

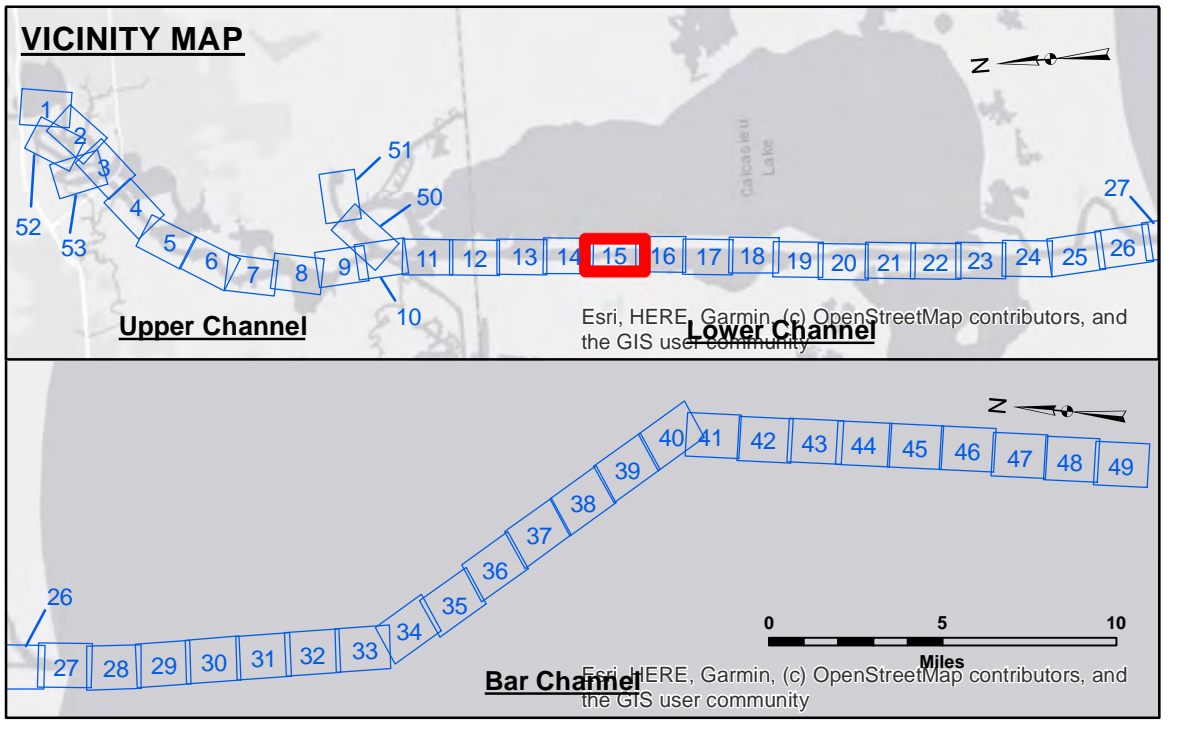
**US Army Corps of Engineers District: CEMVN**

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Submitted:	Surveyed By:	RYLAND/ADAMS
Recommended:	Plotted By:	AO
Checked:	Chart Survey Section	
Approved:	Chart, Waterways Maintenance Section	

**CALCASIEU SHIP CHANNEL LOWER SHEET 15**  
**CR\_15\_LWR\_20210626\_CS**  
 26 June 2021

**Sheet Reference Number**  
 15 of 53



**LEGEND**

- Federal Navigation Channel
- Federal Navigation Center Line
- As-built Pipeline/Cable
- ..... Unconfirmed Pipeline/Cable
- Project Depth Contour
- Cable Area
- Placement Area
- Anchorage Area
- ⊗ Obstruction Point
- ⚓ Wrecks-Submerged
- 3 Fluff Thickness (feet)\*
- Shoalest Sounding\*\*
- ★ Beacon, General
- ◆ Red Navigation Buoy
- ◆ Green Navigation Buoy
- 16' and above
- 16' to -21'
- 21' to -26'
- 26' to -33'
- 33' to -39'
- 39' to -41'
- 41' to -43'
- 43' and below

**Gage Reading:** HACKBERRY: 2.4 MLLW  
**Sea Conditions:** CALM  
**Vessel Name:** M/V OB 169  
**Survey Type:** CONDITION  
**Sounding Frequency\*\*\*:** LOW

**Vertical Datum:**  
 Soundings are shown in feet and indicate depths below Mean Lower Low Water Datum (MLLW).  
 Datum Relationships for gage 73600 as of December 2013:  
 0.0' NAVD88 (OPUS 2010) = 1.0' MLLW = 2.0' 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.

2015 Aerial Photography data source: NAIP  
 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.

**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 73600 as of December 2013:  
 0.0' NAVD88 (OPUS 2010) = 1.0' MLLW = 2.0' MLG or 0.0' MLLW = 1.0' MLG

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