

December 21, 2023

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

RE: Quarterly Progress Report for the period 10/1/2023 – 12/31/2023.

Dear Mr. Raabe,

Please find enclosed the following deliverable: Quarterly Progress Report for the project
“Sediment Quality Assessment Survey of San Antonio Bay” Contract No. 035.

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:

Sediment Quality Assessment Survey of San Antonio Bays

Contract 035

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 January 2023 – 31 December 2024

Reporting Period: 01 October 2023 to 31 December 2023
Date of submission: 21 December 2023

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 will be 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 = April 10, Q2 = July 10, Q3 = October 10, and Q4 = January 10. The Final Report = December 31, 2024. Public engagement.

III. STATUS OF TASKS:

Task 1): In progress.

All 54 samples (=3 replicates at 18 stations) were analyzed for sediment chemistry and the dataset was created. Chemistry component is complete.

Three estuarine species (grass shrimp *Paleomon pugio*, amphipod *Leptochirus plumulosus*, and polychaete *Neanthes arenaceodentata*) were exposed to all 18 sediments and assessed for survivability, and the dataset was created. A Mictrox solid phase assessment and ammonia test was conducted simultaneously to detect factors of toxicity for each site if they were not seen in the other tests, and these datasets were completed. Toxicology component is complete.

Benthic diversity analyses were begun. A total of 25 samples out of 90 (=5 replicates at 18 stations) were completed. Diversity analyses are still in progress.

Task 2): In progress.

Fourth quarterly report submitted.

IV. PLAN FOR NEXT QUARTER:

Task 1): Work on macrofauna sample analyses.

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.