SABINE REFUGE PROTECTION (C/S-18)
C/S-18-MSPR-0995-1
PROGRESS REPORT NO. 1
for the period
September 21, 1994 to September 27, 1995

Project Description/Status

The Sabine Refuge Protection (C/S-18) project, located approximately 20 mi west-southwest of Hackberry, Louisiana, at the Sabine National Wildlife Refuge Impoundment 3 (figure 1), was designed to prevent further erosion of the impoundment west levee, and thereby protect the existing freshwater wetlands within the impoundment from impact by saltwater intrusion. The specific goals of the project are to restore and protect the west levee of the impoundment using dredged material and a free-standing rock breakwater, and to protect the existing freshwater vegetation within the impoundment from saltwater intrusion via the Burton-Sutton Canal.

Construction of approximately 5.5 linear mi of free-standing, continuous rock dike along the east bank of the Burton-Sutton Canal, which forms the west bank of the impoundment, was completed in January 1995 (figure 1).

Monitoring Design

To evaluate project success, 1:12,000 color infrared aerial photography will be flown once at preconstruction and twice at postconstruction, and ground-truthed to document changes in the acreage of vegetated and nonvegetated areas, and to monitor for changes in vegetation types within the impoundment and in a reference area located west of the impoundment, opposite the northernmost mile of dike.

To document shoreline movement, shoreline markers denoting the vegetated marsh edge will be established at 1000-ft intervals along the east bank of the Burton-Sutton Canal adjacent to the northernmost, central, and southernmost miles of dike, and along the west bank of the canal adjacent to the reference area. Shoreline position relative to the shoreline markers will be monitored by direct measurement at 3-yr intervals.

Results/Discussion

On November 1, 1993, the preconstruction aerial photography was flown. Analyses of vegetation change will occur after the first postconstruction aerial survey. During August 1995, shoreline markers were established by a survey contractor along the Burton-Sutton Canal, as described above. The shoreline survey data and drawings are currently being prepared by the survey contractor. The survey will be repeated in three years, in August 1998.

Prepared on September 21, 1995, by Karl A. Vincent.

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Construction Start:	December 1, 1994	
Construction End:	January 27, 1995	

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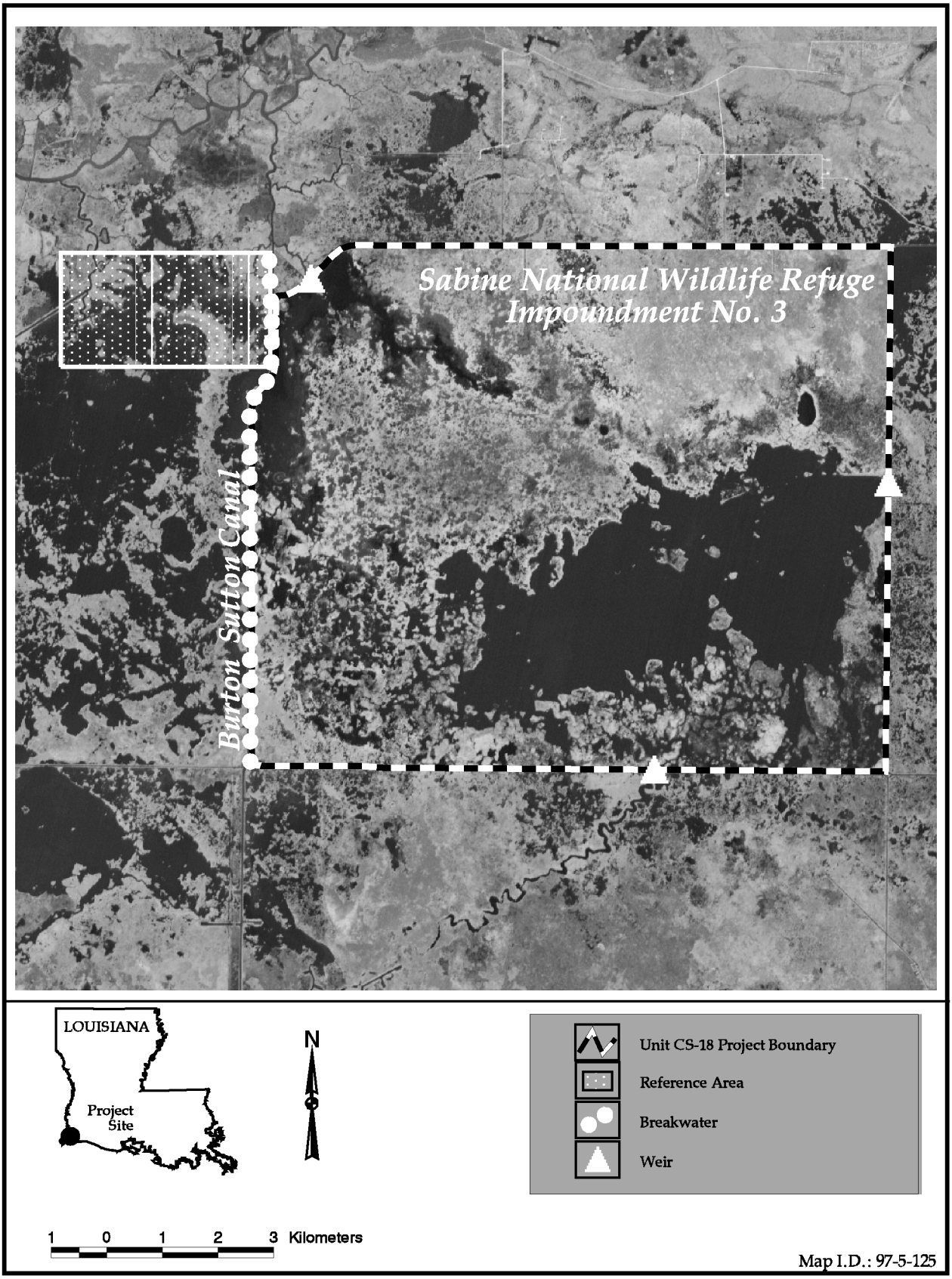

Figure 1. Sabine Refuge Protection (C/S-18) project area map.