

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.

PLEISTOCENE

Pp **Prairie Allogroup, undifferentiated**—A diverse depositional sequence of late to middle Pleistocene deposits of the Mississippi River, its tributaries, and coastal plain streams; includes terraces, basal (meander-belt, backswamp, and braided-stream), coluvial, estuarine, deltaic, and marine units deposited over a considerable interval of the late Pleistocene. Surfaces generally show little dissection and are topographically higher than the Doweysville. Multiple levels are recognized along alluvial valleys and coast-parallel trends. The Prairie is locally mapped as undifferentiated alluvial terraces where discontinuous surfaces are incised into older allogroups within valleys.

INTERMEDIATE ALLOGROUP

Pi **Intermediate allogroup, undifferentiated**—fluvial deposits of the Mississippi, Red, and Calcasieu rivers, their tributaries, and coastal plain streams, includes sediments underlying terraces locally designated as Oakdale, Elizabeth, and Lisse. The surfaces of the Intermediate Allogroup are commonly higher in elevation than the surface of Prairie Allogroup, and lower than the topography of adjoining Upland Allogroup and Tertiary formations. Its surfaces are generally dissected and lack distinct constructional topography. Examination of limited subsurface data indicate these surfaces are underlain by fine-grained sediments that overlie sandy sediments. The Intermediate is locally mapped as undifferentiated alluvial terraces where discontinuous surfaces are incised into an older sediments within valleys.

Pio **Oakdale alloformation**—alluvial deposits of middle Pleistocene streams in southwestern Louisiana, lying in elevation below the higher surfaces of the Intermediate and Upland allogroups and above the Prairie Allogroup. Its surface is moderately dissected and lacks any constructional landforms. According to regional subsurface data, the Oakdale alloformation consists of red, dark brown, light gray, and dark gray clay and silty clay that contain sinuous, light gray, silty, sand bodies which are two to three meters thick. Near the Mississippi River flood plain, the unit is blanketed by Sicily Island Loess, which is overlain by less than one meter of Peoria Loess in places southwest of where the flood plain is joined by that of the Red River.

Pie **Elizabeth alloformation**—alluvial deposits of middle Pleistocene streams in southwestern Louisiana that are older than the Oakdale alloformation and lie topographically above its surface. The surface of the Elizabeth alloformation surface is highly dissected and lacks any constructional landforms. Local water well logs indicate that the Elizabeth alloformation typically consists of an upper layer of fine-grained sediments, which is a few meters thick, overlying reddish sand.

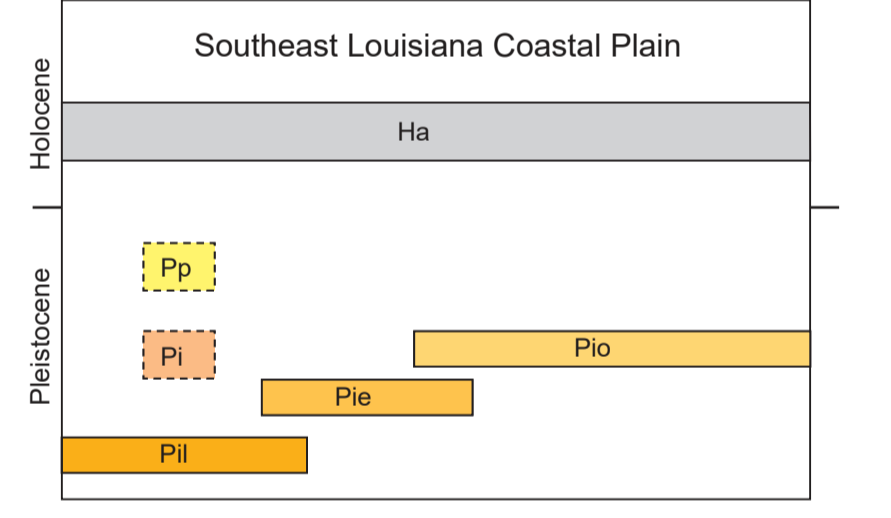
Pii **Lisse Alloformation**—dissected alluvial deposits of early Pleistocene streams. The regionally extensive Upland geosol occurs at the top of the unit. The unit is bounded upland by the Willis Formation and downland by younger subunits of the Intermediate Allogroup. One outcrop consists of light orange-red, orange-red, and dark red gravelly sand. Local water well logs indicate that the Lisse Alloformation typically consists of an upper layer of fine-grained sediments, which is less than one meter thick, overlying graveliferous sand. Near the Mississippi River flood plain, it is blanketed by Sicily Island Loess, which is overlain by less than one meter of Peoria Loess in places southwest of where the flood plain is joined by that of the Red River.

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

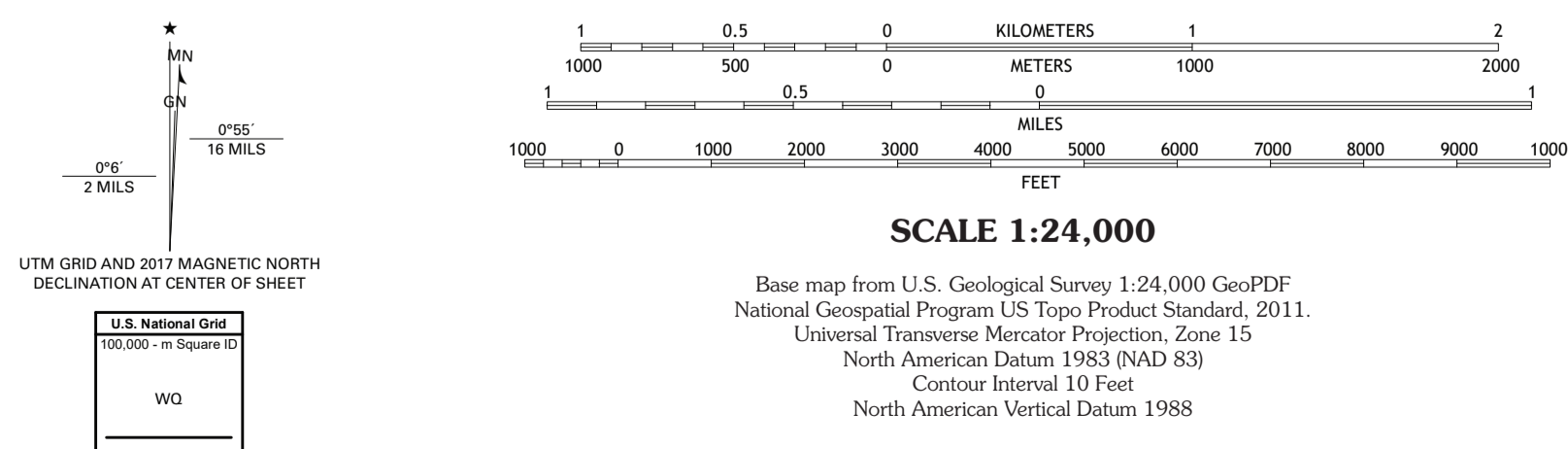
References:

- Holland, W. C., 1943. The physiography of Beauregard and Allen parishes: Unpublished Ph.D. dissertation, Department of Geology, Louisiana State University, Baton Rouge, 168 p., plus plates.
- Holland, W. C., L.W. Hoogh, and G.E. Murray, 1952. Geology of Beauregard and Allen parishes: Louisiana Geological Survey Geological Bulletin No. 27, 224 p., plus plates.
- Snead, J., P. V. Heinrich, and R. P. McCulloh (compilers), 1999. Vile Platte 30 x 60 minute geologic quadrangle: Baton Rouge, Louisiana Geological Survey, scale 1:100,000.

Correlation of Map Units



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Geology: Paul V. Heinrich, Richard P. McCulloh, and Marty Horn
GIS Compilation/Cartography: Robert L. Paulsell



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|----------|---------------|----------|---------|-----------|----------|---------------|-------|
| 1 Pitkin | 2 Sleep Gully | 3 Pawnee | 4 Grant | 5 Oakdale | 6 Mittie | 7 Pine Chapel | 8 Guy |
|----------|---------------|----------|---------|-----------|----------|---------------|-------|
- ADJOINING QUADRANGLES
-
- ROAD CLASSIFICATION**
- Expressway
 - Secondary Hwy
 - Ramp
 - Interstate Route
 - US Route
 - State Route
 - Local Connector
 - Local Road
 - 4WD

- 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

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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 Elizabeth 7.5 minute quadrangle
Allen Parish, Louisiana**