Clifford Smith Interview

January 2011

Interviewers: Carl Brasseaux, Don Davis

Clifford Smith: The area – this is exactly where they had all this rainfall, and um, talk about the blue area is five hundred to six hundred percent.

(inaudible)

C: Okay. Alright, so I mean you know, when some people say – some people say well what the hell. The government screwed up again. (tape breaks) And I said well it depends on where you are. As a matter of fact, I sure it just – um, this is the – this is the flow rate through – this is the report we get every morning. And it shows you that in some places it exceeds twenty seven but in other places it doesn't.

Don Davis: Testing, one two three. I still don't hear it. Testing, one two three four. Testing 1927.

(tape breaks)

C: I'm going to do what I want with that. Because I'm going to – we're going to go through these slides with them, you understand?

D: Yeah. Today is Friday, the twenty seventh of May, 2011. Interview with Clifford Smith, the Louisiana representative to the Mississippi River Commission.

C: No, don't say that. Say I'm on the Mississippi River Commission. I don't consider myself to be a representative of Louisiana. I'm a representative of the nation - the president – the congress, um, of the entire valley, not just Louisiana. There's nothing in the legislation established in the Mississippi River Commission that says you've got to be from a certain area. It says you have to have certain qualifications. So there's one person – there's three civilians, two of which are civil engineers. One of the civilians happens to be from Missouri, one happens to be from Arkansas, and one happens to be from Louisiana. But they don't – they are not there to represent their particular area. They're there to give a (inaudible) civilian perspective of the matters of the Mississippi. Interesting that the reason that all this came about in the 1870s is because there was great debate as to whether or not the military engineers knew exactly what to be done on the Mississippi River. And they wanted some civilian input. We're talking about the congress. And they um, designated three civilians to serve with four military people. The three civilians are – two of them of which are civil engineers. Interesting – the civilian term is nine years. The

military people serve as a command, which generally is about three or four years. So the civilians, in my observation have added a lot of stability to the commission over the years. And again, the commission by our legislative act – congressional act, is to report to the chief of engineers and the congress as to what improvements should be made along the Mississippi River - the entire commission. President of the commission is designated as the commander of the Mississippi River division of the Corps of Engineers, which runs from Minnesota to the Gulf of Mexico – through five or six – five, I believe district engineers. The president of the commission is now General Michael Walsh – Major General Michael Walsh. Um, another military person on the commission is the commander of the Ohio River Valley and Great Lakes division of the Corps of Engineers because Ohio furnishes so much water into the Mississippi. Because another military person is the commander of the um, Northwest Division of the Corps of Engineers, which is basically the Missouri River Valley, which it shows on that particular chart. Which furnishes most of the silt and nutrients into the Mississippi. And the fourth military person is the head of the U.S. Geological Survey which now is an admiral in NOAA. And the reason was– it goes back to 1877 – is really in 1877 nobody knew where the Mississippi began, particularly all the traversing of the Mississippi, and so they wanted the U.S. Geological Survey people involved in it. So that's how they ended up with seven – four military people, three civilian people. Of course this chart, again, and we're not talking about well – back up. After the great 1927 flood, the congress proposed a project to build along the lower Mississippi from Cairo, Illinois basically to the Gulf of Mexico to ensure that they never have a 1927 flood in the Mississippi. Um, they assigned the overview and administration of that project also to the Mississippi River Commission. Again, that project is known as the MR&T project. It um, has been going on since 1928. It's probably appropriated, or spent, about 13.5 billion dollars. Um, it has permitted many floods along the river. It has been designed to prevent the maximum flood, which this particular 2011 has probably been the closest thing to that in the last eighty years. Okay? Um, again, getting back to – I don't represent Louisiana on the commission. I'm supposed to look at the entire valley and basically how it affects the whole United States. Interesting – when you look at the different charts, this – the Mississippi River and its tributaries, which I consider to be the Ohio, the Tennessee, the Arkansas, the Pearl, the Missouri, even the Yellowstone, um, the Yellowstone flows into the Missouri so you're basically draining 41% of the United States, and about thirty five different states, rain into the Mississippi and its tributaries, and goes through Louisiana between New Orleans and Morgan City. There's always been, as far as I can tell, some person on the commission from Louisiana, but again it's not prescribed into law, and again it's not prescribed as you represent a particular geographic area. Um, interesting that um, 41 percent of the United States, through the Atchafalaya and the Mississippi River generally flows through Louisiana into the Gulf of Mexico. Very little of Louisiana drains into the Mississippi or the Atchafalaya. As you know very well, um, which a background in Geography, most of the land in Louisiana particular drain from the river into the

marshes and into the swamps. Not into the river, and that's kind of an interesting thing that we basically in Louisiana are providing the drainage for 41% of the United States through the major river systems, but we use those river systems very little for our drainage improvements. Okay, um, of course, now we're talking about the 2011 event, which by the way is still going on. This is what the 2000 – 1927 event that looked like. Interesting for a particular people in Terrebonne Parish is that very little of Terrebonne – and this as far as I can tell is that Bayou Du Large. This is Lake de Cade, this is Big Bayou Black going up toward Gibson – western part of Terrebonne was affected by the '27 flood – but a lot of people lived in western Terrebonne, particularly in 1927, so Terrebonne had minimum effect on the '27 storm – the '27 flood. Bayou Lafourche had practically nothing, um, the Mississippi and the Atchafalaya basin in particular were drastically affected. Even the levee system from Baton Rouge to New Orleans was not affected in '27. Primarily because um, Lafourche and Terrebonne, as a matter of fact, because Bayou Lafourche was dammed in about 1904, before 1904, and I do have some slides that show that – most of the flooding in Terrebonne and Lafourche came from Bayou Lafourche. And in Terrebonne from the east – from Bayou Lafourche into Terrebonne. After the damming of the 1904 of Bayou Lafourche, generally Terrebonne and Lafourche had been protected from the Mississippi River. Now ironically that is, in my humble opinion, caused out great concern with coastal erosion – that we cut off the natural flow of the Mississippi to our area, and therefore, we have the coastal erosion problem. If we didn't have Bayou Lafourche dammed as of right now, and you didn't have a levee system from Baton Rouge to New Orleans, we would be drastically affected. In fact, I make the point all the time that my grandparents built houses in downtown Houma on lots eleven feet above sea level and they built their house six feet off the ground in about 1900 before Bayou Lafourche was dammed. And they built it because they didn't want their houses to flood. They didn't like to go six foot of steps. They built it – they didn't want their houses to flood. Now ironically, I'm may see their houses flood from the Gulf of Mexico because we dammed Bayou Lafourche, we've protected ourselves from the Mississippi, but we've caused this horrible coastal erosion problem, which is causing the Gulf of Mexico to back up on us. Again, ironically, if you know anything about hydraulics, if you go right now to New Orleans and look at the Mississippi River flowing due south barreling ass, about five or ten miles an hour, you go to the Atchafalaya river and you see it going due south five or ten miles an hour. Yesterday with the south wind, if you went to Bayou Terrebonne in the middle of Houma, it was going north because the south wind was blowing the Gulf of Mexico on us. And that's just you know, with Morgan City ain't but thirty miles to our west, New Orleans is probably about fifty miles as the crow flies to our east, and hydraulics are so different. The hydraulics of the river is to move water south, the hydraulics of the Gulf of Mexico and the south wind is to move more water north. That's kind of frustrating, but that's exactly what's happening to us every day. Okay, again, the Mississippi River tributary project, which was stimulated by the Great Flood of 1927, covers 35,000 square miles of flood plain.

That's from Cairo, Illinois to the Gulf of Mexico. They've spent about – they, the federal government – has spent about 13.6 billion dollars on levees in control structures for that system to keep from having flood. Um, as near as we can tell, there's been about a twenty seven to one return on that investment – you know, the federal government loves to do the cost benefit ratio, so if you compare what the cost of building that system compared to the benefits of it is about twenty seven to one, and it protects about 4 million people. Now, interesting – in this particular flood, and frankly before this, it was obvious to me that the system was designed to primarily protect the area from Baton Rouge to New Orleans. And you say well you know, even for us out in West Terrebonne or Morgan City, say well we're going to open up the Morganza Spillway, which is going to flood some of our areas, but it's to protect the area from Baton Rouge to New Orleans. And when you look at the number of people living in Baton Rouge and living in New Orleans and the area along the river, between the two and if you look at the investment – the industrial development between Baton Rouge and New Orleans, it's obvious that it's the proper thing to do. Again, if you were to do a full cost benefit ratio for the levee from Baton Rouge to New Orleans and look at the investment on the sides of the levee, I mean that would be a staggering figure because the biggest petrochemical roof of industries in the world is probably located in those areas. And by the way, those areas as near as I can tell have not flooded since 1900. Actually the last flood that I can find that shows any breaching of the levee between Baton Rouge and New Orleans was prior to 1900, and even in the '27 flood those areas did not breach. And I'm sure that's why there's huge investments along the river. Those people that, frankly, finance those petrochemical plants realize that the levee system functions. As a matter of fact, on of the things that in this episode that we just went through, one of the weak spots in the levee system on the east side of the Mississippi is just south of Baton Rouge. I think they call it Duncan Point. There are some problems with the levee system there. There's some seepage going under it, and I was pointing out to the General – I said two or three miles south of Baton Rouge – I said you're talking about LSU. And he went ballistic, and he said well we're going to save LSU. But if you go there, if you know anything about the LSU campus, first off there's Indian mounds that were built there thousands of years ago. They were built on the natural bank of the Mississippi River. If you go to the LSU campus and you go down the hill to the stadium – going down the hill, is the natural bank of the Mississippi River. And if you didn't have the levee by the Veterinary School, go up walk there and look at it, right now – you didn't' have that levee, you'd have Mississippi River water in Tiger Stadium, and Highland Drive is built on about the natural bank of the Mississippi River. So with the levee system, we've been able to control that and all those investments and all those dollars in there wouldn't be there if you hadn't had that levee system built. People forget that. You don't think of that until you go look at that river today. I would suggest, if anybody's interested, drive up to the Veterinary School. Drive up to the bank to the levee of the Mississippi River. Right at the vet school and go to the top and look where that water is and

then look back to the left and see where Tiger Stadium is. Okay, again, the ’27 – this was after the ’27 flood. This was December – this was the Chief of Engineers, or the Major General Chief of Engineers of the Corps of Engineers at the time, talks about the development of the um, of the Mississippi River tributary project. Again, to adequate pass enough flood waters to where we don’t have the damages that we had in ’27. Again, this is just a picture of um, I’m not exactly sure what community that is. But it shows the levee system in the – in the – we’re going to say that’s now Vicksburg, but that’s not Vicksburg.

D: St. Joseph.

C: Yeah, there you go that’s St. Joseph, there you go. Wherever that is. Okay, (laughs) somewhere up the river. Alright. And again, this is the system. This is Cairo up to the north, they call it Birds Point – that’s the Bird’s Point New Madrid Floodway. Up to the north, that’s the St. Francis floodway. Now those areas – the St. Francis, the White River and the Yazoo Basin are designed – these areas are generally gravity flow. So when the river rises, water will back up into these areas and that you’re having a rain event, it just compounds the problem. Up in Missouri, New Madrid area in here, there’s thousands of acres. When I say thousands, I’m talking about hundreds of thousands of acres – the New Madrid floodway itself is a hundred fifty thousand acres – all cultivatable land. All cornfields, all soybeans, all um, wheat. Winter wheat – I didn’t realize they had so much winter wheat up there – soybeans, corn, um, what’s another major crop – and cotton. Okay, that’s flooded. That’s flooded – a hundred fifty thousand acres flooded by blowing the levee. Okay – taking the pressure of the Mississippi River. But there’s another hundred fifty thousand acres in here that’s flooded because it cannot drain into the Mississippi because the Mississippi is too high. That again is caused by the huge rainfall event that we had in here. Generally going up and down the river was the time for the last four or five weeks from Memphis south, it looks to me like the area is relatively dry. You have some folks right now in the Morganza that you have some people complaining there’s – on one side, the levee maybe in flooding of the Morganza. On the other side, the fields are dying because they don’t have rainfall. We have a very unusual drought in this area in my opinion, and that’s a big factor. But up on the Yazoo Basin, there’s huge – there’s probably – there could be two hundred fifty thousand acres in this area because we’ve got water. That’s not the case. It’s probably about a hundred fifty thousand. But there’s all kinds of water backed into these systems that can’t get out because the Mississippi flowing. Also the storage levee – the storage lakes in particularly in the Ohio and the Missouri are all filled. And they’re going to gradually drain those off as the ebb reduces on the Mississippi. It’s an unbelievable system as you can store water in some of these lakes. But what happened in this area, you had so much rainfall, you didn’t have a lot of storage capacity. That’s why the crest created the predictive problem. Again, as huge areas flooded in Mississippi and the – and huge areas Yazoo Basin area, there’s huge areas flooded up in um, Missouri and up in Arkansas, the White River system is

pretty much inundated. In the St. Francis Basin, there's a series of pump stations – huge pump stations – they're running now – they've been running I would think about ninety days, continuously running. Um, trying to pump out the backwater. I was in one of the stations, which is supposedly the biggest pumping station in the world, which will only be exceeded by the one they're building in Jefferson Parish right now. But um, that pump station has been operating for about ninety days, and when I was there, the water on the inside of the levee was rising like the water on the outside from the Mississippi. So it's a very precarious position. I mean there's thousands of acres of very fertile farmland in this area that is not being productive this year, which is going to cost a lot of people a lot of money, but frankly that is the biggest exporting process we have in America. Again, the Mississippi River Tributary project is to build the Mississippi to protect it from flood, but also to use as a navigation vehicle. The Mississippi River, seventy percent of the grain exported from this country goes down the Mississippi River to New Orleans. And by the way, that navigation is drastically affected. Did you hear about the barges sinking in Baton Rouge on two occasions? Most of those barges were grain barges. I mean corn – I mean it must've fed those pigs pretty good on the river. But I mean this is a big deal economically. We've had some estimates that the Mississippi River Commission has had some estimates from different economists as to what the real total impact is besides flooding – like I tell you, a hundred fifty thousand acres I figure in Missouri being flooded – agricultural land – they probably could produce about five hundred dollars an acre profit, for some farmer – we're talking about fifty million dollars a year just in that particular area, and that land will probably not be usable for another two or three years because besides, you get the water over it, and it may go out. There's a difference between a hurricane flood and a flood on the river. This water may go out in the next sixty days, okay. The longer it stays, the worse the soil conditions will be, and the longer the period for it to recover. So if we're talking about just in that floodway alone – if we're talking about a hundred fifty thousand acres, we're talking about forty five or fifty million dollars a year potential profit for somebody growing corn or growing soybeans or cotton. And that's going to go on for two or three years. Just that could be again, a hundred, two hundred million dollars worth of damage. So that hasn't – of course – been calculated yet, and will not be calculated until some of the water goes down, and that may be at least sixty days from now. Okay? I told you I wanted that copy, right? Not on the board, but just somewhere in there. Okay, this is the plumbing diagram, and again, this shows every morning, by the way in the briefings in this episode, we get a copy of this that tells us exactly what the flows are. Again, this shows theoretically that you get 2,250,000 cubic feet out of the Ohio, which again is part – sixty percent of the flow into the Mississippi. You get a hundred thousand out of Missouri. You get a hundred fifty thousand in the upper Miss. In the Arkansas – by the way – the Arkansas is in a drought. But normally, you can get four to five hundred – forty thousand cubic feet per second coming out of Arkansas. This is to our advantage – this is low. This is high. But this is lower right now. The Yazoo – again, this acts as the vehicle to back up

water. Again, we're going to be threatened with about two hundred fifty thousand acres of flooding in this area. It did not – it flooded to about a hundred, a hundred fifty thousand. The more acres that flooded here is less of a problem than down river. Um, so not to wish any bad things on anybody, but that's what it's designed to do. This basin is designed to predict – to pick up and store some of this water until it flows down. This is theold river structure, 620,000 cubic feet per second – this is the 70/30 split, by the way. By congress that says you will take thirty percent of the Mississippi and the Red River – will amount to thirty percent of the flow to the Gulf of Mexico, and seventy percent will go down the Mississippi. From the percent that is, if you look on a map, the Atchafalaya flows from Old River to the Gulf of Mexico. There's a shorter distance to the gulf than it is down the Mississippi. Okay, there's also a path of gradient rock, so the - naturally the Mississippi wants now over centuries – it now wants to divert into the Atchafalaya. So back in the forties and fifties, through the MR&P project, they built an old river structure to keep the Mississippi from flowing down the Atchafalaya for two purposes. One is, they didn't want the Mississippi to become a slack stream coming by New Orleans – possibly salt water intrusion, and they wanted to keep it open for navigation purposes. The second reason is, if you put more than thirty percent, you jeopardize basically Morgan City. Um, so that's the reason under normal conditions run 70/30 if you have a flood like we have in 2011, then you would take your 70/30 and if the water keeps rising in New Orleans, if you end up with more than 250,000 cubic feet in New Orleans – if you end up with more than a seventeen foot flood stage in New Orleans, and 45 feet in Baton Rouge, then you open up Morganza. When you open up Morganza, if you were to open it up to maximum capacity, you take 600,000 here, 620,000 here, and interesting – that it was passed, 919,000 through Morgan City and 581,000 through Lac Lake Allemand, and it's not 70/30 then. It's 50/50. Because you – the whole system is designed to make sure you've got a 1,250,000 cubic feet going by New Orleans, and it's at a 17 foot flood stage, and that you'd have a 45-foot flood stage in Baton Rouge, and the area between New Orleans and Baton Rouge is protected. You'd sacrifice, frankly, Morganza. You could possibly even sacrifice Morgan City. That's why they have twenty foot high flood wall in Morgan City, which we think is adequate. That has been rebuilt since the '73 flood, which at the time we thought was the worst condition. Okay, um, that has been reworked – rebuilt since then, and it is probably functioning very well. It can again take about twenty feet and now predicted about take up to twenty feet, and it's predicted about eleven at Morgan City. When Morgan City's been (inaudible) about, rightfully so, and western Terrebonne, is that Morgan back up into the Lake Pallourde area, and then the back levees around Morgan City, it's probably about a plus six. And at sometimes in this particular occasion, it was suggested that it could be up to an eight – that's a very grave concern for the people in Morgan city and Amelia. And so therefore, they've done all the remedial things. And then West Terrebonne – it doesn't look like that's going to happen. The crest in Morgan City – I think the latest one is eleven feet. I think believe that suggestion could be Monday. One of the things

that nobody could figure in the formula or in the computer program is that the Morganza floodway as I mentioned in all of our area here, is in a drought. And a lot of that water – it (inaudible) and went into the ground. And that's to our advantage. The other thing is – you woke up this morning. Yesterday we had a hard south wind blowing. Wake up this morning – we've got a north wind. That's to everyone's advantage because we're blowing more water toward Venezuela, very frankly. Now, ironically though, and um, of course you all know this even better than I, ironically we have this event going on, and we have all this water coming down, and believable of course we have all this silt because what's happening is, Southwest Pass is filling up. They've got seven dredges working there now. It's hard to believe that as the water rises, the bottom rises because of the silt and nutrients. And some of us look at some of this water going by, as I mentioned to you about Bayou Terrebonne. And you say well oh man, we're wasting a resource. And it truly is. I mean the silt and the nutrients is coming down that river now. It would really be, in my opinion, managed better particularly to erase some of the things that are happening in the marshes. The other point is, this is an unusual event, obviously. This is the biggest event we think that's on record since '27. Um, interesting that we need to manage that resource whether it's a flood event or not. Many years would go by – you know, hell – eighty years went by, and we had a few floods, but we didn't have anything like this. And those conditions were not in my humble opinion properly managed with diversion interception. Okay, that's got a – it's so you get a – you live in South Louisiana; it's kind of a two-sided coin. The other point is, the people up the river do really not understand that down here where we live, basically Morgan City and New Orleans and south, is that this is where the river meets the Gulf of Mexico. So depending upon what the elevation of the Gulf of Mexico has a lot to with how efficiency the river operates. Now, again north winds and the few north winds we've had in the last month, which are unusual, um has been to our advantage. This again shows you the rainfall over the last what, April to May, um, the area around the confluent of the Mississippi and the Ohio, and we're talking about some cases over a thousand percent more rainfall than normal. This is what caused the event. People say well what the hell – ya'll been sitting around your hands for eighty years and well, this nature caused the event, just like nature has caused the drought, and nature this morning is causing north wind. Okay, okay. Now this is, again – we get a chart like this every morning, and it tells you like somebody asked me, well is this worse than the '27 stuff? Or flood? It depends on where you are. In Cairo, Illinois, 61.72, that's probably a record. That's above anything anytime. It shows here in 1937 believe it or not, there was a flood in '37, and it was only 59. That was the highest stage of record at that time, this year, it was 61.72, and it was forecasted going to 63, and if you had not opened New Madrid floodway, it would've went to 63. Flood stage at that particular community is only 40. Okay, so I mean, this is a big deal. This is right at the confluent of the Mississippi and the Ohio. Coming on down, you can see – if you look over here on the side, '27, look at Baton Rouge. '27 in Baton Rouge was 47, it got to 45 because you opened Morganza. You didn't allow it to go over that.

17 in New Orleans, and at one time it was 22 in – 21 in 1922. Um, Simmesport was 59 in '27, um, I had seen some forecast for Simmesport to be 60, but obviously they dropped it. Butte Larose, Simmesport and Morgan City are affected as to how much flow you let through the Morganza. But anyhow, we get this every day. Um, and believe it or not, this is a huge system, and frankly even the storage lakes in Tennessee and Kentucky and the dams up to – up the Missouri, are all regulated to attempt to allow this to pass a flood without destroying it – destroying as little as possible. Okay, this is a, Cindy wait, let's see. Yeah, I want a copy of this, okay? They'll need it on the board, just a copy of it. Okay, this is the Cumberland letter – dredging in the Mississippi River. Now this – I don't think we need this, but this is an interesting slide because as the river rises, the dredging increases. And um, of course, another point about this slide is – one of the reasons that some of your dredging has decreased along the river is some – from '27 to now, in cutoff and controls along the Mississippi River, we reduce the length of the river by 150 miles, from Cairo to the Gulf of Mexico. And that's the event – that's part of the MR&T flood control project, so I don't need that slide. Okay, this is again, the floodway. This is the floodway up in Bourg Point in New Madrid. This is after the levees were blown. This is the floodway. And again, this was 150,000 acres – generally a very productive farmland. This is the backwater adjacent to it. This was not – this is the main line levee of the river here. There was another levee over here that was blown. This water standing in here is backup water that came spraying out because the Mississippi is high, and because they had so much rainfall. See all this flooding in this area, this is really unbelievable. I was here this week in um, just to see the areas filled inundated, is really – it's gone down a little, but it hadn't gone down enough to put the land back in operation. And this stuff – the floodway has gotten water over four or five feet above the land. This is a boil in um, Cindy, I guess I want a copy of that slide. This a um, one of the big problems when you're talking about maintenance, is of course this could be a bigger disaster if you – a disaster if you had a break in the levee or if you had somebody run through the levee – something like this. This is what you call a sand boil, and what happens is the river rises on the levee. The water pressure in some places goes under the levee. Okay, this happens to be the biggest sand boil anybody's seen, and this is in Cairo. Okay again, this is gone by the 60-foot elevation in Cairo, and what they do is, they ring it off and allow the water to come up to protect around it, and you get enough hydroponic pressure on the inside that stops the water from flowing. This is a big concern. This is the same concern down in um, Duncan Point in Louisiana. Okay, this is an example – by the way I want a copy of both those slides. This is an example of what we're talking about. See this is the levee holding the water back. The water rises. If there's some um, substructure or soil condition of the levee can seep under and boils up. You've got to control that because if you don't control it, first thing you know it's going to wash the whole levee out. That's the kinds of things you've gotta be concerned about. Barge damaging the levee, ships damaging the levee, human beings damaging the levee – because as long as the flood water's up, and again we're talking probably at least thirty to sixty days, those

levees are under tremendous pressure. And rainfall is still been raised up in the Ohio Valley. If you watch some of those fronts go through – every time you see some of that rainfall anywhere basically from St. Louis all the way to Pittsburgh, that's a – that could be a problem. Okay, I don't' need that. I just need – that's part of Illinois and um, under water. That's right along the Ohio River. That's again, um, Illinois. I guess you may get me those two slides too, Cindy. That's all going to be one whatever we're on now. One, B, C, D, E, F, G, or something. Okay, now this is an example- and I'm going to want this slide too. This is an example of Bird Point New Madrid. Again, they blow the levee up here, a lot of water coming back into the Mississippi – but what you do is you take some of that crest off as it's going down river. If you didn't do that, if the levee system failed up here – again, 60 feet is the trigger in Cairo. If it goes and they predict it's going to 63, if this area was to breach for some reason, okay, then you could have 2.5 million acres down through um, Arkansas, Missouri, and Arkansas. Now, so what you do is, you lose about 150,000 acres in here, but if you didn't do that, you could lose two and a half million acres. And that's part of the MR&T project is that – is to sacrifice some areas to minimize the big effect in other areas. And that's the whole theory. Now the project is all constructed that way. The levee systems are built that way. The pump stations are built that way all the way to the Gulf of Mexico. Um, and there's a plan to do that. Okay, there's a printed plan that's been around probably for over fifty years since we've triggered this, when you get to sixty years. A lot of debate about that – "Hey, when you're going to do that?" "Hurry up and do that." a lot of – a lot of debate in Louisiana was to hurry up and do something in Morganza. There were some kinds of specific times of you do it – certain specific flood. They followed the plan. One of the reasons it is a plan. They've spent, again, 13 billion dollars to develop the physical assets, and the verbal plan or written plan, so why wouldn't you follow it. The other problem is, when you flood somebody, and by the way, this is not land owned by the federal government. This is private property. And when I talk about 45 to 50 million dollars of profit, these are individuals. So you – they're going to of course make claims to the federal government, and in some cases it will probably end up in litigation. One of the defenses is that we have a plan. We've had a plan for fifty years. You know about the plan. Actually some of them were even paid for some of the flood – one of the um, flood servitude. But it was frankly paid for 60 or 70 years ago at a really depleted price. So you still owe somebody, in my opinion, you're still going to owe someone for their investment. It's not going to work the guy. You owe him for his oysters if you destroy his oysters. So if you follow the plan though, you've got a much better defense in court than any. If we're doing what we designed to do, we're doing what we built to do, and we're following the plan. It's just no big star or revelation to you. It ain't happened in 80 years, but here's the plan. Okay, but again that gives you an example where you actually sacrificed some areas in here so that you don't have this effect like you had in '27, as a matter of fact in that area. I need that on the slide please. Okay, I don't need that – that just talks about – and the guy on the right is a member of the Mississippi River Commission, and actually he owns some land in that floodway.

Um, and he was you know, personally drastically affected by that. Okay, this is how we blew the levee in Birds Point in New Madrid I don't think I need that. Okay, this is um, this is interesting. And I guess we need this. This is the breach at Birds Point and New Madrid. And this is – you blow the levee up and the water rushes in from the Mississippi. The Mississippi is on our left. The floodway's on our right. You blew it at the top to get the water in there, it takes about four or five days for it to flow through, and you blow it at the bottom to let it out. But in those days, that reduced the crest on the river – reduced the pressure in Cairo. Reduced the pressure in Hickman, Kentucky. Reduced the pressure in New Madrid. Now, we make debate – we talking about how we're going to replace that. Because again, this is part of the system, okay. So come next March and April, we've got another flood. We've got to assume we've got another flood. Well we've got to have the levees rebuilt by then. Okay, again this is the – this is the Cairo gauge - the Ohio River gauge in Paducah. Okay the yellow is what the forecast was, and again, you see on the left it was almost at 59 feet, and when you – when you operated the spillway, see it drop down to 55 feet, and it's dropping now. But by the way, they've had rain up there, and the latest gauge and it's bouncing back up a bit. But nothing where it was.

Cindy: (Inaudible)

C: Yeah. Okay that's the gauge at Cairo. That's right at the affluent. See, it was up forecasted to go up to 63. Notice the flood stage is 40 feet at that location. Okay, this is the crevasse that happened in um, in Missouri. Um, there's a – there was a dam and a – this water pocket was a lake. A recreation lake - it filled up with rainfall and just crevassed into the Missouri River. I want that too. Just get that – this is upriver now. This - you can see the same thing in Morganza and Bonne Carre now, but you can see it on a control structure. This is um, again, this is up in the spillway area. I don't need a copy of that. I guess. Yeah, we can get a copy of that. (laughs) We'll have to eliminate a lot of things. This is um, Caruthersville. This is on the um, Mississippi. This is south of New Madrid. This is a casino highway in Caruthersville, Missouri. See the seawall – they just built that concrete seawall, but what they're doing there is building a wall behind it so that the water comes over that wall – they're going to have a sub pump in there to pump the water out as it breaches over the top of it. That did not happen, but obviously, the um, casino has been closed for some time. And that's been a big affect. I think there was thirteen, at least thirteen casinos closed in the um, upper Mississippi state of Mississippi. Tunica. Okay, again, this I told you – this is upriver. This is north of Memphis. This is on the west side the river. This is a huge um, steel facility – new coarse steel facility right on the river. They want to be on the river for cooling water, and they want to be on the river to – they make steel out here with rejected steel, and um, they have to be on the river to ship raw materials in and ship products out. And you can see how the river levee system protects that investment. If you didn't have the levee system, you wouldn't have that investment and jobs. Um, this is again, in Memphis. This is um – we don't particularly need that I guess. Um, and around Memphis. Again, when you

fly down the Mississippi today and you see the water that's between the levees, it's unbelievable. Another interesting thing – if you go up and down all the rivers in Louisiana – I mean in the U.S., you'll find power plants. Power plants are adjacent to the rivers, primarily for coolant water, including the nuclear plants. Interesting – I didn't realize it. I should've I guess. But the nuclear plants have a problem when the river gets too high; not because the plants flood, but because the intake structures for the coolant water has to be adjusted. And um, as far as we know, none of the nuclear plants shut down, but we were very concerned about water for three at one time. But all of the power plants – I'm talking about nuclear, coal, gas plants – are located along the river primarily for coolant purposes, and that's a big factor. I mean that's got to be programmed – it didn't affect anybody yet, and I've suggested that we have some kind of study done to make darn sure that we're operating the water – the flood system so that we minimize the effect on power generation. Okay, that's again – outside the um, Mississippi, um, but it – and that's not – you're not looking at the Mississippi. You're looking at the Yazoo Basin. That's what I'm telling you – some of that water backs up in the Yazoo Basin and basically ends up being stored and then that area has flooded about 150,000 acres. Okay, this is um, this again is the um, this is the area from um, okay. This is the – this is Vicksburg, okay. This is the area from - this is from Memphis to Vicksburg, and if you didn't have – and this is the Mississippi flowing right through here. And you got it levied, okay. If you didn't have it levied, this is what they – the backwater would look like, and this is pretty much what it looked like in 1927. So again, um, and there's a 1,793,000 acres in the dark blue, and in the area that um, that will flood, which is this area in here, which frankly is the lighter blue, there's a 1, 000, 792 acres in the dark blue, there's only 9,600,000 acres that are affected by this flood. So again, it shows you. Don't forget about us. Bye! Okay, yeah. I want that slide. Okay, Yazoo Basin, again, is 850,000 acres impacted – the cropland is 517,000. Again, crop loss is 534,000 per year. Structures impacted – structures include houses and buildings – 4,200 acres. Value of structures, 138 million dollars. Okay, and again, that did not flood. Okay, well it didn't flood – again, probably about 150,000 acres of cropland flooded. Okay, this is where they – I want this slide. I want this slide too. This is where they were affected in the Yazoo Basin. They expected that the water would overtop the levee and the idea was to put that material on the backside of the levee to stop the erosion as the water overtopped it. Again, this is um, this is some storage lakes – we don't need this slide. This is some storage lakes in Mississippi. There are three lakes in Mississippi that acted actually stores water to keep it from um, from again, into the Mississippi. Um, two years ago, those lakes were practically dry. Um, again, you go through these cycles and um, the people are bitching – there's no water in it, and now they're bitching that they got too much water. These are some of the highways that are now flooded in the Yazoo basin in Mississippi. Why don't we have that – keep that slide, Cindy. Okay, you don't need that. Okay, but you can say – I don't need that. You see, again, I do need that. The Mississippi – the main channel of the Mississippi the main channel of the Mississippi is actually

somewhere over here. This is the (guide?) levee of the Mississippi and this is the – they got an airport in there. This is – when you fly over that and see this kind of water, it's really unbelievable. So they have been drastically affected, like a lot of people in Missouri and Illinois and Arkansas, Mississippi, and Louisiana. Um, we don't need that. Now, of course that does bring up another point. You have these little ports and distribution centers up and down the river, Memphis is not little. St. Louis is not little. But Greenville Mississippi and Vicksburg, Mississippi, and Natchez, Mississippi – and all those ports are going to fill up. Um, with silt and nutrients so there's going to be a dredging problem because all those ports export a lot of grain, particularly out of the country. And frankly, import a lot of fertilizer to go back to the agriculture people. So the port facilities are very important to these people. And when you have high water, you have just like you do in Southwest Pass, you end up with a drainage – a basin problem. Um, protected areas, Vicksburg, yeah, put that in there. That just shows, again, the kind of – when you add it all up, I mean I saw Landrieu made a statement that she wants a supplemental appropriation bill of about a billion dollars, and I think that's a little premature to stand. I'm not sure that a billion dollars is a lot of money, but I'm not sure a billion dollars is enough. Particularly what went on after Katrina – um, but this system will have to be probably modified – the system will have to be rebuilt in some areas. Um, we're going to learn a lot from this. We've had no major failures yet. We're hopefully still going to perform as basically designed, but you're going to have to go back and look at some of these structures for Morganza and old river structures – and all those facilities over fifty years old – those facilities. And of course the levees. We're going to go back and look at these sand boils and look at remedial things. I mean, it's going – it's going to be a lot of money to put the system back like it was, and of course the problem is that you can have another flood next year. Nobody knows. Okay, so there's going to be – I think there's going to be a great push to hurry up and do some of these remedial things. Yeah, and this is the – this is the old river control structure, but this is the auxiliary structure that was built after the '73 flood, and you get a – and again, this is at Morganza, and you get a much better feeling about this project when you stand on it. I mean this is a new facility compared to an old facility, which I believe I have a picture of in a minute. But this is running practically wide open right now. Okay, that's a navigation I want to – that's a navigation lock between Old River and um, and the Atchafalaya for navigation – that particular facility's closed right now. That's on the west side of the Mississippi. On the east side of the Mississippi at this location is Angola. Um, and again, it's navigation – I need that. It's a navigation matter. Not only is it MR&T project – it's a flood control project, but it's a navigation project. So the effect of the flood on navigation is of grave importance, and if you reduce the navigation capacity, which has been reduced, it's going to affect the economy of the country. Again, that was the opening of Bonne Carre. And Bonne Carre, by the way, is going to probably be open for another thirty days at least. You will close Morganza before you close Bonne Carre. This is the opening of Morganza. And Morganza is actually begun to be closed. One of the

reasons is – the flow is dropping at, again, Red River landing. It will probably take another ten days – a week to ten days to close Morganza. And that's going to be determined every day what the flow is through Morganza and through Red River. Again, the more water we can put down the Mississippi going toward New Orleans and Mississippi and not elevate the flood elevation in those locations, the more we can close off Morganza. And then eventually Bonne Carre. Again, this is um, we – this is the Mississippi – I guess I need that slide, Cindy. And that shows that if you didn't have Bonne Carre, the water stages would've gotten to over 21 feet. The um, the flood wall in New Orleans is about 22. So that's why it's pretty critical that you run um, you run Bonne Carre and Morganza, which gets it down to 17. Okay, this is the inundation map that showed the inundation was predicted for Morganza when you opened it. Now interesting, in '73 it was open about 50 percent complete. In this affair or this occasion it was only opened about 25 percent. But this was the forecast of the water. Interesting that this purple area talks about 0 to 5. And so you've got to read the map as 0 to 5. I mean in some places, it can be zero. Some places it can be five. So I tell everyone in Terrebonne, generally if you live above the five foot contour – if your house is above five feet, if your levees protecting you are five feet or above, you aught to be in pretty good shape. These elevations will not be seen. Of course around Morgan City and up toward Stephensville, it's a lot higher than five feet. These elevations will not be seen because again, this was predicted in about a 50 percent opening. It didn't open but 25 percent because it reduced the flow down the Mississippi. Um, and again, some of this water had been absorbed in the ground as it comes down the river. But again, the crest here they expect it till I think Sunday at 11. Um, we had talked about um, it being somewhere maybe about six to eight feet back in Morgan City. We are observing now from the barge operation that it hadn't got much over three feet back of the barge. So that looks like the barge has been very effective.

D: On Bayou Chene?

C: On Bayou Chene. The barge is located right in this location here. We have some charts that show what the elevation of the water is (inaudible). And as near as we can tell, the crest is not there, yet, but as far as we can tell we've reduced the water crest about two or three feet. Which is very positive for Morgan City and frankly for west Terrebonne. Frankly, Morgan City is the largest populated area that of course is affected by Morganza operation. Morgan City and St. Mary - West St. Mary, really. Okay, this is um, this is showing oil and gas wells. I'll need that, Cindy. I need the previous one, though. Okay this is the estimated timeline from Vicksburg, I don't need that. Okay now, you know, if somebody wants to learn more about this system and this um, this episode we're going through, these are a few books you can find and read. (laughs) okay? So anyhow, that's one slide and one set of slides – I'll probably use in some of my discussions on the sixth. Okay? Now again, we get um, we get reports – Cindy, you've got to remind me to call Chuck um, what's my man?

Cindy: Chaney.

C: No…

Cindy: Carmello.

C: I'm going to call Chuck Carmello probably not today, but Tuesday. I'm going to get him Don Davis, his phone number and address, and we're going to give him their phone number and address before we leave. He is a historian for the Mississippi River Commission. He has been following the General around and writing a synopsis every day of what happened. And I'll get you in touch with him so ya'll can get anything he needs or you need. He has. If some of you want to review. Okay, and this is some more slides. I don't need this. Okay. I do need that though. I think that's a very good slide to have. I don't know where we are, Cindy. A-what, or…

Cindy: I'm just putting yes or no, and I'll go back and put…

C: Okay. Okay, now I need – I'm through with this one. Let's go through these. I figure this is the best way to go through these.

D: Oh yeah, this is wonderful.

Carl Brasseaux: For me, guys, we can hang on for just a second – I'm out of tape over here.

C: Okay. The right time.

D: And I think we'll stop so we can…

C: We've got a six-foot differential there. Um, and at Bayou Chene at the flood side of the barge is at 4.8. And at the um, GIWW Bayou Black which is on the protected side of the barge which is 2, and then down (Pension?) where the water aught to be flowing, is 3.2. So anyhow, that's the kind of stuff we get – get that every day too. Okay, now we're going to get into um, this is the briefing I guess. I'm not sure who this was. They're the same thing – the same thing. Same thing. Same thing. Same thing. Same thing. Same thing. Same thing. Same, same, same. Same, same – nothing new. Okay. I don't know why I got this in here. Same thing – it talks about Paducah, talks about Cairo. What do I want? Okay. Alright. Okay. Same thing. What did she do?

B: You pressed record again, or did you put it on pause.

D: No, we're recording.

C: Okay, this is over with.

D: Now, what did she do?

B: Go to the next one?

C: She closed it out by doing this.

B: You close the – alright. And then just double click on the next one.

C: Let me try. Let me see what this is. Let me see what this is.

B: I think it's the same one as the one you just opened.

D: It's the same one with a different title.

C: Okay, so that's it. Well we want to close this out. So let's just go up here and close this out, alright?

D: Yes sir.

(inaudible)

C: Then we'll go down to the next one.

B: Yes sir, that's it.

C: Chinese delegation. That was a – okay. Now somehow or other I got to do this. Go up here like this, right?

D: Sure.

C: There we go. Alright. Let's go down – now what I do? What do you think I do?

D: Um, well Carl will show you. (laughs)

B: I think what you do is…

(inaudible)

C: I might want to put that in one of my speeches. Okay, talking about working on the river. (Inaudible) I like that. I want that somewhere. (Inaudible) inspection trips – again, the Mississippi River Commission is to make two trips on the river a year. One is the high water trip, one is the low water trip. This is spelled out in the legislation, and you have to do it on the river – that's why I go that boat. Um, we made our high water trip in April. We thought, and now we're making a high, high water trip. (laughs) okay, this is the barrier. This is the hurricane storm barrier. See this is – God, when you look at this, see the walls that they built? The old

walls – this is St. Bernard too, by the way. Which, I don't know why you want to protect St. Bernard. (laughs) okay, that's (inaudible) this is – we're doing some work with the (Mekong?) Delta – that's nice. Okay, outdoor activities. Look to about three – okay, so that's that. I guess. That's the…

B: Don, excuse me. Could you move that chair at the end of the table out of the camera's line of vision to the screen? Thank you.

C: That gives you an idea again about the northwest Mississippi Valley and the Great Lakes division. All that fits together. Okay, American watershed, that's what we just saw, right? So I'm going to close this out, right? Alright, so we saw that. We saw the Chinese delegation. Let's see what Fleming says. Let's see what Fleming says, okay.

D: That's all new.

C: Yeah. What we got to do to make this go (inaudible). Oh, here we go. I'm getting to be an expert.

D: This should be – let's see.

B: I gotta get in the right spot with my bifocals.

C: Okay. Okay, shows where the Mississippi – shows where the New Orleans district is, okay. That's pretty good stuff. Shows the money – nobody needs to know about that. That's all before all this – I'm sure that's going to – up, up, up. That's New Orleans. Wonderful New Orleans. Levee in New Orleans. Levee in New Orleans. Control – that's the biggest pump station in the world. Now that's the one in Jefferson parish on the West Bank. Okay. Okay. That's the critical near term – is LCA stuff. Okay, I said I'm sure glad you've got Houma on the map.(laughs) That's New Orleans. Some of the LCA stuff. River diversion. I got a good look at Violet Canal the other day flying around in a helicopter. That ain't nothing – I mean you could use Violet Canal. I mean they make a big deal about – they got people living down Violet Canal. They ain't got nobody living there. Okay this is um, okay. This is – this here is Morganza on the gulf one. I said man I'm glad ya'll got a map that shows – we're making headway. Alright. Old river structure. Alright. You've got a power plant up in there at the um, upper plant, you've got an overbank structure and you've got a low sill structure. Low sill structure is the one that blew out in '73, almost blew out. And the reason it blew out in '73 was that there was a barge that hit that thing. In fact I was talking to Edwin Edwards the other day about it, and he said yeah, I saw you on television. He said what ya'll going to do with the old river and all - he says um, I told them if Clifford says that that's what's going to happen, it's going to happen. I said yes, and you remember you taught me that in '73. I was on that structure in '73 with the governor. And there was a barge that again, this gets back to how critical navigation is and how critical safety

is. In ’73 there was a barge that got loose in the river and hit the old river structure – hit the southernmost point of the old river structure. They finally got the barge out, but caused a scour in there. So they got concerned about that, and that’s when they opened Morganza. They didn’t open Morganza because it was a flood trap. They opened Morganza because they thought they were going to lose the old river structure so they opened it to relieve the pressure at old river. Now interesting – they opened it 50% in ’73. And they opened it like in twenty four hours. It was like hey, get the damn thing done. So when we look at the ’73 flood and we look at the ’73 elevation, for instance in Terrebonne for ’73 the water got to 4.6 at the Humphrey School or the Bayou Black Elementary School which is a low spot along Bayou Black. So I said if we’re above 5 again, we aught to be alright. Well we would’ve been alright – we were alright in ’73 if we were above 5. And we’ve done some things, some remedial things since that time. So again, and then we got back to look at the why they opened Morganza – it wasn’t because of 1,500,000 cubic feet of red river landing – it was because they needed to take the pressure off of the structure. But after that, after ’73 they built the auxiliary structure, and they still got to split 70/30. So what the split 70/30 is, 70/30 – when you combine the Red River and the Atchafalaya and the Mississippi. You follow me? This is – you could actually be taking less off of the Mississippi if you had a flood condition in Red River. Now again, we were very fortunate. We have a drought in the Red River Valley, and we have a drought in the Arkansas Valley. If we didn’t have that, if they were loading and unloading the water they normally do, we would have a bigger problem, particularly in the lower reaches, okay? Okay, this is just the graph, and this shows the – I think the dotted line – I can’t tell what the hell it is. The dotted line is the base option; I don’t know what all this is. But the – the solid blue line with the red up at the top – that’s what’s going on today. Oh, I know what this is. This is the dredging at Southwest Pass. You see, Southwest Pass and the wheel and the colorhead dredge and all that carp – that’s the dredging in Southwest Pass. And that must be the bottom – um, it can’t be the bottom.

B: It looks like a spike.

C: Yeah, yeah. I’m looking on the right the green. That’s the river gauge in New Orleans, I guess. Okay, but anyhow, that’s – that’s another horrible problem they got. And they needed at least to hund – they needed before this, before this episode they needed a hundred million dollars to dredge out southwest pass. Or dredge from Baton Rouge to New Orleans. No, from Baton rouge to the gulf. So after this, it’s going to be more than a hundred million.

B: Now what’s happening to the sediment?

C: Well when they dredge it? Dredge it back into the Gulf of Mexico. They ain’t using it. I mean again, that’s horrible! See, again, at sometimes I think about the Corps of Engineers. See this is in the – this is one of the slides, the general slides – somebody’s slides. Okay, overseas contingency. That’s a big deal for them, and they think that’s sacred, man. The General took off

yesterday to go to a funeral, okay. The general had to take off to go to a funeral. They've got to go to Pearl River to bury some poor guy that got killed in Afghanistan. But the point I raise is, we got no where else in the world does the military engineers take care of civilian operations. No where else. Like we had these people from China who maintains your rivers and canals and navigation systems? Not the army, okay, they got a civilian group that does that. Okay, Chief of Engineers – there's a Deputy Chief of Engineers for civil work. Nowhere else in the world does the army take care of civil works. Okay, now so I raise – and it goes back until the 1870s. Again, the reason they got a Mississippi River Commission – they had a group of people in those days that didn't have a lot of faith in the damn army. And, my problem is that these guys – you know, this general that is now in charge of the Mississippi River – first off, he's going to leave this shit. He's going to leave this shit! Lord knows where he's going to go or what he's going to do. so we spend four years educating this guy, he's going through this unbelievable episode, and hell shit, he may be back in Afghanistan killing people. I mean you know, this is crazy, man. This operation – and again, we're in a defense budget – 800 billion dollars and this is 200 million? Shit, man! We ain't exactly high on the totem pole. You know, I think there's thirty thousand people in the Corps of Engineers. Less than three thousand are military people, you know. This ain't exactly the best way to run the railroad, I don't think. Now there were – but I don't know what the alternative is. Surely the EPA have to run the railroad or the U.S. Fish and Wildlife agency is going to run the railroad. Maybe the transportation department would be. But that's some discussion. Again, we're meeting with the Chinese delegation this week, and that question was raised. You a mili– yeah, man. We've got the guys walking around here six foot tall – that's funny. A captain that's an aid to the general. That son of a bitch was at least six foot six inches tall. Boy he was at least 280 pounds. And all these Chinese little bitty dudes. And they were taking their pictures with him. I said that's good. The little Chinese men said they said well we'd better not mess with him. This guy. No matter how much money they owe us. So anyhow, that is a basic question as to – as to – is this the best way? And I'm telling you this has been debated for a long time. And um, of course as I see it, I don't know about you guys, but I see it – there's more and more bureaucrats or even elected officials and then bureaucrats that get in the position that really, they're not qualified to do. And now this guy that's a general – he didn't go to West Point, and I find that's good. That's positive in my humble opinion. But he's been in the army for twenty five or thirty years. He's a major general. He's from Brooklyn. (laughs) But um, you know, he's really gotten into this thing, and he got into the valley in the third greatest watershed in the world, and all that crap even before this episode. And he's more into it. But he problem is, they ain't going to send this guy somewhere that he's going to be a benefit to the system. I mean he's going to go – one of the – I went to seventeen colonel command changes in New Orleans in my lifetime. Seventeen! Okay, one guy was a great guy and spent seven years – we taught him everything he knew, he went to West Point to run the physical plant. I said, he went to West Point to run the sewer plant. Three days, three years in

Louisiana, he don't do us no good. Now if he'd have moved up to be the chief of engineers or assistant chief of engineers. That would be not bad. But that wouldn't happen. You know, it's horrible. It's horrible. And you try to get them to change that, I mean it's like – you crazy. I mean it is – and like I tell you, here's the report. We're going up and down the Mississippi River. We tell them everybody's there telling us what they need. They need this levee. We need this pump – that's before the flood. They needed a pump and the general said well we ain't got no money. You know, but by the way, we've got fifteen people in Afghanistan. And again, you're flying around New Orleans. I'm flying around New Orleans the other day – the guy says, how many goddamn miles we got of levees and floodwalls around New Orleans? Oh I said they got about a hundred fifty miles. He said goddamn, fifteen billion dollars? I said well it depends on where they at. It depends on where they are in Afghanistan. One general – every trip was, and we're in 90 countries in the world with the Corps of Engineers. Ninety countries in the world. And yet, we turn around and tell you we can't build a levee in Missouri. We don't' have no money. Okay, let me get to the next one. Oh shit. I don't know how to do that.

(inaudible)

C: Okay, here we go. Again this shows – complicated – the New Orleans district is – that's another point. The New Orleans district, see that's another argument I make. The New Orleans district is the biggest financial district in the United States of America. Okay? They have more projects, navigation, flood control, levee systems, and etcetera, in any place. So first off, they aught to not have a guy in charge every three years. A guy aught to – somebody aught to stay. Second place, I'm not sure that the New Orleans district aught to be involved in the Louisiana Coastal Plan. Goddammit. The Louisiana Coastal Plan is as big as the New Orleans district. Okay, if you're going to really go after it. So why would you have those people that are running navigation flood control blocks in the levees include the Louisiana Coastal Plan? Alright? So I suggest – again, I'm scared to go through anybody else but through the Corps of Engineers – I suggest through lack of knowledge of the bureaucracy that we create a Louisiana Coastal Command. And we put some general in charge, and we put some general in charge, and we put some general in charge that don't move every three or four years. Now, you really want to make it broad, why don't we create a United States Coastal Command? And why don't we domical it in Louisiana and put a two-star general in charge of the damn thing. And put an appropriation process – like MR&T. That's what happened in MRN&T after the great '27 flood. I don't get too far with that. (laughs) okay, let's get out of here then. Let me get out of here. Okay, and by the way, I suggested that to of course Breaux and Tauzin over the years, and anybody else that would listen to me. By the way I'm pretty impressed with the guy from um, Baton Rouge. Dr. Cassidy. I suggested – if ya'll ever get a chance to talk to that guy. He is a sharp dude.

D: He's in um…

C: He's in the congress. He represents Baton Rouge. And their goofy-ass district – they got set up with to include part of Terrebonne Parish. Which is ridiculous. But he is a good – he's very – he's met with me at least three times. And um, he is – what am I doing wrong again?

D: See this? Right there.

(inaudible)

C: Okay. Alright, let me see what this is. This is again, the Cairo gauge. Now Cairo, believe it or not, because of rain, again Cairo critically is 60, flood is 40, and this day, Wednesday May 18 it was 52. But it's predicted to kick up again. Okay because of the water – they were getting some rain the Ohio valley last three or four days. Okay, Cairo, (inaudible). Okay, this is just one of those daily reports. That's what I got. This shows, again, that um, New Madrid floodway shows the water coming in at the north, coming out at the south. It shows New Madrid – the city of New Madrid. Okay, this is one deal. Alright, this is a slide we don't need this, but this talks about when we're going to operate Morganza – when we *were* going to operate Morganza. You see down there in that lower line that 1.4, that's the million cubic feet at Red River. And you see there again it's 1.5 in the star? That means on May the 16, that's when you start operating it. And even after you keep operating; it keeps rising, okay, at Red River. Okay. No, that's not the right. That was – if you didn't operate it that's what would happen at Red River. But that's the kinds of things, you know – this is, that's just not throwing something at the wall. As a matter of fact, what's amazing to me is there's so many controls you can have to it. Okay, this is – and this is um, now, the – believe it or not – the division has got some responsibilities now in some of this cleanup for um, for tornadoes. So this is a pretty big deal. This is the –this is all in different planning. Again, these are some of those geo-bags that had been…

B: How are those holding up?

C: As far as I know, they are. Um, probably the biggest place to look at them is right there where they're talking about the Yazoo Basin. They got them around, again – they've got them in Baton Rouge, but frankly they don't need them. They got some in Terrebonne too. Now they work pretty good around particularly industrial areas, in my opinion. Like in Morgan City, you know, they got some people in Morgan City that got twenty-foot high seawall, and they got some people with some big business between this seawall and the goddamn Atchafalaya River that have probably ten feet of water in them today. Which they aught to have ten feet of water! Okay, that um, I don't know what that breaching of that levee is. I don't know where that is. That might be where we blew it up. It couldn't be though. It might be. This is all kinds of stuff. Trespassing, (inaudible) 31 of July. See, they're talking about the river generally being at the um, at the um, back to flood stage at 31 July. I'm talking about the whole system. But you

see, that's like – it's so difficult – see you say alright, there's the twenty one harbors. That's going to be the harbors up and down. Reset - that's going to be where you have to go and do some scouring. Now what they're trying to do where they have these sand boils – they go and they put some relief wells. They eventually dig a hole. Put some pipe in it; put some shell or gravel around it, and have it come up so that you don't have a sand boil anymore. You've actually got water flowing out of it. You collect it and you pump it back in to the river. And I mean, they're going to spend big bucks on – well not a hundred but probably – I bet you over ten million dollars building damn relief wells up and down the river. (laughs) You know this was somebody in Butte Larose somewhere. Okay, this is already getting – you see, they're getting ready to come back to congress hopefully and talk about what they need is a retrofit and what have you. And what they're trying to do is to build up a case to have um, again, to have um, to have what is it, supplemental appropriation for that. Okay. (Inaudible) Okay, let's look at the – watershed, I guess is the same thing maybe.

D: Same thing.

C: The same stuff, yeah. I don't need to look at that anymore. Okay, um, alright. This is something that I put together some time ago – I'm changing it now. Again, this is some of the same stuff, but it really wasn't for – it wasn't for the flood. It was prior to the flood. But you see, I'm adding to it – like this is going to be the overall map that shows the topography of the area. Um, this is again, as you know, the delta building process - this was '97, this was '97 without any levees. And this is what Louisiana would look like today. Basically Lafayette to Slidell would be under water. This is '97. It shows how the plumes came out – Bonne Carre was open. You look at Lake Ponchartrain. And of course Mississippi was open and of course the Atchafalaya was open. And again, to me, it shows how the river from the Mississippi to the Atchafalaya starved off of by Southwest Pass dropping all the water to the south. And that's exactly – well you know, what's a tragedy today is that's what exactly is happening from the Mississippi to the Atchafalaya with it being refinished. Refurbished. But if you call that a tragedy, this would be a tragedy, right?

B: Oh yeah.

C: This is again, the '27 flood. Um, this is the – I don't know if ya'll have ever seen this. Somebody had given me this. These are the tributaries, which I think is a wonderful word of the Mississippi historically. Now what I want to put in there eventually – I want to find the Atchafalaya and follow the Atchafalaya in some different color. And show okay, well this is what the damn thing used to look like, say four to five hundred years ago, and this is what it looks like today. So why we got a problem – we got a problem because we done cut off the circulation just like your body, right? Again, this was 1882. Now this is the last time I think the damn river flooded along the Mississippi from Baton Rouge to New Orleans and into

Terrebonne Parish. I think this is the last – this is the last episode. This is before ’27 of course. Alright, now this – I got these over Wax Lake Outlet. This is Grand Lake, on the left, that’s Grand Lake and 6-Mile Lake. That’s in 1912, 1930, and 1960 and 1975. And that’s why you’re building a delta at the mouth of the Atchafalaya and Wax Lake Outlet. You’ve filled up the Atchafalaya. Interesting – the top slide is the - again, the old river control structure. Now, I say – 1912. Okay. Prior to 19- well let’s say prior to 1830, there was a log jam in the Atchafalaya. And Shreve came in there to clean it out the navigation purposes. Up until that time, you had no flow basically down the Atchafalaya. So you had Six Mile lake, and you had Grand Lake. When you started cleaning it out and getting flow down the damn thing is when you started filling up six mile lake and Grand Lake. We get a big lawsuit over there because pipelines create the problem of flow through the Atchafalaya – that’s bullshit. I wish we had bull like this because now, the people think man, now we’ve got a little bit too much water in the - but when this thing goes down, you’re going to be able to walk on land out there in the Atchafalaya basin. Okay, okay. This is Wax Lake Outlet. Manmade - 1973, 1977, 1986, 1990. Now if you look at the plumbing map – because I have to get the chart. If you look at the plumbing map, the amount of water on the flood stage going by Morgan City and Wax Lake Outlet and the Mississippi and New Orleans, it’s 50/50. Okay. It ain’t 50/50 today, but it’s more than 70/30. But again, again the question is – ya’ll never had – can you use the river to rebuild the delta? And I said, man, get in an airplane and fly over Wax Lake Outlet and the Atchafalaya River, you’re making a delta out there by accident. You know, that system was built for flood control; not for building a delta. Okay, this is an interesting slide. See – one on the right is the floodplain of the Mississippi today. The one on the left was the floodplain of the Mississippi five hundred years ago. I mean, obviously look what we did. Again, that’s the plumbing map. Again, that’s two million – read down there. Look at the bottoms. Coming by Morgan City, Vermillion, 60,000, go out to Wax Lake Outlet – 440,000, and that’s under flood conditions. That’s the maximum flood. That’s 1,500,000. Look at New Orleans – a million two fifty. It ain’t no – it ain’t no 70/30. I bring that up every now and then – well what does that mean? I said you know, that’s what it means. We done built this thing to save New Orleans. Okay, again, this is ’08. Bonne Carre was opening in ’08, see Bonne Carre up there. You see Carnaveron. Now I don’t Carnaveron why Carnaveron and Davis Pond is not open now. I don’t understand that. Somebody needs to explain that to me – I should’ve asked that question. Well, Davis Pond and Canaveron are not open right now. And I don’t know why you wouldn’t have them open. Of course another thing – the diversion and Davis Pond and Carnaveron are the two biggest diversions – besides the river. Besides that – that’s the biggest diversion. But the people up north on the commission question the diversions. I said well what y’all worrying about diversion for? They said well we’re going to take all the water out of the Mississippi and you’re going to reduce the navigation. I said shit man! I said I want to bring you to a diversion project. I want to bring you to Davis Pond. I want to have the guy there with you that runs the goddamn thing, and I want you to stand on that

structure and I want you to open it. Open it – whether it's high water or low water – I don't care. And I want you to tell me how this structure effects the goddamn navigation of the river out there that's two thousand feet wide. The damn structure ain't but a hundred. Again, these are – this is '08. I use this all the time to show that basically from Suthwest Pass in the Atchafalaya to Eugene Island, is starved from silt from the Mississippi. We're dumping it in the damn gulf and we're causing a dead zone. So I mean, this is enough – and if you go back again in history before '27, Southwest Pass, you could walk on. After '27, it cleaned out southwest pass with the idea to get more floodwaters out, and it's going to scour itself and keep it reduced dredging besides when you get out of Southwest Pass you're in about two hundred feet of water. If you continued on South Pass, you're in the mud lumps. You follow me? So that's again for navigation purposes. Another interesting thing – in the Mississippi River Commission legislation it talks about from (head of passage?) to Lake Itasca. And I said, well what happens between – they had a patch in the Gulf of Mexico? They said, well dredge it; do whatever we could do. I said, well that ain't in the Mississippi River tributary project! What do you mean? I said, well read the son of a bitch and look at a map! There they had not recognized that. some lawyer…okay. I said, well I don't have a big deal about it. You get money and go do what you want to do – but I'm just telling you it's not from the head of pass people it's to the Gulf of Mexico. But most of the people think Mississippi River stops in New Orleans. Okay, that's just the erosion map. See now this is the thing I keep around with me. I don't know if y'all have ever seen this, but this is the average elevation of the water in the Intracoastal Canal, there's a gauge that's been there since 19 – before 1965, but that's where we took the average – it's a recording gauge and we took the average elevation per year of the Intracoastal Canal in Houma, at Bayou Terrebonne, which is the major drainage already for the community, okay. And look how it was in '65 the average elevation was .5. In '02, the average elevation was 2.1. in other words, as we've lost coastal Louisiana and we lost coastal Terrebonne, the water rises. I don't think its sea level rise. In fact, we have no resistance to the sea. And the tide comes in. now as an engineer; we don't live in New Orleans. So most of our drainage has mostly been gravity flow. Well there's an engineer in '65 – if you were developing a subdivision north of Houma and the average flow of that stream, whatever you would drain it into, you put your flow lines and your culvert at the average line of the water. And it was a 24-inch culvert; today, the 24-inch culvert is full of water all the time because it's really 24 inches. We still get six to eight inches of rainfall. So of course your drainage system don't work. You gotta put pumps in. or you gotta do something else. So that's the real – when we talk about the twenty five square miles, talking about 400,000 acres of land in Terrebonne eroded – all that – yeah. That's all great statistic, but what does that mean to me riding down the street? It means a damn waterslide. And we get – you know, it's unbelievable as I told you about looking at the rivers and looking at the bayous – when you think about where we live, we were affected – we are affected by river obviously. We're affected obviously by hurricane. And we are affected

obviously by six inches of rainfall. I mean some days I don't know where the hell the water goes, frankly. You end up – coastal Louisiana. Again, the first time I showed that to John Breaux, he said you want to build a road coming through Cuba? I said no, I Just wanted to show you where the hurricanes go. And this was Lily. Again, this was Lily twenty four hours before Lily hit, it was a Category 4 storm. And it was that red line proposed to go over Eugene Island, and that's what this place would've looked like for Lily. And it went from a four to a one, and he went forty miles to the west. And the reason I think it did that – we had a storm the week before called um, Isadore, and Isadore was a rain event. That's another thing people don't understand is that in hurricanes you have rain events, and sometimes you don't. Well for Isadore we had a rain event, and it cooled the water in the coastal areas, and I think it decreases that strength of the damn Lilly. So that's amazing. You know, that's a – that's a miracle that that happened. Just like it's a miracle that it ain't rained in sixty days down here. This is the confluent of the Ohio and the Mississippi. Believe it or not, the river on the right is the Ohio. And that's Cairo, you see that little crappy little town right there? And if you go to Cairo, there ain't anything worth saving in Cairo. At one time, it was sort of a big deal. But you really – and the General got on that pretty good. You don't say that we did the um, the Birds point New Madrid Floodway because of Cairo because Cairo ain't worth saving. I mean again, when I tell you a hundred thousand acres of agriculture land is worth a hell of a lot more than the city of Cairo. But um, you go back up the Ohio and this piece is like Paducah, and you go down the Mississippi and there's places like Hickman, Kentucky and etcetera that needed to be saved, frankly. Now look at that picture. Now I don't know when that picture was taken. I mean it wasn't – not this year. But that's a big – that's a big son of a bitch, there partner. Those bridges is actually closed now. It had been for at least the last month. And these are the diversion structures. Everybody's talking about diversion – we're all talking about diversion. These are the proposed diversion – of course, this slide is not proper because it don't show um, the Atchafalaya, which is the big diversion, but these are the only things that show the Morganza and it shows – I mean Davis Pond, and it shows um, Carnaveron, and it shows a few other little ones that exist, but all these others are particularly proposed. Now I can't get them off of this – they just don't see the big picture. They talk about West Bay. And they talk about west bay is not being successful. Well first off, for some damn reason at West Bay, they dug the damn thing to the northwest. They didn't dig it. The river flows of course southeast – southwest. Well they didn't dig the damn hole to go to the southwest. They dug it to go to the opposite way. I don't understand that. Nobody's ever going to explain that to me. And then they say well it don't work because it's also causing shoring where the anchorage is. I said well why, why is the anchor there? Goddammit, you got a hundred twenty miles between there and New Orleans. You could anchor a ship anywhere you want. Oh no, no. that's where we're going to anchor it right there. Well I don't understand that. Shit. You people are crazy. Then I said, first thing you dug the son of a bitch in the wrong direction – go redig it the other way and see

what happens! But they crazy. Uh oh, it didn't work. I tried to divert – we told ya'll science that it didn't work! Man get out of here with your damn science. Okay, making a different diversion. Okay, now this is another no-brainer. No brainer! Alright? This is Bonne Carre. Bonne Carre is flowing wide open right now. Alright? At one time, there was a diversion proposed in Bonne Carre that would operate all the time –well not all the time – any stage of the flood in Mississippi. The goddamn people at the lake in Lake Ponchartrain didn't want that nasty Mississippi River water in Lake Ponchartrain. You remember that? And Mississippi was going to pay some money for it. Mississippi wanted it, okay? So I wasn't – (inaudible) Blanco had a fallout with Mississippi or something and they're not going to build. Alright? So then, here comes the goddamn Lake Ponchartrain Foundation comes into a hearing about two years ago, and said well what we oughta do with Bonne Carre is to divert the water out of Bonne Carre into the marshes! Well yeah! That's a great idea! So now, they're doing a hundred million dollar study to look into it, and it would be so simple to do today. Just walk out there with a backhoe and dig a goddamn hole. Alright? Now again, in my humble opinion for diversion purposes, see you've got Bonne Carre open right now. Wide open! Alright? Well on a normal year, you ought to have a small structure right here with some type of bayou duct which under normal conditions you could open this damn thing up on a normal flood conditions, open this thing up, let some of the damn freshwater in here, divert some of it this way, divert some of it this way, and the rest into Lake Ponchartrain. And you would have a diversion structure pretty much every year. Depending on what flows into the Mississippi. Another point that I never realized, they tell me one of the problems with algae is the temperature of the water. If you happen to have a high river in January or December, which we have on occasion, the water is cold. As a matter of fact, the water in the river is cold even now. But you would – you would particularly get it when your water is cold – it's not going to affect the algae as much as it does when it's hot, you know? But have that as a control structure. I mean when all the controls we got on this goddamn system, a few diversion structures with controls on them would make the most sense in the world. Take Davis Pond has just decided to go cut a hole in there. That's fine, I would cut a hole and put a control structure. Anything you do here, you ought to have controls and you ought to monitor because this is a laboratory. Again, to get back to the science, and you guys are scientists and what have you, but the point is that – we got a, this is a laboratory. The whole frigging place is a laboratory. Again, that shows you how confused the New Orleans district is, and you're going to throw all this other crap on them. Okay, this is all the different goofy studies that are going on. Now this is something I always use that show you after Katrina, say you know, we were affected in Houma from Katrina primarily because we lost electricity. Well we didn't have a lot of damage, but when your road trips to Chalmette I said, ya'll better go over there and look at Chalmette because that's what Houma's going to look like. And so I did this chart. I said look how far Houma is from the barrier islands and look how far Chalmette is. Then go look at Chalmette, man. It's a bad deal. Yeah, that's our projects there. Navigation –

see again, New Orleans is so – I mean the levee system, again – in 1958, I got out of LSU – I went to see Fred Chaverick, chief engineer and district engineer in New Orleans. Not a civilian – not a civilian. Mr. Chaverick was a Tulane graduate – lived on St. Charles Avenue. I don't think he ever went over the Huey P. Long Bridge. So I go over there and tell him I'm T. Baker's son. Oh yeah, how you doing? I said just finished at LSU. And he said well how you doing? I said yeah, and I'm very close to Senator Ellender, who at the time was the chairman of the Appropriation Committee of the Senate. And I want to talk to you a little bit about hurricanes. It was before Betsy. And he said boy let me get this straight. And this guy went to Tulane, grew up on St. Charles Avenue. He said let me get this straight. You're from Houma? Yeah. He said you went to LSU? Yeah. He said, and you live – you're a civil engineer to go live in Houma? Yeah. He said, man you've got to be crazy! And then I said well look I want to tell you about hurricane protection. He said hurricane protection? We ain't in that business. Man, get out of here! What the shit you talking about? This is before Betsy. We build levees along the Mississippi River. We don't worry about no hurricanes. Okay? And I mean he insulted me all kinds of – of course I wasn't but about twenty five years old, twenty three. So it didn't make a shit. I'll never forget that. That old son of a bitch. But that's been the attitude, you know. I mean – and I go back. I tell everybody these stories. I said um, that on that I said I had an opportunity ten or fifteen years later to buy controlling interest in a bank in Houma. And of course, I don't know nothing about banking, but I figure that's a pretty good deal. So I pick up my balance sheet at the bank and all kinds of other bullshit about the community. And I got me a lawyer. And I go down there and I talk to the vice chairman of the board of Hibernia Bank at the time, which was the biggest bank in New Orleans. And I tell this guy about this project, and I said I can buy controlling interest in this bank and the assets and the community and the balance sheet and all that shit. And the guy says you from Houma? I said yeah. He said is Houma north of New Orleans or South of New Orleans? I pulled up my little boat and went to Baton Rouge and borrowed the money. So that's what I tell everybody. I said that's why I'm paranoid about New Orleans. Every time I see – again, this is a slide I keep with me. And I'm sure with all the stuff I keep, this is you know, the leases – the active leases on the Gulf of Mexico. And again, look at the line – and I show them that. I said look at the line in Florida. I said we're over here busting our buns – sure we make a few dollars out of this, but we're using our resources to supply the whole goddamn United States with um, with gas and oil. And them other people sit over there and say they can't do nothing because they've got to keep their peaches clean or something. This is the old river structure – shows the power plants. See one of the things I got concerned about in this episode is that the old river structure and the alternative – the alternate structure etcetera was all built by the government. But this power plant is actually the city of Vidalia sold the land and built this power plant. Power plant was also built at the – Avondale. They built basically a barge and put the power pant – put the turbines in the barge, and as far as I think they sunk it. One of the reasons they got financing for it was because it was a job and the public service

commissioner of Louisiana, um, allowed to get some rate increases through Entergy. Well I said you know, we've got this structure which this is a government structure. This is a government structure. This is a government structure. This is a government structure, and by the way, Morganza spillway is further down the river form here. Okay, about twenty miles down the river is the Morganza structure. Okay, the um, I said well suppose this damn thing washes out. Not only is it built on the government, it was built by a private enterprise, and not only that, it's on the upper side of the old river structure, so it could get even more flow than the old river structure. So when I was up there luckily we do have some people – some bureaucratic type people that are good people – the guy that runs the Morganza structure went to work there when he was about 21 years old as a laborer. And he's been there for about 25 years – knows everything about the damn - I'm not sure how educated he is with the - formally educated, but he is very well educated about how to run the structure. So I'm asking him – I'm telling him I said well you have this and you didn't have this in '73, so this is the insurance and all that shit. I said well what about this thing? I said what about this thing washing out? He said oh I wouldn't worry about that. I said I'm a man. I wouldn't worry about that. I said why you wouldn't worry about that? He said well, it was built in Avondale and they brought it up - the turbines actually came from Europe to put on and he said yeah, well they dug a hole and put this thing in here and filled the damn um steel containment full of concrete. He said that thing is – and they said they drove pilings over it. And he said I think that thing is the most stable thing than anything else up there. And that's what the guy told me, so I quit worrying about it. But that is a big and as a matter of fact, I suggested to everybody that I know of to go up there. It ain't easy to get to. Forty five minutes from nowhere. And you get to – you go by – you can go to the town of Morganza and that's where the floodway – the Morganza floodway is. But you continue on up about twenty miles following the river and you go through this installation here. And to see the water going through there today – that was a – I was talking to somebody yesterday about that. and again, I see a lot of water up the river, and a lot of areas flooded. Well I mean when you go and see that mother, and all those people from up that river on the commission physically go there and look at it twice. I made them go before you open Morganza. And I actually was there when they opened Morganza. And that is something to see. I mean it really is. That structure is moving. That old inflow channel structure that um, that low sill - see where it says low sill? That thing is moving. I mean you can feel it moving. Obviously it's relatively stable, but um, that's a big deal but you see the Mississippi wants to go that way. Again, because it's a shorter distance to the gulf, and it's a shorter gradient to the gulf. And that's been – that's in excess of a billion dollars right there. In excess of a billion – I mean you couldn't replace it for a billion – and there's all kinds of history about that. You know, I'm up there, what does Pointe Coupee mean? Which to me is "point of the circle", and that um, that Bienville went up the river, and water to get into the Red River, and he found him some Indians up there and he showed him how to do that. And they called that – that's what they called it. Pointe Coupee. Point of the turn, I

believe. Okay, alright. Now again, um, I'm going to get ya'll the guy's name with um, with the general – the historian…

B: Cindy just gave it to us.

D: Yeah. Cindy just gave it to us.

C: I will call him um, next week and tell him you all will be in touch with him. This is the kind of information we get every day. Okay, talks about first off the weather, um, we also get something like this every day. Okay, and they have – the point is, they are documenting all that, and not documenting Louisiana standpoint and documenting it from the entire um, flood condition and basin, okay. So any of that is available to you. I mean you can take those copies right now. But you know, they got that information – I get it, I read it, and I throw it away. But they got the information for every damn day from the last sixty damn days. Okay…

D: Perfect.

C: So, and you know, and I got – like we of course had the map of the '27 flood. We have the map of the '73 flood, which I thought was pretty important because of Morganza. Um, we have um, information – I think it's in there about where they sample – they're taking samples all over the place. Um, one of them showed me last week they were showing me they were sampling down in Chandelier Sound for oysters and what have you. And I said well what about in West Terrebonne? That's where I get my oysters. So they coordinating that with somebody.

D: Well I think one of the things that um, at least you brought to the table is that there are an awful lot of people collecting information. There are federal agencies, state agencies, probably private folks. But we need at least some way to get all the people in the room and discuss their findings and I don't know if that' part of the commission's responsibility or if we have to work with the office of Coastal restoration and Protection, or the Coalition to Restore Coastal Louisiana or whomever, that we can get together, particularly looking at other state of the state or state of the coast meeting, this would be a big deal for all of these diverse groups who don't know anybody – each other to talk.

C: And supposedly that's – that is happening or is going to happen. Supposedly. Um…

D: Well use your unique skills to push them along.

C: Yeah, oh yeah. And um, and again, I think everybody's looking at – that I know of, that everybody's looking at this as a great learning tool. Um, not only how we're going to retrofit – the thing that I asked today. What is the elevation of the Intracoastal in Houma. And this is again, we have a recording gauge in Houma that does it constantly. So you know, and you can see that again, the highest I've ever seen the water in Houma in the Intracoastal Canal was

about 5.5. Now I did see water at Industrial Boulevard over here, not in the canal but on land, but about a plus 7 for Ike. Okay, I don't – but I don't ever recall anything in Houma above a 5.5 and I would suspect that that's not going to happen for this episode. But again, it sounded right – ironical that um, normally we're worried about a hurricane flood. Another ironical thing about it is, in a hurricane flood, it goes in and it goes out depending on what the weather conditions are after the storm. But normally it comes in and it goes out, whereas a river flood is not going to go out. I mean it's going to take some time. I don't know – did I show you this? This is the barge – ya'll need to make arrangements. In fact, um, Randy can make arrangements to get ya'll to this barge they put in Bayou Chene.

D: Alright.

C: Um, basically, let's see where's the map that shows where the barge is. Okay, this is um, this is Bayou Boeuf. This is McDermott. See this yard right here. This place is McDermott right here. This is McDermott. This is the Intracoastal Canal that goes toward Houma. This is what we call Bayou Chene that goes down to the Cutoff Canal that goes down into the – back to the Atchafalaya. The water is backing up here - they put that barge right here. Okay, and they got a gauge – they got a gauge at Morgan City of course, with this – this particular day, was 8.8 um, at Bayou Boeuf and Amelia – that's at the old US-90 bridge in Amelia. It was um…

D: 2.2

C: 2.2 um, at the barge, the Atchafalaya side, 4.8, okay. So just form the Atchafalaya to the barge was a two-foot drop. From the barge to the um, US 90 was another two feet. this is um, this is the GIWW at Bayou Chene which again was here, this is the location right here. But the GIWW and it's at um, 2, and then this is (Bayou Pension?). (Bayou Pension) is on the other side of the barge. Here's the barge. This is Bayou Chene, going into the Atchafalaya. This is Bayou (Pension) going through West Terrebonne, and this is the location of obviously the water going down the pension. And obviously in my opinion, it's good.

D: Yes.

C: So the barge, the point I'm making is the temporary barge is working. Okay? That's for you.

D: Thank you.

C: And that comes out every day. I mean you can make arrangements that you get it every day. But um, just wanted you to know what's going on so ya'll can pick and choose what y'all need to use with anything. Okay? How does that sound?

D: I think that um, we've worn you out.

B: Yes, and we're out of tape. Conveniently out of tape.

D: So I think that…

C: So y'all want to go get something to eat?