

Virtual Public Meeting

December 14, 2022, from 6:30 to 7:30 p.m.



Taylor Gully Flood Risk Reduction Project

Project ID: G103-80-03.1-E001 Bond ID: F-14



Tom S. Ramsey P.E.

Commissioner, Harris County Precinct 3

Meeting Overview / How to Participate

Introduction **6:30 to 6:35 p.m.**

Project Presentation, including: **6:35 to 6:50 p.m.**

- Kingwood Drainage Analysis recap
- Taylor Gully alternatives and info
- Next steps

Virtual Q&A Session **6:50 to 7:30 p.m.**

Meeting Concludes **7:30 p.m.**

Joining the Meeting

December 14, 2022
6:30 to 7:30 p.m.

Join online at:
PublicInput.com/taylor

Join by phone at **855-925-2801**
(Meeting Code: **3364**)

Melissa Meyer, P.E.

Manager, Engineering Division
Harris County Flood Control District



Taylor Gully Flood Risk Reduction Project

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Harris County Flood Control District

- Special purpose district created in 1937 by the Texas Legislature in response to floods that devastated the Houston-area in 1929 and 1935
- Governed by the Harris County Commissioners Court
- Works closely with other regional entities
- Serves as a local partner to leverage federal dollars for flood damage reduction efforts

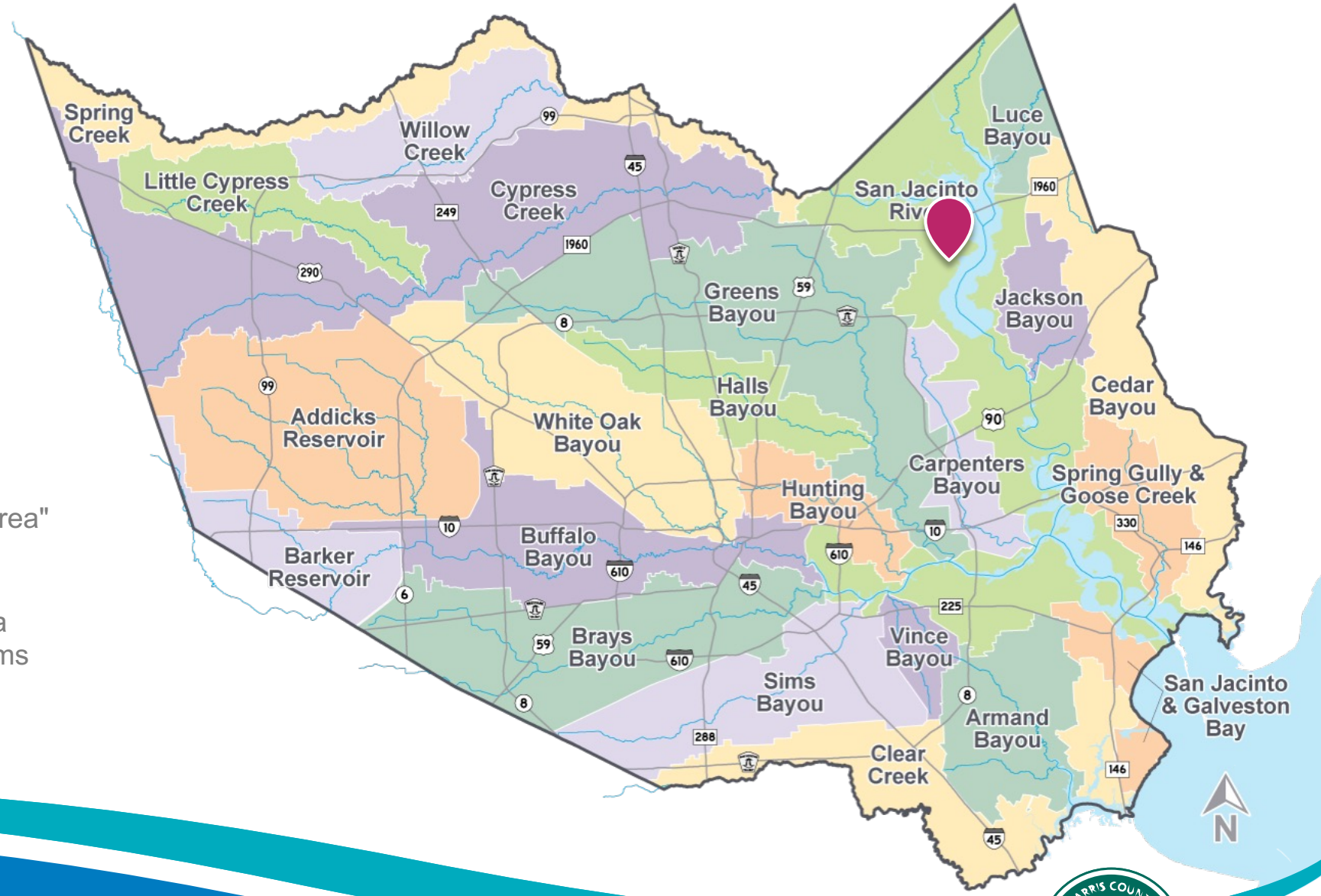
Our Mission

Provide flood damage reduction projects that work, with appropriate regard for community and natural values.

Harris County Watersheds

What is a watershed?

A geographical region of land or "drainage area" that drains to a common channel or outlet, mostly creeks and bayous in Harris County. Drainage of the land can occur directly into a bayou or creek, or through a series of systems that may include storm sewers, roadside ditches, and/or tributary channels.



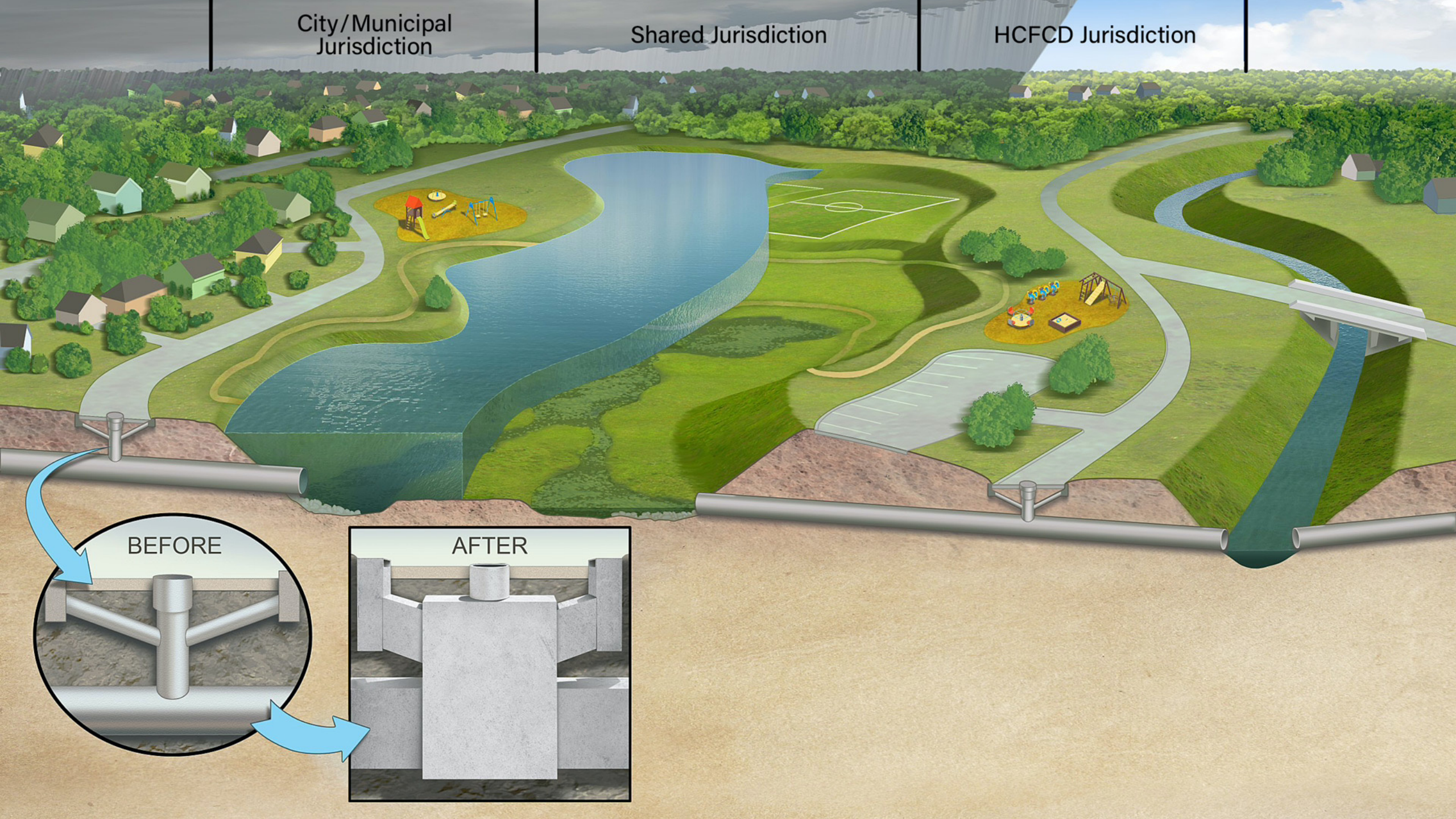
Why is Harris County Flood Prone?

- Subject to extreme rainfall, including tropical storms and hurricanes
- Flat, slow-draining landscape
- Clay soils that do not soak up excess rainfall quickly

City/Municipal
Jurisdiction

Shared Jurisdiction

HCFCJ Jurisdiction



BEFORE

AFTER

Bond Approved on August 25, 2018

List updated May 2020

- 181 projects across all watersheds
ALL projects in the 2018 Bond Program have been initiated, as of August 25, 2021.
- 38 projects added based on community input (\$400M+)

\$2.5B Bond funds

+ ~\$2.4B Partner funds (\$1.35B received)

= **~\$4.9B Total anticipated**



Channel Modification



Stormwater Detention



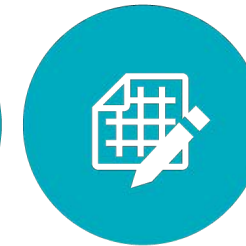
Channel Maintenance



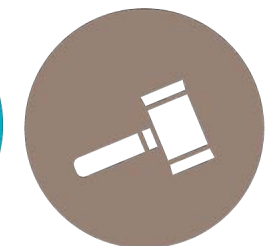
Storm Repair



Home Buyouts



Engineering Study

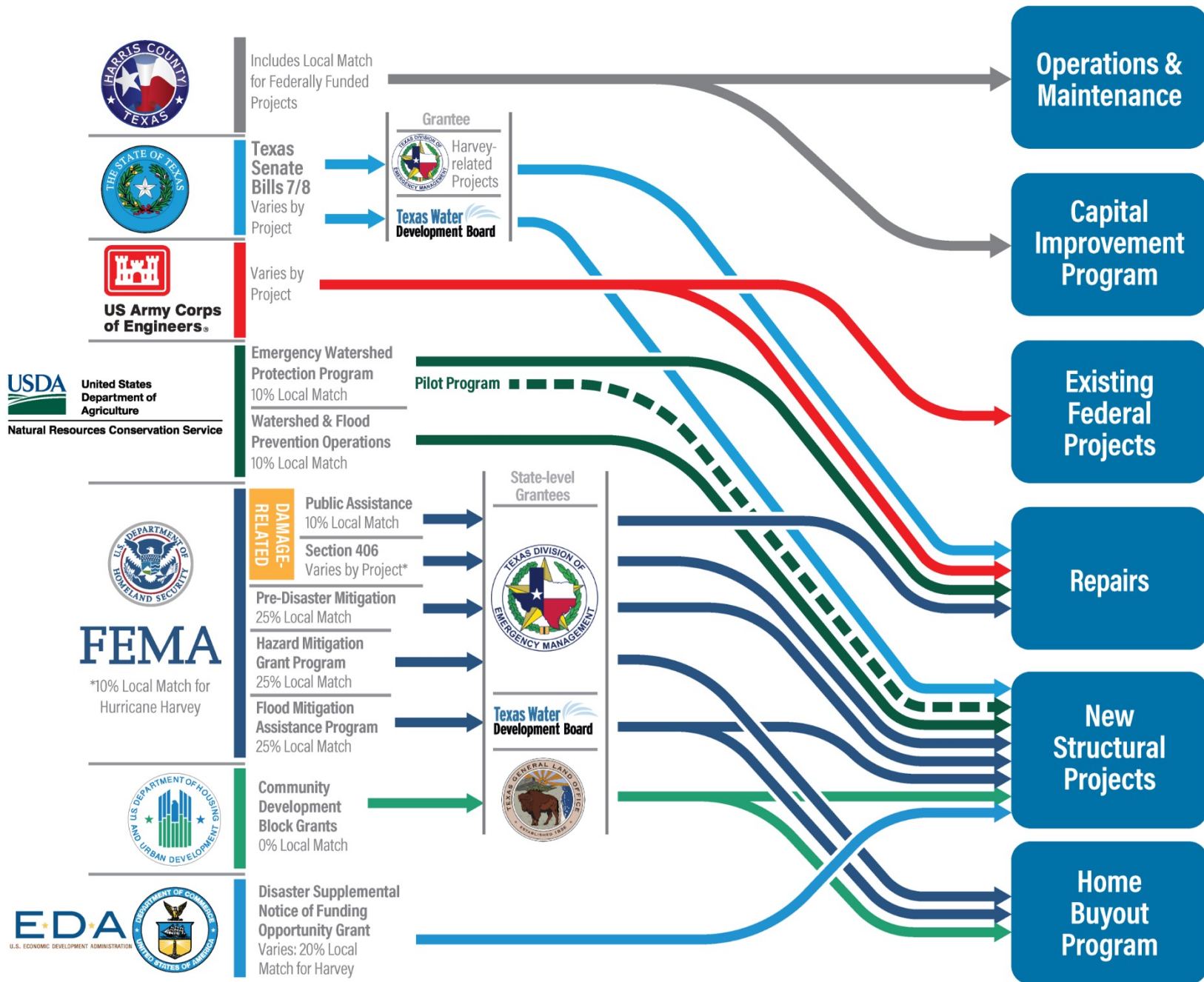


Other Jurisdiction

To learn more about the 2018 Bond Program and see the full project tables, please visit www.hcfcd.org/2018-bond-program.

HARRIS COUNTY
How is
FLOOD CONTROL DISTRICT

funded for disaster recovery & resiliency?

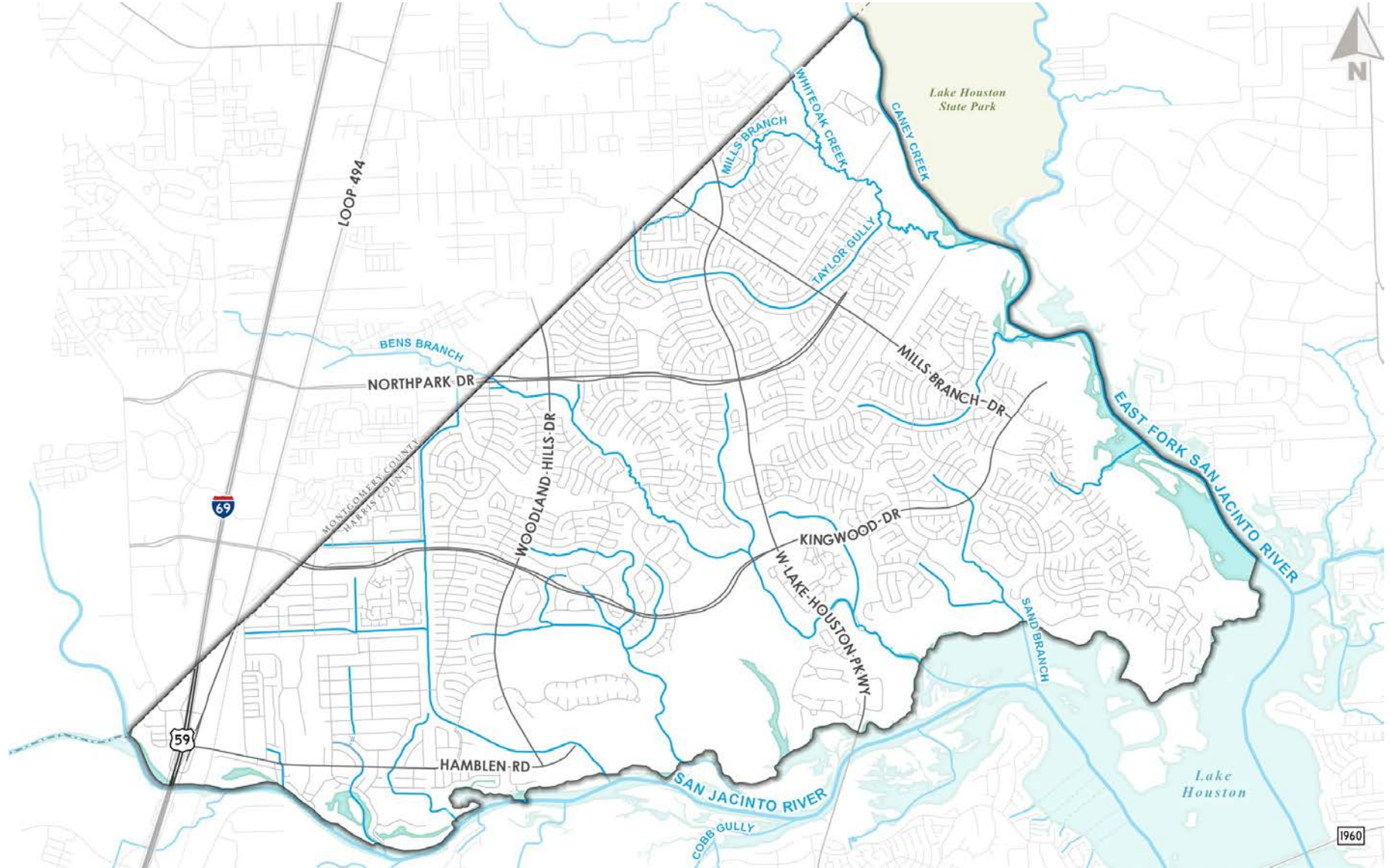


Taylor Gully Flood Risk Reduction Project

HCFCFD Project ID: G103-80-03-E001

Bond ID: **F-14**

About the Kingwood Drainage Network



Taylor Gully Flood Risk Reduction Project

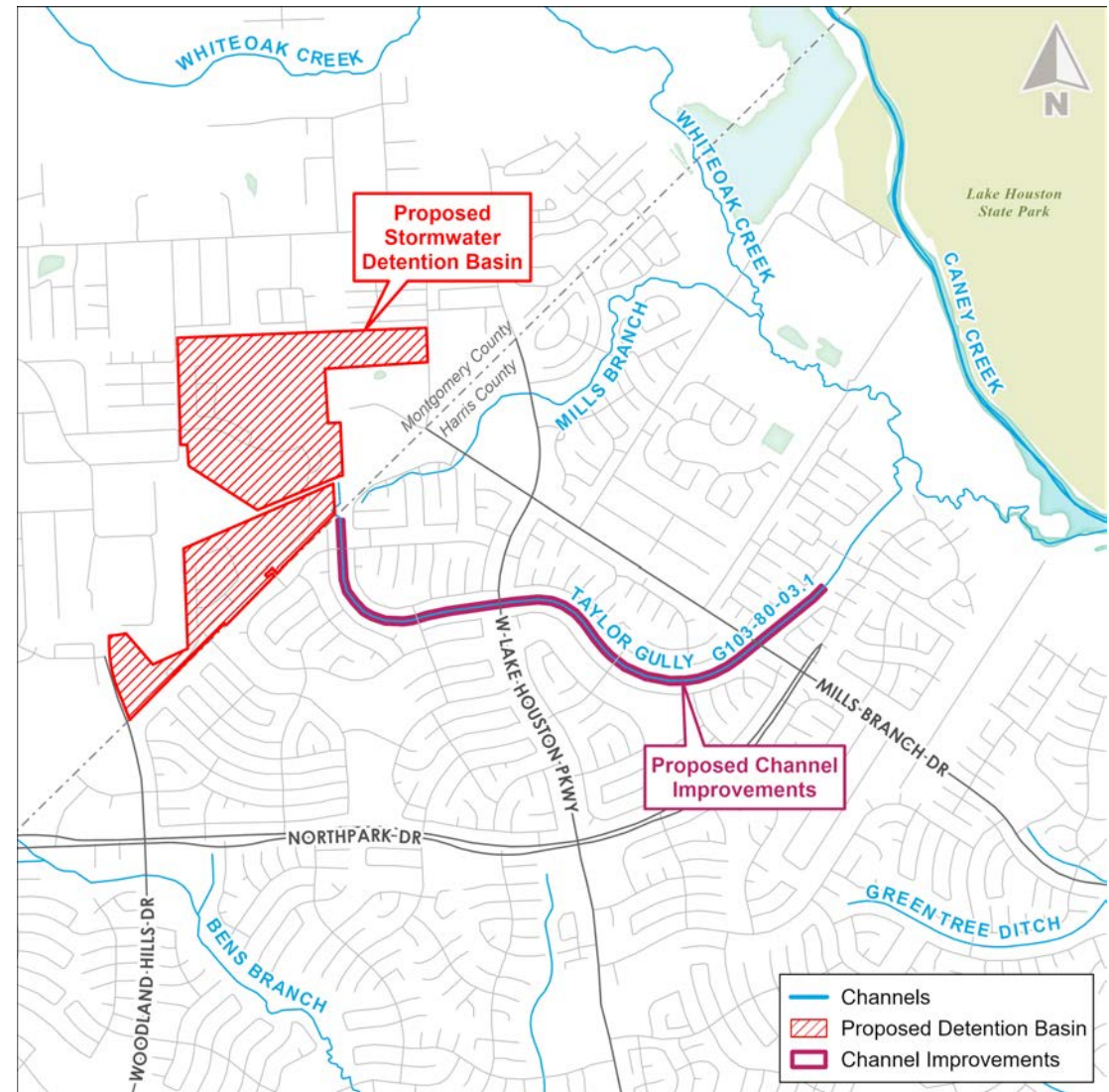
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Proposed Improvement Analysis

- Improved drainage channels, which would include widening and/or deepening for increased conveyance capacity
- Improved conveyance capacity of existing roadway-channel crossings through lengthening or raising existing bridge structures or constructing additional culverts
- Watershed diversions using enclosed conduits or along existing streams

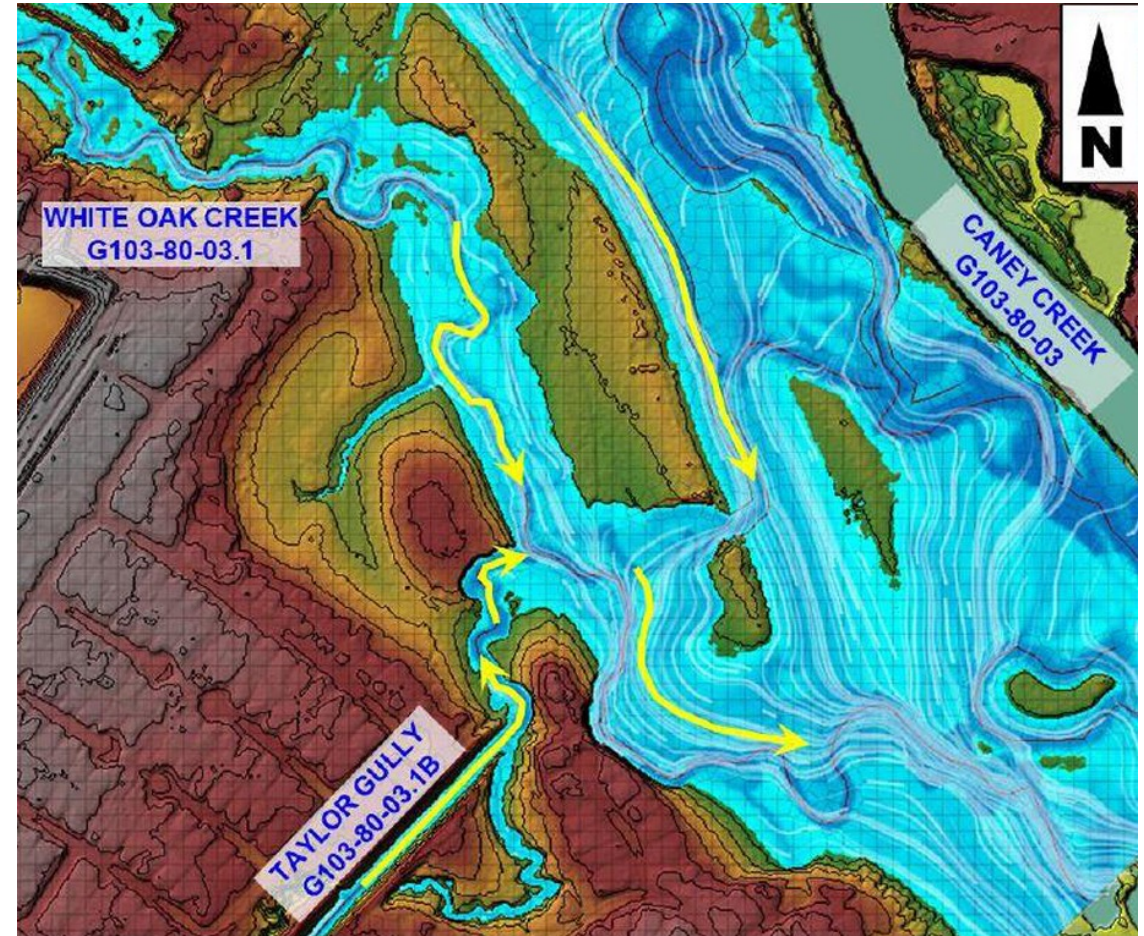
Project Overview

- Borders Harris and Montgomery Counties
- Consists of 2 miles of potential channel conveyance improvements
- Extent spans from the channel source to the site of the potential stormwater detention basin (Montgomery County line)



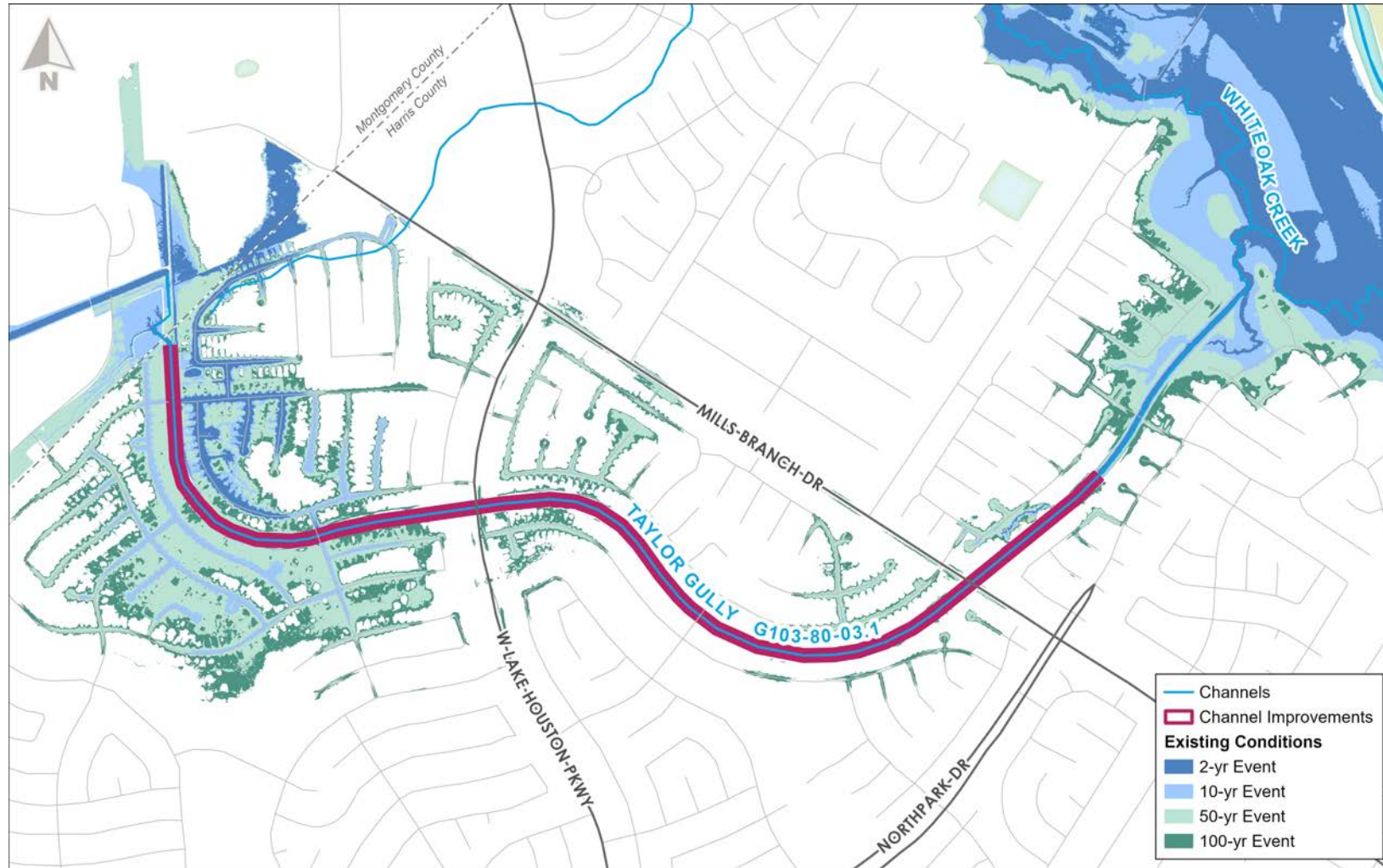
White Oak Creek

- White Oak Creek runs parallel to Caney Creek which is a tributary to the East Fork of the San Jacinto River.
- Rising elevations within Caney Creek resulted in the flow from Caney Creek backing up into Taylor Gully
- If you would like to see more information regarding recommendations for Caney Creek, please visit www.hcfcfd.org/c-17



Taylor Gully/White Oak Creek Confluence

Taylor Gully Existing Conditions

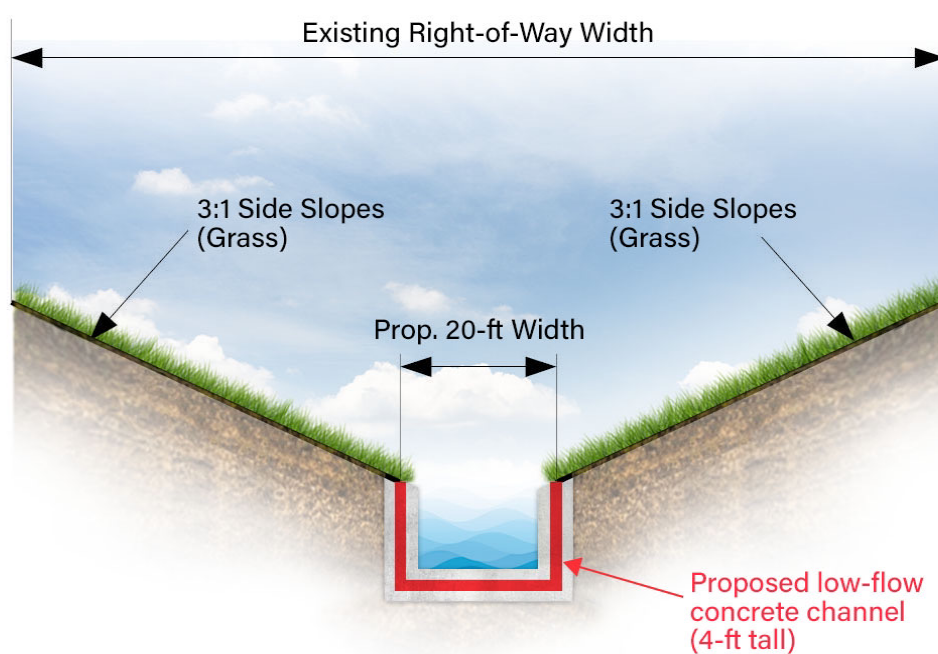


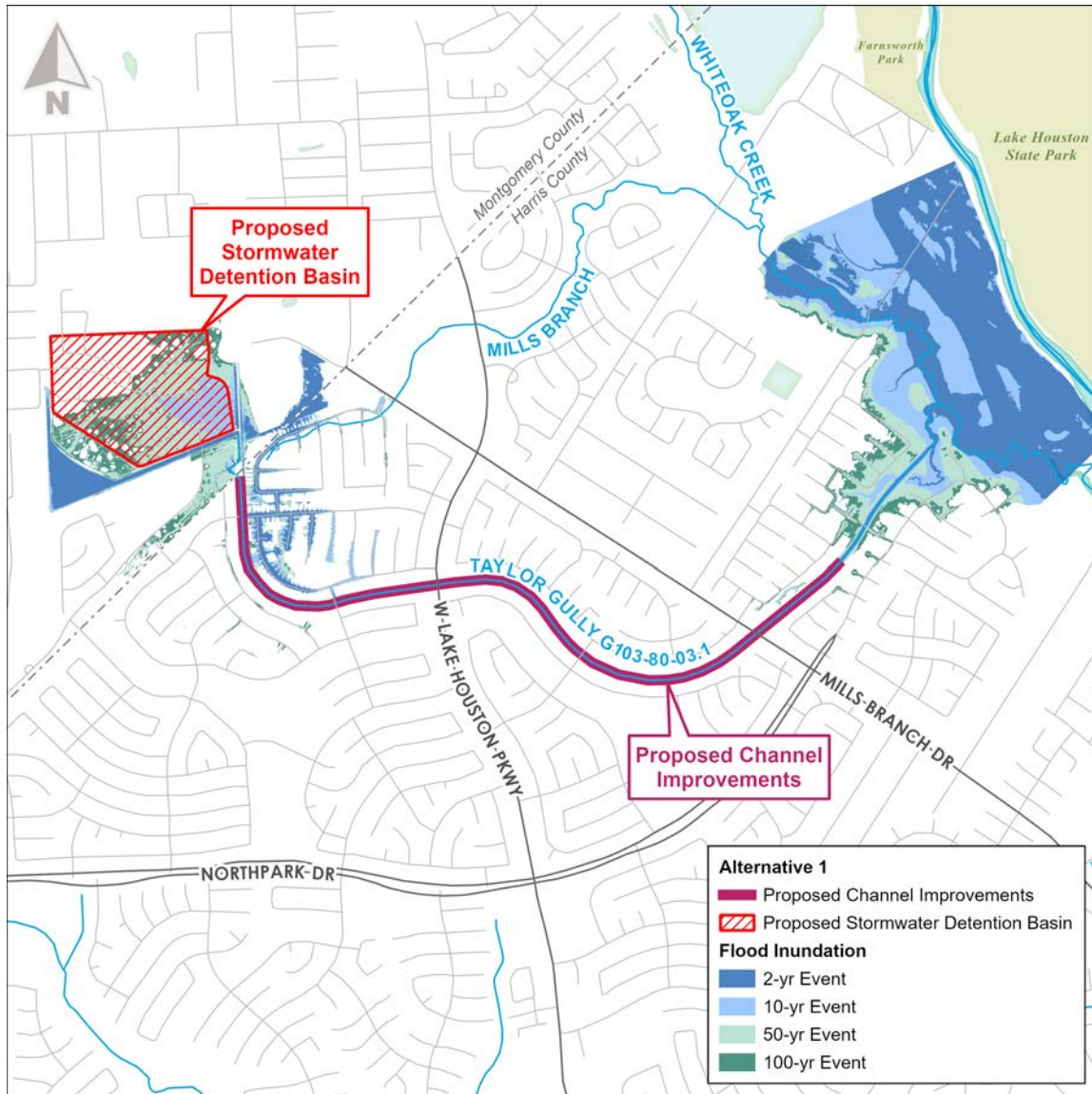
Taylor Gully Flood Risk Reduction Project

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Alternative 1

- Concrete-lined, low-flow channel 350 feet downstream of Creek Manor Drive to the existing drop structure 1,500 feet downstream from Mills Branch Drive
- Dry-bottom stormwater detention basin (estimated capacity: 412.5 acre-feet)



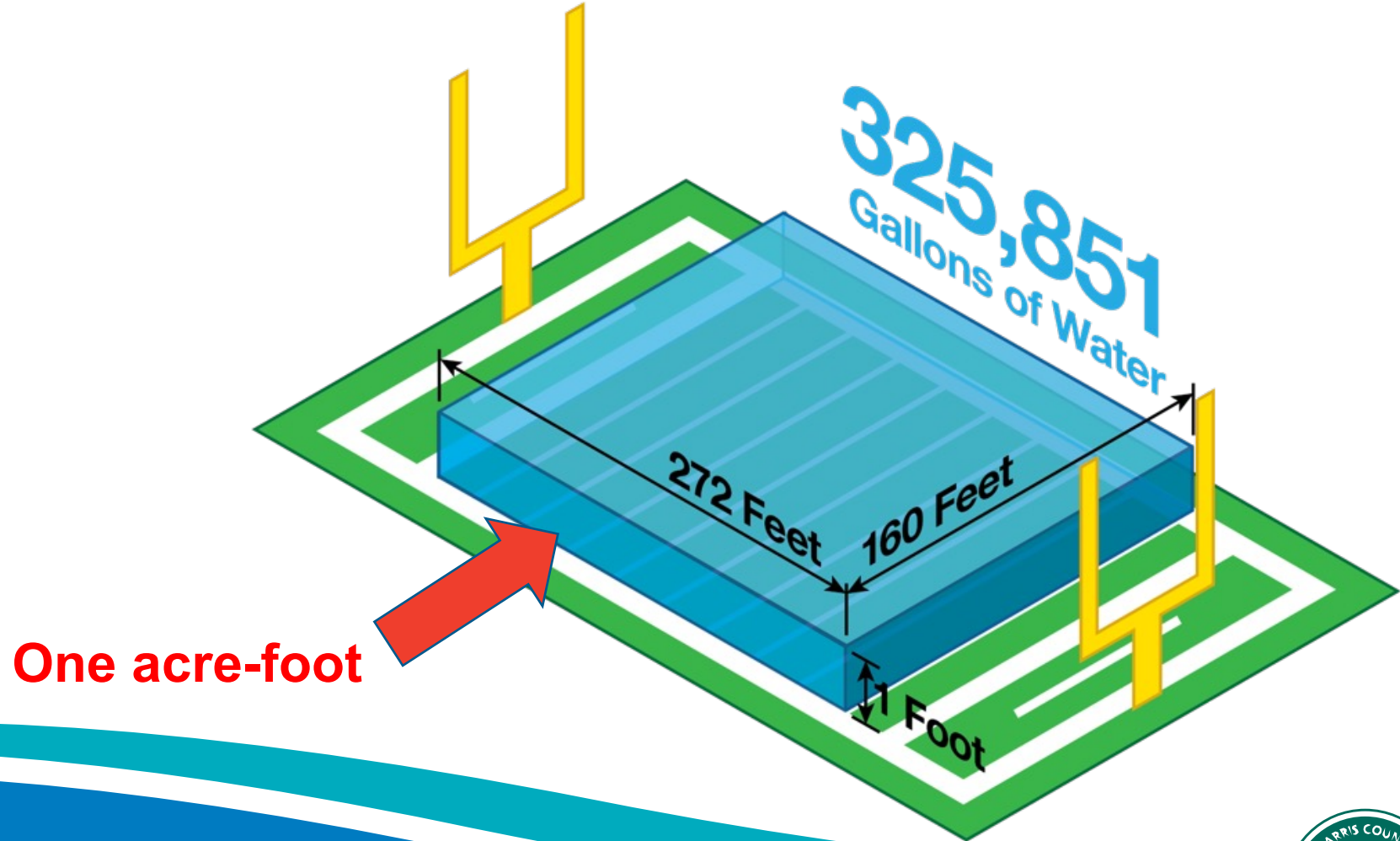


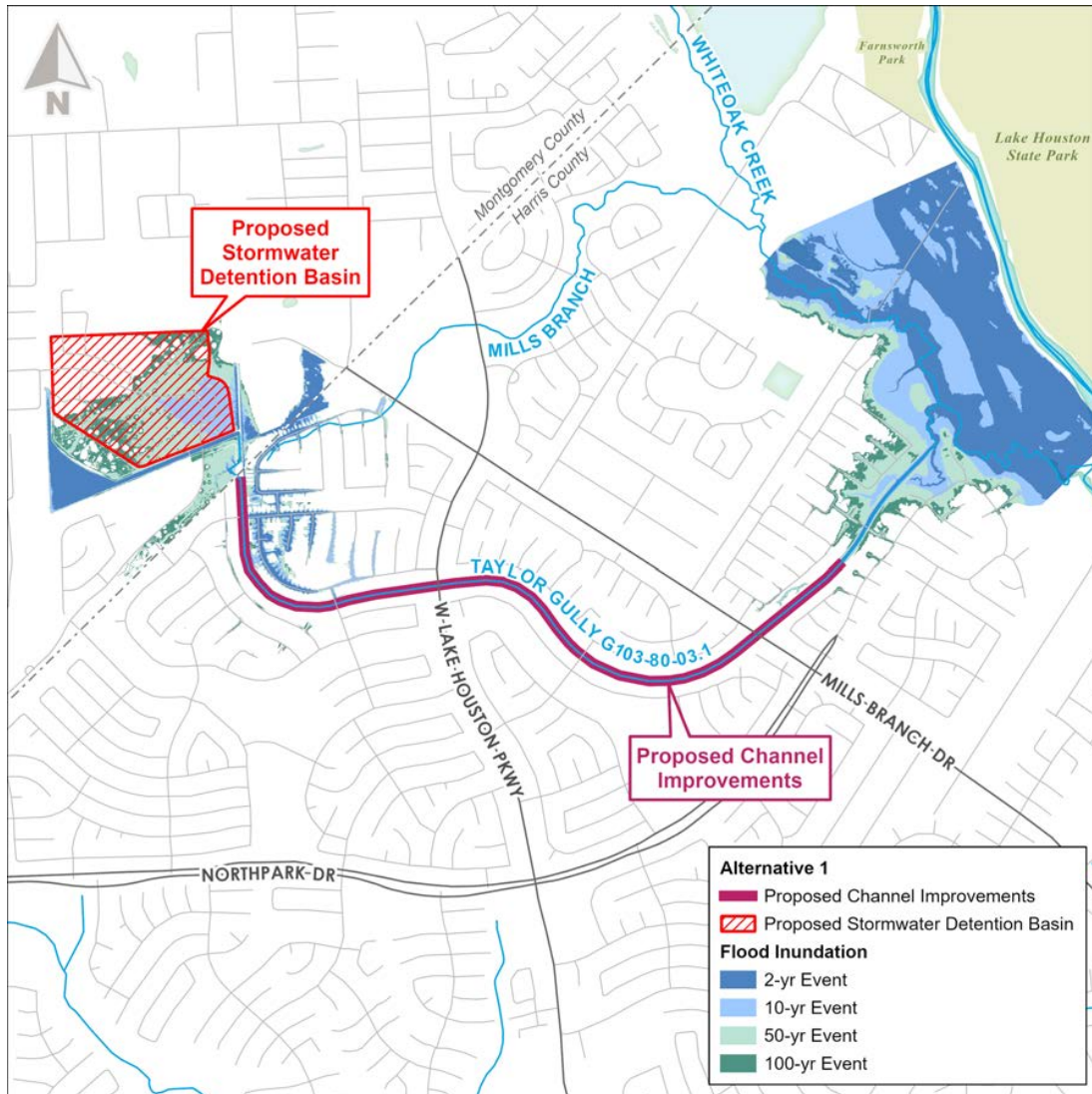
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How much is an acre-foot?

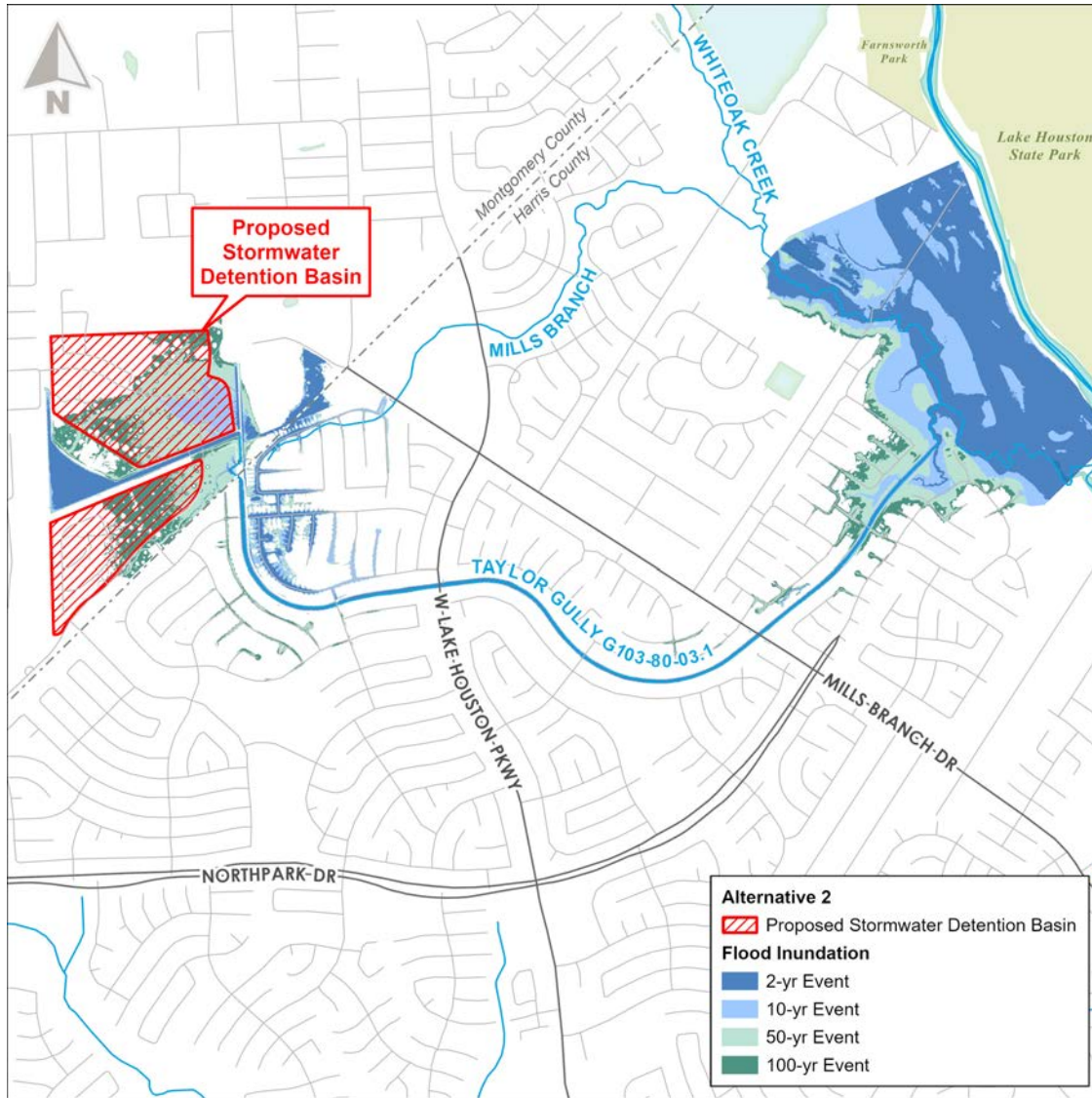




Alternative 1

- Dry-bottom stormwater detention basin (estimated capacity: 413 acre-feet)
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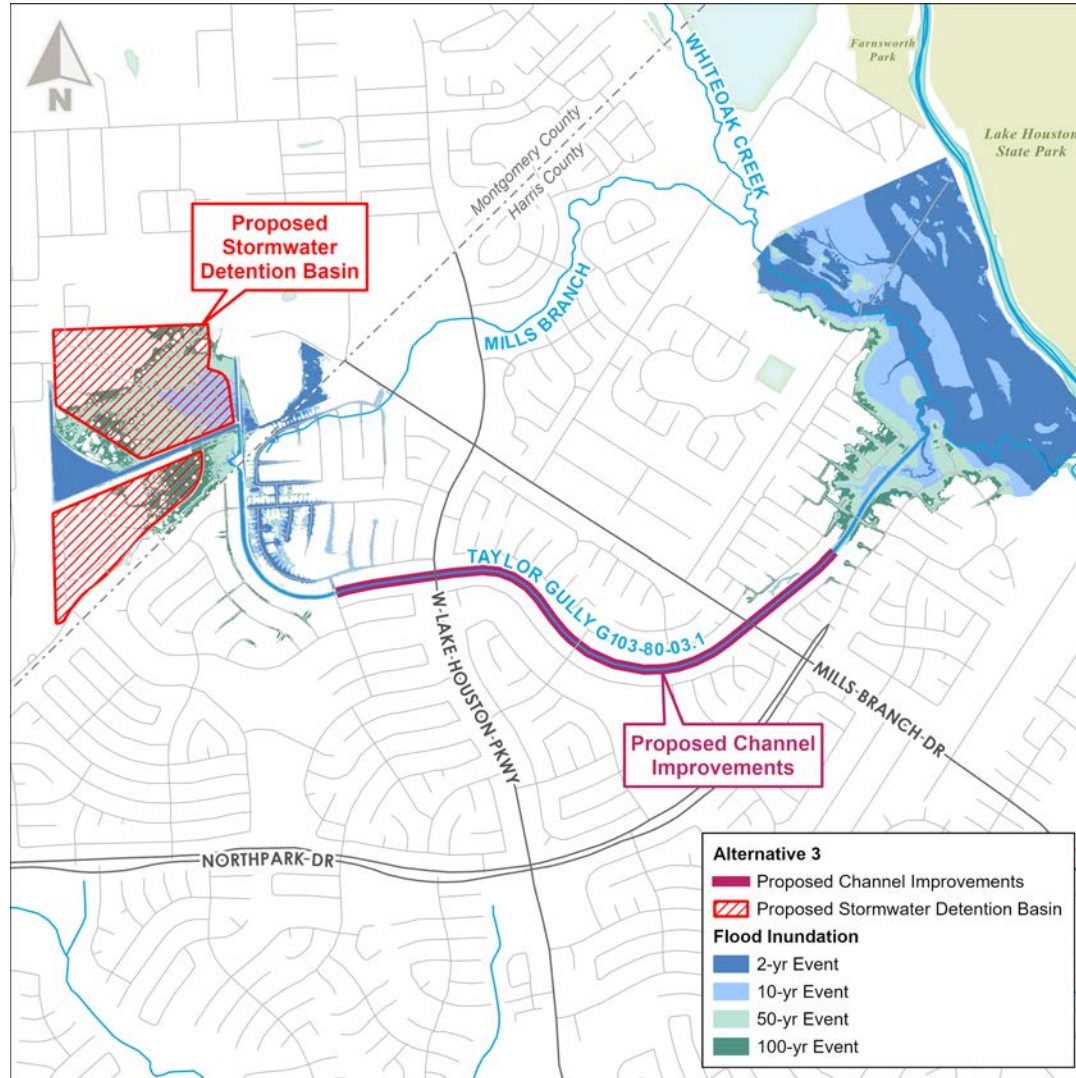


Alternative 2

- Dry-bottom stormwater detention basin (estimated capacity: 412 acre-feet) & wet-bottom basin (estimated capacity: 421 acre-feet)
- Features no channel conveyance improvements
- Includes minor restoration and repair of the existing channel



Detailed view of stormwater detention basin site

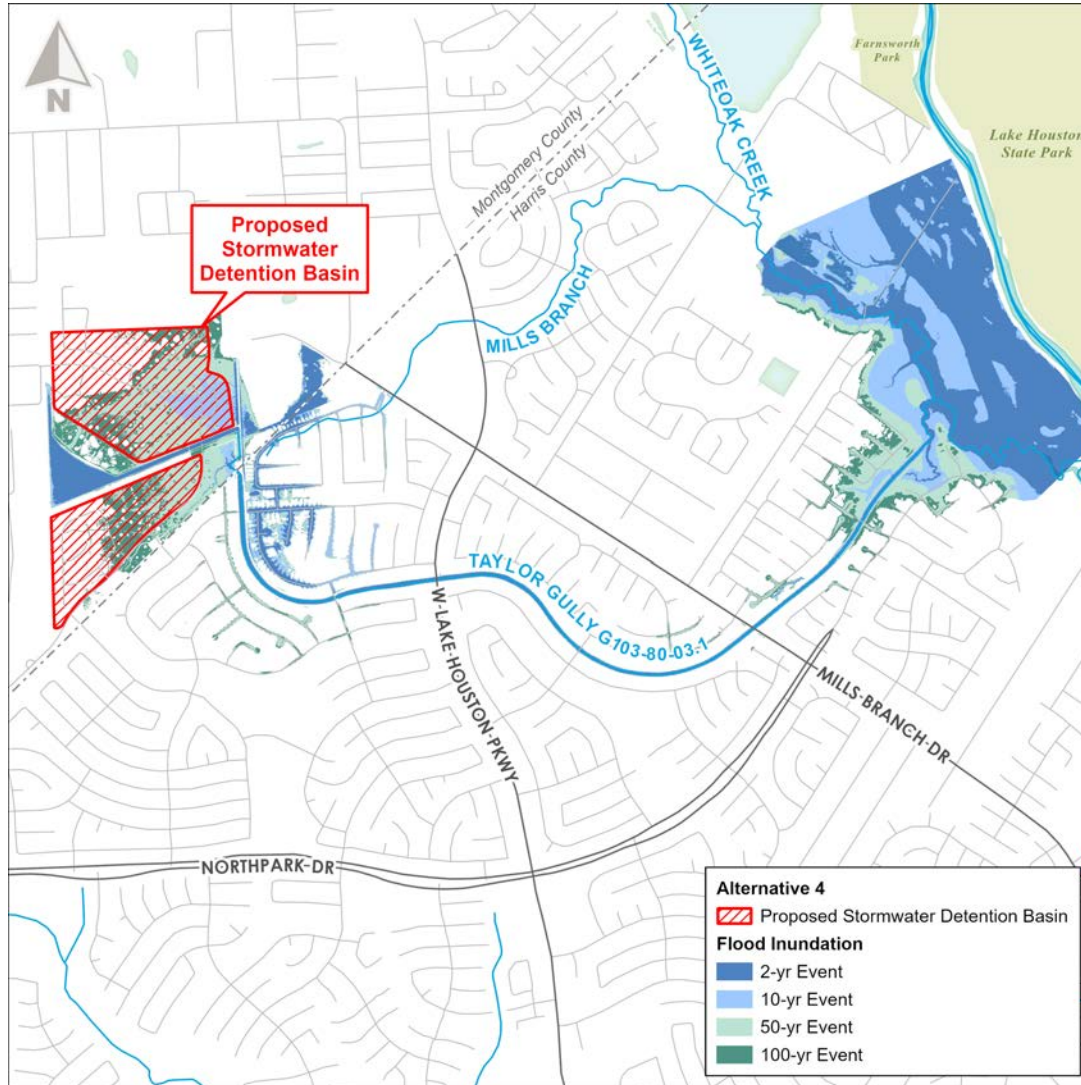


Alternative 3

- Dry-bottom stormwater detention basin (estimated capacity: 330 acre-feet) & wet-bottom basin (estimated capacity: 421 acre-feet)
- Features a grass-lined channel 80 feet downstream from Rustling Elms Drive to the existing drop structure



Detailed view of stormwater detention basin site



Alternative 4

- Dry-bottom stormwater detention basin (estimated capacity: 412 acre-feet) & dry-bottom basin (estimated capacity: 281 acre-feet)
- Features no channel conveyance improvements
- Includes minor restoration and repair of the existing channel



Detailed view of stormwater detention basin site

Taylor Gully Project Alternative Summary



Alternative	Estimated Benefits	Estimated Construction Cost
1	<ul style="list-style-type: none"> Removes the 100-year area of inundation from 276 structures Removes the 100-year area of inundation from 116 acres Removes the 100-year area of inundation from 8 miles of roadway 	\$28,218,400
2	<ul style="list-style-type: none"> Removes the 100-year area of inundation from 260 structures Removes the 100-year area of inundation from 88 acres Removes the 100-year area of inundation from 7 miles of roadway 	\$30,173,000
3	<ul style="list-style-type: none"> Removes the 100-year area of inundation from 260 structures Removes the 100-year area of inundation from 103 acres Removes the 100-year area of inundation from 7 miles of roadway 	\$29,648,900
4	<ul style="list-style-type: none"> Removes the 100-year area of inundation from 260 structures Removes the 100-year area of inundation from 76 acres Removes the 100-year area of inundation from 6 miles of roadway 	\$23,273,800



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Woodridge Excavation & Removal Activity



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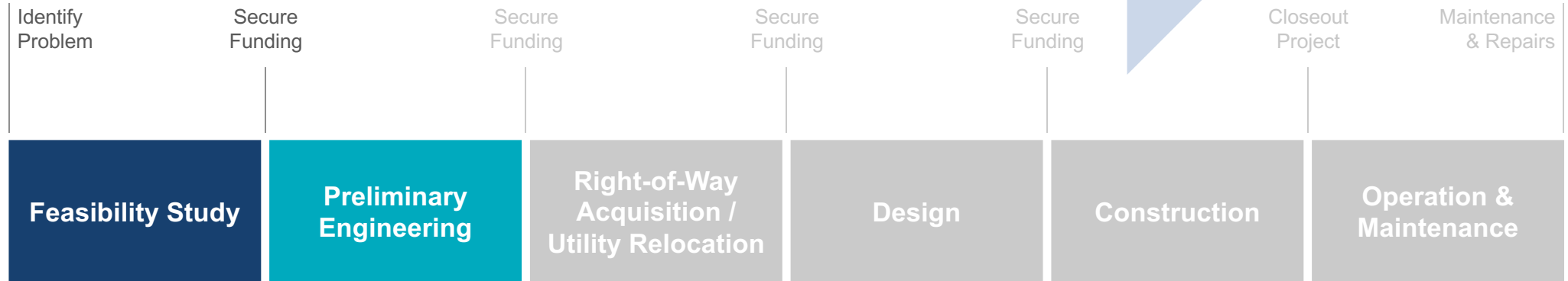
Woodridge Sequencing

- During the design stage, the stormwater storage volume needed for mitigation of the Taylor Gully channel conveyance improvements component of the project will be determined.
- Once the basin configuration is constructed to meet the storage requirements for the Taylor Gully channel conveyance improvements, the channel construction can begin.
- The plan is to excavate first for only the volume that is required for mitigation of the channel conveyance improvements.

Project Outlook & Next Steps



Next Steps & Sequencing



COMMUNITY ENGAGEMENT AND REGARD FOR NATURAL VALUES



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Funding

COMPLETED & ONGOING WORK

- **Property Acquisition:** \$10.2 million spent from Bond ID Z-02 to purchase 195 acres at the former Woodridge site
- **Preliminary Engineering:** \$656,000 spent from Bond ID F-14 on preliminary engineering services

FUTURE WORK

- **Final Design:** Fully funded through federal earmark funding and Bond ID F-14.
- **Construction:** Costs to be determined during Final Design stage. Funding sources will include:
 - Remaining funds through Bond ID F-14
 - \$10 million loan from the Texas Water Development Board through the City of Houston
 - Additional state and federal partners

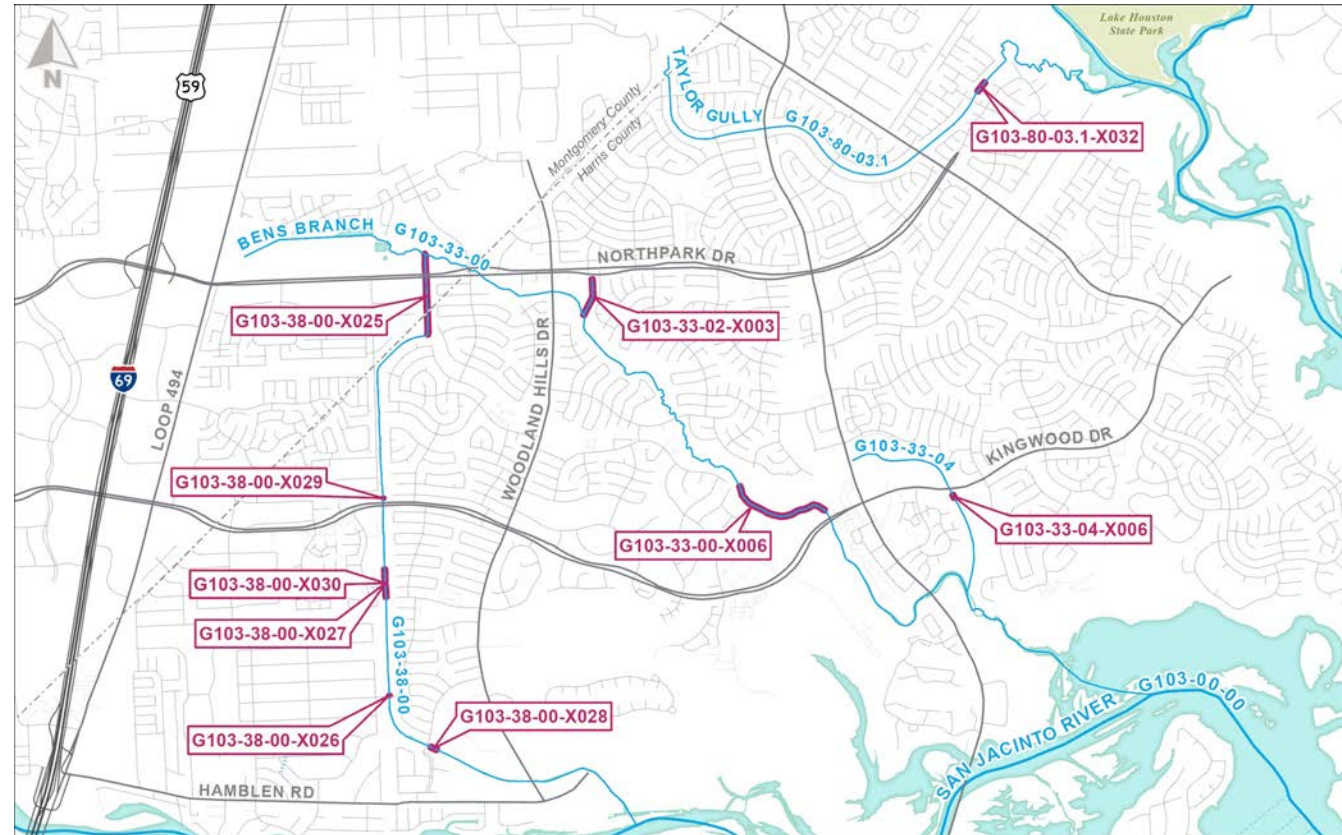
Other Work Within the Kingwood Area

Progress updates:

- Riverview Townhomes at Forest Cove Demolition Complete
- Kingwood Diversion Ditch Preliminary Engineering Stage in progress

Maintenance work in Kingwood:

- Desilting on upper system
- Tropical Storm Imelda repairs
- Installation and repair of gates and bollards
- Interceptor structure repair



We want to hear from you.

Please visit hcfcd.org/F14 to learn more about the **Taylor Gully Flood Risk Reduction Project**, ask questions and sign up for our mailing list.

Virtual Public Meeting Instructions

There are three ways to leave a comment about this project during tonight's session or during the comment period from December 14, 2022, through December 28, 2022:

- Submit a comment at PublicInput.com/taylor
- On the Flood Control District's website at hcfcd.org/F14, or
- Via phone at [855-925-2801](tel:855-925-2801) with Meeting Code: **3364**

Any questions not addressed during tonight's Q&A will receive a response from the Flood Control District after the event. Meeting information and video will be available on:

- hcfcd.org/F14
- The Flood Control District's YouTube channel

✓ GET FLOOD INSURANCE

EVERYONE NEEDS IT

Flooding conditions can occur year-round, and you do not have to live in the 100-year floodplain to be at risk.

Flood loss claims as a result of Hurricane Harvey

- Approximately 68% were outside of the FEMA mapped 100-year floodplain.

Hurricane Season: June-Nov
Flood Season: Year-round