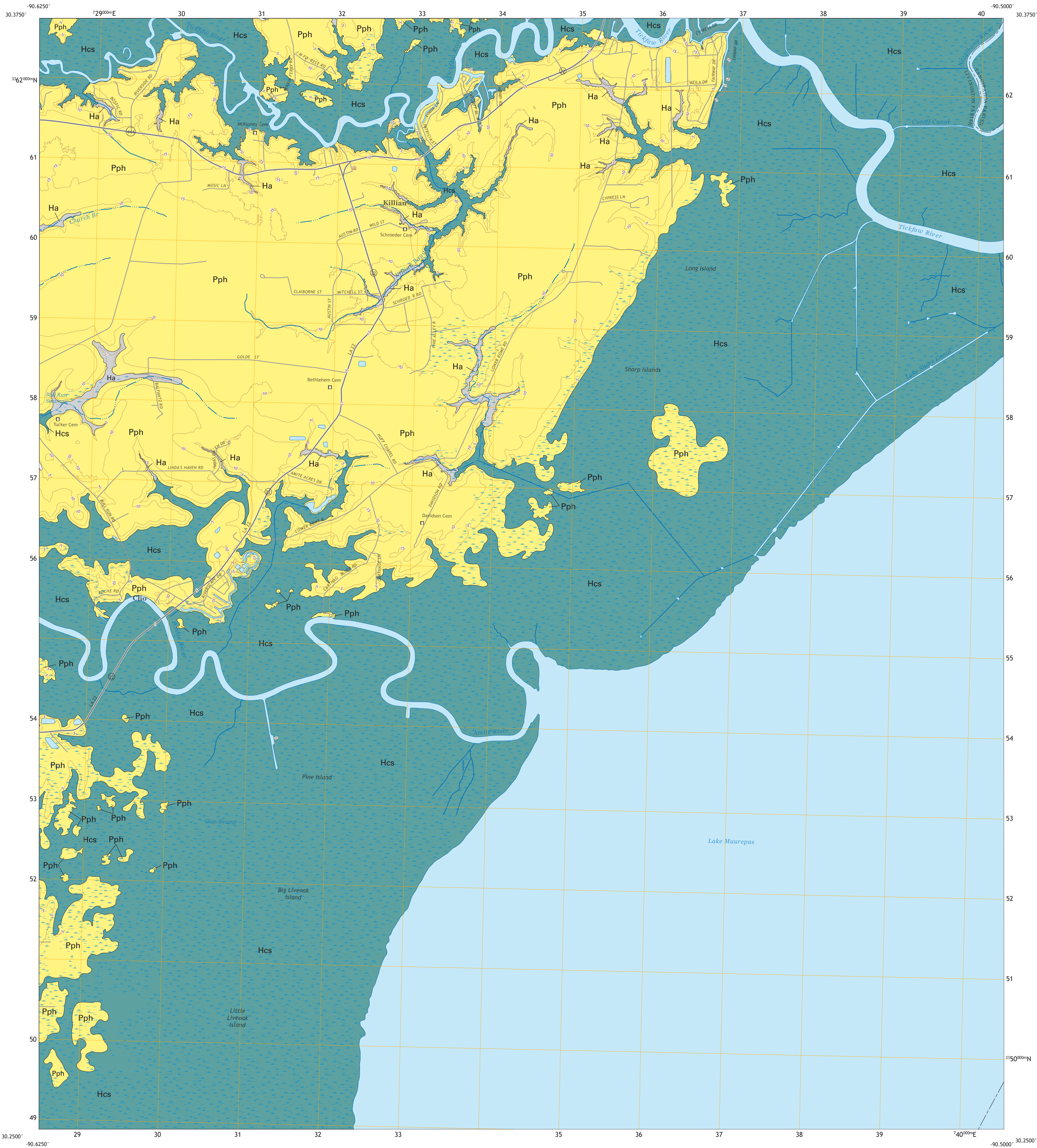




Description of Map Units

QUATERNARY SYSTEM

HOLOCENE

**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

**Peoria loess (not shown)** — Wisconsin age loess in thin (< 1m) veneer over Hammond alloformation. Light brown-white, light brown-gray, and light orange-gray fine sand and silt with minor clay, lacking sedimentary structures. Includes small population of coarse and medium sand size rounded and frosted quartz. Fine sand and silt dominated by quartz with minute trace amounts of feldspar, dark silicates, iron oxides, and light mica. Displays 5 cm scale vertical piping in thin erosional bluffs. Thickness < 1 m.

**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 undetermined.

**Open Water, Inundated Area, Wetland**

**Streams**

**Contacts**

**Topographic Contours**

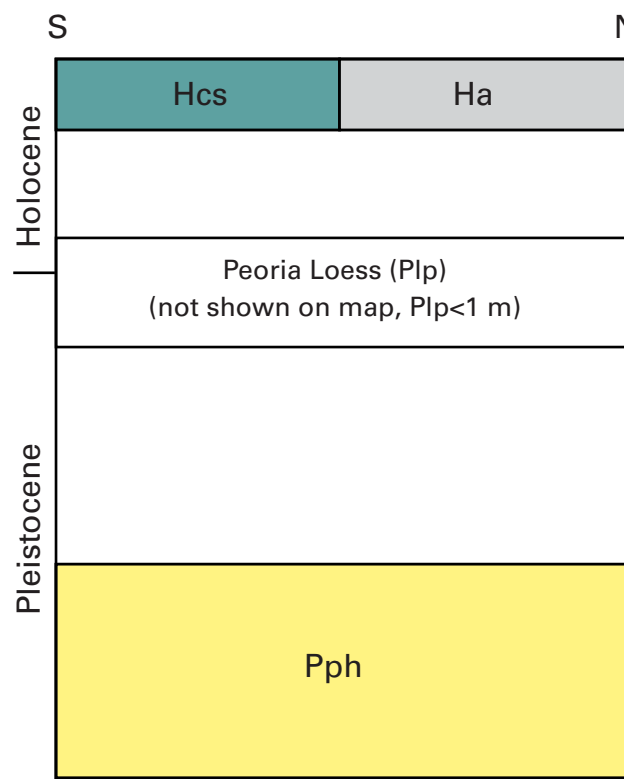
References:

McCulloh, R., Heinrich, P., and Snead, J., 2003, Pontcharoula 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



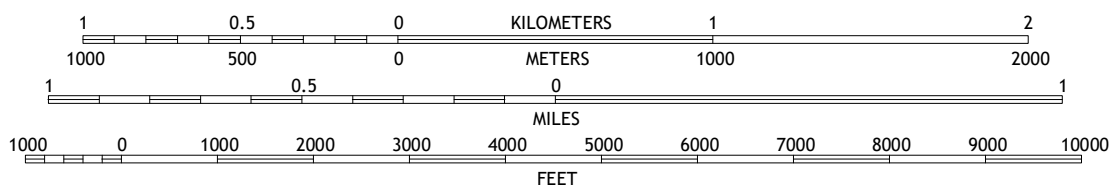
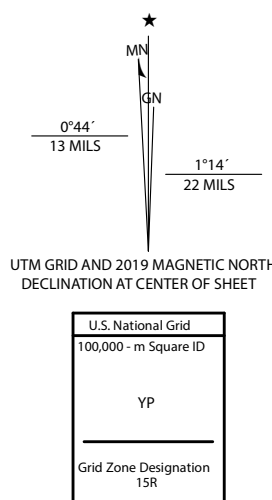
Produced and published by the Louisiana Geological Survey 3079 Energy, Coast & Environment Building, Louisiana State University Baton Rouge, LA 70803, 225/578-5320 www.lsu.edu/lgs/

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

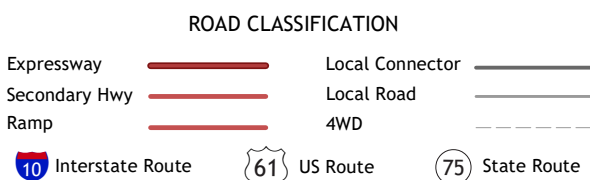
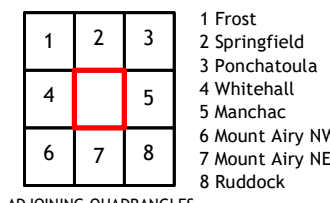
Copyright ©2023 by the Louisiana Geological Survey

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 GEODETTIC 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