

Update to the 2018 Harris County Flood Control District Bond Program

October 10, 2023

Overview

In January 2023, Commissioners Court directed the Flood Control District to return with a plan to complete the 2018 Bond Program using existing resources. Since that time, significant progress continues to be made on the 2018 Bond Program. However, opportunities remain to improve clarity around funding, costs, and scope for projects included in the Bond Program. This document contains a description of those opportunities and a recommended path forward for completing the program within the Flood Control District's currently available financial means.

Bond Program Statistics

The table below shows the number of Bond IDs in the 2018 Bond Program categorized by project lifecycle stage, along with the total spending in the 2018 Bond Program in each stage. Note that some Bond IDs contain multiple project components; in those cases, the lifecycle stage of the most advanced component of the Bond ID is reported here.

Since the initiation of the 2018 Bond Program on August 28, 2018, the Flood Control District has completed 29 Bond IDs. Of those, two have been completed since the previous update in January 2023. One-page summaries for each newly completed Bond ID are included at the end of this transmittal and will be posted on the Flood Control District website at this link: <https://www.hcfcd.org/Activity/2018-Bond-Program/Completed-Bond-ID-Summaries>

Bond Program Statistics: Overall and By Stage	
Number of Bond IDs	181
Number of Completed Bond IDs	29
Number of Bond IDs in Initiation	14
Number of Countywide Bond IDs	11
Number of Active Bond IDs in Feasibility	25
Number of Active Bond IDs in Right-of-Way (ROW) Acquisition	11
Number of Active Bond IDs in Preliminary Engineering	28
Number of Active Bond IDs in Design	34
Number of Active Bond IDs in Construction and Turnover	29
Spending Statistics	
Total Spent	\$1,207,134,329
<i>Total Spent – Feasibility</i>	\$56,490,210
<i>Total Spent – Engineering and Design</i>	\$156,840,126
<i>Total Spent – Right-of-Way</i>	\$456,764,939
<i>Total Spent – Construction and Turnover</i>	\$537,039,054

2018 Bond Program statistics reported as of May 31, 2023

Bond Program Opportunities

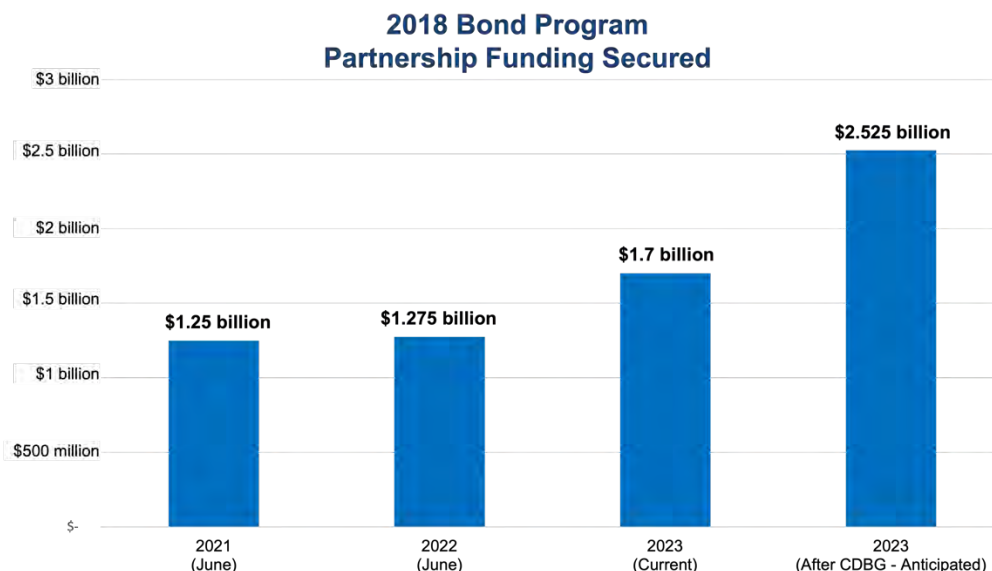
Partnership Funding

To date, Harris County has secured \$1.7 billion in partnership funding for projects in the 2018 Bond Program from a variety of federal, state and local partners (see below for more details). The Flood Control District anticipates submitting applications for \$825 million in additional federal grant funding through the U.S. Department of Housing and Urban Development's Community Development Block Grant (CDBG) program, including up to \$502.5 million in CDBG Mitigation funds and \$322 million in CDBG Disaster Recovery funds. Those funds are administered at the state level by the Texas General Land Office.

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Moving forward, the Flood Control District will continue to aggressively pursue partnership dollars to implement the 2018 Bond Program.



Cost Escalation

On average, the Flood Control District has seen an increase of 15-20% in construction and material costs due to inflationary pressures and market conditions for infrastructure projects. Additionally, Harris County real estate market values continue to increase annually as inventory is low and demand is high, causing increases in right-of-way costs for projects.

Scope Clarity

When the 2018 Bond Program was created, Bond IDs contained projects at various stages of the project lifecycle¹. Overall, each Bond ID acknowledged flooding problems or needs across Harris County, however not all Bond IDs included construction-ready projects. Some were an acknowledgement that additional study and analysis was needed in key areas to identify potential solutions and projects. As such, the scope and cost clarity within each Bond ID could vary based on the lifecycle stages of the projects contained within that Bond ID. This could range from construction-ready efforts with clear initial scopes and accurate cost estimates to early-stage efforts focused on understanding flooding issues and identifying potential projects and associated costs.

Flood Resilience Trust

When the Flood Resilience Trust was originally proposed to Harris County Commissioners Court by the Office of County Administration in June 2021, the office anticipated that approximately \$833 million would be made available for allocation to projects with funding needs through 2030. This estimate included several categories of funding that have not been realized, including \$343 million in mobility funding and \$200 million in unidentified “other county resources.” To date, only 2018 Bond Program funds have been allocated to the Flood Resilience Trust, with \$165.6 million allocated towards projects with funding gaps and \$28 million currently available.

Future funding availability in the Flood Resilience Trust will not be sufficient to fill the remaining funding needs created by unrealized partnership funding and/or cost contingencies. As directed by Commissioners Court in January 2023, the Flood Control District will complete the 2018 Bond Program using existing resources and use of the Flood Resilience Trust as

¹ For more information on the project lifecycle, see <https://www.hcfcd.org/Activity/2018-Bond-Program/Project-Lifecycle>
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originally envisioned will be discontinued. Instead, as part of the review described below, the Flood Control District will transition the Flood Resilience Trust to be a contingency reserve that will be used to manage cost escalation and other financial risks.

Recommended Path Forward²

1. Identify all Bond IDs that have sufficient clarity to continue without additional financial review. **Status: Complete**
2. Conduct a strategic review of the remaining Bond IDs to ensure each Bond ID has a clear scope of work and sufficient funding to complete that scope (including contingencies). Proposed guiding principles and strategies for this review are shown below. **Status: Ongoing**
3. Present an updated 2018 Bond Program for Commissioners Court approval that includes updated funding and scope details on all Bond IDs. **Status: Planned for Q2 2024**

Guiding Principles

The Flood Control District's review of the Bond IDs that require further clarity will use the following guiding principles:

1. **Refine scope:** Clearly define scope for all remaining Bond IDs.
2. **Clarify finances:** Develop realistic cost estimates for remaining Bond IDs based on refined scope, including contingencies³.
3. **Minimize changes:** Minimize changes from the currently structured 2018 Bond Program.
4. **Maximize benefits and equity:** Maximize flood risk reduction benefits while promoting equity.

Creating Value Through Reviewing Bond IDs

Through this evaluation process, we may identify some projects that cannot be fully moved into the construction stage using the 2018 Bond Program's existing financial resources. However, completion of pre-construction project stages including feasibility, preliminary engineering, and design, will enable the Flood Control District to create a "bench" of potential projects that will put future flood resilience efforts on a much stronger footing. These projects will be included in future flood resilience planning efforts as potential projects for future bond funding, candidates for federal or state grants, or candidates for community directed funding at the state and federal levels.

² Note that funding allocations published for Bond IDs do not constitute financial commitments to specific projects from the Harris County Flood Control District or Harris County. Funding allocations published in Bond Program updates are used for planning and program management purposes and are subject to change. In fact, the original Bond Program project list approved by Commissioners Court in August 2018 identified more bond-funded projects than could be funded through the \$2.5 billion funding cap approved by voters.

³ As an additional measure to improve cost estimation, cost estimates for construction are being adjusted for inflation based on the anticipated midpoint of construction.



Brays Bayou Federal Flood Damage Reduction Project (Project Brays)

Bond ID C-11



CAPITAL PROJECT



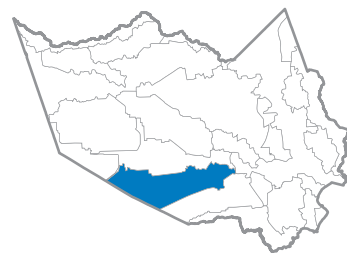
FEDERAL LOCAL PARTNERSHIPS
WORKING TOGETHER



US Army Corps of Engineers®
Galveston District



**Bond ID
C-11**



Brays Bayou

Precincts: 1, 2, 3, 4

(Note: Project Brays ended up touching all four Harris County Precincts between the 1980's and 2022)

Unit ID

D100-00-00



Start and End Dates

The USACE began study of Brays Bayou in the 1980s and the overall Project Brays was completed in 2022.



Funding and Budget

Prior to February 2018, Project Brays funding was split between USACE and the Flood Control District. After the Bipartisan Budget Act of 2018 changed the project funding agreement to reimburse the Flood Control District for the federal and local shares of eligible costs, the Flood Control District incurred and was reimbursed by the federal government for all expenses. The total project cost is approximately \$480 million.



Next Steps

The Flood Control District will continue to provide routine maintenance as needed.

The project has reduced flooding risks for more than 15,000 structures in the Brays Bayou watershed.

[HCFCD.ORG/C-11](https://hcfcd.org/c-11)



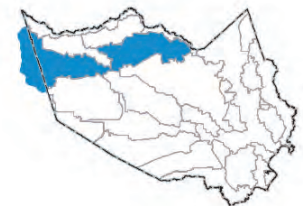
**Bond ID
F-24**



WETLANDS MITIGATION BANK

PROJECT DESCRIPTION AND BENEFITS

The Katy Hockley Wetland Mitigation Bank is located near Katy Hockley and House and Hahl roads in northwest Harris County in the Cypress Creek watershed. This project enhanced and established the prairie wetlands at the Katy Hockley Mitigation Bank. The increase of wetlands within the mitigation bank will be used for future unavoidable impacts caused by other federally permitted Flood Control District projects. This property will remain protected under a conservation easement with the Katy Prairie Conservancy, which includes a larger 440-acre tract that is also being used for wetlands mitigation.



**Cypress Creek
Watershed**

Precinct 4

**Unit ID
K700-01-00**



Start and End Dates

Construction on this project began in November 2020 and was completed in spring 2021 and planting efforts completed in 2022.



Funding and Budget

Total cost of the project was \$6 million funded by the 2018 Bond ID F-24.



Next Steps

After all of the wetland mitigation credits have been debited to other projects with unavoidable wetlands impacts, the site will go into perpetual stewardship and protection as a wetland habitat preserve.

**This project
addressed
the need for
floodplain
preservation
within the
Cypress Creek
watershed.**

[HCFCD.ORG/F-24](https://hcfcd.org/F-24)