# $179 million granted by Texas GLO for historic disaster mitigation projects in Galveston County

*Funds to improve drainage and wastewater infrastructure approved for six entities in Galveston County*

AUSTIN - Today in the city of Galveston, Texas Land Commissioner George P. Bush joined Galveston Mayor Craig Brown, La Marque Mayor Keith Bell, Texas City Mayor Dedrick Johnson, and Dickinson Mayor Sean Skipworth to announce the Texas General Land Office (GLO) approved $179 million in flood mitigation projects for the cities of Dickinson, Galveston, Hitchcock, La Marque and Texas City as well as Galveston County Water Control & Improvements District #1. These drainage and wastewater infrastructure projects will directly benefit more than 123,000 residents in majority low-to-moderate income (LMI) areas that have faced repetitive storm damage in 2015 and in 2017 with Hurricane Harvey.

“During Hurricane Harvey alone, parts of Galveston County got more than 28 inches of rain, and the combination of storm surge and rainfall was devastating,” said Commissioner Bush. “We received more than $6.5 billion in requests for mitigation projects from majority low-to moderate-income communities. This demonstrates the abundant need for resiliency assistance across the state. This mitigation funding has never been available before, and the benefits of these systemwide improvements will make life better for generations of Texans.”

“I and the City of Galveston are extremely excited about participating in the GLO Hurricane Harvey State Mitigation Competition and being chosen as a Grant Recipient of funds allocated by the U.S. Department of Housing and Urban Development for the CDBG-MIT Program,” said Dr. Craig Brown, Mayor of Galveston. “The infrastructure improvements associated with our Southshore Drainage Project will reduce long-term risks of damage and loss of property and help alleviate suffering, and hardship for our residents. Once complete, drainage improvements will increase the city’s resilience to natural disasters and help mitigate re-occurring flooding and improve accessibility to the major thoroughfares during an evacuation. These improvements will also help provide access to the University of Texas Medical Branch as well as the Island Community Center, which serves as an evacuation hub for our residents during a storm event. This grant not only signifies these much-needed improvements but also signifies a partnership between the General Land Office and the City in protecting our citizens from natural disasters. Thank you to the GLO and our City Staff for making this grant a reality and placing the protection of our citizens as a top priority, now and in the future.”

“Nearly 80% of Dickinson was flooded during Hurricane Harvey, but our community is resilient, and we have worked hard to recover from this unprecedented disaster,” said Dickinson Mayor Sean Skipworth. “But Dickinson wants to do more than simply recover what we lost; we want to work towards a vibrant future. This $50 million drainage project, funded by a grant from the Texas General Land Office, will be a substantial step in paving the way to that future.”

"The nearly $50 million of funding awarded by Commissioner George P. Bush and the Texas GLO is truly going to change the future of La Marque," said Mayor Keith Bell. "La Marque is a coastal city. We are resilient, but hurricanes and major storms can overwhelm our aging drainage and wastewater infrastructure, resulting in flooding, danger to the public, and destruction or loss of property. The repairs needed in our infrastructure are necessary, and this grant allows us to complete crucial, big ticket projects while simultaneously working on smaller infrastructure improvement projects across our

community. These funds have propelled us by leaps and bounds and helped us balance the needs of our community as a whole. With every infrastructure improvement, the scales between our existing neighborhoods and new and expanding neighborhoods on the west side of town even a bit more. We want every citizen of La Marque to enjoy the same quality of life and peace of mind - during sunny days and during storms."

“Texas City is a coastal City located just 14 miles northwest of Galveston Island. We often bear the brunt of hurricanes and major storms, which frequently overwhelm our drainage and wastewater infrastructure, resulting in flooding, danger to the public, and destruction or loss of property,” said Dedrick Johnson, Mayor of Texas City, TX. “The significant funding awarded today will help increase and maximize the productivity of our infrastructure and drainage system, protect the health, wellness and safety of so many in our communities – it’s truly going to improve the quality of life for our citizens. We sincerely thank Commissioner George P. Bush and the Texas GLO for supporting these pivotal projects and working with us to fortify our county against the next big storm.”

In May 2020, Commissioner George P. Bush announced the kick-off of the application process for the first round of more than $2.3 billion in Community Development Block Grant Mitigation (CDBG-MIT) funds from the U.S. Department of Housing and Urban Development (HUD) to protect Texas communities hit by Hurricane Harvey and severe flooding in 2015 and 2016**.** During the first round, the GLO conducted three competitive application programs from the CDBG-MIT Action Plan. Those programs include:

- 2015 Floods State Mitigation Competition – GLO awarded $31,426,781 to four grantees.
- 2016 Floods State Mitigation Competition – GLO awarded 21 grantees with $135,462,438.
- Hurricane Harvey State Mitigation Competition Round 1 ($1 billion of $2,144,776,720 total).

Applications closed for the first round of funding October 28, 2020, and the GLO evaluated all 290 submitted applications in accordance with the HUD approved scoring criteria. Eligible applications with the highest scores were awarded funds. The second round of the competition will award the remaining $1,144,776,720 in mitigation funding to Hurricane Harvey eligible entities.

HUD defines mitigation as activities that increase resilience to disasters and reduce or eliminate the long-term risk of loss of life, injury, damage to and loss of property, and suffering and hardship, by lessening the impact of future disasters. HUD requires that at least 50% of total funds must be used for activities benefiting low- to moderate-income (LMI) persons.

The State of Texas CDBG Mitigation Action Plan: Building Stronger for a Resilient Future outlines the use of funds, programs, eligible applicants, and eligibility criteria as required by HUD. The plan was sent to HUD on February 3, 2020, after an extraordinary public outreach effort including a 50-day public comment period and eight regional public hearings, far-surpassing HUD requirements. HUD approved the plan March 31, 2020. For more information, please visit recovery.texas.gov/mitigation.

*City of Galveston: South Shore Drainage Project - $54,309,999*
LMI Percentage: 56.27%

Runoff in the city generally flows from south to north towards the bay. Elevations in this area range from approximately 1 to 18-feet above sea level. As a result, the South Shore improvement and service areas experience frequent flooding, inundation of storm sewers, and ponding in streets due to the flat topography, inadequate system capacity, and tidal backflow. This frequent flooding also impacts access

to evacuation routes and critical lifelines. The South Shore Project will reduce long-term risk of damage to and loss of property, suffering, and hardship for residents within the designated improvement and service areas by increasing the capacity of the existing storm drainage system.

Upon completion of the South Shore Drainage project, the city will have the capacity to effectively control rainwater produced in a 100-year event within the city's right- of-way and eliminate ponding/flooding of private property within the boundaries of the project improvement area. This project will also significantly reduce flooding in the project service areas adjacent to the improvement area, reduce flooding on the city's major evacuation route along 61st Street, provide critical access to community lifelines, and increase the city's resiliency to flooding from future events. In addition, at least one lane of emergency vehicle access will be available during a 25-year storm event.

Drainage Improvements

1) Replace and upgrade existing storm sewer system using the city's updated drainage criteria that now require a 25-year storm drainage capacity, using a total of 9,019.5 LF of storm sewer.
2) Storm drain connections to side streets, leads and 84 inlets at appropriate spacing, as well as restoration of 32 SY of pavement. Storm inverts will vary from a depth between 10 and 25 feet below the existing ground.

Pump Station

1) Construct an outfall pump station on the English Bayou end of the storm drain system.

*City of Dickinson: Flood Mitigation & Diversion Project - $49,272,945.54*
LMI Percentage: 52.93%

This drainage project is comprised of building two large storm sewer systems which facilitate and improve the drainage of flood waters from several bayous within the city of Dickinson. They will convey the water to Dickinson Bayou more quickly, allowing faster draining of the residential area of the city.

1) Construct a large channel south of Dickinson Bayou just to the east of I-45 to convey water from Dickinson Bayou to Hughes Road. It will be over excavated to provide floodplain/detention storage.
2) Construct a large storm sewer including box culverts below Hughes Road all the way to the east and outfall into Dickinson Bayou further downstream.
3) Reconstruct Hughes Road after the construction of the box culverts. It will be over excavated to provide floodplain/detention storage.
4) Construct a large storm sewer including box culverts beginning near the intersection of FM 1266 and Deats Road to pull water from West Gun Bayou. The storm sewer is intended to proceed southwest under Deats Road to Nichols Street and then under Nichols Street to FM 517. The storm sewer would then proceed west to the area of Nebraska Street and then south to Dickinson Bayou.
5) Reconstruct all roadways under which the storm sewer in #4 is proposed.
6) Construct storm sewer connections from west of the railroad corridor to provide drainage enhancements to the area along State Highway 3 and areas draining to Bensen Bayou.

*Galveston County Water Control & Improvements District #1: Water System Improvements Project - $8,107,920.79*
LMI Percentage: 54.82%

The Galveston County Water Control & Improvement District #1 provides water and sanitary sewer service to the city of Dickinson. The improvements will mitigate potential damages that would occur in future flood events, and protect the community's health, wellness and safety by providing more reliable facilities for water pressure and delivery service during natural disaster events such as the severe riverine flooding experienced during Hurricane Harvey. They will also improve the efficiency of the water plants' operations and will therefore provide savings on operations and energy costs to the district.

The project encompasses the following improvements:

1. Construct new water booster station facilities at each water plant above the floodplain – Falco and Hollywood Booster Stations. The improvements will also provide more efficient booster pumps and reduce the power required for pumping operations.
2. Install and elevate natural gas emergency generators at each water plant to mitigate potential damages associated with flooding and to provide backup power in the event of a power outage.
3. Upgrade/Upsize existing water distribution line between the two water plants and create a water system loop for redundancy/resiliency.
4. Inspect, rehabilitate, and re-paint existing ground storage tanks at each water plant.
5. Rehabilitate and re-paint the elevated storage tank at the Hollywood water plant.

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Pump Station

2) Construct an outfall pump station on the English Bayou end of the storm drain system.

*City of Hitchcock: Wastewater Treatment System Improvements - $3,598,615*
LMI Percentage: 57.47%

The City of Hitchcock experiences heavy rains, floods and hurricanes that flood the city, which results in damages to the public infrastructure. Heavy rain events in this area impacts the wastewater system by overflowing the lines, disrupting sewer service, and exceeding permitted flows. The wastewater treatment plant is approximately 40 years old and is easily impacted with the increasing number of floods and rain events. The activities planned aim to increase the reliability of wastewater delivery and treatment during high rain events resulting from hurricanes and tropical storms/depressions.

The following improvements will improve treatment of wastewater and reliability of the wastewater delivery.

1) Replace the existing manual screen with a self-cleaning bar screen.
2) Increase the belt press size to improve the manageability of the solids encountered, especially during high flows.
3) Replace the stormwater clarifier and the two final clarifier mechanisms.
4) Automate the operation of the distribution gates between the final and storm water clarifiers.
5) Improve power distribution to the aeration basin aerators.
6) Structural repairs and coating protection associated with normal wear.
7) Install a SCADA monitoring system for the wastewater plants and the lift stations.
8) Replace pipes at Jackson Street, for a total of 4,200 linear feet.
9) Replace pipes at Delesandri Drive, for a total of 2,400 linear feet.
10) Rehabilitation of manholes at 21 locations citywide.

*City of La Marque: Wastewater Treatment Plant & Lift Station Resiliency Plan - $48,904,004*
LMI Percentage: 53.99 %

During hurricanes and resulting flood events, the city of La Marque's wastewater collection and treatment system experiences serious infiltration and inflow (I/I) and/or power outages. In these events, the city's lift stations are not able to pump the additional I/I, causing wastewater to backup into homes, overflow into ditches, and increase the risks to human health and safety.

In addition, the city's only wastewater treatment plant (WWTP) is overwhelmed to the point it causes unauthorized discharges into Galveston Bay, thereby posing a threat to the environment and to any of the public who may have had contact with the untreated wastewater. The project will make significant improvements to the city's lift stations and WWTP, thereby mitigating flood risk to the entire wastewater collection system.

The City of La Marque Harvey HUD MID project will accomplish the following:

1) Convert the city's 21 lift stations to self-priming pumps which will be elevated to eliminate the impact of floodwaters.
2) Increase the capacity of the lift stations to keep up with I/I and eliminate the backing up of wastewater into residences and eliminate the overflow into City ditches.
3) Add an emergency backup pump at each lift station to operate during times of power outages to eliminate back-ups and overflows.

4) Elevate and/or enclose the existing WWTP walls to raise it above the 100-year flood plain elevation to reduce the potential for inundation during hurricanes/flood events.
5) Increase the WWTP capacity by 2.25 million gallons per day to handle the flows from the lift stations during flooding events and to prevent backups and overflows.
6) Elevate the new WWTP above the 100-year flood plain to reduce the potential for inundation during hurricanes/flood events.

*Texas City: Citywide Drainage Improvements Project - $14,965,447*
LMI Percentage: 55.10%

Texas City has experienced both storm surge and torrential rains and has borne the brunt of hurricanes, and tropical storms over the past 20 years and more. During Hurricane Harvey alone, it received over 28 inches of rain and the combination of surge and rainfall almost overwhelmed the city's infrastructure, and resulted in significant flooding, causing injury, damage of housing stock and quality, as well as unsafe and unsanitary environmental conditions. All project improvements will increase the resiliency and functionality of the drainage system in Texas City to reduce flooding by moving water and pumping to Moses Lake.

The drainage improvement project encompasses the following components:
1) Increase pumping capacity at two rainwater pump stations for discharging rainwater runoff out of the most concentrated population in the city and increasing safety for residents.
2) Construct a concrete liner and reconstruct the drainage ditch at 34$^{th}$ Street to improve conveyance.
3) Reconstruct undersized storm sewer in the 7th Street area which outfalls into the 34th Street Ditch.

All improvements are components of the larger city drainage system, and the addition of these facilities will increase the capacity to respond to major rain events**.**

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