MINUTES OF SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY-EAST COASTAL ADVISORY COMMITTEE MEETING HELD ON MARCH 19, 2015

PRESENT: G. Paul Kemp, Chair Rick Luettich, Committee Member Albert Gaude, Committee Member

The Coastal Advisory Committee (CAC) of the Southeast Louisiana Flood Protection Authority-East (SLFPA-E or Authority) met on March 19, 2015, in the St. Bernard Parish Council Chambers, St. Bernard Parish Government Complex, 8201 West Judge Perez Drive, Chalmette, Louisiana. Mr. Kemp called the meeting to order at 2:20 p.m.

Opening Comments: Mr. Kemp advised that he would like the Coastal Advisory Committee (CAC) to continue its discussion from last month on the continuing investigation of risk associated with surge and waves. The process was started with Bob Jacobsen's studies. The CAC is interested in participating in a more material way with the Coastal Protection and Restoration Authority (CPRA) in its further investigations of surge, waves and levee design elevations.

Adoption of Agenda: The agenda was adopted as presented.

<u>Approval of Minutes</u>: The minutes of the February 19, 2015 Coastal Advisory Committee meeting were approved.

<u>Public Comments</u>: None. Mr. Kemp encouraged participation by the public during the meeting.

New Business:

A. Discussion of the Request for Qualifications (RFQ) on continuing the investigation of surge risk.

Mr. Kemp explained that a mention was made at the last CAC meeting regarding the development of a resolution for the Board's consideration concerning how the SLFPA-E would go about hiring a contractor to assist with the effort to stay on top of new developments and the gathering of information that will be needed at a later date for the recertification of the Hurricane and Storm Damage Risk Reduction System (HSDRRS) either by the U.S. Army Corps of Engineers (USACE) or FEMA. The purpose of the effort, however, is not merely FEMA driven, but is an attempt to understand the dynamics of the threat being faced.

Robert Turner, SLFPA-E Regional Director, explained that the scope of work ("Hurricane Surge and Wave Analysis Update Phase I – Planning") has not been materially altered since it was presented at the last CAC meeting. He advised that he has had discussions with CPRA, USACE and SLFPA-W personnel and that consideration should be given to encouraging the CPRA (the Non-Federal Sponsor) to be the lead on this effort. The work that must be done is not strictly within the SLFPA-E's jurisdictional boundaries, but is for the entire system and involves multiple agencies. He cautioned that the SLFPA-E does not want to place itself in a situation where it commissions the work and develops a process and a schedule and then another entity develops an entirely different process and schedule and different answers are generated for adjoining sections of levee. He suggested that the Board consider the adoption of a resolution requesting the CPRA to begin the work as quickly as possible, perhaps with a monetary contribution to get the work started. Should the CPRA not accept the leadership role, he recommended that the SLFPA-E get someone on board to provide information regarding the time constraints so that it does not fall behind on the recertification effort.

Mr. Luettich commented that until the flood maps are redone by FEMA, recertification essentially amounts to a demonstration that the HSDRRS addresses 100-year protection (e.g., sufficient levee height and adequate armoring) without the need for a new analysis of the design of the system. Mr. Turner pointed out that the SLFPA-E would then have to accept all of the premises that have been made to this point. Mr. Luettich explained that flood insurance is important to the citizenry; however, the SLFPA-E wants to know, given the technology and state of science and practice at this point in time, what are the current design levels and how do they correspond to 100year or 500-year protection (i.e., do we actually have 100-year protection given the current technology and analytical methods). He added that this effort is consistent with the State's five year Master Plan. The SLFPA-E can assist or initiate the process. Mr. Kemp pointed out that the SLFPA-E may wish to begin the collection of useful data. Bob Jacobsen commented that a tremendous amount of information has been pulled together by the CPRA team. He commented on four issues identified in a report that he provided to the SLFPA-E and CPRA associated with the 100-year estimates. He noted that the modification of the Base Flood Elevation is the responsibility of FEMA to initiate. He suggested that in looking at the performance of the HSDRRS the SLFPA-E may wish to consider the calculations related to wave conditions at the levee toe, the overtopping calculations and the treatment of the statistics for the Q 90. He commented on the need for clarity when discussing factors of safety and uncertainties.

Mr. Turner discussed the communication of risks to the public. He pointed out that people really want to know the chances of their homes being flooded by different events and the associated consequences as opposed to being informed about levee heights or overtopping rates. The fragility of the various elements of the system needs to be considered in addition to the overtopping rates in order to fully communicate the true risk. Mr. Jacobsen commented on the five categories of inundation hazard included in his report.

Mr. Kemp suggested that the SLFPA-E may wish to set up a contract to address issues, such as, is there a need to enhance data collection or data management systems, and what would it take for the SLFPA-E to participate in a formal way with the CPRA and the work that it is doing. Mr. Turner commented that there are some things that can be done by the SLFPA-E while an attempt is made to bring in other stakeholders. He reiterated his suggestion that the Board consider the adoption of a resolution requesting

that the CPRA take the leadership role and added that in the meantime he would begin communications with the leadership at CPRA, USACE and the other agencies. He noted that a question that must be answered is how much money does the SLFPA-E want to spend before monetary assistance is provided by other stakeholders.

Allen Dupont with CH2M Hill commented that the work cannot go forward unless there is a group of people looking at this effort from all aspects. He commented on prior USACE efforts in which academia, the State and other Federal and local agencies were brought in for participation. If the SLFPA-E is taking the lead and receiving input from the other entities, at least their concerns will be known and can be acted upon by whomever has control of the RFQ or the process. Taking the RFQ further down the line may start the ball rolling, but it should not be the ultimate goal. An advisory group should have the same goal—reduction of risks. This is a regional effort.

Mr. Luettich explained that he made some inquiries about a year ago concerning the potential interest of different entities, such as, Sea Grant and various non-regulatory and non-flood protection boards, and there seemed to at least be an interest in entertaining a modest level, multi-sourced funding approach in order to do something that is joint, communal and comprehensive. Therefore, there is a willingness to come together and for some groups that have money to actually contribute. Mr. Turner suggested that the issue be discussed at the next Strategic Partnership Committee meeting. The Strategic Partnership Committee meets monthly to discuss and resolve high level problems and includes representatives from the USACE, CPRA, Sewerage and Water Board of New Orleans, parish governments and local levee districts. He suggested that perhaps a technical subcommittee of the group could potentially be established to provide input in the process going forward. He pointed out that if the SLFPA-E is the entity that is paying for the effort, then it should chair the subcommittee.

Mr. Kemp asked if the RFQ is at a point where it can be issued. Mr. Turner replied, yes. The Committee discussed the path forward. Mr. Turner requested the opportunity to schedule some meetings with CPRA leadership to discuss the issue. If the CPRA expresses an interest in the effort, then a resolution can be brought to the Board to request that the CPRA take the leadership role. The SLFPA-W and other authorities can be requested to adopt similar resolutions. If the CPRA does not express an interest in taking the leadership role, he suggested that an item be placed on the Board's agenda to advertise and issue the RFQ. Mr. Luettich reiterated the potential for a more diversified group of participants (such as business councils and the insurance industry) to be included in the entities who come together and help fund the effort. The Committee members concurred with the path forward.

B. <u>Discussion of issues regarding levee lifts in advance of armoring</u>.

Mr. Turner explained that he plans to meet with Rickie Brouillette, CPRA Flood Protection Division Manager, who has been putting together the information that is required in a usable way. The original list of levee lifts complied in June, 2014, has not changed significantly except for the section in the eastern end of the HSDRRS (LPV-109). The overtopping rates for LPV 109 are less than originally anticipated because the wave berm was not properly accounted for in the original analysis. Everything thus

far indicates that the other levees on the list will still fall below the HSDRRS design elevations prior to 2025. Since the USACE did not provide the overtopping rates in the past, the SLFPA-E based its information on design elevations. A schedule that provides the approximate dates for lifts in order for the levees to stay at or above the required elevation is included in the USACE's operations and maintenance manuals. The required elevation is not static and must take into account sea level rise. Therefore, even if there is no subsidence, the required elevations will continue to rise through the years due to sea level rise. The overtopping rates initially used were estimates produced in the 2006-2007 timeframe. The state of the art has advanced and various changes have been experienced. The latest overtopping rate estimates are higher than the USACE anticipated in 2006-2007. Bob Jacobsen commented on the recommended overtopping rates that were included in his report for the purpose of the inundation scenarios. He stated that the information provided in his report is from a comprehensive residual risk management perspective and that the factors of safety and uncertainties are different from those used by FEMA in its overtopping calculations. The HSDRRS was constructed with the National Flood Insurance Program in mind.

Mr. Turner advised that changes will be made to the levee lift schedule developed by the SLPFA-E and that the schedule should be refined by the next Board meeting. He stated that he would like to proceed with the advertisement of the RFQ for the engineering services required for the levee lifts. The SLFPA-E schedule was submitted to the USACE assuming that all of the work would be accomplished. The only response received thus far from the USACE concerned the risk issue. He stated that he recently had discussions with USACE headquarters staff in Washington, D.C., concerning the potential repurposing of armoring program monies and he was told that it was not a major concern at this point in time. The levee lift program manager produced the cost estimates, the schedule to be submitted to the USACE and the RFQ for engineering services. About 12 to 15 miles of levee will be raised in New Orleans East and about 11 miles of levee (if the entire levee is raised) will be raised in Jefferson Parish. Mr. Turner commented that staff would proceed, assuming Board authority has been received, with the advertisement of the RFQ for engineering services. Options will be provided to the Board at its next meeting concerning the work that can be accomplished with the available funding, along with a prioritized listing of the levee sections.

Bob Jacobsen commented regarding a presentation of Part 4 of the Compartmentalization Study in May.

There was no further business; therefore, the meeting was adjourned at 3:10 p.m.