

**MINUTES OF THE
SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY – EAST
BOARD MEETING
THURSDAY, SEPTEMBER 20, 2012**

The regular monthly Board Meeting of the Southeast Louisiana Flood Protection Authority - East (Authority or SLFPA-E) was held on Thursday, September 20, 2012, in the St. Bernard Parish Council Chambers, St. Bernard Parish Government Complex, 8201 West Judge Perez Drive, Chalmette, 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 9:40 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. (arrived 11:35 a.m.)
G. Paul Kemp
Richard A. Luettich, Jr.

ABSENT:

Thomas L. Jackson
Ricardo S. Pineda

OPENING COMMENTS:

Mr. Doody stated that the Hurricane and Storm Damage Risk Reduction System (HSDRRS) worked as designed during Hurricane Isaac (Isaac). The U.S. Coast Guard's plan to evacuate vessels in the Regulated Navigation Area anticipates 72 hours notice in advance of a storm event. None of the last four hurricanes provided 72 hours advance notice. He pointed out that the U.S. Army Corps of Engineers (USACE) and the Coast Guard did their best with the time given to ensure the evacuation of the vessels. The Authority's continued urging to have the USACE take over the operation of the IHNC Surge Barrier has not borne much fruit. It was evident during Isaac that coordination between the Coast Guard, the USACE, the levee districts and the Port of New Orleans is crucial to the protection of the entire area.

Mr. Doody mentioned that After Action Reviews (AAR) were conducted to determine what things worked well and where improvement is needed. Robert Turner, SLFPA-E Regional Director, explained that the SLFPA-E conducted two AAR's—one for the SLFPA-E Emergency Operations Center (EOC) and another with the three levee districts. Levee district liaison officers were placed during the course of Isaac in each parish EOC. Mr. Doody attended the New Orleans Mayoral press conferences and pre-conference meetings. Two USACE liaison officers were embedded in the SLFPA-E EOC, which provided a direct line of communication with the USACE New Orleans

District. Mr. Barry suggested that the placement of contacts in the St. Tammany and Tangipahoa Parish EOCs be investigated.

Mr. Doody commented on several problems that occurred during Isaac. He explained that many of the gages pegged at the very top of the readings and personnel had to be dispatched to visually read the gages at those locations. The SLFPA-E and USACE should work together to select areas for hardened gages. Mr. Estopinal noted that intelligent gages should be investigated in conjunction with hardened gages. Mr. Doody explained that another problem concerned the communication of the threat. The Saffir-Simpson Scale only addresses wind speed and a better methodology is needed to communicate risk to the public. He cited the incidents that occurred in LaPlace and Braithwaite, Louisiana, where the leaders and public did not seem to expect what happened, although maps were readily available that indicated what eventually occurred. Mr. Luettich explained that a lot of information was available in the lead up to the storm that painted a good picture of what was thought would happen. This amount of quality information had not been available in the past; however, in going forward everyone should anticipate having this information. Mr. Barry added that the same situation could occur in the SLFPA-E's jurisdiction on the north shore should a storm come from a different direction and that he hoped emergency managers learned from Isaac.

Mr. Doody commented on the excellent job done by SLFPA-E and levee district employees. Closures of gates and crossings began well in advance of the storm.

Mr. Doody advised that Mr. Turner just returned from the Netherlands where he attended an I-Storm Team meeting. The I-Storm Team shares information concerning the operation of large structures in various countries.

APPROVAL OF AGENDA:

A motion was offered by Mr. Wittie, seconded by Mr. Barry and unanimously adopted, to approve the agenda.

RESOLUTION NO. 09-20-12-01 – APPROVAL OF AUGUST 16, 2012 BOARD MEETING AND AUGUST 24, 2012 SPECIAL BOARD MEETING MINUTES

On the motion of Mr. Wittie,
Seconded by Mr. Barry, 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 August 16, 2012 and the Special Board Meeting held on August 24, 2012.

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

YEAS: Mr. Barry, Mr. Estopinal, Mr. Kemp, Mr. Luettich and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes, Mr. Jackson and Mr. Pineda

PRESENTATIONS:

1. After Action Review of System – U.S. Army Corps of Engineers.

Colonel Edward Fleming, USACE New Orleans District Commander, discussed the preparations for Hurricane Isaac and actions taken since the hurricane event. He stated that he came before the Board with conflicting emotions because the hard work that took place over the past seven years and the performance of the HSDRRS should be acknowledged; however, it must be remembered that people outside of the HSDRRS sustained damages. The USACE is taking a look at whether the HSDRRS exacerbated the damages. There will be time to acknowledge the success of the HSDRRS in the future and there will be lessons that have been learned.

Col. Fleming explained that he and Dr. Rick Knabb, Director of the National Hurricane Center (NHC) discussed how hurricane categories are defined and the other important components (surge, rain, tornado activity, etc.) in addition to wind. Indications are that the NHC will not be changing its current method due to the complexities in attempting to define categories when including the additional components. The NHC uses categories along with surge predictions and is doing a great amount of work to ensure that it is using the most effective way to communicate risks.

Col. Fleming advised that the surge elevation (not including a wave) during Isaac reached +13.6-ft. at the IHNC Surge Barrier. The surge elevation in this particular area during Hurricane Katrina (Katrina) reached +15.5-ft. The elevation of the walls along the Industrial Canal and Intracoastal Waterway are in the range of +11 to 12-ft. Therefore, some overtopping would have occurred had the IHNC Surge Barrier not been in place. The water level at the lakefront near the London Avenue Canal reached +6.4-ft. Although the outfall canal floodwalls are higher than this elevation, the maximum safe water level in one of the outfall canals is below +6.4-ft. The gates and pumps at the outfall canals performed as designed.

Col. Fleming cautioned that every storm is different and that the path of the storm is very critical. The path of Isaac was largely on the west side of the metropolitan area and Katrina was largely on the east side of the metropolitan area. Katrina traveled much faster than Isaac. Isaac had a larger wind field from the center of the storm than Katrina.

Col. Fleming addressed the discussions that took place of the flooding that occurred outside of the HSDRRS. Many models were run, particularly the ADCIRC model, using a number of storms prior to the construction of the HSDRRS. The USACE had this information since 2007 and the information was refreshed in 2009 with the LaCPR. The USACE will rerun the models to ensure that everything meets the standard. Isaac will be run through the same model with the system as it is today and the system as it was prior to the post-Katrina construction. The Water Institute of the Gulf (TWIG) will be looking over the USACE's shoulder while the modeling is being done. This information will be made available to the public in probably mid-to-late October. At that time the

USACE will have some data that will have been reviewed internally; however, it is not known when external the independent peer review would be completed.

Col. Fleming explained that a joint damage assessment of the system was conducted after Isaac by the USACE with participation by the Coastal Protection and Restoration Authority (CPRA) and the levee districts. The system sustained very minor damage. The levee districts will have to remove debris from the levees for the on-going more thorough inspection. The USACE will be collecting information and data from Isaac not only on constructed projects, but also on projects under study or design.

Mr. Doody pointed out that the SLFPA-E would be particularly interested in the return frequency of a storm such as Isaac and on how the hydrology matches with the design at the transition point of the HSDDRS and the Mississippi River Levee (MRL) system.

Col. Fleming explained that the gages are multi-jurisdictional and cross multiple agencies (USACE, NHC, EPA, CWPPRA, etc.). Gages are a complicated issue having hardware, software interface and maintenance components. A plan is needed to determine which gages and areas should be focused upon.

Col. Fleming discussed some of the dynamics of Isaac relative to the movement of water between the various water bodies. Mr. Doody suggested that closer consideration be given to the Chef and Rigolets barrier system. Col. Fleming explained that a barrier plan has been around since the 1960's. The USACE was a proponent of the barrier plan, but shifted away from the barrier plan to the high level plan in the mid-1980's for various reasons. The USACE would be happy to go back and look at the plan should Congress provide the authorization and funding. He cautioned, however, that the barrier plan is not an "end all/be all" for protection or risk reduction around Lake Pontchartrain. Wind driven surge could occur in other areas of the Lake and should also be taken into consideration.

Col. Fleming explained that the USACE sends local government liaisons to all parishes and sends liaisons to agencies such as the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), the Coast Guard and the SLFPA-E. Most of the agencies also send liaisons to the USACE. The USACE also co-locates personnel at Sewerage and Water Board (S&WB) pump stations.

The communication of risks to the public was discussed. Col. Fleming advised that the USACE uses charts that indicate the category of storm versus storm surge. The category of storm is important; however, it does not give the full picture. Some category one or two storms had a higher surge than some category five storms. Mr. Luettich explained that the NHC had planned to redo its approach to messaging over the next two to three years; however, because of recent events it will probably come out with a new approach prior to the next hurricane season and do a better job of focusing on the most significant threat and communicating the most important part of the message to the public. Additional information provided by the USACE and NHC should be put into a better form to communicate to the emergency management community. Work is needed on several different communication pathways, and on the types of information and the degrees of sophistication of the information to be communicated. Col. Fleming

pointed out that the NHC issued surge forecasts every six hours. Mr. Luettich noted that it is the messages that are going to the general public that are deficient and need further work.

Col. Fleming discussed the outfall canal pumps. The system is designed to be operated remotely from several locations with manual operation as a backup. The remote operation was inoperable for several hours one morning and the system had to be operated manually. Four individuals (operators, mechanics and electricians) are on site at each outfall canal to manually operate the system should the remote operation fail. The S&WB wanted, but was unable, to pump an additional 500 cubic feet per second (CFS) at the 17th Street Canal for a two to three hour period. However, no flooding occurred as a result of this situation. He added that he personally went to the 17th Street Canal that morning and saw that the gage reading was 6.4-ft., and that just prior to his visit USACE personnel had read the staff gage on the wall of the canal. He reiterated that for a two to three hour period of time the S&WB had to pump 6,000 CFS instead of 6,500 CFS. There were no issues at the London or Orleans Avenue Canals. Prior to Isaac two pumps were down at the Orleans Avenue Canal and remain down. The USACE performs continuous maintenance on the pumps. Pumps are not taken off-line purposely during hurricane season. Maintenance is performed outside of hurricane season. The pumps at the London Avenue and 17th Street Canals are at 100 percent.

PUBLIC COMMENTS:

Craig Berthold, a resident along the 17th Street Canal, asked for clarification concerning the variance requested from the USACE. Mr. Doody advised that he wrote a letter to Col. Fleming requesting a variance for the three outfall canals relative to the new State law extending the no vegetation zone from 6-feet to 15-feet. He indicated that he would provide a copy of the letter to Mr. Berthold. The SLFPA-E has not yet received a response from the USACE.

Carol Byram, a resident along the 17th Street Canal, reminded the Board that its 2006 decision continues to leave damages in its wake and further commented on this decision. She requested that the toe plus 6-ft. and toe plus 15-ft. situation be corrected.

Epsie Hennessy, a resident along the 17th Street Canal, commented on robberies that took place at night at her residence and at a neighbor's residence. She commented that the substantial barrier provided by the Ligustrum and fencing along the back of the property that protected her home is no longer there. She commented that Metro Security advised that they were told that they could no longer drive along the levee to patrol the back of the homes and that it is the Authority's responsibly to patrol this area. She asked the Board what could be done to patrol the levee to keep out intruders.

COMMITTEE REPORTS:

Finance Committee: Mr. Estopinal advised that the Finance Committee did not meet during the month of September.

Operations Committee: Mr. Wittie reported that the Operations Committee met on September 13th and discussed the following items:

- High Water Mark Data – It was suggested at the Operations Committee meeting that the ID-IQ survey contracts be used to officially record water elevations from Isaac. Mr. Estopinal commented on the non-conformity of data amongst the agencies. He stressed the importance of verifying readings and working towards a uniform conforming continuous datum for the system. Mr. Turner explained that the USACE indicated in discussions that it would be the clearinghouse for the collection of this information. The SLFPA-E is collecting its own high water marks and giving that information to the USACE and CPRA. The USACE collected high water marks across most of the system as it performed its damage assessments and has started publishing draft maps of the data collected. Mr. Luettich commented on the use of this information in modeling and the importance of quality control and documenting how information is collected so that it can be correctly interpreted. Mr. Turner explained the method used by the SLFPA-E for collecting water marks. He added that as a result of one of the AARs he now understands that there are procedures that must be followed to ensure that the marks are done properly for the information to be generally accepted. The SLFPA-E did not follow the quality control procedure and must be better schooled relative to its use to ensure confidence in future marks. Mr. Estopinal reminded everyone that the SLFPA-E designated the Louisiana Spatial Reference System as the origin of the datum for its data. He pointed out that there is not a linear transition between the different datums (e.g. NGVD29 and NAVD88).
- Cooperative Endeavor Agreement (CEA) between the East Jefferson Levee District (EJLD) and Jefferson Parish relative to the Harahan Pump to the River Stormwater Drainage Project – The SLFPA-E General Counsel, Robert Lacour, prepared the CEA and an item has been placed on the agenda for its approval.
- Review of GEC, Inc., (GEC) Task Order No. 1 for the development of a Comprehensive Operation and Maintenance Plan for the Lake Borgne Surge Barrier and Gates, Seabrook Complex and Gates, Bayou St. John Sector Gate, Bayou Bienvenue Sector, Bayou Dupre Sector Gate and Caernarvon Sector Gate – GEC’s proposal listed tasks to be accomplished and a fee schedule. Pat Broderick, Director of GEC’s Public Works Group, explained that the scope of services for Task Order No. 1 consists of collecting existing data and design plans on the various flood control structures, site visits by the engineering staff, and the review of USACE water control plans, operations and maintenance (O&M) manuals and costs reports. A report will be prepared by GEC that includes personnel requirements and costs associated with normal operations and personnel requirements and costs associated with emergency operations. The report will discuss the level of training needed for each individual associated with the O&M of the structures and certification requirements. Mr. Turner advised that the water control manual is still in development and will include revisions based upon experience gained during Isaac. He added that he learned from the I-Storm group that the entities that operate large barrier structures utilize a decision team made up of a small core group of individuals with technical and maintenance expertise to affect the closure and reopening of the structure. A matrix should be developed to define the closure for

particular situations occurring within the system. The barge gate will be of particular concern because of the small window of opportunity to affect a closure due to environmental conditions. The operation of this type of large structure must be kept out of the political arena. Mr. Doody pointed out that communication with the public relative to the operation of the structures should also be made a part of the plan.

Legal Committee: Mr. Barry advised that the Legal Committee did not meet during the month of September. An item has been placed on the Board Agenda for the approval of legal invoices. The invoices have been reviewed and approved by the appropriate levee district Executive Director, the SLFPA-E Regional Director and General Counsel.

CPRA/Governmental Affairs: Mr. Barry reported that he attended the CPRA meeting held yesterday and that it basically dealt with Isaac.

Coastal Advisory Committee: Mr. Kemp advised that the Coastal Advisory Committee will meet at 3:30 p.m. today. Lessons learned from Hurricane Isaac will be discussed at the meeting.

REGIONAL DIRECTOR'S REPORT:

The Regional Director's written report was distributed (copy of report appended hereto).

Mr. Turner reported on the response for Isaac. AAR reports are being prepared. Discussions and conference calls began on Friday, August 24th, and conditions were monitored over the weekend. Employees were called in over the weekend to begin the process of closing floodgates. The SLFPA-E EOC was officially opened on Monday in the Orleans Levee District (O.L.D.) safe house. The USACE and CPRA provided liaisons to the SLFPA-E EOC. The SLFPA-E used the National Incident Management System (NIMS) methodology for reporting in order to collect and disseminate information to the State. The levee districts provided daily written reports, which were used to produce daily standard NIMS reports for forwarding to the CPRA and GOHSEP. Over 180 floodgates were closed and reopened. The SLFPA-E coordinated with the USACE for the closures at the IHNC Surge Barrier and Seabrook Structure. SLFPA-E maintenance and technical personnel witnessed the closure of the IHNC Surge Barrier and Seabrook Gate Structures. The pump stations in St Bernard Parish operated for a period of six days and no reports of flooded structures were received.

Mr. Turner explained that a significant amount of time was spent assisting communities outside of the SLFPA-E's jurisdictional area. In cooperation with the National Guard, the O.L.D. shipped a large load of filled sand bags to Lafitte, Louisiana. The O.L.D. supplied almost 100 filled 3,000 lb. sandbags and 8,500 filled small sand bag—most of which were shipped to Lafitte. The EJLD supplied approximately 400 empty sand bags to the West Authority where they were filled and ultimately used in Lafitte and in areas along the East Bank. A significant amount of activity occurred on the East Bank in Plaquemines Parish, particularly in the Braithwaite area. SLFPA-E and levee district employees assisted in unwatering the Braithwaite area and closing a levee breach that occurred during the storm event below Scarsdale. The damage assessment process commenced on Monday, August 27th, and marks were placed for future recovery of

elevation data. The damage assessments were performed in coordination with the USACE, the levee districts and the CPRA. The results of the damage assessments will be published by the USACE. No significant damage occurred within the system. Some damage occurred to the foreshore protection along the lakefront and minor problems developed in various areas. Mr. Barry added that a point was made at yesterday's CPRA meeting to thank the Lake Borgne Basin Levee District (LBBLD) for its assistance in unwatering Braithwaite.

Mr. Doody pointed out that the issue of non-floating items in the IHNC corridor still exists. Discussions must be held with the Port of New Orleans relative to the regulation of non-floating items in this corridor. The U.S. Coast Guard cannot regulate non-floating items.

The Board discussed scour protection on the floodside of the levees. Mr. Turner explained that the definition of armoring put forth by USACE Task Force Hope specifically excluded floodside scour protection except at transitions. The main focus of the HSDRRS armoring effort is scouring due to overtopping. The SLFPA-E requested that the USACE take a particularly close look at the transition from a vertical concrete face to embankment material, which is susceptible to erosion. The USACE in its preliminary look at this situation viewed the potential erosion as an O&M issue. The SLFPA-E disagreed with the USACE's position. The cost of effectively replacing material under a wall supported by piles due to erosion will be much greater over the life of the structure than initially providing scour protection. The USACE has undertaken some additional studies on this issue and the SLFPA-E is awaiting a response. He added that some of the levee embankments were constructed in the 1970's and consist of a sand core blanketed with clay. Mr. Doody pointed out that the O&M of the system was supposed to be included in the Independent Peer Review (IPR).

Mr. Turner advised that the USACE is currently looking at various alternatives to correct the problem with the transition of the hurricane protection floodwall to the Mississippi River Levee at Caernarvon so that it will fall within HSDRRS guidelines.

Mr. Doody commented that a potential method for obtaining a higher level of protection would be to allow the Central Wetlands to be used as an additional water storage area. The IHNC Surge Barrier is designed to be overtopped in a 100-year event and the system is designed to accommodate up to 8-ft. of water within the IHNC area. Mr. Turner explained that the concept of using the Central Wetlands as storage for water in the IHNC-GIWW corridor bears very close examination because it is a very elegant solution in its simplicity. It would remove a substantial amount of risk from that area by lowering the water surface elevation enough in the corridor so that vessels could not reach and impact the floodwalls. Several options could be utilized to accomplish this concept. One option would be to use the existing Bayou Bienvenue Control Structure, once the Surge Barrier and Seabrook Gates are closed, to allow water to flow into the Central Wetlands. The Central Wetlands are so large compared to the area that encompasses the IHNC-GIWW corridor that the water surface elevation in the wetlands would be raised only a few inches. If this concept is adopted, the Forty Arpent Levee would be made, at least secondarily, a part of the system and require USACE certification. He agreed that this risk reduction concept that could be implemented at a

relatively low cost should be considered. Mr. Doody requested that the Operations Committee consider the use of the Central Wetlands as discussed. Mr. Kemp added that the implementation of this concept would potentially provide a wetlands restoration component.

EXECUTIVE SESSION:

1. Long term legal strategy re: protection system

A motion was offered by Mr. Wittie, seconded by Mr. Barnes and unanimously adopted, for the Board to convene in Executive Session to discuss the item listed on the agenda. The Board convened in Executive Session at 10:35 a.m.

A motion was offered by Mr. Barry, seconded by Mr. Wittie and unanimously adopted, for the Board to reconvene in regular session at 12:50 p.m.

RESOLUTION NO. 09-20-12-02 – APPROVAL OF LEGAL INVOICES

On the motion of Mr. Estopinal,
Seconded by Mr. Barry, 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 September 20, 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 September 20, 2012” are hereby approved.

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

YEAS: Mr. Barry, Mr. Estopinal, Mr. Kemp, Mr. Luettich and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes, Mr. Jackson and Mr. Pineda

RESOLUTION NO. 09-20-12-03 – APPROVAL OF TASK ORDER NO. 1 WITH GEC, INC. FOR AN OPERATIONS AND MAINTENANCE PLAN

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

WHEREAS, after advertising a Request for Qualifications and conducting a competitive selection process, the Board by Resolution No. 03-15-12-05 approved the selection of GEC, Inc., for the development of a Comprehensive Operation and Maintenance Plan for the Lake Borgne Surge Barrier and Gates, Seabrook

Complex and Gates, Bayou St. John Sector Gate, Bayou Bienvenue Sector, Bayou Dupre Sector Gate and Caernarvon Sector Gate, and authorized the SLFPA-E Regional Director to negotiate a contract with GEC, Inc., for said services; and

WHEREAS, GEC, Inc. has provided a scope of work and fee schedule for Task Order No. 1 under the proposed contract to provide a comprehensive manpower and skill level report for both the day-to-day operations and emergency (storm) events in accordance with the water control plans and operations manuals for the Lake Borgne Barrier, Bayous Bienvenue and Dupre Structures, the Seabrook Complex and the Bayou St. John Structure; and

WHEREAS, the not to exceed cost for Task Order No. 1 is \$152,746.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) authorizes the SLFPA-E President to execute a contract for the aforementioned services with GEC, Inc. and approves and authorizes the execution of Task Order No. 1 under the contract.

BE IT FURTHER RESOLVED, that the aforementioned services will be paid for by the Orleans Levee District (O.L.D.) and that the Lake Borgne Basin Levee District (LBBLD) shall reimburse the O.L.D. for the portion of services dealing with structures located in the LBBLD's jurisdictional area.

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

YEAS: Mr. Barry, Mr. Estopinal, Mr. Kemp, Mr. Luettich and Mr. Wittie

NAYS: None

ABSENT: Mr. Barnes, Mr. Jackson and Mr. Pineda

Discussion of communication of risks to the public using tools such as the Saffir-Simpson Scale, National Weather Service Watches and Warnings, etc.

Mr. Luettich explained that much of this issue has to do with which agency is communicating with which part of the community. A clear, concise, effective message is needed for the public that includes the threat from storm surge.

Mr. Doody asked Mr. Luettich whether he had an opportunity to compare the NHC's modeling with the ADCIRC modeling for Isaac. Mr. Luettich explained that he leads a project funded through NOAA to compare the SLOSH model used by the NHC with the ADCIRC model and several other models in the academic and Federal community. This effort specifically considered the performance of Hurricanes Ike and Rita. The conclusions of the study have not yet been completed; however, discussions are taking place with the NHC about ways to further improve its models. He explained the difficulties encountered in attempting to use Isaac in an objective, systematic side-by-side comparison. He commented that in general the models for Isaac were pretty consistent and would have generated the same understanding.

Mr. Luettich pointed out that the various caveats of the different models must be understood in order to arrive at a correct understanding. A single strong unified voice is needed in time of an emergency. The ADCIRC model results generated for Isaac were provided to the NHC so that it would have the benefit of this information to go along side

of the SLOSH results when drafting a message to communicate to the public. The NHC issued intermediate advisories every three to six hours. The top of the advisory had information about wind and rain and the bottom of the advisory had surge predictions. The surge prediction is based on information extracted from the NHC's SLOSH model runs, as well as other information accessed (e.g., ADCIRC model runs). As a storm gets closer, the NHC also issues maps that are based entirely on SLOSH model results. Expert information and guidance goes into creating the SLOSH model runs. Information from ADCIRC model results assists in the creation of the set of model runs that turned into the graphical product.

Mr. Doody pointed out that the risk inside of the hurricane protection system is not the same as the risk outside of the system. He stressed the need for the NHC to effectively inform the decision makers. Mr. Luettich concurred that much improvement is needed in the overall communication pathway. The NHC is the lead Federal agency in communicating hurricane threats to the public at large. The NHC recognized that the way the message had been communicated in the past was inadequate and had been attempting to correct this problem. Isaac is speeding the NHC's search for a solution.

Mr. Barnes explained that statements issued by the local National Weather Service office provided more detail relative to flood threats, as compared to the more generalized statements issued by the NHC, to assist decision makers.

Mr. Barry commented on the potential need for the Authority to assist in communicating risks, if the risks are not being communicated by others. Mr. Luettich added that the importance of map based products in the communication process was made evident during Hurricane Isaac. The ability now exists to provide a much higher quality geographical based product in a map format. The challenge is developing the ability to communicate the new information that is available today. All related organizations, including the Authority, should continue to push the NHC concerning this effort. Mr. Doody suggested that the SLFPA-E follow up with the National Weather Service so that it will be informed about any improvements that are made.

Discussion of potential for additional hydraulic modeling to simulate the surges associated with Hurricane Isaac.

Mr. Doody noted that Col. Fleming addressed this topic during his AAR earlier in the meeting. Mr. Estopinal commented on the need for reliable current data for model runs. Greater details can be fed into the more complex models generating more precise results.

Mr. Barry discussed the need to identify projects that could be done by the Authority that would enhance the level of protection (e.g., polders). He suggested that TWIG could be requested to pursue an investigation to attempt to identify components of the system, such as the Central Wetlands, that could be used to enhance protection. Mr. Luettich explained that TWIG is currently in a staffing up position and that the source of funding for such a study would need to be determined. Additional options for the study were discussed. Mr. Kemp suggested that the Coastal Advisory Committee consider this issue and provide a recommendation.

Mr. Barry commented that during all of his research that he had never come across a meta-analysis that looked at the various causes of coastal erosion and attempted to allocate percentages attributable to sediment decline, subsidence, navigation, flood protection levees, etc. He suggested that such an analysis should be performed by an entity such as TWIG in order to address the problem in the future.

RESOLUTION NO. 09-20-12-04 – CEA BETWEEN EJLD AND JEFFERSON PARISH FOR THE HARAHAAN PUMP TO THE RIVER PROJECT

Mr. Lacour advised that the CEA was reviewed by the Operations Committee. The Harahan Pump to the River Project is a USACE SELA Project for Jefferson Parish. Drainage pipes must cross over the Mississippi River Levee in the vicinity of Powerline Drive, which necessitates the setback of a section of the levee. Jefferson Parish will be responsible for the cost of the levee setback. Mr. Turner advised that the SLFPA-E reviewed the project plans and met with Jefferson Parish representatives and the project consultant on the project.

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

WHEREAS, the Parish of Jefferson is responsible for the maintenance and operation of the major stormwater drainage systems on the East Bank of Jefferson Parish; and

WHEREAS, the Parish of Jefferson has determined that the drainage of stormwater runoff from a large area of the southern portion of the East Bank would be more efficiently and effectively accomplished by the collection and pumping of stormwater runoff directly into the Mississippi River through the construction of the Harahan Pump to the River Stormwater Drainage Project [Southeast Louisiana Urban Flood Control Project (SELA-07)]; and

WHEREAS, the design consultants have determined that a small portion of the Mississippi River Flood Protection Levee at the southern end of Powerline Drive must be relocated and reconstructed approximately fifty (50') feet closer to the River in order to accommodate the stormwater drainage project design, which determination has been concurred in by the U. S. Army Corps of Engineers; and

WHEREAS, the Parish of Jefferson and the East Jefferson Levee District (EJLD) wish to enter into a Cooperative Endeavor Agreement for the aforementioned relocation of a portion of the Mississippi River Flood Protection Levee in order to accomplish the construction of the Harahan Pump to the River Stormwater Drainage Project.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East approves the Cooperative Endeavor Agreement (CEA) between the Parish of Jefferson and the East Jefferson Levee District for the relocation of a portion of the Mississippi River Flood Protection Levee as part of the Harahan Pump to the River Stormwater Drainage Project [Southeast Louisiana Urban Flood Control Project (SELA-07)].

BE IT FURTHER RESOLVED, that the EJLD Executive Director is hereby authorized to execute the aforementioned CEA.

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

RESOLUTION NO. 09-20-12-05 – EJLD CERTIFICATION OF MILLAGE RATE

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

BE IT RESOLVED, by the Southeast Louisiana Flood Protection Authority – East, the governing authority of the East Jefferson Levee District, that the following millage is hereby levied on the 2012 tax roll on all property subject to taxation by the East Jefferson Levee District:

3.91 mills

BE IT FURTHER RESOLVED that the proper administrative officials of the Parish of Jefferson, State of Louisiana, be and they are hereby empowered, authorized, and directed to spread said taxes, as hereinabove set forth, upon the assessment roll of said Parish for the year 2012, and to make the collection of the taxes imposed for and on behalf of the taxing authority, according to law, and that the taxes herein levied shall become a permanent lien and privilege on all property subject to taxation as herein set forth, and collection thereof shall be enforceable in the manner provided by law.

The foregoing resolution was read in full, the roll was called on the adoption thereof, and the resolution was adopted by the following votes:

YEAS: Mr. Barnes, Mr. Barry, Mr. Estopinal, Mr. Kemp, Mr. Luetlich and Mr. Wittie
NAYS: None
ABSTAINED: None
ABSENT: Mr. Jackson and Mr. Pineda

The next regular monthly Board meeting will be held on October 18, 2012 and hosted by the EJLD.

There was no further business; therefore, the meeting was adjourned at 1:30 p.m.

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY - EAST
REGIONAL DIRECTOR'S REPORT
September 20, 2012

100 Year Level of Protection

IHNC 01- Seabrook Complex:

The Seabrook Project is about 99% complete and was opened to navigation on July 2, 2012.

Both vertical lift gates and both sector gate leafs are installed and can be operated by generator or manually. Two of three coordinated operational exercises have been held with Orleans Levee District (OLD). A night exercise was held Sept. 11, 2012; the next will take place in early October.

The trailers have been removed from the site; cleanup and grading will be completed by the end of August. The final inspection is scheduled for the first week of November.

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

The project is 98% complete. Final inspection is scheduled in November, 2012, but that may slip. The Bayou Bienvenue Vertical Lift Gate is currently open to the public with a 22' height restriction.

Some 95% of the scour stone has been placed in the GIWW on the bypass side. The construction access channel closures are completed and inspected.

Traylor Brothers, the approach wall subcontractor, has finished all end piers and approach walls. Only confirmation of the punch list items and installation of 6-inch rub rails remain.

The hinges on the GIWW Sector Gate have to be re-shimmed and the skin tanks filled with about 22 inches of water to solve the buoyant gate concerns, and this should happen before month's end. The DOR is writing all the final responses and gathering the paperwork for the Sector Gate work. CJ Mayhan is working on completing the architectural finishes at the control houses ; roof flashing is the only item left.

Repairs to the Concrete Barge Gate should start in about two weeks and take about five weeks to complete. Baker, the barge gate subcontractor, is 99% complete with the mechanical and plumbing work. The electrical work is 99% complete.

All the concrete at the north shore complex has been placed. Work continues on the architectural finishes (windows, doors, painting, and roof) in the safe house. The wiring of electrical equipment in the safe house, testing generators, and running conduit & wire out to power the GIWW gates is being completed. The GIWW currently opens and closes using temporary generator power. The north vehicle access ramp, the north splash pad, and the wave ejector concrete placements are all complete. The final grading and placing of scour stone and turf are underway. The permanent bulkhead storage platform structure is complete and the bulkheads are stored on the structure.

Commissioning of the Bayou Bienvenue Gate is being scheduled.

The south vehicle access ramp to old Bienvenue and its splash pads with wave ejectors are complete. Work on final grading, scour stone, and turf is being completed.

An Operations and Maintenance (O&M) review of all six volumes of the Lake Borgne Surge Barrier O&M Manuals that have been submitted for final review is scheduled for 10/20/12.

East Jefferson Levee District:

Reach 1 Lakefront Levee:

The Notice of Construction Complete Letter (NCC) for this project was transmitted by the USACE on July 31st 2012.

Reach 2 Lakefront Levee:

The NCC letter for this project was transmitted by the USACE on July 31st 2012.

Reach 3 Lakefront Levee:

The NCC letter for this project was transmitted by the USACE on Aug. 8, 2012.

Reach 4 Lakefront Levee:

The NCC letter for this project is in the executive office waiting to be signed.

Reach 5 Lakefront Levee:

The NCC letter for this project is in the executive office waiting to be signed.

Bonnabel Breakwater Project:

The NCC letter for this project was transmitted by the USACE to CPRA and copied to EJLD on Nov. 12, 2010.

Duncan Breakwater Project:

The NCC letter for this project was transmitted by the USACE to CPRA and copied to EJLD on Feb. 2, 2011.

Williams Blvd. Floodwall and Gate:

The NCC letter for this project was transmitted by the USACE to CPRA and copied to EJLD on May 31, 2012.

Bonnabel Floodwall and Gate:

The NCC letter for this project was transmitted by the USACE to CPRA and copied to EJLD on May 17, 2012.

Pump Station Fronting Protection:

The work is about 79% complete. Work is ongoing at all four pump stations. The breakwater concrete has been completed at all pump stations. Bonnabel and Duncan pump stations have been dewatered and excavation/demolition has begun in the basin. Pile driving is ongoing at both Duncan and Bonnabel pump stations. Modification work is ongoing at both Elmwood and Suburban pump stations. Pre-Inundation Inspections were held at both Elmwood and Suburban stations. The contractor has an approved Hurricane Plan for Duncan Pump Station and has implemented the plan on site.

LPV 017.2 (Causeway Crossing):

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. Contractor is continuing to work on Phase III diaphragms and deck spans. There has been a temporary bulkhead installed at Monolith M5 to achieve 100 year hurricane protection. Work is approximately 92% complete for the project. Red Zone Meeting is tentatively scheduled for Oct. 4th, 2012.

West Return Levee/Floodwall - North:

Work is about 99% complete. The contractor has finished capping the rip rap on the flood side of the new flood wall. Pre-Final Inspection was held May 23, 2012. There was a punch list developed, and the USACE and contractor are working on completing those items. There is a seepage area at the pump station near the south end of the project. There has been attempts made to fix the seepage problem, but they have been unsuccessful so far. There was some damage to the rock dike, berm and access road on the flood side of the "re-curve" area during Hurricane Isaac. The USACE is still uncertain whether or not the current contractor will handle the repairs or if it will be moved to another contract.

West Return Levee/Floodwall North LSRO (Landside Runoff Collection System)

A-E has submitted 95% plans and specifications; they are under review.

West Return Levee/Floodwall – South:

All work for the project is substantially complete. Pre-Final Inspection was held May 30, 2012. There was a punch list developed. The USACE and contractor are working on completing those items. Turf establishment remains an issue. Final Inspection is tentatively scheduled for early October.

Foreshore Protection Reaches 1 and 2:

Work is approximately 96% complete. The contractor has completed the recapping of the rock dike and the erosion modification. During Hurricane Isaac, they lost about 18,000 cubic yards of embankment from the berm. The rock dike held up well during the hurricane. There is an additional failure area on Reach 1 that still needs to be addressed. There has been no direction from USACE to the contractor on how to repair the recent failure area. Turf will not be established until spring 2013.

Foreshore Protection Reaches 3 and 4:

Work is about 96% complete. The contractor has completed recapping the rock dike and the erosion modification. During Hurricane Isaac, they lost about 8,000 cubic yards of embankment from the berm. They will also need to recap a small amount of the rock dike. Most of the debris that was washed on site during the Hurricane Isaac has been cleaned up. Turf will not be established until spring 2013.

West Return Levee (Airport Runway):

The NCC letter for this project was transmitted by the USACE on Aug. 1st, 2012.

Orleans Levee District:

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

Construction is complete.

The final inspection was held on June 28, 2012. As-builts are being prepared.

Ladders are being placed on the floodgates, under another project, for a total of 24 ladders throughout the lakefront on NO East.

Asphalt parking lot buckled during Hurricane Isaac; ,ix being investigated.

LPV 102.01, 103.01, and 104.01:

Projects are complete and NCC letters transmitted to Orleans Levee District on all three projects.

LPV 103.01A1 (Bayou St. John):

Construction is complete; final inspection held on May 24, 2012. Received NCC on Aug. 22, 2012.

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

Construction is complete, and Lakeshore Drive is fully open to traffic. The guard rail at Lake Terrace floodgate was realigned. The NCC was issued on Aug. 2, 2012.

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

Construction of the originally required work is complete and all ramps are open to vehicular traffic. Turf establishment is still incomplete at the Canal Boulevard ramp. Final inspection is not yet scheduled.

The existing I-walls at Franklin Avenue have been converted to L-walls (LPV-104.02b). Only turf establishment remains. Punch Resolution inspection is scheduled for Sept. 26, 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. Half of the piles have been driven for the conversion. The L-wall work is scheduled to be completed before Nov. 1, 2012. The seepage cut-off wall work is scheduled to be awarded in mid-October, 2012.

LPV 105.01 (Lakefront Airport T-Wall West):

Construction is complete. All lanes of traffic are open at Downman Road. One street light and pole still must be replaced on the protected side of the floodwalls. Guard rails at Downman Road were corrected per Louisiana Department of Transportation & Development direction. Gates still require final exercising and adjustment. Final inspection is scheduled for the end of September.

LPV 105.02 (Lakefront Airport T-Wall East):

Construction is 99% complete. All T-wall monoliths are complete. The pre-final inspection was held on Aug. 22, 2012. Two ramps need to be paved, and additional slope pavement work must be completed prior to inspection. Final inspection will be held at the end of September.

LPV 106 (Citrus Lakefront Levee):

Construction is complete. Concrete slope pavement cracks on the floodside still must be repaired; resolution is pending. A USACE white paper on "Crack Repair" has been finalized and used in the inspection process. Operation and maintenance safety concerns still need to be addressed. Corps is still investigating continuous cracking of the slope pavement on the flood side of the levee, along the railroad tracks. The drains along the railroad tracks are being excavated and pavement will be sloped to drain.

Final inspections were held on July 26 and Aug. 2, 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 was scheduled for mid-August after the contractor addresses problems found during the last inspection, but was delayed. . Remaining issues include problems identified with seating the gates; scheduled to be fixed by the end of September.

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 at the levee toe has been removed and was seeded. Gravel was replaced and reshaped on the levee crown. Final inspection was held on May 22, 2012, but further work on turf is required. A second final inspection is to be scheduled following the last grass cutting by the Corps.

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

Construction is complete. The Final inspection was held July 25, 2012.

Highway 11 floodgate monoliths are settling and now leaning away from the floodgate. URS is investigating the movement and submitted their report to the USACE for review. Further movement of the slope pavement and by-pass road is occurring and will continue to be monitored. The by-pass road slump was repaired.

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

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

A report from URS confirming the increased shear strengths resulting from the wick system is pending. Increased strengths are expected to confirm the necessary factors of safety for stability, as required by the HSDRRS.

Debris removal from Hurricane Isaac along the toe of levee berms is to be done by a different contractor. OLD's concern is for turf establishment; will it need to be redone in these removal areas and was there any erosion?

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. Subsidence on the shoulders of I-10 is being investigated. Further survey work is required. The NCC is being prepared by USACE, pending the subsidence review.

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

Construction is being done under LPV 109.02a.

LPV 110 (CSX Railroad Crossing):

Construction is complete. The NCC was issued on June 4, 2012.

LPV 111.01 (North Side GIWW):

Construction is complete, including all T-wall construction and deep soil mixing. The 15' vegetative clear zone waiver request is in review.

Final inspection was held on June 6, 2012. Small areas of turf still need to be addressed. The NCC is being prepared.

Debris removal from Hurricane Isaac along the toe of levee berms is to be done by a different contractor. Debris will be pushed to the edge of the R/W. OLD's concern is for turf establishment; will it need to be redone in these removal areas and was there any erosion?

LPV 113 (NASA):

Construction is substantially complete. Final inspection was held Aug. 23, 2012. Gravel around the relief wells need to be dressed out prior to another final inspection.

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 Nov. 9, 2012.

OFC-04A Orleans Canal:

The work is complete and punch list resolution meeting was held Sept. 28, 2011. Rill problems have been corrected and re-establishment of turf is ongoing. The NCC is planned for Nov. 2, 2012.

OFC-05 17th Street Canal:

The project is nearly complete. Re-establishment of turf is ongoing. The NCC is planned for Nov. 16, 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 has been scheduled for late August, pending turf establishment. Due to weather and storm, access to borrow pit has delayed work.

LPV192.02 Berm:

USACE Memphis Hired Labor force constructed this project (Phase III), and the work is complete. Turf establishment issues remain. Hydro seeding is on-going. Final inspection was scheduled for Sept. 7, 2012, pending turf establishment, but needs to be rescheduled due to weather.

LPV192.03 Relief Wells

Work is substantially complete. Final inspection was held May 23, 2012. Turf establishment is complete, but there are issues still being reviewed. The NCC was received on July 20, 2012.

France Road Floodgate

The project is complete. The Final Inspection was held July 31, 2012. Road is open to traffic. Minor site work is being finalized.

Lake Borgne Basin Levee District:

LPV 144 (Bayou Dupre Control Structure):

The work is about 99% complete. A final inspection was held 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 pintle bushing were removed and examined for damage. It was determined that the pintle ball was not completely round and would have to be replaced. This will be done with a second dewatering in early 2013. The gate is re-assembled and is operating. The project will be dewatered again in spring and final repairs will be made.

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 complete.

The USACE is installing instrumentation to collect data to support the "pile bending moment" analysis. Work began April 12, 2012, and is being coordinated with CPRA. The report on this will be out in early October.

The bridge design by Arcadis is scheduled to be complete before the end of this calendar year, and bids for construction should out in early 2013. The bridge design 30% review is underway. Access Road project on this reach is in 95% plan review; work scheduled for fall of this year.

LPV 146 (Bayou Dupre to Verret):

Work is complete. The emergency by-pass ramp for LA Hwy 46 is complete and paved. The access road has developed settlement cracking, which will be addressed in spring of 2013. The final inspection was held on Aug. 23, 2011. As-built plans and the O&M Manual are under review by USACE.

Access Road Project is in 95% design review and work should be completed in the fall of 2012.

LPV 147 (LA Hwy 46 Flood Gate):

Work is complete. The final inspection was held Aug. 5, 2011. As-built drawings and O&M manuals are being prepared.

LPV 148.02 (Verret to Caernarvon):

Construction is substantially complete. Final inspection was held on June 11, 2012, and all punch list items were completed. USACE has started the NCC process on this project.

Access Road Project is in 95% design review and work should be completed in the fall of 2012.

LPV 149 (Caernarvon 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 have been resolved, and permanent power to the structure was installed on Dec. 13, 2011. The USACE held a punch list resolution meeting Jan. 3, 2012. The final inspection for this project is set for Friday Aug. 17, 2012.

Water level gauges are installed on both flood and protected sides of the sector gate. The data collected from these gauges will be posted 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. The current schedule for approval is Nov. 16, 2012.

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 of 2012, the HPTRM 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 now will be constructed on an east bank HSDRRS levee in St Charles Parish (LPV-05.2B). The project is about one-mile long. Work will begin in early November, 2012, and should be completed in May 2013. 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 in the final P&S. A “sources sought” list was reviewed by the USACE for material criteria of the HPTRM. Five of the six manufacturer/submitters met the original criteria. 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 until the fall of 2012.

The west bank project will start and finish roughly during the same time frame.

Permanent Pump Stations

The Design Build Contract was awarded on April 13, 2011, for \$674 million to CBY Design Builders, a joint venture of CDM, Brasfield and Gorrie, and Yates Construction, but the award was protested by two of the unsuccessful bidders.

The U.S. Court of Federal Claims approved a decision by the Corps to set aside its awarding last year of a \$674 million contract with CBY Design Builders to build the stations, as suggested by the GAO.

The finalists have responded to a revised request for proposals outlining how the permanent pump stations should be built. Corps officials will hold one-on-one meetings with representatives of four of the five finalists in early August, 2012. The USACE plans on awarding a design-build contract for the permanent pump stations at the end of September 2012.

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 2012 Status Map can be found at the following web address:

http://www.mvn.usace.army.mil/hps2/pdf/Status_Map_June_2012_reduced.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.

Fifty percent models for interior flooding have been developed by the USACE for FEMA. The models are in review by the pertinent drainage districts. Revisions to the models are ongoing. SLFPAE staff and executive directors attended recent meetings with FEMA and the appropriate parish officials to discuss final results.

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 SLFPAE Board has given approval to an RFQ for services needed for "certification" of the non-federal levees. The RFQ is due on Sept. 25, 2012. We are also investigating funding sources that could be used to pay for the certification work. SLFPA-E has signed the PAL Agreement with FEMA for the 40 Arpent levee.

The Corps has agreed to, and has partially completed, a damage assessment report on the 40 Arpent Levee resulting from Hurricane Isaac.

Coastal Protection and Restoration

State of Louisiana – CPRA

The next meeting is scheduled for Oct. 17, 2012, in Baton Rouge, Louisiana.

Lake Borgne Basin Levee District:

The Violet Freshwater Diversion is not operating due to low river stage.

Flood Fight

We are awaiting Tropical Storm Lee and the Hurricane Isaac After Action Review documents from the New Orleans District.

Each levee district will provide its AAR in their Director's Report for Hurricane Isaac at the board meeting. USACE closed both the surge barrier and Seabrook.

The Mississippi River is near El. 3.0', at the Carrollton Gage. It is predicted to fall half a foot during the next 30 days. The Carrollton Gage got to 12.38' for Hurricane Isaac.

Design and Construction

East Jefferson Levee District:

EJLD Safe house and Consolidated Facility Project surveys are being completed by BFM this week and sent to Waggoner and Ball, the architects. The title work is being arranged by Bob Lacour. The completed surveys will be sent to the City of Kenner so we can proceed with requesting City Council approval of the alienation of the streets and property from the City and the re-subdivision and rezoning of the area. The EJLD also needs to get the Phase 1 Environmental assessment done. We will use the completed surveys for this work.

Orleans Levee District:

The Franklin Facility new safe house facility was substantially completed on August 21, 2012. Punch list items are being corrected.

The Franklin Administration Building Refurbishment Project is advertised and bids will open on Oct. 16, 2012.

The Bayou St. John Waterfall Removal Project is advertised and bids will be opened on Sept. 27, 2012.

The Bayou St. John Dredge Project is advertised and bids will be opened on Oct. 25, 2012.

The Maxent/Paris Road Levee Clear and Grub Project are advertised and bids will be opened on Oct. 4, 2012.

The Outfall Canal Bank Stabilization Monitoring Project is 50% complete.

The Florida Avenue Sheet Pile Rehabilitation Project is 63% complete.

The Lakefront Seawall Reach 1B Erosion Control Project Design is 47% complete.

Lake Borgne Basin Levee District

Pump Station #6 repairs – The FEMA PA work at Pump Station 6 will be designed under a consolidated Task Order with Atkins in order to expedite the completion of the bid documents and allow LBBLD to advertise and award the work as quickly as possible. Projects included in the Task Order are:

- 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. Projected bid date is scheduled for Oct. 1, 2012.
- Erosion Repair (Fronting Protection) at PS #6. The FEMA PW (19763) for this project is obligated. A cost estimate for the work was reviewed by LBBLD and LADOTD and subsequently provided to FEMA.
- Corrosion on Discharge Pipes at PS #6 and PS #7. On 10/13/11, a Version request accounting for the updated cost estimate of \$212,422 for each station was submitted to FEMA. The FEMA PW for this project (which has been assigned number PW 19840 V0) has passed environmental review. This work will be added to the bid documents for the repairs at Pump station #6 as both a cost- and time-saving measure.

Seepage Repair Project at Pump Stations #2 and #3 is now a 100% federal project managed by the USACE. LBBLD has provided the USACE with the 80% 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. March 29, 2012).

100% Plans and Specifications for the Remote Control/Telemetry Project for PS #2 and PS #3 are under review by LBBLD staff. FEMA Hazard Mitigation Grant Program (HMGP) funding is being pursued for this project, in conjunction with the safe rooms, under the Hazard Mitigation Grant for St. Bernard Parish.

Pump #1 at Pump Station #7 was removed by Conhagen Inc. after a failure occurred in the pump shaft assembly. Conhagen inspected the pump at its facility and determined that the failure occurred in the shaft coupling and key. Recommended repair plans and specifications prepared by Conhagen have been reviewed by BKI Inc. to ensure the repair will be adequate to prevent repeated failures. BKI's final report recommends a possible change in the start-up procedure to avoid torque spikes. LBBLD will require additional testing by BKI to determine which start-up procedure will work best.

Bids for the replacement of the LBBLD VHF Communication Tower were opened on June 19, 2012, and the contract was awarded on Aug. 27, 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, LADOTD staff, and consultants Atkins North America [formerly PBS&J] and Vali Cooper International through an ID/IQ contract with CPRA. One inspector is now primarily focused on the completion of the IHNC Surge Barrier project.

Halcrow Inc. has completed 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 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, and July 18, 2012, to discuss additional remediation work required by the corps on the three outfall canals. An additional remediation report was done by the corps, and we are awaiting a copy. According to the corps, it should address the remaining canal issues found by Halcrow on all three canals. An extension to Halcrow contract was approved by the SLFPAE Board.

The "Hurricane Risk & Safety Module for the New Orleans Levee System" demonstration project is complete. The transfer and location of the website for the next year is being considered.

An O&M Cost Study for all three levee districts was completed by AECOM. They gave a presentation at the August Operations Committee on their report. This work is funded through a CDBG Grant.

SLFPA-E staff is working closely with CPRA staff to develop an automated on line permitting process for levee districts. Billy Wall is the project manager. A beta version will be demonstrated on Sept. 24, 2012 in Baton Rouge for the new "online permit software". On August 6, 2012, SLFPA-E, SLFPA-W, CPRA and Corps personnel met to discuss floodgate information for use in the "Emergency Operations System" floodgate module. SLFPA-E and levee district staffs have updated floodgate information contained in the new program. The system was used successfully during the recent Hurricane Isaac event.

St. Bernard Parish government has agreed to use a portion of its HMGP allocation to fund three 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 three safe rooms so they can be designed and constructed simultaneously.

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

RFQs 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 have prepared a Scope of Work for review; approval of their proposal is requested at today's board meeting.

The Coast Guard held its first monthly RNA Assessment tour on June 28, 2012. Representatives from the Corps and SLFPA-E attended the tour. The next tour is scheduled for Sept. 26, 2012.

We met with GCR Consulting on July 10, 2012, to review the progress of taking data that the USACE and EJLD were able to provide regarding right-of-way. They demonstrated an online mapping capability that could streamline the process of providing information requested by the public and aid in day to day operation and maintenance. Roger Colwell has been assigned as project manager for this development.

Corps realignment on LPV Projects:

The New Orleans District Corps office has decided to turn over review and resolution responsibilities of outstanding HSDRRS design and construction issues to two other corps districts. The Memphis District will handle the New Orleans East polder and St. Paul District will handle the St. Bernard polder issues.

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:

Gulf South Media
IT Services FY 12-13
Not to exceed \$15,000

Hurricane Preparedness:

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

Revisions to the Districts EOP manuals have been completed and approved by the SLFPAE Board.

A hurricane planning and preparedness meeting with the USACE was held on May 18, 2012, to coordinate our planning and response activities with the USACE. Our annual internal planning meeting with the levee districts directors was held immediately after the meeting with the USACE.

A comprehensive table top exercise was conducted at the Lake Borgne Basin Levee District on June 13, 2012.

Preparation for and response to Hurricane Isaac were done in a professional manner by all levee districts and SLFPAE staff. AAR for review of these actions was held with all Districts. Sit Rep reports were supplied to the CPRA on a daily basis and were well received.