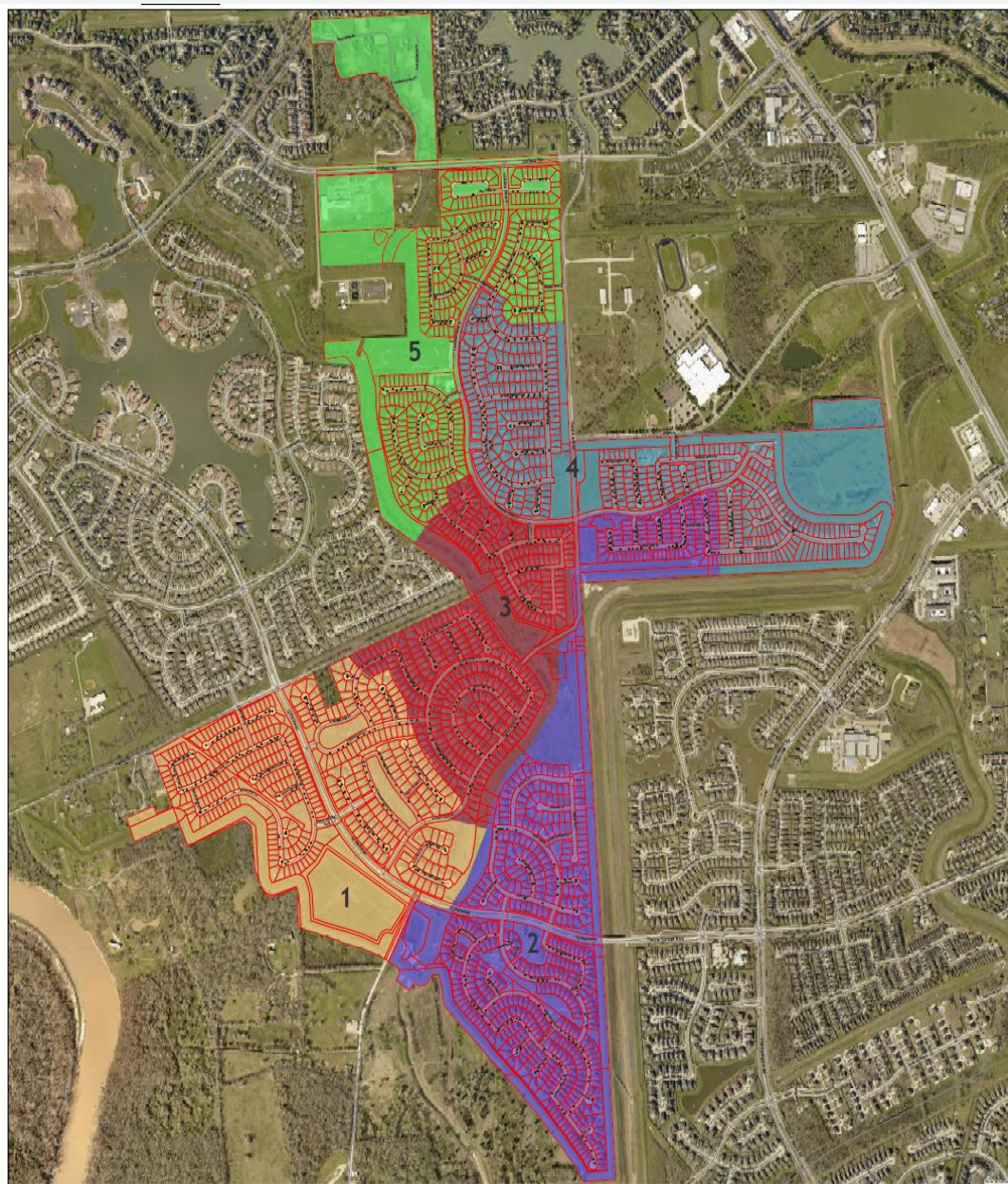


# FORT BEND COUNTY LEVEE IMPROVEMENT DISTRICT NO. 19

Community Meeting  
November 12, 2019

# COMMUNITY MEETING AGENDA

1. Welcome Remarks
2. Introduction of County Commissioner
3. Introduction of LID 19 Directors
4. Guiding Principles
5. Levee and Drainage System
6. Flat Bank Creek Erosion
7. District Projects
8. District Financial Review
9. Risk Rating 2.0
10. District Communications
11. Comments and Questions



## LID 19 DIRECTORS



**Precinct 1**  
**Kalapi Sheth**  
**President**  
**5/18-5/20**



**Precinct 2**  
**Glenn Wong**  
**Assistant Vice President**  
**5/18-5/22**



**Precinct 3**  
**John Arndt**  
**Assistant Secretary**  
**5/18-5/22**



**Precinct 4**  
**Dean Cooper**  
**Vice President**  
**5/18-5/20**



**Precinct 5**  
**Radhika Iyer**  
**Secretary**  
**5/18-5/22**

## LID 19 GUIDING PRINCIPLES

1. Maximize flood prevention and control within LID 19 within the constraints of available financial and operational resources.
2. Maintain levees and other related flood protection infrastructure in excellent condition.
3. Identify and execute projects efficiently to improve flood prevention and control within LID 19.
4. Engage qualified providers and vendors of services (engineering, operating, accounting, legal, etc) necessary for LID 19 operations and conduct periodic evaluation of the competitiveness and quality of services provided.
5. Manage and monitor LID 19's finances, including active review of budgets, expenditures, revenues, and long-term financial planning.
6. Consider ways to accomplish cost savings while maintaining quality of services or products to potentially reduce LID 19's tax rates.
7. Maintain effective communications with LID 19 residents and other governmental entities, including Fort Bend County, Missouri City, Sugar Land, and other levee improvement districts, during both normal operations and during severe weather or potential flood events.
8. Monitor potential changes in federal and state laws and regulations and evaluate any potential impact on the LID 19's residents.
9. Minimize or avoid expenditures or resources that do not relate to legally binding requirements or issues unrelated to flood prevention and control and water management, such as "quality of life" or "convenience" issues.

## INTERESTING LID 19 FACTS

- LID 19 Area size - Approximately 817 acres
- Total number of homes in LID 19 - Approximately 1950 homes
- Total linear length of district levee – 4.8 miles
- Outstanding bond debt - \$39,395,000

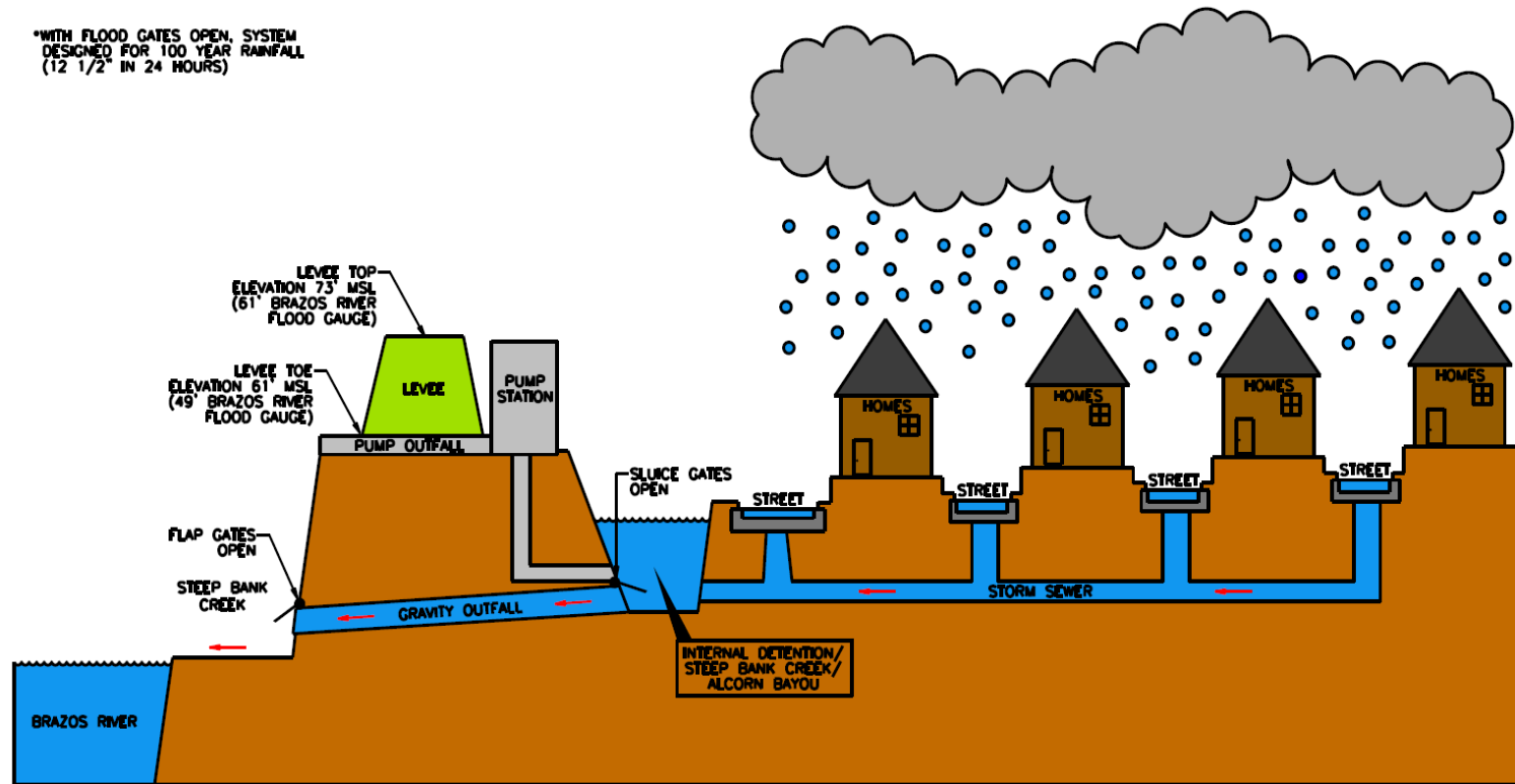
# DISTRICT LEVEE AND DRAINAGE SYSTEM



# LID 19 LEVEE SYSTEM

## NORMAL OPERATIONS 100YR – INTERNAL RAINFALL

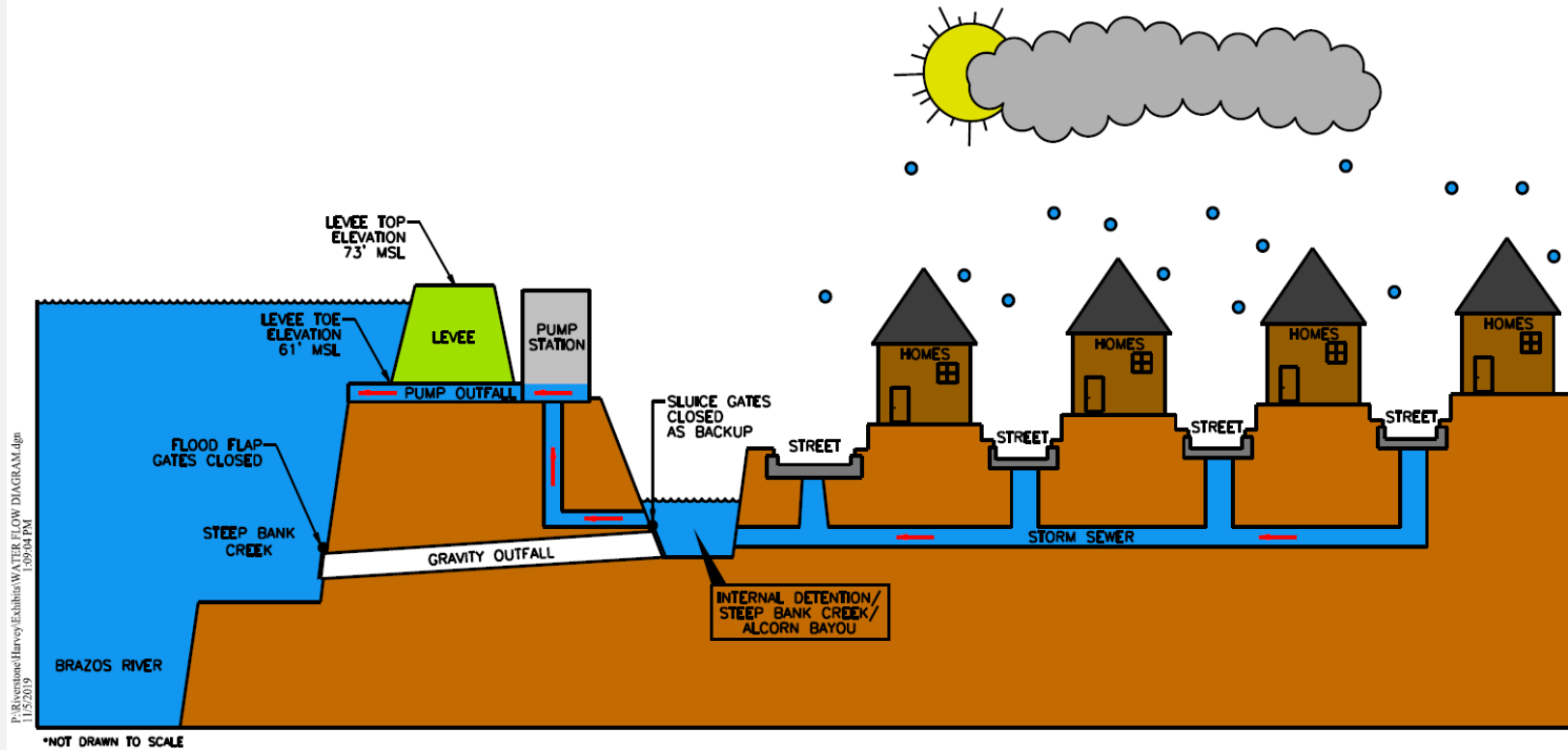
\*WITH FLOOD GATES OPEN, SYSTEM  
DESIGNED FOR 100 YEAR RAINFALL  
(12 1/2" IN 24 HOURS)



\*NOT DRAWN TO SCALE

# LID 19 LEVEE SYSTEM

NORMAL OPERATIONS  
100YR – BRAZOS RIVER FLOOD LEVEL





## STEEP BANK CREEK PUMP STATION PUMPING CAPACITY

- Current pump capacity:  $4 \times 20,000$  gallons per minute (gpm) pumps = 80,000 gpm total
- Supplemental pumps:  $5 \times 5,000$  gpm pumps +  $7 \times 8,000$  gpm pumps = 81,000 gpm total
- SBC pump station expansion project:  $3 \times 50,000$  gpm pumps = 150,000 gpm total

**NOTE:** One 20,000 gpm pump is treated as a spare pump under the current capacity. After the expansion, one 50,000 gpm pump will act as the spare pump.

Fort Bend LID 19 (Riverstone)						Turf Maintenance (Monthly Inspections)				
Report for (Month)	Grade	Q1	Q2	Q3	Q4	Mowing Cycle Performed				
						String Trimming Performed				
Levee Embankment/Tops (Weekly Inspections)						Ant Control Applied				
Dessication Cracking						Agronomist/Soil Testing				
Pig Rutting						Fertilizer Applied				
Livestock Grazing						Herbicide Applied				
Burrowing Animals						Overseeing of Bermuda				
Rutting (Tire Tracks/Unauthorized Traffic)						Overseeing of Winter Rye				
Slope Erosion										
Slope Failures						General Maintenance (Monthly Inspections)				
						Gates, Locks, Fences, and Bollards				
General ROW Items (Weekly Inspections)						Signage/Mapping				
Levee Drainage Conditions						District/Operator Signs				
Backslope Swales						Pipeline/Utility Crossing Signs				
Storm Inlets										
Encroachments (Fences/Landscaping/Mowing/Other)						Pump Stations (Daily Inspections)				
Trees & Brush in ROW						Generator Inspections (Tested Weekly)				
Condition of Turf (Height, Weeds, Overall Health)						Generator Preventative Maintenance Completed				
						Generator Load Bank Test				
Outfalls/Gates (Weekly Inspections)						Transfer Switch Inspection				
Concrete Surfaces (Cracking/Spalling/Shifting)						Transfer Switch Test				
Flap Gates						Transfer Switch Preventative Maintenance				
Flap Gate Debris						Fuel Tank Inspection				
Flap Gate Operable						Diesel Fuel Maintenance (Yearly)				
Sluice Gates						Test Pumps (TBD)				
Sluice Gate Debris						Cleanliness				
Sluice Gate Operable						Building Inspection				
Emergency Gates						Outside Lighting				
Condition of Gates										
Condition of Raceway for Gates										
Gates Preventative Maintenance Perform this month						USACE Ratings:				
						- Acceptable (A)				
						- Minimally Acceptable (MA)				
						- Unacceptable (U)				
						Not Applicable (N/A)				



Pump Station Inspection Log

Operator: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Pump Station Facility:

General Housekeeping	Complete	Not Needed	
AC Unit Functioning	Yes	No	
Remote Monitoring System	On	Off	
dial tone	Yes	No	
Alarms	Yes: _____		
Pump Switches	Auto	Hand	Off
Automatic Transfer Switch	Normal	Emergency	
Pump Run Time			
1 _____	2 _____	3 _____	
4 _____	5 _____	6 _____	
Cameras	Operational	N/A	
Fuel Tanks	Leaks	Yes	No
	Level	Full	Half Empty
Building Power Boxes	Ok	Housekeeping Needed	
_____			
Plant Access / Road	Good	Bad	
Stop Logs	Good	Bad	
Mowing	Complete	Needed	
Natural Gas Valve	Operational	Service	N/A
Fuel Pump	Operational	Service	N/A
Fencing	Good	Bad	
Security (inc All Locks)	Good	Replace	
Signage	Good	Replace	

Generator Set:

Check for Leaks	Comments: _____		
Batteries	Good	Bad	
Generator Status	Automatic	Off	
Block Heater	Operational	Service	
Alarms	Yes: _____		
Grease Valves	Operational	Services	N/A

# FLAT BANK CREEK EROSION

# FLAT BANK CREEK EROSION



# FLAT BANK CREEK EROSION





# FLAT BANK CREEK EROSION REPAIRS





# DISTRICT PROJECTS

## PROJECTS COMPLETED SINCE HURRICANE HARVEY

- Staff gauges
- Emergency notification system and independent website design
- Purchase of supplemental pumps
- Storage for supplemental pumps
- Hardening of levee top near Steep Bank Creek pump station
- LED emergency notification sign on LJ Parkway
- Additional emergency communication systems (walkie-talkies)

## PROJECTS IN PROGRESS

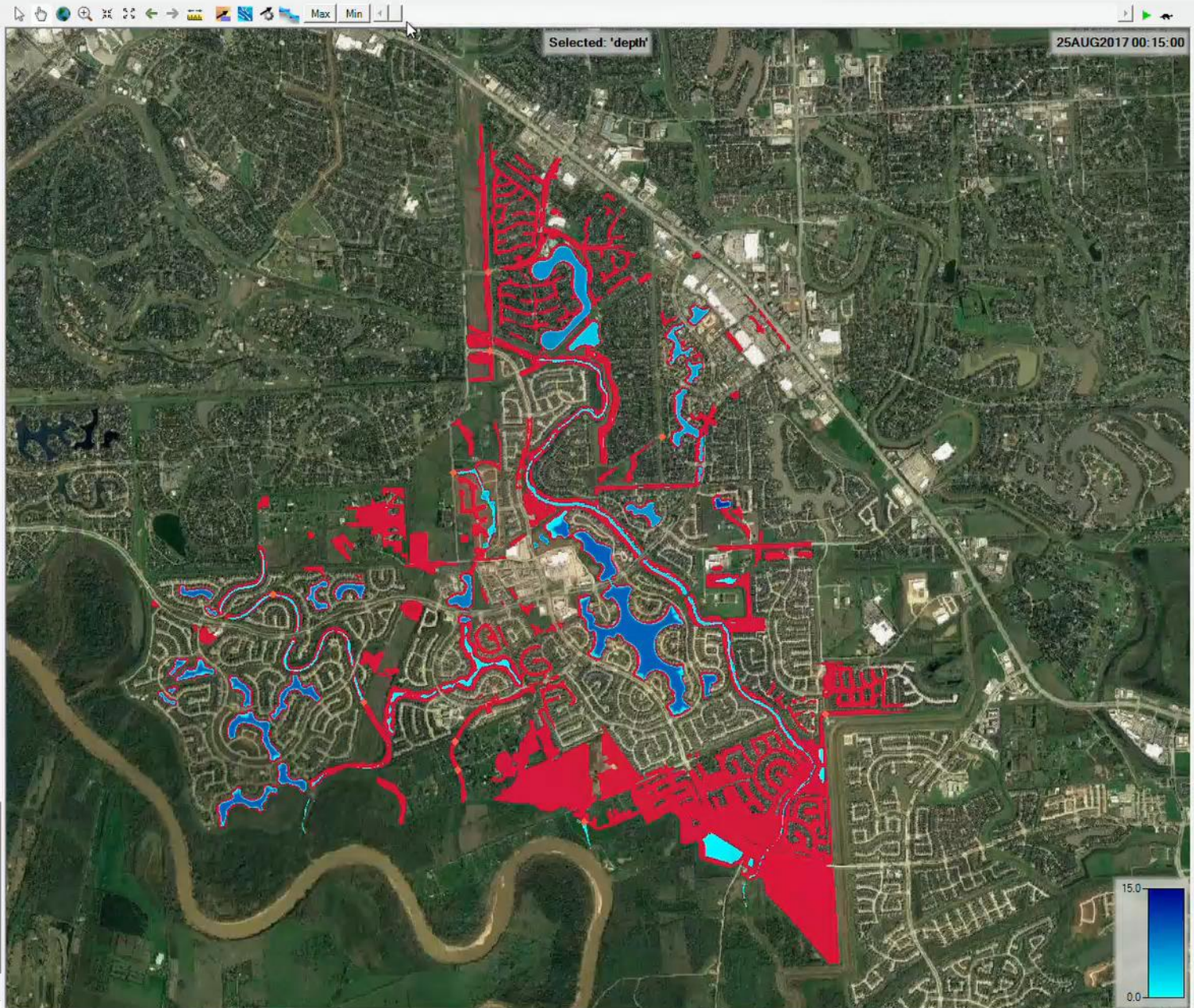
- Steep Bank Creek pump station expansion
- Steep Bank Creek Watershed Regional Modeling Project
- Hagerson Road watershed interconnect (Steep Bank Creek to Snake Slough)
- Data logging at Steep Bank Creek pump station

## FUTURE PROJECTS

- Regional Flood Protection Project
- University Boulevard watershed interconnect (Steep Bank Creek to Alcorn Bayou)
- Lighting improvements at the Steep Bank Creek pump station
- Emergency Operations Center

Selected Layer: Depth

- ☐ test\_rain\_0807(3)
- ☐ Harvey\_081419
- ☐ test\_rain\_0807(4)
- ☐ Harvey\_081519
- ☐ Harvey\_081519\_None
- ☐ Harvey\_081919
- ☐ Harvey\_082019
- ☐ Harvey\_082119
- ☐ Harvey\_082619
  - ☐ Geometry
  - ☒ Depth (30AUG2015 08:00:00)
  - ☐ Velocity (31AUG2015 16:30:00)
  - ☐ WSE (30AUG2015 08:30:00)
  - ☐ Courant (29AUG2015 06:30:00)
- ☐ Starting\_Pond\_Hotstart
- ☐ Harvey\_09182019
  - ☐ Geometry
  - ☒ Depth (28AUG2017 23:45:00)
  - ☐ Velocity (26AUG2017 00:15:00)
  - ☐ WSE (26AUG2017 00:15:00)
- ☐ Harvey\_082619\_new run
  - ☐ Geometry
  - ☒ Depth (30AUG2017 08:15:00)
  - ☐ Velocity (Max)
  - ☐ WSE (Max)
- ☒ Harvey\_09242019
  - ☐ Geometry
  - ☒ Depth (25AUG2017 00:15:00)
  - ☐ Velocity (30AUG2017 11:45:00)
  - ☐ WSE (Max)
  - ☐ Depth (30AUG2017 08:30:00)
  - ☐ Courant (30AUG2017 10:30:00)
  - ☐ Depth (30AUG2017 08:30:00)
- ☒ MapLayers
  - ☒ Inundation\_083017
  - ☐ Channel\_cross\_sections
  - ☒ Google Satellite
  - ☐ 1D XS
  - ☐ 2D Connection\_Rainfall\_EC
  - ☐ 2D Connection\_Rainfall\_Harvey
  - ☐ KA\_All\_Basins\_EC\_Rainfall
  - ☐ KA\_All\_Basins\_Harvey\_Rainfall
  - ☐ All Crossings
  - ☐ Mannings\_n
  - ☐ OpenStreetMaps
- ☒ Terrains
  - ☒ LiDAR\_Bathy\_052319
  - ☐ Bathy\_from\_XS\_clip\_052319
  - ☐ LiDAR\_050719
  - ☐ LiDAR\_EC\_061219
  - ☐ LiDAR\_Bathy\_EC\_061819
  - ☒ LiDAR\_Harvey\_082019



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# DISTRICT FINANCIAL REVIEW



## LID 19 FINANCIAL OVERVIEW

- Appraisal value of the district - \$722,158,481
- 2019 Tax rate - \$0.68
- Outstanding bond debt - \$39,395,000



# SERIES 2019 \$10,725,000 LEVEE IMPROVEMENT BONDS

Proposed Project	Amount Allocated*
Grove at Riverstone – Detention and Mass Grading	\$723,088
Steep Bank Creek – Pump Station Expansion	\$3,050,591
Snake Slough/Steep Bank Creek Interconnect	\$542,522
Alcorn Bayou/Steep Bank Creek Interconnect	\$349,650
Levee Hard Surfacing	\$3,200,496
Emergency Operations Center	\$345,000
Emergency Signage	\$138,000
Storage Building for Mobile Pumps	\$30,774
Steep Bank Creek Drainage Analysis	\$300,000

\*Amount allocated is subject to change.

# RISK RATING 2.0

# RISK RATING 2.0

## What is Risk Rating 2.0?

- FEMA's new method to calculate insurance premiums by implementing new factors that accurately reflect a property's flood risk.
- The purpose of the program is increase premium revenues to keep pace with flood damage claims.
- The program may lead to lower premiums for houses with lower flood risks and higher premiums to houses with high flood risks.
- New rates for single-family homes go into effect **October 1, 2021**.

## RISK RATING 2.0

### INSURANCE PREMIUMS UNDER CURRENT RATING SYSTEM

- The house's location on the Flood Insurance Rate Map
- Base flood elevation

### INSURANCE PREMIUMS UNDER RISK RATING 2.0

- Type of flood risk
- House's proximity to coast or water source
- Cost to rebuild the house
- Other unknown factors

# RISK RATING 2.0

## **COMMISSIONER KEN DEMERCHANT'S PETITION**

- The goal of the petition is to request that FEMA—
  - Provide transparency throughout the risk rating adoption process
  - Give stakeholders the opportunity to provide input in developing Risk Rating 2.0 before its adoption

## **PLEASE SIGN PETITION TODAY!**

**Petition is set up on iPads stationed at the back of the meeting room**

**WEBSITE LINK TO THE PETITION IS ALSO AVAILABLE AT [FBLID19.COM](http://FBLID19.COM)**

# DISTRICT COMMUNICATIONS

## DISTRICT COMMUNICATIONS

Sign up for email alerts on [www.fblid19.com](http://www.fblid19.com).

Text LID19 to 474747 to receive text alerts.

### Sign Up for Email or Text Alerts

For Text Alerts, text **LID19** to **474747**  
to receive  
important news and emergency  
notifications via text.

For **Email Alerts**, complete the form  
below.

Sign Up

meeting and meet their LID 19 Directors  
powered by MailMunch



## DISTRICT WEBSITE

Visit the district website at  
[fbld19.com](http://fbld19.com) to stay updated  
on your district!



✉ Sign Up for Email or Text Message Alerts!

HOME ABOUT MEETINGS ELECTIONS EMERGENCY OPS PROJECT UPDATES RESOURCES SOCIAL MEDIA CONTACT US



### LID 19 Community Meeting

October 30, 2019 by [FBLID 19](#)

LID 19 Directors will be holding a community meeting at the [Riverstone Clubhouse](#) on November 12, 2019 at 7pm. Residents are encouraged to attend the meeting and meet their LID 19 Directors and learn about the ongoing operations of the District. Please refer to [www.fbld19.com](http://www.fbld19.com) or the [District Facebook page](#) for upcoming information.

Posted in: [Latest News](#)

### LID 19 Tax Rate

October 15, 2019 by [FBLID 19](#)

At the September 27th board meeting, LID 19 Directors voted to maintain the District's 2018 tax rate of 68 cents per \$100 of assessed value for the 2019 tax year. The District is primarily responsible for overseeing storm drainage and maintaining the levee system that protects homes from rising water. The District also continues to implement projects that increase resilience against flooding. The unchanged tax

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### Upcoming Meetings

November 12 (Tuesday) at 7:00 PM  
Community Meeting  
Meeting Location:  
The Club at Riverstone  
[18353 University Boulevard](#)  
[Sugar Land, Texas 77479](#)

November 22 (Friday) at 8:30 AM

The Board generally meets at:

The Muller Law Group, PLLC  
[2008 West Loop South, Suite 200](#)

# EMERGENCY NOTIFICATION SIGNS

- 1<sup>ST</sup> SIGN CURRENTLY LOCATED ON LJ PARKWAY APPROACHING THE FLAT BANK CREEK BRIDGE
- FUTURE 2<sup>ND</sup> SIGN TO BE LOCATED ON OILFIELD ROAD NEAR CREEKSTONE VILLAGE DR.



COMMENTS AND QUESTIONS

THANK YOU FOR ATTENDING!