

W00595

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service

DESCRIPTIVE REPORT

Type of Survey: Habitat Mapping

Registry Number: W00595

LOCALITY

State(s): Texas

General Locality: Espiritu Santo Bay

Sub-locality: Bayucos Island to Steamboat Island

2017

CHIEF OF PARTY
Dr. Emma Clarkson

LIBRARY & ARCHIVES

Date:

HYDROGRAPHIC TITLE SHEET

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INSTRUCTIONS: The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

State(s): **Texas**

General Locality: **Espiritu Santo Bay**

Sub-Locality: **Bayucos Island to Steamboat Island**

Scale: **20000**

Dates of Survey: **01/03/2017 to 12/21/2017**

Instructions Dated: **10/04/2021**

Project Number: **ESD-PHB-21**

Field Unit: **Texas Parks and Wildlife**

Chief of Party: **Dr. Emma Clarkson**

Soundings by: **Biosonics DT-X (SBES)**

Imagery by: **Teledyne Benthos C3D (SSS)**

Verification by: **Pacific Hydrographic Branch**

Soundings Acquired in: **meters at Mean Lower Low Water**

Remarks:

Any revisions to the Descriptive Report (DR) applied during office processing are shown in red italic text. The DR is maintained as a field unit product, therefore all information and recommendations within this report are considered preliminary unless otherwise noted. The final disposition of survey data is represented in the NOAA nautical chart products. All pertinent records for this survey are archived at the National Centers for Environmental Information (NCEI) and can be retrieved via <https://www.ncei.noaa.gov/>. Products created during office processing were generated in NAD83 UTM 14N, MLLW. All references to other horizontal or vertical datums in this report are applicable to the processed hydrographic data provided by the field unit.

DESCRIPTIVE REPORT MEMO

October 04, 2021

MEMORANDUM FOR: Pacific Hydrographic Branch

FROM: Report prepared by PHB on behalf of field unit
Dr. Emma Clarkson
Team Lead, Corpus Christi, Texas Parks and Wildlife

SUBJECT: Submission of Survey W00595

The Coastal Fisheries Habitat Assessment Team has been using sidescan sonar and singlebeam bathymetry to map sub-tidal habitats (predominantly oysters and unconsolidated sediments) across the Texas coast. The singlebeam data have also been used to create updated bathymetric products for our survey areas, many of which have not been updated since the 1960's.

The following products were created by the Habitat Assessment Team: Oyster habitat shapefiles, Sidescan sonar image, Singlebeam echosounder data, Digital Elevation Model (DEM), Metadata word document

All soundings were reduced to Mean Lower Low Water using Discrete Zoning. The horizontal datum for this project is North American Datum of 1983 (NAD 83). The projection used for this project is Universal Transverse Mercator (UTM) Zone 14.

The soundings for this survey were collected using a Biosonics DT-X singlebeam sonar, with integrated DGPS for precision positioning. Soundings were reduced to MLLW using hour-wide intervals from Rockport tide gauge, station #8774770.

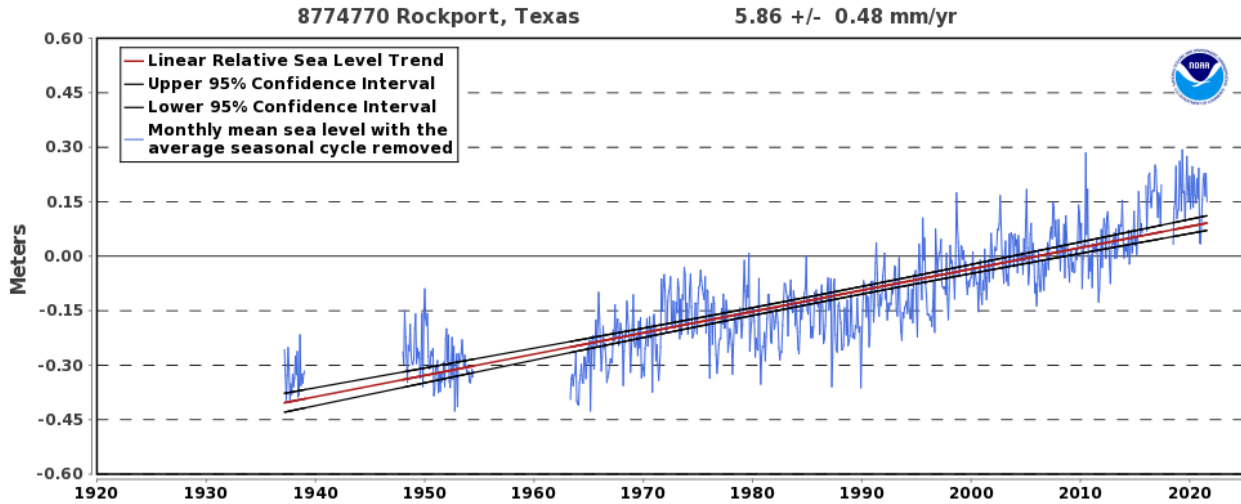
All survey systems and methods utilized during this survey were as described in Metadata - Espiritu Santo.docx

All data were reviewed for DTONs and none were identified in this survey.

TPWD acquired the data outlined in this report. Data are available at <https://tpwd.texas.gov/landwater/water/habitats/coastal-fisheries-habitat-assessment-team/>. Additional documentation from the data provider may be attached to this report.

Bathymetry from W00595 show depths that are, on average, 0.54m deeper than the 1935 leadline depths from H05887. The W00595-to-H05887 comparison was conducted with two TIN surfaces gridded at 10m resolution from original point data.

Historic sea level data from Rockport tide gauge (8774770) shows that the measured average sea level difference from 1935 to 2017 is estimated at 0.50m, accounting for almost all the depth disagreements between charted soundings and surveyed soundings.



Historic sea levels plotted over time at the Rockport, TX tide gauge

This survey does meet charting specifications and is adequate to supersede prior data.

APPROVAL PAGE

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The survey data meet or exceed the current requirements of the Office of Coast Survey hydrographic data review process and may be used to update NOAA products. The following survey products will be archived at the National Centers for Environmental Information:

- Descriptive Report
- Collection of Bathymetric Attributed Grids (BAGs)
- Geospatial PDF of survey products

Approved: _____

Peter Holmberg

Acting Chief, Pacific Hydrographic Branch