

SECTION 1 - DESCRIPTION OF PROJECT SETTING

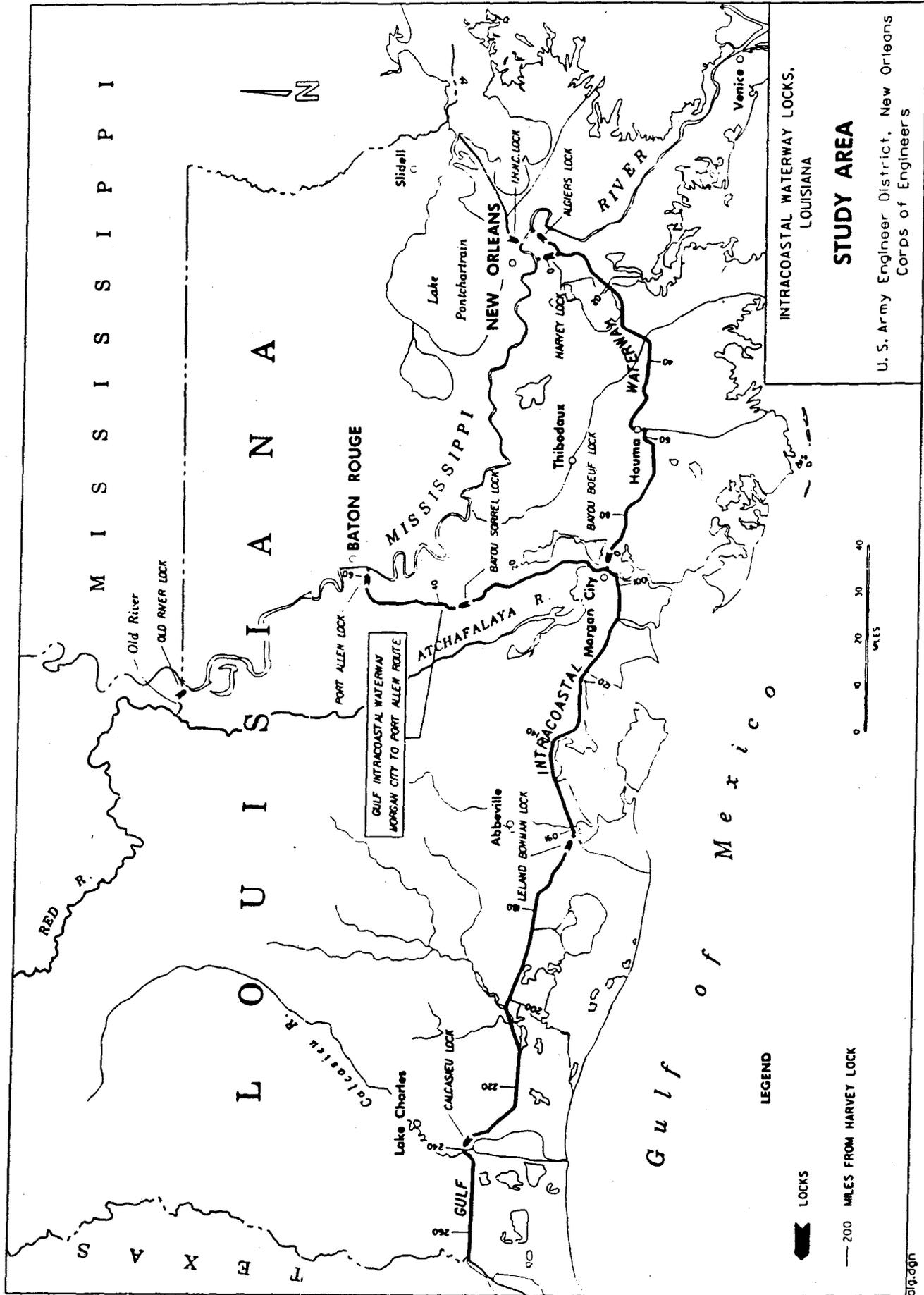
The Intracoastal Waterway (IWW) traces the U.S. coast along the Gulf of Mexico from Apalachee Bay near St. Marks, Florida, to the Mexican border at Brownsville, Texas. Mile 0.0 of the IWW intersects the Mississippi River at mile 98.2 above Head of Passes (AHP), the location of Harvey lock, and extends eastwardly for approximately 376 miles and westwardly for approximately 690 miles. In addition to the mainstem, the IWW includes a major alternate channel, 64 miles long, which connects Morgan City, Louisiana to Port Allen, Louisiana at Mississippi River mile 227.6 AHP, and a parallel mainstem channel, 9.0 miles long, which joins the Mississippi River at mile 88.0 AHP, the location of Algiers lock, to the mainstem at IWW West mile 6.2. Project dimensions for the mainstem channel and the alternate route are 12 feet deep and 125 feet wide, except for the 150 foot width between the Mississippi River and Mobile Bay portion of the IWW East. Numerous side channels and tributaries intersect both the eastern and western mainstem channels providing access to inland areas and coastal harbors.

Within the study area, there are nine primary navigation locks. On the IWW mainstem west: Algiers, Harvey, Bayou Boeuf, Leland Bowman, and Calcasieu, with Port Allen and Bayou Sorrel on the IWW Morgan City - Port Allen Alternate Route. On the Inner Harbor Navigation Canal (IHNC), which intersects the Mississippi River at mile 93 AHP there is the IHNC lock, connecting the eastern and western sections of the IWW. On Old River, there is the Old River lock near mile 304 AHP on the Mississippi River, which links the Atchafalaya and Mississippi Rivers. West of Calcasieu lock, the western-most lock identified above, there are four additional navigation structures. These include the East and West Brazos River Floodgates located at IWW West mile 404.1, and the East and West Colorado River locks located at IWW West mile 444.8. There are no navigation structures on the IWW east of the IHNC lock. Table 1 - 1 describes the physical characteristics and locations of the nine primary locks and Figure 1 - 1 maps the area that includes these locks.

The Intracoastal Waterway is a middle-aged system compared to other inland waterway segments within the United States. As table 1 - 1 shows, with the exception of Port Allen, Old River and Leland Bowman, most of the primary locks are over 40 years old. However, the IWW continues to be a critical part of our nation's infrastructure and confers wide-ranging benefits on national and state economies. The waterway is not only important to American commerce, it supports a variety of other public purposes, including flood control, waterside commercial development, and water-based recreational activities.

The Corps completed a Reconnaissance study in June 1995. The Reconnaissance study found that, based on navigation alone, there was an immediate need for capacity increases at Bayou Sorrel and Calcasieu Locks. The study also found that there were future needs for capacity increases at Port Allen Lock and possibly Algiers Lock.

This study is addressing the feasibility of a lock replacement at Bayou Sorrel Lock only based on navigation reasons alone.



M I S S I S S I P P I

L O U I S I A N A

RED R.

Calcasieu R.

ATCHAFALAYA R.

GULF INTRACOASTAL WATERWAY
MORGAN CITY TO PORT ALLEN ROUTE.

Lake Charles

CALCASIEU LOCK

Abbeville

LELAND BOWMAN LOCK

BATON ROUGE

PORT ALLEN LOCK

BAYOU SORREL LOCK

Thibodaux

BAYOU BOEUF LOCK

Houma

HARVEY LOCK

ALGIER LOCK

IHNC LOCK

Lake Pontchartrain

NEW ORLEANS

MISSISSIPPI RIVER

Gulf of Mexico

LEGEND

LOCK

— 200 MILES FROM HARVEY LOCK

0 10 20 30 40
MILES

INTRACOASTAL WATERWAY LOCKS,
LOUISIANA

STUDY AREA

U. S. Army Engineer District, New Orleans
Corps of Engineers

alg.dgn

Table 1 - 1

System Physical Description of Locks

Waterway/Lock	GIWW Mile	Miss. River Mile	Length (Feet)	Width (Feet)	Sill Depth (Feet)	Lift (Feet)	Year Opened
<hr/>							
GIWW East							
IHNC	0	92.6	640	75	31.5	17	1923
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GIWW West							
Algiers	0	88.0	760	75	13	18	1956
Harvey	0	98.2	425	75	12	20	1935
Bayou Boeuf	93.3	n.a.	1156	75	13	11	1954
Leland Bowman	162.7	n.a.	1200	110	15	5	1985
Calcasieu	238.9	n.a.	1206	75	13	4	1950
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GIWW Alt. Route M.C. - P.A.							
Port Allen	64.1	227.6	1202	84	14	45	1961
Bayou Sorrel	36.7	n.a.	797	56	14	21	1952
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Atchafalaya-Mississippi River Link (Old River)							
Old River	n.a.	304	1200	75	11	35	1963