

**Description of Map Units**

**QUATERNARY SYSTEM**

**HOLOCENE**

**Ha** **Holocene undifferentiated alluvium**—Undifferentiated deposits of small upland streams; unconsolidated alluvial deposits of minor streams and creeks filling valleys incised into older deposits, with textures varying from gravelly sand to sandy mud. The Holocene alluvium underlying the flood plain of the Vermilion River also includes sandy and silty sediments of the Red and Mississippi rivers. These sediments were deposited during periods when floodwaters of either river overflowed into the Vermilion River course.

**PLEISTOCENE**

**LOESS**—Eolian silt veneer of late Wisconsin age (Peoria Loess) mantling Pleistocene strata. Loess is 3–5 m thick in Lafayette quadrangle (Miller, 1983) and consists of gray to brown clayey silt to silty clay, in places with rootlets, organic matter, calcareous and/or iron-oxide stains and/or nodules, light gray to dark brown mottles, and some very fine to fine sand.

**PRAIRIE ALLOGROUP**

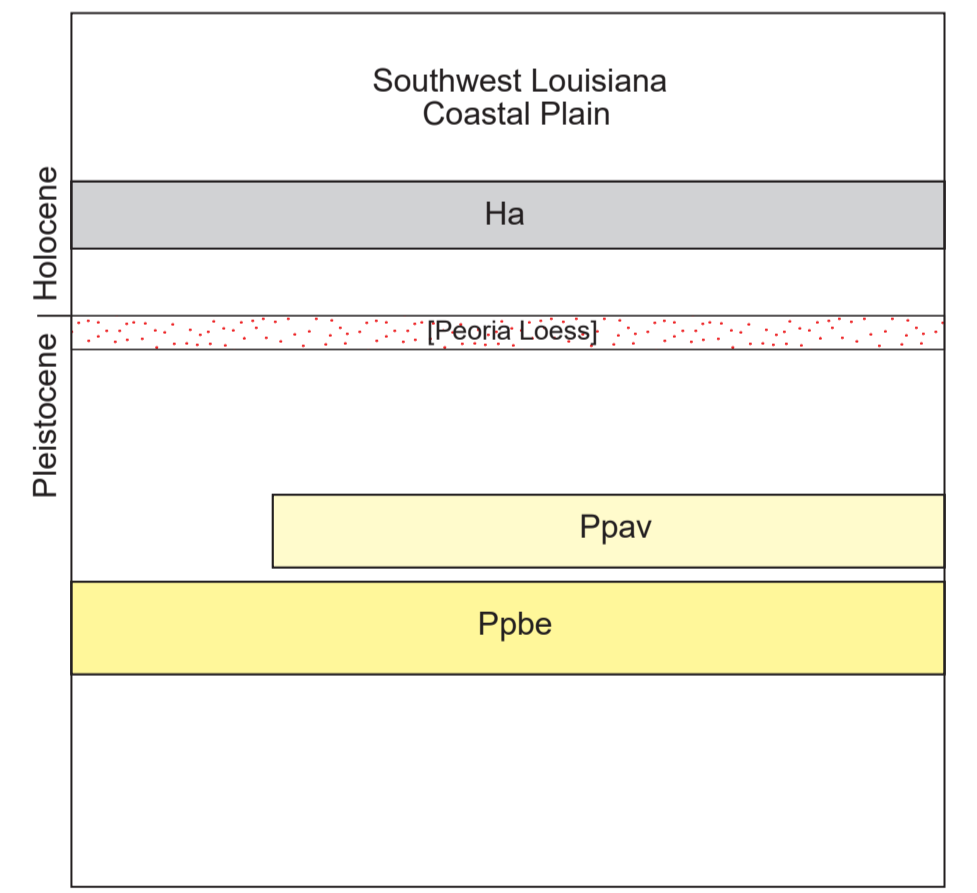
**Ppav** **Avoyelles alloformation**—Meander-belt deposits of the late Pleistocene Mississippi River, terraced above and parallel to its western valley wall and incised into the underlying Beaumont Alloformation. The surface is occupied by relict channels of the Lafayette meander belt. Gray, tan, and brown clay, silt, and sand, in places calcareous and/or carbonaceous, or with clay pockets, silt seams, laminae of clayey silt and sand, sand layers, organic matter, iron-oxide stains and/or nodules (≤ 2 mm), and brown mottles. In the Lafayette area and vicinity a thin blanket of overbank sediment overlies the Beaumont Alloformation adjacent to the edge of the Lafayette meander belt (Mateo, 2015), and could not be mapped.

**Ppbe** **Beaumont Alloformation**—Coastal-plain deposits of late to middle Pleistocene streams, forming the oldest and topographically highest of the Prairie surfaces of southwestern Louisiana. Gray, tan, brown, and red clay, silt, and sand, in places with Fe nodules (≤ 2 mm). Subsurface data indicate that in its upper 80+ m the unit in places shows a transition from fining-upward gravel, overlain by coarse sand and gravel, to fining-upward sand (coarse to fine) and clay at the surface. In areas to the north and west of the study area the surface exhibits relict channels of the Red, Mermontau, and Calcasieu Rivers, and the unit includes deposits of the Ingleside barrier trend (Houston Ridge).

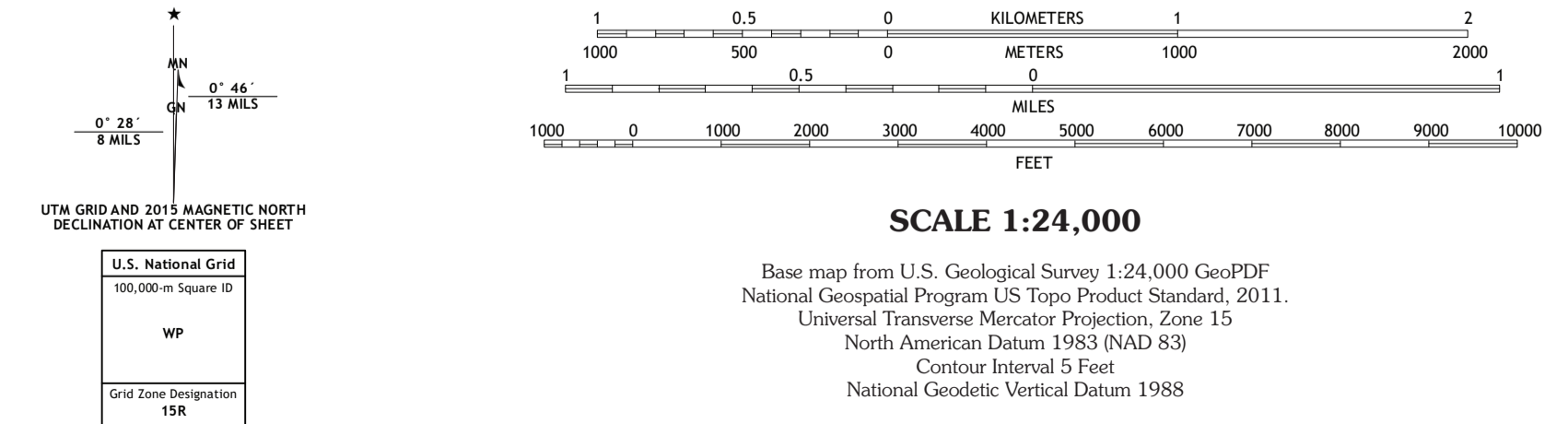
- Open Water, Inundated Area, Wetland**
- Contact**—includes inferred contacts.
- Streams**
- Topographic Contours**

**References:**  
 Mateo, Z. R. P., 2005. Fluvial response to climate and sea-level change, Prairie Complex, Lower Mississippi Valley: M.S. thesis, University of Illinois, Chicago, 66 p.  
 Miller, B. J. (compiler), [1983]. [Distribution and thickness of loess in Lake Charles, Louisiana 1 x 2 degree quadrangle]. Louisiana State University Department of Agronomy, Louisiana Agricultural Center, Louisiana Agricultural Experiment Station, Baton Rouge, unpublished map, Louisiana Geological Survey, scale 1:250,000.

**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 G16AC00183, 2016.  
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1	2	3	1 Mile
4	5	6	2 Carencro
7	8	8	3 Carencro Bridge
			4 Dason
			5 Broussard
			6 Arroy
			7 Milton
			8 Youngville

**ROAD CLASSIFICATION**

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

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

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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**Geologic Map of the Lafayette 7.5 minute quadrangle  
 Lafayette and Vermillion Parishes, Louisiana**