

October 9, 2024

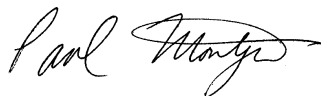
Steven J. Raabe, P.E.
Trustee, Matagorda Bay Mitigation Trust
PO Box 1269
Poth, TX 78147-1269

RE: Quarterly Progress Report for the period 7/1/2024 – 9/30/2024.

Dear Mr. Raabe,

Please find enclosed the following deliverable: Quarterly Progress Report for the project “Are benefits of freshwater inflow confounded with degradation by non-point source pollution in Lavaca and Matagorda Bays” Contract No. 068.

Sincerely,



Paul A. Montagna, Ph.D.
Endowed Chair, Hydroecology, Harte Research Institute
Professor, Physical and Environmental Science Department
Regents Professor, Texas A&M University System
Texas A&M University-Corpus Christi
6300 Ocean Drive, Unit 5869
Corpus Christi, TX 78412
Phone: 361-825-2040
Email: Paul.Montagna@tamucc.edu

I. TITLE, CONTRACT INFORMATION, AND CONTACTS:

**Are benefits of freshwater inflow confounded with degradation by non-point
source pollution in Lavaca and Matagorda Bays?
Contract No. 068**

Performing Party Representative:

Dr. Paul A. Montagna
Harte Research Institute for Gulf of Mexico Studies
Texas A&M University-Corpus Christi
6300 Ocean Drive, Unit 5869
Corpus Christi, TX 78412-5869
Telephone: 361-825-2040
Email: Paul.Montagna@tamucc.edu

Contract Period: 01 February 2024 – 31 January 2026

Reporting Period: 01 July 2024 to 30 September 2024
Date of submission: 9 October 2024

SUBMITTED TO:

Steven J. Raabe, P.E.
Trustee, Matagorda Bay Mitigation Trust
PO Box 1269
Poth, TX 78147-1269
Via Email to: Trustee@mbmTrust.com

II. DESCRIPTION OF TASKS:

There are two tasks for this project:

Task 1): Sediment Quality Triad (SQT) analysis. 18 stations sampled and analyzed for sediment chemistry, toxicity, and biodiversity.

Task 2): Data Management, Reporting, and Outreach Engagement. Quarterly Progress Reports: within 10 days of the end of each annual quarter: Q1 = 10 April 2024, Q2 = 10 July 2024, Q3 = 10 October 2024, and Q4 = 10 January 2025. The Final Report = January 31, 2026. Public engagement.

III. STATUS OF TASKS:

Task 1): In progress.

The field sampling was completed on 13-15 May 2024 and on 22 May 2024.

Chemistry samples were shipped to College Station, TX and are being analyzed.

Benthic samples were brought back to Corpus Christi, TX and are being analyzed. In this quarter, 40 benthic samples (= 4 stations x 5 replicates x 2 section depths) were completed for community structure analyses.

The toxicology analyses were completed (Fig. 1) at the NOAA Ecotoxicology Branch, Stressors Detection and Impact Division, Hollings Marine Laboratory, Charleston, South Carolina by co-PIs Marie DeLorenzo and Pete Key.

TAMUCC student, Angelica Ovalle, traveled to SC and worked on the samples (Fig. 2). Angelica was at the NOAA lab from 27 May to 16 August 2024 and her travel expenses were covered by a grant to perform a NOAA Experimental Research and Training Opportunity (NERTO), and while not an official match, those expenses are a significant benefit to the MBMT.

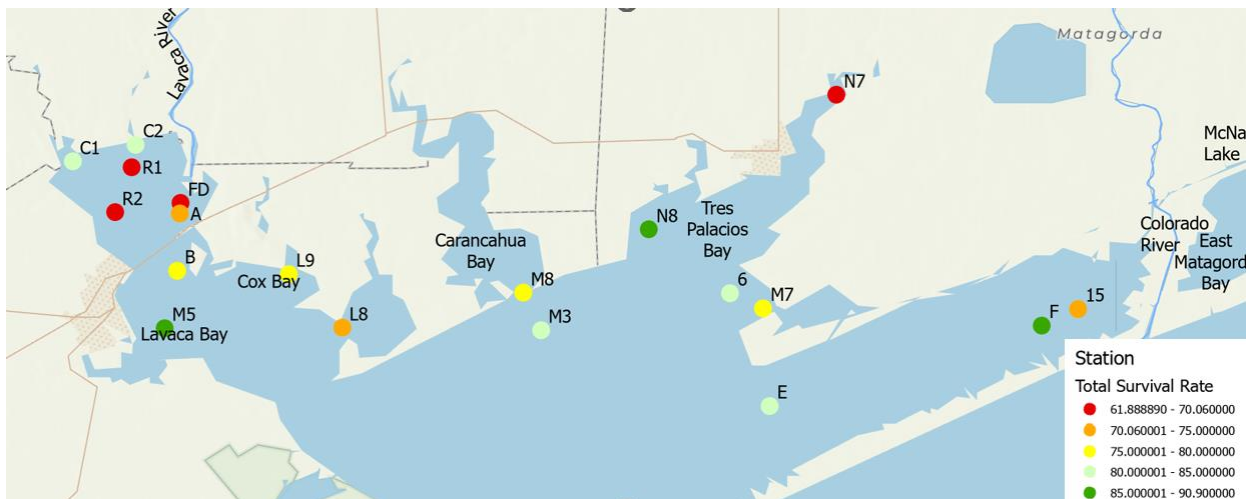


Figure 1. Spatial distribution of total survival rates of total benthic organisms across sampling stations in the Matagorda Bay System.

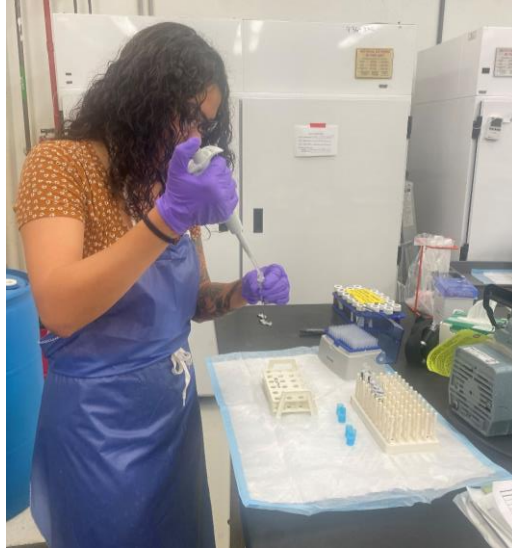


Figure 2. Angelica Ovalle performing ammonia tests on water from test chambers.

Task 2): In progress.

Third quarterly report submitted to MBMT.

Report submitted to NOAA:

Angelica Ovalle, "Sediment Quality Assessment Survey of the Matagorda Bay System." NERTO or Professional Development Report to the National Oceanic and Atmospheric Administration.

IV. PLAN FOR NEXT QUARTER:

Task 1): Complete chemistry analyses in College Station, TX. Continue benthic analyses in Corpus Christi, TX.

Task 2): Submit a quarterly reporting.

V. PROBLEMS ENCOUNTERED/CORRECTIVE ACTIONS:

None.

VI. ADHERENCE TO PROJECT TIMELINE:

A. Explanation of delays (if any): No delays.

B. Anticipated delays: None expected.