

July 27, 2020

Coalition for Environment, Equity & Resilience (CEER) Iris Gonzalez, Coalition Director 2010 North Loop West, Suite 103 Houston, TX 77018

Dear Ms. Gonzalez,

This letter has been drafted in response to the community questions you sent to the Harris County Flood Control District. Please see our responses below.

Clarity on the long term plan to protect the Northeast corridor

1. Exactly how much investment would it take to bring up Halls, Greens and other Northeast watersheds to a 1% flood level protection? How does that compare to other watersheds like the Buffalo Bayou watershed? What is the price tag to close the gap of watersheds left behind? What is the game plan for getting that done?

The level of protection or level of service for watersheds varies throughout the County; however, none of the 22 watersheds has a 1%, 24-hour storm level of service. Based on information collected and generated as part of the Harris County Flood Control District (District) Watershed Master Plan data, approximately 41% of the channels in Harris County provide sufficient capacity to accommodate more than a 50-year storm event (11.3 inches of rainfall in a 24-hour period). Approximately 47% of the channels throughout the County have less than a 2-year level of service (4.4 inches of rainfall within a 24-hour period). This means that when these channels receive between 4 and 5 inches of rain, the stormwater may exceed the channel top of bank.

The tables below summarize the estimated average level of service throughout the Greens Bayou, Carpenters Bayou, Hunting Bayou and Buffalo Bayou watersheds, as well as the estimated costs to provide a 100-year level of service, or about 13 inches of rain in a 24-hour period.

Estimated Level of Service Throughout the Open Channel Systems (%) 1,2						
	Greens	Carpenters	Hunting	Buffalo		
	Bayou	Bayou	Bayou	Bayou		
	Watershed	Watershed	Watershed**	Watershed		
Greater than 50-yr	49%	43%	18%	66%		
(>11.3 inches in 24 hrs)	49 /0	45 /0	10 70	00 70		
25-yr to 50-yr						
(9.6 inches - 11.2 inches	4%	3%	3%	1%		
in 24 hrs)						
10-yr to 25-yr						
(7.6 inches – 9.5 inches in	5%	2%	2%	5%		
24 hrs)						
5-yr to 10-yr						
(6.2 inches – 7.6 inches in	3%	2%	11%	3%		
24 hrs)						
2-yr to 5-yr						
(4.4 inches – 6.1 inches in	4%	3%	5%	6%		
24 hrs)						
< 2-yr	35%	47%	61%	19%		
(< 4.4 inches in 24 hrs)	33 %	71 /0	0170	1370		

Notes:

1. Precipitation data is based on the FEMA effective rainfall (pre-2019 Atlas 14 updates). This information was developed between 2004 - 2005 and may not reflect improvements constructed since then, such as progress on the Hunting Bayou Federal project. The District is in the process of updating our watershed master plan with NOAA Atlas 14 rainfall data using grant funding received from a Community Development Block Grant.

Estimated Costs to Provide Increased Level of Service Throughout the Watershed (Cost in Billions) ¹						
Level of Service	Greens Bayou Watershed ²	Carpenters Bayou Watershed	Hunting Bayou Watershed	Buffalo Bayou Watershed		
100-Year (13.2 inches in 24 hrs)	\$4.78 - \$5.46	\$2.80 - \$2.90	\$1.06 - \$1.10	\$2.00 - \$2.12		
500-Year (18.9 inches in 24 hrs)	\$5.98 - \$6.83	\$3.50 - \$3.63	\$1.33 - \$1.38	\$2.50 - \$2.65		

Notes:

 Estimate is based on cost data compiled in 2005 for the Watershed Master Plan (WMP). Costs included general right-of-way acquisition and construction costs. A multiplier of 2 was applied to the WMP costs for 100-year level of service to estimate increased costs, environmental mitigation and professional services. A multiplier of 2.5 was used to estimate the current cost for a 500-year level of service.

2. The Greens Bayou estimate includes \$1.4B and \$1.8B to provide a 100-year and 500-year level of service, respectively, for the Halls Bayou watershed.

- 3. These costs do not include the necessary improvements to local drainage that may be needed to get all the stormwater to our channels without causing structural flooding along the way.
- 2. At the conclusion of all Flood bond spending what will the added flood protection be for Northeast Houston? Another way of asking this is, if Harvey happened again, after all construction is completed, what is the flood level reduction we can expect?

While the drainage improvement projects that will be constructed as part of the Flood bond program will reduce flood risks, the projects will not eliminate all flood risks. This is a true statement for all projects in the 2018 Bond Program, and this fact was included in our original presentation of the Bond Program leading up to the bond election in August 2018. As the Flood Control District moves forward with bond projects, we continue to work to balance the ability to maximize flood risk reduction with the need to minimize impacts on the surrounding community, enhance and/or protect the natural environment, respond to community input, and work within the allocated budget. All of these factors will be considered and will influence the bond project recommendations as they move from initial planning to preliminary engineering and then final design.

Hurricane Harvey was an unprecedented rainfall event. Record flooding occurred along Greens Bayou from East Mount Houston Pkwy downstream (south) to the Houston Ship Channel exceeding Tropical Storm Allison by an average of 1.0-2.0 ft. Upstream (west) of East Mount Houston Pkwy water level were below Tropical Storm Allison and near the October 2002 flood. Harvey water levels were above the 0.2% (500-yr) annual exceedance probability downstream of East Mount Houston Pkwy, generally between the 10% (10-yr) and 2% (50-yr) upstream of IH-45, and 2% (50-yr) to 1% (100-yr) in between.

In the Halls Bayou watershed, Hurricane Harvey resulted in water levels above the 0.2% (500-yr) annual exceedance probability downstream of Wayside, generally between the 10% (10-yr) and 2% (50-yr) upstream of Wayside to the Hardy Toll Road, and 1% (100-yr) and 0.2% (500-yr) upstream of the Hardy Toll Road.

The recently completed Halls Ahead study identified almost \$2 billion in flood damage reduction projects to help significantly reduce structural flooding associated with a 100-year event. Our current bond program includes funding for many, but not all of these recommended projects. It is important to note that even when all of the identified bond projects are complete, the risk of flooding will be reduced, but not eliminated.

It is estimated that the projects underway in the Greens Bayou watershed will provide a 10-year level of service between Cutten Road and JFK Boulevard, and will provide a significant reduction in water surface elevations through this reach for the 25-year storm event, which will be nearly contained within the channel banks. Bottom line, we will need significantly more investment in flood control and local drainage projects to achieve a 1%, 24-hour storm level of protection across Harris County.

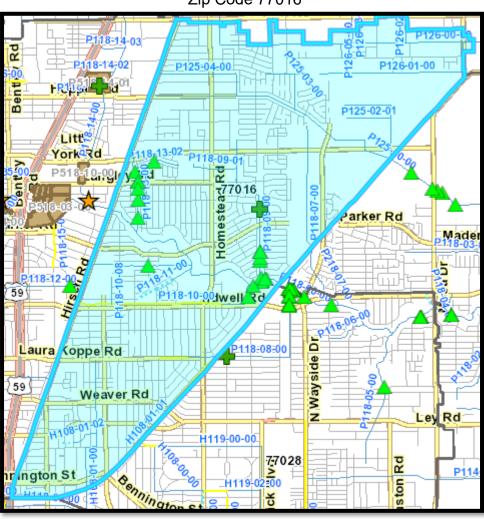
3. What are the project start and end dates of construction for all projects in Halls, Brays and Greens Bayou?

Brays Bayou Watershed - Current Construction Projects					
BOND ID	PROJECT ID	PROJECT NAME	PROJECT START	CONSTRUCTION START	FINISH DATE
C-11	D100-00-00-B006	DS 101 - South 75th Street	23-Mar-18	28-Jan-19	1-Mar-22
C-11	D100-00-00-B008	Brays Bayou Federal Flood Control Project Telephone, Lawndale, South 75th and Almeda Bridge Replacements Discrete Segments 102A, 102B, 101A and 105B	23-Mar-18	24-Aug-19	15-Mar-21
C-11	D100-00-00-B009	Telephone Road Bridge - Brays Bridge Repairs	30-Sep-02	28-Jan-19	26-May-21
C-11	D100-00-00-B011	DS 104 - Calhoun Street Bridge	23-Mar-18	2-Sep-19	31-Dec-21
C-11	D100-00-00-B015	DS 105 - Almeda Road Bridge	31-Dec-19	15-Jan-19	31-Dec-21
C-11	D100-00-00-B021	Brays Bayou Federal Flood Control Project Greenbriar Bridge Replacement at Brays Bayou Discrete Segment 108B	23-Mar-18	4-Jan-19	25-Jul-20
C-11	D100-00-00-B026	Brays Bayou Federal Flood Control Project Buffalo Speedway Bridge Replacement and Approach Roadway Replacement Discrete Segment 108A	18-Dec-17	18-Oct-18	4-Dec-21
C-11		Brays Bayou Federal Flood Control Project Stella Link Bridge Extension and Ardmore Bridge Replacement On Brays Bayou Discrete Segment 109A	18-Dec-17	20-Jul-18	19-Nov-20
C-11	D100-00-00-B030	South Rice Ave and Chimney Rock Bridges	28-Jan-19	28-Jan-19	30-Jan-22
C-11	D100-00-00-B033	Hillcroft Street Bridge	23-Mar-18	12-Aug-19	27-Sep-20
C-11	D100-00-00-B038	DS 101a - Galveston Sub Railroad Bridge	23-Mar-18	1-Jan-21	31-Dec-21
C-11	D100-00-00-B047	Brays Bayou Federal Flood Control Project	23-Mar-18	18-Oct-18	1-Mar-22
C-11	D100-00-00-E010	DS109 - 2,200 Feet Upstream of Buffalo Speedway to 2,600 Feet Upstream of S. Rice Avenue	1-Feb-17	1-Dec-20	20-Nov-21
Z-02	D100-00-00-E016	Detention on City of Houston ROW at S Braeswood and W 610 Loop	24-Jan-19	15-Oct-19	25-Aug-20
NO Bond ID	D100-00-00-G002	Brays - General Engineering Services	24-Oct-00	10-Jul-18	30-May-25
NO Bond ID	D111-00-00-C001	Poor Farm Ditch Conveyance Improvements	30-Jun-14	11-Aug-21	23-Feb-22
NO Bond ID	D118-00-00-X009	D118-00-00-X009: General Repairs - US-59 to Dairy Ashford	3-Jun-19	4-Sep-20	2-Mar-22
Z-02	D500-11-00-E001	Meyergrove Detention Basin	21-Oct-19	14-Oct-20	22-Apr-21
NO Bond ID	Z100-00-00-X217	Z100-00-00-X217: Erosion Repair	1-May-19	17-Jul-17	5-Aug-20

Hall Bayou Watershed - Remaining Construction Projects						
			PROJECT	CONSTRUCTION		
BOND ID	PROJECT ID	PROJECT NAME	START	START	FINISH DATE	
Z-Subdiv	P118-00-00-HC001	Airline Estates and Bluebell (Combined)	28-Aug-18	6-Dec-22	29-Jan-24	
Z-Subdiv	P118-00-00-HC002	Northfield Place	27-Jan-23	1-Feb-22	27-Jan-23	
Z-Subdiv	P118-00-00-HC003	Oak Glen Place	24-May-18	21-Dec-21	13-Feb-23	
Z-StormRep	P118-00-00-X054	General Erosion and Outfall Repairs	25-Jun-19	29-Aug-19	21-Sep-20	
		Excavation of P518-11-00 and P518-21-00 Detention Basins and Channel Conveyance Improvements				
C-25	P118-21-00-E001		13-Apr-18	28-Jun-21	18-Sep-22	
		Excavation of Little York Basin and Hopper Basin and Channel Conveyance Improvements in P118-				
NO Bond ID	P518-10-00-E001	14-00	12-Mar-20	1-Apr-19	31-Oct-20	
		Excavation of Little York Basin and Hopper Basin and Channel Conveyance Improvements in P118-				
C-35	P518-10-00-E002	14-00	4-Aug-19	27-Apr-20	5-Oct-20	
C-01	P518-26-01-E001	Excavation of the Helms Rd. Stormwater Detention Basins, Phase 1	7-Jan-19	1-Sep-19	24-Jun-20	

Greens Bayou Watershed - Current Construction Projects					
			PROJECT	CONSTRUCTION	
BOND ID	PROJECT ID	PROJECT NAME	START	START	FINISH DATE
C-20	P100-00-00-E012	Greens Bayou Mid-Reach Channel Conveyance Improvements	18-Apr-19	3-Feb-22	11-Mar-24
Z-Subdiv	P100-00-00-HC001	Beaumont Place	24-May-18	12-Jul-22	30-Oct-23
Z-Subdiv	P100-00-00-HC002	Evergreen Villas	28-Aug-18	5-Jan-23	31-Jan-24
Z-Subdiv	P100-00-00-HC003	Fountainview	28-Aug-18	31-May-22	18-Sep-23
Z-Subdiv	P100-00-00-HC004	Hidden Meadow	28-Aug-18	7-Sep-22	31-Oct-23
Z-Subdiv	P100-00-00-HC005	Houmont Park	28-Aug-18	8-Aug-22	7-Jul-25
Z-Subdiv	P100-00-00-HC008	North Forest	18-Dec-18	6-Dec-22	9-Sep-24
Z-Subdiv	P100-00-00-HC010	Parkway Mobile Homes	24-May-18	9-Sep-22	28-Dec-23
Z-Subdiv	P100-00-00-HC011	Parkway Forest	28-Aug-18	11-May-22	16-Jan-24
Z-Subdiv	P100-00-00-HC012	Pine Trails	27-Apr-18	11-Nov-22	26-Feb-26
Z-Subdiv	P100-00-00-HC013	Ralston Acres	29-Jan-19	28-May-21	10-Nov-22
Z-Subdiv	P100-00-00-HC015	Sierra Ranch and Stonefield Subdivision (Combined)	28-Aug-18	3-Feb-23	23-Jun-23
	P100-00-00-HC016	Tidwell Lakes	28-Aug-18	5-Jan-23	24-May-23
Z-Subdiv	P100-00-00-HC017	Castlewood Addition Section 3 and 4	24-May-18	10-May-22	20-Nov-23
Z-Subdiv	P100-00-00-HC022	Fountainhead Sec. 2	18-Dec-18	15-Jul-22	23-Mar-23
Z-Subdiv	P100-00-00-HC024	Kingslake Forest	24-May-18	8-Jul-22	26-Oct-23
Z-02	P152-00-00-E002	Partnership with WCID 109 for Local Flood Damage Reduction	12-Aug-19	28-Oct-19	14-Aug-20
NO Bond ID	P500-00-00-E001	Excavation of Kuykendahl & Glen Forest Stormwater Detention Basins	4-Jun-17	4-Jun-17	10-Jul-20
NO Bond ID	P500-01-00-E001	Lower Greens Bayou Regional Detention Embankment and Control Structure Improvements.	4-Aug-19	1-Aug-18	1-Aug-20
F-40	P500-01-00-E002	Lower Greens Bayou Regional Detention Embankment and Control Structure Improvements - P500- 01-00-E001	5-Oct-18	5-Oct-18	18-May-20
C-32	P500-02-00-E013	Cutten Stormwater Detention Basin Improvements	26-Nov-18	2-Jan-20	14-May-21
C-33	P500-04-00-E004	Aldine-Westfield Stormwater Detention Basin - Phase I	12-Mar-19	12-Mar-19	31-Aug-21
C-33	P500-04-00-E005	Aldine-Westfield Stormwater Detention Basin - Phase II	27-Jul-20	22-Apr-21	9-Nov-23
C-34	P500-06-00-E005	Lauder Stormwater Detention Basin - Phase 1	28-Feb-20	28-Feb-20	28-Dec-22
C-34	P500-06-00-E006	Lauder Stormwater Detention Basin - Phase II	28-May-19	14-Jan-22	17-May-25
NO Bond ID	P500-08-00-E001	Glen Forest Stormwater Detention Basin	27-Feb-17	27-Feb-17	9-Jul-20
NO Bond ID	P545-01-00-E005	Kuykendahl Stormwater Detention Basin	27-Feb-17	27-Feb-17	9-Jul-20

4. Why, if equity is central to planning, have we not seen any improvements already taking place in 77016, 26, 28 or 78?



Zip Code 77016

The District is working on the Halls Ahead program which includes the evaluation of channel improvements along Halls Bayou and some tributary channels in this area. The alternatives analysis for improvements along this tributary is currently underway and will be complete before the end of this year.

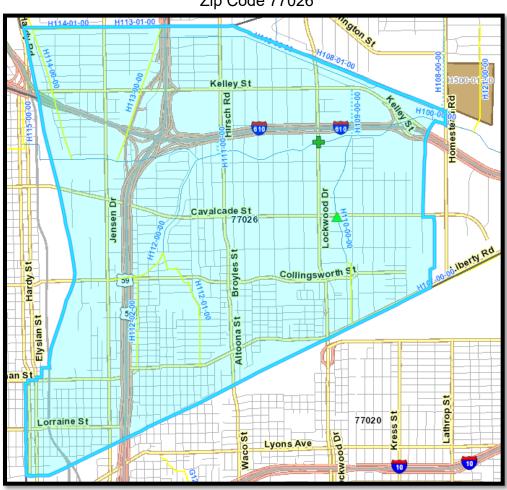
The District also is about to begin construction on the nearby Little York stormwater detention basin, the Hopper stormwater detention basin and P118-14-00 channel improvements project. These basins are the brown areas in the screen capture adjacent to Hopper Road and Little York Road, and will reduce the flooding for approximately 800 homes once complete.

The District has completed various repair projects to channels in this zip code (the green triangles in the screen capture). These repairs are part of a ~\$90M infrastructure repair program that the District is working to complete in September of this year. The Natural

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Resources Conservation Services is the District's funding partner on this countywide effort.

There is also significant partnership funding available in the Bond Program to help implement local drainage projects, so if there are items such as these not included in our Bond Program, please let us know where these are so we can pursue those with the appropriate entity.



Zip Code 77026

The District has been working continuously on Project Hunting, and we recently bid a \$10M construction contract for channel widening on Hunting Bayou from the Homestead Stormwater Detention Basin (brown area in the screen capture) to US 59. Channel improvements on Hunting Bayou from IH-610 to Liberty Road are planned to begin in the Spring of 2021. The Homestead Basin was completed in 2019, which is a major component of Project Hunting. Once completed, Project Hunting will significantly reduce the flood risk to approximately 4,450 homes in the Kashmere Gardens neighborhood.

There is also significant partnership funding available in the Bond Program to help implement local drainage projects, so if there ae items such as these not included in our

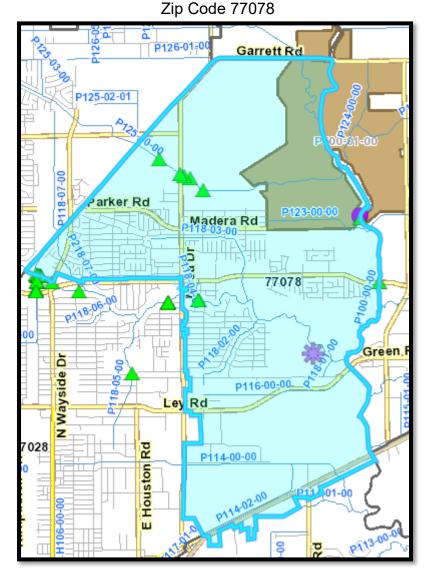
Bond Program, please let us know where these are so we can pursue those with the appropriate entity.



Zip Code 77028

The District has been working continuously on Project Hunting, and we recently bid a \$10M construction contract for channel widening on Hunting Bayou from the Homestead Stormwater Detention Basin (brown area in the screen capture) to US 59. Channel improvements on Hunting Bayou from IH-610 to Liberty Road are planned to begin in the Spring of 2021. The Homestead Basin was completed in 2019, which is a major component of Project Hunting. Once completed, Project Hunting will significantly reduce the flood risk to approximately 4,450 homes in the Kashmere Gardens neighborhood.

There is also significant partnership funding available in the Bond Program to help implement local drainage projects, so if there are items such as these not included in our Bond Program, please let us know where these are so we can pursue those with the appropriate partner.



The District recently completed a major maintenance project on the P500-01-00 stormwater detention basin on Greens Bayou (shown in brown in the screen capture). This \$2.5M project included a complete rehabilitation of the embankment, replacement of various culverts and pipes, and construction of an access road to facilitate future maintenance of the structure.

The District recently started the Lower Greens Bayou feasibility study. The limits of the study start at the downstream side (south side) of the P500-01-00 stormwater detention basin and go downstream to the Houston Ship Channel. The feasibility study includes coordination with a stakeholder group, and will identify additional drainage improvement projects along Greens Bayou.

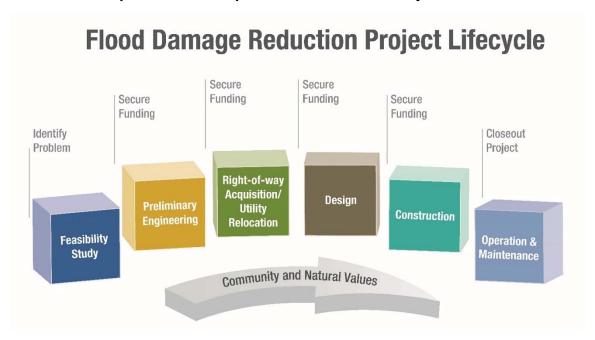
The District is working on the Halls Ahead program, which includes the evaluation of channel improvements along Halls Bayou and some tributary channels in this area. The District has completed various repair projects to channels in this zip code (green triangles in the screen capture). These repairs are part of a ~\$90M infrastructure repair program that the District is planning on completing in September of this year. The Natural Resources Conservation Services is the District's funding partner on this countywide effort.

The Halls Ahead program includes the potential for a new stormwater detention basin at Brock Park (shown as the purple asterisk in the screen capture). The District is working with the City of Houston and the Houston Parks Board on this concept.

It should be noted, projects do not necessarily have to be immediately adjacent to your home or subdivision for you to see reduced flood risks at your home.

Moving beyond planning or studies to moving dirt

1. The neighborhood drainage projects in Sheldon and other areas of Northeast seem to be in a constant state of study and no infrastructure/construction has occurred. Can the community receive regular updates on the progress and milestones achieved with the neighborhood drainage projects funded by the County Bond? Can target dates for construction completion dates be provided to the community?



Subdivision Drainage Improvement projects are managed by the Harris County Engineering Department- Recovery and Resiliency Division. The Division oversees 86 projects dedicated to the reduction of flood risk following Hurricane Harvey. Below is a list of projects within Halls Bayou and Greens Bayou that includes current project status with anticipated timelines for construction. Please note that timelines are subject to change depending on various situations like project development, right-of-way acquisition, utility conflicts and/or project funding.

Multiple projects within your watersheds have begun study phase services with the design phase services to follow. Notices about all fieldwork during the study and design phases are sent via Nextdoor.com with additional meetings between Harris County projects managers, Precinct representatives, community leaders and municipal utility district representatives. For more information on subdivision improvement projects, please email Recovery@eng.hctx.net.

Please see below for the requested anticipated target dates for our projects.

- Aldine Village- Study phase to begin summer 2020, followed by design phase. Construction phase to begin summer 2022 with a duration of 26 months.
- Beaumont Place- Study phase currently in progress, followed by design phase. Construction phase to begin summer 2022 with a duration of 17 months.
- Castlewood Addition Secs 3 and 4 Study phase currently in progress, followed by design phase. Construction phase to begin spring 2022 with a duration of 20 months.
- Fountainview–Study phase to begin summer 2020, followed by design phase. Construction phase to begin spring 2022 with a duration of 17 months.
- High Meadows and Fairgreen –Study phase currently in progress, followed by design phase. Construction phase to begin summer 2022 with a duration of 19 months.
- Kingslake Forest Study phase to begin summer 2020, followed by design phase. Construction phase to begin summer 2022 with a duration of 17 months.
- Northfield Place Study phase to begin summer 2020, followed by design phase. Construction phase to begin spring 2022 with a duration of 18 months.
- Oak Glen Place Study phase to begin summer 2020, followed by design phase. Construction phase to begin winter 2021 with a duration of 21 months.
- Parkway Forest Study phase currently in progress, followed by design phase. Construction phase to begin spring 2022 with a duration of 22 months.
- Pine Trails –Study phase currently in progress, followed by design phase. Construction phase to begin in fall 2022 with a duration of 43 months.
- Ralston Acres— Study phase currently in progress, followed by design phase. Construction phase to begin spring 2021 with a duration of 19 months.
- Western Homes Addition—Study phase to begin summer 2020, followed by design phase. Construction phase to begin summer 2022 with a duration of 18 months.

General Flood Control District Operations

1. Can you hold an online training for the community to understand more about how flood projects are funded, how to read the flood control items on Commissioners Court agenda and how flood control makes decisions about how budget and resources are set aside?

We appreciate your desire to understand Harris County's flooding issues. There is a wealth of information on the Flood Control District's website to assist residents with better understanding their flood risk. The first step to understanding what's happening in your area is to understand the watershed in which you reside. Because we don't build projects by city, neighborhood or other political jurisdictions – our projects are watershed based, which can cross all other jurisdictional boundaries. Once you determine your watershed, you can sign up for e-alerts for your watershed on the Flood Control District website. In addition, please attend one of our upcoming project meetings. Meetings are posted on the website as available. The Flood Control District is also constantly working to produce additional materials (that will be posted on hcfcd.org), to assist with understanding Harris County's Flood Risks and Response and how to track the 2018 Bond Program.

2. Can we receive a bimonthly update from flood control on progress in our neighborhoods? It is impossible for us to hold the HCFCD accountable if we don't know what is happening.

The Flood Control District completes projects by watershed, because stormwater in Harris County flows according to watershed, not according to a geographical area defined by neighborhood or city. We continue to focus on proving project-specific information and materials related to bond projects on hcfcd.org, through media relations and across all five of our social media platforms. Additionally, we have committed to providing a 2018 bond update twice a year to our governing body - the Harris County Commissioners Court. That said, we would like to follow up with you to better understand how we can accommodate your request for additional information, such as what is the desired format, distribution method, etc. that would be most convenient for you.

3. What do you suggest we do if we hear conflicting information from one Flood Control representative to another or if we have documentation and information that conflicts with what is on your website? How are you working to address this so it doesn't happen?

If you see confusing or conflicting information on our website you can contact the Citizen Service Center through our online <u>Service Request</u> form at https://www.hcfcd.org/Contact-Us or call our Citizen Service line at 346-286-4197. Please make sure to describe the conflicting information in detail. We will generate a Service Request and route to District staff to look into the issue. Our online form

has the ability for you to attach documents, so that we can better understand the issue. Using this same process you can let us know if you take issue with a previous response that you received from the District and we will have appropriate staff look into the issue. The District works very hard to provide reliable and accurate information and one way to make sure that we continue to provide effective communication is through receiving constructive feedback from residents.

Flood control in Harris County consists of two legs, the Harris County Flood Control District and the City of Houston Public Works. The problem that we have encountered is getting a partial response from one unit that addresses their responsibility and not completely solving all the issues that require addressing. To obtain information concerning flood control, we need to simultaneously address both entities to ensure all problems are identified and addressed. If not, all outlined issues will never be resolved. The forming of a commission to address flooding issues in Houston Gardens requires both entities, Harris County Flood Control District and the City of Houston Public Works Department. Both organizations are at the table simultaneously, documenting and addressing what each will do and when. A coordinated effort will resolve the ongoing issues that we currently have. How can we make this happen?

The City of Houston and the District must work together to properly identify drainage issues and work towards needed improvements. Generally speaking, the City of Houston maintains neighborhood drainage infrastructure and the District maintains the regional open channel systems. Both City and District staff are no strangers to each other; however both entities recognize the need for improved coordination and communication on the drainage issues that frustrate our communities. If a community approaches the District with a drainage issue that requires City involvement, the District will make contact with our counterparts at the City as a part of our investigation so that we can provide a coordinated response. When required, staff will coordinate field analyses, follow up meetings with communities, and maintain routine discussions until the issues are addressed. The intent is to keep residents from feeling like they are passed around from one jurisdiction to the next. Specific to Houston Gardens, District staff recently met with members of the community to discuss their concerns. We are working to schedule a follow-up discussion and will invite both Precinct and City staff to attend. We also have a \$175 million budget line item in the bond program that is specifically allocated for joint projects with entities like the City of Houston to address local drainage issues.

It is worth noting that Harris County Flood Control District and the City of Houston are not the only government agencies responsible for operating and maintaining drainage infrastructure within Harris County. Along with our four Commissioner Precincts there are 34 municipalities, the US Army Corps of Engineers and other utility and special purpose districts within Harris County that combine to maintain the network of drainage infrastructure across the county's 1,777 square miles.

High Meadows

1. Has the issue with Braes Bayou water run off been addressed?

We need additional clarification to ensure we answer this question correctly. High Meadows is between Greens and Halls Bayou, not Brays Bayou, and we do have a project ongoing at this location. The Recovery and Resiliency Division in the County Engineer's office is working on a subdivision project known as the High Meadows and Fairgreen Subdivision Drainage Improvement project. Additionally, the District is starting our feasibility study along P138-01-00 which will take about a year to complete.

As additional development is being done in our community what steps have taken place to prevent flooding?

The District does not regulate land development. Development in unincorporated Harris County is regulated by the County's Infrastructure Regulations and Floodplain Regulations, which are administered by the Harris County Permits Department and are some of the most, if not the most, stringent regulations in the nation. These regulations require that all developments provide storm water detention to mitigate increases in peak flow leaving the development and entering receiving systems (roadside ditches, storm sewers and/or open channels). If the development is within the floodplain, additional mitigation is required to ensure that there is no net fill placed within the 500-year floodplain. These regulations also require that sheet flow from neighboring and adjacent properties is accommodated so that the new development will not block or impound the natural flow of surface waters. These regulations were updated in July 2019 to account for the increases in the rainfall depths with the release of NOAA Atlas 14 in early 2019. We understand the City of Houston has adopted the Atlas 14 rainfall rates, and are in the process of increasing their mitigation requirements for new or re-developments and should adopt those updates by the end of the year.

Homestead Detention Basin

1. We need a target or completion date for the biking & walking trail as well as fishing pond/beautification on the Homestead Detention Basin. Precinct 1

In speaking with Harris County Commissioner Precinct One's staff, the design of these amenities is underway and is expected to be complete by the end of 2020. Construction is tentatively scheduled to begin early in 2021 and be complete in the summer of the same year.

2. Commissioner Representatives are not responding to the phone numbers/emails listed on the flyer which they sent out to the community. Why?

Precinct 1 representatives take pride in community service. Due to Covid-19 seriously affecting Harris County, much of the staff has been working from home so response times have not been as efficient as they would be under normal working conditions. Precinct 1 asks that you please use the below phone number and email address to share any questions or concerns.

Precinct 1 Constituent Services

Phone: 346-286-2125

Email: ConstituentsServices@cp1.hctx.net

Hunting Bayou

1. What is the scheduled timeline of construction for the work along Hunting Bayou from Hwy 69 to the retention pond (H100-00-00-R001, H100-00-00-G020, H100-00-00-G040, H100-00-00-G070, H100-00-00-B004, H100-00-00-E005) once the project begins? Will there be liquidated damages assessed against the contractor

That segment of the Hunting Federal Project has advertised for construction this month, with construction starting in approximately three months. The project will be complete by the end of 2021, and we include liquidated damages in our projects to the extent legally allowed to ensure projects finish on schedule.

2. Who will be assigned to the project if the project goes beyond the scheduled completion date?

If the contractor defaults on the project, surety bonds are in place to assure it is completed.

Northwood Manor

1. After homes in my neighborhood were flooded during Hurricane Harvey and again during Tropical Storm Imelda, I began another assessment of why and what needed to be done to reduce flooding in our subdivision. I have been back and forth with Precinct 1 Commissioner and staff, Precinct Coordinator and Property Management Department Manager in HCFCD and have sent service requests to COHPW Dept. to check drains in the neighborhood after I was made aware that flood ditches/channels in the neighborhood were clogged. I want to know the status on scopes of work and project timelines to be completed before next hurricane season. We deserve better. Every family deserves to live in a safe, environmentally healthy and dry community

The District completed a sediment removal project along P125-00-00, main channel system within Northwood Manor, in 2020. District staff recently evaluated the lateral channels P125-03-00 and P125-04-00 and observed the need for sediment removal projects and fence line pruning. Please see the exhibit below

for the proposed project area. The Property Management team is scheduling these projects and will provide updates once they are initiated. In addition to these maintenance efforts there are two ongoing efforts in the watershed. To follow these efforts please visit our website at www.hcfcd.org.



2. Cutting of the grass/weeds/other greenery growing in the P125-00-00 and tributaries and/or removing trees, illegally dumped items from P125 will not suffice because the water is still standing in the flood channel from the small rains we've had so far. What is the plan and scope of work? What are the other flood projects planned and/or in progress for our area?

Earthen channels that span long distances and relatively flat land may have a minimal amount of standing water due inconsistences in elevations within the flow line, wastewater treatment plan effluent, and regular rainfall. This does not hinder the overall function of the channel to convey rainfall during extreme events. If excess water exists within an existing channel, the District staff may need to

assess if further efforts are necessary. See the response to question #1 above for both maintenance and capital project information in your area.

Aldine

1. Is the buyout program going to move forward? How much will families be given to move if the buyout will take place that will help them purchase a home and land equivalent to what they have in the current Houston market?

The District has several active voluntary buyout areas within the Aldine area. There are currently nearly 20 buyouts in process here. You can view a map of those areas here: https://www.hcfcd.org/Portals/62/Home-Buyout-Program/HomeBuyouts-Buyout-Program619.pdf?ver=2020-06-19-110816-987.

Owners interested in the program are asked to volunteer online here: https://survey123.arcgis.com/share/dced0658099e45c5a2059748577d4beb.

Properties that meet eligibility will be included in federal grant applications to leverage local funding. Once funds are secured homes are appraised by a third party state licensed appraiser and an offer is made based on the appraised value. Owners are eligible for relocation assistance including a housing/rental supplement for a comparable home outside the floodplain, moving and closing costs. For more information about the program please see the video on our website here: https://youtu.be/wDoszfHR1Cg.

2. What is the status of the study for Halls Bayou P118-00-00-P005? Aside from the current maintenance project will additional work be done to help control flood water away from the Greenwood Village neighborhood?

The final draft of the study was completed in August 2019. It is currently being reviewed. In Phase 1 of the study, a conveyance project, downstream of Bertrand and upstream of Little York is proposed. Additionally, a modification of that project is being analyzed and considered as a mainstream project under Bond ID C-41 as part of the Halls Bayou Bond Implementation Program. The District is looking to augment our available local funding for the construction of this project with Community Development Block Grant (CDBG) funding, and these applications are being prepared now for submission to the Texas General Land Office (GLO) in October 2020. Additional community engagement is mandatory for the CDBG application to be considered complete, and we are planning for these additional touch points with the community during this summer.

3. As of 7/12/20, the Flood Control District website states \$1.3 million has been spent on this study. As a resident, it is difficult to understand how \$1.3 million can be spent on a study while this money could have been allocated to actual mitigation. What has consumed \$1.3 million thus far?

The study recommends 12 phases that can be reasonably funded over an extended period. A total of 58 improvement features (projects) valued at an estimated \$1.745 billion were proposed in the study. It is critical that before constructing any flood risk management projects they are properly evaluated, presented to the community for input, and designed to ensure they will effectively reduce the risk of flooding without causing adverse impacts in other locations. The evaluation includes identification and prevention of impacts to downstream or adjacent properties, developed estimates of right-of-way needed to complete the projects, as well as avoidance or minimization of impacts on the environment. In addition to analyzing Halls Bayou, detailed hydrologic and hydraulic models were created for eight tributary channels previously unstudied. Because the District is applying for CDBG funds to help implement many of these improvements, we must follow federal requirements, which includes the National Environmental Policy Act, or NEPA. Complying with NEPA is time intensive and tedious as the District must show we are not adversely impacting the environment or disadvantaged neighborhoods, that we have considered multiple alternatives, and have multiple engagements with the public to ensure their input is documented and included in the proposed project. In our past project experiences in dealing with NEPA, this process can take between 2 and 3 years to complete and document which must occur before the project can be constructed.

4. What are all the start and end dates for projects in our area? Where do we find that and get regular updates?

Aldine - Current Projects						
BOND ID	PROJECT ID	PROJECT NAME	PROJECT START	CONSTRUCTION START	FINISH DATE	
Z-Subdiv	P118-00-00-HC001	Airline Estates and Bluebell (Combined)	28-Aug-18	6-Dec-22	29-Jan-24	
Z-Subdiv	P118-00-00-HC002	Northfield Place	24-May-18	1-Feb-22	27-Jan-23	
Z-Subdiv	P118-00-00-HC003	Oak Glen Place	24-May-18	21-Dec-21	13-Feb-23	
		Excavation of P518-11-00 and P518-21-00 Detention Basins and Channel Conveyance Improvements				
C-25	P118-21-00-E001	in P118-21-00	13-Apr-18	28-Jun-21	18-Sep-22	
C-01	P518-26-01-E001	Excavation of the Helms Rd. Stormwater Detention Basins, Phase 1	7-Jan-19	1-Sep-19	24-Jun-20	
NO Bond ID	P118-00-00-P005	Halls Bayou Flood Risk Reduction Phasing Study	1-May-17	Feasibility Only	16-Sep-25	
C-26	P118-23-00-P001	P118-23-00 and P118-23-02 Alternative Analysis	1-Oct-18	Feasibility Only	31-Dec-20	
C-28	P118-25-00-P001	P118-25-00 and P118-25-01 Alternative Analysis	1-Oct-18	Feasibility Only	31-Jan-20	

The best place to track your projects is online at hcfcd.org. There you can enter your address and see the projects closest to your location and see the latest project details.

C-01 HALLS BAYOU TRIBUTARY P118-26-00 AND STORMWATER DETENTION BASINS P518-26-01 AND P518-26-02 states it is still in the construction phase. What is the projected completion date?

The original construction contract was cancelled because the contractor was not able to construct the project within the allotted schedule. The project was readvertised and bids were received on Monday, July 13, 2020. Work should be

back underway by the late September timeframe with construction complete by early 2021.

Excavation of Little York Basin and Hopper Basin Will P518-10-00-E002 begin as scheduled this summer of 2020?

Yes, the project has been bid for construction and the preconstruction meeting was held the week of July 13. Construction will take approximately 9 months to complete.

When will P118-27-00 begin? No updates listed on the project page

The Alternative Analysis for P118-27 is ongoing and on schedule to be completed in November 2020. Once that activity is complete, we will move into preliminary engineering so we can start identifying right-of-way needs, utility adjustments, and necessary environmental permits. The District is looking to augment our available local funding for the construction of this project with Community Development Block Grant (CDBG) funding, and these applications are being prepared now for submission to the Texas General Land Office (GLO) in October 2020. Additional community engagement is mandatory for the CDBG application to be considered complete, and we are planning for these additional touch points with the community during this summer.

Did P118-25-00 and P118-25-01 Alternative Analysis result in proposed right of way acquisition or buyouts? Several vulnerable families live along this sector of the bayou.

The Alternative Analysis indicated that additional right-of-way would likely be needed. The preliminary design for the project has begun and is scheduled for completion in May 2021. During preliminary design, the recommended location(s) of parcels required for the project will be determined. Every effort is being made to minimize the right of way acquisition requirement. The District is looking to augment our available local funding for the construction of this project with Community Development Block Grant (CDBG) funding, and these applications are being prepared now for submission to the Texas General Land Office (GLO) in October 2020. Additional community engagement is mandatory for the CDBG application to be considered complete, and we are planning for these additional touch points with the community during this summer.

Did P118-23-00 and P118-23-02 Alternative Analysis result in proposed rightof-way acquisition or buyouts? Several vulnerable families live along this sector of the bayou.

The Alternative Analysis indicated that additional right-of-way would likely be needed. The preliminary design for the project has begun and is scheduled for completion in June 2021. During preliminary design, the recommended location(s) of parcels required for the project will be determined. Every effort is being made to minimize the right-of-way acquisition requirement. The District is looking to augment our available local funding for the construction of this project with Community Development Block Grant (CDBG) funding, and these applications are being prepared now for submission to the Texas General Land Office (GLO) in October 2020. Additional community engagement is mandatory for the CDBG application to be considered complete, and we are planning for these additional touch points with the community during this summer.