

**MINUTES OF THE
SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY – EAST
BOARD MEETING
THURSDAY, FEBRUARY 20, 2014**

The regular monthly Board Meeting of the Southeast Louisiana Flood Protection Authority-East (Authority or SLFPA-E) was held on Thursday, February 20, 2014, in Meeting Room 201 of the Orleans Levee District Franklin Administrative Complex, 6920 Franklin Avenue, New Orleans, Louisiana, after due legal notice of the meeting was sent to each Board member and the news media and posted.

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

The roll was called by Secretary Wittie:

PRESENT:

Timothy P. Doody, President
Stephen Estopinal, Vice President
Louis E. Wittie, Secretary
Wilton P. Tilly, III, Treasurer
Kelly J. McHugh
G. Paul Kemp
Richard A. Luettich, Jr.

ABSENT:

Jefferson M. Angers
Lambert J. Hassinger, Jr.

OPENING COMMENTS:

Mr. Doody reported that he and Robert Turner, SLFPA-E Regional Director, participated in a conference call with Senator Vitter regarding the In Lieu Fee (ILF) Program. The primary goal of the ILF Program is “no net loss of wetlands” and program funding will be used to re-establish marsh in the State’s coastal area. Program funding will be derived from monies collected from 404/410 permittees who purchase program credits to satisfy compensatory mitigation requirements for projects with unavoidable adverse impacts to vegetated wetlands and coastal habitats. The program will allow levee districts to build projects to protect the marsh.

Mr. Doody advised that he met with Jefferson Parish officials over the past several weeks concerning the construction of the proposed East Jefferson Levee District (EJLD) safehouse.

Mr. Doody reported that he attended the Jefferson Parish delegation’s annual meeting held on February 6th. The purpose of the meeting was to review the proposed legislative agenda for the upcoming session and to discuss Capital Outlay requests.

The SLFPA-E requested partial funding in the amount of \$1.8 million from the Capital Outlay Program for the EJLD's construction of a safehouse.

Mr. Doody advised that a meeting has been scheduled with representatives from the Coastal Protection and Restoration Authority (CPRA), Lake Pontchartrain Levee District (LPLD), U.S. Army Corps of Engineers (USACE) and SLFPA-E to discuss the feasibility of constructing an additional lift on levees requiring a lift within the next ten years prior to armoring the levees. The Hurricane and Storm Damage Risk Reduction System (HSDRRS) will be certified for a period of ten years and will then require recertification. Most of the levees within the SLFPA-E's jurisdiction will not require a lift until 2025. The USACE's estimate of the cost of armoring is nearly as much as the cost to construct a lift; therefore, significant savings (an estimated \$20 million to \$30 million) would be achieved by constructing a lift prior to armoring the levees. At this time the local sponsors are responsible for constructing future levee lifts.

Mr. Doody advised that he and Mr. Turner plan to attend the Association of Levee Boards of Louisiana (ALBL) Executive Committee meeting on February 28th. The meeting is held annually in advance of the Mississippi Valley Flood Control Association (MVFCA) meeting in Washington, DC, to ensure a coordinated effort on local levee district needs. A significant concern is the implementation of the Biggert-Waters Act, which could result in huge increases in FEMA flood insurance premiums.

Mr. Doody reported that the SLFPA-E and U.S. Coast Guard will meet on March 11th to discuss the SLFPA-E's plans for exercising the IHNC navigation gates and the impact to the maritime community. Preparations for the upcoming hurricane season will also be addressed.

ADOPTION OF AGENDA:

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

RESOLUTION NO. 02-20-14-01 – APPROVAL OF JANUARY 16, 2014 BOARD MEETING MINUTES

On the motion of Mr. Wittie,
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 January 16, 2014.

The foregoing was submitted to a vote, the vote thereon was as follows:
YEAS: Mr. Estopinal, Mr. Kemp, Mr. Luettich, Mr. McHugh, Mr. Tilly and Mr. Wittie
NAYS: None
ABSENT: Mr. Angers and Mr. Hassinger

1. Coastal Restoration and Protection Projects - SLFPA-East and Vicinity – CPRA

Rickey Brouillette, P.E., Engineer Manager CPRA, explained that the presentation is to provide a lower level perspective of the projects that evolved from the initial State Master Plan to the 2012 Master Plan and the status of those projects. Structural protection, bank stabilization, oyster barrier reef, ridge restoration, shoreline protection, marsh creation, sediment diversion and hydrologic restoration projects are included in the 2012 Master Plan. A presentation slide listed the projects within the SLFPA-E's jurisdiction that were inserted in the Master Plan. Some of the projects are still at the Master Plan conceptual level; i.e., no additional funding has been received to advance the projects beyond their insertion into the Master Plan. High level conceptual cost estimates were developed for the projects.

Mr. Brouillette reviewed the Master Plan projects in the planning stage:

- Mid Breton Diversion – Medium sediment diversion into mid-Breton Sound in the vicinity of White Ditch to build and maintain land with 5,000 cfs capacity. The diversion would only be operated when the river is flowing at about 200,000 cfs. The projected cost is \$123 million. Currently, no construction funds have been secured. Funds have been secured to advance the planning of the project.
- Lower Breton Diversion – Medium sediment diversion into lower Breton Sound in the vicinity of Black Bay to build and maintain land with 50,000 cfs capacity when the river is flowing at 600,000 cfs or more. The diversion would not operate when the river flow is below 200,000 cfs. The projected cost is \$212 million. No funding for construction is expected before 2017; however, funding could be secured through oil spill settlements.
- Lower Barataria Diversion – Medium sediment diversion into lower Barataria Bay in the vicinity of Empire to build and maintain land with 50,000 cfs capacity when the river flow is 600,000 cfs or more. The projected cost is \$203 million. Construction funds have not been committed to the project, but are likely to be secured through oil spill settlements.
- Mississippi Sediment Delivery – West – Projects have been constructed in the Bayou Dupont area to take sediment out of the river and build marsh. Some of the delivery mechanisms previously constructed will be used to expand the project to the west. The total project area is 8,000 acres. Engineering and design (E&D) is currently on-going and construction could commence in 2017.
- Greater New Orleans LaPlace Extension – The USACE completed the draft Feasibility/EIS report on the project.
- Lake Pontchartrain Barrier – The CPRA is currently refining the modeling. The project team will meet with representatives from Mississippi to obtain their perspectives. The projected cost for planning and design is \$76 million. Funds have not been secured to perform all of the project's planning and design.
- Upper Barataria Risk Reduction – The on-going storm surge modeling will inform the decision process on the types of alternatives that could be considered to reduce

risks. This is a reassessment of additional alternatives to determine whether the project can be included in the Master Plan.

- Nonstructural Protection – A statewide level effort to consider alternatives available to the public for nonstructural protection. Alternatives include floodproofing of structures anticipated to experience less than 3-feet of flooding, elevation of structures anticipated to experience 3 to 18-feet of flooding and property acquisition.

Andrew Bell with the CPRA reviewed the active engineering, design and construction projects in the Master Plan and the sources of funding for the projects:

- South Lake Lery Shoreline and Marsh Restoration [CWPPRA (Coastal Wetlands, Planning, Protection and Restoration Act)] - Marsh creation in southern portion of Lake Lery and shoreline restoration on the western shore of Lake Lery. Project features include three marsh creation cells totaling 496 acres and the restoration of 35,831 linear feet of shoreline. The total project cost is \$32.4 million (engineering, design, construction and 20 years of operation and maintenance). Construction bids have been received and the notice to proceed is anticipated to be issued to the contractor in March, 2014.
- Terracing and Marsh Creation South of Big Mar (CWPPRA) - Creation of 334 acres of marsh on the West shore of Lake Lery and 65,000 linear feet of terraces in three locations south of Big Mar. The total project cost is \$22.7 million. The project is in the initial stages of E&D. Construction funds have not yet been authorized.
- Bayou Bonfouca (located on the north shore of Lake Pontchartrain south of Slidell) [CWPPRA/St. Tammany Parish Coastal Impact Assistance Program (CIAP)] - The project consists of four marsh creation cells totaling 638 acres and the nourishment of 42 acres of marsh. The total project cost is \$28 million. Construction funding has been made available. The final E&D is in progress. Construction of the project is anticipated to commence in February, 2015.
- Previously Authorized Mitigation LPV – Manchac – Mitigation work on the Lake Pontchartrain and Vicinity (LPV) Project prior to Hurricane Katrina. The project is funded through a number of Water Resource Development Acts (WRDA). Existing segmented breakwaters will be raised to provide a solid rock shoreline dike. About 110 acres of marsh will be created between the rock dike and the shoreline. The total project cost is approximately \$23 million (100% Federal). The project is currently in construction and expected to be completed by April, 2014.
- Living Shoreline Demonstration Project (CIAP) – The goal is to provide up to 21 miles of shoreline protection from Eloi Point to the mouth of Bayou LaLoutre. A living shoreline product will be used to stimulate oyster growth as an alternative to standard rock shoreline protection. The total project cost is \$24 million. The survey and geotechnical efforts are being completed and discussions are underway with several vendors concerning various products to be tested.
- River Reintroduction into Maurepas Swamp (CWPPRA/State) – The 95% design was completed under CWPPRA. The project was transferred to the State for funding. Construction funds have not yet been secured; however, State surplus funds and potential oil spill funds are anticipated to be used. The purpose of the

project is to restore the health and essential functions of the Maurepas Swamp wetlands. Project features include three 10-ft. by 10-ft. box culverts at the Mississippi River near Reserve, maximum design flow of 2,000 cfs, and five miles of conveyance channel into the swamp just north of I-10. The total project cost is \$197.7 million. The project is proceeding through the 404 and 408 permit processes. Landowner coordination is currently on-going.

- Alligator Bend Shoreline Project (CWPPRA) – The project will provide shoreline protection along the Alligator Bend portion of the Lake Borgne shoreline to maintain the Orleans Landbridge. The total project cost is \$40.3 million. A foreshore rock dike will be constructed. Some portions of the shoreline with weaker soils will require the use of lightweight aggregate. The 95 percent design has been completed. Construction authority has not yet been received and construction funds have not been secured.
- Small Diversion at Convent/Blind River [Louisiana Coastal Area (LCA)] – The project is in the early stages of E&D by the USACE. The project will improve habitat function by establishing hydrologic period fluctuation into the Maurepas Swamp wetlands. The maximum design flow is 3,000 cfs. Modeling is being used to resolve project features and modify minor adjustments to the locations. The total project cost is \$123.2 million. Landowner coordination is currently ongoing.
- Biloxi Marsh (2007 State Surplus) – Shoreline protection will be constructed along the southeast coast of Lake Borgne in St. Bernard Parish. Approximately four miles of breakwater structure will be constructed. The total project cost is \$22 million. Construction is scheduled to be completed in March, 2014.
- Madisonville Bulkhead Project [Community Development Block Grant (CDBG)] – The total project cost is \$2.3 million. The project includes a 798-ft. long steel sheet pile wall and dock replacement. Construction is scheduled to be completed in April, 2014.
- Central Wetlands Assimilation – Demonstration Project (CIAP) – A ferrator process will be used to assimilate the waters for the beneficial use of biosolids. The Sewerage and Water Board of New Orleans has the lead on the project. The total project cost is \$3.5 million. The ferrator is currently being tested and the project is scheduled to be completed in March, 2014.
- Central Wetlands Assimilation – Riverbend (CIAP) – The purpose of the project is to restore 354 acres of critical wetlands in St. Bernard Parish using wetland assimilation of wastewater from the Riverbend Oxidation Plant. The total project cost is \$2 million. The notice to proceed was provided to the contractor in November, 2013. The project is scheduled to be completed in December, 2014.
- Central Wetlands Assimilation (CIAP) – The project is a continuation of the demonstration project and will create additional cells using the ferrator process. The total project cost is \$4.5 million. Construction is anticipated to begin in the Fall of 2014.

Mr. Estopinal commented that the bathymetry data for Lake Borgne and the Mississippi and Chandeleur Sounds is dated. He asked whether the CPRA had any projects

planned to update this data. Mr. Bell responded that this type of project would be run by the Planning Group as part of the update of the 2017 Master Plan.

There was a brief discussion relative to the SLFPA-E taking on small projects that are currently unfunded should funds become available to the SLFPA-E. Mr. Doody advised that the Coastal Advisory Committee would develop the priorities for the SLFPA-E on such projects.

2. Use of GPS for monitoring systems - David Rutledge, Leica Geosystems

Mr. Tilly advised that through the Strategic Petroleum Reserve he worked with David Rutledge in the installation of tilt meters and GPS on abandoned wells.

Mr. Rutledge with Leica Geosystems advised that he would be addressing monitoring technology that could be employed to provide meaningful information for advance notification and to inform decisions with regards to subsidence.

Mr. Rutledge discussed the case study for Long Beach, California. Long Beach sits over the Wilmington Oil Field and considerable subsidence was taking place due to the extraction of large amounts of oil and water from relatively shallow, uncompacted hydrocarbon reservoirs. First order spirit leveling was the primary method for monitoring vertical subsidence from 1953 until 2001. A National Geodetic Survey (NGS) control point (Tidal 8) was used, which allowed the readings to be tied to mean sea level. Long Beach developed a formula to arrest the subsidence by replacing extracted fluids with reinjected fresh water. The spirit leveling campaigns were costly and took a long time to obtain results. In the fall of 2001 Long Beach shifted from spirit leveling to GPS leveling. In order to make this transition and to provide a tie to historical spirit leveling data, Leica had to precisely establish the difference between relative orthometric heights obtained from spirit leveling and the relative ellipsoidal heights obtained from GPS. This difference provides a constant offset between the two height systems and provides a connecting mechanism that allows the conversion (or transformation) of GPS determined relative ellipsoidal heights to equivalent relative orthometric heights. The benefits of this approach included:

1. A precise connection mechanism between the historical leveling data and the future GPS data.
2. The establishment of surrogates to Tidal 8 and/or future points-of-beginning for any spirit leveling surveys.
3. An updated geoid for the Long Beach area.
4. The ability to effectively perform leveling using GPS methods.

Mr. Rutledge explained that Long Beach added 12 permanent and continuously operating GPS stations to strengthen the monitoring effort. The fixed GPS arrays were cost effective, eliminated much of the procedural error, and provided precise data and a continuous record of subsidence. The stations were established using ITRF coordinates to account for regional deformation. The resulting positional coordinates are consistent with those used by other Federal and State agencies. Long Beach is

now able to reliably convert GPS-derived ellipsoidal heights to orthometric heights and vice versa and have access to real-time vertical and horizontal information.

Mr. Rutledge reviewed the reasons GPS is attractive:

1. High accuracy horizontal and vertical coordinates
2. Real time data (full temporal coverage and immediate notification)
3. GPS data is easily converted to orthometric heights.
4. Global reference frame – every location on the planet has a unique address
5. The resulting elevations are consistent with those used by other Federal and State agencies because everyone is operating in the same reference system.

Mr. Rutledge advised that the technology has advanced rapidly since the early 2000's. GPS is ubiquitous now and accepted as another utility. Cellular communication systems make it easy to remotely operate networks. The cost of a GPS monitoring station has decreased. Statewide networks are now in place in many parts of the country. The presence of existing statewide networks provides an inexpensive path to measure broad regional subsidence. The only real requirement to move forward with the use of the statewide networks is GPS processing software and the knowledge of correct procedure. Regional subsidence maps providing meaningful data can be generated at a small cost. The price to install GPS stations continues to fall. GPS is an accepted instrument for structural and geotechnical monitoring today.

Mr. Rutledge reviewed options that the SLFPA-E may wish to consider:

- Begin using the existing Leica SmartNet GPS stations to map subsidence over a broad area in near real-time. This would leverage work already done and be cost-effective.
- Deploying a small test network of GPS receivers, perhaps with a modest coincident spirit leveling campaign to tie historical data to new GPS leveling data.

Mr. Rutledge estimated the cost to establish a new GPS station at \$6,000 (equipment only). The appropriate software would be required to process data from the station.

Mr. Kemp inquired about the CPRA's efforts in this area. Mr. Brouillette advised that a geodist is assisting the CPRA in its effort for the Greater New Orleans area. The CPRA is confirming the elevation surveys for the flood protection system. The geodist is evaluating geoidal and ellipsoidal issues, as well as the NGS's effort to go to a gravity based system. A GPS is located on the IHNC Surge Barrier, along with in-place inclinometers and shape array instruments that measure tilt and motion with depth. GPS was put in place in three locations next to sensors as part of the iLevee Program. The continuation of the program will depend on the type of commitment and investment made by various interested agencies.

Mr. Luettich inquired about the accuracy of the data collected from a GPS station. Mr. Rutledge responded that the accuracy should be within one millimeter (one standard deviation) for both vertical and horizontal data.

PUBLIC COMMENTS:

Jack Hulse, representing Hamp's Construction, commented concerning Agenda Item XII.C.4 - Lake Pontchartrain Seawall Erosion Control Reach 4 and 5 Project. He stated that the engineer's estimate for the project is about \$6.8 or \$6.9 million. Eight bids were submitted. Seven of the eight bids were over \$7 million. He suggested that if the project is rebid that the bids will likely come in just above \$7 million and that the completion of the project will be pushed into the winter months making it more difficult, expensive and time consuming. The low bidder was determined to be not responsive since the affidavits required under the public bid law were not submitted during the mandated timeframe. He commented that the second low bidder was also not responsive. Hamp's Construction was the third lowest economic bidder and the bid is within about 10 percent of the engineer's estimate. Hamp's Construction submitted the required affidavits within ten days of the bid opening. He requested that the Board award the contract for the project to Hamp's Construction.

Mr. Doody advised that the Assistant Attorney General and the SLFPA-E's General Counsel have suggested that the best course of action to protect the Board legally is to rebid the project. Robert Lacour, SLFPA-E General Counsel, added that the consulting engineering firm, Design Engineering, Inc. (DEI), will be reviewing the plans and making changes to reduce the potential bids. He explained that under the new law the low bidder has ten days from the date of the bid opening to submit certain affidavits. If the low bidder does not submit the required affidavits and is disqualified, there is a question as to when the ten day time frame begins for the second low bidder.

COMMITTEE REPORTS:

Finance Committee: Mr. Tilly reported that the Finance Committee met on February 6th and received the FY 2014 preliminary draft budgets for the SLFPA-E and levee districts.

Operations Committee: Mr. Wittie reported that the Operations Committee met on February 6th and discussed the issuance of Task Orders to Eustis Engineering for testing services and URS for resident inspection services for the Florida Avenue Bridge Erosion Control Project. The Committee also discussed the receipt of bids for the Lake Pontchartrain Seawall Erosion Control Reach 4 and 5 Project; however, the low bidder was subsequently determined to be not responsive. The Committee received reports from the Regional Director and levee district Executive Directors.

Legal Committee: Mr. Doody advised that the Legal Committee did not meet during the month of February. The legal invoices were submitted for review to the members of the Legal Committee.

CPRA: Mr. Hassinger was unable to attend the Board meeting; therefore, there was no report.

Coastal Advisory Committee: Mr. Kemp reported that the Coastal Advisory Committee (CAC) met on January 17th. A presentation was provided by Dr. Chris Swarzenski with the U.S. Geological Survey (USGS) that included information on the velocity and stage gage located at the Seabrook Complex, which is critical to the operation of the IHNC Surge Barrier gates. A resolution has been placed on the agenda for the Board to consider approval of the \$21,000 annual cost to continue the USGS monitoring effort at Seabrook. The USACE is anticipated to turn over similar equipment located at the GIWW gate to the SLFPA-E. A presentation was also provided by Cliff Mugnier with the LSU Center for GeoInformatics concerning geodic controls for monitoring the flood protection system. Additional information will be received on this subject from the CPRA at tomorrow's CAC meeting. An update on Mardi Gras Pass and a presentation on a small amphibious dredge will also be taken up by the CAC at its February 21st meeting.

REGIONAL DIRECTOR'S REPORT:

Mr. Turner reviewed the highlights of the Regional Director's Report (copy appended to minutes) and offered the following additional comments:

- IHNC Surge Barrier Barge Gate – The Orleans Levee District (O.L.D.) conducted its first monthly Barge Gate exercise on February 10th. No issues were encountered other than the fact that the barge could not be sunk and a full closure of the gate could not be affected because of the low tide. The SLFPA-E spent a considerable amount of time working with the U.S. Coast Guard and maritime industry to develop the appropriate language to notify mariners about the operational exercises. Alerts relative to closure of the structure during emergency events will be discussed in a meeting with the Coast Guard in March. The SLFPA-E has requested that the USACE review the Independent Environmental Report (IER) in order to determine whether the Barge Gate could be kept closed during the hurricane season. The USACE has not yet started the process of reviewing the IER for this purpose.
- Complex Structures Group – The O.L.D. has hired additional employees to make up the Complex Structures Group. Internal training is under development. The first major training class has been conducted.
- LPV 145-A Bayou Bienvenue Bridge – The USACE awarded a \$7.4 million contract to build a swing bridge at the Bayou Bienvenue Sector Gate to access the floodgates in the floodwall between Bayou Bienvenue and Bayou Dupre. The bridge is anticipated to be completed during the Hurricane Season of 2015. Until the bridge is completed Lake Borgne Basin Levee District employees will access the floodwall by boat to close the structures well in advance of a storm and monitor their closure.
- Non-Federal Levee Certification – Geotechnical field investigations are on-going. A meeting will be held to discuss the results of the investigations. The consultant conducted an additional preliminary visual inspection of the system.
- Quarterly Inspection Meeting – A meeting to review the quarterly inspection reports was conducted. No critical issues were found.

NEW BUSINESS:

RESOLUTION NO. 02-20-14-02 - COMMENDING LEEVE DISTRICT PERSONNEL FOR SERVICES PERFORMED DURING THE WINTER STORM OF JAN. 28-29, 2014

Mr. Doody commented that an incredible use of levee district personnel and equipment took place in response to a unique challenge and that the State was very thankful for the levee districts' efforts.

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

WHEREAS, the Southeast Louisiana Flood Protection Authority–East (SLFPA-E) is charged by law with overseeing flood protection in a large geographical area that includes St. Bernard Parish and the east banks of Orleans and Jefferson Parishes; and

WHEREAS, the operation and maintenance of earthen levees, floodwalls, floodgates, barriers and related infrastructure is provided daily by employees of the Lake Borgne Basin, Orleans and East Jefferson Levee Districts; and

WHEREAS, many of the employees of these three levee districts are required to remain on duty during tropical storms and hurricanes in order to close and secure the federal Hurricane Storm Damage and Risk Reduction System against storm surges out of Lake Pontchartrain, Lake Borgne and the Gulf of Mexico; and

WHEREAS, these same employees must also close and secure any open gates along the east bank of the Mississippi River in these jurisdictions; and

WHEREAS, these employees also patrol the Mississippi River levees during periods of seasonal high water, prepared to flood fight wherever rising river water threatens bank or levee stability; and

WHEREAS, the levee districts also maintain, equip and train police forces that patrol the levees and flood defense infrastructure daily to provide security and halt prohibited activities that could do damage and increase flood risks; and

WHEREAS, these police officers are also required to remain on duty during tropical storms and hurricanes to provide security and assist, if needed, to close gates or provide convoys for the transport of emergency equipment, food and personnel; and

WHEREAS, the men and women of these levee districts are required by conditions of their employment to act as first responders in the event of tropical storms, hurricanes and Mississippi River high water events; and

WHEREAS, the Louisiana Department of Transportation and Development requested assistance from SLFPA-E and its levee districts to combat icy conditions threatening to close critical roads and bridges throughout Jefferson, Orleans and St. Bernard Parishes; and

WHEREAS, many of the levee district employees answered the State's call for help during the Winter Storm of January 28-29, 2014 by operating heavy equipment, transporting and dispersing sand and salt, giving safe passage and police escorts

for equipment operators engaged in the de-icing mission, and providing all other support necessary for the operation.

BE IT HEREBY RESOLVED, that the SLFPA-E Board of Commissioners commends the Orleans, East Jefferson and Lake Borgne Basin Levee District employees who went beyond the call of duty and worked tirelessly alongside State Department of Transportation and Development employees, the Louisiana National Guard and others in hazardous conditions to help ensure the traveling public's safety during the Winter Storm of 2014.

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

YEAS: Mr. Estopinal, Mr. Kemp, Mr. Luettich, Mr. McHugh, Mr. Tilly and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers and Mr. Hassinger

RESOLUTION NO. 02-20-14-03 - APPROVAL OF LEGAL INVOICES

On the motion of Mr. Luettich,

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

WHEREAS, the legal invoices submitted to the Southeast Louisiana Flood Protection Authority-East (SLFPA-E), East Jefferson Levee District, Lake Borgne Basin Levee District and Orleans Levee District listed on the spreadsheet entitled "Legal Invoices Approved on February 20, 2014", have been reviewed and approved by the appropriate levee district Executive Director, the SLFPA-E Regional Director and the SLFPA-E General Counsel, Robert Lacour, and provided to members of the Legal Committee.

BE IT HEREBY RESOLVED, that the legal invoices listed on the spreadsheet entitled "Legal Invoices Approved on February 20, 2014" are hereby approved.

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

YEAS: Mr. Estopinal, Mr. Kemp, Mr. Luettich, Mr. McHugh, Mr. Tilly and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers and Mr. Hassinger

RESOLUTION NO. 02-20-14-04 - USGS GAGES AT SEABROOK COMPLEX

Mr. Kemp explained that there is a need for accurate velocity data in the funnel area situated between Seabrook and the GIWW in order to develop rating curves. The USGS collected one year of velocity data on the Seabrook side; however, the USGS's contract with the USACE terminated and the equipment was about to be removed. The USGS data is available in real time on its website. The USACE installed equipment on the GIWW side; however, the performance of the equipment was unreliable. Therefore, there is no good contemporaneous data. The resolution before the Board concerns the continuation of the equipment at Seabrook. An assessment and determination relative to the equipment at the GIWW will be needed. Mr. Luettich added that the Seabrook Complex structure gate cannot be operated if the water velocity is too high.

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

WHEREAS, the U.S. Army Corps of Engineers (USACE) contracted with the U.S. Geological Services (USGS) to monitor velocity, stage and discharge in the IHNC near the Seabrook Complex and to provide the data on a project driven basis; and

WHEREAS, the contract between the USACE and the USGS terminated on December 31, 2013 and the USGS will be required to remove the gage at the Seabrook Complex due a lack of funding to continue its operation and maintenance; and

WHEREAS, the current velocity and stage gages at the Seabrook Complex provides real-time data on the USGS web page and said data can be published in the LaWSC annual data report; and

WHEREAS, the real-time velocity data provided at the above location is crucial for determining a safe window for opening and closing the IHNC Sector and Barge Gates, as well as for determining the need to inspect the scour stone at the bottom of the Seabrook Complex structure when velocities exceed seven-feet per second; and

WHEREAS, discharge data calculated by the USGS based on data collected by the gages is required in order to develop empirical relationships between the differential head and velocity; and

WHEREAS, the total annual cost for equipment rental (\$3,300), operation and maintenance (velocity and stage - \$11,000) and discharge (\$7,500) is \$21,600; and

WHEREAS, funding for the rental, operation and maintenance of the current velocity and stage gages at the Seabrook Complex and discharge data is available in the Orleans Levee District (O.L.D.) Special Levee Improvement (SLIP) Fund Budget; and

WHEREAS, the Coastal Advisory Committee recommended at its meeting held on January 21, 2014 that actions be taken to continue the operation and maintenance of the USGS gages and receipt of discharge data.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) approves the rental, operation and maintenance of the USGS current velocity and stage gages at the Seabrook Complex and the providing of discharge data by the USGS at a total cost of \$21,600 for a period of one year.

BE IT FURTHER RESOLVED, that the SLFPA-E Regional Director and/or O.L.D. Executive Director are hereby authorized to execute any and all documents necessary to accomplish the above.

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

YEAS: Mr. Estopinal, Mr. Kemp, Mr. Luettich, Mr. McHugh, Mr. Tilly and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers and Mr. Hassinger

**RESOLUTION NO. 02-20-14-05 –
RFQ FOR RISK ASSESSMENT ENGINEERING SERVICES**

Shelley Midura, Grant Administrator, explained that it has taken about a year to secure the \$500,000 Community Development Block Grant (CDBG) for the Probabilistic Performance Analysis. The Office of Community Development Disaster Recovery Unit was contacted to ensure that the SLFPA-E is following the correct procedures and that the Request for Qualifications (RFQ) is acceptable. A recent requirement is that the RFQ must include timelines and penalties for tasks not completed on time.

Mr. Turner explained that representatives of the I-Storm Network peer reviewed the operations and maintenance procedures for the IHNC Surge Barrier for the USACE. It was noted that the Dutch go into great depth relative to potential failure points that could affect the operation of a large structure and a determination of the best course of action to mitigate the risks. Part of analysis would include the identification of key items that should be kept on hand. The analysis would become the basis of a study. The analysis may need to be extended and additional grant funding sought.

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

WHEREAS, the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) has received funding through Community Development Block Grant (CDBG) to address ongoing planning issues resulting from the impact of Hurricanes Katrina and Rita; and

WHEREAS, the SLFPA-E is in need of a Probabilistic Performance Analysis for the Lake Borgne Surge Barrier, Seabrook Complex and Gates, Bayou St. John Sector Gate, Bayou Bienvenue Sector Gate, Bayou Dupre Sector Gate and the Caenarvon Sector Gate, which can be funded through the aforementioned CDBG.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the advertisement and issuance of a Request for Qualifications for Risk Assessment Engineering Services to perform the aforementioned analysis.

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

YEAS: Mr. Estopinal, Mr. Kemp, Mr. Luettich, Mr. McHugh, Mr. Tilly and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers and Mr. Hassinger

**RESOLUTION NO. 02-20-14-06 –
CONSTRUCTION BUDGET FOR EJLD CONSOLIATED FACILITY**

Mr. Doody noted that the construction budget of \$19 million does not include land or furniture.

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

WHEREAS, on October 16, 2008, the Board authorized the East Jefferson Levee District (EJLD) to advertise and issue a Request for Qualifications for Professional Architectural-Engineering-Real Estate Consulting Services for a study to investigate safe housing for employees, including recommendations and alternative recommendations with respect to existing facilities and safe housing; and

WHEREAS, by Resolution No. 04-16-09-08 the Southeast Louisiana Flood Protection Authority-East (SLFPA-E) approved the selection of the firm of Waggoner and Ball Architects and the execution of a contract with said firm for EJLD Project No. 2009-08-01 - EJLD Safehouse and Operations Facilities; and

WHEREAS, the aforementioned project consists of three phases (Phase I – Study Phase, Phase II – Design Phase, and Phase III - Construction); and

WHEREAS, by Resolution No. 04-21-11-08, the SLFPA-E authorized the purchase of 15 parcels of property from the City of New Orleans by and through the New Orleans Aviation Board, and subsequently approved the purchase of the additional private parcels for the construction of the proposed safehouse and consolidated facilities; and

WHEREAS, by Resolution No. 01-17-13-08, the SLFPA-E approved the execution of the contract for Phases II and III (Design and Construction) of the EJLD New Safehouse and Consolidated Facilities; and

WHEREAS, a construction budget (Cost of the Work) must be established for the safehouse and consolidated facilities for use in the development of construction documents.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the establishment of a budget in the amount of \$19 Million for the construction (Cost of the Work) of the EJLD safehouse and consolidated facilities.

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

YEAS: Mr. Estopinal, Mr. Kemp, Mr. Luettich, Mr. McHugh, Mr. Tilly and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers and Mr. Hassinger

**RESOLUTION NO. 02-20-14-07 –
IHNC FLORIDA AVENUE BRIDGE EROSION CONTROL PROJECT**

Mr. Wittie advised that the Task Order to URS was discussed by the Operations Committee and recommended for approval.

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

WHEREAS, the deteriorating non-hurricane flood protection at the Florida Avenue Bridge must be replaced with a steel sheet pile wall southeast and northwest of the bridge; and

WHEREAS, the Florida Avenue Bridge Erosion Control Project was awarded to Cycle Construction in the amount of \$394,455.00; and

WHEREAS, the Orleans Levee District (O.L.D.) negotiated fees to provide construction inspection services with URS Corp. under an Indefinite Delivery-Indefinite Quantity (ID-IQ) contract with Southeast Flood Protection Authority–East; and

WHEREAS, the O.L.D. issued an interim task order to URS Corp. in an amount of \$10,000 for construction inspection services from February 3, 2014 to February 24, 2014 for the above project.

BE IT HEREBY RESOLVED, that Southeast Louisiana Flood Protection Authority-East authorizes the issuance of a Task Order to URS Corp. in the amount of \$52,151.60 to provide construction inspection services for the remaining Florida Avenue Bridge Erosion Control Project work.

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

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

YEAS: Mr. Estopinal, Mr. Kemp, Mr. Luettich, Mr. McHugh, Mr. Tilly and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers and Mr. Hassinger

RESOLUTION NO. 02-20-14-08 - IHNC SURGE BARRIER AND SEABROOK SECTOR GATE COMPLEX QUARTERLY INSPECTION SERVICES

On the motion of Mr. Estopinal,

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

WHEREAS, the Orleans Levee District (O.L.D.) has been tasked with maintenance and inspection of the IHNC Surge Barrier and the Seabrook Sector Gate Complex; and

WHEREAS, the O.L.D. does not have sufficient personnel to perform quarterly inspections of the IHNC Surge Barrier and the Seabrook Sector Gate Complex; and

WHEREAS, the O.L.D. negotiated fees to provide quarterly inspections of the IHNC Surge Barrier and the Seabrook Sector Gate Complex with Atkins North America, Inc. under an Indefinite Delivery-Indefinite Quantity (ID-IQ) contract with the Southeast Flood Protection Authority–East.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the issuance of a Task Order to Atkins North America, Inc. in a not to exceed amount of \$250,000 for four quarterly inspections of the Seabrook Sector Gate Complex and the IHNC Surge Barrier and one annual

inspection of access channels adjacent to the Surge Barrier (\$213,525.25) and to allow for pre and post event inspections.

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

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

YEAS: Mr. Estopinal, Mr. Kemp, Mr. Luettich, Mr. McHugh, Mr. Tilly and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers and Mr. Hassinger

**RESOLUTION NO. 02-20-14-09 – LAKE PONTCHARTRAIN SEAWALL
EROSION CONTROL REACH 1B PROJECT**

Mr. Wittie asked whether the contractor will be assessed liquidated damages for overrunning the contract period. John Holtgreve with DEI responded that the contract was scheduled to be completed about February 1st; however, it will not be completed until about the end of May. The contractor requested a time extension and additional cost for the trouble experienced during the first excavation into the seawall for the drainage discharge. The request for a time extension does not cover the entire length of the additional contract time. DEI is currently reviewing the contractor's claim. Liquidated damages assessed against the contractor would offset the cost of the additional inspection and contract administration.

On the motion of Mr. Tilly,

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

WHEREAS, areas between the Lake Pontchartrain Seawall and Lakeshore Drive are experiencing erosion and said erosion is frequently making Lakeshore Drive between Shelter 1 and the Orleans Avenue Canal impassable for days after winter storms; and

WHEREAS, the Lake Pontchartrain Seawall Erosion Control Reach 1B Contractor, Shavers Whittle, LLC, will be working beyond the prior deadline of February 13, 2014; and

WHEREAS, the Orleans Levee District (O.L.D.) negotiated fees to provide extended Construction Administration and Resident Inspection Services for the Lake Pontchartrain Seawall Erosion Control Reach 1B with Design Engineering, Inc. (DEI) under a contract with the Orleans Levee District.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes a Supplemental Agreement to the contract between Design Engineering, Inc. and the O.L.D. in a total amount of \$155,322.74 (\$50,885.79 for Construction Administration and \$104,436.95 for Resident Inspection Services) for the Lake Pontchartrain Seawall Erosion Control Reach 1B.

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

The foregoing was submitted to a vote, the vote thereon was as follows:
YEAS: Mr. Estopinal, Mr. Kemp, Mr. Luettich, Mr. McHugh, Mr. Tilly and Mr. Wittie
NAYS: None
ABSENT: Mr. Angers and Mr. Hassinger

RESOLUTION NO. 02-20-14-10 - LAKE PONTCHARTRAIN SEAWALL EROSION CONTROL REACH 4 AND 5 PROJECT – REJECTION OF BIDS

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

WHEREAS, the Lake Pontchartrain Seawall Erosion Control Reach 4 and 5 Project was advertised and eight bids were received on January 31, 2014, as follows:

Bidding Contractors	Total Base Bid Price
TKTMJ, Inc.	\$6,654,932.00
Fleming Construction Company LLC	\$7,257,289.75
Hamp's Construction LLC	\$7,357,504.00
Barriere Construction Company LLC	\$7,477,562.50
Hard Rock Construction, LLC	\$7,565,390.00
Wallace C. Drennan, Inc.	\$8,433,389.20
Cycle Construction Company, LLC	\$8,595,497.00
Cajun Constructors, Inc.	\$9,513,940.00

WHEREAS, the apparent low bidder, TKTMJ, Inc., failed to provide the necessary affidavits required by LA R.S. 38:2212(A)(1)(b)(ii)(bb) within ten days after the bid opening; and

WHEREAS, the remaining bids exceeded the project budget of \$6,900,000.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority – East authorizes the Orleans Levee District to reject all bids in accordance with LA R.S. 38:2214.

BE IT FURTHER RESOLVED, that the Orleans Levee District Executive Director is hereby authorized to re-advertise the project for bid.

The foregoing was submitted to a vote, the vote thereon was as follows:
YEAS: Mr. Estopinal, Mr. Kemp, Mr. Luettich, Mr. McHugh, Mr. Tilly and Mr. Wittie
NAYS: None
ABSENT: Mr. Angers and Mr. Hassinger

Mr. Doody commented that the greatest challenge that the SLFPA-E will face going forward is the funding for the operations and maintenance costs of the HSDRRS. He stated that he would try to put together a working group for a study on how best to fund this effort. The effort will ultimately involve some study by an efficiency firm to provide ideas on ways to become more efficient and how best to utilize the resources at the SLFPA-E's disposal.

The next regular monthly Board meeting will be held on March 20, 2014 and hosted by the LBBLD.

There was no further business; therefore, the meeting was adjourned at 11:55 a.m.

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY - EAST

REGIONAL DIRECTOR'S REPORT

February 20, 2014

HSDRRS Project Status Update

IHNC-02 - Lake Borgne Surge Barrier Complex

The NCC was issued Dec. 6, 2013, and a final Punch List Inspection took place Feb. 6. The Orleans Levee District (OLD) conducted its first barge exercise Feb. 10 and will continue to do so monthly. A notification system is being developed to keep the Army Corps of Engineers (Corps), the U.S. Coast Guard and the navigation industry informed of these exercises

LPV-01.2 - Foreshore Protection Reaches 1&2 The Corps did work to repair substantial erosion along the landward interface between the rock and the soil embankment on this project several months back, but the method failed. SLFPAE tasked consultant CH2MHill to evaluate the area and develop repair options that we find acceptable. Their findings are among the options now under consideration. A scope of work is being prepared by the Corps in order to get proposals from contractors; it will be reviewed by SLFPAE when complete. The NCC for this project will be delayed until spring.

LPV-105.02- The work to replace a T-wall monolith across from the Lakefront Airport began on Jan. 7. The contractor placed the new concrete on Feb. 17. All work should be complete by the end of February.

LPV-109.02a - Levee Enlargement for South Point to CXS Railroad and US11 and US 90 Floodgates A Corps consultant is preparing plans to repair problems resulting from excessive settlement of the Highway 11 floodgate, which could involve degrading the floodside berm. In mid-March, the Corps will begin degrading the floodside berm and making repairs to the emergency by-pass road adjacent to the gate.

LPV-111 - CSX RR to Michoud Canal The Corps' plan to issue the NCC for this project in March has been delayed due to new surveys showing that about 6,000 linear feet of levee has settled an average of six inches below design grade. The plan is to add up to 12 inches of fill to the levee in these areas.

LPV-145A- Bayou Bienvenue Bridge The Corps has awarded a \$7.4 million contract to build a swing bridge at the Bayou Bienvenue Sector Gate in Orleans Parish. A pre-construction meeting was held Feb. 5, and the contractor will mobilize to the site within 30 days. The project is scheduled to be complete by Hurricane Season of 2015.

LPV-149AR - Access Road at Caenarvon Construction is underway, but completion previously expected by Feb. 19 has been delayed by weather.

LPV – 149A – Floodwall Tie-in to the MRL at Caenarvon Construction is underway and scheduled to be completed by May 22, 2014. The floodwall monoliths were demolished in early January. The contractor has driven all sheet piles for this project and will begin driving H-Piles this week.

Outfall Canals The work to install more sheet pile along the London Ave Canal and the west side of the 17th St. Canal (OFC-07) was delayed by a bid protest that was ultimately dismissed. The project is now scheduled for award Feb. 28.

The 17th Street Canal bank protection project (OFC-08) is awaiting completion of an environmental review.

Permanent Canal Closures and Pumps (PCCP) Construction continues on this HSDRRS project. A major upcoming milestone is completion of the 17th Street Canal Pump Station coffer dam by March 5. Meanwhile, work on the Orleans Avenue Canal Pump Station coffer dam began Feb. 17.

Armoring The Armoring Engineering Alternative Report (EAR) scheduled for completion April 30 will identify the levee reaches to be armored. System-wide armoring installation contracts are not scheduled to be awarded until July of 2014.

SBPS - 07 – Repairs to LBBLD Pump Stations #2 and #3 The project is scheduled for construction contract award in June of 2014.

Internal Affairs

Non-Federal Levee Certification

Geotechnical field investigations have been completed in Orleans and are ongoing in St. Bernard. Land surveying work on both projects continues.

The initial sheetpile testing and assessment report for the 40-Arpent Levee indicates that a 2,500 linear foot section of piling may require extensive repair.

Alternative designs for a new closure at the Shrimp Factory in St. Bernard have been developed by the consultant and a site meeting was held with the property owner to discuss them.

Complex Structure Training Our personnel train weekly to become more familiar with operation and maintenance of the complex gated HSDRRS

navigational structures. The OLD has new hires and is setting up an inspection/training program.

Emergency Preparedness The Mississippi River level at the Carrollton Gage in New Orleans is approximately 8' and is expected to drop slowly later this week.

Meetings and Items of Note:

The CPRA board will meet in regular session on Feb, 26 at 9:30 am in the LaSalle Building's LaBelle Room, 617 N. Third St. in Baton Rouge.

The Coastal Advisory Committee will meet at 9:30 a.m. tomorrow, Friday, Feb. 21, in the SLFPAE meeting room at OLD.

Levee District Construction Projects:

Project	District	Status	Comments
Franklin Administration Building Refurbishment	OLD	100%	Complete
Bayou Bienvenue Maintenance Cycle	OLD	100%	Complete
Bayou St. John Sandbar Removal	OLD	100%	Complete
Seawall Steps Erosion – Phase 1B	OLD	50% complete	
Franklin Warehouse Steel Silo Demolition	OLD	100%	Complete
Franklin Warehouse Safe house Remediation	OLD	100%	Complete
OLD Franklin Facility Parking Lot Improvements Landscaping Plan	OLD	2% complete	
Citrus Lakefront Levee Haynes Blvd. utility pads removal	OLD	100%	Complete
IHNC Florida Ave. Bridge Sheet Pile	OLD	5% complete	
Floodgate & Floodwall Repairs	OLD	0% complete	Notice to Proceed issued
MRT and IHNC Vegetation Removal	OLD	0% complete	Work delayed due to high river crest.

Levee District Project Designs and Studies

Project	District	Comments
Citrus Lakefront Railroad Drain Pipe Crossings (BKI)	OLD	Study 95% complete
Franklin Front Parking Facility	OLD	Design complete; construction administration 0%
Lakefront Seawall/Erosion Reach 1B	OLD	Design complete; construction administration 85%
Lakefront Seawall Area Reach , 4&5	OLD	Reach 4&5 design complete; Construction Administration Board approval pending
Lakefront Seawall Area Reach 2B	OLD	Design 10% complete
Floodgate Seal Repairs	OLD	Design complete; construction administration 0%
IHNC Florida Bridge Floodwall Replacement	OLD	Design complete; construction administration 0%
Phase 1 for engine upgrades at Pump Stations 1&4 HMGP approved by FEMA	LBBLD	Design contract awarded; 5% complete project ongoing
Phase 1 for Safe Room Design HMGP approved by FEMA	LBBLD	Design submitted to FEMA Region 6 for Phase 2 approval
Pump Station #6 pump repair and hangers at P.S. #7	LBBLD	P&S at 100%; advertise when erosion control project is complete
Pump Station #6 Erosion Repair	LBBLD	P&S at 100%; advertise for construction bids in February 2014
Floodgate #9 renovation	LBBLD	P&S at 100%; advertise for construction bids in February 2014
Safe house & Consolidated Facility	EJLD	Revised conceptual plans have been submitted by the architect and reviewed by SLFPA-E. Design work will continue after construction budget is set.
PM Support to LBBLD Staff for HMGP Projects	LBBLD	Ongoing; provides staff augmentation for LBBLD HMGP projects.