

W00584

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

DESCRIPTIVE REPORT

Type of Survey: Navigable Area

Registry Number: W00584

LOCALITY

State(s): Louisiana

General Locality: Gulf of Mexico

Sub-locality: Point Au Fer Island to Raccoon Point

2015

CHIEF OF PARTY
Nancy T. DeWitt

LIBRARY & ARCHIVES

Date:

HYDROGRAPHIC TITLE SHEET

W00584

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: **Gulf of Mexico**

Sub-Locality: **Point Au Fer Island to Raccoon Point**

Scale: **40000**

Dates of Survey: **07/22/2015 to 07/29/2015**

Instructions Dated: **11/09/2021**

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

Field Unit: **US Geological Survey**

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

Soundings by: **ODIM Brooke Ocean Echotrac CV100 (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

November 09, 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 W00584

Coastal Louisiana encompasses a highly dynamic environment where high rates of deltaic sedimentation are offset by delta-plain subsidence, eustatic sea-level rise, storm impacts, barrier island erosion and segmentation, variable sediment supply, and human alteration. These factors collectively contribute to shoreline retreat and barrier-island and mainland land loss as shoreline sediments are eroded and coastal wetlands become inundated by marine waters (Kindinger and others, 2013). The associated effects are important because barrier islands protect natural ecosystems and human infrastructure by absorbing wave energy, thus mitigating the wave field in adjacent bays along fringing marshes and other coastal features.

This survey, serves as part of the Barrier Island Comprehensive Monitoring Program (BICM), which was implemented under the Louisiana Coastal Area Science and Technology (LCA S&T) office as a component of the System Wide Assessment and Monitoring Program (SWAMP) originally developed by the State of Louisiana Coastal Protection Restoration Authority (CPRA, formerly Louisiana Department of Natural Resources [LDNR]) to complement other Louisiana coastal monitoring programs such as the Coastwide Reference Monitoring System-Wetlands (CRMS-Wetlands), and is an ongoing collaboration research effort by CPRA, the University of New Orleans, and the U.S. Geological Survey (USGS). The goal of BICM is to provide long-term data on Louisiana's barrier islands, coastal features, and use this data to plan, design, evaluate, and maintain current and future barrier island restoration projects (Kindinger and others, 2013). The survey area extends 5 kilometers (km) offshore from Point Au Fer Island in the west to Raccoon Point in the east, encompassing the shallow water shelf of the Gulf of Mexico (fig. 1). The data described here will provide baseline bathymetric information for future research investigating island evolution, sediment transport, and recent and long term geomorphic change, and will support modeling of future changes in response to restoration and storm impacts.

This data series report serves as an archive of processed single-beam bathymetry data collected in the nearshore of the southern coast of Louisiana from Raccoon Point to Point Au Fer Island. The data were collected from July 22–29, 2015, under USGS Field Activity Number (FAN) 2015-320-FA. Geographic information system data products include a 200-meter-cell-size interpolated

bathymetry grid, trackline maps, and point data files. Additional files include error analysis maps, Field Activity Collection System (FACS) logs, and formal Federal Geographic Data Committee (FGDC) metadata.

A 4-meter grid was created for data archival and charting purposes.

All soundings were reduced to Mean Lower Low Water using VDatum. 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 survey systems and methods utilized during this survey were as described in "2015-320-FA_SBB_xyz_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://pubs.usgs.gov/ds/1041/ds1041_data.html. 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.