

Humble Canal Hydrologic Restoration (ME-11)

Coastal Wetlands Planning, Protection and Restoration Act

2000 and 2005 Photomosaics and Land-Water Analyses

2000 Photomosaic



Project Description:
The Humble Canal Hydrologic Restoration Project (ME-11) is located in Cameron Parish, Louisiana. The project is bounded by Little Chenier Ridge to the south, the Mermentau River to the east, oil-field canals on the west, and an east-west trenaise (a small ditch or passage through the marsh) and an oilfield canal along the north. The project area is classified as freshwater marsh, with 68 percent being marsh habitat and 32 percent being open water habitat. Although no conclusive data exist, wetland loss and marsh deterioration in the Mermentau basin estuary are primarily due to excessive water levels within the Lake Sub-Basin. Other suspected factors include relative sea-level rise, hurricanes, shoreline erosion, herbivory and hydrologic alterations. Records indicate that from 1932 to 1990, about 826 acres (334.3 ha) of land were converted to open water in the Humble Canal project area. Historically, floods occurring in spring inundated wetlands with fresh water. As water levels receded, salt water could only move slowly into the basin through meandering bayous during periods of low rainfall in late summer and early fall. Humble Canal, constructed for mineral exploration in the early 1950s, has increased water exchange between the Mermentau River and the eastern end of Big Burn Marsh. One environmental consequence has been increased northward migration and intrusion of salt water and the deterioration of freshwater wetlands within the project area. Additionally, a 24-inch (60.96-cm) culvert in the southeastern portion of the project may be introducing salt water into the area.

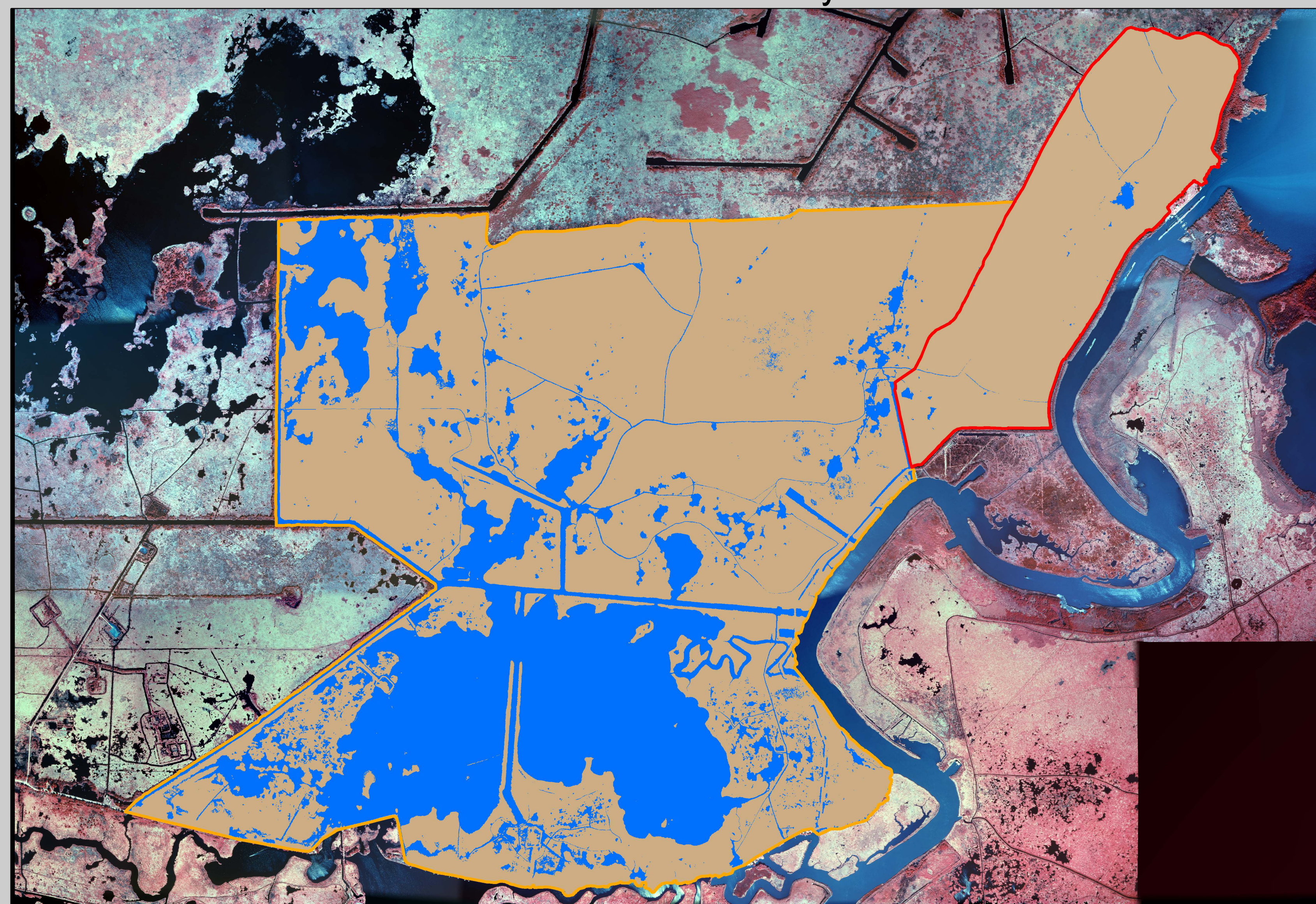
Project Objectives and Features:
The Humble Canal Project seeks to reduce the overall water level and the rate of salt water intrusion into the project area. To accomplish this, a weir with five 48-inch (121.92-cm) culverts with flapped outlets were installed in an oilfield access canal north of Marsellaise Bayou in the spring of 2003.

2005 Photomosaic



Project Features:
● Weir with five 48" flapped culverts

2000 Land-Water Analysis



Land-Water Analyses:
To conduct the land-water analysis, aerial photographs were scanned, and habitats were classified. All areas characterized by emergent marsh, scrub-shrub, and upland were classified as land. Areas characterized by open water, aquatic beds, and mud flats were classified as water.

2000 Acreages

Class	Project Acres	Reference Acres
Land	2,993	683
Water	1,401	9
TOTAL	4,394	692

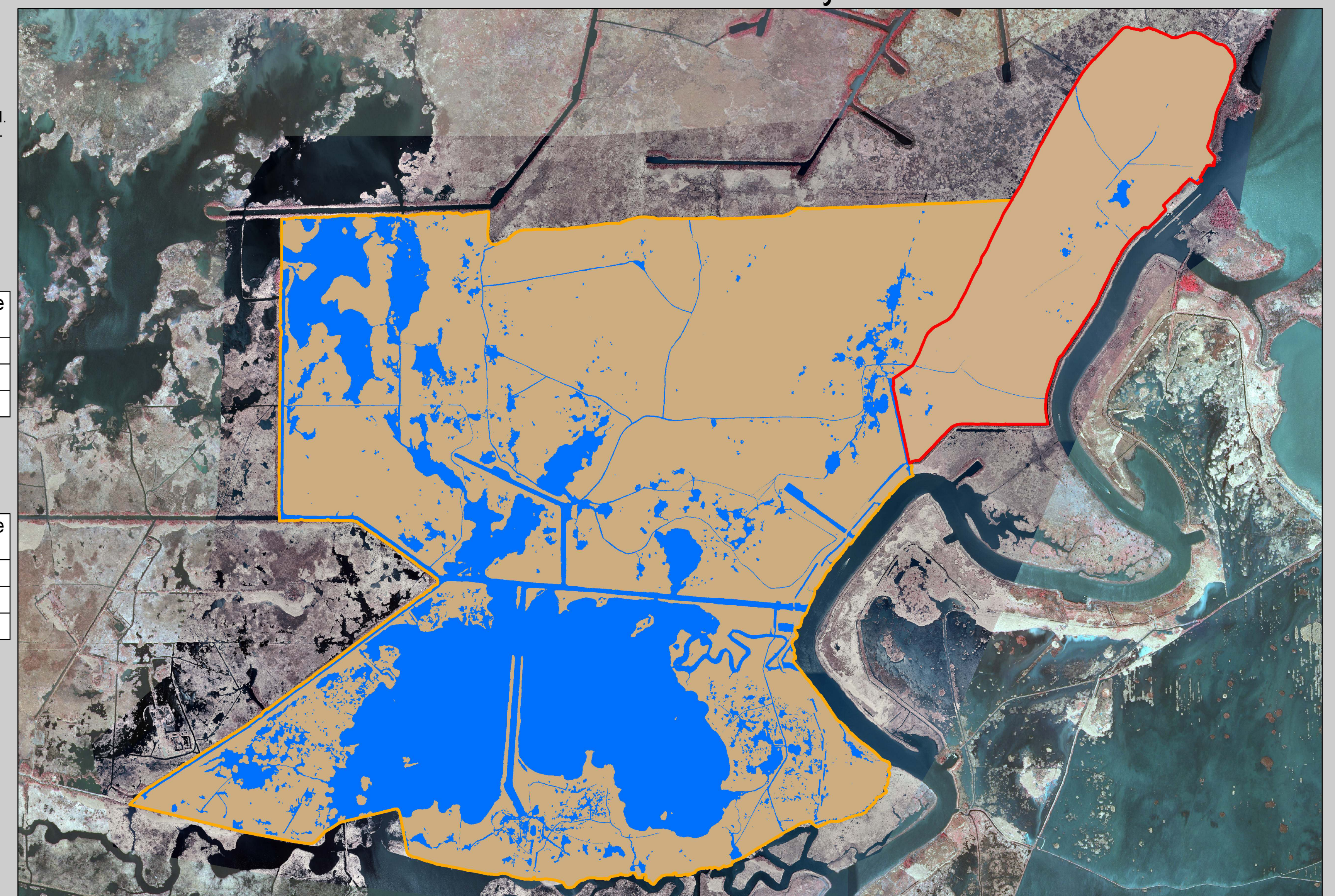
2005 Acreages

Class	Project Acres	Reference Acres
Land	2,986	681
Water	1,408	11
TOTAL	4,394	692

Project Location



2005 Land-Water Analysis



Project Area
Reference Area

Scale = 1:20,000

