MINUTES OF THE SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY – EAST BOARD MEETING THURSDAY, JANUARY 21, 2010

The regular monthly Board Meeting of the Southeast Louisiana Flood Protection Authority - East (Authority or SLFPA-E) was held on Thursday, January 21, 2010, at the East Bank Regional Library Meeting Room, 4747 West Napoleon Avenue, Metairie, Louisiana, after due legal notice of the meeting was sent to each Board member and the news media and posted.

Mr. Doody called the meeting to order at 9:35 a.m. and led in the pledge of allegiance.

PRESENT:

Timothy P. Doody, President Stradford A. Goins, Vice President Stephen Estopinal, Treasurer John M. Barry Thomas L. Jackson Ricardo S. Pineda Louis E. Wittie

ABSENT:

George Losonsky, PhD, Secretary David P. Barnes, Jr.

OPENING COMMENTS:

Mr. Doody advised that the new year will be busy in terms of constructing the 100 Year Flood Protection Projects. It will be important that the land necessary for the construction of this project to be delivered in order for the construction contracts to be awarded. The U.S. Army Corps of Engineers (USACE), the State of Louisiana, the Sewerage & Water Board of New Orleans and the SLFPA-E are continuing work on language to allow forward movement on the Outfall Canals.

Mr. Doody explained that since the SLFPA-E's jurisdiction includes the Pontchartrain Basin, it should also focus on coastal restoration efforts. The SLFPA-E has stated its support on at least three restoration projects. Many entities will be working on these and other restoration projects. He stated that he hoped that the SLFPA-E would coordinate the restoration efforts. The SLFPA-E has received informal advice from a number of experts in this area, including Mark Schexnayder, Carlton Dufrechou and John Lopez. Mr. Doody stated that he is formalizing the association of these individuals with the SLFPA-E by creating and naming these individuals to a Coastal Advisory Committee. He anticipated that this Committee would meet and develop a plan and strategy for implementing coastal restoration projects within the State's Master Plan and would coordinate with all of the agencies having a role in coastal restoration. Mr. Doody clarified that the Committee would report to the full Board. He pointed out that this could be a method for obtaining the input of all parties and setting priorities in order to

obtain strength of legislation. Mr. Jackson asked whether a Board member should serve as a liaison on the Committee. Mr. Doody explained that the individuals named constitute the initial membership of the Committee and that other members may be added. Mr. Barry pointed out that the Committee would serve in an advisory capacity and that the Board is not delegating any of its responsibility or authority to the Committee. He welcomed the idea of the Committee and stated that the individuals named to the Committee worked well together; however, he would like to see a little creative tension on it. Mr. Pineda commented that one of the first actions by the Committee should be the development of a charter and offered to provide sample charters.

ADOPTION OF AGENDA:

The agenda was amended to delete the item listed under XIII.C.4 relative to a Temporary Work Area Servitude over Parcel No. 2-1 and to add a motion under XIII.C.4 concerning the execution of a road right-of-way with Sundown Energy, LP. A motion was offered by Mr. Estopinal, seconded by Mr. Goins and unanimously adopted to approve the amended agenda.

RESOLUTION #01-21-10-01 - APPROVAL OF MINUTES

On the motion of Mr. Goins,

Seconded by Mr. Jackson, the following resolution was offered:

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East approves the minutes of the Board Meeting held on December 17, 2009.

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

PUBLIC COMMENTS:

None.

PRESENTATIONS:

 Beneficial use of Dredge Material and <u>Coastal Protection and Restoration – U.S. Army Corps of Engineers</u>

Colonel Alvin Lee, USACE New Orleans District Commander, stated that there has been a huge focus on the hurricane protection system and that the USACE has not clearly communicated as effectively as it should have the status of coastal restoration efforts. He stressed that all parties need to be engaged and that a common vision is needed for the success of coastal restoration efforts. He explained that he and Gregory Miller, USACE Senior Planner, would address Coastal Restoration Efforts and that

Chris Accardo, USACE Operations Chief, would address the beneficial use of dredge material.

Col. Lee advised that a commitment has been made to complete and deliver six studies in the Louisiana Coastal Area (LCA) to the Congress by December 31, 2010, which would be a challenging accomplishment. Two additional studies (Beneficial Use of Dredge Material and the Barataria Land Bridge) will also be completed in 2010. Additional feasibility studies are being accomplished in LCA (15 have been identified). The USACE and the State are working closely together to ensure a shared vision and that priorities are aligned. The Delta Management Hydro Study will model hydraulic effects in the lower Mississippi River. CWPPRA task force information and the work that was done at West Bay will be utilized in the lower Mississippi hydro and will feed into other diversions in the LCA. He stressed that it is important to understand the effects of the Mississippi River and of diversions in order for the diversions to be placed in locations that will achieve the maximum benefits.

Col. Lee reviewed the four major flood risks in Coastal Louisiana:

- Riverine flooding The MRT (Mississippi River and Tributaries) system has provided tens of billions of dollars in flood damage risk reduction.
- Coastal erosion and environmental degradation This includes the impacts of human intervention from navigation channels, oil and gas exploration, cypress deforestation and land use.
- Rainfall extreme rainfall in a short period of time.
- Hurricane Storm Surge This can be coupled with sea level rise and subsidence.

A picture was shown of 100 years of land change in Coastal Louisiana. Col. Lee stated that the USACE is working closely with the State to determine priorities and how to execute those priorities and formulate a vision for Coastal Louisiana.

Col. Lee commented on the importance of Coastal Louisiana to the national economy and addressed Integrated Water Resources Management. He explained that the USACE, the State and the SLFPA-E have been trying to communicate that this is a complex national problem. Subsidence and sea level rise will affect coastal communities throughout the United States. He explained that some positive things have occurred in the last year. The Federal working group for Coastal Louisiana and Mississippi has been stood up and the Executive Director for CEQ has committed to getting this working group to focus at the highest levels of the Federal agencies to achieve consistency and integration. The Planning and Guidance (P&G) has been updated and is out for comment. The consistency piece that will come out of the P&G will be essential for setting the framework at the national level to better integrate Federal agencies in coastal restoration efforts. Water Resources Management is a shared responsibility between the USACE, the Federal Partners, the States of Louisiana and Mississippi and the non-federal sponsors at the local level. Accomplishing coastal restoration efforts will take innovation and collaboration in order to stretch Federal resources. Collaboration, partnerships and teamwork will be essential in determining, developing and implementing solutions. He pointed out that there must be a new perspective on land and water management and that essential trade-offs will have to

occur. He stressed a key issue in coastal restoration deals with land issues. For example, 1,200 rights-of-entries were needed in order to do the investigations needed for the MRGO Ecosystem Restoration Feasibility Study. Lands, Easements, Rights-of-Way, Relocations and Disposal Sites (LERRDs) are the responsibility of the non-Federal sponsor and will be essential for undertaking ecosystem restoration projects.

Col. Lee reviewed some of the on-going efforts:

- Coastal Wetlands Planning, Protection and Restoration (CWPPRA) task force
- Beneficial use of dredge material
- Louisiana Coastal Area (LCA)
- Louisiana Coastal Protection & Restoration Study (LaCPR)
- MRGO Ecosystem Feasibility Study
- Diversions and River Management

Copies were provided of the USACE Lake Pontchartrain Coastal Zone (Basin) Plan indicating all of the projects currently planned in the basin and the USACE Stakeholder Update for December, which includes information on the MRGO Ecosystem Restoration Plan Feasibility Study and beneficial use.

Gregory Miller discussed the chronology of restoration.

In the 1960's and 1970's -

- Scientific evaluation and documentation emerged on the loss of coastal lands
- Some of the first big authorities to protect the environment were passed (National Environmental Policies Act and the Clean Water Act)
- Agencies began to change their regulations and policies to protect wetlands
- There was movement towards initial restoration efforts along the coast.

In the 1980's -

- Additional documentation and quantification of the problem
- Increased beneficial use of dredge material to rebuild land
- Section 1135 authority allowed modification of projects to benefit the environment
- Construction of the Caernarvon freshwater diversion project

In the 1990's -

- Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)
- Additional standing authority was given to the USACE for ecosystem restoration
- State level passage of the commitment for funding and partnering with the Federal government for restoration
- CWPPRA Mississippi River Sediment, Nutrient and Freshwater Redistribution Study
- CWPPRA Coast 2050 long term restoration planning study
- Construction of the LaBranche wetlands restoration project

In the 2000's -

- Transfer from the Coast 2050 Plan to the large scale LCA Ecosystem Restoration feasibility study
- Construction of the Davis Pond diversion
- Movement towards a Near-term LCA Plan

- Impacts of the 2005 Hurricane Season resulted in combining flood risk reduction and coastal restoration efforts
- WRDA 2007 authorized the LCA Near-term plan
- De-authorization and closure of the MRGO
- Louisiana Coastal Protection and Restoration Technical Report (2009)

Mr. Miller advised that the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA), which is also known as the Breaux Act, is a partnership between five Federal agencies and the State of Louisiana. The CWPPRA program has a dedicated funding source from taxes on small engine fuels and excise taxes on marine and fisheries equipment. The program is coast-wide from the Texas to the Mississippi border and provides the ability to quickly plan and put in place smaller scale coastal projects. Col. Lee is the Chairman of the task force that helps to lead the effort. The USACE as an entity is the administrative arm of the CWPPRA program.

Mr. Miller explained that one of the lessons learned from the Breaux Act in the mid-1990's was that the dedicated Federal appropriations and the State's match would not fully address the land loss problems along Coastal Louisiana. A graphic from the mid-1990's demonstrated that only about a quarter of the land loss and restoration problem was being addressed by Federal authorities and funding. The coastal wetlands continued to decline. The Coast 2050 Plan was developed, which laid out a vision for the coast for roughly 50 years. The Coast 2050 Plan is a series of ecosystem restoration system strategies along the coast. The strategies are used in the development and authorization of the smaller Breaux Act projects. It was then recognized that the CWPPRA Program would not provide enough funds to address the large scale coastal needs. The Louisiana Coastal Area (LCA) Ecosystem Restoration Plan was developed in 2005 and authorized by the Congress in 2007. The LCA plan is a near-term plan with projects that can be completed within ten years. Fifty projects are identified in the plan specifically for implementation. The majority of the projects are in southeastern Louisiana, which is where the most severe erosion has occurred.

Mr. Miller highlighted three distinct pieces of the LCA authority passed by the Congress in 2007:

- 1) Five projects (LCA "5") are subject to construction reports. Authority is in place for the Secretary of the Army to provide construction reports to the Congress for funding construction of these projects.
 - MRGO Environmental Restoration
 - Barataria Basin Barrier Islands
 - Medium diversion with dedicated dredging at Myrtle Grove
 - Small Bayou Lafourche Reintroduction Project
 - Small diversion at Hope Canal
- 2) Four projects (LCA "4") require feasibility reports by December, 2009. An agreement with the State to initiate these studies was executed in June, 2009.
 - Protection of Point Au Fer Island
 - Protection of the Caillou Land Bridge
 - Modification of the Caernaryon Diversion

- Modification of the Davis Pond Diversion
- 3) Six projects (LCA "6") are in the feasibility phase and a Chief of Engineers' Report will be signed by December 31, 2010.
 - Operation of a lock for salinity control purposes for the Houma Navigation Canal
 - Conveyance of Atchafalaya River water farther to the east (Terrebonne Mashes)
 - Additional barrier island restoration along the Terrebonne shoreline
 - A small river diversion in the Blind River
 - Gapping of spoil banks along the Amite Diversion Canal to help Cypress forests in the Maurepas system
 - A medium diversion at White Ditch

Mr. Miller reiterated that 15 projects are authorized to be studied for going to construction. Thirteen of the projects are currently under agreement with the State of Louisiana and in development for feasibility studies with reports to be released in 2010 or early 2011 that will enable the Congress to make the decisions relative to appropriations for construction. The LCA plan was produced in 2005, authorized by the Congress in 2007 and will be ready for construction appropriations in 2011.

Mr. Miller pointed out that additional authorities fall within Title 7 of WRDA 2007 for a Comprehensive Plan, modification of projects to improve coastal restoration opportunities, a Science and Technology Program, demonstration projects and the Beneficial Use of Dredge Material Program.

Mr. Miller showed depictions of the ecosystem before the MRGO was constructed and at its closure. He discussed the monitoring of saline levels in the channel. The Lake Borgne Ecosystem has been divided into 51 subunits and the causes of wetland loss and opportunities for restoration have been identified.

Mr. Miller stated that interest had been expressed concerning the diversion of water from the Bonnet Carre Spillway to the LaBranche Wetlands system and the marshes along the Maurepas-Pontchartrain land bridge. He advised that this opportunity for restoration can be explored.

Mr. Miller explained that beneficial use of dredge material is a key component within the LCA Program and the USACE's Operations and Maintenance Program. The authority provided authorization for \$100 million over a ten year period to be spent on beneficial use opportunities. The USACE and the State have developed a feasibility report that is being prepared for release shortly for public comment. This report will show a ten year set of plans and opportunities for using dredge materials beneficially along the coast.

Mr. Jackson expressed concern about the erosion along the land bridge between Lake Pontchartrain and the Lake Borgne/Mississippi Sound. Mr. Miller explained that the USACE recognizes the critical importance of the land bridge from a storm surge and ecological perspective. A schematic from the MRGO Ecosystem Restoration Study showed key focus points and the East Orleans Land Bridge falls within that key focus area. There are plans in the feasibility study for the protection of all of the shoreline on the Lake Pontchartrain side, as well as the Lake Borgne side. Mr. Jackson requested

that the USACE provide a presentation at the appropriation point to the Board on the details of the problems and solutions relative to this land bridge.

Mr. Goins requested that the USACE identify the projects that pertain to the SLFPA-E's jurisdiction and provide the project intent, schedule and funding source.

Chris Accardo, USACE Chief of Operations, showed a map indicating the Federal channels which the USACE is responsible for maintaining. The USACE dredges the channels according to need in order to provide the project depth and width required for the survival of the navigation industry. The most frequently dredged channel is the Mississippi River, especially in the area of Southwest Pass. The map highlighted areas where there is beneficial use of dredge material when the waterway is dredged. The first question considered by the USACE when a channel is dredged is whether there can be beneficial use of the material.

Mr. Accardo advised that approximately 67 million cubic yards (CY) of material is dredged per year by the USACE. Approximately 16 million CY of this material is fluff and 18 million CY is unavailable because the location being dredged is too far from a beneficial use site for the material to be reasonably moved. Approximately 33 million CY is suitable for beneficial use. Typically, about 16 million CY (48%) of the available material is utilized for beneficial use.

Mr. Accardo explained that the USACE utilizes beneficial use under its Federal standards when no additional costs are involved. The authorities for the navigation projects are written for navigation purposes and provide project dimensions for navigation. The authorities do not contain language concerning beneficial use. The USACE must work within Federal standards and dredge the channels in the least costly environmentally acceptable manner. The extra cost for beneficial use must be funded in some manner. The USACE may take the cost upon itself if it is not significant. If the cost of beneficial use is significant, it cannot be absorbed within the Operations and Maintenance Program. He explained that there is a problem in trying to use all of the sediment in the Mississippi River and that it would take two to three times the normal dredging process. The obstacles are money and the number of dredges that would be required. If there is an effort to increase beneficial use, trade-offs would be necessary that would affect the navigation industry.

Mr. Accardo showed a slide on the Mississippi River Sediment Delivery System – Bayou Dupont Project. This is a State project in which the Mississippi River is being mined. Sediment is being taken from the river and pumped to a disposal area for marsh creation. Mr. Accardo explained that there were some hurdles that needed to be addressed for the navigation industry concerning the location of the dredge. He stated that the USACE supported this project because it is a dredging project for marsh creation that is not tied to navigation.

Col. Lee added that the Federal working group is looking for opportunities to provide O&M funding in the USACE's budget for expanding beneficial use. The USACE reaches out to the State through the CPRA and Louisiana Department of Natural

Resources (DNR) by laying out opportunities for beneficial use if the State can pay for the incremental cost.

2. <u>Lessons learned from Hurricane Ida-Capt. Edwin M. Stanton, U.S. Coast Guard</u>

Captain of the Port authority. He explained that the Louisiana Office of Coastal Protection and Restoration (OCPR) wrote a letter to the U.S. Coast Guard (USCG) last year requesting that it prohibit vessels from the Inner Harbor Navigation Canal (IHNC) because of the potential for damage to the floodwalls during a storm. The USCG Commandant replied in a letter that the USCG would prohibit vessels from the IHNC, the Harvey Canal and the Algiers Canal. He stated that the USCG has authority over vessels in the waterways; however, having that authority and being able to carry it out are two different things. The USCG's response to the OCPR letter was to propose a regulated navigation area and prohibit vessels in those areas 24 hours before winds are expected to reach 39 miles per hour (tropical force). The regulation did not take into account whether this was physically doable. One of the lessons learned from Hurricane Ida was that this is probably not physically doable.

Capt. Stanton explained that he had to resort to issuing a Captain of the Port Order to each facility and vessel relative to this prohibition since the regulated navigation area was merely proposed, but not in effect, which upset the owners of facilities and vessels along the IHNC and the Harvey and Algiers Canals. A Captain of the Port Order allows for an appeals process that goes to the USCG Commandant for a final resolution. In addition, a Captain of the Port order must be issued to each specific vessel or facility. He pointed out that in the midst of a storm vessels are not only tied up to facilities, but are also in transit along the Gulf Intracoastal Waterway (GIWW). After the orders are issued, vessels would have to go into and up the Mississippi River; however, there are three significant choke points—the Algiers Canal locks, the Harvey Canal locks and the IHNC locks. Another lesson learned from Hurricane Ida relates to lockage capacity and the number of vessels that would have to move through the locks. Vessels may have a hard time leaving even if their best intention is to do so. Therefore, if a storm is coming and a waterway is shut down, it does not mean that all of the vessels would be able to leave. He commented on the speed in which Hurricane Ida developed and moved.

Capt. Stanton explained that a rational approach is needed for keeping vessels that are going to be in the waterway safe from themselves and the storm, rather than issuing an order that cannot be enforced in an effective way. He suggested finding and installing moorings in places such as the Michoud Barge Canal Slip. He stated that vessels generally seek responsible, suitable moorings; however, there are not enough moorings for vessels to moor safely. Capt. Stanton added that the USCG does inspect moorings. He stressed that when a storm is rapidly approaching, vessels will be caught in the waterways and will need adequate moorings.

Capt. Stanton further explained that the initial trajectory of Hurricane Ida was consistently to the east. A failure of the current regulation as proposed is that it does not make any adjustment for the forecast track of storms. There is a significant difference in surge for the Harvey and Algiers Canals between a storm that goes to the

west of the river and a storm that goes to the east of the river. A storm that goes to the east like Hurricane Ida presents very little threat in surge to the Harvey and Algiers Canals. Therefore, a calculated risk was taken and the facilities and vessels along the Harvey and Algiers Canals were told that the R&A and Captain of the Port Orders would not be enforced on those canals and that they should make sure that their moorings were good.

Capt. Stanton added that when he issued a Captain of the Port Order to the Boomtown Casino, which is a vessel certificated by the USCG and has propulsion and a crew, he received a call from the Louisiana Department of Economic Development. He commented that basically a State agency was asking a Federal agency to effect a prohibition against vessels to essentially protect infrastructure for which the USCG is not responsible. He suggested that the State could enact legislation to prohibit the existence of facilities associated with barge traffic along the waterways in proximity of floodwalls and levees. In addition, the vessels and facilities along the IHNC are largely there because the property is leased by the Port of New Orleans. The State could insist that the Port include a provision in their lease agreements for the safe mooring of vessels or the Port could revoke the lease and demand that the vessel leave. He indicated that the State made an unusual request to perhaps an inappropriate agency and the USCG in its willingness to try to prevent bad things from happening has taken on a task which in his mind is somewhat inappropriate. However, he stated he would do his best to see that the bad things that can happen don't happen.

Capt. Stanton stated that given the fact that he had what he considered a poorly written regulation with little chance of being effectively enforced, he asked his staff to engage with the maritime industry to come up with a new regulation that would provide for differences in storm track and surge expectations east and west of the Mississippi River, standards for heavy weather moorings to provide a greater level of protection in terms of controlling barges from getting underway and provisions such as a requirement for a standby vessel when a facility chooses to allow vessels to remain. This effort is to give some semblance of a reasonable expectation for the survival of vessels in the midst of a storm. Capt. Stanton stated that a copy of the initial draft would be provided to Mr. Doody. Input has been received from NOAA on forecasts and storm surge. Input will also be requested from the USACE and OCPR. He stated that he told his staff that he wanted this effort completed by the beginning of the hurricane season. He commented that if the canals are shut down, the region would have to deal with the local economic impact. Capt. Stanton added that he would be happy to meet with SLFPA-E representatives to discuss this matter further.

Mr. Doody commented that Capt. Stanton is aware of the problems faced by this area and that the SLFPA-E will work closely with the USCG, the maritime industry and the USACE to help resolve this issue. He suggested that vessels that are effectively permanently moored could be addressed legislatively. Mr. Jackson added that the agencies must work together to come up with a good workable plan and determine how that plan can be funded. He pointed out that the points regarding economic development and impacts are good; however, the possibility of a levee breach must also be considered.

Mr. Barry acknowledged the efforts of the USCG during Hurricane Ida. He pointed out that the USCG's responsibility is to protect the public as it relates to the maritime industry. He explained that SLFPA-E representatives met with Capt. Stanton's predecessor after Hurricane Gustav and one of the problems discussed was the practice of barges tying up on levees. Capt. Stanton responded that this practice is illegal and that he recognized the threat that it presents. He advised that if the USCG receives a report of barges typing up on the levee, they will order the barges to be moved. Mr. Turner added that since meeting with the USCG, this problem has diminished considerably.

Mr. Turner pointed out that additional precautions may be necessary for the IHNC surge barrier system. Mr. Doody asked that Mr. Turner get together a team to work on this issue with the USCG, the USACE and other appropriate entities.

EXECUTIVE SESSION:

- 1. Theodore Lange vs. Orleans Levee District, State of LA, Court of Appeal, First Circuit 2009 CA 1255 consolidated with 2009 CA 1256.
- 2. Haspel & Davis Milling & Planting vs. Orleans Levee District, No. 31-357A 25th Judicial District Court.

A motion was offered at 11:25 a.m. by Mr. Barry, seconded by Mr. Goins and unanimously adopted, for the Board to convene in executive session to discuss the items listed on the agenda.

A motion was offered at 12:30 p.m. by Mr. Estopinal, seconded by Mr. Goins and unanimously adopted, for the Board to reconvene in regular session.

PRESENTATIONS: (continued)

3. Renewable Energy on Levees: Generating Revenue, Creating Jobs, and Putting Infrastructure to Work- Bioengineering Group (Candice Somerville)

Candice Somerville advised that Bioengineering Group was started in 1992. It is a women-owned small business firm providing design and construction management services. The firm is based on building sustainable communities on an ecological foundation and is considered a pioneer in the field of ecological restoration and incorporating sustainable practices in site design, development and management. The firm has an 18 year history of working with the USACE and communities in developing sustainable solutions.

Ms. Somerville explained that Bioengineering Group is currently in a joint venture with Arcadis Group and holds contracts with the USACE Hurricane Protection Office (HPO) and Protection and Restoration Office (PRO). Bioengineering Group has working knowledge of the T-wall levee system design and is proposing the incorporation of renewable energy into the project. The existing right-of-way, the foundation structure and access could be used for the purposes of flood protection and renewable energy (wind power and biofuels). The renewable energy would provide a cash stream to

offset the costs of operations and maintenance of the flood protection system. As the flood protection project moves towards construction, the window for implementing renewable energy is getting smaller. Therefore, creative solutions must be crafted in order for these opportunities to be put into practice.

Ms. Somerville stated that the study area is LPV145 in St. Bernard Parish. Bioengineering Group worked on the T-wall designs and is familiar with the geo-tech and the foundations. This reach could accommodate about 160 wind turbines; however, the window is too small to accommodate this quantity since adaptations must be made to incorporate the wind turbines into the T-wall. She suggested implementing a pilot project with a smaller subset of selected and identified locations for the placement of wind turbines in order to achieve some benefit without delaying the project schedule. Ms. Somerville explained that discussions have taken place with wind developers. The developers were interested; however, they had some uncertainty because of the lack of the traditional data set used in running their financial models. Agreement must be obtained from the USACE and the levee district for the modification of the T-wall design. The modification for a turbine pad would be needed as the T-wall is being built; therefore, the cooperation of the contractor would be required. The tower would be placed on the pad after the floodwall is built. A photo simulation of the turbine base with T-wall design was shown. There is a jut out in the floodwall and the turbine will be in line with the wall on the protected side. Additional pilings will be put in place.

Ms. Somerville advised the second renewable energy source is biofuels. The benefits of biofuels and wind turbines were reviewed:

- Creates a taxable infrastructure and revenue for the local community
- Helps to offset maintenance and operation costs
- Provides an opportunity for jobs for the local community
- Allows Greater New Orleans to fulfill part of its energy needs

Ms. Somerville explained that the H-piles and sheetpiles are roughly 100 to 130 feet long. The height of the wind towers is roughly 150 to 165 feet. LPV 145 provides a large siting opportunity, is relatively remote and does not affect any abutter. There is data indicating good wind resources in the area. Substantial wind data was obtained from a tower located close to the study area; however, the tower is only seven meters high. Typical studies are done at a greater height closer to the location of the turbines. In addition, the wind developers typically look at an investment of a year's worth of data. The current data can be extrapolated; however, there is an uncertainty with the extrapolation and developers will be looking for something that will fit their financial model for this fairly significant investment. The developers are not comfortable with this uncertainty coupled with the time crunch for implementation.

Ms. Somerville discussed the economics for the pilot wind project. The minimum recommended turbines are 660KW. The height of the tower is 165 feet and is designed to work with the existing levees. A pilot project of 15 to 16 turbines would generate 100,000 MWH annually, which can power 20,000 homes in the New Orleans area. The foundation costs total \$237,795 per pole; however, this cost does not include the

monopole and turbine. The foundation costs would be significantly higher for a wind developer to erect wind towers in this area which are not incorporated into the floodwall.

Ms. Somerville addressed the use of switchgrass as a biofuel.

- The primary use of switchgrass as a biofuel is to produce ethanol. Switchgrass is a relatively new technology in the production of ethanol; therefore, there is no historical data on which to base numbers. A large commercial scale ethanol refinery is located in Jennings, Louisiana.
- Switchgrass can be mixed with coal so that it burns cleaner. A coal facility located approximately 115 miles away from the project is being modified to incorporate switchgrass into its production. No pricing data is available; however, long term contracts are anticipated to be available.
- Switchgrass can be made into pellets for use in pellet stoves.

Ms. Somerville explained that switchgrass is a hardy plant that is easy to establish and has a good root system. Standard farming equipment can be used for mowing and harvesting. Switchgrass is mowed for production once or twice a year. A study was done in Mississippi on yields and the average annual yield was approximately 5.5 tons per acre. The literature states that the breakeven point for a farmer is 3.5 to 4.5 tons per acre. Genetic engineering is currently on-going that is expected to greatly increase the production rates of ethanol from switchgrass. Pricing is based on the distance to the point of delivery, contract terms and other factors. General pricing according to the literature is \$30 to \$45 per ton. Based on a range of the aforementioned yields, the potential is \$100 to \$250 per acre. The 10-mile stretch of levee, 300 feet wide (approximately 360 acres) could potentially produce \$90,000 in gross sales, which could be used to offset operations and maintenance costs.

Ms. Somerville reviewed the benefits of switchgrass:

- Improves soils stability and erosion control
- Tolerant to drought, flooding and saline conditions
- Helps to dissipate wave energy
- Viable as a renewable energy resource
- Potential revenue source
- Used in levee slope stabilization in the St. Louis District

Ms. Somerville explained that the current USACE Operations and Maintenance (O&M) specifications call for 6 to 8 inch ground cover in order to inspect levees. She suggested that since switchgrass grows from 6 to 10 feet tall that mowing could be done to coincide with levee inspections. Adaption of the USACE's O&M specifications would present a challenge; however, a pilot project could be used to determine how the O&M specifications could be adapted.

Ms. Somerville stated that although there is inadequate funding, there are excellent renewable resources that could be tapped. A huge amount of work has taken place obtaining rights-of-way, going through the NEPA process, engineering and access. Minor adaptations would be needed to the existing designs. Both wind and biofuels can

be incorporated without impacting the schedule. There are various mechanisms for capital and/or O&M cost contributions.

Ms. Somerville advised that Bioengineering Group began the process by talking to USACE representatives, who indicated that it was a good idea, but that it should be taken to the Board. The concepts were then discussed with SLFPA-E representatives. The biggest challenge at this point is obtaining a sponsor. The concepts fit in with new mandates for renewable energy and sustainable design; however, they do not fit in with the standard practices and procedures for this type of civil works project.

Mr. Doody commented on the USACE's support for the program and on its mandate to include renewable energy in flood protection projects. He recommended that a letter be drafted from the SLFPA-E to the USACE requesting that they follow their mandate and incorporate renewable energy into the flood protection project. Ms. Somerville offered to assist with language for the letter.

Mr. Estopinal asked did the levee district have fee title to the right-of-way or a servitude. Robert Lacour, SLFPA-E counsel, advised that Mark Hanna is investigating whether the levee district has fee title or a servitude. Mr. Lacour further advised that a levee district can only lease property for a period not to exceed three years. In addition, investors would have to be told that they would have to remove the wind towers at their expense if the levee/floodwall is reconfigured. He suggested that a legislative solution could be sought to allow the levee districts to place renewable energy projects on levee rights-of-way and to allow leases for renewable energy to be longer than three years. He did not have a recommendation on how to solve the problem of removing the wind turbines should their removal become necessary. Mr. Doody reiterated that the USACE could be requested to incorporate renewable energy into the project as a part of its mandate.

Mr. Jackson indicated that the concept of renewable energy is a good idea and that the engineering concerns could be resolved. He stated that it may not be possible to incorporate renewable energy in the LPV 145 project because of the short time window; however, this concept could possibly be used in other areas. Therefore, he suggested that the Authority continue the attempt to resolve the issues. He agreed that the USACE should be requested to look at this concept as part of its mandate to incorporate renewable energy. He added that this concept could not be used along the lakefront levees in Orleans and Jefferson Parishes for aesthetic reasons. However, the concept could be used in remote areas and that a retro fit approach could possibly be considered.

Mr. Barry requested that Ms. Somerville provide information to him on the things that could be done on the Federal level to expedite this process. He also asked about the grass height of 6 to 10 feet in terms of inspecting the levee. Ms. Somerville responded that 6 to 10 feet would be the optimal height; however, the grass could be cut at a shorter height. Mr. Turner indicated that some research would be needed on this subject. He pointed out that trees and bushes will typically begin to grow amongst high grass. He added that he would like to check into the concept to determine whether it is something that could be used. Mr. Doody requested that Mr. Wittie include a discussion of the use of switchgrass on the agenda for the next Operations Committee meeting.

Mark Schexnayder with the LSU AgCenter suggested that the Ag Center's local experts may wish to review the concept of using switchgrass to determine its viability.

Ms. Somerville was asked whether a financial plan had been developed and she responded that one has not been developed.

Mr. Pineda stated that official comments could be obtained from the USACE through the submittal of a permit request. He commented on the problem of animals burrowing into levee sections in California. He recommended that the USACE Engineering Research and Development Center (ERDC) be approached with these concepts. Ms. Somerville advised that Bioengineering Group has a contract with ERDC and has had discussions with ERDC.

Mr. Doody called for a lunch break at 1:20 p.m.

The Board reconvened at 2:00 p.m. and the meeting was called back to order.

COMMITTEE REPORTS:

The Finance, Operations and Special Issues Committees did not meet in the month of January; therefore, there was no report from the Finance, Operations and Special Issues Committees. The Legal Committee met prior to the Board meeting and approved legal invoices.

Mr. Jackson requested that the Operations Committee discuss the subject of inspection services for the flood protection projects being constructed. Mr. Turner advised that the State provided one inspector to the SLFPA-E last week and would be providing another inspector soon. The State has also agreed to look for funding for additional inspectors.

Mr. Pineda advised the Board that a Request for Qualifications (RFQ) was publicized for the services of a Strategic Communications Consultant. Statements of qualifications were received and reviewed. The selection committee, consisting of himself, Bob Turner, Tim Jarquin, Fran Campbell and Wilma Heaton, met yesterday and interviewed the five teams that had responded to the RFQ. The selection committee members will independently complete score sheets. He planned to return to the Board in February with a recommendation.

RESOLUTION #01-21-10-02 - LEGAL ACTION

Mr. Pineda offered a motion based upon discussions in the Executive Session.

On the motion of Mr. Pineda.

Seconded by Mr. Estopinal, the following resolution was offered:

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East approves the recommendation of Legal Counsel in the litigation entitled "Theodore Lange vs. Orleans Levee District, State of LA, Court of Appeal, First Circuit 2009 CA 1255 consolidated with 2009 CA 1256".

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

REGIONAL DIRECTOR'S REPORT:

Robert Turner, SFLAP-E Regional Director, reviewed the highlights of the Regional Director's Report (copy appended to minutes).

Mr. Doody requested that an update be provided at the next Operations Committee meeting on the possible seepage in a section of the Mississippi River Levee in Jefferson Parish.

RESOLUTION #01-21-10-03 - AMENDMENT OF RESOLUTION NO. 09-17-09-07

Mr. Doody advised that Allison Laborde with Frye Magee, LLC was present to answer any questions pertaining to the motions concerning the State of Louisiana Community Development Block Grant.

Ms. Laborde explained that a resolution previously adopted by the Board needed to be amended because according to State requirements the same individuals cannot sign payment requests and checks. The request for payment and payments are both to be certified by the President.

On the motion of Mr. Barry,

Seconded by Mr. Estopinal, the following resolution was offered:

WHEREAS, the Southeast Louisiana Flood Protection Authority – East adopted Resolution No. 09-17-09-07 concerning the State of Louisiana Community Development Block Grant (CDBG) Disaster Recovery Program administered by the Division of Administration; and

WHEREAS, it is necessary under the program regulations to authorize certain actions and individuals to perform certain designated functions by the State; and

WHEREAS, Section 1 – Financial Management of Resolution No. 09-17-09-07 designated and authorized Timothy P. Doody, Stephen Estopinal and Robert A. Turner, Jr. to sign "Authorized Signature Card for Request for Payment", and further designated Timothy P. Doody, President, to certify the correctness of the signatures; and

WHEREAS, after review of the resolution, Frye Magee, LLC, Grant Administrator, recommended that Section 1 – Financial Management of Resolution No. 09-17-09-07 be amended to authorize Robert A. Turner, Jr. and Glenda Boudreaux to sign "Authorized Signature Card for Request for Payment".

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East hereby amends Section 1 – Financial Management of Resolution No. 09-17-09-07, to read as follows:

"NOW THEREFORE BE IT RESOLVED, by the Southeast Louisiana Flood Protection Authority – East as legal authorized recipient of the LCDBG funds, in regular session convened, that Robert A. Turner, Jr. and Glenda Boudreaux are hereby authorized to sign "Authorized Signature Card for Request for Payment;" and

"BE IT FURTHER RESOLVED, that Timothy P. Doody, President, shall certify to the correctness of the signatures; and"

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

RESOLUTION #01-21-10-04 – APPROVAL OF COMMUNITY DEVELOPMENT BLOCK GRANT PRE-APPLICATION

Ms. Laborde explained that the consulting engineering firm of Frye Magee, LLC, was hired by the State of Louisiana to assist different parishes with funding coming through the Disaster Recovery Program associated with Hurricanes Katrina, Rita and Gustav. The SLFPA-E has applied for two grants. The first grant is a technical assistance grant in the amount of \$500,000 and the second grant is a \$900,000 grant for studies. The pre-application is an application to apply for the \$900,000 grant and spells out the three studies requested by the SLFPA-E to be paid for through the grant.

On the motion of Mr. Barry, Seconded by Mr. Goins, the following resolution was offered:

WHEREAS, the Southeast Louisiana Flood Protection Authority – East has been afforded funding through the Community Development Block Grant – Disaster Recovery Unit to conduct planning and study activities related to flood protection; and

WHEREAS, the Southeast Louisiana Flood Protection Authority – East has identified potential projects that are extremely important to the Metropolitan New Orleans areas; and

WHEREAS, the Southeast Louisiana Flood Protection Authority – East has prepared a Pre-Application to be submitted to Office of Community Development – Disaster Recovery Unit requesting funds for these projects in the amount of \$900,000.

BE IT HEREBY RESOLVED by the Southeast Louisiana Flood Protection Authority – East that the Pre-Application is hereby approved for submittal to the Office of Community Development – Disaster Recovery Unit for planning and study activities in the Metropolitan New Orleans areas.

BE IT FURTHER RESOLVED that the President, Timothy Doody, is hereby authorized to execute the Pre-Application for submittal to the Office of Community Development – Disaster Recovery Unit as presented.

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

RESOLUTION #01-21-10-05- AMENDMENT OF ID-IQ CONTRACTS IN CONNECTION WITH THE COMMUNITY DEVELOPMENT BLOCK GRANT DISASTER RECOVERY PROGRAM

Ms. Laborde advised that she and Kendal Magee spent several days in the SLFPA-E office reviewing the procurement process and the indefinite delivery-indefinite quantity engineering agreements executed by the SLFPA-E. Several changes will be required in those agreements in order to meet the requirements for providing services under the Community Development Block Grant Disaster Recovery Program. Frye Magee will prepare the amendments and forward the documents to the SLFPA-E for execution.

On the motion of Mr. Pineda, Seconded by Mr. Wittie, the following resolution was offered:

WHEREAS, the Southeast Louisiana Flood Protection Authority – East has obtained a grant under the State of Louisiana Community Development Block Grant (CDBG) Disaster Recovery Program administered by the Division of Administration; and

WHEREAS, it is the intent of the SLFPA-E to utilize the professional engineering consultants previously selected on a competitive basis and contracted on an Indefinite Delivery-Indefinite Quantity (ID-IQ) basis; and

WHEREAS, it is necessary to amend the Agreements for Professional Services for compliance with the program regulations when services are provided under the program; and

WHEREAS, the amendment to the Agreements for Professional Services will be reviewed by the Counsel to the Authority.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East approves the amendment of the Agreements for Professional Services contracted on an ID-IQ basis for compliance with State of Louisiana Community Development Block Grant (CDBG) Disaster Recovery Program regulations for when services are provided under said program upon approval by the Counsel to the Authority.

BE IT FURTHER RESOLVED, that the SLFPA-E President is hereby authorized to sign the amendments to the aforementioned Agreements for Professional Services.

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

RESOLUTION #01-21-10-06 – EJLD PROPERTY INSURANCE COVERAGE

Hardie Edgecombe with Arthur J. Gallagher Risk Management Services advised that there is a change in carrier for this coverage. The previous carrier had excluded coverage for wind damage. The coverage is for an eleven month period so that its expiration will fall on one of the two dates targeted for coverage expirations. There is a \$35.000 named storm deductible.

On the motion of Mr. Estopinal,

Seconded by Mr. Jackson, the following resolution was offered:

WHEREAS, Property Insurance Coverage on the three buildings (administrative, maintenance/police and sandbag buildings) owned by the East Jefferson Levee District (ELJD) is due to expire on February 1, 2010; and

WHEREAS, a quotation has been received through Arthur J. Gallagher Risk Management Services for the purchase of the aforementioned coverage with Fireman's Fund at an estimated premium of \$14,382.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the procurement of Property Insurance Coverage from Fireman's Fund at an estimated premium of \$14,382 through Arthur J. Gallagher Risk Management Services for the period February 1, 2010 through January 1, 2011.

BE IT FURTHER RESOLVED, that the EJLD Executive Director is authorized to execute any and all documents necessary to carry out the above.

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

RESOLUTION #01-21-10-07 - BAYOU ST. JOHN SECTOR GATE REPAIRS

Gerry Gillen, Orleans Levee District (O.L.D.) Executive Director, advised that in 1996 Kostmayer Construction had dewatered the Bayou Bienvenue Structure. He recommended that the contract for the sector gate repairs be awarded in order to take advantage of the USACE's current dewatering of Bayou St. John structure.

On the motion of Mr. Jackson,

Seconded by Mr. Estopinal, the following resolution was offered:

WHEREAS, the Bayou St. John Sector Gate requires maintenance and repairs in accordance with a first cycle maintenance program; and

WHEREAS, the Bayou St. John Sector Gate Repair Project was advertised and one bid was received from Kostmayer Construction, LLC, in the amount of \$310,710; and

WHEREAS, funds for this project are available from the approved FY 2010 Major Maintenance Capital Improvement Budget.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the award of a contract in the amount of \$310,710 to Kostmayer Construction, LLC, and the establishment of a budget in the amount of \$350,000 to include contingencies, for the Bayou St. John Sector Gate Repair Project.

BE IT FURTHER RESOLVED, that the O.L.D. Executive Director is hereby authorized to execute a contract in the amount of \$310,710 with Kostmayer Construction, LLC, and to execute any and all documents necessary to accomplish the above.

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

RESOLUTION #01-21-10-08 - LPV 103.01A.1 BAYOU ST. JOHN SECTOR GATE DEWATERING - COMPENSATION TO USACE

Mr. Gillen advised that the USACE negotiated a rate of \$500 per day with its contractor to keep the structure dewatered. The O.L.D.'s maintenance and repair contract is 45 days. An additional 30 days was requested for the USACE's contractor to keep the structure dewatered in the event additional repair items are found during the inspection.

On the motion of Mr. Wittie,

Seconded by Mr. Barry, the following resolution was offered:

WHEREAS, the U.S. Army Corps of Engineers' (USACE) contractor for Project LPV 103.01A1 is dewatering the Bayou St. John Sector Gate in order for the USACE to inspect the structure; and

WHEREAS, the USACE has negotiated a rate of \$500 per day for its contractor to keep the structure dewatered in order for the Orleans Levee District (O.L.D.) to perform the first maintenance cycle repairs; and

WHEREAS, the O.L.D. maintenance and repair contract provides for a contract time of 45 days; and

WHEREAS, the O.L.D. has requested that the USACE allow 75 days for maintaining the structure dewatered in the event that additional repair work is discovered during the inspection.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) approves the execution of an agreement with the USACE

for the Orleans Levee District to compensate the USACE for the cost of its contractor keeping the Bayou St. John Sector Gate dewatered at a rate of \$500 per day up to 75 days.

BE IT FURTHER RESOLVED, that funds in the amount of \$37,500 be identified in the FY 2010 Special Levee Improvement Fund for this dewatering effort.

BE IT FURTHER RESOLVED, that the SLFPA-E President or O.L.D. Executive Director are hereby authorized to execute said agreement and any and all documents necessary to carry out the above.

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

RESOLUTION #01-21-10-09 – APPROPRIATION OF PERMANENT SERVITUDE OVER PARCEL 4-2 FROM THE AUDUBON NATURE INSTITUTE, INC.

Mr. Lacour advised that this is a revisiting of an appropriation authorized by the Board at its last meeting because the title examiner discovered that the parcel had been transferred to the Audubon Nature Institute, Inc.

On the motion of Mr. Wittie, Seconded by Mr. Goins, the following resolution was offered:

A resolution providing for the appropriation under the Constitution and Laws of the State of Louisiana of a permanent servitude over Parcel No. 4-2 from Audubon Nature Institute, Inc. and/or its successors in title for the benefit of the Orleans Levee District for the building of levees and other water control structures including the repairing of hurricane protection levees on the alignment approved by the U. S. Army Corps of Engineers.

WHEREAS, the U. S. Army Corps of Engineers has determined that certain lands, easements, servitudes and rights-of-way situated in the Parish of Orleans owned by Audubon Nature Institute, Inc. and/or its successors in title are required for the construction of the Lake Pontchartrain and Vicinity, Hurricane Protection Project, Orleans Parish, LPV 109.02a, South Point to CSX Railroad Levee, as shown on COE Map File No. H-8-47066, dated May 5, 2009, Sheet Identification No. R-024; and

WHEREAS, the Louisiana Coastal Protection and Restoration Authority as the non-federal sponsor has the responsibility for providing all lands, easements, servitudes and rights-of-way determined by the U. S. Army Corps of Engineers to be required for the construction of the Lake Pontchartrain and Vicinity, Hurricane Protection Project; and

WHEREAS, the Orleans Levee District, pursuant to legislation and a delegation and grant of authority by the Louisiana Coastal Protection and Restoration Authority,

has the responsibility of acquiring of such lands, easements, servitudes and rightsof-way with funds furnished by the Louisiana Coastal Protection and Restoration Authority;

Section 1. Be It Resolved, by the Board of Commissioners for the Southeast Louisiana Flood Protection Authority-East, that a permanent servitude over the following described property on the alignment approved by the U. S. Army Corps of Engineers is hereby appropriated for the benefit of the Orleans Levee District in accordance with the provisions of the Constitution and Laws of the State of Louisiana for the building of levees and other water control structure including the repairing of hurricane protection levees:

Parcel No. 4-2:

One certain parcel of land designated as Lot 25, Irish Bayou Subdivision, Section 8 and Lots 1, 2 and a portion of Lot 3, Irish Bayou Subdivision, Section 9, together with all the buildings and improvements situated wholly or partially thereon and all of the rights, ways, privileges, servitudes, appurtenances and advantages thereunto belonging or in anywise appertaining, situated in the Third District, City of New Orleans, Orleans Parish, State of Louisiana, Section 1, Township 11 South, Range 13 East, and being more fully shown as Parcel 4-2 on a Right of Way map prepared by C. Randall Dixon, Krebs, LaSalle, LeMieux Consultants, Inc., Registered Land Surveyor, dated July 24, 2009, LPV 109.02a, South Point to CSX Railroad, New Orleans East Bank Levee, sheet 4 of 15 and is more fully described as follows:

BEGIN Levee Baseline station 763+20.44, 79.15' right, said point having Louisiana State Plane Coordinates, South Zone of X=3,744,433.46 and Y=593,439.71, said point lies on the west right of way line of U.S. Highway 11; thence S 06°57'19" E a distance of 176.99 feet to a point; thence S 87°05'14" W a distance of 120.30 feet to a point; thence N 06°57'19" W a distance of 168.51 feet to a point; thence S 83°02'41" W a distance of 120.00 feet to the Point of Beginning. The coordinate values, bearings, and distances used herein are referenced to the North American Datum of 1983 (NAD83), Louisiana State Plane Coordinate System, South Zone, U.S. Survey Feet. Said parcel contains 0.476 acres.

Section 2. Be It Further Resolved, that (A) this resolution shall be published in the official journal of the Orleans Levee District and in the official journal of the parish where the property is located; (B) a certified copy of this resolution be sent to the public records and assessment records owner by certified mail return receipt within five (5) days of adoption; and (C) a certified copy of this resolution be registered in the conveyance records of the parishes where the property is located and the domicile of this Board.

Section 3. Be It Further Resolved, that a copy of Corps of Engineers Map File No. 4-2 referenced above shall be kept on file in the offices of the Orleans Levee District for the review and copying by any affected property owner or any other interested person.

Section 4. Be It Further Resolved, that the compensation due the affected owner as determined in accordance with applicable law shall be paid within one year of the date of this resolution.

Section 5. Be It Further Resolved, that the employees and contractors of the Orleans Levee District take all necessary or appropriate action, including obtaining appraisals of the property, to carry out the above resolutions.

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

RESOLUTION #01-21-10-10 - BOHEMIA RIGHT-OF-WAY

Mr. Lacour explained that the operator of an oil and gas lease wishes to obtain a servitude over land owned by the O.L.D. Mr. Estopinal asked that the details for the roadway, such as elevation and type of construction materials to be used, be provided.

On the motion of Mr. Wittie,

Seconded by Mr. Goins, the following resolution was offered:

WHEREAS, the Orleans Levee District owns certain interests in certain tracts of land in an area of Plaquemines Parish commonly referred to as the Bohemia Spillway; and

WHEREAS, Sundown Energy, LP seeks to acquire a road right-of-way over some of the tracts in the Bohemia Spillway owned by the Orleans Levee District specifically, Tracts 10, 13, 14, 18, 19 and 20; and

WHEREAS, Counsel to the Authority will review the final form of the right-of-way.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority - East approves and authorizes the execution by the Executive Director of the Orleans Levee District of a road right-of-way with Sundown Energy, LP, upon approval by the Counsel to the Authority.

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

RESOLUTION #01-21-10-11 – SERVITUDES AND RIGHTS-OF-ENTRY FOR LPV 148.02

On the motion of Mr. Wittie,

Seconded by Mr. Estopinal, the following resolution was offered:

WHEREAS, the U.S. Army Corps of Engineers requires Authorization for Entry to certain properties on a timely basis for the construction of the Lake Pontchartrain and Vicinity Hurricane Protection Project, LPV 148.02; and

WHEREAS, servitudes and rights-of-entry will be necessary to acquire the property rights required for the construction of LPV 148.02; and

WHEREAS, Counsel to the Authority or the Office of the Attorney General will review the final form of the servitudes and rights-of-entry.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority - East approves and authorizes the execution by the Executive Director of the Lake Borgne Basin Levee District of servitudes and rights-of-entry, as required, with the owners and other interest holders of properties needed for construction of LPV 148.02, upon approval by the Counsel to the Authority or the Office of the Attorney General.

The foregoing was submitted to a vote, the vote thereon was as follows:

YEAS: Mr. Barry, Mr. Estopinal, Mr. Goins, Mr. Jackson, Mr. Pineda and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Losonsky

The next regular Board meeting will be held on February 18, 2010. There was no further business; therefore, the meeting was adjourned at 3:09 p.m.

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY - EAST

REGIONAL DIRECTOR'S REPORT

January 21, 2010

100 Year Level of Protection

Inner Harbor Navigation Canal Hurricane Storm Surge Barrier:

Design work on the project continues. The overall design of the entire project is approximately 82% complete. Our emphasis continues to be Operation & Maintenance considerations and the necessity to "design in" reasonable O&M features early in the process.

All of the 66" diameter concrete piles have been driven as of Oct 21, 2009. 97% of the closure piles (2202) and 54% of the batter piles (349) have been driven with no major difficulties. 25% of the precast caps (86) have been set and 684 l.f. of the parapet wall has been erected. (69) Cast in place "gaps" have also been completed. All parts of the wall (except guard rails) are now underway.

The support piles for the by-pass Barge Gate foundation have been driven and the cofferdam has been completed. Tremie cutting and rebar placement continue inside the coffer dam. Placement of the first of four sill castings will begin soon. The barge gate sill is scheduled for completion before the end of 2009.

The Contractor has begun mobilizing for the T-Wall work and fabrication of the required piles has begun.

Bayou Bienvenue is now closed to all navigation at the Project site due to lift gate construction.

East Jefferson Levee District:

Reach 1:

The Work is approximately 15% complete. Borrow operations have been impacted by recent high river levels and heavy rains. This Reach is scheduled for completion in June 2010.

Reach 2:

The Work is approximately 20% complete. Unsuitable material east of Williams Blvd. is being removed. The USACE will instruct the Contractor to remove the large pieces of unsuitable material (concrete, steel etc.) from the area east of Williams. New material will be brought in and

blended with the remaining existing material to insure compliance with specifications. Borrow operations have been impacted by recent high river levels and heavy rains. This Reach is scheduled for completion in July 2010.

Reach 3:

The project is approximately 22% complete. Borrow operations have been impacted by recent high river levels and heavy rains. This Reach is scheduled for completion in May 2010.

Reach 4:

The project is approximately 11% complete. A Contract Modification will be issued to address seepage areas along this reach. The work is scheduled to be complete in May 2010.

Reach 5:

The Project is more than 69% complete. Contract modifications are required for Coast Guard utility relocations, the Ridgelake ramp, and embankment work. Scheduled completion is set for June 2010.

Bonnabel Breakwater Project:

Work is progressing and is approximately 48% complete. Pile driving is ongoing. The scheduled completion is July 2010.

Duncan Breakwater Project:

The Project is approximately 21% complete. The Contractor has completed dredging the access channel and has begun driving piles for the access bridge. Scheduled completion is June 2010.

Williams Blvd. Floodwall and Gate:

The Project is approximately 16% complete. The work should be complete by April 2010.

Williams Blvd. Floodwall and Gate:

The Construction Contract has been awarded.

Pump Station Fronting Protection:

Pile load testing has been completed at all four Pump Stations. The Construction Contract was awarded on November 6, 2009 but is currently under protest. Construction will not begin until late February 2010.

LPV 017.2 (Causeway Crossing):

The OCPR and USACE are reviewing compensability issues for utility and facility relocations. Pile load testing will begin in mid February 2010. Design is nearing completion. Contract award is scheduled for the first quarter of 2010. A CEA or MOU will be required at some point to define OMRR&R responsibilities for the various parts of the project.

West Return Levee/Floodwall:

The contractor is finishing the last of the pile load tests.

West Return Levee (Airport Runway):

A meeting was held with the Airport and OCPR to discuss construction and safety issues associated with the reconstruction of the levee segment located at the west end of the east-west runway, and to develop a strategy to move forward. We are awaiting word from OCPR and a ROE request from the USACE.

Orleans Levee District:

LPV 101.02 (17th St. Canal to Topaz Street):

Work includes demolition of the existing floodwall and replacement with a new concrete T-Wall with a top elevation of +16.0 (NAVD88.2004.65). OLD has forwarded a check for \$162,424.85 to the USACE to cover the anticipated cost to relocate utilities owned by the levee district. Construction is approximately 18% complete and the Project is scheduled for completion before June 2011.

LPV 102.01, 103.01, and 104.01 Projects are 100% complete.

LPV 103.01 A1 (Bayou St. John):

Construction is now about 23% complete. A contract modification is being negotiated with the Contractor for de-watering the sector gate for USACE inspection and OLD maintenance.

LPV 103.01 A2 (Rail Street and Lake Terrace Flood Gate):

The 65% Design Submittal is under review. The Construction Contract is scheduled for award in early 2010.

LPV 104.01 A (Ramp Crossings – Lakeshore Dr.):

The Construction Contract for this Project was awarded on October 2, 2009 and the Pre-construction meeting took place on November 2, 2009. The Contractor is mobilizing on site, and is currently removing paving at the Franklin Ave. roadway crossing. Other forut crossing will be closed within the next two weeks.

LPV 104.02 (Seabrook West Side IHNC):

This project includes the construction of a new T-Wall.

LPV 104.02A (Retrofit of Wall and Floodgate South of W-40):

Plans and Specs are underway on NS Railroad Floodgate.

LPV 105.01 (Lakefront Airport T-Wall West):

Plans and specs were completed on December 11, 2009. Construction Contract Award is scheduled for mid February 2010.

LPV 105.02 (Lakefront Airport T-Wall East):

Plans and specs were completed on December 11, 2009. Construction Contract Award is scheduled for late February 2010. A contract modification will be negotiated with the selected Contractor for OLD utility relocations (approx. \$40,000 cost to OLD).

LPV 106 (Citrus Lakefront Levee):

A design modification has been issued to move the I-Wall to the edge of the levee crown. Plans and specs were completed on December 4, 2009. Construction Contract Award is scheduled for mid to late February 2010.

LPV 107 (Lincoln Beach Floodgate):

Plans and specs were completed this month. A contract modification will be negotiated with the selected Contractor for OLD utility relocations. Construction Contract Award is scheduled for early February 2010.

LPV 108 (New Orleans East Lakefront Levee):

The required construction (earthen embankment) is complete. A design modification was required for the Collins Pipeline crossing. Construction is approximately 90% complete. The Project will bring the elevation of the levee to pre-Katrina authorized elevation, which is higher than the new 100 year elevation.

LPV 109.2a (South Point to CSX Railroad – Levee Embankment):

The Permanent Servitude Agreement with USFWS has been finalized. Plans and specs have been completed. Construction Contract Award is scheduled for late February 2010. Construction of the Project will be combined with LPV 109.02c.

LPV 109.02a1 (South Point to CSX Railroad - Wick Drain Test Section):

Construction is 100% complete. URS and USACE will monitor settlement and test to determine increases in shear strengths.

LPV 109.02a2 (South Point to CSX Railroad – Drainage Blanket):

The Construction Contract has been awarded and work is approximately 8% complete.

LPV 109.02b (South Point to CSX Railroad - I-10 Crossing):

Plans and specs were completed on December 15, 2009. Construction Contract Award is scheduled for early March 2010.

<u>LPV 109.02c (South Point to CSX Railroad – Hwy 90 and Hwy 11 Floodgates):</u>

Plans and specs are complete. Construction will be done under LPV 109.2a.

LPV 110 (CSX Railroad Crossing):

Plans and specs were completed on December 15, 2009. The project permit with CSX Railroad is nearly complete and should be issued soon. Construction Contract Award is scheduled for January 28, 2010.

LPV 111.01 (North Side GIWW):

The USACE awarded a \$3.1 million pre-construction services contract (ECI Contract) in July 2009. The contract includes three options for construction of levee sections, and a T-wall from the end of the earthen levee to the Inner Harbor Navigation Canal tie-in.

LPV 111.02 Pump Station 15 Fronting Wall:

Plans and specs are about 60% complete and are scheduled for completion in February 2010.

LPV 111.03 Tie-in to IHNC:

The Project consists of about 1000' of new T-Wall. Plans and specs are scheduled for completion in January 2010.

LPV 113 (NASA):

Construction has begun and is approximately 16% complete. The Project is scheduled for completion in May 2010.

Seabrook Structure:

USACE awarded the Design/Build Contract to Arcadis. Protest of Contract Award has delayed the Project. A decision on award is expected by the end of February 2010. ROE for the test pile program has been issued by OLD.

Lake Borgne Basin Levee District:

LPV 144 (Bayou Dupre Control Structure):

This project will replace the existing Bayou Dupre Control Structure (sector gate) with a new sector gate. The Plans and specs are complete. The Bid Solicitation was published on December 4, 2009. Bids are due in on January 25, 2010. LBBLD issued the ROE.

LPV 145 (Bayou Bienvenue to Bayou Dupre):

The project includes approximately 6 miles of new T-Wall atop the existing earthen levee. An ECI Contract has been awarded for this reach. Driving of the piles for the pile load test is now complete. A temporary bridge across Bayou Bienvenue and an aggregate surfaced access roadway the length of the project will be constructed in the next few months. Plans and specs are complete Pile Load Tests conducted at Site #1 generated allowable pile loads much less than expected.

LPV 146 (Bayou Dupre to Verret):

The project includes approximately 8 miles of new T-Wall atop the existing earthen levee. An ECI Contract has been awarded for this reach. The NTP for the pile load tests has been issued and piles should be driven in early January 2010. 95% Plans and specs are complete.

LPV 147 (LA Hwy 46 and LA Hwy 300 Flood Gates):

The project includes a new set of floodgates at LA Hwy 46 and the replacement of the existing floodgate at LA Hwy 300. An emergency bypass ramp will be constructed at the LA Hwy 46 location. We are awaiting

the LNO from DOTD to grant the Right of Entry to the USACE for construction. The LA Hwy 300 Flood Gate will be constructed under the LPV 148 Project.

LPV 148.02 (Verret to Caernarvon):

The Project includes approximately 9 miles of new T-Wall atop the existing earthen levee. An ECI Contract was awarded for this Project last month. A protest was filed by one of the proposers. The USACE has decided to re-issue the solicitation, which will delay this project for several months.

LPV 149 (Caernarvon Floodwall – Lake Borgne Basin Levee District):

The project design requires a realignment of the Caernarvon levee/floodwall to a location east of the Caernarvon Canal. The new alignment necessitates the construction of a new Control Structure (sector gate) in the Caernarvon Canal.

Plans and specs are 100% complete. Final plans include a sector gate at the Caernarvon Canal. 100% Plans and specs are out for review.

The new alignment requires construction of a section of the project outside of the jurisdiction of Lake Borgne Basin Levee District. Plaquemines Parish Council approved a Cooperative Endeavor that will allow for that portion of the project located in Plaquemines Parish. The agreement, once executed, will allow for construction of the project on the proposed alignment and would place the responsibility for operation and maintenance of the project with LBBLD.

Permanent Pump Stations and Outfall Canals:

According to the USACE, they are authorized and funded to design/construct perimeter protection only (Option 1). They are authorized but not funded to do an engineering study, which would include modifying the outfall canals to allow for gravity flow to the new pump stations at the lake and removing the existing upstream pump stations (Option 2/2a). This study would include a risk assessment of Option 1. Funding for the study would probably have to be included in the Corps' Federal Works Appropriations Budget.

According to USACE, design and construction Option 2/2a is neither authorized nor funded. All agree, however, that Option 2/2a is technically superior to Option 1 alone. In any case, it is imperative that the new pump stations be designed and constructed with the features necessary to accommodate construction of Option 2/2a. Failure to do at least this would make conversion of the outfall canals to gravity flow low level interior drainage channels impracticable.

The Amendment to the LPV PPA for the permanent pump stations is being negotiated. The NOSWB, OCPR/CPRA and SLFPAE are working to ensure that the language in the Amendment fully describes the features required for Option 1 conditions with easy conversion to Option 2/2a future conditions.

Development of the RFP for design/build of the Permanent Pump Stations is continuing with input from stakeholders.

Elevation Map:

The USACE has published a map showing the 100 year level of protection elevations for the hurricane protection levee system in the metro New Orleans area. The elevations depicted are current as of June 2009. The map can be found at the following web address:

http://www.mvn.usace.army.mil/hps2/pdf/100-Year%20Status%20Map_051209_Final.pdf

Coastal Protection and Restoration

Lake Borgne Basin Levee District:

The Violet Freshwater Diversion siphon is operating.

Additional Coastal Restoration projects in the MRGO area scheduled to begin during the next 12 months. The projects will be designed and constructed through the USACE and will be funded with the \$75 million dollars in federal appropriations provided after Hurricane's Katrina and Rita.

Flood Fight

The Mississippi River has fallen below 11' at the Carrollton Gage and is expected to stay below 11' for the remainder of the forecast period.

Design and Construction

East Jefferson Levee District:

It has been determined that the source of the seepage noted in Reach 4 is from rain water finding its way into the levee section probably via shrinkage cracks and/or fissures. The USACE will develop a plan and address this problem during the upcoming Reach 4 construction project.

Work is continuing on the EJLD Safe House. The Architect has submitted a draft of the "Existing Conditions Assessment". EJLD and SLFPAE met with the Architect to discuss parameters that will be used in the planning and design of the facility.

A wet area along River Road near Hickory St. appears to be from seepage. The USACE has been notified and EJLD is monitoring the area to determine if seepage is the cause.

Orleans Levee District:

Work is complete on the LPV 101.01 Advance Measures sheet pile contract. The USACE is awaiting the revised set of As-Builts from the contractor before turning this project over to Orleans Levee District for O&M.

Construction on LPV 117 Project (East Side IHNC – Relief Wells) is complete. Overall the project looks good but grass has not yet begun to grow. The project involved the installation of approximately 20 relief wells. An additional contract (\$2.4 million) has been let to install about 1400 linear feet of steel sheet pile at a location that is about 4000' south of the Seabrook Bridge.

Construction has begun on the OLD Safe House Project (NTP issued on January 11, 2010). The Project is scheduled for completion in August 2010.

The Floodgate Seal Repairs Project is ready for Contract Execution.

Notice to Proceed for the Franklin Ave Warehouse South Section Roof Replacement Project was issued effective January 1, 2010.

Dr. Lorenzo started field investigations on the 17th St. Canal failure location on January 14, 2010.

<u>Lake Borgne Basin Levee District:</u>

The Contractor for the Trash Screen Repairs/Rehabilitation Project has installed the screens at all three pump stations and is finalizing work at the sites.

The Contract for the Bluebird and Artillery Canal Cleaning Project has been awarded to the lowest bidder, Regency Construction. Work will begin after the survey is complete and survey discrepancies are resolved between NRCS and the Contractor.

Work is nearly complete on the Taintor Gate Repairs at P.S. Nos. 1 & 4. A punch list has been developed and a change order has been issued to address problems with the existing air piping system.

The Notice of Award was issued to Fleming Construction for the Transition Improvements and Scour Protection at various locations along the 40 Arpent Canal. We are awaiting signed contract documents.

LBBLD has received proposals from A/E firms to prepare plans and specs for a remote control system to operate the pumps at Pump Station 2 from Pump Station 6. The proposals have been reviewed and negotiations with the selected consultant will begin this month.

Internal Affairs

The USACE will issue new reports on computed Safe Water Elevations for the three outfall canals in Orleans Parish. The London Ave SWE report is undergoing peer review. Review comments will be addressed before any of the reports are completed and released. The London Ave Report is scheduled for completion in February 2010.

The H&H Workshop is scheduled for January 26, 2010.

We now have an inspector (Jim McAlister) working with us provided by OCPR. Additional technical support is forthcoming.

Data has been collected for the Levee Information Management System Demonstration Project and forwarded to the Dutch Group. SLFPAE and representatives of EJLD met with the Dutch here in New Orleans on October 20, 21, and 22 to exchange ideas and finalize the scope of work for the project. A Workshop will be conducted on February 25, 2010.

The OCPR Levee Inspector class will be held on March 10, 2010 at the LDOTD Regional Traffic Management Center on Veterans Blvd.