

**MINUTES OF THE
SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY – EAST
BOARD MEETING
THURSDAY, JANUARY 15, 2015**

The regular monthly Board Meeting of the Southeast Louisiana Flood Protection Authority-East (Authority or SLFPA-E) was held on Thursday, January 15, 2015, 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. Estopinal called the meeting to order at 9:30 a.m. and led in the pledge of allegiance.

The roll was called by Mr. Wittie and a quorum was present:

PRESENT:

Stephen V. Estopinal, President
Lambert J. Hassinger, Jr., Vice President
Louis E. Wittie, Secretary
Wilton P. Tilly, III, Treasurer
Tyrone Ben
G. Paul Kemp
Richard A. Luettich, Jr.

ABSENT:

Jefferson M. Angers
Kelly J. McHugh

OPENING COMMENTS:

Mr. Estopinal reminded everyone that a Special Board Meeting will be held on Thursday, February 5, 2015, at 9:30 a.m. at the Orleans Levee District headquarters on Franklin Avenue to consider the adoption of a resolution calling for a special election for the levy of an ad valorem tax in the Lake Borgne Basin Levee District.

ADOPTION OF AGENDA:

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

**RESOLUTION NO. 01-15-15-01 – APPROVAL OF DECEMBER 18, 2014
BOARD MEETING MINUTES**

On the motion of Mr. Wittie,
Seconded by Mr. Ben, 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 December 18, 2014.

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

YEAS: Mr. Ben, Mr. Hassinger, Mr. Kemp, Mr. Luettich and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers, Mr. McHugh and Mr. Tilly

PRESENTATIONS:

1. U. S. Army Corps of Engineers' Analysis and Response to 10/23/14 SLFPA-E Letter Regarding the Monte Carlo Analysis

Maxwell Agnew, MS, EIT, Hydraulics and Hydrologic (H&H) Branch, U.S. Army Corps of Engineers (USACE), New Orleans District (NOD), provided a presentation on the "Analysis and Response to the 10/23/14 SLFPA-E Letter Regarding the Monte Carlo Analysis". Also in attendance at the meeting were Julie LeBlanc, Chief of the NOD H&H Branch, Bob Bass, USACE Coastal Engineer, and Brett Herr, USACE Project Manager.

Mr. Agnew advised that the purpose of the presentation is to provide a response to the October 23, 2014 SLFPA-E letter concerning Monte Carlo overtopping calculations. Design elevations are developed by the USACE H&H Branch. The Monte Carlo scripts are used to determine the final design elevations. The USACE's response is primarily composed of comments from the experts involved with the original design of the Hurricane and Storm Damage Risk Reduction System (HSDRRS)—Dr. Donald Resio, former USACE Engineer Research and Development Center (ERDC) senior scientist, and Dr. Mathijs Van Ledden, a Dutch engineer embedded within the H&H Branch during the 2007-2009 timeframe. The USACE also performed an additional analysis in response to the SLFPA-E's letter. The most important conclusion is the USACE's recommendation that a reoccurring surge hazard analysis be done every ten years.

Mr. Agnew explained that the data from the stage-frequency curve is used to develop 100-year surge elevations to design a 100-year levee. He discussed the development of stage-frequency curves with and without uncertainty. An old approach would be to arbitrarily add freeboard to the levee design elevation to arrive at a final design elevation; however, this approach neglects the true uncertainty in the 100-year water level statistics. He pointed out that hydraulic calculations are inherently uncertain. Sources of uncertainty include modeling and the lack of long term climate records and water level records. He discussed the modern way of dealing with uncertainty by using a best guess of the 100-year water level and the bell curve developed using the Monte Carlo Analysis. The SLFPA-E letter states that more uncertainty should be incorporated into the design. The USACE used standard deviations of about .8-ft. The letter states that the standard deviations should be on the order of 2.6 to 3-ft. Larger standard deviations will produce higher overtopping rates. Therefore, if the letter is correct, the levees as designed may have more overtopping than initially calculated. The letter cites modeling and sampling as sources of uncertainties in the stage frequency data.

Mr. Agnew advised that the primary finding in the USACE's response is that when the larger standard deviations are included in the Monte Carlo Analysis, the overtopping rates increase, but not beyond the threshold that the USACE now knows that a levee can handle. He pointed out that it is difficult to look back at a single issue in the analysis because of the number of decisions that were made. If the data in the letter is accurate, this particular decision may have been under conservative; however, other decisions were overly conservative. It is difficult to determine the impact on the final system without reviewing all of the previous design decisions. The USACE provided the SLFPA-E letter to the experts involved in the original design of the HSDRRS and received their comments. Dr. Resio headed a team that conducted the 2007/2008 Surge Hazard Analysis. Outputs of the JPM-OS analysis include stage frequency curve and uncertainty estimates. Dr. Van Ledden headed the design team at MVN-H&H, which was responsible for the development of the MATLAB based Monte Carlo Overtopping Tool. The tool took JPM-OS output and determined the 1% design elevations. The USACE's response also includes a re-analysis of overtopping rates using larger standard deviations.

Mr. Agnew reviewed and discussed the four major findings provided by Dr. Van Ledden relative to the SLFPA-E letter:

- A team consisting of engineers from the private and public sectors under the guidance of MVN was responsible for developing the Monte Carlo design approach at the time of the 2007-2008 design. The approach was externally peer reviewed and vetted through the American Society of Civil Engineers (ASCE).
- A decision was made to use a smaller standard deviation in conjunction with very strict overtopping criteria. The 90% confidence overtopping rate was set to be less than 0.1 cfs. Additional conservative decisions were used in the design process. Using smaller standard deviations in the Monte Carlo Analysis was a prudent way of proceeding considering the earlier conservative assumptions in the entire chain.
- The choice of standard deviations in the surge level cannot be isolated from the rest of the design approach without review of the entire design process because other decisions were made that were conservative.
- The design approach used to determine elevations of the HSDRRS should be periodically reviewed. Mr. Agnew noted that the USACE states in the 1% design report and the design guidelines report that the surge hazard analysis must be completely reassessed about every ten years using the latest technology, science and methodologies to determine the system's current level of risk reduction.

Mr. Agnew advised that the latest science at the time the design process was taking place indicated that 0.1 cfs was the point at which damage may occur; however, since that time tests were performed at Colorado State University (CSU) to determine the amount of overtopping that a levee with good grass cover can handle. The levee in the CSU tests was subjected to several different overtopping rates. The CSU tests indicated that the point at which damage may potentially occur is higher than 0.1 cfs.

Mr. Agnew explained that Dr. Resio was the brains behind the JPM-OS methodology in which a full suite of synthetic storms are run in order to calculate stage frequency data

across the coast. The USACE asked Dr. Resio the question, were the standard deviations in the 1% design report appropriate? Dr. Resio responded that this was what was requested from him by the New Orleans District. There was some concern expressed that there was a disconnect between what Dr. Resio intended and what was carried through in the USACE's H&H Branch with the overtopping calculations. Dr. Resio also made the point that if a larger standard deviation is used, the mean water level would have to be adjusted downward by approximately 0.3-ft. because uncertainty was included in the mean water estimates. The JPM-OS code includes the effects of uncertainty when it produces a stage frequency curve due to uncertainty in the modeling and the neglect of certain parameters in the wind fields (the Epsilon term). Therefore, when the USACE reanalyzed the Monte Carlo overtopping calculations, since the larger standard deviation was used, the mean water level was lowered by 0.3-ft.

Mr. Agnew advised that in response to the SLFPA-E letter the USACE also looked at four levee segment designs and recomputed overtopping with larger standard deviations. The Monte Carlo simulation uses many sample water levels and waves. He reviewed the results for one of the sample levee design segments. A graph showed a plot of all 10,000 water levels against the profile of the levee. None of the water levels produced free flow overtopping and the overtopping rates were small. The design elevation for the sample levee segment was 16.5-ft. and the overtopping rate was .02-ft. cfs for the 90% assurance level. A larger standard deviation was used for the next levee design segment example. The spread of the 10,000 water levels was much wider and some of the water levels overtopped the levee. The overtopping rate increases considerably from .02-ft. to .16-ft. cfs. More overtopping is experienced with the effects of the larger standard deviations for the 90% assurance level. A slide was reviewed showing the original overtopping rates for the four design segments with the smaller standard deviations and a run with a 2.6-ft. standard deviation and a 3-ft. standard deviation. The overtopping rates increase, but not to an extent that a levee could not handle. The impacts are not the same for all of the levee segments.

Mr. Luettich pointed out that the context in which the overtopping rates should be viewed should be to what extent the levee can withstand the overtopping rate. Mr. Agnew responded that the purpose of the CSU tests performed as part of the armoring study was to determine how much overtopping a levee can handle. In the tests the levee could not be failed with overtopping rates higher than the rates produced in the simulations for the four sample segment designs. It was pointed out that the USACE will be armoring levees to add protection against overtopping.

Mr. Agnew stated that the USACE just changed one variable in the Monte Carlo reanalysis and performed a sensitivity analysis. The better approach would be to look at all of the previous design decisions, come up with new stage frequency data, compute new overtopping rates and design elevations, and compare the new design elevations to the old design elevations.

Mr. Agnew explained that there are many things that can be done within the JPM-OS approach to achieve improvements over the 2007-2008 analysis. The probability distributions can be updated with recent data, such as Hurricanes Gustav, Ike and Isaac. There is a need to know how the new storms impact estimates of stage

frequency. Different methods can be utilized, such as the Resio Surge Response and Toro methods. Different areas of the country are using different methods. There are standard deviations from the JPM-OS code, which is the issue isolated for discussion today. There could also be issues in the JPM-OS code that could change water levels a few tenths of a foot. New formulations for wind drag have been developed since 2007-2008 for ADCIRC and STWAVE modeling. He pointed out that a major conservative decision in the original analysis was to use a starting water surface elevation in all of the synthetic storms of 1.2-ft., which is a 90% non-exceedance steric water level adjustment. Therefore, the starting water surface elevations were artificially increased in all of the ADCIRC runs, which adds some conservatism to the modeling. He reiterated that all of the decisions need to be reviewed before a determination can be made regarding whether the levees are deficient.

Mr. Angew further explained that there is a series of issues within the Monte Carlo Analysis. The USACE assumed coincident peak surge and peak wave, which resulted in slightly higher overtopping rates. The USACE also assumed a perpendicular approach of waves. An additional decision concerned structural superiority. Floodwalls that were difficult to rebuild were given an additional two feet of elevation. The USACE assumed one-foot of relative sea level rise over 50 years. The estimated sea level rise could change and greatly impact design elevations. He reiterated that the USACE recommends that rather than looking at one issue (the Monte Carlo standard deviations) that all of the design decisions be first reviewed.

Mr. Agnew reviewed the USACE's conclusions:

- The smaller standard deviations used where chosen in conjunction with very conservative overtopping criteria.
- If the larger standard deviation is used, the overtopping rates increase, but not beyond critical levels according to the CSU tests.
- The USACE recommends a complete reanalysis of the HSDRRS on a re-occurring interval of at least ten years using the latest technology and approach. Since the previous analysis was completed in 2007-2008, the next reanalysis could be due in 2017-2018.

Mr. Kemp commented that the process takes time and that he wanted to ensure that it is underway. The 2007-2008 work was accomplished under a very severe time constraint. He asked, considering the commitments of various agencies and funding streams, will the target of a 2017-2018 reevaluation be met? Mr. Luetlich asked for clarification concerning which entity is in charge of initiating and accomplishing the reanalysis. Mr. Estopinal commented that there is a need to move forward with improving the informational data stream and that the SLFPA-E may need to initiate a process to accomplish an analysis that would provide reasonable results.

Mr. Turner informed the Board that SLFPA-E staff has begun discussions with the Commander of the USACE NOD concerning the reanalysis process. There is some uncertainty about the timing of the reanalysis. The HSDRRS was certified in June, 2013; therefore, the system must be recertified in 2023. Discussions indicated that the

timeframe for the completion of the reanalysis is closer to 2022 because of the connection with the HSDRRS recertification process. The reanalysis can be accomplished before, but not later than, 2022. The process must be started two to three years beforehand. The Coastal Protection and Restoration Authority (CPRA) performed a considerable body of work with regards to surge analysis for the existing information. The USACE's final H&H report is just becoming available and must serve as the baseline. He pointed out that the USACE cannot commit to funding the reanalysis process. The reanalysis should be a state lead effort since it would involve the entire HSDRRS and several levee districts and authorities, including SLFPA-E, SLFPA-W and the Pontchartrain Levee District. The CPRA has accumulated a good amount of basic knowledge on the process used in the past and a path forward. Mr. Luettich suggested that the minimum cost of a comprehensive reanalysis of the entire HSDRRS for both sides of the Mississippi River could be \$10 million. The estimate excludes observational data collection.

Bob Jacobsen commented that he has been a consultant to the SLFPA-E on this issue for the past four years. He complimented Mr. Agnew on the presentation and stated that the presentation today is 100 percent in line with the presentation that he made to the Board in April, 2013, concerning the review of the USACE's surge hazard analysis. He added that many of the decisions for the analysis was made in 2005.

Mr. Hassinger stated that, considering the comments and recommendation presented concerning the periodic review, the reanalysis should not be driven by the recertification of the system by FEMA. The goal of the SLFPA-E should be to find the funding required and work with its partners to accomplish the reanalysis within the recommended timeframe. Mr. Estopinal concurred with Mr. Hassinger and added that the SLFPA-E will need to help the CPRA acquire the funding required and ensure that the reanalysis remains a top priority. Mr. Kemp pointed out that the reanalysis should be accomplished far in advance of the 2023 recertification deadline because it may indicate a need for remediation work.

Brett Herr, USACE Project Manager, advised that the USACE at this time does not have authority or funding to look at a reanalysis of the storm surge modeling. The USACE would like to participate and there is at least the potential for it to be involved in the effort. The Water Resources Development Act (WRDA) of 2014 included language for future levee lifts. The USACE was hopeful that it would provide the authority to use some of its existing funding for the study. However, the implementation guidance received by the USACE states that additional funding must be requested and a reevaluation report must be done of the system. He noted that there is a potential for the USACE to include ADCIRC modeling and a reanalysis of the surge modeling in the reevaluation report; however, it would require the USACE to obtain additional funding and the execution of a cost share agreement. Therefore, the USACE is hopeful that it can participate in future efforts along this line; however, since the request for funding is a major hurdle, and the USACE must have funding in hand before it can start work, he did not anticipate that the USACE could meet a 2017-2018 deadline for the effort.

Mr. Luettich recommended that the status of this issue be added to the Regional Director's monthly report.

PUBLIC COMMENTS:

Carol Byram commented that the property owners along the 17th Street Canal are grateful that the SLFPA-E has acknowledged that there is a legitimate issue that needs to be resolved. She commented on the Board's previous actions and that the legislation that created the SLFPA-E mandates that tax revenues collected in each parish be used in that parish. However, in spite of this mandate a significant amount of the property tax revenues that should have been available to pay for projects in Orleans Parish, including acquisition of properties, such as the properties along the 17th Street Canal, was diverted elsewhere. She commented that she was sorry for the difficulties others have faced in rebuilding and that she would not object to something that would prevent a greater hardship for others. She commented on the need for transparency. She stated that a dramatic change has occurred in the representation of Orleans Parish residents and that they could not ask for a better representative, president or board. She noted that there is still work to be done and commented on the Orleans Parish tax revenues used for the recertification of the non-federal levee in St. Bernard Parish and the designation of monies for future projects. She stated that the property owners reject claims that there is no money to fairly pay their expenses and losses, which are now seven years old, and, if necessary, they are still willing to go to court in October.

Roy Arrigo expressed his appreciation to the Board for addressing many of the lingering issues, such as the modeling. He commented that in the past former Board members and representatives have abused their positions, which led to other lingering issues. He stated that one of the issues is the unnecessary toe plus 15-ft. increase that the USACE does not recognize as a valid real estate interest and that the sole purpose of this increase was retribution against property owners along the 17th Street Canal. He asked that the Board request and pursue legislation to reverse the toe plus 15-ft. increase and to hold accountable the individuals who broke the law to hide their part in this increase by violating public records law and falsifying documents.

Craig Berthold requested that the Board support efforts in the legislature to address the toe plus 15-ft. reversal issue.

COMMITTEE REPORTS:

Finance Committee: Mr. Tilly advised that the Finance Committee did not meet during the month of January.

Operations Committee: Mr. Wittie advised that the Operations Committee did not meet during the month of January.

Legal Committee: Mr. Hassinger advised that the Legal Committee did not meet during the month of January. Mr. Estopinal requested that the agenda for the next Legal Committee include a review of the toe plus 15-ft. issue.

Coastal Advisory Committee: Mr. Kemp advised that the Coastal Advisory Committee did not meet during the months of December or January. He pointed out that the Coastal Advisory Committee set the stage at its November meeting for the

presentation given earlier by the USACE and the subsequent discussion, and commended the USACE on the response provided to the SLFPA-E's letter.

CPRA: Mr. Hassinger advised that the CPRA did not meet in December.

REGIONAL DIRECTOR'S REPORT:

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

- Permanent Canal Closures and Pumps Project – The potential hazardous, toxic and radiological waste issue that the USACE believed may exist has turned out to be very small.
- Levee raising prior to armoring – It is anticipated that the USACE 408 permit process for the levee raisings will be minor and can be handled at the USACE NOD.
- Mississippi River Levee Raising Project – A letter was received from Jefferson Parish Government regarding impacts to the bike path during construction and a recommendation was received that one piece of work be completed before another piece is done. The request was forwarded to the USACE and every effort is being made to reopen the bike path as soon as possible for the pieces that are primarily completed. Additional work is being done to make the bike path safe.

RESOLUTION NO. 01-15-15-02 – APPROVAL OF LEGAL INVOICES

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

WHEREAS, the legal invoices submitted to the Southeast Louisiana Flood Protection Authority-East (SLFPA-E), East Jefferson Levee District, Lake Borgne Basin Levee District and Orleans Levee District listed on the spreadsheet entitled "Legal Invoices Approved on January 15, 2015", 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 invoices listed on the spreadsheet entitled "Legal Invoices Approved on January 15, 2015" are hereby approved.

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

**RESOLUTION NO. 01-15-15-03 –
AMENDED CONSTRUCTION BUDGET FOR EJLD CONSOLIDATED FACILITY**

Mr. Estopinal explained that the initial estimate of the cost of constructing the East Jefferson Levee District (EJLD) safehouse and consolidated facility was \$19 million.

After the plans and specifications were prepared another estimate was made and the estimated cost is now \$21 million. Mr. Tilly asked whether the EJLD had enough money for the project. Fran Campbell, EJLD Executive Director, replied, yes. Mr. Estopinal added that the EJLD had set aside the money for the project.

On the motion of Mr. Wittie,
Seconded by Mr. Hassinger, 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, by Resolution No. 02-20-14-06, the SLFPA-E authorized 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.

WHEREAS, a Design Development Cost Estimate performed by Pro-Serv Estimating, an independent evaluator, determined that the safehouse and consolidated facilities could not be built for the previously authorized \$19 Million construction costs.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes an amended budget in the amount of \$21 Million for the cost of construction of the EJLD safehouse and consolidated facilities.

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

YEAS: Mr. Ben, Mr. Hassinger, Mr. Kemp, Mr. Luettich, Mr. Tilly and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers and Mr. McHugh

RESOLUTION NO. 01-15-15-04 – RENEWAL OF O.L.D. LAW ENFORCEMENT PROFESSIONAL LIABILITY INSURANCE POLICY

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

WHEREAS, the Orleans Levee District's Police Professional Liability Insurance policy will expire on February 10, 2015; and

WHEREAS, Indian Harbor Insurance Company offered to renew the current insurance coverage with \$1M per claim limit and a \$2M annual aggregate, with the defense cost outside of policy limits and a \$50,000 deductible, through the Morrison Insurance Agency at an annual cost of \$26,281.20 for a period of one year, commencing on February 10, 2015 and expiring on February 10, 2016 at 12:01 am.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes the renewal of Police Professional Liability Insurance coverage with Indian Harbor Insurance Company through the Morrison Insurance Agency with the aforementioned policy limits and conditions at the renewal quote of \$26,281.20 for a period of one year commencing on February 10, 2015.

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

RESOLUTION NO. 01-15-15-05 – PROCES VERBAL AND PROCLAMATION OF THE CANVASS OF VOTES AT SPECIAL ELECTION HELD IN LBBLD

Mr. Estopinal advised that 3,214 votes were cast in favor and 5,044 votes were cast against the levy of a special tax; therefore, the proposition failed.

On the motion of Mr. Hassinger,
Seconded by Mr. Ben, the following resolution was offered:

PROCÈS VERBAL AND PROCLAMATION OF THE CANVASS OF THE VOTES CAST AT THE SPECIAL ELECTION HELD IN THE LAKE BORGNE BASIN LEVEE DISTRICT, LOUISIANA, ON SATURDAY, DECEMBER 6, 2014.

BE IT KNOWN AND REMEMBERED that on Thursday, January 15, 2015, at nine-thirty o'clock (9:30) a.m., at its regular meeting place, the 2nd Floor Council Chambers, Joseph Yenni Bldg., 1221 Elmwood Park Blvd., Harahan, Louisiana, the Board of Commissioners of the Southeast Louisiana Flood Protection Authority-East, Louisiana (the "Governing Authority"), acting as the governing authority of the Lake Borgne Basin Levee District, Louisiana (the "District"), and being the authority ordering the special election held therein on Saturday, December 6, 2014, with a quorum being present, did examine the official certified tabulations of votes cast at

the said election, and did examine and canvass the returns of said election, there having been submitted at said election the following proposition to wit:

PROPOSITION
(MILLAGE)

Shall the Lake Borgne Basin Levee District, Louisiana (the "District"), levy and collect a special ad valorem tax of seven and one-half (7.5) mills on all property subject to taxation within the District (an estimated \$2,591,000 reasonably expected at this time to be collected from the levy of the tax for an entire year), for a period of thirty (30) years, beginning with the year 2015 and ending with the year 2044, for the purpose of constructing and maintaining necessary levees, levee drainage, flood protection, hurricane flood protection and all other purposes incidental thereto which tax may be used as security for bonds or other evidences of indebtedness to be used to pay the costs of such projects?

The canvass of the results of the election showed that there was a total of **3,214** votes cast **IN FAVOR OF** the Proposition and a total of **5,044** votes cast **AGAINST** the Proposition, and that there was a majority of **1,830** votes cast **AGAINST** the Proposition as hereinabove set forth.

Therefore, the Governing Authority did declare and proclaim and does hereby declare and proclaim in open and public session that the Proposition as hereinabove set forth was duly **DEFEATED** by a majority of the votes cast by the qualified electors voting at the said special election.

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

YEAS: Mr. Ben, Mr. Hassinger, Mr. Kemp, Mr. Luettich, Mr. Tilly and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers and Mr. McHugh

RESOLUTION NO. 01-15-15-06 – COOPERATIVE ENDEAVOR AGREEMENT FOR MISSISSIPPI RIVER BIKE PATH PROJECT

On the motion of Mr. Wittie,

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

WHEREAS, the St. Bernard Parish Government (Parish), the Lake Borgne Basin Levee District (District), and St. Bernard Sheriff James Pohlmann (Sheriff) are each political subdivisions of the State of Louisiana; and

WHEREAS, Article VII, Section 14 of the Louisiana Constitution provides, in part, that "for a public purpose the State and its political subdivisions or political corporations may engage in cooperative endeavors with each other . . . or with any public or private association, corporation or individual"; and

WHEREAS, the District has a legal servitude and general jurisdiction of the Mississippi River Levee (MRL) on the East Bank of St. Bernard Parish and;

WHEREAS, the Parish wants to construct a bicycle (bike) path (Project) on the MRL; and

WHEREAS, the St. Bernard Parish Council by Resolution No. 2452-04-05 authorized the Parish President to sign a Cooperative Endeavor Agreement (CEA) between the Parish and the District relative to the Mississippi River Bike Path; and

WHEREAS, James Pohlmann as Sheriff of St. Bernard Parish has authority to enter into a CEA with the Parish and the District; and

WHEREAS, the Mississippi River Bike Path will benefit the citizens of St. Bernard Parish and the general public; and

WHEREAS, the Parish will obtain all necessary permits as required by the District prior to beginning any construction of the Project; and

WHEREAS, prior to beginning construction of the Project, the Parish will obtain authority, permission or permits from all necessary persons and agencies, including but not limited to, the U.S. Army Corps of Engineers (USACE) and the Coastal Protection and Restoration Authority (CPRA), if such permission or permits are necessary; and

WHEREAS, in order to protect the interests and clarify the obligations of all parties involved, prior to commencement of construction of the Project, the Parish, the Sheriff and the District wish to execute a Cooperative Endeavor Agreement.

BE IT HEREBY RESOLVED, that the Southeast Louisiana Flood Protection Authority-East authorizes Lake Borgne Basin Levee District through its Executive Director to sign a Cooperative Endeavor Agreement between the Parish, the District, and the Sheriff relative to construction of the Mississippi River Bike Path Project.

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

YEAS: Mr. Ben, Mr. Hassinger, Mr. Kemp, Mr. Luetlich, Mr. Tilly and Mr. Wittie

NAYS: None

ABSENT: Mr. Angers and Mr. McHugh

The next regular monthly Board meeting will be held on February 19, 2015 and hosted by the Orleans Levee District. A Special Board Meeting will be held on February 5, 2015, at the Orleans Levee District to consider the adoption of a resolution calling for a special election for the levy of an ad valorem tax in the Lake Borgne Basin Levee District.

There was no further business; therefore, the meeting was adjourned at 10:55 a.m.

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY – EAST
REGIONAL DIRECTOR’S REPORT

Jan. 15, 2015

HSDRRS Project Status Update

Warranty Paint Repairs In response to our concerns about peeling paint on newly-built complex structures, the U.S. Army Engineering Research and Development Center (ERDC) has determined that the Corps of Engineers (Corps) will make spot repairs at the Seabrook Structure and repaint gate leaves at the Caernarvon Structure; no additional painting is required at the GIWW Sector Gate.

LPV-03.2b.1- Landside Runoff Turf establishment and erosion must still be addressed by the original contractor, but final site grading and construction of a lip levee adjacent to the swale will be done under a new contract awarded on Dec. 12.

LPV-111 – CSX RR to Michoud Canal The Notification of Contract Completion (NCC) was issued Nov. 6, but turf must still be established by the Corps on recently raised sections.

LPV-144 – Bayou Dupre Despite investigation by the bearing manufacturer, no conclusive cause of the vibrations in the hinge assembly of both gate leaves has been determined. The path forward includes shaving the plates that hold the top bearing, in order to increase clearances, and changing over to greased bearings for the hinge assemblies. New top bearings will be on site in March.

LPV-145,146 & 148.02 The NCCs for 146 and 148.02 were received in September, but as a result of inspections by the Non-Federal Sponsor (NFS) and the Corps, a Corps task order was issued to repair hog damage, address settlement around access ramps and mow LPV-145.

Since then, gaps around the foundations of all three floodgates in LPV-145 have been filled, and a final inspection was held last month. The need for additional hog damage repairs has delayed the NCC on LPV-145 until later this month.

LPV-145A – Bayou Bienvenue Bridge The periodic closures of Bayou Bienvenue that began in November to facilitate pile driving near the channel will continue through February. The contractor is now driving bridge bent pilings on the west side of the channel; the bridge project is scheduled for completion in late 2015.

LPV 148.02A Safe Room at St. Mary's Pump Station Rebar and piles will be delivered to the site by mid-January, and pile driving is scheduled to begin on Jan. 16, assuming submittal issues are resolved. Project completion is currently scheduled in mid- 2015

LPV-149 – Caernarvon Structure The Corps will issue a contract to repaint Sector Gate leafs to address peeling paint problems discovered after the NCC was issued. In order to repaint, the structure must be dewatered, and that will temporarily impact navigation. Additionally, the Corps is reviewing our request that they replace machinery pit hatch covers, and Hydrodine, if they can be sole sourced, will modify the hydraulic system to correct a water-in-oil problem. That work should be finished in February.

LPV-150 Utility Crossings/Jib Crane Pad/Bypass Ramp Repair The Corps will begin this month to replace utility crossing pads with gravel along the Access Road. They are also preparing plans and specifications for the Emergency Bypass Road at Highway 46, as well as for replacing jib cranes and building parking pads at Bayou Dupre.

LPV-153 Bayou Dupre & Caernarvon Sector Gate Needles The contract for manufacture of additional dewatering needles for Bayou Dupre and Caernarvon was awarded on Dec. 9, 2014. The needles are scheduled to be delivered to the site by month's end

OFC-07 London Avenue and 17th Street Remediation The work along the London Ave Canal will be complete when the concrete cap along Reach 35B is placed and the work of back filling and handrail construction is finished. The cap is being placed this week, and the rest of the work is about 30 percent complete. The NCC for this project is currently scheduled for June 2015 in order to allow for adequate turf establishment during spring months.

OFC-08 17th Street Canal Bank Stabilization The contractor placing stone for this project is 45 percent complete and should finish by late February.

Permanent Canal Closures and Pumps (PCCP) Some of the still-outstanding issues include:

- Reaching agreement on the appropriate number of bypass closure gates to maintain maximum velocities through the permanent floodgates in the 17th Street Canal; and
- Reviewing settlement calculations based on new borings and updated consolidation values in the 17th Street, Orleans and London Avenue canals.

Commissioning of the new structures is still scheduled for May 2017, with decommissioning of the temporary structures possible within the following two

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

Armoring The first system-wide armoring installation contracts were awarded in December for levees in St. Charles Parish. In preparation for armoring the metro New Orleans lakefront levees, the Corps has submitted two Right-of-Entry requests to the Orleans Levee District (OLD). We have also just learned this week that we may have to acquire temporary construction rights-of-way along some sections of the Orleans lakefront where there is insufficient land to accommodate the armoring work without the temporary use of additional land. We are waiting for the Corps to tell us the exact locations and extent of property needed.

The SLFPA-E, Southeast Louisiana Flood Protection Authority-West and the Coastal Protection and Restoration Authority continues to plan to raise some levees, at local cost, before they are armored by the Corps in order to save millions of dollars in future armoring replacement costs. The group has developed a near-term path forward for designing levee lifts prior to armoring, and we have awarded a contract for preliminary land survey work to include profiling of levees in both the East Jefferson and Orleans levee districts. In December, Evans and Graves was awarded a task order for program management work in support of the pre-armoring levee lift construction; the firm already has prepared a very aggressive preliminary schedule and is currently drafting Requests For Qualifications for design services on future levee lifts.

SBPS-07 – Repairs to LBBLD Pump Stations #2 and # 3 Work is progressing at Pump Station #3. The cofferdam is complete, the first two T-wall base slabs will be placed at PS # 3 this week and the entire project is scheduled to finish in late 2015.

Mississippi River Projects

Jefferson Heights Work is complete on the Phase 1 levee-raising project in East Jefferson, a 4.2-mile stretch of river levee between the Orleans Parish line and Orchard Road. Currently, the ramps that provide over-levee access to several river-side businesses are being modified and some other miscellaneous issues are being addressed. The Corps proposes issuing a partial NCC of the project that would turn over the completed first phase to the East Jefferson Levee District for operation and maintenance.

In March, construction is scheduled to begin on the project's second and final phase, which is the 4.5 miles of levee between Orchard Road in River Ridge and the St. Charles Parish line.

Carrollton Project All levee enlargement work in Orleans Parish is complete, and only site cleaning remains. Representatives of the Corps and OLD continue to discuss resolution of several issues raised by the Levee District during a final inspection last summer.

Internal Affairs

Non-Federal Levee Certification Our certification report for the Maxent Levee will be resubmitted to FEMA once the Orleans Sewerage & Water Board completes preparation of an O&M Manual for Pump Station #18. The inclusion of such a document, along with two minor text edits in the original report filed last September, were the only changes recommended during a FEMA review. We still expect accreditation in February.

The results of geotechnical investigations of the Forty Arpent Levee indicate that no substantial levee stability issues remain. Our consultant is awaiting additional survey data to complete the design of a new floodwall proposed near the Violet Canal. Meetings have been held with both Orleans and St. Bernard government officials concerning the urgency of this project.

IHNC-01 – Seabrook Complex We are still awaiting a Corps response to the distress report OLD submitted in early December detailing damage to a bearing pad beneath the eastern Vertical Lift Gate. Additionally, greaseless wheels on the gates' guides did not turn during recent exercises, and the Corps is also reviewing the need for greased-type wheels in the guides.

IHNC-02 – Lake Borgne Surge Barrier The Corps is looking for money to make extensive repairs to two of its current velocity meters at the Sector Gate that are not functioning due to electrical problems. A third meter, which was damaged when struck by an object not-yet identified, has been repaired. The Corps will reinstall when all three meters are operational, but no estimated date has been provided.

The repainted bulkheads will be barged back to the site this month.

Pump Station #4 The station is back to full power after a successful global search for a turbo charger to replace the old one that failed three months ago. Because the turbine runs German-made engines so aged that they are no longer manufactured, it has become increasingly difficult to find parts necessary to keep the station's 1,200 horsepower Deutz BV6M 545 marine diesel engines running. Although Levee District Executive Director Nick Cali could find no suitable turbocharger in the United States, he did locate one in the Netherlands. In fact, Nick thinks he may have bought the last available turbo for these pumps anywhere in the world. Only 2,000 of these particular engines were produced back in the 1930s and 1940s, and LBBLD has four them. There are currently two Deutz 545s in Pump Station #4 and two more in Pump Station # 1, and all were used when installed in the early 1970s. Cali calls them as "rock-solid, workhorse"

engines, but they are still machines that depend on replacement parts to function.

PS #4 helps to drain the area between Paris Road and the Violet Canal between the Forty Arpent Canal and the Mississippi River. Normally, Pump Stations #3 and #7 also help drain this area, but because PS #3 is undergoing reconstruction by the Corps, it is currently inoperable. For this reason, there was a 20 to 25 percent reduction in available pumping capacity in this drainage basin during the time it took to locate the needed turbo charger, get it shipped to the Levee District and installed. Fortunately, Cali said no flooding occurred while the engine was out of service.

Prior to Hurricane Katrina, the LBBLD was working with the state Department of Transportation and Development, which designed and built PS #1 and #4, to find a way to replace the aging engines. But that planning had to be shelved after Katrina while the Corps, the state and Levee District struggled to repair catastrophic damage to the entire flood defense system. More recently, the Levee District and SLFPAE have identified grant funding to replace most or all of the four old engines, but the purchase is awaiting approval from the state and FEMA. It cost the district about \$30,000 to secure, ship and install the new turbo charger, but flood officials felt it was too great a risk to go without full pumping capacity any longer than necessary.

Semi Annual Report (SAR) We will meet with the Corps and CPRA this month to discuss lessons learned from our first Semi Annual Report and to prepare for the next one.

Training A task order to review alternatives for automated asset management software for the Complex Structures was awarded to ID-IQ consultant Moffat & Nichols, and their report is now complete. One of its recommendations is to develop reporting forms utilizing the software program currently used by the OLD.

Emergency Preparedness The Mississippi River, now around elevation 6.5, ' , is expected to drop slowly below 4.0' by month's end.

Complex Structures All navigation gates are in working order and maintenance is up to date.

Tidal Gage Network The USGS is drawing up a formal agreement allowing that agency to begin operating tidal gages at the GIWW East Closure Sector Gate and the Caernarvon Sector Gate. Todd Baumann with USGS understands that SLFPAE also wants USGS to operate gages at sector gates on bayous Dupree, Bienvenue and St. John once those are turned over by the Corps. The USGS proposal, which was approved by SLFPA-E in December, quoted an annual cost of \$7,200 per each structure with two gages and \$6,000 for the Bayou St. John

structure, which has only a single gage. The Seabrook Complex will continue to be maintained under the existing contract of \$21,600 a year.

Periodic Inspection Reports Representatives of SLFPA-E and its three Levee Districts met with the Corps last month to review the previous Periodic Inspections (PI), which are done by the Corps every five years, commencing five years after initial construction. The purpose of a PI is to verify continued and appropriate operation and maintenance evaluate the stability of structures and compare constructed criteria to current criteria. The first PIs were conducted between February 2013 and January 2014 on all MR&T and HSDRRS projects. The Executive Directors of our Levee Districts are now reviewing their individual portions of the overall PI, and each is preparing a list of items that need to be addressed

Meetings and Items of Note:

The Coastal Protection and Restoration Authority Board will meet Jan. 21 at 9:30 a.m. in the Louisiana State Capitol, House Committee Room 1, 900 North Third Street, Baton Rouge.

The Governor’s Advisory Commission will meet Feb. 26 at 10:00 a.m. in the Galvez Building in Baton Rouge.

Levee District Construction Projects:

Project	District	Status	Comments
Floodgate & Floodwall Repairs	OLD	96% complete	Contractor to schedule remaining work with CSX RR.
MRT and IHNC Vegetation Removal	OLD	60% complete	Work progressing
Seawall Steps Erosion Phase 4&5	OLD	75% complete	
Seawall Steps Erosion Phase 2B	OLD	0% complete	NTP scheduled Jan. 8, 2015.
Floodgate Replace Traffic Barriers	OLD	Completed	

Levee District Project Designs and Studies

Project	District	Comments
Outfall Canals Erosion	OLD	Study complete; design 47% complete
Lakefront Seawall Area Reach , 4&5	OLD	Design complete; construction administration 75%
Lakefront Seawall Area Reach 2B	OLD	Design complete; construction administration 0% complete
Floodgate Seal Repairs	OLD	Design complete; construction administration 97% complete
IHNC St. Claude Bridge Drainage	OLD	Design 90% complete
Lakefront Levee Slope Drainage Reach 4	OLD	Survey complete; design 90% complete
Citrus Lakefront Levee Survey at Intersections	OLD	Survey complete; design 0% complete
Bayou St. John Adaptive Water Management Plan	OLD	Plan 15% complete
Citrus Lakefront Levee Railroad Drainage Study	OLD	Investigation complete; design proposal to be submitted and approved by NSRR.
Lakefront Seawall Area Reach 1A-4C	OLD	Design 22% complete
Phase 1 for engine upgrades at Pump Stations	LBBLD	95% designs received; comment resolution ongoing
Phase 1 for Safe Room Design HMGP approved by FEMA	LBBLD	Phase 2 approval received from FEMA Region 6 & GOHSEP; anticipate Phase 2 funds by month's end
Pump Station #6 pump repair and hangers at P.S. #7	LBBLD	P&S complete; advertise by the end of February
Pump Station #6 Erosion Repair	LBBLD	P&S complete; Advertise by month's end
Safe house & Consolidated Facility	EJLD	Cost estimate for EJLD Safehouse Project construction, based on Waggoner & Ball Design Development documents, is complete and will be before SLFPA-E board today. The PUD, Resub and Street Alienation Applications are on Kenner Planning Commission's Jan. 28 agenda. If approved, it will go to Kenner City Council for two readings.