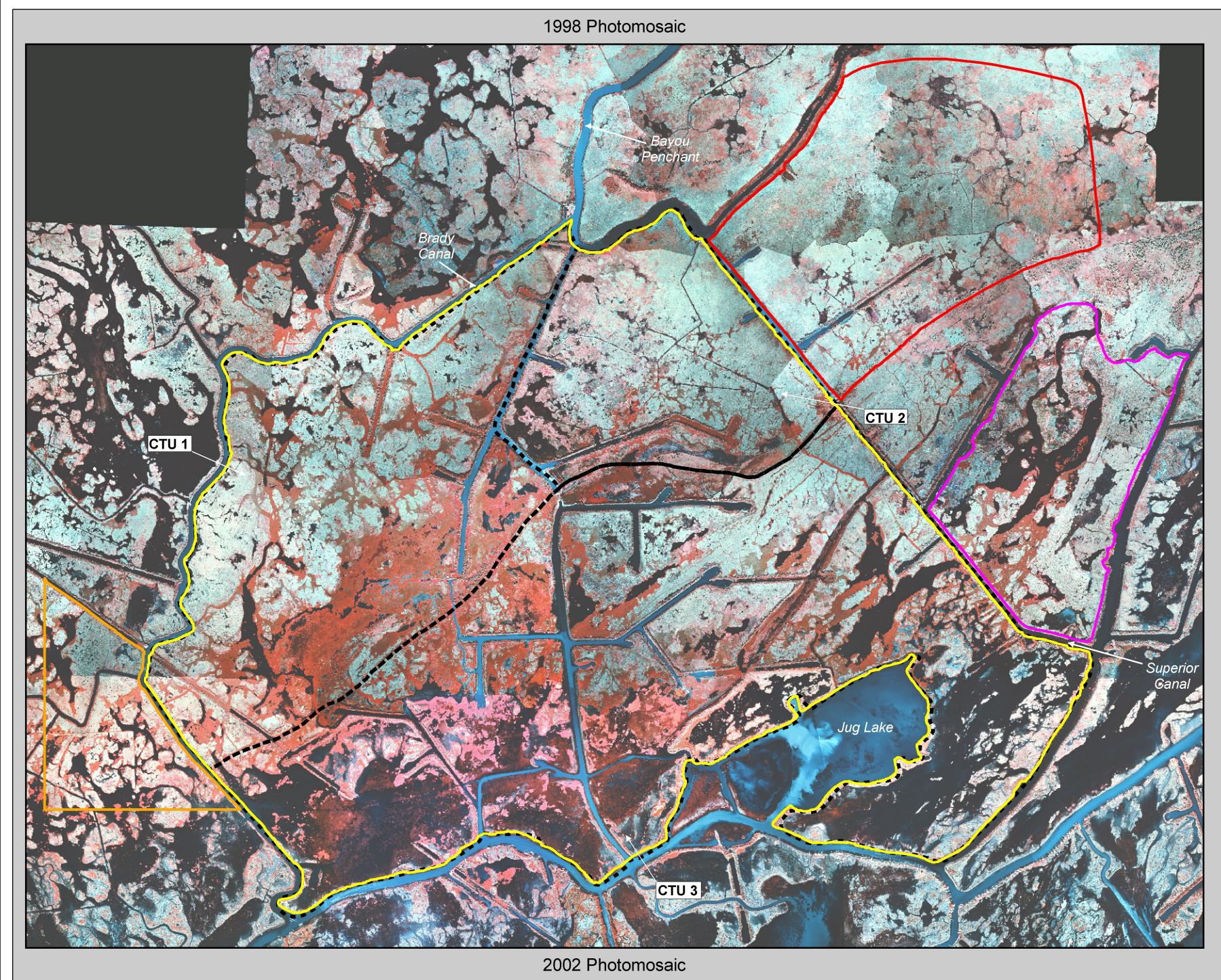


Brady Canal Hydrologic Restoration (TE-28)

Coastal Wetlands Planning, Protection and Restoration Act

1998 and 2002 Photomosaics and Habitat Analyses



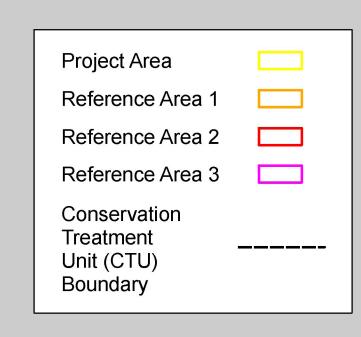


Project Background:

The Brady Canal Hydrologic Restoration project is located in Terrebonne Basin, within the Bayou Penchant-Lake Penchant watershed. The project is bounded by Bayou Penchant and Brady Canal to the north, Jug Lake to the south, and Superior Canal to the east. The northern section of the project area still receives freshwater and sediments through overbank flow from Bayou Penchant and Brady Canal. Freshwater and sediment retention has diminished in the southern portion of the project area due to unimpeded throughflow and tidal exchange, combined with a decrease in freshwater and sediment. Land loss data shows that during the period from 1932 to 1990, about 1,818 acres of land were converted to open water in the Brady Canal Hydrologic Restoration project area. Approximately 52% of the loss occurred over a 16-year period between 1958 and 1974. The average loss per year between 1932 and 1958 was approximately 18 acres per year. The average loss of 31 acres per year from 1983 to 1990 illustrates an increase in land loss rates for the project area.

Project Description

The Brady Canal Hydrologic Restoration project includes the installation and maintenance of canal plugs; the repair, construction, and maintenance of levees; and the placement of stabilized channel cross-sections. The structures are designed to reduce adverse tidal effects in the project area as well as to better utilize available freshwater and sediments. Goals have been set in order to maintain and enhance existing marshes in the project area and to improve the retention of introduced freshwater and sediment. These goals are to (1) decrease the rate of marsh loss, (2) maintain or increase the abundance of plant species typical of a freshwater and intermediate marsh, (3) decrease variability in water level within the project area, (4) decrease variability in salinities in the southern portion of the project, (5) increase vertical accretion within the project area, and (6) increase submerged aquatic vegetation.



1998 Habitat Analysis Results

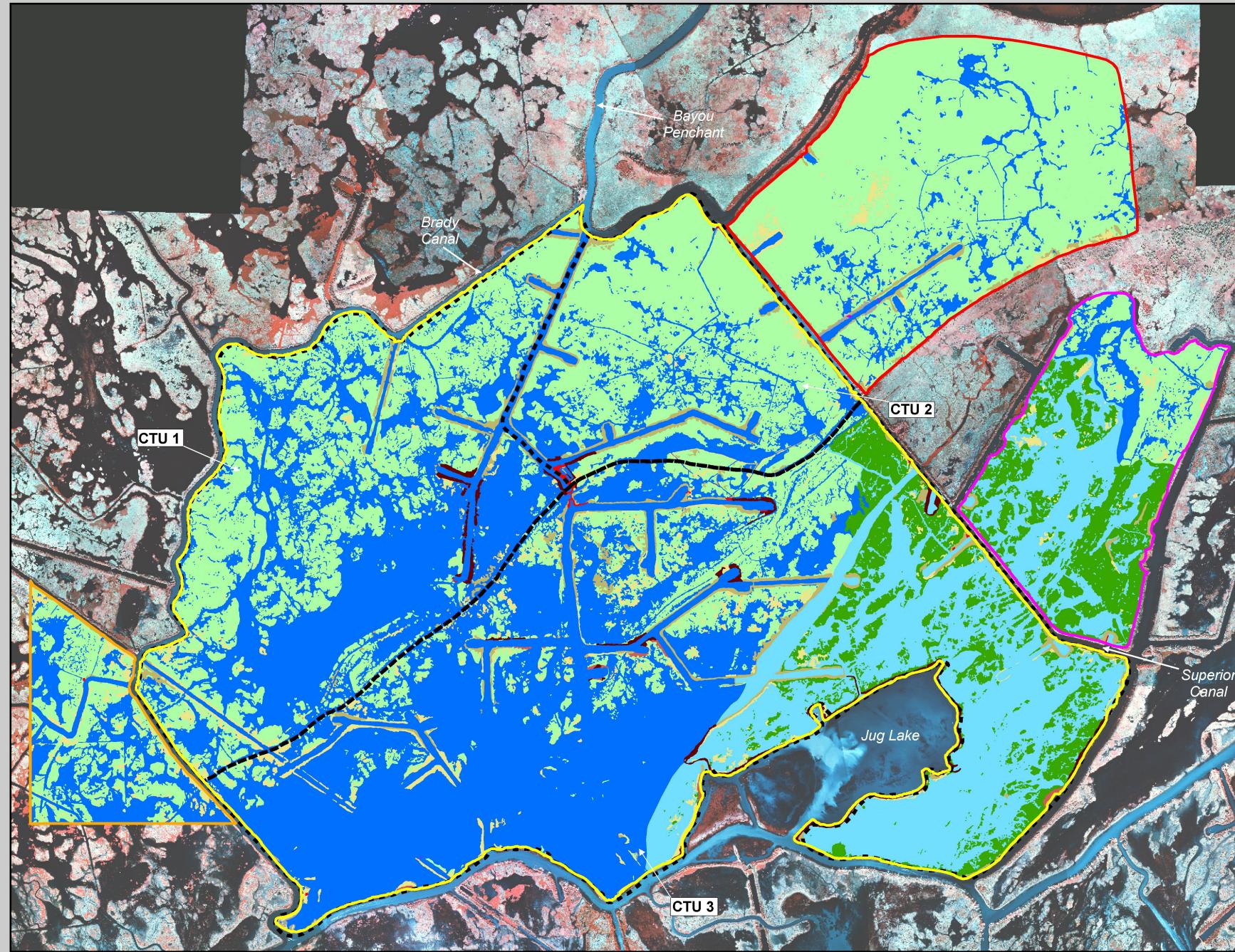
Habitat Class	Project Acres	CTU 1 Acres	CTU 2 Acres	CTU 3 Acres	Reference 1 Acres	Reference 2 Acres	Reference 3 Acres
Fresh Marsh	2,177	968	738	471	201	1,295	164
Mudflat	1	0	1	3	0	3	0
Open Water - Fresh	3,404	1,124	303	1,974	227	169	80
Open Water - Intermediate	1,036	0	0	1,036	0	0	318
Intermediate Marsh	359	0	0	359	0	0	275
Upland Barren	<1	0	0	<1	0	<1	0
Upland Forested	65	15	3	47	0	0	0
Upland Range	0	0	0	0	0	0	0
Upland Scrub-Shrub	7	0	0	7	0	0	0
Upland Urban	6	1	2	3	<1	0	<1
Wetland Forested	206	57	43	106	4	26	20
Wetland Scrub-Shrub	220	48	10	162	35	31	22
Total	7,481	2,213	1,100	4,168	467	1,524	879

2002 Habitat Analysis Results

Habitat Class	Project Acres	CTU 1 Acres	CTU 2 Acres	CTU 3 Acres	Reference 1 Acres	Reference 2 Acres	Reference 3 Acres
Fresh Marsh	1,960	932	690	338	196	1,276	99
Mudflat	<1	0	0	<1	0	0	0
Open Water - Fresh	3,089	1,091	341	1,657	235	184	36
Open Water - Intermediate	1,338	0	0	1,338	0	0	350
Intermediate Marsh	446	0	0	446	0	0	357
Upland Barren	5	<1	0	5	0	0	0
Upland Forested	14	0	0	14	0	0	0
Upland Range	8	0	0	8	0	0	0
Upland Scrub-Shrub	16	0	0	16	0	0	0
Upland Urban	6	1	2	3	<1	0	1
Wetland Forested	294	97	50	147	7	55	30
Wetland Scrub-Shrub	305	92	17	196	29	9	6
Total	7,481	2,213	1,100	4,168	467	1,524	879

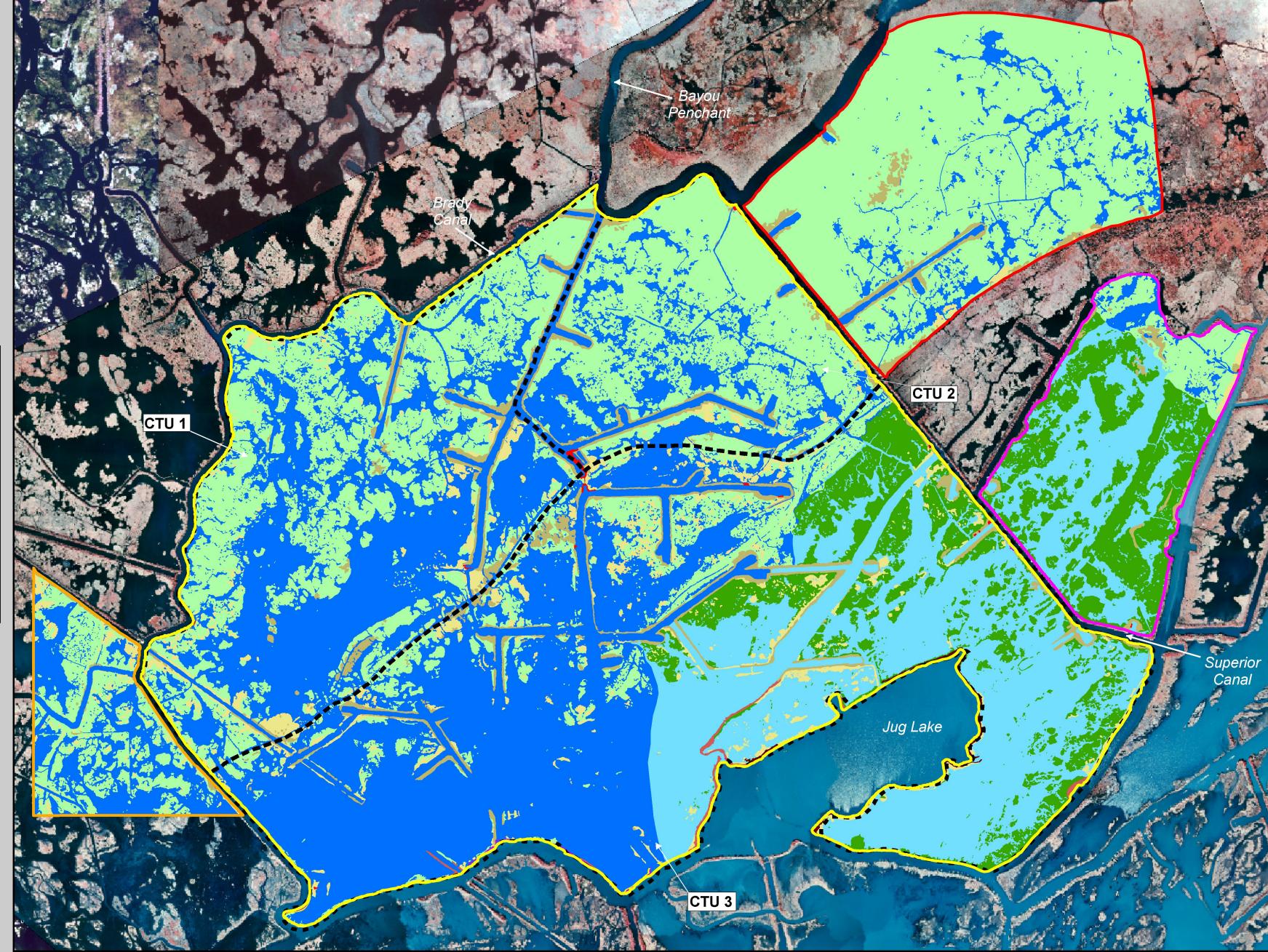






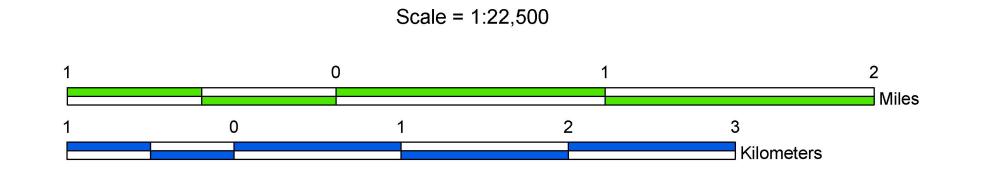
2002 Habitat Analysis

1998 Habitat Analysis



Prepared by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Lafayette, Louisiana
and
Louisiana Department of Natural Resources
Coastal Restoration Division

Thibodaux Field Office



Data Source:
Habitat data were derived from 1:12,000 scale, color infrared photography obtained December 16, 1998 and December 15, 2002. Habitat classes are modified from "Classification of wetlands and deepwater habitats of the United States" (Cowardin and others, 1979).



