

Matagorda Bay Mitigation Trust – Progress Report

Project Name: A research and monitoring program to mitigate the impact of harmful algal blooms on the Matagorda Bay and San Antonio Bay ecosystems

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Contract No.: 0014

Reporting Period: 6/1/23-8/31/23

Task 1: Real-time, high frequency detection of HABs and other phytoplankton.

Status of the task during this reporting period: not started in progress completed

- Describe major accomplishments for this reporting period.
 - Testing of data transmission/communication equipment continued, including set-up of modem, remote management card and environmental sensor, and successful remote data syncing software and scripting.
 - Site visit and training from regional representative for Stenner pumps.
 - Installation of new computer board in IFCB. Testing system functions of IFCB installed in pressure housing.
 - Continuing deployment construction visits in July and August: set-up and installation of water and electrical lines and connections (photos attached)
- List the deliverable(s)/milestone(s) completed during this reporting period.
 - Nothing to report.
- Were there any problems or obstacles encountered during this reporting period (e.g., delays, remedial action taken, schedule revision). Yes No If yes, please explain:

There was a small delay for deployment construction due to paving at the on-site location.

Parts received with the water pumps were not working as designed. This was confirmed by the Stenner representative, and they arranged shipping of replacement parts.
- Briefly describe plans for the next reporting period.
 - Scheduled deployment trip on September 15, 2023.

Task 2: Water sampling program for HABs and relevant environmental conditions.

Status of the task during this reporting period: not started in progress completed

- Describe major accomplishments for this reporting period.
 - Continued analysis of samples collected during previous periods.
- List the deliverable(s)/milestone(s) completed during this reporting period.
 - On 8/30/23, we reported the abundance of *Karenia brevis* (“red tide”) at the Port O’Connor site to Texas Department of State Health Services so that they could follow up.

- Were there any problems or obstacles encountered during this reporting period (e.g., delays, remedial action taken, schedule revision). Yes No If yes, please explain:
- Briefly describe plans for the next reporting period.
 - Complete analysis of previously collected samples.
 - Continue to synthesize water quality data collected during the two years of sampling.

Task 3: Stakeholder meetings.

Status of the task during this reporting period: not started in progress completed

- Describe major accomplishments for this reporting period.
 - Laura Beecraft presented an update on the project at the Lavaca Bay Foundation speaker series on June 15th 2023.
- List the deliverable(s)/milestone(s) completed during this reporting period.
 - Copy of Beecraft LBF presentation is included with this report.
- Were there any problems or obstacles encountered during this reporting period (e.g., delays, remedial action taken, schedule revision). Yes No If yes, please explain:
- Briefly describe plans for the next reporting period.
 - Laura Beecraft will presenting project results at Coastal & Estuarine Research Federation meeting in November.



Figure 1. (Left) Trench running electrical extensions to grounded power outlet. (Right) Set-up and testing of electrical and water line connections.