

# The Flood Protection Authority-East

**News of Your Flood Defense System** 

April 1, 2021



**Seabrook Floodgate Complex** 

#### Message From Commissioner Gene Joanen

What I see!

The essence of teamwork on a big mission and total quality management.

Over the past six months I have had the honor and pleasure to get to know some of the great people that work at the Flood Protection Authority-East (FPA). What I find to be exceptional are the attitudes. Seeing the confident, smiling faces of individuals going about their daily work, it is evident that everyone cares about their role.

I recognize total quality management (TQM) in play at the FPA. The TQM concept has been around a long time. About 27 or 28 years ago I learned TQM from Major General Ames S. Albro, Jr., an extremely accomplished engineer who served many important roles for our country. After his role as the Director of Engineering and Construction for all of the U.S. Army Corps of Engineers, we worked together as problem solvers at Walk, Haydel & Associates. He inspired everyone to rise above and go beyond our limitations. I learned on the job how to manage very difficult tasks, even sometimes with seemingly impossible challenges.

I have made a pledge to tour and observe some important aspects of the FPA system. I know this: the FPA's people are its most important asset. Their challenges are never ending. Their dedication and professionalism are apparent. From what I can see, everyone is their customer. The overall mission for everyone with the Flood Protection Authority is to maintain and improve the system. Everyone's role is integral to the overall efficiency of the organization.

With so much negative news these days, it is important to concentrate on the positive and make people believe they can accomplish very difficult missions. As non-resident board member I am seeing the FPA from the inside out and what I see from the employees, inspires me to give my all for this great mission these employees live every day.

Gene Joanen

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Flood Protection Authority

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## FPA Board Recognizes Service of Quentin Dastugue



Quentin Dastugue

The Board of Commissioners of the Southeast Louisiana Flood Protection Authority-East (FPA) recognized Quentin Dastugue at its meeting on February 18, 2021, for his service to the FPA and to the citizens of Southeast Louisiana.

Governor John Bel Edwards appointed Mr. Dastugue to serve on the FPA Board of Commissioners due to his outstanding qualifications, expertise and professional experience. Mr. Dastugue served as a Board member from September 28, 2016 to December 31, 2020, and as Board Treasurer and Chair of the Finance Committee from July 1, 2019 to December 31, 2020.

Mr. Dastugue graduated from the Georgia Institute of Technology in 1977 with a degree in Civil Engineering and from the Loyola University Institute of Politics

Mr. Dastugue's extensive career in the real estate profession and public service includes in 1985 co-founding Property One, a full service commercial real estate firm that grew into one of the largest firms in south Louisiana, serving four consecutive terms as a Louisiana State Representative (1980 - 1996), during which he advocated for levee board reform, and as Chairman of the House Committee on Transportation, Highways and Public Works. He was also a member of numerous civic organizations and served on various real estate industry committees.

In addition to his many recognitions, Mr. Dastugue was inducted in 2018 into the Louisiana Political Museum and Hall of Fame.



Commissioners (L-R) Clay Cosse, Mark Morgan, Jason Latiolais, Randy Noel, Herb Miller, Quentin Dastugue, Joe Hassinger, Herb Weysham and Gene Joanen

## FPA-East Announces New Regional Director

On Friday, March 19, 2021, Herbert Miller, President of the Board of Commissioners of the Southeast Louisiana Flood Protection Authority-East (FPA), appointed Kelli Chandler as the incoming Regional Director. Ms. Chandler is a Certified Public Accountant who has served as the FPA's Regional Finance Director since October of 2016 and was instrumental in the regionalization of the FPA. She joined the organization with 20 years of experience to call upon, 12 of which were spent working with other state agencies as a senior executive.

Ms. Chandler led her division with distinction by overseeing the consolidation and centralization of Finance functions, spearheading the Culture Change Initiative, and receiving recognition from the Board for Outstanding Leadership, Teamwork, and Commitment to Excellence for all of her efforts.



Kelli Chandler



**Derek Boese** 

In her new capacity as Regional Director, Ms. Chandler will ensure that the FPA carries out its mission to protect the community from flood events.

The title of Chief Administrative Officer, currently held by Derek Boese, will be retired and its responsibilities transferred to the Regional Director. Mr. Boese, who has led the FPA since March of 2017, will stepping down on April 30<sup>th</sup> to serve as the general manager of the San Antonio River Authority.

In his time as CAO, Mr. Boese managed the transition from three distinct levee district offices to a regional organization, directed the organization-wide Culture Change Initiative, and received a commendation for his leadership and exceptional management during the COVID-19 pandemic.

## FPA Creates Operations & Maintenance Training Videos



On Wednesday, February 10, 2021, filming began at the 17<sup>th</sup> Street PCCP Station of its Hurricane Preparation procedures to create training materials for future employees. This basic course is the first of many that will be developed to explain all operations and maintenance features located at the Permanent Canal Closures and Pumps (PCCP), Complex Structures, and LBBLD Pump Stations.

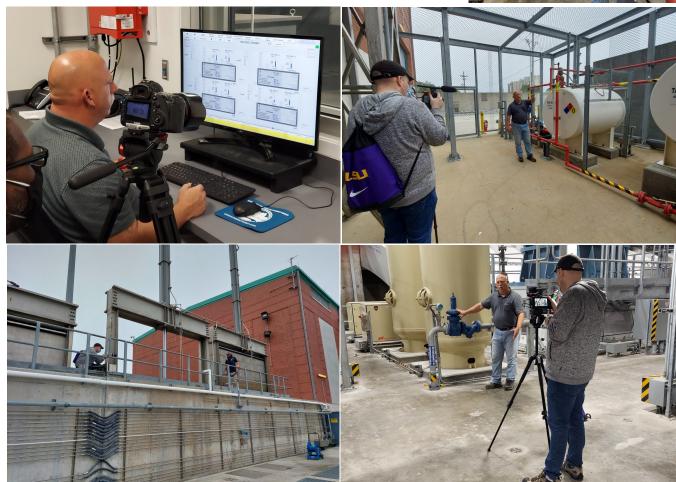
The goal is to provide an interactive training series to new employees so that they can perform tasks safely and correctly.

Courses will range across basic, intermediate, and expert levels to familiarize staff with the operations and maintenance requirements for each piece of equipment.

These training courses, in conjunction with hands-on teaching, will allow new employees to become more independent and confident in the equipment functions. The FPA has contracted with Peter Forest to provide the camera work and editing, and lessons will be built with the assistance of Information Technology (IT) and Human Resources staff.

Colleen Billiot, FPA Public Information Officer





### FPA Maximizes Use of Drone Technology

Glenda Winfield, GIS Analyst 1, one of the FPA's FAA Licensed Unmanned Aircraft systems (UAS) or drone pilots prepares done for flight

#### **Drone Inspection of 40 Arpent Levee System**

The Flood Protection Authority is in the final stage of FEMA accreditation of the 40 Arpent Levee System that traverses both St. Bernard and Orleans Parishes. A portion of the accreditation process included inspections of the levee. The inspections were accomplished over the past few months utilizing a drone, which collected aerial photos and videos across 24 miles of levee. A segment of this levee system is a combination of both earthen levee and sheet piling. Therefore, in this portion of the system, in addition to the overhead aerial photography, videos facing each side of the sheet piling were recorded.

The 40 Arpent Levee System inspection was the largest project thus far using the FAA's licensed drone pilots. Most projects come with challenges and this one was no exception. Learning a good workflow, understanding the best method to plan the series of missions flown, checking the data collected to verify it was collected correctly, re-flying missions, being limited by weather conditions, and managing the limited flight time each battery afforded were just a few of the challenges staff had to face and work out.

After completing the inspection project, the data was delivered to the FPA's consultant for review and key sites were visited to validate any potential concerns.

The project was not only a success, it provided an excellent opportunity for the FPA staff to more fully understand the capabilities and limitations of the technology. The FPA now has a record of the entire 40 Arpent Levee System that can be utilized for future reference.

Special thanks to Roger Colwell, CFM GIS Manager

Pictures taken from drone footage of pump station in St. Bernard Parish and 40 Arpent Levee System







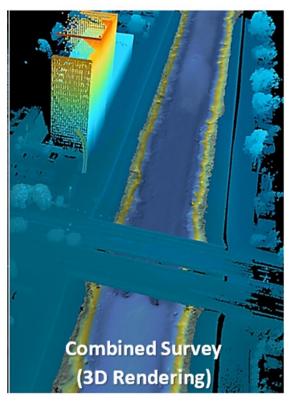




#### FPA Uses New Technology for Surveying the Outfall Canals

The three New Orleans Outfall Canals (London, Orleans and 17th Street) were constructed in the 1800s. These drainage conduits continued to be a crucial element of New Orleans' flood control system over the years. The Outfall Canals (OFCs) are also part of the Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS). These canals vary from 2.3 miles to 2.7 miles in length and have levees and floodwalls on both sides totaling almost 15 miles. It is the Flood Protection Authority's responsibility to inspect and maintain these canals, levees and floodwalls to ensure the physical and operational integrity of these crucial components of our flood protection and drainage infrastructure. Major New Orleans Sewerage and Water Board Pump Stations located at the south end of each of the Outfall Canals discharge huge volumes of water into the OFCs during each rain event.





At the north end of the canals are the Permanent Canal Closures and Pumps (PCCPs) operated by the FPA. During tropical storms and hurricanes, the FPA closes the floodgates to the lake at these pump stations to prevent storm surge into the canals. In addition, during these tropical events, the FPA will operate these massive pumps as needed to remove the water discharged into the canals by the Sewerage and Water Board to drain the City so that the water levels in the canals remain in strict accordance with approved water management plans.

HSDRRS Operation, Maintenance, Repair, Replacement and Rehabilitation (OMRR&R) Manuals issued by the US Army Corps of Engineers for each of the OFCs and associated Levees and Floodwalls include specific inspection and maintenance requirements to ensure that the system functions as required. These inspection guidelines include routine surveys of the levees, floodwalls, canal banks and canal bottoms to note changes such as sedimentation, erosion or scour that could affect the hydraulic or structural integrity of the canals and floodwalls. Therefore, observations are required that help the FPA monitor the floodwall and ground surfaces as well as below the water. The FPA is concerned about issues like wall/ slope stability, seepage, erosion and even sedimentation that can impede proper drainage of the canals. These issues have to be detected early and addressed in a timely manner.

The FPA Engineering Department developed a survey solution that combined topographic (LIDAR) and hydrographic (Sonar) survey methodologies to survey the entire area of the canals. This bi-annual or more frequent inspection method allows the FPA not only to detect and repair these issues, but provides the needed information about the canals to assess the impact over time that pump operations and other factors have on the OFC levee system.

The FPA also utilizes Autonomous Surface Vehicles (ASVs) for the Sonar collection and drones for the LIDAR to better navigate the canals and save time. Survey solutions like these have become a reliable resource that continues to help the FPA map and monitor our levee system in order to remain ready for any emergency and continue protecting the New Orleans community.

Autonomous Surface Vehicle (ASV)

Special thanks to Sean Hodges, GIS Analyst 3

## Mitigation of Erosion Along 17th Street Outfall Canal

The FPA Board awarded a contract to Cycle Construction Company, LLC, for the mitigation of erosion along the 17th Street Outfall Canal. The final construction cost was \$3,979.724.

The project was for the repair of the interior canal banks on both the West (EJLD) and East (OLD) sides of the 17th Street Canal from Veterans Boulevard south to S&WB Pump Station No. 6. The repairs included the rebuilding of the canal banks with clay material and the installation of a rock-filled geocell system, which will prevent future erosion from fast flowing water and animal burrowing, as well as vegetation growth, thus reducing maintenance costs. An area along the East side just south of Veterans Boulevard required installation of sheet piling for stability in addition to rock filled geocell. The project commenced in April 2020 and was completed in December 2020.

Special thanks to Ryan Foster, Engineer 8

#### **Preconstruction Condition**

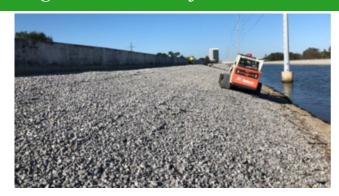


#### Construction



## Mitigation of Erosion Along 17th Street Outfall Canal

#### Construction



#### **Completed Project**



#### **Final Phase**

The final phase of the 17th Street Canal Erosion Mitigation Project (pictured on right) will be along the East Side of the canal from Veterans Boulevard to Old Hammond Highway.

Topographic and Bathymetric Surveys have recently been completed by C.H. Fenstemaker and Associates and the FPA has engaged Evans Graves Engineers to complete the Civil Design and prepare the plans and specifications and Jacobs to perform stability and other Geotechnical Engineering analyses for the project. The project is anticipated to be advertised for public bid for construction late 2021 or early 2022.



### FPA Public Information Alerts



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 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 floodgate opening, closing or maintenance)

**<u>FPAEast</u>** (Any general news about the Flood Protection Authority-East)

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

**<u>HighTide</u>** (Information regarding gate openings and closures as they relate to high tide situations)

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".

## Serving Our Bilingual Communities

The Flood Protection Authority-East has teamed up with TNola Languages in an effort to serve our bilingual communities. Press releases from the FPA-East and Everbridge alerts are now available in Spanish.

Antwan Harris, Public Information Director, said "We want to make sure all communities are served and represented in the work we do here. We have plans to incorporate more languages in the coming year."

To receive Everbridge Spanish alerts please text FPAEspanol to 333111

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.

The Flood Protection Authority has postponed all tours of the IHNC Lake Borgne Surge Barrier and Permanent Closures and Pumps (PCCP) Stations at this time due to the COVID-19 Public Health Emergency. The FPA will resume the tours when conditions allow.

When tours resume, 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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