



US Army Corps  
of Engineers  
New Orleans District

# Public Meeting Summary

## Greater New Orleans Hurricane and Storm Damage Risk Reduction System Mitigation Public Meeting (HSDRRS) Westwego December 9, 2010

<b>Location</b>	Westwego Tassin Senior Center
<b>Time</b>	Open House 6:00 p.m. Presentation 6:30 p.m., followed by a discussion
<b>Attendees</b>	Approx. 15
<b>Format</b>	Open House Presentation
<b>Handouts</b>	<ul style="list-style-type: none"> <li>• Presentation</li> <li>• Approval Process Brochure</li> <li>• June 2010 HSDRRS Status Map</li> </ul>
<b>Facilitator</b>	Rachel Rodi

### Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS)

West Bank & Vicinity (WBV)  
Environmental Mitigation

Westwego Tassin Senior Center  
Westwego, LA  
December 9, 2010



US Army Corps of Engineers  
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Rachel Rodi: I would like to thank your mayor for coming; Mayor Shaddinger, Councilman Rogers from Westwego, Rep. Billiot and we have Royce Blanchard from President John Young's office. We also have our FEMA representative here, Brian Bartley; he works with the national flood insurance program.

### Meeting Agenda

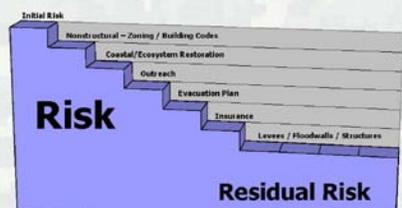
- Discuss Mitigation Program Objectives
- Review Mitigation Project Status
- Review Construction Status of Bayou Segnette Projects
- Discuss Proposed Refinements to Lake Cataouatche Levee
- Break-Out / Feedback Session

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Tonight we are talking about the Greater New Orleans Hurricane Storm Damage Risk Reduction System and we are going to talk about the West Bank & Vicinity Projects as well as environmental mitigation. We are talking about program mitigation objectives, the status of the mitigation program, the construction status of Bayou Segnette Projects and the refinements to the Lake Cataouatche Levees. At the end, we will take you back to our breakout sessions and that is when we want feedback so we can get it into our reports.

### Risk – Shared Responsibility



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This is our slide about risk. We all know that risk is a shared responsibility. There are several things you can do to buy down risk. If you look at this like stair steps and you are looking down there are ways you can buy down risk. If it's nonstructural or zoning or mitigation for your house, coastal ecosystem restoration like barrier islands, outreach, having an evacuation plan and having flood insurance. Then there are things structural like levees and floodwalls. Even when those are in place there will be residual risks. It's especially

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important that during hurricane season you listen to local officials and that you evacuate when an evacuation is called.

## National Environmental Policy Act (NEPA)

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



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National Environmental Policy Act, or NEPA, is used for all major federal actions. It analyzes the impact to humans and the natural environment. What we do in NEPA is discuss environmental documents and again we are here tonight to hear from you.

## Individual Environmental Report: Project Areas



This map is our Individual Environmental Report. Basically, after Katrina, the Corps took all the area that would be needed in the hurricane and storm damage risk reduction system and split them up into 17 distinct areas. What that did was help us get the projects moving along faster. Normally it takes three to four years to get a project going and we did it in 18 months using this system. I am now going to turn it over to Elizabeth Behrens who will talk about our mitigation program.

## Environmental 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 fully funded



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Elizabeth Behrens: There are federal laws that require the Corps to avoid and minimize its impact to the maximum extent practical before compensating for those impacts. While designing the HSDRRS system, the Corps made a concerted effort to avoid and minimize its impacts. Now that engineering and design is largely complete on the system, we are moving forward with plan to mitigate for those unavoidable impacts. Mitigation is an important part of the construction of the whole system and we will replace the lost functions and values of the habitats impacted by either

replacing that habitat type in another area, enhancing similar habitat of low quality or preserving that similar habitat somewhere else. As mentioned earlier, all the impacts from the HSDRRS system have been documented in IERs so consistent with that process and once we get moving on our mitigation, you will see IERs come out that document how we plan to mitigate for those impacts. The funds to implement our mitigation program have already been set aside from the parent project that incurred the impacts so we are currently fully funded for this effort.



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### WBV Mitigation Policies

Generally, mitigation would occur:

- As close as possible to the impact area
- Within the same hydrologic basin (Barataria)
- Within same habitat type
  - Bottomland hardwood
  - Swamp
  - Fresh marsh



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The levees around New Orleans have been broken up into two different project areas. Those on the East Bank of the river are lumped into the Lake Pontchartrain & Vicinity Projects; those on the west side of the river are grouped into the West Bank & Vicinity Projects. To keep our mitigation projects as close as possible to the impacted areas and to be consistent with our regulatory process, mitigation alternatives that we analyzed fell into either the Lake Pontchartrain & Vicinity watershed or the West Bank & Vicinity watershed. You will notice on the map

the West Bank & Vicinity watershed looks a lot smaller than the Lake Pontchartrain & Vicinity watershed. That's because for West Bank & Vicinity HSDRRS work, we only impacted fresh marsh so we truncated the southern boundary of that watershed into the fresh intermediate interface. I also wanted to note that our mitigation will be done in-kind by habitat type so if we impacted a swamp area we will mitigate for it with a swamp project.

### WBV Affected Habitats



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For the West Bank & Vicinity HSDRRS work, here are the habitat types we impacted. We have bottomland hardwoods, both wet and dry, consisting of deciduous hardwood forest generally occurring in low-land flood plains along large rivers and lakes. We also have swamp, generally consisting of flooded cypress tupelo stands of trees and fresh marsh occurring in areas of little to no salinity with little to no tidal action.

### Total WBV Impacts

West Bank & Vicinity Projects  
Original Construction and HSDRRS – Current Working Estimate

Habitat Type	Quantity (acres)	Quality (AAHUs*)
Bottomland Hardwood Wet	1,986	1,105
Bottomland Hardwood Dry	30	11
Swamp	205	125
Fresh Marsh	148	74
<b>Total</b>	<b>2,349</b>	<b>1,315</b>

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

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So for the West Bank & Vicinity, here are impacts by habitat type. Last time we presented to you all, we were asking for any alternatives that might be beneficial for us to look to implement our mitigation program. We got a lot of good suggestions from you, our non-federal sponsors, non-governmental organizations, and state and federal resource agencies. We took all these suggestions and ran them through some initial screening criteria to reduce the suggestions to a workable number.

### WBV Initial Screening Criteria

- Compliance with laws, regulations and policies
- Avoid Hazardous Toxic and Radioactive Waste
- Within WBV Mitigation Basin (Barataria)
- Must address 100% of mitigation need in kind by habitat type
- Technically viable (e.g. correct salinity)

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These are some of the initial screening criteria we went through. I will only highlight a few of them. The second to last one, basically any suggested mitigation project had to meet 100% of our need by habitat type. For instance, if we only need 10 acres to fully mitigate our swamp impacts, the suggested project for swamp had to be at least 10 acres. The last one, technically viable, if someone suggested a project, the area it was suggested for had to be able to support that type of

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habitat. If it's a swamp project, it couldn't be in areas where the salinity was too high that the trees couldn't survive.

## WBV Initial Screening Criteria

- No conflicts with other projects constructed or planned for construction
- Not dependent upon another project
- Can be adjusted to meet mitigation requirement only
- Addresses multiple mitigation requirements in one project area
- Addresses opportunities to expand existing resource-managed areas

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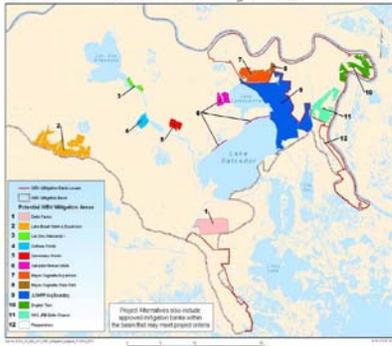
So these are the rest of our screening criteria. We have the criteria that selected projects had to be scalable. If someone gave us a swamp project that was 100 acres and we only needed 50 acres, you had to be able to scale that project back down to 50 acres. For example, we had some large and medium-sized diversions and typically diversions like that are not scaled efficiently to meet our mitigation needs so some of those fell out that went through our initial screening. The last two, in an effort to encourage large mitigation projects, we developed various criteria to several of our mitigation requirements into large continuous tracks of manageable land in lieu of doing multiple small projects throughout the watershed.

## West Bank Projects Considered



For West Bank & Vicinity we had over 400 initial features that went through our initial screening criteria. They consisted of mitigation banks, LCA projects, CWPPRA projects, those suggested by the state and federal resource agencies, the public, non-federal and non-governmental organizations.

## WBV Initial Screening Results



As you will see this slide, a lot of them fell out because the southern boundary was moved on the West Bank due to our fresh marsh impacts only. What we ended up with is 12 potential Corps mitigation sites. We are not showing banks on this slide as all banks that meet our initial screening criteria, by the time we get to make a decision on the mitigation plan, will be considered further. Alternatives shown here all meet or exceed the mitigation requirement and we are currently working to further refine and size these appropriately. For instance, the blue area; that's much more than we need for the habitat that we impacted, but we know these areas are good for mitigation so they will be scaled down.

## Mitigation Tentative Timeline

Iniated Study	May 2010	(Completed)
5 Scoping Meetings	May 2010	(Completed)
Initial Screening of Measures	Sep 2010	(Completed)
Project Status Public Meetings	Dec 2010	(Completed)
Refine Measures	Apr 2011	
Assemble Alternative Plans	Jun 2011	
Identify Proposed Action	Aug 2011	
Release Individual Environmental Reports	Jan 2012	
Division Approval of Mitigation Plan	Jan 2012	
Final Design of Mitigation Projects	Jun 2012	
Start Real Estate Acquisition	Jun 2012	
Issue Construction Contract	Jun 2013	
Transfer Project to Non-Federal Sponsor	Post-Construction	

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Here is our timeline for our mitigation projects. To be consistent with our IER process, we will be coming back to you periodically with status meetings on the IERs and where we are in our planning process and to get input from you. As I mentioned, we are now at the point where we are refining our measures, where we are getting all information possible on the projects and sizing them accordingly. Our anticipated release of our IERs is about a year from now with engineering and

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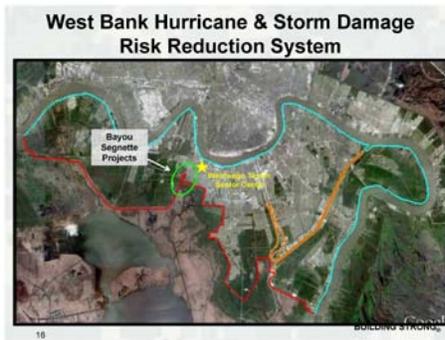
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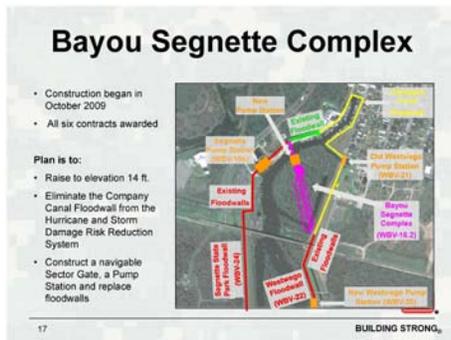
design being complete around June of 2012. Our goal is to issue all of our construction contracts by June 2013.



Sami Mosrie: I'm Sam Mosrie and I'm one of two senior managers assigned to the West Bank & Vicinity Project. Tonight I am going to give you an update on several ongoing construction projects, six of many.



This map just shows you where we are located in relation to all the projects that we are going to discuss today along Bayou Segnette.



We currently have six ongoing projects initiated back in October 2009. Pre-Katrina the protection was through the Company Canal and back down tying back into the new Westwego Pump Station. An analysis was done on the existing protection system post-Katrina and it was determined that we were deficient in height and stability. It was determined that nothing could be done in this area of the Company Canal Floodwall, which is an I-wall structure. The purpose of the Phase I analysis was to get us through several more years until the design for the 1% 2057 storm event could be designed and awarded. What we did there, since nothing could be done with

the Company Canal, we did emergency measures and we have something we call the Company Canal Barge Gate, which is a barge that is hinged on this side and swings into position and then it's flooded and dropped. It seals up against a seal underwater. It's deep enough that it allows navigation through there; that is our protection right now. We've had the opportunity to operate that Company Canal Barge Gate on several occasions and it's proven to be very beneficial. We have some instances of pedestrian gates opening in the Company Canal that has a seal elevation of two and as you know, the elevation in that canal because of wind, not necessarily rain or a storm, but just a wind-driven event will push water up in that canal and can overtop. The current protection system right now, the Phase I, we were able to go in and reinforce everything that you see here other than the Company Canal and that bought us a little more time to get the Phase II design out.

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**Segnette State Park Floodwall (WBV-24)**

- Award Date: Dec. 23, 2009
- Contractor: David Boland, Inc.
- Award Amount: \$20.9M
- Status: 43% completed



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The plan is to raise this whole area to elevation 14. The first one out of the six projects is the Segnette State Floodwall, which is a floodwall that runs along the embankment of Segnette State Park. There is an existing floodwall out there to elevation nine. This is going to be built to 14 and was awarded back in 2009 to David Boland at a cost of \$21 million and we are currently at 43% complete. At no time during construction did we allow a gap opening any larger than 300 linear feet to be unprotected. By doing that, if there is an approaching storm, that 300-foot could be closed off in a short time and I believe it was 48-hours notice to the contractor.

**Segnette Pump Station Fronting Protection (WBV-16b)**

- Award Date: Jan. 25, 2010
- Contractor: M.R. Pittman Group, LLC
- Award Amount: \$19.6M
- Status: 47% completed



19 BUILDING STRONG

The second project is the Segnette Pump Station Fronting Protection. As you probably know, we have an old pump station and a new one; we call them Pump Station One and Two. Again, we did phase one interim measures to protect that and buy us some more time. That contract has been finalized and awarded back in January 2010 to M.R. Pittman for approximately \$20 million. We are almost 50% complete on that. We also have temporary by-pass pumps that count for the loss of pump capacity of Pump Station One. The foundation of Pump Station One required us to construct that outside of hurricane season because there is an existing wall in front of it that has tie backs to it and that can't be cut.

**Segnette Pump Station Fronting Protection (WBV-16b)**



20 BUILDING STRONG

This is just a shot of the new versus the old pump station.

**Bayou Segnette Complex (WBV-16.2)**

- Award Date: Feb. 10, 2010
- Contractor: Cajun Constructors
- Award Amount: \$42.8M
- Status: 33% completed



21 BUILDING STRONG

The next project adjacent is the Bayou Segnette Complex; we refer to it as a mini Western Closure Complex. It has the same toys that we have on the other one, but just smaller. It has a levee section through here and a T-wall section through there. We have a pump station and a navigation sector gate as well. The purpose of this is to take this whole system out of the protection system so once this is completed, our protection system will wrap around. We had to tie into the north side of Bayou Segnette because the Segnette Pump Station has a capacity of a little over 2200 cfs. If we were to come anywhere below that we would have to have compensated for that. As it stands, the Old Westwego Pump Station, currently at 400 cfs, we are matching it with a new pump station here. After this



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is built, the whole area behind here will become a retention area only. We will probably knock down the elevation to it. I believe the current plan is to take it down to elevation four and six. I'm not sure of the final elevation on that.

Male Speaker: When you say elevation do you mean the levee?

Sami Mosrie: The elevation yes. The area right here. Once this project is in place and we tie it in on both sides, this whole area in will be retention area for this 400 cfs pump right there. It only has to retain so much because once we close off the sector gate and we start the pumps right here, that's going to have the same capacity, 400 cfs. Whatever goes into the retention area will come out.

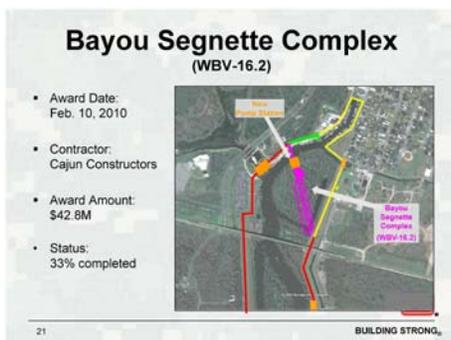
Male Speaker: That retention area ...what is going to be the elevation there? Are you going to maintain the retention pond...

Sami Mosrie: It's not going to be dredged. What you see is what we are going to have. It will not be dredged. The only thing we are doing with the walls is to cut them down slightly because we don't have to head up against...the Company Canal Barge Gate will come out and will no longer be used. That was designed and built for temporary measures only. Every year prior to hurricane season, we go out there and test it and we have to do repairs to it. This is something that West Jeff Levee District didn't take over. We maintain it until we can get the final protection system in.

Male Speaker: I guess the concern that I'm having now is that what you are saying that area, the wooded area right there, that's going to stay....

Sami Mosrie: Everything will stay wooded with exception of a 56-foot sector gate right here. The reason we are building out here is that it's easier for us to build it on land and once that is complete, we are going to re-dredge; we are going to dredge this material out here and here to allow navigation through that sector gate. Once that is done we will come back and close off the existing canal with T-walls.

Male Speaker: You didn't say that before so I was wondering once you did that how that would work, but I see that now.



Sami Mosrie: One thing to note is that by June 2011 we will have the majority of this done. The only thing that will be left is this closure structure right here. We are currently looking at either revising the design of that to expedite it or having a TRS, if we build it the way it's currently designed and that means it has to be built in the wet, we will have a temporary retaining structure that goes around it to keep the water out. We will probably design that TRS to accommodate the 2011 one-percent event. We are currently looking at methods to expedite the construction of this area. Of course this can't be done until we open up the channel here for navigation.



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**Bayou Segnette Complex**  
(WBV-16.2)

Early construction at Bayou Segnette included driving the sheet piles for the Temporary Retaining Structure also known as a coffer dam.



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This is just a shot of Bayou Segnette Complex here. This is a picture of them driving sheet pile. This eventually will be the compression ring cofferdam that you will see on the next slide.

**Bayou Segnette Complex**  
(WBV-16.2)

The Temporary Retaining Structure at Bayou Segnette allows workers to build the sector gate in the dry.



23 BUILDING STRONG

This is the picture of the compression ring cofferdam, which is basically sheet pile in the ground for stability and we have a compression ring that is poured around and this allows us to build the foundation and the bottom slab of the structure in the dry.

**Westwego Floodwall**  
(WBV-22)

- Award Date: Oct. 22, 2009
- Contractor: W. G. Yates & Sons Construction Company
- Award Amount: \$7.5M
- Status: 98% completed



23 BUILDING STRONG

This slide is the Westwego Floodwall that goes all the way from the new pump station to the old pump station. We've had some issues with this reach of the wall and that's why we came in with a tie-in point right here. Phase I did make some repairs to this whole reach. We had some deep soil mixing through here to stabilize this. We also replaced this wall and that is what we are calling WBV 22, the Westwego Floodwall that extends here and ties into the Segnette Complex.

**Westwego Floodwall**  
(WBV-22)



The newly constructed T-wall in Westwego was completed November 18, 2010.

24 BUILDING STRONG

This is a shot of the completed wall.



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**New Westwego Pump Station (WBV-20)**

- Award Date: Oct. 2, 2009
- Contractor: Shavers-Whittle Construction
- Award Amount: \$14.7M
- Status: 58% completed



25 BUILDING STRONG

This is the New Westwego Pump Station, WBV-20. It was awarded in 2009 to Shavers for a cost of \$15 million and we are beyond the half-way point.

**Company Canal Floodwall and Old Westwego Pump Station**

The existing protection behind WBV 16.2, Bayou Segnette Complex, will no longer be the main line protection. It will be converted to a retention area.



26 BUILDING STRONG

(slide not covered in presentation)

**Lake Cataouatche Levee Refinements**

Individual Environmental Report 15 Supplemental to be released in early 2011

Current Conditions:

- Pipeline is placed on the surface of the existing levee crown and slope

Proposed Action is to:

- Relocate the utility within existing right-of-way via Directional Drill
- Dredge a portion of Bayou Segnette for construction access
- Temporarily impact approx 5-10 acres of wetlands
- Replace a culvert with a pontoon bridge



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This is the Individual Environmental Report 15 Supplemental to be released in early 2011 and will be out for public review for 30 days. One thing to take from here is that we have an existing Chevron pipeline crossing at this point and we will directionally drill underneath it to get it out of our way and all of this will have an impact of five to 10 acres of wetland, but it's all within our right-of-way. In order to reduce impact on mitigation, we are also replacing a culvert with a pontoon bridge for access. I believe the dredging is from Bayou Segnette this way. This will be out in early 2011 for a 30-day review.

**Currently Available for Public Review**

- IER 33 – Co-located Mississippi River Levees
  - Public review through Dec. 25, 2010



28 BUILDING STRONG

Rachel Rodi: Currently right now for review we have IER 33, which is the Co-located Mississippi River Levees. It's on review until Christmas and that is on nolaenvironmental.gov.



# Public Meeting Summary

### Upcoming Public Meetings

**Monday, Dec. 13, 2010**  
Atchafalaya Basin Floodway System Master Plan Update public meeting - Opelousas  
Opelousas High School  
1614 Judson Walsh Dr.  
Opelousas, LA 70526  
Expected attendance - 100

**Tuesday, Dec. 14, 2010**  
Atchafalaya Basin Floodway System Master Plan Update public meeting - Port Allen  
West Baton Rouge Community Center  
749 N. Jefferson St.  
Port Allen, LA 70767

**Wednesday, Dec. 15, 2010**  
Causeway Construction  
New Orleans Market Metairie at Lakeway  
3530 N. Causeway Blvd  
Metairie, LA 70002  
Open House 5:00 to 8:00 p.m.



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If you want to attend some other across the state, we will be in Opelousas on Monday and the Port Allen on Tuesday for the Atchafalaya Basin Floodway System Master Plan Update Meeting and then the Causeway Construction meeting is on the 15<sup>th</sup>. These are not mitigation meetings but they are other meetings we want to make you aware of.

### 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)



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Besides tonight, you can also write us, email, and call or fax us and let us know your feedback on this or any other project. We also have a construction impact hotline if you have construction in your area and there is any concern. Reports can be found at [nolaenvironmental.gov](http://nolaenvironmental.gov). If you want to talk to us personally, you can call public affairs at 862-2201.

### Resources

[www.nolaenvironmental.gov](http://www.nolaenvironmental.gov)      <http://www.mvn.usace.army.mil>





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We have several resources; we have [nolaenvironmental](http://nolaenvironmental.gov) and then we have the Corps website and those links are at the bottom of the maps in the back.

### 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 work 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](http://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).

**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.



We are on Facebook, Twitter and Flickr.

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Here are all the links. Twitter is quick updates while Flickr has a lot of pictures of all our projects. On Facebook, you will find news releases, updates, photos and other things. That is it for tonight. We have teams in the back to hear from you.

## Comments collected during feedback session:

- What happens when you mitigate?
- Will mitigation be in kind?