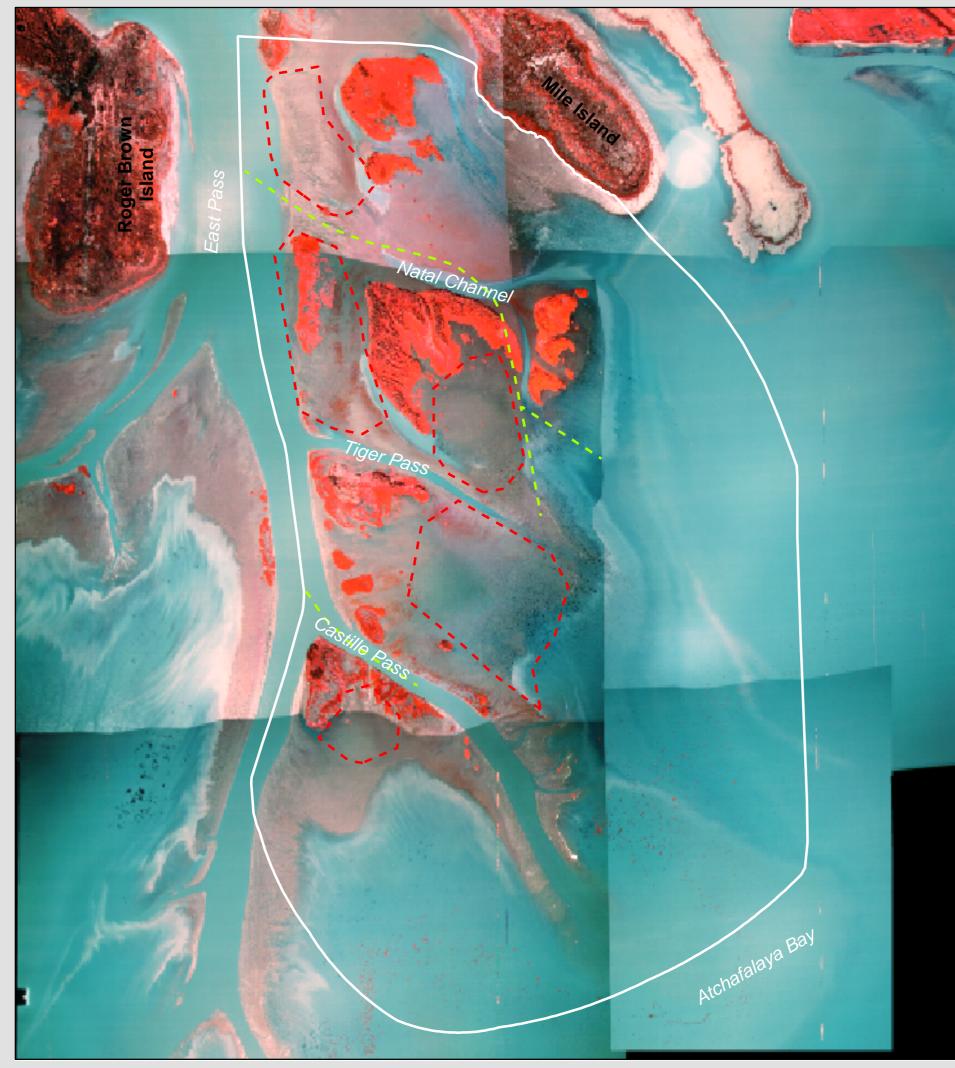


Atchafalaya Sediment Delivery (AT-02) Coastal Wetlands Planning, Protection and Restoration Act

1994, 1997, 1998, 2000, and 2007 Habitat Classification



1994 Preconstruction Photomosaic



1997 Preconstruction Photomosaic

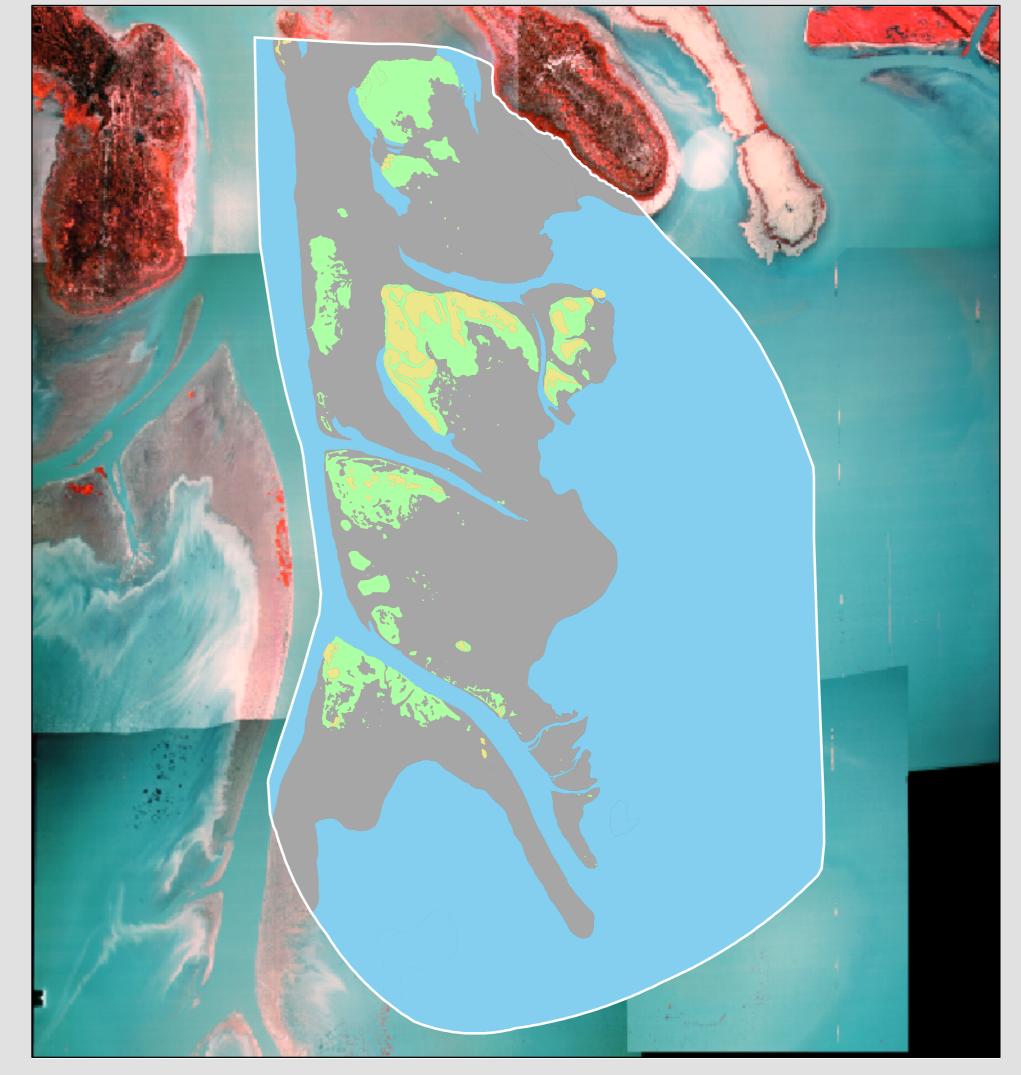
Project Description

The Atchafalaya Sediment Delivery project encompasses 2,181.55 acres (882.87 ha) of fresh wetlands located in the northwestern region of the Atchafalaya River delta within the Atchafalaya Delta Wildlife Management Area in St. Mary Parish, La. The project is bounded by East Pass to the northwest, Atchafalaya Bay to the south and southeast, and Mile Island to the northeast.

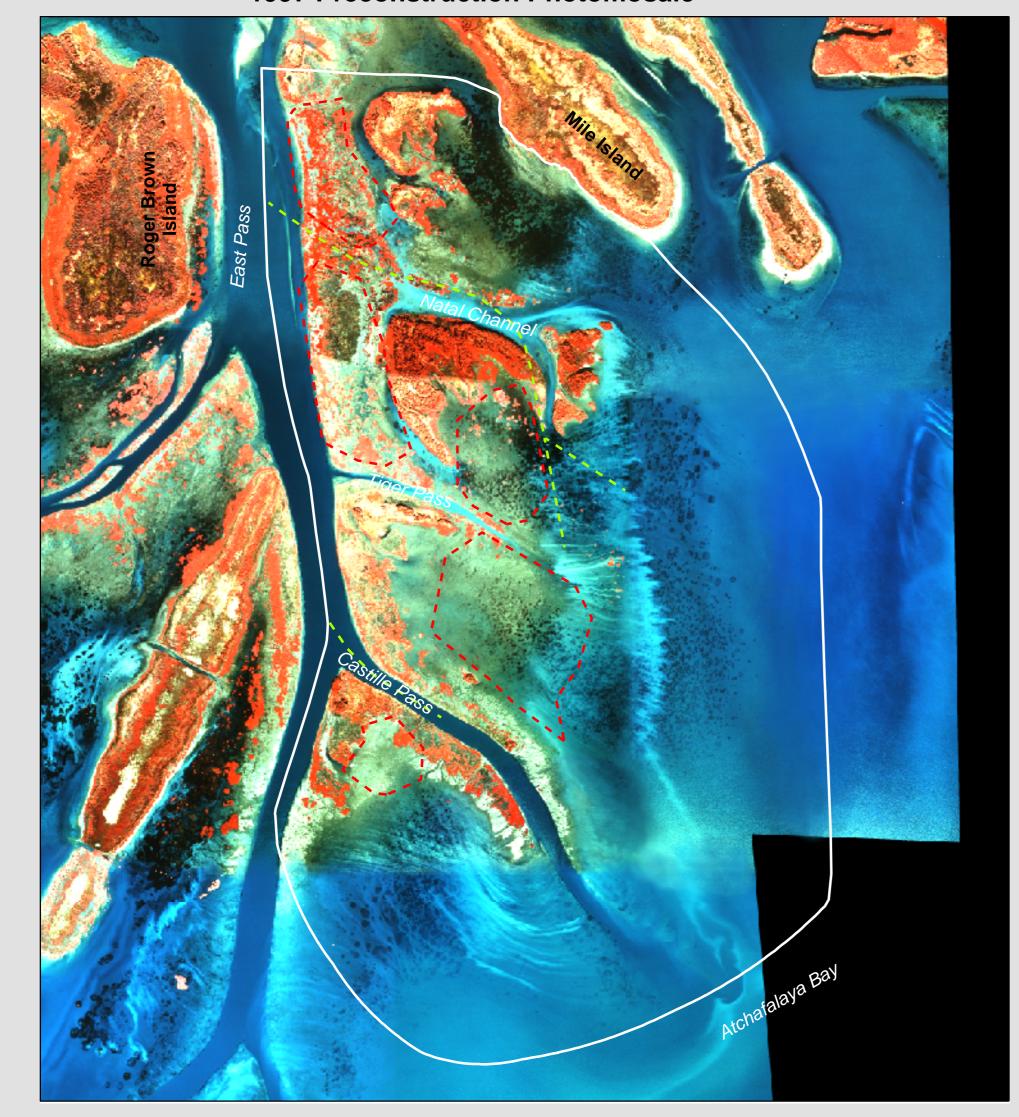
A subaqueous delta formed at the mouth of the Atchafalaya River between 1952 and 1962 with the introduction of silts and fine sands to the bay. From 1962 to 1972, coarser materials were deposited into the Atchafalaya Bay, and a period of accretion occurred building distal and subaqueous delta bars. During the progradational phase of delta growth, which occurred between 1973 and 1976, deposition of coarse sediment accounted for growth of new land at an average rate of 2.0 mi²/ yr (5.3 km²/yr) to form its present subaerial expression of 11.3 mi² (29.4 km².)

The Atchafalaya River delta is bisected by the Lower Atchafalaya River navigational channel, which is maintained by the U.S. Army Corps of Engineers for navigational purposes. Dredged materials on the channel banks and increased channel depth have created unnatural conditions, forming a conduit for river sediment to the Gulf of Mexico that deprives the adjacent delta environments of sediment that is crucial to the deltabuilding process. Also, distributary channels in the eastern portions of the Atchafalaya RIver delta have undergone large reductions in cross-sectional area and flow efficiency, further reducing sediment delivery to the delta lobes. These restrictions have resulted in the deprivation of sediment to the wetland areas and the formation of a shallow delta platform in the eastern portion of the Atchafalaya Bay.

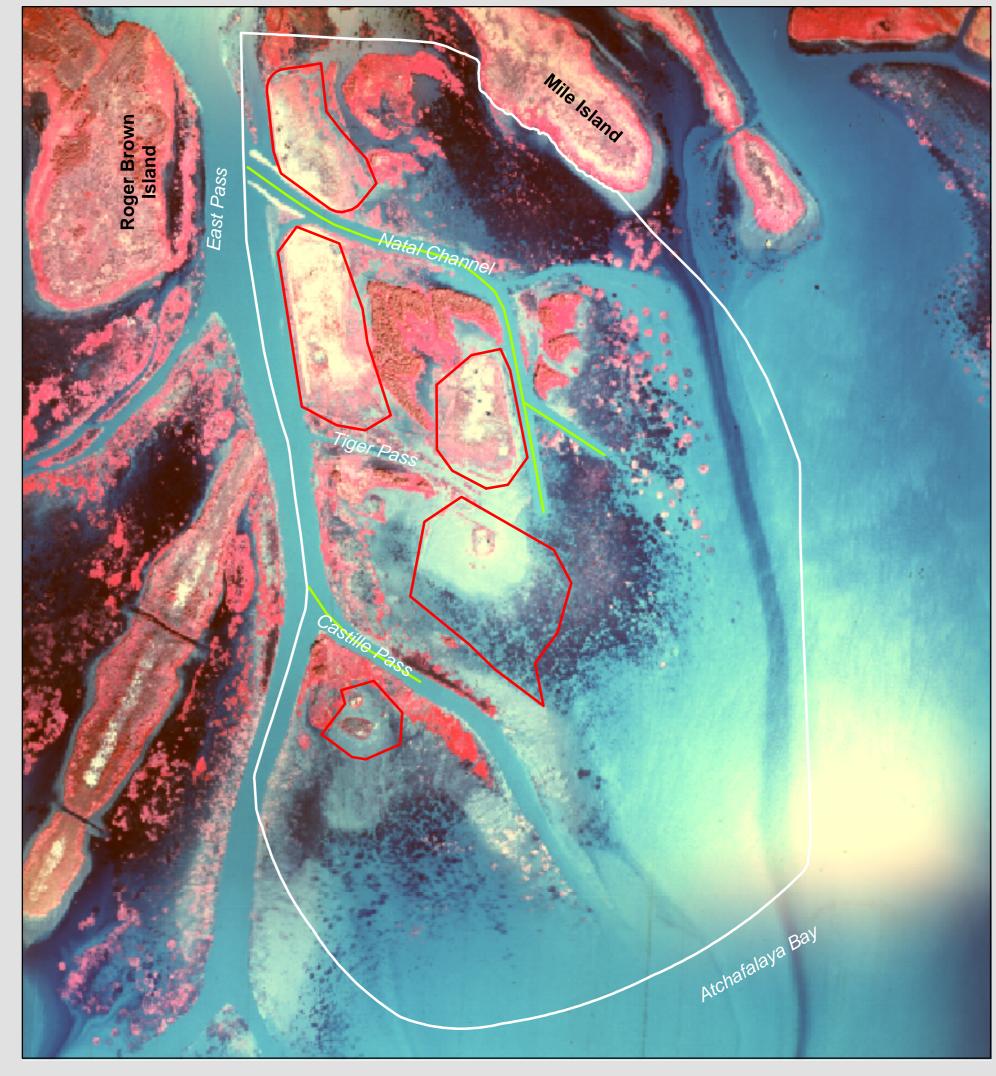
1994 Preconstruction Habitat Classification



1997 Preconstruction Habitat Classification



1998 Postconstruction Photomosaic



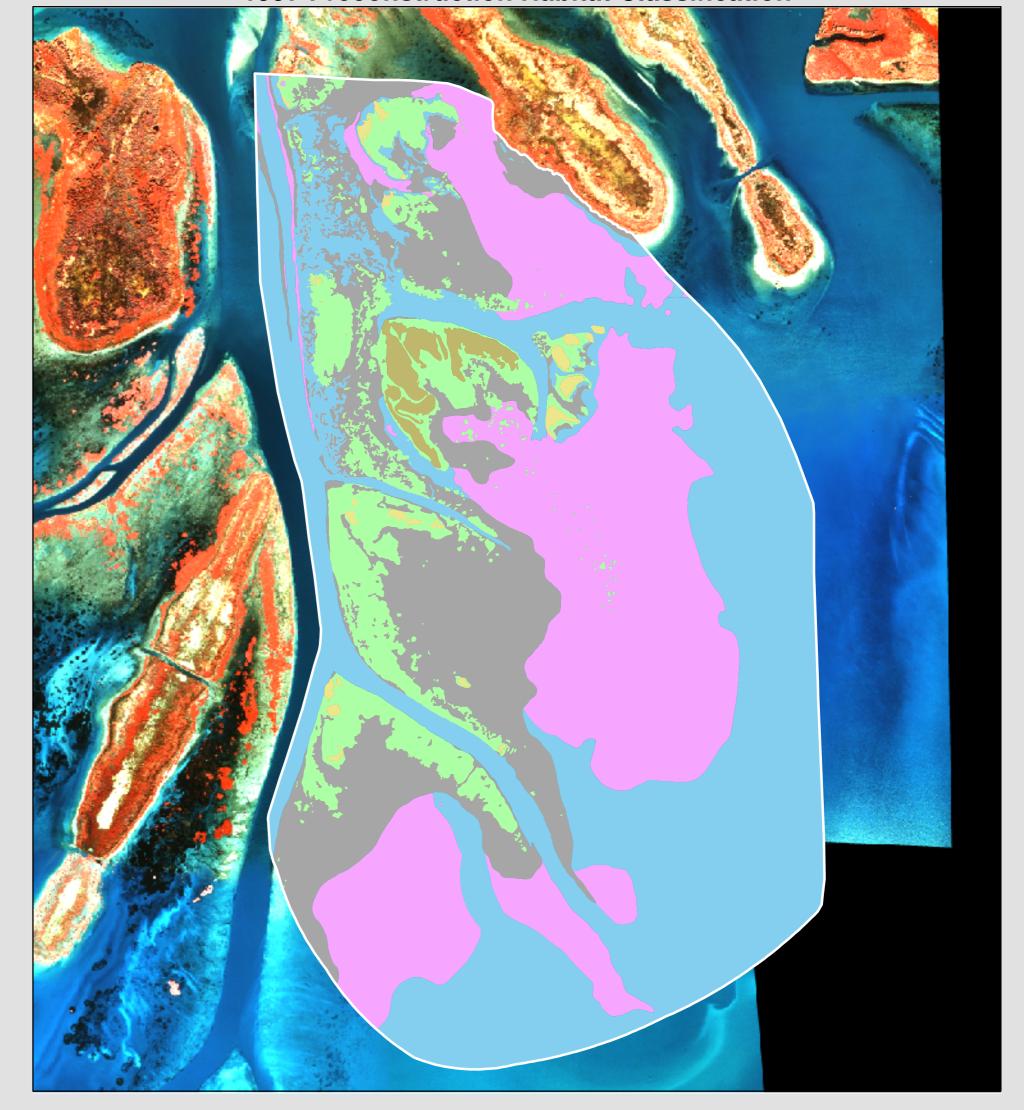
The project features include dredging Natal Channel and Castille Pass and placing the dredged material at an elevation suitable for emergent marsh vegetation. Natal Channel and Castille Pass are tertiary channels on the east side of East Pass. Each of these channels was dredged at an elevation of -10 ft (-3 m). Construction for dredging began February 1, 1998, and ended on March 28, 1998. Reopening Natal Channel and Castille Pass will supply fresh water and suspended sediments to 2,000 acres (809.4 ha) of the delta.

Project Features

Project Area
Future Dredged Channels
Future Disposal Areas
Dredged Channels
Disposal Areas

Habitat Classes

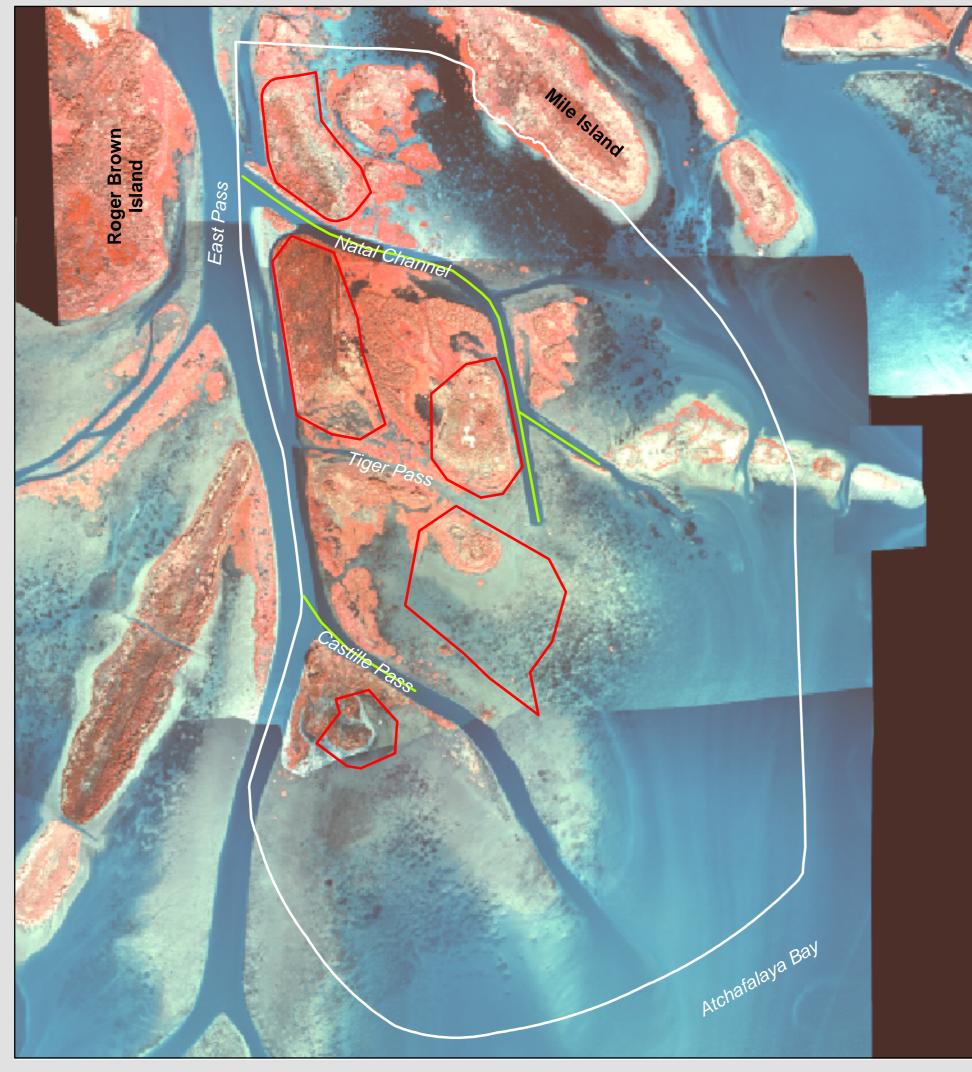




1998 Postconstruction Habitat Classification



2000 Postconstruction Photomosaic



Project Area Acreages

Habitat Class	1994	1997	1998	2000	2007
Beach/Bar/Flat	751	430	302	460	555
Fresh Marsh	142	217	231	227	520
Open Water - Fresh	1,252	850	660	952	613
Submerged Aquatics	0	643	865	405	315
Upland Barren	0	0	14	0	<1
Wetland Forested	0	28	31	37	128
Wetland Scrub-Shrub	37	14	78	101	52
TOTAL	2,182	2,182	2,181	2,182	2,183

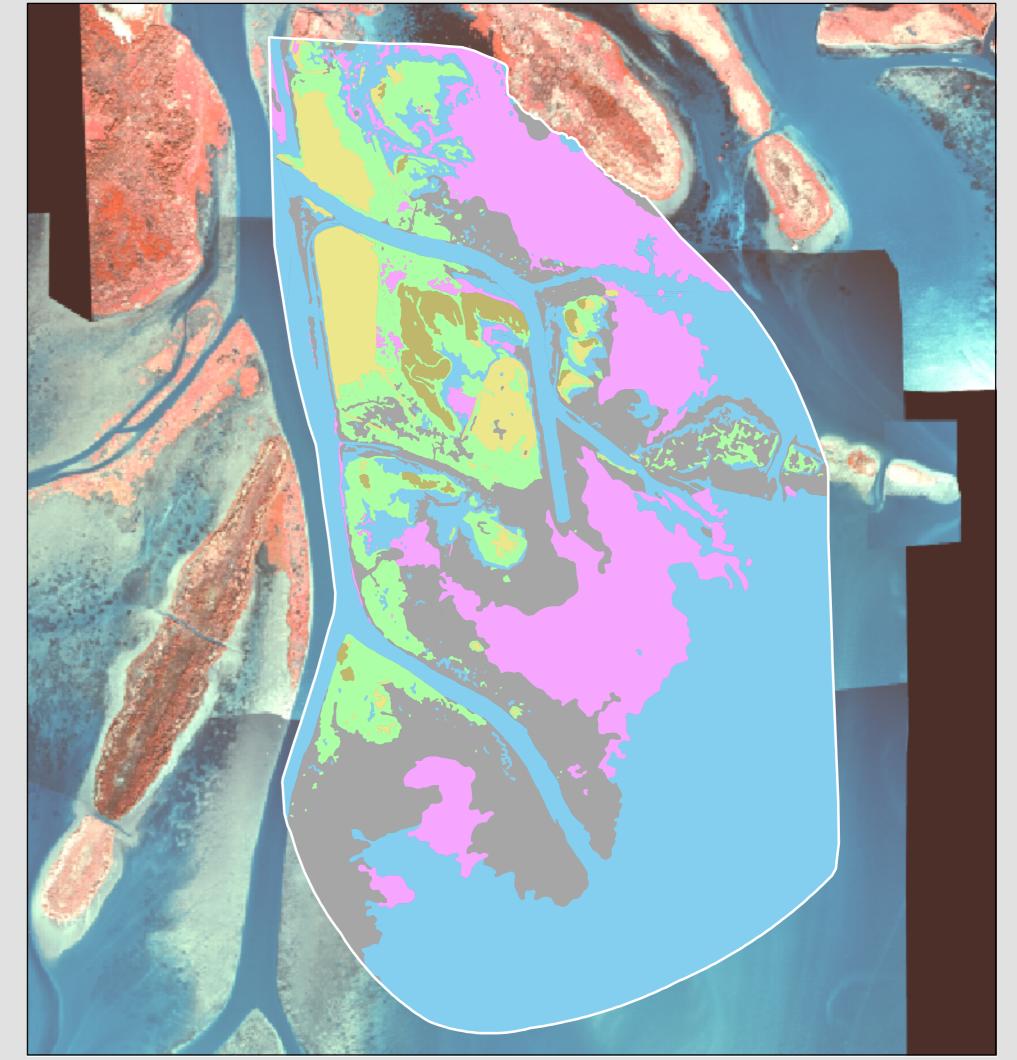
Source:

The preconstruction habitat data (1994 and 1997) were derived from 1:12,000 scale, color-infrared aerial photography acquired on December 19, 1994, and November 24, 1997. The postconstruction habitat data of 1998 were derived from 1:40,000 scale, color-infrared photography obtained November 3, 1998. The postconstruction habitat data of 2000 were derived from 1:12,000 scale, color-infrared photography obtained November 15, 2000. The postconstruction habitat data of 2007 were derived from 1:12,000 scale, color-infrared photography obtained November 15, 2000. The postconstruction habitat data of 2007 were derived from 1:12,000 scale, color-infrared photography obtained October 29, 2007. Habitat classes are based on "Classification of Wetlands and Deepwater Habitats of the United States," (Cowardin and others 1979, FWS/OBS-79/31) as modified for the National Wetlands Inventory mapping conventions. Uplands were aggregated from the Anderson classification scheme (Anderson et al., 1976; USGS, 1992).

Project Location



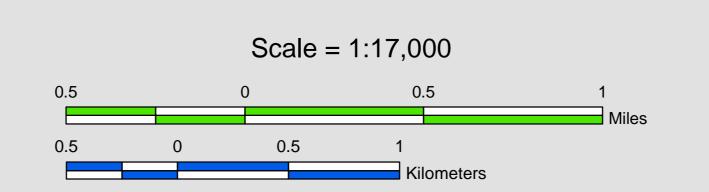
2000 Postconstruction Habitat Classification



St. Mary Parish

2007 Postconstruction Photomosaic



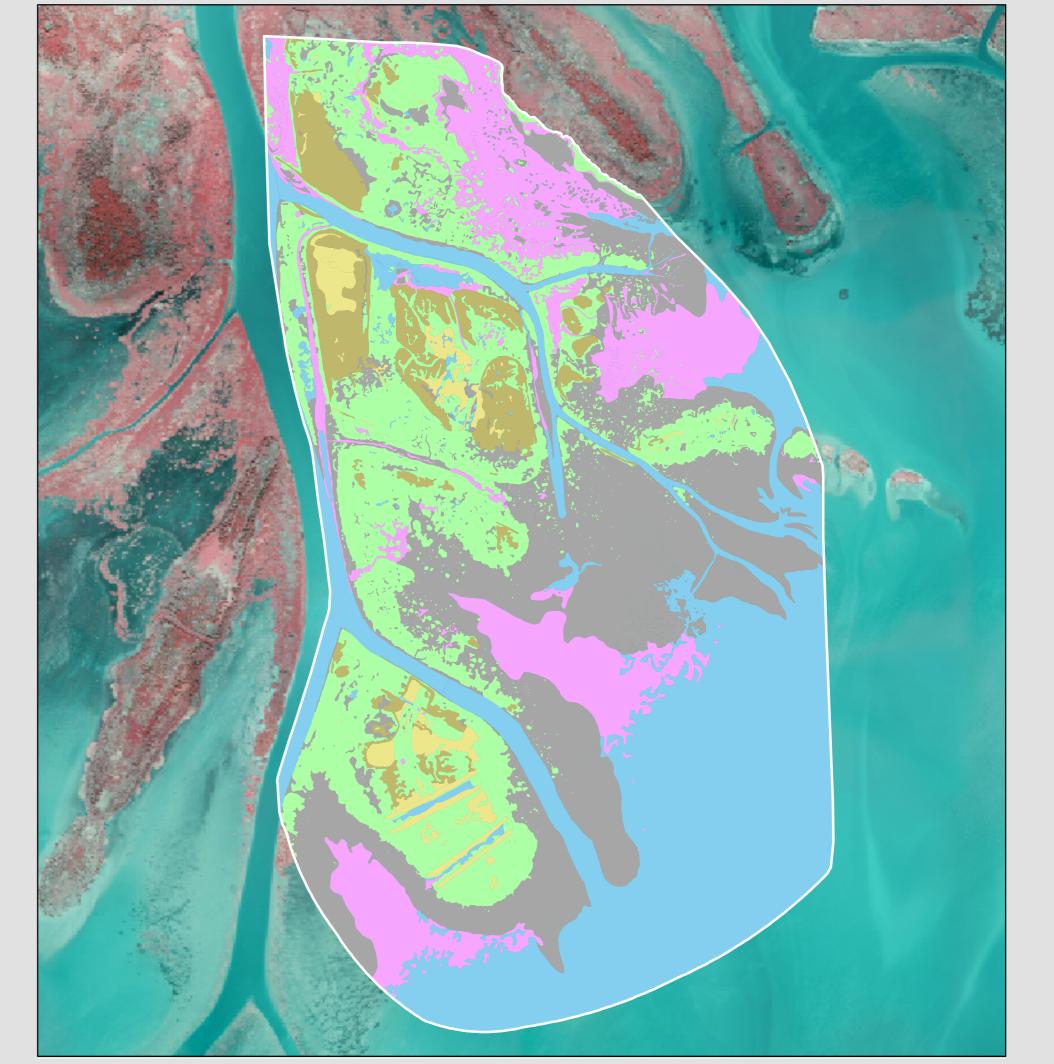


Prepared by: U.S. Department of the Interior U.S. Geological Survey National Wetlands Research Center Lafayette, La. and Coastal Protection and Restoration Authority of Louisiana Office of Coastal Protection and Restoration Thibodaux Field Office



Federal Sponsor: National Oceanic and Atmospheric Administration National Marine Fisheries Service

2007 Postconstruction Habitat Classification



Map ID: USGS-NWRC 2009-02-0132