

Fort Bend County Levee Improvement District No. 2

May 2019 Flood Emergency Operations Summary

Between May 7th and May 12th Fort Bend County Levee Improvement District No. 2 (FBCLID2) received 10-13" of rainfall. The majority of the rain occurred on May 7th with some areas receiving more than 6" of rain in under two hours. The intensity of these rainfall rates exceeded any previously measured in FBCLID2, including during Hurricane Harvey.

While all this rain was falling, the Brazos River was already at elevated levels which automatically closed the flood gates in the levee. When the flood gates are closed all rainfall must be pumped out of the levee. The FBCLID2 pump stations operated continuously during the event and there were no problems or issues with the pumps. Five auxiliary pumps were also brought in to help pump water out of the levee.



Auxiliary pumps brought in to help pump water out of the levee



In contrast, during Hurricane Harvey FBCLID2 received more than 30" of rainfall. While this amount of rain was far greater, the intensity of rainfall did not approach the incredible rates experienced during the May 2019 flood. Rainfall during Harvey was also spread out over five days and not concentrated into a few hours. When Harvey made landfall, the Brazos River was also at a much lower level, allowing the majority of the rainfall to flow out of the levee through the flood gates and did not require pumping.

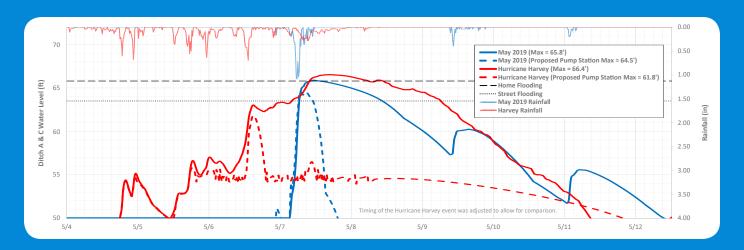
Immediately following Hurricane Harvey in 2017, FBCLID2 studied the causes of and solutions to flooding inside the levee. Design and construction have already started on several improvement projects as a result of this study. The project that will provide the most benefit during future storms of this nature is the addition of a Third Pump Station at the end of Ditch A (generally located behind Clements High School). A project schedule for construction of the Third Pump Station is shown on the following page.

FBCLID2.COM 2019 Spring Newsletter

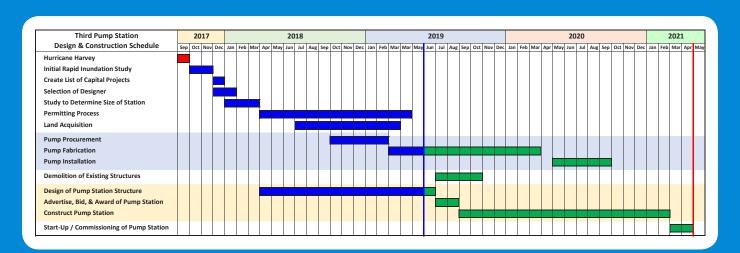
May 2019 Flood Emergency Operations Summary (contined)

FBCLID2 is more than a year into design of the Third Pump Station. The required property for the station has been acquired, and the new pumps have been ordered. The new pumping facility will be constructed to enclose seven pumps with 1,500 horsepower motors, capable of pumping a combined 980,000 gallons per minute. The project is currently scheduled for completion in Spring 2021. The existing pump station on Ditch A has a capacity of 241,800 gallons per minute.

A series of projects are also being designed and constructed to improve drainage and increase rainfall storage inside the levee. A construction project to perform maintenance and channel improvements to Ditches B, C and E is already underway. Another project to widen and increase the storage capacity of Ditch A is entering design. FBCLID2 is also looking to partner with Fort Bend ISD and/or Sweetwater Country Club to provide additional storage for runoff during the most extreme rain events.



The chart above compares the water levels inside the FBCLID2 levee during Hurricane Harvey and the May 2019 flood. The chart also displays rainfall rates during both events measured in 15-minute increments. The two horizontal black lines approximate the elevations where street flooding and home flooding occur. The red and blue dashed lines estimate the water levels inside the levee had the Third Pump Station been constructed and operating during Hurricane Harvey and the May 2019 flood.



Hurricane Season Starts June 1st

One of the most dramatic and damaging weather events that occur in this country is a hurricane. August and September are peak months of hurricane season, which lasts from June 1st to November 30th annually. In Fort Bend County, hurricane damage occurs from a combination of high winds, inland flooding, and tornadoes. High winds from 74 mph to over 200 mph can easily topple power lines, uproot trees, and knock down buildings as far as 175 miles from coastal areas. Flooding caused by torrential rains is probably the greatest threat that storms pose to inland counties such as Fort Bend. Tornadoes are often spawned by hurricanes and can occur well away from the center of a storm.

Prepare a Family Disaster Plan

A well-thought-out plan of action for you and your family can go a long way toward reducing potential suffering from any type of disaster that could strike. With hurricane season upon us, preparing your family disaster plan is the first step. Household emergency plans should be kept simple. The best emergency plans are those that are easy to remember.

Annual Table Top Emergency Exercises

Fort Bend County Office of Homeland Security & Emergency Management recently hosted a functional emergency exercise on April 26th. Likewise, FBCLID2 hosted it's annual Table Top Emergency Exercise on May 3rd. These emergency exercises are discussion-based sessions where local agencies and emergency personnel discuss their roles during emergency situations. The events are organized as an opportunity to practice emergency action plans live. They are designed to familiarize the participating members with emergency response, operation continuity and crisis communications plans and their roles and responsibilities as defined in the plans.

sign up during this hurricane season to receive important district news and updates

Text **LID2** to **474747** to register for text messages alerts, or visit **FBCLID2.com/alerts** to receive this information via email.*

stay up to date on weather emergencies

For FBCLID2 weather updates and links, including FBCLID2 rainfall and stream gauges and the National Weather Service's Brazos River level gauge visit FBCLID2.com/emergency

The FBCLID2
Board would
like to thank
all residents
who
participated
in the
2019 Bond
Election and
helped pass
the Bond
Authorization
Proposition



Fort Bend County Levee Improvement District No. 2 3200 Southwest Freeway, Suite 2600 Houston, TX 77027 FBCLID2.com PRESORTED STANDARD U.S. POSTAGE PAID PAMELA PRINTING CO. 77478

Texas Water Conservation Association's 2019 Texas Water Day Conference

During the week of April 1, 2019, two board members from the FBCLID2, Andre McDonald (President) and Glen Gill (Secretary), went to Washington D.C. for the events surrounding Texas Water Day. Each year, the Texas Water Conservation Association (TWCA) sponsors a conference in DC focusing on water issues of importance to Texans. Different water districts throughout Texas come for meetings, briefings and sessions by executive and legislative branch officials of the Federal government. TWCA's Texas Water Day is an effort to educate these policymakers on the important water issues facing the great state of Texas.

While in DC, Andre and Glen had meetings which focused on the need to reauthorize the National Flood Insurance Program (NFIP), which is set to expire on May 31, 2019 if Congress does not extend it. The coverage that the NFIP provides is essential and indispensable to the residents of FBCLID2. Furthermore, Andre and Glen discussed the need for the voluntary option for the community purchase of flood insurance. If enacted into law, the community purchase of flood insurance would be an important option and tool for the different municipalities and counties across the country.



As part of the Texas Water Day meetings, Andre and Glen participated in meetings with the following Hill offices: Sen. Ted Cruz; Sen. John Cornyn; Rep. Dan Crenshaw; Rep. Lizzie Fletcher; Rep. Randy Weber; Rep. Pete Olson; Rep. Sylvia Garcia; Rep. Brian Babin; Rep. Al Green; Senate Banking Committee; and the House Financial Services Committee. Andre and Glen also had in-person meetings with FEMA and the National Association of Realtors. Andre and Glen also participated in Texas Water Day briefings from the following Federal agencies: Bureau of Reclamation; EPA; US Geological Survey; and the US Army Corps of Engineers. Lastly, the interests of FBCLID2 were well represented in Washington DC as part of Texas Water day activities.