

**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.

PLEISTOCENE

PRAIRIE ALLOGROUP

**Ppl** **Irene alloformation**—alluvial deposits of the middle Pleistocene ancestral Mississippi River and local fluvial equivalents of Florida Parishes streams in southeastern Louisiana. Where mapped, this unit is blanketed by both Peoria and Sicily Island Loess or loess-derived colluvium.

INTERMEDIATE ALLOGROUP

**Pi** **Intermediate Allotgroup, undifferentiated**—fluvial deposits of the Mississippi River, its tributaries, and coastal plain streams; includes terraces locally designated as Montgomery, Lissie, Elizabeth, Oakdale, and most of the Bentley. Included are broad areas of colluvial and slope deposits of the middle Pleistocene, locally derived from the Upland allotgroup and/or Tertiary formations. Where mapped near the Mississippi River flood plain, the unit is blanketed by Peoria and/or Sicily Island Loess.

**Pib** **Bentley alloformation**—dissected alluvial deposits of early Pleistocene streams of primarily the Red River in central Louisiana. The unit is blanketed by yellow loam and incises Tertiary formations; it is incised by younger subunits of the Intermediate allotgroup, and by the Prairie Allotgroup and younger strata. Equivalent to the Natchez Formation of Mississippi.

TERTIARY SYSTEM  
EOCENE

**Ecs** **Sparta Formation**—Lightish colored massive to bedded sand, cross bedded in places, with interbedded clays, glauconitic sands that weather to concretionary ledges, and some thin interbeds of lignite or lignitic sands and shales. Though no detailed depositional characterization is available, the unit overall shows aspects broadly suggestive of deposition in environments transitional between continental and marine.

**Ecr** **Cane River Formation**—Brown silty clay with basal glauconitic, fossiliferous silts, which may weather to ironstone locally. Fine-grained overall texture and the presence of glauconite are suggestive of deposition on a shallow, muddy shelf.

PALEOCENE-EOCENE

WILCOX GROUP

**PEw** **Wilcox Group, undifferentiated**—Heterogeneous suite of strata comprising gray to brown lignitic sands and silty to sandy lignitic clays, many seams of lignite, and some glauconite and limestone. May include small outcrops of overlying Carrizo Sand of the basal Claiborne Group in some places.

**Open Water, Inundated Area, Wetland**

**Contact**—includes inferred contacts.

**Streams**

**Topographic Contours**

References:

Andersen, H. V., 1960. Geology of Sabine Parish: Louisiana Department of Conservation, Louisiana Geological Survey, Geological bulletin no. 34, 164 p. plus plates includes one 1:62,500 scale geologic map.  
Andersen, H. V., 1993. Geology of Natchitoches Parish: Louisiana Geological Survey, Geological bulletin no. 44, 227 p. plus plates includes one 1:62,500 scale geologic map.

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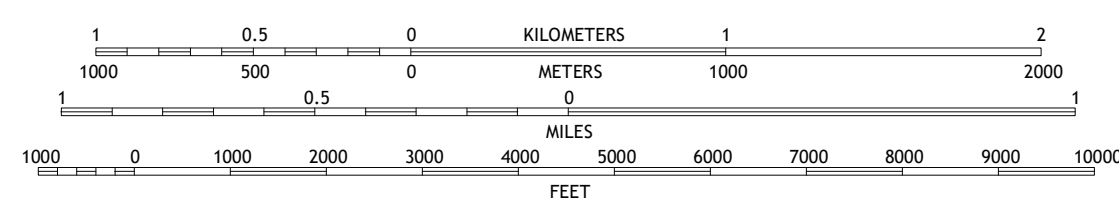
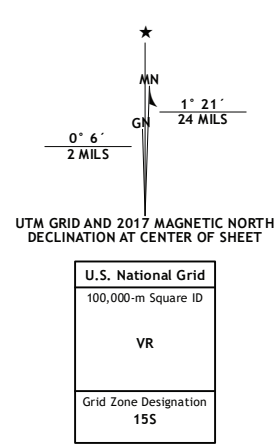
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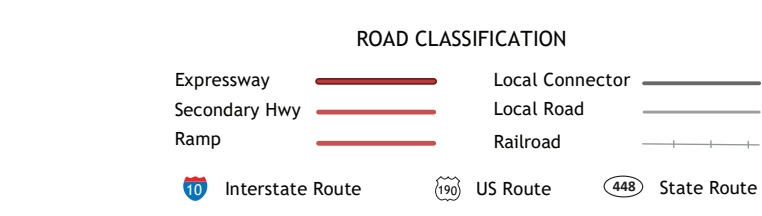
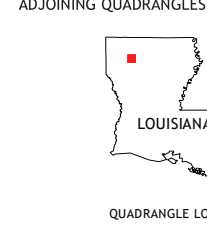
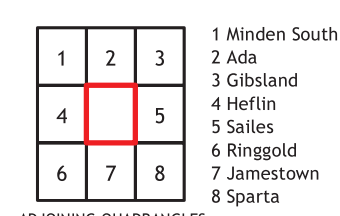
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SCALE 1:24,000

Base map from U.S. Geological Survey 1:24,000 GeoPDF  
National Geospatial Program US Topo Product Standard, 2011.  
Universal Transverse Mercator Projection, Zone 15  
North American Datum 1983 (NAD 83)  
Contour Interval 10 Feet  
North American Vertical Datum 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

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**Geologic Map of the Fryeburg 7.5 Minute Quadrangle  
Webster and Bienville Parishes, Louisiana**