MINUTES OF THE SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY – EAST BOARD MEETING THURSDAY, MAY 17, 2012

The regular monthly Board Meeting of the Southeast Louisiana Flood Protection Authority - East (Authority or SLFPA-E) was held on Thursday, May 17, 2012, in Meeting Room 221, Orleans Levee District Franklin Administrative Complex, 6920 Franklin Avenue, New Orleans, Louisiana, after due legal notice of the meeting was sent to each Board member and the news media and posted.

Mr. Barry called the meeting to order at 9:30 a.m. and led in the pledge of allegiance.

PRESENT:

John M. Barry, Vice President Louis E. Wittie, Secretary Stephen Estopinal, Treasurer Thomas L. Jackson G. Paul Kemp Richard A. Luettich, Jr. Ricardo S. Pineda

ABSENT:

Timothy P. Doody, President David P. Barnes, Jr.

OPENING COMMENTS:

Mr. Barry advised that Mr. Doody was in Baton Rouge testifying before the Senate Transportation Committee of the Louisiana Legislature on House Bill (HB) 701 concerning the employment of a single police superintendent for the levee district police forces under the SLFPA-E's jurisdiction. Mr. Barry explained that, in theory, he is the SLFPA-E Legislative Liaison; however, since Mr. Doody has been intimately involved in HB 701 and had spoken to the Jefferson Parish Sheriff and the Chief of the New Orleans Police Department, the decision was made that he would testify concerning the bill.

Mr. Barry reported that progress had been made in a recent meeting relative to the U.S. Coast Guard IHNC Regulated Navigation Area (RNA).

ADOPTION OF AGENDA:

A motion was offered by Mr. Estopinal, seconded by Mr. Willie and unanimously approved, to adopt the agenda.

RESOLUTION NO. 05-17-12-01 – APPROVAL OF APRIL 19, 2012 BOARD MEETING MINUTES On the motion of Mr. Wittie, Seconded by Mr. Pineda, 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 April 19, 2012

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

YEAS: Mr. Estopinal, Mr. Jackson, Mr. Kemp, Mr. Luettich, Mr. Pineda and

Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Doody

PRESENTATIONS:

1. Elevation confirmation survey report by NTB Associates, Inc., for the USACE's monument "TED" at the Bayou Dupre structure.

Lyles Budden with NTB Associates, Inc. (NTB) advised that the SLFPA-E tasked NTB with furnishing observations on Benchmark TED. An executive summary describing the tasks performed and a spreadsheet indicating the findings and the various methods used to determine the provided elevations were distributed. He introduced Mark Ballard, NTB's GSP Department Manager, who performed the field work, monitored the survey and processed the data.

Mr. Ballard explained that the executive summary described the procedures and methods used for the project. Benchmark TED was positioned using nearby benchmarks and National Geodetic Survey (NGS) Height Modernization marks. The PID number for TED is BBBC63. NTB set up GPS antennas on marks on the ground surrounding TED to provide a triangular solution for positioning TED. This was also sent through OPUS. Other local CORS (Continually Operating Reference Stations) that are not a part of the OPUS network were downloaded in order to provide an independent check. The RTK (Real Time Kinematic) measurement on TED was between three and four-tenths lower than the static observation of TED. The GPS antenna was set for the static observation and run for 18 hours. The long static session was used to isolate multi-path errors and atmospheric condition errors associated with the measurements. Mr. Ballard advised that he contacted a TRIBLE representative, Lee Drennan, who used his GPS tied into the C4GNET to provide an independent check. The C4GNET is the center for geomatics out of LSU. The calculation derived using C4GNET was one-half foot lower than the number derived from the long static session. NTB then used SMARTNET for positioning. The two SMARTNET positionings were within 17/100's of a foot (about 2-inches). Mr. Ballard commented that he could not explain the anomaly or the reason that the Real Time Network (RTN) solution comes out one-half foot lower than the static network. He added that the RTN solution is two to three minutes of occupation versus an 18 hour occupation for the static observation. Therefore, the multi-path or atmospheric conditions affecting the RTN measurement at the site could not be isolated. He pointed out that there are some RTN procedures in place to adjust the data to conform to information previously furnished by surveyors.

Mr. Ballard reviewed the information provided in the spreadsheet. He explained that ALCO, C189 and REGGIO 2 are benchmarks that surround TED. WASTE WELL 2 is a benchmark in the Michoud Facility. COVINGTON, HAMMOND and NOLA are CORS located in the New Orleans and St. Bernard area. ALCO, C189 and REGGIO 2 were positioned and then reused to position TED and provide an adjustment. The first six numbers in the spreadsheet for TED are derived from static observations and the next four numbers are derived by using RTNs. The remaining three numbers are for the top of the floodwall adjacent to TED using C4GNET and SMARTNET, as well as by using the conventional method. The C4GNET result is about one-half (45/100's) foot lower than the result by using differential leveling techniques.

Mr. Barry asked that the significance of the findings be explained. Mr. Estopinal explained that the top of the St. Bernard Floodwall was planned to be a specific elevation based upon storm water hydrology and other factors. The height of the floodwall based upon sea level is not really known because there seems to be an anomaly in this particular area. Mr. Luettich commented that there is a disagreement between the RTN elevation of TED and the static elevation of TED; therefore, there is an anomaly of some sort. He asked Mr. Ballard which observations (RTN or static) he would more likely believe to be correct. Mr. Ballard responded that he would be more apt to believe the static observations because they are more repeatable. Relative to the question about whether the floodwall was built to the correct height, he explained that it would depend on whether TED was used in the surge model and, if so, what elevation was used to help model the surge. The published value of TED according the U.S. Army Corps of Engineers (USACE) datasheet is 1.753 or 5.75 feet. Mr. Estopinal pointed out that the published value of TED is consistent with the static and OPUS observations; however, it is inconsistent for reasons that cannot be ascertained at this time with both the C4GNET and SMARTNET RTNs. Mr. Estopinal asked Mr. Ballard was the value of TED appropriate based on the static observations. Mr. Ballard replied, ves. Mr. Estopinal explained that the IHNC surge barrier was constructed using the WASTE WELL as the elevation control. There is a 4-1/2-inch height differential between the surge barrier and the floodwall where the two structures met. The field observation prompted the SLFPA-E to determine whether there was an error in the value of TED or an anomaly. It was pointed out that the possible anomaly would not have been reflected in a 4-1/2-inch differential had proper procedures been used to establish the controls for the construction. He noted that there will be a need to investigate the reason for the anomaly should the SLFPA-E institute a RTN.

Robert Turner, SLFPA-E Regional Director, advised that the USACE is re-doing much of the survey work. Mr. Ballard explained that the plan that the USACE discussed with NTB yesterday includes the setting of a network of benchmarks (deep rod monuments) throughout the system. The deep rod monuments are less susceptible to subsidence compared to concrete marks. Eighty to 100 deep rod marks will be placed around the perimeter of the system to provide consistency. Mr. Estopinal added that this procedure is called a Height Modernization Program.

Mr. Barry commented that with the height differential the hydrological forces will be different should a storm greater than the one percent standard overtop the structure. He asked whether additional armoring will be required. Mr. Turner responded that this question has been posed to the USACE. The USACE will determine the acceptable

measured deviation. A zero to two-inch deviation will not require an adjustment. However, if the USACE determines that the floodwall deviation is two inches or more in comparison to the design plans, an adjustment may be required. The USACE may review the hydraulic analysis to determine the overtopping rates for the actual height measured. In many cases, particularly for the 100-year event, the actual floodwall elevation was based upon the overtopping criteria and rounded up. The USACE is collecting additional survey data on all of the floodwalls to determine the final numbers. Once the information is finalized, it will be reviewed with the SLFPA-E to determine what needs to be done. The SLFPA-E advised the USACE that if the contractor did not fulfill the requirements of the contract on a cost-shared project and build the wall to the design height, it should not have to pay the full cost share for the contract and that the Authority should receive a rebate for the height differential.

Mr. Jackson cautioned against the potential for compounding errors. Mr. Budden commented that over the next year there will be a tremendous amount of elevation and positional data coming not only from the USACE, but also from the Coastal Protection and Restoration Authority (CPRA), as a result of the resurveying of the entire system. NTB is in discussions with the State for not only performing physical surveying, but also generating Lidar data through aerial photography for levee sections. NTB will have to set up a primary control network for the surveying of 60 to 100 points.

Mr. Turner advised that a conference call has been scheduled with Tim Osborn with NOAA to discuss the planning process for the establishment of a RTN and procedures that should be established for surveyors doing work for the Authority.

Mr. Budden advised that the field data and notes for the project will be furnished to Stevan Spencer, SLFPA-E Regional Chief Engineer.

PUBLIC COMMENTS:

Craig Berthold, a resident along the 17th Street Canal, commented that the issue going back four years on the 17th Street Canal was based upon an Attorney General (AG) opinion requested by the Lake Borgne Basin Levee District (LBBLD) about five years ago. The AG opinion was issued for levees constructed in St. Bernard Parish and maintained and controlled differently than those in Orleans Parish. He asked that the Board request that an AG opinion be issued for the levees specifically along the 17th Street Canal and on the validity of the toe plus 6-ft. and the toe plus +15-ft. zones.

Mr. Barry advised that the USACE provided a lengthy presentation at the CPRA meeting yesterday relative to its interpretation of the 15-ft. zone. The USACE will be requested to provide this presentation to the Board in the near future. The CPRA adopted a motion for a statewide study, starting with the outfall canals, to determine the needs from a safety standpoint. Depending on a number of issues, such as soil conditions, the margin for safety can vary from one area to another. The study will provide a technical opinion. The results may involve obtaining a variance from the USACE.

Steven Beaux Jones, Assistant Attorney General, explained that an AG opinion must be requested by the Board through the adoption of a resolution. However, the AG has a

policy of not issuing opinions on issues that are slated to be decided by the courts or where it appears that litigation is imminent. Therefore, it is highly unlikely that the AG would issue an opinion on a matter in on-going litigation.

John Koeferl, representing the Holy Cross Neighborhood Association, commented that he was encouraged to hear that the SLFPA-E and USACE are working on GPS systems for measuring levee heights. He asked that the SLFPA-E specifically request its contractor or the USACE's contractor to determine the heights of the IHNC basin levees, the 5-1/2 miles of MRGO levee and Florida Avenue sheetpile wall/levee in order to determine the risks and safety of the Lower Ninth Ward.

Mr. Turner clarified that IHNC levees are a part of the Federal levee system and additional data will be received from the USACE on these wall heights. The Florida Avenue sheetpile wall/levee is a non-federal levee. The levee district typically measures non-federal levee heights using differential leveling from NGS benchmarks. The USACE has been resistant to performing any work along the non-federal levees because of authorizations. He cautioned everyone to closely monitor the issue of the certification of the non-federal levees, which is extremely important for the Lower Ninth Ward, New Orleans East and St. Bernard Parish. Currently, the USACE is not going to include the non-federal levees in its levee system evaluation report. Therefore, another entity will be required to provide the engineering data and other information required for the certification process in order for the non-federal levees to be accredited. There will be a significant impact on flood insurance premiums should the non-federal levees not be accredited.

Amy Sins, a resident along the 17th Street Canal, commented that she was attending today's meeting to support the efforts of the individuals in Baton Rouge fighting HB 701. She commented that it has been four years since her property was taken and that there is an unjust servitude. She commented that no one from the Board had ever visited her property to see the impact of the decision made concerning her private property and offered an invitation for Board members to do so. She stated that a 33 by 80-foot section (over 2,600 square feet) of property has been affected and that she purchased this huge portion of property, but cannot use it. She added that she must pay taxes on the property and remains liable if someone is hurt on the unfenced property. She stated that this affects her financially, as well as her quality of life. She asked how much movement will be allowed of the theoretical levee toe and the plus 6-ft. and 15-ft. zones into her property without compensation with the additional mud that is being added to the levee, and at what point does this stop.

Epsie Hennessy, a resident along the 17th Street Canal in Lakewood South, asked that her remarks be considered as a part of an open records request. She commented that several months ago the Board's attorney, Robert Lacour, stated that the AG's office would not render an opinion on Revised Statute 38:225, which established a 15-ft. servitude on properties adjacent to levee toes in the entire State of Louisiana. The reason given was that it was not done until action had been taken against the amended statute. She asked if there were minutes to the meeting where the AG told the Board that he would not render an opinion on the revised statute and what exactly was stated at the meeting. She commented that it was suggested that the real reason an answer was not received on the constitutionality of the revised statute was that the Board would

not have liked the answer from that AG. She commented that several weeks ago Mr. Anzelmo spoke to the House Transportation Committee and stated that the AG's office had approved the taking of property and that the AG did issue an opinion. She stated that he did not mention that it was the former AG who gave that opinion. She asked for the totals thus far of the fees paid to Mr. Anzelmo and Mr. Lacour for defending the Board against the property owners on Bellaire Drive. She commented on articles in the Times Picayune concerning Tulane University servitudes and an April 17TH editorial in the Sacramento Bee concerning trees and the USACE.

Mr. Pineda advised Ms. Hennessy that the public records request should be put in writing to Mr. Turner. He explained that the big issue that is occurring in California and nationwide is not as much about the management of vegetation on the landside of the levee, as the management of vegetation on the waterside where the river meets the toe of the levee, which is critical fish, aquatic and migratory bird habitat. The bigger issue for the USACE Sacramento District is the environmental impacts of clearing the levee slope and toe of the levee on the waterside of the levee.

COMMITTEE REPORTS:

Finance Committee: Mr. Estopinal reported that the Finance Committee met on May 7th. The Committee discussed the extension of a cellular tower lease for the Orleans Levee District (O.L.D.), revisions to the LBBLD FY 2012 Budget, the renewal of the O.L.D. SLIP (Special Levee Improvement) Tax and grant administration. He explained that there has been a lot of difficulty finding someone with the same skills in obtaining grants as Shelly Midura. Ms. Midura was not able to accept the Civil Service position for the proposed salary. Alternate ways and options for filling this position were discussed by the Committee.

Operations Committee: Mr. Wittie reported that the Operations Committee met on May 7th. The Committee discussed the scope of work with representatives from GEC for an Operations and Maintenance Plan for the Hurricane and Storm Damage Risk Reduction System Storm Surge Barriers and associated closure structures and navigation gates. The USACE's manuals are only about 60 percent complete at this time. The USACE will operate these structures during the 2012 Hurricane Season with personnel from the levee districts working alongside of the USACE's personnel in order to gain experience. The levee district Executive Directors provided an update to the Committee on the Emergency Operations Procedures Manuals. The Committee received information from the O.L.D. concerning the maintenance of drainage pipes underneath the Norfolk Southern Railroad tracks along the levee paralleling Hayne Boulevard. Burk-Kleinpeter, Inc. provided an estimate of \$3 million for the work. The O.L.D. Executive Director will meet with the railroad company concerning this work and the agreement executed with the railroad during the 1970's and will report back to the Committee.

<u>Legal Committee</u>: Mr. Barry advised that the Legal Committee did not meet during the month of May. A motion has been placed on the Board agenda for the approval of the legal invoices.

CPRA/Governmental Affairs: Mr. Barry advised that Mr. Kemp provided a presentation on the Old River Control Structure at the CPRA meeting held yesterday. Mr. Kemp explained that the Governor recently requested that the flow down the Atchafalaya be increased to help crayfishermen travel to their fishing spots. This request was turned down because it did not meet the criteria set up by the USACE. This issue led to a broader discussion concerning the management of the Old River Control Structure and the requirement in the Water Resources Development Act of 2007 that a hard look be taken at the current management regime that 30 percent of the latitudinal flow of the combined Mississippi and Red Rivers is to be allowed down the Atchafalaya through the three dams and maintained on a daily basis. He commented that a management plan could be developed that could go beyond the 24 hour/7 day a week basis that could lead to environmental benefits at no cost to the flood control aspects. He stated that he participated in a hyro-dynamtic model for the basin that would allow the prediction of the effects of changing the management in order to develop a plan.

Mr. Barry advised that legislation in Washington, including the act for sending 80 percent of the British Petroleum (BP) monies to the Gulf States, is currently frozen.

<u>Coastal Advisory Committee</u>: Mr. Kemp reported that the Coastal Advisory Committee met on April 19th after the regular Board meeting. The Committee is going through a very careful review of the assumptions inherit in the surge and wave modeling used to establish the design guidelines for the levees and other flood control structures. The Committee would like to continue these briefings next month.

Mr. Kemp commented that the Mardi Gras Pass in the Bohemia Spillway was discussed at the CPRA meeting and that there is an interest in keeping the pass open until a decision can be made about how it could possibly be used to expedite a diversion. Several diversions have been proposed for this area. There is much that can be learned from this modern crevasse; however, it cannot be allowed to cause concerns about navigation or flood control. The Board previously adopted a resolution requesting that it be kept informed concerning the Mardi Gras Pass. A permit is pending for the rebuilding of the roadway along the levee that crosses the crevasse; however, the State is working with the oil company requesting the permit to develop an alternate way to access its downstream facility.

Mr. Kemp advised that Mr. Doody requested that the Committee develop an overall restoration plan. In order to lay the groundwork, a meeting will be held with Steve Wilson, President of the Pontchartrain Levee District (PLD), so that a plan can be developed that dovetails with the PLD's plan.

REGIONAL DIRECTOR'S REPORT:

Mr. Turner reviewed the highlights of the Regional Director's Report (copy appended to minutes). He provided additional comments, as follows:

 Permanent Pump Stations – The federal judge has ruled on the protest filed concerning the award of the contract for the Permanent Pump Stations. The ruling was temporarily sealed; however, the USACE is reviewing the decision to determine a path forward. It appears that the five short listed firms will be provided a revised scope of work and a specified period of time to adjust their proposals based upon the revised scope. There will be a reevaluation process and eventually a contract award. The USACE will be working to award a contract by the fall of 2012. The SLFPA-E will re-engage the USACE relative to the reasons for the changes in the scope of work and the significance of these changes. Mr. Spencer sits on the USACE's evaluation committee as a non-voting member.

- International Storm Surge Barrier Conference The SLFPA-E and USACE cohosted a conference for the International Storm Surge Barrier Network. The SLFPA-E is a participating member of this network and has started the process of exchanging data and information with the network.
- Flood Control 2015 Program This is a pilot program for a module related to levee safety for the Levee Information Management System (LIMS). The forecasting module allows the USACE's suite of 152 storms to be used in relationship to a storm approaching this area. The results are used to apply a hydraulic load against the levees in the system. A factor of safety is then calculated for three modes of failure (overtopping, seepage and stability). The locations where the most significant surge may occur and of the lowest factor of safety for a particular storm are reported. Additional information can be accessed within the dashboard environment regarding existing environmental conditions, such as gage readings, wind speeds and rain fall amounts. The final version of the pilot program should be completed within the next month. The pilot program focused on an area in New Orleans East between Southpoint and the surge barrier.
- Operations and Maintenance Cost Study The final version of the study by AECOM should be completed within the next thirty days. The numbers from a preliminary standpoint are close to those in the Rand study. The most significant assumptions relate to the IHNC surge barrier and Seabrook Complex and the associated gates. In this situation, the estimates provided by the USACE were used as a starting point and scrubbed to provide a final estimate.
- Armoring Two pilot projects (one on the east bank and one on the west bank) are being done by the USACE. High Performance Turf Reinforcement Mat (HPTRM) will be installed on a one mile section of levee in East Jefferson Parish. The pilot project will be used to determine the correctness of the specifications, unforeseen installation problems and the performance of the HPTRM and the associated turf during levee maintenance. The results will be applied to the actual projects that will probably commence in the fall.

NEW BUSINESS:

RESOLUTION NO. 05-17-12-02 – APPROVAL OF LEGAL INVOICES

On the motion of Mr. Wittie, Seconded by Mr. Estopinal, 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 May 17, 2012", 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 May 17, 2012" are hereby approved.

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

YEAS: Mr. Estopinal, Mr. Jackson, Mr. Kemp, Mr. Luettich, Mr. Pineda and

Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Doody

RESOLUTION NO. 05-17-12-03 – APPROVAL OF EMERGENCY OPERATIONS PROCEDURES MANUALS

On the motion of Mr. Wittie,

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

WHEREAS, Louisiana Revised Statutes, Title 38, Section 319, mandates that each Board of Commissioners of each Levee District prepare and regularly review its emergency procedures manuals; and

WHEREAS, the staffs of the Orleans Levee District (O.L.D.), the Lake Borgne Basin Levee District (LBBLD) and the East Jefferson Levee District (EJLD) have each reviewed and updated their respective Emergency Operations Procedures Manual.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) approves the revised O.L.D., LBBLD and EJLD Emergency Operations Procedures (EOP) Manuals, and authorizes all actions under the EOP Manuals and the Statute.

BE IT FURTHER RESOLVED, that the President, SLFPA-E Regional Director or Executive Director of the O.L.D., LBBLD and EJLD for their respective levee district, are hereby authorized to sign 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. Estopinal, Mr. Jackson, Mr. Kemp, Mr. Luettich, Mr. Pineda and

Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Doody

<u>Discussion of the development of a higher level plan – restoration effort.</u>

Mr. Barry commented that the Board previously discussed the inadequacy of 100-year protection. Mr. Doody and several Commissioners have expressed that it is past time that this issue be addressed by the Board and that the Board determine what it can do

to achieve a higher level of protection. It is beyond the resources of the SLFPA-E and the Metropolitan New Orleans Area to pay the billions of dollars needed to achieve a 0.2 percent level of protection. However, there may be things that can be done within the SLFPA-E's jurisdiction and things that the Board can advocate for outside of its jurisdiction to improve the level of protection. These efforts may include polders, coastal restoration and foreshore protection.

Mr. Estopinal commented that a 0.2 percent level of protection is possible in the New Orleans area if people take the necessary actions required to protect themselves, such as elevating structures. In addition, there are things that can be done by the local governments to make the area resilient, such as addressing building restrictions and the construction of infrastructure. He commented that the FEMA program allows people to build in floodplains without recognizing the unreasonable risks. Mr. Barry noted that the Board could make policy recommendations to other entities.

Mr. Luettich pointed out that it would be helpful to know what it means to go from 100-year to 500-year protection in terms of the issues. An evaluation is needed and the information that is collected will be different for the various parts of the system. Mr. Barry added that a first step may be to survey the existing data. He suggested that small projects could be identified that may be within the resources of the local area that could significantly strengthen a weak spot and have a high cost-benefit ratio.

Mr. Kemp commented that an analysis is needed of the residual risks and how the first dollar could be most effective on lowering the residual risk. The USACE through the LaCPR is not looking at what can be done inside the perimeter of the system. He suggested that a first step may be to look within the SLFPA-E's jurisdictional boundaries to determine what can be done inside the perimeter. Another step may be look at weaknesses in the system's perimeter.

Mr. Turner suggested that instead of strictly looking at structural improvements that the Board may wish to consider what can be done from risk reduction perspective. This includes flood insurance, raising structures and coastal projects that would reduce risks.

Mr. Barry stated that Mr. Doody previously discussed the establishment of a blue ribbon committee to address the financial issues and provide recommendations. He suggested that a higher level plan could be addressed in conjunction with the financial issues by the blue ribbon committee.

Mr. Pineda recommended that this issue be kept on the agenda and that a decision be made at a future meeting on whether the issue should be addressed by a committee, a working group or some other method. He commented on the importance of armoring to provide resiliency and that in some areas Hurricane Katrina was actually a 400-year event. He added that statistically speaking this area will see greater than a 100-year event sometime in the future. The question is how will the 100-year system perform against an event that is a little bigger or substantially bigger than a 100-year event?

Mr. Turner explained that the inundations can be determined within the system for various area overtopping events assuming the design elevations are maintained and sufficient armoring is put in place. The USACE did a risk analysis for the armoring team

that looked at approximate 500-year and approximate 750-year return frequency events to determine how the system would perform. The 152 storms developed for determining the system's design were put together based upon a 100-year return frequency. Therefore, extrapolating this information to produce a 500-year number will not be nearly as accurate as for the 100-year number. However, there comes a point in time where the overtopping rate is so high that it does not matter if the levee remains because the damage is the same because of the flood height. The USACE can be requested to provide a copy of these calculations. Armoring can prevent a levee failure, but not overtopping.

Mr. Estopinal suggested that Commissioners could attend planning commission and local government meetings to formally address the residual risk issues. Mr. Jackson agreed with Mr. Estopinal and commented on the lack of support of local governments for the advancement of flood protection on behalf of the entire metropolitan area. The best effort is to educate the public, including initially the public leadership, on the system and its needs and determine the public's tolerance for risks. Mr. Kemp pointed out that a path forward is needed before the Board can embark on such an endeavor. Mr. Jackson added that the public and public leadership must be energized.

Mr. Pineda recommended that the SLFPA-E have some small projects ready to go in the event that monies, such as stimulus dollars, become available.

Mr. Barry stated that it is the consensus of the Board that this discussion be continued at the next meeting.

<u>Discussion of Land Purchases for the EJLD Safehouse and Consolidated Facility.</u>

Fran Campbell, East Jefferson Levee District (EJLD) Executive Director, reported that the land purchase was approved by the City Planning Commission and will be placed on the agenda of the New Orleans City Council for approval.

RESOLUTION NO. 05-17-12-04 – APPROVAL TO ADVERTISE PUBLIC HEARING FOR EJLD

Ms. Campbell advised that a special Board meeting may be needed since Jefferson Parish may not have the required numbers until the end of July.

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

WHEREAS, the East Jefferson Parish Assessor was mandated by the Louisiana Tax Commission to reassess the tax rolls for 2012; and

WHEREAS, there is a need for the Board to consider levying additional or increased millage rates above the adjusted millage rates, in accordance with Art. 7, Sec. 23(C) of the LA Constitution and R.S. 47:1705, in order to meet the financial obligations of the East Jefferson Levee District.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the advertising, as required, of a public hearing for the

East Jefferson Levee District, in conjunction with the regular monthly Board meeting on July 19, 2012 or a special Board meeting, if required, in order to consider levying additional or increased millage rates without further voter approval or adopting the adjusted millage rates not to exceed the prior year's maximum in accordance with Art. 7, Sec. 23(C) of the LA Constitution and R.S. 47:1705.

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

YEAS: Mr. Estopinal, Mr. Jackson, Mr. Kemp, Mr. Luettich, Mr. Pineda and

Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Doody

RESOLUTION NO. 05-17-12-05 – APPROVAL OF LBBLD FY 2012 BUDGET AMENDMENT

Charles Doize, LBBLD consultant, explained that the Board must approve an amended budget if revenues are five percent less or expenditures are five percent greater than the original budget. The LBBLD planned to do some pump station seepage work in the current fiscal year (FY); however, this work will not be done until the next FY. The USACE has indicated that it will do some of this seepage work for the LBBLD. Revenues were reduced since the LBBLD will not be receiving the number of Federal and State grants in the current FY that were anticipated. The LBBLD cannot operate two pump stations at this time due to seepage problems; therefore, the LBBLD did not hire as many people as anticipated. The ad valorem taxes have not increased as anticipated. The LBBLD will use approximately one million dollars of prior year surplus monies to balance the current FY budget.

Mr. Turner pointed out that the future cost of operations and maintenance for the LBBLD will be increasing by at least 40 to 50 percent over the pre-Katrina costs. It is unrealistic to think that ad valorem taxes will increase sufficiently or that a tax can be imposed on St. Bernard Parish to cover this increased cost; therefore, other solutions must be sought. He commented on the establishment of a blue ribbon committee to assist with the financial issues. A meeting will be held today to investigate and develop a path forward for this process.

On the motion of Mr. Wittie,

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

WHEREAS, the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) has reviewed the operating results to-date which indicate that budget revisions to the Lake Borgne Basin Levee District Operating Budget for Fiscal Year ending June 30, 2012 are necessary to comply with applicable state law, which requires that budgets be changed to reflect new expectations; and

WHEREAS, funding in the following amounts is required as detailed by the line item budget for Fiscal Year Ending June 30, 2012.

LAKE BORGNE BASIN LEVEE DISTRICT

AMENDED BUDGET

FOR FISCAL YEAR ENDING JUNE 30, 2012

REVENUES:		CURRENT	AMENDED	AMENDED
	_	BUDGET	ITEMS	BUDGET
Taxes	\$	3,300,000	(85,000)	3,215,000
Intergovernmental		3,523,000	(3,250,000)	273,000
Insurance proceeds		-	-	-
Charges for services:				
Permits		3,000	-	3,000
Rents and leases		-	-	-
Oil and gas royalties		-	-	-
Investment income		35,000	(20,000)	15,000
Cost sharing allocations from affiliates		-	-	-
Miscellaneous	_	39,000	(15,000)	24,000
Total revenues	_	6,900,000	(3,370,000)	3,530,000
<u>EXPENDITURES</u>				
FLOOD AND DRAINAGE PROTECTION:				
Personnel services		2,946,000	(578,000)	2,368,000
Travel		4,300	-	4,300
Contractual services		158,500	(12,000)	146,500
Materials and supplies		484,300	(15,000)	469,300
Professional services		351,200	50,000	401,200
Other charges		1,691,700	(785,000)	906,700
Cost sharing allocations to affiliates		100,000	(30,000)	70,000
Machinery and equipment		4,635,000	(4,500,000)	135,000
Hurricane expenses	_	-	-	-
Total expenditures	_	10,371,000	(5,870,000)	4,501,000
	_			
Excess of revenues over expenditures	\$_	(3,471,000)	2,500,000	(971,000)
OTHER FINANCING SOURCES (USES)		-	-	-
NET CHANGES IN FUND BALANCES	\$	(3,471,000)	2,500,000	(971,000)
FUND BALANCE AT BEGINNING OF YEAR		5,422,966		5,422,966
	_			
FUND BALANCE AT END OF YEAR	\$ _	1,951,966		4,451,966

BE IT HEREBY RESOLVED, that the revisions to the Lake Borgne Basin Levee District Fiscal Year Ending June 30, 2012 Budget are approved.

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

YEAS: Mr. Estopinal, Mr. Jackson, Mr. Kemp, Mr. Luettich, Mr. Pineda and

Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes and Mr. Doody

The next regular Board meeting will be held on June 21, 2012, and hosted by the LBBLD.

There was no further business; therefore, the meeting was adjourned at 12:30 p.m.

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY - EAST REGIONAL DIRECTOR'S REPORT

May 17, 2012

100 Year Level of Protection

IHNC 01- Seabrook Complex:

The Seabrook Project is about 75% complete.

The Seabrook Complex has reached "Hundred Year Level Attained" (HYLA) status with manual operation of gates. Both Vertical Lift Gates and both sector gates are installed; all coffer cells have been removed.

Pile driving for the fender system and guide walls and armoring operations are underway.

The pre-inundation inspection of the Sector Gate is scheduled for May 21, 2012.

The IHNC is completely closed to navigation at the Seabrook construction site; it will be opened for navigation at the end of June.

Two days for training have been scheduled for OLD and CPRA in mid June for operation of the gates.

IHNC 02 - Inner Harbor Navigation Canal Hurricane Storm Surge Barrier:

The Project is 96% complete. Navigation traffic is using the sector gate channel.

The shoreline protection filter fabric and stone placement are approximately 85% complete.

Traylor Brothers, the approach wall subcontractor, has completed driving all of the 48" steel piles for the north, center, and south GIWW end piers. The end pier concrete is approximately 20% complete. They are 86% complete in setting precast skirt beams and placing concrete for the approach walls along the sector gate channel. They are setting and grouting the landing beams along the closed bypass channel.

At the GIWW gate structure, Massman has completed the mechanical gate activities. They are almost finished welding the cylinder's base (called the pillow block) into its new position to handle the over travel issue and some of the fender alignment issue. They may still need to taper some fenders. Shaw's DOR and Engineering Division are reviewing the buoyancy conditions and determining the necessary action (most likely action is add water to the tanks). The gate is basically more buoyant than originally anticipated. They completed another round of surveying last week and plan to add water to the tanks this weekend as a test to see how much the gate will sink with different levels of water.

The mechanical and plumbing work on the concrete barge is approximately 84% complete. Hydrostatic testing is nearly complete. There is still a great deal of electrical work to do. The windlass (equipment that pulls the chain to swing the barge into position) is on site. The barge feature inspections were held on May 10, 2012. The concrete barge is scheduled to be floated in place and partially sunk in the closed position within the barge gate structure.

The roof deck has been placed on the safe house at the north shore complex. Form work is being constructed for the parking bay and concrete will be placed next week.

The north vehicle access ramp is approximately 54% percent complete with all of the footings and columns placed. Most of the pile bent caps are in place and they have placed a few of the deck slabs. They have completed driving the piles for the permanent bulkhead storage and have begun working on the platform structure. North splash pad backfill is ongoing and they will place the first concrete in about a week.

The commissioning process has begun at the Bayou Bienvenue (BB) Lift Gate. Commissioning should be complete by mid May.

The south vehicle access ramp is approximately 64% percent complete with all of the footings placed, all of the columns placed, all of the pile bent caps placed, and most of the decks placed. They have started placing rebar and concrete for the splash pads and wave ejectors (50% complete).

The site wide electrical contractor is installing conduit and wire at the BB control house; BB mechanical equipment, GIWW sector gate, and GIWW sector gate control houses. Their main focus is the BB generators and control panel.

East Jefferson Levee District:

Reaches 1 thru 5:

The work is substantially complete. Turf establishment issues still remain. Final Inspections on Reaches 1 and 5 were completed in late August 2011 and early September2011. There was an additional Final Inspection for Reach 1 held November 9, 2011. Reaches 2, 3 and 4 still have turf establishment issues and Final Inspections are pending. The contractor has fertilized both Reach 2 and 3 in early February and completely seeded them at the end of February. Reach 1 and Reach 4 are scheduled to be fertilized this month. The USACE has modified contracts to address East Jefferson Levee District's concerns with access ramps in all Reaches. There are repairs to the access roads on Reach 1, 4 and 5 that will be addressed on a separate contract.

Bonnabel Breakwater Project:

The Notice of Construction Complete Letter for this Project was transmitted by the USACE to CPRA and copied to EJLD on November 12, 2010.

Duncan Breakwater Project:

The Notice of Construction Complete Letter for this Project was transmitted by the USACE to CPRA and copied to EJLD on February 2, 2011.

Williams Blvd. Floodwall and Gate:

Work is substantially complete. The gate winch, which was sent back to the manufacturer for inspection and repair/replacement, has now been given to East Jefferson Levee District. Final Inspection was held on November 28, 2011. Hired labor fixed the issues with the scour protection and the joint sealant. During a gate exercise held by EJLD, the vertical seal was caught and flipped over in the fractured fin while returning the gate to the storage position. Since then, hired labor chipped down the fractured fin so that the gate will close properly without affecting the seal. Another gate exercise was scheduled for Wednesday, May 16, 2012.

Bonnabel Floodwall and Gate:

Work is substantially complete. Final Inspection was held on November 28, 2011. The repairs to the scour protection and joint sealant have been completed by hired labor. The road re-striping has also been completed.

Pump Station Fronting Protection:

The Work is approximately 70% complete. Work is ongoing at all four Pump Stations. The breakwater concrete has been completed at all pump stations. Work on the coffer dam at Bonnabel Pump Station is ongoing. All major features of work have been completed in both Suburban and Elmwood Pump Stations. Pre-Inundation Inspections were held at both stations. Concrete and formwork for the land monoliths at Duncan Pump Station is ongoing. The contractor has submitted their revised Hurricane Plan for Duncan Pump Station to the USACE, but it has not yet been approved.

LPV 017.2 (Causeway Crossing):

Overall, the project is approximately 78% complete. The phase II traffic switch to the new roadway has been completed in both directions. An additional turning lane has been added to the southbound lane to alleviate congestion. The contractor has completed Phase III pile driving as well as the pile driving for the canopy. They are continuing to work on the all weather access road, retaining walls and placing embankment. Work is continuing on Phase III pile caps and slab spans. There has been a temporary bulkhead installed at Monolith M5 to achieve HYLA status.

LPV 03.2B (West Return Levee/Floodwall – North):

Work is approximately 99% complete. All base slabs and walls have been completed. Demolition and debris removal of the existing wall is complete. The rip rap installation on the flood side of the new wall is complete, including the recapping. There was a Red Zone Meeting held on March 28, 2012. Due to unbalanced loads there will be additional concrete scour protection added to the entire protected side of the new wall. This additional scour protection will double as an access road for the Levee District. All of the additional scour protection work has been completed. A separate contract will be let by the USACE for construction of new landside runoff features. The embankment work and associated seeding and mulching is nearly complete.

There is an area just south of the drainage pump station where it appears that seepage is occurring. This area was noticed by the EJLD and is continuing to be monitored. The USACE is planning to do some exploratory excavation on May 18, 2012 to determine the source and path of the seepage. This area has been capped with clay and there have been no signs of seepage since. The Pre-Final Inspection for this project is scheduled for May 23, 2012.

LPV 03-2A (West Return Levee/Floodwall – South):

Work is approximately 99% complete. The contractor has completed all concrete work for the floodwall, the concrete for the scour protection modification, the land side runoff modifications, the embankment work including seeding and mulching, modifications to accommodate runoff under I-10, and the fabrication and installation of the steel doors under I-10. There remains an issue with the slope paving at the southwest end of the project. It has cracked along the sheet pile tie in to the airport runway levee. There is also a settlement issue with the scour protection in the airport area. It is settling down and away from the new floodwall. Both of these issues will be addressed prior to the Pre-Final Inspection that will be held on May 30, 2012.

Foreshore Protection Reaches 1 and 2:

Work is approximately 88% complete. Work on Reach 2 has been completed and compliance surveys taken. Seeding and mulching has been completed on most of Reach 2. The contractor is continuing to place uncompacted fill on Reach 1. There was a modification to the contract that will add geotextile fabric and 9" of course aggregate between the clay and the rock dike. Drawings have been issued by the USACE and the contractor has started working on Reach 1. They will recap areas of the rock dike that are low at the end of the project. The Red Zone Meeting for this project is scheduled for June 5, 2012.

Foreshore Protection Reaches 3 and 4:

Work is approximately 86% complete. The contractor has completed sand and uncompacted fill placement on Reach 4, and has begun to recap the stone in low areas on Reach 3 where settlement has taken place. There has also been some

settlement in the clay close to rock dike that will have to be addressed. Compliance surveys have begun on portions of Reach 3 and seeding and mulching operations are underway. There will be a modification to the contract that will add geotextile fabric and 9" of course aggregate between the clay and the rock dike. Drawings have been issued by the USACE and contractor should be starting the work on Reach 4 shortly.

West Return Levee (Airport Runway):

Contractor started Phase II of the project on September 21, 2011 and is now approximately 99% complete with the overall project. The contractor has completed the excavation and placement of the reinforcement fabric and surfacing for the access roads and ramp. There was an additional permanent ramp added to the contract near the northeast end of the project. Work by the Airport contractor to raise the conduit bridge has been completed. All embankment work and seeding/mulching has been completed. The only remaining work is the installation of the security fence. The Pre-Final Inspection is scheduled for May 29, 2012.

Orleans Levee District:

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

Construction is about 99% complete.

Floodgates L-1A and L-5 columns were bowed, which prevented proper sealing of the gate in the closed position. The USACE approved the contractor's plan to correct the deficiencies, which includes column repair and track replacement for both gates. The tracks have been replaced and are grouted in place. Repairs on the vertical monoliths (that the gates seal against) are complete. A punch list resolution meeting was held on May 15, 2012.

LPV 102.01, 103.01, and 104.01:

Projects are 100% complete, and NCCs have been transmitted to Orleans Levee District on all three projects.

LPV 103.01A1 (Bayou St. John):

Construction is complete. The Punch List Resolution meeting was held July 6, 2011. Turf issues had to be addressed, along with safety and scour protection issues. Additional slope pavement was added near the control structure. Final inspection is scheduled for May 24, 2012.

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

Construction is 99% complete, and Lakeshore Drive is now fully open to traffic. The guard rail at Lake Terrace floodgate was realigned but still needs striping. Safety fence was added on the Rail Street floodwall. Final inspection is scheduled for May 24, 2012.

<u>LPV 104.01A (Ramp Crossings – Lakeshore Dr.):</u>

Construction is complete and all ramps are open to vehicular traffic. Turf establishment is still required at the Franklin Avenue and Canal Boulevard ramps. The contractor is working the punch list items. Turf establishment will be turned over to an IDIQ contractor after final inspection. Final inspection is scheduled for June 14, 2012.

The existing I-walls at Franklin Avenue must be converted to L-Walls (LPV-104.02b). The work will begin on May 21, 2012..

LPV 104.02 (Seabrook West Side IHNC):

Construction is complete. The final inspection will be rescheduled, and punch list items (cracks in slope pavement) are being resolved.

Contract modifications are required to convert the I-Wall section at the miter gates on Lakeshore Drive to L-Wall, and to construct a sheet pile or cut-off wall to address seepage design issues between Franklin Avenue and the Seabrook Complex. This work is scheduled to be completed before August 30, 2012.

LPV 105.01 (Lakefront Airport T-Wall West):

Construction is complete. All lanes of traffic are open at Downman Road. The flood side of the T-Wall has been painted by the contractor. One street light and pole still must be replaced on the protected side of the floodwalls. Guard rails at Downman Road were corrected per LADOTD's direction. Final inspection has been rescheduled for June 1, 2012.

LPV 105.02 (Lakefront Airport T-Wall East):

Construction is 99% complete. All T-Wall monoliths are complete. Work is progressing on the discharge end of the St. Charles Drainage Pump Station. Turf establishment is ongoing. Exercising of valves and sluice gates for OLD will be scheduled after actuators are installed. 2,000 LF of levee slope was regraded and is to be sodded. Some concrete joints need to be redone. Problems with the valve actuators have been resolved; waiting on equipment (delivery on June 14, 2012). A small area requires safety fence, similar to LPV-106. The Pre-Final inspection is scheduled for June 28, 2012.

LPV 106 (Citrus Lakefront Levee):

Construction is about 98% complete. Turf needs to be established. Concrete slope pavement cracks must be repaired. A white paper authored by the USACE on "Crack Repair" is being finalized as it relates to inspections. Operation and Maintenance safety concerns still need to be addressed. The proposed type of "safety" device for installation on the top of the I-Wall (2' high PVC coated chain link

fence) is being installed; installation will take 60 days to complete. The drains along the railroad tracks are being excavated and slope pavement will be shaped to drain.

Ramps must be asphalt paved and curbs redone. Pre-final inspection is scheduled for June 27, 2012. Armoring may still be required on the protected side of the levee (under review by USACE).

LPV 107 (Lincoln Beach Floodgate):

Construction is complete. Final inspection will be rescheduled after the contractor addresses problems found during the last inspection.

LPV 108 (New Orleans East Lakefront Levee):

The project is substantially complete. The USACE hired labor group is mowing the grass and correcting rill problems (flattening out); a bigger roller was used and appears to have been successful. The access roadway has been removed and was seeded. Slope pavement at Collins pipeline crossing has been repaired. Final inspection is scheduled for May 22, 2012 pending satisfactory turf establishment.

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

Construction is complete. Grass is growing well in most areas, due to irrigation. Acceptable turf still needs to be established on the protected side of Area 4. The T-Wall monoliths associated with the floodgate at HWY 90 and HWY 11 are complete and the floodgates are installed and have been exercised. HWY 90 and HWY 11 are open to traffic. Slope pavement north of CSX railroad floodgate is being removed and replaced due to severe cracking. All work at four drainage structures and two USFWS pump stations is complete. The Punch List Resolution meeting was held Nov. 22, 2011. Stations have been tested for USFWS and require retesting, along with the drainage structures. An inspection was held on May 16, 2012 for turf establishment.

Hwy. 11 floodgate monoliths are undergoing settlement and are now leaning away from the floodgate. URS is investigating the movement and preparing a report with recommendations for repair/replacement.

The 15' vegetative clear zone waiver request is in review.

Final resolution of the 23 monitoring test sections is pending completion of a report by URS.

The S&WB still has several issues needing clarification at PS#15 frontal protection.

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

Construction is complete.

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

Construction is complete.

LPV 109.02b (I-10 Crossing):

Construction is complete. The NCC is being prepared by USACE.

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

Construction is being done under LPV 109.02a.

LPV 110 (CSX Railroad Crossing):

Construction is complete. The NCC is being prepared by USACE.

LPV 111.01 (North Side GIWW):

Construction is complete, including all T-Wall construction and deep soil mixing.

The pumps at USFWS Pump Station CTU #6 need to be operated successfully for USFWS.

The project punch list resolution meeting was held on Nov. 17, 2011. Final inspection for turf establishment is scheduled for May 17, 2012.

LPV 113 (NASA):

Construction is complete. Final inspection is scheduled for May 22, 2012.

OFC-03 London Ave. Canal:

Turf still needs to be established. Final inspection was held on Nov. 15, 2011. Another Final Inspection will be scheduled to check turf establishment. The NCC planned for September 18, 2012.

OFC-04A Orleans Canal:

The work is complete and the punch list resolution meeting was held on Sept. 28, 2011. Rill problems have been corrected and re-establishment of turf is ongoing. The NCC is planned for July 16, 2012.

OFC-05 17th Street Canal:

The project is nearly complete. Re-establishment of turf is ongoing. The NCC is planned for September 21, 2012.

OFC-06 Orleans Canal:

The project is complete and the NCC was transmitted on March 9, 2012.

LPV192.02b Buttress Slab:

The work is nearly complete. Final inspection is scheduled for June 24, 2012 pending turf establishment.

LPV192.02 Berm:

USACE Memphis Hired Labor force constructed this project (Phase III), and the work is 99% complete. Turf establishment issues remain. Hydro seeding is ongoing. Final inspection is scheduled for July 16, 2012, pending turf establishment.

LPV192.03 Relief Wells

On Reach 2, the scope of work includes installation of 12 new relief wells; on Reach 3, the installation of 50 new relief wells, modification of 9 existing wells, and installation of a subsurface collector line with cleanouts. Collector pipes are in place. With the exception of proper turf establishment, work is complete. Final inspection is scheduled for May 23, 2012, pending turf establishment.

France Road Floodgate

A new floodgate in the IHNC west side levee/floodwall is being built at the request of the Port of New Orleans. Funding from Port and Corps

The monoliths and concrete floodwalls for the gate are complete. The overall project is 85% complete. Site grading and roadway surface preparation continues. The gate has been set in place. The roadway embankment is being placed on each side of the floodgate in four lifts. The abandoned gas and water lines have been filled.

Lake Borgne Basin Levee District:

LPV 144 (Bayou Dupre Control Structure):

The work is about 99% complete. A Final Inspection of the structure was held on March 8, 2012. The contractor has completed all punch list items. Vibrations were detected during gate operation. Further investigations have determined there is a problem with the hinge and pintle assemblies. Operations Branch from USACE has dewatered the Structure. The Gate was jacked up and the upper hinge and pintail bushing were removed. The bushings and bearings were examined for damage and at this point no significant damage has been found. Further inspection revealed that the gate leafs need to be repainted. The sand blasting and painting will be done on site. Construction of the jib crane pad will be done as part of the access road modifications.

The section of the PDD dealing with abandonment of the old Bayou Dupre Structure is being revised by Corps.

LPV 145 (Bayou Bienvenue to Bayou Dupre):

The project is 99% complete. The USACE has instructed the contractor to use uncoated steel sheet piles and H-piles on this project in order to meet schedule demands. Turf establishment is ongoing. No further progress payments will be made until the contractor establishes turf on entire project area.

The USACE is installing instrumentation to do "bending moment analysis" on this reach. Worked start on April 12, 2012, and is being coordinated with CPRA.

The access swing bridge will be designed by Arcadis. The bridge design is scheduled to be completed before the end of this calendar year and bids for construction should out in early 2013.

LPV 146 (Bayou Dupre to Verret):

The work is 99% complete. The emergency by-pass ramp for LA Hwy 46 is complete and paved. The final inspection was held on Aug. 23, 2011. As-built plans and the O&M Manual are under review by USACE.

Access Road design is under review by USACE. The design will be sent to NFS for review.

LPV 147 (LA Hwy 46 Flood Gate):

The work is complete. The LA Hwy 300 Flood Gate has been constructed under the LPV 148.02 Project. The final inspection was held on Aug. 5, 2011. As-built drawings and O/M manuals are being prepared.

LPV 148.02 (Verret to Caernarvon):

Construction is 99% complete. Pre-final inspection and Punch List Resolution Inspection have been held.

The USACE has determined that the Creedmore Drainage Structure is no longer needed and removed it from the project without replacing the structure's drainage capacity.

Turf establishment is all that remains on this project.

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

The work is about 99% complete. The Pre-final inspection was held Oct. 21, 2011. All power supply issues are resolved; permanent power to gate was installed on Dec. 13, 2011. The USACE held a Punch List Resolution meeting Jan.23, 2012. Contractor will complete turf establishment in the spring 2012.

Water level gauges are installed on both flood and protected sides of sector gate. The data collected from these gauges will be included on "River Gauges" web site.

Armoring:

Staff continues to engage the USACE on armoring planning and design.

SLFPA-E has reviewed the Armoring Project Description Document (PDD) and provided its comments to the USACE through CPRA. CPRA has asked for a response to its comments before the PDD is forwarded to the Mississippi Valley Division Commander for signature.

An armoring test site was constructed in St. Charles Parish during the latter part of September 2011, and an additional test section was constructed on the LPV 111 project site in late October/early November 2011. The purpose of the test was to determine the potential for damage to HPTRM from wild hogs. In April 2012 the TRM was removed from the St. Charles levee project to check on how well the turf roots were anchored through it into underlying soil. Report is in review. The USACE proposes two more armoring pilot projects, the first of which will be constructed on an east bank HSDRRS levee in Jefferson Parish (LPV-19.2, Reach 4). The project is about one-mile long. The USACE has received the ROE from the EJLD for the work to be done within its jurisdiction and work will begin within 60 days of that issuance. Work will start in May and should be completed in October 2012. The work will include installation of high performance turf reinforced mat, or HPTRM. Sod will be placed on half the mat, and the other half will be seeded. Plans and specs have been reviewed by SLFPAE, EJLD, and CPRA and those comments are being incorporated for final P&S. An additional pilot project is currently under consideration for the SLFPAW. Lessons learned from all these pilot projects are to be incorporated into the permanent armoring work, which is not expected to begin the fall of 2012.

Permanent Pump Stations

The Design Build Contract was awarded on April 13, 2011, for \$675 million to CBY Design Builders, a joint venture of CDM, Brasfield and Gorrie, and Yates Construction, but the award was protested by one of the unsuccessful proposers. A federal judge issued a ruling on the matter on May 11, 2012. The ruling is temporarily sealed, so we don't yet know any details.

The Corps has indicated that they will provide us with details on the path forward along with a schedule in the near future.

HSDRRS Elevation and Status Maps

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/2010 System Construction%20Status Map.pdf

The new Greater New Orleans HSDRRS June 2011 Status Map can be found at the following web address:

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

FEMA NFIP Levee System Accreditation

USACE leadership is pushing hard to find ways of making up lost time and accelerating contracts that have slipped beyond original completion dates so that accreditation isn't adversely affected. Estimated completion dates change on most of these contracts from month to month as new issues present themselves and existing ones are resolved.

50% models for interior flooding have been developed by the Corps for FEMA. The models are in review by the pertinent drainage district.

OLD and LBBLD may have to "certify" the non-federal levees in the Lower Ninth Ward/St. Bernard area and the New Orleans East area. We are working with FEMA and the USACE to develop a plausible path forward. The Board has issued its approval for issuing a RFQ for the accreditation of these non-federal levees. The RFQ will be advertised next week. We are also investigating funding sources that could be used to pay for a full certification effort. SLFPAE representatives met with FEMA on April 17, 2012 to discuss free board and gate closure issues and how they affect new BFE.

SLFPA-E will most likely have to sign a PAL Agreement with FEMA.

Coastal Protection and Restoration

State of Louisiana – CPRA

The Draft "Coastal Master Plan" was issued on January 12, 2012 for public comment. Comments were provided before February 25, 2012.

Lake Borgne Basin Levee District:

The Violet Freshwater Diversion is flowing. Flow is decreasing with falling river stage.

Flood Fight

We are awaiting the Tropical Storm Lee after action review document from the New Orleans District.

The Mississippi River is near El. 6.0' at the Carrollton Gage. It is predicted to rise 1' before beginning to fall.

Design and Construction

East Jefferson Levee District:

Work is continuing on the EJLD Safe House. Discussions are underway with the City of New Orleans, Jefferson Parish Government the City of Kenner regarding required property acquisitions. The EJLD was notified that the New Orleans City Planning Commission approved the sale of the Kenner Airport property to the EJLD at their April 10th meeting.

Orleans Levee District:

The State Fire Marshall inspection was completed on March 16, 2012. A/C testing and balance report is pending.

The Audio/Visual work in the OLD Safe House is 100% complete.

The Administration Building Refurbishment Project designs are 100% complete. The bid will be solicited for the work upon completion of the Safe House Project.

The SEA Grant for the Bayou St. John Waterfall Removal Project was signed and Burk-Kleinpeter has Task Orders to design for demolition of the waterfall structure and removal of the sandbar under Lakeshore Drive Bridge.

The Outfall Canal Bank Stabilization Monitoring Project is 49% complete.

The Florida Avenue Sheet Pile Rehabilitation Project Notice to Proceed was scheduled for May 14, 2012.

The Lakefront Seawall Erosion Control Project Design Modification is progressing.

Lake Borgne Basin Levee District:

Bidding documents are under review by LBBLD staff and attorney for Engine Replacement at PS #4. LBBLD is awaiting a response from CPRA/DOTD regarding the possibility of funding this project under State Project No. 579-44-0001, Forty Arpent Levee.

Repairs to Pumps 1, 2, and 3 at Pump Station #6. The FEMA PWs (19790, 19792 & 19794) for this project are obligated. Advertising and bidding documents were provided to LBBLD and are under review by LBBLD staff, attorney, LADOTD and representatives of Atkins Global. Bid document modifications are still ongoing.

Pump Station #2 and #3 seepage repairs are now a 100% federal project managed by the Corps of Engineers. LBBLD has provided the USACE with the 60% P&S completed by WS Nelson and is applying for FEMA reimbursement of the design

costs incurred up to the date of the USACE decision to complete this work (i.e. 29 March 2012).

Bid documents for Violet Canal dredging are in the latter stages of assembly and scheduled to be ready to go out for bid on or about the third week of May, 2012.

Remote Control/Telemetry for PS #2 and PS #3. WS Nelson has submitted 100% Plans and Specifications and they are under review by LBBLD staff. FEMA HMGP funding is being pursued in conjunction with the safe rooms themselves.

Pump #1 at Pump Station #7 was removed and assessed at CONHAGEN's shop. CONHAGEN believes the problem lies with the shaft and coupling. Plans and specs from Conhagen will be reviewed by BKI, Inc. to ensure that the best design is used for the repair. A task order has been executed with BKI with a deliverable date of May 21st, 2012.

Internal Affairs

We continue to have three inspectors working with us provided by CPRA, and we are getting additional technical assistance from CPRA staff, LDOTD staff, and consultants Atkins North America [formerly PBS&J] and Vali Cooper International through an ID/IQ contract with CPRA.

Halcrow Inc. has completed the review of the Safe Water Elevation (SWE) Reports and the designs for the remediation work proposed by the USACE for all three outfall canals. All major comments submitted by Halcrow have been incorporated into the current plans or are under further review by the USACE's consultants. The maximum stick-up/minimum embedment issues identified by Halcrow are still being investigated by the USACE. The SWE Report was reissued as the "Mean" Operating Water Level" (MOWL) Report with the text rewritten. Halcrow has completed the review of the final version of the MOWL Report for the London Ave. Canal and 17th St. Canal. Final review has just been completed for the Orleans Canal. This work is being conducted under Halcrow's original SOW. The New Orleans District is having each canal's report reviewed in detail by other Corps Districts. The USACE ETL 1110-2-575 (6/14/2011) regarding Evaluation of I-Walls has been released by the Corps and Halcrow is reviewing the document to determine potential impacts to previously completed work. We met with the Corps on April 18, 2012 to discuss additional remediation work required by the Corps on the three outfall canals. An additional remediation report was done by Corps and we are awaiting a copy. According to the Corps it should address remaining Orleans issues found by Halcrow.

The "Hurricane Risk & Safety Module for the New Orleans Levee System" demonstration project is at 80% complete. Most of the updated GIS, geotechnical H&H, P&S, etc. has been obtained from the USACE for the two demonstration sites (LPV 109.02A and LPV 111.01, totaling 15 miles of earthen levees). Additional geotechnical information has been received from Corps on LPV-111.01; and was incorporated into the project. The final geotechnical information is being reviewed. The "dashboard" test screen was provided to SLFPA-E in January for review. The

Project is partially funded through a grant from the Netherlands Government (50/50 cost share). A workshop was held by the consultant on April 23, 2012 at UNO and was well attended (over 70 attendees).

The final report is being reviewed. The transfer and location of the website for the next year is being considered.

The O&M Cost Study for all three levee districts is nearly complete by AECOM. This work is funded through a CDBG Grant.

The project for the LIMS Strategic Implementation Plan (SIP) is at 95% completion and interviews have been held with staff. The results are being compiled. This project is funded through a CDBG Grant. A presentation on the SIP was given at the April 5, 2012, Operations Committee meeting. The final report is being reviewed.

SLFPA-E staff is working closely with CPRA staff to develop an automated on line permitting process for levee districts. A meeting was held at the DNR training facility in the LaSalle Building in Baton Rouge on December 20, 2011, to get input from other interested Louisiana levee districts. CPRA gave a presentation to SLFPAE at the January 19, 2012 Board meeting. Work is proceeding with CPRA.

A training session was held on May 10, 2012, with SLFPA-E, SLFPA-W, CPRA and Corps personnel for use of the "Emergency Operations System" program, for monitoring floodgate operations. The OCPR's consultant is finalizing their revisions to the original module that will be housed in the DNR system.

SBPG has agreed to use a portion of its HMGP allocation to fund 3 safe rooms. The State submitted LBBLD's initial application for one safe room to FEMA for unofficial review. It will be revised again to incorporate the other two safe rooms. Ultimately, we will submit one application for all 3 safe rooms so they can be designed and constructed simultaneously.

Two new internal workgroups have been established to deal with new O&M requirements for the HSDRRS. One will deal with general Operation and Maintenance and the other will deal with the specialized O&M requirements for the surge barrier and navigation gates.

The New Orleans District office briefed the CPRA and both regional levee authorities this week regarding our concerns on the Mississippi River Levee colocated work.

RFQ for survey firms to survey and confirm the Levee District's servitudes and properties have been received. The selection Committee will have a recommendation to the Board in May.

RFQ for a consultant to develop a comprehensive O&M plan for all flood control structures within SLFPAE's jurisdiction have been received. The Board selected a consultant and they are preparing a Scope of Work before negotiations begin.

Three separate ID-IQ RFQ's were published in the Times-Picayune, for as-required services on Geotechnical, Hydraulic and Coastal Engineering specialties. We received 42 responses, and they are being prepared for review.

SLFPAE staff met with the Executive Directors and Carol Kiefer to finalize the forms that will be used to collect data that will allow commissioners to look at health benefits offered to current and retired employees across the three Districts. The data was presented to the Finance Committee in March 2012.

The Coast Guard is hosting a meeting on May 17, 2012 to go over the plan for the IHNC for this hurricane season.

Safety:

SLFPA-E levee districts will continue to conduct ongoing safety meetings to review levee district safety manuals and emphasize the importance of following safety rules and guidelines at all times. All field inspectors will conduct a similar ongoing safety meetings process.

New Contracts:

None

Hurricane Preparedness:

The 2012 Hurricane Season officially starts on June 1, 2012.

Revisions to the Districts EOP manuals have been completed and will be submitted for approval by the Board in May, 2012.

A hurricane planning and preparedness meeting with the USACE is scheduled for May 18, 2012. The purpose of the meeting is to coordinate our planning and response activities with the USACE. Our annual internal planning meeting with the levee districts directors is scheduled immediately after the meeting with the Corps.