Addicks Reservoir Watershed
Channel De-silt and Repair Program
Bond Project F-53

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Engineering Division Director
Harris County Flood Control District
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.
1. County/Municipal neighborhood drainage and HCFCD infrastructure pre-dates current criteria. Neighborhood streets are re-graded and re-constructed by the City with more inlets and bigger storm sewers to get the water out of the neighborhood faster.
2. The increased flow is mitigated in a new stormwater detention basin that HCFCD constructs in consultation with the City who then maintains the basin. Water is held in the basin and slowly released through a restricted outfall pipe.
3. The stormwater detention basin also provides greenspace and opportunities for recreation such as public parks, which the City constructs and maintains.
4. Because the increased flows are mitigated in the stormwater detention basin, the water flowing to the HCFCD maintained channel is unchanged and does not increase flooding elsewhere.
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 funds = ~$4.8B Total
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IDS Engineering Group
INTRODUCTION

– There are 159 miles of open waterways that drain into Addicks Reservoir
– This program involves desilting of channels to restore them to their original design capacity and repairing them where erosion and slope failures have occurred
– Work effort began before Hurricane Harvey as part of a watershed maintenance program
PROGRAM CRITERIA

- Includes channels within the Addicks Reservoir watershed for which the Flood Control District has property rights
- Limits will not extend past SH-99 (Grand Parkway)
- Channels included have previously been developed and altered; natural channels will not be included
- Actively working with USACE to obtain additional rights to work further within the reservoir
- Overall program includes 4 main channels and their tributaries, totaling 63 miles
WHAT IS DESILTING?

– Desilting is the removal of sediment within a channel that has been deposited throughout years of rain events
– Sediment is removed to restore the channel to the original capacity
– Sediment deposit naturally occurs when fast moving water slows and sediment settles in the channel
WHAT IS DESILTING?

Original Design

Sediment to be Desilted
GOALS & OBJECTIVES

- De-silt channels
- Repair channel segments
- Create database for future maintenance efforts
PILOT PROJECT

NOTES:
39,000 Linear Feet
500,000 Cubic Yards

Legend
- Pilot Project - Under Construction
- Addicks Channels (Non-USACE)
- Harris County Commissioner Precincts
- Addicks Watershed

ADDICKS WATERSHED
CHANNEL SEGMENTS
DRAFT
OCTOBER 3, 2019

1 inch = 12,000 feet
NOTES:
31,680 Linear Feet
172,000 Cubic Yards
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Program Outlook & Next Steps
NEXT STEPS

- Program is expected to last 3 years
- All de-silt packages are expected to be under construction by Spring 2020
- Repair packages to be bid by Fall 2020
- Future community engagement meetings will be held once a year for program updates
- Quarterly updates for projects will be shared at www.hcfcd.org/F53
CONSTRUCTION EXPECTATIONS

- Truck traffic and possible temporary lane closures
- Limited access and/or temporary closures to trails and footpaths
- Traffic control to be implemented when necessary
We want to hear from you.

Please visit HCFCD.org/F53 to learn more about the Addicks Reservoir Watershed Channel De-silt and Repair Program, ask questions and sign up for our mailing list.