Barataria-Terrebonne National Estuary Program Management Conference Meeting #61 Minutes Multi-Purpose Room – Ellender Memorial Library 9:30 a.m. – Tuesday, September 11, 2012

CALL TO ORDER

Roll Call

	Present	Absent
American Sugarcane League		Herman Waguespack
Bayou Lafourche Freshwater District	Archie Chaisson	
Coalition to Restore Coastal Louisiana		Steven Peyronnin
Coastal Conservation Association of LA		
Coastal Protection Restoration Authority	Jerome Zeringue	Kirk Rhinehart
Commercial Fisheries	John Tesvich	
Greater Lafourche Parish Port Commission	Chett Chaisson/Davie Breaux	
Iberville Parish		
Jefferson Parish		Marnie Winter
LA Association of Levee Boards	Dwayne Bourgeois	
LA Department of Ag & Forestry		Joey Breaux
LA Department of Environmental Quality		Jan Boydston
LA Department of Health and Hospitals		Chasity Cheramie
LA Department of Natural Resources	Linda Pace	
LA Department of Wildlife and Fisheries	Vince Guillory/Marty Bourgeois	
LA Department of Education	Ann Wilson	
LA Dept. of Culture, Recreation and Tourism		Debra Credeur/Karen Leathem
LA Dept. of Economic Development		
LA Forestry Association		
LA Independent Oil & Gas Association		Randy Robichaux
LA Landowners Association	Timothy Allen	
LA Mid Continent Oil & Gas Association	Ed Landgraf	
LA Oil Spill Coordinators Office	Brian Wynne	Randall McGimsey
LA Science Teachers Association	Nathan Colton	
LA Wildlife Federation		
Lafourche Parish	Archie Chaisson, III	
Louisiana Association of Conservation District		
LSU Ag Center & LA Sea Grant	Alan Matherne	Rex Caffey
LUMCON	John Conover	
National Marine Fisheries Service (NMFS)	Richard Hartman	
Nicholls State University	Gary LaFleur/Quenton Fontenot	

Plaquemines Parish		Albertine Kimble
Point Coupee Parish		
Sassafras LA		
St. Charles Parish		Kim Marousek
South Central Planning and Development Commission	Martha Cauzabon	
South Louisiana Economic Council		
Terrebonne Parish Consolidated Government	Al Levron	
The Nature Conservancy		
U.S. National Park Service		Angela Rathle
US Coast Guard		Sarah Brennan
US Corps of Engineers	Susan Hennington	
US Environmental Protection Agency	Doug Jacobson	
USDA/NRCS		John Boatman
US Fish & Wildlife Service	Ronald Paille	Bill Vermillion
USGS	Susan Bergeron/Scott Wilson	
	Guests	
US Army Corps of Engineers, New Orleans District	Andrew MacInnes	
La DNR, Office of Coastal Restoration and Management	David Fruge, Karl Morgan	
US Army Corps of Engineers, New Orleans District	Danny Wiegand	
Bayou Grace	Diane Huhn/Rebecca Templeton	
Righteous Fur	Cree McCree	
	Steve Emmett-Matox	
	Alisha Renfro	
EPA – Gulf of Mexico Program	John Bowie	
UNO - CHART (Center for Hazards Assessment, Response & Technology)	Dr. Kris Peterson	
	David Muth	
Arcadis	Ryan Clark	
Tetra Tech	Joe Cancienne	
Houma Courier	Nikki Buskey	
La Coastal Protection and Restoration Authority	Wes LeBlanc	
	Meredith McKoin	
Terrebonne	James Miller	

BTNEP Staff

Kerry St. Pe'
Richard DeMay
Dean Blanchard
Matt Benoit
Alma Robichaux
Andrew Barron
Joe Dantin
Michael Massimi
Kristy Monier
Jenny Schexnayder

READING AND APPROVAL OF THE PREVIOUS DATE MEETING

A motion was made to dispense with the reading of the May 30, 2012 minutes and to accept them as submitted. Tim Allen motioned and Archie seconded

PROGRAM ACTIVITIES

Kerry reviewed agenda items noting that there were thirteen volunteer events since the last meeting. Slides of these events were shown as the meeting progressed. The media items included were media items that specifically noted the Barataria-Terrebonne National Estuary Program. Kerry informed everyone about the upcoming Spahr's "Gulf" Tournament benefiting BTNEP. Pamphlets were provided at check-in and everyone was encouraged to participate.

BTNEP had two grants initiated this year. Alma explained that a "Keep Louisiana Beautiful" grant was received again this year. The grant request last year was for \$10,000 and this year we received \$5,000. The Bayou Lafourche Cleanup is scheduled for March 2, 2013. BTNEP also received \$10,000 from Wal-Mart to raise homeowners' awareness about septic system. The aim is to get homeowners to take responsibility and teach them how to maintain their own systems.

SCHEDULE NEXT MEETING DATE

Al asked everyone to mark their calendars with December 5, 2012 for the next scheduled meeting.

DISCUSSION ITEMS

Dean announced that the work plan approved at the last meeting has been approved by EPA.

A. Davis Pond Freshwater Diversion – Status of MR&T Project and LCA Study (Danny Wiegand)

Danny Wiegand from the US Army Corps of Engineers Planning Office in New Orleans was introduced. Danny serves as lead planner for the project "Modification to the Davis Pond Diversion," which is funded under the Louisiana Coastal Area Study (LCA) Program. He provided a status briefing on the Davis Pond Freshwater Diversion Project (MR&T) and modification of Davis Pond Diversion Study. The Davis Pond Project (MR&T) construction began in 1997 and was completed in 2002 with a notice of construction completed in August of 2012. The primary purpose of this project was to divert Mississippi River water

into Barataria Basin to combat saltwater intrusion. Some ancillary benefits have been the reduction of land loss and improvement of fish and wildlife habitat. A map showing pre and post project isohalines was shown, which confirmed that post numbers were actually lower than pre-project values for salinity. He also showed a schematic of the project as it exists today. It is officially now in O&M Phase. The cost share remains the same under MRT program - 75% Federal and 25% State.

Discussion moved on to LCA Modification of Davis Pond Diversion Study. A map of the study area was shown and planning goals and objectives were reviewed. It was noted that they are in the feasibility phase for this study. The existing project is being assessed for operational changes and the objectives were discussed. The objectives over a 50-year period are to decrease the rate of land loss and increase wetland acreage, increase the geographic extent and distribution of Davis Pond freshwater and sediment, and create a salinity transition that supports a healthy and diverse estuarine system. There was an initial array of 43 operational alternatives that were developed and screened into a final array of 8 alternatives ranging from "no-action" to operating at maximum capacity throughout the year. A map was shown indicating Pre-MR&T, Existing MR&T, and proposed LCA 5 ppt lines. Kerry questioned what will happen to the Davis pond operation when Myrtle Grove kicks in. Danny reviewed the six-step planning process; identifying problems, inventorying and forecasting conditions, formulating alternative plans, evaluating alternative plans, comparing alternative plans, and selecting a plan. They have completed steps one through five and are currently at step six since February as they cannot reach a consensus. They are considering two plans. The first is Alternative 18 river-stage dependent alternative that does not have 5ppt line or salinity threshold. The second plan, Alt 42A, does incorporate that 5ppt line. Alternative 18 is the State-preferred plan and produces the most benefits. However, it does not spatially identify a salinity threshold. Alternative 42A provides 87% of Alt 18's net reduction in wetland loss, provides 68% of projected benefits of Alt 18, provides a proposed 5ppt line that provides predictability, can modify operation to complement Myrtle Grove, and is supported by fisheries agencies. At one point, it was the federally-recommended plan by National Marine Fisheries Service, the Corps federal partner agency. Other considerations were the environmental effects, the social effects and retaining Davis Pond's relevance post-Myrtle Grove. The next step will be to identify a consensus plan for recommendation and shooting for a signed report by November 2013.

Kerry asked when 42B was removed as a possibility which was the same as 42A but maintains the existing 5ppt line. Danny said that it was never removed and that the other two options were the preferred alternatives at this point.

Rick asked where they were in the process. Danny responded that they were basically in constant coordination with the state and federal agencies trying to set up a consensus meeting but has been postponed a few times. Kerry asked if the project development team had been disbanded. Danny responded that they had not and were still actively engaged and figuring out how to move forward with recommendation.

Rick Hartman noted that BTNEP liked Alt 42B but asked if the estuary program had taken a position on Alt 18 or 42A. Kerry stated that 42A was preferable to 42B but that the BTNEP still preferred 42B. 42B would allow the state to have flexibility on management of the diversion during the spring time when the river is high but after May manages the structure for the current 5 ppt line 42A basically does the same thing during the spring time, but is problematic because it manages the diversion for a new 5 ppt line in upper Barataria Bay. It is questionable whether Davis Pond can even influence this area with fresh water.

Vince asked if the 5ppt line included Myrtle Grove. The 5 ppt line was developed based on data, considering wet, dry year data generated by Earl Melancon, NSU. It was not developed in with any consideration of Myrtle Grove.

Rick asked if Davis Pond alone could effectively manage or achieve that new 5ppt as part of alternative 42A. Danny responded that it possibly could affect the new 5 ppt line, depending on environmental conditions. He asked that they remember that model predictions are calculated over a 50 year time period and conditions will change substantially over that time.

Al thanked Danny for his presentation.

B. Louisiana's Coastal Management Boundary Change (Dave Fruge, OCM)

Dave Fruge discussed the Coastal Zone Boundary changes in Louisiana.

The initial boundary was established in 1978 and amended in 1979 and 1980 to include additional areas. The study was done by DNR's Office of Coastal Management from July 2009 through May 2011. CPRA passed a resolution in May 2011 accepting the report. Some of the concerns with the previous boundary were that the coast changed significantly, it was inconsistent with boundaries of other coastal related programs in Louisiana and some coastal wetlands were not included. The new science-based boundary incorporates environmental changes that have taken place since the initial boundary was established in 1978. The study used storm surge information, geology, elevation and boundaries of existing coastal programs to identify areas with a high level of coastal influence. The new coastal zone boundary incorporates a net increase of 1,887 square miles.

Act 588 became effective upon the signature of the Governor on June 7, 2012. Some provisions of Act 588 requires an electronic version of new boundary map to be available on the OCM website, requires the DNR Secretary to maintain map(s) depicting areas in coastal zone determined by the Secretary to be fastland or above the 5-foot contour and to have maps readily accessible to the public for their comparison to proposed project footprints. The latter is to help the public make their own determination as to whether their activity is exempt and reduce the number of unnecessary permit applications. Act 588 did not establish or require any new regulations or exemptions. The same coastal use permit regulations apply to those areas that were added by Act 588.

Dave summarized boundary changes. The changes affected 8 parishes. The CZ area increased in Cameron, Calcasieu, Iberia, St. Martin, St. Mary, Terrebonne, Lafourche, and Assumption parishes. The CZ area was reduced in Tangipahoa and Livingston parishes. The CZ area remains the same in Vermilion, St. John, St. James, St. Charles, Jefferson, Plaquemines, Orleans, St. Bernard, St. Tammany, and Ascension parishes. There were five parishes that were partially included. These parishes are Terrebonne, Lafourche, St. Mary, Assumption and Cameron Parishes. Three parishes with increased coast area with the entire parish not included are Calcasieu, Iberia, and St. Martin. The parishes with decreased coastal area were Livingston and Tangipahoa parishes.

The benefits of the boundary changes are that it ensures consistency with the State's Coastal Master Plan, provides State management of coastal resources in newly added areas, reduces wetland impacts and coastal hazards, requires Federal activities within the newly added areas to obtain a state consistency determination, reduces processing time for many wetland permits, and demonstrates Louisiana's strong commitment to coastal sustainability.

The benefits of Programmatic General Permit (PGP) include:

- Over 60% of all permits issued by OCM in La. coastal zone are eligible for PGP approval
- PGP expedites Corps of Engineers approval for many projects in the La. coastal zone
- Oil and gas projects affecting up to 3.5 acres of wetlands are eligible
- PGP eligibility for other projects is up to 3 acres of impacts to non-tidal wetlands and up to 2 acres of impacts to tidal wetlands
- Office of Coastal Management does all of the processing and evaluation of the applications
- Allows Corps to approve PGP-eligible projects much faster

Existing coastal permitting regulations also apply to those areas added to the coastal zone. Any project in the area added to the coastal zone that had not obtained all necessary state authorizations and is not exempt from permitting, will be within the regulatory jurisdiction of OCM and will require review and permitting by the OCM. OCM and Local Coastal Program offices are available to assist potential applicants in determining if their proposed project requires a permit, and to assist them with applications when necessary.

Dave reviewed the activities that require permits and noted that oil and gas activities account for 60% of all applications. Others include commercial, municipal, and industrial activities. Some activities that are exempt include fastlands; areas above the 5-foot contour, existing agricultural, forestry and aquaculture activities; normal maintenance and repair of existing structures; private camps and residences; and activities which do not have a direct and significant impact on coastal waters. All questioned whether or not fastlands was a defined term. Dave confirmed that it was. Kerry questioned the 5-foot contour - if there was subsidence does the 5-ft contour change? Dave confirmed that it did.

Dave reviewed the joint permit application. It allows for online completion and submission. It allows electronic distribution, commenting and real-time notification of comments. It allows online payment and online tracking of applications with real time status updates. The objectives of the permitting program are to avoid adverse impacts to coastal resources by relocating or redesigning a project and hope to minimize adverse impacts to coastal resources by utilizing less damaging construction techniques. Pre-application meetings are encouraged to discuss projects in the early planning stages. Application processing time can be dramatically reduced by incorporating agency suggestion during preapplication meetings.

Next, he discussed what has been done to implement Act 588. Meetings have been hosted to inform parish officials, made supervisors/staff available for assistance, established a help desk at CPRA's Thibodaux office to name a few. Maps of new Coastal Zone boundaries are now available on DNR-OCM website and hardcopy maps are projected to be available in a few months. OCM is providing GIS data sets showing areas currently determined to be fastlands and areas above 5-foot contour. That information is available at www.sonris.com under GIS link. The long term vision is to sustain coastal communities, commerce and industry, fisheries production, coastal ecology, employment opportunities and coastal Louisiana culture. Dave opened the floor for questions. Marty questioned if the southern boundary expanded seaward. Dave responded no.

Nick Matherne asked if they were seeing an increase in the number of permits. Karl Morgan explained that they figure about a 10% increase. Tim Allen responded that this expansion hasn't affected his particular company but companies are concerned about increased government oversight and the time it takes to process things. Dave explained that if a project was not in the coastal zone before the

boundary expansion, the applicant had to go to the U.S. Army Corps of Engineers for a permit. But with the expanded boundary, it is expected to actually shorten the process. Joe Dantin asked if anything in CZM that is above the 5ft contour line does not require a Coastal Use Permit (CUP). There are some special areas that are exemptions and those were explained. Joe also asked if a camp owner was a new lease and constructing a camp and driving pilings and if it was below the 5 foot contour would they be exempt from CUP. The construction of the camp itself is exempt from their regulatory program but they would still have to get something from the Corps. Joe asked if the wharf would be included. He was told that it would depend on whether or not any dredging was needed.

Dave was asked if they had a rough estimate of who had been denied. Karl explained that over the last 10 years a few have been denied but not many. They usually work with the applicant to minimize the impacts. They will often see the applicant withdraw due to expenses. Kerry asked if they were expecting applications as a result of washing sand off barrier islands filling the location channels. It would depend and be very site specific. Many already have permit and maintenance and are already authorized. Al thanked Dave for his presentation.

C. <u>LCA Medium Diversion at Myrtle Grove with Dedicated Dredging Project Update (Andrew MacInnes)</u>

Al introduced Andrew MacInnes from the Army Corps of Engineers Planning Division. He started by providing a broad picture overview of where the LCA projects are right now. LCA Study authority of 2007 identified 5 near term critical restoration projects of which Myrtle Grove was one of them. These projects were the top tier projects meant to address some of the most fundamental problems in the Louisiana coastal zone. There was an initial budget estimate of \$278 million. There is a provision with Water Resources Development Act (WRDA) that allows that budget to be adjusted to 150% of that number. He noted that they had some wiggle room of up to 420 million for that project. Richard Hartman asked what the process would be if the budget went over that. Andy explained the 902 limit and that it gives flexibility of up to 20% of the original budget. If that is the case, then a reauthorization can be sought. Some of the critical needs that were identified in the original LCA report which was approved in 2005 identified points that were meant to look at the big picture. This was a different approach from what the CWPPRA program have experience in, where projects tend to be small in budget. We are talking about big picture, large scale objectives with the LCA Program and these are some of the more critical points that help shape the original recommendation of the Myrtle Grove project. We have a Project Development Team (PDT) and are working in a joint effort with the state of Louisiana along with the federal agencies and BTNEP is a part of this process as well. We're keeping these points in mind as we develop a project and we try to figure out solutions to the problems that need fixing. With these concepts, the PDT has come up with a couple of objectives that they focused on. They have an overarching goal to use river resources and a combination of diversion and dedicated dredging to increase area one - primary polygon in the Myrtle Grove outfall area - wetlands quantity and quality. This ties very specifically to what was recommended in the 2004 LCA report. From that goal, there are two specific objectives. One is to establish the connection to the river and fix some of the fundamental problems in southeast Louisiana. The second is to set a minimum threshold of marsh acreage that we want to maintain over 50 years. We want at least 33,880 acres present at the end of 50 years. We use that threshold to define what needs to happen given the overarching goal and given the other objective to deem the project successful. A map of project area was shown. They recognize that by recommending a diversion that they are going to have effects. The Environmental Impact Statement (EIS) will be written to address what happens here and will identify benefits and impacts. They will have

to disclose that information but not trying to fix the entire Barataria Basin. He indicated the area they were focused on.

The PDT came up with an initial array of alternatives that reflected what they were trying to achieve. Alternatives were developed in concert with project objectives and to address problems in the study area. They represent different combinations of diversion structure size, flow regime, and marsh creation scale. Each alternative was evaluated for benefits (marsh acres) and preliminary costs. He presented the matrix of combinations of variables to present one specific solution that will address the problems that we are trying to fix. We have a range of diversion sizes. We have flow regimes to consider; flow regimes that determine how the structure is operated, some are calendar-based, and some have no real flow regime at all. All of the alternatives that have been developed focus on having different sediment thresholds to determine when it would be turned on and off. They came up with three different scales of marsh creation over time. They came up with 60 different alternatives that meet objectives and they came up with screening mechanisms to try to reduce that number of alternative so that they had a smaller number to do more detailed work on. Andy presented a draft final array of alternatives indicating structure size and the different flow regimes being considered. He discussed dredging and marsh creation concepts that the PDT came up with. They looked at small, medium, and large for direct marsh creation. Initial estimates showed that they could probably dredge about 6.5 million cubic yards from the Mississippi River. Dredging and marsh creation cycles occur no more often than every 4 years because they would be going back to the same borrow site in the Mississippi River and it needs that time to recharge. So they would dredge that borrow site 5 separate times allowing for that borrow site to recharge. By using different estimates from other marsh creation projects that have been built in our exact area, like Bayou Dupont, we get an estimate from the long distance sediment pipeline project under CIAP BA48 project, they believe that they can reasonably achieve about 946 acres and create 4,700 acres over that period of time. Kerry questions the recharge rate. Andy reiterated that it was a 4 year period. And that is an estimate. Aside from the Bayou Dupont project, there hasn't been a focused monitoring effort and evaluation to determine how quickly it really does refill. What has been dredged out for Bayou Dupont has filled in fairly quickly at around 80 - 85% refilled in a couple of years. However, this did include a very high river event last year. That borrow site was also used for the sill and they are monitoring very closely to see how rapidly it is infilling. Andy displayed three alternative approaches that they considered in trying to insure that an adequate amount of sediment was introduced into the project area at the time. Essentially, the idea was to dredge 6.5 million cubic yards by pumping that material directly into the diversion channel and letting the diversion distribute that material throughout the project area, as opposed to doing a targeted marsh creation. That concept was looked at for a while but more problems were identified. It indicated that it would create a logistical nightmare with operations and maintenance within the channel itself because that much material could easily clog it up and restrict flow. They decided to stick with the targeted marsh creation.

In regards to flow regime, he presented data that looks back over 25 years of the Mississippi River flows and noted different sediment thresholds for determining when the structures would be on or off. He explained that If you take a 1% threshold as far as correlation between the amount of suspended sediment in the Mississippi River plus the particular flow of the Mississippi River that is needed to carry that top 1% occurrence of suspend sediment, the 1% event where you have the highest sediment concentrations in the river and the number of days per year where the target has been reached over 25 years of river data.

He then reviewed the screening process applied to reduce the total number of alternatives for full evaluation. They needed to figure the ones that were most interesting, most promising, and had the

best ability to do something positive for Area 1 wetlands. They looked at benefits of each alternative: does an alternative meet both objectives, which are most cost effective, and which avoid constraints. Ideally, they got down to around five alternatives and explained how they examined each. What they came up with was that it basically takes a big diversion to solve the problems that he outlined earlier. He reviewed five diversion alternatives with the fifth being no action. 1B represents what was recommended in the 2004 report. He mentioned that they want to carry that one forward all the way even if it doesn't compare to the larger diversions that are 75,000 cfs and greater. They have to do that because it was recommended in 2004 and it gives that alternative an equal comparison to the other alternatives that do accomplish the goals that have been set for the project. All of the diversion alternatives basically operate the same way. The diversion alternatives have minimum flow for a sediment threshold criteria of 136 milligrams per liter of suspended sediment concentrations. Where you get differences between them is in the structure size and the amount of marsh creation that gets paired with a particular structure size. He then reviewed the flow regime and the two criteria that would determine whether or not they would be operating. If you reached a sediment threshold, then you turn in on. If the rivers fall below 600,000 cfs then it is turned off. He showed what the conceptual graphic of the marsh creation component looks like. He discussed projects that were either constructed or very near construction through CWPPRA program. He noted the CIAP long distance sediment project. The concept there is to essentially build a marsh platform that would serve as a construction footprint for future marsh creation activity. He reminded everyone that this is a concept. This is something that the team used to help them think through the process and would stretch through year 2049. PDT's idea is to maximize this synergy with the long distance sediment pipeline project first and build on either side. All of first cycles are in area 5,9,13, 21, to 25. Once that area is addressed then they jump down to the lower section. The concept is that we are going to leave a conduit for the water to work its way through the system and we would expect that the majority of the sediments that do get introduced in the project area to fall out through and that as that diverted water percolates through the system it will help nourish and maintain the marsh that gets created through the dedicated dredging aspect. Some of the next steps are a lot of hydrodynamic modeling. They need to look at velocity in the basin, they need to look at water surface elevation in the basin and then what happens with salinity. They will be completing Wetland Valuation Assessments (WVAs) on the alternatives and the PDT is committed to doing fisheries specific modeling. Once that is done then they have to look at what is happening in the river as well with river modeling. They have to do a detailed cost estimate. He noted that everything discussed today is referring to the joint effort of the state and corps on the feasibility to carry the 2005 Chief's Report for LCA forward and arrive at a project recommendation. The ultimate goal is to have a recommended plan by May 2013 and a Chief's Report in by October of 2014.

Rick Hartman referred to slide 13 and addressed a question about what happens if a 75,000 cfs project affects flooding in a community. Andy explained that if they carry through with an alternative that violates constraints that they have set up then they can identify mitigation measures or toss that idea and move to something else. Rick's concern is that they have selected these really large diversions and a 15,000 with no intermediate in there between 15,000 and 75,000 cfs diversions. He had concerns with limiting ourselves. Andy explained that if they continue with their evaluation of these larger projects and note that it would raise the water too much then it would not be something that they could recommend. However, if they add the cost of flood protection to a particular alternative, that in turn would affect how it compares to all the other alternatives. When a cost analysis is done, you would find out that it is not cost effective and something smaller would rise up in ranking.

Wes Leblanc stated that they would do a sensitivity check at 75,000 and if 75,000 cfs is affecting Lafitte, then there would really be no reason to do 125,000 cfs diversion. Doug Jacobson suggested changing the parameters and adjusting the inflow to those lower amounts.

Dean asked if the model to the east is the Mississippi boundary then how far to the west does it go and will waters in the Gulf Intra-Coastal Waterway be modeled? Andy said that they definitely would and that they were using the same model as Davis Pond. Kerry asked how much the GIWW is modeled and questioned the directional flow that would occur. Would it raise water levels in Morgan City? Andy responded that they would have a rough time disclosing that impact because there would be so many other influences. Kerry agreed and stated that those influences included 150,000 cfs flowing in the Atchafalaya. John asked how many days a years the river was below 600,000 cfs. Andy referred him back to slide 9 - Sediment Thresholds and discussion followed. Andy informed the group that they would be operating 1/3 of the year or roughly 122 days per year. Rick stated that these numbers were dependent on river stages. Andy stated that when he references a particular structure size, it means that you would be able to divert that amount of water only when the river is flowing at 1 million cfs.

Kris Peterson asked if they had taken the IPEC report into consideration where this year's drought across the Midwest is supposed to expand further north. If that's the case then the flow becomes less from the Mississippi then the chart looking backwards may not be what we need to be looking at going forward. Andy felt that that becomes a really twisted radical idea because working things from the Northern end with sea level change conditions working from the southern end - then essentially we are stopping up the river by raising sea levels.

Laura asked if the 600,000 cfs flow would also be combined with the sediment trigger. Andy confirmed that it did.

Kerry had questions about slide 13 and asked for further clarification on the amount of marsh creation in relationship to the structure size and the dedicated dredging. This amount of marsh creation will need a particular structure size to sustain it. Andrew stated that if you build it you have to sustain it. Discussion followed regarding slide 13.

Archie II asked why they were not going past the Barataria Waterway. He was told that they wanted to focus on the long distance sediment pipeline and once you get beyond the waterway it is hard to determine whether or not it is having a nurturing affect. Andy stated that he would be happy to return with more information as they progress.

D. Righteous Fur (Cree McCree)

Cree McCree gave an update on Righteous Fur. She began by explaining that they received their 2nd mini grant in 2011 which was a follow-up to the 1st in 2009. She explained where they have come from and where they are trying to go. The initial grant was used to create the logo for branding. She reviewed the mission of Righteous Fur and explained that thousands of acres were being destroyed. In 2011, they went through rebranding and reclaiming nutria's luxury status. She discussed recycling valuable natural resources. She referred back to Native Americans belief in honoring an animal kill. Nutria is considered a beautiful fur and it was a prized luxury fur in 1940-1970's. Their main focus is to reach out to top designers. During the 1980-90s fur usage faded away due to PETA but is now making a comeback. She showed slides of top designers using nutria fur in their winter collections. Some of the designers mentioned were Billy Reid, Michael Kors, and Oscar de la Renta. Not only is nutria coming back but also

is a sustainable fur. They began using the tag line "Why not glamour without the guilt?" (Marie Claire, 8/11) when reaching out to designers.

She discussed Project Nutria. Loyola students created touch-feely press kits. Thirteen student handcrafted boxes designed to pique designers' interest in working with nutria pelts. The winning design was sent to top designers. Samples were passed around the room. The kits included press books. The press book centerpiece was their full-page spread in the *New York Times*. Billy Reid put in a rush order for sheared nutria pelts before New York Fashion Week. Though Billy Reid had worked with nutria before, this was the first time with Righteous Fur.

Cree talked about how Righteous Fur's save-the-wetlands mission places nutria in the center of current trends. She discussed the furs adaptability, which allows it to be dyed and its low price points which makes it attractive to designers. As an eco-conscious purchase, Righteous Fur products make consumers feel good about helping the wetlands. She talked about Nutria Palooza shows being held around the country. Nutria Palooza is a multimedia nutria celebration by fashion designers, storytellers, filmmakers and musicians. Righteous Fur also played a small, but pivotal role in the "Beast of The Southern Wild" by supplying nutria pelts to create the beasts known as aurochs. She wrapped up with where they are today. They sell one-of-a-kind pieces at art markets and fashion show auctions, they create prototype nutria hats and bags, they continue to build the brand, and an online store is now being launched at RighteousFur.com for the 2012 holiday season.

Doug Jacobson stated that he thought they were doing a fantastic job on the marketing side but asked if they were doing anything to get a supply fix where you don't have to worry about enough of the product. She responded that Tab Pitre buys from the trappers at around \$1.50 per animal and discussed the hide processing process. The hides are tanned out of state. She does not believe that a shortage will be a problem. Michael Massimi commented that we take in 1.8 million a year in the coast wide nutria control program.

E. Status of Terrebonne Bay Shoreline Protection Demonstration Project TE-45 (Earl Melancon, Ph.D.

Earl explained that many of the slides shown were part of the two year report. He used the two year reports as a basis to understand what they see out there now. This is going to be the 4 year mid-term report in an 8 year CWPPRA project in Terrebonne Bay and this mid-term 4 year report will come out in 2013. They have three different types of structures. The first is the Triton Gabion Mats. They are 5'W X 20'L X 1' deep and filled with limestone. He provided images of what they look like when placed along the shoreline and explained that they are placed in such a way that they span a tide range. The second is the A-Jacks structure made of concrete and shaped like the jacks that we played with as kids. They are two feet in height and width and tied together with galvanized steel cable in 8' lengths to form a unit. The third type is Reefblocks. They are triangular units made with rebar prefabricated double triangular steel units which hold plastic mesh bags that are filled with oyster shells.

Earl provided a picture of TE45 Project Area and indicated the natural intertidal oyster reef reference site. He talked about data in the first two year report that dealt with erosion rates after one year post construction. He had images of T. Baker Smith depth profiling and updated erosion rates. He noted that the whole idea of this project was not to create oyster reefs but to protect shoreline. As the structures deteriorate, the oyster reefs can take over the role of shoreline protection. We would have a live organism that that can change height and structure naturally as time goes by. Can they develop into a reef community, can they function in such a way that they begin to take over, and do we see changes in

these structures. He reviewed the history of storms associated with this project and noted that Reach E was oiled in the BP spill. It did have an impact on the shoreline but did nothing to the oysters. This will be assessed when they do their December assessment.

He then took another look at the Gabion mats and noted some loss behind the mats. Reef development took place on about ½ of the mat. The Upper 1/3 will not produce significant oyster reefs based on the elevation levels they see out there. Earl talked about hooked muscles. They compete for food, space, and they have the capacity to filter the water and filter out oyster larvae. He explained how they attach themselves and how this is affecting structures with vertical height.

He then talked about A-jacks and noted significant oyster development in 2 years. Ronny Paille asked if there was more colonization on the windward or leeward side. He thought that food would be more readily available on the windward side and see more colonization there and discussion followed. Earl felt confident that wind and wave activity negates most of the food activity. He showed the wash over behind the A-jacks.

Reefblks have greatest vertical structure but that can be part of its downfall. The greatest concentration of oysters is on the top edge so this can be somewhat deceiving. They are not seeing a tremendous amount of oysters protruding out from the cage.

He gave an overview of what they saw in the first 2 years and what they are seeing now. This information is not published yet. It has to be reviewed by the State CPRA Office, US Fish and Wildlife Service who is sponsoring the project through CWPPRA, and has to be assessed by other scientist as well. He showed the 2-year post construction data which included mean sizes. His next slide covered mean number oysters per linear meter of shoreline for each of the structures.

Preliminary assessments indicate that deepwater oil/dispersants did not measurably impact oysters and oyster communities and that Gabion Mats are continuing to function, A-Jacks are continuing to function and Reefblocks are beginning to fail. Why? He discussed findings and showed images. They are in high energy areas with plenty open bay water. Storms are vicious and wind driven waves crash into structures. You usually find oysters in less high energy areas. Oysters have to have a way of setting there and establishing themselves. He then discussed submergence and tides. He reviewed his opinion as to why shell has broken down and the amount of time underwater. AJacks – Reefblocks are submerged same amount of time. The 3rd component is the salinity factor. Estuarine and marine organisms that we find along our coast have a certain degree of tolerance of wide salinity ranges. Some love to set on calcium carbonate structure. He showed images of boring sponge that likes high salinity. Shells are becoming brittle. High salinity and under water for any length of time along with wind activity, shells become brittle and pounded into small pieces slip through mesh. Reefblocks are failing but may do well in other areas.

Woody Cagliano noted that what comes out of this presentation is an outstanding piece of work. It is showing us the site condition, biology effects, success of the reef, the wave energy affects and also the sedimentary processes. What they are finding in St. Bernard Parish is that the shells from these fossil reefs and living reefs are actually being picked up by high energy storm conditions moved up onto the marsh floors where they behave as shell banks not reefs.

Earl noted the graduate students who are out in the field working on this project. They were Mark Linson, Dan O'Malley, Justin Sancho, Victoria Bacheler, Maggie Bruce, and Kristin Buter.

Questions followed and Earl directed all to the two-year 2010 report found at http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700">http://lacoast.gov/reports/project/3890700"

New Business

LaFete d'Ecology is scheduled for November 10, 2012. Applications were available for anyone interested in becoming an exhibitor.

Kerry announced that the Gulf Coast Eco System Task Force had been disbanded.