



LOTTIE QUADRANGLE LOUISIANA 7.5-MINUTE SERIES



## **Description of Map Units**

## QUATERNARY SYSTEM

HOLOCENE

Point bar deposits of the Atchafalaya River — light brown coarse sand of quartz, feldspar, and rock fragments. Deposit surface expressed as ridge-and-swale relief. Thickness not determined.

- Distributary deposits of the Atchafalaya River meander belt muddy sand and sandy mud levee and minor crevasse deposits of distributaries Alabama, Little Alabama, and Close Bayous in the southern map area. Normally graded cycles of red-brown muddy medium sand to fine sandy mud, coarse fraction dominated by quartz and feldspars with light and dark micas and fragments of phyllites, chert, red siltstone, and coal (trace). Other dark silicates and iron oxides occur in trace amounts. Thickness < 5 meters.
- Levee deposits of Atchafalaya River meander belt brown and red-brown muddy fine sand and fine sand with mud. Coarse fraction dominated by quartz and feldspar with fragments of phyllite, schist, chert, red siltstone and dolomite, and lesser dark micas, dark silicates, and iron oxides. Thickness < 6 meters.
- Distributary deposits of Mississippi River meander belt 1 overbank and minor crevasse deposits of Bayou Fordoche and its secondary distributaries Black, White, and Gerance Bayous. Brown and brown-gray fine sandy mud and muddy fine sand of quartz, feldspar, lithic fragments, and light and dark micas. Other dark silicates and iron oxides occur in trace amounts. Thickness < 8 meters.
- Distributary deposits of Red River meander belt degraded crevasse splay of Bayou Petite Prairie, a (now abandoned) distributary channel of Red River cross-cut and isolated by the modern Atchafalaya channel in the northwestern corner of the map. Red-brown fine sandy mud, coarse fraction dominated by quartz and feldspar with lesser amounts of rock fragments, micas and dark silicates, and iron oxides. Thickness < 5 meters.
- Backswamp deposits steel gray clay with trace amounts of very fine sand and silt size quartz, feldspar, rock fragments, iron oxides. Skolithos trace fossils (~0.2 mm diameter) occur in trace amounts, depending upon location. Thickness not determined.
- Open Water, Inundated Area, Wetland
  - Streams
- **Contact**s
- **Topographic Contours**

## **References:**

Heinrich, Paul V. and Whitney J. Autin, 2000, "Baton Rouge 30 x 60 Minute Geologic Quadrangle", scale: 1:100,000, Map No. 30091-A1-100K, Louisiana Geological Survey, Louisiana State University, Baton Rouge, LA.

Heinrich, Paul V. and Richard P. McCulloh, 2007, "New Roads,

Louisiana 30 X 60 Minute Geologic Quadrangle, scale: 1:100,000, Map No. 30091-E1-TM-100, Open File Map 2007-04, Louisiana Geological Survey, Louisiana State University, Baton Rouge, LA.

Saucier, Roger T. and John I. Snead, 1989, "Quaternary Geology of the Lower Mississippi Valley", scale 1:1,100,000, Quaternary Non-glaacial Geology: Conterminous U.S., Geology of North America, vol. K-2, Geological Society of Americ, Boulder, CO.



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Wetlands.

..FWS National Wetlands Inventory 2021