



The Flood Protection Authority-East

News of Your Flood Defense System

April 8, 2020

Message from Derek Boese, Chief Administrative Officer

Like the rest of Louisiana and the United States, it has been a challenging time for the Flood Protection Authority due to COVID-19 in recent weeks. The FPA has been impacted like many others, with some employees with confirmed cases of coronavirus and many others quarantined for a period of time. We have had to extensively modify our work practices, including time clock procedures, staggered and alternating daily shifts, plus crews working at night. These are all in addition to the new PPE (personal protection equipment) requirements and cleaning practices.

When this crisis started, I told our Directors we had two priorities: Maintain the system and take care of our people. I am happy to be able to report that while we have had our challenges, we have been able to do both. Our Engineering Department, supported by Maintenance and Police, have had inspectors every day on the Mississippi River Levee system doing checks. This is especially critical since not only is the river high, but high enough that the Corps of Engineers had to open the Bonnet Carre Spillway on April 3rd. We have been able to maintain the hurricane flood protection system and continue to prepare for storm season on 1 June. Through hard work, perseverance and creativity, our Purchasing Department and other staff have been able to secure enough PPE to protect our field staff.

Since the crisis started, we have also maintained our focus on Public Safety. We are fully supporting the Governor's Directives and those of our local City and Parish partners to stay at home and not gather in large groups. We recognize how important it is for people to be able to exercise during times like these, but we also know that public health and safety is critical right now. That is why we have closed Lakeshore Drive on weekends and are supporting Jefferson Parish and the City of Kenner with their boat launch closures and restrictions along Lake Pontchartrain.

I will wrap this up by stressing two things. First, for the public who receives this newsletter – you should feel confident in the FPA's ability to take care of the system and prepare for storm season. Regardless of the new circumstances we are all living through, those are constants. For the FPA employees who continue to work, whether in the field or at home, I appreciate everything you do to take care of the people and property of the citizens we protect. You make a difference every day.

Stay safe,

Derek

Chief Administrative Officer

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Flood Protection Authority

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N.O. Lakefront Airport Terminal Gains Glass Elevator



The challenge of providing ADA compliant access to the second floor of the Lakefront Airport Terminal, while impacting as little as possible the transformed historic Art Deco structure, was met with the addition of a metal framed glass elevator which is being constructed adjacent to the airfield side of the building. The elevator will provide riders a panoramic view of the airfield and Lake Pontchartrain.

The new elevator is being constructed by the Lakefront Management Authority (formerly the Non-Flood Protection Asset Management Authority) and is expected to be completed by the end of May, 2020.

The historic Otis elevator, which will remain in place, was part of the original design of the building and was operating when the Airport Terminal was dedicated on February 9-13, 1934. It was originally designed to have a lift attendant or elevator operator. The elevator was updated in 2013 and the operation modernized to provide push button recall service; however, it is not ADA compliant and has been inoperable for extended periods of time when repairs are required due to the need to specially manufacture parts due to its age.

The new elevator will not only provide access to second floor offices and the conference facility, but it will also provide ADA compliant access for the public to view the series of eight murals created by renowned artist Xavier Gonzalez that circle the second floor atrium.



New Orleans Town Hall Meeting Addresses Crime

The Orleans Levee District Police Department participated in the Town Hall meeting held on January 21, 2020, at the Hynes School in New Orleans. The meeting was held to address recent crimes and, in particular, car break ins and window smashing.

The panel included city council members, the New Orleans Police Department, the district attorney, and the head of the Louisiana Center for Children's Rights and juvenile court judges.



FPA Training Program

The Flood Protection Authority is developing a comprehensive, robust training program for all of its employees designed to meet the following objectives:

- ◆ Improve knowledge and skills in all areas of the organization in order to increase effectiveness, productivity and efficiency, and implement new technologies
- ◆ Support employee development and growth
- ◆ Promote workplace safety
- ◆ Increase job satisfaction and improve morale

Building a training program that achieves these objectives in a vast, changing organization like the Flood Protection Authority is daunting and will take time; however, staff is up to the challenge. Training will be provided by way of instructor-led and technology-based course delivery methods. Staff will seek the most highly-qualified instructors to provide in-facility training and opportunities at recognized, accredited institutions to meet the needs of its employees.

In addition to the more traditional training, such as Levee Inspection, Supervisory, Safety, Ethics and Preventing Sexual Harassment training, recent training opportunities were developed for employees to achieve their Herbicide License, Permanent Canal Closures and Pumps' (PCCP) Certification, Complex Structure Operator Certification and FAA Remote Pilot (Drone) Certification. Employees will continue participating in available professional and technical training opportunities.

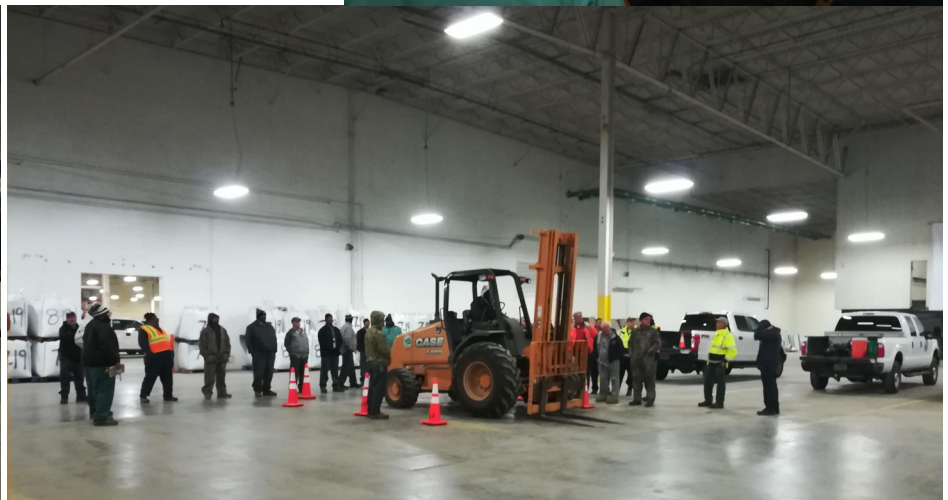
The Orleans Levee District and East Jefferson Levee District Police Departments have a fully developed, continually improving, program in place for their personnel.

FPA Employees Participate in Heavy Equipment Training

Jim Green from the Alamo Group provided heavy equipment training in November and December, 2019, on the following machinery:

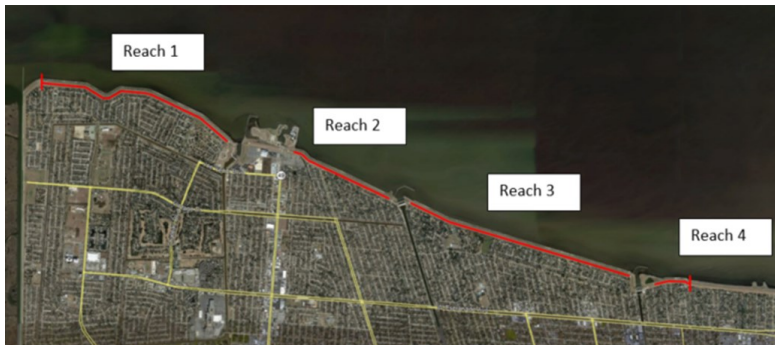
- ◆ All Terrain Forklift Operation for 72 employees
- ◆ Skid Steer/Kubota New Holland for 69 employees
- ◆ Bob Tail Dump Truck for 22 employees

The employees attended classroom training, received machinery and safety instructions, and demonstrated what they had learned by driving a road course that had been set up in the Orleans Levee District's Franklin Facility warehouse.



East Jefferson Lakefront Levee Foreshore Protection

The US Army Corps of Engineers (USACE) extended the wave berm in the East Jefferson Levee District (EJLD) along Lake Pontchartrain, which was completed in 2012. This foreshore component is part of the overall Hurricane and Storm Damage Risk Reduction System (HSDRRS) that protects Jefferson Parish. It was created by constructing a rip-rap berm in the lake and filling in the area from the previous shoreline to the rip-rap berm. This critical element of the HSDRRS reduces potential high energy wave impact on the earthen levees. Since the completion of its construction in 2012, the rock berm has experienced significant reduction in its elevation and the soils between the berm and the levee are eroding (pictured right). The extent of the heavily eroded areas extend from Reach 1 (West Return Wall) to about half a mile East of the Suburban Canal in Reach 4.



In an effort to protect the soils, the Flood Protection Authority is undertaking two pilot study projects to study several different methods for achieving a long term solution to protecting these soils. These projects, which commenced on March 16, 2020, will install three test sections in Reach 1 and four test sections in Reach 3. The installation of the test sections is to be completed before May of 2020; however, the evaluation of the effectiveness and cost/benefit of the various erosion protection solutions will take place from May, 2020, to February, 2021. The test sections' performance under tropical events and the North wind/high lake conditions of the winter months is of particular interest.

Several test sections utilize water energy dissipation and will incorporate erosion control. A section of Spartina marsh grass and a section of Vetiver grass, which will provide resistance to waves, reducing the energy imparted to the soils and the grass root systems, will further help bind the soils in-place. In addition to the grasses, half of the areas will have Flexterra and half will have Proganics Duel applied. Flexterra is a high performance-flexible growth medium that will assist in establishing vegetation, while stabilizing the soils from erosion until the vegetation is fully established. Proganics Duel is a combination of Flexterra and Proganics. This offers the erosion control of Flexterra and the site specific formulation of Proganics, which ensures that the soils will be treated with the right amount of organic matter, PH correction, bacteria, etc., to accelerate growth of vegetation.

(continued)



East Jefferson Lakefront Levee Foreshore Protection

There are two sections planned for Articulated Concrete Block (ACB) with geo-synthetic backings and Bermuda grass applied. One section will have Flexamat installed and one section will have ShoreFlex installed. These systems function similarly to the grass sections, in that, the ACB will reduce the energy impact to soils, while the grass and geo-synthetics will aid in soil retention. Half of these ACB areas will also be treated with Flexterra and half with Proganics Duel.

At another location a section of HydroTurf will be installed. HydroTurf is an impermeable cementitious and artificial turf product that will keep the aesthetics of clean freshly mowed grass, while maintaining resistance and protection from high wave energy.



HydroTurf



Articulated Concrete Block



GrassGuard

Two additional sections are to be installed that focus more on erosion control than wave energy dissipation. One section will include GrassGuard and one section will have Anchor Armor ARVS installed. Both of these sections will be additionally seeded with Bermuda grass. GrassGuard is a reinforcement mesh that is an extruded polyethylene mesh designed to reinforce and strengthen grassy areas and provide bank stabilization.



Anchor Armor

Anchor Armor is an Anchor Reinforced Vegetation System (ARVS) that utilizes Futerra R45, which is a high tenacity polyester geo-grid within thermally fused and entangled, three-dimensional nylon monofilaments creating a High Performance-Turf Reinforcement Mat (HP-TRM) along with Percussive Driven Earth Anchors (PDEAs) to provide permanent anchorage.

By: Donald F. Jerolleman, Jr, MSc, PE and Christopher G. Humphreys, PE

Removal of Interim Closures and Pumps at 17th Street, Orleans and London Avenue Canals



Above 17th Street Canal ICS removal site / Below London Avenue Canal ICS removal site



Following Hurricane Katrina, interim pump stations (Interim Closure Structures or ICS) were constructed by the US Army Corps of Engineers at the ends of the 17th Street, Orleans and London Avenue Canals where they meet Lake Pontchartrain. These temporary pumps and gates were constructed to provide a 100-year level of risk reduction by preventing surge from Lake Pontchartrain from entering the canals.

The goal was to have these structures in service for approximately three to five years, while the Permanent Canal Closures and Pumps (PCCP) were designed and built. With the completion of the PCCP in May of 2018, the ICS could then be demolished.

M.R. Pittman Group, LLC was awarded the contract for removal of the Interim Closure Structures in October of 2018 and began work in December of that year. The contractor is currently on schedule to complete the demolition of these structures in May of 2020.

Work completed to date at the 17th Street Canal site includes removal of sheet piles along the sides of canal to allow for dredging and installation of rip-rap and installation of a new I-wall on the east side of the canal. The entire interim pump station has been demolished, except for approximately 32 piles in the canal that supported the structure. Remaining work also includes installation of High Performance Turn Reinforcement Mat (HPTRM) from the existing lakefront Hurricane and Storm Damage Risk Reduction System (HSDRRS) levee to the canal floodwall and approximately 30% of the rip-rap. Once all of the demolition is completed, the site will be graded and sodded.

Work completed to date at the Orleans Avenue Canal site includes the demolition of the generator buildings, pump platform, and gates. A new floodwall on the east side of the canal has also been installed. Some of the remaining work to be completed includes the demolition of the east cell, backfilling of the levee on the west side of the canal, removal of the temporary roads, and sodding and seeding of the entire site.



Orleans Avenue Canal ICS removal site

Work completed to date at the London Avenue Canal site includes the demolition of the generator buildings, pump platform, and gates. Floodwalls have also been installed on the east and west sides of the canal. Remaining work to be completed includes installation of rip-rap on both sides of the canal, backfill and removal of the temporary roads, and sodding and seeding of the entire site.

By Ryan Hathaway, PE,

Mount Carmel Junior Class Tours FPA/LMA Facilities



Mount Carmel Academy's Junior STREAM Day takes students out into the real world to see careers in science, technology, engineering, art and mathematics at work.

The Junior Physics Class took advantage of our open invitation and toured the IHNC Surge Barrier and Permanent Canal Closures and Pumps (PCCP), as well as the New Orleans Lakefront Airport. The tours provided a means to introduce students to careers in engineering, water management, aviation and related fields.



FPA Engineer Darrin Austin (pictured above) conducted the tour of the IHNC Surge Barrier and discussed the flood defense system with the class.

LMA staff members Bruce Martin, Airport Director, Daniel Hill, Director of Operations and Engineering, and Chris Henderson, Airport Manager, conducted the tour of the Lakefront Airport facilities and operations (pictured below).

Wilma Heaton hosted lunch at Messina's on January 29th and February 6th for both classes.



FPA Public Information Alerts

sign-up



If we can't **REACH** you
we can't **ALERT** you

The Flood Protection Authority-East (FPA) strives to provide timely information to the public regarding public safety issues, closures and events that impact people, businesses and communities in order to minimize disruptions and keep the public safe and informed. The FPA recently implemented the Everbridge Management Platform for providing alerts to the public.

Everbridge is the industry standard using the most up-to-date communication technology and is widely used throughout federal, state and local government agencies, organizations, commerce and industry.

The FPA offers subscriptions to the following Keywords:

Floodgate (Any information on floodgates opening, closing or maintenance)

FPA (Any general news about the Flood Protection Authority-East)

River (Any information about the High River or the Mississippi River)

HighTide (Information regarding gate openings and closures as they relate to high tide situations)

Closure (Any gate closures in the system on land or waterways)

It's a simple process to register for these Emergency Alerts. Text the appropriate Keyword listed above to "333111" for the alerts you would like to receive. Should you wish to receive alerts offered under more than one Keyword, each Keyword must be texted to "333111".

COVID-19 Notice

Flood Protection Authority's facilities, including the East Jefferson Levee District, Orleans Levee District, and Lake Borgne Basin Levee District facilities, will be closed to the public until April 30, 2020, in accordance with Governor John Bel Edwards's Stay At Home Proclamation. The closure of our facilities will be modified in accordance with the issuance of any additional proclamations by the Governor.

While employing all available safety measures against the Coronavirus, essential Flood Protection Authority personnel will continue performing the FPA's maintenance and operation responsibilities to ensure that the critical flood defense system continues to meet the highest level federally mandated. Employees who are able to work at home will do so until the Stay At Home Order terminates.

All tours will be suspended until the Covid-19 Public Health Emergency ends.

Flood Protection Authority Monthly Board Meetings can be viewed via livestream by visiting the FPA website www.floodauthority.org/ and clicking on the Facebook icon located at the top right corner of the page or going to: www.facebook.com/FloodProtectionAuthority/.

The Flood Protection Authority urges everyone to become informed about their flood defense system and encourages organizations and business and community groups to schedule a tour of the IHNC-Lake Borgne Surge Barrier and Permanent Canal Closure and Pumps (PCCP) Stations.

To schedule a tour of the IHNC Surge Barrier and/or PCCP, visit our website at floodauthority.org and click on "Schedule Facility Tours" at the bottom of our home page. Fill out the Tour Information Sheet and click on "submit" at the bottom of the sheet.

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Associate Editor: Wilma Heaton**

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