MINUTES OF SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY-EAST COASTAL COMMITTEE MEETING HELD ON JANUARY 20, 2022

PRESENT: Eugene J. Joanen, IV, Chair Roy Arrigo, Committee Member Mark L. Morgan, Committee Member

The Coastal Committee of the Southeast Louisiana Flood Protection Authority-East (FPA or Authority) met on January 20, 2022, at the Joseph Yenni Building, 2nd Floor Council Chambers, 1221 Elmwood Park Blvd., Jefferson, Louisiana. Mr. Joanen called the meeting to order at 9:00 a.m.

Opening Comments: Mr. Joanen expressed his enthusiasm regarding the presentations that will be provided at today's meeting.

Adoption of Agenda: The Committee adopted the agenda as presented.

<u>Approval of Minutes</u>: The Committee approved the minutes of the Coastal Committee meeting held on November 18, 2021.

Public Comments: None

New Business:

A. <u>Presentations by Committee members.</u>

Mr. Joanen explained that for the past several months he spent a great amount of time attempting to keep up with the existing, new and proposed projects around the FPA's flood protection system. Today, the Committee will receive a preview of existing and proposed projects of great importance.

Mr. Arrigo advised that he was unable to attend the Coastal Protection and Restoration Authority (CPRA) meeting; however, he reviewed the agenda and did not find anything pertinent to the FPA's jurisdiction. He planned to attend the January 26th CPRA meeting on the Draft 2023 Annual Coastal Plan. Mr. Morgan noted that the CPRA Master Plan establishes projects over a five-year period and that it is revised every five years.

B. Introduction/Overview Coastal Project Presentations:

Mark Schexnayder: Past FPA-E Coastal work and updates:

Mark Schexnayder, currently a Biologist with Batture, LLC, provided information on his background. Mr. Schexnayder worked with the Louisiana Department of Wildlife and

Fisheries for most of his career and with the Louisiana Sea Grant Program for ten years. He became involved in coastal restoration while working on Grand Terre Island.

Mr. Schexnayder explained that much of the southern natural shoreline of Lake Pontchartrain had been sacrificed putting armoring in place for flood protection. In 2010, he participated in the development of the Flood Protection and Ecosystem Restoration Conference or "Levee School" for the education of commissioners. The Levee School was set up through the LSU AgCenter with the assistance of the Department of Natural Resources (DNR) and Department of Transportation and Development (DOTD), and consisted of three days of training with a diverse curriculum.

Mr. Schexnayder advised that during his work in the past with the FPA, Sea Grant had the LSU School of Landscape Design developed a booklet that addressed the types of protection in various areas of the FPA's jurisdiction that would support the restoration and protection mission. Three projects were developed: 1) LaBranche Wetlands Marsh Project (St. Charles Parish) - fresh water/sediment was introduced though the levee system into the marsh with sewage effluent used as a nutrient in order to provide a holistic approach to building marsh and shoreline; 2) Central Wetlands – Ridges were proposed along the levee system; and 3) Lake Pontchartrain Shoreline Projection.

Mr. Schexnayder reviewed Green (living shoreline) to Gray (coastal structures) Infrastructure Techniques in the range of vegetation only, edging, sills, breakwaters, revetments and bulkheads, and noted that layers of protection can be added in front of levees using living shoreline components. Mr. Schexnayder is working with Jefferson Parish on funding opportunities for the Bucktown area, the shorelines and the marina.

Lauren Averill: Bucktown Living Shorelines, Bucktown Harbor and Park Foundation

Lauren Averill, Council Aide for Jefferson Parish Councilmember Jennifer Van Vrancken, District 5, explained that the Bucktown Living Shoreline Project was a long time coming. Ms. Averill was the first Coastal Director for Jefferson Parish appointed by Parish President Mike Yenni in 2016, which was about the time that the last Master Plan was put into place by the Coastal Protection and Restoration Authority (CPRA). Historically, the Parish's projects have been specific to areas of the Barataria Basin, Lafitte and Grand Isle, which suffered immense subsidence and coastal loss. Prior to Jefferson Parish's submittal of projects for the Master Plan in 2018, significant attention had not been given to the fact that the urban areas of Districts 4 and 5 (Metairie and Kenner) lies adjacent to the southern coastal shoreline of Lake Pontchartrain. The project submitted to the CPRA was not just for the Bucktown area, but for the entire tenmile shoreline from the 17th Street Canal to the LaBranche Wetlands.

Ms. Averill advised that Jefferson Parish has worked extensively with the FPA and its engineers since the project's concept. After hearing about issues regarding the foreshore protection based on the U.S. Army Corps of Engineers' (USACE) design, making it unable to meet its design life, Ms. Averill, as a professional engineer by

degree, immediately saw the opportunity to find a resilient and sustainable living shoreline solution that would include multiple lines of defense versus just dropping rocks into muck. The Hurricane and Storm Damage Risk Reduction System (HSDRRS) is one of the best flood defense systems in the world. The concept of using a living shoreline to serve as frontal protection for a Federal protection system had never before been done. Dollars had to be put to the concepts developed by the landscape architects for Sea Grant in order to determine the feasibility of their working with the HSDRRS. In 2018, the first grant (\$250,000) was received from GOMESA (Gulf of Mexico Energy Security Act) providing design dollars. Ms. Averill advised that upon receipt of the grant, one of the first calls she made was to Derek Boese, former FPA CAO, for coordination of the project.

Ms. Averill explained that the Lake Pontchartrain shoreline in Jefferson Parish is a sterile shoreline that separates the community from the lake and does not provide much habitat for the ecological system. The Bucktown Marsh Living Shoreline Project is about a mile in length from Bucktown Harbor to the Bonnabel Boat Launch. Rock breakwaters will be constructed in the lake and dredge material will be used as fill to create approximately 20 to 30 acres of marsh habitat. Green projects, such as living shorelines, provide a multitude of benefits and serve as resilient foreshore protection. Mr. Joanen pointed out that a living shoreline would increase the life span of the armored infrastructure. Ms. Averill stressed that the breakwaters and marsh do not act as a hurricane protection system, but they do provide an extra buffer of protection against everyday wave action and northern winter storms.

Ms. Averill explained that extensive studies and design efforts have taken place to ensure that the project is designed for the long term. A feasibility study for the area from the 17th Street Canal to the Causeway was completed that included costs and material quantities. Survey, geotechnical and wave studies are available should the project be extended to the Causeway. The studies included breakwater types and heights, and different alternatives were considered relative to the size of the marsh, the distance of the breakwaters from the shoreline and water depth.

Ms. Averill advised that Jefferson Parish focused on the Bucktown to Bonnabel area due to the recreational and public component, and commented on the educational opportunity that the completed project would provide. A blueway trail is incorporated to provide kayaking opportunities. She pointed out that the mitigation marsh built near Bucktown Harbor when the Coast Guard Station was constructed in 2003 is doing well and that a boardwalk was constructed around the marsh. The marsh, which was built on State land leased to Jefferson Parish, has weathered multiple storms and has been monitored for the past three years by the Pontchartrain Conservancy. The marsh was constructed as a brackish marsh; however, due to the closure of the MRGO, it is transitioning to a freshwater marsh.

Ms. Averill reviewed a slide that showed a cross section of the proposed enhanced system that included the levee, foreshore protection, dredge material fill/marsh, kayak blueway, and breakwater. In addition to the FPA, Jefferson Parish has been working

with USACE on the project. In order for the marsh fill to be extended to the foreshore protection, a substantial amount of geotechnical slope stability analysis was done to determine what, if any, effects the material would have on the foreshore protection. The analysis showed that the effect would be very limited. The material will be pumped from an offshore borrow site about two miles from the project area in order to obtain the best dredge material possible. The construction of a kayak launch is anticipated to begin at the end of 2022.

Ms. Averill reviewed the rendering of the project from the Bucktown Harbor to the Bonnabel Boat Launch, which includes 400-ft. long breakwaters that fluctuate depending on distance from the levee system. The project will increase water quality, provide habitat for fish and wetland species, and return the shoreline to its former condition prior to the construction of the levee.

Ms. Averill explained that Jefferson Parish had studies and geotechnical analyses performed to address any concerns that were expressed and reviewed the permitting process to date:

- LDNR (Louisiana Department of Natural Resources): The Coastal Use Permit (CUP) request has been submitted through the State and is under review.
- SLFPA-E: Supportive, fulfilled conditions
- CPRA: Supportive, provided partial funding
- USACE 408 Permit: Permit is under review and is expected in June 2022

Ms. Averill advised that based on the status of the permitting, construction of the project is anticipated to start in the Fall of 2022. The project was funded using various funding streams totaling \$11 million:

Design

- \$250K NFWF (National Fish and Wildlife Federation)
- \$250K JP GOMESA (Jefferson Parish Gulf of Mexico Energy Security Act)

Construction

- \$2.5M NFWF
- \$4.0M JP GOMESA
- \$500K State Capital Outlay
- \$3.5M CPRA Coastal Surplus

NFWF is a conglomerate of multiple funding streams from entities such as NOAA and Shell. Both sets of NFWF funding were the result of its resilient communities' competition.

Ms. Averill explained that the feasibility study only looked at the area from Causeway to Bonnabel; however, the entire 10-mile length of shoreline would be an easily scalable project. The project that Jefferson Parish submitted for funding in the 2023 Master Plan included the entire length of shoreline (10 miles). She commented that should Federal funds become available to repair the existing foreshore protection, a more sustainable and resilient solution could be considered, while still maintaining the same foreshore protection for the levee system. She noted that the Federal infrastructure dollars included an extensive amount of resiliency and nature based solution funding.

Mr. Joanen stated that he would like to see the template developed by Jefferson Parish used to pave the way for the Orleans and St. Bernard shorelines. Ms. Averill added that the living shoreline concept was not a typical project; therefore, it would not have come to fruition had there not been money from District 5 to move the project forward.

Craig Gothreaux: Evolution of CWPPRA Living Shorelines Projects, Other Federal Funding Opportunities

Mr. Schexnayder commented on the string of pearls concept and the attempt to establish projects in the six parishes surrounding Lake Pontchartrain, as well as the Pearl River. Craig Gothreaux, Fish Biologist, Habitat Conservation Division, NOAA, is working on the CWPPRA PPL32 Project for Orleans Parish and with other parishes on similar projects. Batture, LLC, is working with NOAA, the U.S. Fish and Wildlife Service and St. Tammany Parish on the feasibility of a project on the north shore. The projects will provide coastal benefits, as well as tremendous habitat potential. Mr. Gothreaux had discussions with the USACE relative to maintaining corridors for work on flood protection projects and constructing projects adjacent to the corridors by beneficially using the access dredge material. Governor Edwards recently announced that \$2.6 billion in USACE funding will be available to support coastal, water management and hurricane risk reduction projects throughout south Louisiana.

Mr. Gothreaux was unable to attend the meeting because of Federal restrictions on travel and attempted to provide the presentation by video conference. Due to technical difficulties, Mr. Gothreaux's presentation was deferred to the Board meeting.

C. Open Discussions on Coastal Projects.

Councilmember Jennifer Van Vrancken, District 5, Jefferson Parish Council, thanked the FPA for its support. She stated that it was great having the FPA's support when Jefferson Parish began work on the living shoreline pilot project between Bucktown and Bonnabel, and that she appreciated that the FPA had an open mind regarding the project. She explained that growing up down the street from the levee made her realize that the safety and lifestyle of the community depended on flood protection. She hoped that Jefferson Parish and the FPA working together can produce a healthier lake and a more resilient flood protection system with a vibrant marsh serving as frontal protection.

Mr. Joanen thanked Councilmember Van Vrancken for her hard work on the project. He stated that the project is precedent setting and that he hoped everyone takes note that this is the benchmark that everyone should try to emulate.

There was no further business; therefore, the meeting was adjourned at 9:55 a.m.