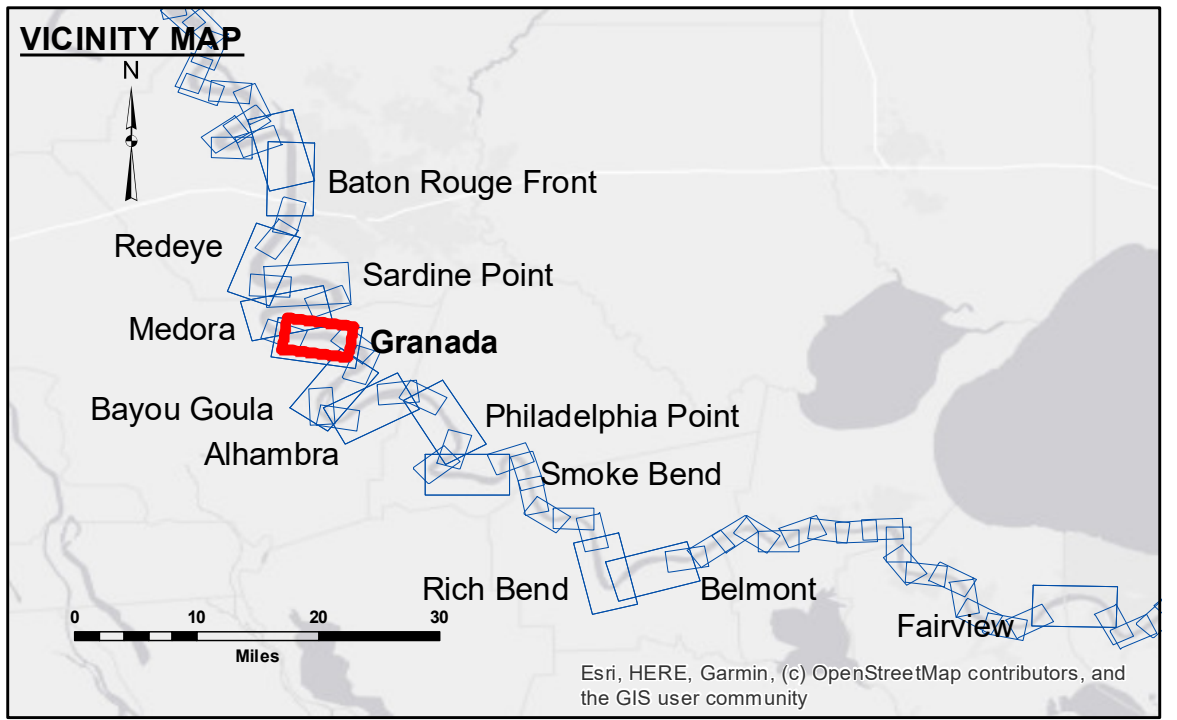


DISCLAIMER: The data represents the results of data collection processing for a specific US Army Corps of Engineers project. The data is only valid for the intended use and accuracy specifications. The user is responsible for the results. The application of the data for other than its intended purpose is not recommended. The user should not rely on the data for critical decisions. Hydrographic survey data is subject to change due to several factors including but not limited to dredging, sedimentation, and channel migration. The user should verify the data for their intended use. The information depicted on this map represents the results of a survey conducted on the date shown. The user should consider the general condition existing at that time.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: JDH/SPS
Recommended: Chief Survey Section	Plotted By: BD
Approved: Chief Waterways Maintenance Section	Checked By: AC

**MISSISSIPPI RIVER - B.R. TO GULF
GRANADA CROSSING
MD_10_GRA_20191121_CS
21 November 2019**



LEGEND		0' and above	
--- Federal Navigation Channel	○ Cable Area	■ 0' to -5'	
— Federal Navigation Center Line	□ Placement Area	■ -5' to -10'	
— As-built Pipeline/Cable	□ Anchorage Area	■ -10' to -20'	
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	■ -20' to -30'	
— Project Depth Contour	★ Beacon, General	■ -30' to -35'	
	◆ Wrecks-Submerged	■ -35' to -40'	
	□ Borrow Area	■ -40' to -45'	
	● Shoalest Sounding**	■ -45' and below	
	◆ Red Navigation Buoy		
	◆ Green Navigation Buoy		

LWRP: 1.9
 Gage Reading: BR:24.8 D:16.3 USED 20.9 NAVD
 Sea Conditions: CALM
 Vessel Name: M/V LAFOURCHE
 Survey Type: CONDITION
 Sounding Frequency***: HIGH

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 Low Water Reference Plane 2007 (NAVD).
 Distances on the Mississippi River, above and below Head of Passes are shown at 1 mile intervals.
 The location of navigation aids are based on and provided by the U.S. Coast Guard and USACE crew.
 2015 Aerial Photography data source: NAIP, USDA-FSA-APFO Aerial Photography Field Office.
 Reference is N.O.A. Navigation Chart No. 11370.
 ** 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.

**Sheet
Reference
Number
10 of 97**