



**Fort Bend County  
Recovery and Mitigation  
Report #11  
February 13, 2019**

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# Fort Bend County

## Recovery and Mitigation Report #11

February 13, 2019

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This Report provides an update on recovery and mitigation activities related to Hurricane Harvey as well as the flooding events experienced by the County in 2016. *New or updated information from previous reports is italicized.*

### INFRASTRUCTURE

**Willow Fork Desilting Project** Flooding in 2016 and Hurricane Harvey caused a silt buildup in the Willow Fork Channel. To improve stormwater conveyance, the project will remove approximately 325,000 cubic yards of silt from the Channel within the limits of the Barker Reservoir. The total cost is unknown at this point. Funding provided by FEMA will cover 90% of the construction cost leaving a 10% local match.

- **Local Cost:** Funding for this project will be provided through an advance funding agreement from County General Fund Reserves. Should other federal, state or local funds become available; the County will reimburse the reserve account pursuant to the terms of the agreement.
- **Status:** The Drainage District has received a nationwide permit for desilting within the Willow Fork channel within the Barker Reservoir. With the nationwide permit established the Drainage District can focus on the remaining approvals required under the National Environmental Protection Act. Pending these approvals, the construction plans for desilting can be finalized and work can begin. *This project's invitation for bids went out on February 11, 2019 and bids are due March 5, 2019.*

**NRCS Projects** The Drainage District has been awarded \$52 million from the Natural Resources Conservation Service to repair damage to Willow Fork of Buffalo Bayou, Oyster Creek, and Cane Island Branch. The County will be paying engineering costs separately. The funding provided by NRCS will cover 90% of the construction cost leaving a 10% local match. *The NRCS funding will be divided into multiple projects in order to meet NRCS's 180-day deadline for project completion.*

- **Local Cost:** The local match is estimated at \$5.2 million. Funding for this project will be provided through an advance funding agreement from County General Fund Reserves. Should other federal, state or local funds become available; the County will reimburse the reserve account pursuant to the terms of the agreement.
- **Status:** *NRCS has provided an agreement to the County for the NRCS projects. The agreement for \$2,433,613.77 was approved at Commissioners Court on February 5, 2019.* These projects cannot move forward until the US Army Corps of Engineers (USACE) environmentally clears the projects. Bio-West Inc. is currently working on the environmental assessment for USACE approval. The Cane Island Branch design stage is complete and M&E consultants are preparing a construction bid package.

**HMGP-Funded Rain Gauge Network** This hazard mitigation project, in cooperation with the Harris County Flood Control District, would expand the Harris County Flood Control District ALERT2 Flood Warning System into Fort Bend County by installing 30 gauges to provide real-time data before, during, and after rainfall incidents. If HMGP grant funds can be obtained, then FEMA will cover 75% of the construction cost leaving a 25% local match.

- **Local Cost:** The local match is estimated at \$134,000. Funding for this project will be provided through an advance funding agreement from County General Fund Reserves. Should other federal, state or local funds become available; the County will reimburse the reserve account pursuant to the terms of the agreement.
- **Status:** Commissioners Court approved the HMGP application on August 28, 2018. TDEM has completed their review process and the application has been sent to FEMA for review. *As of February 2019, Fort Bend County is still waiting for FEMA's decision on this project.*

**FBC-Funded Rain Gauge Network** In conjunction with the project above, the Fort Bend County Drainage District is proactively installing five additional ALERT gauges within the county over the coming months. These gauges will be installed and maintained through an interlocal agreement with the Harris County Flood Control District (HCFCD).

- **Local Cost:** The project cost is estimated to be approximately \$47,500, to be funded by the County via the FY2019 Drainage District budget.
- **Status:** The Drainage District met with HCFCD on December 5, 2018 to finalize the locations for the gauges and equipment lists have since been developed. The Drainage District started engaging equipment vendors in mid-December 2018. Once vendor agreements are in place and all equipment is received, installation will begin. *As of February 2019, a portion of the equipment has been received; the Drainage District is waiting for the remaining equipment to be delivered. In the meantime, the Drainage District remains engaged with HCFCD on equipment status and plans for the equipment installation.* It will likely be springtime in 2019 when the gauges will be up and running.

**Brazos River Gauge at I-69** Fort Bend County Drainage District recently amended their agreement with the US Geological Survey (USGS) to install and maintain a new gauge on the Brazos River at I-69 in Sugar Land, similar to the existing USGS gauges in Richmond and Hempstead. *Being a USGS satellite-based gauge, this will allow for the National Weather Service – West Gulf River Forecast Center to create a forecast point at this location, which will forecast river elevations 5-days out during significant flood events.*

- **Local Cost:** The local cost of this gauge, which includes \$25,000 for installation and yearly maintenance costs of \$15,900, will be funded by the Drainage District budget.
- **Status:** The gauge is tentatively scheduled to be installed by the USGS in the spring of 2019 with official river forecasts for this gauge brought online by the end of 2019.

**Peek Road Bridges** This project will repair the bridge structures, located between Fry Road and Westheimer Parkway, damaged by floodwaters. The flooding caused severe erosion, resulting in the collapse and failure of the sloped paving along the channel banks. Though the bridges are not currently affected by the slope paving failure, this project will make needed repairs and mitigate future damages from flooding. The cost of the project is \$1.025 million. The Federal Highway Administration will be covering 75% of the cost leaving a 25% local match.

- **Local Cost:** The local match is estimated at \$256,000. Funding for this project will be provided through an advance funding agreement from County General Fund Reserves.

Should other federal, state or local funds become available; the County will reimburse the reserve account pursuant to the terms of the agreement

- **Status:** CivilTech received a purchase order in early October 2018 to begin the design phase of this project. *As of February 2019, this project is still in the design phase and will continue to be so for several more months.* Once the design phase is complete, the County can accept bids for bridge repairs.

**Harlem Road Elevation Project** This project includes the design for elevating the road and additional culverts to allow Harlem Road to remain open during a 100-year flood event. The closure of Harlem Road near US 90A resulted in a detour of 11.4 miles and affected emergency responders during the closure. The total cost is \$1,720,278. If Hazard Mitigation Grant Program (HMGP) funds can be obtained, then FEMA will cover 75% of the construction cost leaving a 25% local match.

- **Local Cost:** The local match is estimated at \$430,069. Funding for this project will be provided through an advance funding agreement from County General Fund Reserves. Should other federal, state or local funds become available; the County will reimburse the reserve account pursuant to the terms of the agreement.
- **Status:** Commissioners Court took action on approving this HMGP application during the August 28, 2018 meeting. The application has been submitted to the State, *and as of February 2019 is still pending TDEM and FEMA review.*

## STUDIES

**FBC Watershed Study** The Fort Bend County Watershed Study will provide an analysis of critical watersheds, drainage criteria, and flood concerns following Hurricane Harvey. This study will include 1) update of the Master Drainage Plan in critical watersheds; 2) Brazos River erosion analysis; 3) Brazos River floodplain development analysis; 4) update of the Drainage Criteria Manual; 5) analysis of potential flood control projects; and 6) Barker Reservoir project monitoring and engagement. It should be noted that NOAA Atlas 14 rainfall data is planned to be released by the end of 2018 and will be incorporated into the project.

- **Local Cost:** The project cost is estimated to be approximately \$3.4 million, to be funded by the County.
- **Status:** Fort Bend County has contracted with Freese and Nichols, Inc. to review and update the Drainage Criteria Manual and Brazos River Floodplain Master Plan, as well as to develop and update the Stream Master Drainage Plans, which include analysis of regional detention systems. *All studies are progressing rapidly with varied completion dates depending on the complexity of the study.*

## REGULATIONS

### **Floodplain Regulations**

The Engineering Department is leading efforts to update the County's floodplain regulations based on information learned as a result of recent flood events, including the need to review the calculation of substantial damage in conformance with the variance approved by the Court.

- Local Cost: None.
- Status: The Engineering Department is working with the Drainage District to update the minimum slab elevation requirements for structures based on Atlas 14, Volume 11 rainfall data. *Since January 2019, questions have been raised about the Atlas 14 data. Once those questions are resolved, the revised minimum slab elevation requirements for structures will need to be vetted with the development community. From there the Engineering Department will work with the County Attorney's Office to bring its recommendations for revising the Regulations to Commissioners Court for approval. It is unknown at this time of when this will occur.*

## HAZARD MITIGATION GRANT PROGRAM

### **Hazard Mitigation 2016 (Buyout Program)**

In October 2016, the County submitted applications to FEMA, through its Hazard Mitigation Grant Program (HMGP), to acquire and demolish 42 properties. The County has received \$10,457,883.48 from the Hazard Mitigation Grant Program (on a 75% federal and 25% local basis) to complete this project.

- Local Cost: The local match is \$2,614,470. *Fort Bend County will provide the 25% local match for this program.*
- Status: The performance period for the buyout program ends on February 20, 2020. Fort Bend County has met with the selected contractor for project administration. *On January 29, 2019, Commissioners Court approved to cover the 25% local match on behalf of the residents. This will greatly streamline and speed up the implementation process. As of mid-February, the contractor has begun reaching out to residents on this grant. A grant kick-off meeting for residents has been scheduled during the last week of February for the contractor to review the buyout process.*

### **Hazard Mitigation 2016 (Structure Elevations)**

In October 2016, the County submitted an application for the elevation of 12 structures located in areas that flooded during that year. The total project cost is \$2,088,300, to be funded by the Hazard Mitigation Grant Program, on a 75% federal and 25% local basis.

- Local Cost: *The local match associated with this grant is 25%. Homeowners will be given three options regarding the local match: 1) the homeowner can self-fund the 25% cost, in which case the homeowner will be required to pay the totality of their 25% up front before any County or grant funds are expended.; 2) The homeowner can discuss his/her possible eligibility with the Fort Bend County Community Development Department for the use of Community Development Block Grant – Disaster Recovery (CDBG-DR) funds, in which case if the homeowner is deemed eligible and wants to move forward with using CDBG-DR funds, the homeowner will be removed from the HMGP grant and placed on the CDBG-DR grant. It is important to note that the CDBG-DR grant timeline is farther behind in the process than the HMGP grant and will result in a significant delay in progress. However, the use of CDBG-DR funds results in 100% coverage of elevation costs.; 3) As this grant is 100% voluntary, the homeowner can chose to be removed from the HMGP grant.*

- *Status: Fort Bend County has made the final selection for a vendor to implement this project and a contract and Purchase Order has been issued. As of mid-February, the contractor has begun reaching out to residents on this grant. A grant kick-off meeting for residents has been scheduled during the last week of February for the contractor to review the elevation process.*

### **Hazard Mitigation 2017 (Infrastructure)**

The County has developed applications for infrastructure projects to submit for Hazard Mitigation Grant Program (HMGP) funding. Each of these projects required data collection and the completion of a benefit cost analysis (*the majority of which were completed by Tetra Tech*). When projects showed a positive benefit (per HMGP rules), an application was developed and provided to Commissioners Court for consideration.

- **Local Cost:** If an application for a project is funded, there will be a 25% match. Funding for this project will be provided through an advance funding agreement from County General Fund Reserves. Should other federal, state or local funds become available; the County will reimburse the reserve account pursuant to the terms of the agreement.
- **Status:** All proposed projects have undergone a benefit cost analysis review and applications have been developed for those projects that received a qualifying score. Commissioners Court approved two applications on August 28, 2018; these applications have been submitted to the State. The applications are for the elevation of Harlem Road and for a countywide rain gauge network (both described above). *On January 29, 2019, Commissioners Court approved four additional HMGP applications, which have since been submitted to State. These projects include Bessie's Creek Detention, Jones Creek Detention, McCrary Road Evacuation Route, and Flat Bank Creek Diversion.* For more information related to the 2017 Hazard Mitigation Grant Applications, please see Appendix D.

## **COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY**

**CDBG-DR 2016 (Housing)** The US Department of Housing and Urban Development provides CDBG-DR monies to communities to assist in recovery from presidentially declared disasters, with a focus on low income areas. The County will receive \$9,362,472 to be used for housing activities countywide. Project activities will include buyouts, homeowner assistance, homebuyer assistance, planning, and program administration.

- **Local Cost:** None.
- **Status:** The contract was executed by the Texas General Land Office (GLO) and Commissioners Court approved the contract on August 28, 2018. *After a posted public comment period, the final buyout guidelines were submitted to the GLO for final approval on January 28, 2019. Fort Bend County is awaiting final approval of the guidelines. The Community Development Department submitted draft guidelines for rehabilitation and reconstruction programs to the GLO on January 22, 2019. The guidelines for homebuyer assistance (down payment, closing cost, etc.) are being developed. In addition, the Needs Assessment was submitted to GLO for final approval. All financial documents have been submitted to GLO for funding deposits. This grant is slated to end October 12, 2020.*

**CDBG-DR 2016 (Non-Housing)** Pursuant to CDBG-DR eligibility requirements, CDBG-DR funds can be used for the restoration of infrastructure damaged during a presidentially declared disaster. A total of \$7,660,204.65 is allocated for CDBG-DR non-housing activities and is split among the 2016 disaster impacted jurisdictions. The County will receive \$1,932,545 of this funding to be used for infrastructure activities.

- **Local Cost:** None.
- **Status:** The deadline to submit non-housing projects to the GLO for this funding was extended to September 1, 2018. Approximately \$5.7 million has been allocated to the 2016 disaster impacted jurisdictions. The County did not qualify any eligible non-housing projects. The GLO continues to review non-housing project applications submitted by the 2016 disaster impacted Fort Bend County jurisdictions to determine their eligibility. Any funding that is not used by Fort Bend County disaster impacted jurisdictions will be used for 2016 CDBG-DR Housing programs.

**CDBG-DR 2017 (Buyouts & Acquisitions)** The County is estimated to receive \$21,155,575 to be used for buyouts and acquisitions, per the final draft of the H-GAC Method of Distribution (MOD). Homeowners interested in other housing programs must apply directly to the GLO.

- **Local Cost:** None.
- **Status:** The GLO approved the HGAC MOD on October 3, 2018. Fort Bend County has indicated to the Texas General Land Office that the County intends to use these funds. The County has until *March 15, 2019* to develop and submit programs applications to the General Land Office. *The draft application for buyouts is available for review and comment by contacting the Fort Bend County Community Development Department.*

**CDBG-DR 2017 (Infrastructure)** The County is estimated to receive \$17,417,192 for infrastructure activities.

- **Local Cost:** None.
- **Status:** The GLO approved the HGAC MOD on October 3, 2018. Fort Bend County has indicated to the Texas General Land Office that the County intends to use these funds. Fort Bend County departments are currently working to develop projects applications to submit to

the General Land Office under this grant. *The County has until March 15, 2019 to develop and submit programs applications to the General Land Office.*

**CDBG-DR 2017 (Housing and Non-Housing Programs)** *The General Land Office has launched several housing and non-housing programs (other than the buyouts/acquisitions program and the local infrastructure program) under the 2017 CDBG-DR grant. These programs include the Homeowner Assistance Program (HAP), Homeowner Reimbursement Program (HRP), Affordable Rental Program, Economic Revitalization Program, and Planning Studies. For more information about these programs, please visit the General Land Office's recovery website at <http://recovery.texas.gov/>.*

- ***Local Cost:** None.*
- ***Status:** These programs are geared to low-to-moderate income residents (although any resident can apply) inside the Hurricane Harvey disaster-affected counties, pending eligibility requirements. These programs also generally operate on a first-come, first-served basis.*
  
- ***Homeowner Assistance Program (HAP)** This program can provide funding for rehabilitation and reconstruction of eligible owner-occupied single-family homes damaged by Hurricane Harvey. HAP operates on a first come, first serve basis and will operate until the program is out of funds.*
  - ***Local Cost:** None.*
  - ***Status:** The Homeowner Assistance Program opened up its application process on December 3, 2018 and is still accepting applications. As of February 13, 2019, approximately 218 applications from Fort Bend County have been received by the GLO for this program.*
  
- ***Homeowner Reimbursement Program (HRP)** This program can reimburse eligible homeowners for certain out-of-pocket expenses incurred for repairs to their home including reconstruction, rehabilitation, or mitigation up to \$50,000. HRP will operate on a first come, first serve basis and will operate until the program is out of funds.*
  - ***Local Cost:** None.*
  - ***Status:** The GLO will likely open up the application process for this program by the end of February 2019.*
  
- ***Affordable Rental Program** This program provides funding for rehabilitation, reconstruction, and new construction of affordable multi-family housing units in areas impacted by Hurricane Harvey.*
  - ***Local Cost:** None.*
  - ***Status:** As of February 2019, six apartment complexes in Fort Bend County have applied for this program.*
  
- ***Economic Revitalization Program** This program allows for interim assistance to small businesses (up to \$250,000) impacted by Hurricane Harvey through deferred forgivable loans in exchange for job creation or retention for low-to-moderate income employees.*
  - ***Local Cost:** None.*
  - ***Status:** The GLO will open up the application process for this program in the spring of 2019.*

## COMMUNITY RECOVERY

**Fort Bend Recovers** Fort Bend Recovers (FBR) is the official long-term recovery committee of Fort Bend County. Thirty-four (34) agencies are formal members of FBR and are comprised of local government agencies, non-profit organizations, faith-based organizations, and business partners within the community. Approximately 70 agencies attend FBR meetings and coordinate activities and programs. Fort Bend Recovers provides a variety of services and assistance including emergency basic needs (food and emergency financial assistance), free mental health counseling, long-term case management services, and home repair assistance. Fort Bend Recovers is also able to refer residents to other assistance programs and services that do not fall under Fort Bend Recovers. There are no income thresholds to qualify for FBR assistance; instead residents must demonstrate verified financial need and have been affected by the disasters of 2016 and/or Hurricane Harvey. [www.fortbendrecovers.org](http://www.fortbendrecovers.org)

- **Local Cost:** None.
- **Status:** *FBR is shifting its focus to long-term recovery and conducting outreach to ensure that underserved communities are being connected to recovery resources. FBR's next meeting is scheduled for Tuesday, March 5, 2019.*
  
- **FBR Case Management** Disaster Case Management is the first step in the Fort Bend Recovers recovery process and acts as the point of contact for assistance programs through Fort Bend Recovers and other long-term recovery programs. Case Managers meet one on one with residents to develop a recovery plan and determine what resources are available to assist with the resident's recovery. Case Managers then to refer eligible residents to those resources and programs. To date, the agencies that are a part of this work group have helped access over \$400,887 in unmet needs funding for eligible residents.
  - **Local Cost:** None.
  - **Status:** *As of February 5, 2019, the Case Management Work Group has 1,746 assigned cases to case management agencies, of which there are 918 open cases, 826 closed cases, and 2 duplicate cases. (These numbers do not account for cases being worked on by disaster case management agencies that are not directly affiliated with or funded under Fort Bend Recovers.)*
  
- **FBR Donations Management** This work group solicits, inventories, and distributes donated items for disaster recovery efforts. The Donations Management Work Group is operating one donations warehouse in Booth for building materials. Overall, this work group has managed over \$1 million in donated goods and warehouse space since the 2016 flooding disasters.
  - **Local Cost:** The cost of the lease and utilities of the donations warehouse in Booth until March 31, 2019. This funding is coming from the donation made to Fort Bend County by Polk County, Iowa.
  - **Status:** *The Donations Management Work Group is working to hand out the remaining building supplies in the donations warehouse in preparation of closing the warehouse by March 31, 2019. Beyond March 31, 2019, individual Repair/Rebuild organizations will warehouse their own materials. Only building supplies are available at the donations warehouse for Repair/Rebuild agencies or residents going through the case management and repair/rebuild process.*

- **FBR Repair/Rebuild** This work group oversees the basic home repairs of affected homeowners to a safe, sanitary, secure and functional condition. This includes performing clean-ups (muck and gut), assessments and estimates, project prioritization, assignment of work crews and construction management. Fort Bend Recovers offers two home repair programs: a turnkey Home Repair Program and a homeowner managed repair program (called the Construction Pool Program).

  - Local Cost: The County has paid *\$64,690.35* in dumpster costs on behalf of Repair/Rebuild Work Group organizations completing Fort Bend Recovers related projects. The County will continue to provide dumpsters for Repair/Rebuild organizations through *August 31, 2019*.
  - Status: *As of January 2019, the FBR Repair/Rebuild Work Group has a new project manager who is reviewing all referrals and applications for repair/rebuild assistance. Assistance is still being provided to eligible homeowners under this work group.*
  
- **FBR Spiritual & Mental Health** Disaster behavioral health and emotional support are a large component to any disaster recovery. This work group is comprised of mental healthcare practitioners as well as pastors, ministers, chaplains, and other clergy who work in partnership with one another to help disaster-affected communities recover their mental, emotional, and spiritual well-being. This work group is able to provide free emotional support sessions to interested residents as well as coordinate group support groups.

  - Local Cost: None.
  - Status: The agencies under this work group continue to explore new ways to provide home-based and community-based services to residents affected by Hurricane Harvey.

**Direct Housing Programs** FEMA is funding several direct (temporary) housing programs in Texas. These programs are coordinated through the Texas General Land Office, who has in turned tasked local council of governments (including the Houston-Galveston Area Council) to offer local support for these programs. Current Direct Housing programs include Manufactured Housing Units (MHUs)/Recreational Vehicles (RVs) and Direct Leasing (rental assistance for rental properties not generally available to the public). FEMA determined the eligibility of residents for these programs and the General Land Office works directly with the residents to implement the appropriate housing program. Caseworkers through H-GAC and the GLO continue to maintain contact with residents in these programs to ensure that residents are working towards permanent housing solutions.

- Local Cost: None.
- Status: The FEMA Direct Housing Program has been granted a six-month extension and is now slated to end on August 25, 2019. *As of January 10, 2019, 24 households are being housed in a MHU or RV throughout the county (for a total of 25 units).* The Engineering Department is tracking these units to ensure that all permitting requirements are being met.

## RECOVERY FINANCES

**FEMA Public Assistance** Public Assistance is FEMA’s largest grant program providing federal assistance to government organizations and certain private nonprofit organizations responding to and recovering from major disasters. The program provides emergency assistance to save lives and protect properties, and assists with permanently restoring infrastructure affected by a federally declared incident. Appendix C of this Report provides a summary of damages resulting from Hurricane Harvey. The summary indicates that the County suffered approximately \$80 million of damages to infrastructure, in addition to expenses related to providing emergency protective measures.

- Local Cost: If FEMA deems the County’s expenses as eligible, *the local match is estimated to be just over \$7 million.*
- Status: The County Auditor’s Office meets with FEMA and TDEM on a weekly basis to discuss the disaster damage and project worksheet formulation.

## COMPLETED/REMOVED PROJECTS

**Ditch H Channel Repair** This project involves repairing 7,400 feet of erosion from sloughing in the channel caused by the Brazos River backing up into the channel. The cost is unknown at this time.

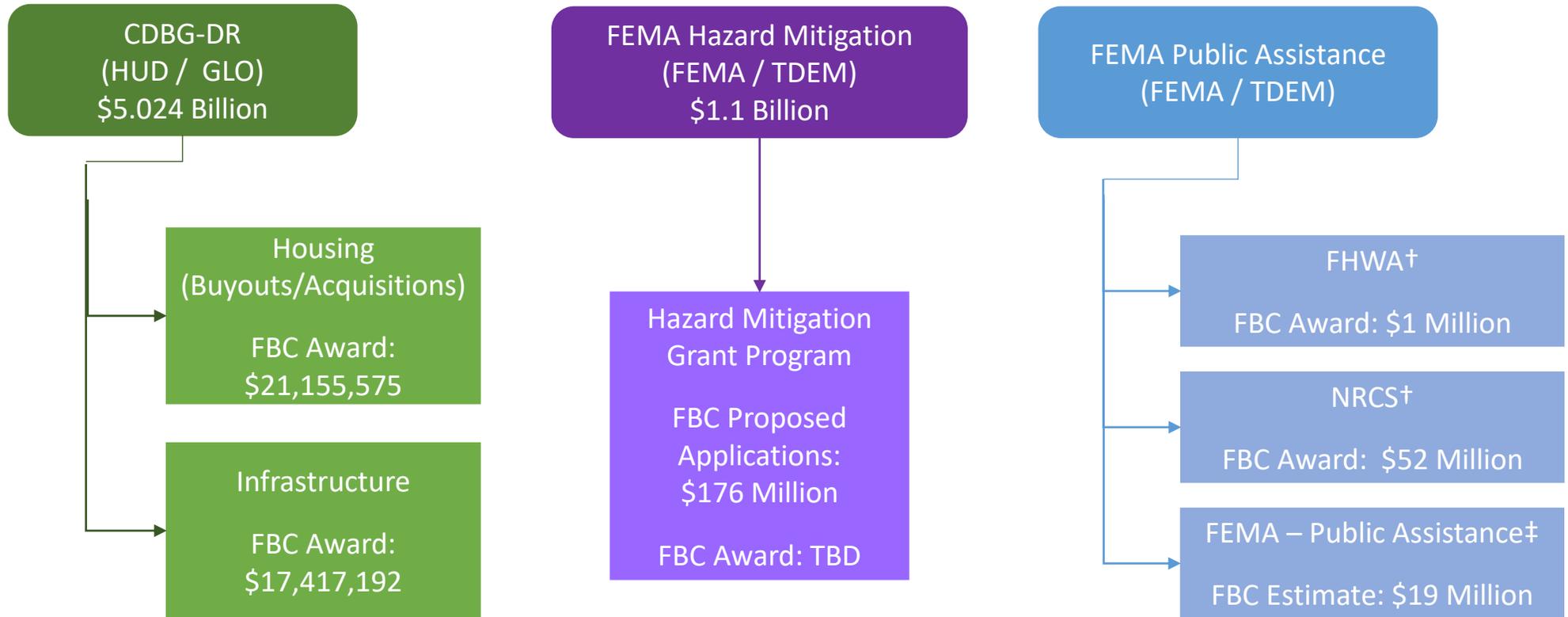
- Local Cost: *The Fort Bend County Drainage District is providing labor towards this project.*
- Status: *This project was submitted to FEMA for review and possible cost sharing. FEMA has since rejected this project, determining that the damage to Ditch H was caused pre-Hurricane Harvey. In the meantime, the Drainage District has completed a major slough repair along the west bank of Ditch H in coordination with Levee Improvement District (LID) 17.*

**Barker Reservoir Levee Study** This high-level study investigated the feasibility and estimated cost of enclosing the western side of the Barker Reservoir with a levee as well as pump stations to lessen flooding to private properties adjoining the reservoir. The final report was accepted by Commissioners Court on September 25, 2018. The report identifies feasible alternatives for future consideration. The preliminary estimated cost for the preferred alternative for the project is in the range of \$667,000,000 to \$1,020,000,000.

- Local Cost: No cost required beyond what the Court has previously funded.
- Status: Complete. No further action is planned at this time.

## APPENDIX A

# Federal Funding Streams / Grant Awards 2017



**CDBG-DR** – Community Development Block Grant – Disaster Recovery

**FBC** – Fort Bend County

**FEMA** – Federal Emergency Management Agency

**FHWA** – Federal Highway Administration

**GLO** – Texas General Land Office

**HUD** – US Dept. of Housing and Urban Development

**TDEM** – Texas Division of Emergency Management

**NRCS** – Natural Resources Conservation Service

† Certain projects can potentially be funded by these agencies. If the agency does not fund the project, FEMA can still potentially fund the project under Public Assistance.

‡ Based on FEMA approved damages

## APPENDIX B

### Community Recovery Statistics

As of February 13, 2019

Number of homes that may have been destroyed or damaged	6,824 homes estimated*
Number of FEMA Approved Applicants	22,935 applications
Amount of FEMA Assistance to Individuals and Households	\$ 96,949,249.22
Amount of FEMA Individuals and Households Program Max Grants Awarded (\$33,000)	208
Number of National Flood Insurance Program (NFIP) Claims Submitted	3,076*
Estimate of NFIP Settlements Paid	\$ 202,510,000*
Number of SBA Low Interest Disaster Loans Approved	3,436 applications
Amount of Approved SBA Low Interest Disaster Loans	\$ 10,080,000
FEMA Direct Housing: MHUs/RVs Housed	24
Fort Bend Recovers: Case Management (as of 2/13/2019)	1,746 assigned cases 918 open cases 826 closed cases 2 duplicate cases
Fort Bend Recovers: Repair/Rebuild	Pending updated numbers

\* No change since last report

## APPENDIX C

### Fort Bend County

# Hurricane Harvey County Damage Summary

As of February 13, 2019

Type	Agency	Description	Total Project	Funding Source			Expended to date	Reimbursed to date	
				Fed/State Application	Fed/State Award	Local Match			Insurance
Debris	FEMA	Debris Removal	\$ 10,379,927	\$ 9,629,640	\$ 10,379,927	\$ -	\$ 10,379,927	\$ 5,469,024	
EPM	FEMA	Emergency Protective Measures	4,080,497	4,080,497	4,080,497	-	4,080,497		
Roads/Bridges	FEMA	Road & Bridge Repairs	540,059	486,053	486,053	54,006	630,000		
Ditches	NRCS	Willow Fork Channel	31,441,320	28,297,188	28,297,188	3,144,132			
Ditches	NRCS	Oyster Creek Channel	10,388,780	9,349,902	9,349,902	1,038,878			
Ditches	NRCS	Willow Creek - Cane Island	10,248,075	9,223,268	9,223,268	1,024,808			
Ditches	FEMA	Willow Fork Desilting	4,800,000	3,600,000	3,600,000	1,200,000	2,697,699		
Ditches	FEMA	Big Creek Channel	800,000	600,000	600,000	200,000			
Ditches	FEMA	Flat Bank/Steep Bank Channel	500,000	375,000	375,000	125,000			
Bldgs/Equip*	FEMA	Multiple Facilities Damaged	1,000,000	100,000	80,000	20,000	900,000	1,000,000	
Bridge	FHWA	Peek Road Bridge	1,025,528	769,146	769,146	256,382		907,227	
<b>Totals</b>			<b>\$ 79,273,180</b>	<b>\$ 66,510,693</b>	<b>\$ 67,240,980</b>	<b>\$ 7,063,205</b>	<b>\$ 900,000</b>	<b>\$ 18,788,122</b>	<b>\$ 6,376,251</b>

FEMA Federal Emergency Management Agency - Department of Homeland Security

NRCS Natural Resource Conservation Service - Department of Agriculture

FHWA Federal Highway Administration - Department of Transportation

\* FEMA will pay what is not reimbursed by insurance, FBC estimates \$100,000 total not reimbursed by insurance for damages to various facilities.

## APPENDIX D

### Development of Hazard Mitigation Grant Program Applications

As of February 13, 2019

PROJECT	NOTES	STATUS
Harlem Road Elevation Project	Commissioners Court approved application submittal on August 28 <sup>th</sup> . The project would elevate a portion of Harlem Road for a total amount of \$1,720,278, with a 25% local match not to exceed \$430,069. Application received by TDEM on August 31, 2018.	Pending TDEM and FEMA Review
Rain Gauge Network	Commissioners Court approved application submittal on August 28 <sup>th</sup> . The project would install a rain and flood gauge network across the County for a total amount of \$534,731, with a 25% local match not to exceed \$133,683. Application received by TDEM on August 31, 2018.	TDEM Review Complete, Sent to FEMA for Review
Cangelosi Ditch Widening	Draft application has been completed and sent to Missouri City for their review and submittal to TDEM	Pending Missouri City Review & Submittal to TDEM
Flat Bank Creek Diversion Channel	Benefit-cost analysis (BCA) screening has been reanalyzed and Commissioners Court approved the application submittal on January 29, 2019. The project would construct control structures across Flat Bank Creek Diversion Channel and Lower Oyster Creek for a total amount of \$45,000,000, with a 25% local match not to exceed \$11,250,000. Application received by TDEM on January 31, 2019.	Pending TDEM and FEMA Review
Bessie's Creek Detention	Commissioners Court approved the application submittal on January 29, 2019. The project would construct a detention basin along Bessie's Creek for a total amount of \$27,493,357.93, with a 25% local match not to exceed \$6,873,339.48. Application received by TDEM on January 31, 2019.	Pending TDEM and FEMA Review
Jones Creek Detention	Commissioners Court approved the application submittal on January 29, 2019. The project would construct a detention basin along Jones Creek for a total amount of \$44,000,000, with a 25% local match not to exceed \$11,000,000. Application received by TDEM on January 31, 2019.	Pending TDEM and FEMA Review
McCrary Road Evacuation Route	Commissioners Court approved the application submittal on January 29, 2019. The project would connect two highways that currently serve as evacuation routes to other interstate highway systems for a total amount of \$57,000,000, with a 25% local match not to exceed \$14,250,000. Application received by TDEM on January 31, 2019.	Pending TDEM and FEMA Review
Mustang Bayou Channel Improvements	Benefit-cost analysis (BCA) screening completed. Benefit-cost ratio (BCR) less than 1.00. Work on this application has been suspended.	Suspended
Dry Creek Channel Improvements	Benefit-cost analysis (BCA) screening completed. Benefit-cost ratio (BCR) less than 1.00. Work on this application has been suspended.	Suspended
Stafford Run Improvements	Benefit-cost analysis (BCA) screening completed. Benefit-cost ratio (BCR) less than 1.00. Work on this application has been suspended.	Suspended

## APPENDIX D

Settlers Park – Chimneystone Drainage Improvements	County worked with the City of Sugar Land to get Notice of Intent (NOI) approved. NOI approved by TDEM on August 31, 2018. Sugar Land has indicated that they will prepare and submit application.	Closed
Covington Woods Drainage Improvements	After getting NOI approved by TDEM, the City of Sugar Land indicated it would be moving forward with project without using HMGP funding.	Closed
2 <sup>nd</sup> Street Outfall Structure	After getting NOI approved by TDEM, the City of Richmond indicated it would be moving forward with project without using HMGP funding.	Closed
Dry Creek Detention Pond	This project located in the City of Rosenberg. BCA screening complete. BCR less than 1.00	Closed
Willow Waterhole Expansion	This project located in the City of Missouri City. BCA screening complete. BCR less than 1.00	Closed
Big Creek Expansion	BCA screening complete. BCR less than 1.00	Closed
Brazos River Erosion Barrier	This project located in the City of Richmond. BCA screening complete. BCR less than 1.00	Closed
Dam #3 Emergency Bypass	This project located in the City of Sugar Land. BCA screening complete. BCR less than 1.00	Closed