

## Army Corps Public Meeting Summary

IER 12, 13 and borrow Public Meeting Thursday, March 13, 2008

Location	Our Lady of Holy Cross College
Time	7 p.m.
Attendees	approx 75 and 16 staff
Format	Presentation
Handouts	<ul> <li>PPT print out</li> <li>Borrow Mar. 10, 2008</li> <li>Corps Approval Process</li> </ul>
Facilitator	Julie Morgan
Presenter	Julie Vignes, senior project manager, Westbank and Vicinity Projects



Welcome by **Billy Nungesser**, Plaquemines Parish President

Colonel Alvin Lee, New Orleans District Commander

Thanks for being here. We are trying to provide a level of protection and are presenting the alternatives we're looking at to you. This is an opportunity for you to give us feedback that we will consider as we move forward with designing the system. We have not made a

decision yet, these are alternatives we're looking at to determine which direction we should go and how to build the system. With any option, just like with clothes, you have options. Some alternatives are better than others, some require tradeoffs, some of the tradeoffs are negative and some are positive. What you'll hear is an explanation of the alternatives. Our team will run through the alternatives then facilitate a discussion to get your feedback. It is important for us to hear what you have to say and it is important for us to take what you say into account.

There are a few things such as timelines and timeframes that coincide with decisions. 100-year level of protection for the Harvey and Algiers Canals fall under IER 12. That's what we are here to talk about tonight. The draft report is expected to be released around May 21, 2008. As soon as it comes out there will be 30-day public comment period which is scheduled to end on June 19<sup>th</sup>. This summer will be the final approval of IER 12, it will be around July 7, 2008. That could change but that is the current schedule. What will happen is we will hold another meeting on the 22<sup>nd</sup> of May where we'll present the preferred alternative.

I will turn the floor over to Julie Morgan who will facilitate tonight.

#### Julie Morgan, USACE Public Affairs

Thank you President Nungesser for your opening. I'd also like to thank Col. Lee and Our Lady of Holy Cross College for providing us a venue. I'd like to recognize our elected officials here tonight:

Anthony Buras Council Member, District 5
Keith Hinkley Council Member, District 2

This is the third time we've been in this venue and we have a good crowd. Thanks for coming. We know it's been a long day and it is important that you realize your role here is important. We're going around the metro area getting comments on alternatives we're proposing. The purpose is to update you on on-going construction projects and to provide you an avenue to express issues and concerns you may have about the proposed alternatives for 100-year level of protection. The program tonight will be presented by Ms. Julie Vignes, the senior project manager for the Westbank. She will give the presentation then we will open the floor to questions. Please wait until after the presentation before asking questions or making comments. If people start interrupting the presentation gets off track and she may answer your question during the presentation.



#### Julie Vignes, Senior Project Manager

Good evening. Thanks for coming tonight. We have such a large crowd and we appreciate your input. We'll talk about Individual Environmental Reports the Corps is evaluating for this area. IER 12 covers the Harvey and Algiers Canals and IER 13 covers the Hero to Oakville levee. I will discuss the alternatives for 100-year level of protection.

National Environmental Policy Act: NEPA

Required of all major federal actions

Analyze potential impacts to the human and natural environment and investigate reasonable afternatives

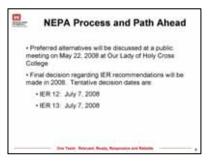
Public Involvement is KEY! We want to hear from you'

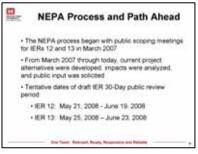
Goal: more informed decision making through public involvement

Analysis documented in Individual Environmental Reports (IER)

The National Environmental Policy Act requires the federal government to consider impacts to the natural and human environment. The key to the process is public involvement, we need public involvement to make a more informed on the selection of the alternative. All the project impacts will be documented in the IER.

This is the tentative schedule for IER 12 and the proposed 30-day



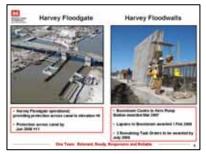


review period. IER 13's comment period will probably be from May 25-June 23. We will have a public meeting before the comment period ends.

The proposed approval of IER with the selected alternative is July 7, 2008 for both reports.



This is the Westbank Vicinity hurricane project. It has 66 miles of levees and floodwalls from [pointing] St. Charles Parish in the west near Davis Pond to Avondale, through Westwego and Lapalco to Algiers. It terminates near Oakville.



This is the Harvey Floodgate at Lapalco which is now operable. We can close that gate and provide protection to elevation 8 feet. There will be contractors working on the walls from the Cousins Pump Station to [inaudible]. It will be at an elevation 11 by the start of this hurricane season.

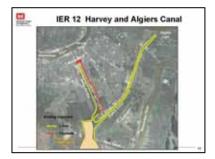


These are the floodwalls along Peters Road on the Eastbank of the Harvey Canal [pointing] they extend south to the Hero Canal. We have one contract awarded that will go from the Boomtown Casino to [inaudible] that was awarded in March. You have probably seen the walls under construction.

Last month we awarded a contract from Lapalco to Boomtown. That was a four mile reach and three more contracts will be awarded by July of this year. This reach [pointing] will be under construction for about a year. A contract was just awarded from Lapalco to the casino. There is a short reach to the Hero Canal Pump Station that we expect contracts to be awarded for by July.

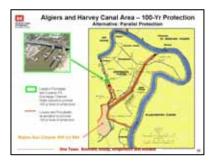


We awarded a contract to improve the levees from Algiers to the Hero Cutoff. The remaining levees on the Westbank of the levee and on the Eastbank have been previously improved for hurricane protection.



These are the alternatives under consideration for the Harvey and Algiers Canals.

The yellow shows the existing levees and the red shows the floodwalls. This is the 404(c) site [pointing].

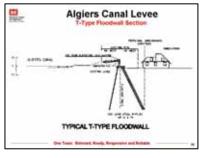


There are three basic alternatives. One is parallel protection we would have to enlarge and raise the levees along Algiers and Harvey Canals to achieve 100-year protection. The floodwalls are at the 100-year level of protection. We'd need to improve them at the Lapalco floodgate because they were already under construction to a point where we couldn't raise them.



For improving protection on the west side of the Harvey Canal we looked at different levees, shifting to the canal side, straddling the levee, splitting it and we considered floodwall options. This blue line represents a footprint that the enlarged levee would sit in. We'd take more property behind the system to fit the levee around the 404(c) area. All of our impacts would be away from the 404c area.

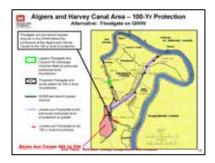
We looked at enlarging the levee. This image depicts the existing levee which sits at 9 -10 feet. The stability needs to be improved. Not only would we enlarge the levee but we would add a berm. Our preliminary engineering told us the levee would have impacts on businesses and residents on the banks of the canal. As part of parallel protection we are looking at structures. The floodwall behind the existing levee mitigates impacts of barges. It will take up less of the levee footprint and reduce impacts but still poses impacts to residents and businesses.



This is the type of floodwall that exists.



One alternative is a floodwall on Engineers Road and improving levees in the remainder of the area. It eliminates access issues. We're also looking at a adding a floodgate on the Algiers Canal to eliminate impacts to many residences and businesses. We still have to improve levees [pointing] and enlarge the floodgate. There are levees we can construct with some business impacts but there are environmental concerns and the levee section is large and costly. This alternative avoids this 404(c) area.



By providing 100-year protection at this location we eliminate the need for [inaudible] and reduce work needed on pump stations. There are 11 pump stations above this gate. This alternative includes a sector gate pump station and a bypass channel that would be used during construction to maintain navigation. This alternative would be a levee or a floodgate section that would cross the 404(c) section.





This is IER 13 project area, it covers the Hero Canal Levee and goes to Oakville.

We looked at many configurations for this area. The likely the alternative is an enlarged section like the existing levee on the bank of Hero Canal. It requires a large footprint and there are



impacts to a small number of businesses and houses.

The Hero levee comes across here [pointing] on the north to close the system by tying in to the Mississippi River levees. We've looked at seven alternatives to get there.





Alternative 1 has us crossing the Hero Canal. It would require a gate and there is a levee section along that alignment.

Alternative 2 has a gated closure and ties in structures.



Alternative 3 has [inaudible] engineering reasons or obvious environmental [inaudible] to identify this alternative.



For Alternative 4 we are considering extending the Hero levee and tying it straight into the Mississippi River levee. This would leave businesses, the landfill and residents from Oakville outside of 100-year level of protection.





Alternative 5 avoids having to close the gate. We could build the floodwall levees here [pointing] and it would come near the highway and [Inaudible].

Alternative 6 also crosses the highway.



Alternative 7, all of these alternatives would require us to raise Belle Chase Highway. The floodgate would have to be closed or a ramp or a bridge section would need to be built.





This gives a perspective of all areas identified to possibly acquire borrow material. There is a great need for borrow suitable for the levees. The need is greater than 100-million cubic yards.





On the Westbank of Jefferson Parish, we've investigated these sites.

These are the sites in Plaquemines Parish we've investigated.

These are other sites in Plaquemines, moving further south.





Larger maps are on the walls. They reflect what investigations have been done and say whether or not they are suitable or declined or approved. We can address your questions about them.





There are detailed displays around the room and the team will be available to answer your questions.

Nolaenvironmental.gov houses presentations and reports as they become available. There is lots of information available on the site. There is a 30-day review period for IERs. Gib Owen is the environmental

manager. His e-mail address and phone number are here for you to provide comments.

#### Julie Morgan, USACE, Outreach:

When we go to meetings we bring many of Subject Matter Experts and Project Managers. There are also people here from other agencies:

Dean Arnold Task Force Hope, Risk and Reliability

Tim Connell Project Manager, Algiers Levees

Todd Klock Real Estate

James McMenis Louisiana Department of Transportation

Bill Maloz Senior Project Manager, Plaquemines

Sami Mosrie Project Manager, Floodwalls

Al Naomi Branch Chief

Gib Owen Environmental Manager

Jamie Phillips Louisiana Department of Environmental Quality

Tutashinda Salaam Project Manager, Borrow

Stevan Spencer Orleans Levee Board

Benny Rousselle Louisiana Department of Natural Resources

Rob Thompson Real Estate

Stuart Waits Senior Project Manager, Floodwalls

We want you to take advantage of this team's knowledge and we want to answer your questions. Please step up and use the microphone. Please introduce yourself and limit your comments to 3 minutes. Respect each other's time, we'll get through all your comments. I'll be watching the clock so please be constructive and follow the rules. Your feedback will help us select an alternative and makes this process more meaningful. Constructive comments are appreciated. If we haven't answered you, please ask again or we can meet with you afterwards to talk more. We'll try to answer your question then move on. Our Project Managers will also be here afterwards in case you don't want to talk in front of everyone else.

Question 1. Susan Weyer: You mentioned that on Peters Road there are various floodwalls and contracts have been let. You also mentioned there would be Algiers Canal contracts awarded in July. When is the expected date of completion? On Mar. 11 in the Times-Picayune there were risk maps published showing what the Corps expects impacts of a storm event will be by 2011. With 100% pumping and it shows the metro area is completely dry, including the [inaudible] of New Orleans but it still shows flooding in Algiers. So what's going to change with 100-year protection? Do we have to have additional things? That article just affected my property value.

**Response 1.** Vignes: As far as construction contracts, the one we awarded in January we expect to be completed in October, with a levee on both banks. The Harvey Canal floodwall not awarded so the task orders don't have completion dates for those projects but, before June 2011 we expect to have the 100-year hurricane system.

That risk model was done for planning purposes to give a general idea of your risk before Hurricane Katrina, show improvements since Katrina and then show how risk will be reduced by June 2011. Those maps don't show how the water will be in a basin. It's a gross model trying to show something very detailed. Do we think the model is exactly right? Not exactly. The street flooding on those maps show risk from surge and rainfall [but it doesn't show internal drainage issues well]. There is some pump capacity in the model.

**Question 2.**Weyer: Why is Algiers lagging behind then? If these maps are not reliable should we not have had more qualifications on publication of them as it's changing property value? Maybe you should have put more qualifiers on the maps. You show New Orleans dry but not Algiers. Is once again Algiers coming up last?

**Response 2.** Vignes: It's not true that Algiers is lagging. Improvements to the system for 100-year protection are moving along just as quickly here as in the rest of the system. We are doing preliminary planning. The system is scheduled to be completed by June 2011. An alternative is being selected, the design being completed and construction is beginning.

**Question 3.** Don Costello: Thank you for being here. What concerns me is that Algiers will still have 2 to 4-feet of flooding. I saw it in the Times-Picayune. Algiers is coming in last. In IER 12, Alternative 2 with floodgates, that's a viable alternative. I haven't heard anything about London,

Orleans or the 17<sup>th</sup> St. canals? They wanted to put a pump station at the head of the canal so it wouldn't have to go through berm expansion on private property. You made a comment [about Alternative 1] that there is poor soil and that the alternative was more expensive. Is it more expensive than the social and economical costs to the Eastbank? I would say no. I don't want to hear about cost. It's good to have meetings but I don't want to hear about how much it's going to cost. If you don't do it you'll lose your home and get more insurance, that is if someone writes it. With the amount of material, 100 million cubic yards of clay, would you have to borrow less of it if you don't have to do the canals?

**Response 3.** Vignes: Yes, one advantage of a gate is we wouldn't enlarge the levee.

**Question 4.** Costello: Just like a cargo ship learned from the Titanic [inaudible] then shut it off so the ship [inaudible]. There is a levee on the Donner Canals it has sheet piling going to the other side [inaudible]. It doesn't know about spending money shoring up the canal and keeping Algiers from flooding. I mentioned that a year ago. I see nothing about it. Compartmentalization always has a line to follow back to. The year before North Dakota flooded, was under 59 feet of water, I spent one month in Grand Forks and it's beautiful now. Their levee looks like the ones built in the 1920's. Why not have lines of defense to fall back on?

**Response 4.** Vignes: Part of the decision involves many things. We have to improve reliability. One advantage of a gated structure is it reduces the area that would get storm surge entering the system [inaudible]. You have secondary protection behind [inaudible]. Some alternatives consider [inaudible] reliability and risk.

**Question 5.** Allen Green, Oakville Community Action Group: Why do we have to have an alternative to save Oakville? Oakville has been around since 1869. We figured we should be in the protection plan. Who is going to hold our fate to see if we're in the protection plan?

**Response 5.** Vignes: You are talking about Hero?

**Green**: I'm talking about protection of Oakville. Why have an alternative that doesn't protect Oakville?

**Vignes**: NEPA makes us look at all alternatives. One alternative is no action. What would be the effect if we didn't construct anything? It was identified to be considered and has some advantages but much less than an action. Trade offs of each alternative will be considered.

**Question 6.** Green: I talked to Coleen about a meeting on April 3. What is she coming to talk about? To talk about how we might be in the plan or might not?

**Response 6.** Vignes: We want to make sure you have opportunity to speak so we hear your opinion. We have 7 alternatives under consideration.

**Comment 7.** Green: We've had seven churches in Oakville since 1865. You're going to have displacement of a whole community if we're not in the protection plan. Hopefully you will have us in the plan.

**Response 7.** Vignes: That alternative is essentially not going to move forward. We just need to show all alternatives under consideration, including No Action. We appreciate the impacts to that community.

**Question 8.** Lea Perez, Oakville: Gentlemen, I understand his concerns as we look at alignments. Oakville should be in the protection system. My comment is that I'm glad to see people from Jefferson and Plaquemines are here but would like to see more people here from the lower end of the alignment, from Jesuit Bend. I didn't have clear notification of the meeting tonight. I can't speak for them and can't express their feelings. This alignment should go back to back with the other levee which would extend down [inaudible]. There is an exiting levee that's been there for 60 years. It runs behind Oakville and goes to Larousette. I wish the protection went down to Larousette. The alliance refinery produces jet fuel. At one time it was the largest refinery built in the United States. There are plans to expand it. [Inaudible] would alleviate the problem and go behind rather than through nonresidential property. It would include a lot of residential property in the Jesuit Bend area. That is where [a high] percentage of Plaquemines Parish population is. There it's developed a strong tax base and potential for growth. If you look at an aerial view from the river to the alley, 75 percent or more is the Naval Air Station. I understand the Naval Air Station [inaudible] but we, below the alignment, feel we've been neglected. Even though it is 9 miles, the other man said "costs." I know 100-million cubic yards [is a lot] but it is a drop in the bucket for projects you have going on now. If you go back to the alley frame, you'll notice at the lower end of Plaquemines you have alignment the alignment going across the highway. You mentioned 3 scenarios; one is looking at a gate, another a ramp and then a bridge. We have some other affected landowners. As for myself, they'll speak for themselves but I'd prefer a gate across the highway because it's economical and takes the least amount of area in which people live around. We would lose the ingress/egress but I'm for the gate scenario.

**Response 8.** Bill Maloz: We have a project to incorporate non-federal levees into the federal system. It would take 9 miles and tie into the Westbank and Vicinity project. We'd bring the levee down from New Orleans to Venice. To bring it up to the authorized grade, we'd need it mandated by Congress.

**Question 9.** Perez: Not knowing what exactly the project was, we would have been here a year ago to express my feelings that the 100-year levees should be to Larousette. I understand this project would start next year and end in 2011. My question is how high would the back levee be toward the marsh?

**Response 9.** Maloz: 14 feet. It would tie-in. It's at 15 feet in the reach from New Orleans to Venice. That's where the beginning of the hurricane protection levee [inaudible].

**Question 10.** Perez: Is there anyway to have Oakville to Larousette incorporated into the 100-year protection system?

**Response 10.** Maloz: I don't know.

**Question 11.** Perez: What did you say about another back levee project? It's not federal yet but it's authorized?

**Response 11.** Maloz: It's a local levee. There is one project in the Westbank and Vicinity portion of the system that is a non federal levee. We're mandated to include those 25 miles into the federal system. They're 14 feet and at the southern most portion go to elevation 15 feet.

**Perez**: When would it start?

Maloz: We are in the planning stages and working with NEPA on developing a supplemental environmental impact statement on the existing [project]. Construction I've discussed yesterday indicates we would have construction complete in late 2011 or early 2012. That includes preparation of a supplemental Environmental Impact Statement and issuance of a record of decision and [inaudible] to bring us an alignment that's acceptable to government property owners and [inaudible].

**Question 12.** Robert, Algiers: Is there any consideration to close the Algiers section of the Gulf Intracoastal Waterway and move it to enlarge the Hero Canal so you don't have to protect along the canal? The canals in New Orleans facilitate commerce but also storm surge. We need to think about a Category 5 ring levee. It's been shown in computer models that the storm surge pushed [the water] up higher. We're positioned [to belike the] 17<sup>th</sup> Street canal but on the Westbank.

**Response 12.** Connell: That alternative was considered in the innovation study but cost and impracticalities such as dredging and other environmental hurdles led us to determine it wasn't viable. Essentially, the sector gate south alternative will do the same thing. [Your suggestion] was looked at.

Question 13. Jay Madison Drake: I support the efforts of the Corps with public meetings and it's hard work to get plans [in place]. I support the floodgate control structure planned across the Gulf Intracoastal Waterway that would cut off at the root of the Harvey and Algiers canals. I know [inaudible] but would provide a greater chance of success if there was serious storm surge. [Inaudible] to avoid Eastbank canals. The Westbank has a new agency called the Southeast Louisiana Flood Protection Authority West with seven board members. Will the final EIS be revised and will the Corps be asking for board approval?

**Response 13.** Vignes: Yes, the Department of Transportation and Development and Southeast Louisiana Flood Protection Authority work as a state partner in construction. They're involved in planning and we'll provide an opportunity for them to comment and work closely with us on selection of the alternative. The actual decision is a Corps decision but they work with us.

**Morgan**: We are taking your comments and the Project Managers will review them. You can go to <a href="https://www.nolaenvirnmental.gov">www.nolaenvirnmental.gov</a>, click on this meeting and see our responses. You can also submit comment at the Web site.

**Question 14.** Aloma Savastano: I hear you talking about second classes and are forgetting the Eastbank of Plaquemines Parish. Why isn't it included?

**Response 14.** Vignes: The 66-mile project was authorized by Congress. It doesn't mean [inaudible] would need Congress to do that.

**Question 15.** Glenn Orgeron, Algiers: The publication of maps and charts in the Times Picayune shows Algiers was one area that would flood even after 2011. What, if anything, can the Corps or designers do to improve the plans so we're not faced with 0-2 feet of water when the rest of the city is dry? Why are we still going to flood after all the construction is done?

**Response 15.** Dean Arnold: Internal drainage is a local government interest. We're building a system to withstand a 1 percent storm. The maps weren't meant to reflect interior drainage. Interior drainage flows through canals, it can't be modeled. It took \$25 million to get this far and will probably take another \$10 million to get better. You could have 23 inches of less water but these maps aren't that accurate, they weren't intended for that. When it was first published, it showed 0% pumping. Now pumping is in there but it is not accurate.

**Question 16.** Orgeron: Where can I go to find out who is responsible for drainage? How do we address this so we're not lead to believe that houses will flood?

**Response 16.** Tom Podany: You go to the Southeast Louisiana Flood Authority. There's an Algiers sub-basin we'll do a study to see if [inaudible] to reduce rainfall. Over the next two years we're scheduled to complete [inaudible] to reduce the threat of rainfall flooding. It is currently underway, we are just getting started. There was lack of funding but we'll address it under the Southeast Louisiana (SELA) project.

**Question 17.** Man on the side: So with a 1 percent storm, you have areas of Gen. de Gaulle and areas from the lower coast flooding and you're calling that a rain event? I thought the hurricane system was about preventing a storm surge event? So the Plaquemines portion of that doesn't flood but you're saying we will have flooding from 1-3 feet and [this scenario] still exists with the 100-year flood solution? Why would Algiers flood but not Plaquemines?

**Response 17.** Podany: Most of that flooding is from rainfall. The maps aren't very good at showing where rainfall flooding is. They show where water collects. It gives a sense of how much rainfall will fall. [Inaudible]

Comment 18. Orgeron: Hopefully we will have something else going on. I think what was done, through the publishing of these charts in the Times–Picayune, was to create a significant reason for insurance companies to say Algiers is going to flood. Insurance and flood rates and homeowner policy rates are going to go higher. You're going to cause home values to go down. If that is the intent then [your maps] did a good job. [Inaudible] let's not leave that impression with the public. It could cause significant [inaudible].

**Comment 19.** Susan Weyer: I heard "cost" regarding the 533d we were looking at for drainage. If on the national news, the entire Algiers area is underwater no one can forget it. Eastbank [inaudible] if this event happens again you can forget the economy. That cost to do drainage, whether from rain or floodwater, will pale in comparison to the evening news showing flooding.

**Question 20.** Frank Dollinger: I'm concerned about the east side of the Harvey Canal. I heard you say April 2009. That project was pushed back from July 2008 and now it's into 2010 or 2011. It's going to take a long time and there are more hurricane seasons that I have to worry about getting wiped out. The levee board has done Hesco baskets. I have been asking this question, what can the corps do to help us out?

**Response 20.** Waits: There's no federal protection on the east side of the canal. You have protection with the Hesco baskets. They're looking at getting the gates up to 11 feet. I don't know the status. We are looking to award the last 3 contracts in the next 3 months. What drives the end date is the longest duration contract which is the Hero pump station, probably 2 years. We just awarded a contract for 8,200 feet. The construction contractor has a 580-day duration and that looks like it will be complete in Sept. 2009 without delays. If it's not done in July, early 2010 is the best case scenario.

**Question 21.** Dollinger: I noticed Cajun Contractors. It looks like some days they don't work or they don't work weekends. Construction doesn't seem to be done with a sense of urgency. The second section is being completed later than what was supposed to be. Can we pick up [the pace]?

**Response 21.** Waits: All project schedules are aggressive. The floodwall is 19 feet high, that's a lot of effort in that first portion. It doesn't look like it but it's a phenomenal task to drive piles 130 feet long. The sheet piles are 80-60 feet long, and that's before concrete can be placed. There will be something around 25 cranes needed to get everything done within the next 500 days.

**Dollinger**: I watched them pull flimsy sheet piles. We don't have much protection. I hope you would do something.

**Stuart**: We've compressed the timeline.

**Question 22.** Alan: I commend the Corps for what they are trying to do. Everybody is frustrated and I'm frustrated too. I represent owners from properties between the Harvey Canal and the new floodwalls that are going to be built. We've been told in writing that we won't be compensated for being on the flood side of wall. Can you explain this?

**Response 22.** Real Estate: We're not excluding you, your property just won't be within the protection system. The conditions and possibilities of barges and other activities in the Harvey Canal causing damage has lead us to place the wall on Peters Road. You're not losing property value, you'll have the same value.

**Question 23.** Alan: Is there another avenue for compensation? They said there would be no federal protection along the Harvey Canal. We've been omitted. Is there another venue for compensation? Another government office since our property has been commandeered?

**Response 23.** Real Estate: We're acquiring property for our projects and will make an offer during negotiations. If we can't agree we'll finalize condemnation with the court and you would go through the courts to get just compensation.

**Question 24.** Alan: The policy told us [inaudible]. What happens [inaudible] value of the footprint of the wall? There's no consideration after 60-years of flood protection? We'll be on our own to flood fight?

**Response 24.** Real Estate: The local levee was protected before and is still protecting that area. That hasn't changed.

**Vignes**: As we said earlier we're considering a 100-year alternative that crosses the GIWW. It would provide protection to businesses on the Eastbank of the Harvey Canal.

**Question 25.** Margie Leclere: I live near the levee in back of Walker Road and the Hero Canal. I am concerned with the quality of soil used for borrow. I have concerns about testing for toxins.

**Response 13.** Vignes: We take borings and do testing of the soil. The tests determine how wide the levee should be and if berms are going to be on either side.

**Question 26.** Leclere: Do you test for pollutants?

Response 26. Vignes: Yes.

**Question 27.** Leclere: Where can I get a report of that report?

**Response 27.** Gib Owen: As we do hazardous and radioactive testing it's posted on the Web site.

**Question 28.** Leclere: If toxins are found, could that prevent building levees?

**Response 28.** Owen: There are landfills in that area and we go around those.

Question 29. Leclere: So we would have a levee constructed in the area even if a pollutant was there?

**Response 29.** Owen: Most studies have figured ways to get around pollutants. We have a workable solution to get around known problems.

**Question 30.** Gary: If we're still reviewing alternatives, to me that sounds like we don't have firm funding. Is that something we do have already? The problem is [inaudible] and maintenance. Is that

being considered? The government is famous for building first class buildings and not maintaining them.

Response 30. Col. Lee: We have \$7 billion now, the president's budget for 2009 adds \$5.7 billion a portion is cost shared from our non-federal sponsors and that brings the total to \$14.6 billion. That's what we have to fund the entire system. From my perspective we have \$7.1 billion in hand and we need \$7.5 billion to finish. Funding is in the president's budget and Congress will determine if [inaudible] supplemental budget. We're pretty confident we'll have funding to complete the project. We did a cost estimate. We have a cost center, we used that center in Wala Wala, Washington and had an external review. That cost estimate was built project by project and they estimated the cost, then looked at how long it will take to build. We did a risk analysis and determine the costs then added contingency and escalation. We feel confident that \$14.6 billion will give us a 100-year level of protection system.

**Question 31.** Gary: What about subsidence and maintenance issues?

**Response 31.** Col. Lee: Subsidence and sea level rise built into the design of levee. It will take us to 2057. \$1.5 billion is required to keep the system it at the required elevation. We all know if you build a levee it starts sinking. There's a plan to have operation and maintenance through 2057. 50 years is the standard project life.

**Question 32.** Gary: So we do have funding for maintenance?

**Response 32.** Podany: We have planned for project maintenance for 50 years. Currently we are funding levees and floodwalls to be completed by 2011 so you can be certified for flood protection insurance. We know there will be a need in 10-20 years for levee lifts. It has been factored in. Those funds are not on hand but are not likely needed for 20-30 years to keep the system up. We anticipate subsidence so we can keep levees at 100-year elevation. Future funding requirements, over 50 years, account for settlement

.

Question 33. Donald Vallee: There are shooting grounds at Walker and Bayou Road. I have a hunting club. I watched construction back there and the failure of soil packets and trash soil dug out. We have encountered the Peters Road extension to connect to Belle Chase Highway. I assume that's part of your plan. My concern is with a floodwall. How much land encroachment will there be on Bayou Road? From a safety standpoint, we have a shooting range. How far is the encroachment from the crown of levee to Walker Road? We have a bunch of [inaudible] that encapsulates lead.

**Response 33**. Connell: There are 18 [inaudible] anticipated if we go that route. There will also be a bypass channel.

Vallee: Through my front door.

**Connell**: Yes, there will be a bypass channel. If the plan chosen includes a gate, it will be constructed in [inaudible] and the channel will be excavated. Once this channel is completed [inaudible] flow and

concurrent [inaudible] pump station construction in this vicinity. There will be large impacts to this area.

**Question 34.** Vallee: Is that Bayou Road? Those are dedicated roads. That's our 225 acres from that corner all the way through [pointing]. We've had great expenditures over 25 years. Will you compensate us?

**Response 24.** Todd Klock: There will be an appraisal of your property and you'll get compensated based on what the property is appraised for. You'll get benefits for relocating.

**Question 35.** Vallee: I have interest in [inaudible] beneficiary. Is there consideration on a lease holding interest?

**Response 35.** Klock: It depends on the lease. [Inaudible].

**Question 36.** Vallee: What about [inaudible] and remediation?

**Response 36.** Klock: Remediation is a different question. We'll have environmental testing done.

**Connell**: We'll start environmental testing.

**Question 37.** Vallee: You've looked at the soil because of the lead aspect? Where can we meet with you to see a time table and drawings to see what will impact us?

**Response 37**. Morgan: I'll get with you and make an appointment. If you are a representative from a neighborhood association our Project Managers will come out and talk to you and your area.

**Question 38.** Diann Amstutz, Harvey east of the canal: This gentleman mentioned funding. I read that there was a funding shift taking place. Money was going to improvements [at the outfall canals] was being shifted for an emergency repair of the Industrial Canal. Is the funding shift going to affect us?

**Response 38.** Col. Lee: You asked about if a shift at the IHNC surge barrier is going to affect this area? No. The funding was transferred from permanent pumps and shifted to the IHNC surge barrier. When the president's money is available it'll be replenished in this area.

**Question 39.** Amstutz: That's good to hear. What I read is that this southern sector gate may be a good idea according to the Harvey Canal Industrial Association. They are in favor of this. What I'm looking at is, even if [this alignment is] approved, are the rest of the levees going to constructed and backed up?

**Response 39.** Col. Lee: Correct. There will be no affect to ongoing construction. What will happen is if this gate is built here [pointing] the levees will become secondary lines of defense, secondary lines of protection. So this would be primary [pointing] and this would be secondary.

**Question 40.** Amstutz: So if this is built, Algiers won't funnel water up the Harvey Canal and create the same problems that they had New Orleans?

**Response 41.** Col. Lee: If it is a sector gate, it must be improved.

**Question 42.** Amstutz: I'm on the other side of the gate and I have no protection. That's going to push pressure on the floodwall and increase the likelihood of overtopping. Where you have the southern sector gate looks like a more reasonable way to go. If you do 100-year protection I guess there will be an enormous pump station. I can think of 5 pump stations on the Algiers/Jefferson side pumping into the Harvey and Algiers Canal.

**Response 42.** Col. Lee: There would be pump stations and they would have pump capacity. Both should have tremendous pump capacity.

**Vignes**: Pumping could be 18,000 cfs. The Algiers gate is 10,000-12,000 cfs.

**Question 43.** Amstutz: Is the date to begin and finish [inaudible]?

**Response 43.** Vignes: We're doing preliminary engineering and will move forward on more than one option. [Inaudible] could decrease the construction period. [Inaudible] one point might be the Harvey floodwalls which are being constructed to elevation 14. Those will provide 100-year level of protection.

**Question 44.** Lady sitting: Will that cover surge like that at the 17<sup>th</sup> Street canal?

**Response 44.** Vignes: It'll give you protection from a 100-year storm. You'll see that in Kenner or Lakeview the storm surge was predicted to be [inaudible]. You can't compare the elevation in Kenner to the elevation here but the design will still provide 100-year level of protection.

**Question 45.** Lady sitting: Would a 14-foot wall cover that?

**Response 45.** Vignes: It would be overtopped but the T-wall designs are different than the I-walls on the 17<sup>th</sup> Street canal. We reduce catastrophic failure.

Question 46. Lady sitting: What is the reason our walls are only 14 feet?

**Response 46**. Vignes: Hydrology determines the 14 feet elevation.

**Comment 47.** Mark Magee, Belle Chasse: [Inaudible] on Walker Road and the GIWW and they tie in to the Marrero Land levee in Lafitte. Katrina is a past [inaudible] for water. The surge didn't [inaudible] water surge. We know Plaquemines got 22 plus feet of water surge. Belle Chasse logged a [inaudible] in diameter and washed up [inaudible]. I take position at [inaudible] crossing the east side

of the Westbank. [Inaudible]. I resent you only building a levee to 14 feet and calling it 100-year protection. I would like you to pursue [inaudible] the levee from Caernarvon to the Gulf Intracoastal Waterway including Belle Chasse and into Oakville.

I'm looking at the plan you have here. The GIWW lock system [inaudible]. [Inaudible]] If you're looking for soil and that's a big issue. If you're removing the further height and going with a gate, bearing hydraulics [inaudible]. If Katrina had gone much further to the west and fell in Plaquemines in Port Sulphur and in Grand Isle, the water hydraulics would have come up through Barataria and would have been restricted. They would have funneled through and made their way through the tributaries. It would have been like a fire hose. A 14 feet gate should be saved. The height of that levee is 6-10 feet which would sustain 1 or 2 [inaudible] marine traffic at the southern side. You could use the Harvey Canal and GIWW if it were locked during a Category 5 storm. I have reservations about building to 14 feet height. With hydraulics and the speed of the water, all of Algiers and Jefferson would look like the 9<sup>th</sup> ward. A 14 foot levee and miles of protection on a waterway is money spent unnecessarily.

**Question 48.** Kennett Stewart: Are all seven alternatives still under review or are any prioritized? Is anything prioritized before a selection?

**Response 48.** Vignes: All alternatives are being evaluated and then we will have a selected plan. We're reviewing input on all seven then will select one alternative.

**Stewart**: You'll have 1 alternative?

**Gib Owen**: We'll put the document [with the proposed action] our for a 30-day review and then will come back for a public meeting. If during the 30-day review, someone brings up a new alternative, we'd do an addendum and look at the suggestion. We're pretty confident we have the information we need and in the report it would be obvious what to do.

**Question 49.** Stewart: Oakville would go for another 26 miles?

**Response 49.** Maloz: St. Jude would be at 15 feet.

**Stewart**: Is it tied into Oakville?

Maloz: Yes.

**Stewart**: When is the start time?

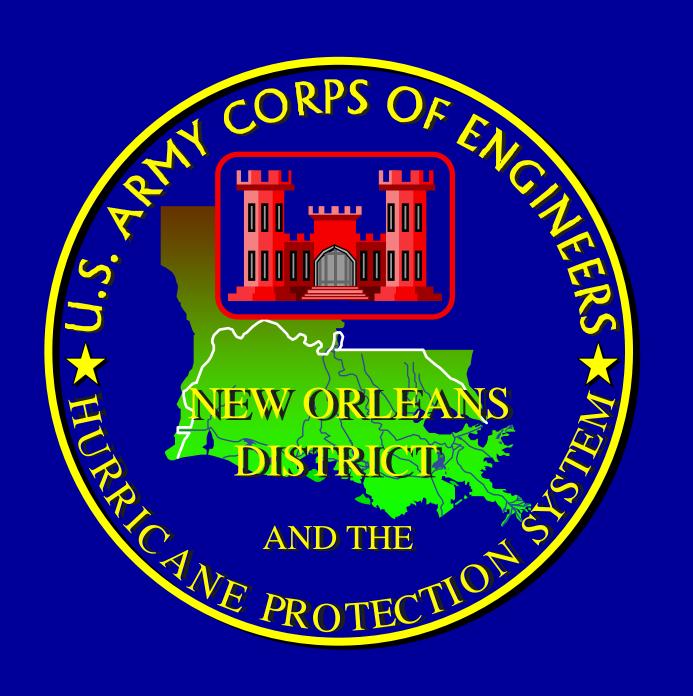
Maloz: 2011/2012.

**Question 50.** Weyer: My main concern is about 14 feet. A CNN report with data from the national hurricane center, the U.S. Army Corps, NOAA and [Inaudible] said that a Category 3 storm would generate 18 feet of storm surge. If there were anything above a Category 3 it wouldn't be adequate.

**Response 50**. Vignes: Our levee designs are based on surge and probability. Katrina was a 400-year storm event. If Katrina hit the Westbank levee it would overtop the system.

Comment 51. Rose Jackson, LA Environmental Action Network in Baton Rouge and Oakville Community Action Group and a resident of Plaquemines: I have not heard anything about the Eastbank side of Plaquemines or the lower end of Plaquemines from Port Sulphur going down. There are residents down there who are taxpayers. I don't want to hear about cost when we spend \$12 billion a week in a country that we aren't in. (some clapping). I don't want to hear about cost. If the president can send money to Iraq, we need it here. Plaquemines has been [inaudible]. Let [inaudible] cut canals and waterways. It's time for payback. (clapping)

**Morgan**: Thanks for coming. The Project Managers are here for you. Please fill out the surveys before you leave.





## Westbank and Vicinity Project Update

IERs 12, 13 and borrow
100-year protection
Storm Damage Risk Reduction System

Ms. Julie Vignes, Senior Project Manager
March 13, 2008
Our Lady of Holy Cross College
Algiers, LA



## Why are we here tonight

To discuss the status of in-progress projects and alternatives that will bring the Westbank and Vicinity portion of the Storm Damage Risk Reduction System in Jefferson, Plaquemines and Orleans parishes up to 100-year protection levels.



# National Environmental Policy Act: NEPA

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

One Team: Relevant, Ready, Responsive and Reliable



## **NEPA Process and Path Ahead**

- The NEPA process began with public scoping meetings for IERs 12 and 13 in March 2007
- From March 2007 through today, current project alternatives were developed, impacts were analyzed, and public input was solicited
- Tentative dates of draft IER 30-Day public review period:
  - IER 12: May 21, 2008 June 19, 2008
  - IER 13: May 25, 2008 June 23, 2008



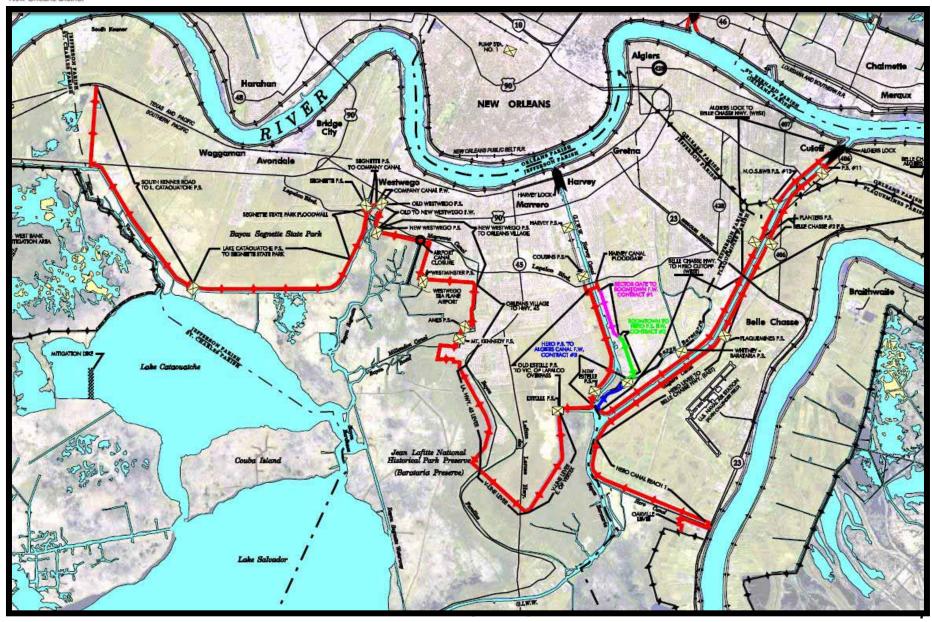
## **NEPA Process and Path Ahead**

- Final decision regarding IER recommendations will be made in 2008. Tentative decision dates are:
  - IER 12: July 7, 2008
  - IER 13: July 7, 2008

## HAH

## **West Bank and Vicinity Hurricane Protection Project**

US Army Corps of Engineers. New Orleans District



## **Harvey Floodgate**

## **Harvey Floodwalls**





- Harvey Floodgate operational; providing protection across canal to elevation +8
- Protection across canal by Jun 2008 +11

- Boomtown Casino to Hero Pump Station awarded Mar 2007
- Lapalco to Boomtown awarded 1 Feb 2008
- 3 Remaining Task Orders to be awarded by July 2008





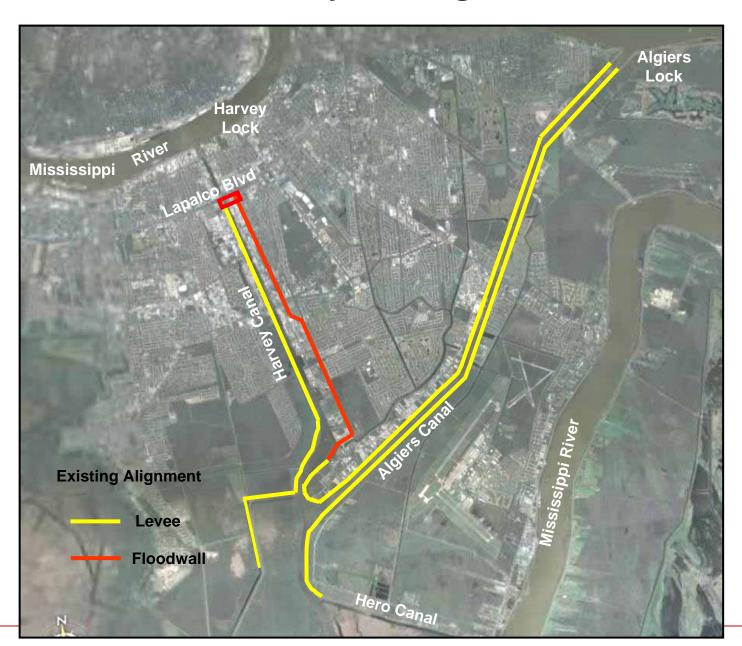
## **Algiers Canal Levees**



- Contract awarded 4 Jan 2008 to raise the levee along the west bank of the Algiers Canal from Belle Chasse Hwy to Hero Cutoff to elevation +10.
- Remaining levees on the west bank, and all levees along the east bank of the canal, have been previously improved for hurricane protection.



**IER 12 Harvey and Algiers Canal** 

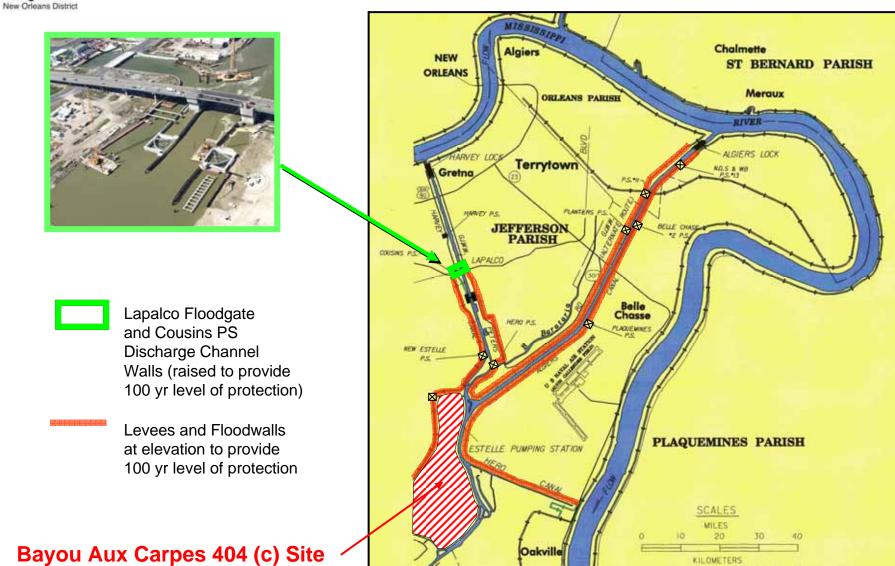


## US Army Corps

of Engineers

## Algiers and Harvey Canal Area – 100-Yr Protection

**Alternative: Parallel Protection** 



One Team: Relevant, Ready, Responsive and Reliable

## Hai

## **Levees West of Harvey Canal**

US ATTIVE COTES OF FRANCE PROPERTY (STRAIGHT OF FRANCE O

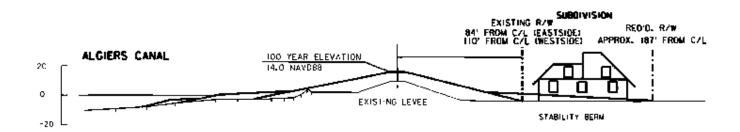
Earthen levee section (landside shift)
May require relocation of drainage canal





## **Algiers Canal Levee**

#### **Earthen Levee Section**

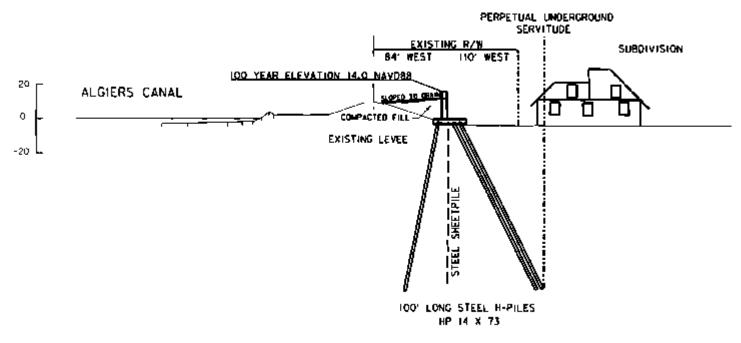


#### TYPICAL SECTION - FULL EARTHEN LEVEE



## **Algiers Canal Levee**

## **T-Type Floodwall Section**



## TYPICAL T-TYPE FLOODWALL

## US Army Corps of Engineers

# Algiers and Harvey Canal Area – 100-Yr Protection Alternative: Floodgate on GIWW

Floodgate and permanent bypass channel in the GIWW below the confluence of the Algiers and Harvey Canals to the 100 yr level of protection

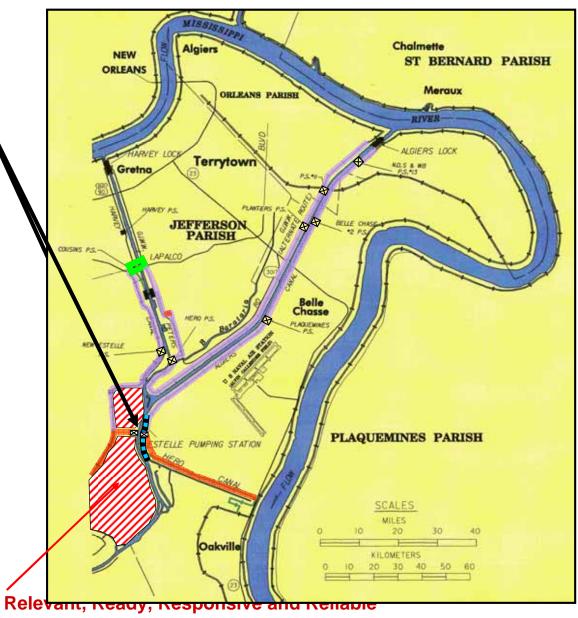
Lapalco Floodgate and
Cousins PS Discharge
Channel Walls at previously
authorized level
of protection

Proposed Floodgate and pump station at 100 yr level of protection

GIWW permanent bypass channel

Levees and Floodwalls to the previously authorized level of protection or greater

Levees and Floodwalls to the 100 yr level of protection



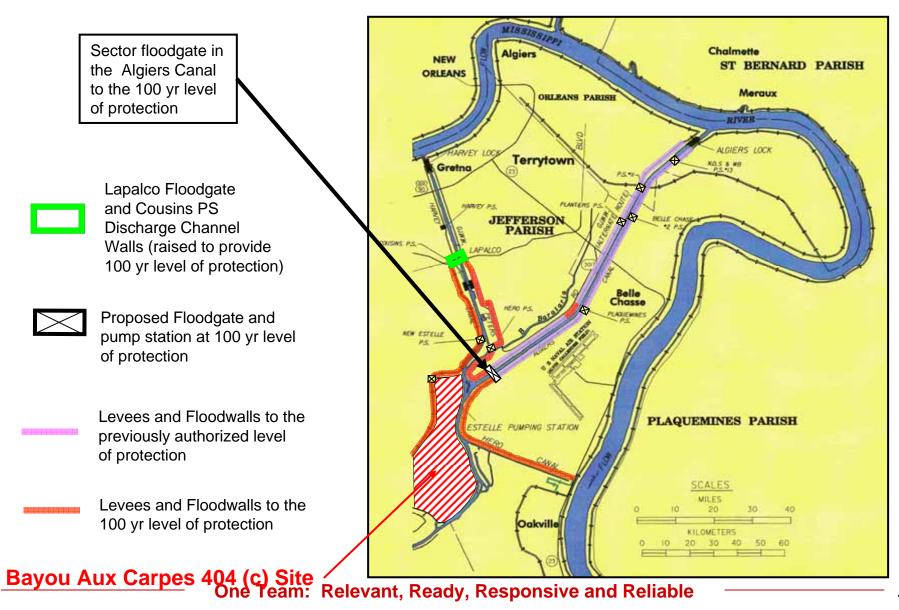
Bayou Aux Carpes 404 (c) Site

16

#### US Army Corps of Engineers. New Orleans District

## Algiers and Harvey Canal Area – 100-Yr Protection

**Alternative: Floodgate on Algiers Canal** 





### **IER 13 Hero to Oakville Levees and Floodwalls**



### HAH

#### **Hero Levee**

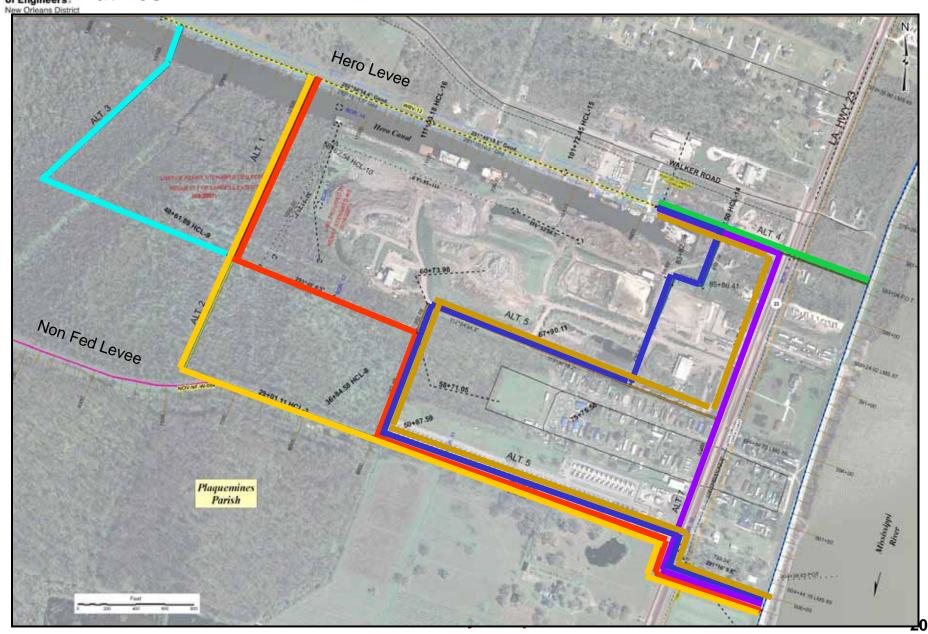
of En Arthur Corps of En Arthur

#### **Earthen levee section (landside shift)**

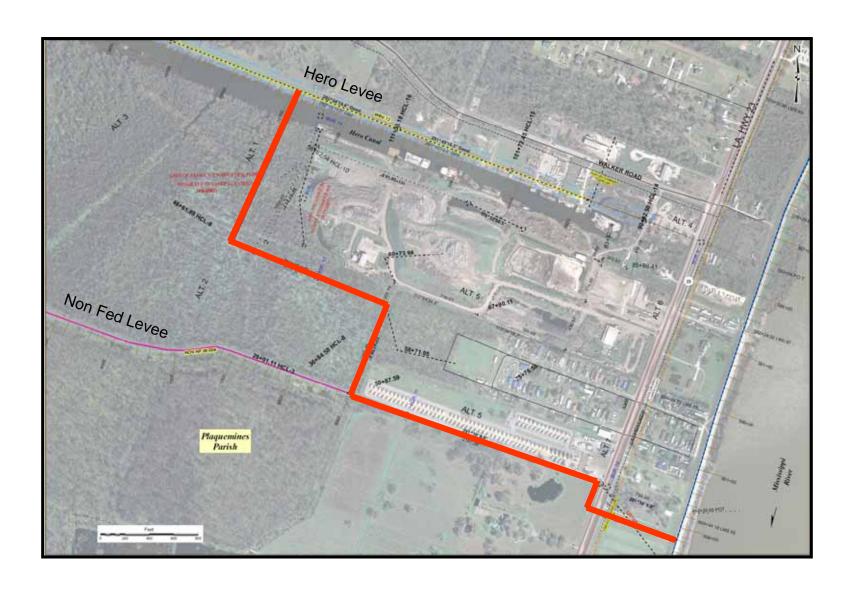


### ero to Oakville 100-Yr Protection

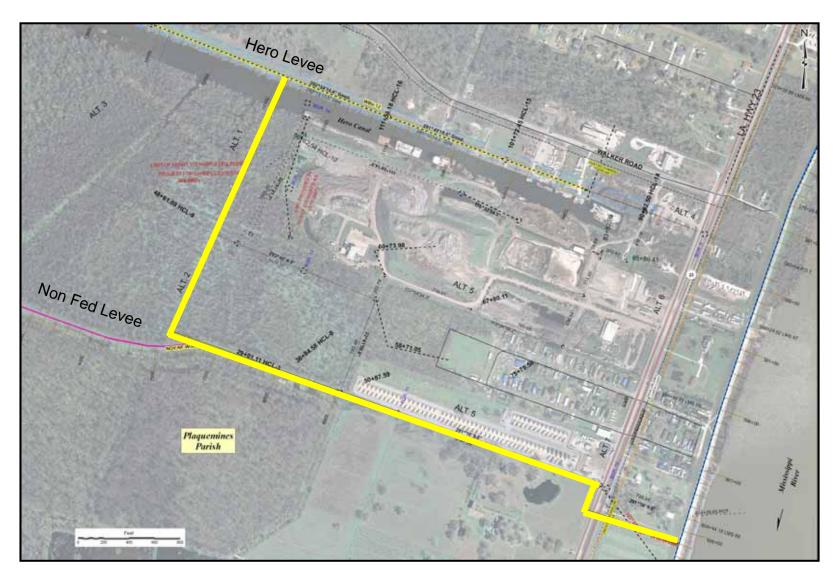
### us a ternatives



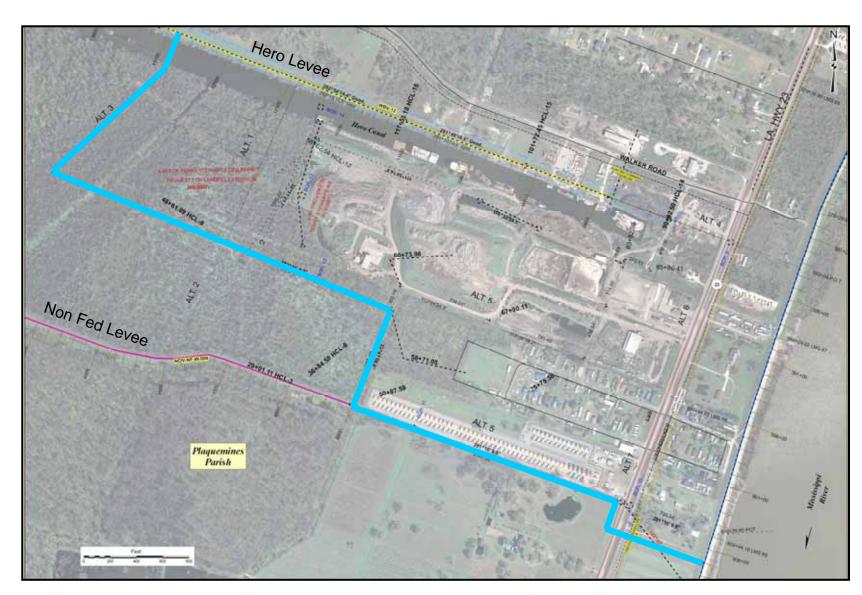
# ero to Oakville 100-Yr Protection US AN LET native 1 New Orleans District



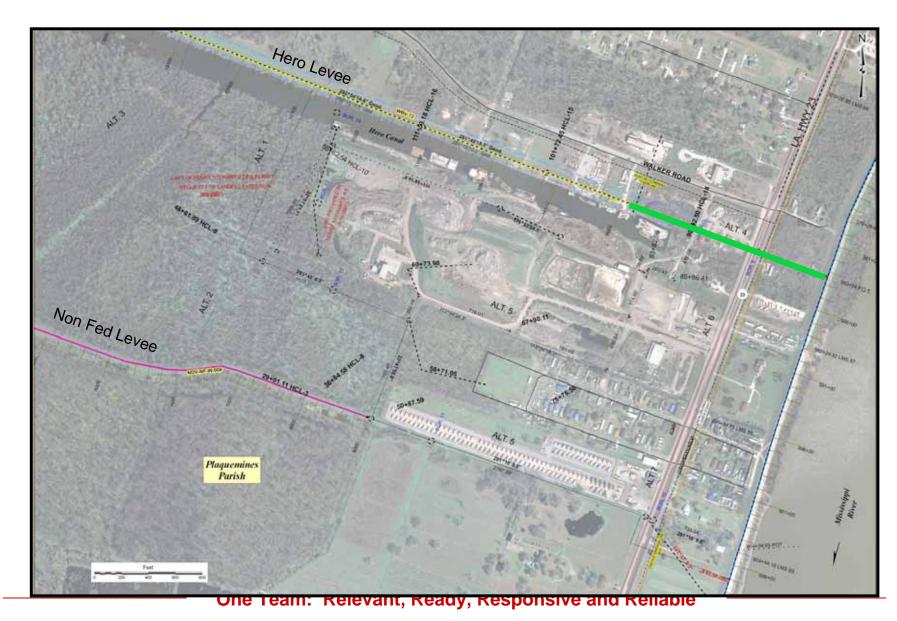
# ero to Oakville 100-Yr Protection US A Lernative 2 New Orleans District



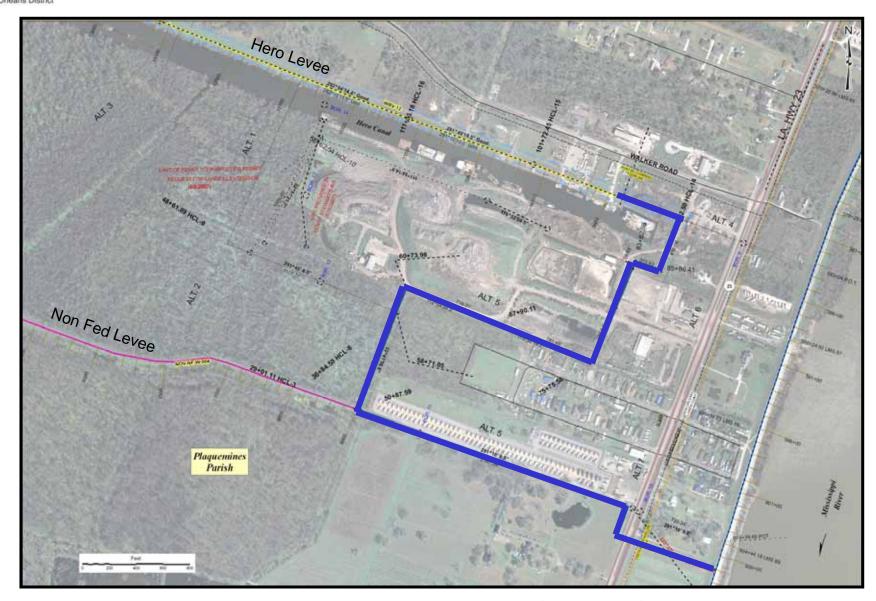
# ero to Oakville 100-Yr Protection US A Lernative 3 New Orleans District



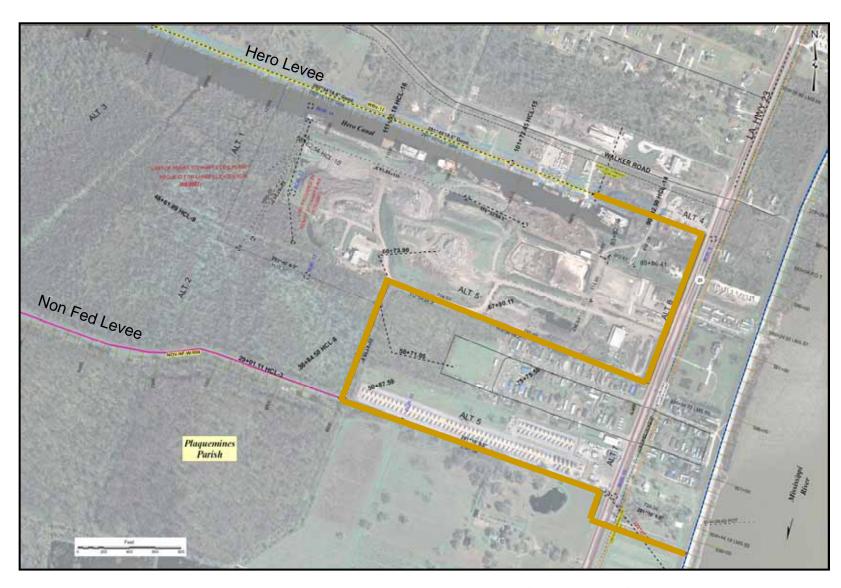
# ero to Oakville 100-Yr Protection US ANTERNATIVE 4 New Orleans District



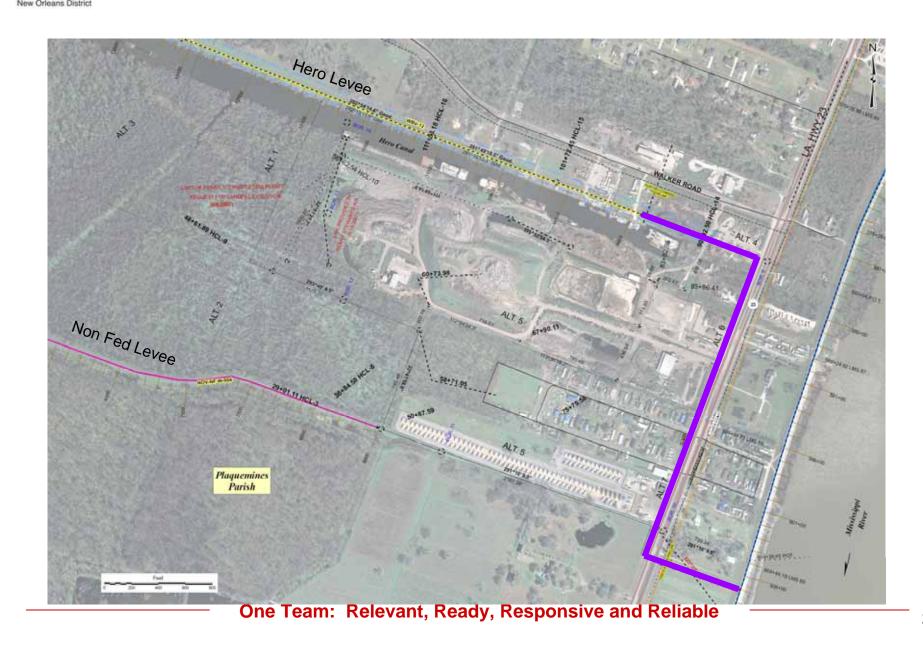
### ero to Oakville 100-Yr Protection US AN ternative 5: New Orleans District



# ero to Oakville 100-Yr Protection US A Lernative 6: New Orleans District

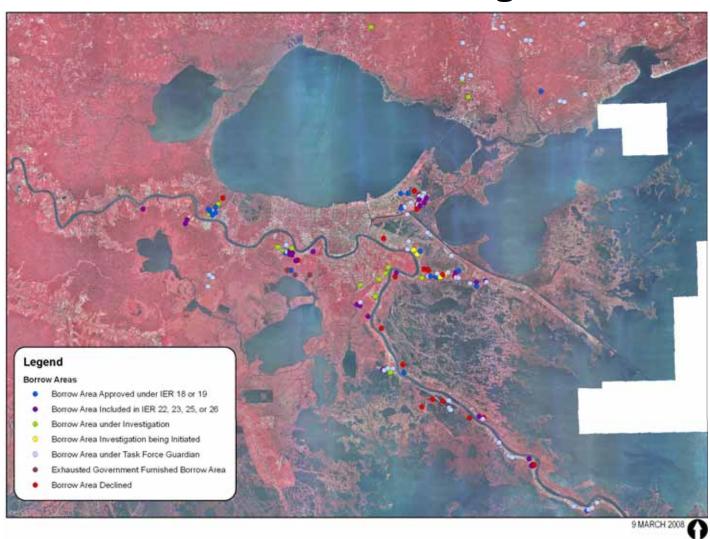


# ero to Oakville 100-Yr Protection Us Anternative 7: New Orleans District



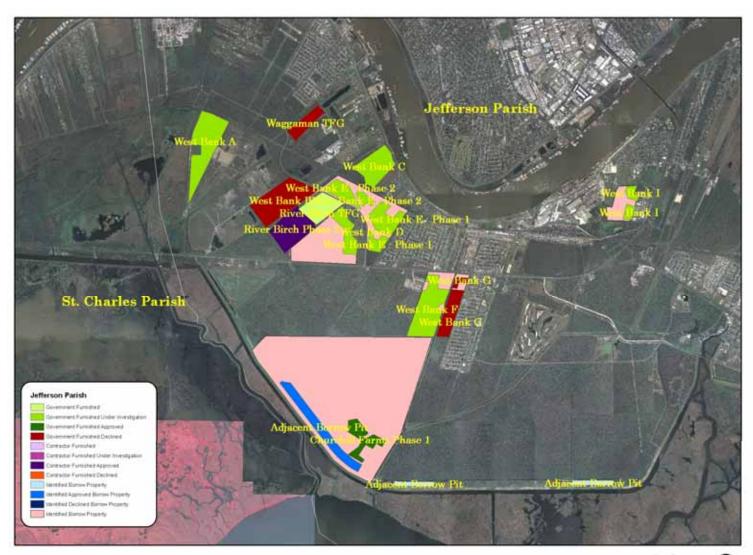


### Borrow All Sites Investigated

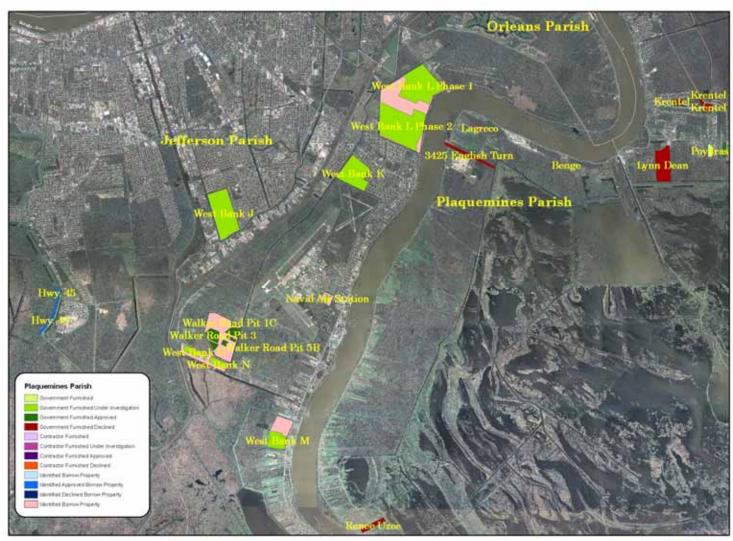




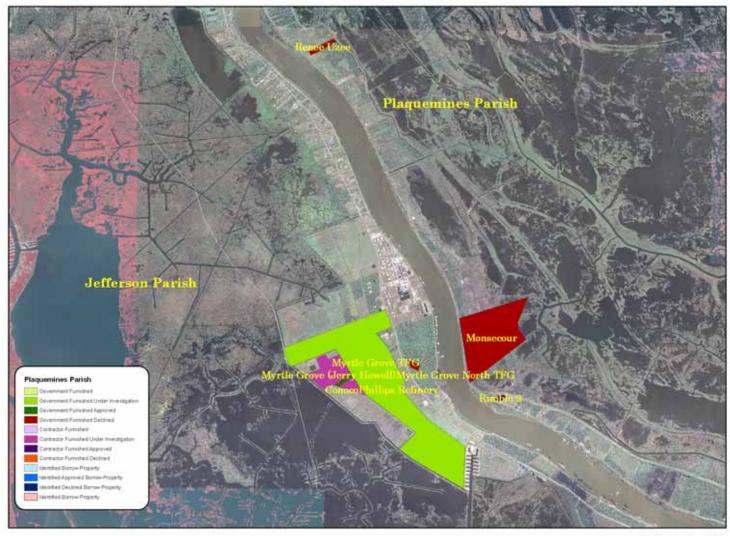
# **Borrow**Westbank Jefferson Parish





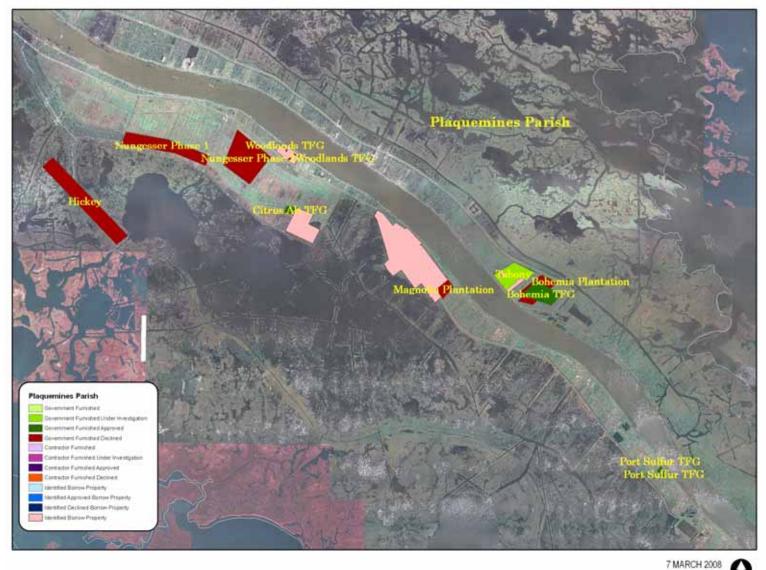






7 MARCH 2008











### **Opportunities for Public Input**

- Monthly Public Meetings throughout New Orleans Metro Area
  - Make sure to sign in tonight to get on our meeting notification mailing list <u>www.nolaenvironmental.gov</u>
- Comments can be submitted at any time at Questions and comments regarding Hurricane Protection Projects should be addressed to:
- Individual Environmental Reports (IER) 30-day
   Public Review
   PM-RS

P.O. Box 60267

New Orleans, LA 70160-0267

Telephone: 504-862-1337

E-mail: mvnenvironmental@usace.army.mil

One Team: Relevant, Ready, Responsive and Reliable







**Environmental Compliance Data Bank** 

www.nolaenvironmental.gov

HH

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 Protection 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). This process was implemented in order to expeditiously complete environmental analysis for the 100-year level of Hurricane and Storm Damage Reduction effort authorized and funded by the Administration and the Congress. The proposed actions are located in southern Louisiana area and relate to the Federal effort to rebuild the Hurricane and Storm Damage Reduction system in the New Orleans Metropolitan area as a result of Hurricanes Katrina and Rita. (Learn More)

#### NOW AVAILABLE:

IER 14 Section 404 Public Notice

IER 15 Section 404 Public Notice

The Decision Records for IERs 18 and 19 have been signed by the District Commander

Final IER 18 (News Release)

Final IER 19 (News Release)



#### **UPCOMING EVENTS: Public Meetings**

Mar. 10, 2008 6:30 - 9:00 pm, New Orleans East (IERs 6, 7, 11, and Borrow)

Mar. 12, 2008 6:30 - 9:00 pm, Environmental Justice Public Meeting

Mar. 13, 2008 6:00 - 9:00 pm, Jefferson, Orleans, and Plaquemines Parishes (IERs 12, 13, and Borrow)



### West Bank and Vicinity Hurricane Protection Project

Sold in sive System. **US Army Corps** of Engineers® **New Orleans District** Silon - Public

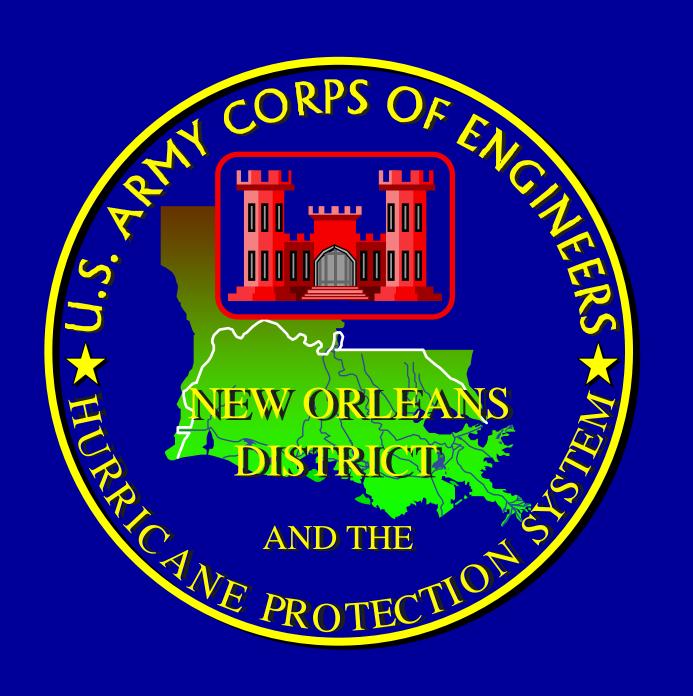
Tim Connell
Project Manager
West Bank Hurricane Protection Project

Julie Vignes
Senior Project Manager
West Bank Hurricane Protection Project

Stuart Waits
Senior Project Manager
PRO Hurricane Protection Floodwalls

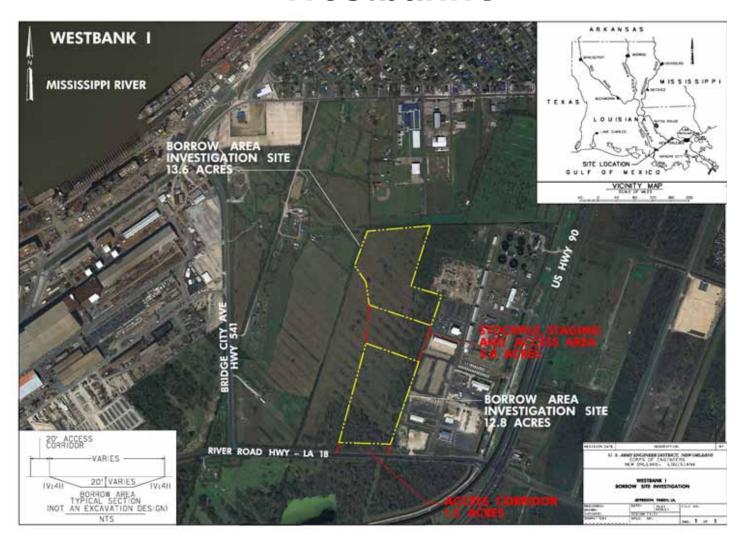
Mike Stack, Jr
Project Manager
West Bank Hurricane Protection Project

Gib Owen
Hurricane Protection System
Environmental Coordinator





### Borrow Westbank I





# **Borrow**Westbank K





### Borrow Westbank L



One Team: Relevant, Ready, Responsive and Reliable



# **Borrow**Westbank M