

W00580

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

DESCRIPTIVE REPORT

Type of Survey: Navigable Area

Registry Number: W00580

LOCALITY

State(s): Louisiana

General Locality: Vermillion Bay

Sub-locality: Shark Island Bayou

2013

CHIEF OF PARTY
Nancy T. DeWitt

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): **Louisiana**

General Locality: **Vermillion Bay**

Sub-Locality: **Shark Island Bayou**

Scale: **20000**

Dates of Survey: **01/14/2013 to 01/18/2013**

Instructions Dated: **N/A**

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

Field Unit: **US Geological Survey**

Chief of Party: **Nancy T. DeWitt**

Soundings by: **Knudsen Engineering 320M (SBES)**

Imagery by: **N/A**

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 15N, 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

September 21, 2021

MEMORANDUM FOR: Pacific Hydrographic Branch

FROM: Report prepared by PHB on behalf of field unit
Nancy T. DeWitt
Principle Investigator, United States Geological Survey

SUBJECT: Submission of Survey W00580

A team of scientists from the U.S. Geological Survey, St. Petersburg Coastal and Marine Science Center, collected 92 line-kilometers of dual-frequency single-beam bathymetry data in the tidal creeks, bayous, and coastal areas near Weeks Bay, southwest Louisiana. Limited bathymetry data exist for these tidally and meteorologically influenced shallow-water estuarine environments. In order to reduce the present knowledge gap, the objectives of this study were to (1) develop methods for regional inland bathymetry mapping and monitoring, (2) test inland bathymetry mapping system in pilot locations for integrating multiple elevation (aerial and terrestrial lidar) and bathymetry datasets, (3) implement inland bathymetry mapping and monitoring in highly focused sites, and (4) evaluate changes in bathymetry and channel-fill sediment storage using these methods.

A 10-meter grid of the Shark Island Bayou was created for data archival and charting purposes.

The vertical datum for this project is Mean Lower Low Water. 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 15.

All soundings were manually calculated to Mean Lower Low Water from NAVD88 due to a lack of VDatum coverage.

All survey systems and methods utilized during this survey are described in the report "13CCT01 Metadata" available at the URL below.

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

United States Geological Survey acquired the data outlined in this report. Data are available at <https://dx.doi.org/10.3133/ds835>. Additional documentation from the data provider may be attached to this report.

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

APPROVAL PAGE

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Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NCEI for archive

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

The survey evaluation and verification has been conducted according current OCS Specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: _____

James J. Miller, NOAA
Chief (Acting), Pacific Hydrographic Branch