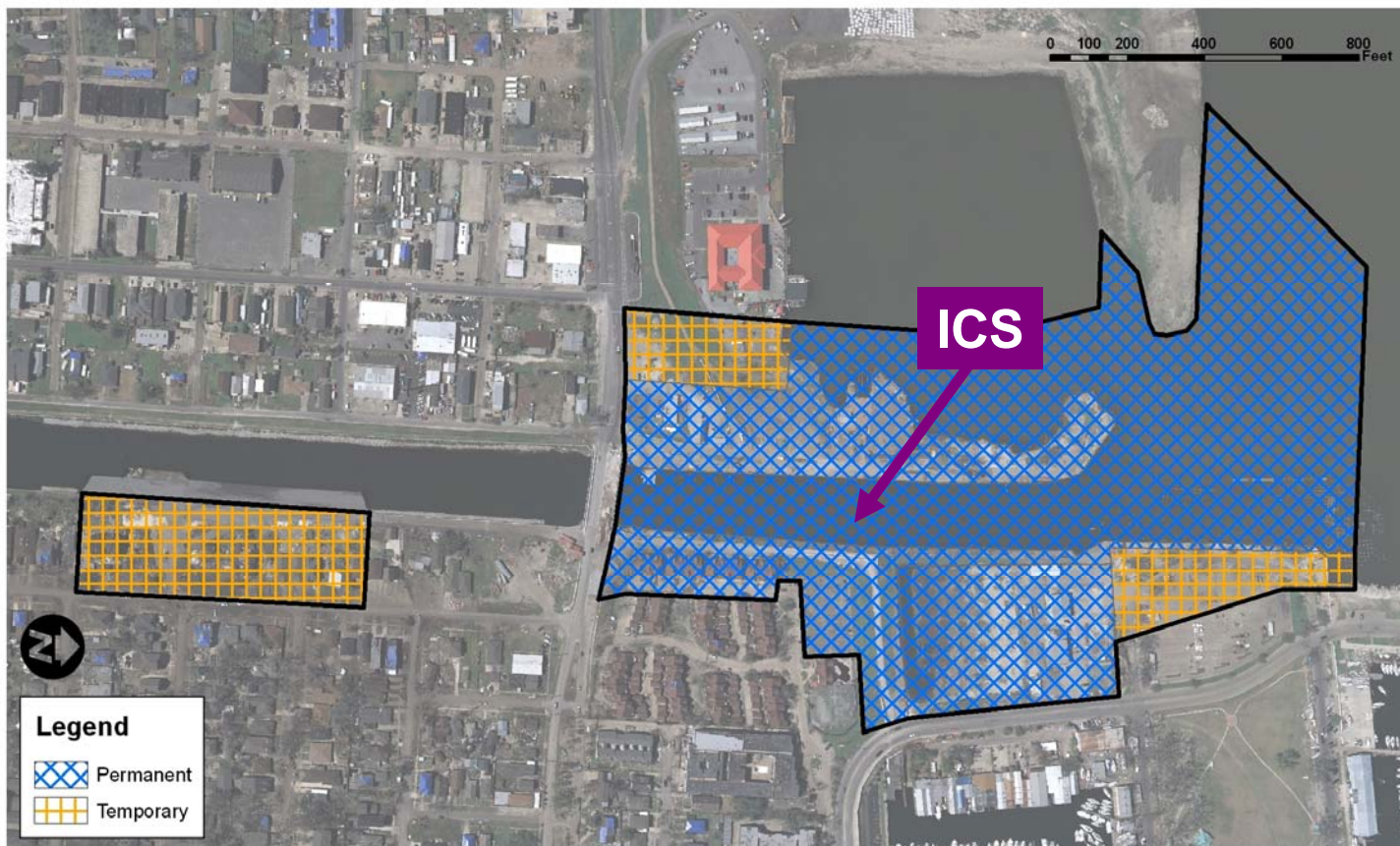




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# 17<sup>th</sup> Street Canal Proposed Site Location A



*The proposed site location shown indicates a maximum footprint with the intent to minimize the footprint during construction.*



# 17<sup>th</sup> Street Canal

## Proposed Site Location A

- Reasons layout alternative A was selected as the proposed site:
  - No bridge modification required
  - Fewer constructability issues
  - Less impact on commercial and residential properties when compared to other layout alternatives
  - The ability to site the pump station and closure structure so that local businesses could possibly remain in their present location
  - Section 5.2.1 of the IER describes advantages and disadvantages of each layout alternative



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# Interim Closure Structure (ICS) at Orleans Avenue



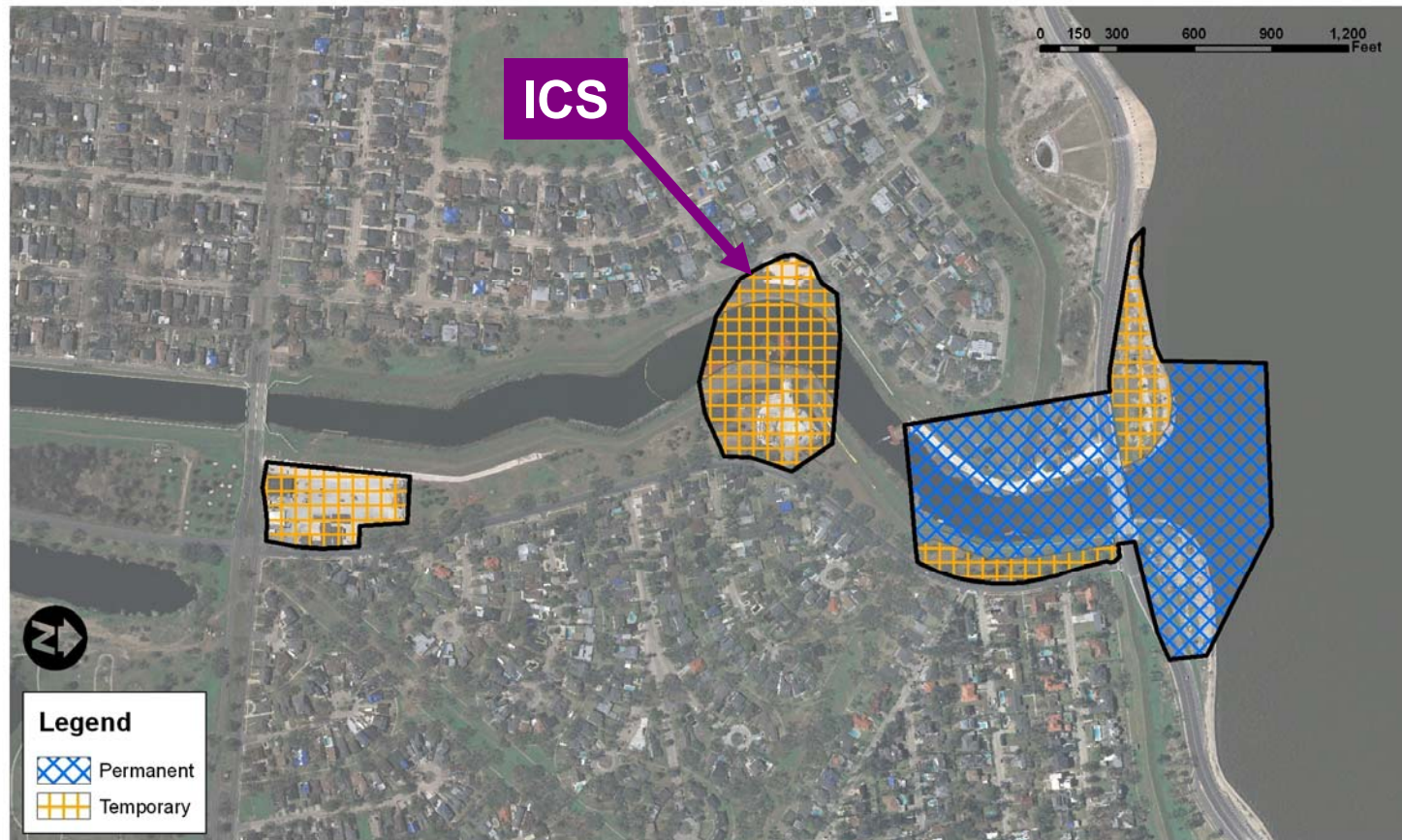




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# Orleans Avenue Canal Proposed Action Site B



***The proposed site location shown indicates a maximum footprint with the intent to minimize the footprint during construction.***



# Orleans Avenue Canal Proposed Site Location B

- Reasons layout alternative B was selected as the proposed site:
  - Ease of construction and minimal impacts on existing hurricane risk reduction system when compared to other layout alternatives
  - Requires less new parallel protection construction
  - Less traffic impacts
  - No bridge modification required
- Section 5.2.2 of the IER describes advantages and disadvantages of each layout alternative



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# Interim Closure Structure (ICS) at London Avenue

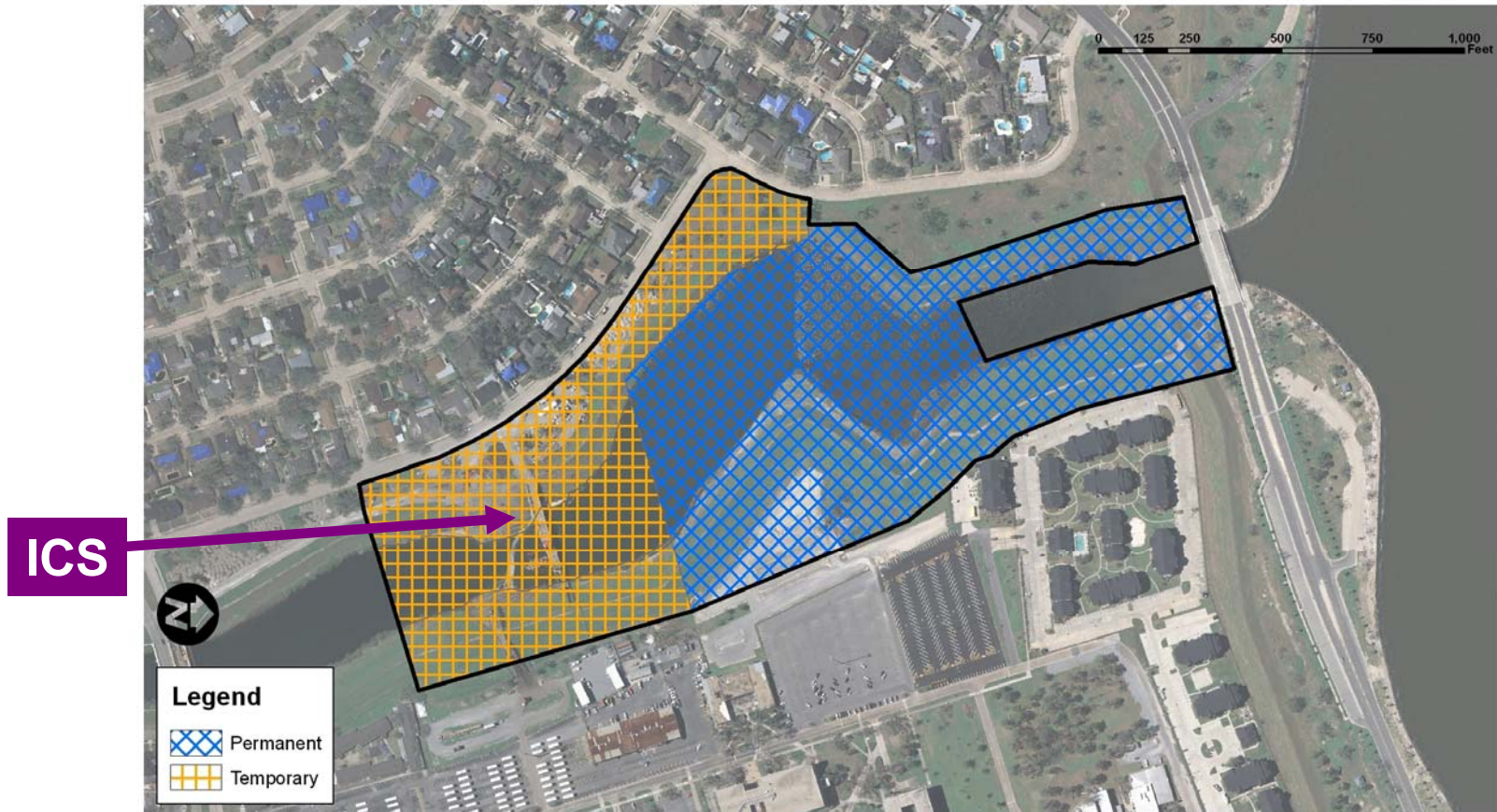




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# London Avenue Canal Proposed Site Location C



*The proposed site location shown indicates a maximum footprint with the intent to minimize the footprint during construction.*



# London Avenue Canal Proposed Site Location C

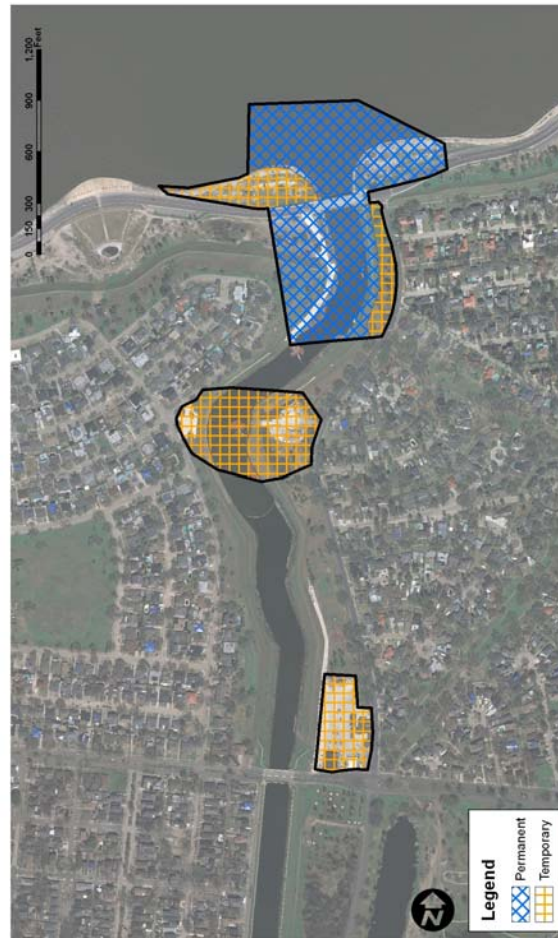
- Reasons layout alternative C was selected as the proposed site:
  - fewer constructability issues
  - less impact to maintaining canal operations with layout
  - no bridge modification required
  - less environmental and visual impacts
- Section 5.2.3 of the IER describes advantages and disadvantages of each layout alternative



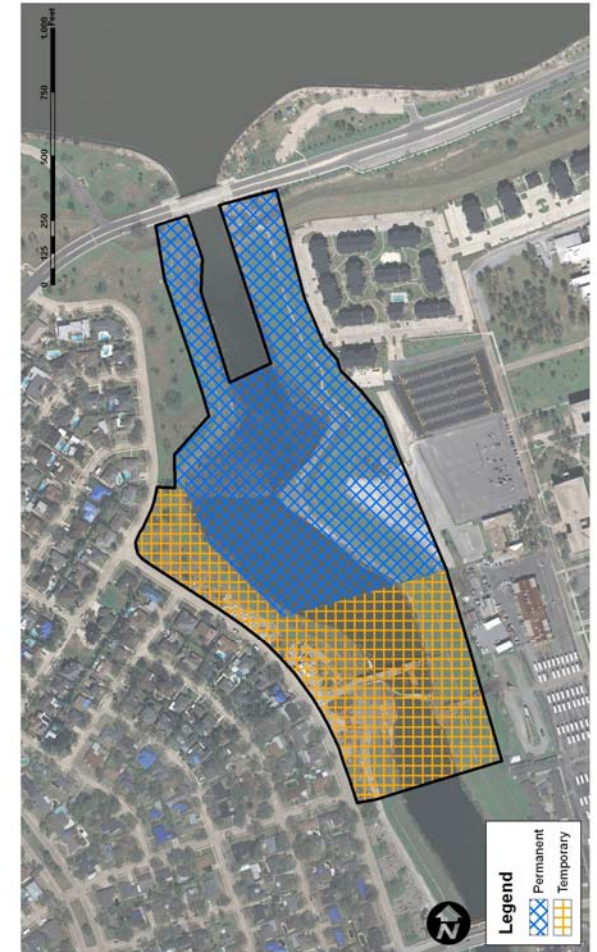
## IER 5: Proposed Site Locations



**17<sup>th</sup> Street Canal**



**Orleans Ave Canal**



**London Ave Canal**



## Proposed Schedule

4 May 2009	NEPA IER #5 public review period (minimum 30 days)
Jun 2009	IER Decision Recommendation
Aug 2009	Project Partnership Agreement
Aug 2009	Issue Design-Build Phase I Request for Proposal
Sep 2009	Meeting # 1 Community Involvement
Oct 2009	Meeting # 2 Community Involvement
Nov 2009	Meeting # 3 Community Involvement
Dec 2009	Issue Design-Build Phase II Request for Proposal
Jun 2010	Award Design-Build Contract
Dec 2013	Est. Construction Completion
2014	Demolition of the Interim Closure Structures



# Community Involvement for Design-Build RFP

- **Meeting 1-** Provide preliminary design parameters to the public for review and comments (**September 09**)
- **Meeting 2-** Discuss ideas and receive written comments from the public (**30 days after Meeting 1**)
- **Meeting 3-** Discuss which ideas and comments were and/or were not incorporated into the RFP and why (**30 days after Meeting 2**)



# Opportunities for Public Input

- **Regular Public Meetings throughout the Hurricane and Storm Damage Risk Reduction System (HSDRRS) 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) minimum 30-day Public Review**

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

**Gib Owen**

**PM-RS**

**P.O. Box 60267**

**New Orleans, LA 70160-0267**

**Telephone: 504-862-1337**

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



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## 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 - 6/3
- 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)
- 05/12/2009 - 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

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

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**Floodwalls**  
*Building them bigger, stronger, better*  
The U.S. Army Corps of Engineers is continuing to work expeditiously to complete the Hurricane and Storm Damage Risk Reduction System (HSDRRS) by 2011. To this end, the Corps is using valuable lessons learned to construct more resilient levees and floodwalls.  
[See for yourself >>](#)

**Hurricane & Flood Risk Reduction**  
Learn more about what the Corps is doing to reduce risk [here >>](#)

**Emergency Information**  
[Road Closures, Disaster Recovery, Parish Information and More >>](#)

**Nola Environmental**  
Did you miss a meeting? No problem! Find presentations, summaries and [More >>](#)

**TOP HEADLINES**

- [USACE-MVN Emergency Alternative Arrangements document confirms action on Westwego & Harve](#)
- [Corps releases environmental document for public review](#)
- [Corps to provide update on Westbank risk reduction projects](#)
- [Corps Seeks Industry Input on Design and Construction of the Greater New Orleans Hurricane and Storm Damage Risk Reduction System](#)

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