Quarterly Report for Matagorda Bay Mitigation Trust June 30, 2021

Project:

Colorado River Delta Ecosystem Assessment: Gathering Key Baseline Data to Guide Future Habitat Restoration in Matagorda Bay

Organizations:

¹Center for Sportfish Science and Conservation (CSSC) at Harte Research Institute for Gulf of Mexico Studies Texas A&M University at Corpus Christi ²BIOWEST, INC.

Investigators:

Gregory W. Stunz, Ph.D.¹ (PI) Matthew K. Streich, Ph.D.¹ (Co-PI) Edmund L. Oborny, Jr. Project Manager, ELO/eo² Contract No.: 0015 Project Term: 03/01/2021 – 07/31/2023 Reporting Period: 3/1/2021 – 6/30/2021

The contracted project with the Matagorda Bay Mitigation Trust was initiated as of March 1, 2021. After this date, we identified and got approval for a subcontractor with expertise in areas not covered by researchers at Texas A&M University-Corpus Christi. Areas for subcontract expertise include Benthic Habitat Characterization, and a portion of the Hydrological and Ecological Assessment work. The chosen contractor was BIOWEST, Inc. and a subaward was issued to this group in April 2021 (with a start date of March 1) in the amount of \$230,000.

Task 1 - Benthic Habitat Mapping: Perform a detailed benthic habitat characterization of the Colorado River Delta study area to provide an updated habitat baseline.

Status: Ongoing

- BIO-WEST conducted project management, internal project team meetings, task coordination, and invoicing.
- BIO-WEST conducted a site reconnaissance with CSSC scientist on May 25th, 2021.
- BIO-WEST initiated map preparation and conducted site selection analysis to facilitate ecological sampling.

Task 2 – Ecological Assessment: Conduct a comprehensive ecological assessment linking the distribution of species and their habitats spatially within the Colorado River Delta study area.

Status: Ongoing

- BIO-WEST conducted the Spring 2021 coastal bird surveys for the six established study sites in the delta on May 26-27, 2021.
- BIO-WEST initiated analysis of species and habitat data collected during Spring 2021 coastal bird surveys.

- CSSC performed first of two sampling events for Spring on June 2nd, 2021. Three epibenthic sled samples were taken at six sampling sites. In addition, water quality was taken at two additional sites, see map.
- CSSC performed the second Spring sampling event on June 11th, 2021. Three epibenthic sled samples were taken at six sampling sites along with water quality at sentinel sites. At present, CSSC has 36 samples in house representing Spring samples.

Task 3 – Hydrological Assessment: Complete a hydrological assessment to better understand water availability, flow paths, and topography in the Colorado Delta.

Status: Not yet begun

• Nothing to report for this quarter.

Task 4 – Data Analysis, Compilation and Reporting: Collective data analysis, interim/quarterly reporting, input solicitation, and final reporting.

Status: Ongoing

- 06/30/2021 Quarterly report No. 1 completed for project.
- CSSC will soon begin to pick through biological samples.

