

**MINUTES OF
SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY-EAST
COASTAL ADVISORY COMMITTEE MEETING
HELD ON SEPTEMBER 21, 2010**

**PRESENT: Carlton Dufrechou
Mark Schexnayder
John Lopez
Colonel Robert Sinkler (left meeting at 12:20 p.m.)**

The Coastal Advisory Committee met on September 21, 2010, in the Second Floor Hall of the Lake Vista Community Center, 6500 Spanish Fort Blvd., New Orleans, Louisiana. The meeting was called to order at 9:40 a.m.

Opening Comments:

Mr. Dufrechou advised that this is the second quarterly review conducted by the Coastal Advisory Committee (CAC) for the Southeast Louisiana Flood Protection Authority-East (SLFPA-E). Nineteen projects will be reviewed at today's meeting. The purpose of the CAC is to support coastal efforts and projects that complement the structural works for flood protection for metropolitan New Orleans and to assist with getting those projects implemented as soon as possible. Dr. Lopez added that the second quarterly review was delayed due to the BP oil spill. The review crosses all project authorities and helps to monitor the pulse of the restoration program.

Cypress planting in Big Mar (LPBF) (Caernarvon Delta Cypress Planting Project)

Dr. Lopez explained that the delta started becoming emergent in 2004. In 2007 much of the mud flat had become permanently vegetated. The emerging delta is being targeted for cypress planting and is a prime site from both an ecological and flood protection standpoint. The turbidity is being monitored at Caernarvon and dramatic spikes in the turbidity are being seen at the discharge. He pointed out that if the diversion is flowed at the maximum of 8,000 cfs, as is the case during some of the spikes, as opposed to 1,000 cfs during a period of low turbidity, sediment delivery could increase by 30 fold. The structure is capable of delivering 15,000 cfs; however, the conveyance canal is probably not capable of handling this flow. Some changes were caused to the delta during this past spring because of the diversion flow of 8,000 cfs due to the oil spill and the resulting turbidity. The mud flats or bars near the outfall showed evidence of erosion and scour because of the high discharge coming out of the canal. The long, high discharge scoured out part of the delta, moving the sediment further out and delivering additional sediment. It is felt that overall the delta has probably expanded this past year. A cypress tree that was planted in March of this year was inspected last month and was about 5-ft. tall and doing well. The alligator population has increased because alligators were not hunted last year; therefore, the nutria population has decreased. This presents a good opportunity for planting because the additional cost and complication of nutria protection may not be necessary. The U.S. Army Corps of Engineers (USACE) had proposed a potential borrow site for a mitigation project related

to the Braithwaite Levee; however, the LPBF, the land manager and the land owners are opposed to this proposed borrow site since it is not a good idea to mine the emerging delta. The USACE advised that it now has a cypress planting in Big Mar in its inventory of potential mitigation projects. Since the LPBF project will probably be shorter term and smaller scale, it will not be in conflict with the USACE project. The LPBF project would present an opportunity for a larger scale project under the mitigation program. At this time the project is being funded with discretionary funds. The LPBF is hoping that the project will be of little cost, since the trees are being supplied at no cost.

Dr. Lopez concluded the presentation with the following points:

- The discharge in 2010 shifted the delta slightly, but probably expanded the footprint of the delta.
- The LPBF opposes mining of the active Caernarvon Delta, but supports a mitigation project to plant cypress.
- The bald cypress tree planted in March 2010 survived high water and nutria.
- Planting around vegetated islands may improve survival.
- The first planting of 100 to 500 bald cypress trees is anticipated in about the third week of October of 2010. This small planting is to test the physical logistics. The Coalition to Restore Coastal Louisiana is working with RPM in supplying about 10,000 cypress trees for multiple planting projects. Some of these trees will be used in this planting project and will possibly be fertilized. Conditions at this time are conducive to excluding nutria protection.

Plaquemines Parish Non-Federal Levee Mitigation (Braithwaite to Scarsdale) (USACE) (Braithwaite levee mitigation at Caernarvon)

Greg Miller advised that the authority for this project is Public Law 109-148 (Emergency Supplemental Appropriations Act of 2006) and the Hurricane Katrina Environmental Assessment finalized in 2006. Approximately 21 acres of fresh and intermediate marsh were impacted under Task Force Unwatering in the reach between Braithwaite to Scarsdale on the Plaquemines side of the levee during the breach repair. About 24 acres of mitigation is required due to this impact. The preferred method to achieve this restoration is hydraulic dredge and fill with borrow from Big Mar. About 150,000 cubic yards of sediment will be required to create 24 acres. The project was delayed when the original borrow site was deemed unsuitable because emerging vegetation was discovered. A new borrow area in Big Mar was identified. An additional environmental assessment (EA) is needed because the new borrow source was not identified in the Katrina EA. The proposed dredge site will be moved to avoid existing vegetative marsh and emerging wetlands. Mr. Miller indicated that he would confer with Dr. Lopez and the land manager relative to identification of a dredge/borrow site and a potential conceptual plan for Big Mar.

Mr. Miller reviewed the project schedule. The NEPA document is targeted for release for public comment in mid-November, 2010. If there are no significant comments, the NEPA document should be approved in mid-December, 2010. The draft Project Information Report (PIR) is anticipated to be completed and sent to Vicksburg for approval in mid-December, 2010. The design work is expected to be completed in December, 2010. The USACE's target for beginning the three month construction

project is September, 2011. At the meeting the USACE was offered the material that will be dredged from the DC Canal under an upcoming contract.

LPV Mitigation at Manchac Wildlife Management Area (USACE)
(Manchac LP shoreline Mitigation re-do LP&V post Betsy)

Mr. Miller advised that the project is located on the western shoreline of Lake Pontchartrain along the Manchac Land Bridge. This project is part of the original Lake Pontchartrain and Vicinity (LPV) Hurricane Protection Project and was identified as a project feature in the 1988 LPV Mitigation Study and Environmental Impact Statement (EIS). Funds are available for repair of the project under the Third Supplemental Appropriation (2006 Public Law 109-148). The project area is fronted by continuous gabion baskets with segmented breakwaters that were constructed off shore to the north and south in the early 1990's. The project components include raising the breakwaters, filling in the gap to provide approximately five miles of continuous breakwater protection, and dredging 806,000 cubic yards of material to create 100 acres of marsh between the Wildlife Management area shoreline and the breakwater. If the area fails to naturally vegetate, then the USACE will proceed with a planting plan.

Mr. Miller reviewed the project schedule. The draft NEPA document will be available for public review in mid-October, 2010. Approval of the NEPA document is expected in mid-November, 2010. The PIR will be completed and transmitted for approval in mid-November, 2010. Construction is expected to begin in July, 2011, and be completed in August, 2012.

Hurricane and Storm Damage Risk Reduction System (HSDRRS) mitigation projects (East Bank only) (USACE)

Mr. Miller explained that this item covers the mitigation for the 100-year risk reduction system currently under construction. Mitigation is provided when there are unavoidable impacts to the environment. The USACE is operating under multiple authorities for the HSDRRS mitigation. Mitigation is a project feature of the LP&V project authorized by the Flood Control Act of 1965. Public Law 84-99 provided authority for emergency repairs performed by Task Force Guardian and authorities exist under the Third and Fourth Supplemental Appropriations provided by Congress after Hurricane Katrina. The USACE has worked to greatly reduce the construction impact of the 100-year system. Construction impacts have been reduced to less than 5,000 acres and the USACE is still working to reduce this number as projects progress to construction. A slide was shown of the possible alternatives to mitigate for the various impacted habitats. Areas close to the impacts are targeted. The USACE will attempt to put as many projects together as possible in a program approach to achieve efficiencies and greater benefits. The mitigation projects shown on the slide were a combination of previously identified restoration projects from sources that included the Coast 2050 Plan, the Breaux Act Restoration Plan and the MRGO Eco-System Restoration Plan, as well as suggestions by an inter-agency team involved in the mitigation planning effort and ideas presented to the USACE at a series of public scoping meetings.

Mr. Miller reviewed the tracking of the mitigation impacts and the estimated restoration required to mitigate for the impacts. About 200 alternatives were proposed for potential

mitigation. The USACE is attempting to narrow this number to a reasonable number of alternatives for field work. Public meetings were held in May, 2010. The initial screening of measures was completed in the summer of 2010 and the final screening of measures is expected to take place in the spring of 2011. The proposed mitigation plan is expected to be identified by the summer of 2011, the Individual Environmental Reports (IER) released and signed in the spring of 2012, the design of the mitigation projects to take place by the fall of 2012 and construction to begin in the fall of 2013.

Risk Reduction via Modification to Caernarvon Diversion (4th Supplemental) (USACE)

Mr. Miller explained that a special authority was received in Public Law 109-148 that called for the use of up to \$20,200,000 to reduce the risk of storm damage in the greater New Orleans metropolitan area at full Federal expense by restoring the surrounding wetlands through measures that would begin to reverse wetland losses in areas affected by navigation, oil and gas, and other channels and through the modification of the Caernarvon Freshwater Diversion structure or its operations. The budget amount was split at about \$10.1 million for wetlands work on the west bank to reduce storm surge and \$10.1 million for the Caernarvon area. A number of projects proposed by non-government organizations (NGO) and local, State and Federal governmental entities are targeted in the Caernarvon area and will need to be coordinated. The focus of the project is to move water from the diversion outfall canal to the 40 Arpent Canal. The proposed project includes canal clearing and the construction of an inverted siphon to enable the movement of the diverted Caernarvon water underneath the EDI Canal and into the 40 Arpent Canal for distribution in the marshes through the cleaned-out canal system. The project planning was delayed because the alternative design costs exceeded the available budget. The draft NEPA document is anticipated to be available for public review in mid-October, 2010, the NEPA document completed in mid-November, the draft Project Description Document (PDD) completed in mid-November, 2010, the design of the inverted siphon completed in July, 2011, and construction started in September, 2011 and completed in September, 2012.

The LCA authority to modify Caernarvon and potential modifications were briefly discussed.

MRGO Ecosystem Restoration Plan Feasibility Study and EIS (USACE) **MRGO FA recommendations**

Mr. Miller advised that the MRGO Ecosystem Restoration Plan was authorized under the Water Resources Development Act (WRDA) of 2007. Section 7013 of the Act required the USACE to submit a plan for deauthorizing the navigation channel and provided a time period for submitting a detailed ecosystem restoration plan. The deauthorization report submitted in June of 2008 advised Congress that additional time was needed to develop the full details of the ecosystem restoration plan. The authority calls for the following:

- A plan to restore all of the areas affected by the navigation channel.
- A plan to restore natural features of the ecosystem that will reduce or prevent damage from storm surge.

- A plan to prevent the intrusion of saltwater into the waterway.
- For the USACE to look for ways to integrate the MRGO Ecosystem Restoration Plan into the LCA and the LaCPR.
- To consider using native vegetation and diversion of fresh water to restore the Lake Borgne ecosystem.

The authority also provides that the Secretary of the Army can approve the plan by determining that it cost effective, environmentally acceptable and technically feasible.

Mr. Miller explained that potential alternatives were mined out of existing restoration plans. In addition, the public has been engaged for ideas about restoring the wetlands around the MRGO channel, and the inter-agency team was used to refine and evaluate the ideas in terms of potential benefits. Restoration and protection were keyed in to replace the acres lost as identified by USACE in terms of direct and indirect impacts from the ship channel. The restoration plan identified includes:

- 13,950 acres of fresh and intermediate marsh
- 33,966 acres of brackish marsh
- 466 acres of saline marsh
- 10,431 acres of cypress swamp restoration
- 48 acres of ridge habitat
- 70 miles of shoreline protection around Lake Borgne and on the east Orleans Land Bridge on Lake Pontchartrain and Lake Borgne
- 55,000 acres of marsh and swamp restoration and nourishment
- 20,000 acres of restoration on critical landscape features
- The Violet Freshwater Diversion with 1,000 cfs year around flow and about a 7,000 cfs pulse to achieve salinity goals in the Biloxi marsh system.

Mr. Miller stated that the USACE has attempted to fill in the gaps left between existing and proposed Breaux Act or CIAP projects along the Lake Borgne shoreline. The estimated cost of the work is between three and four billion dollars. A ten year plan for implementing the selected plan will be laid out. The ten year timetable can be adjusted depending on funding appropriations.

Mr. Miller advised that a letter of intent was received from the State of Louisiana supporting the plan; however, the letter advised that the State believes that the work should be 100 percent Federally funded. However, the authorization does not state that the MRGO Ecosystem Restoration Plan is a 100 percent federally funded project. The study efforts have been done using Federal funds provided after Katrina. The USACE's interpretation is that a local sponsor is needed in order to implement a project of this magnitude. The upcoming milestones necessary to progress the plan to the Chief's Report are on hold pending a resolution of the funding issue; i.e., whether the plan is to be 100 percent Federally funded or cost shared 65% Federal and 35% local. The required lands would be cleared by the State or other local sponsors and the operations and maintenance would be 100 percent non-Federal. The planning, design and construction of the MRGO closure structure was done at 100 percent Federal cost; however, the USACE partnered with the State of Louisiana for the State to acquire the footprint needed for the closure plug. The State now owns and maintains the closure structure.

The interpretation and potential need for a clarification of the Congressional legislative language was briefly discussed. Colonel Sinkler advised that the decision about how Congressional language is interpreted is not a local decision. The USACE receives specific instructions on the interpretation and implementation of legislation passed by Congress. The legal team that assists with the interpretation of how to implement Congressional language is not local. He stated that the USACE wants to do what Congress intended. However, the momentum of the program will be slowed until this interpretation issue is resolved. Funds are not generally appropriated for construction until after the feasibility study is approved. Mr. Miller added that the USACE is trying to identify ways to keep the momentum of public involvement going. The USACE web site (www.MRGO.gov) provides a GIS map display with all of the features of the plan, as well as additional information. The USACE is continuing its work by doing such things as continuing the environmental evaluations and doing advance work to finish preliminary designs in order to have cost estimates for the technical review and peer review processes. The report cannot proceed to the public comment period until the Congressional language issue is resolved.

Colonel Sinkler noted that the MRGO Ecosystem Restoration Plan is the largest effort inside of the Lake Pontchartrain Basin. He pointed out that a fully integrated watershed effort or strategic plan, integrating all Federal, State and local government and NGO efforts in the basin does not currently exist. The State has identified the Lake Pontchartrain Basin as Planning Unit 1 in its Master Plan and the long term intent is to try to develop the integrated effort and plan. The development of an actual master plan recognized by all Federal, State and local governmental organizations as the coastal zone management or water management resources plan that effectively integrates all of the competing water resource needs should be a next step.

Mr. Dufrechou stressed that the MRGO Ecosystem Restoration Plan is the cornerstone of coastal restoration for the Pontchartrain Basin. He asked to meet with Col. Sinkler and Col. Fleming to discuss the possibility of providing assistance to help move the project forward.

Caernarvon Outfall Management/Lake Lery Shoreline Restoration (CWPPRA)

Dr. Lopez advised that Robert Dubois with the U.S. Fish and Wildlife Service was unable to attend today's meeting and proceeded with a brief update on the project. The original intent of the project was to move water from Caernarvon and to do some restoration around Lake Lery. The water conveyance portion of the project is now essentially included under the \$10.1 million USACE project previously discussed. This will allow 220 acres of marsh creation to be added to the project. The project will provide shoreline stabilization and marsh creation along the south and west shores of Lake Lery. The project is expected to be up for the Phase 2 Construction Request by January, 2012.

Medium Diversion at White Ditch – LCA (USACE)

Greg Miller explained that this project was identified in the LCA near term ecosystem restoration plan. An opportunity exists for a diversion at White Ditch since it is an area

with limited infrastructure that is hydrologically isolated from the effects of the Caernarvon Diversion by the ridge at Oak River. The project is authorized in WRDA 2007 under the LCA Title VII authority. It is a unique authorization in that construction is authorized if the Chief completes a report by December 31, 2010. The authorized cost for the medium diversion is \$86,100,000. The project is under feasibility study in partnership between the State and the USACE with working members of the team from both agencies. The agreement between the USACE and the State was signed in December, 2008. The project was recently brought before the Civil Works Review Board in Washington, D.C.

Mr. Miller advised that the Recommended Plan includes the construction of a 35,000 cfs diversion structure with outfall management features at a cost of \$387 million. The Recommended Plan exceeds the authorization of \$126.2 million; therefore, a reauthorization is required. The potential benefits of the recommended plan were reviewed:

- It accrues benefits over a significant amount of the study area.
- It reestablishes the connection between the Mississippi River and its available sediments, water and nutrients with the estuary.
- It creates over 13,000 average annual habitat units across the 98,000 acre project area.
- It can be operated more efficiently than a series of small diversion projects.
- It offers more flexibility to address uncertainty in relative sea-level rise.
- Extensive work has been done with the parish, land owners, shipping interests, State and Federal agencies and other entities to recognize possible concerns about diverting water at this location and the appropriate size to achieve the targeted benefits in the area.

Mr. Miller showed a slide indicating the approximate line of the outfall canal, which crosses the main line Mississippi River Levee, utilities and a State highway. Project features include:

- A controlled diversion structure at the Mississippi River.
- An outfall channel that would be dredged from the river levee and connect into a natural waterway in the outfall area.
- The dredge material from the outfall canal would be beneficially used for wetlands creation at various sites.
- Targeted weirs or canal plugs along the Oak River for water management within the targeted benefit area.

Mr. Miller reviewed the project schedule. The USACE is currently responding to public comment. State and Agency Review is anticipated to end in November, 2010. The Chief of Engineers' draft report will be signed by early December, 2010 and will be reviewed by the Assistant Secretary of the Army and the Office of Management and Budget. The report is expected to be transmitted to Congress before the end of 2011. A partnership agreement between the USACE and the State will be needed for the design work. Authorization for construction and funding will be needed from Congress for the larger recommended project and the higher dollar amount. Work must be done on the design elements and plans and specifications prepared. If appropriations are received from Congress, the USACE can acquire the real estate, advertise the

construction contracts and go to construction. Construction is currently targeted for November, 2013, and should be completed in three years. The Recommended Plan will be the largest river diversion for restoration purposes on the east bank of the Mississippi River.

Oyster Cultches Oil Mitigation (Emergency Measures to Reduce Oil Induced Erosion of Eastern St. Bernard Parish)

Bill Kappel advised that a presentation on the project was provided to the CPRA and the SLFPA-E. A tremendous amount of marsh edge erosion was discovered on the eastern perimeter of the oil. Emergency projects were suggested to prevent the worst sites that were identified from breaching into bayous, bays or ponds and subjecting the protected areas to the open water while the Natural Resource Damage Assessment (NRDA) process continues. Oyster cultch would be used to build a short-term and long-term protective barrier. Examples were shown of vegetation dieback and the progressive undercutting of the marsh line resulting in wash outs and marsh segmentation. Various alternatives were considered. The recommended alternative is doing cultch spread applications to stabilize the erosion along the banks. Local oyster fisherman could assist with the application. The process in the long term will result in shell islands and beaches and will provide a buffer for storm surge. Cultch is readily accessible and its use is cost effective. It was pointed out that St. Bernard oyster fishermen are using crushed concrete as a substitute material for building oyster reefs on their leases because oyster shells are scarce. The cultch would be spread about 75 to 100 feet along the shoreline. Bags of cultch will be used in specific areas of heavy undercutting for quicker oyster growth and to provide a wave break. A proposal was made for the project to be funded through the current phase of the recovery project; however, the response was that this project is a NRDA emergency project. Sixteen high risk areas for potential breaches have been identified. Unless the Governor's Office provides a funding advance, these areas will probably be breached by the end of the winter season. Natural attrition versus erosion caused by the oil impact was discussed. Methods for applying the tons of cultch material that will be used were described.

Black Bay Oyster Reef Demonstration Project (LPBF)

Dr. Lopez explained that a small marsh island with significant erosion in Black Bay is targeted for this demonstration project. The island was almost seven acres prior to Hurricane Katrina; post Katrina the island is approximately one acre. The goal is to convert the island to a reef/shoal by placing structure materials and cultch around its perimeter. The island was surveyed for elevations and a simple biological survey was done. At this time reef balls are being considered for use as the structured material. The structured material will be placed within about 20 to 30 feet of the emergent marsh shoreline of the island and cultch placed within this deployment. Approximately seven acres will be permitted and requested to be red lined. Cable will be strung from piling through the reef balls to ensure stability. Act 734 passed by the Legislature this year limits liability when a non-governmental organization builds a restoration project that will eventually be donated to the State. An additional issue that was brought up deals with State water bottoms and the Class C permit that will be required from the State Land Office, which will require not just proof of ownership of the land on which the project is located, but letters from adjacent land owners in order to allow the project to move

forward. The Coastal Use Permit is being drafted. The requests for a Class C Permit and the red line boundary must be made. Project funding is through a private donation and a grant from the Coalition to Restore Coastal Louisiana.

Alligator Bend PO 34 - Orleans Land Bridge Project (CWPPRA) (NRCS)

Dexter Sapp with the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) advised that this project was approved for Phase I funding under the 16 projects for CWPPRA. The project is located along the East Orleans Land Bridge on the northwest shoreline of Lake Pontchartrain. Erosion losses range from 3-ft. to 8-ft. per year in the project area. The proposed project will protect approximately nine miles of shoreline. The NRCS, USACE and OCPR concluded that the original scope of the project should be changed to provide strictly for shoreline protection due to the land owner's intent to establish a mitigation bank in the project area. The project team looked at eleven alternatives to provide shoreline protection. Alternative 11 - Foreshore Rock Dike North and South Critical Section with 50 percent Vegetative Plantings and Terraces was selected based on cost versus benefit. The team concluded that protection should extend from Unknown Pass to the western end of Alligator Point. The project would protect about 26,000 feet of shoreline and include 21,000 feet of vegetative plantings behind the rock dike. An engineering report was completed in July, 2009 that considered the construction of earthen terraces, along with a rock dike, to provide protection. PBS&J was hired for the project design. Due to several issues, including the lack of suitable material within the project area, it was concluded that the earthen terraces were not feasible and were taken out of the project. It was determined that a rock dike would provide the level of protection being sought in this project. The alternative recommended by PBS&J is the construction of a foreshore rock dike located about 20 feet offshore with a crest elevation of 2-1/2-ft., crest width of 6-ft., and 2 to 1 side slope for the length of the project. Some of the headland and critical areas would have a 4 to 1 side slope with a crest elevation of 2-1/2-ft. Should additional funds be made available and the project budget expanded to meet the \$23 million recommended alternative, the crest elevation of the structure would be increased to about 3-ft. at the headlands and would provide more stability in the design life of the structure and the protection of the marsh.

Mr. Sapp reviewed the project schedule. The geotechnical investigation and surveying are completed. The 30% Planning and Design Meeting is anticipated in October, 2010. The NEPA and permitting processes are expected to be completed by January, 2011. The Construction Funding Request (Phase II) is scheduled for about December, 2011. The cost share agreement and final design/contract package must still be done.

Dr. Lopez pointed out that the draft feasibility study for the MRGO Ecosystem Restoration Plan currently includes some massive borrow sites in Lake Borgne for marsh creation, which may affect the design of this project.

LaBranche East Marsh Creation PO-75 (CWPPRA) (NRCS)

Jason Crowl with the USDA NRCS advised that the project was approved by the task force in January, 2010. The cost share agreement was executed in March, 2010. Project features include 729 acres of marsh creation, 202 acres of marsh nourishment,

10,000 linear feet of tidal creeks and a borrow site for the project in Lake Pontchartrain at the mouth of the Bonnet Carre Spillway. The current funding is only for engineering and design. There is no funding as yet for construction.

Mr. Crowl reviewed the anticipated project schedule. The geotechnical field work, bathymetric, magnetometer and topographical surveys have been completed. The final geotechnical and survey reports should be completed by the end of October, 2010. Project plans and specifications will be drafted during the period November, 2010 through May, 2011. The borrow site wave impact analysis, draft Environmental Analysis and monitoring plan will be done this winter. Should everything proceed according to plan, the 30% design review meeting could be held in June, 2011, the 95% design review meeting in August, 2011, and the request for Phase II construction approval and funds at the CWPPRA Technical Committee meeting in December, 2011. The estimated construction cost is approximately \$25 million.

Biloxi Marsh – Lake Borgne Shoreline (PO 72) (OCPR)

Chris Williams with OCPR advised that John Troutman was selected as the Regional Program Manager and will be the OCPR point of contact for questions on projects for Planning Units 1 and 2. The Biloxi Marsh project is a sister project to two recently constructed shoreline protection projects (PO 30 and PO 32). The overall objective of the Biloxi Marsh project is to halt the shoreline retreat that is occurring on the rim of Lake Borgne. The goal is to design a project with a rock structure elevation capable of handling wave energy that will last 20 years without the need for a maintenance list. The project location is along the southeast rim of Lake Borgne. The project is funded in the amount of \$22 million with 2007 surplus dollars. HDR Engineering, Inc. has been contracted for the project design. The 30% preliminary design review occurred about a month ago. The project is progressing towards final design. Two culturally sensitive sites were discovered. The Phase One Cultural Resource Survey of the two sites was completed and the Phase Two Cultural Resource Survey is currently being done. Once the report is finalized, the State Historic Preservation Office and the Indian tribes will be consulted about whether the areas can be mitigated or will need to be avoided. Construction is anticipated to begin in about a year; however, it may begin sooner depending on the outcome of the consultation on the cultural sites.

Orleans Land Bridge SP and Marsh Creation and Irish Bayou SP with I-10 spans (OCPR)

Irish Bayou -- Mr. Williams advised that the Department of Transportation and Development (DOTD) is currently soliciting construction bids for the demolition of the twin spans. The bids will be opened on October 22, 2010. An additive alternate was included to place some of the spans along the shoreline in the Bayou Sauvage National Wildlife Refuge. Two areas totaling 2.5 miles of shoreline will be protected in the Refuge. The \$4 million of funding for this project is made up of \$1.5 million dedicated from 2009 State surplus dollars and \$2.5 million earmarked in reserves.

Orleans Land Bridge – Mr. Williams advised that this project will also be beneficially using the I-10 twin span material. The DOTD contractor will dismantle the bridge and barge the materials to an area leased on the north shore of Lake Pontchartrain. The

Orleans Land Bridge contractor will crush this material and form articulated mats for placement along the shoreline to provide about 8.7 miles of shoreline protection. This is a CIAP funded project. The project ties into the northwest portion of Lake Borgne. The project is funded just under \$42 million and is a partnership between the State and Orleans Parish. Orleans Parish is putting up \$15 million of its CIAP funds for this project. The project has been designed and documents are being finalized in order to receive the grant. Money will be advanced with surplus dollars to provide temporary funding until the grant is received. Land rights and permits are anticipated to be finalized within the next two months and the project advertised by the end of this year.

Blind River Freshwater Diversion (Small Diversion at Convent) (PO 37) (OCPR)

Mr. Williams advised that this project is one of six projects authorized for feasibility study under WRDA 2007. The USACE took the lead on three of the projects and the State took the lead on the other three projects. The State took the lead on this project and embarked on a very ambitious schedule with a timeline end date of December, 2010. Authorization was received last month from the Civil Works Review Board in Washington, D.C., to release the selected plan for agency review. The Chief's Report is expected to be signed by December, 2010, which will allow the request to Congress for the authorization and appropriation to finish the design on the preferred alternative and to go to construction. In the interim it is anticipated that the State will enter into a PED agreement with the USACE in order to finalize the design.

Mr. Williams explained that the project plan recommended by the team consists of a 3,000 cfs diversion with a number of gated structures and gapping of berms. The estimated cost of the recommended plan is \$123 million, which is within the original authorization of \$124 million. The project will introduce sediments and nutrients from the Mississippi River into the marsh. A period of two to three years is estimated for design, which includes the acquisition of all permits. The State authorized \$22 million in CIAP funds for the project and the parish authorized about \$1 million of its dollars for property purchase. Money is available to complete the design of the project; however, there is a need to ensure that the USACE receives its share in order for the State to partner with the USACE. Construction of the project will take about two years.

River Reintroduction into Maurepas Swamp (Hope Canal) (PO 29) (OCPR)

Mr. Williams advised that this project is currently in the CWPPRA program. The official design of the project started in August, 2003. A number of delays were experienced. One of the delays dealt with modeling issues. In addition, the USACE requested that the project be transferred to the LCA program. The project passed the 30% milestone under the CWPPRA program. The State is working to document its work on the feasibility process in a form that will be acceptable to the USACE. The State's desire is to complete the design under the CWPPRA program, finalize plans and specifications and have the project ready to be transferred at that point into LCA. The State anticipates completing the design in December, 2011.

Mr. Williams explained that the current project plan calls for up to a 2,000 cfs diversion. The limiting factor of the diversion is the I-10 bridge. Multiple infrastructures must be

crossed, including Airline Highway, River Road, two railroads and about 20 pipelines. Project features include a gated structure on the river and a sedimentation pond.

East & West LaBranche Shoreline Protection (St. Charles) (PO 42 and PO 43)

Keegan Roberts with Moffatt & Nichols explained that the West LaBranche Project (PO 42) extends from the Bonnet Carre Spillway to the currently protected shoreline, and that the East LaBranche Project (PO 43) is approximately 19,000 ft. of unprotected shoreline extending from the middle of the LaBranche Wetlands to the Jefferson Parish Line. More than 6,000 acres of area wetlands have been lost over the last fifty years. The area has also experienced significant deterioration of interior wetlands and saltwater intrusion. The best approach for the project is through shoreline defense. An average of 12 to 15-ft. of shoreline retreat or erosion has been experienced per year. The rock protected portion of the shoreline (12,000 ft. on the west) has not experienced a loss of shoreline. Shoreline surveys have been completed for both projects and geotechnical investigations were begun.

Mr. Roberts reviewed the project schedules. The development of permit drawings and application for the West LaBranche project are anticipated by October, 2010, final design and construction documents and the application for CIAP funding by early 2011, and construction to begin in the summer or fall of 2011. The development of permit drawings for the East LaBranche project are anticipated in late 2010 and the permit application in early 2011. Currently, there is insufficient funding to complete the construction of the shoreline protection in this area. The application for CIAP funds and search for additional funding is on-going.

Mr. Roberts explained that the preferred alternative at this time for the West LaBranche Project is a perched sill at a contour of approximately two to three feet below mean sea level. The intent is to create a low energy zone behind the perched sill for sediment deposition and the natural recruitment of grasses as the shoreline accretes outward. Plantings will be done in this region if additional funding can be found. The preferred alternative for the East LaBranche Project at this time is to continue the shoreline protection along the entire reach to the Jefferson Parish Canal, as well as a perched sill about 100 yards out to create a quiescence zone for sediment deposition.

There was no further business; therefore, the meeting was adjourned at 3:25 p.m.