



# Fort Bend County Recovery and Mitigation Report #4

September 19, 2018

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# Fort Bend County

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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 is in the final review of documents to be submitted to the US Army Corps of Engineers (USACE) for environmental clearance relating to desilting work within Barker Reservoir. Construction plans for desilting are complete, but need environmental clearance before finalizing. It is expected that the environmental clearance documents will be submitted to the USACE the week of September 17, 2018.*

**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. Funding provided by FEMA will cover 90% of the construction cost leaving a 10% local match.

- **Local Cost:** The local match will be covered by in-kind contributions from County.
- **Status:** This project is pending action by FEMA. A concern is the possibility of project funding being denied by FEMA, if they make a determination that damage was caused pre-Harvey. *In the meantime, the Drainage District is completing the second phase of repairing a major slough along the west bank of Ditch H in coordination with Levee Improvement District (LID) 17.*

**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.

- **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:** The project is pending NRCS providing an agreement to the County. In addition, this project cannot move forward until the US Army Corps of Engineers environmentally clears the project. Design for the first phase of Cane Island Branch is in the final design stage and NRCS has approved the preliminary designs.

**Flat Bank Creek Diversion Channel** This project would build a closure structure to prevent Brazos River backwater from traveling up the Flat Bank Creek Diversion Channel. The initial phase of the project has a total cost of \$25 million. 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 \$6.25 million; the funding source has not been determined. There are several potential cost share partners including Missouri City, Sugar Land, municipal utility districts, and levee improvement districts benefiting from construction of the improvements. If County participation is deemed necessary, 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:** This project is pending completion of a benefit cost analysis by Tetra Tech. If the project is deemed viable, the project will be placed on a future Commissioners Court agenda for approval to submit an HMGP application to the State.

**Rain Gauge Network** This 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 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, and the application has since been submitted to the State.

**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:** Commissioners Court approved on July 24, 2018 for the County to negotiate with CivilTech Engineering for RFQ 18-081, Engineering Services for Peek Road Bridge Repair Design. The Road & Bridge Department is waiting on the design proposal so a contract can be created and executed.

**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 since been submitted to the State.

## **STUDIES**

**Barker Reservoir Levee Study** This high-level study investigates the feasibility and estimate 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.

- **Local Cost:** No cost required beyond what the Court has previously funded.
- **Status:** The Engineering Department has reviewed the final draft; alternative cost scenarios are being added to the report. Pending further review by the Engineering Department, the report will be prepared for distribution to Commissioners Court.

**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:** *A Brazos River Erosion Study Professional Service Agreement has been approved and work is being performed by Huitt-Zollars. An approved Scope of Work has been established with Freese and Nichols, Inc. and a Professional Service Agreement is being prepared for the following projects: Drainage Criteria Manual review and update; Brazos River Floodplain Master Plan; and development and update of Stream Master Drainage Plans including analysis of Regional Detention Systems for applicable streams. Work is expected to begin in early October 2018.*

## 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, working with the County Attorney's Office, is working to bring its recommendations for revising the regulations to the Court in November 2018.

## HAZARD MITIGATION GRANT PROGRAM

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

In October 2016, the County submitted applications to FEMA, through its Hazard Mitigation Grant Program, 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. CDBG-DR funds will be used to the extent allowable based upon the CDBG-DR grant guidance towards the 25% local match. In circumstances where CDBG-DR funds cannot be used to assist the homeowner with offsetting the local match, then the 25% local match will be the responsibility of the homeowner, often times in the form of a reduced payment. Third party project administration assistance will be required. The County Auditor has requested the use of the Fort Bend County General Fund to pay for the 25% local match associated with the cost of procuring project administration.
- Status: The performance period for the buyout program ends on February 20, 2020. Currently, Fort Bend County has concluded the scoring of all submitted proposals for project administration and a formal vendor selection was made at the September 4, 2018 Commissioners Court. *Fort Bend County is currently in contract negotiations with the selected vendor. Once the negotiations have been completed, a contract will be drafted and taken to Commissioners Court for action. Once approved, a Purchase Order will be issued and project implementation will begin.*

### **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 is expected to be \$522,075. Initial plans, at time of application, were to use CDBG-DR funds to offset the local match requirements. If it turns out that such funds cannot be used, each homeowner would then be responsible for the local match in terms of reduced payment for the buyouts.
- Status: The award letter was accepted by Commissioners Court on August 14, 2018. Third party project administration assistance will be required. *Fort Bend County and the Texas Division of Emergency Management held a kick-off meeting on September 6, 2018. The Fort Bend County Purchasing Department and the Office of Emergency Management are working on the development of a request for proposals that will be released for third party project administration.*

## Hazard Mitigation 2017 (Infrastructure)

The County is developing applications for 14 specific infrastructure projects to submit for Hazard Mitigation Grant Program (HMGP) funding. The largest of these projects is the Flat Bank Creek Diversion Channel improvements (described above). Each of these projects requires data collection and then the completion of a benefit cost analysis (being done by Tetra Tech). When projects show a positive benefit (per HMGP rules), an application will be 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:** Weekly conference calls are being held with Tetra Tech in efforts to develop viable project applications. 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). *Currently, Tetra Tech is working on completing the Benefit Cost Analysis for Cangelosi Ditch improvements, Mustang Bayou improvements, and Dry Creek channel improvements. These are likely to be the next project applications that will be developed so long as they meet the benefit cost ratio as required by hazard mitigation requirements. For more information related to the 2017 Hazard Mitigation Grant Applications, please see Appendix D.*

## FLOOD PREPAREDNESS TRAINING

### FloodWarn Seminars

The National Weather Service will be hosting two upcoming seminars related to flooding. Each seminar will discuss types of flooding, watersheds, forecasts, warnings, flood risks, and flood insurance and will include a panel discussion. The first seminar will be held on September 27, 2018 and will be geared towards first responders and response partners. This seminar will be held from 10:30am-12:30pm at the Gus George Law Enforcement Academy. The second seminar will be held on October 17, 2018 from 6:30pm-8:30pm. This seminar will be held at the University of Houston campus in Sugar Land (14000 University Blvd, Sugar Land, TX 77479) in Brazos Hall, Room 103. Both seminars are free and open to the public.

- **Local Cost:** None.
- **Status:** Both FloodWarn Seminars are free and open to the public but registration is encouraged.

September 27, 2018 FloodWarn Seminar: <http://fbcoem.org/registration/registration-for-nws-floodwarn/>

October 17, 2018 FloodWarn Seminar: <http://fbcoem.org/registration/community-floodwarn-seminar-hosted-by-the-national-weather-service/>

## 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. *The Fort Bend County Community Development Department continues to develop housing program guidelines, a needs assessment, and an Affirmative Fair Housing Marketing Plan.*

**CDBG-DR 2016 (Non-Housing)** Pursuant to CDBG-DR eligibility requirements, CDBG-DR monies 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 is reviewing non-housing project applications submitted by the 2016 disaster impacted Fort Bend County jurisdictions to determine their eligibility. The GLO's review should be completed by mid-October.*

**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:** H-GAC submitted the final MOD to GLO on July 17, 2018 for approval. *At the direction of the GLO, H-GAC reopened their MOD for additional public comment through September 14, 2018.*

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

- **Local Cost:** None.
- **Status:** H-GAC has submitted the final MOD to GLO on July 17, 2018 for approval. *At the direction of the GLO, H-GAC reopened their MOD for additional public comment through September 14, 2018.*



## COMMUNITY RECOVERY

**Fort Bend Recovers** Fort Bend Recovers (FBR) is the official long-term recovery committee of Fort Bend County. Thirty (30) 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:** *Since the 2016 flooding disaster, FBR has received \$3 million in funding from area foundations, over \$230,000 in grant funding from the American Red Cross for unmet needs, and \$155,000 in funding from the American Red Cross for a staff position for Fort Bend Recovers for two years. In addition, United Way has invested over \$1.5 million in FBR partners and United Way has leveraged a Texas Workforce Solutions grant on behalf of FBR for two disaster recovery assistants to triage cases for disaster case management. FBR's next meeting is scheduled for Tuesday, October 2, 2018 with a focus on a Hurricane Harvey after action review of recovery programs and activities.*
- **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, 15 different agencies are a part of this work group and have helped access over \$300,000 in unmet needs funding for eligible residents.*
  - **Local Cost:** None.
  - **Status:** As of September 4, 2018, the Case Management Work Group has 1,190 active assigned cases to case management agencies, 10 unassigned cases, and 200 closed 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 oversaw the management of two donations warehouses for Hurricane Harvey, but currently operates just one warehouse. This donations warehouse contains furniture and household items for residents with a referral letter from a case manager and building materials for Repair/Rebuild agencies. 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 Tractor Supply Company Warehouse while the donations warehouse is open. This funding is coming from the donation made to Fort Bend County by Polk County, Iowa.

- Status: The Donations Management Work Group is operating one donations warehouse (Tractor Supply Company building) in Richmond. The lease on this warehouse is through the end of October 2018. *The work group is actively researching options for additional warehouse space and pushing harder to distribute the furniture currently in the warehouse.*
  
- **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 \$51,701.36 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 December 31, 2018.
  - Status: *As of September 11, 2018, the Repair/Rebuild Work Group has processed 246 applications (since September 1, 2017). Of those applications, 147 projects have been completed and 48 are active projects. There have been 44 applications not authorized to receive Fort Bend Recovers Repair/Rebuild services for various reasons. Applications continue to come in consistently. (These numbers do not account for cases being worked on by repair/rebuild organizations that are not directly affiliated with or funded under Fort Bend Recovers.)*
  
- **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 that comprise this work group have collectively provided more than 500 hours of individual, family, and group counseling/therapy to more than 90 households since Hurricane Harvey. In addition, this work group has teamed up with the FBR Repair/Rebuild Work Group to provide support to residents going through the repair/rebuild process. The agencies under this work group continue to provide home-based and community-based services.*

**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: As of September 17, 2018, there are 193 households eligible for direct housing. *Sixty-one (61)* households are being housed in a MHU or RV throughout the county. 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 over \$80 million of damages to infrastructure, in addition to expenses related to providing emergency protective measures.

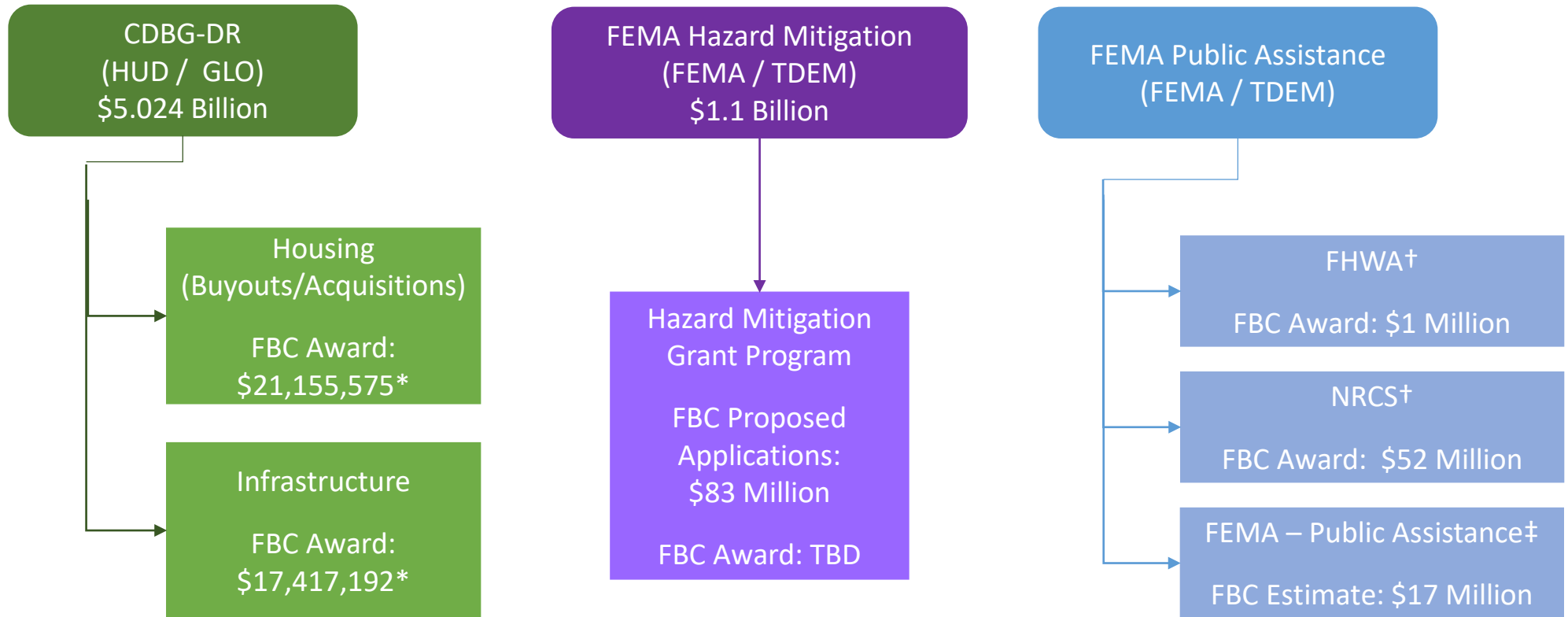
- Local Cost: If FEMA deems the County's expenses as eligible, the local match is estimated to be \$9.032 million.
- Status: The County Auditor's Office meets with FEMA and TDEM on a weekly basis to discuss the disaster damage and project worksheet formulation.

**Disaster Accounting Training** The Auditor's Office and the Office of Emergency Management is hosting the Texas Division of Emergency Management's (TDEM's) Disaster Accounting training series to better improve Fort Bend County's finance policies and procedures for seeking reimbursement from FEMA. This will ultimately be able to save the Fort Bend County community local tax dollars following future disasters.

- Local Cost: None.
- Status: *Approximately 40 representatives from various County departments attended the first training module on September 12, 2018. The Auditor's Office and Office of Emergency Management are working on next steps, including strengthening County processes for tracking time, equipment, etc. during a disaster as well as scheduling the subsequent training modules.*

## 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

\* CDBG-DR, pending HUD approval

† 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

Revised: 9/18/2018



## APPENDIX B

### Community Recovery Statistics

As of September 18, 2018

Number of homes that may have been destroyed or damaged	6,824 homes estimated*
Number of FEMA Approved Applicants	22,932 applications
Amount of FEMA Assistance to Individuals and Households	\$96,780,366.74
Amount of FEMA Individuals and Households Program Max Grants Awarded (\$33,000)	203
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	3,420 applications
Amount of Approved SBA Low Interest Disaster Loans	\$308,820,000
FEMA Direct Housing: Eligible Applicants	193*
FEMA Direct Housing: Applicants Found Other Housing Solution	116*
FEMA Direct Housing: MHUs/RVs Housed	61
Fort Bend Recovers: Case Management (as of 9/4/2018)	1,190 assigned cases* 200 closed cases*
Fort Bend Recovers: Repair/Rebuild (as of 9/11/2018)	246 processed applications since 9/1/2017 147 completed projects 48 active projects

\* No change since last report

## APPENDIX C

### Fort Bend County

# Hurricane Harvey County Damage Summary

As of September 13, 2018

Type	Agency	Description	Total Project	Funding Source			Expended to date	Reimbursed to date	
				Fed/State Application	Fed/State Award	Local Match			
Debris	FEMA	Debris Removal	\$ 10,944,049	\$ 10,556,341	\$ 10,944,049	\$ 917,943	\$ 10,944,049	\$ 4,515,708	
EPM	FEMA	Emergency Protective Measures	5,500,000	5,500,000	5,500,000	-	5,510,000		
Roads/Bridges	FEMA	Road & Bridge Repairs	630,000	567,000	567,000	63,000	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	530,234		
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			
Ditches	FEMA	Ditch H	3,500,000	2,625,000	2,625,000	875,000			
Bldgs/Equip*	FEMA	Freedom Park Maintenance Building	286,958	100,000	100,000	186,958	286,958	186,958	
Bldgs/Equip*	FEMA	Vehicles - Totaled	83,380				\$ 83,380	83,380	
Bldgs/Equip*	FEMA	Vehicles - Damaged	8,029				8,029	8,029	
Bldgs/Equip*	FEMA	Mustang Park	24,525				24,525	24,525	
Bldgs/Equip*	FEMA	Freedom Park Ball Fields	200,000				200,000	200,000	
Bridge	FHWA	Peek Road Bridge	1,025,528	769,146	769,146	256,382			
<b>Totals</b>			<b>\$ 80,380,644</b>	<b>\$ 71,562,844</b>	<b>\$ 71,950,553</b>	<b>\$ 9,032,100</b>	<b>\$ 315,934</b>	<b>\$ 18,217,175</b>	<b>\$ 5,018,600</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. FBC submitted more projects than needed.

Funding source of these projects could change as the process with FEMA is ongoing.

## APPENDIX D

### Development of Hazard Mitigation Grant Program Applications

As of September 17, 2018

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 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.	Pending TDEM review
Flat Bank Creek Diversion Channel	Benefit-cost analysis in progress.	Pending Benefit-Cost Analysis
Cangelosi Ditch Widening	County working with the City of Missouri City to develop application. Benefit-cost analysis in progress.	Pending Benefit-Cost Analysis
Mustang Bayou Channel Improvements	County working with the City of Missouri City to develop application. Benefit-cost analysis in progress.	Pending Benefit-Cost Analysis
Dry Creek Channel Improvements	County working with the City of Rosenberg to develop application. Benefit-cost analysis in progress	Pending Benefit-Cost Analysis
Stafford Run Improvements	Benefit-cost analysis (BCA) screening completed. Benefit-cost ratio (BCR) less than 1.00. Work on this application suspended pending release of NOAA Atlas 14 rainfall data.	Suspended
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