

STRATIGRAPHIC AND GEOHYDROLOGIC UNITS OF LOUISIANA

| SYSTEM | SERIES | STRATIGRAPHIC UNIT | | GEOHYDROLOGIC UNIT | | | | | | | | | |
|----------------------|--------------------|--|--|--|----------------------------------|--|--|----------------------------------|--|---|--|---|-------------------------|
| | | | | Northern Louisiana | | Central and Southwest Louisiana | | | Southeast ¹ Louisiana | | | | |
| | | | | Aquifer or Confining Unit | Aquifer System or Confining Unit | Aquifer or Confining Unit | | Aquifer System or Confining Unit | Aquifer | | | | |
| Lake Charles Area | Rice Growing Area | Baton Rouge Area | St Tammany, Tangipahoa & Washington Parishes | | | New Orleans area and lower Mississippi River parishes | | | | | | | |
| QUATERNARY | HOLOCENE | | | Undifferentiated alluvial deposits Red River alluvial deposits Mississippi River alluvial deposits | | | Undifferentiated alluvial aquifers | Alluvial aquifer system | Undifferentiated alluvial aquifers | | Alluvial Aquifer System | Undifferentiated alluvial aquifers | |
| | PLEISTOCENE | Northern Louisiana terrace deposits Unnamed Pleistocene deposits Upland Complex ² | | Northern Louisiana terrace aquifer | Chicot aquifer system | "200 foot" aquifer | Upper Chicot aquifer | Chicot equivalent aquifer system | SOUTHERN HILLS AQUIFER SYSTEM ³ | "400-foot" "600-foot" | Shallow Upper Ponchatoula | Gramercy Norco Gonzales New Orleans "1200-foot" | |
| TERTIARY | PLIOCENE | FLEMING FORMATION | Blounts Creek Member ² | Equivalent aquifers absent in this area | Evangeline aquifer ² | | | | | Evangeline ² equivalent aquifer system | "800-foot" "1000-foot" "1200-foot" "1500-foot" "1700-foot" | Lower Ponchatoula Big Branch Kentwood Abita Covington Slidell | Unnamed saline aquifers |
| | MIOCENE | | Castor Creek Member | | Castor Creek confining unit | | Castor Creek equivalent confining unit | | | | | | |
| | | | Williamson Creek Member Dough Hills Member Carnahan Bayou Member | | Jasper aquifer system | Williamson Creek aquifer Dough Hills aquifer unit Carnahan Bayou aquifer | | Jasper equivalent aquifer system | | | | | |
| | | | Lena Member | | Lena confining unit | | | Lena equivalent confining unit | | | | | |
| | OLIGOCENE | Catahoula Formation | Catahoula aquifer | Unamed saline aquifers | | | Catahoula equivalent aquifer system | | | | | | |
| | | Vicksburg Group | Vicksburg confining unit | | | | | | | | | | |
| | EOCENE | Jackson Group | Jackson confining unit | | | | | | | | | | |
| | | CLABORNE GROUP | Cockfield Formation | Cockfield aquifer | | | | | | | | | |
| | | | Cook Mountain Formation | Cook Mountain confining unit | | | | | | | | | |
| | | | Sparta Formation | Sparta aquifer | | | | | | | | | |
| Cane River Formation | | | Cane River confining unit | | | | | | | | | | |
| WILCOX GROUP | | Carrizo Formation | Carrizo-Wilcox aquifer | | | | | | | | | | |
| | Various formations | | | | | | | | | | | | |
| PALEOCENE | Midway Group | Midway confining unit | | | | | | | | | | | |

¹ Clay units separating aquifers in southeastern Louisiana are discontinuous and unnamed.

² May be Pliocene in part; Pliocene not traditionally recognized at the surface in Louisiana

³ The Southern Hills Aquifer System is a sole surface regulatory aquifer unit. This term is not in general or geologic use.

DEFINITIONS

AQUIFER: a formation or group of formations that will yield water to a well or a spring.

AQUIFER SYSTEM: a group of aquifers that functions regionally as a water-yielding hydraulic unit.

EQUIVALENTS: Aquifer systems east of the Mississippi River that are stratigraphically correlative but not hydraulically connected to those west of the Mississippi River.