-90.7500° 30.7500° 3403000mN Puc Pph Pimo EAST BATON ROU Puc ST. HELENA PARIS Puc Puc Pph Ppi 30.6250° -90.7500° 30.6250° -90.8750° Produced and published by the Louisiana Geological Survey ROAD CLASSIFICATION 3079 Energy, Coast & Environment Building, Louisiana State University 2 Hatchersville Baton Rouge, LA 70803 • 225/578-5320 • www.lsu.edu/lgs/ 5 Montpelier This geologic map was funded in part by the USGS National 6 Watson Cooperative Geologic Mapping Program under STATEMAP award number G18AC00179, 2018. **SCALE 1:24,000** Copyright ©2019 by the Louisiana Geological Survey Base map from U.S. Geological Survey 1:24,000 GeoPDF Geology: Richard P. McCulloh and Paul V. Heinrich National Geospatial Program US Topo Product Standard, 2011.

Universal Transverse Mercator Projection, Zone 15

North American Datum 1983 (NAD 83)

Contour Interval 5 Feet North American Vertical Datum 1988

Geologic Map of the Pine Grove 7.5 minute quadrangle

St. Helena, Livingston, E. Feliciana, and E. Baton Rouge Parishes, Louisiana

GIS Compilation: Robert L. Paulsell, Richard P. McCulloh, and

Paul V. Heinrich

Cartography: Robert L. Paulsell

Description of Map Units

QUATERNARY SYSTEM HOLOCENE

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.

total thickness of either or both loess units is 1 meter or greater.

PLEISTOCENE

LOESS—Eolian silt veneer of late Wisconsin age (Peoria Loess) mantling Pleistocene and older strata. Underlain in places by older loess of possible late Sangamon to early Wisconsin age (Sicily Island Loess). Loess is shown where the

PRAIRIE ALLOGROUP

Hammond alloformation—Deposits of middle to late Wisconsin coastal-plain streams in the Florida Parishes of southeastern Louisiana. In the upper Amite River valley area it consists of grayish silty clay to very fine to medium sand, with yellowish and brownish mottles and abundant ferromagnesian nodules (≤ 2 cm) in places.

Relict Pleistocene ridges—Alluvial remnants (predominantly sand hills) delineated on portions of the surface of the Hammond alloformation.

Irene alloformation—Alluvial and colluvial deposits of the middle Pleistocene ancestral Amite River and other equivalents of Florida Parishes streams in southeastern Louisiana. Texture ranges from silty clay to coarse sand, with fining-upward sequences common. The upper surface in places is a grayish silty clay with a distinctive mixture of fragmented whitish flakes of silt. West of the Amite River valley, this unit

INTERMEDIATE ALLOGROUP

is blanketed by 1 m or more of loess, or loess-derived colluvium.

Montpelier alloformation—Alluvial, colluvial, and slope deposits of the Florida Parishes of southeastern Louisiana derived from the Pliocene Citronelle Formation. In the upper Amite River valley it consists of silt to clayey very fine to coarse sand, with sandy gravel in places, reddish to yellowish brown with grayish mottles, blanketed by Peoria and\or Sicily Island Loess. Contains root casts and ironstone deposits including nodules and stringers in places.

TERTIARY SYSTEM
PLIOCENE

UPLAND ALLOGROUP

Citronelle Formation—Alluvial sediments deposited by Pliocene streams in the Florida Parishes of southeastern Louisiana. Where mapped in the upper Amite River valley, it consists primarily of clayey very fine to coarse sand, with gravelly sand to sandy gravel (comprising chert, quartz, and/or light-colored mud), reddish to reddish brown with grayish to yellowish to brownish mottles, and is blanketed by Peoria and/or Sicily Island Loess. In places it includes abundant tree root casts and ironstone. Less-weathered exposures of Citronelle may show large-scale cross beds with light-grayish, whitish-weathering grains and sparse mica concentrated on cross beds; horizontal bedding; and mud rip-up clasts.

Open Water, Inundated Area, Wetland

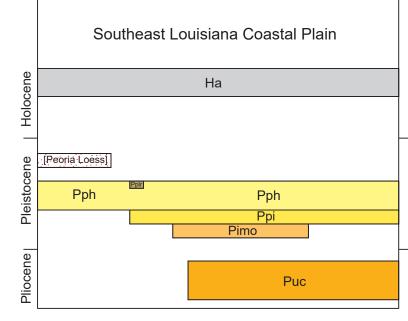
Streams

Contact—includes inferred contacts.

Escarpment—Marks the valley wall of a late Pleistocene paleovalley of the Amite River within the Hammond alloformation.

Topographic Contours

Correlation of Map Units



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.

.United States Geological Survey, 2020

National Elevation Dataset, 2008 - 2011

..FWS National Wetlands Inventory 2021

.National Hydrography Dataset, 2002 - 2017

..LaDOTD, 2007

...GNIS, 1980 - 2017

...U.S. Census Bureau, 2017

Boundaries..

Hydrography.

Contours..

Names...

Roads....

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.