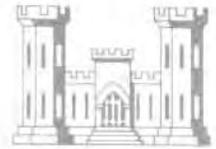




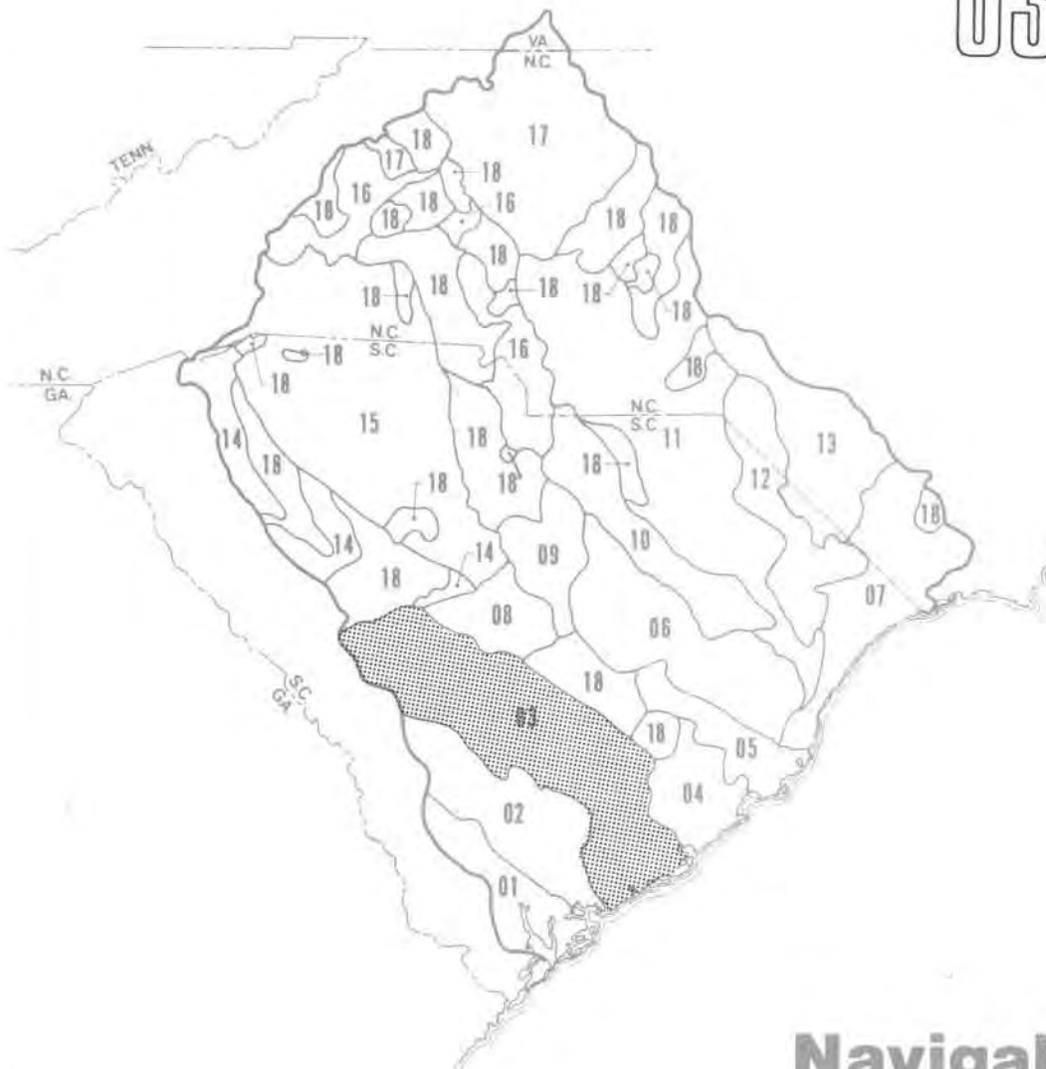
U.S. ARMY CORPS OF ENGINEERS  
CHARLESTON DISTRICT  
Charleston, South Carolina



# EDISTO RIVER AREA

Report No.

03



**Navigability  
Study  
1977**



STANLEY CONSULTANTS

## CONTENTS

	<u>Page</u>
SECTION 1 - INTRODUCTION .....	03-1
Purpose .....	03-1
Scope .....	03-1
Related Reports .....	03-2
Acknowledgements and Data Sources .....	03-3
SECTION 2 - PHYSICAL CHARACTERISTICS .....	03-4
SECTION 3 - NAVIGATION IMPROVEMENT PROJECTS .....	03-8
Federal Navigation Projects .....	03-8
Other Navigation Projects .....	03-14
SECTION 4 - INTERSTATE COMMERCE .....	03-15
Past .....	03-15
Present .....	03-17
Future Potential .....	03-19
SECTION 5 - LEGAL AUTHORITY .....	03-20
General .....	03-20
Navigability Interpretations .....	03-20
General Federal Court Cases .....	03-21
Specific Federal Court Cases .....	03-23
South Carolina State Court Cases .....	03-23
Recent Federal Litigation .....	03-25
Federal Agency Jurisdiction .....	03-30
SECTION 6 - NAVIGATION OBSTRUCTIONS AND CLASSIFICATIONS .....	03-32
Navigation Classification Procedures .....	03-32
Navigation Classification Categories .....	03-36
Present Navigable Waters of the U. S. ....	03-36
Historically Navigable Waters .....	03-37
Recommended Navigable Waters of the U. S. ....	03-37
Recommended Practical Navigable Waters of the U. S. ....	03-37
Obstructions to Navigation .....	03-39
Waters of the U. S. ....	03-39
SECTION 7 - CONCLUSIONS AND RECOMMENDATIONS .....	03-66

CONTENTS (continued)

	<u>Page</u>
BIBLIOGRAPHY .....	03-68
Cited References .....	03-68
Other Background Information .....	03-69
APPENDIX A - STREAM CATALOG .....	03-A1
APPENDIX B - SUMMARY OF 10 TO 1,000 ACRE LAKES .....	03-B1

TABLES

<u>Number</u>		<u>Page</u>
1	Physical Characteristics .....	03-6
2	Key Stream Gaging Stations .....	03-7
3	Authorized Federal Navigation Projects .....	03-11
4	Obstruction Listing from Tidal Influence Limit to Recommended Practical Limit of Navigable Waters of the U. S. ....	03-40

FIGURES

<u>Number</u>		<u>Page</u>
1	Navigability Decision Diagram .....	03-33
2	Utility Line .....	03-44
3	Utility Line .....	03-44
4	U. S. 17A Highway Bridge .....	03-45
5	Utility Line .....	03-45
6	Utility Line .....	03-46
7	Two Utility Lines .....	03-46
8	Utility Line .....	03-47
9	Utility Line .....	03-47

CONTENTS (continued)

FIGURES (continued)

<u>Number</u>		<u>Page</u>
10	S. C. 61 Highway Bridge .....	03-48
11	S. C. Secondary 29-21 Highway Bridge .....	03-48
12	Utility Line .....	03-49
13	U. S. 15 Highway Bridge .....	03-49
14	Utility Line .....	03-50
15	Four Utility Lines .....	03-50
16	Utility Line .....	03-51
17	Utility Line .....	03-51
18	I-95 Highway Bridge .....	03-52
19	Utility Line .....	03-52
20	Utility Line .....	03-53
21	U. S. 21 Highway Bridge .....	03-53
22	Utility Line .....	03-54
23	Utility Line .....	03-54
24	Utility Line and U. S. 78 Highway Bridge .....	03-55
25	Utility Line .....	03-55
26	Southern Railroad Bridge .....	03-56
27	Utility Line .....	03-56
28	S. C. Secondary 39-42 Highway Bridge .....	03-57
29	Utility Line .....	03-57
30	Utility Line .....	03-58
31	U. S. 601-301 Highway Bridge .....	03-58

CONTENTS (continued)

FIGURES (continued)

<u>Number</u>		<u>Page</u>
32	U. S. 601-301 Highway Bridge .....	03-59
33	Utility Line .....	03-59
34	Seaboard Coast Line Railroad Bridge .....	03-60
35	S. C. 70 Highway Bridge .....	03-60
36	Utility Line .....	03-61
37	U. S. 321 Highway Bridge .....	03-61
	<u>FOUR HOLE SWAMP</u>	
38	Utility Line .....	03-62
39	S. C. Secondary 19 Highway Bridge .....	03-62
40	Utility Line .....	03-63
41	S. C. Secondary 56 Highway Bridge .....	03-63
	<u>NORTH FORK EDISTO RIVER</u>	
42	Utility Line .....	03-64
43	S. C. Secondary 63 Highway Bridge .....	03-64
44	Utility Line .....	03-65
45	S. C. Secondary 39 Highway Bridge .....	03-65

PLATES

<u>Number</u>		<u>Follows Page</u>
03-1	Location Map .....	03-70
03-2	Significant Features .....	03-70
03-3	Significant Features .....	03-70
03-4	Significant Features .....	03-70

CONTENTS (continued)

PLATES (continued)

<u>Number</u>		<u>Follows Page</u>
03-5	Plan and Profile - Miles 0.0 - 19.0 .....	03-70
03-6	Plan and Profile - Miles 19.0 - 37.0 .....	03-70
03-7	Plan and Profile - Miles 37.0 - 55.0 .....	03-70
03-8	Plan and Profile - Miles 55.0 - 64.0 .....	03-70
03-9	Plan and Profile - Miles 64.0 - 81.0 .....	03-70
03-10	Plan and Profile - Miles 81.0 - 98.0 .....	03-70
03-11	Plan and Profile - Miles 98.0 - 119.0 .....	03-70
03-12	Plan and Profile - Miles 119.0 - 135.0 .....	03-70
03-13	Plan and Profile - Miles 135.0 - 136.6 .....	03-70
03-14	Plan and Profile - Miles 0.0 - 9.8 North Fork Edisto River .....	03-70
03-15	Plan and Profile - Miles 0.0 - 3.5 Four Hole Swamp .....	03-70

## SECTION 1 - INTRODUCTION

### Purpose

The purpose of this study is to collect, develop, and evaluate information on waterbodies within the boundaries of the Charleston District, Corps of Engineers, for establishing the classification of "navigable waters of the U. S." and "waters of the U. S." (During the course of this study the term "navigable waters" was changed to "waters of the U. S." Herein references to "navigable waters" are synonymous with "waters of the U. S.") Study objectives include definition of the present head of navigation, the historic head of navigation, the potential head of navigation, and the headwaters of all waterbodies within the district.

The information generated as a part of the study will be utilized by the Charleston District in administration of its programs dealing with water resource project construction permits in "navigable waters of the U. S." (River and Harbor Act of 1899), and the deposition of dredge or fill material in "navigable waters" or their contiguous wetlands (Section 404 of PL 92-500).

### Scope

The scope of this project is generally summarized by the following:

1. Outline drainage areas, locate headwater points where mean flow is five cubic feet per second (cfs), summarize lake data (10 to 1,000 acres), establish stream mileage for "navigable waters of the U. S.", and prepare a stream catalog summary for the district.
2. Conduct field surveys of waterbodies to establish mean water levels and obstruction clearances for evaluating the potential head of navigation.
3. Analyze available hydrological data to estimate mean, maximum, and minimum discharge rates at obstructions and other selected locations.
4. Conduct a literature review to identify past, present, and future uses of waterbodies for interstate commerce.

5. Conduct a legal search to identify Federal and state court cases which impact on navigation classifications.
6. Prepare plan and profile drawings, maps of the district showing significant physical features, and a map delineating the recommended navigation classifications.
7. Prepare reports on all major river basins and large lakes (greater than 1,000 acres) including information on physical characteristics, navigation projects, interstate commerce, court decisions, navigation obstructions, and recommended classification of waterbodies for navigation.
8. Prepare a summary report outlining navigation-related information for the entire district as well as the methodology, procedures, and other factors pertinent to the development of each of the river basin reports.

Conduct of this study relies heavily upon available information. Compilation and evaluation of existing data from many sources and development of field survey information are the main contributions to the new water resource data base represented by this study.

#### Related Reports

Information pertaining to this navigability study for the Charleston District has been compiled into a series of reports, one of which is represented by this document. A complete listing of the reports is presented below to facilitate cross referencing.

<u>Number</u>	<u>Title</u>
--	Summary Report
01	Coosawhatchie River Area
02	Combahee River Area
03	Edisto River Area
04	Cooper River Area
05	Santee River Basin
06	Black River Area
07	Waccamaw River Basin
08	Congaree River Basin
09	Wateree River Basin
10	Lynches River Basin

<u>Number</u>	<u>Title</u>
11	Great Pee Dee River Basin
12	Little Pee Dee River Basin
13	Lumber River Basin
14	Saluda River Basin
15	Broad River Basin
16	Catawba River Basin
17	Yadkin River Basin
18	Lakes - Greater Than 1,000 Acres
--	Coastal Supplement

The eighteen reports covering various drainage areas in the district present information for the specific basins. The Summary Report provides an overview of the entire study of district waterbodies and presents information applicable to all waters in the district. Reference should be made to both the individual drainage area reports as well as the Summary Report to obtain a thorough understanding of the study approach and results.

#### Acknowledgements and Data Sources

The contribution of many project team members within the Corps of Engineers, Charleston District, and Stanley Consultants is gratefully acknowledged by Stanley Consultants. In addition to the legal search and other evaluations and input from Charleston District staff, several others made significant contributions to this study effort. Dr. John W. Gordon, Assistant Professor in the Department of History, The Citadel, prepared the narrative and literature review information for past and present interstate commerce.

Several state water resource, transportation, utility, and planning agencies also cooperated and provided useful data for compiling these reports. Federal water resource and regulatory agencies and private utilities provided information along with public and private operators of large reservoirs.

Specific numbered data sources are referenced in the reports in parentheses. These data sources are listed in the Bibliography of each report of the navigation study.

## SECTION 2 - PHYSICAL CHARACTERISTICS

As shown on Plate 03-1, the Edisto River basin is located in the south central portion of South Carolina and bordered by the Combahee River basin on the west and the Cooper and Congaree River basins, as well as Lakes Moultrie and Marion on the east. The headwaters of the basin are located near the fall line which divides the Coastal Plain and Piedmont Plateau. The river mouth empties to the Atlantic Ocean. The largest river in the basin is the Edisto River which is formed by the confluence of the South and North Fork Edisto Rivers at river mile (R.M.) 113. The South and North Forks are also large rivers and extend upstream another 83 and 82 miles, respectively. From the confluence of the North and South Forks, the Edisto River flows to R.M. 21 where it divides into the Dawho River and South Edisto River. Dawho River flows easterly and in conjunction with other rivers and tributaries forms the North Edisto River. South Edisto River continues on a southerly course to the northern shore of St. Helena Sound. Four Hole Swamp, the Intracoastal Waterway, Charleston Harbor, Ashley River, Abbapoola Creek, Russell Creek, and Adams Creek are other waterbodies in the Edisto River area and are discussed further in Sections 5 and 6. There are many more rivers and streams located in the area, especially near the coast; however, emphasis has been primarily placed on large rivers that extend inland. Plates 03-2 through 03-4 show the significant features in the Edisto River area. Additional information on the Combahee, Cooper, and Congaree Rivers, as well as Lakes Moultrie and Marion, is presented in Reports 02, 04, 08, and 18, respectively.

The Edisto River lies entirely in the coastal lowlands and is generally characterized by low, occasionally submerged, tree lined flood plains. As the river nears the ocean, the flood plains turn to grassy marshes. The North and South Forks for the most part have irregularly defined channel sections which vary in width and depth.

Table 1 presents selected key physical characteristics, such as approximate drainage areas, mean water flows, and elevation changes for the Edisto River and some of the major tributaries. The methodology

used in developing these characteristics is defined in the Summary Report. Table 2 presents information on the USGS gaging stations located in the Edisto River area. Additional flows, river miles, and slopes are presented in Section 6.

TABLE I  
PHYSICAL CHARACTERISTICS (1)(2)(3)\*

<u>Stream &amp; Code</u> <sup>1)</sup>	<u>Length-Mouth to Headwaters</u> (mi)	<u>Elevation Change</u> (ft)	<u>Drainage Area</u> (sq.mi)	<u>Mean Discharge at Mouth</u> (cfs)	<u>Limit of Tidal Influence</u> (R.M.)	<u>Confluence With Edisto River</u> (R.M.)	<u>Present Navi- gable Waters of the U. S.</u> (R.M.)
Edisto 03-01	113 <sup>2)</sup>	100 <sup>2)</sup>	3,000 <sup>4)</sup>	3,300 <sup>4)</sup>	37.0	--	113.0
South Fork Edisto 03-01-38	83 <sup>3)</sup>	400	870	1,050	None	113.0	41.0
North Fork Edisto 03-01-37	82 <sup>3)</sup>	380	770	920	None	113.0	27.2
Four Hole Swamp 03-01-32	56	30	660	800	None	62.0	5.0
Ashley 03-14	55	40	340	375	36.0	--	40.0

03-6

1) See Summary Report for explanation of code.

2) From mouth at St. Helena Sound to confluence of South and North Fork Edisto Rivers.

3) From the confluence with the Edisto River to a remote point in the indicated stream basin having a mean annual flow of five cfs.

4) Value is for entire drainage basin of the Edisto River including all tributaries.

\* See Bibliography for these references.

TABLE 2  
KEY STREAM GAGING STATIONS (1)(4)

<u>Stream</u>	<u>USGS Gaging Station Number</u>	<u>Location Description</u>	<u>Drainage Area (sq.mi.)</u>	<u>Mean Flow (cfs)</u>	<u>Minimum Flow<sup>1)</sup> (cfs)</u>	<u>Maximum Flow<sup>2)</sup> (cfs)</u>
Edisto River	02174000	Located near Branchville, S. C., Bamberg Co. at U. S. Highway 21 Bridge, 4.7 miles downstream from Brier Branch	1,720	2,035	730	3,950
Edisto River	02175000 <sup>3)</sup>	Located near Givhans S. C., Dorchester Co. at S. C. Highway 61 Bridge, 2.3 miles downstream from Four Hole Swamp	2,730	2,690	720	5,800
North Fork Edisto River	02173500	Located at Orangeburg, S. C., Orangeburg Co. at U. S. 301 bridge near SCL RR Bridge	683	797	350	1,360

- 
- 1) Exceeded or equaled 90 percent of the time
  - 2) Exceeded or equaled 10 percent of the time.
  - 3) Water supply diversion just upstream of station.

## SECTION 3 - NAVIGATION IMPROVEMENT PROJECTS

### Federal Navigation Projects

Eight Federal navigation projects have been authorized on streams in the Edisto River area. The only project on the Edisto River provided for the removal of snags and shoals and for channel rectification by cutting off bends and closing lateral channels to provide a clear channel suitable for light draft steamers from the sea to the junction of the North and South Forks, and suitable for rafts and flatboats on South Fork from the junction of the Forks to Guignards Landing at R.M. 154. (River mileage from Edisto River is continued on South Fork Edisto River. A 20-mile discrepancy involving the river mileage of the project location exists between reference sources. As discussed in the Summary Report, the source of river mileage used for presentation in this study sometimes differs from river mileage referred to in authorized project information.) Work was discontinued in 1896, except for minor maintenance in 1905 and 1938, after completion of the project. In 1938, the river was reported as partially obstructed with sunken logs and fallen trees and navigable only for shallow craft. No further funds or work were proposed at that time. (5)

The seven other navigation projects located on streams within the report area are briefly described below. (3) (5) (6) Table 3 summarizes all eight projects.

The Atlantic Intracoastal Waterway between Norfolk, Virginia, and St. Johns River, Florida, provides for a 12 feet deep and 90 feet wide waterway at mean low water along several coastal streams within the Edisto area. The waterway enters the Edisto area from the Cooper River basin, on Wapoo Creek near the mouth of the Ashley River. It flows along Wapoo Creek for a short distance to Elliott Cut, along Elliott Cut to the Stono River, and along Stono River to the Wadmalaw River. The waterway proceeds along the Wadmalaw to Dawho River, along Dawho River to North Creek and through Watts Cut to the South Edisto River. The waterway continues through Fenwick Cut where it flows into the Combahee basin (see Report 02). The project was completed in 1940.

Surveys made during May-September, 1975, showed controlling depths of 7.2 feet and widths of 90 feet in the Edisto basin area.

The Charleston Harbor project, located partially within the Edisto basin boundary, provides for a channel 35 feet deep from the Atlantic Ocean to the mouth of Goose Creek (26.3 miles) with varying widths, a turning basin 700 feet wide at the Port Terminals, and a channel 35 feet deep and 500 feet wide through Town Creek; also a channel in Shem Creek 10 feet deep and 110 feet wide from a flared entrance from Hog Island Channel to and including a turning basin 130 feet wide and 400 feet long; thence 10 feet deep and 90 feet wide to the bridge on U. S. Highway 17; also a channel 10 feet deep and 90 feet wide in Hog Island Channel from Shem Creek to the Atlantic Intracoastal Waterway. The project also includes two entrance jetties of stone on log mattress foundations; the north jetty 15,443 feet long and the south jetty 19,104 feet long; the distance between the outer end is 2,900 feet. The project also provides for national defense a proposed 40-foot channel from the sea to the Commandant's Wharf with varying widths; also an anchorage area 30 feet deep in the area between Castle Pinckney and Fort Moultrie; to be prosecuted only as found necessary in the interest of national defense. The project is completed except for a portion of the anchorage basin and the 40-foot national defense project. The controlling depth as of 1975 was 35.0 feet in the entrance channel and Cooper River; and 11.7 feet in Shem Creek.

An aquatic plant control project provided for a program leading to the control and eradication of the water-hyacinth, alligatorweed, and other obnoxious aquatic plant growths in the combined interest of navigation, flood control, drainage, agriculture, fish and wildlife conservation, public health and related purposes including research for development of the most effective and economic control measures. Approximately 27 miles of the North Fork Edisto River were treated before activities were suspended in 1975, pending receipt of an exemption from the Environmental Protection Agency for the use of 2, 4-D in flowing waters.

A project on the Ashley River provided for a channel 30 feet deep, 300 feet wide, and 7.4 miles long at mean low water and suitably widened at bends and at the head of the improvement. The project was completed in 1940. A survey made of the main channel during 1975 indicated a controlling depth of 15.0 feet from the mouth to R.M. 3.0, and 14.3 feet from R.M. 3.0 to the head of the project.

The fifth project, located on Abbapoola Creek, provides for a channel 4 feet deep and 60 feet wide at mean low water, from the mouth to a turning basin at R.M. 5. The project was authorized in 1945, however, no work had been done as of 1975.

A project on Russell Creek provides for a channel 5 feet deep and 60 feet wide, at mean low water, from the mouth to R.M. 4.2. The project was authorized in 1945, however, no work had been done as of 1975.

The last project, located on Adams Creek, provided for a channel 10 feet deep and 80 feet wide from the mouth at Bohicket Creek to approximately R.M. 1.4 with a turning basin at the upper end. Construction was completed in February, 1973.

TABLE 3

## AUTHORIZED FEDERAL NAVIGATION PROJECTS (3) (5)

<u>Stream</u>	<u>Work Authorized</u>	<u>Date Complete</u>	<u>Project Location</u>	<u>Authorization</u>
Edisto and South Fork Edisto River	Channel clearing	1896	R.M. 0.0 to R.M. 175	River and Harbor Act of 2 August 1882 H. Doc. No. 23, 46th Cong., 3d Session
Intracoastal Waterway	12 ft deep by 90 ft wide channelization	1940	Virginia to Florida	River and Harbor Act of 2 March 1925* S. Doc. 178, 68th Cong., 2nd Session; River and Harbor Act of 30 August 1935 H. Doc. 129, 72nd Cong., 1st Session; River and Harbor Act of 26 August 1937 Rivers and Harbors Comm. Doc. 6, 75th Cong., 1st Session
Charleston Harbor	Channelization of harbor and tributary streams and construction of two stone jetties with additional channelization to Naval Commandants Wharf and anchorage basin	Jetties 1895; channelization 1965 with the exception of the naval channelization and anchorage basin	R.M. 0.0 to R.M. 26.3 and reaches of surrounding tributaries (see text)	River and Harbor Acts of: 18 June 1878, 8 August 1917 H. Doc. 288, 62nd Cong., 2nd Session; 18 July 1918 H. Doc. 1916, 64th Cong., 2nd Session; 21 January 1927 H. Doc. 249, 69th Cong., 1st Session; 17 October 1940 RH 40 HD 259/7611

TABLE 3 (continued)  
 AUTHORIZED FEDERAL NAVIGATION PROJECTS (3) (5)

<u>Stream</u>	<u>Work Authorized</u>	<u>Date Complete</u>	<u>Project Location</u>	<u>Authorization</u>
Charleston Harbor (continued)				H. Doc. 259, 76th Cong., 1st Session; 2 March 1945 H. Doc. 156, 77th Cong., 3 September 1954 S. Doc. 136, 83rd Cong., 2nd Session; H. Doc. 35, 86th Cong., 1st Session
North Fork Edisto River	Plant control	Project Suspend- ed 1975	R.M. 0.0 - 27.0	River and Harbor Act of 3 July 1958 H. Doc. 37, 85th Cong., 1st Session; River and Harbor Act of 27 October 1965
Ashley River	Channelization	1940	R.M. 0.0 - 7.4	River and Harbor Act of 25 July 1912 Rivers and Harbors Comm. Doc. 4, 62nd Cong., 2d Session;  River and Harbor Act of 26 August 1937 Rivers and Harbors Comm. Doc. 49, 74th Cong., 2nd Session

03-12

TABLE 3 (continued)

## AUTHORIZED FEDERAL NAVIGATION PROJECTS (3) (5)

<u>Stream</u>	<u>Work Authorized</u>	<u>Date Complete</u>	<u>Project Location</u>	<u>Authorization</u>
Abbapoola Creek	Channelization	Not Started	R.M. 0.0 - 5.0	River and Harbor Act of 2 March 1945 H. Doc. 97, 76th Cong., 1st Session
Russell Creek	Channelization	Not Started	R.M. 0.0 - 4.2	River and Harbor Act of 2 March 1945 S. Doc. 41, 76th Cong., 1st Session
Adams Creek	Channelization	1973	R.M. 0.0 - 1.5	OCE on 17 April 1968 under Section 107 of the 1960 River and Harbor Act As Amended

---

\* Additional River and Harbor Acts were used to authorize the portions of the waterway outside the basin.

#### Other Navigation Projects

No other modern-day navigation improvement projects have been identified in the basin. As discussed in Section 4, several legislative efforts by the state of South Carolina were directed toward the Edisto River and its tributaries in the 1700's. Some of these projects, such as Watts Cut have been upgraded and are still used as part of the Intracoastal Waterway.

Inquiries made at various state and Federal agencies indicate no projects are now planned or under construction which would improve or substantially benefit navigation on the Edisto River.

## SECTION 4 - INTERSTATE COMMERCE

### Past

Early settlers entered what is now Orangeburg County, South Carolina in approximately 1730. These settlers "at first clustered together near the banks of the Edisto River ..., supposing that the adjacent stream could be advantageous in forming an outlet for them to Charleston, in the transportation of lumber to market." (7) However, as reported by another source, "There was little if any navigation of the Edisto" in the period up to about 1756. (8)

Quite a number of legislative efforts were aimed at making the Edisto and its various tributaries an effective system of inland navigation in the 18th Century. An act passed in 1714, for example, sought to cut or make "a convenient Creek or Watercourse through that part of the land ... commonly called the Hallover," and may have sought to effect better access to the Edisto basin. (9) In 1734, an act was passed "for clearing and opening ... several creeks, cut-offs or water-passages ... and for regulating the boats and perriaugers\* going through the same." Watts Cut, a tributary of the South Edisto River, was among the various watercourses named in this act. (10) Other acts continued the effort to keep Watts Cut navigable.

The General Assembly of South Carolina passed, in 1785, "An Ordinance for clearing Edisto" and other rivers, and two years later, established a "Company for clearing and improving the navigation of Edisto and Ashley Rivers, and for forming a communication by a canal and locks between the former and the latter." (11)

As is apparent from its language, the intent of this last act was to provide an inland passage between the mouth of the Edisto and Charleston, the chief port of South Carolina. While it is difficult to gauge the extent to which such efforts succeeded, inland-passage navigation in South Carolina very clearly preceded the creation of the Atlantic Intracoastal Waterway in the late 1930's.

---

\* Perriauger - A vessel used during the early development period of the United States (1700's-1800's) for the transportation of supplies. The vessel was sometimes oared, poled, or pulled and was occasionally fitted with mast and sail.

By 1818, the Civil and Military Engineer of South Carolina reported that "There are no obstructions to this navigation up to the branches of the Edisto about 15 miles from the ocean, and vessels drawing 5 and 6 feet water trade to Jacksonborough, 10 miles higher up [R.M. 32\*]." From that point, wrote John Wilson, "the navigation continues good to Parker's Ferry, about 40 miles from the ocean, where the influence of the tide ceases." It was above Parker's Ferry that "the obstructions commence"; these consisted of sandbars and logs. But "during eight months in the year, the navigation is good for rafts and boats to the confluence of the North and South Branches, about 80 miles in a direct line from the ocean [R.M. 113\*]." (12)

"The North Branch of the Edisto", Wilson's report continued, "is navigable for boats and rafts to Black Creek, one of its principal sources, 45 miles from the confluence." Above that point occurred the logs and sandbars which obstructed it, although Wilson thought that "The navigation may be opened to Lightwood Creek, 15 miles higher up." As to the South Edisto, it was "navigable for rafts and boats, drawing 5 feet water, without any material obstruction, for 20 miles in a direct line, from its confluence with the North Branch." After cataloging the obstructions which blocked the river above that point, Wilson's report suggested that "The navigation may be opened for boats 8 to 10 miles above the Rockledge to the confluence of Shaw's Creek [R.M. 166\*]," and might be opened for rafts as far up as "Monk's Falls, 14 or 15 miles above its confluence with Shaw's Creek; and Shaw's Creek may be rendered navigable for the same purposes for about 10 to 12 miles of its course." (13)

A year later, Wilson reported that the Edisto "has been cleared and made navigable from Parker's Ferry, to the neighborhood of Givhan's Ferry, a distance of 32 miles [R.M. 60\*]," and on the North Edisto, "a channel sufficient for the navigation of rafts and boats has been cleared for upwards of 50 miles." (14) By 1820, it was possible to proclaim the South Edisto "navigable ... some 60 miles above the fork for boats 10 feet wide and 50 feet long, with a draught of 2-1/2 feet during the driest season [R.M. 173\*]." Larger boats could get as far

---

\* R.M. based on these study efforts.

up as Shaw's Creek during the wet season of the year. (15) For the two branches of this river the General Assembly appropriated \$2,500 in 1823, and an additional \$3,000 in 1825. (16)

These statements about the Edisto River were further amplified in 1826 by those of architect and inland-navigation visionary Robert Mills. Mills stated that "both branches and the main river are now navigable, having no shoals." As to the commercial advantages which this state of affairs afforded, "Large quantities of pine timber squared, are taken down the Edisto in rafts, to Charleston, each year." (17)

Thereafter, trade on the Edisto seems to have declined, at least in so far as the upper branches were concerned. In 1883 the State Board of Agriculture proclaimed that "The two Edistos might be rendered navigable for small steamboats." (18) When Colonel Quincy Gillmore, Corps of Engineers, examined the river in 1880, he found a rather insignificant volume of commercial activity thereon. The Rivers and Harbors Act of 2 August 1882, appropriated \$8,000 for the improvement of the Edisto from the ocean to the confluence of the two branches. However, "No steamboat or flatboat navigation was developed by the improvement, and during the progress of the work it became apparent that the rafting of timber and lumber was the only interest that warranted the improvement of the stream." (19)

This project was eventually completed, and work was discontinued in 1896, except for additional clearings. The total amount expended on the Edisto by the Federal government amounted, by 1938, to \$34,000. At that time there were no terminal facilities on the river except for private ones used for fishing and pleasure craft. (20)

#### Present

Except for the Intracoastal Waterway, the Edisto River is not currently being used for purposes of waterborne interstate commerce. (21)

During the 18th Century, the Edisto River appears to have been navigable along its lower stretches to the variety of sail and oar craft then in use. So also were its lower tributaries, those tidewater streams which formed a network of waterborne trade and communication

during the era of the rice plantation. Based upon the sketchy and inconclusive evidence available, streams which may at one time or another have enjoyed extensive use by canoes, rafts, perriaugers, bateaux, or steam-powered vessels are the following: Bailey Creek (in 1965, rated as navigable for 6 miles); Big Bay Creek (for 4 miles); Bohicket Creek (for 14 miles); Church Creek (for 5.5 miles); Dawho River (for 11 miles); Fishing Creek (for 4 miles); Four Hole Swamp (for 5 miles); Leadenwah Creek (for 8 miles); Milton Creek (for 1 mile); Ocella Creek (for 1.5 miles); Pioneer Creek (for 1 mile); Russell Creek (for 7 miles); Sand Creek (for 2 miles); St. Pierre Creek (for 4 miles); Shingle Creek (for 2 miles); Steamboat Creek (for 5 miles); Store Creek (for 5 miles); Toogoodoo Creek (for 9 miles) Townsend River (for 8 miles); Wadmalaw River (for 9 miles); Watts Cut (for 0.8 miles); and Whooping Island Creek (for 3 miles).

During the 19th Century, but only from about 1820 until the early 1840's, the head of navigation on the North Edisto was apparently at a point 45 miles from its confluence with the South Branch. This point, Black Creek, is what Wilson suggested was the limit of navigation. The South Edisto was apparently, after the program of improvements, navigable as far as 60 miles above the confluence of the two branches.

In 1965, the Edisto River was described as follows: "Navigable length in miles 60.0; 7 mi. forms link of IWW, Charleston to Beaufort, S. C. Mi. 6 limit of practical nav." The North Edisto River's "Navigable length in miles" was given as 8 miles, while North Fork, Edisto River, was described as "Nav. impractical," as was the South Fork of the Edisto River. (22)

In 1974, the Edisto River navigation project was termed "Completed; No commerce reported." (23) At present, the head of navigation on the Edisto River cannot be established on the basis of historical records and must be established on the basis of physical characteristics and other data.

### Future Potential

The potential use of the Edisto River and its tributaries for interstate commerce in future years is difficult to predict. Comprehensive analysis of the regional economics (income, education, employment, community facilities, transportation systems, and similar factors), which would indicate growth patterns and the services needed to sustain various types of industrial and commercial activities, is beyond the scope of this study. However, some analysis and judgments have been made concerning future commerce.

It is anticipated that the Edisto River has the potential to be utilized for shipment of goods into other states since it is connected to the Atlantic Ocean near St. Helena Sound. The upstream reaches of the basin are not currently used for interstate commerce and the future potential is not anticipated to be significant. This is due in part to limited industrial and commercial activity and heavy dependence on other forms of transportation including the interstate highway system, railroads, and air transport.

## SECTION 5 - LEGAL AUTHORITY

### General

This section presents information pertaining to the legal aspects of the navigability investigation. Such Federal and state court decisions as apply to the specific basin reported on herein are outlined. The Summary Report presents more complete documentation and references to the court cases dealing with navigation classifications and legal jurisdiction.

### Navigability Interpretations

The term "navigable waters of the U. S." is used to define the scope and extent of the regulatory powers of the Federal government. Precise definitions of "navigable waters" or "navigability" are ultimately dependent on judicial interpretation, and are not made conclusively by administrative agencies.

Definitions of "navigability" are used for a wide variety of purposes and vary substantially between Federal and state courts. Primary emphasis must therefore be given to the tests of navigability which are used by the Federal courts to delineate Federal powers. Statements made by state courts, if in reference to state tests of navigability, are not authoritative for Federal purposes.

Federal courts may recognize variations in definition of navigability or its application where different Federal powers are under consideration. For instance, some tests of navigability may include:

1. Questions of title to beds underlying navigable waters.
2. Admiralty jurisdiction.
3. Federal regulatory powers.

This study is concerned with Federal regulatory powers. Unfortunately, courts often fail to distinguish between the tests, and instead rely on precedents which may be inapplicable. Thus, a finding that waters are "navigable" in a question dealing with land title may have a somewhat different meaning than "navigable waters of the U. S." which pertains to Federal regulatory functions.

In this study, the term "navigable waters of the U. S." is used to define the extent and scope of certain regulatory powers of the Federal government (River and Harbor Act); this is distinguished from the term "navigable waters" which refers to other Federal regulatory powers (Section 404 of PL 92-500).

Administratively, "navigable waters of the U. S." are determined by the Chief of Engineers and they may include waters that have been used in the past, are now used, or are susceptible to use as a means to transport interstate commerce landward to their ordinary high water mark and up to the head of navigation. "Navigable waters of the U. S." are also waters subject to the ebb and flow of the tide shoreward to their mean high water mark. These waters are deemed subject to a Federal "navigation servitude". The term "navigable waters of the U. S." defines the more restricted jurisdiction which pertains to the River and Harbor Acts -- particularly the one of 1899 which specifically defined certain regulatory functions for the Corps of Engineers.

In contrast, the term "navigable waters" defines the new broader jurisdiction with respect to Section 404 of the Federal Water Pollution Control Act Amendments of 1972. Accordingly, "navigable waters" not only include those waters subject to the navigation servitude, but adjacent or contiguous wetlands, tributaries, and other waters, as more fully defined in revised Corps of Engineers Regulations.

Although this navigability study covers both "navigable waters of the U. S." and "navigable waters", the analysis of judicial interpretation has only focused upon determining "navigable waters of the U. S." to the head of navigation. Due to common usages in court cases, the terms "navigability" and "navigable waters" may herein appear interchangeably with the term "navigable waters of the U. S." However, the summary of court cases is directed at the Federal regulatory jurisdiction of the River and Harbor Acts, and not necessarily regulatory jurisdiction under the Federal Water Pollution Control Act.

#### General Federal Court Cases

Powers of the Federal government over navigable waters stem from the Commerce Clause of the U. S. Constitution (Art. I, §8). Pursuant

to its powers under the Commerce Clause, Congress enacted the River and Harbor Act of 1899 which particularly specifies regulatory powers of the Federal government in "navigable waters of the U. S."

The well-established Federal test of navigability is whether a body of water is used or is capable of being used in conjunction with other bodies of water to form a continuous highway upon which commerce with other states or countries might be conducted.

Several Federal court decisions make it clear that a waterway which was navigable in its natural or improved state retains its character as "navigable in law" even though it is not presently used for commerce. The test of navigability is not whether the particular body of water is in fact being used for any form of commerce but whether it has the capacity for being used for some type of commerce. Several cases substantiate this (see the Summary Report for details on the court decisions).

The ebb and flow of the tide is another test which remains a constant rule of navigability in tidal areas, even though it has sometimes been disfavored as a test of Federal jurisdiction. Several cases note that ebb and flow should not be the sole criterion of navigability, but that extension of Federal jurisdiction into the major non-tidal inland waters is possible by an examination of the waters "navigable character". The ebb and flow test, however, remains valid as a rule of navigability in tidal areas; it is merely no longer a restriction for non-tidal areas. For bays and estuaries, this extends to the entire surface and bed of all waterbodies subject to tidal action, even though portions of the waterbody may be extremely shallow or obstructed by shoals, vegetation, or other barriers as long as such obstructions are seaward of the mean high tidal water line. Marshlands and similar areas are thus considered "navigable in law" insofar as they are subject to inundation by the mean high waters. The relevant test is therefore the presence of the mean high tidal waters. Navigable waters are considered navigable laterally over the entire surface regardless of depth.

Another factor relevant to navigability determinations is land title. Whatever title a party may claim under state law, the private ownership of the underlying lands has no bearing on the existence or

extent of the dominant Federal jurisdiction over "navigable waters of the U. S." Ownership of a river or lake bed will vary according to state law; however, the Supreme Court has consistently held that title to the bottomlands is subordinate to the public right of navigation.

#### Specific Federal Court Cases

Navigability, in the sense of actual usability for navigation or as a legal concept embracing both public and private interests, is not defined or determined by a precise formula which fits every type of stream or body of water under all circumstances and at all times. A general definition or test which has been formulated for Federal purposes is that rivers or other bodies of water are navigable when they are used, or are susceptible of being used, in their ordinary condition as highways for commerce over which trade and travel are or may be conducted in the customary modes of trade and travel on water.

The question of navigability of water when asserted under the Constitution of the U. S., as is the case with "navigable waters of the U. S.", is necessarily a question of Federal law to be determined according to the general rule recognized and applied in the Federal courts.

Review of legal documentation reveals there are no Federal court decisions which apply specifically to navigation in the Edisto River area.

#### South Carolina State Court Cases

The South Carolina legislative enactment defining navigability and requiring freedom from obstruction may be found in Section 70-1 of the South Carolina Code of Laws. This section essentially provides that all streams which can float rafts of lumber or timber are considered navigable by state law.

Many of the South Carolina state cases reported are primarily concerned with state ownership questions. While the majority of states actually own streams and exercise control over their navigable waters, the ultimate authority has been granted to the Federal government by the Commerce Clause of the Constitution. The general rule, then is

that the states both own and control the navigable streams within their borders, subject to exercise of the superior right of control by the U. S. Although case histories show that state and Federal concepts of navigability do not always agree, when Federal interests are at stake, the Federal test will govern.

There are exceptions, however, to the "overwhelming majority rule of state ownership of lands beneath navigable waters", and South Carolina is in the minority. In the minority states, it was considered that property rights were vested at the time of independence from England and that the state took title only to tidal-navigable streams while riparian owners took title to all stream beds, both navigable and non-navigable, if non-tidal. Even in the minority states, however, private ownership of the bed does not affect the rights of the public to the use of navigable waters.

Review of legal documentation indicates there are two South Carolina state court cases which specifically deal with navigation considerations in the Edisto River area. (24) These cases are briefly summarized below.

State v. Collum\* - This case deals with McTier Creek, a branch of the South Edisto River. An 1825 act of the legislature provided:

"No person shall erect any mill dam, or other obstruction, across any stream used for the purposes of navigation by boats, flats or rafts of lumber or timber, without sufficient locks, slopes or canals, to admit free navigation of such streams..." (VI Stat. 268 (S.C. 1825))

In this case, the defendant had been indicted for obstructing such a stream. His defense was that the act of 1825 only affected streams then "used for purposes of navigation" and that this stream was not cleared for rafting lumber until 1830. The Supreme Court affirmed the conviction holding that the clearing of obstructions made the stream navigable under the act and that "(t)he term 'used' is a participle, and may have a past, present and future meaning..." and "refers to the use of it which should give it a public character" at the time of the defendant's act.

---

\* 2 Spears 581 (S. C. 1844).

State v. Hickson\* - This case regarding Shaw Creek, tributary of the Edisto River, was very similar to the above case (State v. Collum) arising under the 1825 act of the legislature, but had one crucial difference. Here, the defendant built his dam in 1830 before the streams had been cleared for rafting. His conviction was reversed by the Supreme Court which went on to say:

"At the time Hickson built his mill, it is very clear that Shaw's Creek was not a stream used for navigation ... It has become so since, but that has been done by private enterprise, and neither Hickson or the legislature have dedicated it to public use."

The case seems to say that small non-navigable streams may be kept that way by the riparian proprietors merely by erecting a permanent obstruction, thus forestalling the development of navigation. The court did seem to indicate that this result might not be conclusive upon the legislature as to "large fresh water streams, which by nature are navigable". It is difficult to determine whether the court considers the distinction to be the stream size or that the creek was made navigable by "private enterprise" and not nature or the legislature. It is likely that the court considered that the opposite result would be to divest the owner of property rights valid when acquired.

#### Recent Federal Litigation

A review of recent Federal regulatory litigation concerning the Charleston District reveals several court actions pertaining to streams in the Edisto River area. The summaries presented below indicate jurisdictional "navigable waters of the U. S." wherein recent activities have entailed court decisions. (24)

Milton P. Demetre v. Howard Callaway and Harry S. Wilson, Jr.\*\* - This court action concerns Charleston Harbor. On 20 June 1969, plaintiff applied for a permit to construct two rock groins at Charleston Harbor on the north shore of James Island, Charleston County, South Carolina. Upon discovering that plaintiff had exceeded the scope of his permit by constructing an embankment and filling marsh behind it, a cease

---

\* 5 Rich. 447 (S. C. 1844).

\*\* U.S.D.C. South Carolina, Civil Action No. 74-553.

and disist order was issued by the Charleston District Engineer. In July, 1970, plaintiff applied for a permit to complete the embankment and filling operation that had already begun. The U. S. Department of Interior objected to this permit proposal and recommended that tidal circulation be restored to the impounded area. After coordination with the Office, Chief of Engineers (OCE) and the Under Secretary of the Department of Interior, in November, 1973 the Charleston District Engineer advised plaintiff that his permit had been denied. On 1 May 1974 plaintiff filed this civil action to have the cease and desist order lifted so that he could continue with his filling project. Pursuant to court order dated 7 May 1975, revised permit application submissions outlining the entire project development where made by plaintiff limiting the subject property to a public boating facility. With the concurrence of the Federal District Judge and pursuant to Corps regulations, a public hearing pertaining to the newly revised permit application was held 16 December 1975. In accordance with court directives, processing of the permit was to be expedited to the utmost extent consistent with an adequate, thorough public interest review. Recommendations were forwarded on 27 January 1976 to OCE for a final administrative determination. This determination is currently being coordinated with the Department of Interior.

U. S. v. Fred H. Horlbeck\* - This civil complaint, filed 5 June 1975, deals with Church Creek at Wadmalaw Island and alleges violation of Sections 10 and 13 of the River and Harbor Act of 1899 and non-compliance with Sections 404(a) and 301(a) of the 1972 Amendments to Federal Water Pollution Control Act (FWPCA). This complaint alleges that defendant, Fred H. Horlbeck, built an earthen embankment impounding approximately 50 acres of wetlands, including approximately 25 acres of tidal marsh in the marsh and waters adjacent to Church Creek at Wadmalaw Island, Charleston County, South Carolina. The suit initially sought injunctive relief, restoration, and civil penalties available under Section 309(d) of the FWPCA. Defendant's answer and counterclaim were served on 25 June 1975, alleging that the Federal government's

---

\* U.S.D.C., South Carolina, Civil Action No. 75-952.

widening, deepening, and relocation at a different area of a section of the Atlantic Intracoastal Waterway changed the character of the water on which defendant's property fronted from fresh-brackish water to salt and that the resulting change in salinity caused defendant's trees and vegetation to die, caused the level of defendant's property to sink, and caused saltwater invasion of former highland. The government moved to dismiss defendant's counterclaims due to: (1) the lack of a case or controversy ripe for judicial decision; (2) the tolling of the statute of limitations; (3) the lack of jurisdiction in the Federal District Court; and (4) the failure to state a claim upon which to grant relief. Memoranda in support of and in opposition to the government's motion were filed. Upon hearing of the motion, the Federal District Judge deferred ruling. However, aerial photographs and Corps data do not substantiate defendant's counterclaim. Another aspect of defendant's defense is that prior project assistance had been secured from a different Federal agency (Soil Conservation Service of the U. S. Department of Agriculture). The government's position, which has been recognized by the Federal District Judge, is that this "other" assistance does not obviate the burden of defendant to comply with permit requirements. This is especially so where, as in the instant case, permit matters are outside the scope of the "other" Federal agency, where there is ample evidence of defendant's prior knowledge of permit requirements, and where there is evidence that defendant continued work after the issuance of Corps cease and desist directives. Defendant's proposed plan for restoration entailing the installation of uncontrolled pipe culverts has been rejected by the District as insufficient.

U. S. v. Thomas M. Evans and Magellan R. Brunson\* - This civil complaint regarding the Ashley River, filed 25 June 1975, alleged violation of Sections 10 and 13 of the River and Harbor Act of 1899 and non-compliance with Sections 404(a) and 301(a) of the FWPCA. The complaint alleged that defendants, Thomas M. Evans and Magellan R. Brunson, filled in the estuarine marshlands, constructed a rip-rap

---

\* U.S.D.C., South Carolina, Civil Action No. 75-1094.

sustaining wall made of concrete blocks, placed stone, constructed an extension to an existing pier connecting same to the illegal fill, and constructed two pilings channelward of said pier in the Ashley River at Evanston Estate Subdivision, Charleston County, South Carolina. The complaint also alleged that as recently as 24 June 1975, the defendant, Thomas M. Evans, was carrying on a different filling project in the same general area. The suit initially sought injunctive relief, including a temporary restraining order, restoration, and civil penalties available under Section 309(d) of the FWPCA. Defendant's answers were served on 10 July 1975 along with a motion by defendant, Thomas M. Evans, for severance. Subsequent to meeting with counsel for defendants, a consent order was entered assessing a civil fine of \$2,250.00, and restraining defendants from any further unauthorized filling in wetlands (above and below mean high water - "waters of the U. S.") along with all further unpermitted work in "navigable waters of the U. S." (below mean high water). The order also provided for quit-claim conveyance to the state of South Carolina, consistent with state claim, of "all lands which lay below the mean high water prior to the placement of fill and rip-rap, and thereby elevating such lands by artificial and man-made methods above the natural mean high water mark." The quit-claim has been executed as the state was made a party-plaintiff to this action.

U. S. v. Hugh H. Lee and R. T. Lee\* - This litigation concerns Mosquito and Musselboro Creeks, tributaries of Ashepoo River. The civil complaint seeking an injunction, restoration, and civil monetary penalties was filed on 31 October 1975, and alleges violation of Sections 10 and 13 of the River and Harbor Act of 1899 and non-compliance with Sections 404(a) and 301(a) of the FWPCA. The complaint alleges that defendants excavated, constructed earthen embankments, deposited dredged and fill material, obstructed tidal flow, and impounded approximately two acres of tidal marsh in the marsh and waters in the area of and adjacent to Mosquito and Musselboro Creeks at Bennett's Point, Colleton County, South Carolina. After District refusal to accept an after-the-fact permit application for the entire unauthorized work as

inconsistent with prior administrative determination, a proposed consent order has been drafted providing for removal of all fill below mean high water and affording defendants an opportunity to apply for an after-the-fact permit for embankment relocations above mean high water.

U. S. v. Anthony P. Cecil\* - Steamboat and Russel Creeks, tributaries of North Edisto River, are the areas covered by this litigation. This civil complaint seeking an injunction, restoration, and civil monetary penalties were filed on 14 January 1976, and alleged violation of Section 10 of the River and Harbor Act of 1899 and non-compliance with Sections 404(a) and 301(a) of the FWPCA. The complaint alleged that defendant excavated, deposited fill material, obstructed tidal flow of at least nine tidal creeks, and impounded approximately 42 acres of tidal marsh in the marsh and waters in the area of and adjacent to Steamboat and Russel Creeks at Rabbit's Point, Edisto Island, Charleston County, South Carolina. Defendant answered this suit on 12 February 1976. Further investigations revealed that of the three impoundments at the site, one was constructed prior to 1968, and therefore, prior to exercise of Corps jurisdiction over such activities in these areas. Defendant has agreed to restore and open the 14 acre second impoundment, while the third impoundment (three acre), after coordination with the EPA and Department of Interior, would remain as a water retention basin for irrigation serving community agricultural needs. A proposed consent decree reflecting this position is currently being formulated.

Oak Island Environmental Protection Association, etc. v. United States of America\*\* - This court action deals with Oak Island Canal, off Folly Creek. On 1 March 1975, suit was filed against the U. S. Coast Guard and William S. Brown, a developer (among others), alleging that the Coast Guard granted a permit for the construction of a bridge to Oak Island, Charleston County, South Carolina, without sufficient public input in the form of a hearing and Environmental Impact Statement (EIS) as required by the National Environmental Policy Act (NEPA). The plaintiff also alleged that no permit for filling in connection with a planned

---

\* U.S.D.C., South Carolina, Civil Action No. 76-69.

\*\* U.S.D.C., South Carolina, Civil Action No. 76-358.

causeway associated with the bridge had been applied for and obtained from the Corps of Engineers. At a hearing on the motion for a preliminary injunction, the court ordered the Coast Guard to conduct a public hearing and determine whether an EIS would be required. The court further ruled that the Coast Guard's granting of the bridge permit without ascertaining the extent of proposed development on Oak Island was arbitrary, capricious, and constituted a violation of NEPA. The Coast Guard has since conducted its public hearing. To date, no Department of the Army permit application has been made for proposed work although defendant, Brown, has been advised of Corps jurisdiction.

#### Federal Agency Jurisdiction

The delineation of "navigable waters of the U. S.", as discussed earlier, in essence, defines the Federal navigation servitude and is applicable to Federal jurisdiction generally (not merely applicable to the Corps of Engineers). No matter which Federal agency or activity may be involved, the assertion of "navigability" ("navigable waters of the U. S.") arises under the U. S. Constitution, or under application of Federal statute.

By virtue of the Commerce Clause of the Federal Constitution, and the clause empowering Congress to make all laws necessary to carry into execution the Federal judicial power in admiralty and maritime matters, "navigable waters of the U. S." are under the control of Congress, which has the power to legislate with respect thereto. It is for Congress to determine when and to what extent its power shall be brought into activity. It may be exercised through general or special laws, by Congressional enactments, or by delegation of authority.

Thus, Congress has power which is paramount to that of the states to make improvements in the navigable streams of the U. S. and for this purpose to determine and declare what waters are navigable. The Federal government also has the power to regulate the use of, and navigation on, navigable waters.

The above presents the basis upon which Federal jurisdiction in "navigable waters of the U. S." is established. The basic definition

or jurisdictional concept of "navigable waters of the U. S." remains consistent, irrespective of which department or office of the Federal government may be delegated particular responsibility. For instance, the safety, inspection, and marine working functions of the U. S. Coast Guard embrace vessel traffic within "navigable waters of the U. S." as previously defined.

With specific reference to agency regulation of construction or work within "navigable waters of the U. S.", other than by the Corps of Engineers, the Department of Transportation Act of 15 October 1966 (PL 89-670) transferred to and vested in the Secretary of Transportation, certain functions, powers, and duties previously vested in the Secretary of the Army and the Chief of Engineers. By delegation of authority from the Secretary of Transportation, the Commandant, U. S. Coast Guard, has been authorized to exercise certain of these functions, powers, and duties relating to the location and clearances of bridges and causeways in the "navigable waters of the U. S."

An additional agency of particular interest concerning work or construction within "navigable waters of the U. S." is the Federal Power Commission. The Federal Power Act, Title 16, United States Code, Sections 791 et. seq., contemplates the construction and operation of water power projects on navigable waters in pursuance of licenses granted by the Federal Power Commission. The statute was enacted to develop, conserve, and utilize the navigation and water power resources of the nation. The act provides for the improvement of navigation, development of water power, and use of public lands to make progress with the development of the water power resources of the nation.

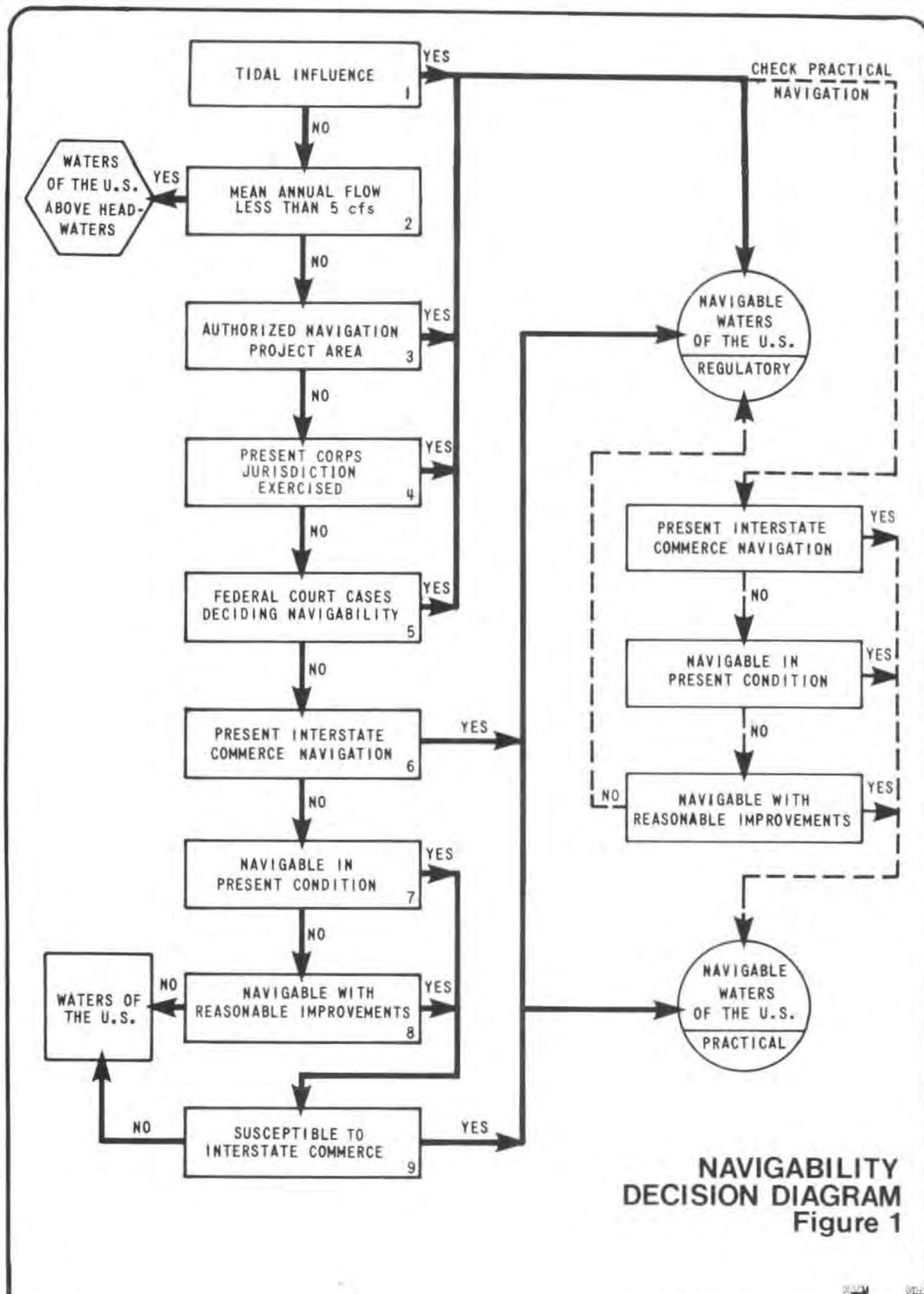
## SECTION 6 - NAVIGATION OBSTRUCTIONS AND CLASSIFICATIONS

### Navigation Classification Procedures

As noted in Section 5, definition of navigability is not subject to a single precise formula which applies to every circumstance. Many factors including stream physical characteristics (depth, width, flow, slope, etc.), presence of obstructions, court decisions, authorized navigation projects, potential for reasonable improvements, and susceptibility of a stream to interstate commerce activities, play a role in the decision-making process for classifying waterbodies in the Charleston District. In an effort to make the analytical process concerning stream classifications as systematic as possible, a "Navigability Decision Diagram" has been developed and is presented in Figure 1. This diagram has been utilized as a guide in assessing the various navigation classifications for streams in the Charleston District. The Summary Report includes a detailed presentation on the methodology and approaches used in the analysis; however, the following presents a brief synopsis of the techniques as indicated in Figure 1.

Tidal Influenced Areas - Tidal areas (see Item 1 in Figure 1) which are affected by mean high water are classified "navigable waters of the U. S." according to various legislative and judicial actions. The "navigable waters of the U. S." are subject to regulatory jurisdiction by the Corps of Engineers and other agencies. Even though all tidal areas are so classified and subject to regulatory procedures, many are not practically navigable based upon past and/or present requirements for vessels. Figure 1 shows that some additional "check" analyses are necessary to distinguish those tidal waters which are actually capable of practical navigation. Investigation of the tidal areas is beyond the scope of this study; however, drawings showing the "plan" of major rivers to their mouth, often tidal influenced, are presented in the interest of continuity.

Waters of the U. S. Above Headwaters - Section 404 of PL 92-500 considers the headwaters of waterbodies to be the point at which the mean annual flow is five cfs. Waterbodies or portions of waterbodies



**NAVIGABILITY  
DECISION DIAGRAM  
Figure 1**

located upstream of the headwaters are nationally permitted by law and will not require an individual application for dredge or fill discharge permits provided the proposed work will meet certain conditions.

However, these waters are classified "waters of the U. S." and are within Corps of Engineers jurisdiction as applicable to Section 404. Item 2 in Figure 1 shows the testing procedure for the five cfs point.

Authorized Navigation Project Area - Any streams which currently have authorized Federal projects to aid navigation are classified as "navigable waters of the U. S." (Item 3 in Figure 1). Many of the projects thus authorized were based upon conditions which are not currently applicable (for example, use of pole boats or steamboats for justifying the navigation benefits). Consequently, many of the streams having older authorized projects will not allow passage of present-day commercial navigation vessels without some additional improvement. Thus, some portions of the authorized project areas are not considered practical for navigation. Figure 1 shows the additional "check" procedure which has been followed to assess the practical limit of "navigable waters of the U. S."

Present Corps Jurisdiction Exercised - The Corps of Engineers is exercising jurisdiction on several non-tidal waterbodies which are not covered by authorized projects (Item 4 in Figure 1). (22) Determinations previously made on these waterbodies under the River and Harbor Act indicated use for interstate commerce and hence the current classification as "navigable waters of the U. S." Some of these streams are not currently navigable by present-day commercial vessels and thus have practical limits. Figure 1 shows the "check" used to assess the practical limits of "navigable waters of the U. S."

Federal Court Decisions - As noted in Section 5, Federal case law is the predominant indicator which is to be used for establishing Federal jurisdiction over waterbodies in the Charleston District (Item 5 in Figure 1). Several decisions have been rendered which classify certain streams in the district as "navigable waters of the U. S." However, some of these court decisions have been arrived at under different circumstances or without the benefit of the data developed as a part of this investigation. Therefore, even though some of the

streams are classified by judicial review as "navigable waters of the U. S.", they are not practical for navigation with present-day vessels. Figure 1 shows the steps necessary to "check" those portions of the "navigable waters of the U. S." which are capable of practical navigation.

Present Interstate Commerce Navigation - Any rivers currently involved in interstate commerce activities are classified as "navigable waters of the U. S." from both the regulatory and practical standpoint (see Item 6 in Figure 1).

Waters of the U. S. Below Headwaters - For those streams, or portions of streams, not subject to authorized projects, court cases, or present interstate commerce navigation, several additional tests for determining navigability are required (Items 7 and 8 in Figure 1). If the waterbody is not judged to be navigable in its present state or with reasonable improvements, then it is beyond the limit of "navigable waters of the U. S." and is termed "waters of the U. S." over the remaining length. These "waters of the U. S." (as well as the "navigable waters of the U. S.") up to the headwaters (five cfs points) of the streams are subject to jurisdiction under Section 404 of PL 92-500. A general or individual permit is required for discharge of dredged or fill material below the headwaters (five cfs point) of "waters of the U. S." Discharges above the headwaters are discussed in the previous subsection, "Waters of the U. S. Above Headwaters."

Interstate Commerce - Some non-tidal waters in the district are not now subject to authorized projects, court decisions, or interstate commerce navigation, but can be navigated under present or reasonably improved conditions. These streams may be considered for classification as "navigable waters of the U. S." if they are susceptible to interstate commerce activities (past, present, or future). A combined judgment considering both "reasonable improvement" factors (Item 8 in Figure 1) and "interstate commerce" factors (Item 9 in Figure 1) has often been utilized in arriving at the conclusions and recommendations concerning navigability of waterbodies in the Charleston District. The Summary Report provides further details on these factors.

### Navigation Classification Categories

This study classifies streams into several different categories, each of which is discussed subsequently:

1. Present "navigable waters of the U. S." (by regulatory procedures).
2. Historically navigable waters (based on literature review).
3. Recommended "navigable waters of the U. S." (based upon data developed as a part of this investigation).
4. Recommended waters for practical navigation (within "navigable waters of the U. S.>").
5. Headwaters for all waterbodies (five cfs points).

The first four navigation classifications are displayed on the plates presented later in this report. The headwater limits are summarized in Appendix A.

### Present Navigable Waters of the U. S.

Currently, the Edisto River is classified as "navigable waters of the U. S." from its mouth at St. Helena Sound to Guignards Landing (R.M. 154; river mileage, as explained in the Summary Report, is continued from Edisto River to South Fork). (3) This classification includes the entire length of the Edisto River, from the mouth to R.M. 113, as well as 41 miles of the South Fork Edisto River; and is based on the length of river authorized for Federal navigational improvements (see Section 3). The North Fork Edisto River is classified as "navigable waters of the U. S." from its mouth to R.M. 27.2 near Orangeburg (river mileage on North Fork begins at 0.0). Four Hole Swamp is presently classified as "navigable waters of the U. S." from its mouth to R.M. 5.0. Both the North Fork Edisto and Four Hole Swamp classifications are based on Corps of Engineers' information indicating potential for navigability. (22) In addition, all rivers, creeks, streams, and parts of streams subject to tidal influence are presently classified as "navigable waters of the U. S." based on the legal and administrative definition of the term "navigable waters of the U. S." (see Section 5). No streams in the basin, other than the Edisto River, are partially

tidally influenced and meet "navigable waters of the U. S." criteria in the non-tidal portions. Plate 03-4 presents a map location of limits.

#### Historically Navigable Waters

As discussed in Section 4, historically the Edisto and South Fork Edisto Rivers were navigable to about R.M. 173. The North Fork Edisto River was navigable as far as R.M. 50. Four Hole Swamp has been estimated to have been navigable for approximately 5 miles. Section 4 presents additional tidally influenced streams that may have been historically navigable. Plate 03-4 presents map location of limits on the non-tidal streams.

#### Recommended Navigable Waters of the U. S.

"Navigable waters of the U. S.", once classified in the past, cannot be declassified. Thus, the recommended limit of "navigable waters of the U. S." (for regulatory purposes) on the Edisto and South Fork Edisto Rivers is at R.M. 154 because that is the limit of an authorized Federal navigation project. The recommended limit of "navigable waters of the U. S." on both the North Fork Edisto River and Four Hole Swamp extend from their mouths upstream for 27.2 miles and 5.0 miles, respectively. Both the North Fork Edisto and Four Hole Swamp recommendations are based on Corps of Engineers' information indicating potential for navigability. (22) Plate 03-4 presents the map location for these limits.

#### Recommended Practical Navigable Waters of the U. S.

The recommended limit of "practical navigable waters of the U. S." on the Edisto River is at R.M. 113. The recommended limit of "practical navigable waters of the U. S." on the South Fork Edisto River is at U. S. 321 (R.M. 136.6). Field investigation and computational analysis of channel dimensions at all bridges crossing the Edisto and South Fork Edisto Rivers between the limit of tidal influence (R.M. 37) and the recommended limit of "practical navigable waters of the U. S." revealed approximate mean water depth of at least 7 feet and channel width

of at least 50 feet. The channel was slightly less than 7 feet deep at three bridges, S. C. Secondary 39 Highway bridge, S. C. 70 Highway bridge, and Seaboard Coast Line Railroad bridge; however, the variance was either small enough to be insignificant, or upstream locations revealed a 7 foot depth, or both. In addition, several locations upstream of U. S. 321 Highway bridge were investigated and all were found to be less than 7 feet deep requiring extensive modifications to make the river navigable.

The recommended limit of "practical navigable waters of the U. S." on the North Fork Edisto is at S. C. Secondary 39 Highway bridge (R.M. 9.8). The recommended limit of "practical navigable waters of the U. S." on Four Hole Swamp is at S. C. Secondary 56 Highway bridge (R.M. 3.5). Field investigation and computational analysis of channel dimensions at all bridges crossing these streams between their mouth and the recommended limit of "practical navigable waters of the U. S." revealed approximate mean water depths of at least 7 feet and channel widths of at least 50 feet. Investigation upstream of these locations indicated depths and widths less than these which would require extensive improvements to make the streams navigable. See Plate 03-4 for map location of limits.

No practical recommendation or investigation of tidally influenced streams or parts of streams has been made. No other streams in the basin are recommended as "practical navigable waters of the U. S."

Plan and profiles of the recommended "practical navigable waters of the U. S." are shown on Plates 03-5 through 03-15. The plan and profile plates show mean water surface as determined from USGS maps, stream bed depth, 50-foot wide navigable channel depth, pier spacing for bridges crossing the river, and vertical clearances at structures. Approximate vertical clearances for overhead utilities are shown later in this Section in Table 4. It is emphasized that all references to elevation are approximate since vertical control was established from USGS contour maps and not field instrument surveys. Water depth and structure vertical clearance measurements are also approximate

due to the accuracy inherent in the field techniques. (See Summary Report for a detailed description of the field procedures and the methodology used to calculate water depth at mean flow.)

#### Obstructions to Navigation

Table 4 presents the vertical clearance to mean water level and mean water slope at all obstructions and the mean discharge of the river at all bridges, located within the recommended "practical navigable waters of the U. S." It is emphasized that mean discharge, slope, and vertical clearance are only approximations based on best available data. Specific procedures for determining these are discussed in the Summary Report. Figures 2 through 44 are photographs of the obstructions starting with the most downstream. These photographs are identified to correspond with the data in Table 4.

#### Waters of the U. S.

"Waters of the U. S." are considered to be all streams beyond the recommended limits of "navigable waters of the U. S." "Waters of the U. S." with more than five cfs mean annual flow require a permit for discharge of dredged or fill material. "Waters of the U. S." with less than five cfs mean annual flow are nationally permitted by law and will not require an individual application for dredge or fill discharge permits provided the proposed work will meet certain conditions.

Appendix A lists all the five cfs flow points located in the Edisto River report area. Each point is located by stream code, stream name, latitude and longitude, and a mileage reference.

Appendix B lists the lakes located in the Edisto River report area which have surface areas between 10 and 1,000 acres. The lake summary identifies the stream basin code, lake name or owner, county location, and where data is available, the surface area and gross storage.

TABLE 4

OBSTRUCTION LISTING FROM TIDAL INFLUENCE LIMIT  
TO RECOMMENDED PRACTICAL LIMIT OF  
NAVIGABLE WATERS OF THE U. S. (2)

<u>Edisto River Mile</u>	<u>Description</u>	<u>Mean Discharge (cfs)</u>	<u>Mean Water Slope (ft/mi)</u>	<u>Approximate Vertical Clearance To Obstruction (ft)</u>
42.8	Utility Line (power)	--	1.0	37.0
49.2	Utility Line (power)	--	1.0	50.0
49.3	U.S. 17A Highway Bridge	2,760	1.0	18.0
50.5, 50.6	Utility Line (power)	--	1.0	40.0
51.2	Utility Line (power)	--	1.0	40.0
57.5	Utility Line (power)	--	1.0	40.0
57.5	Utility Line (power)	--	1.0	20.0
58.5	Utility Line (power)	--	1.0	50.0
59.7	Utility Line (power)	--	1.0	27.5
59.9	S.C. 61 Highway Bridge	2,690	1.0	18.0
72.4	S.C. Secondary 29 Highway Bridge	2,230	1.0	7.0
72.4	Utility Line (power)	--	1.0	39.0
80.1	U.S. 15 Highway Bridge	2,190	1.8	11.0
80.1	Utility Line (power)	--	1.8	43.0
80.4	Utility Line (power)	--	1.8	32.0
80.4	Utility Line (power)	--	1.8	40.0
80.4	Utility Line (power)	--	1.8	35.0
80.4	Utility Line (power)	--	1.8	41.0
80.4	Utility Line (power)	--	1.8	51.0

TABLE 4 (continued)

OBSTRUCTION LISTING FROM TIDAL INFLUENCE LIMIT  
TO RECOMMENDED PRACTICAL LIMIT OF  
NAVIGABLE WATERS OF THE U. S. (2)

<u>Edisto River Mile</u>	<u>Description</u>	<u>Mean Discharge (cfs)</u>	<u>Mean Water Slope (ft/mi)</u>	<u>Approximate Vertical Clearance To Obstruction (ft)</u>
80.4	Utility Line (gas-underground)	--	1.8	-3.0 <sup>1)</sup>
80.6	Utility Line (cooling water- surface)	--	1.8	20.0
81.1	Utility Line (power)	--	1.8	39.0
83.7	I-95 Highway Bridge	2,180	1.8	16.0
86.3	Utility Line (power)	--	1.8	57.0
90.8	Utility Line (power)	--	1.8	38.0
100.1	U.S. 21 Highway Bridge	2,030	1.3	15.0
100.6	Utility Line (power)	--	1.3	30.0
108.1	Utility Line (power)	--	1.3	26.0
108.8, 108.9, 109.1	Utility Line (power)	--	1.3	26.0
109.4	U.S. 78 Highway Bridge	1,940	1.3	14.0
110.4	Utility Line (power)	--	1.8	31.0
112.6	Southern Railroad Bridge	1,901	1.8	1.0

TABLE 4 (continued)

OBSTRUCTION LISTING FROM TIDAL INFLUENCE LIMIT  
TO RECOMMENDED PRACTICAL LIMIT OF  
NAVIGABLE WATERS OF THE U. S. (2)

<u>S. Fork Edisto River Mile</u>	<u>Description</u>	<u>Mean Discharge (cfs)</u>	<u>Mean Water Slope (ft/mi)</u>	<u>Approximate Vertical Clearance To Obstruction (ft)</u>
117.8	Utility Line (power)	--	1.8	30.0
122.5	S.C. Secondary 39-42 Highway Bridge	980	2.8	8.0
122.5	Utility Line (power)	--	2.8	31.0
126.7	Utility Line (power)	--	2.8	42.0
127.2	U.S. 601-301 Highway Bridge	970	2.8	8.0
127.2	Utility Line (gas-underground)	--	2.8	-2.5 <sup>1)</sup>
127.3	Utility Line (power)	--	2.8	30.0
130.9	Seaboard Coast Line Railroad Bridge	920	2.4	8.0
132.9	S.C. 70 Highway Bridge	910	2.4	16.0
136.6	Utility Line (power)	--	2.4	28.0
136.6	U.S. 321 Highway Bridge	850	2.6	11.0
<u>N. Fork Edisto River Mile</u>	<u>Description</u>	<u>Mean Discharge (cfs)</u>	<u>Mean Water Slope (ft/mi)</u>	<u>Vertical Clearance To Obstruction (ft)</u>
3.0	Utility Line (power)	--	2.5	45.0
3.0	S.C. Secondary 63 Highway Bridge	890	2.5	8.0
9.8	Utility Line (power)	--	2.5	25.7
9.8	S.C. Secondary 39 Highway Bridge	860	2.5	8.0

TABLE 4 (continued)

OBSTRUCTION LISTING FROM TIDAL INFLUENCE LIMIT  
TO RECOMMENDED PRACTICAL LIMIT OF  
NAVIGABLE WATERS OF THE U. S. (2)

<u>Four Hole Swamp River Mile</u>	<u>Description</u>	<u>Mean Discharge (cfs)</u>	<u>Mean Water Slope (ft/mi)</u>	<u>Approximate Vertical Clearance To Obstruction (ft)</u>
0.4	Utility Line (power)	--	0.3	28.7
0.4	S.C. Secondary 19 Highway Bridge	650	0.3	11.0
0.5	Utility Line (power)	--	0.3	29.0
3.5	S.C. Secondary 56 Highway Bridge	640	0.3	14.0

---

1) Estimated minimum depth below streambed at time of construction.



FIGURE 2 - UTILITY LINE (R.M. 42.8)



FIGURE 3 - UTILITY LINE (R.M. 49.2)  
(WITH U. S. 17A HIGHWAY BRIDGE)



FIGURE 4 - U. S. 17A HIGHWAY BRIDGE (R.M. 49.3)



FIGURE 5 - UTILITY LINE (R.M. 50.5 AND 50.6)



FIGURE 6 - UTILITY LINE (R.M. 51.2)



FIGURE 7 - TWO UTILITY LINES (R.M. 57.5)



FIGURE 8 - UTILITY LINE (R.M. 58.5)



FIGURE 9 - UTILITY LINE (R.M. 59.7)



FIGURE 10 - S. C. 61 HIGHWAY BRIDGE (R.M. 59.9)



FIGURE 11 - S. C. SECONDARY 29-21 HIGHWAY BRIDGE (R.M. 72.4)



FIGURE 12 - UTILITY LINE (R.M. 72.4)  
(WITH SECONDARY 29-21)



FIGURE 13 - U. S. 15 HIGHWAY BRIDGE (R.M. 80.1)



FIGURE 14 - UTILITY LINE (R.M. 80.1)  
(WITH U. S. 15 HIGHWAY)



FIGURE 15 - FOUR UTILITY LINES (R.M. 80.4)



FIGURE 16 - UTILITY LINE (R.M. 80.6)



FIGURE 17 - UTILITY LINE (R.M. 81.1)



FIGURE 18 - I-95 HIGHWAY BRIDGE (R.M. 83.7)



FIGURE 19 - UTILITY LINE (R.M. 86.3)



FIGURE 20 - UTILITY LINE (R.M. 90.8)

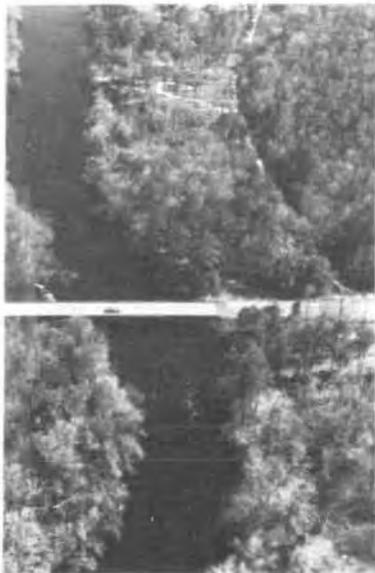


FIGURE 21 - U. S. 21 HIGHWAY BRIDGE (R.M. 100.1)



FIGURE 22 - UTILITY LINE (R.M. 100.6)



FIGURE 23 - UTILITY LINE (R.M. 108.1)



FIGURE 24 - U. S. 78 HIGHWAY BRIDGE AND UTILITY LINE  
(R.M. 108.8, 108.9, 109.1 AND 109.4)



FIGURE 25 - UTILITY LINE (R.M. 110.4)



FIGURE 26 - SOUTHERN RAILROAD BRIDGE (R.M. 112.6)



FIGURE 27 - UTILITY LINE (R.M. 117.8)



FIGURE 28 - S. C. SECONDARY 39-42 HIGHWAY BRIDGE (R.M. 122.5)



FIGURE 29 - UTILITY LINE (R.M. 122.5)  
(WITH SECONDARY 39-42)



FIGURE 30 - UTILITY LINE (R.M. 126.7)



FIGURE 31 - U. S. 601-301 HIGHWAY BRIDGE, EASTBOUND (R.M. 127.2)



FIGURE 32 - U. S. 601-301 HIGHWAY BRIDGE (R.M. 127.2)



FIGURE 33 - UTILITY LINE (R.M. 127.3)



FIGURE 34 - SEABOARD COAST LINE RAILROAD BRIDGE (R.M. 130.9)



FIGURE 35 - S. C. 70 HIGHWAY BRIDGE (R.M. 132.9)

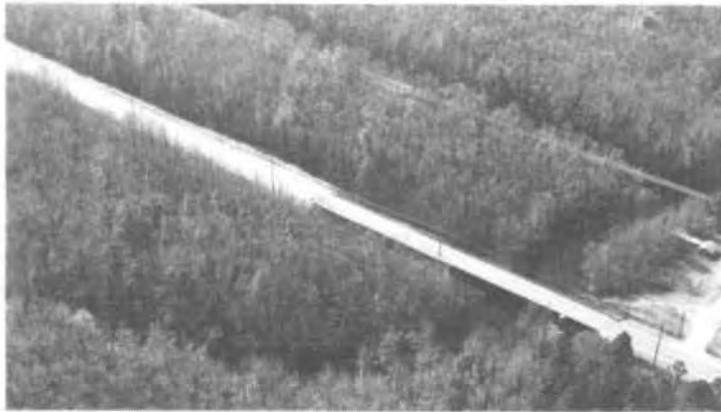


FIGURE 36 - UTILITY LINE (R.M. 136.6)  
(WITH U. S. 321)



FIGURE 37 - U. S. 321 HIGHWAY BRIDGE (R.M. 136.6)



FIGURE 38 - UTILITY LINE (R.M. 0.4)  
(WITH SECONDARY 19 AND UTILITY)

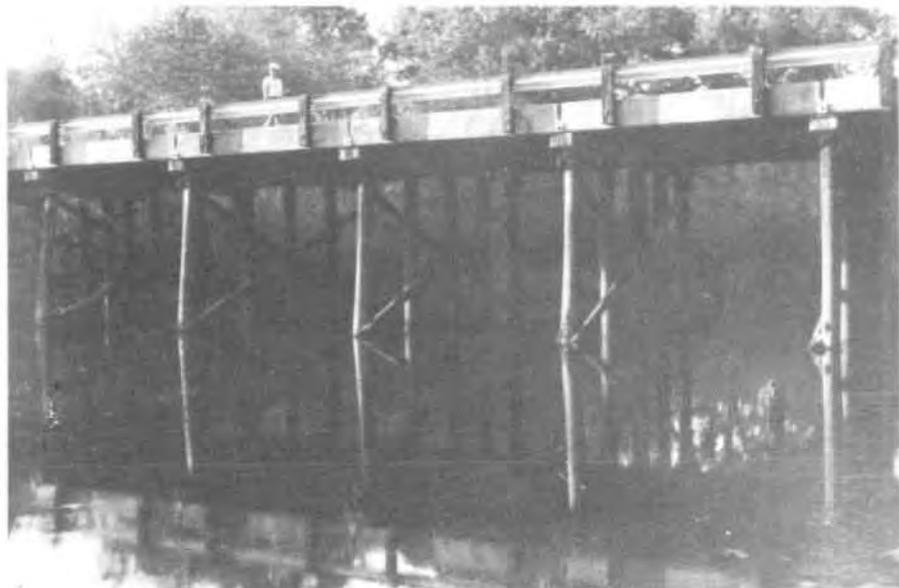


FIGURE 39 - S. C. SECONDARY 19 HIGHWAY BRIDGE (R.M. 0.4)



FIGURE 40 - UTILITY LINE (R.M. 0.5)

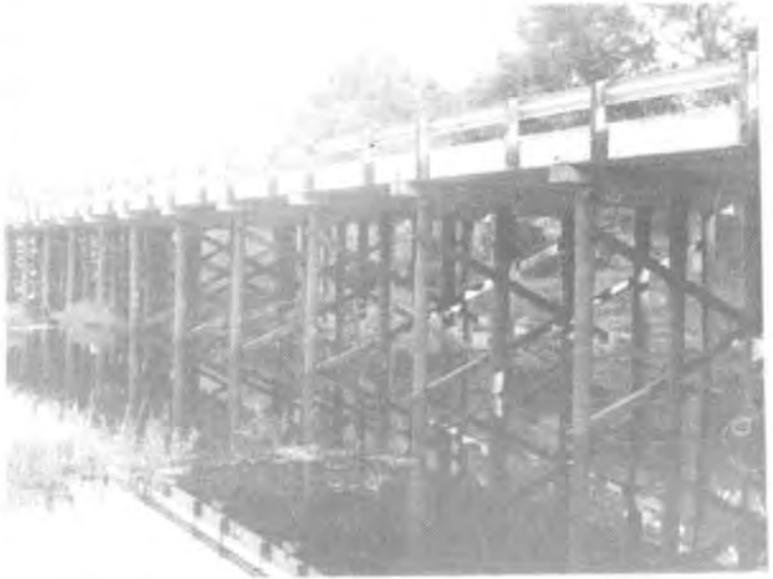


FIGURE 41 - S. C. SECONDARY 56 HIGHWAY BRIDGE (R.M. 3.5)



FIGURE 42 - UTILITY LINE (R.M. 3.0)  
(AND SECONDARY 63)



FIGURE 43 - S. C. SECONDARY 63 HIGHWAY BRIDGE (R.M. 3.0)



FIGURE 44 - UTILITY LINE (R.M. 9.8)  
(AND SECONDARY 39)



FIGURE 45 - S. C. SECONDARY 39 HIGHWAY BRIDGE (R.M. 9.8)

## SECTION 7 - CONCLUSIONS AND RECOMMENDATIONS

Five classifications of navigation on streams in the Edisto River report area have been determined and are presented below. The first two are classifications developed from historical evidence and current Federal stream classifications. Classification 3 is based on field measurements, observations, and data analysis for the river. Classification 4 is based on review of all previously determined limits with a recommendation of the most upstream locations with supporting evidence of navigability. The fifth classification accounts for all streams not otherwise classified and was determined based on the drainage area and hydrological aspects of the stream.

1. Presently the Edisto River is classified as "navigable waters of the U. S." between its mouth at St. Helena Sound and Guignards Landing (R.M. 154). This classification includes 41 miles of the South Fork Edisto River. The North Fork Edisto River is classified from its mouth to Orangeburg (R.M. 27.2). Four Hole Swamp is presently classified as "navigable waters of the U. S." from its mouth to R.M. 5.0. All tidally influenced streams or parts of streams are classified as "navigable waters of the U. S."
2. Historically, the Edisto and South Fork Edisto Rivers were navigable to about R.M. 173. The North Fork Edisto River was navigable as far as R.M. 50. Four Hole Swamp has been estimated to have been navigable for approximately 5 miles.
3. The recommended practical limit of navigation on the Edisto and South Fork Edisto Rivers is at U. S. 321 (R.M. 136.6). The recommended practical limit of navigation on the North Fork Edisto River is at S. C. Secondary 39 (R.M. 9.8). The recommended practical limit of navigation on Four Hole Swamp is at S. C. Secondary 56 (R.M. 3.5). No recommendation of practical limits for tidally influenced streams or parts of streams has been made.

4. Since an authorized project establishes "navigable waters of the U. S." on the Edisto River between its mouth and Guignards Landing (R.M. 154), and this cannot be declassified, the recommended limit for classifying "navigable waters of the U. S." is at R.M. 154. This includes 41 miles of the South Fork Edisto River. It is also recommended based on Corps of Engineer information that North Fork Edisto River and Four Hole Swamp be classified "navigable waters of the U. S." to R.M. 27.2 and R.M. 5.0, respectively. It is recommended that all tidally influenced streams or parts of streams be classified as "navigable waters of the U. S."
5. All streams not recommended for classification as "navigable waters of the U. S." are recommended for classification as "waters of the U. S." throughout their entire length.

## BIBLIOGRAPHY

### Cited References

1. Water Resources Data for South Carolina 1975, Water Data Report 75-1, U. S. Geological Survey, 1976.
2. Summary Report, Navigability Study, U. S. Army Corps of Engineers, Charleston District, by Stanley Consultants, 1977.
3. Project Maps Charleston District 1975, U. S. Army Corps of Engineers, Office of the District Engineer, Charleston, South Carolina, 1975.
4. South Carolina Streamflow Characteristics Low-Flow Frequency and Flow Duration, U. S. Geological Survey, Raleigh, North Carolina, 1967.
5. Extract Report of the Charleston, S. C., District, Annual Report of the Chief of Engineers on Civil Works Activities, U. S. Department of the Army, USGPO, Washington, D. C., 1974, pp. 7-16.
6. U. S. Geological Survey, 1:24,000 scale quadrangle maps.
7. Salley, A. S., The History of Orangeburg County, South Carolina, Regional Publishing Co., Baltimore, reprint ed., 1969, p. 60.
8. Meriwether, Robert L., The Expansion of South Carolina 1729-1765, Southern Publishers, Kingsport, 1940, p. 49.
9. McCord, David J., The Statutes at Large of South Carolina, A. S. Johnston, Columbia, 1840, Vol. VII, p. 475.
10. Ibid., p. 487.
11. Ibid., pp. 538, 545.
12. Kohn, David and Glenn, Bess eds., Internal Improvement in South Carolina 1817-1828, "Report of the Civil and Military Engineer of South Carolina (1818)", USGPO, Washington, D. C., p. A14.
13. Ibid., p. A15.
14. Ibid., p. 13.
15. Ibid., p. 21.
16. Phillips, Ulrich B., A History of Transportation in the Eastern Cotton Belt to 1860, Columbia University Press, New York, 1908, p. 91.

17. Mills, Robert, Statistics of South Carolina 1826, Reprint Co., Spartanburg, reprint ed., 1972, pp. 159, 362.
18. S. C. State Board of Agriculture, South Carolina: Resources and Population, 1883, Reprint Co., Spartanburg, reprint ed., 1971, p. 72.
19. U. S. Congress, House, Edisto River, South Carolina, H. Doc. No. 173, 58th Cong., 2d Sess., 1903, pp. 2-3.
20. U. S. War Department, Annual Report of the Chief of Engineers, U. S. Army, 1938, Pt. 1, p. 573.
21. U. S. Department of the Army, Waterborne Commerce of the United States, 1975, Pt. 1, Waterways and Harbors: Atlantic Coast, p. 124.
22. Incomplete List of Navigable Waters, RCS ENG CW-ON(OT), U. S. Army Corps of Engineers, Charleston District, Charleston, South Carolina, 1965.
23. U. S. Department of the Army, Annual Report of the Chief of Engineers on Civil Works Activities, 1974, Vol. 11, pp. 7-16, Table 7-C.
24. Legal Documentation for Navigability Study, U. S. Army Corps of Engineers, Charleston District, Charleston, South Carolina, 1977.

#### Other Background Information

Clark, Thomas D., ed., South Carolina: The Grand Tour 1780-1865, USC Press, Columbia, 1973.

Glover, Baulah, Narratives of Colleton County: The Land Lying Between the Edisto and Combahee Rivers, np., 1963, ed.

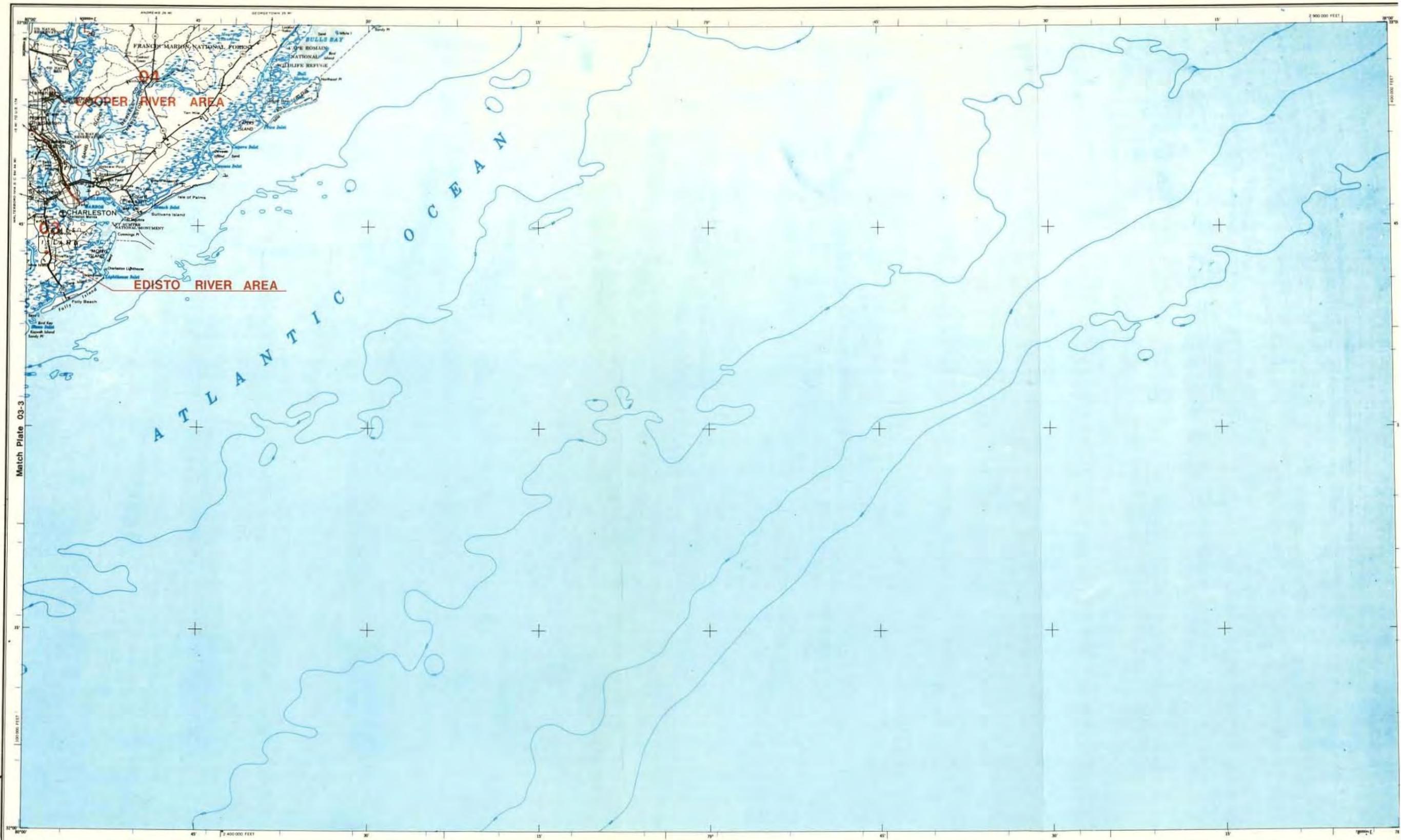
Journal of the Proceedings of the Commercial Convention of the Southern and Western States, held in the City of Charleston, commencing on 10 April 1854, Charleston: Walker and Evans, 1854.

Land Jno., E., Charleston: Her Trade, Commerce Industries and Advantages 1883-4, Land, Charleston, 1884.

S. C. Historical Records Survey, WPA, Inventory of the State Archives of South Carolina, See for Colleton, Charleston, Bamberg, Dorchester, and Lexington Counties, S. C. Historical Records Survey, Columbia, 1939-1941.

S. C. Water Resources Commission, A Reconnaissance Survey in the South Carolina Coastal Plain for consideration as a part of the National Wild and Scenic River System, S. C. Water Resources Commission, Columbia, 1971.

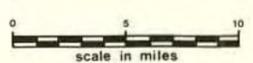
Writers' Program, WPA, The Intracoastal Waterway: Norfolk to Key West,  
USGPO, Washington, 1937.



Match Plate 03-3

<p><b>UNPUBLISHED PLACES</b></p> <p>NEW ORLEANS CHARLOTTE CHARLESTON Georgetown Spartanburg</p>	<p><b>ROADS</b></p> <p>Primary, all weather, hard surface Secondary, all weather, hard surface Light duty, all weather, improved surface Fair to no weather, unimproved surface Dirt Gravel Road markers Interstate, U.S. State Power line Landmark School, Church, Other, etc. Landmark Landing area Ship or vessel Barge anchorage</p>	<p><b>LEGEND:</b></p> <p>(N) PRESENT LIMIT OF NAVIGABLE WATERS OF THE U.S. (H) HISTORIC LIMIT OF NAVIGATION (P) PRACTICAL LIMIT OF NAVIGATION (RECOMMENDED) (R) LIMIT OF NAVIGABLE WATERS OF THE U.S. (RECOMMENDED) RIVER MILE</p>
---	--	--

USGS BASE MAP  
JAMES ISLAND, S.C.  
1969  
NI 17-12

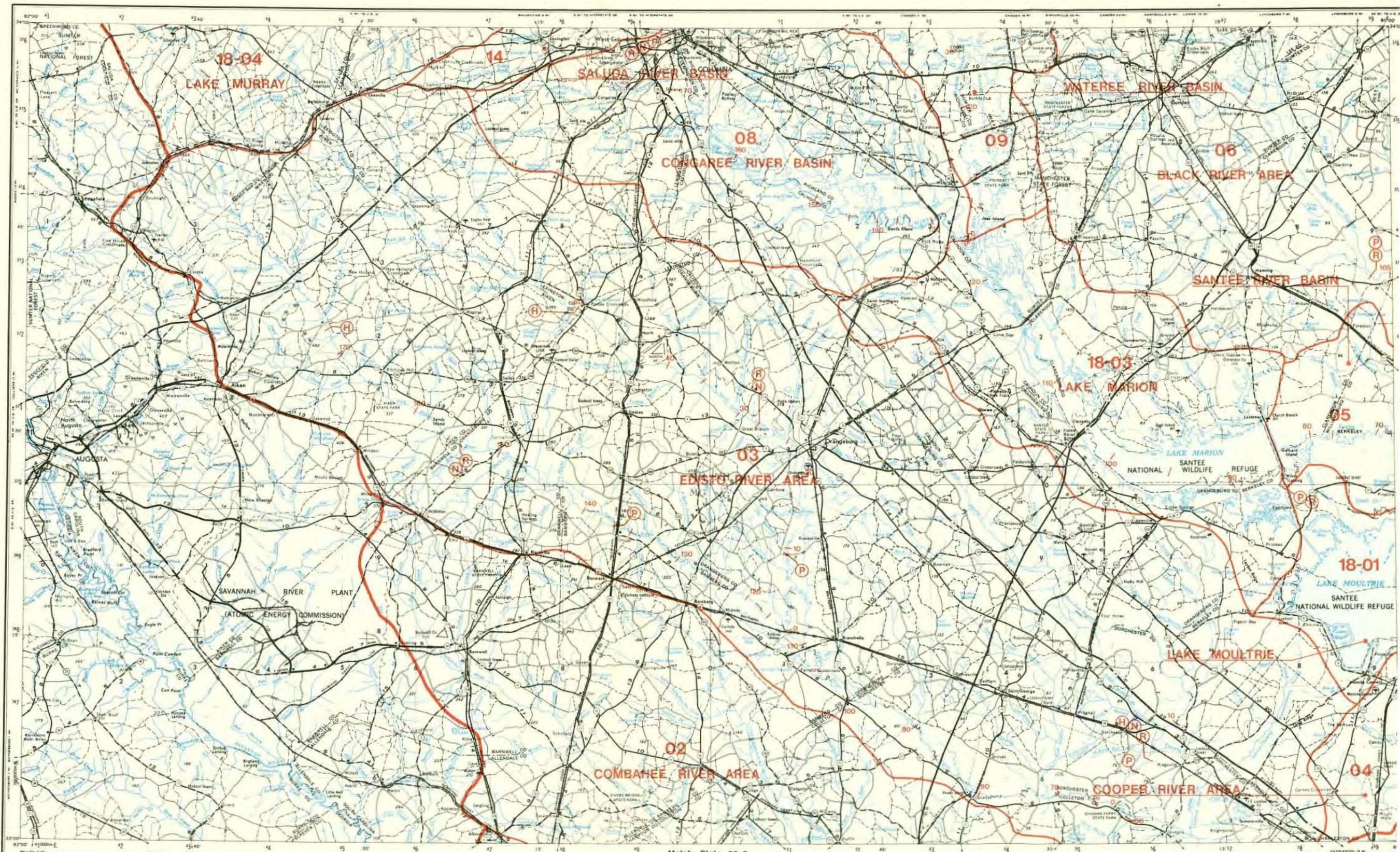


U.S. ARMY CORPS OF ENGINEERS  
CHARLESTON DISTRICT  
Charleston, South Carolina  
STANLEY CONSULTANTS

SIGNIFICANT FEATURES  
EDISTO RIVER AREA  
Report No. 03,04  
NAVIGABILITY STUDY  
Plate 03-2

1977





**POPULATED PLACES**

Over 100,000	100,000 - 250,000	25,000 - 100,000	10,000 - 25,000	5,000 - 10,000	Under 5,000
--------------	-------------------	------------------	-----------------	----------------	-------------

**NEW ORLEANS CHARLOTTE CHARLESTON**

100,000 - 250,000	25,000 - 100,000	10,000 - 25,000	5,000 - 10,000	Under 5,000
-------------------	------------------	-----------------	----------------	-------------

**ROADS**

Primary, all weather, hard surface	Secondary, all weather, hard surface	Light duty, all weather, improved surface	Foot or dirt road, unimproved surface
------------------------------------	--------------------------------------	---	---------------------------------------

**RAILROADS**

Single track	Double track	Interlocking	Passing siding
--------------	--------------	--------------	----------------

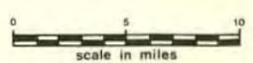
**POWER LINES**

High voltage	Medium voltage	Low voltage
--------------	----------------	-------------

**WATER**

Open water	Swamp	Marsh	Shoals
------------	-------	-------	--------

USGS BASE MAP  
 AUGUSTA, GA., S.C.  
 1957, Revised 1969  
 NI 17-8



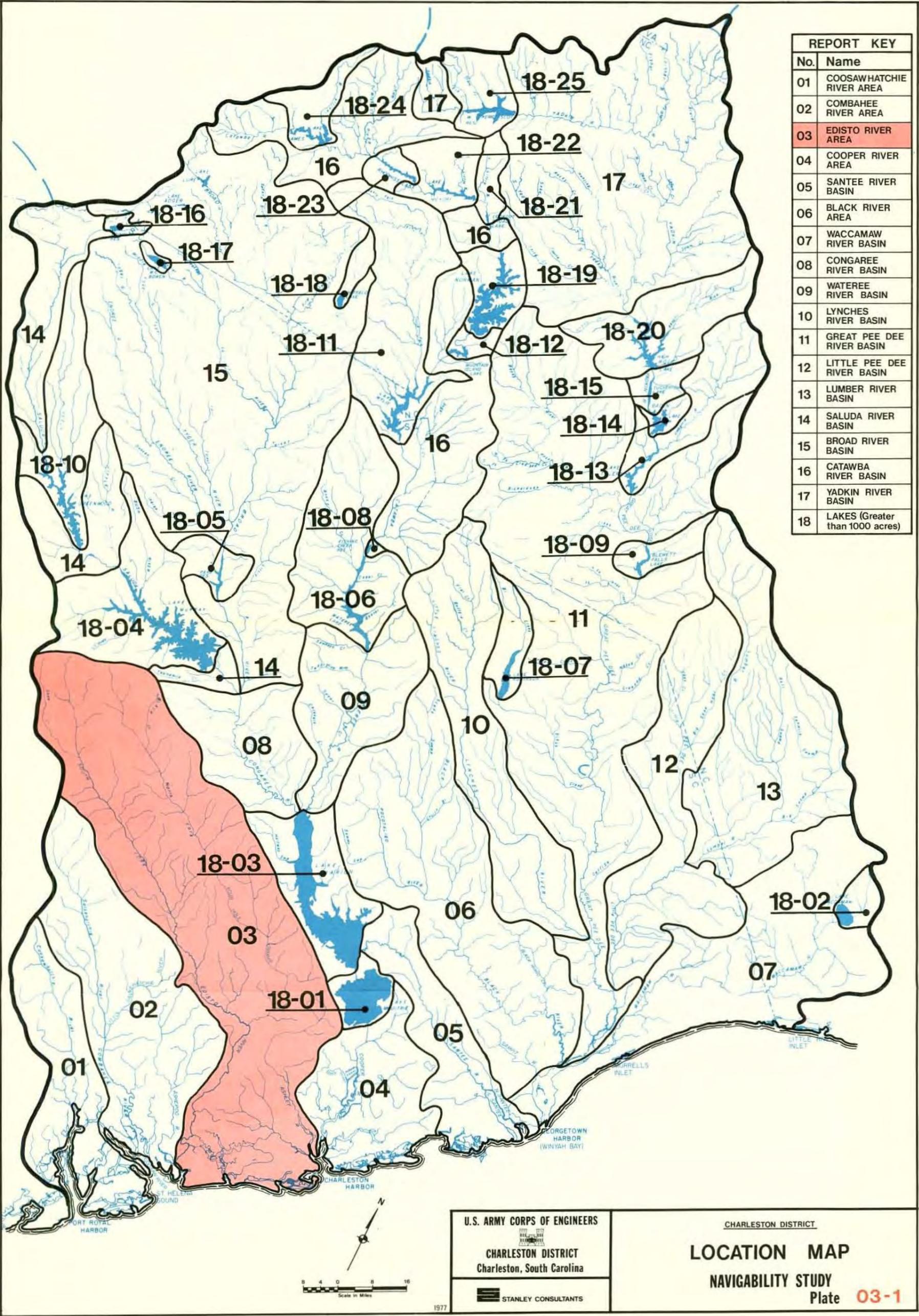
- LEGEND:**
- (N) PRESENT LIMIT OF NAVIGABLE WATERS OF THE U.S.
  - (H) HISTORIC LIMIT OF NAVIGATION
  - (P) PRACTICAL LIMIT OF NAVIGATION (RECOMMENDED)
  - (R) LIMIT OF NAVIGABLE WATERS OF THE U.S. (RECOMMENDED)
  - ↔ RIVER MILE



U.S. ARMY CORPS OF ENGINEERS  
 CHARLESTON DISTRICT  
 Charleston, South Carolina  
 STANLEY CONSULTANTS

**SIGNIFICANT FEATURES**  
 EDISTO RIVER AREA  
 Report No. 01, 02, 03, 04, 05, 06, 08, 09, 14, 18  
 NAVIGABILITY STUDY  
 Plate 03-4

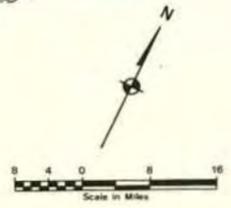
1977

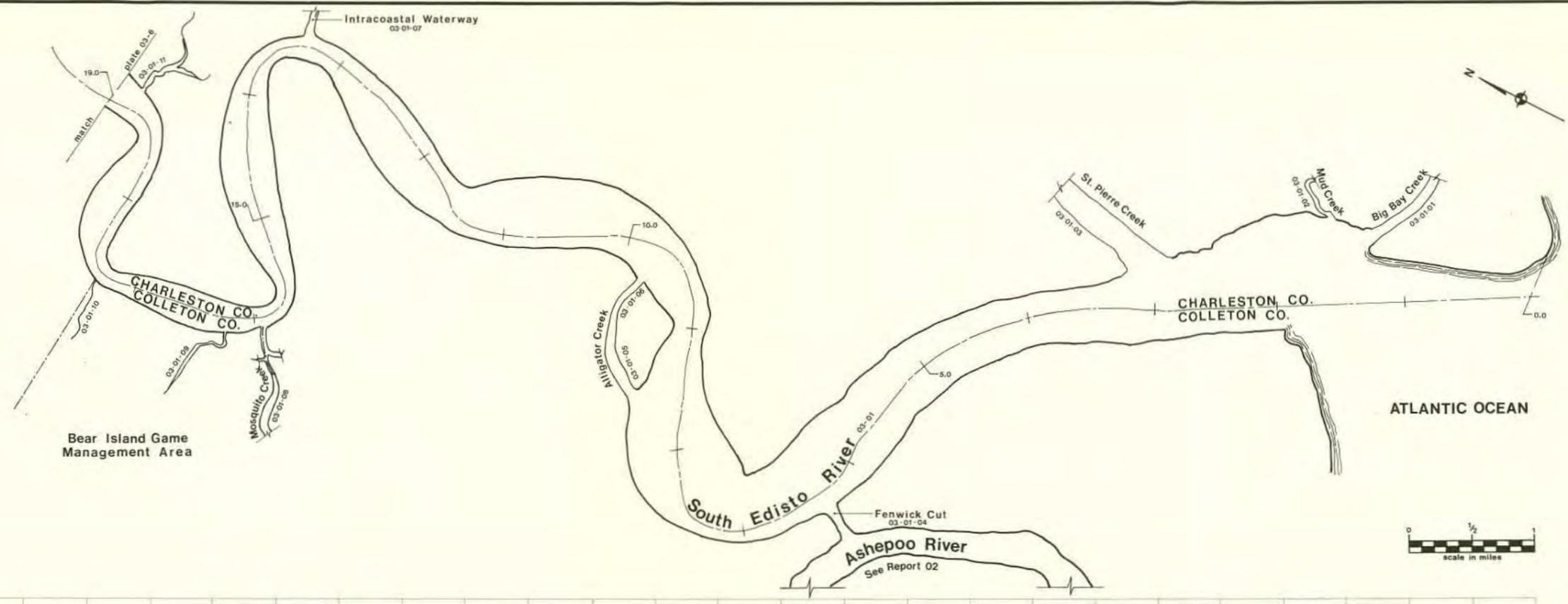


REPORT KEY	
No.	Name
01	COOSAWHATCHIE RIVER AREA
02	COMBAHEE RIVER AREA
03	EDISTO RIVER AREA
04	COOPER RIVER AREA
05	SANTEE RIVER BASIN
06	BLACK RIVER AREA
07	WACCAMAW RIVER BASIN
08	CONGAREE RIVER BASIN
09	WATEREE RIVER BASIN
10	LYNCHEE RIVER BASIN
11	GREAT PEE DEE RIVER BASIN
12	LITTLE PEE DEE RIVER BASIN
13	LUMBER RIVER BASIN
14	SALUDA RIVER BASIN
15	BROAD RIVER BASIN
16	CATAWBA RIVER BASIN
17	YADKIN RIVER BASIN
18	LAKES (Greater than 1000 acres)

U.S. ARMY CORPS OF ENGINEERS  
 CHARLESTON DISTRICT  
 Charleston, South Carolina  
 STANLEY CONSULTANTS

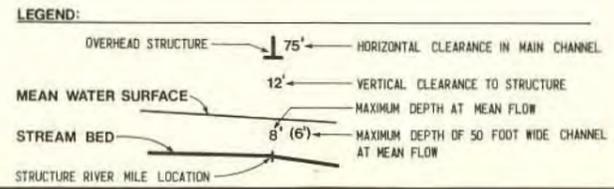
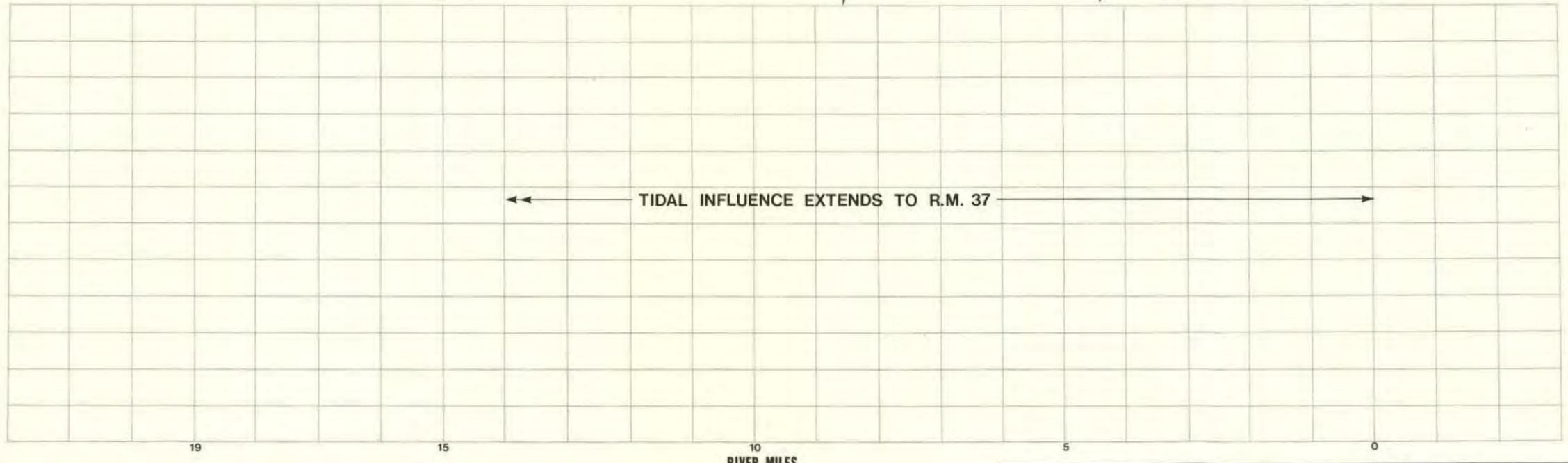
CHARLESTON DISTRICT  
**LOCATION MAP**  
 NAVIGABILITY STUDY  
 Plate **03-1**





ELEVATION FEET ABOVE MSL

ELEVATION FEET ABOVE MSL

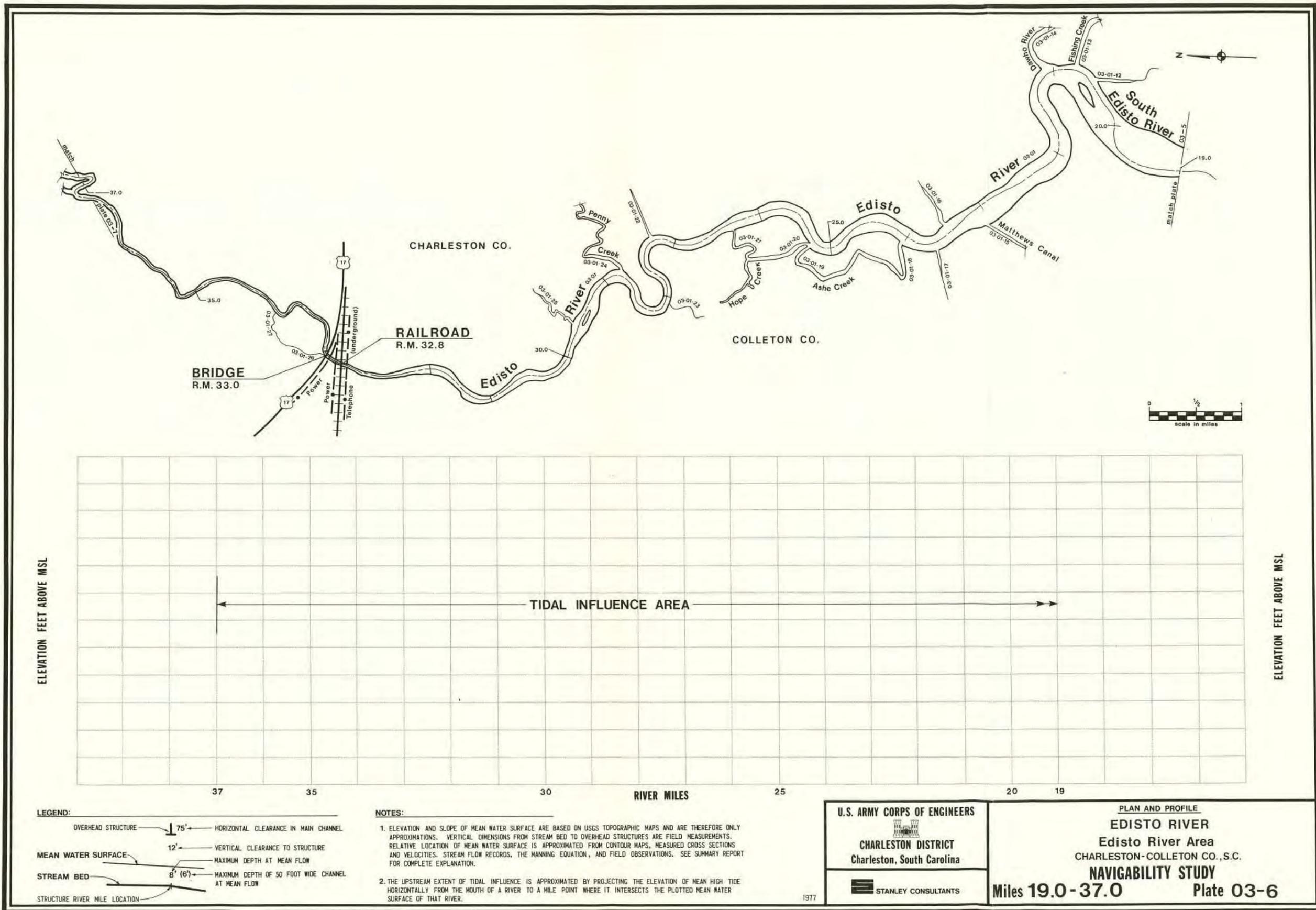


**NOTES:**

- ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES, STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.
- THE UPSTREAM EXTENT OF TIDAL INFLUENCE IS APPROXIMATED BY PROJECTING THE ELEVATION OF MEAN HIGH TIDE HORIZONTALLY FROM THE MOUTH OF A RIVER TO A MILE POINT WHERE IT INTERSECTS THE PLOTTED MEAN WATER SURFACE OF THAT RIVER.

U.S. ARMY CORPS OF ENGINEERS  
 CHARLESTON DISTRICT  
 Charleston, South Carolina  
 STANLEY CONSULTANTS

PLAN AND PROFILE  
**EDISTO RIVER**  
 Edisto River Area  
 CHARLESTON-COLLETON CO., S.C.  
**NAVIGABILITY STUDY**  
 Miles 0.0-19.0 Plate 03-5



ELEVATION FEET ABOVE MSL

ELEVATION FEET ABOVE MSL

37

35

30

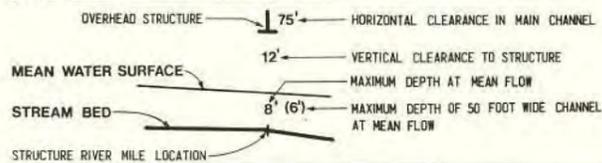
RIVER MILES

25

20

19

**LEGEND:**



**NOTES:**

- ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES. STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.
- THE UPSTREAM EXTENT OF TIDAL INFLUENCE IS APPROXIMATED BY PROJECTING THE ELEVATION OF MEAN HIGH TIDE HORIZONTALLY FROM THE MOUTH OF A RIVER TO A MILE POINT WHERE IT INTERSECTS THE PLOTTED MEAN WATER SURFACE OF THAT RIVER.

U.S. ARMY CORPS OF ENGINEERS

CHARLESTON DISTRICT  
Charleston, South Carolina

STANLEY CONSULTANTS

PLAN AND PROFILE

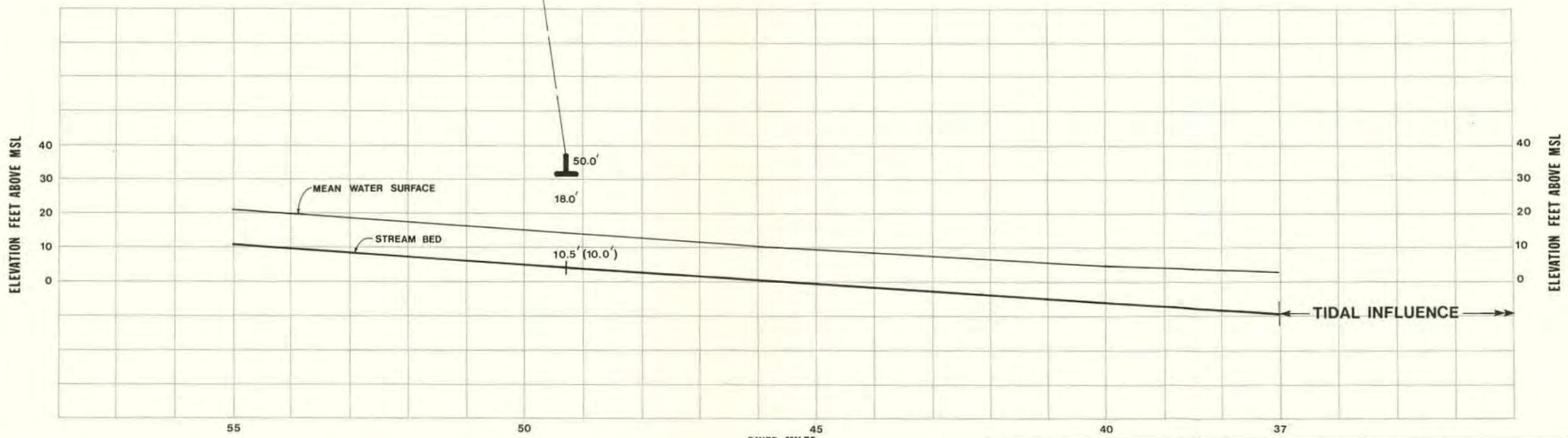
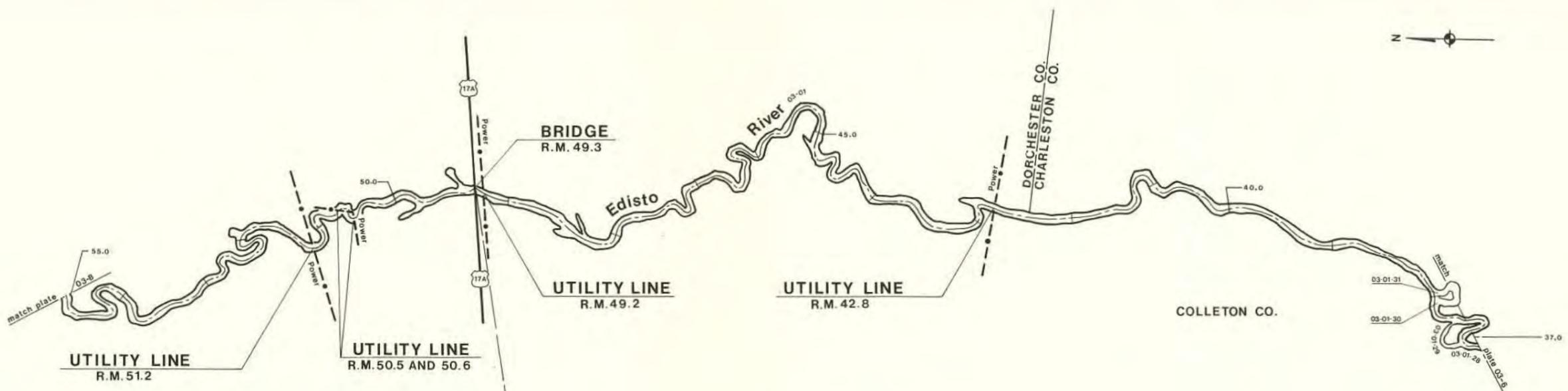
**EDISTO RIVER**  
Edisto River Area  
CHARLESTON-COLLETON CO., S.C.

**NAVIGABILITY STUDY**

Miles 19.0-37.0

Plate 03-6

1977



**LEGEND:**

OVERHEAD STRUCTURE — 75' — HORIZONTAL CLEARANCE IN MAIN CHANNEL

MEAN WATER SURFACE — 12' — VERTICAL CLEARANCE TO STRUCTURE

STREAM BED — 8' (6') — MAXIMUM DEPTH AT MEAN FLOW

STRUCTURE RIVER MILE LOCATION — 8' (6') — MAXIMUM DEPTH OF 50 FOOT WIDE CHANNEL AT MEAN FLOW

**NOTES:**

1. ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES. STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.

**U.S. ARMY CORPS OF ENGINEERS**

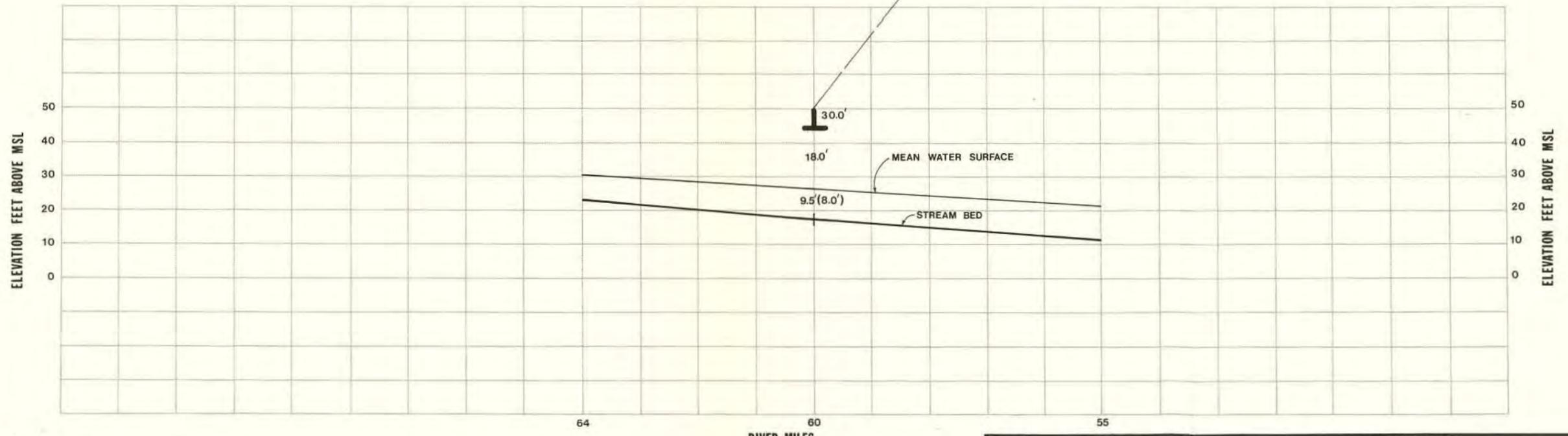
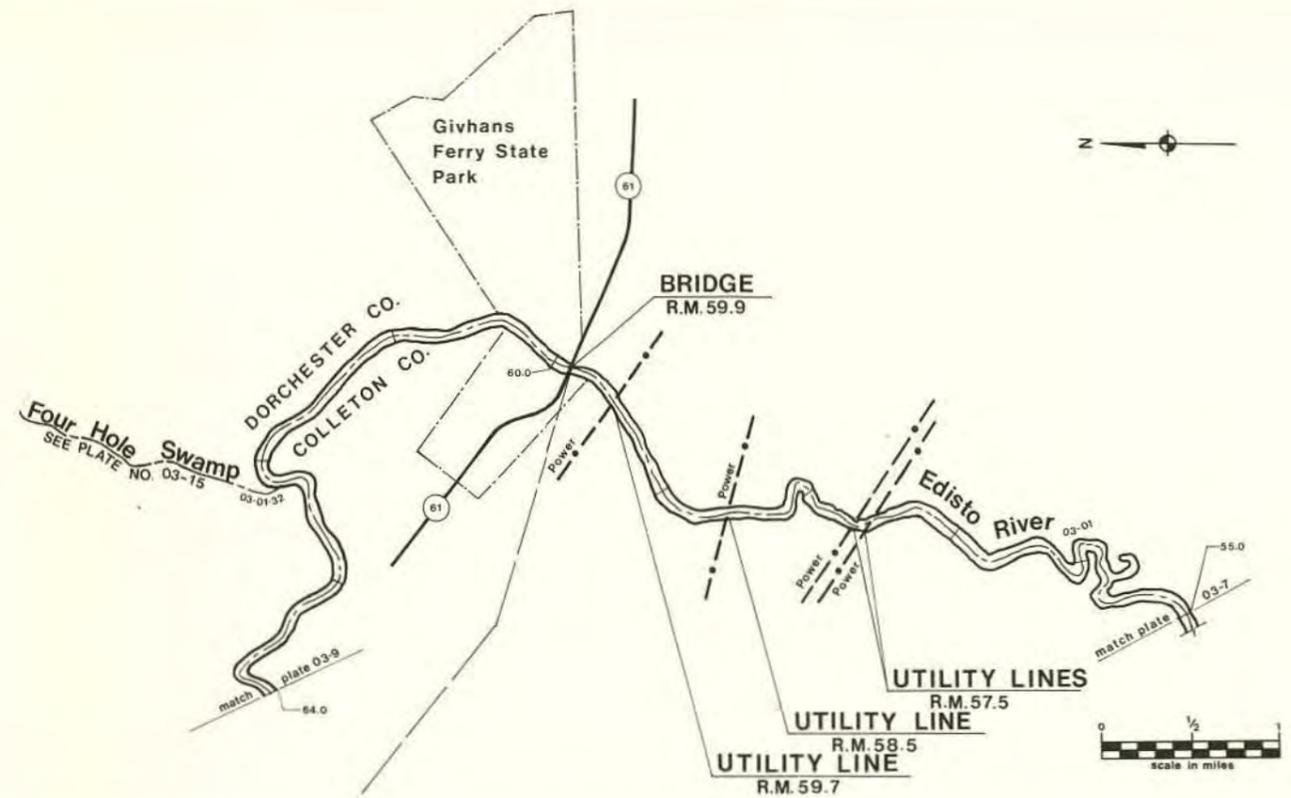
**CHARLESTON DISTRICT**  
Charleston, South Carolina

STANLEY CONSULTANTS

**PLAN AND PROFILE**

**EDISTO RIVER**  
Edisto River Area  
CHARLESTON-COLLETON-DORCHESTER CO., S.C.

**NAVIGABILITY STUDY**  
Miles 37.0-55.0 Plate 03-7



**LEGEND:**

OVERHEAD STRUCTURE — 75' — HORIZONTAL CLEARANCE IN MAIN CHANNEL

MEAN WATER SURFACE — 12' — VERTICAL CLEARANCE TO STRUCTURE

STREAM BED — 8' (6') — MAXIMUM DEPTH AT MEAN FLOW

STRUCTURE RIVER MILE LOCATION — 8' (6') — MAXIMUM DEPTH OF 50 FOOT WIDE CHANNEL AT MEAN FLOW

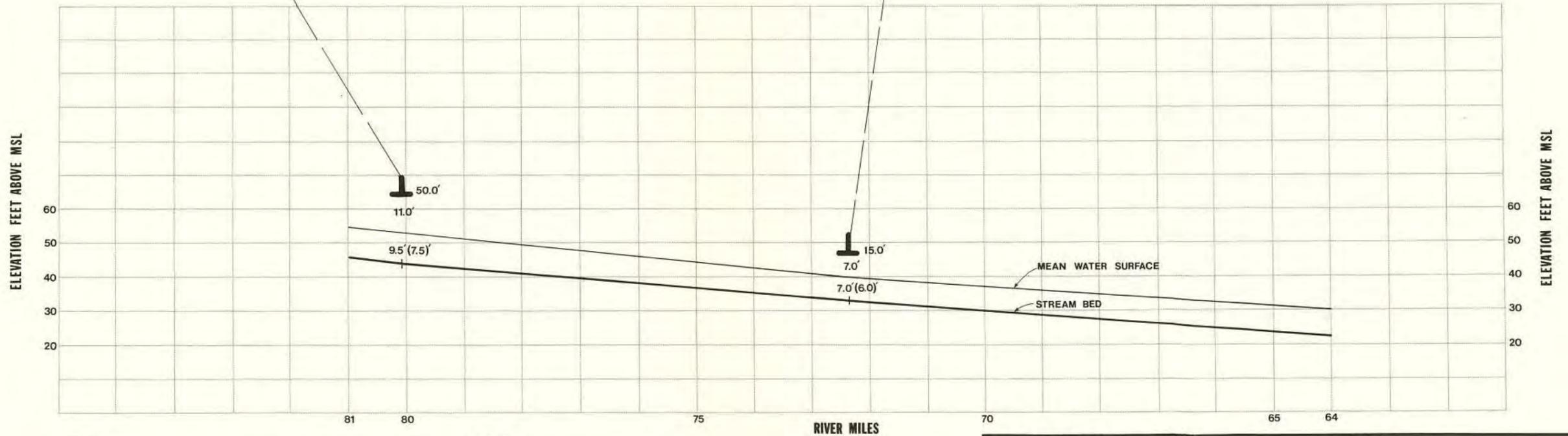
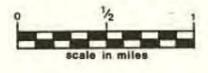
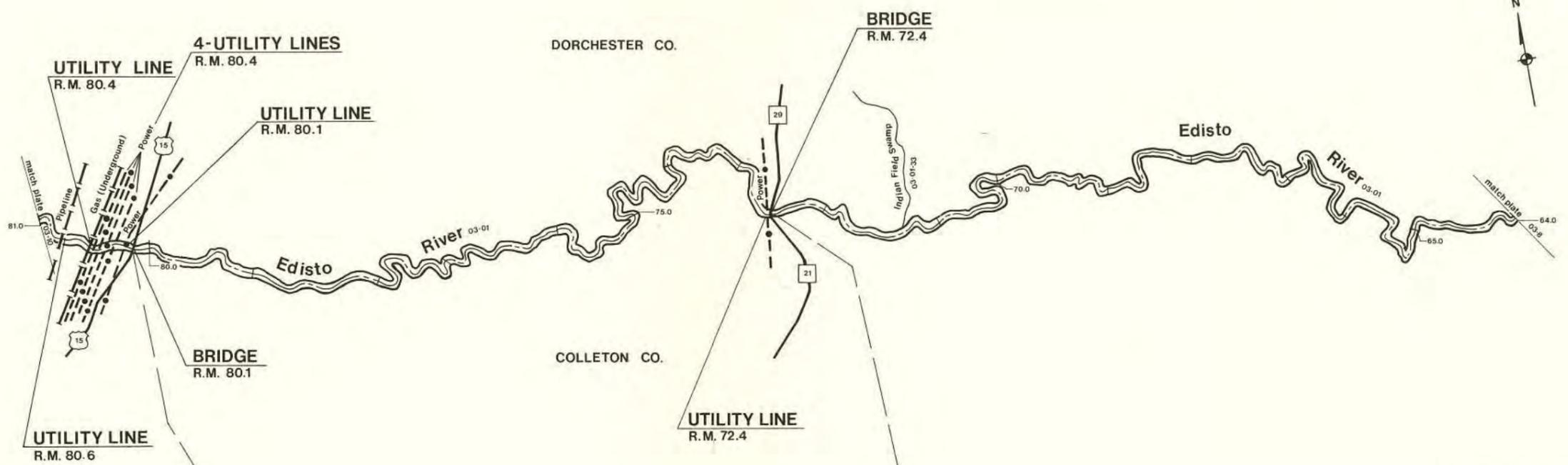
**NOTES:**

1. ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES, STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.

**U.S. ARMY CORPS OF ENGINEERS**  
 CHARLESTON DISTRICT  
 Charleston, South Carolina

STANLEY CONSULTANTS

**PLAN AND PROFILE**  
**EDISTO RIVER**  
 Edisto River Area  
 COLLETON-DORCHESTER CO., S.C.  
**NAVIGABILITY STUDY**  
 Miles 55.0-64.0 Plate 03-8



**LEGEND:**

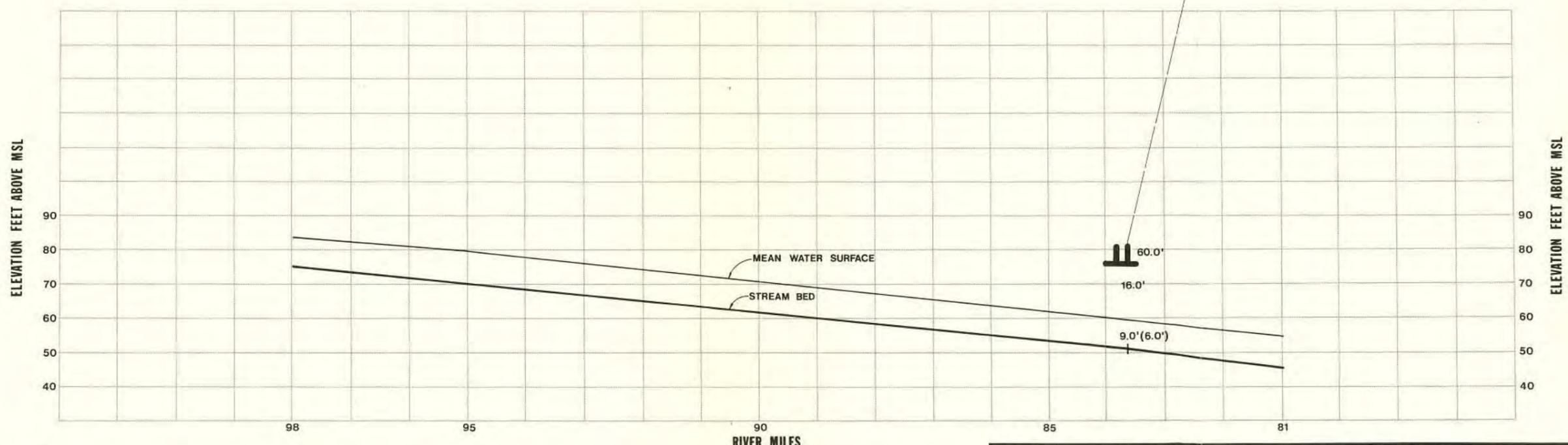
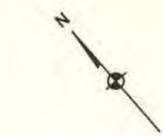
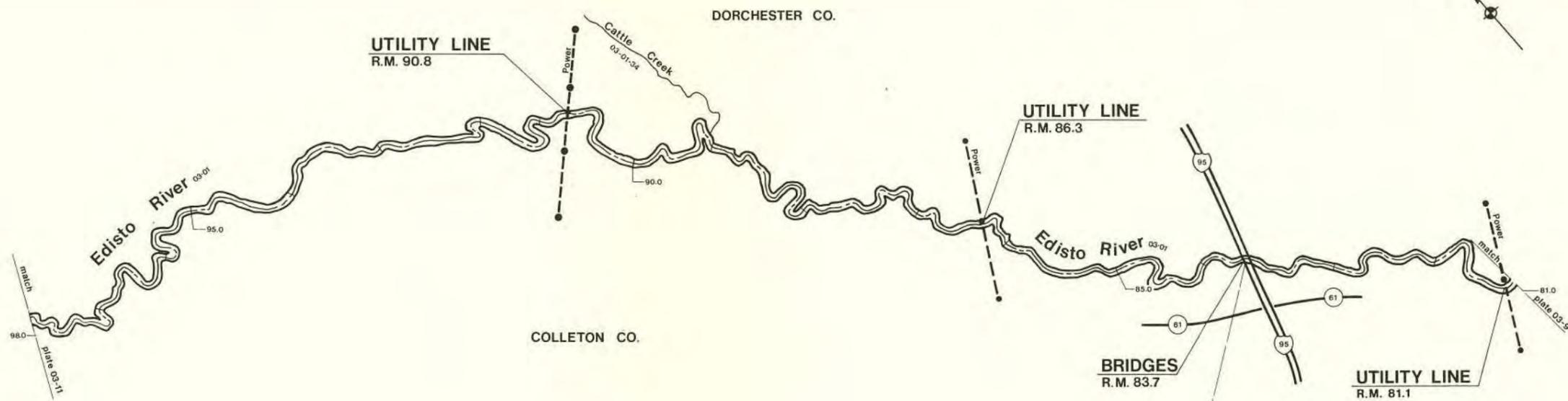
OVERHEAD STRUCTURE	75'	HORIZONTAL CLEARANCE IN MAIN CHANNEL
MEAN WATER SURFACE	12'	VERTICAL CLEARANCE TO STRUCTURE
STREAM BED	8' (6')	MAXIMUM DEPTH AT MEAN FLOW
		MAXIMUM DEPTH OF 50 FOOT WIDE CHANNEL AT MEAN FLOW
STRUCTURE RIVER MILE LOCATION		

**NOTES:**

1. ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES. STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.

**U.S. ARMY CORPS OF ENGINEERS**  
 CHARLESTON DISTRICT  
 Charleston, South Carolina  
 STANLEY CONSULTANTS

**PLAN AND PROFILE**  
**EDISTO RIVER**  
 Edisto River Area  
 COLLETON-DORCHESTER CO., S.C.  
**NAVIGABILITY STUDY**  
 Miles 64.0-81.0 Plate 03-9



**LEGEND:**

OVERHEAD STRUCTURE	75'	HORIZONTAL CLEARANCE IN MAIN CHANNEL
MEAN WATER SURFACE	12'	VERTICAL CLEARANCE TO STRUCTURE
STREAM BED	8' (6')	MAXIMUM DEPTH AT MEAN FLOW
STRUCTURE RIVER MILE LOCATION		MAXIMUM DEPTH OF 50 FOOT WIDE CHANNEL AT MEAN FLOW

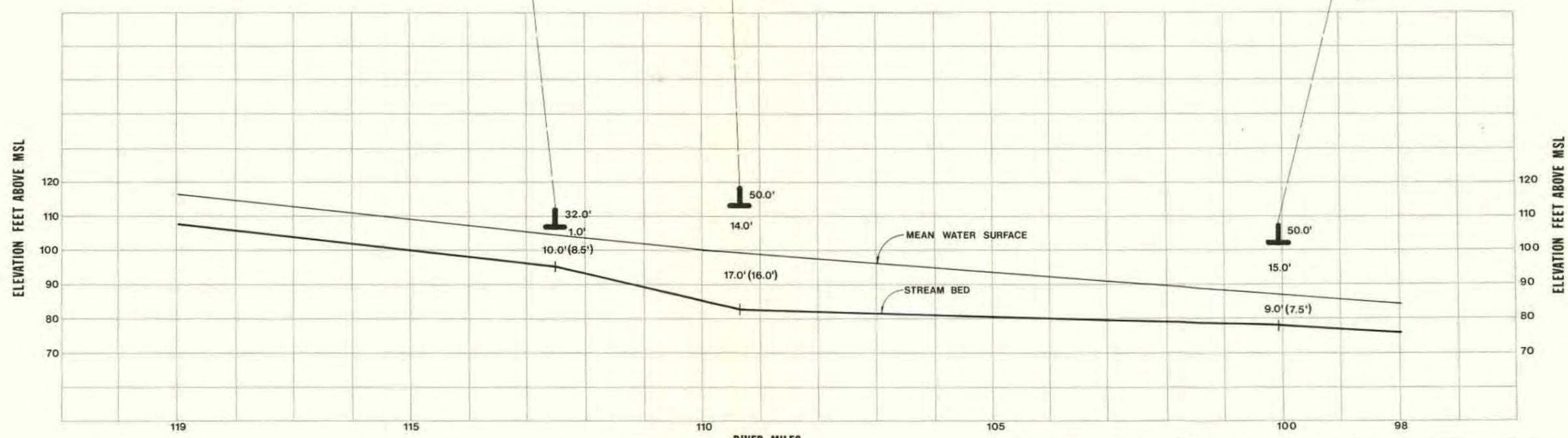
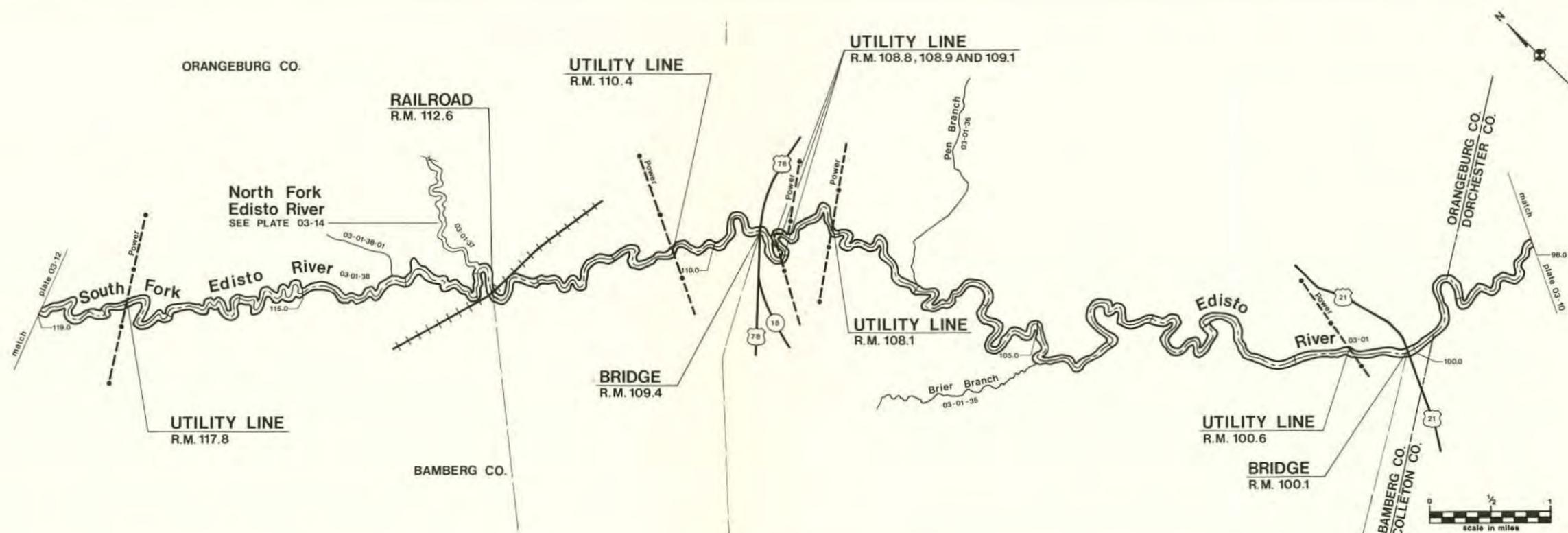
**NOTES:**

1. ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES, STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.

**U.S. ARMY CORPS OF ENGINEERS**  
 CHARLESTON DISTRICT  
 Charleston, South Carolina

STANLEY CONSULTANTS

**PLAN AND PROFILE**  
**EDISTO RIVER**  
 Edisto River Area  
 COLLETON-DORCHESTER CO., S.C.  
**NAVIGABILITY STUDY**  
 Miles 81.0-98.0 Plate 03-10



**LEGEND:**

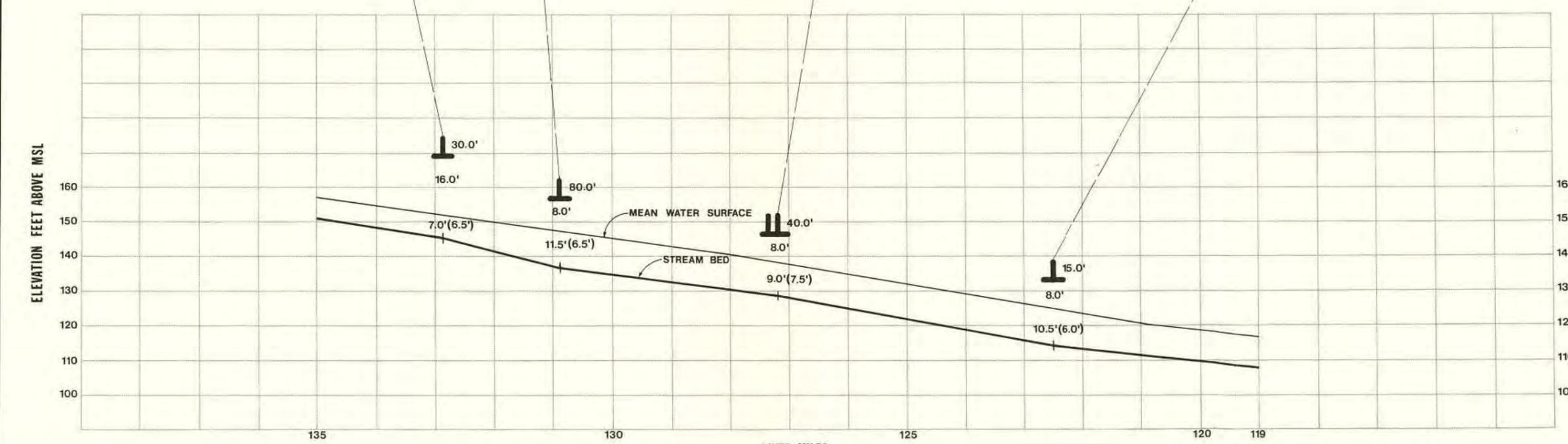
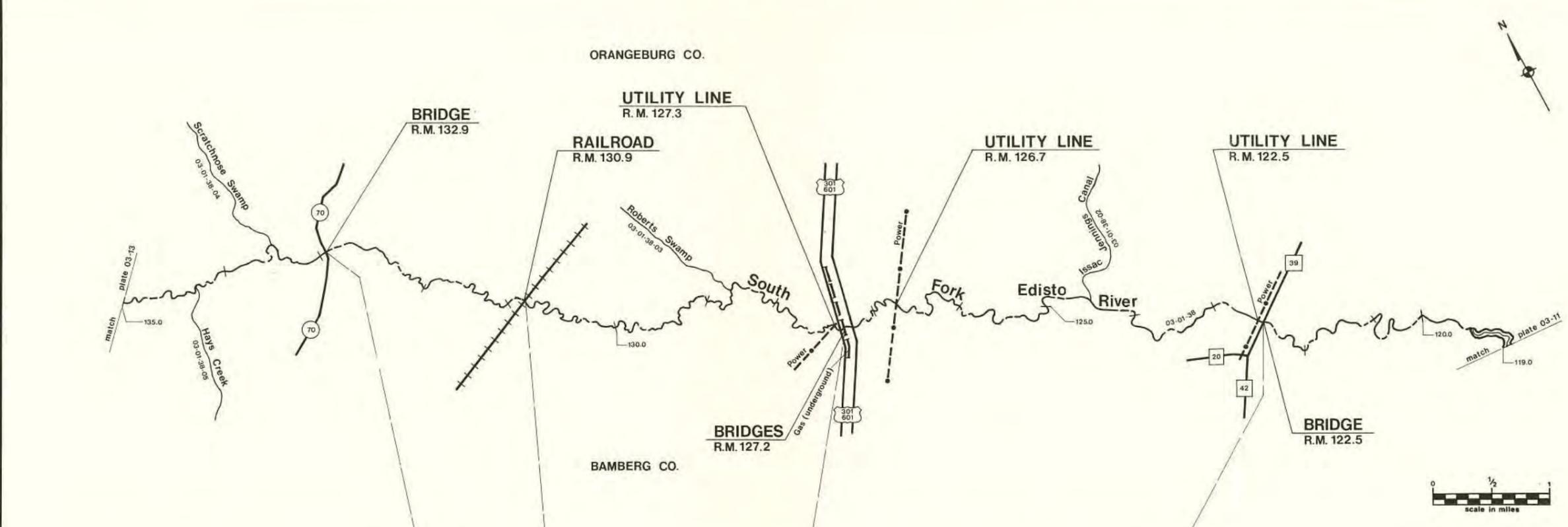
- OVERHEAD STRUCTURE — 75' — HORIZONTAL CLEARANCE IN MAIN CHANNEL
- MEAN WATER SURFACE — 12' — VERTICAL CLEARANCE TO STRUCTURE
- STREAM BED — 8' (6') — MAXIMUM DEPTH AT MEAN FLOW
- STRUCTURE RIVER MILE LOCATION — 8' (6') — MAXIMUM DEPTH OF 50 FOOT WIDE CHANNEL AT MEAN FLOW

**NOTES:**

1. ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES. STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.

**U.S. ARMY CORPS OF ENGINEERS**  
 CHARLESTON DISTRICT  
 Charleston, South Carolina  
 STANLEY CONSULTANTS

**PLAN AND PROFILE**  
**EDISTO RIVER AND SOUTH FORK EDISTO RIVER**  
 Edisto River Area  
 BAMBERG-COLLETON-DORCHESTER-ORANGEBURG CO., S.C.  
**NAVIGABILITY STUDY**  
 Miles 98.0-119.0 Plate 03-11



**LEGEND:**

OVERHEAD STRUCTURE	75'	HORIZONTAL CLEARANCE IN MAIN CHANNEL
MEAN WATER SURFACE	12'	VERTICAL CLEARANCE TO STRUCTURE
STREAM BED	8' (6')	MAXIMUM DEPTH AT MEAN FLOW
STRUCTURE RIVER MILE LOCATION		MAXIMUM DEPTH OF 50 FOOT WIDE CHANNEL AT MEAN FLOW

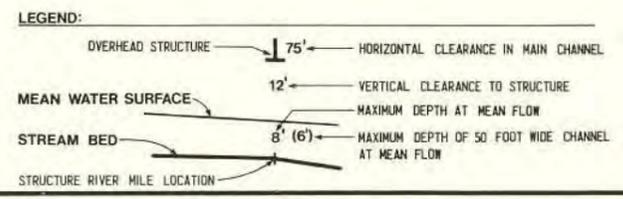
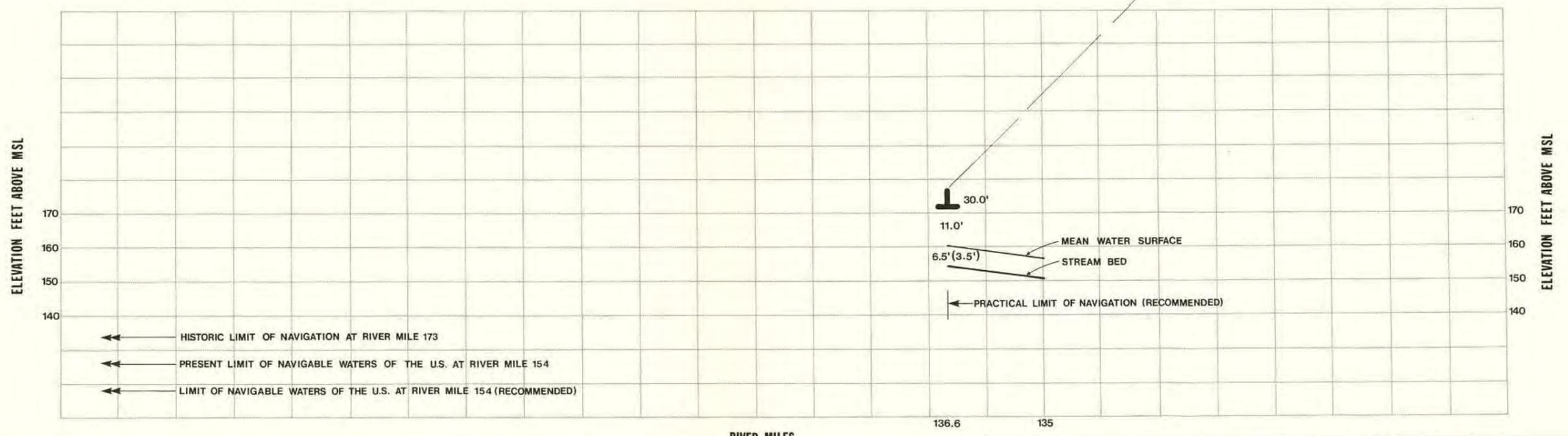
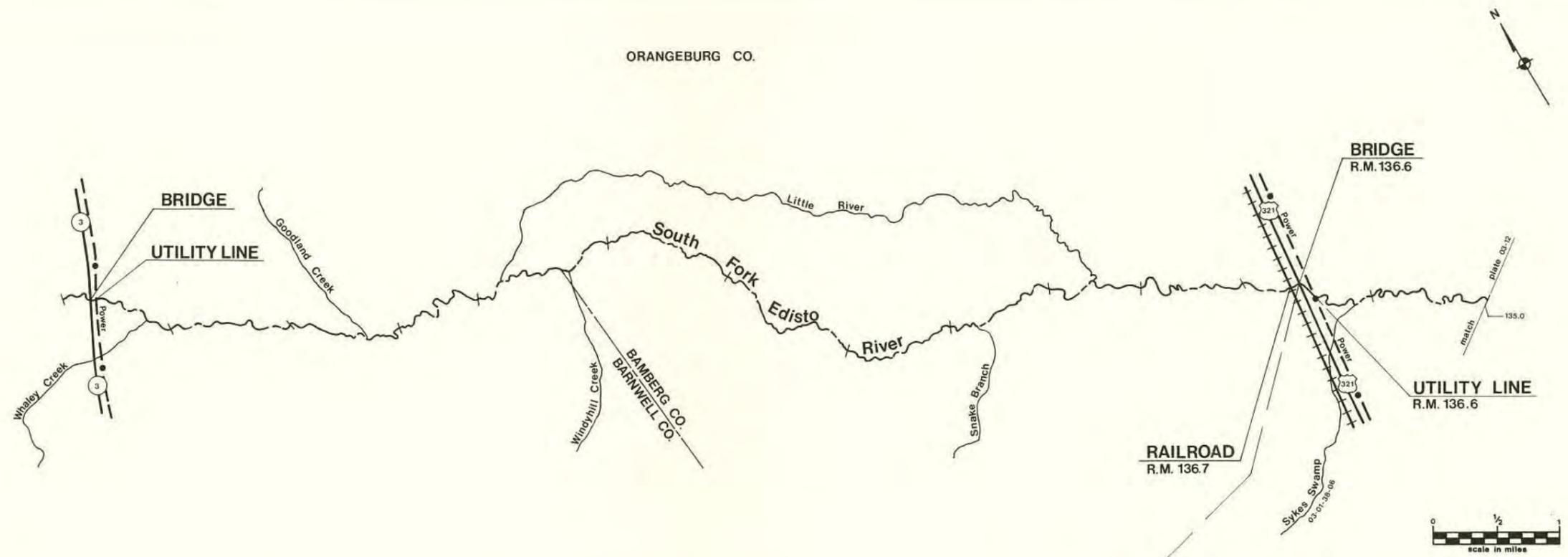
**NOTES:**

1. ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES. STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.

**U.S. ARMY CORPS OF ENGINEERS**  
 CHARLESTON DISTRICT  
 Charleston, South Carolina

STANLEY CONSULTANTS

**PLAN AND PROFILE**  
 SOUTH FORK EDISTO RIVER  
 Edisto River Area  
 BAMBERG-ORANGEBURG CO., S.C.  
 NAVIGABILITY STUDY  
 Miles 119.0-135.0 Plate 03-12



**NOTES:**

1. ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES, STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.

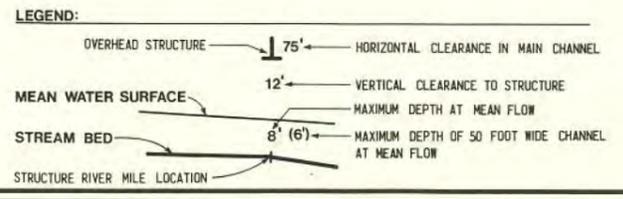
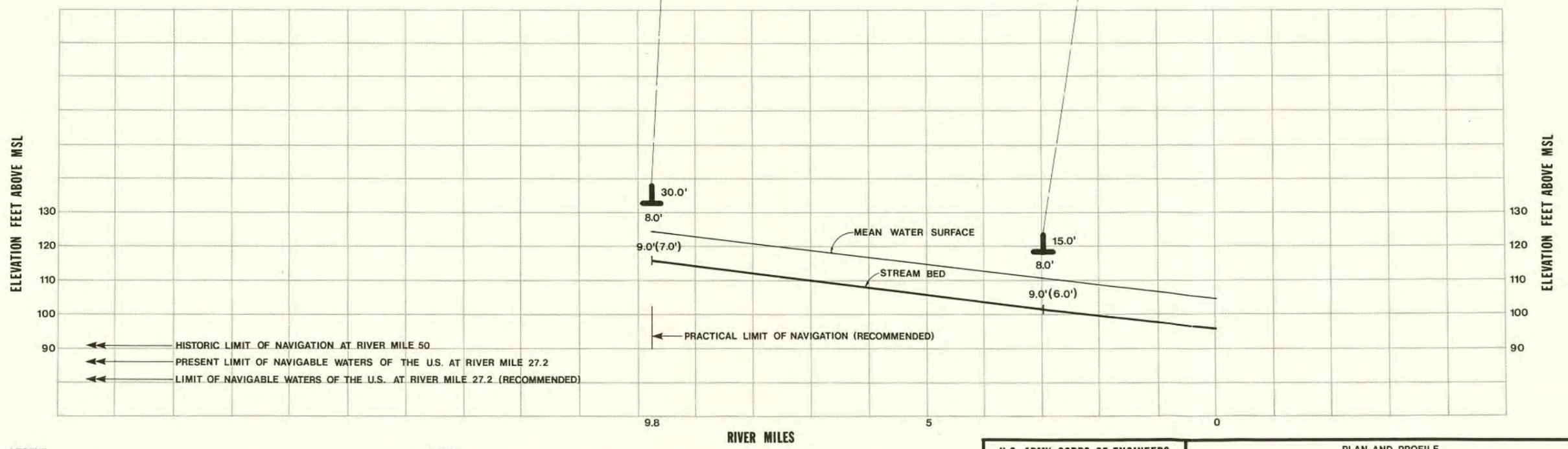
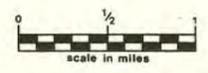
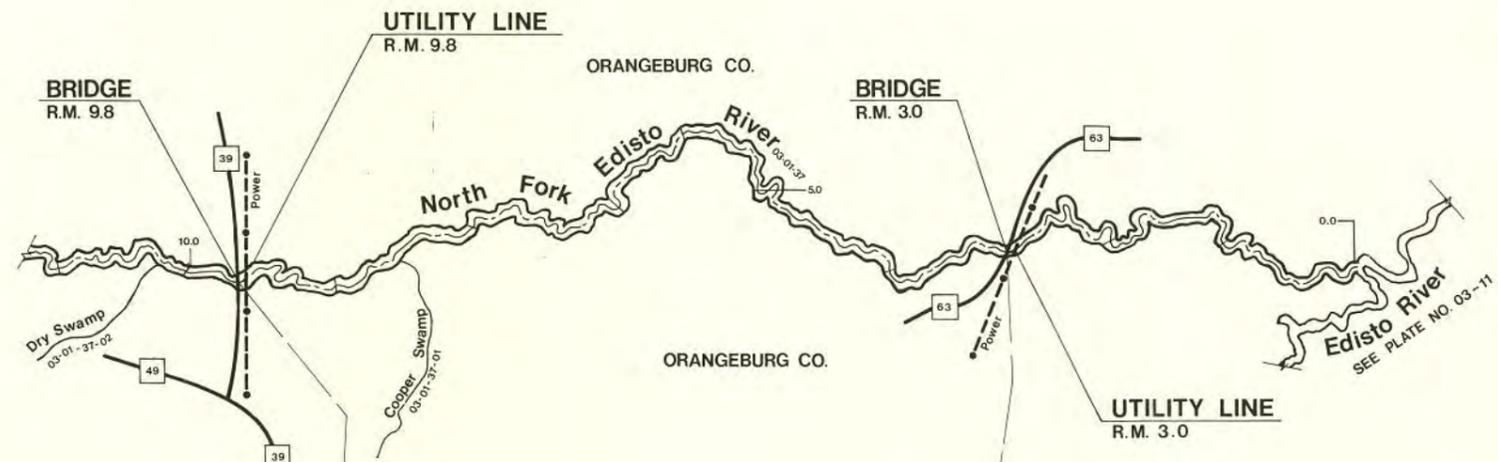
**U.S. ARMY CORPS OF ENGINEERS**  
 CHARLESTON DISTRICT  
 Charleston, South Carolina

1977

**PLAN AND PROFILE**

**SOUTH FORK EDISTO RIVER**  
 Edisto River Area  
 BAMBERG - BARNWELL - ORANGEBURG CO., S.C.

**NAVIGABILITY STUDY**  
 Miles 135.0-136.6 Plate 03-13

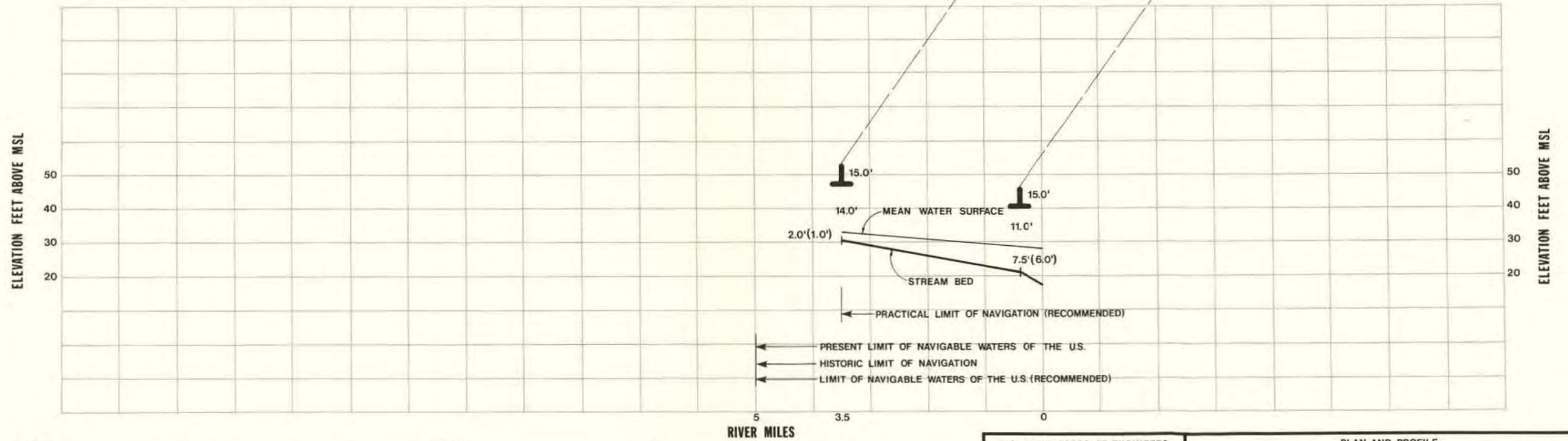
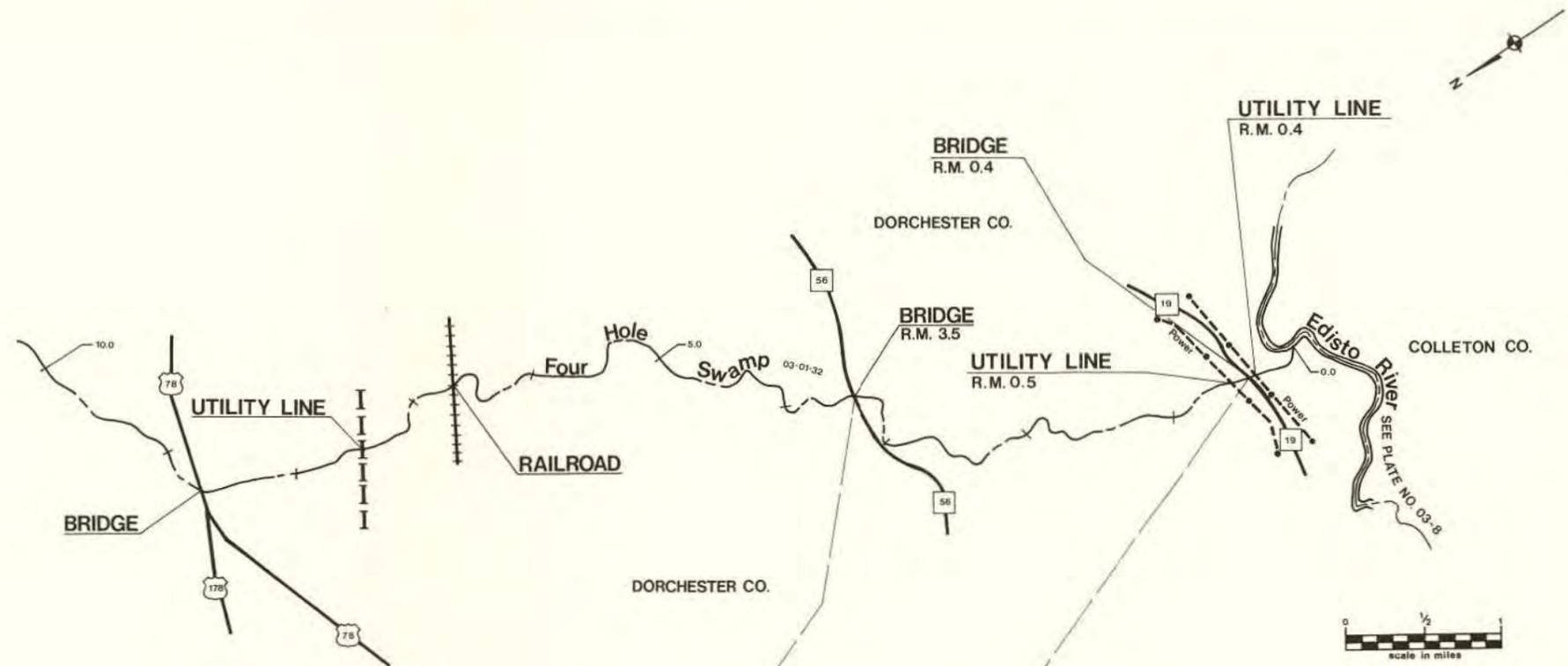


**NOTES:**

1. ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES. STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.

**U.S. ARMY CORPS OF ENGINEERS**  
  
**CHARLESTON DISTRICT**  
 Charleston, South Carolina  
**STANLEY CONSULTANTS**

**PLAN AND PROFILE**  
**NORTH FORK EDISTO RIVER**  
 Edisto River Area  
 ORANGEBURG CO., S.C.  
**NAVIGABILITY STUDY**  
 Miles 0.0 - 9.8      Plate 03-14



**LEGEND:**

- OVERHEAD STRUCTURE: 75' HORIZONTAL CLEARANCE IN MAIN CHANNEL
- MEAN WATER SURFACE: 12' VERTICAL CLEARANCE TO STRUCTURE
- STREAM BED: 8' (6') MAXIMUM DEPTH AT MEAN FLOW
- STRUCTURE RIVER MILE LOCATION: 8' (6') MAXIMUM DEPTH OF 50 FOOT WIDE CHANNEL AT MEAN FLOW

**NOTES:**

1. ELEVATION AND SLOPE OF MEAN WATER SURFACE ARE BASED ON USGS TOPOGRAPHIC MAPS AND ARE THEREFORE ONLY APPROXIMATIONS. VERTICAL DIMENSIONS FROM STREAM BED TO OVERHEAD STRUCTURES ARE FIELD MEASUREMENTS. RELATIVE LOCATION OF MEAN WATER SURFACE IS APPROXIMATED FROM CONTOUR MAPS, MEASURED CROSS SECTIONS AND VELOCITIES, STREAM FLOW RECORDS, THE MANNING EQUATION, AND FIELD OBSERVATIONS. SEE SUMMARY REPORT FOR COMPLETE EXPLANATION.

U.S. ARMY CORPS OF ENGINEERS  
 CHARLESTON DISTRICT  
 Charleston, South Carolina  
 STANLEY CONSULTANTS

PLAN AND PROFILE  
**FOUR HOLE SWAMP**  
 Edisto River Area  
 COLLETON-DORCHESTER CO., S.C.  
**NAVIGABILITY STUDY**  
 Miles 0.0-3.5 Plate 03-15

APPENDIX A  
STREAM CATALOG

This appendix presents a coded listing of all non-tidal streams located in the Edisto River report area having a mean annual flow greater than or equal to five cfs. In tidal areas essentially all streams are coded; however, some very small, short streams and drainage tile systems were not coded.

Streams which are all or partially subject to tidal influence are noted in the listing. These are classified "navigable waters of the U. S." to the tidal limit. Non-tidal reaches of streams classified "navigable waters of the U. S." are covered in Section 6 of this report. All other streams not tidally influenced are classified "waters of the U. S."

The points where flow is approximately equal to five cfs (headwaters) are defined by approximate longitude and latitude, and river miles from the nearest named tributary, major highway, railroad, or other similar reference point. Some streams listed in the tabulation may not have headwater locations identified. This occurs when the name of a stream changes at a confluence where the flow immediately downstream is greater than five cfs. Thus, the headwater locations for streams with more than one name are associated with the appropriate upstream name found on USGS quadrangle maps. Some streams in this appendix listing are also coded in other reports for this study. Cross-references to specific reports are noted.

The coding system shown in the tabulation uses a procedure developed by the Charleston District, Corps of Engineers. Streams are summarized from the mouth of the major river upstream to the report boundary.

USGS data was used to identify the location where the mean annual stream flow is five cfs. Flow records from gaging stations throughout the Charleston District were evaluated and an isoflow map developed to indicate variations in runoff (cfs per square mile). These runoff values were then applied to the appropriate stream drainage areas (as determined from USGS quadrangle maps) so that a flow of five cfs was approximated.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	01						South Edisto River (St. Helena Sound)					Principal outlet of Edisto River to ocean.
		01					Big Bay Creek * #					
			01				Scott Creek * #					
			02				Fishing Creek * #					
		02					Mud Creek *					
			01				Unnamed Tributary *					
			02				Unnamed Tributary *					
		03					St. Pierre Creek *					
			01				Fishing Creek * #					
				01			Unnamed Tributary *					
				02			Big Bay Creek * #					
				03			Unnamed Tributary *					
		02					Store Creek *					
				01			Unnamed Tributary * #					

03-A2

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	01	03	02	02			Unnamed Tributary * #					
				03			Unnamed Tributary *					
				04			Ocella Creek * #					
			03				Bailey Creek *					
				01			Unnamed Tributary *					
				02			Shingle Creek *					
					01		Milton Creek *					
				03			Unnamed Tributary *					
				04			Unnamed Tributary *					
				05			Unnamed Tributary *					
		04					Fenwick Cutt * ##					
		05					Alligator Creek * #					
		06					Alligator Creek * #					
		07					Watts Cut *					
			01				Intracoastal Waterway* #					
			02				North Creek * #					

03-A3

\* All or part tidally influenced.

# Dual code in Report 03.

## Dual code in Report 02.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' '' )	LONGITUDE ( ° ' '' )	STREAM MILES		FROM
										UP	DOWN	
03	01	08										
			01				Mosquito Creek * ##					
				01			Sampson Island Creek *					
				01			Unnamed Tributary *					
				02			Unnamed Tributary *					
				03			Unnamed Tributary *					
				04			Unnamed Tributary *					
			02				Bull Cutt * ##					
		09					Unnamed Tributary *					
		10					Unnamed Tributary *					
		11					Unnamed Tributary *					
		12					Unnamed Tributary *					
		13					Fishing Creek * #					
			01				Unnamed Tributary *					
			02				Unnamed Tributary *					
			03				Unnamed Tributary *					
			04				Unnamed Tributary * #					

03-A4

\* All or part tidally influenced.

# Dual code in Report 03.

## Dual code in Report 02.

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	STREAM CODE						STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )						
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM		
										UP	DOWN			
03	01	13	05				Unnamed Tributary * #							
			06				Dawho River * #							
			14				Dawho River * #							
			15				Matthews Canal *							
			16				Unnamed Tributary *							
			17				Unnamed Tributary *							
			18				Ashe Creek * #							
						01			Unnamed Tributary *					
			19					Ashe Creek * #						
			20					Hope Creek *						
						01			Unnamed Tributary *					
						02			Unnamed Tributary * #					
			21						Unnamed Tributary *					
			22						Unnamed Tributary * #					
			23						Unnamed Tributary *					
			24						Penny Creek *					

03-A5

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	STREAM CODE						STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' '' )	LONGITUDE ( ° ' '' )	STREAM MILES		FROM
										UP	DOWN	
03	01	24	01				Adams Run *					
				01			Unnamed Tributary *					
				02			Unnamed Tributary *					
			02				Unnamed Tributary *					
		25					Unnamed Tributary *					
		26					Unnamed Tributary * #					
		27					Unnamed Tributary * #					
		28					Unnamed Tributary * #					
		29					Unnamed Tributary * #					
		30					Unnamed Tributary * #					
		31					Unnamed Tributary * #					
		32					Four Hole Swamp	33 35 05	80 44 35	2.7		S.C. 33 Highway Bridge
			01				Timothy Creek	33 08 20	80 17 30	1.7		U.S. 78 Highway Bridge
			02				Halfway Gut Creek	33 07 30	80 22 15			At Seaboard Coast Line Railroad Bridge
			03				Walnut Branch	33 10 10	80 24 40	0.8		Coldwater Branch

03-A6

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	01	32	03	01			Little Walnut Branch	33 10 40	80 23 20			Confluence-Cane Br
			04				Dean Swamp					
				01			Briner Branch	33 19 30	80 23 15	2.6		S.C. 31 Highway Bridge
				02			Black Creek	33 17 35	80 15 45	1.9		Cedar Swamp
				03			Cedar Swamp					
					01		Sandy Run	33 22 20	80 20 55	6.8		Cedar Swamp
			05				Horserange Swamp	33 23 00	80 29 15	0.3		S.C. 31 Highway Bridge
			06				Providence Swamp	33 27 00	80 31 15	1.6		Canty Branch
			07				Cow Castle Creek					
				01			Buck Branch					
					01		Sandy Creek	33 23 45	80 46 40	2.3		S.C. Secondary 1443 Highway Bridge
				02			Crum Branch	33 25 45	80 48 40	1.9		Cow Castle Creek
			08				Mill Branch	33 24 15	80 40 00	2.7		Four Hole Swamp
			09				Goodbys Swamp	33 29 15	80 36 35	3.7		Four Hole Swamp

03-A7

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )						
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM		
										UP	DOWN			
03	01	32	10				Indian Camp Branch	33 27 05	80 39 45	0.7		Four Hole Swamp		
			11				Middle Pen Swamp	33 28 05	80 46 35	6.0		Four Hole Swamp		
			12				Polk Spring Creek	33 30 50	80 39 30	0.7		S.C. 31 Highway Bridge		
			13				Bull Swamp	33 33 05	80 46 45	1.7		S.C. 33 Highway Bridge		
				01				Little Bull Swamp	33 31 15	80 46 40	2.2		Gramling Creek	
					01			Gramling Creek	33 30 15	80 47 45	2.4		Little Bull Creek	
			14					Flea Bite Creek	33 35 25	80 41 00	1.1		Atlantic Coast Line Railroad Bridge	
					33				Indian Field Swamp	33 14 45	80 34 50			U.S. 15 & 301 Highway Bridge
						01			Polk Swamp	33 14 05	80 39 15	2.9		U.S. 78 Highway Bridge
							01		Lee Branch	33 08 30	80 33 30	1.9		Polk Swamp
							02		Cowtail Creek	33 09 45	80 37 15	2.0		Polk Swamp
						02			Gum Branch	33 08 00	80 30 30	0.6		Indian Field Swamp

03-A8

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )					
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM	
										UP	DOWN		
03	01	34					Cattle Creek	33 19 45	80 46 20	0.7		S.C. Secondary 80 Highway Bridge	
		35					Brier Branch	33 13 40	80 52 40	2.5		Edisto River	
		36					Pen Branch	33 18 05	80 47 45	2.9		S.C. Secondary 121 Highway Bridge	
		37					North Fork Edisto River						
			01					Cooper Swamp	33 24 50	80 59 00	1.5		S.C. 33 Highway Bridge
			02					Dry Swamp	33 22 15	80 54 10	1.3		North Fork Edisto R
			03					Whirlwind Creek	33 24 50	80 54 35	2.6		S.C. 36 Highway Bridge
			04					Caw Caw Swamp	33 39 45	80 55 45	1.6		S.C. Secondary 220 Highway Bridge
					01			Early Branch	33 34 10	80 51 30	0.5		S.C. 210 Highway Bridge
					02			Saddler Swamp	33 37 10	80 50 15	3.5		Caw Caw Swamp
			03			Burke Creek	33 38 40	80 51 15	0.8		S.C. Secondary 119 Highway Bridge		

03-A9

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' '' )	LONGITUDE ( ° ' '' )	STREAM MILES		FROM
										UP	DOWN	
03	01	37	04	04			Murph Mill Creek					
					01		Mack Branch	33 40 15	80 53 20	0.4		Murph Mill Creek
					02		Crim Creek	33 40 25	80 52 55	0.7		Murph Mill Creek
			05				Great Branch	33 30 10	81 00 10	2.2		S.C. 4 Highway Bridge
			06				Limestone Creek	33 37 00	80 57 45	1.0		Limestone Road
				01			Little Limestone Creek	33 35 55	80 56 45	0.8		Limestone Creek
			07				Double Branch	33 32 50	81 00 50	1.4		Edisto River
			08				Long Branch	33 35 30	81 00 15			At Amaker Pond
			09				Bull Swamp Creek	33 46 45	81 08 10	0.8		Boggy Branch
				01			Little Bull Swamp Creek					
					01		Cowpen Swamp	33 40 05	81 00 15	1.0		Layseth Millpond
				02			Third Creek	33 43 10	81 02 55	0.8		Redmond Pond
				03			Fourth Creek	33 45 05	81 05 55	0.2		S.C. 3 Highway Bridge
			10				Turkey Branch	33 33 30	81 04 30	1.2		Jones Bridge Road
			11				Big Beaver Creek	33 35 15	81 10 50	0.4		Jones Pond
				01			Little Beaver Creek	33 34 30	81 07 40	1.2		Big Beaver Creek

03-A10

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )					
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' '' )	LONGITUDE ( ° ' '' )	STREAM MILES		FROM	
										UP	DOWN		
03	01	37	12				Penn Branch	33 37 30	81 07 30	1.5		Edisto River	
			13				Salem Creek	33 39 55	81 08 45	1.2		U.S. 178 Highway Bridge	
			14				Unnamed Tributary						
				01			Pond Branch	33 43 15	81 10 20	1.1			Pooles Upper Millpond
			15				Hollow Creek	33 37 50	81 16 00	2.3			Little Hollow Creek
			16				Cedar Creek	33 46 45	81 13 45	1.0			Fort Pond
				01			Lynch Branch	33 45 05	81 15 10	0.3			Cedar Creek
			17				Black Creek	33 53 45	81 22 15	0.2			Jones Pond
				01			Little Black Creek	33 50 05	81 23 15	0.1			Bouknight Pond
				02			Pond Branch	33 52 15	81 21 15	0.7			Black Creek
			18				Giddy Swamp Creek	33 40 45	81 20 10	2.8			North Fork Edisto R
				01			Unnamed Tributary	33 40 20	81 19 25	0.5			Giddy Swamp Creek
			19				Wolf Pit Branch	33 44 30	81 23 45	1.0			North Fork Edisto R
			20				Marrow Bone Swamp Cr						
				01			Juniper Creek	33 42 50	81 25 00	0.9			Marrow Bone Swamp Cr

03-A11

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )					
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' '' )	LONGITUDE ( ° ' '' )	STREAM MILES		FROM	
										UP	DOWN		
03	01	37	21				Chalk Hill Creek	33 44 15	81 28 10	1.0		Toms Creek	
			22				Goose Platter Creek	33 46 15	81 30 05	4.5		North Fork Edisto R	
			23				Lightwood Knot Creek	33 54 05	81 26 45			At Shealy Pond	
				01			Marlowe Creek	33 52 00	81 28 50	0.9		Lightwood Knot Cr	
				02			Hellhole Creek	33 53 30	81 28 45			Confluence-Rocky Ford Creek	
			24				Chinquapin Creek						
				01			Unnamed Tributary	33 49 05	81 31 30	0.4		Chinquapin Creek	
				02			Unnamed Tributary	33 50 45	81 33 15	1.0		Chinquapin Creek	
				03			Duncan Creek	33 52 45	81 32 30	1.7		Chinquapin Creek	
				38			South Fork Edisto River	33 48 25	81 46 25	0.8		Temples Creek	
				01			Unnamed Tributary	33 18 05	80 55 30	3.2		South Fork Edisto R	
				02			Issac Jennings Canal	33 19 50	80 58 45	0.6		South Fork Edisto R	
				03			Roberts Swamp	33 29 15	81 04 00	4.8		Twomile Swamp	
				01			Twomile Swamp	33 27 05	81 02 25	1.4		Roberts Swamp	
				04			Scratchnose Swamp	33 25 15	81 05 40	3.0		South Fork Edisto R	
				05			Hays Mill Creek	33 21 15	81 06 10	9.0		Stout Creek	

03-A12

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	STREAM CODE						STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )					
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM	
										UP	DOWN		
03	01	38	05	01			Stout Creek	33 21 45	81 06 35	4.0		Hays Mills Creek	
			06				Sykes Swamp	33 22 15	81 09 00	1.9		South Fork Edisto R	
			07				Little River #						
				01			Willow Swamp	33 29 25	81 07 35	6.1		Little River	
				02			Rocky Swamp Creek	33 30 20	81 11 15	0.4		Bolen Mill Creek	
					01		Bolen Mill Creek	33 31 20	81 10 15	1.8		Rocky Swamp Creek	
			08				Snake Branch	33 23 30	81 11 30	1.8		South Fork Edisto R	
			09				Windy Hill Creek	33 23 30	81 16 15	1.6		Sheepford Branch	
				01			Sheepford Branch	33 23 30	81 14 45	0.5		Windyhill Creek	
			10				Little River #						
			11				Goodland Creek	33 33 55	81 17 10	1.5		Gin Branch	
				01			Tampa Creek	33 33 00	81 13 55	4.2		Goodland Creek	
			12				Whaley Creek	33 24 45	81 19 35	5.1		South Fork Edisto R	
			13				Spur Branch	33 24 35	81 21 30	4.8		South Fork Edisto R	
14				Dean Swamp Creek	33 39 55	81 27 15	1.7		Cooks Bridge Road				
	01			Jordan Creek	33 36 30	81 20 00	1.3		Millers Pond				

03-A13

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	01	38	14	02			Unnamed Tributary	33 37 15	81 22 30	1.0		Dean Swamp Creek
			15				Yarrow Branch	33 26 05	81 25 10	0.8		David Bridge Road
			16				Pond Branch	33 27 30	81 26 40			Confluence-Buzzard Branch
				01			Long Branch	33 28 25	81 27 45	1.8		Pond Branch
			17				Hunter Branch	33 34 20	81 24 00			At S.C. 394 Highway Bridge
			18				Burcalo Creek	33 35 35	81 27 45			At S.C. 215 Highway Bridge
			19				Shaw Creek	33 45 50	81 50 35	0.4		S.C. Secondary 121 Highway Bridge
				01			Cedar Branch	33 32 15	81 31 55	1.7		Shaw Creek
				02			Chavous Creek	33 32 25	81 34 40	0.3		Johnson Millpond
				03			Redds Branch	33 34 00	81 38 45	1.7		Shaw Creek
				04			Joyce Branch	33 35 55	81 38 10	1.3		Shaw Creek
				05			Dairy Branch	33 38 30	81 42 55	0.2		Shaw Creek
				06			Paces Branch	33 43 15	81 49 15	2.5		Shaw Creek

03-A14

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	MAJOR RIVER	STREAM CODE					STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
		PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	01	38	19	07			Tiger Creek	33 45 55	81 48 20	1.1		Shaw Creek
			20				Cedar Creek	33 38 45	81 29 15	0.2		Cooks Bridge Road
			21				Rocky Springs Creek	33 43 00	81 31 45	0.5		Wildcat Branch
				01			Poplar Branch	33 40 00	81 32 05	1.3		Rocky Spring Creek
				02			Wildcat Branch	33 43 15	81 32 30	0.6		Rocky Spring Creek
			22				Beaverdam Branch	33 39 40	81 36 50			Confluence-Smith Br
			23				McTier Creek	33 48 35	81 36 40	1.6		S.C. Secondary 151 Highway Bridge
				01			Boggy Branch	33 43 30	81 36 40	0.6		McTier Creek
				02			Gully Creek	33 46 40	81 33 35	3.8		McTier Creek
			24				Bridge Creek	33 42 15	81 39 45			Confluence-Mill Br
			25				Jumping Gut Creek	33 44 40	81 40 05	0.2		South Fork Edisto R
			26				Long Branch	33 44 05	81 41 55	1.4		South Fork Edisto R
			27				Bulls Branch	33 45 10	81 42 45	1.8		South Fork Edisto R
			28				Mill Creek					
				01			Flat Rock Creek	33 49 10	81 40 40	0.7		Pitts Branch

03-A15

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	STREAM CODE					STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )						
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER		FIFTH ORDER	LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM	
										UP	DOWN		
03	01	38	29	01			Beeck Creek	33 49 35	81 43 10	0.7		Old Plank Road	
							Bog Branch	33 48 25	81 42 30	0.2		Beeck Creek	
			30				Temples Creek	33 48 20	81 45 40			Confluence-Flat Rock Branch	
	02						Scott Creek * # (Jeremy Inlet)						
	03		01					Unnamed Tributary *					
								Townsend River * (Frampton Inlet)					
			01					Unnamed Tributary *					
			02					Unnamed Tributary *					
			03					Unnamed Tributary *					
			04					Unnamed Tributary *					
			05					Unnamed Tributary *					
	04							South Creek * #					
			01					Unnamed Tributary * #					
				01				Unnamed Tributary * #					
		02					Ocella Creek * #						

\* All or part tidally influenced.

# Dual code in Report 03.

03-A16

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	STREAM CODE						STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )							
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM			
										UP	DOWN				
03	04	02	01				Unnamed Tributary * #								
			02				Fishing Creek * #								
			03				Unnamed Tributary *								
	05	01	02					North Edisto River *							
								South Creek * #							
								Privateer Creek *							
								Unnamed Tributary *							
								Unnamed Tributary *							
							01			Unnamed Tributary *					
										Unnamed Tributary *					
										Unnamed Tributary *					
							03			Bohicket Creek *					
										Adams Creek *					
										Unnamed Tributary *					
										Unnamed Tributary *					
										Unnamed Tributary *					
						Unnamed Tributary *									

03-A17

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )					
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM	
										UP	DOWN		
03	05	03	02				Unnamed Tributary * #						
			03				Unnamed Tributary * #						
			04				Unnamed Tributary *						
			05				Unnamed Tributary *						
			06				Fickling Creek *						
				01				Unnamed Tributary *					
				02				Unnamed Tributary *					
				07				Unnamed Tributary *					
				08				Unnamed Tributary *					
				09				Unnamed Tributary *					
				10				Unnamed Tributary *					
				11				Unnamed Tributary *					
				12				Unnamed Tributary *					
	13				Church Creek * #								
	04				Unnamed Tributary *								
	05				Unnamed Tributary *								
	06				Unnamed Tributary *								

03-A18

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' '' )	LONGITUDE ( ° ' '' )	STREAM MILES		FROM
										UP	DOWN	
03	05	07					Leadenwah Creek *					
			01				Unnamed Tributary *					
				01			Unnamed Tributary *					
				02			Unnamed Tributary *					
			02				Unnamed Tributary *					
			03				Unnamed Tributary *					
			04				Unnamed Tributary *					
		08					Westbank Creek * #					
			01				Unnamed Tributary *					
			02				Unnamed Tributary *					
			03				Unnamed Tributary *					
		09					Westbank Creek * #					
		10					Steamboat Creek *					
			01				Unnamed Tributary *					
				01			Unnamed Tributary *					
			02				Long Creek *					
			03				Russell Creek *					

03-A19

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	MAJOR RIVER	STREAM CODE					STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )					
		PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM	
										UP	DOWN		
03	05	10	03	01			Unnamed Tributary *						
				02			Unnamed Tributary *						
				04			Unnamed Tributary *						
				05			Unnamed Tributary *						
				06			Unnamed Tributary *						
				07			Unnamed Tributary *						
				08			Unnamed Tributary *						
				09			Sand Creek *						
								01		Unnamed Tributary *			
						10		Whooping Island Creek *					
							01	Unnamed Tributary *					
							02	Unnamed Tributary *					
							03	North Creek * #					
				11				Dawho River * #					
						01		Unnamed Tributary *					
						02		Intracoastal Waterway* #					

03-A20

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )					
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM	
										UP	DOWN		
03	05	11	03				Intracoastal Waterway* #						
			04				Intracoastal Waterway* #						
			05				Intracoastal Waterway* #						
			06				Intracoastal Waterway* #						
			07				Unnamed Tributary *						
			08				Intracoastal Waterway* #						
			09				North Creek * #						
			10				Unnamed Tributary *						
			11				Fishing Creek * #						
			12				Unnamed Tributary * #						
			13				Unnamed Tributary * #						
							01		Unnamed Tributary *				
					12				Wadmalaw River *				
						01			Tom Point Creek *				
							01		Unnamed Tributary *				
							02		Unnamed Tributary *				

03-A21

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' '' )	LONGITUDE ( ° ' '' )	STREAM MILES		FROM
										UP	DOWN	
03	05	12	01	03			Unnamed Tributary *					
				04			Unnamed Tributary *					
				05			Unnamed Tributary *					
				06			Unnamed Tributary *					
			02				Toogoodoo Creek *					
				01			Unnamed Tributary *					
				02			Unnamed Tributary *					
				03			Lower Toogoodoo Creek *					
					01		Swinton Creek *					
						01	Unnamed Tributary *					
						02	Unnamed Tributary *					
						04	Unnamed Tributary *					
			03				Unnamed Tributary *					
			04				Oyster House Creek *					
				01			Unnamed Tributary *					
				02			Unnamed Tributary *					

\* All or part tidally influenced.

03-A22



APPENDIX A  
STREAM CATALOG

REPORT NUMBER	STREAM CODE						STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' '' )	LONGITUDE ( ° ' '' )	STREAM MILES		FROM
										UP	DOWN	
03	06	06	01				Unnamed Tributary *					
			07				Unnamed Tributary *					
			01				Unnamed Tributary *					
			02				Unnamed Tributary *					
			03				Unnamed Tributary *					
			04				Abbapoola Creek * #					
				01			Unnamed Tributary *					
				02			Unnamed Tributary *					
			08				Unnamed Tributary *					
			09				Unnamed Tributary *					
			10				Bryans Creek *					
				01			Unnamed Tributary *					
			11				Unnamed Tributary *					
				01			Unnamed Tributary *					
12				Unnamed Tributary *								
13				Unnamed Tributary *								
14				Unnamed Tributary *								

03-A24

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	STREAM CODE						STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	06	15					Unnamed Tributary *					
		16					Chaplin Creek *					
		01					Unnamed Tributary * #					
		17					Unnamed Tributary *					
		01					Unnamed Tributary * #					
		07					Stono River * # (Stono Inlet)					
			01				Unnamed Tributary *					
			02				Bass Creek *					
			01				Cinder Creek *					
			02				Unnamed Tributary *					
			03				Kiawah River * #					
			04				Alligator Creek * #					
			01				Unnamed Tributary *					
			05				Green Creek *					
			01				King Flats Creek * #					
			02				Robbins Creek * #					

03-A25

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )						
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM		
										UP	DOWN			
03	07	06					Unnamed Tributary *							
		07					Abbapoola Creek * #							
			01					Unnamed Tributary *						
			02					Unnamed Tributary *						
			03					Unnamed Tributary *						
			08					Holland Island Creek *						
			09					Hut Creek *						
				01					Unnamed Tributary *					
				10					Unnamed Tributary *					
				11					Unnamed Tributary *					
				12					Unnamed Tributary *					
				13					Unnamed Tributary *					
				14					Unnamed Tributary *					
					01				James Island Creek * #					
				15					Pennys Creek * #					
			01				Unnamed Tributary *							

03-A26

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	07	16					Elliott Cut * #					
		17					Wappoo Creek *					
		01					Sandy Bay *					
		18					Unnamed Tributary *					
		19					Unnamed Tributary *					
		01					Unnamed Tributary *					
		20					Unnamed Tributary *					
		21					Long Branch Creek *					
		01					Church Creek * #					
		02					Macbeth Creek * #					
		22					Unnamed Tributary *					
		01					Unnamed Tributary *					
		23					Unnamed Tributary *					
		24					Unnamed Tributary *					
		25					Unnamed Tributary *					
		01				Unnamed Tributary *						

03-A27

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )						
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM		
										UP	DOWN			
03	07	26					Unnamed Tributary *							
			01				Unnamed Tributary *							
			27					Unnamed Tributary * #						
			01					Unnamed Tributary * #						
			28					Unnamed Tributary * #						
			29					Unnamed Tributary * #						
			30						Rantowles Creek *					
			01						Unnamed Tributary *					
			02						Wallace River *					
				01					Unnamed Tributary *					
				02					Unnamed Tributary *					
							01		Unnamed Tributary (Caw Caw Swamp) *					
								03	Middle Branch *					
				03					Unnamed Tributary *					
				04					Unnamed Tributary *					
				05					Unnamed Tributary *					

03-A28

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	07	30	06				Unnamed Tributary *					
			07				Unnamed Tributary (Bear Swamp) *					
				01			Unnamed Tributary *					
			08				Back Water *					
				01			Unnamed Tributary *					
				02			Unnamed Tributary *					
			09				Unnamed Tributary *					
				01			Unnamed Tributary *					
				02			Unnamed Tributary *					
				10			Unnamed Tributary *					
				31			Log Bridge Creek *					
				01			Mellichamp Branch *					
				32			Unnamed Tributary *					
				33			New Cut * #					
				08			Folly River * # *					

03-A29

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	08	01					Cole Creek *					
			01				Unnamed Tributary *					
		02					Robbins Creek * #					
			01				Cutoff Reach * #					
			02				Unnamed Tributary *					
		03					Folly Creek *					
			01				Oak Island Creek * #					
			02				Cutoff Reach * #					
				01			Unnamed Tributary *					
							Unnamed Tributary *					
			04				King Flats Creek * #					
			05				Unnamed Tributary *					
			06				Oak Island Creek * #					
			07				Unnamed Tributary *					
			08				Unnamed Tributary *					
				01			First Sister Creek * #					

03-A30

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	08	03	08	02			Second Sister Creek * #					
			09			Unnamed Tributary *						
			10			Unnamed Tributary *						
			11			Sucessionville Creek* #						
			12			Unnamed Tributary *						
			13			Unnamed Tributary *						
			04			Unnamed Tributary *						
			05			Unnamed Tributary *						
			06			Unnamed Tributary *						
			07			Unnamed Tributary *						
			09			Lighthouse Creek * (Lighthouse Inlet)						
			01			Block Island (Creek) *						
			01			Unnamed Tributary *						
02		Unnamed Tributary *										
03		Unnamed Tributary *										
02		Rat Island Creek *										

03-A31

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	MAJOR RIVER	STREAM CODE					STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
		PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	09	02	01			Unnamed Tributary *						
				01		Unnamed Tributary *						
				02		Unnamed Tributary *						
			02			Unnamed Tributary *						
			03			Second Sister Creek * #						
			04			First Sister Creek * #						
		03				Unnamed Tributary * #						
		04				Unnamed Tributary *						
		05				Second Sister Creek * #						
		06				First Sister Creek * #						
		07				Ft. Johnson Creek *						
		08				Folly Creek * #						
		09				Unnamed Tributary *						
		10				Secessionville Creek* #						
		11				Seaside Creek *						
		12				Unnamed Tributary *						

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	STREAM CODE						STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' '' )	LONGITUDE ( ° ' '' )	STREAM MILES		FROM
										UP	DOWN	
03	10						Bass Creek *					
		01					Unnamed Tributary *					
	11						Schooner Creek *					
		01					Unnamed Tributary * #					
	12	02					Unnamed Tributary *					
							Parrot Point Creek *					
		01					Unnamed Tributary *					
		02					Unnamed Tributary * #					
			01				Unnamed Tributary *					
							Kushiwah Creek *					
	13						Ashley River *					
		01					Mill Creek *					
	14	02					James Island Creek * #					
			01				Simpson Creek *					
				01			Unnamed Tributary * #					
					01		Wolfpit Run *					

03-A33

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	14	02	02	01			Unnamed Tributary *					
							Unnamed Tributary *					
							Unnamed Tributary * #					
							Unnamed Tributary *					
							Dill Creek *					
							Unnamed Tributary *					
							Wappoo Creek * #					
							Elliott Cut * #					
							Unnamed Tributary *					
							Oldtown Creek *					
03												
01												
06												
07												
08												
09												
10												

03-A34

\* All or part tidally influenced.

# Dual code in Report 03.

APPENDIX A  
STREAM CATALOG

REPORT NUMBER	STREAM CODE					STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )							
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER		FIFTH ORDER	LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM		
										UP	DOWN			
03	14	11												
		12												
			01											
			02											
			13											
			14											
			15											
			16											
				01										
				02										
			17											
			18											
			19											
			20											
			21											
			22											
			23											

03-A35

\* All or part tidally influenced.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )					
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM	
										UP	DOWN		
03	14	24					Unnamed Tributary *						
		25					Unnamed Tributary *						
		26						Unnamed Tributary *					
		27						Eagle Creek *					
			01					Chandler Bridge Br *					
			02					Spencer Branch *					
			03					Federwitz Branch *					
		28						Dorchester Creek *					
			01					Unnamed Tributary *					
			02					Unnamed Tributary *					
			03					Sawmill Branch *					
				01				Unnamed Tributary *					
				02				Unnamed Tributary *					
				03				Unnamed Tributary *					
		29						Unnamed Tributary *					
		30						Unnamed Tributary *					
		31						Unnamed Tributary *					

03-A36

\* All or part tidally influenced.

APPENDIX A  
STREAM CATALOG

STREAM CODE							STREAM NAME	HEADWATER LOCATION ( Mean Flow = 5 cfs )				
REPORT NUMBER	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FOURTH ORDER	FIFTH ORDER		LATITUDE ( ° ' " )	LONGITUDE ( ° ' " )	STREAM MILES		FROM
										UP	DOWN	
03	14	32					Unnamed Tributary *					
		33					Hurricane Branch *					
		34					Rumphs Hill Creek	33 01 15	80 16 10	2.1		Ashley River
		35					Captains Creek	33 03 45	80 20 50	2.0		S.C. 27 Highway Bridge
		36					Stanley Branch	33 04 25	80 14 35			Confluence-Kelly Br
		37					Cypress Swamp					
		01					Sandy Run	33 07 15	80 10 25	1.7		Ashley River (Cypress Swamp)
		02					Partridge Creek	33 09 20	80 12 55			Confluence-Rudd & Mill Branches
		38					Wassamassaw Swamp					
		01					Caton Creek	33 10 55	80 11 00	0.5		Calamus Pond Road
		02					Mill Branch	33 10 55	80 07 35	2.4		Wassamassaw Swamp
		03					Black Creek	33 13 45	80 10 45	2.7		Big Run
		04					Big Run	33 13 10	80 08 25	1.9		Black Creek

\* All or part tidally influenced.

03-A37

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

This appendix is a compilation of lakes from 10 to 1,000 acres which are contained in the Edisto River report area.

This inventory was compiled from the following sources:

1. Inventory of Lakes in South Carolina Ten Acres or More In Surface Area.
2. USGS Quadrangle Maps.

The USGS quadrangle maps were used to locate and to detect lakes that were not listed in the other sources. Actual surface area and gross storage information is supplied where available. The lakes were coded by major stream basin in accordance with other procedures developed for identifying streams. The map data from Source 1 above generally does not permit detailed location of the small lakes. Thus, lakes are coded by basin only as far as the secondary order.

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	14					N. Lamar	100	400	Charleston
03	14					Magnolia Gardens	100	400	Charleston
03	14					Magnolia Gardens	10	40	Charleston
03	14	16				George Fabian	16	96	Charleston
03	14					Etiwan Fertilizer Co.	22	110	Charleston
03	14					Banks Construction Co.	24	360	Charleston
03	14					W. O. Hanahan	50	100	Charleston
03	14	24				Middleton Gardens	30	360	Charleston
03	14	12				McLeod Sisters	25	50	Charleston
03	14	12				W. O. Hanahan	15	90	Charleston
03	14	02				Lawton Bluff	22	110	Charleston
03	01	03	02			Greenway Plantation	44	176	Charleston
03	09	11				T. C. Long	14	70	Charleston
03	06	11				Mrs. C. C. Royal	17	51	Charleston
03	07	02	02			Mrs. C. C. Royal	21	63	Charleston
03	07	02	01			Mrs. C. C. Royal	28	84	Charleston

03-B2

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	06	16				Bob Berry	120	480	Charleston
03	07	02	02			Mrs. C. C. Royal	32	96	Charleston
03	06	03				J. S. Limehouse	12	48	Charleston
03	06	07				J. S. Limehouse	15	60	Charleston
03	06	07				J. S. Limehouse	12	48	Charleston
03	06	07				J. S. Limehouse	56	280	Charleston
03	07	15	01			N. Thumbleston	12	96	Charleston
03	05	03				Unnamed Lake	--	--	Charleston
03	05	12	07			John F. Sosnowski	14	40	Charleston
03	05	12				Unnamed Lake	--	--	Charleston
03	05	12				Hugh Dawson & Harold Igoe	25	100	Charleston
03	05	12	02			Mac Gibson & Arthur Smoak	125	1,000	Charleston
03	05	07	04			J. Walpole	12	60	Charleston
03	07	04				Unnamed Lake	--	--	Charleston
03	07	30	01			W. W. McConnell	15	45	Charleston
03	07	30	01			McLeod Sisters	75	300	Charleston
03	07	31				Robert Chaplin	14	420	Charleston
03	07	31	01			Malcolm Haven	50	300	Charleston

03-B3

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	07	31	01			McLeod	15	30	Charleston
03	05	07	03			L. E. Glenn	50	100	Charleston
03	07	03				Unnamed Lake	--	--	Charleston
03	09	11				Unnamed Lake	--	--	Charleston
03	05	12	02			Dr. W. D. McDowell	10	70	Charleston
03	01	01	01			Unnamed Lake	18	36	Charleston
03	01	03	03			Raymond Dion	25	50	Charleston
03	01	13	06			Maybank Brothers	400	800	Charleston
03	01	24				State Forestry Commission	90	180	Charleston
03	01	25				State Forestry Commission	110	220	Charleston
03	01					Hugh Lane	100	200	Charleston
03	01	08				Billy Baldwin	150	240	Colleton
03	01					C. D. C. Adams	12	25	Colleton
03	01					S. C. Electric & Gas	15	24	Colleton
03	14	21				Stratford Capers	10	50	Dorchester
03	14	21				Unnamed Lake (Reservoir)	--	--	Dorchester
03	14	28				Wando Inc.	18	90	Dorchester

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	14					Becker Sand & Gravel Co.	70	300	Dorchester
03	14					Lang Strobel	10	50	Dorchester
03	01					Vesta Rumph	15	75	Dorchester
03	01					West Virginia Pulp & Paper Co.	20	120	Dorchester
03	01					West Virginia Pulp & Paper Co.	20	120	Dorchester
03	01					West Virginia Pulp & Paper Co.	20	120	Dorchester
03	01	32	03			Southern Railway	100	320	Dorchester
03	01	32	09			Giant Portland Cement Co.	100	1,000	Dorchester
03	01	32				MacDougall State Correctional Institute	20	200	Berkeley
03	01	32				Lake Merkel	20	160	Berkeley
03	01	32	04			Superior Store	60	4,800	Berkeley
03	01	32	04			Harrey McCormick	12	60	Orangeburg
03	01	32	06			Unnamed Lake	13	65	Orangeburg
03	01	32	06			Fannie B. Shuler	12	50	Orangeburg
03	01	32				Whetsell Brothers	60	300	Orangeburg
03	01	32				Unnamed Lake	30	150	Orangeburg

03-85

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	32				Unnamed Lake	16	80	Orangeburg
03	01	32	08			Brunson Pond	25	100	Orangeburg
03	01	32	08			Wheathers Pond	10	40	Orangeburg
03	01	32				Alma Zimmerman	12	60	Orangeburg
03	01	32				Unnamed Lake	15	75	Orangeburg
03	01	32	11			Early Pond	15	50	Orangeburg
03	01	32	11			Owens Pond	25	100	Orangeburg
03	01	32	13			J. Herman Gramling	50	240	Orangeburg
03	01	32				Hanseer Shuler	12	50	Orangeburg
03	01	32	13			Unnamed Lake	14	56	Orangeburg
03	01	37	03			Country Hatchery	40	320	Orangeburg
03	01	37				Nelda P. Livingston	11	53	Orangeburg
03	01	37				U. S. Fish Hatchery Pond	50	140	Orangeburg
03	01	37				Unnamed Lake	13	83	Orangeburg
03	01	37				W. W. Dibble	17	61	Orangeburg
03	01	37				Harry Davis	15	50	Orangeburg
03	01	37				Unnamed Lake	21	218	Orangeburg

03-86

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	37	04			Unnamed Lake	11	40	Orangeburg
03	01	37	04			T. E. Wannamaker	100	320	Orangeburg
03	01	37	04			L. P. O'Cain	13	52	Orangeburg
03	01	37	04			Arcadia Farms	100	1,400	Orangeburg
03	01	37	04			Unnamed Lake	22	106	Orangeburg
03	01	37	04			Unnamed Lake	20	88	Orangeburg
03	01	37				Smoaks Pond	20	96	Orangeburg
03	01	37	05			Moss Pond	40	160	Orangeburg
03	01	37	06			Millwood Pond	20	96	Orangeburg
03	01	37	06			Annie L. Smith	14	56	Orangeburg
03	01	37				Ezel Hutto	14	67	Orangeburg
03	01	37				Annie L. Smith	13	62	Orangeburg
03	01	37				T. E. Wannamaker	10	48	Orangeburg
03	01	37	08			Cutter Mill Pond	10	48	Orangeburg
03	01	37	08			Eva E. Strickland	15	72	Orangeburg
03	01	37	05			H. G. Fralick	15	25	Orangeburg
03	01	37	10			Hutto Mill Pond	16	77	Orangeburg

03-87

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	37	10			Conner Pond	12	58	Orangeburg
03	01	37	10			H. L. Chaplin	12	58	Orangeburg
03	01	37	10			Livington Pond	--	--	Orangeburg
03	01	37	10			Knots Pond	--	--	Orangeburg
03	01	37	07			Unnamed Lake	--	--	Orangeburg
03	01	37	11			Harleys Mill Pond	18	86	Orangeburg
03	01	37	11			Cooks Pond	--	--	Orangeburg
03	01	37	11			Jones Pond	--	--	Orangeburg
03	01	37				Unnamed Lake	16	104	Orangeburg
03	01	37	09			Unnamed Lake	12	40	Orangeburg
03	01	37	09			Etheredge Mill Pond	100	600	Orangeburg
03	01	37	09			Layseth Mill Pond	13	62	Orangeburg
03	01	37	08			Amaker Pond	--	--	Orangeburg
03	01	37	09			Midway Millpond	--	--	Orangeburg
03	01	37	12			Friday's Pond	16	83	Orangeburg
03	01	37	13			Culler Pond	16	90	Orangeburg
03	01	38	08			Glen W. Cope, Estate	30	168	Orangeburg

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	38	08			Carolyn W. Cope	12	40	Orangeburg
03	01	38	08			Fogle Pond	25	120	Orangeburg
03	01	38	08			Unnamed Lake	13	94	Orangeburg
03	01	38	03			Unnamed Lake	18	86	Orangeburg
03	01	38	03			John A. Fogle	13	94	Orangeburg
03	01	38	03			John Fogle Pond	20	96	Orangeburg
03	01	38	03			Unnamed Lake	10	48	Orangeburg
03	01	38				M. A. Shecut	18	58	Orangeburg
03	01	38	07			B. B. Willoams	10	50	Orangeburg
03	01	38	07			J. W. Williamson	10	40	Orangeburg
03	01	38	11			Dr. Ben Cole	16	77	Orangeburg
03	01	38	11			Unnamed Lake	12	58	Orangeburg
03	01	38	10			Priesters Mill Pond	25	140	Orangeburg
03	01	38	14			Dean Swamp Pond	100	480	Orangeburg
03	01	32	14			T. C. Moss	35	224	Calhoun
03	01	32	11			J. Moss (Moss Lake)	30	168	Calhoun
03	01	32	11			G. Rast	25	120	Calhoun

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	32				George Bull (Bull Pond)	20	112	Calhoun
03	01	37	04			Beckham	10	48	Calhoun
03	01	37	04			Gressette	20	112	Calhoun
03	01	37	04			Staley	25	160	Calhoun
03	01	37	04			Way (Raymond Pond)	28	179	Calhoun
03	01	37	04			Suttcliffe	18	86	Calhoun
03	01	37	04			Suttcliffe	35	196	Calhoun
03	01	37	09			L. Rast	12	67	Calhoun
03	01	37	09			Burton Gunter	50	180	Lexington
03	01	37	09			Edward Sharpe	22	88	Lexington
03	01	37	09			Edward Sharpe	12	36	Lexington
03	01	37	09			Redmond Pond	--	--	Lexington
03	01	37	09			Wilson Shealy (Brookers Mill Pond)	35	182	Lexington
03	01	37	09			Ralph Wessinger (Witt Pond)	10	56	Lexington
03	01	03	09			Marie Hydrick	13	67	Lexington
03	01	03	09			Leto B. Fallaw	12	58	Lexington

03-B10

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	37	14			Dan Poole (Pooles Upper Millpond)	20	80	Lexington
03	01	37	14			Pooles Upper Millpond	16	65	Lexington
03	01	37	14			Lila Bachman	10	52	Lexington
03	01	37	14			Ruth Whisenhunt (Brooker Pond)	12	40	Lexington
03	01	37	16			James F. Rast	40	144	Lexington
03	01	37	16			Fort Pond	70	280	Lexington
03	01	37	14			Poole Millpond	--	--	Lexington
03	01	37	17			John Gunter	150	600	Lexington
03	01	37	17			LaBrodie Mathias (Clarks Mill Pond)	50	200	Lexington
03	01	37	17			Huffman Burnt Millpond	--	--	Lexington
03	01	37	17			Frank Harmon	32	154	Lexington
03	01	37	17			Johnson Pond	18	100	Lexington
03	01	37	17			LaBrodie Mathias (Bouknight Pond)	13	62	Lexington
03	01	37	17			U. H. Collum Est. *(Collum Pond)	10	56	Lexington
03	01	37	17			Hallman Millpond	--	--	Lexington
03	01	37	17			B. F. Paxton (Paxton Millpond)	50	200	Lexington

03-811

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	37	17			Old Barr Pond	24	134	Lexington
03	01	37	17			Crouts Pond	12	87	Lexington
03	01	37	17			M. H. Oswald	11	57	Lexington
03	01	37	17			Arthur Gunter (Taylor Pond)	12	67	Lexington
03	01	37	17			Jones Pond	--	--	Lexington
03	01	37				Halls Pond (Steedman Pond)	34	184	Lexington
03	01	37				Old Rowe Pond	12	58	Lexington
03	01	37	24			L. R. Cone	12	58	Lexington
03	01	37	23			N. C. Ridgell	43	275	Lexington
03	01	37	23			Kirklands Pond	20	80	Lexington
03	01	37	23			Martin Rawl Estate	10	48	Lexington
03	01	37	23			Abells Pond (Abells Millpond)	15	84	Lexington
03	01	37	23			Ansel C. Smith	13	73	Lexington
03	01	37	23			Brodie Millpond	--	--	Lexington
03	01	37	23			Shealy Pond	--	--	Lexington
03	01	37	24			O. E. Hartley	10	56	Lexington
03	01	37	24			Clarence Collum	12	67	Lexington

03-812

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	37	24			James H. Davis	50	300	Lexington
03	01	37	24			Town of Batesburg (Batesburg Reservoir)	16	77	Lexington
03	01	37	24			Joe Shealy	10	64	Lexington
03	01	37	15			Cornelia Corbert	50	160	Aiken
03	01	37	15			Gus Culbertson	35	154	Aiken
03	01	37	15			Whetstone Estate	12	38	Aiken
03	01	37	15			Onie W. Boles	42	250	Aiken
03	01	37	15			Harry Hallman	15	72	Aiken
03	01	37	18			Cooper Realty	200	2,000	Aiken
03	01	37	18			Robert Corbett	33	238	Aiken
03	01	37	18			P. D. Collum (Collums Millpond)	15	60	Aiken
03	01	37	18			Clinton Brown Estate	20	120	Aiken
03	01	37				O'Neal Miller	21	134	Aiken
03	01	37				Chum Gunter	23	166	Aiken
03	01	37	21			Chum Gunter	22	176	Aiken
03	01	37	21			Unnamed Lake	30	120	Aiken

03-B13

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	37	21			C. M. McKeown	35	294	Aiken
03	01	37	20			Rawls Millpond	--	--	Aiken
03	01	37	22			Jones Pond	50	350	Aiken
03	01	37	22			Dr. Ronald Dew	46	331	Aiken
03	01	37	24			Plato Kneece	10	28	Aiken
03	01	38	11			Alonzo Bailey	16	77	Aiken
03	01	38	14			Jack Weathersby	13	62	Aiken
03	01	38	14			Lois M. Holman (Miller Pond)	25	120	Aiken
03	01	38	14			Lourie Johnson (Johnsons Pond)	13	78	Aiken
03	01	38	14			A. Louie Brodie	14	78	Aiken
03	01	38	14			George Wooten	12	67	Aiken
03	01	38	14			L. B. Williams	21	101	Aiken
03	01	38	14			Perrin Garvin	18	79	Aiken
03	01	38	14			Pickens Rish (Cofer Pond)	10	68	Aiken
03	01	38	14			Johnsons Pond	--	--	Aiken
03	01	38	16			Webbs Pond	--	--	Aiken
03	01	38	17			Tylers Pond	50	220	Aiken
03	01	28	17			Goodyear Pond	55	220	Aiken

03-B14

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	38	16			T. B. Hallman	11	57	Aiken
03	01	38				Aiken State Park	18	86	Aiken
03	01	38	18			Otis Baughman Est. (Baughman Pond)	15	90	Aiken
03	01	38	18			O. E. Garvin	15	48	Aiken
03	01	38	20			C. H. Warner (Neeses Pond or Neeses Lake)	50	240	Aiken
03	01	38	20			Garvin Mill Pond (Garvin Pond)	50	300	Aiken
03	01	38	20			G. M. Quattlebaum (Kennedy Pond)	11	57	Aiken
03	01	38	20			Harold Beard	10	56	Aiken
03	01	38	20			Brantley Garvin	22	88	Aiken
03	01	38	20			J. Paul Swartz	25	100	Aiken
03	01	38	20			Garvin Brothers	13	47	Aiken
03	01	38	20			Camp Rawls (Cedar Pond)	21	84	Aiken
03	01	38	19			A. D. Greer (Cedar Lake)	14	62	Aiken
03	01	38	19			Mackey Scott	25	130	Aiken
03	01	38	19			Murry Johnson	10	40	Aiken
03	01	38	19			Vincent Johnson	10	40	Aiken
03	01	38	19			Unnamed Lake	--	--	Aiken

03-B15

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	38	19			Mrs. Julia DuBose (Wildwood Lake)	10	52	Aiken
03	01	38	19			O. T. Canady	12	43	Aiken
03	01	38	19			O. T. Canady (Johnson Lake)	11	40	Aiken
03	01	38				Milton Stack	11	53	Aiken
03	01	38	21			Kirkland Pond	10	40	Aiken
03	01	38	21			Robert N. Milling (Jones Pond)	15	72	Aiken
03	01	38	21			Huttos Pond	50	240	Aiken
03	01	38				Michael Laughlin (Laughlin Pond)	25	110	Aiken
03	01	38				Michael Laughlin	29	174	Aiken
03	01	38				Ruth J. Snipes	18	108	Aiken
03	01	38				Camp Long	21	118	Aiken
03	01	38	23			Camp Gravatt	11	40	Aiken
03	01	38	23			Al Ballenger Estate	25	135	Aiken
03	01	38	23			G. W. Sawyer	42	168	Aiken
03	01	38	23			Lucy V. Kneece	10	48	Aiken

03-816

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	38	23			P. W. Boatwright	11	66	Aiken
03	01	38	23			Jack Ott	13	57	Aiken
03	01	38	23			James Cato	15	54	Aiken
03	01	38	23			Charlie Collum	17	95	Aiken
03	01	38	24			H. D. Pridgeon	12	77	Aiken
03	01	38	24			H. E. Heath & H. N. Willing	21	84	Aiken
03	01	38	24			W. R. Morris	29	116	Aiken
03	01	38				G. T. Miller	10	36	Aiken
03	01	38	25			G. T. Miller	25	110	Aiken
03	01	38	25			Barney Fulmer	12	77	Aiken
03	01	38	27			Vernon Yonce	11	62	Aiken
03	01	38	19			Reynolds Pond	125	625	Aiken
03	01	38	28			Unnamed Lake	--	--	Aiken
03	01	38	29			Cecil Yonce	18	112	Saluda
03	01	38	28			M. S. Watson	12	66	Saluda
03	01	38	29			J. E. Yonce	20	144	Edgefield

03-B17

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	38				J. E. Yonce	10	50	Edgefield
03	01	38				Charlie Holmes	26	208	Edgefield
03	01	38				Ralph Boatwright	11	110	Edgefield
03	01	38				L. D. Holmes	21	150	Edgefield
03	01	38				Town of Johnston	13	115	Edgefield
03	01	38	30			W. L. (Tiny) Yonce	10	90	Edgefield
03	01	38				Town of Johnston	10	89	Edgefield
03	01	38	19			H. S. & L. F. Holmes (Holmes Pond)	14	105	Edgefield
03	01	38	19			L. D. Holmes	30	336	Edgefield
03	01	38	19			Charles Smith	15	120	Edgefield
03	01	38	19			L. E. Smith & G. C. Holmes	11	110	Edgefield
03	01	38	19			L. D. & G. C. Holmes	16	128	Edgefield
03	01	38	19			Vernon Holmes	10	50	Edgefield
03	01	38	19			Maurice Smith	14	70	Edgefield
03	01	38	19			Ridge Fishing Club	12	110	Edgefield
03	01	38	19			H. G. Reynolds	15	90	Edgefield

03-B18

APPENDIX B  
SUMMARY OF 10 TO 1,000 ACRE LAKES

REPORT NUMBER	STREAM CODE					LAKE NAME OR OWNER	SURFACE AREA (acres)	GROSS STORAGE (acre-ft)	LOCATION BY COUNTY  (SOUTH CAROLINA)
	MAJOR RIVER	PRIMARY	SECONDARY	TERTIARY	FIFTH ORDER				
03	01	38	19			Long Pond	--	--	Edgefield
03	01	38	19			L. D. Holmes	12	115	Edgefield
03	01	38	19			J. Maurice Smith	12	90	Edgefield
03	01	38	19			Hovis Bruce & W. G. Smith, Jr.	15	125	Edgefield
03	01	38				Embree Sand Pit	15	45	Bamberg
03	01	38				Embree Sand Pit	12	36	Bamberg
03	01	38	05			T. Conner Guess	15	48	Bamberg
03	01	38	06			W. R. Spell	12	43	Bamberg
03	01	38	06			P. C. A. Richardson	10	36	Bamberg
03	01	35				Airport	12	38	Bamberg
03	01	38	09			J. H. Hair	19	68	Barnwell
03	01	38				T. E. Redd Pond	13	42	Barnwell
03	01	38	12			Ed Bolen's Pond	12	38	Barnwell
03	01	38	12			Whaley (Matthews Pond)	32	102	Barnwell
03	01	38	13			Willis Mill Pond	20	64	Barnwell
03	01	38	13			W. C. Smith & Sons	10	36	Barnwell
03	01	38	15			W. C. Smith & Sons	20	72	Barnwell
03	01	38	13			Boylston Mill	--	--	Barnwell

03-819