

L.M. “Matt” Sebesta, Jr.  
County Judge



Lacey Powell  
Chief of Staff

## Brazoria County

June 30, 2026

Melissa Hislop, EIT, CFM, CTCM  
Manager, FMEs for Small Communities  
Texas Water Development Board  
512-475-1725

**Subject: Additional Funds Request – Waterhole Creek – Caney Creek Basin, Linnville Bayou, and East Matagorda Bay (TWDB Commitment# G1001484)**

Ms. Hislop,

This letter summarizes a request for additional funds by Brazoria County, a key participant in the Wharton County application for FIF grant funds related to TWDB Commitment # G1001484. The original estimated cost for this project was \$432,500.00. The TWDB agreed to cover \$324,375 (being 75% of the total project cost). The request for additional matching funds is primarily associated with the following:

1. Use of 1D/2D model for Linnville Bayou – The original scope of this project was to simulate Linnville Bayou using HEC-RAS in a 1D/2D environment. Essentially this means that the main study channel is simulated with 1D cross-sections and the overbank flow is simulated in a full 2D environment. This 1D/2D environment was selected primarily due to the fact that in 2022 HEC-RAS could not simulate a bridge in full 2D. One could only accurately simulate bridge hydraulics in the 1D environment. As of roughly 2025, HEC has enabled robust full 2D environment calculations for bridges, eliminating the need to simulate in 1D/2D. Scheibe was able to successfully create a 1D/2D model of Linnville Bayou for existing conditions, but any alternatives added has created extensive instability into this model due to the complex overflows between the many parallel channels within the Linnville Bayou watershed. Scheibe has recommended that a conversion to full 2D for the Linnville Bayou watershed would be the best way to resolve these modeling instabilities. It should be noted that the Caney Creek and Cedar Lake Creek models are also simulated in 1D/2D but since these channels are more traditional, in that they have one main channel and few parallel spill channels, this modeling approach has been sufficient. Linnville Bayou, on the other hand, has numerous parallel overflow channels that make this model very complex which has resulted in an inability to accurately simulate flood reduction alternatives, and arguably existing flood risk.

Request: Brazoria County is requesting funds to convert the Linnville Bayou 1D/2D model into a full 2D HEC-RAS model (using the latest version of RAS).

2. Desire to simulate 7 flood reduction alternatives in Linnville Bayou. The scope of work for this project did not define a total number of alternatives to be evaluated, but there was only \$60,000 budgeted for flood reduction alternatives in all three counties, which translates to about \$20,000 for Brazoria County. Scheibe has indicated that this is sufficient budget for 2 complex alternatives or 4 relatively simple alternatives per County. Brazoria County has identified 3 alternatives along Cedar Lake Creek (which have already been completed by Scheibe) and 7

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alternatives along Linnville Bayou. The need for additional flood reduction alternatives in and around the P66 plant is very critical to Brazoria County and there is a desire to fund all 7 alternatives within this watershed so that the County can identify realistic solutions to flood risk in this region.

Request: Brazoria County is requesting additional funds to evaluate 7 flood reduction alternatives within the Linnville Bayou watershed.

These requests are essential to ensuring that Brazoria County will get an accurate hydraulic model for Linnville Bayou and also get accurate flood reduction solutions that the County can act on.

The following are details regarding this request for additional grant funds to cover the additional costs:

1. **Confirmation of Project Scope:** This project remains within the original project scope approved by the TWDB. There is a need to further evaluate additional alternatives along Linnville Bayou and to simulate Linnville Bayou in a more stable full 2D environment.
2. **Work Completed To-Date & Remaining:** Scheibe has completed the development of the HEC-HMS model for Linnville Bayou, the existing conditions 1D/2D model for Linnville Bayou, and all the data collection for this watershed. Scheibe started to simulate alternatives in this model but ran into extensive instability issues that they feel can only be resolved by converting to a full 2D environment. Once this is done, the remaining seven (7) identified alternatives can be simulated.
3. **Updated Project Budget:** Brazoria County is requesting (through the Project applicant – Wharton County) an increase in total project budget of \$150,000. This would result in a **grant increase request of \$112,500**. Brazoria County is able to cover the local 25% match of \$37,500.
4. **Assessment of Risks:** Brazoria County is of the opinion that if the additional funds are not available, the Linnville Bayou watershed will have nominally accurate flood reduction alternatives due to model instability, which will not be sufficient for future grant funding. Identifying solutions to flood risk along Linnville Bayou is critical to the community due to our past experience with extreme flood losses in this region.

Please let us know if you have any questions regarding this formal request for additional grant dollars to cover unanticipated cost overruns related to this project.

Sincerely,

A handwritten signature in blue ink, appearing to read "L.M. Sebesta, Jr.", is written over a light blue circular stamp.

L.M. "Matt" Sebesta, Jr.  
County Judge  
Brazoria County, Texas

**January 25, 2022**  
**THE COMMISSIONERS' COURT OF BRAZORIA COUNTY**  
**SPECIAL MEETING**

**ORDER NO. 6.M.11**

**RE:** Resolution Authorizing Match Funding for the Caney Creek Project

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Approve the attached Resolution authorizing the participation, administration, and local match funding for the proposed Texas Water Development Board Flood Infrastructure fund grant for the Caney Creek Project.

Further, that a certified copy of this order and the signed Resolution be furnished to the County Engineer for distribution to all parties involved.

## RESOLUTION

A RESOLUTION OF BRAZORIA COUNTY, TEXAS, AUTHORIZING THE PARTICIPATION, ADMINISTRATION, AND LOCAL MATCH FUNDING FOR THE PROPOSED TWDB FLOOD INFRASTRUCTURE FUNDED CANEY CREEK PROJECT

WHEREAS, Wharton County has applied for and has obtained grant funding, and will administer a Texas Water Development Board flood infrastructure fund grant for the purpose of conducting a multi-jurisdictional flood risk and flood reduction project of Caney Creek;

WHEREAS, Wharton County has applied for additional funding anticipates obtaining grant funding for additional study streams in Brazoria County (namely Linnville Bayou and East Matagorda Bay Watersheds), and will administer a Texas Water Development Board flood infrastructure fund grant for the purpose of conducting a multi-jurisdictional flood risk and flood reduction project of Caney Creek, Linnville Bayou, and East Matagorda Bay Watersheds;

WHEREAS, Wharton County will manage and administer this TWDB Grant, and is willing to collaborate with Matagorda County Drainage District #1, Matagorda County, Brazoria County, and the City of Wharton on the overall local match funding for this project;

WHEREAS, This Texas Water Development Board Flood Infrastructure Fund Grant requires a 25% local match, to be funded with cash and the total amount of the additional study streams (being Linnville Bayou and East Matagorda Bay Watersheds) is \$432,500.00 and the local 25% match is \$108,125.00;

WHEREAS, This Texas Water Development Board Flood Infrastructure Fund project is expected to last for a 1.5 to 2 year period;

NOW, THEREFORE, BE IT RESOLVED:

Section 1. That Brazoria County agrees to fund **\$108,125.00** over the course of this project with cash.

PASSED AND APPROVED ON January 25, \_\_\_\_\_, 2022.

APPROVED:

County Judge

ATTEST:

County Clerk

