

**MINUTES OF THE
SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY–EAST
BOARD MEETING
THURSDAY, OCTOBER 20, 2016**

The regular monthly Board Meeting of the Southeast Louisiana Flood Protection Authority-East (Authority or SLFPA-E) was held on Thursday, October 20, 2016, in the Second Floor Council Chambers, Joseph Yenni Building, 1221 Elmwood Park Boulevard, Harahan, Louisiana, after due legal notice of the meeting was sent to each Board member and the news media and posted.

Mr. Hassinger called the meeting to order at 11:00 a.m. and led in the pledge of allegiance. Mr. Kemp called the roll and a quorum was present:

PRESENT:

Lambert J. Hassinger, Jr., President
Richard A. Luettich, Jr., Vice President
G. Paul Kemp, Secretary
Mark L. Morgan, Treasurer
Clay A. Cosse'
Quentin D. Dastugue
Jason P. Latiolais
Herbert I. Miller

ABSENT:

Andrew J. Englande

INTRODUCTION OF NEW COMMISSIONERS AND OATH OF OFFICE:

Mr. Hassinger welcomed Commissioners Quentin D. Dastugue, Jason P. Latiolais and Herbert I. Miller to the Board. Nyka Scott, SLFPA-E Executive Counsel, administered the Oath of Office to the new Board members.

Mr. Dastugue received a degree in Civil Engineering from Georgia Tech and was elected to serve in the Louisiana State Legislature from 1980 to 1996. He is the owner of Property One, a real estate company.

Mr. Miller received a degree in Civil Engineering and a Masters Degree in Sanitary (Environmental) Engineering from Georgia Tech. He has been a resident of Louisiana since 1976, practiced engineering in both governmental and consulting environments and retired in 2014.

Mr. Latiolais received a degree in Civil Engineering from Louisiana State University and has worked for Barriere Construction for the past eight years.

NOMINATION AND ELECTION TO FILL VACANT OFFICES OF VICE PRESIDENT AND TREASURER FOR THE UNEXPIRED TERM ENDING ON JUNE 30, 2017:

The floor was opened for nominations to fill the vacant office of Vice President, previously held by Stephen Estopinal, for the unexpired term ending on June 30, 2017. Mr. Kemp offered and Mr. Cosse seconded the nomination of Mr. Luettich. There were no further nominations. Mr. Luettich was elected by a unanimous vote of the Board to fill the office of Vice President for the unexpired term ending on June 30, 2017.

A motion was offered by Mr. Miller, seconded by Mr. Morgan and unanimously adopted by roll call vote, to add the nomination and election to fill the office Treasurer, previously held by Mr. Luettich, for the unexpired term ending on June 30, 2017 to the Agenda.

The floor was opened for nominations to fill the office of Treasurer for the unexpired term ending on June 30, 2017. Mr. Hassinger offered and Mr. Kemp seconded the nomination of Mr. Morgan. There were no further nominations. Mr. Morgan was elected by a unanimous vote of the Board to fill the office of Treasurer for the unexpired term ending on June 30, 2017.

**RESOLUTION NO. 10-20-16-01 –
ELECTION OF SLFPA-E VICE PRESIDENT AND TREASURER**

“A resolution stating the results of the election to fill the unexpired term of the Southeast Louisiana Flood Protection Authority-East offices of Vice President and Treasurer.”

WHEREAS, the Board adopted revised Bylaws at a Regular Board Meeting held on December 17, 2009, which provide in part for the designation and election of Officers of the Board; and

WHEREAS, Article IV, Section 1 (Officers and Elections), designates the officers as President, Vice President, Secretary and Treasurer to be elected from among the members of the Board at the regularly scheduled June meeting; and

WHEREAS, Article IV, Section 1 further provides that officers shall assume their duties on July 1st; and

WHEREAS, Article IV, Section 2, provides that officers shall be elected to serve one year terms; and

WHEREAS, the Board at its meeting on June 16, 2016 elected Stephen V. Estopinal, to fill the office of Vice President and Richard A. Luettich, Jr. to fill the office of Treasurer for the term ending on June 30, 2017; and

WHEREAS, Mr. Estopinal’s term on the Southeast Louisiana Flood Protection Authority-East Board ended on September 28, 2016; and

WHEREAS, an election was held this date and by a unanimous vote the Board elected Richard A. Luettich, Jr. to fill the vacant office of Vice President for the unexpired term ending on June 30, 2017; and

WHEREAS, with the election of Mr. Luettich to fill the office of Vice President, an election was needed to fill the office of Treasurer; and

WHEREAS, an election was held this date and the Board by a unanimous vote elected Mark L. Morgan to fill the office of Treasurer for the unexpired term ending on June 30, 2017.

BE IT HEREBY RESOLVED, that, in accordance with the election held this date, Richard A. Luettich, Jr. shall fill the office of Vice President and Mark L. Morgan shall fill the office of Treasurer for the unexpired term ending on June 30, 2017.

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

YEAS: Mr. Cosse, Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

OPENING COMMENTS:

Mr. Hassinger advised that the Board has taken the opportunity each month to recognize employees with exceptional work performance and who are essential to the Authority's mission. East Jefferson Levee District (EJLD) Police Officer Walter Torres was nominated by the EJLD Executive Director and his colleagues for recognition for his contribution to the EJLD and the Authority. Officer Torres is recognized by his Watch Commander, Lt. Terry Durnin, as the top performer on his watch. His professionalism and attention to detail are reflected in his daily work assignments. He is the first to volunteer if there is a manpower shortage or if his watch's tour of duty needs to be extended. Officer Torres has been commended for his patience and calm demeanor while assisting the general public. He is a leader in strengthening the EJLD's relationship with the Jefferson Parish Sheriff's Office (JPSO) by being proactive on service calls in close proximity to the flood protection system. He also assists the JPSO with calls for Spanish translation at least twice a week during his regular watch. Officer Torres was selected by the EJLD leadership for assignment to the Jefferson Parish EOC during emergency events. He always goes the extra mile and is an asset to the general public, the EJLD Police Department, and the Flood Protection Authority. Mr. Hassinger presented a Certificate of Commendation to Officer Torres and thanked him for his outstanding public service and commitment.

Mr. Hassinger reported that he and Robert Turner, SLFPA-E Regional Director, attended the Coastal Protection and Restoration Authority (CPRA) Meeting in Lafitte, LA, to hear the discussion of a topic generated by St. Bernard Parish President Guy McInnis and Windell Curole, South Lafourche Levee District General Manager/ Executive Secretary, relative to how to fund the system as a regional system. While the flood protection system must be operated and managed as a regional system, the statute that created the Flood Protection Authority prohibits money generated in one parish from being spent in another parish. The Authority's funding ability is therefore restricted and this restriction eliminates the flexibility needed to truly manage the system as a regional system. Discussions are being started with the CPRA to determine

whether it can assist the Flood Protection Authority with a remedy. The Authority is not seeking to increase its overall budget, but more flexibility in order to smartly spend money. Discussions will continue and a determination will be made as to whether a mechanism can be put in place to resolve this situation. The Authority must be able to adequately communicate its mission and successes to the public and demonstrate the efficiencies of its operations. He pointed out that there is little notice by the public when the Flood Protection Authority successfully accomplishes its mission. Mr. Morgan commented that the Flood Protection Authority-West has a similar situation relative to the Western Closure Complex and the operation of a regional system. Mr. Hassinger pointed out that there are other levee districts that span multiple parishes that do not have the limitation placed on the SLFPA-E; therefore, these levee districts can spend money where needed in order to accomplish their goals.

Mr. Hassinger announced that the annual staff meeting will be held after the November 17th Board meeting at the Orleans Levee District's Franklin Avenue Complex.

Mr. Hassinger advised that he, Mr. Turner, and Tim Pisciotta, Orleans Levee District Electrician, attended the Annual I-Storm Conference. I-Storm is an international network of managers and owners of storm surge barriers. Mr. Turner has instrumentally participated in the I-Storm network for the past several years. I-Storm members toured various structures and facilities in the United States in June, 2016. Mr. Hassinger commented that the professionalism, talent and seriousness by which the network operates is astounding. Many of the challenges faced by participants in the network are identical to the challenges faced by the Authority. Network participants are doing a tremendous job relative to public education and awareness (e.g., visitor centers and museums).

Mr. Hassinger introduced John Lewis, the new SLFPA-E Human Resources (HR) Director, and welcomed him to the Authority. He advised that Nyka Scott, SLFPA-E Executive Counsel, had taken the lead in addressing many administrative and HR issues in the past year and drove efforts to the point where an HR Director could be hired. He thanked Ms. Scott for her efforts.

ADOPTION OF AGENDA:

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

RESOLUTION NO. 10-20-16-02 – APPROVAL OF SEPTEMBER 15, 2016 BOARD MEETING MINUTES

It was noted that the Board agenda incorrectly listed the minutes of the last Board meeting as June 16, 2016, in lieu of September 15, 2016.

On the motion of Mr. Kemp,
Seconded by Mr. Luettich, the following resolution was offered:

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East approves the minutes of the Board Meeting held on September 15, 2016.

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

YEAS: Mr. Cosse, Mr. Kemp, Mr. Hassinger, Mr. Luettich and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

ABSTAINED: Mr. Dastugue, Mr. Latiolais and Mr. Miller

PRESENTATIONS:

1. 2016 Audit of Southeast Louisiana Flood Protection Authority and its Levee Districts performed by the Legislative Auditor – Jim Durbin

Jim Durbin with Car, Riggs & Ingram, LLC, provided a brief presentation on the 2016 Financial Audit. There was a \$25 million increase in net assets as a whole for the organization, partly driven by an increase in capital assets over the past year, an increase in tax revenue and the receipt of the eight million dollar BP settlement. The audit was conducted utilizing normal governmental auditing standards, which require the auditor to test, but not go into, internal controls. The internal controls were tested and several recommendations were provided relative to the non-flood protection assets. An unmodified (clean) opinion was rendered for the Flood Authority. There were no difficulties or disagreements with management. Mr. Durbin commended the levee districts' staffs for their efforts. There were no uncorrected misstatements. The corrected misstatements were due to the timing in which the audit had to be completed. The auditor found no fraud or illegal acts. There was nothing of significance other than a small increase in the pension liability this year.

2. Tulane River and Coastal Center – Dr. Michael J. Blum

Dr. Michael Blum, Director of the ByWater Institute, explained that the Tulane River and Coastal Center (TRCC) is the first phase of a larger Riverfront Initiative. He provided an overview of the Riverfront Initiative and the role of the TRCC. The objective of the TRCC is to build new capacity and foster innovation. Economic development, community resilience and environmental stewardship were identified as the greatest opportunities. He explained that Tulane is a research intensive university and that much of the research has been modeled after basic discovery rather than application aspects. The initiative shifts Tulane University away from its emphasis on basic discovery and more towards translation in collaboration with its partners. Since Hurricane Katrina Tulane University has increased participation in the areas of business incubation, economic development and leveraging resources, and public outreach and community engagement.

Dr. Blum addressed the applied research programs and educational dimensions. Tulane University is currently doing work associated with diversions, shoreline remediation, wildlife conservation and human dimensions. Much of its work is in traditional degree programs. Tulane University is now determining how it can leverage its experience in order to do more work in informal education (e.g., hosting workshops and conferences that align with the degree programs) and technical certifications.

Dr. Blum advised that Tulane University is moving forward with its Disaster Resilience Program along with two new degree programs (i.e., Environmental Management and Geofluids Engineering). The Disaster Resilience Program is being retooled to address Gulf-wide, particularly Louisiana, concerns. Environmental Management is an interdisciplinary program (e.g., sciences to humanities). After Hurricane Katrina Tulane University lost much of its capacity in its engineering programs, particularly its Civil and Environmental Engineering Programs. Over the past five years discussions took place on how to bring back some of this capacity and how to address some of the particular area concerns. Instead of bringing back a whole department, such as Civil Engineering, Tulane is focusing on various specific training subsets (e.g., Geofluids). Geofluids speaks to concerns of the energy sector, the water sector and infrastructure resilience. Its efforts will provide opportunities for accelerated, flexible programs, skill-oriented training, complementary opportunities and partnership participation (e.g., internships).

Dr. Blum explained that an important step towards Tulane's goals is the opening of the TRCC located on the Mississippi River. The TRCC was designed to have greater efficiencies in science, engineering and enterprises. One of the TRCC's values is its ability to deploy researchers into the field more efficiently. Approximately 50 percent of the space in the TRCC is allocated to the public forum to facilitate and encourage community engagement. Tulane encourages public entities to utilize the space free of charge in order to encourage communication. The next phase of the TRCC includes rebuilding the wharf area in the rear of the building in order to encourage public access to the river. Future phases anticipate doubling or tripling the size of the current usable space. The TRCC is partnering with the developers for the Convention Center site.

Mr. Miller inquired about Tulane University's water quality monitoring efforts on the Mississippi River and the availability of the database. Dr. Blum responded that Tulane is currently monitoring the water quality. The instrument package has been deployed on the river for about a year and performs autonomous water samplings that provide water assessment characterization on a 15 minute cycle. The progressively generated information can be accessed on a website. The initiative is being done in partnership with The Water Institute of the Gulf and Woods Hole Oceanographic Institution. The effort is a node within a broader initiative called the Global Rivers Observatory. The Mississippi River is being plugged into a set of comparisons across the world.

Mr. Dastugue inquired about the funding of the facility. Dr. Blume advised that federal funding was obtained through the Economic Development Administration. Delta Regional Authority and State of Louisiana funding was also received in addition to private funding and funding from Tulane University.

Mr. Hassinger explained that after seeing media reports he thought the Commissioners and staff would be interested in hearing about the TRCC. He thanked Dr. Blume for the presentation and asked that he advise the Board should he come across any scientific, educational or programming opportunities in which the Flood Protection Authority could work with Tulane University.

2. An Analysis of Flow Conditions at the IHNC-GIWW Sector Gate – Arcadis.

Paul Tschirky, PhD., Associate Vice President of Arcadis, provided a presentation on the Analysis of Flow Conditions at the IHNC-GIWW Sector Gate. The analysis was a review of available data and past modeling. The motivation for the analysis was the high velocities observed through the IHNC Surge Barrier (GIWW) Sector Gate, which is causing a navigation safety concern, and the impact of the closure of the Barge Gate, which has been closed for repairs, to flow conditions. An additional concern is that the existing gages may not adequately inform the SLFPA-E about flow conditions in the navigation channels. The questions included:

1. What are the regional and local conditions that generate the high velocities?
2. How often are the high velocities likely to occur?
3. What can the original modeling studies explain?
4. What is the consequence of keeping the Barge Gate closed?
5. How can the gaging network be improved?
6. What additional modeling is needed?

Dr. Tschirky explained that there is a regional interaction that includes the Surge Barrier (GIWW) Sector and Barge Gates, the Seabrook Complex Gate and the IHNC Lock.

The data inventory includes:

- 24 water level data locations
- 11 wind data locations
- 2 velocity data locations (GIWW Sector Gate and Seabrook Complex)

Dr. Tschirky reviewed a sampling of the Acoustic Doppler Current Profiler (ADCP) data at the GIWW Sector Gate. Under regular tidal conditions there were many occurrences in the sampled month where the 4 fps (feet per second) level was exceeded. He advised that Arcadis extensively reviewed the quality of the data in the analysis. Some errors were discovered and some mis-labeling was identified. Arcadis sorted through the data, looked at the issues with the earlier ADCP data, and then used as much of the clean data as possible to look at the influences. The correlations between different gages were used in an attempt to do an analysis of the regional scale hydrodynamics to determine conditions of concern and assist with monitoring to warn of impending high velocities.

Slides were shown of velocities at Seabrook (before and after the closure of the Barge Gate) and a correlation of the velocities at Seabrook and the GIWW with the closure of the Barge Gate. Dr. Tschirky pointed out the 105 minute lag between Seabrook and the GIWW. A slide was then viewed of an example of the regional dynamics during an

event in 2008 and of the hydrodynamic gradient across the IHNC Barrier. He noted the drawdown of the water level at the GIWW Sector Gate.

Dr. Tschirky provided the following summary of the data inventory and analysis:

- Linear relationship between velocity at Seabrook and GIWW Sector Gate.
- Moderate relationship of velocity and gradient at the GIWW Sector Gate, but gage data affected by set-up due to placement.
- Good data for regional dynamics, but inadequate at the structure.
- Recommend improvements to existing gages and placement of additional gages.

Dr. Tschirky reviewed the inventory of previous modeling, modeling approaches, comparison of model validation and regional dynamics and model results. He pointed out that none of the models had all of the pieces adequately presented that are needed to answer the question at hand based on the data that was reviewed to look at the flows through the GIWW Sector Gate. The conclusions from the model review were:

- Previous modeling confirms potential for high velocities.
- Velocity is higher at the GIWW Sector Gate when the Barge Gate is closed. Velocity is lower at Seabrook.
- ADH reveals eddying details, but neglects adjacent marsh and many regional scale effects (wind & waves).
- Updated modeling study is needed.

Dr. Tschirky recommended the following next steps to help answer the questions dealing with the velocities through the GIWW Sector Gate and to provide a better predictive tool:

Phase 2:

- Use the updated ADCIRC/SWAN/NAM system
- Explore regional scale dynamics for variety of scenarios
- Identify locations for remote monitoring/gaging to warn of potentially dangerous conditions
- Provide boundary conditions for Phase 3

Phase 3:

- Develop fully three dimensional Flow3D model
- Use Flow3D to explore eddying and guide walls
- Identify optimal locations for ADCP and local gaging

Dr. Tschirky pointed out that the previous models did not include the closure of the Mississippi River-Gulf Outlet (MRGO). In addition, the previous models that included wind used a single inland wind data point and did not account for wave setup across Lake Borgne. He noted that additional gaging may be needed or some of the existing gages may need to be moved in order to obtain a better representation of the flows through the gate and provide a better predictive capability that is not influenced by the local eddies of the guide walls. Data from the ACIRC/SWAN model could be used to drive the boundaries to look at more detail in a full 3-D model for a more detailed flow through the Sector Gate for navigation purposes, and identify the best locations for the

ADCP's in order to have a predictive capability and identify the events driving the higher velocities.

Mr. Turner advised that there are at least four entities that deal with the current gages [i.e., National Weather Service, U.S. Geological Service (USGS), U.S. Army Corps of Engineers (USACE) and SLFPA-E].

Mr. Luettich explained that the current gages were placed to meet the needs of the particular agency that installed the gage without the coordination and integration that is needed in order for the gage to be of value to the SLFPA-E. The analysis was performed in order to determine what gages were in place, the usefulness of the data for the SLFPA-E's purposes, and ways to optimize the observational system to meet the SLFPA-E's needs. He pointed out that the flow through the gates must be reasonably well coordinated with the head differential between Lake Pontchartrain and Lake Borgne. He asked whether a correlation was done between the head differential and the velocities through the gates. Dr. Tschirky responded that Arcadis did not look at the head differential between the lakes. It looked at some of the differentials driven by tides and winds.

Nancy Powell with Arcadis advised that the USGS recently fixed the SLFPA-E ADCP meter. She noted that for the study Arcadis had only one month of data and that some of the events that may drive a higher velocity may have been missed with only one month of data. She suggested that Mr. Luettich's suggestion could be accomplished with a better data set. Modeling could be helpful to fill in the gaps. She pointed out that the correlation is with what the USGS is calling the channel velocity, not the velocity through the navigation gate itself. The USGS measures two velocities. The correlation was really bad using the velocity through the gate itself due to the Barge Gate being closed; therefore, the full cross section was needed at Seabrook to get the correlation. Mr. Luettich asked whether the historical data could be corrected and used. Ms. Powell responded that she would not characterize the historical data as something that could be rescued. She pointed out that the meter was placed too low in the water column and false readings were produced. Better data was produced once the USGS raised the instrument and began monitoring the readings. Arcadis used the historical data to identify events; however, the values were not very good. She pointed out that an additional step to identify flood velocities and ebbtide velocities is needed.

Mr. Kemp explained that the SLFPA-E is attempting to use the data to create an active management system. He suggested the possibility of taking advantage of the 105 minute lag between discharge changes at Seabrook and the Surge Barrier to improve management. Mr. Turner noted that there is value in continuing the analysis. He pointed out the need to investigate the scour hole that has developed about 500-600 feet away from the Barge Gate on the floodside of the Surge Barrier. Additional modeling could include the retaining walls placed across the canals in order to determine whether a point of stability has been reached with the scour or what may need to be done to address the issue. The USACE began looking into this issue about

six months ago, but has not yet provided the result of its investigation. Based upon the current depth of the scour hole, there is no stability problem with the Surge Barrier.

Mr. Miller inquired about construction of a model of the Surge Barrier to address issues such as scour and velocity gradients. Ms. Powell explained that a physical model was done by the USACE's contractor; however, it was site specific. It was pointed out that from a modeling perspective it may be more cost effective to first utilize a numerical model to determine whether flow conditions may be driving the scour. A numerical model would help drive a better physical model, if needed.

Mr. Turner pointed out that the placement of the gages have historically been a problem. The gages at the Surge Barrier are too closely placed. A gage should be placed outside of the GIWW Sector Gate and Seabrook Gate, away from the draw down that occurs as the water goes through the gate structures, to obtain the head difference that is driving the flow.

Mr. Luettich requested that Mr. Turner develop a list of action items or recommendations.

Mr. Kemp suggested that any future modeling be tied into the USACE's navigation simulator at Vicksburg, MS.

Mr. Turner commented on the purposes of the analysis. He pointed out that several allusions have occurred with vessels coming into contact with the fender system. In addition, the SLFPA-E is attempting to reduce risks during a storm event by modifying the operation of the Barge Gate; therefore, data is required relative to the Barge Gate closure's impact on velocities and on the control of velocities through the GIWW Sector Gate. The analysis performed by Arcadis is the first step (i.e., determining what historical information may be usable and what datasets may be missing in order to make good decisions).

4. Use of High-Resolution Seismic Data for Evaluation of Geologic Areas of Concern (AGC) – David B. Culpepper

David B. Culpepper, Registered Professional Geoscientist, The Culpepper Group, LLC, advised that he has had discussions with former Board member Stephen Estopinal relative to concerns about the closure of the Surge Barrier Barge Gate during storm events and the potential impact of possible subsidence to the closure process. He discussed the Harris-Galveston subsidence district created in the State of Texas in 1985 to manage ground and surface water used by various industries in the area and the mapping of surface faults in California. The project proposed to the SLFPA-E is based on recommendations from the USACE's 2007 independent Performance Evaluation of the New Orleans and Southeast Louisiana Hurricane Protection System. The evaluation highlighted the need for seismic data with closely spaced borings and elevation monitoring systems to determine rates of subsidence, along with radiometric

dating of organic sediments. He noted a recent Times Picayune newspaper article concerning subsidence around the Entergy Power plant in the Michoud facility.

Mr. Culpepper discussed Areas of Geologic Concern (AGC), which may include surface fault ruptures, underlying large faults, peat deposits, and other types of geologic features that could have a bearing on subsidence and souring. He commented that he was advised that recent elevation monitoring revealed almost 1-1/2-ft. of subsidence has occurred at the Paris Road Bridge at Bayou Bienvenue in the past twenty years. He pointed out that subsidence in Louisiana is not well understood. Subsidence in Louisiana is not uniform and there are hot spots of subsidence. He advised that he is working with acquiring 3-D seismic data, which has traditionally been used for oil and gas exploration, from seismic companies. The data is very expensive to obtain and it is hoped that the seismic companies would donate the data to the public to use for mapping surface faults. Only the top two seconds of the seismic record would be repurposed and reprocessed to extrapolate where deeper faults could extend to the surface. The data would assist geotechnical engineers in developing mitigation procedures for potential subsidence that could impact the Surge Barrier and its navigation gates. He pointed out that the results of the proposed work may reveal a geological reason for the previously discussed souring.

Mr. Culpepper explained that the general public thinks that most of the coastal land loss in Louisiana comes from sea level rise or erosion. He stated that he has been working with The Water Institute of the Gulf and anticipates that in the next several years it will be found that most of the land loss in Louisiana is the result of land subsidence—the land is sinking and not eroding away.

Mr. Culpepper reviewed a series of slides of an area in lower Barataria, LA. The slides include a map of the area, a graph of tide levels in Grand Isle, LA, and Pensacola, FL (which is believed to be geologically stable), and the Global Mean Sea Level in 1932, 1956, 1973, 1975, 1977, 1985, 1988, 1990, 1995, 1999, 2004, 2006 and 2009. He pointed out that Old Paris Road was three feet above sea level in 1930 and is currently two feet below sea level. Should the current rate continue, it is expected that another five feet of subsidence will take place in this area in the next 85 years. A slide was viewed of the subsidence taking place at Fort Proctor.

Mr. Culpepper reviewed a map of areas where permits were obtained to shoot seismic data throughout coastal Louisiana. He reiterated that it is hoped that this data can be obtained to save costs for the citizens of Louisiana and produce efficiencies. He advised that he is also working with the University of New Orleans (UNO), Tulane University and to some extent Louisiana State University (LSU). Several companies have donated their seismic data to the universities to utilize in mapping faults.

Mr. Culpepper advised that a recent paper was published in March, 2016, by Dr. Cathleen Jones from the NASA Jet Propulsion Lab, concerning subsidence in the Michoud area, which is near the location of the Surge Barrier Barge and Sector Gates. The location where the Michoud fault is suspected to occur was pointed out. He noted

the importance of focusing on proving whether there is a fault in that location, and if there is a fault, determining how active the fault may be and the cause of the activity. The information would be useful in future mitigation efforts for the Surge Barrier structure.

Mr. Culpepper advised that some work was done decades ago using carbon 14 sediment dating techniques. He proposed incorporating the data, after ensuring its validity, into the current work.

Mr. Culpepper reviewed a slide with information that was based on the work of Dr. Roy Doka showing subsidence in New Orleans East that included the Area of Geological Concern in Michoud and the projected Michoud fault. He explained that an attempt is being made to take the information learned in research projects at universities and apply it to infrastructure projects.

Mr. Culpepper reviewed a slide showing a seismic shoot for the Lake Borgne area that was donated to UNO. The lines show where faults are projected from a deep depth to the surface. Another slide showed information concerning faults in Lake Borgne that were detected using a Bubble Gun (a device for capturing seismic data). Three unknown faults were mapped in the area where the instrument was used.

Mr. Culpepper discussed the proposed use of the HMS-620 Bubble Gun, which can be deployed from a small vessel in shallow water. He explained that many of the scanned images that were reviewed were profiles of the surface bottom. An attempt is being made to go below the surface and look at what is going on underground in a 3-D setting. He also proposed using electro resistivity tomography (ERT) to assist with pinpointing the location of faults. Soil borings could then be performed on either side of the fault to determine the rate of subsidence and if an accumulation of peat exists. It is suspected that most of the subsidence is occurring where large amounts of peat are located.

Mr. Culpepper reviewed the proposed project scope of work:

- Selective Data Review for AGC
- High-resolution Marine Seismic
- ERT Feasibility Pilot Project
- Borings along Fault Ruptures
- Subsidence Maps

Mr. Culpepper reviewed the project organization chart.

Mr. Kemp commented that his understanding is that the work is part of a regional collaboration with the universities and the New Orleans Geological Society. He noted that the SFLPA-E recently retained Tremaine and Associates for a pilot project on the collection of electromagnetic data. Mr. Morgan suggested that the proposal be reviewed by the Coastal Advisory Committee for a recommendation to the Board.

PUBLIC COMMENTS:

Evelyn Riehm advised that she represents area residents concerning the sand yard operation in Harahan. Harahan is the only location along the Mississippi River with a batture sand yard operation located next to a large residential community. She stated that the residents' quality of life is being greatly affected due to Wood Materials' operation of dump trucks, frontend loaders, cranes and excavators throughout the night and producing noise, airborne sand and diesel emissions 24-hours/day. Wood Materials is a contractor supplying sand for a Louis Armstrong Airport project. She pointed out that Wood Materials could use its sand yards located in Waggaman, Hahnville and Lower Algiers that are not located next to a large residential community. The Department of Natural Resources issued a cease dredging order to Wood Materials in 2015 and 2016 for dredging over its permit of 225,000 cubic yards of sand. Night work then ceased for two months and the other yards were used. An East Jefferson Levee District (EJLD) police officer advised the residents that Wood Materials had a Federal permit that allowed work at night; however, when asked, the officer said that he did not see a copy of the permit and did not have access to the permit. She asked did the permit issued to Wood Materials allow operations throughout the night within the City of Harahan. At a Harahan Council meeting in September the attorney for Wood Materials advised that the City of Harahan would be sued if the Council restricted its hours of operation. She stated that the USACE permit issued to Wood Materials states that at no time shall the stockpile area be allowed to exceed the height of levee. Wood Materials continues to stockpile sand above the height of the levee. The EJLD police department is contacted and Wood Materials is told to lower the height of the stockpile with no penalties for its repeated behavior. She commented that the EJLD police witness firsthand the effects of the 24-hour/day operations during their patrol of the levee. A meeting was held with Wood Materials representatives in December, 2015, relative to the impact on the residents; however, no changes have been made to its operations. She commented on an attempt made by Wood Materials to expand its operations in Harahan and on the court ruling in favor of the ordinance that freezes the private commercial development at its present state and protects the community.

Beverly Crais, whose residence backs up to the West Return Floodwall Landside Runoff Project, explained that her property has flooded 13 times over the past 2-1/2 years. A CPRA study determined that the drainage system put in place by the USACE was inadequate for the floodwall runoff and that there was an elevation problem with the catch basins. She stated that the USACE's contractor started repairs in her area last week; however, the contractor replaced the drainage pipe with the same size pipe and installed another catch basin behind her residence at the same elevation as the previously installed catch basin that was having problems. She stated that she met with a USACE engineer who advised that a larger pipe could not be installed without changing the entire system. The elevation of the catch basin could not be altered because water could back up in the first catch basin. She commented on the earthen berm and sheetpile that will be installed in the area by the contractor. She questioned whether the repairs would resolve the flooding issues and stated that she did not want an earthen berm or sheetpile installed behind her property that would hinder access to

the levee and have a detrimental effect on property values. She stated that residents north of Vintage Drive were not notified by the USACE about its plans.

Mr. Hassinger requested that Mr. Turner contact the USACE to find out what steps it has taken to notify residents concerning the scope of work.

COMMITTEE REPORTS:

Finance Committee: The Finance Committee did not meet during the month of October. Mr. Luettich advised that implementation of the Information Technology (IT) improvements across the levee districts is being monitored. Firewalls were put in place since the last Board meeting at all locations in addition to the backup storage location in Baton Rouge. The next step is the implementation of high level security software. A region-wide backup plan is being developed for the Authority. He stated that he looked forward to working with the new Regional Finance Director who will be starting work on Monday. He anticipated that the new Regional Finance Director will be a great asset to the Authority.

Operations Committee: The Operations Committee did not meet during the month of October.

Legal Committee: The Legal Committee did not meet during the month of October.

Coastal Advisory Committee: The Coastal Advisory Committee did not meet during the month of October.

Mr. Hassinger announced that Mr. Kemp would be the new chair of the Operations Committee, which was previously chaired by Mr. Estopinal. The new Board members would serve on the following committees: Mr. Miller - Operations Committee, Mr. Latiolais and Mr. Englande – Coastal Advisory Committee, and Mr. Dastugue – Finance Committee.

Mr. Dastugue inquired about the regulation of the permit for the sand yard operation in Harahan. Mr. Turner explained that the SLFPA-E regulates permits that it issues; however, many of the issues previously discussed are not within the SLFPA-E's purview to regulate and may fall under the purview of the City of Harahan. Ms. Scott advised that she did not have a copy of the USACE permit; however, if the USACE's permit allows 24-hour/day operation, it would be under the USACE's purview.

Mr. Dastugue inquired about the drainage repairs along the West Return Floodwall. Mr. Hassinger explained that the USACE is attempting to remedy a problem that is the consequence of its design and construction of the West Return Floodwall. It has been acknowledged that the landside runoff project was a poor design and the USACE is trying to address the effects. The SLFPA-E has no authority to compel the USACE to do anything; it can only try to exert influence. Brett Herr, USACE Project Manager, explained that the USACE presents its designs to the SLFPA-E and must receive right-

of-entry from the SLFPA-E; therefore, cooperation is critical. The drainage repairs are 100 percent federally funded. He offered to address Ms. Crais' complaints at the meeting. Mr. Hassinger encouraged that the USACE do everything possible, not only to address the problem, but to compensate the people who have been effected by the poor design.

Mr. Hassinger asked would the drainage system repairs result in ponding. Mr. Herr explained that there are some properties that drain from the front of the property to the back of the property, which is not in accordance with Parish ordinances or State law. In those instances, there will be some trapped water in the back of the property. The repairs in the area north of Vintage Drive would be no different than essentially what was done south of West Esplanade Avenue where sheet pile was driven the entire length of the reach. If the water is not flowing from the back of the property to the front, it will pond in the back. Prior to the West Return Floodwall Landside Runoff Project, all of the water in the area from the floodwall to the private property ponded and was trapped. All of the water from the swale to the floodwall will be taken to the drainage system.

Mr. Hassinger asked what steps were being taken to notify the effected residents. Mr. Herr explained that USACE representatives have met with representatives from the Board on each step of the process. He presented the plans to the Board at several Board meetings and discussed the earthen embankment north of Vintage Drive. What he may not have communicated to the Board was the sheet pile driving at the drop inlets. The USACE has not had public meetings with the residents along the West Return Floodwall (both north and south of Vintage Drive) for some time. He stated that if the SLFPA-E Board would like the USACE to hold a public meeting, it would be happy to do so. Mr. Hassinger commented that a public meeting would be a great idea. Mr. Herr advised that he would contact Mr. Turner and Derek Boese, EJLD Executive Director, to set up a meeting.

REGIONAL DIRECTOR'S REPORT:

Robert Turner, SLFPA-E Regional Director, reviewed the highlights of the Regional Director's Report (copy appended to minutes). He provided the following additional comments:

- West Return Wall Landside Runoff Project – The USACE's contractor is currently doing work on the north end of the project. The plan is to enlarge the originally constructed swale to provide additional storage capacity. The culvert initially installed was removed and replaced and an additional catch basin provided. The initially installed culvert consisted of plastic pipe that became buoyant resulting in an un-unified grade. It was speculated that air became trapped in the middle of the pipe because of the un-unified grade and the air was eventually forced into the downstream catch basin. The size of the pipe north of Vintage Drive was not changed because it is located at the top end of the system.

Mr. Turner explained that after the Landside Runoff Project was constructed, some residences experienced flooding, particularly in the area south of West Esplanade

Avenue, where water flowed over the small berm, into backyards and homes, and into the street. After reviewing the USACE's designs for the initial work, Mr. Estopinal and Mr. Turner determined that the initial design was inadequate. It became apparent that the pipes were inadequate in size for even the 10-year event; therefore, it was significantly worse for a 100-year event. There was not enough storage capacity in the swale constructed by the USACE to capture and transport the water to the catch basins and into culverts. A series of meetings were held with representatives from the USACE and CPRA. CPRA commissioned a drainage study to determine available potential fixes. It was determined that the additional volume was required as well as some additional height along the berms. The most significant change was in the area south of West Esplanade Avenue where an approximately 200-ft. long sheet pile wall was driven from the Grand Lake Pump Station to West Esplanade Avenue. The sheet pile wall has an above ground stickup of two to three-feet. Northward the sheet pile wall varies until the lake. A pocket park located between Vintage Drive and the lake is also used for overflow; therefore, the berm in this section is a little lower than the other sections.

- Orleans Avenue Outfall Canal Permanent Canal Closure and Pumps Project – The floodwall at the canal was recently opened to allow for construction of a floodwall that will extend across the water and connect the pump station to the floodwall along the levee.
- East Jefferson Levee District Levee Lifts – Eight bids were received on October 14th for construction of the LPV 00.2 Levee Lift Project. Durr Heavy Construction submitted the apparent low bid of \$1.37 million. The estimated probable cost was \$1.6 million. The project is approximately two miles in length extending from the West Return Floodwall to the Duncan Pump Station. The project duration is 210 days. An item has been included on the agenda for the award of the contract to the apparent low bidder. Bids are due on November 4th for the construction of the LPV 1.1 and 2.2 and LPV 19.2 and 20.1 Levee Lift Projects.
- GPS Surveying Workshop - The SLFPA-E sponsored workshop will be held in December and is being planned with LSU. PEHs will be available for participation.
- Violet Canal Levee Realignment Project – An application was submitted for a Hazard Mitigation Grant (\$2.9 million to \$3 million) and SLFPA-E was advised that the grant funding would be available for drawdown in November or December. The grant funding is for the construction of the offset levee in the area of the Shrimp Factory. The eastern segment of the project near the Soap Factory will be constructed by the Lake Borgne Basin Levee District (LBBLD) in conjunction with the St. Bernard Parish government.

REPORT BY SLFPA-E EXECUTIVE COUNSEL:

Nyka Scott, SLFPA-E Executive Counsel, provided the following report:

- The Legal Department is in the process of negotiating, drafting or finalizing ten intergovernmental agreements or memorandums of understanding with various governmental agencies.

- Twenty-nine Indefinite Delivery-Indefinite Quantity (ID-IQ) Contracts have been drafted for the consultants selected at the September Board meeting. Several questions regarding the contracts were submitted to Mr. Turner. After Mr. Turner's response, the contracts will be finalized and executed.
- A contract has been prepared to engage Frank Tatje, Appraiser, to provide an appraisal for the sale of a piece of property. The property will be auctioned according to State law.
- John Lewis, SLFPA-E HR Director, was provided a copy of the regional employee manual for review. Mr. Lewis provided his edits to the Legal Department. The final version of the manual will be provided next Friday or Monday to Mr. Turner for his review. The manual will be presented to the Board.
- Employees from the Authority and levee districts will attend training sessions by the Office of the Secretary of State relative to records retention.
- The Legal Department is in the process of responding to two public records requests and a subpoena.
- Grants Administration – Four grants are under administration. Three project worksheets for Hurricanes Gustave, Isaac and Katrina are being closed out for the Orleans Levee District (O.L.D.). Six grant applications are pending. One grant application was rejected, a decision was made not to accept another grant and the SLFPA-E is awaiting decisions on four applications. Five grants applications are in process. The Grants Administrator is working with Mr. Turner and Mr. Kemp on grants relative to the Central Wetlands or with the levee district Executive Directors on needs. Four grant opportunities are being explored to determine whether grant applications should be submitted. Eighteen projects are being researched to find possible funding streams.

Mr. Luettich inquired about the posting of the SLFPA-E IT Director position and was advised that the position had just been posted. He noted that this is another director position to fill out the authority-wide administrative staff.

Mr. Luettich commented on the grants that were turned down (a Port Security Grant for cameras and the Highway Safety Traffic Grant that was not accepted by the EJLD). Mr. Turner advised that the portion of the Port Security Grant for cameras for the Lake Borgne Basin Levee District (LBBLD) was turned down because the LBBLD could not afford to operate, maintain and monitor the cameras. Mr. Luettich pointed out that this is an example of the inability to provide similar services across the levee districts. Mr. Turner advised that a grant application was submitted last March for Highway Safety Traffic Grant funding and the EJLD was unable to work a portion of the grant because several officers were attending classes or transporting sandbags during the timeframe. The grant was for reimbursement of overtime for setting up roadblocks under the Drive Sober or Get Pulled Over Campaign. Mr. Luettich commented that he was referring to another Highway Safety Grant and pointed out the effort that goes into the grant application process. He cautioned that the SLFPA-E should ensure it wants a grant before time and effort is expended on the application process.

Mr. Luettich noted that the SLFPA-E anticipates spending \$180,000 on a web based permitting program. Ms. Scott advised that the funding is a reallocation of a portion of a \$900,000 Community Development Block Grant (CDBG) received for the Landbridge Study. Mr. Turner explained that the SLFPA-E Strategic Plan was reviewed and the development and implementation of software to allow the public to apply for permits on line and that would automatically notify the SLFPA-E, USACE and CPRA about the permit request, and track the process was selected as a priority need. The State began the development of permitting software several years ago; however, the software was not brought to a point where it would work. Basically, \$225,000 remained in the \$900,000 CDBG; an estimate of \$180,000 was used for the permitting software and a smaller project was submitted in order to utilize the remaining funds. Mr. Hassinger commented that the Authority is still in a learning and transition process relative to grant applications. The SLFPA-E formerly retained a consultant for grant writing. The position was brought in house and it has been a huge success. He pointed out that the fundamental policy of the Board, evidenced by the fact that the Grants Administration position was brought in house, is that it wants to apply for grants. As staff reviews potential grant applications for feasibility and for suitability with the SLFPA-E's mission, it should keep the perspective broad rather than narrow.

Mr. Morgan inquired about the spreadsheet given out listing on-going ID-IQ contract task orders. Mr. Turner explained that the contracts have expired; however, some of the task orders have not been completed. The contracts will be extended to provide for the completion of the task orders; however, no additional work or costs will be approved.

Mr. Miller inquired about the permitting process. Mr. Turner explained that each levee district handles its own permits. The process currently is a paper process. There is not total consistency between the three levee districts.

NEW BUSINESS:

RESOLUTION NO. 10-20-16-03 – RECOGNITION OF MR. STEPHEN V. ESTOPINAL

Mr. Hassinger advised that Mr. Estopinal was unable to attend today's meeting. He noted the accolades showered upon Mr. Estopinal at the Board's last meeting.

On the motion of Mr. Luettich,
Seconded by Mr. Morgan, the following resolution was offered:

“A resolution recognizing the commitment and contributions of Mr. Stephen V. Estopinal, P.E., P.L.S., to the Southeast Louisiana Flood Protection Authority-East and to the citizens of Louisiana.”

WHEREAS, after the devastation resulting from Hurricane Katrina, the Southeast Louisiana Flood Protection Authority-East was created by the Louisiana State

Legislature to provide regional flood protection for the Lake Pontchartrain Basin area; and

WHEREAS, due to his outstanding qualifications, expertise and professional experience, Mr. Stephen V. Estopinal, P.E., P.L.S., was appointed to serve on October 31, 2008 as a member of the Board of Commissioners of the Southeast Louisiana Flood Protection Authority-East; and

WHEREAS, Mr. Estopinal is a graduate of Louisiana State University College of Engineering (class of 1968) with a Bachelor of Science Degree in Civil Engineering and a Registered Professional Engineer since 1975 and a Registered Professional Surveyor since 1976; and

WHEREAS, Mr. Estopinal, the recipient of the prestigious Louisiana Engineering Society Services to the Profession Award in 2016, is widely recognized for exercising the highest of professional standards, and for his active pursuit of the advancement of his profession and his unselfish service; and

WHEREAS, Mr. Estopinal's considerable professional experience and expertise in the field of Civil Engineering and Land Surveying provided an invaluable resource for the Flood Protection Authority and its member levee districts during the construction of the \$14 billion Hurricane and Storm Damage Risk Reduction System; and

WHEREAS, Mr. Estopinal's leadership, hard work and devoted service as a member of the Board, and as President from June 6, 2014 to June 30, 2015, as Vice President from November 21, 2013 to June 30, 2014 and July 1, 2015 to September 29, 2016, as Treasurer from July 1, 2009 to November 21, 2013, and on the Board's Legal, Finance and Operations Committees, has resulted in many positive achievements and a more regionalized approach to the management of the flood protection system; and

WHEREAS, recognizing the importance of the mission of the Southeast Louisiana Flood Protection Authority- East, Mr. Estopinal has continuously strived to achieve the best flood protection possible and has worked tirelessly in the service of the citizens of Southeast Louisiana.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East hereby expresses its gratitude and appreciation to Mr. Stephen V. Estopinal, P.E., P.L.S., for his dedication and contribution during his tenure as a member of the Board of Commissioners of the Southeast Louisiana Flood Protection Authority-East.

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

YEAS: Mr. Cosse, Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

RESOLUTION NO. 10-20-16-04 - APPROVAL OF LEGAL SERVICES INVOICES

Mr. Hassinger explained that the legal services invoices are reviewed and approved by the SLFPA-E Executive Counsel, Regional Director, Levee District Executive Directors and Chair of the Legal Committee. Mr. Morgan asked about the safehouse litigation. Ms. Scott explained that the O.L.D. constructed its safehouse several years ago and a lawsuit was subsequently filed. She anticipated that the litigation would not have to go to trial.

On the motion of Mr. Miller,
Seconded by Mr. Morgan, the following resolution was offered:

WHEREAS, the legal services invoices submitted to the Southeast Louisiana Flood Protection Authority-East (SLFPA-E), East Jefferson Levee District, Lake Borgne Basin Levee District and Orleans Levee District listed on the spreadsheet entitled "Legal Invoices Approved on October 20, 2016", have been reviewed and approved by the appropriate levee district Executive Director, the SLFPA-E Regional Director and the SLFPA-E Executive Counsel, and provided to members of the Legal Committee.

BE IT HEREBY RESOLVED, that the legal services invoices listed on the spreadsheet entitled "Legal Invoices Approved on October 20, 2016" are hereby approved.

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

YEAS: Mr. Cosse, Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

RESOLUTION NO. 10-20-16-05 - APPROVAL OF TASK ORDER TO ATKINS FOR LEVEE LIFT INSPECTION SERVICES

Mr. Turner explained that the Board approved the selection of consultants to enter into ID-IQ contracts. Originally, staff recommended a not-to-exceed value of \$500,000 for the ID-IQ contracts for Inspection Services. The contracts have not yet been executed. If a contract is amended after its execution to increase the cost, it must be recorded by the Clerk of Court, which has proven to be very costly. Atkins is being recommended by staff to provide all of the inspection services for the levee lifts along the East Jefferson Lakefront. In order to ensure sufficient capacity for the levee lift services and future services over the next two year period (Atkins has been used in the past for the IHNC Surge Barrier quarterly inspections) staff is recommending that the not-to exceed value of the contract for the ID-IQ contract with Atkins be increased to \$1 million. The motion further addresses the awarding of a task order for \$175,000 to Atkins for the resident inspection services for the East Jefferson levee lift projects after execution of the contract. Mr. Hassinger asked the reason why \$500,000 would

not be sufficient. Mr. Turner explained that the concern at the time that the agenda was prepared was that the SLFPA-E did not know the cost of the task order for the inspection services for the levee lift projects. Glenda Boudreaux, SLFPA-E Administrator, has a concern about the costs of recording contracts. In order to avoid the possibility of having to record this particular contract by amending later it to increase the value, a recommendation was made to increase the contract value to a not-to-exceed amount of \$1 million. This does not mean that the \$1 million amount must be used. At this time the request is to only raise the not-to-exceed contract value for the Atkins contract. The contracts for the actual construction of the levee lift projects will be awarded soon; therefore, Atkins must be on board to provide the resident inspection services.

Ms. Scott advised that for many years the contracts have not been formatted correctly and are currently being reformatted in an attempt to reduce recordation costs. The recordation cost is computed per page and is more expensive in Orleans Parish than in Jefferson Parish. Ms. Scott advised that the cost to record the last contract was \$225. Mr. Turner commented that if that is the cost, then there is no reason to increase the contract value. Ms. Scott added that costs to record some of the contracts have been as high as \$600.

Mr. Hassinger asked the cost for the inspection services for the levee lift projects. Mr. Turner responded \$175,000. Mr. Miller asked the number of ID-IQ contracts approved by the Board for inspection services. Mr. Turner responded four. Mr. Miller asked did Mr. Turner expect that the contract values would need to be increased to \$1 million for all four contracts. Mr. Turner responded, no. Mr. Miller asked if there was any reason why the other three inspection firms could be awarded the work if the cap is reached on the Atkins contract. Mr. Turner replied that he thought that this could be done.

Mr. Luettich asked did all of the other ID-IQ contracts for various services have a \$1 million cap. Mr. Turner responded that a cap of \$1 million was used for the engineering contracts. The SLFPA-E did not previously have ID-IQ contracts for resident inspection services prior to this time. He commented that there would be no problem with amending the resolution to keep the \$500,000 not-to-exceed value for the Atkins ID-IQ contract. Mr. Hassinger clarified that the resolution would then just need to approve the task order in the amount of \$175,000 for the resident inspection services for the levee lift projects.

A motion was offered by Mr. Miller, seconded by Mr. Luettich, and adopted with Mr. Cosse, Mr. Kemp, Mr. Latiolais, Mr. Luettich, Mr. Miller and Mr. Morgan voting yea and Mr. Dastugue voting nay, to amend the resolution to delete all reference to an increase in the not-to-exceed value of the contract to \$1 million.

Mr. Hassinger called for the vote on the amended resolution. Mr. Dastugue abstained stating that he was not on the Board at the time that the consultant was selected.

On the motion of Mr. Luettich,
Seconded by Mr. Kemp, the following resolution was offered:

WHEREAS, the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) by Resolution No. 09-15-16-04 selected Atkins as one of the firms to provide Inspection Services on an Indefinite Delivery-Indefinite Quantity (ID-IQ) basis and authorized the execution of an Agreement with the firm with a total not-to-exceed value of \$500,000; and

WHEREAS, there is a need to utilize the services of Atkins for the inspection of the construction of the three East Jefferson Levee District Levee Lift Projects (LPV 00.2; LPV 01.1 and 02.2; and LPV 20.1 and 19.2); and

WHEREAS, a Task Order shall be issued to Atkins in an amount not-to-exceed \$175,000.00 to provide the inspection services for the LPV 00.2; LPV 01.1 and 02.2; and LPV 20.1 and 19.2 Levee Lift Projects.

BE IT HEREBY RESOLVED, that the SLFPA-E approves the execution of a task order in an amount not-to-exceed \$175,000.00 to provide the inspection services for the LPV 00.2; LPV 01.1 and 02.2; and LPV 20.1 and 19.2 Levee Lift Projects.

BE IT FURTHER RESOLVED, that the SLFPA-E Regional Director is authorized to sign any and all documents necessary to accomplish the above.

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

YEAS: Mr. Cosse, Mr. Kemp, Mr. Latiolais, Mr. Luettich, Mr. Miller and
Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

ABSTAIN: Mr. Dastugue

RESOLUTION NO. 10-20-16-06 - AWARD OF CONTRACT FOR THE CONSTRUCTION OF LPV 00.2 LEVEE LIFT PROJECT

Mr. Turner advised that engineering firm that is the designer of record reviewed the bids and recommended that the contract be awarded to Durr Heavy Construction in the amount of \$1,374,706. Durr Heavy Construction submitted the lowest bid. The contract duration is 210 days; however, the construction is not anticipated to take that long. Pre-approved borrow sites will be utilized.

On the motion of Mr. Luettich,
Seconded by Mr. Morgan, the following resolution was offered:

WHEREAS, the Southeast Louisiana Flood Protection-East (SLFPA-E) by Resolution No. 05-21-15-02 directed the Regional Director to proceed with the necessary analysis and design of levee lifts for the following levee segments prior to armoring by the U.S. Army Corps of Engineers: LPV 00.2, LPV 20.1, LPV 19.2, LPV 01.1, LPV 02.2, LPV-109, and LPV 111; and

WHEREAS, the SLFPA-E by Resolution No. 09-17-15-03 authorized the advertisement for bids for the construction of the LPV 00.2 Levee Lift Project upon completion of the plans, specifications and bid documents and the receipt of the required 408 Permit from the USACE; and

WHEREAS, the construction of the LPV 00.2 Levee Lift Project was advertised with the bid opening to occur on October 14, 2016; and

WHEREAS, the eight bids received were reviewed and Durr Heavy Construction was determined to be the lowest responsible bidder with a total bid of \$1,374,706.00.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East approves the award of a contract to Durr Heavy Construction in the amount of \$1,374,706.00 for the construction of the LPV 00.2 Levee Lift Project, pending submittal of Completed Attestations Affidavit form and Non-Collusion Affidavit form.

BE IT FURTHER RESOLVED, that the SLFPA-E Regional Director or EJLD Executive Director be authorized to execute the aforementioned contract with Durr Heavy Construction and any and all documents necessary to carry out the above.

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

YEAS: Mr. Cosse, Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

**RESOLUTION NO. 10-20-16-07 –
EXECUTION OF A MOU BETWEEN THE DEPARTMENT OF THE ARMY,
CPRA AND SLFPA- RELATIVE TO LEVEE REACH LPV-00.2**

Mr. Turner advised that the SLFPA-E must enter into a Memorandum of Understanding (MOU) with the USACE for the construction of the LPV-00.2 Levee Lift. The process to bring the levee lift project to this point has taken about three years. The SLFPA-E had to go through the Section 408 process. The purpose of the MOU is to reserve the SLFPA-E's right to claim cost share credit for the work at a future date should the credit be allowed. The levee was certified by the USACE and must be recertified prior to 2023.

On the motion of Mr. Luettich,

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

WHEREAS, the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) is in the process of receiving bids for construction work associated with the raising of LPV-00.2 in Jefferson Parish;

WHEREAS, Section 221(a) of the Flood Control Act of 1970, as amended by Section 2003 of the Water Resources Development Act of 2007, allows non-federal

interests to receive credit for the value of certain materials or services so long as a Memorandum of Understanding (MOU) is executed between the non-federal interest and the Department of the Army before a Project Partnership Agreement is executed; and

WHEREAS, the parties to the MOU include the Department of the Army and the non-federal interest, who are the Coastal Protection and Restoration Authority Board of Louisiana and the SLFPA-E; and

WHEREAS, the parties wish to enter into a Memorandum of Understanding relative to the raising of LPV-00.2 levee section.

BE IT HEREBY RESOLVED, that the SLFPA-E approves the execution by the SLFPA-E President or the SLFPA-E Regional Director of a Memorandum of Understanding between the Department of the Army, the Coastal Protection and Restoration Authority Board of Louisiana and the SLFPA-E for work provided or performed prior to execution of a Project Partnership Agreement for the Lake Pontchartrain and Vicinity, LA Rehabilitation of Existing Levees under Section 3017 of the Water Resources Reform and Development Act of 2014 (Public Law 113-121) for Levee Reach LPV 00.2.

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

YEAS: Mr. Cosse, Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

**RESOLUTION NO. 10-20-16- 08 –
AMENDMENT OF MOU WITH CPRA FOR LPV 00.2 LEVEE LIFT**

Mr. Turner advised that several years ago when the process began the SLFPA-E partnered with the CPRA to determine the USACE's requirements to raise certain levees. A MOU was entered into with the CPRA to utilize its contractor to begin work on the preparation of the things that would be necessary to submit to the USACE in order for the work to be done. The first part of the process was the geotechnical work. CPRA came up with a methodology to determine the strength of the levees without redoing the 5-inch borings that the USACE originally wanted that would have been very costly. CPRA had contracted the services of HNTB and a CPT process was used to define the strength of the levees. Plans and specifications were prepared earlier than anticipated in order to begin the Section 408 process. The MOU was amended to increase the not-to-exceed amount by approximately \$102,000 for the preparation of plans and specifications for the LPV-00.2 Levee Lift Project, which was used as the test project. The amended amount of the MOU only carried the process through the bidding phase.

Mr. Turner explained that a cost was negotiated with HNTB for the construction management phase. The MOU must be amended in order to access the

services HNTB for the construction management phase. CPRA would then issue a task order to HNTB for the work. A scope of work was submitted by HNTB. Brock Schmit, Project Manager with Evans Graves Engineers, Inc., noted that engineering during construction and construction management is estimated at 8.9 percent of project value, which was determined acceptable given the small size of the project.

Mr. Miller inquired about the role of Evans Graves Engineers, Inc. Mr. Turner explained that the SLFPA-E retained the services of Evans Graves Engineers, Inc. to provide program management for all of the levee lift work in both Orleans and Jefferson Parishes. HNTB was retained by the CPRA for the work on the LPV-00.2 levee lift project.

On the motion of Mr. Luettich,
Seconded by Mr. Morgan, the following resolution was offered:

WHEREAS, the Southeast Louisiana Flood Protection-East (SLFPA-E) by Resolution No. 05-21-15-02 directed the Regional Director to proceed with the necessary analysis and design of levee lifts for the following levee segments prior to armoring by the U.S. Army Corps of Engineers: LPV 00.2, LPV 20.1, LPV 19.2, LPV 01.1, LPV 02.2, LPV-109, and LPV 111; and

WHEREAS, Resolution No. 05-21-15-02 further authorized the Regional Director and Executive Counsel to negotiate a Memorandum of Understanding (MOU) with the Louisiana Coastal Protection and Restoration Authority (CPRA) for assistance with the geotechnical analysis associated with the levee lift design work; and

WHEREAS, Resolution No. 06-18-15-04 authorized the Regional Director to execute the MOU between CPRA and SLFPA-E for the geotechnical analysis; and

WHEREAS, the Memorandum of Understanding (MOU) between the CPRA and the SLFPA-E for the geotechnical analysis stipulates that the SLFPA-E shall pay the costs associated with the work required for the aforementioned levee lifts, and the CPRA shall instruct its consultant to proceed with the work upon execution of the MOU; and

WHEREAS, a not-to-exceed amount of \$260,000 was included in the MOU for completing the required geotechnical analysis; and

WHEREAS, on July 16, 2015, the SLFPA-E Regional Director advised the SLFPA-E Board that HNTB prepared a proposal to complete the plans and specifications for the LPV 00.2 levee segment for a not-to-exceed amount of \$102,390; and

WHEREAS, the Regional Director advised the SLFPA-E Board that the MOU between the CPRA and the SLFPA-E authorized by Resolution No. 05-21-15-02 must be amended to allow for the inclusion of the new work and provide for payment by SLFPA-E to CPRA for the work; and

WHEREAS, the SLFPA-E Board, by Resolution No. 07-16-15-10, authorized the Regional Director to execute the revised MOU between the CPRA and SLFPA-E after review and approval of the SLFPA-E Executive Counsel, allowing HNTB to complete the plans and specifications for the LPV 00.2 levee segment for a not-to-exceed amount of \$102,390; and

WHEREAS, a bid for the levee lift has recently been accepted and a contract for project management and construction administration needs to be awarded; and

WHEREAS, HNTB has submitted a budget of \$127,418 to perform project management and construction administration work for the LPV 00.2 levee lift project; and

WHEREAS, the MOU between the CPRA and the SLFPA-E authorized by Resolution Nos. 05-21-15-02 and 07-16-15-10, must be amended to allow for the inclusion of the new work and provide for payment by SLFPA-E to CPRA for the work.

BE IT HEREBY RESOLVED, that the SLFPA-E Board approves amending the MOU between CPRA and SLFPA-E to include project management and construction administration for the LPV 00.2 levee segment with an increase in the total not-to-exceed amount to \$489,808.

BE IT FURTHER RESOLVED, that the Regional Director is authorized to execute the revised MOU between the CPRA and SLFPA-E after review and approval by the SLFPA-E Executive Counsel.

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

YEAS: Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Cosse and Mr. Englande

**RESOLUTION NO. 10-20-16-09 –
RENEWAL OF O.L.D. AUTOMOBILE LIABILITY INSURANCE COVERAGE**

Gerry Gillen, O.L.D. Executive Director, advised that a substitute resolution has been provided that increases the cost of coverage to \$242,135. The incumbent provider, AIG, provided a quote with an increase in premium from \$203,000 to \$378,000. The market was shopped and State National Insurance provided a quote of \$242,000 for the same coverage. The policy issued last year included collision coverage for nine vehicles that were purchased through a FEMA grant. This year the O.L.D. will insure an additional 42 vehicles at an additional cost of \$14,000 in order to take advantage of the low rate for collision coverage. One hundred thirty-four O.L.D. vehicles will be insured under the Automobile Liability Insurance Coverage.

Mr. Morgan asked whether consideration had been given to combining coverage for the three levee districts in order to have a bigger pool with lower costs. Mr.

Luettich commented that the Board over the past two years has taken a number of steps towards building a regional authority and that it would make sense to revisit this issue in the future along with the issue of personal benefits for employees across the levee districts.

Randy Maddox, President of Morrison Insurance Agency, advised that the vehicle liability coverage is \$1 million and that the average cost per unit is \$1,500. Comprehensive coverage is included for those vehicles with collision coverage at an average cost of \$250 per unit with a \$1,000 deductible. Combining coverage is a possibility in the future. He recommended that the Board take advantage of State National Insurance Company's proposal at this time. He cautioned that each levee district has its own loss experience. He pointed out that the O.L.D. has an excellent record.

On the motion of Mr. Morgan,
Seconded by Mr. Kemp, the following resolution was offered:

WHEREAS, the Orleans Levee District's Automobile Liability insurance policy with Limited Physical Damage/Collision Insurance policy on nine scheduled vehicles will expire on November 1, 2016 at 12:01 AM; and

WHEREAS, State National Insurance Company, a company admitted to do business in the State of Louisiana Best Rated "A" VIII, offered the most cost effective Automobile Liability Insurance proposal through the Morrison Insurance Agency for Liability coverage plus Physical Damage coverage limited to 53 scheduled vehicles with a \$1,000 deductible for a term of one year, commencing on November 1, 2016 at 12:01 AM and expiring on November 1, 2017 at 12:01 AM, at an annual estimated cost of \$242,135.00.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the procurement of Automobile Liability Insurance coverage from State National Insurance Company as stated above through the Morrison Insurance Agency for a period of one year commencing on November 1, 2016.

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

YEAS: Mr. Cosse, Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

RESOLUTION NO. 10-20-16-10 - O.L.D. RENEWAL OF OFFICE OF GROUP BENEFITS HEALTH PLAN COVERAGE

Mr. Gillen advised that the cost of coverage was \$1.7 million for 2016 and the estimated cost for 2017 is \$1.9 million. The Louisiana Office of Group Benefits (OGB) increased premium rates for its various plans. Carol Kiefer, O.L.D. Safety-Risk Manager, explained that the O.L.D. joined OGB three years ago.

The O.L.D. has not shopped the market for healthcare coverage since joining O.G.B. The O.L.D. historically experienced significant cost increases each year with conventional healthcare plans prior to joining O.G.B. Healthcare providers would initially submit low proposals and the next year significantly increase rates (in some cases 45 percent). The O.L.D. has had a better experience with O.G.B. than with shopping the market. The OGB rate increases for 2017 are 7.5 percent for active employees, three percent for health savings plans, and seven percent for retirees.

Mr. Turner advised that the EJLD is the only levee district under the SLFPA-E's jurisdiction not under O.G.B. Ms. Scott noted that historically the levee districts have had difficulty obtaining healthcare coverage that included retirees. The EJLD is dealing with this issue at this time.

On the motion of Mr. Luettich,
Seconded by Mr. Morgan, the following resolution was offered:

WHEREAS, the Orleans Levee District's (O.L.D.) Health Plans will expire on December 31, 2016; and

WHEREAS, renewal quotes were submitted by the Office of Group Benefits (OGB) for six Health Care Plan options in September of 2016 for a one-year term, commencing on January 1, 2017 and ending on December 31, 2017, for the O.L.D.'s Flood Protection Assets Division employees and retirees; and

WHEREAS, the OGB Health Plan quote contains six Health Plan options with variable premiums at an annual estimated total of cost of \$2,310,945.98 with the Orleans Levee District paying an estimated \$1,909,930.08 and the employees and retirees paying an estimated \$401,015.90 towards the total premium.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the renewal of the OGB Healthcare Plans as stated above for a period of one year, commencing on January 1, 2017.

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

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

YEAS: Mr. Cosse, Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

**RESOLUTION NO. 10-20-16-11 –
RENEWAL OF O.L.D. DENTAL PLAN AND VISION PLAN COVERAGES**

Mr. Gillen advised that the correct estimated annual cost for the Crescent Dental Care Plan for 2017 is \$54,237. The O.L.D. pays the cost for dental coverage for active

employees. Retirees pay 100 percent of the premium for dental coverage. The inconsistency of benefits across the levee districts was noted.

On the motion of Mr. Luettich,
Seconded by Mr. Morgan, the following resolution was offered:

WHEREAS, the Orleans Levee District's (O.L.D.) Dental Plan will expire on December 31, 2016; and

WHEREAS, flat premium rate quotes were received from Crescent Dental Plan for a one-year dental plan and from United Health Vision for the second year of a three-year vision plan, through Arthur J. Gallagher Risk Management Services, Inc., for coverages commencing on January 1, 2017, as follows:

- The Crescent Dental Care Plan for active employees is offered at an estimated annual cost of \$54,237.
- The United Health Vision Three-Year Plan for active employee is offered at an estimated annual cost of \$10,350.84

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the renewal of the Crescent Dental Plan and the United Health Vision Three-Year Plan as stated above for a period of one year, commencing on January 1, 2017 and ending on December 31, 2017.

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

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

YEAS: Mr. Cosse, Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

RESOLUTION NO. 10-20-16-12 - AMENDMENT OF LaPAC CONTRACT

Ms. Scott advised that the contract with LaPAC is for obtaining rights-of-ways and servitudes along the Audubon Park area for a section of floodwall that was not previously completed. There was a dispute concerning the ownership of the property and whether it was owned by the City of New Orleans or the Audubon Commission. A right-of-entry was subsequently received from the Audubon Commission and approval of the servitude is expected to be approved at today's Audubon Commission meeting.

On the motion of Mr. Luettich,
Seconded by Mr. Morgan, the following resolution was offered:

WHEREAS, the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) entered into a Contract for Professional Services on behalf of the Orleans Levee District with Louisiana Property Acquisition Co., LLC., to provide assistance with

obtaining Rights-of-Entry in connection with the work being performed at the Carrollton Phase II Railroad Gate; and

WHEREAS, additional work not originally contemplated will be required in order to obtain the necessary Rights-of-Entry; and

WHEREAS, there is a requirement to amend the aforementioned contract to increase the not-to-exceed contract fee by \$35,000, thereby increasing the total not-to-exceed contract fee from \$49,500 to \$84,500.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East approves the amendment of the aforementioned Contract for Professional Services with Louisiana Property Acquisition Co., LLC, to increase the total not-to-exceed contract fee from \$49,500 to \$84,500.

BE IT FURTHER RESOLVED, that the SLFPA-E Regional Director be authorized to execute the contract amendment and any and all documents necessary to carry out the above.

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

YEAS: Mr. Cosse, Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

Discussion of painting of murals on Mississippi River Floodwall.

Wilma Heaton, SLFPA-E Director of Governmental Affairs, explained that over the years different groups have approached the SLFPA-E or levee districts about painting murals on the floodwalls. In the past the groups were asked to provide a sketch of the contemplated mural. The request was vetted with the respective levee district Executive Director and SLFPA-E Regional Director. If a painting on a specific floodwall was deemed feasible, the policy put in place by former Commissioner Estopinal, was to then provide the sketch to the Board. Also, prior to placement of the request on the Board's agenda, the requesting party had to prove that they had the economic wherewithal to take care of graffiti and maintain the mural, since this additional cost could not be borne by flood protection dollars.

Ms. Heaton advised that a group with experience with such work wishes to paint murals on some floodwalls along Tchoupitoulas Avenue. Due to the number of new Board members, she asked for clarification as to whether the Board wished to follow the previously established rule. The Board indicated its approval.

RESOLUTION NO. 10-20-16-13 – A RESOLUTION OF THE SLFPA-E AUTHORIZING THE SLFPA-E PRESIDENT OR THE O.L.D. EXECUTIVE DIRECTOR TO EXECUTE AN INTERGOVERNMENTAL AGREEMENT BETWEEN THE O.L.D. AND THE NON-FLOOD PROTECTION ASSET MANAGEMENT AUTHORITY

Ms. Scott advised that the O.L.D. has (1993, 1994 and 1998) three vehicles that it no longer needs. The Non-Flood Protection Asset Management Authority expressed interest in purchasing the vehicles. The dealer trade-in value and the fair market value were used to provide a price for the sale of the vehicles. A MOU must be put in place to go forward with the transaction.

On the motion of Mr. Luettich,
Seconded by Mr. Morgan, the following resolution was offered:

WHEREAS, the Orleans Levee District (OLD) has determined that it no longer needs the following vehicles:

- 1993 Chevrolet Truck (VIN 1GBHC39J9PE139441)
- 1994 Chevrolet Truck (VIN 1GBGC24K4RE3101184)
- 1998 Jeep Cherokee (VIN 1J4FJ28SOWL202167)

WHEREAS, La. R.S. 33:1321, *et. seq.*, allows the OLD to sale movable property to another political subdivision or state agency without the necessity of public auction; and

WHEREAS, the Non-Flood Protection Asset Management Authority (NFA) is a political subdivision of the State of Louisiana and has expressed interest in purchasing the vehicles; and

WHEREAS, the vehicles have an average, fair market value as follows:

1993 Chevrolet Truck (VIN 1GBHC39J9PE139441)	\$2,151
1994 Chevrolet Truck (VIN 1GBGC24K4RE3101184)	\$2,068
1998 Jeep Cherokee (VIN 1J4FJ28SOWL202167)	\$1,705

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East hereby agrees to the execution of an Intergovernmental Agreement between OLD and NFA for the sale of the following vehicles:

1993 Chevrolet Truck (VIN 1GBHC39J9PE139441)	\$2,151
1994 Chevrolet Truck (VIN 1GBGC24K4RE3101184)	\$2,068
1998 Jeep Cherokee (VIN 1J4FJ28SOWL202167)	\$1,705

BE IT FURTHER RESOLVED, that the President of the Southeast Louisiana Flood Protection Authority-East or Executive Director of the OLD, is authorized to execute any and all documentation to effectuate the agreement.

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

YEAS: Mr. Cosse, Mr. Dastugue, Mr. Kemp, Mr. Latiolais, Mr. Luettich,
Mr. Miller and Mr. Morgan

NAYS: None

ABSENT: Mr. Englande

The next regular monthly Board meeting will be held on November 17, 2016 and hosted by the Orleans Levee District.

There was no further business; therefore, the meeting was adjourned.

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY – EAST

REGIONAL DIRECTOR’S REPORT

October 20, 2016

HSDRRS Project Status Update

IHNC-01 – Seabrook Complex The final inspection for the painting of the Vertical Lift Gates was held on September 1, 2016. All punch list items have been adequately addressed and the facility is fully operational. The Notice of Construction Complete (NCC) was issued on September 19, 2016.

IHNC-02 – Lake Borgne Surge Barrier USGS and the Corps have made the necessary changes to obtain accurate real-time velocity readings at the Sector Gate structure. We are working with USGS to schedule velocity surveys that will be used to validate the reported data. USGS’s work has been temporarily delayed due to higher priorities associated with the riverine flooding in Louisiana in August, 2016.

The Corps is preparing a schedule to refurbish the two windlasses on the Bypass Barge Gate and replace the rusted hydraulic oil tanks. The gate will remain closed until all repairs are completed.

We are awaiting information from the Corps regarding a permanent fix for the scour hole discovered on the flood side of the surge barrier about 1000’ south of the Sector Gate.

LPV-03.2b.1- Landside Runoff The Corps’ contractor finished driving the vinyl sheet pile on the reach south of West Esplanade Ave. Stone aggregate has been placed adjacent to the vinyl sheet pile to act as a vegetation apron.

The Corps’ contractor has begun the work to enlarge the existing swale (north of Vintage) and increase the berm height on the “house side” of the swale in selected areas. Work has begun to address problems with the culvert near the north end of the system.

PV-144A – Removal of Old Bayou Dupre Gates Both sector gate leaves have been removed and the new fender systems have been placed across the gate leaf recesses. A pre-final inspection was held on August 9th and a punch list was developed and is being worked by the Contractor.

The Corps has issued a modification to the Contract to fill a scour hole that has developed between the old and new structures.

LPV-146 – St. Bernard T-Wall The Corps issued the Notice of Construction Complete (NCC) for this project on Sept. 5, 2014. Horizontal and vertical

displacement of several monoliths near LA Hwy 46 was recently discovered during quarterly inspections.

LBBLD developed a distress report that was submitted to CPRA on August 11, 2016. CPRA submitted the report to the Corps on August 23, 2016. The Corps visited the site on August 25, 2016 and we are waiting for a copy of their site visit report and recommendations. Meanwhile, we will continue to monitor the wall monoliths at this location.

LPV-149 – Caernarvon Structure The coal tar epoxy coating on the sector gate leafs started peeling off in sheets shortly after the Corps issued the Notice of Construction Complete (NCC) document for this project. After we reported the problem, the Corps commissioned ERDC CERL Paint Technology Center to inspect the structure, determine the cause of the problem, and render a recommendation for repair. ERDC CERL determined that the problem was caused by inadequate surface preparation by the Corps' construction contractor. They recommended blasting and repainting the gate leafs.

The Corps awarded a contract to do this work, but it was delayed because of the internal process the Corps must now use to get approval to address construction defects. A meeting has been tentatively scheduled for Oct. 24, 2016 to discuss project timing.

Permanent Canal Closures and Pumps (PCCP) A status update for the three pump stations was sent to all Commissioners on September 12, 2016.

The Corps finalized emergency closure plans for the wall openings for the upcoming hurricane season. The contractor has removed approximately 50' of concrete I-Wall at the London Ave Canal. The opening was successfully closed for Hurricane Hermine, but has since been reopened. The opening at Orleans Ave Canal started this week. Both openings are scheduled to be permanently closed before the end on December, 2016.

Please check the New Orleans District web site at www.mvn.usace.army.mil/missions/hsdrss/pccp.aspx for details and regular updates on this last, major HSDRRS perimeter project.

SBPS-07 – Repairs to LBBLD Pump Stations #2 and # 3 The NCC for most of the work was issued by the Corps on September 1, 2016. A Stop Log Gate still needs to be constructed to restore access to the flood side of the levee between Pump Stations 2 and 6. This work will be added to the existing contract and a separate NCC for the Stop Log Gate will be issued upon completion.

Armoring Work continues on the Orleans lakefront levees (ARM-02) and the New Orleans East Levee (ARM-04). A status update on all armoring projects was sent to all Commissioners on October 7, 2016.

The Corps is still evaluating several alternatives to address the construction issues on the ARM-04 Project.

The Corps provided SLFPA-E with a cost estimate of \$2.8M for adjusting all of the land side levee slopes on LPV-111.01 to 1V on 3H. SLFPA-E has requested that the Corps add this work to the upcoming armoring project at full federal expense. We are awaiting on the Corps' response.

We asked the Corps to provide us with a cost estimate for a Corps constructed levee lift on the LPV-109.02a reach (South of I-10). The Corps' approximate estimate for constructing a levee lift on the LPV 109.02a reach (south of I-10) came in at \$3 Million. Allowing the Corps to do this work at our expense will accelerate the completion of the armoring work and extend the life of the armor. The CPRA is preparing this request letter to send to the Corps.

Manchac Dike Mitigation Project. This mitigation project provides protection to marshland along the western shoreline of Lake Pontchartrain near the Manchac Wildlife Management Area. The project includes a rip-rap dike approximately 5 miles long protecting dredged material placed adjacent to the existing shoreline. It provides mitigation for Lake Pontchartrain and Vicinity (LPV) Projects located in both the PLD and SLFPA-E. The final inspection was held on August 19, 2016. According to CPRA, PLD and SLFPA-E will be responsible for continued maintenance of the project after the Corps completes construction. The NCC was issued on August 26, 2016, the CPRA has concerns about the completeness of the project.

Levee Lifts Prior to USACE Armoring The status of each project is listed below:

1. LPV 00.2: Bids were opened on October 14th, 2016. We will issue the Notice of Award immediately after the Board passes the resolution to award the contract.
2. LPV 1.1 and LPV 2.2: The project went out for advertisement on October 5th, 2016 and the pre-bid conference is scheduled for October 21st, 2016. The bid opening is scheduled for November 4th, 2016. We anticipate awarding the contract after approval of the SLFPA-E Board meeting in November.
3. LPV 19.2 and LPV 20.1: The project went out for advertisement on October 5th, 2016 and the pre-bid conference is scheduled for October 21st, 2016. The bid opening is scheduled for November 4th, 2016. We anticipate awarding the contract after approval of the SLFPA-E Board meeting in November.
4. LPV 109.02: At the request of SLFPA-E, the Corps and SLFPA-E are working on a plan to have USACE lift LPV 109.02a as part of the armoring program. Orleans Levee District will pay for the cost of the lift. LPV 109.02a

MOA is in the process of being drafted and must be approved to commence work on the project.

5. LPV 111: At the request of SLFPA-E, the Corps has agreed to raise approximately 4,000LF of the levee prior to armoring. Orleans Levee District will pay for the cost of the lift. LPV 111 MOA was sent to USACE-MVD on 29 July 2016. MOA approval is required before design can begin.

Mississippi River Projects

Jefferson Heights The Corps' contractor has completed raising segments of the Mississippi River Levee in East Jefferson. Site work, turf establishment and replacement of the asphalt bike path is ongoing. Several ramps servicing businesses on the batture are under construction. Tree removal and grass seeding has begun.

A Red Zone Inspection was held on July 20 2016. Project completion is scheduled for October 15, 2016. EJLD has submitted a punch list of items to be corrected prior to turn over and the Corps is reviewing it.

A pre-final inspection was held on October 12, 2016 to review punch list items from Red Zone. Substantial completion of the work is expected late next month, but turf may not be fully established until late Spring 2017.

Internal Affairs

Surge Analysis Update On May 31, 2016 we met with representatives of CPRA and Arcadis to discuss a phased approach for the work. Arcadis agreed to submit a Scope of Work to CPRA.

Non-Federal Levee Certification Plans and specifications for both phases of the levee realignment near the Violet Canal are complete. All required right of way has been acquired and relocations completed.

The Benefit/Cost Analysis necessary for securing hazard mitigation grant funds for Phase II work was completed and submitted to GOHSEP, who reviewed it and passed it on to FEMA as "Cost Effective" with no other comments. We are awaiting FEMA's final approval of the grant.

Asset Management Phase 2 of the work to develop the software and data base necessary to effectively schedule and track operation and maintenance activities on our Complex Structures is ongoing. Teleconferences are scheduled every two weeks for status reviews and discussion of issues. A working template with dashboards is expected to be ready for user testing by the end of this month.

Emergency Preparedness and Response

The River stage at the Carrollton gage is now near 5' and is forecast to continue to fall to near 4' in the next 30 days.

Floodgate EB-5 (on Mississippi River) was damaged by a derailment of a N.O. Public Belt train car on July 2, 2016. Only the anchoring column was damaged. Demolition and repair plans are being finalized and prepared for bid.

Preparations continue for the 2016 Hurricane season.

Tidal Gage Network The Corps has submitted three AFE requests for hardened tide gage station sites at Delacroix, Breakwater Park and Chef Menteur. The CPRA is preparing the necessary documents and checking property ownerships; we are awaiting project plans and specifications from the Corps before issuing the AFE.

Periodic Inspection All unacceptable PI items have been field-verified and photographed. Required information was submitted to the CPRA with the recommended resolutions in December, 2015.

A list and course of action for all remaining minimally acceptable items has been finalized by all three levee districts. A meeting was held with CPRA and the levee districts on October 3, 2016 to review the responses. The non-federal sponsor's official response is due from CPRA to the Corps no later than December 2016.

Risk Assessment The Scope of Work for this project includes a Probabilistic Performance Analysis for the navigational flood gates in the LPV HSDRRS. The analysis will identify failure modes and recommend mitigation measures based on reducing overall risk. The results of this work will help to inform operation and maintenance plan enhancement for these complex structures.

Phase I is complete. Phase 2 of the work has been authorized and a kick-off meeting was held on May 4, 2016 with our Consultant and the OLD maintenance staff to discuss results of the Phase 1 Report and develop a path forward for the remaining work. CLARA modeling is currently underway with State provided information.

ID-IQ Contracts In response to our Request for Qualifications (RFQs), one hundred and three (103) Statements of Qualifications were submitted on May 13, 2016. The six disciplines (as approved by Board Resolution) are: Surveying, Geotechnical, Hydraulics, Coastal, Inspection and Civil Engineering. 26 firms were selected at the Board meeting on September 15, 2016. Contracts for the 26 firms are currently being prepared.

The St. Bernard Subsidence Study was authorized to start on July 5, 2016. Data has been collected and a report was submitted on August 19, 2016. The frequency of future readings is still to be determined.

Tremaine Associates A revised SOW for Geophysical Investigations was issued. Work will restart within the month.

Velocity Study for Closure of the Barge Gate Arcadis has completed a Draft Report on the literature and model review for the analysis of flow conditions at the IHNC-GIWW sector gate and has furnished the report on August 26, 2016. Historical gage data and previous modeling reports have been reviewed and compared; conclusions and model limitations have been noted in the report.

The report summarizes what is known at this time regarding regional meteorological and hydrodynamic conditions that result in high velocities at the GIWW sector gate. Several historical events have been analyzed showing that both spring tide conditions and the passing of frontal weather systems have the potential to generate hydraulic head differentials that cause the high velocities at the GIWW sector gate. The report reaffirms that closing the barge gate increases the velocity at the GIWW sector gate and reduces the velocity at the Seabrook navigation gate.

Meetings and Items of Note:

The Coastal Protection and Restoration Authority Board meeting is scheduled for November 30, 2016, at 9:30 am at the State Capital, House Committee Room 5 in Baton Rouge.

The Governor's Advisory Commission is scheduled to meet on December 7, 2016 (location TBD)

Governor's Advisory Commission Diversion Subcommittee Meeting is scheduled to meet on December 6, 2016 at the Center for River Studies Building in Baton Rouge.

The calendars of other meetings for the CPRA can be found at www.coastal.la.gov/calendar

New Contracts:

Construction Projects:

Project	District	Status	Comments
System Wide Slope Paving	OLD	0%	Install slope paving where levees are difficult to maintain
IHNC Michoud Floodgate Painting & Repair	OLD	0%	Planned for 12/2017 thru 7/2018
GIWW Swale North of Gentilly Landfill	OLD	100% complete	OLD ready complete
Seawall Steps Erosion Reach 4&5	OLD	100% complete	Final Punch List items remaining.
Seawall Steps Erosion Reach 2B	OLD	99% complete	Final Punch List items remaining.
Seawall Steps Erosion Phase 1 (Reach 1A/3B)	OLD	99% complete	Final punch list items remaining
N.O. Lakefront airport Conference Center	OLD	99% complete	Contract awarded
GIWW Surge Barrier, Ladder and Walkways	OLD	40% complete	Shop drawings approved. Materials on order, arrive October 2016.
Seabrook	OLD	100% complete	Complete
Hayne Blvd. Drainage by E-13	OLD	75% complete	Contractor working; trying to mitigate standing water at floodgate E-13. Several change orders received due to unforeseen site conditions. Submit report to USACE for reimbursement.
IHNC – East	OLD	0% complete	Drain standing water between floodgate E-02 & E-01, east of Florida Ave. Bridge underway
IHNC – East	OLD	30% complete	Survey levee between floodgate E-03 & E-06, prepare P&S. Move drainage from flood side toe, survey complete, P&S beginning
BBSG Repairs	OLD	100%	Complete will repaint splash zone later
Lakefront Levee Drainage-UNO	OLD	100%	Completed July 2016, need more fill for standing water west of the new inlet.

Construction Projects (continued):

Project	District	Status	Comments
Seawall Steps Erosion (Phase 2-Reach 2c/2d/3c)	OLD	0%	
Hayne Blvd. Levee	OLD	0%	OLD contractor to fill and seed low spots
17th St Canal Levee	OLD	0%	Remove concrete left on levee surface from OFC-05; fill and seed - OLD contractor
Remove OHV-15, 16 ORV-30; Replace OHV-23 & 24	OLD	0%	OLD contractor \$35,000 – informal bid. NTP Oct. 3, 2016.
Slope Paving Repairs on MRL, near Carrollton and St. Charles	OLD	0%	Work pending completion of work on Henry Clay floodgate
Valve Box Repairs 38a-23a, Michoud Levee	OLD	0%	Top of valve boxes need cut down to facilitate mowing, scheduled spring 2017
Temporary Repairs to West Roadway	OLD	100% complete	
Repair Drains Under NSRR Tracks, on Lakefront levee in N.O. East	OLD	0%	Permitting completed Advertising
East Side London Canal Drainage Remediation	OLD	0%	Protected side holding water (900'+), needs regraded, permit to Corps awaiting response
Phase 1 for Engine Upgrades at Stations 1 & 4	LBBLD	0%	Bid opening 11/1/16
Phase 2 for Safe Room Design HMGP	LBBLD	0%	Bid opening 11/8/16

Levee District Project Designs and Studies

Project	District	Comments
System Wide Slope Paving Installation	OLD	P&S for slope paving where levees are difficult to maintain
Outfall Canals Erosion	OLD	Study complete; design 90% complete; Stability analysis underway @CH2M
Lakefront Seawall Area Reach , 4&5	OLD	Design complete; construction administration 99% complete
Lakefront Seawall Area Reach 2B	OLD	Design complete; construction administration 99% complete
Lakefront Levee Drainage Improvement East of UNO Ramp	OLD	Proposal under review
Citrus Lakefront Levee Railroad Drainage Study	OLD	Investigation complete; design 95% complete.
Lakefront Seawall Area Phase 1	OLD	Construction, administration and inspection 99% complete
Bayou Bienvenue/Bayou St. John O&M Manuals	OLD	BBSG at USACE for review /BSJSG 70% complete fiscal 2017
Police Administration Building	OLD	Board has authorized
Cap Michoud Valve Pits (2)	OLD	P&S 70% complete OLD-start spring 2017
Seabrook Internal Tower Modifications	OLD	OLD working with AC Contractor
MRT Floodgate Painting	OLD	60% complete
Lakefront Seawall Area Phase 2 (2c, 2d, 3c)	OLD	Construction Administration and inspection 0% complete
Lakefront Lake Marina Road Raising	OLD	Task Order extended. Work to start early 2017, pending PCCP work.
IHNC _ East	OLD	Low area water at East side Florida Ave. Bridge. P&S at 75%
Demolish and Repair Portions of Floodgate EB-05	OLD	Consultant preparing P&S, 75% complete
Pump Station #6 pump repair and hangers at P.S. #7	LBBLD	P&S complete; preparing to advertise
Pump Station #6 Erosion Repair	LBBLD	P&S complete; preparing to advertise
EJLD Safehouse Complex	EJLD	Schematic design, complete, Detailed Design underway. Independent Cost Estimator will start work mid-October. AE has begun assembling separate site demolition package for bidding.