

Quarterly Progress Report: Assessment of PFAS concentrations and loadings in the Lavaca Bay watershed

Contract No. 071

Texas A&M AgriLife Research, Texas Water Resources Institute

December 10, 2024

Investigators:

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Reporting Period: Q1, 2024-09-01 through 2024-11-30

Summary of Q1 Updates:

Overall work focused on developing internal Quality Assurance documents, hiring and training students on lab methods, and securing boat captain services to access sites on Lavaca Bay. Our first sampling trip is scheduled for January 22 and 23 with a field staff reconnaissance trip scheduled for January 9th.

Task 1. Project Administration:

The project team is continuing to work with Texas A&M Sponsored Research Services to ensure reports, status updates, invoices and other obligations are delivered on time. There are no anticipated issues for this task.

Task 2. Data Collection and Laboratory Analysis:

The team has finalized sites and sampling regime for 12 sites in the watershed. We were not able to obtain access to the site below Lake Texana as planned, so a site above the confluence of the Navidad and Lavaca rivers will serve as a surrogate. Finalized sites are shown in Table 1. A boat captain was secured to assist TWRI field staff access sites on Lavaca Bay and the tidal portion of the river. The first monitoring trip is scheduled for January 22 and 23 (weather dependent) with a reconnaissance trip scheduled for January 9th for the field team.

Field standard operation procedures for PFAS monitoring have been developed for the field staff and internal QA documents have also been developed to ensure quality and data integrity of our sampling and analytic processes. One graduate student has been hired for Dr. Ma's lab and is training on PFAS analytic methods.

Table 1. Sampling sites.

Internal ID	Agency Site ID	Description	Sample Media	Routine Sample Events (n)	High-flow Sample Events (n)	Soil Samples (n)
LR1	USGS08163500	Lavaca Rv at Hallettsville, TX	Soil, Water	24	8	24
LR2	USGS08164000	Lavaca Rv nr Edna, TX	Soil, Water	24	8	24
NR1	USGS08164390	Navidad Rv at Strane Pk nr Edna, TX	Soil, Water	24	8	24
SC1	USGS08164450	Sandy Ck nr Ganado, TX	Soil, Water	24	8	24
WMC1	USGS08164503	W Mustang Ck nr Ganado, TX	Soil, Water	24	8	24
EMC1	USGS08164504	E Mustang Ck nr Louise, TX	Soil, Water	24	8	24
NR3	TCEQ15374	Navidad River Tidal mid channel 30 M upstream of Lavaca River confluence approx 170 M upstream of FM 616 between Vanderbilt and Lolita	Water	24	0	0
LR3	TCEQ15371	Lavaca River Tidal 3.50 miles downstream of SH 616 and 740 M upstream of Menefee Bayou at Mobile Dock.	Water	24	0	0
LR4	TCEQ18336	Lavaca River mid channel 2.05 km south of confluence with Catfish Bayou near mouth of Lavaca Bay in S Jackson County	Water	24	0	0
LB1	TCEQ13563	Lavaca Bay 152 m SSW of CM 22 in Red Bluff Channel	Water	24	0	0
LB2	TCEQ13383	Lavaca Bay at SH 35 Causeway	Water	24	0	0
LB3	TCEQ13384	Lavaca Bay Y Intersection of Port Lavaca and Matagorda Ship Channels as Marker 66	Water	24	0	0

Task 3. Data Analysis

Work on this task has not started.

Task 4. Project Outreach

Work on this task has not started.