

Description of Map Units

QUATERNARY SYSTEM

Holococene

- Ha** Stream alluvium, undifferentiated—Deposits of ephemeral and perennial (Tickfaw River) streams incised into older strata. Occur as active and recently stranded terraces. Light to medium gray-brown clay mud and silt mud with medium to fine sand component of quartz and trace amounts of dark silicates and iron oxides. Produced by local re-working of Pleistocene sediments. Thickness 0 – 1 meter.
- Hcs** Coastal Swamp—Active deposit of fresh and brackish water inundation in peralic setting. Dark brown, black-brown, and black organic-rich clay with <1% very fine quartz sand and silt. Undetermined thickness.

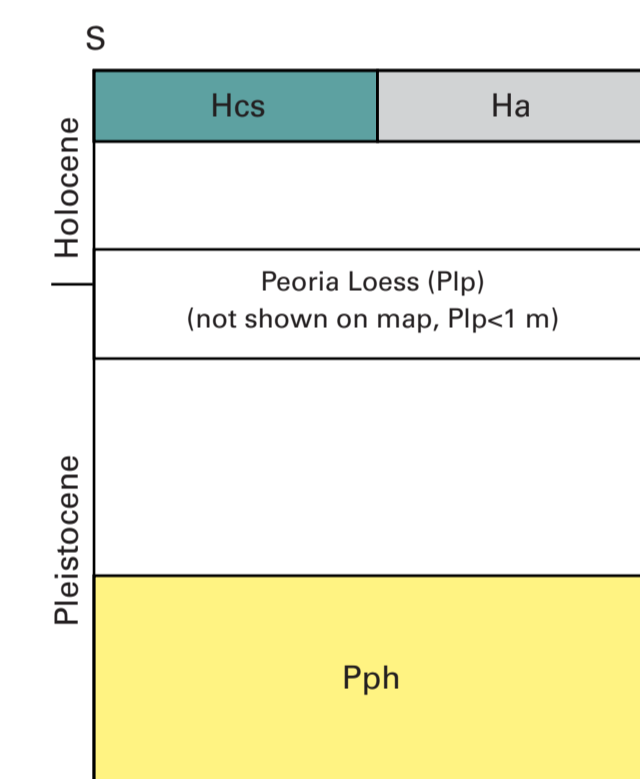
Pleistocene

- Pph** Hammond alloformation—Sequence of bedded sandy muds and muddy sands with small scale internal planar and low angle cross lamination. Gray, brown-gray, and gold-gray micaceous, arkosic fine sand, silt and clay with dark silicates and iron oxides in accessory amounts. Pedogenically altered clay-rich light colored mud with dark orange and red mottling is interpreted to mark upper boundary. Thickness < 1 m.

- Open Water, Inundated Area, Wetland**
- Streams**
- Contacts**
- Topographic Contours**

References:
 McCulloh, R., Heinrich, P., and Sneed, J., 2003, Ponchatoula 30 x 60 minute geologic quadrangle: Louisiana Geological Survey, scale 1:100,000.
 Saucier, R. T., 1963, Recent geomorphic history of the Pontchartrain basin, Coastal Studies Series No. 9, 114 p.
 Saucier, R.T., 1994, Geomorphology and Quaternary geologic history of the Lower Mississippi Valley, US Army Engineer Waterways Experiment Station, Vols I and II, 364 p. + Appendices + map folio.

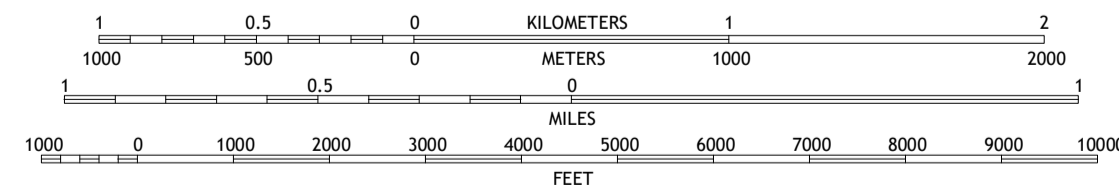
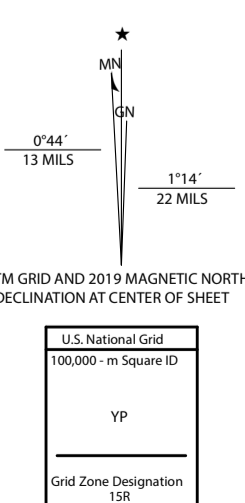
Correlation of Map Units



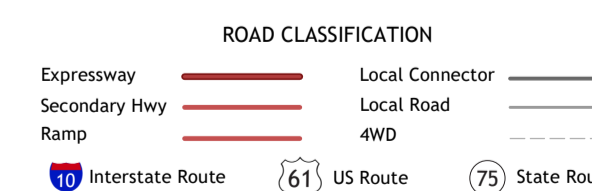
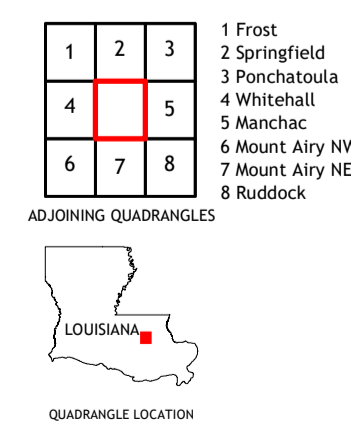
Produced and published by the Louisiana Geological Survey
 3079 Energy, Coast & Environment Building, Louisiana State
 University Baton Rouge, LA 70803, 225/578-5320 www.lsu.edu/lgs/

This geologic map was funded in part by the USGS National
 Cooperative Geologic Mapping Program under STATEMAP award
 number G22AC00379-00, 2022.

Copyright ©2023 by the Louisiana Geological Survey
 Geology: Marty Horn and Akinbobola Akintomide
 GIS Compilation/Cartography: Robert L. Paulsell



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



Base Map.....United States Geological Survey, 2020
 Boundaries.....LaDOTD, 2007
 Contours.....National Elevation Dataset, 2008 - 2011
 Hydrography.....National Hydrography Dataset, 2002 - 2017
 Names.....GNIS, 1980 - 2017
 Roads.....U.S. Census Bureau, 2017
 Wetlands.....FWS National Wetlands Inventory 2021

LGS acknowledges individual property owners for field work access and information in support of this study.

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.

This map has been carefully prepared from the best existing sources available at the time of preparation. However, the Louisiana Geological Survey and Louisiana State University do not assume responsibility or liability for any reliance thereon. This information is provided with the understanding that it is not guaranteed to be correct or complete, and conclusions drawn from such data are the sole responsibility of the user. These geologic quadrangles are intended for use at the scale of 1:24,000. A detailed on-the-ground survey and analysis of a specific site may differ from these maps.

**Geology of the Killian 7.5 Minute Quadrangle,
 Livingston and Tangipahoa Parishes, Louisiana, 2023**