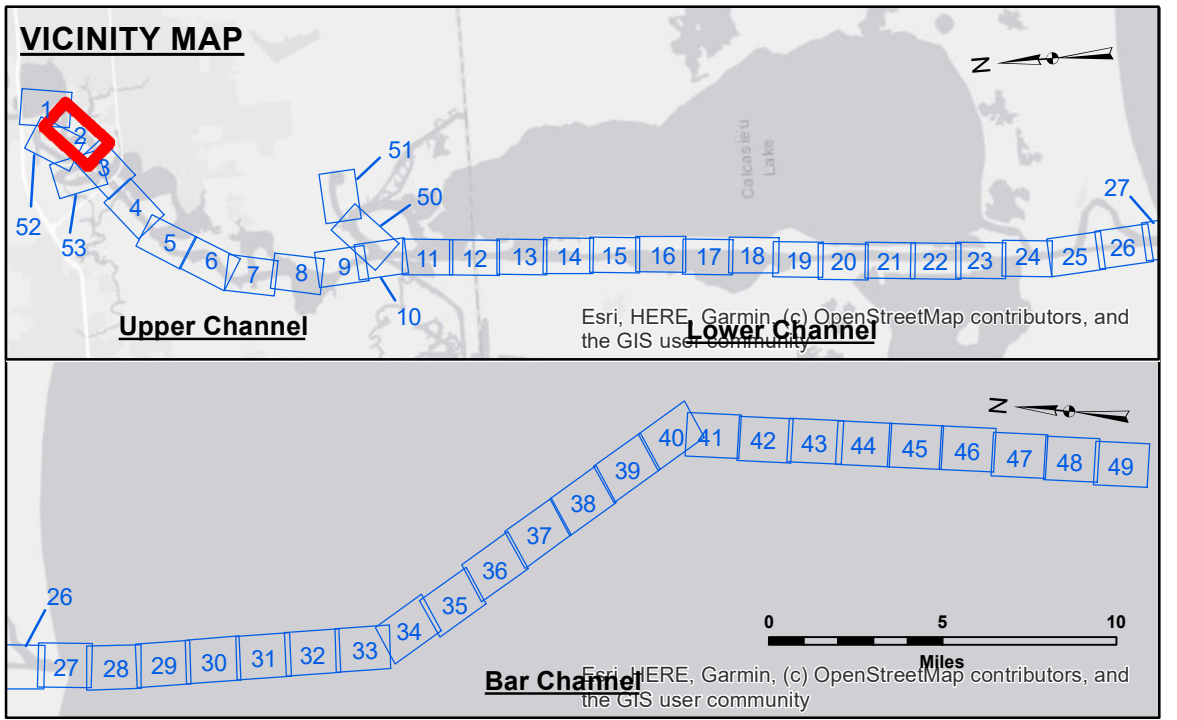


DISCLAIMER
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not warranted for any purpose other than that for which they were collected. The user is responsible for the results of any use of the data for other than the intended purpose.
 Distribution Liability: The data represents the results of data collection for a specific US Army Corps of Engineers project. It is only valid for its intended use, content, time and accuracy. The user is responsible for the results of any use of the data for other than the intended purpose.
 Data Accuracy: Hydrographic survey data is subject to change rapidly due to several factors including, but not limited to, changing hydrographic conditions, changes in the bathymetry of the channel, and changes in the hydrographic conditions which develop after the date of the survey. The user is responsible for the results of any use of the data for other than the intended purpose.
 The information depicted on this map represents the results of a survey conducted on or about the date shown. It is not intended to represent the general condition existing at that time.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: SPSR	Plotted By: BD
Recommended: Chief, Survey Section	Checked By: ADU/H	Approved: Chief, Waterways Maintenance Section

**CALCASIEU SHIP CHANNEL
 UPPER SHEET 2
 CR_02_UPR_20220822_CS
 22 August 2022**



LEGEND		
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
— As-built Pipeline/Cable	⊗ Anchorage Area	★ Beacon, General
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy
— Project Depth Contour	⊗ Wrecks-Submerged	◆ Green Navigation Buoy

Gage Reading: VRS RTK NTRIP: 1.91 MLLW AVG.
 Sea Conditions: CALM
 Vessel Name: OB-169
 Survey Type: CONDITION
 Sounding Frequency***: LOW

NOTES:
 Horizontal Coordinate System:
 North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Louisiana South Zone. Distance units in U.S. Survey Feet.
 Vertical Datum:
 Soundings are shown in feet and indicate depths below Mean Lower Low Water Datum (MLLW).
 Datum Relationships for gage 73550 as of December 2013:
 0.0' NAVD88 (OPUS 2010) = 0.6' MLLW = 1.6' MLG or 0.0' MLLW = 1.0' MLG
 Distances on the Calcasieu River are shown at 1 mile intervals.
 The location of navigation aids are base on and provided by the U.S. Coast Guard and USACE survey crews.
 2022 Aerial Photography data source: PAR LLC
 Reference is N.O.A. Navigation Chart No. 11339.
 * Difference between high and low frequency elevations where greater than 1.0'.
 ** Shoalest Sounding per Quarter per Reach.
 *** High frequency (200 kHz) survey data represents the first signal return at a sounding location and will include suspended solids, known as "fluff", if present. Low frequency (20 kHz) survey data normally penetrates through this "fluff" layer to depict elevations of consolidated bottom material. Low frequency accuracies may vary depending on channel conditions and fathometer settings.

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