

- QUATERNARY SYSTEM
- HOLOCENE
- Hbp** Holocene beach sand—sand and shaly sand comprising beaches along the seaward edge of Grand Isle, Grand Terre Islands and Breton Islands.
  - Hbm** Holocene back-barrier marsh and mangroves—Coastal marsh sediment consisting of fine sand, gray clay, dark gray muddy clay, and/or blackish peaty clay, deposited upon surface sandy mudstone deposits that were revealed during sand on the low side of barrier island beach sand fill deposits of Grand Terre Islands. On the landward side of the beaches of Breton Island, these sediments underlie a mixture of coastal marsh and mangroves.
  - Hdp** Deposits of the Plaquemines and Balise delta lobes, Mississippi River—deltaic deposits underlying the delta plain of the Plaquemines and Balise delta lobes. They are composed of cyclically interbedded intertidal peat and clay, natural levee silt and clay, distributary sand, delta-front sand, and prodelta mud and clay. Occurrence varies locally because they are too narrow and thin to map separately occur in places along the shoreline of these delta lobes.
  - Hdp** Natural levee complex of the Plaquemines and Balise delta lobes, Mississippi River—deposits of the natural levee complex of the Plaquemines and Balise delta lobes, Mississippi River. The natural levees of the Plaquemines and Balise distributary courses consist predominantly of silt, clay, and clay. Along the distal segments of the distributaries, the natural levees are not shown where they are too narrow to map.
  - Hdpm** Mender belt of distributary course of the Plaquemines and Balise delta lobes, Mississippi River—sandy point bar deposits along the Mississippi river course of the Plaquemines and Balise delta lobes, Mississippi River. They are mapped where overlying natural levee deposits (Hdp) are sufficiently thin that scroll marks, however faint, are visible as surface indicators of point bar ridge-and-pond topography.
  - Hdl** Deposits of the Lafourche delta lobe, Mississippi River—deltaic deposits underlying the delta plain of the Lafourche delta lobe. They are composed of cyclically interbedded intertidal peat and clay, natural levee silt and clay, distributary sand, delta-front sand, and prodelta mud and clay.
  - Hds** Deposits of the St. Bernard delta lobe, Mississippi River—deltaic deposits underlying the delta plain of the St. Bernard delta lobe. They are composed of cyclically interbedded intertidal peat and clay, natural levee silt and clay, distributary sand, delta-front sand, and prodelta mud and clay.
- Open water**
  - Tidal flats**
  - Contact**
  - Inferred contact**
  - Inferred fault**—Identity or existence questionable, location inferred. Ball and bar on downthrown block.
  - Roads and railroads**
  - Streams and canals**
  - Topographic contours**
  - Bathymetric contours**

References

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Sucker, R. T., and J. I. Sneed (compiler), 1989. Quaternary geology of the Lower Mississippi Valley. In: Merton, R. B., ed., Quaternary non-glacial geology, continental United States. Boulder, Colorado, Geological Society of America, The Geology of North America, v. G2, Plate 6, scale 1:1,000,000.

New mapping by the compiler based in part on LIDAR quarter-quadrangle maps (source: Louisiana Federal Emergency Management Agency, and U.S. Army Corps of Engineers, St. Louis District), and digital orthophoto quarter quadrangle images, downloaded from the Atlas website (<http://atlas.fws.us>), and on the U.S. Department of Agriculture, National Resources Conservation Service (NRCS), Soil Survey Geographic (SSURGO) Database.

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**Note**  
 The shoreline used for this map was selected to permit detection of historic infrastructure and coastal information because feedback regarding use of historic shorelines that preserve such cultural information from users of maps in the delta has been positive, and actual land loss consistently has outpaced shoreline depictions on newer maps in recent decades.

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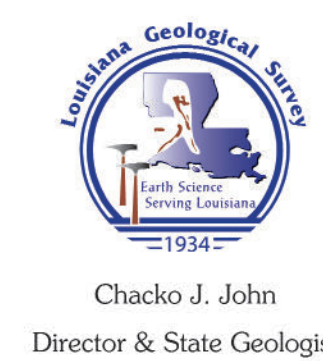
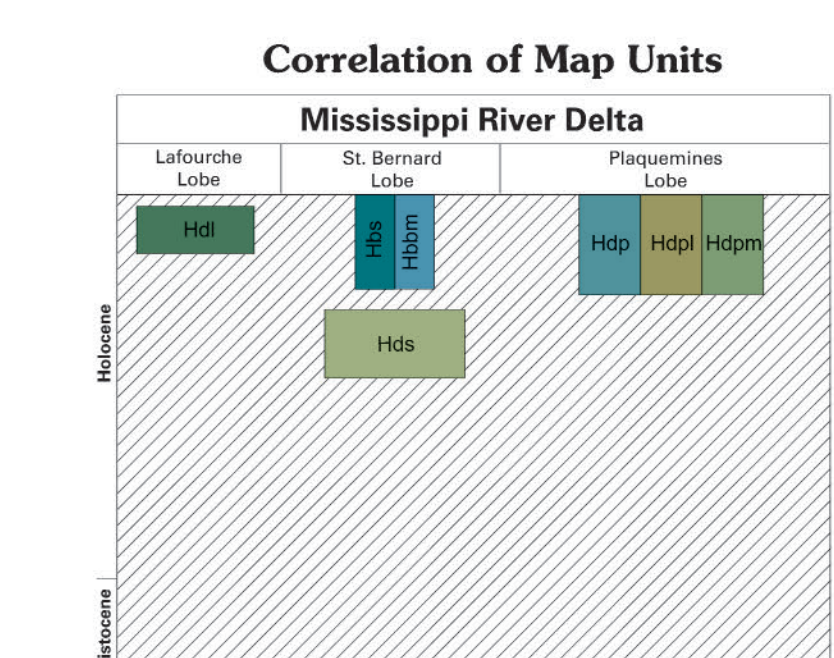
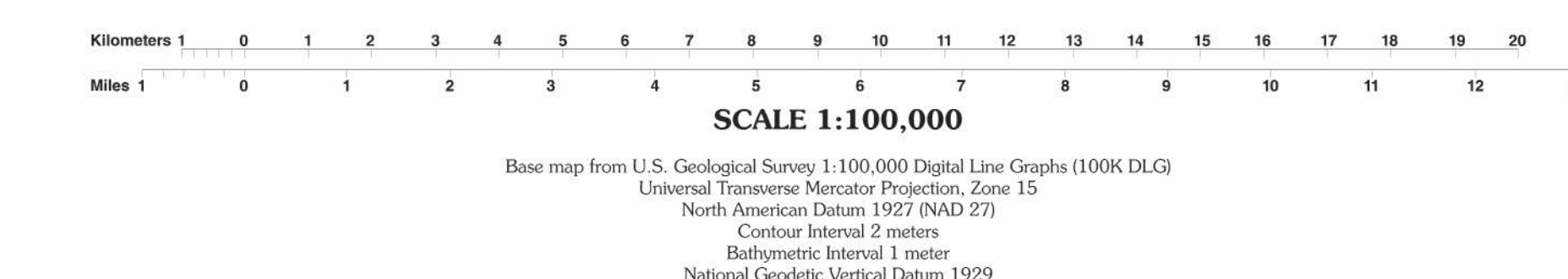
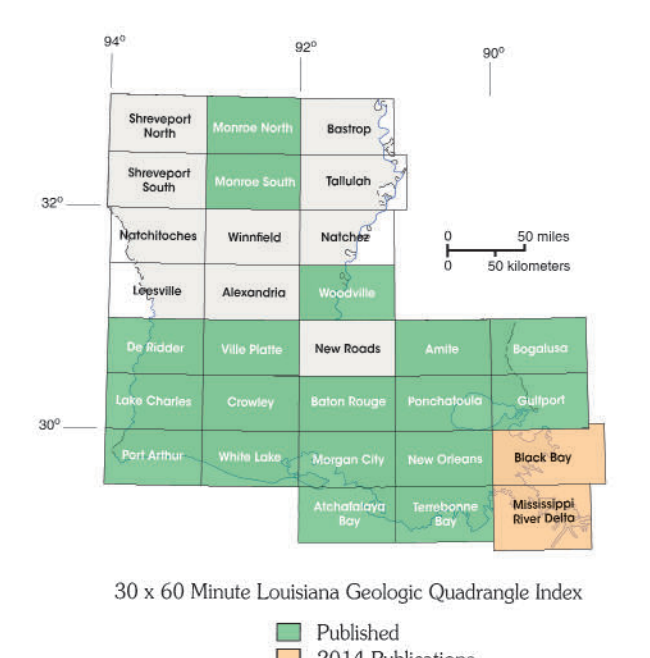
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# Mississippi River Delta 30 x 60 Minute Geologic Quadrangle

## 2014