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

The regular monthly Board Meeting of the Southeast Louisiana Flood Protection Authority - East (Authority or SLFPA-E) was held on Thursday, October 21, 2010, in the Second Floor Council Chambers, Joseph Yenni Building, 1221 Elmwood Park Blvd., Harahan, 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 9:30 a.m. and led in the pledge of allegiance.

PRESENT:

Timothy P. Doody, President John M. Barry, Vice President Louis E. Wittie, Secretary Stephen Estopinal, Treasurer David P. Barnes, Jr. Thomas L. Jackson George Losonsky, PhD Ricardo S. Pineda

ABSENT:

Stradford A. Goins

OPENING COMMENTS:

Mr. Doody advised that the Association of Levee Boards' Annual Meeting will be held December 1-2 in New Orleans. Commissioners wishing to attend should advise SLFPA-E staff.

Mr. Doody explained that as a member of the Coastal Protection and Restoration Authority (CPRA), the SLFPA-E is to obtain input from local authorities and officials on the Natural Resource Damage Assessment (NRDA) process. Mr. Doody and Mr. Barry will meet with Craig Taffaro, St. Bernard Parish President, and Kevin Davis, St. Tammany Parish President, to discuss local input in the NRDA process in advance of the November 3rd CPRA meeting. He added that discussions have continued with Kevin Davis on the best way to establish a St. Tammany Levee District.

Mr. Doody reported that Colonel Robert Sinkler, Commander of the U.S. Army Corps of Engineers' (USACE) Hurricane Protection Office (HPO), visited the Lake Borgne Basin Levee District (LBBLD) pump stations on October 11th. Col. Sinkler was able to see many of the problems firsthand and come away with a better understanding of some of the issues, including the need for safe houses and seepage issues. SLFPA-E representatives met with the USACE concerning the reprioritization of FCCE (Flood Control and Coastal Emergencies) funding to allow for the planning and design of two

LBBLD safe houses. The SLFPA-E is continuing to work towards appropriations for the construction of the safe houses.

Mr. Doody advised that he, Robert Turner, Carlton Dufrechou and John Lopez were on a Green Matters Conference Panel discussing the need to speed up coastal restoration and to coordinate regionally on coast restoration issues.

Mr. Doody stated that on next Tuesday he would be meeting with a group of individuals, including Charles Allen with the New Orleans Mayor's Office, Jon Johnson, New Orleans City Councilmember, and Cynthia Willard-Lewis, the newly elected State Senator from New Orleans East, to tour the IHNC surge barrier.

ADOPTION OF AGENDA:

The agenda was amended to add the following items:

- Item XIII.A.6 Motion to approve the use of Community Development Block Grant funding for the salary of a GIS employee and to execute an amendment to the Cooperative Endeavor Agreement with the LA Office of Community Development.
- Item XIII.A.7 To discuss the need for the Board or appropriate committee to evaluate the scopes of work and deliverables in consulting contracts which fall within the \$50,000 signatory authority of the Regional Director.
- Item XIII.B.2 Motion to authorize the EJLD Executive Director to enter into a contract with Fueltrac, Inc. for the EJLD's fuel needs.
- Item XIII.C.4 Motion to authorize the President to execute the Funded Agreement between the SLFPA-E, on behalf of the Orleans Levee District, and the Port of New Orleans for the France Road betterment.

A motion was offered by Mr. Barry, seconded by Mr. Wittie and unanimously approved by a roll call vote, to adopt the amended agenda.

RESOLUTION #10-21-10-01 – APPROVAL OF SEPTEMBER 16, 2010 BOARD MINUTES

On the motion of Mr. Barry, Seconded by Mr. Estopinal, 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 September 16, 2010.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

PUBLIC COMMENTS:

Craig Berthol with the 17th Street Canal Coalition stated that he presented the Board with some questions at its last meeting. He commented that he understood that the Board cannot address the property issues that are currently in litigation. He stated that he attended the USACE's IER 27 public meeting and was informed that all mediation work on the 17th Street Canal would be done within the existing right-of-way. He asked how the Board could give the USACE the right to enter property for which the use is undetermined because of on-going litigation. Robert Lacour, SLFPA-E Legal Counsel, advised that there is a 4th Circuit Court of Appeals decision that states that there is a servitude in that area. Unless this decision is overturned, this is the existing law.

Carol Byram, a resident along the 17th Street Canal, asked that the Board allow the property owners to move their fences back to the original and legal property line. She stated that her request is based on the overwhelming previous evidence, which she would provide to the new members of the Board next month, as well as new information. She stated that she and her husband live next to the most secure section of the 17th Street Canal with a 13.5-ft. safe water elevation and a high factor of safety of 2.3 to 1.5, depending on whether the water reaches 9-ft. or the top of the wall. There is an 80-ft. wide high levee and a low sand layer. She stated that Colonel Bedey told her that the USACE was using the wrong measurement to find the toe in her area. The USACE used this incorrect measurement to take the trees even though its own guidelines say that trees are allowed on an overbuilt levee. She stated that this destruction was carried out during the peak of hurricane season, putting the levee at risk and leaving a levee filled with dying roots, depressions that hold water and a loss of levee height where the fences had stood. She stated that the Board said that it did not want to let the USACE take anything in her area, but had to since the USACE threatened the Board with decertification. The USACE states that a levee has to be inspected on a regular basis for seepage in order to be certified. She stated that it was said that this work had to be done by June 1, 2008; therefore, the Board could not give the property owners more time to present their side. Yet two years later, 50 feet from her property stands a fortress alone out on the levee undisturbed by the USACE with no way to see inside or inspect, and if you could, the entire yard is covered with structures, deck and a pool built into the levee. She stated that she is not asking that this property be removed, but she mentioned it because the Board's reason for reversing its original support of the property owners was supposedly because of certification. She asked, where have the inspectors been the last two years. She stated that no one has seen them walking the levee or appear to be inspecting from a vehicle. She stated that she has seen levee district trucks occasionally drive by, but have watched their faces and did not see inspection. She stated that obviously the Board's reason for taking the property was not valid or necessary, especially by June, 2008. She commented on the property owners' attempt to stand up to the USACE. She stated that communities all over the country were losing trees because the USACE stated that trees may have contributed to the breaches and that they do not like to be proven wrong. However, now it seems that top USACE people, as well as many experts, have questioned the tree issue and are now finally doing real studies. She stated that it is too late for the levee in her area, which lost a second line of defense for the wall and levee, according to some USACE people, experts and common sense. She commented on the Board

meeting in which the vote was taken, stating that it was unprecedented, and on the emotional toll of the actions taken. She asked that the Board help to make this right.

PRESENTATIONS:

1. Overview of Coastal Protection and Restoration Authority Master Plan and <u>Prioritization Tool.</u>

Mr. Barry stressed the importance of the prioritization tool, which will be the means by which money will be allocated and will define the order in which flood protection and coastal restoration projects are constructed. He stated that it is important that the tool be science based. He pointed out that the one thing more important than money is sand. Therefore, it is important that the projects are properly designed and that funding is properly allocated. The Master Plan thus far has been largely conceptual and everyone agrees on the concept. However, as more detail is obtained, hard choices will be required, and this is when the prioritization tool will come into play.

Kirk Rinehart, Director of Planning for the Office of Coastal Protection and Restoration (OCPR), explained that the first integrated Master Plan with restoration and protection was unanimously approved by the Legislature and published in 2007. It was largely a conceptual document to guide restoration and protection efforts and did not cover hard decisions, specifics and future funding allocations. Legislation requires that the Master Plan be updated every five years in order to continue building on the knowledge base. Improvements for 2012 are to include a real vision for coastal restoration efforts with defined discrete projects, community protection level outcomes and restoration outputs. This is a system approach. An understanding is needed of how restoration features augment protection features, which must be communicated to community stakeholders. He pointed out that funding is limited; therefore, the projects must be prioritized. The CPRA has begun the development of a tool that will allow it to look at and measure protection and restoration features against a vision of the coast and see how those projects move Louisiana towards a sustainable system.

Karim Belhadjali with OCPR reminded everyone that coastal Louisiana is facing a crisis; however, there are solutions to the problems. A number of projects that include levee flood protection, barrier island restoration and marsh creation, are currently on the ground. A team of about 35 nationally and internationally renowned scientists came to Louisiana in 2006 and looked at the problems and solutions. Those scientists acknowledged that there are things that could be done, especially on the eastern side, which included harnessing the river and its sediments to build and restore coastal wetlands. The 2012 Master Plan builds on previous efforts, such as the 2007 Master Plan, the Coast 2050 and the LCA programs, and the LaCPR. Coordination is being done with other planning efforts, such as the Mississippi River Delta Management, the Southwest Coast Study, Morganza to the Gulf, and the LCA and CWPPRA programs. Concepts and ideas are being brought in from other initiatives, such as the Dutch Perspective, New Framework and Envisioning the Future. New elements will also be included in the 2012 Master Plan Update. Tools and information are being developed that will enable the tough choices. A decision framework is being built that is

transparent and uses decision criteria, constraints and uncertainties in the thought process. The plan is building on previous modeling efforts. The intent is to come up with a list of prioritized project portfolios and actual projects that can be implemented in a coastal zone to restore wetlands and protect communities.

Mr. Belhadjali explained that the Master Plan Update is a two year process that was started in May, 2010. Currently, the tools and inputs are being developed, including the Decision Framework, the Prioritization Tool and Project-effects Models. Input and feedback will be received through a Framework Development Team, a Science and Engineering Board, and Regional Stakeholder Workgroups. The applications will be tested and refined in early 2011. The intent is to prioritize projects and set up portfolios in late 2011. The release of the Updated Master Plan to the Legislature is targeted for April, 2012. The CPRA and OCPR are leading this effort with an extension of staff from Brown and Caldwell for work on program management, the Rand Corporation for work on the prioritization tool, Dr. Denise Reed from the University of New Orleans, the University of Lafayette, and a USACE embedded team to bring in experience from LaCPR into the process. The Master Plan Delivery Team is supported by seven modeling workgroups and about 100 modelers working on this effort, technical advisory committees on the prioritization tool and project models, the Science and Engineering Board, the Framework Development Team, Stakeholders, the LCA Science Board, Roadmap, the Gulf Recovery Plan and the CWPPRA Technical Committee.

Mr. Belhadjali advised that the Framework Development Team is composed of representatives from over 30 Federal, State, NGO (non-governmental organizations), Academic, Community and Industry Organizations. The team's first meeting was in July, 2010. Members will be added to assure representation from different areas across the State. The Science and Engineering Board is currently being set up so that independent technical review will begin early in the process. The Board will be composed of experts in the field of coastal ecology, engineering, geosciences, land use planning and risk, climate change and economics.

Dr. Denise Reed addressed the vision. She explained that a clear idea of where we wanted to go had never been articulated in the past. The analysis is built around the concept of a vision with the objective of informing people in coastal Louisiana of what can realistically be expected in terms of protection and restoration. It will require many of the trade-offs inherit in coastal restoration and protection to be confronted upfront. A group of technical experts were brought together in the spring of this year to put together a draft vision to begin the process. The vision must be technically feasible. The vision has been reviewed with advisory groups. Currently, predictive models are being developed that will be at the heart of the application of the prioritization tool. The vision will be tested as the models are developed. An extensive outreach and engagement process will be undertaken to test whether or not the vision laid out is the vision that people really want to achieve for the coast.

Dr. Reed advised that there are elements of the vision which deal with the levels of protection to be expected. The level of risk reduction for different parts of the coasts will be laid out in the vision. The vision is about the desired achievement in terms of levels of protection. The prioritization tool works out how the vision will be achieved. There is

no promise of how that protection would be provided. The protection is the outcome and could be structural or non-structural. It was pointed out that the 0.2% level of risk reduction is the 500-year level of protection, 1% is 100-year protection, 2% is 50-year protection, and 4% is 25-year protection.

Dr. Reed explained that the vision is being cost in terms of ecosystem services on the restoration side. Nine different groupings of ecosystem services cover the range of things that occur on the coast and an array of different things that a restored coast could provide. Human habitation is addressed under the levels of protection. The vision encompasses a number of different levels of protection and a number of different characteristics of the system that are valuable to the public. The level of the various ecosystem services may increase or decrease. Ultimately, the public can be shown how these levels of protection and ecosystem services can be changed in the future, as compared to how they will change if nothing is done; i.e., a desirable future against an undesirable future of no action. In general terms, if dramatic action is not taken for the coast, the future is bleak. The vision represents the idea of greater protection for major population centers and nationally strategic assets. There will be varying levels of protection, maximizing the available use of river resources, managing estuarine gradients to provide ecosystem services and the strategic use of dredge material.

Dr. Reed indicated that the prioritization tool would be used to determine how the change from an undesirable future with no action to a future that seeks to achieve and fulfill the articulated vision can be worked out. The prioritization tool will be used to determine how to achieve a sustainable future, the order in which things should be done, and how different uncertainties in the future affect choices. At this time lists of projects, concepts and ideas are being assembled and a set of scenarios are being articulated about the future. Approximately 30 different scenarios lay out different plausible future conditions relating to sea level rise, subsidence, Mississippi River flow, and storm intensity and frequency. The projects and scenarios feed into the models and the effects of the individual projects under each of the scenarios are predicted. Each project can be looked at to determine how far it will go in reaching the articulated vision. The decision criteria are weighted and will be used to rank the projects, and then the constraints are applied. Constraints include funding, available sediment and river flow. A sequencing component is used in recognition of funding streams. Portfolios consisting of groups of projects will be produced. The projects in a portfolio are re-analyzed to look at conflicts and synergies. The portfolios are put back into the system models. At the end portfolios can be selected to achieve the desired outcomes.

Dr. Reed advised that the first step in the process is to scale the effects of each of the projects relative to the vision. The projects are ranked according to the various decision criteria. The constraints are applied to develop portfolios. The optimization process that applies the constraints selects a portfolio for each scenario. The frequency that projects are selected can be examined and explored. Portfolios can be selected and analyzed together. The plan is the list of projects with the outcomes that the projects will produce, along with schedules and costs laid out.

Mr. Estopinal suggested that human ecosystems and adaptations be more greatly emphasized. Mr. Losonsky pointed out that the process going from vision to plan must grapple with conflicting priorities. Dr. Reed clarified that this is handled in the weighting process. The two main components of the vision are protection and restoration. The differences in priorities among different groups can be explored. The weighting can be adjusted to determine the difference that it makes at the end. A series of feasible portfolios will ultimately be produced that could be implemented. A decision will be made as to which ones will move forward and be part of the plan.

Mr. Rinehart advised that this process is not holding up any current projects. The State has been asked for a plan and whether the projects are sustainable. Part of this effort is to articulate the vision, the projects that can be built with certain levels of funding and the outcomes associated with these projects.

Dr. Reed advised that some of the larger concepts, such as reengineering the mouth of the Mississippi River, are being developed into projects at the level of information required for input into the prioritization tool. Uncertainties can be accommodated within the tool.

Mr. Barry asked whether peer review would be done on the multi-criteria decision analysis (MCDA). Dr. Reed explained that the process will be transparent about the weights and an array of different weighting schemes will be used. Four experts in decision theory will assist with the MCDA. The technical advisory committees are working with OCPR on a regular basis. The Science and Engineering Board will probably come in quarterly. Mr. Barry commented that politics will be involved in the ranking of the values and the decision on selecting the portfolios. Mr. Rinehart stated that the key is transparency. Everyone will be able to see the types of decision criteria used and how the criteria are weighted. This will be an on-going process. The CPRA will continue to develop and update the tool and the models that feed the tool. The job of OCPR and the charge given to the Master Plan Delivery Team is to provide the best technical recommendation. The intention is to have a public interface for the tool.

Dr. Reed advised that at this time the team is working on how to incorporate population density into the decision criteria. The goal is to work through the models and decision criteria so that the analysis will be done in April. Mr. Rinehart further advised that part of the process is to look at funding scenarios. One of the intents is to use the process as a sales tool to secure Federal funding. Dr. Reed added that the heavy lifting on the analysis is the system models and the projects. Once there is a prediction for each scenario on the effects of each project, the decision criteria application is much simpler. The massive amount of data can be interrogated from different angles. If new funding is received, the database can be easily interrogated with the new funding stream.

Mr. Losonsky inquired about the members of the regional stakeholder groups. Mr. Rinehart replied that the groups were set up last year and targeted members of industry, parish, NGO's and community leaders. He added that the meetings are public.

John Kelly advised that he spent ten years working at Michoud and that most of this work was modeling. He stated that MCDA hides the complexity of the decision in the

weights. He stressed the importance of using the right numbers for the weights. He stated that MCDA is a tool that can be used well; however, it is entirely too easy to use it incorrectly and get the wrong answer. It could potentially give people a basis for confidence in a poor decision. He suggested that in this particular case economics should be used as inputs instead of political weights. The perspective of prioritization is wrong. He stated that the best way to make a decision is to analyze each project individually by looking at its cost-benefit. He added that complexity is being substituted for clarity. He urged everyone to reject this approach and to compel the USACE to release the relevant cost-benefit data and models.

Mr. Doody stressed the importance of giving population density and infrastructure a high weighting. Mr. Barry commented that he would personally prefer having the science and the politics separate; i.e., having a technical evaluation of the proposals and then letting the politics clearly get into the process, as opposed to less clearly. He stated that since the prioritization tool is the process that will be used that everyone should pay very careful attention as the process proceeds.

2. Lakefront Seawall Stabilization Project – Orleans Levee District

Kevin Spruell, Orleans Levee District (O.L.D.) Engineer Manager, advised that the length of the seawall is approximately 5.2 miles. Erosion is occurring behind the seawall steps due to wave action overtopping the steps. Two projects have been constructed that have helped with this problem:

- 1. The Mardi Gras Fountain Plaza is approximately 500 linear feet (LF) with pile supported stamped concrete paving from the back of the seawall steps to the back of the curb along Lakeshore Drive.
- 2. The Reach 2 area is approximately 3,200 LF with an 8-ft. wide pile supported erosion protection slab (sidewalk) abutting the back of the seawall steps and steel sheet pile (vinyl sheet pile in some sections) along the toe of the steps.

No additional improvements have been done to the remaining 4.5 miles of seawall. This presents a continuous maintenance problem and a general safety hazard. Maintenance personnel refill the voids that occur during every storm season.

Mr. Spruell presented three options for improving the remaining 4.5 miles of seawall: Option 1 builds on the Mardi Gras Plaza design and includes:

- Continuous pile supported stamped concrete paving from the back of the seawall steps to the back of the curb along Lakeshore Drive.
- Vinyl sheet piling behind the seawall steps to prevent sediment runoff under the steps.
- New storm drainage lines, structures and outfalls.
- Landscaping in planters with park benches.
- New lighting and relocation of existing lighting.
- Concrete bollards placed along the back of the curb to prevent vehicles from driving onto the plaza.

Cost estimates for Option 1 are based on a set of plans put together by Design Engineering, Inc. (DEI) in 2005. Major construction items include replacement of drainage pipe and structures, timber support piles, vinyl sheet pile, 7.5-inch thick colored concrete slab, concrete bollards, planter boxes and landscaping, lighting, mobilization, embankment, and site preparation. The total estimated cost for 4.5 miles of construction is approximately \$29 million. The total estimated cost for the erosion protection features (without drainage improvements, bollards and landscaping) is approximate \$22.3 million.

Option II is a continuation of the Reach 2 project and includes:

- An 8-ft. wide pile supported concrete erosion slab abutting the seawall steps.
- Steel or vinyl sheet pile at the toe of the seawall steps.
- Drainage Improvements.
- Stability anchor structure to reinforce the seawall.

Cost estimates for Option II were derived from the plans and the completed construction cost of the Reach 2 Project in 1999. Major construction items include a cofferdam, steel or vinyl sheet pile, timber piles, concrete, anchor structure, drainage improvements, mobilization, embankment and site preparation. The total estimated cost for 4.5 miles of construction is approximately \$27 million. The total estimated cost for the erosion features (without drainage improvements and anchor structure) is approximately \$21 million.

Option III is based on an in-house O.L.D. study to determine a sufficient project for recommendation and includes:

- A 12-ft. wide pile supported concrete slab (sidewalk) abutting the back of the seawall steps.
- Vinyl sheet pile at the back of the steps (instead of at the toe of the steps which would require a cofferdam for construction)

Major construction items include vinyl sheet pile, timber support piles, concrete slab, excavation behind the seawall in areas where rip-rap was placed, mobilization, embankment and site preparation. The estimated cost for the 4.5 miles of construction is approximately \$9 million.

Additional items for consideration are:

- Safety lights along the seawall at a cost of approximately \$4 million
- Uniform drainage improvements at a cost of approximately \$2.7 million

Mr. Spruell pointed out that engineering design, contract management and ancillary costs were not included in the figures provided and are anticipated to add approximately 20 to 30 percent to the stated costs. He clarified that Option II was actually constructed, the O.L.D. has the plans prepared by DEI for Option I, and Option III is a staff recommendation for constructing what may be necessary at this point. Plans would have to be prepared for Option III should this option be selected.

Mr. Wittie commented on the ability of the seawall to dissipate wave energy that would otherwise erode the shoreline. At the time the seawall was constructed 13 steps were visible. Due to settlement and sea level rise, only about seven steps are now visible. He suggested that the plans for a sidewalk area include a five to eight percent slope to compensate for the loss in elevation. Mr. Spruell explained that at this point the staff was only looking at the erosion issue. Raising the elevation of the seawall by adding steps or other methods would considerably increase the costs presented. Mr. Wittie recommended that if the levee district is going to incur the expense of solving the erosion problem, it should also try to recover some of the elevation. Mr. Estopinal concurred with Mr. Wittie and stated that Option III seemed to be what needs to be done. Mr. Doody commented on the need to solve the erosion problem, but asked that some weight be given to appearance since this area is frequented by the public.

Mr. Estopinal suggested that an RFQ be issued for an engineering team to present recommendations and evaluations on a solution. Mr. Jackson asked whether DEI, the firm retained by the Orleans Levee District for prior engineering work on the seawall, is currently under contract. Mr. Estopinal noted that DEI prepared the plans for Option II; however, the plans are owned by the O.L.D. He also noted the high estimated construction cost of Option II. He asked whether the contract with the designer (DEI) of Options I and II would allow the firm to make adjustments.

Walter Baudier, President of DEI, stated that DEI has been looking at the seawall for about 20 years. He advised that DEI has a contract in its legal opinion and performed under this contract as late as 2006. He stated that he understood that the Board wishes to reduce the scope and cost of the project so that it fits within a reasonable budget. He commented on the need to address drainage in the project. He advised that DEI prepared two sets of plans for the reach between Franklin Avenue and Leon C. Simon Boulevard. The first set of plans was bid and the bids were too high. The plans were modified to make the project more simplistic and reduce the cost. The project was rebid using the second set of modified plans with bids due the day after Hurricane Katrina. DEI also prepared plans for the reach between the Mardi Gras Fountain and the Lighthouse (Reach 1). Since this time Lakeshore Drive was repaired as a result of Hurricane Katrina and a new lighting system was installed along Lakeshore Drive. He commented on the loss of sidewalk behind the seawall in Reach 2 from overtopping caused by Katrina. He stated that Lakeshore Drive was raised at Rail Street to include the levee section at that location and to improve the site line and a floodwall was constructed at Rail Street, which contributed to the high cost of the Reach 2 project. A different set of circumstances existed at the Mardi Gras Fountain area. He stated that each location must be looked at for the circumstances in that area. He offered to work with the O.L.D. staff to modify and rebid the plans, which are about 84 sheets.

Mr. Estopinal offered a motion for the SLFPA-E Legal Counsel, Robert Lacour, to examine the documents and present an opinion to the Authority at the next Operations Committee meeting as to whether or not the contract is still in full force. He stated that if the contract is in full force, then the Authority could proceed; however, if the contract is not in place, he suggested that a RFQ be issued. Mr. Wittie seconded the motion.

Mr. Pineda asked for an analytic or scoping-type report about the extent of damage to the seawall for a clearer understanding of the overall problem and the future if no action is taken. Mr. Baudier noted that the seawall was originally constructed at elevation +9-ft.; however, it is now at elevation +6.5 to +7-ft. Lake Pontchartrain at the time the seawall was constructed was at elevation zero; however, it is now at elevation +1.5-ft. The constant overtopping is a result of the differential in these elevations between 1930 and today. He stated that over time this situation will be detrimental to the seawall. Large voids are occurring behind the seawall. He offered to review DEI's extensive documents with Mr. Pineda. Mr. Pineda pointed out that there would be a need to tie the problem and the potential solution into a document should FEMA mitigation funding or other funding sources be sought.

Mr. Jackson concurred that a determination should be made about whether a commitment to DEI exists, and if not, an RFQ should be issued. He urged potential selection committee members to consider DEI's experience and investment of time on the seawall. He added that he would like the opportunity for himself, other engineers on the Board and the Regional Director to have input in the identification of the problem and the solution. He recommended that the levee district continue to seek Federal funding for the cost of this project. Mr. Losonsky commented that he would like the Authority to receive the benefit of the institutional knowledge, rather than having another engineering firm go through the full learning curve. Mr. Doody noted that attempts have been made to use the costs of the seawall as a part of the local cost share.

A motion was offered by Mr. Wittie, seconded by Mr. Barry and unanimously adopted by roll call vote, to amend the agenda to include the consideration of a motion to obtain a legal opinion on the status of the DEI contract and the possible issuance of a RFQ.

Mr. Jackson clarified that the motion would first confirm whether or not a valid contract is in place. If a valid contract is not in place, then the Authority would proceed with the issuance of an RFQ. Mr. Pineda stated that he was hesitant to move to design when he did not understand the full picture of the problem. Mr. Jackson agreed with Mr. Pineda.

Mr. Doody clarified the motion is to advertise for an RFQ after consulting with the Authority's attorney. If the Authority's attorney states that a valid contract is in place, then it would move forward with DEI. The motion was adopted with five commissioners voting in favor and three commissioners voting against the motion.

3. Ability of IHNC canal wall to handle overtopping of the Surge Barrier during <u>100 and 500 year storm surges – U.S. Army Corps of Engineers</u>

John Greishaber, Chief of Execution USACE HPO, explained that he appeared before the Board several months ago and that concern was expressed about the ability of the IHNC corridor to contain all of the water that would be washing over the IHNC surge barrier, as well as rain falling in the corridor and the water being pumped into the corridor. He stated that the IHNC basin and its levees and floodwalls are part of the Hurricane and Storm Damage Risk Reduction System (HSDRRS) as a secondary line of defense. The IHNC basin will serve as a retention basin during storm conditions. The retention volume from pumping, rain and overtopping during an event will increase the stages within the basin. The concern that was expressed related to how much the stages would increase. He explained that the IHNC basin is a totally contained system. The Seabrook Gate is under construction and a cofferdam will be in place shortly, which will provide protection from a 100-year storm. The IHNC surge barrier will allow some overtopping during a 100-year event.

Mr. Greishaber showed a slide of the IHNC storage basin and explained that the storage basin is strictly within the lines shown and the closures at end each; i.e., the surge barrier and Seabrook Gate. The navigation gates at Seabrook and the surge barrier will be closed as a storm approaches. The basin will start at an elevation of approximately +3-ft. with a totally closed system. Mr. Jackson commented on the potential to store water in the marsh areas. Mr. Greishaber advised that the USACE does not have an issue as far as containment ability.

Mr. Greishaber explained that for rainfall the USACE addressed a 10-year event (10% event) and used that in association with the 100-year surge and wave event (1% event). The USACE is assuming the 10-year event and the surge happening simultaneously. He explained that a 100-year rainfall event would add about two-tenths of a foot; however, it would not make a difference because the pumps would already be pumping as fast as they can be pumped. The USACE used the 10% (10-year) rainfall flow to pump stations taken from calculations from adjoining polders to address the pumping capacity. The pumping capacity was increased by 25 percent to get to 2057. He commented that everything was brought out to 2057 and that 25 percent was just arbitrarily added to the pumping capacity. The precipitation from the rainfall event is eight-tenths of a foot; therefore, 250 million cubic feet will be added. He cautioned that the USACE designed for a 100-year event in accordance with its authorization. The USACE designed resiliency for a 500-year event.

Mr. Greishaber advised that the entire 152 storm suites were investigated using all future conditions (2057), which included assuming the Lake Borgne Surge Barrier height at +24.5-ft., normalizing the height of Seabrook at +16-ft., and adding a 1-ft. relative sea level rise. Most of the 152 storms resulted in no barrier overtopping; however, 15 resulted in overtopping larger than the 1% assumed rate that is in the 100-year design. Ten out of the 15 storms produce greater than 1% surge. The events exceeding the design capacity range from approximately the 600-year event, which is outside of the USACE's design, to the 10,000-year event. He stated that the system has a tremendous amount of capacity for protection well beyond the 100-year authorization. At the Board's request, the USACE went storm by storm to determine the impact of the mega-storm (10,000 year storm) all the way down to the 500 and 100-year storms, which are normally used. Mr. Barry clarified that none of the storms that overtop are 100-year events. Mr. Greishaber advised that this was correct.

Mr. Greishaber explained that the Joint Probability Method with Optical Sampling (JPM-OS) is used to determine the stage frequency relationship based upon the maximum water levels per storm for a point. One hundred fifty-two interior IHNC stages translated to a 1% (100-year) and 0.2% (500-year) stage for the JPM-OS method. Mr. Greishaber clarified that the 152 storms were used to develop the 100-year and 500-year storm designs. He cautioned that the USACE is not saying that there is some capacity

beyond the 100-year event and reiterated the USACE's authorization for the 100-year event.

Mr. Greishaber reviewed the wind setup. The USACE used a 77 mile per hour (mph) wind for a 1% (100-year) storm and an 88 mph wind for a 0.2% (500-year). The effect of the wind setup is that the water will be one-half a foot higher on one side than the other side due to the wind driving the water. Mr. Barry noted that a 77 mph wind seemed low for a 100-year storm. Mr. Greishaber explained that this is the speed of the wind along the water.

Mr. Greishaber explained that adding 2-ft. due to overtopping, 1.6-ft. due to pumping for a 10-year rain event, 0.8-ft. due to rainfall during a 10-year event, and 0.5-ft. for wind setup to the closure elevation of +3-ft., the stage during a 100-year event comes to +7.9-ft. The stage during a 500-year event is +9.8-ft. The floodwalls are designed for an elevation of +12-ft. The actual hurricane protection design is for water to the top of the wall. Splash guards are an armoring issue to keep water overtopping the wall from eroding the back side of the wall. He stated that the USACE took the full hydrostatic pressure of water to the top of the wall and checked the foundation and/or levee along the corridor.

Mr. Greishaber was questioned about post-Katrina work on the IHNC floodwalls. He explained that splash pads were put in place along some of the floodwalls. The USACE will be letting contracts in December to do some additional soil mixing. Some soil mixing had previously been done. Additional wells and sheet pile will be put in place. Some wells and sheet pile have already been put in place. The USACE established the entire corridor back to the original criteria after Katrina. In December the entire corridor will be brought up to the new 100-year criteria. This work will be finished June 1, 2011.

Mr. Greishaber stated in conclusion that the USACE has established that the walls can hold an elevation to the top of the wall and that the 500-year (resiliency) storm does not get water to the top of the wall. There are some storms greater than 500-years, which are outside of the USACE's authorization. The USACE looked at those numbers for the Board; however, there are not that many of them.

Stradford Goins stated that he had asked about the assumptions of the models, which he had not looked at, nor did he know if anyone on the Board had looked at them. The information provided by the USACE assumes that the models are correct. He questioned issues dealing with the models. He stated that if the modeling is right, then we have a decent system; however, if the modeling is wrong, we don't have the system that we think that we have. This is the reason that it is imperative that this be checked. He stated his concern about how the distribution of storms was presented in the modeling and how the 152 storms affected the coast of the metro New Orleans area. He commented that the closely modeled storms on our coastline are what really affect our coast. The 100-year storm model is not something set in stone. It is a dynamic model that most hydrologists estimate should be updated every ten years. Therefore, this number should be re-investigated every ten years. He stated that it was irresponsible to set a hard number now for fifty years in the future.

Mr. Goins pointed out that subsidence varies across the metropolitan area. For example, the south shore of Lake Pontchartrain, New Orleans East and Lakeview subside substantially faster than other parts of metropolitan New Orleans. He stated that the estimate that he saw was .8-ft. per decade, which over a fifty-year life span is 40 inches. He stated that the USACE is assuming a certain flow to determine the numbers that it used for surge barrier overtopping. If the flow used by the USACE is incorrect, there will be a lot more water coming in and a failure mode that the USACE has not considered. He commented that a known storm event will eventually come and cause failures; however, the USACE states that it is not authorized for it. He stated that the USACE has the data showing an equivalent column of water 20 to 30-ft. in the corridor. He stated that no one knows at what point the water will come, since it depends on the flow and the column of water. He noted that a failure mode that happened during Hurricane Katrina was the overflow of water which created eddies that caused large scour holes. The trajectory of the water coming over the wall could be higher and scour holes could be created beyond the limits of the splash pads. He stated that his understanding is that a severe, higher intensity storm could bring 15 to 25 inches of rainfall, which would surpass the safety factor or cushion. He added that vertical height cannot be added to the walls, that there will be subsidence and that storms are getting more intense. These conditions are creating a differential for overtopping. He felt that a system is being endorsed that is going to fail.

Mr. Doody clarified that Mr. Goins was suggesting that the Authority have someone look over the models to verify the input. Mr. Goins advised that this was correct. He added that the statistics in general and the statistics on what is the true 100-year storm should be done, and that the assumptions of the modeling should be looked at.

Mr. Losonsky recommended that the consideration to hire a modeler to review the USACE's models, assumptions and boundary conditions, and to perform the appropriate statistical analysis be reviewed by the Operations Committee.

Mr. Greishaber explained that the model was reviewed inside and outside of the USACE. The model was reviewed by the National Academy, a number of the USACE's critics, and Battelle, and had IPET involvement. It is the cornerstone for the whole project. He added that the USACE tried to make it as conservative as possible and brought everything as though it was coming to New Orleans.

Mr. Jackson asked Mr. Goins was his concern about the calculations relative to stagevolume relationship within the basin or about the selection of the storms. Mr. Goins stated it was a combination of all these issues. He stated that he was not discounting that any of these things are right or wrong, but just that they needed to be looked at.

Mr. Barnes expressed a concern about whether a sufficient number of different types of storms, dealing with size, spacing and direction, were run on the model. He noted that the main difference with rain amounts is due to the speed of the storm. He suggested reviewing the USACE's data before engaging a consultant for the recommended work. Mr. Greishaber clarified that the storms were all fabricated and that the level of review also went into the number of storms. He pointed out that this was not done by the USACE, per se, but by a consortium.

Mr. Barry stated that the USACE has a 90% confidence level. He asked how much greater are the storms to get the confidence level to a standard deviation equaling 95.7% or more. Mr. Greishaber replied that the USACE's hydraulics people are working on this issue. He commented that the USACE has been open and transparent and tried to answer every question brought up by the Board. He noted that some of the questions are expensive as far as manpower and resources to answer. Models have to be redeveloped and other things have to be redone that are outside of what is normally done. The USACE has guidelines that it must follow; however, it wants the Board to feel comfortable. Therefore, if the Board asks this question, the USACE must go to the developer, since it was not developed in the HPO. Mr. Barry stated that he understood that there has been criticism of the USACE from several sources on using the 90% confidence level. Mr. Greishaber stated that the Board's concerns are very important.

Mr. Turner pointed out that the 100-year target has nothing to do with safety or anything other than the National Flood Insurance Program (NFIP). It is unfortunate that when Congress wrote the language to direct the USACE to build the HSDRRS, they based it on the NFIP 100-year level of protection. The National Committee on Levee Safety has stated that this is an inappropriate way for the nation as a whole to determine what needs to be done to provide protection.

Mr. Goins stated that certain assumptions, such as the radius of the storm, will result in a significant difference in storm surge. These are the types of assumptions which must be investigated in the nuts and bolts of the modeling. He stated that if the assumptions are good, then you have a good model; however, if the assumptions are poor, you have a poor model.

Mr. Turner commented that modeling is used to try to mimic reality; therefore, the results must be tempered with engineering judgment. He stated that the SLFPA-E has looked at the basic process that has been used to develop the elevations required by the system. Taylor Engineering, Inc. was selected for this review because of its experience. A hydraulics workshop was developed, which was attended by some of the Board members. Much of the information presented at the workshop had to do with the earlier steps on how the modeling was put together. He suggested that committee members should be prepared to discuss how deep it would like to go in the investigation. He further suggested that the Authority tap into the reviews and on-going work being done by others on the various issues. He stressed the importance of doing a re-assessment and re-evaluation every ten years or perhaps less due to environmental conditions, such as sea level rise, subsidence and changes in the coast.

Mr. Jackson stated that he was perplexed that at this stage that the Board is still concerned about work that had been done by numerous people, including the National Academy peer review on predicting tidal storm surges based on various hurricanes. He stated that there should at least be confidence that the projections of the tidal surges for various storms are in the neighborhood of where they will actually occur with a storm that is identical to the one that has been put into the model; that is, the arithmetic is correct. There seems to be confusion at this meeting as to whether or not the questions are relative to the tidal surge model or the calculations (model or engineering calculations) on the relationship between the volumes of water within the basin versus what the basin can contain at what level, which has not been scrutinized to the level that the tidal surge model has been scrutinized. He stated that he would support a review of those calculations. He added there seems to be a tremendous buffer that the USACE has not used because it states that it is not necessary. The wetlands area could be used to contain some of the water to keep the level in the basin lower. He stated that it is beyond the SLFPA-E's ability and late to begin looking again at the tidal surge modeling, which has been questioned and reviewed enough. Therefore, the assumption should be made that the model predicting the tidal surges is correct at this point and the focus should be on how that relates to the concerns about the IHNC corridor and the methodology used to predict the maximum water level in the basin.

Mr. Pineda concurred with Mr. Jackson that the predictive water surface models have been thoroughly vetted in various forums. He suggested that Mr. Losonsky's recommendation be referred to the Engineering Advisory Committee.

John Kelly commented that numerical models can be elegant in their details and accuracy; however, they can also be completely wrong. He stated that it is difficult to audit someone else's model. In the space program in certain cases where the results were of high value, there would be two independent efforts. He recommended that a completely independent effort is a much better approach. The independent effort does not have to be funded at the same level. He commented on the Monte Carlo analysis run by the USACE and that perhaps not a big enough population of storms was used for predicting 100-year and 500-year events. He stated that he understood that NOAA has a population of over 1,000 hurricanes in their model and suggested that if there was a way to run that larger population through the model, it would a basis for greater confidence in the statistical results, particularly in terms of infrequent events.

Robert Jacobsen with Taylor Engineering, Inc. advised that his firm was retained by the SLFPA-E to assist the Regional Director with understanding the USACE's modeling. He described the current modeling work being done by Taylor Engineering and offered to assist with answering questions about the model from his independent reviews of the IPET report, the ASCE report, the FEMA report and the CPR report.

Mr. Doody advised that this issue would be referred to the Engineering Advisory Committee at its next meeting.

Mr. Goins recommended that the Authority obtain the USACE's input on the full 152 storms. Mr. Greishaber explained that this information can be provided; however, it is an enormous amount of information. Mr. Doody requested that Mr. Goins speak to Mr. Greishaber about obtaining this information.

Coastal Advisory Committee Report:

Carlton Dufrechou commented that the vision aspect of the CPRA prioritization tool is excellent. He noted, however, that computer models are only as good as the data going into the model. He stated that his biggest concern is the ultimate outcome of the model.

He stated that benefit-cost (BC) ratio is proven, known and recognized throughout the country as a way of leveling. He strongly recommended that everyone continue looking at the BC ratios.

Mr. Dufrechou reported that the Coastal Advisory Committee (CAC) met on September 21st and reviewed 19 projects. Motions have been placed on the Board agenda relative to two of the projects reviewed by the committee. The MRGO Ecosystem Study Report is ready for public release; however, it is being held up because of cost share challenges between the Federal government and the State. He stated that the tentative recommendations of the report have a lot of validity and a strong potential to re-create a self-sustaining coast. He suggested that the Authority consider a resolution asking the U.S. Government to direct the USACE to release this report to the public as soon as possible and to request the State to consider a letter of intent to cost share on the project while reserving the opportunity to negotiate the cost share for the future. The second resolution is relative to the St. Bernard Parish Emergency Erosion Control Proposal, which is an oyster reef project that re-establishes the natural ecosystem and coastal line of defense. This proposal is endorsed by the CAC.

EXECUTIVE SESSION:

- 1. Vincent Bruno versus the Orleans Levee District and its Board of Commissioners, et al, CDC No. 2001-15465, Div. K, Orleans Parish.
- 2. Union Title Guarantee Company, Inc. by and through its Court-Appointed Liquidators v. Board of Levee Commissioners of the Orleans Levee District, 25th JDC for the Parish of Plaquemines, Div. A, No. 52-856.
- 3. Board of Commissioners of the Southeast Louisiana Flood Protection Authority-East on behalf of the Orleans Levee District v. Louisiana Department of Natural Resources, 19th JDC for the Parish of East Baton Rouge, Sec. 22, No. 562122.
- 4. Report by SLFPA-E Counsel on legal requirements for the auction of surplus vehicles and other items.

A motion was offered by Mr. Barry, seconded by Mr. Wittie and unanimously adopted, for the Board to convene in Executive Session to consider the items listed on the Agenda. The Board convened in Executive Session at 1:10 p.m.

A motion was offered by Mr. Barry, seconded by Mr. Wittie and unanimously adopted, for the Board to reconvene in regular session at 1:45 p.m.

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

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

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) follow the recommendation of legal counsel provided in Executive Session in the litigation entitled *Vincent Bruno versus the Orleans Levee* District and its Board of Commissioners, et al, CDC No. 2001-15465, Div. K, Orleans Parish.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

COMMITTEE REPORTS:

Finance Committee: Chairman Stephen Estopinal reported that the Finance Committee met on October 7th and discussed the funding of the strategic communications program planning. The Committee requested a presentation on this program, which will be provided by the consultants at the next Board meeting.

Operations Committee: Chairman Louis Wittie reported that the Operations Committee met on October 7th and considered the following items:

- Lakefront Seawall Stabilization Project A presentation was provided by Design Engineering, Inc. (DEI), which included plans previously prepared for the O.L.D. Mr. Pineda pointed out that if Federal funding is being sought for this work, a report comprehensively describing the problem will be required.
- Refurbishment of Franklin Administration Building Upgrades to the building and air conditioning system were discussed.
- Lakefront Airport Sewer Line Replacement The sewer line crosses a levee that is being brought to the 100-year level (LPV 105.01). A solution has not yet been determined. Due to the cost to re-route the line (approximately \$800,000), other optioned are being considered. Lakefront Airport is an asset of the O.L.D. Non-Flood Division.
- Outfall Canal Scour The O.L.D. Executive Director will issue task order to analyze and provide an assessment of the scour situation.

Engineering Advisory Committee: Chairman Thomas Jackson advised that the Engineering Advisory Committee did not meet in October; however, several actions have taken place since the last meeting. He reported that he, Robert Turner and Stevan Spencer participated in a telephone conference with Halcrow, Inc., during which the progress of the peer review on the outfall canal remediation work was discussed and the details of the outfall canal wall calculations on the safety factor and maximum water surface elevations were reviewed. The USACE consultant's numbers up to this point seem consistent with Halcrow's calculations. The concern that all of the calculations by the USACE's consultant, which are being verified by Halcrow, and the remediation work that will be done are based on existing canal cross sections was discussed. Mr. Jackson suggested that the SLFPA-E and the Sewerage and Water Board (S&WB) jointly request the USACE to provide a template for use when the canals are cleaned out, which will confirm that the stability of the adjacent levees will not be impacted. The adoption of a resolution on this issue will be discussed at the next Committee meeting. A follow up meeting with held with representatives of the S&WB

during which the template for future clean-outs and canal cross sections for current and future pumping needs were discussed. Mr. Jackson further explained that the safe water elevation will be set at +8-ft. for all three outfall canals. A USACE representative had mentioned at a meeting that the containment along the canals should be lowered to about a foot above the safe water elevation. This issue will be discussed at the next committee meeting.

CPRA/Governmental Affairs: John Barry advised that the next CPRA meeting would be held in two weeks. He explained that the Oil Spill Commission held a hearing in Washington, DC, and that the Commission appears to want to go beyond the spill and address coastal restoration issues. The White House has named Lisa Jackson as the head of a task force to deal with coastal issues. It has been proposed that 80 percent of the BP fines go to the coast; however, this proposal would require legislation. The White House supported the proposal in principal, but did not come out with a number. Mr. Barry advised that he met with Lisa Jackson and Janet Woodka with the EPA, as well as Commissioners on the Oil Spill Commission.

REGIONAL DIRECTOR'S REPORT:

Robert Turner, Regional Director, reviewed the Regional Director's Report (copy appended to minutes). Mr. Turner discussed the annual operations and maintenance performed by the USACE on the MRT (Mississippi River and Tributaries) Project. The USACE basically notifies the levee districts about this work through a right-of-entry request. The USACE has been requested to provide additional information when this type of work takes place.

Mr. Doody advised that it was initially stated that there was a need to acquire 1,500 pieces of real estate in order to complete the 100-year level of protection system. At this time there remains only one piece of real estate to be acquired. He commended Irys Allgood for her work in handling these real estate matters.

RESOLUTION #10-21-10-03 - MRGO ECOSYSTEM STUDY REPORT

Mr. Doody explained that there is a disagreement between the USACE and the State relative to the cost share for the MRGO Ecosystem work. It was pointed out that a letter of intent from the non-federal sponsor is usually made a part of the report, which is otherwise complete. The USACE is being requested to release the report while the cost share issue is being worked out. Mr. Barry added that this issue could be raised at the next CPRA meeting.

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

WHEREAS, construction of the Mississippi River Gulf Outlet (MRGO) in the late 1950s and early 1960s significantly accelerated the loss of southeast Louisiana's coast; and

WHEREAS, the dredging of the channel bisected 40 miles of coast directly destroying 20,000 acres (31 square miles) of wetlands and compromising our region's natural lines of defense against hurricanes, such as marsh land bridges, natural ridges and wetland forest; and

WHEREAS, the MRGO changed water flows and fundamentally altered hydrology by cutting through the Bayou La Loutre ridge and adjacent marshes allowing salt water to intrude further inland acting as a cancer progressively killing brackish marshes and freshwater swamps and forest; and

WHEREAS, since construction, the MRGO adversely impacted almost 618,000 acres (922 square miles or 1/7 of coastal Louisiana); and

WHEREAS, the MRGO created a new pathway for storm driven tides/surges and was dubbed a "superhighway for storm surge" because of its influence in destroying coastal barriers and increasing storm surge intensity and duration; and

WHEREAS, Section 7013 of the Water Resources Development Act (WRDA) of 2007 authorized a plan to physically modify the MRGO and restore the areas affected by the navigation channel; and

WHEREAS, the MRGO was plugged permanently in 2009 at Bayou La Loutre and recent data indicates that salinity levels above (inshore) of the plug and in western Lake Borgne have dropped significantly; and

WHEREAS, since the permanent plugging of the MRGO tidal exchanges and flow patterns appear to be replicating historic (pre-MRGO) conditions, and overall, the changes suggest the initial stages in reestablishment of a self sustaining coast; and

WHEREAS, Section 7013 of WRDA 2007 also authorized a plan to restore natural features of the coastal ecosystem that reduce or prevent damage from storm surge; and

WHEREAS, the MRGO Ecosystem Study has been underway for several years and the draft report recommends restoration of about 60,000 acres of coastal wetlands, 70 miles of shoreline protection, and freshwater diversions; and

WHEREAS, the draft report is ready for public review/comment but is being held by the U.S. Army Corps of Engineers because of a cost sharing dispute with the State of Louisiana; and

WHEREAS, implementing the recommendations of the MRGO Ecosystem Study are absolutely critical to restore a robust coast to protect and sustain the greater New Orleans region and southeast Louisiana for the future.

BE IT HEREBY RESOLVED, that the SLFPA-E request the Louisiana Congressional Delegation and President Obama to direct the Corps of Engineers to release the MRGO Ecosystem Study Report for public review/comment immediately.

BE IT FURTHER RESOLVED, that the SLFPA-E request the State of Louisiana to issue a Letter of Intent to sponsor MRGO Ecosystem projects while reserving the right to continue to negotiate agreeable cost sharing.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

RESOLUTION #10-21-10-04 – ST. BERNARD PARISH EMERGENCY EROSION CONTROL PROPOSAL

It was noted that Bill Kappel provided a presentation on this proposal to the Board at its September meeting.

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

WHEREAS, the oil spill resulting from the Deepwater Horizon (BP Well MC 252) accident in the Gulf of Mexico is the largest recorded in U.S. history; and

WHEREAS, oil from the spill impacted significant reaches of the coast of Southeast Louisiana; and

WHEREAS, this oil destroyed coastal wetlands and accelerated shoreline erosion along reaches of the eastern perimeter of the Biloxi Marsh; and

WHEREAS, historically, naturally occurring oyster reefs in the Biloxi Marshes protected nearby coastal shoreline and wetlands from erosion.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Control Authority-East supports the St. Bernard Parish Emergency Erosion Control proposal to recreate oyster reefs to protect critical reaches of the Biloxi Marsh.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

RESOLUTION #10-21-10-05 – AUCTION OF SURPLUS ITEMS

Robert Lacour, SLFPA-E General Counsel, stated that it was his recommendation after review of the appropriate laws that a resolution be adopted for the Orleans Levee District to hold an auction and that each of the other levee districts may contribute items to the auction. In addition, he recommended that an employee of each of the levee districts sign an affidavit listing all of the items, the estimated value of each item and the fact that all of the items are surplus. Mr. Barry added that due to legislation that was passed last year that the Orleans Levee District should stipulate that the items to be auctioned are from the inventory of the Flood Protection Division.

Mr. Doody pointed out that assets could be transferred between the levee districts. Mr. Lacour added that an agency may donate or lend items to another agency that is

involved in public safety. Mr. Doody asked that the three levee districts confer and determine that the items to be sold by auction are not needed by the other levee district.

On the motion of Mr. Barry,

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

WHEREAS, the Orleans Levee District intends to sell certain items by auction that have been determined to be surplus; and

WHEREAS, the East Jefferson Levee District and Lake Borgne Levee District wish to use the aforementioned opportunity to sell certain items that have been determined to be surplus by each of the levee districts.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the sale of surplus items by the East Jefferson Levee District (EJLD), Lake Borgne Basin Levee District (LBBLD) and the Orleans Levee District (O.L.D.) by an auction to be held by the Orleans Levee District, subject to the following requirements:

- A notarized affidavit shall be executed by the Executive Director of each of the levee districts listing the items to be sold by auction, an estimated value of each item and certifying that the items listed are surplus.
- The affidavit for the Orleans Levee District shall stipulate that the surplus items to be sold by auction are from the inventory of the Flood Protection Division of the Orleans Levee District.

BE IT FURTHER RESOLVED, that the Executive Directors of the EJLD, LBBLD and O.L.D. are hereby authorized to execute any and all other documents for his/her levee district that may be required to accomplish the above.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None

ABSENT: Mr. Goins

RESOLUTION #10-21-10-06 - APPROVAL OF LEGAL INVOICES

Mr. Barry explained that the standard practice for the future will be the placement of an item on the Board agenda for the approval of legal invoices, rather than scheduling a Legal Committee meeting for this sole purpose. The legal invoices are reviewed and approved each month by the appropriate Executive Director of each levee district, the SLFPA-E Regional Director and the SLFPA-E General Counsel. The Legal Committee will meet should anyone have a legal issue to discuss or should any member of the Committee wish to meet.

On the motion of Mr. Barry, Seconded by Mr. Wittie, the following resolution was offered: WHEREAS, the legal invoices submitted to the Southeast Louisiana Flood Protection Authority-East (SLFPA-E), East Jefferson Levee District, Lake Borgne Basin Levee District and Orleans Levee District listed on the spreadsheet entitled "Legal Invoices Approved on October 21, 2010", have been reviewed and approved by the appropriate levee district Executive Director, the SLFPA-E Regional Director and the SLFPA-E General Counsel, Robert Lacour; and

WHEREAS, the aforementioned invoices were submitted to the members of the Legal Committee for review.

BE IT HEREBY RESOLVED, that the legal invoices listed on the spreadsheet entitled "Legal Invoices Approved on October 21, 2010" are hereby approved.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

Status report on \$500,000 and \$900,000 Technical Assistance Community Development Block Grants.

Robert Turner advised that the original intent of the \$500,000 Community Development Block Grant (CDBG) was to obtain additional staffing and to retain consultants to assist with the HDRRS review process, which is coming to an end. The SLFPA-E requested the State to allow the use of a portion of this funding for an employee to assist with GIS applications and for the remainder of the funding to be used for the operations and maintenance studies to be conducted by AECOM for the three levee districts. The task orders with AECOM are expected to be signed within the next two weeks.

Mr. Turner explained that one of the original items listed for funding in the \$900,000 CDBG was the I-Gap Analysis. This work has largely been done by the USACE and an independent review is being conducted by Halcrow, Inc. The SLFPA-E has requested that the funding originally dedicated to the I-Gap Analysis be used to fund the development of the Levee Information Management System (LIMS) in a GIS environment. This will assist the SLFPA-E with the up-coming deluge of information, such as, operations and maintenance manuals, as-built drawings, etc., that will be provided as the HSDRRS is completed. The task order with Taylor Engineering on the first phase of the Compartmentalization Study will be signed shortly.

Mr. Turner advised that a consultant has been retained on an as-needed basis to assist with grant administration.

RESOLUTION #10-21-10-07 - CDBG – AMENDMENT OF CEA

It was pointed out that the resolution approves the use of a portion of the \$500,000 CDBG funding to employee a GIS employee. The approvals needed in connection with

the proposed GIS work under the \$900,000 CDBG will be addressed next month. Mr. Pineda commented on the equipment and software that will be needed in employing GIS applications. Mr. Turner advised that the individual that will be employed should have GIS experience at a fairly high level so that he/she will be involved in the GIS planning and management process.

On the motion of Mr. Barry,

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

WHEREAS, the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) is the recipient of a Grant under the State of Louisiana Community Development Block Grant (CDBG) Disaster Recovery Program; and

WHEREAS, by Resolution No. 09-16-10-03, the Board approved the substitution of Engineering Studies for the levee districts in lieu of the work plan originally submitted to the State of Louisiana Office of Community Development; and

WHEREAS, it is the intent of the SLFPA-E to utilize the remaining funding in the SLFPA-E Urgent Projects Program Technical Assistance Grant (CDBG Grant Number 677085) for the funding of the salary for a GIS employee; and

WHEREAS, a Cooperative Endeavor Agreement (CEA) was executed between the State of Louisiana Office of Community Development – Disaster Recovery Unit and the SLFPA-E implementing the grant under the CDBG Disaster Recovery Program; and

WHEREAS, an amendment to the CEA is required for the aforementioned substitution and usage of the Grant funds.

BE IT HEREBY RESOLVED, that the SLFPA-E approves the use of the subject grant funding for the funding of the salary for a GIS employee.

BE IT FURTHER RESOLVED, that the SLFPA-E President is hereby authorized and to execute an amendment to the Cooperative Endeavor Agreement for the purposes stated herein, and to sign any and all documents necessary to accomplish the above.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky,

Mr. Pineda and Mr. Wittie

NAYS: None ABSENT: Mr. Goins

To discuss the need for the Board or appropriate committee to evaluate the scopes of work and deliverables in consulting contracts which fall within the <u>\$50,000 signatory authority of the Regional Director.</u>

Mr. Losonsky advised that in the interest of time that he would withdraw Item XIII.A.7, which was added to the agenda, and that this issue would be brought to the Finance Committee for discussion.

RESOLUTION #10-21-10-08 – EAST JEFFERSON LEVEE DISTRICT-CAPITAL OUTLAY PROGRAM FUNDING REQUEST

Fran Campbell, East Jefferson Levee District (EJLD) Executive Director, advised that the draft resolution was prepared based on last year's request. The first and third items listed on the draft resolution are to be deleted since they deal with interior drainage issues and have been placed in Jefferson Parish's Capital Outlay Request. The estimate for the Safehouse/Consolidated Operating Facility was revised to \$20,720,877. Mr. Wittie offered a motion, which was seconded by Mr. Losonsky and unanimous adopted, to revise the resolution to reflect these changes.

On the motion of Mr. Wittie,

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

WHEREAS, the State of Louisiana COP funding applications are required to be submitted by November 1, 2010, with a Resolution requesting sponsor funding; and

WHEREAS, the East Jefferson Levee District (EJLD) has projects that require funding from the COP in order to initiate planning, design, land acquisition and construction phases of said projects.

BE IT HEREBY RESOLVED, the Southeast Louisiana Flood Protection Authority-East on behalf of the EJLD by this Resolution formally requests the State of Louisiana COP to fund the following EJLD projects for Fiscal Year 2011-2012 in the amounts shown:

Planning, Design, Land Acquisition and Construction of a Safehouse/Consolidated Operating Facility - \$20,720,877

BE IT FURTHER RESOLVED, that the EJLD does hereby certify, in accordance with the State Capital Outlay Act, the following:

1. There is no bond funding, other than State general obligation bond funding, sufficient to fund the above Capital Outlay request.

2. All local options for funding for this Capital Outlay request through taxation, special assessments, loans, bonds, or other resources have been considered and rejected as not being feasible or readily acceptable at this time.

3. There is no revenue source for these non-recurring project appropriations.

4. No surplus and/or unobligated funds are available.

BE IT FURTHER RESOLVED, that the EJLD is committed to providing a local project match to the extent it is economically able for the amounts required/ recommended and necessary by the State.

BE IT FURTHER RESOLVED, that the EJLD Executive Director be authorized to sign any and all documents necessary to accomplish the above.

BE IT FURTHER RESOLVED, that the EJLD Executive Director is hereby authorized and designated to act on behalf of EJLD in all matters pertaining to each of the aforementioned Projects for which Capital Outlay funds are being requested including requests for State disbursements.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

RESOLUTION #10-21-10-09 - EJLD - FUELTRAC, INC.

On the motion of Mr. Barry,

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

WHEREAS, the East Jefferson Levee District (EJLD) wishes to enter into a contract with Fueltrac, Inc. for all of the district's on-site and off-site fueling needs; and

WHEREAS, Fueltrac, Inc. currently holds the state contract for fuel (State Contract #407730) until October 2013; and

WHEREAS, the quote received by the EJLD from Fueltrac, Inc. is the average OPIS rack rate plus a mark-up of \$.159 per gallon, including freight charges, plus state taxes, which is cheaper than the district's current vendor; and

WHEREAS, the EJLD will contact its current vendor to have all of the necessary equipment transferred.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the EJLD Executive Director to enter into a contract with Fueltrac, Inc. for the aforementioned fuel services.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None

ABSENT: Mr. Goins

RESOLUTION #10-21-10-10 - RENEWAL OF ORLEANS LEVEE DISTRICT AUTOMOBILE LIABILITY INSURANCE COVERAGE

Mr. Estopinal advised that this item was reviewed by the Finance Committee. Mr. Doody added that it was determined at the committee meeting that the insurance relationship between the Flood Protection and Non-Flood Assets Divisions would be severed and that each division will procure its own insurance policies in the future.

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

WHEREAS, the Orleans Levee District's (O.L.D.) Automobile Liability and Physical Damage Insurance policy will expire on November 1, 2010; and

WHEREAS, Praetorian Insurance Company has offered a renewal quote for a standalone Automobile Liability Policy and Physical Damage Policy for certain vehicles to the Orleans Levee District Flood Assets Division; and

WHERAS, Praetorian Insurance Company is Best Rate A- IX, admitted and authorized to do business, in the State of Louisiana; and

WHEREAS, Option 1/Proposal 2 offers a standalone policy to the O.L.D. Flood Division as a renewal option of liability and physical damage insurance per scheduled vehicles through Morrison Insurance Agency for a period of one year, commencing on 11/01/10 and expiring on 11/01/11, at a estimated annual cost of \$91,892.00, which is subject to annual audit.

BE IT HEREBY RESOLVED, the Southeast Louisiana Flood Protection Authority-East authorizes the procurement of the standalone Automobile Liability and Physical Damage Insurance Policy, Option 1/Proposal 2 from Praetorian Insurance Company through Morrison Insurance Agency at the estimated annual cost of \$91,892.00 for a period of one year commencing on November 1, 2010.

BE IT FURTHER RESOLVED, that the O.L.D. Executive Director is hereby 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. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

RESOLUTION #10-21-10-11 – RFQ FOR REFURBISHMENT OF O.L.D. FRANKLIN ADMINISTRATION COMPLEX

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

WHEREAS, certain elements of the Franklin Administration Complex are in need of attention due to age and wear and tear, such as the Administration Building A/C system, wall coverings, ceiling and flooring, and the covered walkway between the Administration Building and warehouse building that houses the safe house build out; and

WHEREAS, the build out in the Franklin warehouse that is currently under construction will be used for future SLFPA-E Board meetings and other public meetings that are hosted by the Orleans Levee District, which necessitates attention to passageways that will be used by the public for access to the meeting site.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the advertisement and issuance of a Request for Qualifications for an architect for the refurbishment of the Franklin Administration Complex.

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

YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

RESOLUTION #10-21-10-12 – ORLEANS LEVEE DISTRICT CAPITAL OUTLAY PROGRAM FUNDING REQUEST

On the motion of Mr. Barry,

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

WHEREAS, the Orleans Levee District (O.L.D.) has successfully obtained funding from the State of Louisiana Capital Outlay Program (COP) for the design of several vital projects over the past years; and

WHEREAS, the State of Louisiana COP funding applications are required to be submitted by November 1, 2010, with a Resolution requesting sponsor funding; and

WHEREAS, the O.L.D. has projects that require funding from the COP in order to initiate design and/or construction phases of said projects.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East on behalf of the O.L.D. by this Resolution formally requests the State of Louisiana COP to fund the following O.L.D. projects for Fiscal Year 2011-2012 in the amounts shown:

| A. Seawall Flood Protection Modification, Phase I | |
|---|--------------|
| (at Lakeshore Drive) | \$ 5,000,000 |
| B. Bayou St. John Water Management Improvements | \$ 875,000 |
| C. Highway 90 Land Bridge | \$ 5,000,000 |

BE IT FURTHER RESOLVED, that the O.L.D. does hereby certify, in accordance with the State Capital Outlay Act, the following:

1. There is no bond funding, other than State general obligation bond funding, sufficient to fund the above Capital Outlay request.

2. All local options for funding for this Capital Outlay request through taxation, special assessments, loans, bonds, or other resources have been considered and rejected as not being feasible or readily acceptable at this time.

3. There is no revenue source for these non-recurring project appropriations.

4. No surplus and/or unobligated funds are available.

BE IT FURTHER RESOLVED, that the O.L.D. is committed to providing a local project match to the extent it is economically able to for the amounts required/recommended and necessary by the State.

BE IT FURTHER RESOLVED, that the O.L.D. Executive Director be authorized to sign any and all documents necessary to accomplish the above.

BE IT FURTHER RESOLVED, that the O.L.D. Executive Director is hereby authorized and designated to act on behalf of O.L.D. in all matters pertaining to each of the aforementioned Projects for which Capital Outlay funds are being requested including requests for State disbursements.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

RESOLUTION #10-21-10-13 - FUNDED AGREEMENT BETWEEN SLFPA-E AND PORT OF NEW ORLEANS

Mr. Lacour advised that a permanent servitude for the pile tips and a temporary servitude for staging and construction areas will be needed. The O.L.D. Executive Director will sign the Authorization for Entry (AFE) to the USACE after a permit is received from the Port.

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

WHEREAS, the Board of Commissioners of the Port of New Orleans and the Orleans Levee District (O.L.D.) wish to provide for the betterment of the Port of New Orleans' France Road as it crosses over the west bank levee of the Inner Harbor-Navigation Canal; and

WHEREAS, the parties desire to reconstruct France Road as it crosses the Levee and consider it necessary that this roadway reconstruction be included in the USACE's Floodgate construction contract; and

WHEREAS, the parties have estimated that the total cost of the betterment work to be performed by the USACE, including applicable, relocation, construction, contingency, supervision and construction, will not exceed \$751,282.56; and

WHEREAS, the O.L.D. will not incur any costs as a result of requesting the USACE to perform the betterment work.

BE IT RESOLVED, that the President of the Southeast Louisiana Flood Protection Authority, acting on behalf of the Orleans Levee District, is hereby authorized to execute the Funded Agreement between the SLFPA-E on behalf of the Orleans Levee District and the Board of Commissioners of the Port of New Orleans.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

RESOLUTION #10-21-10-14 - LAKE BORGNE BASIN LEVEE DISTRICT CAPITAL OUTLAY PROGRAM FUNDING REQUEST

On the motion of Mr. Estopinal, Seconded by Mr. Barnes, the following resolution was offered:

WHEREAS, the Lake Borgne Basin Levee District (LBBLD) has successfully obtained funding from the State of Louisiana Capital Outlay Program (COP) for several vital projects over the past years; and

WHEREAS, the State of Louisiana COP funding applications are required to be submitted to Facility Planning and Control by November 1, 2010, with a Resolution requesting sponsor funding; and

WHEREAS, the LBBLD requires funding from the COP for various projects.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East on behalf of the LBBLD by this Resolution formally requests the State of Louisiana COP to fund the following LBBLD projects for Fiscal Year 2011-2012 in the amounts and priority shown:

LIST OF PROJECTS

| Drainage Improvements to LA 46 Roadway and Drainage Improvement Project Between Parish Road and Webster Road, Planning and Construction | \$ 2,320,000 |
|---|---------------|
| 2. Flooding and Drainage Improvements, Planning and Construction | \$ 360,000 |
| Drainage Pump Stations and Channel Improvements, Land Acquisition, Planning and Construction | \$ 11,550,000 |
| 4. Bulkheading of Canals, Planning and Construction-Phase 1 | \$ 2,040,000 |
| 5. Storm Proofing Pump Stations St. Bernard Parish, La. Planning and Construction | \$ 24,000,000 |
| | |

BE IT FURTHER RESOLVED, that the LBBLD does hereby certify, in accordance with the State Capital Outlay Act, the following:

1. There is no bond funding, other than State general obligation bond funding, sufficient to fund the above Capital Outlay request.

2. All local options for funding for this Capital Outlay request through taxation, special assessments, loans, bonds, or other resources have been considered and rejected as not being feasible or readily acceptable at this time.

3. There is no revenue source for this non-recurring project appropriation.

4. No surplus and/or unobligated funds are available.

BE IT FURTHER RESOLVED, that the LBBLD is committed to providing a local project match to the extent it is economically able to for the amount required/recommended and necessary by the State.

BE IT FURTHER RESOLVED, that the LBBLD Executive Director and/or SLFPA-E President is hereby authorized to sign any and all documents necessary to accomplish the above.

BE IT FURTHER RESOLVED, that the LBBLD Executive Director and/or SLFPA-E President is hereby authorized and designated to act on behalf of LBBLD in all matters pertaining to each of the aforementioned Projects for which Capital Outlay funds are being requested including requests for State disbursements.

The foregoing was submitted to a vote, the vote thereon was as follows: YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Jackson, Mr. Losonsky, Mr. Pineda and Mr. Wittie NAYS: None ABSENT: Mr. Goins

The next Board meeting will be held on November 18, 2010 and hosted by the Orleans Levee District.

There was no further business; therefore, the meeting was adjourned at 3:00 p.m.

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY - EAST

REGIONAL DIRECTOR'S REPORT

October 21, 2010

100 Year Level of Protection

Inner Harbor Navigation Canal Hurricane Storm Surge Barrier:

The Contractor continues to make good progress. Overall design is approximately 96% complete. Our emphasis continues to be Operation & Maintenance considerations and the necessity to "design in" reasonable O&M features.

All of the 66" diameter concrete piles and closure piles have been driven. All of the batter piles (645) have been driven with no major difficulties. All precast caps (337) have been set and all of the parapet wall has been erected. Cast in place "gaps" have also been completed. All of the braced wall is now at final elevation.

All 26 castings on the north T-wall have been completed and all 24 castings of the south T-wall are complete.

The Barge Gate area has been flooded and all navigation traffic is being routed through the Barge Gate Structure (as of August 16. 2010).

The GIWW Barge keel slab is complete. The barge's lower walls are 85% complete and the mid deck is 15% complete.

All 478 piles have been driven at the Sector Gate location. The Contractor has completed the sheet pile cofferdam.

From October 16, 2010 thru October 17, 2010 (60 hours of continuous work), the Contractor placed 10,000 cubic yards for the tremie slab.

The Bayou Bienvenue cofferdam has been dewatered and the contractor has completed the leveling course slab. The Contractor has begun the placement of concrete for the gate sill.

Bayou Bienvenue will remain closed to all navigation at the Project site due to lift gate construction.

East Jefferson Levee District:

Reach 1:

The Work is approximately 99% complete. Levee crown work is ongoing.

Reach 2:

The Work is approximately 88% complete. The Project is scheduled for completion in November 2010. The Red Zone Meeting is scheduled for October 26, 2010.

Reach 3:

The Work is approximately 95% complete. The pre-final inspection was held on October 7, 2010. Work is continuing on the levee crown, turf establishment and other punch list items.

Reach 4:

The Work is approximately 99% complete. Pre-final inspections were held on October 14 and October 18, 2010.

Reach 5:

The Work is approximately 98% complete. The pre-final inspection was held on October 5, 2010. Utility relocations at the Coast Guard Station will be completed by the USACE hired labor crews outside of hurricane season.

Bonnabel Breakwater Project:

All punch list items have been resolved and the Work is complete.

Duncan Breakwater Project:

Work is substantially complete. The pre-final inspection was conducted on September 10, 2010. Final inspection will be conducted on October 27, 2010.

Williams Blvd. Floodwall and Gate:

The Work is approximately 96% complete. Gate tie downs are being installed to address potential uplift conditions. The pre-final inspection will be scheduled after the tie down modification is complete.

Bonnabel Floodwall and Gate:

The Work is 98% complete. Although the pre-final inspection date has not yet been set, a preliminary punch list was compiled by the USACE and the Contractor on October 14, 2010.

Pump Station Fronting Protection:

The Work is approximately 10% complete. Bridge demolition at Pump Stations #2 and #3 is complete.

LPV 017.2 (Causeway Crossing):

The Contract Award was protested. The protest has now been resolved. The stop work order was lifted by the USACE and the Contractor was given the NTP on October 18, 2010.

West Return Levee/Floodwall - North:

The Contractor is mobilizing on site. Work is approximately 3% complete. The Contractor is clearing and grubbing along the levee/wall alignment.

West Return Levee/Floodwall - South:

Contract Award is under protest. The protest period could last as long as 100 days.

Foreshore Protection Reaches 1 and 2:

Contract Award is under protest.

Foreshore Protection Reaches 3 and 4:

The Contractor is working on construction submittals.

West Return Levee (Airport Runway):

The Construction Contract was awarded on September 28, 2010. NTP was issued on October 15, 2010. The pre-construction conference is scheduled for October 28, 2010.

Orleans Levee District:

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

Construction is approximately 63% complete and the Project is scheduled for completion before June 2011. The Work is approximately 10% behind schedule. The aesthetic quality of the wall finish has been poor and we have requested the USACE to require the Contractor to make the appropriate repairs. Construction has been hindered by lake water seepage under the parking lot area. A "fix" to the seepage problem is being finalized by the USACE.

LPV 102.01, 103.01, and 104.01

Projects are 100% complete.

LPV 103.01 A1 (Bayou St. John):

Construction is now about 95% complete.

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

The Construction Contract has been awarded. The Contractor is mobilizing on site and work has begun at the Rail St. location.

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

Construction is approximately 68% complete. The Canal Blvd Ramp is now open to traffic with some lane restrictions.

LPV 104.02 (Seabrook West Side IHNC):

This project includes the construction of a new T-Wall. Construction is approximately 45% complete. The UNO Ramp will undergo consolidation for approximately 4 more months before it is paved.

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

100% Plans and Specs were completed in mid June 2010.

LPV 105.01 (Lakefront Airport T-Wall West):

Construction is approximately 9% complete. The Work is approximately 25% behind schedule. Downman Rd. is expected to reopen in mid November 2010.

LPV 105.02 (Lakefront Airport T-Wall East):

Construction is approximately 5% complete. The Work is now on schedule.

LPV 106 (Citrus Lakefront Levee):

Construction is approximately 27% complete.

LPV 107 (Lincoln Beach Floodgate):

Construction is approximately 30% complete.

LPV 108 (New Orleans East Lakefront Levee):

The Project is substantially complete. Final punch list items have not yet been addressed.

LPV 109.02a (South Point to CSX Railroad – Levee Embankment):

Construction of the Project has been combined with LPV 109.02c (HWY 90 and HWY 11 floodgates). Construction is about 23% complete.

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

Construction is 100% complete.

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

Construction is 100% complete.

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

Construction is approximately 31% complete. I-10 west bound traffic will be detoured onto the newly constructed temporary bridge in approximately 2 weeks.

LPV 109.02c (South Point to CSX Railroad - Hwy 90 and Hwy 11 Floodgates):

Construction will be done under LPV 109.02a. Deep Soil Mixing operations are underway.

LPV 110 (CSX Railroad Crossing):

The Construction Contract has been awarded. Construction is about 1% complete. Demolition of the existing structure will begin after Hurricane season.

LPV 111.01 (North Side GIWW):

The contract includes construction of levee sections using deep soil mixing techniques. Work is progressing on schedule. Approximately 60% of the Deep Soil Mixing work is complete.

LPV 111.02 Pump Station 15 Fronting Wall:

Work is progressing on schedule.

LPV 111.03 Tie-in to IHNC:

The Project consists of about 1000' of new T-Wall. 71% of H-piles have been driven. 95% of sheet piles have been driven. 62% of the monoliths have been completed.

LPV 113 (NASA):

Construction is approximately 99% complete. Pre-final inspection was conducted in the first week of October 2010 and the Contractor is working on the punch list.

Seabrook Structure:

95% P&S are under review. Final P&S is scheduled for completion in December 2010.

The Contractor has begun filling the scour hole in the IHNC on the protected side of the proposed Seabrook Structure. The IHNC will soon be completely closed to navigation at the construction site.

Outfall Canal Remediation to Raise SWE to +8.0:

Plans are under review for portions of the London Ave, Orleans and 17th St. Canals.

IHNC Remediation:

A public hearing (pre-IER) was held on October 12, 2010 to discuss items included in the IER for this Work.

Lake Borgne Basin Levee District:

LPV 144 (Bayou Dupre Control Structure):

Overall, the Work is approximately 21% complete. The cofferdam has been completed and the tremie slab has been placed. Construction is about 16% behind schedule. Bayou Dupre will be closed to navigation at the existing Control Structure until April 2011.

LPV 145 (Bayou Bienvenue to Bayou Dupre):

The USACE has instructed the Contractor to use uncoated steel sheet piles and H-piles on this project in order to meet schedule demands. Construction is approximately 70% complete and production rates are good. The Work is approximately 10% ahead of schedule.

A swing bridge will be constructed at Bayou Bienvenue for O&M access.

LPV 146 (Bayou Dupre to Verret):

The USACE has instructed the Contractor to use uncoated steel sheet piles and H-piles on this project in order to meet schedule demands. Production rates continue to improve. The Work is approximately 58% complete and 8% ahead of

schedule. The stem section of one of the T-Wall monoliths (#633) will have to be broken out and replaced due to bad concrete.

The emergency by-pass ramp for LA HWY 46 will be constructed under the LPV 146 Contract.

LPV 147 (LA Hwy 46 Flood Gate):

The Work is approximately 47% complete.

The LA Hwy 300 Flood Gate will be constructed under the LPV 148.02 Project.

LPV 148.02 (Verret to Caernarvon):

The USACE has instructed the Contractor to use uncoated steel sheet piles and H-piles on this project in order to meet schedule demands. Construction is approximately 6% complete.

The USACE is conducting a drainage study to determine the effects associated with their proposed elimination of the Creedmore Gravity Drainage Structure.

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

The Work is approximately 26% complete.

Permanent Pump Stations and Outfall Canals:

The "short list" of the Consultants who submitted on the Phase I RFP has been finalized.

The Phase II RFP has been issued and the short-listed firms are working on preliminary design submittals. All design submittals (35% design) are due from proposers in mid November 2010. Award of the Design-Build Contract is scheduled for late April 2011.

All three Pump Stations will undergo Independent External Peer Review.

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 2010. The map can be found at the following web address:

http://www.mvn.usace.army.mil/hps2/pdf/riskstatusmap.pdf

Coastal Protection and Restoration

Lake Borgne Basin Levee District:

The Violet Freshwater Diversion siphon is operating at full capacity.

Flood Fight

The Mississippi River is below 4' at the Carrollton Gage and is predicted to continue to fall slowly.

Design and Construction

East Jefferson Levee District:

Work is continuing on the EJLD Safe House. The Architect has submitted a draft of the "Existing Conditions Assessment". EJLD meets with the A/E about twice a month.

Orleans Levee District:

Construction of the OLD Safe House Project began in January 11, 2010. The Project is approximately 44% complete. The Contractor has fallen behind schedule, but lately progress continues to show improvement.

ID/IQ Contract Task Order #1 with AECOM has been authorized in the amount of 39,579 for design and construction management required for the Citrus Airport Levee Sewer Line Replacement. Construction bids are in and the lowest bid is for \$332,795.00.

The Cooperative Endeavor Agreement for the Bayou St. John Water Management Study has been approved by the State of Louisiana Facility Planning and Control. A notice to proceed has been issued to BKI. This Project will be funded through State Capital Outlay.

Dr. Lorenzo continued field tests in October and has provided a status report.

Lake Borgne Basin Levee District:

FEMA has written a PW and obligated funds for pump repairs at Pump Station #6 (\$360,000). LBBLD will bid the work after Hurricane Season.

The Emergency Work required to address the seepage issue at Pump Station #3 has been completed. Sheet piles were driven to construct a temporary cofferdam to isolate 2 of the three discharge tubes. Seepage stopped after the cofferdam was dewatered. An RFQ has been advertised and qualification statements are due on October 27, 2010 for design of the permanent fix to seepage at Pump Stations 2 and 3.

The Construction Contract for the Violet Canal Closure Structure Improvement Project has been awarded to Barrier Construction. The pre-construction meeting was held on September 7, 2010. The Contractor has begun work at the site.

LBBLD is negotiating with W.R. Nelson for the preparation of plans and specs for a remote control system to operate the pumps at Pump Station 2 from Pump Station 6, and Pump Station 3 from Pump Station 7. LBBLD will request Board approval to award a Contract to Nelson based on the agreed upon Scope of Work and fees.

Burk-Kleinpeter has been selected as the A/E for the Engine Replacement Project at Pump Station 1 or 4. Scope of Work and fee negotiation is underway.

The USACE will issue a Contract to repair the right angle gear drives at Pump Station 8. The drives were improperly repaired by the USACE's Contractor post Katrina.

OCPR has begun preparation of Plans and Specifications for the Violet Canal Dredging Project (Phase II). LBBLD is working to secure the necessary right-of-ways.

The Contractor will begin construction of the Fortification Canal Bank Repair Project in late October 2010. Work is scheduled for completion in mid November 2010.

Internal Affairs

The USACE intends to make modifications to the existing canal floodwalls to achieve a minimum safe water elevation of 8' in all three canals. Our ID/IQ Consultant, Halcrow Inc. continues to review the Safe Water elevation Reports and the designs for the remediation work proposed by the USACE.

We now have four inspectors working with us provided by OCPR. We have developed a management plan to establish procedures for interaction between the USACE, OCPR and SLFPAE during project construction. We are still awaiting USACE concurrence. We have been getting addition technical assistance from OCPR staff, LDOTD staff, and PBS&J (through an ID/IQ contract with OCPR).

The Emergency Module for Floodgate Management is nearly complete and a demonstration will be given at the next Operations Committee Meeting

New Contracts:

LBBLD – Sopena Corp. – Emergency construction to address seepage at Pump Station #3 for **\$132,000**. Work is scheduled for completion is early October, 2010.

Hurricane Preparedness

Preparation for the 2010 Hurricane Season began in earnest in April 2010. The Emergency Manuals for all Districts were updated and forwarded to all appropriate parties and the following tasks were completed:

- Inventory of emergency supplies has been completed
- Orders for required durable goods have been placed and plans have been made for the acquisition of perishables as needed
- Vendor contact information has been updated
- The annual Hurricane Preparedness Staff Meeting has been held at each
 District
- The Heavy Equipment Inventory has been updated and forwarded to OCPR as part of the interagency cooperative resource sharing plan

We are conducting radio checks of our emergency radio system and monitoring weather conditions in the tropics.

We are monitoring the Construction Projects throughout the LPV System and the USACE/Contractor's emergency closure plans that must be executed in case of an approaching storm.

We continue to inspect our levees and immediately correct any deficiencies.