From:	Jerry Helfand
To:	<u>CESWT-BBTRS</u>
Subject:	[Non-DoD Source] Feedback on Flood control options for Buffalo Bayou & Braes Bayou, Houston
Date:	Thursday, May 30, 2019 9:11:51 PM
Attachments:	190429 BBTRS Public Meetings.pdf

I heard about the presentation to the Braes Bayou Association after the fact. After reviewing it online, I have some concerns:

1) I just saw a presentation by a grad student that shows that the Braes Bayou watershed is larger than previously published. Assuming he hasn't made large mistakes, this may necessitate a change to flood risk assumptions. Hopefully, the USACE will use the latest elevation data, including current changes being made to Braes Bayou, for its flood modeling.

2) As much as I want my local flooding risk to be reduced, I worry more about the tunnels, as illustrated, causing more flooding along the industrialized part of Buffalo Bayou (the Houston Ship Channel)which includes a lot of industrial sites containing hazardous materials. Hopefully, downstream risks are also being evaluated.

3). As I write, I have to admit that I don't exactly understand all the options. Are there web links that describe them in greater detail?

4). Have you presented to the Harris-Galveston Area Council?

Regards, Jerry Helfand (Living 0.3 miles south of Braes Bayou, within the 100 year flood plain)

Blockedhttps://www.swg.usace.army.mil/Portals/26/190429%20BBTRS%20Public%20Meetings.pdf

Sent from my iPad

-02

-01

No Substantive Comments Identified.

From:	Margaret Sweeney
То:	<u>CESWT-BBTRS</u>
Subject:	[Non-DoD Source] Buffalo Bayou and Tributaries Resiliency Study
Date:	Thursday, May 30, 2019 9:19:56 PM

Dear To Whom It May Concern:

I am strongly opposed to the idea of diverting water from the Barker Reservoir to the Brays Bayou watershed. I have lived in Meyerland for fifty-seven years. The bayou has always flooded occasionally, but recent floods have been catastrophic. We had three severe floods in three years and then Harvey, which devastated the area. We do not need overdeveloped West Memorial's water. Buy land there and dig a lake. Better yet, reverse the development of Katy Prairie.

Sincerely, Margaret Sweeney 5522 Grape Houston TX 77096

From:	nick singleton
То:	CESWT-BBTRS
Subject:	[Non-DoD Source] Oppose Barker Cypress diversions to Braes Bayou
Date:	Thursday, May 30, 2019 9:42:35 PM

Gentlemen- I am writing to vehemently oppose the plan being studied to potentially divert storm water runoff from Barker Cypress Reservoir into Braes Bayou!

Have you completely lost your minds??

-01

The Braes Bayou watershed has suffered 3 devastating out of bank flood events during the last decade and is still trying to recover from the flood losses caused by Harvey! Moving water from one flood prone area into another is an extremely poor idea and no solution at all!

I strongly urge the COE to discontinue this ill conceived plan!

Sincerely Nick Singleton 5522 Grape St. Houston, Texas 77096

From:	Julie Cohn
To:	<u>CESWT-BBTRS</u>
Subject:	[Non-DoD Source] Buffalo Bayou and Tributaries Resiliency Study
Date:	Thursday, May 30, 2019 10:29:09 PM

Greetings. Please add this message to your public comments on the proposed study of flood risk mitigation options for Buffalo Bayou. I live a block and a half away from Brays Bayou and I have witnessed high water and bayou overflow during numerous storms over the past 26 years. I must say quite simply that it would be the height of folly, and disingenuousness, for the Army Corps of Engineers to decide that the best plan for protecting property in the Buffalo Bayou Watershed is to divert water to the Brays Bayou Watershed. Residents of the Brays Bayou watershed have suffered enough. Surely you can engineer solutions to our region's flood control problems without increasing the risk to a significant population in order to minimize risk to our neighbors to the north. I strongly urge you to eliminate this option from your study and focus instead on comprehensive solutions that take into consideration the challenges faced by all residents in the region.

Thank you for the opportunity to share my perspective.

Sincerely, Julie Cohn, Ph. D.

Julie Cohn, Ph.D. Research Historian, Center for Public History University of Houston, 315 McElhinney Hall Houston, TX 77204-3007 cohnconnor@gmail.com <<u>mailto:cohnconnor@gmail.com</u>>

Author: The Grid: Biography of an American Technology (MIT Press, 2017) Blockedhttps://mitpress.mit.edu/books/grid

-01

From:chadwick sullivanTo:CESWT-BBTRSSubject:[Non-DoD Source] Flood control on buffalo bayouDate:Thursday, May 30, 2019 11:02:12 PM

Easiest way to reduce flooding is to widen the bayou inside beltway 8, allowing for a larger flooding area and more area for the bayou to flow. Any improvements made upstream of beltway 8 will have negligible effects without opening up the bayou inside the beltway.

Sent from my iPhone

Jennifer Claridge
CESWT-BBTRS
[Non-DoD Source] Future Flood Mitigation Options
Thursday, May 30, 2019 11:02:56 PM

My expertise comes from simply being a lifetime Houston resident. I live in Meyerland, my home flooded 3 times in 27 months, most recently from the 5 feet of water Harvey put in it = and I am still not home. I also grew up at Memorial and Hwy 6. Between the 2015 and 2016 floods we stayed in that home for 16 months - it was not an option once the dam release emptied water directly into the home. Needless to say my parents have moved after 40 years there.

-01 I care about the city and it needs to be livable and a viable place to live and work. Another dam that is just going to end up being developed (who builds in a flood pool?) like Barker and Addicks, or release flooding streets like Tax Day or homes like Harvey, is not the answer. Honestly I do not think it would have helped the widespread flooding we had in Harvey. It would have maybe kept the Corp from thinking it needed to release when it did, but the rest of the city had flooded already. Another resevoir will not stop that. (I know every storm is unique but they nonetheless flood Meyerland).

-02 Clearing and widening the channels - besides imminent domain issues, the bayous have been straightened, paved, widened, cleared....we keep flooding. It is not going to help enough. Water seems to overtake the improvements time and time again.

-03 The best answer is the underground tunnels like those in San Antonio. It is no more expensive than the other plans, doesn't move the water to cause a problem for someone else, no imminent domain issues. It is the only way to make Houston viable and livable.

From:	Michael Huffmaster
To:	<u>CESWT-BBTRS</u>
Cc:	Weber, Andrew R CIV USARMY CESWG (USA)
Subject:	[Non-DoD Source] BBTRS Comments
Date:	Thursday, May 30, 2019 11:18:04 PM
Attachments:	BFSN Buffalo Bayou and Tributaries Resiliency Study comments.1.pdf
	Buffalo Bayou Bridges and Oxbows.4.pdf
	5.21.19 Buffalo Bayou Advocates-MAH7.pdf

May 30, 2019

U.S. Army Corps of Engineers Galveston District

BBTRS@usace.army.mil Attn: BBTRS P.O. Box 1229 Galveston, TX 77553-1229

Dear Sir/Madam:

Please find enclosed comment letter for the Buffalo Bayou and Tributaries Resiliency Study. It is very much appreciated that USACE presented the study material and story boards to the community and especially that public input was period extended to end of May with public comments and input graciously invited and considered.

Thank you,

Michael Huffmaster President BFSN Attachments: BFSN Buffalo Bayou and Tributaries Resiliency Study Comments.1.pdf supporting attachments: presentation 5.21.19 Buffalo Bayou Advocates-MAH7.pptx discussion document Buffalo Bayou Bridges and Oxbows.4.pdf.



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May 30, 2019

U.S. Army Corps of Engineers Galveston District

BBTRS@usace.army.mil Attn: BBTRS P.O. Box 1229 Galveston, TX 77553-1229

Dear Sir/Madam:

-01

-02

-04

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-06

On behalf or Briar Forest Super Neighborhood, thank you for the opportunity to provide community input for the Buffalo Bayou and Tributaries Resiliency Study meeting held on May 2. We were pleased with the community response and hope it will provide valuable input.

Our infrastructure committee members offer following comments and recommendations:

- 1. Improve and channel conveyance and capacity downstream of Addicks/Barker Reservoir. Development in the non-impounded watershed often has little or no detention and has increased peak flow rates to levels pre-Addicks/Barker. Options to consider include: :
 - Selective Channel Improvements between Beltway 8 and Shepherd, in particular restriction removal and bypass (oxbow or bridge bypasses, bridge elevation or bridge channel opening please see presentation 5.21.19 Buffalo Bayou Advocates-MAH7.pptx and Buffalo Bayou Bridges and Oxbows.4.pdf)
 - Flood Tunnel: Addicks/Barker to Ship Channel with connection at BW-8 and I-610
 - Implement the north canal bypass at Buffalo Bayou /White Oak confluence to protect downtown from other conveyance improvements.
- 2. Work with City of Houston and Harris County to provide detention downstream of Addicks and Barker, especially in non-impound areas of Clodine and I-10 and Brittmore (east face of Addicks to BW-8) as these contribute significantly to peak flow in Buffalo Bayou.
- Add intermediate detention/retention capacity upstream of Barker and Addicks Reservoirs especially utilizing natural prairie features providing ponding and detention along natural tributary channels.
- 4. Add capacity within Barker and Addicks Reservoirs through selective excavation in the reservoirs.
 - Manage Cypress Creek with infrastructure through a combination of solutions such as detention in northwest section of the watershed and channel conveyance improvement which will reduce overflow to Addicks
 - 6. Utilize nature based and natural solutions including acquiring undeveloped lands on the Katy Prairie to hold runoff, promoting ponding, evaporation and percolation.

We would welcome the opportunity to discuss these further with you.

Yours sincerely,

Septend Huffmath

Michael Huffmaster Briar Forest Super Neighborhood President

Infrastructure Committee: Michael Huffmaster, Kathy Clark, Judson Bryant, Fred Graves, Selim Shaker, Dean Barnes

Buffalo Bayou Bridges and Oxbows

for USACE Buffalo Bayou Tributaries Resiliency Study Summary of Proposal for Conveyance Improvement

This document addresses reducing flooding along Buffalo Bayou by improving conveyance. This would be achieved by improving bridges which interfere with flow and also by installing high-flow bypass - supplemental pathways for stormwater at selective oxbow bends in Buffalo Bayou. This approach – flow bypasses – can be high benches or buried big-box culverts to carry floodwater across the necks of oxbow bends – and could be adopted now. It could be done in an environmentally sensitive way and could be carried out in phases, as budgets allow. This notes accompanies a presentation (5.21.19 Buffalo Bayou Advocates MAH7.pdf)

The entire bayou does not need rectification. There are over 33 bridge crossings and 20 oxbows which restrict flow in a 100-year event. Much improvement can be realized by focusing first on five low bridges and ten-or-so oxbows. The work can start downstream and work its way upstream to minimize adverse impact -- beginning with the planned North Canal downtown and working westward toward I-610, Memorial Park, the villages and west to Beltway 8. Improving conveyance in this way will reduce back water level and reduce flooding along the entire length of Buffalo Bayou.

Reducing the hydrologic profile of bridges is familiar technology, increasing channel cross-section at the bridge or elevating structure out of water flow path. Our idea for supplemental stormwater pathways at oxbow bends is a long also an established practice but this selective application warrants explaining

Meanders in the bayou between Beltway 8 and Shepherd worsen flooding, especially from Gessner westward to Highway 6, where about 10,000 homes flooded during Harvey. This does not propose to do away with the meanders for they are key to Buffalo Bayou's natural feel. We just want to make them work better. Our proposal involves letting the bayou flow normally around meanders at normal water flow, when it is not swollen with floodwaters. What we propose is to bury big-box culverts across the necks of oxbow bends at an elevation above normal water levels – call it flood level. When stormwater swells the bayou above normal levels, these culverts would provide a bypass, or for excess flow.

To smooth the implementation of this approach, we are searching for oxbow bends that appear unplatted to any owner. In addition to sites already publicly owned, such as those in Memorial Park or at Beltway 8, unplatted sites would be easiest to access first because they would not require ROW purchase via eminent domain. Even at sites where rights to private land need to be negotiated, the amount of ROW needed is limited, basically a stretch cutting across the "base" of the oxbow, and would be pursued with willing property owners. These proposed culvert paths vary in length from 300 feet to 1,500 feet. We are not talking about digging the Houston Ship Channel here!

There are many benefits to this approach. It can be done while preserving the existing meanders in the bayou. And once the high-flow big-box culverts are buried, the land above them can be restored to previous uses – as golf course fairways, hiking paths, private backyards or simply undeveloped greenspace. Improving Buffalo Bayou stormwater conveyance in this way would mitigate erosion, since velocity on the wear banks would be reduced, with e benefit of reducing the need for silt-removal in Buffalo Bayou Partnership Park and Houston Ship Channel. Supplementing meanders between Beltway 8 and Shepherd also meshes nicely with adding detention basins west of Beltway 8, at Brittmore (east of ADdicks), and west of Highway 6 at Clodine. Both detention areas would lower the peak level of Buffalo Bayou downstream and allow needed increase in outfall rates from neighborhoods along the route.

To dig into the weeds technically, the flow gradient in Buffalo Bayou at flood stage is about 5 feet per mile, 0.1%. Reduction in the length of the flow path, although a small contribution in this proposal, will provide direct benefit of up to approximately 1 ft water level per 1000 ft of channel, depending on the severity of a particular flood.

A classic oxbow represents about a 360-degree turn for the flowing water – a 90-degree turn, a 180 degree turn and another 90 degree turn. The head loss, height of water for energy to overcome resistance through the typical ox-bow bend in the natural channel at incipient flood is approximately:

Head loss, feet = 0.5 * (degrees/90)^.5 x velocity^2/2gc

For 90+ 180 + 90 oxbow = 0.5 *(1+ 1.41+ 1)* (3 ft/sec)^2/(2*32ft/sec^2) = 0.24 ft

The head loss is a function of water velocity, radius of turn and roughness of bank. During high flow of Harvey the velocities were higher and observed head loss on many oxbows was 0.5 to 0.8 feet.

With a flow reduction through the oxbow reduced to half the head loss is reduced to one-quarter.

Suggested locations for early focus are:

- 1. River Oaks and Houston Country Clubs can be approached to make a dollars and sense deal, appeal to the higher community interest and restore the surface use for fairways, improving the golf course in the end.
- 2. At I-610 there is an oxbow in Memorial Park city property, and again can provide surface restoration or a channel and bridge.
- 3. Further west, near Kinkaid, near Buckingham, on east side and west side are non-platted properties north of Stoney Brook and old Farm road.
- 4. Another opportunity looks to be east and west of Gessner on what might already be drainage ROW
- 5. Just East of BW8 a single property for a modest sum would allow access to build an oxbow bypass
- 6. Just west of Beltway 8, just below the waste water plant, a HCFCD owned oxbow can be relieved with double benefit of reducing losses at the BW8 bridges.

The materials in the presentation examin prospective oxbow locations and properties with indicate plat lines. Note that most areas listed above are not platted to single-family residential ownership, those which are can be assessed by an easement with one or two owners.

Restrictions which cause backwater and flooding along Buffalo Bayou are bridges and a tortuous path made by many oxbows, mainly between Beltway 8 and Shepherd. Additionally, multiple bridges along the bayou downtown as well as he White Oak confluence with Buffalo Bayou. Addressing these flow impediments will reduce flooding in downtown Houston and all along the bayou to Highway 6.

Please consider support for a project be included in Flood Bond and in USACE Buffalo Bayou and Tributaries Resiliency Study to relieve oxbow restrictions. It will take all of our neighbors and official working together to get this project underway. All of our communities and Houston can benefit.

Buffalo Bayou Coalition Advocates for Funding Flooding Reduction

Flood Control Enhancements Improve Conveyance Preserve Natural Character

Buffalo Bayou



Flood impacted areas Harvey – August 2017

Goal

Secure funding to provide conveyance improvements through the mid-reach of Buffalo Bayou to reduce the future risk of flooding Harvey release created a lake from Gessner to Highway 6, inundating 10,000 homes —

Today We Are Right Where We Were Last Year!

but things are beginning to happen

Opportunity: reduce flow restrictions at oxbows and bridges in mid-reach

Flood Bond - Buffalo Bayou Projects mid-reach conveyance projects

F-58 W100-00-00-LIN	Construction of Linear Detention on Buffalo Bayou	\$ 3,000,000 10,000,000
CI-017 W100-BCON	Design & Construction of Replacement Bridges Along Buffalo Bayou	\$ 30,000,000
CI-016 W100-B	Study Investigations of Bridges over Buffalo Bayou and Conveyance Improvement/Bypasses (Huitt Zollars)	\$\$ 385,000 500,000
F-82 W100-	COMMERCE Demolition of Structure	\$ 2,000,000
CI-018 W140-00-00-GEN	Rehabilitation of W140-00-00 to Restore Channel Conveyance Capacity	\$ 2,000,000
F-59 W140-00-00-X005	Spring Branch Creek Stabilization	\$ 4,000,000
F-80 W141-00-00-GEN	Planning, Right-Of-Way Acquisition, Design and Construction Along Soldiers Creek	\$ 10,000,000
CI-014 W151-00-00-GEN	Planning, Right-Of-Way Acquisition, Design and Construction Along W151-00-00	\$ 10,000,000
F-81 W153-00-00-GEN	Planning, Right-Of-Way Acquisition, Design and Construction Along W153-00-00	\$ 10,000,000
F-79 W157-00-00-GEN	Planning, Right-Of-Way Acquisition, Design and Construction Along W157-00-00	\$ 10,000,000
CI-009 W190-JOINT	Partnership Project with Fort Bend County on Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along Clodine Ditch	\$ 30,000,000
W-NRCS	Storm Repairs in Buffalo Bayou Watershed	\$ 5,890,000

C-39 E200-02-00-NC White Oak Bayou North Canal downtown Houston \$20,000,000 100,000,000

HCFCD \$2.5 Billion Bond Election

- Not Much Money for Buffalo Bayou mid-reach
- No New Funds for Years
- Most funds Designated
- \$500 Million Not Allocated
- Challenge to Consider Equity
- North Canal is an enabling project, providing relief downstream

Buffalo Bayou Coalition Advocates

- Support Addicks and Barker Improvements
- Support Natural /Nature-based Solutions
- Support Third Reservoir/Reducing Cypress Creek Overflow
- Support North Canal /White Bayou Bypass
- Support Addition of Detention Where Feasible
- Support Greater Operating Range of Buffalo Bayou
- Support HCFCD Working With Community
- Advocate Funding to Remove Restrictions in Mid-Reach Improve Conveyance of Buffalo Bayou

Impediments to Action

Rights-of-way challenge

"people in the Villages, Tanglewood, River Oaks own to middle of the bayou"

Political Aversion to work in Mid-Reach

 Misconception: Buffalo is well protected whereas reality is Buffalo had not been tested between 1935 and Harvey

Reality

- People Who Flooded Want Something Done!
- •Near-term Solutions can:
 - Improve Conveyance
 - Reduce Erosion
 - Lower Water Surface in Major Events
 - Preserve the Natural-Stream Character

Buffalo Bayou:

West of Beltway 8 - straightened, smooth East of Beltway 8 - tortuous, constricted, restricted Both have numerous bridges restricting conveyance



Framework Proposed for Solutions

- High Flow Bypasses for 10-20 Oxbows
 - High flow tunnels
 - High flow benching
- Bridge Adjustments to Relieve Obstructions
 - Bridge Openings Increased
 - Bridge Elevation/ Replacement
 - High flow bridge by-passes
- Work from East to West
 - Start with the North Canal Bypass
 - Relieve down stream constrictions/ avoid adverse impact

improve conveyance for entire bayou same rain, same flow, <i>lower water surface elevation Oxbows and Bridges Impede Flow Needed: \$300 million*

- \$100,000,000 from Harris Bonds
- \$200,000,000 from Federal Government

Lower Water Levels a Minimum of 2 Feet Reduce flooding along all of Buffalo Bayou

* pending results of HCFCD C-16 Study

Oxbows Impede Flow

O oxbows



Bridges Impede Flow





Oxbow Near Buckingham and Kinkaid at the Old Farm property Oxbow relief - bypass across neck of the oxbow for high flow Kinkaid School



Oxbow Relief – a high flow bypass

Water at oxbow makes 360 degree turn

- Head loss (V²/2g + friction) increases water level upstream
- Erosion at turns

Bypass half of flow at flood

- Velocity in turns reduced
- Head loss reduced to one quarter
- Erosion reduced
- **Overall water level reduced**





Ground surface restored to previous use & appearance after installation of conduits Large "conduits" ~ 20 ft x 50 ft, to support overburden where required er ove

Oxbow Bypass Proposal

Oxbow Opportunities

Selective ROW or easement only where bypass is installed, not entire bayou only where property owners are amenable





Possibility of a high flow bench across one property



West of Gessner

Areas not developed, not platted Is it land public? Drainage easement?

Possibilities do exist for high flow bypass And east of Gessner













Google Earth





Riverbend West of Voss

Google Earth

10100

Lee Lee

Hunters Creek Village

Shorter Alternate in Hunters Village

1,000 feet

Houston Country Club

369 feet

Lec'

R

250

fee

Google Earth







Bridges – dealing with flow constraints

Restriction

 Structural members or roadway submerged = flow obstructed



Relief

Raise bridge and roadway



Restriction

 Reduced channel cross section or substructure =

acceleration / deceleration



Relief

Increase cross section
 Square-off sides
 Deepen channel/Bypass



B	3ridge Submergence Level Buffalo Bayou					
	Bridge	event year level	10	50	100	500
	• Highwa	y 6	-	-	-	1.5
	• Eldridge	2	-	-	-	0
	• Dairy As	shford	-	-	0	3.5
	• Kirkwoo	bd	-	-	-	0
	• Wilcres	t	-	0	2	5
	• Sam Ho	uston	-	_	0	4

Bridge elevations basis FEMA Flood Insurance Study Harris County January 2017 Event basis: United States Geological Service Report (USGS), Asquith (1988)

Current City of Houston standard is lowest stringer at 500-yr event level

Bridge Submergence Level Buffalo Bayou						
Bridge	event year level	10	50	100	500	
Gessner	r	-	1	3	7	
• Briar Fo	orest	-	-	-	3	
• S. Piney	' Point	-	-	-	2	
• San Feli	ре	-	-	1.5	6.5	
• Voss		-	-	-	2	
• Further	Point	-	-	1.5	6.5	
• Chimne	y Rock	-	-	-	2	
• Woodw	ay	-	-	2.5	7.5	
• I-610		-	-	-	5	

Bridge elevations basis FEMA Flood Insurance Study Harris County January 2017 Event basis: United States Geological Service Report (USGS), Asquith (1988)

Bridges Impede Flow – Wilcrest to Shepherd



Bridge Submergence Level Buffalo Bayou

Bridge	event year l	evel 10	50	100	500
• Shepherd		-	-	1.5	7.5
 Waugh 		-	-	-	4
• Montrose		-	-	1	7
• Memorial		2	6	9	15
• Memorial		4	8	11	17
• Texas/Sab	ine	-	-	2	7
 Louisiana Capital 	/Franklin/ /Allen	-	5.5	8.5	13.5
• Milam		7	11	14	19
• Travis/Sm	ith/Preston	-	4	7	12
• Prairie/Ba	gby	-	-	0	5
• Congress		-	1.5	4.5	9.5
• Main		-	-	-	-
• Fannin		-	-	0	5
• San Jacint	0	-	-	1.5	8

Bridges East of Shepherd, Downtown



Bridge Opportunities (based on structure elevation)

Highway 6 to Beltway 8

- High Benefit
 - Wilcrest, Beltway 8
- Secondary Benefit
 - Dairy Ashford

Beltway 8 to Loop 610

- High Benefit
 - Gessner, San Felipe, Further Point, Woodway, I-610
- Secondary Benefit
 - Briar Forest, Voss, Chimney Rock

Loop 610 – Downtown

- High Benefit all bridges except Main St and secondary
- Secondary Benefit Fannin, Prairie, Bagby

Beltway 8 Bridges









Gessner Bridge



Briar Forest Bridge



NE Downtown at I-10, looking upstream



Buffalo Bayou – Improve Conveyance

- Achievable: Bypass oxbows, Improve bridge sections, Raise bridges
- Aesthetic: Protect and restore natural features, Reduce flooding risk
- Affordable: Selected ROW purchase, High value improvements
- Benefits: Greatly reduces future flood risks, Protects thousands of homes in the mid-reach of Buffalo Bayou

Strategy

- Develop Coalition of Residents along Buffalo Bayou
- Inventory Credible Concepts
- Establish Formal Advocacy Organization
- Formal Study and Assessment
- Take HC/HCFCD \$300MM Proposal Spring 2019
- Engage Judge Hidalgo, Commissioners Radack and Cagle, HCFCD Director Poppe
- Provide input to USACE Buffalo Bayou Tributaries Study
- Engage Congressman Fletcher

Advocacy

- Political Acceptance and Support for Improvements in Mid-Reach of Buffalo
- Identify ROW/Easements Selective Oxbow bypass
- Take HC/HCFCD \$300MM Proposal
 - Funds for right-of-way
 - Funds for conveyance
 - Preservation of bayou character
 - \$100MM local; \$200MM federal match
- Request Support Federal Representative Fletcher

Buffalo Bayou – Improve Conveyance

Buffalo Bayou Coalition

Advocates For Funding Flood Reduction

- Achievable: Bypass oxbows, Raise bridges, Protect thousands of homes west of Gessner
- Aesthetic: Keep natural features along Buffalo Bayou, reduce flooding risk
- Affordable: No litigation, no condemnation, selected ROW and purchase

Our community must speak with a strong, coherent voice: improve conveyance

add detention at storm water sources

Next Steps

- Future Meetings and Future Participants
- Consolidate Support
- Discussion with Rep Fletcher
- Presentation to BBP, BPA, Parks
- Develop Acceptable Solutions with HCFCD
- Commissioner's Court 2019
- Contact: Michael Huffmaster michael.Huffmaster@att.net