

Mississippi River Levees Co-Located Work Individual Environmental Report 33 Status Update

Dec. 6, 2010

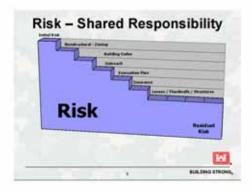
Location	Bayou Barriere Golf Club
Time	Open House 6:00 p.m.
	Presentation 6:30 p.m., followed by a discussion
Attendees	Approx: 30
Format	Open House
	Presentation
Handouts	Corps Approval Process Brochure
	TFH newsletter
	• 2010 Status map
Facilitator	Rene Poche



Rene Poche: Good evening and thank you for coming. My name is Rene Poche and I'll be facilitating tonight's meeting. Before we get into tonight's meeting, Plaquemines Parish president Billy Nungesser has asked for a few minutes.

Billy Nungesser: I just want to thank everyone for coming as this input is very valuable. Hopefully our concerns will be heard and we have a lot of them. As we move through this project, we have major concerns over

the permanent fix of seeing that money available. We don't have much of a choice in this temporary levee experiment on top of the levee at F. Edward Hebert and we are real concerned about that and whether it will be a temporary fix and saying it's temporary and then not having the funding in place for permanent really concerns all the residents. Hopefully we can see some changes or guarantees that will give us some comfort level that we are heading in the right direction. We appreciate and look forward to the comments.



Rene Poche: Thank you Mr. President. Before we get into the meeting, we always talk about risk being a shared responsibility and that goes from the federal level all the way down to the individual level. In ways we do that is through zoning, building codes, evacuation, insurance, levees, floodwalls and structures. Ultimately, it's up to you as an individual as to how much risk you can tolerate and decide on where you want to live and if the risk is worth living in that area. We have these measures here so you can make an informed decision, but like we tell folks you have to listen to your elected officials. If you are living in an area and when the time



comes and they order an evacuation that you go ahead and evacuate.

National Environmental Policy Act: NEPA

Required of all major federal actions

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

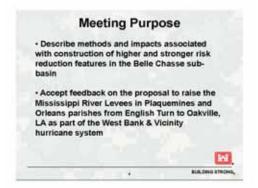
Public involvement is KEY!

Goal: more informed decision making through public involvement

Analysis documented in Individual Environmental Reports (IER)

Corps has made alternative arrangements to expedite project timelines

The National Environmental Policy Act; it's required for all major federal actions. We are going to look at potential impacts to human and natural environment and investigate reasonable alternatives. Public involvement is very important and that's why we are here tonight to hear what you have to say so we can get it in the record and report and ultimately all those goes forward to the commander who makes the final decision after weighing all the inputs. Again, the goal is to make an informed decision through your involvement. We will look at the analysis in the IER and we have alternative arraignments in place to expedite these projects.



We are going to look at the methods and impacts associated with the construction of higher risk reduction features in the Belle Chasse sub-basin and we are going to take feedback from you on the proposal to raise the Mississippi River levees in Plaquemines and Orleans Parishes from English Turn to Oakville as part of the West Bank and Vicinity Hurricane System.



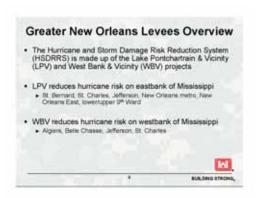
This is an overview of the system; the scope and magnitude of it. I am going to turn it over now to Julie LeBlanc, she is the senior project manager for this project. What I will ask to is to please hold all questions until after the presentation.

Julie LeBlanc: There are handouts of this in the back and I just wanted to point out that we do this map once a year and it shows the status as of June 2010 and one important thing of note, this map that was done at

the beginning of hurricane season this year shows work required to river mile 84, which is about right here. You will see that has changed slightly. Initially, our analysis showed we had to do work on both the East Bank and the West Bank, but the limits of work have been refined after we completed a detailed storm surge modeling and overtopping analysis and as a result, there is no work required on the East Bank for the Lake Pontchartrain and Vicinity Project, but there is additional work required up to river mile 85.5, which is about a mile and a half further upstream



than what was initially thought. One of the reasons is because when a storm is coming in, it's turning in this direction so any levees that are facing the east would feel the brunt of that and have more storm surge and wave overtopping so it needs to be slightly higher. If anyone has any questions on the map, please see me afterwards and we can give you an explanation. This map is done once a year and this is the third year we've done it.



The Greater New Orleans Levee Overview is our next slide. The Hurricane Storm Damage Risk Reduction System is made up of the Lake Pontchartrain and Vicinity Project on the East Bank and the West Bank and Vicinity Project on the West Bank. LPV reduces risk on the East Bank of the Mississippi River in the areas of St. Bernard, St. Charles, Jefferson, New Orleans Metro, New Orleans East and the 9th Ward. The West Bank and Vicinity Project reduces hurricane risk on the West Bank of the Mississippi River in Algiers, Belle Chasse, Jefferson Parish and St. Charles.



The Mississippi River levees when they were initially built protect against a riverine flood event. In Southeast Louisiana, the further south you go those rivers also serve a dual purpose of protecting against hurricane surge. Because of that, the Mississippi River Levees are an integral part of the hurricane system.



We are describing here some of the terminology because it can get a little confusing. We say the Mississippi River Levees and the Hurricane System Levees coincide in the following areas, and there are some maps in the back that show this. The map over here show you the existent on the Lake Pontchartrain and Vicinity, which runs from river mile 81.5 at the Caernarvon Fresh Water Diversion to the Bonnet Carre Spillway at river mile 127. On the West Bank, the river levees coincide with hurricane system from river mile 70, which is

approximately at Oakville to the Davis Pond Freshwater Diversion at river mile 118.5. In most of those areas the river levees are high enough to protect against a hurricane surge. However, there are some reaches of the levee on the West Bank where we consider those levees colocated because the height protection required for surge protection is higher than what's required for riverine protection. So we do have to make improvements to those levees in order to provide hurricane risk reduction to the West Bank and Vicinity Project. Again, that's the



reaches we are talking about the 15.5 miles that range from river mile 85.5 just right into Orleans Parish near English Turn to the Eastern Tie-In at river mile 70. In this reach, the height of the levee for hurricane purposes needs to be higher than what's already required for river purposes. I'll just note here that we are constructing a 700-foot demonstration section in Belle Chasse, right at the intersection of the river with F. Edward Hebert Ave. and we will talk more about why we are doing a demonstration section a bit later.



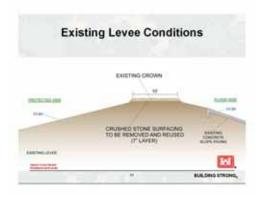
The map just orients you to where you are. Here you are today. The blue along the river shows the river perimeter so where we are talking about this upper limit at the Western Tie-in all the way down to river mile 70 at Oakville, this is where the Mississippi River Levees coincide with the hurricane system. In the areas where we have to do work are going to be from about here downward to Oakville. The red line shows you the perimeter of the West Bank and Vicinity Project and you see it starts at this end and comes all the way to Oakville. The red line shows you the perimeter of the West Bank

and Vicinity Project and so you see it starts at this end and goes all the way to Oakville and then we have other areas along the Algiers Canal and Harvey Canal that are detention basins, or secondary lines of defense.



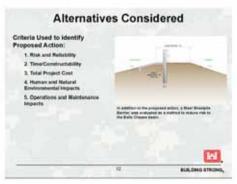
These are the specific levees we are here to talk to you about. They are covered under IER 33, which is out for draft review right now and we will get into the details of that in a moment and how you can provide comments. IER 33 proposed action in the areas that are shown in green; we are proposing to raise the levees using an allearthen clay cap in the upper contract reaches. In the lower three reaches, we are looking at raising the levees using a stabilized soil clay cap. What that does is allow us to put a steeper slope in to stay within the existing levee toe so we don't have to acquire additional right-of-

way. We are building the existing levees within the existing right-of-way so we can minimize potential environmental and culture resources impacts and we can have those risk reduction measures in place by hurricane season 2011.

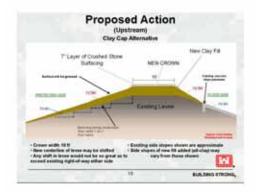


This is showing you a cross-section of the Mississippi River Levee. You have a ten-foot existing crown with a crushed stone surface and that would be removed and reused later. Currently we have a 104 horizontal slope on the protected side, this is the river side, and we have concrete slope paving at a one vertical on three horizontal slope.





Here are some of the alternatives that we considered in addition to the clay cap. We were also looking the possibility of putting sheet pile wall in with a maximum stick-up of four feet. The criteria we used to analyze the alternatives were risk and reliability, time, constructability, the total project cost, impacts to the human and natural environment and then operation and maintenance impacts. As we went through and considered the alternatives, the ones that we are presenting as our proposed actions fell out as the best alternatives when we looked at all the criteria.



This slide relates to the two upstream reaches in green. This is mostly in Orleans Parish as well as the upper part of Plaquemines Parish. This is the clay cap alternative. It has a ten-foot crown with a one-on-three slope on the protected side and a one-on-three on the flood side tying into the existing slope paving. The new center line of the levee may shift depending on the need or stability purposes. Side slopes and new fill will be added and may vary slightly from this. Another thing on note, during construction we will actually bench into the

existing levee before we go and raise that levee. These are the two upper contract reaches that are approximately seven miles and in these two reaches, we are raising the levees approximately two to three feet from what they are now.



These are the downstream three reaches were we are using the stabilized clay alternative. We are going to stabilize the clay mixing it with lime or fly-ash or bedash and mixing that with clay. Basically, that stabilizes the soil so that it can be placed on a steeper side slope than what we can use with just clay. The crown is typically going to be 11 feet, but where we have to have turnouts, it will be 18-feet wide. We will have concrete curbs that will be spaced so they can be drained. You don't want someone driving down this slope. Typically it will be one-on-two half, but there will be some

locations where there is one-on-two. On this side there is one-on-two and tying into the existing concrete slope paving. Again, the center line of the levee may be shifted. Any shift would not be so great as to exceed the existing right-of-way on either side. On this reach, it's approximately eight miles. These reaches are more deficient; three and a half to five feet is how much we have to raise these levees.

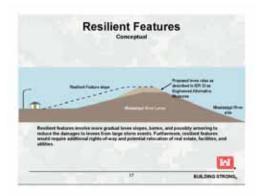




During construction, during the clay section that are the upper two reaches, it looks like a typically levee lift. We bench into the levee and raise the levee, we compact the levee and we grass it. Aesthetically, it looks the same as the existing levees do today. On the downstream reaches, clay is mixed with either lime or ash and placed on the existing levee. It is less aesthetically pleasing in that it won't grow grass so it will like a bare levee. We have run some test on this to make sure they won't erode. Once the ash is mixed with the clay, it cures and becomes the consistency of concrete so it won't erode.



We are not going to be mixing the soil on the levees because we don't have enough right-of-way. We will be doing the mixing in these areas, which are off Walker Road and Highway 23. Some of the borrow pits that are currently being used we will reuse and do some mixing there and then it will be hauled to the levee and placed. The staging areas are within the existing right-of-way and the haul routes we are proposing include Highway 406, River Road, Patterson Road, F. Edward Hebert, Main Street, however not through the residential area, Ave. G, Highway 23 and Walker Road.



This IER covers the work we want to do by next hurricane season. We do plan on coming back and doing resilient features; however, what these engineering measures we plan on putting in place by June 2011 will allow us to do, is complete the system and provide the 1% level of risk reduction to the West Bank and Vicinity and to the Belle Chasse area by June 2011. What we are doing currently with resilient features, we have field investigations ongoing and we are about to start some cultural investigations. We will have to acquire additional right-of-way so that we can put what you

expect to see. We will have to acquire additional right-of-way here. If there are some areas where we can't acquire that additional right-of-way and we have a constraint, we can put a T-wall here. This is showing the existing levee and this is showing what we want to put in place by June 2011 that keeps us within the existing toe and that's what we are talking about today. We do want to let you know that we will come back with resilient features and the environmental clearance for that will be covered under a separate NEPA document. If we were to start with resilient features today, we wouldn't have the 1% system in place until 2016, which is why we are moving forward with engineering alternative measures.





I am going to orient you again with a status update on Eastern Tie-In.



This is just showing you some of our features that we have. We do have our project manager, Ed Carr here, and if you've been down in Oakville lately you will see the construction going on. The existing alignment runs along here and then it run this way. There are two swing gates here on Highway 23 and across the railroad and then there is an emergency bypass road in this area.



So the Eastern Tie-In; the plan was approved in IER 13 and includes construction of a 56-foot stoplog gate across the Hero Canal, two pumps stations, earthen levees that will connect with the Mississippi River Levee so it does tie into the project we are talking about today. There is also a swing gate, three swing gates, at Highway 23 and a concrete T-wall built to elevation 14 on the southern edge of Capt. Larry's Seafood Restaurant parking lot and then there is an emergency bypass road. That will be maintained while we are constructing the project and it will be accessible at all times during construction of the Eastern Tie-In project as well as our project.

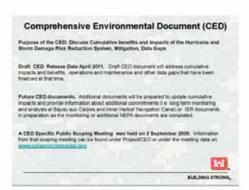


This is just showing you the emergency access road comes along this way. We are going to be raising the levee in this location and when we do we will shift the emergency bypass road to be at the toe. Right now we are looking at the road on the center line so it's either going to be on the center line of the levee or the toe of the levee and comes back down this way so that you can get back on Highway 23.





Rene Poche: So this IER is going to be available through Christmas and you can submit comments three ways. You can give us a call, email or at anytime at nolaenvironmental.gov.



Comprehensive Environmental Document; we are going to look at benefits and impacts of the Risk Reduction System, Mitigation and Data Gaps. The draft release date right now is April 2011 and it will look at cumulative impacts and benefits, operations and maintenance and other data that will have been finalized at that time. For future documents, they will update the cumulative impacts and provide additional information about commitments, long-term monitoring and IERs. A specific meeting was held last year on this and you can get information on that at nolaenvironmental.gov.



These are all the upcoming public meetings. We do have one Thursday in Westwego to talk about West Bank and Vicinity mitigation, the Company Canal and Bayou Segnette construction. We have a variety of other meetings listed there if you are interested.

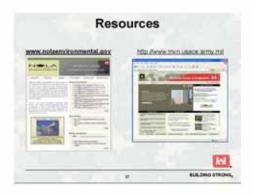


Your input is really important to this whole process. There are a variety of ways you can give us input. We have the public meetings, we have a construction impact hotline should you have any questions about construction in your area you can call that number, leave the information and we will get back to you with an answer. Again, you can submit comments any time at nolaenvironmental.gov and questions can comments can be submit to public affairs and the phone number is listed there and there is always email at askthecorps.





If you are inclined to do social media we have a Twitter account, although it's used primarily for emergency operations so there won't be a lot coming from us coming on that. If you want to see pictures from projects, we have a Flickr account set up and you can see all the pictures on projects across the system. If you are on Facebook, go friend us and you can follow us. Every news release is posted on Facebook.



We have more resources. We have nolaenvironmental.gov and then our public website at mvn.usace.army.mil.



We are going to get into the discussion period now. In order to get all input, we ask that you hold your comments to three minutes. You can't yield your unused time and we ask that we allow everyone to make a comment before we come back around to make any follow-up comments. Everything you say or write will become part of the record of the IER. If you think about something after you leave tonight that you want in the record, you can go to nolaenvironmental.gov and submit your comments there. So we will open up to the floor.

William Stringfield: On Oakville St. right now the ramp goes in both directions. It will only go to the south after this, right? Does the ramp to drive up to the river levee at Oakville St. right now, there is one going downstream and one going upstream so it will only be the one going downstream after this, right?

Ted Carr: I don't understand why you are thinking that one will be going

away.

William Stringfield: So they will keep the ramp going to the upstream direction?

Ted Carr: That would be the access to go up to the other direction.



William Stringfield: All I'm saying is that right now the dredge operates off of a ramp going into the river and the guys park on top of the river levee there. They would have to go, once this gets finished, they won't be able to use the river levee.

Ted Carr: It's not our intention to change the access that is currently there. Our intention is to provide a way around the gates when they are closed. Typically the direction would be, depending on what the event is, if you were trying to evacuate and the gates were closed you would be going from in front of the gates, if you were traveling north, and you would go up the river levee and travel on top.

William Stringfield: Let me show you on the map. Right now there is a ramp going this way and a ramp going this way. Is this ramp going to come out totally? If you raise the slope all the way through here this is the only slope you are going to keep to drive.

Ted Carr: Oh, I see what you are saying. Maybe the MRL project needs to address that.

Jennifer Vititoe: This map is only trying to show where the emergency bypass can go. Any existing ramps we are going to replace. I know what ramp you are talking about [Inaudible].

William Stringfield: Second question, the concrete liners you aren't going to change, but you will replace the ones that need to be replaced?

Jennifer Vititoe: No, we are replacing certain ones...

William Stringfield: Well, the concrete liners at my house need to be replaced; there is a hole about this deep inside of it. You replaced on in 2000 and there is another section above that was replaced in 2000 that needs to be replaced again.

Male Engineer: It's going to be replaced with a lime [Inaudible]

William Stringfield: No, this is the concrete liner side [Inaudible]

Male Engineer: The contract that is going to raise that levee up is going to remove the existing slope and replace it.

William Stringfield: The way I was noticing it, the slope on the river side that is all concrete now isn't going to change...

Male Engineer: ...the slope is going to be removed

William Stringfield: The steeper levee is going to be there and we are supposed to use this for our neighborhood walkway, will there be stairways because it's steep.

Jennifer Vititoe: You will have access at existing ramps because they are not going to be grass so you are not going to be going up and down them as you did before.



Dallas Picou: I live about a mile south of Belle Chasse High School ferry. What level, sea level, are we going to attain when this raise is completed?

Male Engineer: Twenty-one to 22 throughout the region.

Rene Poche: The engineers are saying 21 to 22 feet elevation along the

Mississippi River Levees.

Dallas Picou: When you decide to expand the base, consider expanding it to the river side. For one thing there are generally 100 or 200 feet of batcher in that area and our original property description said we owned from Dayton Road, which is now 23, to the water's edge so the levee has taken 20% of my property already. So please consider using the riverside to expand your base and not take any more of my property.

Geneva Grille: I'm a resident of Belle Chasse for 23 years and also a levee advisor to the Southeast Louisiana Levee Authority West. I'm concerned about some of your language in the IER 33 where you talk too much about the environmental sensitivity of batcher are and it's cultural value and things like that as opposed to the way it has classically been in my entire career as an engineer, that the batcher is subservient to the MRL system in the protection of that system for the people and property of Plaquemines Parish. I'm concerned about all the concrete slope pavement that is going to be removed and broken out and will be hauled away as opposed to be used for shore protection, which it has been throughout the MRL system to my knowledge up and down the river forever until this project. It's an unnecessary cost and it's more valuable as shore protection for the MRL system here and the people that it protects. I understand the necessary of raising the levee because of the surge because it's too low and it is going to have to be steep, but I'm concerned that there will be provisions to put access roads possibly on the flood side and in certain reaches on the protected side so that this stabilized earth that will probably have intrusions of grass and vegetation that have to be maintained by herbicides, that accessibility will be provided in the project to maintain the stabilized levee system. My concern is that you get this document environmentally correct that you are dealing with the MRL system whether it's raised this way or not and for its continued maintainability that every time you have to do maintenance on the MR&L system that you don't have to come out with some type of environmental document, especially in using the batcher. For your resilient feature in the future, if you do you have use the batcher that has been servitude on that batcher for flood protection for the state of Louisiana for some time.

Billy Nungesser: That was a great point. That batcher to environmentally impact, look at that as opposed to taking someone's backyard, is under water much of the year so what we are trying to protect is environmentally sometimes is killed by the floodwaters that come up and down the Mississippi River so that should be taken into consideration when we you weigh that as opposed to taking someone's yard in or moving on the other side of the levee. I know you are about to complete the test area. How you are going to rate/gauge whether this is successful to go forward? Is it deterioration, settlement? How are we going to gauge, obviously we are not going to have a high river to test its stability, but what criteria are you using to gauge whether this will work or not?



Female Engineer: What we are going to do is that we are going to look at different criteria, the constructability, environmental, a couple of different scenarios and lay out both the pros and cons on both the fly-ash and lime stabilize from the demonstration section and from there make an evaluation or if they both come out equally, we will consider that.

Billy Nungesser: How long before that determination do you suspect...

Female Engineer: How long until then? We are talking about the next few weeks or

so.

Julie LeBlanc: And Plaquemines Parish has asked to be engaged in that as well as the West Levee Authority.

Male Speaker: Walker Road, how are you going to control the traffic that is going to be coming down Walker Road to 23 with the dump trucks?

Rene Poche: That would be the Plaquemines Parish sheriff's office...

Male Speaker: You can't call him, he's been paid off. The speed is so bad there at night you can't even sleep.

Rene Poche: Thank you for coming this evening. We will have project managers available after to answer any questions you may have.