



MITCHELL J. LANDRIEU  
LIEUTENANT GOVERNOR

**State of Louisiana**  
OFFICE OF THE LIEUTENANT GOVERNOR  
DEPARTMENT OF CULTURE, RECREATION & TOURISM  
OFFICE OF CULTURAL DEVELOPMENT  
DIVISION OF ARCHAEOLOGY

ANGÈLE DAVIS  
SECRETARY  
  
PAM BREAU  
ASSISTANT SECRETARY

December 13, 2007

Ms. Elizabeth Wiggins  
Environmental Planning and Compliance Branch  
New Orleans District, Corps of Engineers  
P.O. Box 60267  
New Orleans, LA 70160-0267

Re: Reconnaissance Survey Management Summary (22-2998)  
*Phase IA Cultural Resources Records Review and  
Field Reconnaissance Performed for Lake Pontchartrain  
and Vicinity Project, Individual Environmental Report Area I  
(IER#1): La Branch Wetlands Levee, St. Charles Parish*  
R. Christopher Goodwin and Associates, Inc.

Dear Ms. Wiggins:

We are in receipt of your letter of October 31, 2007 transmitting a Management Summary from R. Christopher Goodwin and Associates, Inc. for the above-cited project. This management summary meets the basic guidelines for such documents set forth by the Louisiana Division of Archaeology.

We agree with the recommendations concerning cultural resources for the project area made by **R. Christopher Goodwin and Associates, Inc.** that no known historic properties will be affected by the proposed undertaking.

We look forward to reviewing the full reports for this and other Individual Environmental Report Areas (IERs). Technical comments of a minor nature are enclosed and should be considered with the submission of a draft report for all the IERs. If you have any questions or comments concerning this project, please feel free to contact Dennis Jones at 225 342 8170 or [djones@crt.state.la.us](mailto:djones@crt.state.la.us)

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Sincerely,



Pam Breaux  
State Historic Preservation Officer

PB:DJ:s

C: Mr. Rob Lackowicz, R. Christopher Goodwin and Associates, Inc. (w/enclosures).

## TECHNICAL COMMENTS

1. Page 16. Coyle et al. 2006 is not in the References Cited.
2. The figures and photographs included in the report are of generally good quality and they aid in assessing the location of the APE and the four previously reported archaeological sites.

by the coastal marshlands of the Louisiana Chenier Plain, on the east by the Gulf of Mexico, and on the north by the Mississippi River Alluvial Valley. A distinct physiographic unit, the plain is a broad, low-lying tract of alluvial land with an extensive network of distributaries that radiate largely gulfward either from an abandoned or active Mississippi River course.

The physiographic region of IER#1 is dominated by natural levee ridges and wetlands. The narrow natural levee ridges flank the present course of the Mississippi River and its numerous abandoned deltaic distributaries (Fisk 1944; Kolb and VanLopik 1958; Frazier and Osanik 1965). The wetlands consist of swamps, marshes, shallow lakes, and tidal channels that have water tables at or above the surface most of the time. Swamps are in broad depressions or basins distant from the natural levees of the Mississippi River and its distributaries, whereas marshes are adjacent to Lake Pontchartrain.

The topography of St. Charles Parish is typical of the lower Mississippi River region. The land slopes away from the Mississippi River and its natural levees, toward the lower swamps and marshes. Historically, drainage from the East Bank of the Mississippi River runs northerly through a system of open ditches and canals, into the swamps and marshes bordering Lake Pontchartrain.

#### Geologic History and Chronology

The period from about 18,000 to 11,000 years ago marked the waning of the Late Wisconsin glaciation, the wasting of the Laurentide ice sheet over North America, and the rapid and major rise in sea level known as the Holocene transgression. As the Mississippi River continued to transport huge volumes of meltwater and outwash to the Gulf of Mexico, the coastline retreated rapidly inland away from the Mississippi entrenchment. At first, the lower ends of the entrenchments of the smaller streams were inundated, but then the entire Pleistocene surface was submerged and overridden by shallow water marine deposits.

About 12,000 years ago, the entire region experienced a variety of dramatic changes. Within a matter of a few centuries, the Mississippi River ceased carrying large quantities of glacial outwash and it was subsequently transformed from a braided to a meandering regime. The dominant sediment load of the river changed from sands and gravels to mostly clays, silts, and fine sands. About 9,000 years ago, the first Mississippi River delta complex - the Outer Shoal complex - formed well offshore from central coastal Louisiana when sea level was perhaps about 15 m (49.2 ft) lower than at present (Penland et al. 1988). Apparently this complex was inundated and largely destroyed within a thousand years by rising sea level, but it was followed by a second one - the Maringouin complex - that formed about 7,000 years ago slightly farther inland and at a higher elevation (about 5 m [16.4 ft] lower than at present). Geological studies indicate that the trunk course of the Mississippi River associated with both delta complexes was located along the western side of the alluvial valley, i.e., along the route of the later Teche meander belt (SaucIER#1994).

With sea level only slightly lower than at present, the Mississippi River began constructing the Teche meander belt and Teche delta complex about 6,000 years ago (SaucIER#1994). About 4,800 years ago, the Teche delta complex had developed to the southwest into the Houma, Louisiana area. At that time and because of a major upstream diversion, the Mississippi River began forming a new meander belt along the eastern side of its valley past the Baton Rouge, Louisiana area and it began constructing a delta complex (the St. Bernard complex) eastward into and beyond the New Orleans area. Within less than a millennium, the embayment was transformed into an active deltaic plain landscape with seasonal influxes of large volumes of turbid fresh water, the rapid eastward and southeastward growth of distributaries, and the formation of broad expanses of intratidal wetlands. Sea level at this time probably was not more than a meter or so below that of the present and it was rising slowly.

Considerable subsurface geological evidence (Kolb 1962; SaucIER#1963) indicates that from at least 4,000 years ago, the Mississippi River has occupied a well developed meander belt essentially along its present route from Donaldsonville, eastward past New Orleans, Louisiana, including the current project