June 18, 2019

Aldine Westfield Stormwater Detention Basin

Marcus Stuckett, P.E.
Engineering Division Director
Harris County Flood Control District

HARRIS COUNTY FLOOD CONTROL DISTRICT

PROJECT PROGRESS & COMMUNITY ENGAGEMENT

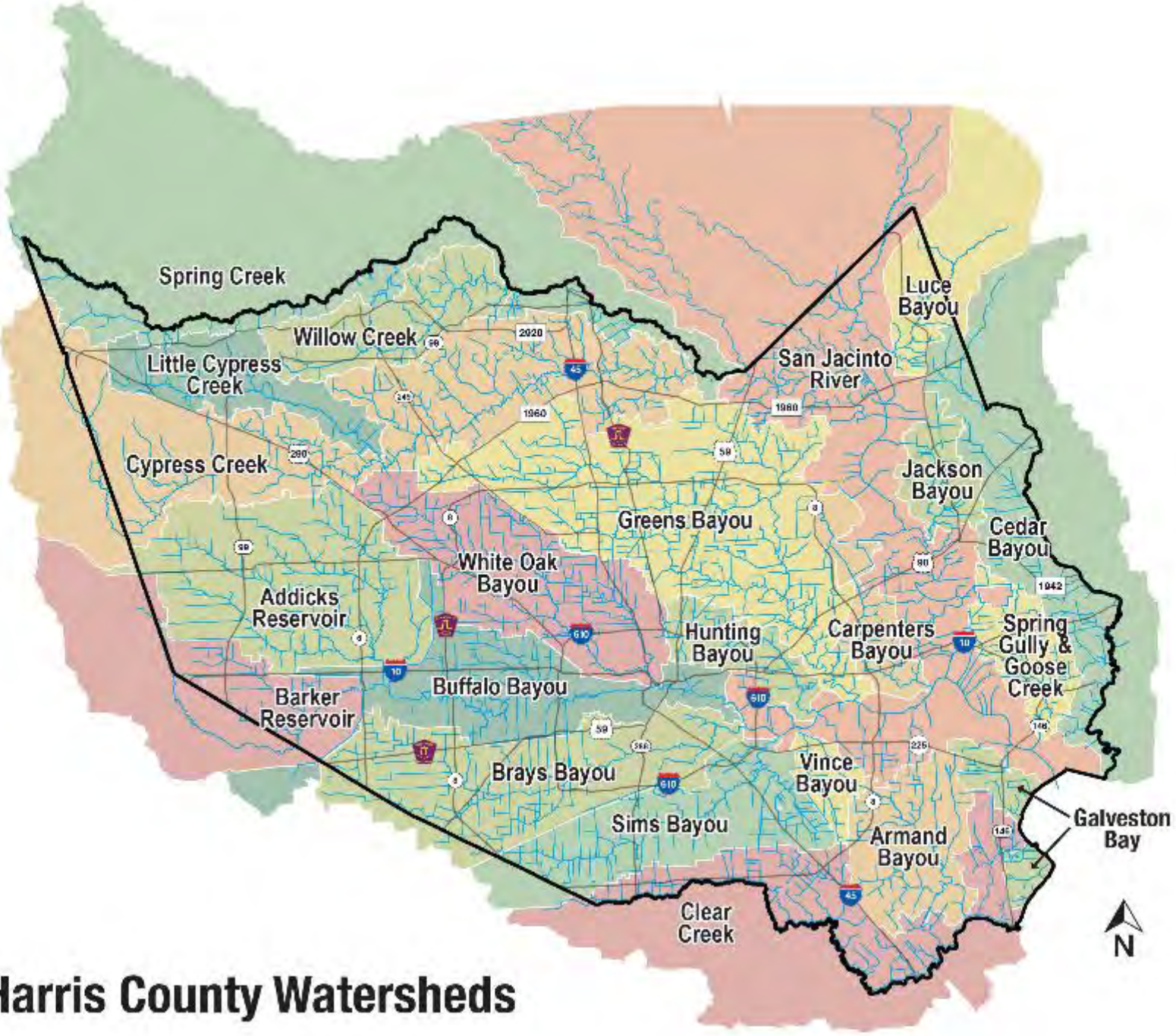
2018 | BOND PROGRAM

Harris County Flood Control District

- A special purpose district created in 1937 by the Texas legislature.
- In response to floods that devastated the Houston-area in 1929 and 1935.
- Serves as a local partner to leverage federal tax dollars for flood damage reduction.
- Harris County Commissioners Court serves as our board of directors or governing body.

OUR MISSION

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

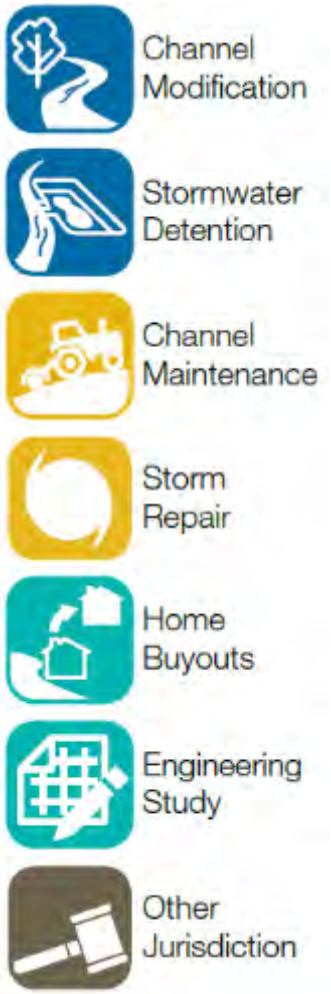


HARRIS COUNTY FLOOD CONTROL DISTRICT

Harris County Watersheds

Jurisdiction

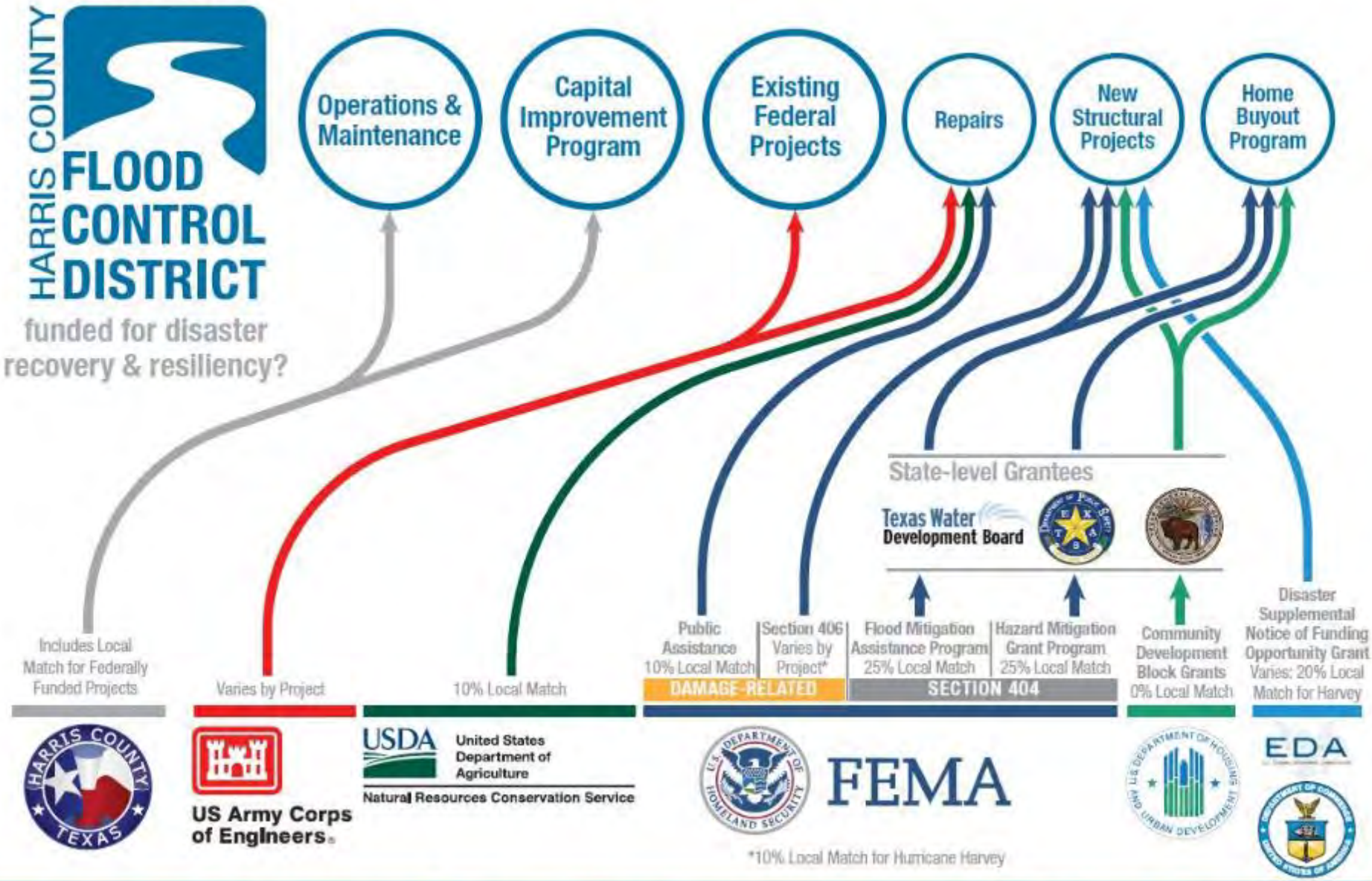
Bond Approved on August 25, 2018



- **237** projects across all watersheds
- **38** projects added based on community input ($400M+)

	$2.5B	Bond funds
+	$2.3B	Partner opportunities
=	~$4.8B+	Total

How is HARRIS COUNTY FLOOD CONTROL DISTRICT funded for disaster recovery & resiliency?



Aldine Westfield Stormwater Detention Basin

2018 Bond Program – Greens Bayou

- Community Engagement Meeting June 16, 2018
- HCFCD requested public input
- 44 public comments received
  - 27.5%

  - 25.0%

  - 22.5%

  - 22.5%

Aldine Westfield Stormwater Detention Basin

Isabel S. Fung , P.E., P.M.P.
Project Manager
Harris County Flood Control District

Aldine Westfield Stormwater Detention Basin

DEFINITIONS

– What is a stormwater detention basin?

Stormwater detention basins are places to store damaging flood waters temporarily until the channels can safely carry the water away.

– What is meant by the term 10% (10-year) or 4% (25-year) storm event?

The 10% (10-year) storm is a rain event having a 10% chance of being equaled or exceeded in any given year, whereas the 4% (25-year) rainfall event has a 4% chance of being equaled or exceeded in any given year.

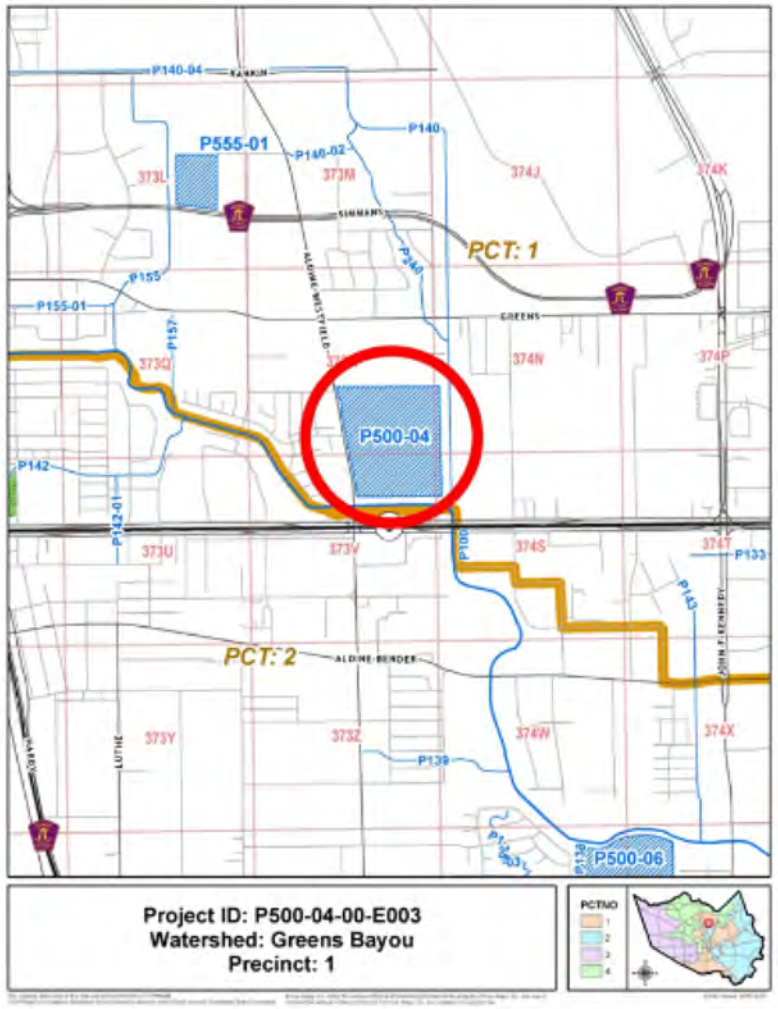
Greens Bayou Mid Reach
Channel Conveyance Improvements
P545-01-00
KUYKENDAHL STORMWATER DETENTION BASIN
KUYKENDAHL
SPEARS
GLEN FOREST STORMWATER DETENTION BASIN
P500-08-00
RANKIN
HARDY
IMPERIAL VALLEY
ELLA
IH45
SIMMANS
JOHN F KENNEDY
ALDINE WESTFIELD STORMWATER DETENTION BASIN
P500-04-00
BW 8
VETERANS MEMORIAL
ALDINE WESTFIELD
P500-06-00
LAUDER STORMWATER DETENTION BASIN PHASE I
Greens Bayou Mid Reach Channel
Stormwater Detention Basins
0 0.225 0.45 0.9 Miles

Aldine Westfield Stormwater Detention Basin

INTRODUCTION

- Target: Provide approximately 1,250 acre-feet (407.3 million gallons) of stormwater detention volume.

- Design Consideration: Dry basin is being recommended due to proximity to Bush Intercontinental Airport.



Aldine Westfield Stormwater Detention Basin

INTRODUCTION

- The site has been part of the HCFCD's Excavation & Removal (E&R) Program since 2005.
- Approximately 533,000 cy excavated to date.
- A pipeline corridor is bisecting the property.

Aldine Westfield Stormwater Detention Basin
Project Outlook & Next Steps

Aldine Westfield Stormwater Detention Basin

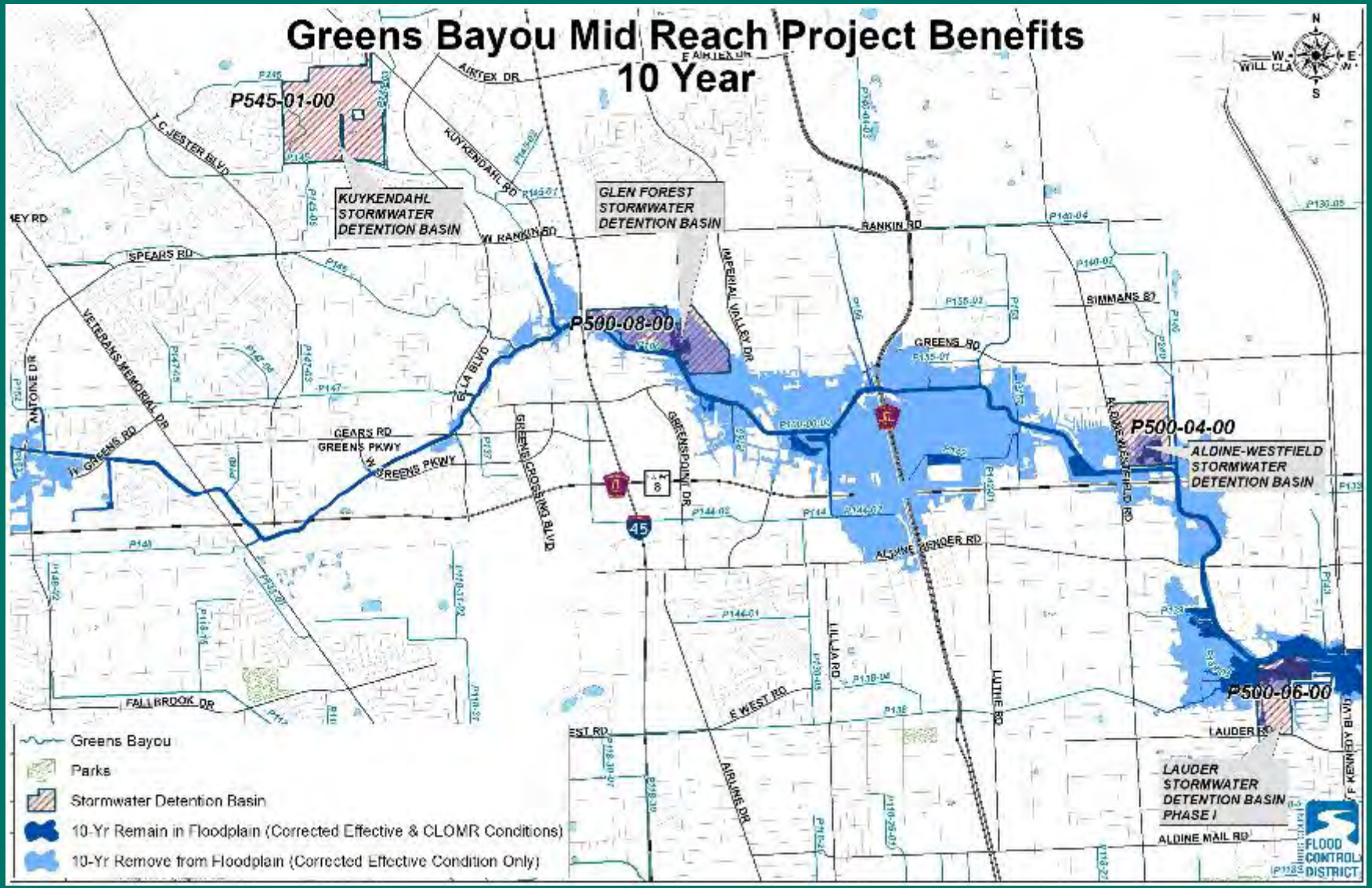
Current Outlook

- Construction of Phase 1 began in May 2019.
- Phase 1 will provide approximately 667 acre-ft (217+ million gallons) of stormwater detention volume.
- Construction cost is $6.85 M and will take 370 calendar days to complete.

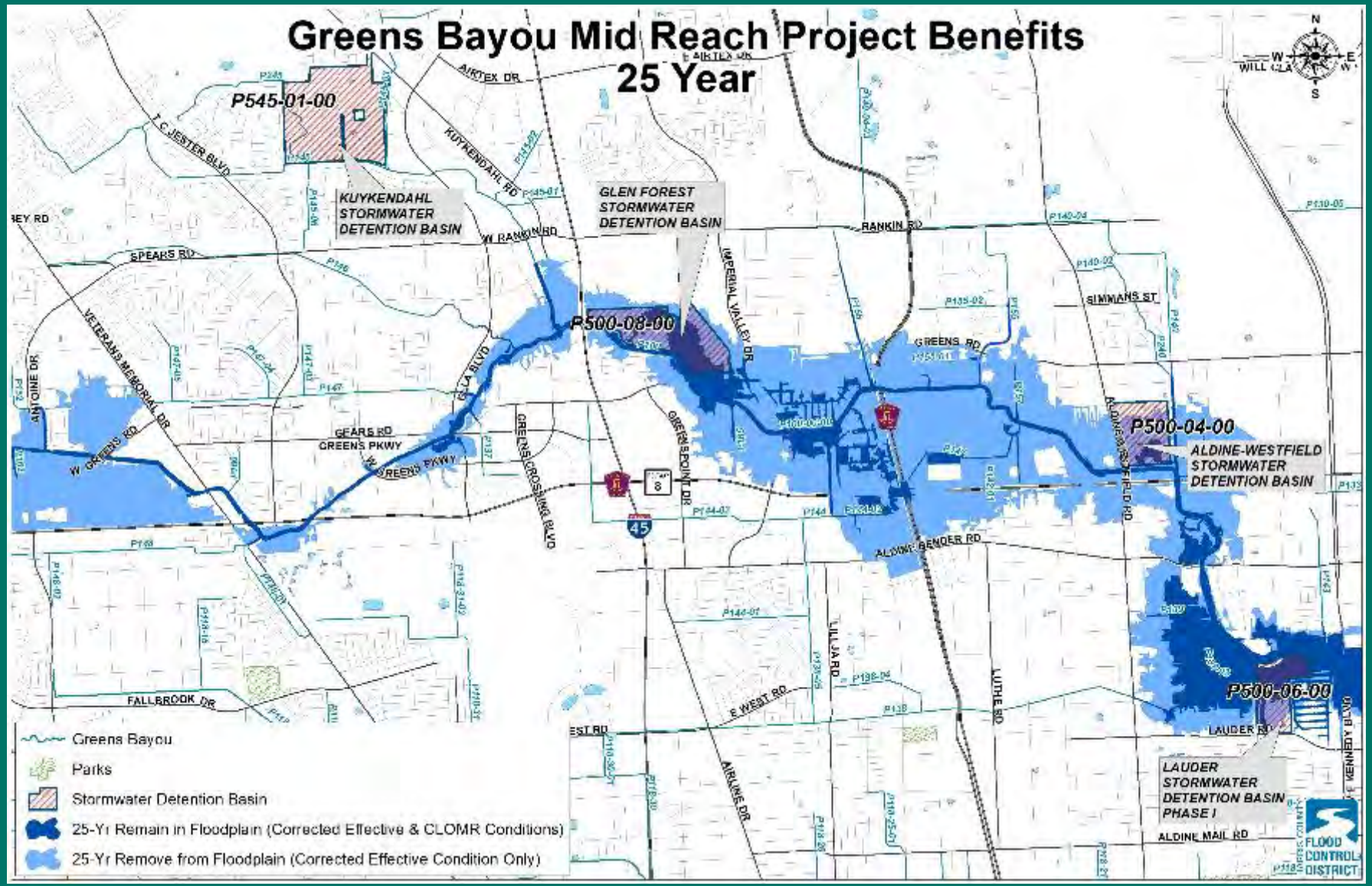
Aldine Westfield Stormwater Detention Basin

Long Term Outlook

- Phase 2 is under design. Plans are about 50% complete.
- An Individual Permit has been submitted to the US Army Corps of Engineers for approval.
- Phase 2 will provide approximately 600 acre feet (190 million gallons) of stormwater detention volume.



Floodwater is contained within channel banks during 10-year and 25-year storm events



Floodwater is contained within channel banks during 10-year and 25-year storm events

We want to hear from you.

Please visit **HCFCD.org/C-33** to learn more about the ALDINE WESTFIELD STORMWATER DETENTION BASIN, ask questions and sign up for our mailing list.

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