

W00439

NOAA Form 76-35A

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

**DESCRIPTIVE REPORT**

Type of Survey: LiDAR Survey

Registry Number: W00439

**LOCALITY**

State: Michigan

General Locality: Upper Lake Michigan

Sub-locality: Beaver Islands Archipelago and South Manitou Island

**2016**

CHIEF OF PARTY  
Unknown

LIBRARY & ARCHIVES

Date:

**HYDROGRAPHIC TITLE SHEET**

**W00439**

**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: **Michigan**

General Locality: **Upper Lake Michigan**

Sub-Locality: **Beaver Islands Archipelago and South Manitou Island**

Scale: **1:15,000**

Dates of Survey: **11/16/2015 to 06/04/2016**

Instructions Dated: **N/A**

Project Number: **ESD-PHB-18**

Field Unit: **Unknown**

Chief of Party: **Unknown**

Soundings by: **LiDAR**

Imagery by: **N/A**

Verification by: **Pacific Hydrographic Branch**

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

**Remarks:**

*The purpose of this survey is to update the nautical chart in the vicinity of the Beaver Islands Archipelago and South Manitou Island. Any revisions to the Descriptive Report (DR) generated during office processing are shown in bold red italic text. The processing branch maintains the DR as a field unit product, therefore, all information and recommendations within the body of the DR are considered preliminary unless otherwise noted. The final disposition of surveyed features is represented in the OCS nautical chart update products. All pertinent records for this survey, including the DR, are archived at the National Center for Environmental Information (NCEI).*

## DESCRIPTIVE REPORT MEMO

March 21, 2018

**MEMORANDUM FOR:** Pacific Hydrographic Branch

**FROM:** Kurt Mueller  
Physical Scientist, NOAA

**SUBJECT:** Submission of Suvey W00439

This project was conducted under a NOAA grant by the University of Southern Mississippi for potential incorporation into charting products.

A 4m BAG was created at the Pacific Hydrographic Branch for archive.

This report does not include vertical control information.

This report does not include data acquisition and processing information.

Four (4) Dangers to Navigation were discovered during review at the Pacific Hydrographic Branch and were submitted to NDB on March 23rd, 2018.

Data were originally acquired by Leading Edge Geomatics and processed by Dewberry for NOAA's Office of Coastal Management (OCM). The original intent of the data was to fill critical gaps in coverage used for effective planning for coastal storms, mapping fluctuating lake levels and to identify changes in aquatic vegetation. The University of Southern Mississippi (USM) was requested to review the data quality for potential charting updates. acquired the data outlined in this report. Data are available at <https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=6195>

This survey will be used to update NOAA navigational products where possible.

This survey does meet charting specifications and is adequate to supersede prior data. This survey will be used to update NOAA navigational products where possible.

Survey data should be archived at NCEI and the DR memo forwarded to HSD.

<b>Metadata for Survey W00439</b>	
Project	ESD-PHB-18
Survey	W00439
State	Michigan
Locality	Upper Lake Michigan
Sub-Locality	Beaver Islands Archipelago and South Manitou Island
Scale of Survey	1:15000
Sonars Used	Leica Chiroptera II (Topobathy LiDAR system)
Horizontal Datum	NAD83
Vertical Datum	176 meters above IGLD85
Vertical Datum Correction	VDatum
Projection	UTM 16N
Field Unit	NOAA
Survey Dates	11/16/2015 - 06/04/2016
Chief of Party	Unknown
Submission Date	03/15/2018

APPROVAL PAGE

W00439

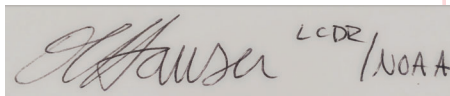
Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NCEI for archive

- Descriptive Report
- Collection of Bathymetric Attributed Grids (BAGs)
- Processed survey data and records

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: \_\_\_\_\_

Handwritten signature of Olivia Hauser in black ink, with "LCDR / NOAA" written in red ink to the right of the signature.

Digitally signed by  
HAUSER.OLIVIA.A.1275636009  
Date: 2018.08.15 18:38:09 -07'00'

**Lieutenant Commander Olivia Hauser, NOAA**  
Chief, Pacific Hydrographic Branch