

Description of Map Units

QUATERNARY SYSTEM

HOLOCENE

- Hmpb₁** **Mississippi River point bar deposits belt 1** — Point bar deposits of Mississippi River meander belt 1, buried by a thin layer of overbank sediments. Sand-size grains and deposit is composed of quartz, mica, iron oxide, and a trace of dark-colored mafic silicate minerals.
- Hmc₁** **Crevasse and crevasse complex deposits of the Mississippi River meander belt 1** — Silty to sandy crevasse splay deposits of Mississippi River meander belt 1. Crevasse splays are partially overlain in some places by point bar deposits. Grains are silt to sand-size and the deposit is composed of quartz, mica, iron oxide, and a trace amount of dark-color mafic silicate minerals.
- Hml₁** **Levee overbank flood deposits of the Mississippi River meander belt 1** — Clayey to Silty deposits of the natural levee flanking Mississippi River meander belt 1. This deposit becomes more clayey at the distal side of the river. Minerals presents include quartz, iron oxide, and mica.
- Hcs** **Coastal Swamp** — Mud deposit in paralic setting of seasonally fluctuating fresh and brackish surface water. Dark steel gray, black, and brown-black organic-rich mud with less than 0.1% silt fraction.

PLEISTOCENE

- Pph** **Hammond alloformation** — Rust-yellow, rust-orange, and reddish-brown silty and fine sandy mud. Depositional structures (laminations) and half-centimeter scale Skolithos ichnofossils are diagnostic. Clay vs. silt and fine sand fraction vary with location, the latter dominated by quartz with feldspar and light and dark mica.

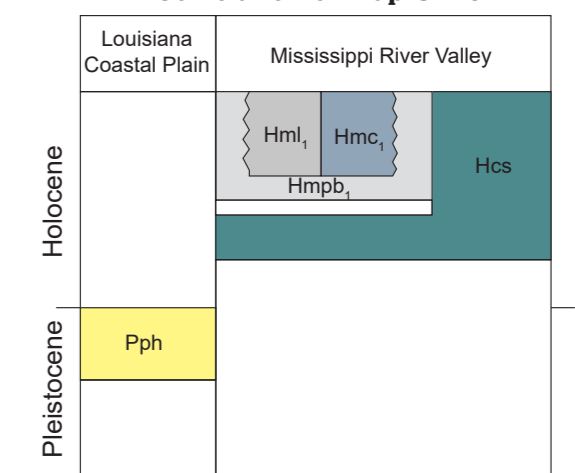
Open Water, Inundated Area, Wetland

- Streams**
- Contacts**
- Topographic Contours**

References:

- Arrick, C., Seely, F., Cameron, R., and Walker, A., 1892, Donaldsonville, Louisiana 15 minute topography quadrangle: United States Geological Survey.
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- McCulloh, R., Heinrich, P., and Sneed, J., 2003, Ponchartroula 30 x 60 minute geologic quadrangle: Louisiana Geological Survey, scale 1:100,000.
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- Saucier, R.T., 1994, Geomorphology and Quaternary geologic history of the Lower Mississippi Valley, US Army Engineer Waterways Experiment Station.

Correlation of Map Units



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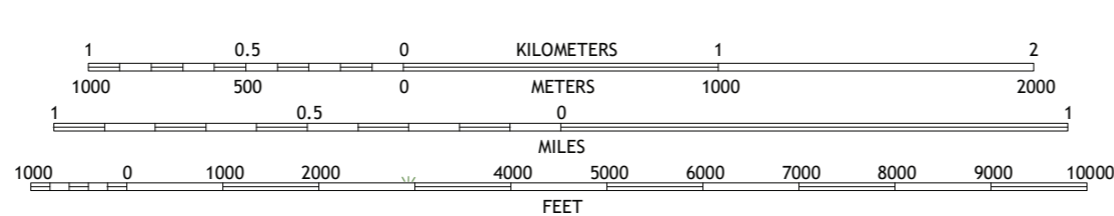
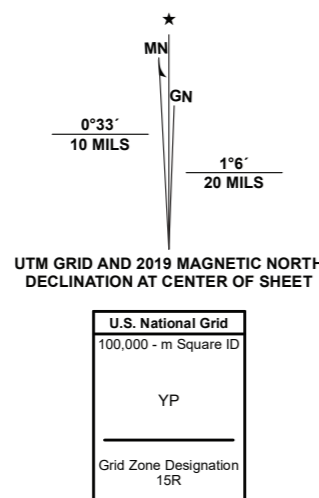
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SCALE 1:24,000
 CONTOUR INTERVAL 5 FEET
 NORTH AMERICAN DATUM OF 1983 (NAD 83)
 WORLD GEODETIC SYSTEM 1984 (WGS 84)
 UNIVERSAL TRANSVERSE MERCATOR PROJECTION, ZONE 15
 NORTH AMERICAN VERTICAL DATUM OF 1988

1	2	3	1 Gonzales
4	5	6	2 Sorrento
7	8	8	3 Mount Airy HW
			4 Donaldsonville
			5 Litchner
			6 Waldwood
			7 Lagan
			8 Lower Yacherie



ROAD CLASSIFICATION	
Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route

Base Map	United States Geological Survey, 2020
BoundariesLADOTD, 2007
ContoursNational Elevation Dataset, 2008 - 2011
HydrographyNational Hydrography Dataset, 2002 - 2017
NamesGNIS, 1980 - 2017
RoadsU.S. Census Bureau, 2017
WetlandsFWS National Wetlands Inventory 2021

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This research is supported by the U. S. Geological Survey, National Cooperative Geologic Mapping Program. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U. S. Government or the state of Louisiana. This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.

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**Geology of the Convent 7.5 Minute Quadrangle,
 St. James and Ascension Parishes, Louisiana, 2023**