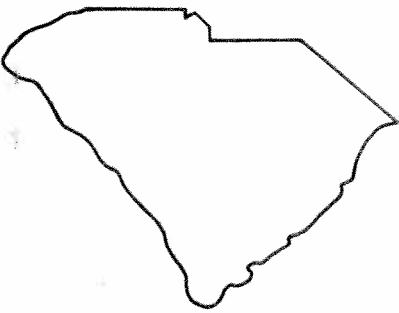


SCWRC REPORT NO. 146



TRAVELTIME AND DISPERSION CHARACTERISTICS
OF THE
EDISTO RIVER SYSTEM,
SOUTH CAROLINA



STATE OF SOUTH CAROLINA
WATER RESOURCES COMMISSION



IN COOPERATION WITH THE
CHARLESTON COMMISSIONERS OF PUBLIC WORKS

JUNE 1984

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Gerald E. Lonon

Report No. 146

**South Carolina Water Resources Commission
3830 Forest Drive
Columbia, South Carolina 29240**

June, 1984

**Report prepared in cooperation
with the
Charleston Commissioners of Public Works**

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A special note of thanks is extended to the Charleston Commissioners of Public Works for financial support, and specifically to John R. Bettis, Manager and Engineer, for his support and cooperation.

SUMMARY

A study was undertaken in 1982 to evaluate the rate of movement and dilution of soluble contaminants entering the North Fork Edisto River, South Fork Edisto River, and the Edisto River in South Carolina. The study was conducted over a wide range of flow conditions along approximately 110 miles of river. Traveftime and dispersion rates were determined by injection of a fluorescent dye and sampling the dye cloud at downstream points. Results of the study allow prediction of arrival times and concentrations downstream of any spill of a soluble contaminant. Detailed explanations and graphic presentations are provided with a simplified procedure to predict traveltme and dispersion characteristics.

INTRODUCTION

The demand for water has increased greatly in South Carolina in recent years. Surface water bodies, such as rivers, creeks, and lakes, satisfy most of the demand. More than 95 percent of all withdrawals in the State are made from surface water sources (Lonon and others, 1983). Since surface water bodies are exposed, they are susceptible to contamination, which can threaten public health, disrupt industrial processes, damage irrigated cropland, or temporarily eliminate the use of a supply source. Pipelines, storage tanks, retention ponds, municipal and industrial wastewater systems, and railway, highway, and waterborne shipments are potential sources of contaminants. Several accidental pollutant spills have occurred recently in the State, affecting downstream withdrawals. Increasing industrial development will increase the probability of such spills in the future, and water users must be prepared for these emergency situations.

When a mass of soluble contaminant is released into a flowing stream, dispersion begins immediately. Because of differences in velocity across the channel, parts of the contaminant cloud will move downstream rapidly while some will be detained in eddies and slower currents. This ever-increasing dispersion along the channel results in a reduction of peak concentration as the contaminant moves downstream. Water users downstream must know if concentrations will be sufficient to disrupt their operations, and if so, when and for how long to suspend withdrawals. Estimates of peak concentrations and arrival times are subject to large errors unless the traveltme and dispersion characteristics are well defined (Hubbard and others, 1982). The purpose of this study was to define these characteristics for portions of the North Fork Edisto, South Fork Edisto, and Edisto Rivers. The study was conducted cooperatively with, and funded in part by, the Charleston Commissioners of Public Works, in the interest of their water supply.

DESCRIPTION OF THE EDISTO RIVER BASIN AND STUDY SEGMENTS

The Edisto River Basin includes parts of twelve counties in south-central South Carolina, draining a total area of 3,100 square miles. The North Fork Edisto and South Fork Edisto Rivers originate near the Fall Line, and flow nearly parallel for more than 80 miles before joining to form the Edisto River. The Edisto River continues southeastward for 50 miles to the confluence with Four Hole Swamp, turns sharply southward, and continues 60 miles before emptying into St. Helena Sound (Figure 1).

The study area includes the North Fork Edisto River from U.S. Highway 301 to its mouth, the South Fork Edisto River from U.S. Highway 321 to its mouth, and the Edisto River from the confluence of the North Fork and South Fork to S.C. Highway 61 (Figure 2).

Streamflow records are available for U.S. Geological Survey (USGS) gaging stations in the study area, as listed in Table 1. Records indicate that the flow characteristics of the North Fork Edisto and South Fork Edisto Rivers are similar in magnitude and duration (Figure 3). Upstream of the study boundary, the total drainage area of the North Fork and South Fork Edisto Rivers lies within the Inner Coastal Plain (Sandhills) physiographic province. As is typical of streams originating in this region, streamflow is relatively well-sustained during drought periods (Bloxham, 1976) and not subject to rapid rises or recessions. The flow characteristics of the Edisto River are largely dependent on the North Fork and South Fork, particularly at lower flows, when tributary inflow to the main stem is greatly reduced. Cattle Creek, Polk Swamp, and Four Hole Swamp contribute little flow during dry periods (Bloxham, 1981), as is typical of streams originating in the Lower Coastal Plain. Throughout the study area, floods tend to crest and fall slowly, due to pervious soils in the upper basin, and due to low relief in the lower basin. Low flows are generally confined to a single, deep, well-defined channel, while high flows spread into broad swamp flood plains. The study segments are free flowing, unobstructed by dams, and meander considerably.

Although withdrawals of surface water are few in number within the study area, two major withdrawals occur along the study segments. The City of Charleston withdraws as much as 110 cubic feet per second (cfs) from the Edisto River near S.C. Highway 61 for drinking water and industrial use in the Charleston-Summerville area. The Canadys Thermoelectric Power Plant of the South Carolina Electric and Gas Company near U.S. Highway 15 uses approximately 240 cfs for cooling purposes (Lonon and others, 1983). Other withdrawals are made by the City of Orangeburg and Ethyl Corporation from tributaries of the North Fork and South Fork Edisto River, respectively, and for agricultural irrigation at numerous sites throughout the upper part of the basin (S.C. Water Resources Commission, 1983).

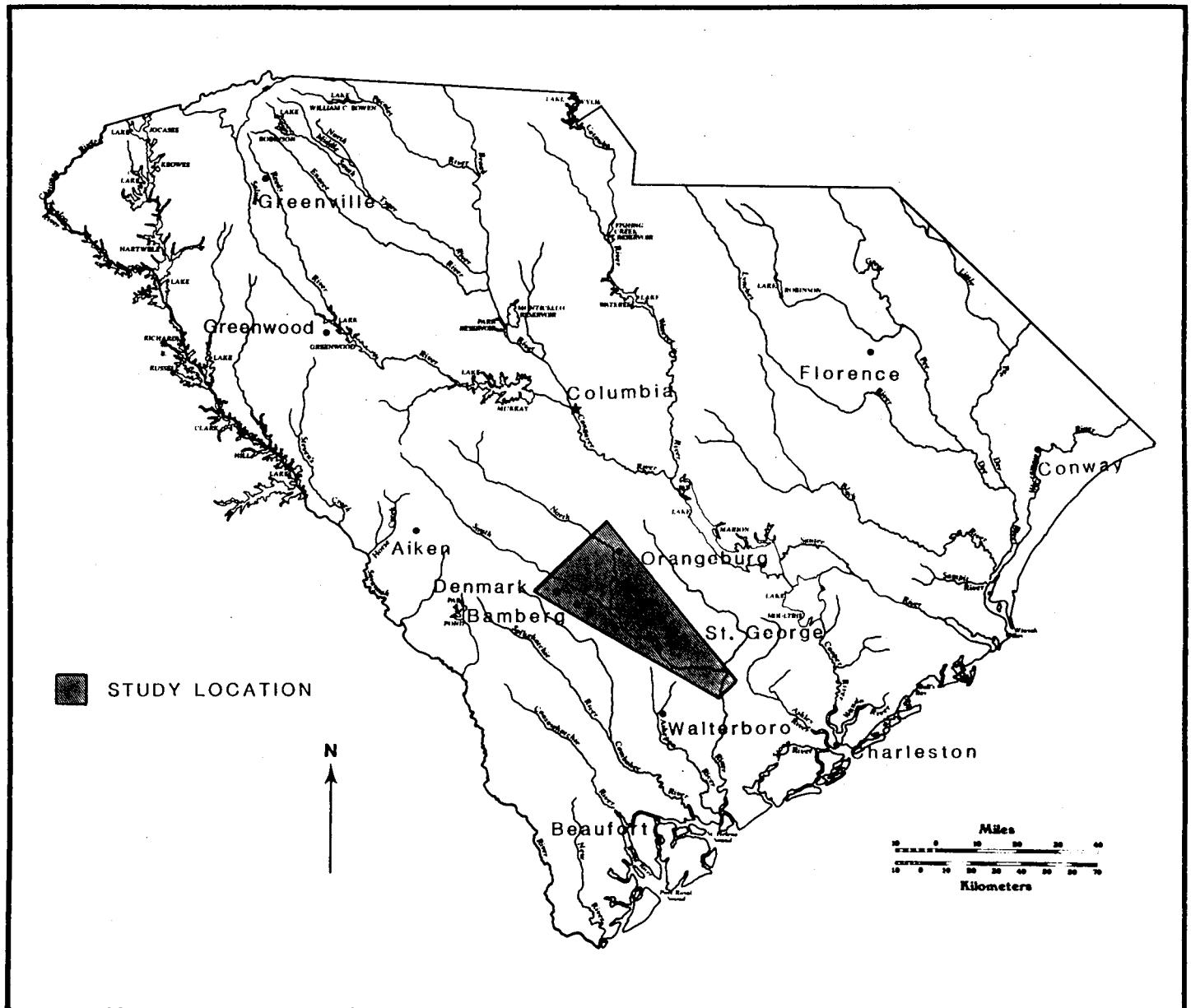


Figure 1. Location of study area in the Edisto River Basin, South Carolina.

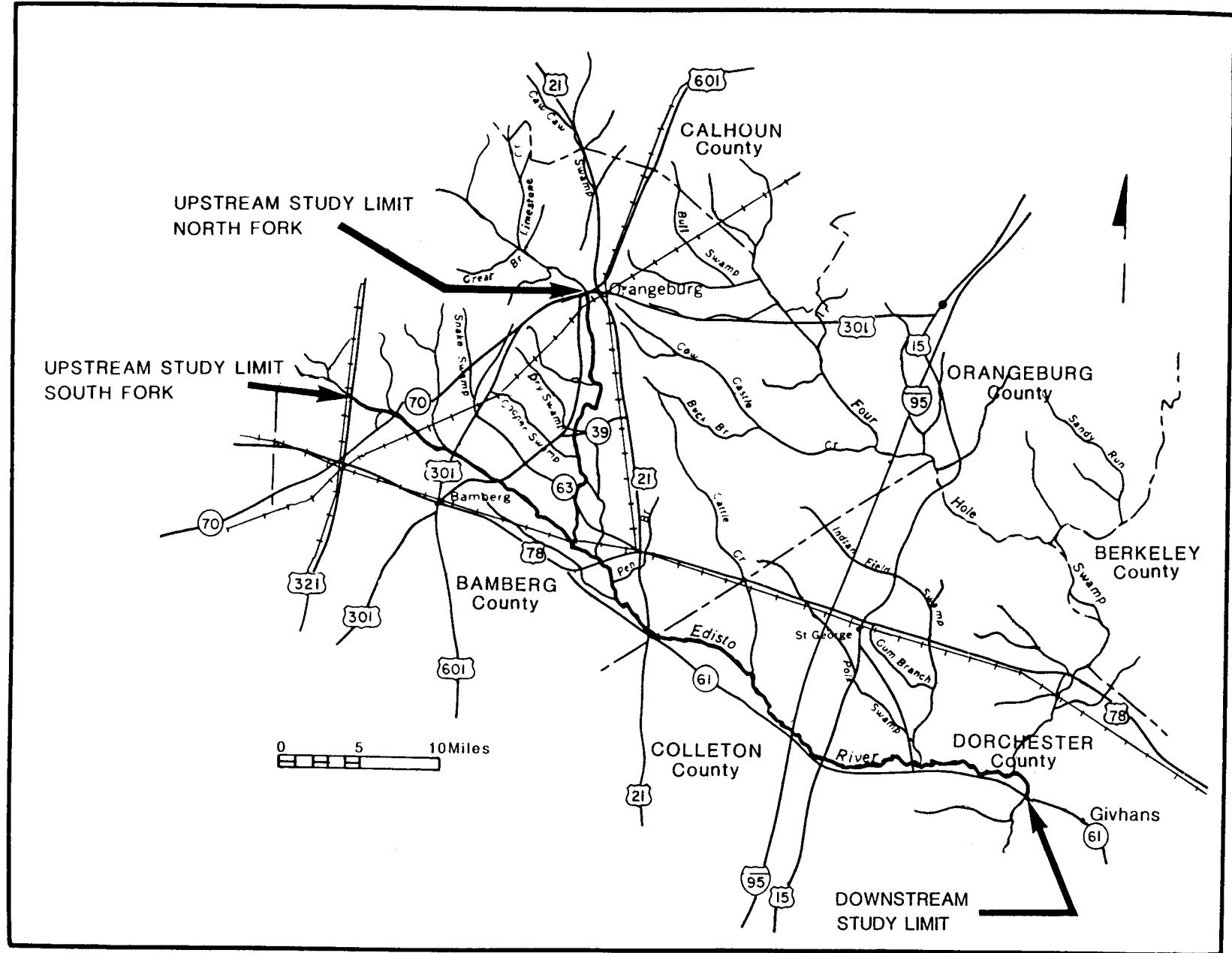


Figure 2. Location of study segments, rail and highway crossings, and major tributaries within the study area.

TABLE 1. Selected data for U.S. Geological Survey gaging stations in the study area (U.S. Geological Survey, 1983).

2-1730 SOUTH FORK EDISTO RIVER NEAR DENMARK

LOCATION.--Lat $33^{\circ}23'35''$, long $81^{\circ}08'00''$, Bamberg-Orangeburg County line, on left bank at downstream side of bridge on U.S. Highway 321.

DRAINAGE AREA.--720 square miles.

PERIOD OF RECORD.--August 1931 to September 1971, October 1980 to September 1982.

GAGE.--Water-stage recorder. Datum of gage is 155.68 ft. NGVD.

AVERAGE DISCHARGE.--42 years (1932-71, 1981, 1982) 787 cfs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 cfs, April 11, 1936, gage height, 10.91 ft; minimum, 146 cfs, August 12, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known since at least 1893, 11.7 ft in October 1929, discharge 17,100 cfs.

2-1735 NORTH FORK EDISTO RIVER AT ORANGEBURG

LOCATION.--Lat $33^{\circ}29'00''$, long $80^{\circ}52'25''$, Orangeburg County, on left bank under bridge on U.S. Highway 301 at Orangeburg.

DRAINAGE AREA.--683 square miles.

PERIOD OF RECORD.--October 1938 to September 1982.

GAGE.--Water-stage recorder. Datum of gage is 149.02 ft. NGVD.

AVERAGE DISCHARGE.--44 years, 794 cfs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 cfs, September 18, 1945, gage height, 14.28 ft; minimum, 190 cfs, September 13, 14, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.-- Maximum flood known since at least 1893, 14.7 ft in September 1928, discharge, 10,000 cfs.

2-1750 EDISTO RIVER NEAR GIVHANS

LOCATION.--Lat $33^{\circ}01'40''$, long $80^{\circ}23'30''$, Dorchester County, on left bank at downstream side of the bridge on State Highway 61.

DRAINAGE AREA.--2,730 square miles.

PERIOD OF RECORD.--January 1939 to September 1982.

GAGE.--Water-stage recorder. Datum of gage is 20.46 ft. NGVD.

AVERAGE DISCHARGE.--43 years, 2,662 cfs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 cfs, June 14, 1973, gage height, 15.84 ft; minimum, 290 cfs, August 16, 1956, gage height, 0.51 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1904, 17.5 ft in February 1925, discharge, 24,900 cfs.

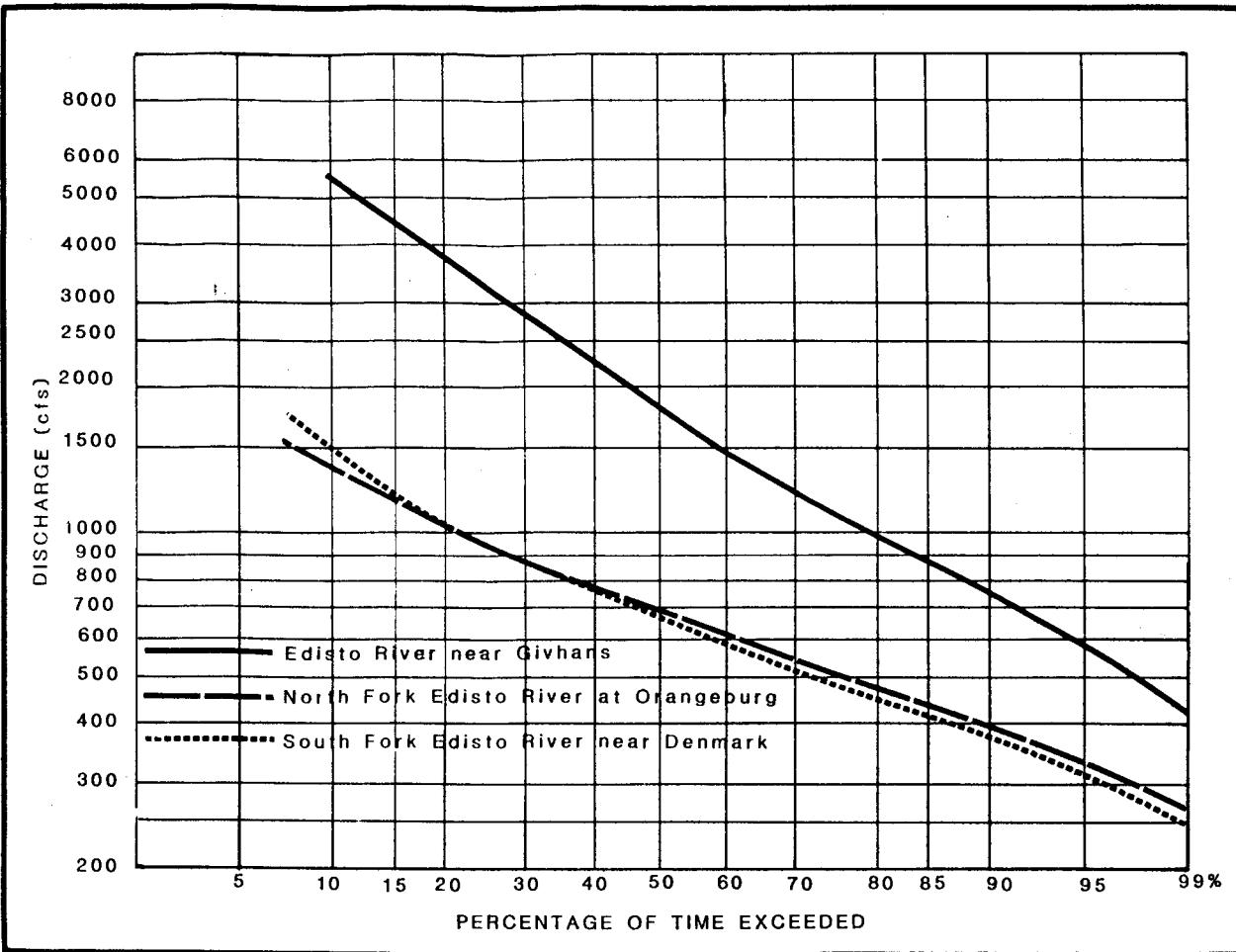


Figure 3. Duration of streamflow at U.S. Geological Survey gaging stations in the study area (Bloxham, 1979).

DATA COLLECTION

Traveltimes and dispersion characteristics of all river segments were determined using standard techniques of the U.S. Geological Survey (Hubbard and others, 1982). Injections of dye were made on several dates from November 1982 through January 1984. Injection dates were dependent on river discharge, with studies generally conducted at flows which are exceeded 35, 70, and 95 percent of the time. Determination of traveltimes and dispersion at these discharges would allow predictions for conditions occurring at least 60 percent of the time, excluding higher flows when dilution would be greatest, but including lower flows, when the effects of a spill would be most severe.

Several dyes are available for use as tracers in water (Smart and Laidlaw, 1977), all of which are water soluble, highly detectable, and harmless in low concentrations. Rhodamine WT, a fluorescent dye, was selected for this study because of its relatively low loss rate and ease of handling. A 20 percent solution was used for all injections. Since concentration is directly related to the degree of fluorescence, dye concentration could be accurately determined by analyzing water samples with a fluorometer.

From the outset, every effort was made to ensure that the study was conducted to meet the highest level of completeness (Hubbard and others, 1982). To do so, injections of dye were made at three different river discharges on each segment, and

- (1) standard solutions for calibration of the fluorometer were prepared from a sample of the dye to be injected,
- (2) the volume of dye to be injected was measured accurately prior to injection,
- (3) the dye was injected laterally across the channel to ensure complete mixing,
- (4) for each dye injection, sampling of the dye cloud as it moved downstream was conducted at two or more sites,
- (5) samples were taken at downstream sites prior to arrival of the dye cloud to determine background fluorescence,
- (6) the dye cloud was sampled concurrently at several points across the channel to verify complete lateral dispersion,
- (7) river discharge was determined at each sampling site during passage of the dye cloud, and
- (8) sampling at each site continued until dye concentrations fell to 10 percent of the peak concentration or 0.20 micrograms per liter, whichever was less.

These requirements were adhered to rigorously, with exceptions on only two occasions, when circumstances allowed sampling at only one downstream site.

The volume of dye to be released was measured carefully, the amount being that thought necessary to produce a peak concentration of 2.0 micrograms per liter at the most downstream sampling site. In reality, the peaks varied, with maximum concentrations of as little as 1.2 micrograms per liter being accepted if a distinguishable rise, crest, and recession of concentration was detected.

Water samples were analyzed for fluorescence with a Turner Designs model 10 fluorometer. The fluorometer was calibrated prior to and during use at each sampling site with standard solutions of known concentration.

Samples were collected near midstream or where velocities appeared greatest. Samples taken at a single point are representative of concentrations laterally at that time, provided that lateral dispersion is complete. Occasionally samples were taken across the channel to verify complete dispersion, and in all cases this condition was met.

In general, sampling intervals were chosen so that twenty or more samples were taken at each site. This allowed accurate observations of the traveltimes of the leading edge, peak, and trailing edge of the dye cloud. With sufficient samples at each site to define the time-concentration curve, along with determination of the discharge, the volume of dye passing each site could be calculated.

Streamflow at each sampling site was determined by current meter measurement, except at U.S. Highway 21 and S.C. Highway 61, where gage readings were available at USGS stations. Tabulations of all discharge measurements are included in Appendix A.

METHODS OF ANALYSIS

Dispersion of a contaminant in a stream, and the resulting reduction of peak concentration, logically varies with the amount of contaminant released, rate of streamflow, and traveltimes to downstream locations. Thus analyses were made to show the relation between these variables.

Reductions in concentration of a soluble material will also occur as a result of decay, chemical reactions, and sorption by benthic or suspended matter. If a contaminant is totally stable, or conservative, the entire amount entering a stream will remain constant, and eventually be transported downstream. Since conservativeness varies and may be unpredictable, analyses were made to allow predictions as if contaminants were totally conservative. In this way, any error introduced would be on the high, or safe, side. Field data were sufficient to allow calculation of the percentage of dye injected which was transported past the sampling sites, and the observed peak concentrations could then be adjusted to conservative concentrations by the equation:

$$\text{Conservative Peak} = \frac{\text{Observed Peak Concentration}}{\text{Concentration}} \times 100 \quad \text{Percent Recovery}$$

Where percent recovery is calculated by the equation:

$$\text{Percent Recovery} = \frac{Q \times A}{1403 \times V} \quad (\text{from Hubbard and others, 1982, converted to standard units}),$$

Where Q is the discharge at the sampling point, in cfs,
A is the area beneath the time-concentration curve,
in micrograms per liter-minutes,
V is the volume of 20 percent dye solution injected, in liters.

Detailed sampling data and calculations of percentages of recovery are included in Appendix B.

In the analyses which follow, the use of the term "peak concentration" is always in reference to conservative peak concentration. To allow for varying amounts of contaminants, these values have been further adjusted to conservative peak concentration per pound of solute. For the rhodamine WT dye solution with a specific gravity of 1.19,

$$\text{Total pounds} = \text{Liters of 20 percent dye solution} \times 0.525 \quad \text{of dye}$$

Since traveltimes and dispersion varies with streamflow, each dye injection and the associated traveltimes and peak concentration were correlated to a single index discharge for each river segment. This discharge was generally the daily average flow rate for the date of

injection at the USGS gaging station located on the segment, as follows:

<u>Segment</u>	<u>Index USGS Station Number and Name</u>
North Fork Edisto River	2-1735 North Fork Edisto River at Orangeburg
South Fork Edisto River	2-1730 South Fork Edisto River near Denmark
Edisto River	2-1750 Edisto River near Givhans

On several occasions, a single injection at the head of a segment was insufficient to produce the necessary peak concentrations at all downstream sites. When this occurred, a second injection was later made within the segment at approximately the same discharge. When the difference in the two discharges was not great, the index discharge was the average of the two. Index discharges for the Edisto River are the sum of that at USGS station number 2-1750 and the withdrawal by Charleston.

Predictions of dispersion are made by relating traveltimes between the point of injection and the point of interest to the peak concentration per unit weight of solute (for an index discharge). Theoretically, the relation between these variables is a straight line on logarithmic paper (Hubbard and others, 1982). These relations were determined for each river segment and for each index discharge.

Distances along the river segments were scaled from USGS topographic maps. The entire area was covered by 1:24,000 scale maps, all of which were published since 1979.

Determination of the relation between several pairs of variables was required in the analyses. In all cases where a line of relation is shown, that line was derived by least-squares linear regression of the data points.

RESULTS

A summary of field data, including locations and dates of injections and sampling, discharges, traveltimes, and peak concentrations is shown in Tables 2, 3, and 4. Typical time-concentration curves are shown in Figure 4.

From these data, the relation between discharge and velocities of the leading edge and peak was found to be well-defined for all river segments (Figure 5). The plotted points in Figure 5 are the average velocities for an entire segment for any injection. Traveltime of the peak and leading edge can be determined with knowledge of the index streamflow and the distance between points of concern.

Data indicated that the velocity of the trailing edge was not related singularly to discharge. For a given segment, trailing edge velocities were greater at intermediate flows and less at both low and high flows. Further, an increase in the velocity of the trailing edge almost invariably occurred with increased distance downstream from the point of injection. However, no clear relation could be established between trailing edge velocities and either elapsed time since injection, distance downstream from point of injection, or peak concentration. Traveltime of the trailing edge could be determined by adding the time of passage of the dye cloud to the traveltime of the leading edge, if a means of predicting passage time was established. As might be expected, peak concentrations decreased as passage time increased, since the dye was dispersed into an increasing length of channel. The relation between peak concentration and passage time for the study segments was found to be reasonably well-defined, and is shown in Figure 6. Thus, once the expected peak concentration is determined, the passage time, and traveltime of the trailing edge, can also be determined.

Relations between peak concentration and traveltime of the peak are shown in Figures 7, 8, and 9. The theory of a straight-line relation was verified in all cases where samples were taken at more than two locations. To allow prediction of peak concentrations at index discharges other than those of the study, graphs of traveltime versus discharge, producing a family of peak concentration curves, were derived from the relations shown in Figures 7, 8, and 9. From these graphs, suitable flows were selected, and replotted to the original form.

Table 2. Traveltime and dispersion data for the North Fork Edisto River.

Site	Distance downstream from point of injection (miles)	Discharge (cfs)	Traveltime (hours)			Mean velocity (miles per hour)		Peak concentration (micrograms per liter)		Conservative peak conc. (micrograms per liter)		
			Leading edge	Peak	Trailing edge	Leading edge	Peak	Trailing edge	Percent recovery			
U.S. Hwy 301	0	533*	4.2 liters dye injected at 1840 hrs, November 8, 1982									
County Road 39	15.2	538	15.7	18	24	.96	.84	.63	3.4	60	5.7	
County Road 63	23.7	522	25.8	28.8	38	.92	.82	.62	2.1	59	3.6	
12	U.S. Hwy 301	0	876*	8.0 liters dye injected at 1800 hrs, January 8, 1983								
	County Road 39	15.2	1010	15	17.8	38	1.01	.85	.40	1.3	58	2.2
County Road 39	0	761*	7.0 liters dye injected at 0020 hrs, January 13, 1983									
	County Road 63	8.5	911	8.3	11	20	1.02	.77	.42	2.1	65	3.2
U.S. Hwy 301	0	384*	3.0 liters dye injected at 1645 hrs October 10, 1983									
	County Road 39	15.2	382	17.6	19.6	27	.86	.78	.56	4.6	76	6.1
	County Road 63	23.7	385	28.8	31.8	38	.82	.75	.62	3.0	64	4.7

*Index Discharge at USGS Gaging Station 2-1735, North Fork Edisto River at Orangeburg (U.S. Hwy. 301).

Table 3. Traveftime and dispersion data for the South Fork Edisto River.

Site	Distance downstream from point of injection (miles)	Discharge (cfs)	Traveftime (hours)			Mean velocity (miles per hour)			Peak concentration (micrograms per liter)			Conservative peak conc. (micrograms per liter)
			Leading edge	Peak	Trailing edge	Leading edge	Peak	Trailing edge	Percent recovery	Percent	Percent	
U.S. Hwy 321	0	530*	6.2 liters dye injected at 0230 hrs, December 8, 1982									
S.C. Hwy 70	5	578	5	6.2	16.5	1.0	.81	.30	9.1	74	12	
U.S. Hwy 301	12.7	592	14.5	17	30	.88	.75	.42	1.7	44	3.9	
31	U.S. Hwy 321	0	670*	16 liters dye injected at 0400 hrs, January 13, 1983								
	S.C. Hwy 70	5	731	5	6.2	26	1.0	.81	.19	7.3	62	12
	U.S. Hwy 301	12.7	1000	14.8	23	56	.86	.55	.23	1.2	61	2.0
U.S. Hwy 301												
U.S. Hwy 301	0	720*	25 liters dye injected at 1600 hrs, May 10, 1983									
Cannon Bridge	6.6	905	5.7	7.5	22	1.16	.88	.30	11	71	15	
Near Mouth	17.8	861	17.5	24	49	1.02	.74	.36	3.0	55	5.5	
U.S. Hwy 301												
U.S. Hwy 301	0	414*	5 liters dye injected at 0200 hrs, June 2, 1983									
Cannon Bridge	6.6	470	6.7	8	11	.99	.82	.60	12	72	17	
Near Mouth	17.8	438	19	22	30	.94	.81	.59	4.9	69	7.1	
U.S. Hwy 321												
S.C. Hwy 70	5	263*	5 liters dye injected at 0100 hrs, August 2, 1983									
U.S. Hwy 301	12.7	279	6.4	7.6	12	.78	.66	.42	25	78	32	
Cannon Bridge	19.3	308	17	19.5	29	.75	.65	.44	11	78	14	
Near Mouth	30.5	321	26	28.5	37	.74	.68	.52	7.7	70	11	
		331	41	45	56	.74	.68	.54	4.6	61	7.5	

*Index Discharge at USGS Gaging Station 2-1730, South Fork Edisto River near Denmark (U.S. Hwy. 321).

Table 4. Traveltine and dispersion data for the Edisto River.

Site	Distance downstream from point of injection (miles)	Discharge (cfs)	Traveltine (hours)			Mean velocity (miles per hour)			Peak concentration (micrograms per liter)	Percent recovery	Conservative peak conc. (micrograms per liter)
			Leading edge	Peak	Trailing edge	Leading edge	Peak	Trailing edge			
Southern RR 0 1230* 15 liters dye injected at 1600 hrs, May 30, 1983											
U.S. Hwy 78	3.8	1120	3.1	4.1	7.3	1.23	.93	.52	26	88	30
U.S. Hwy 21	13.8	1220	12.5	14.5	21	1.10	.95	.66	8.4	79	11
Stokes Bridge	44.7	1130	42	47	62	1.06	.95	.72	3.3	71	4.6
S.C. Hwy 61	58.9	1180	56	62	73	1.05	.95	.81	1.8	44	4.1
Southern RR 0 800* 12 liters dye injected at 1300 hrs, October 13, 1983											
U.S. Hwy 78	3.8	901	3.5	4.4	7.5	1.09	.86	.51	29	99	29
U.S. Hwy 21	13.8	857	13.0	15.5	22	1.06	.89	.63	11	86	13
Stokes Bridge	44.7	768	44.5	50	66	1.00	.89	.68	3.6	68	5.3
S.C. Hwy 61	58.9	812	59	66	80	1.00	.89	.74	2.5	60	4.2
Southern RR 0 2150* 50 liters dye injected at 0740 hrs, January 4, 1984											
U.S. Hwy 78	3.8	2210	2.5	3.2	13	1.52	1.19	.29	38	87	44
U.S. Hwy 21	13.8	2320	10	13	34	1.38	1.06	.41	6.0	83	7.2
U.S. Hwy 15	35.7	2150	27.8	34.5	69	1.28	1.03	.52	1.9	65	2.9
U.S. 15 0 2530* 39 liters dye injected at 2400 hrs, January 8, 1984											
Stokes Bridge	9.0	2000	6.0	7.3	15	1.50	1.23	.60	20	98	20
S.C. Hwy 61	23.2	2560	16.5	19.6	34	1.41	1.18	.68	5.0	76	6.6

*Index Discharge at USGS Gaging Station 2-1750, Edisto River near Givhans (S.C. Hwy. 61), and withdrawal by Charleston.

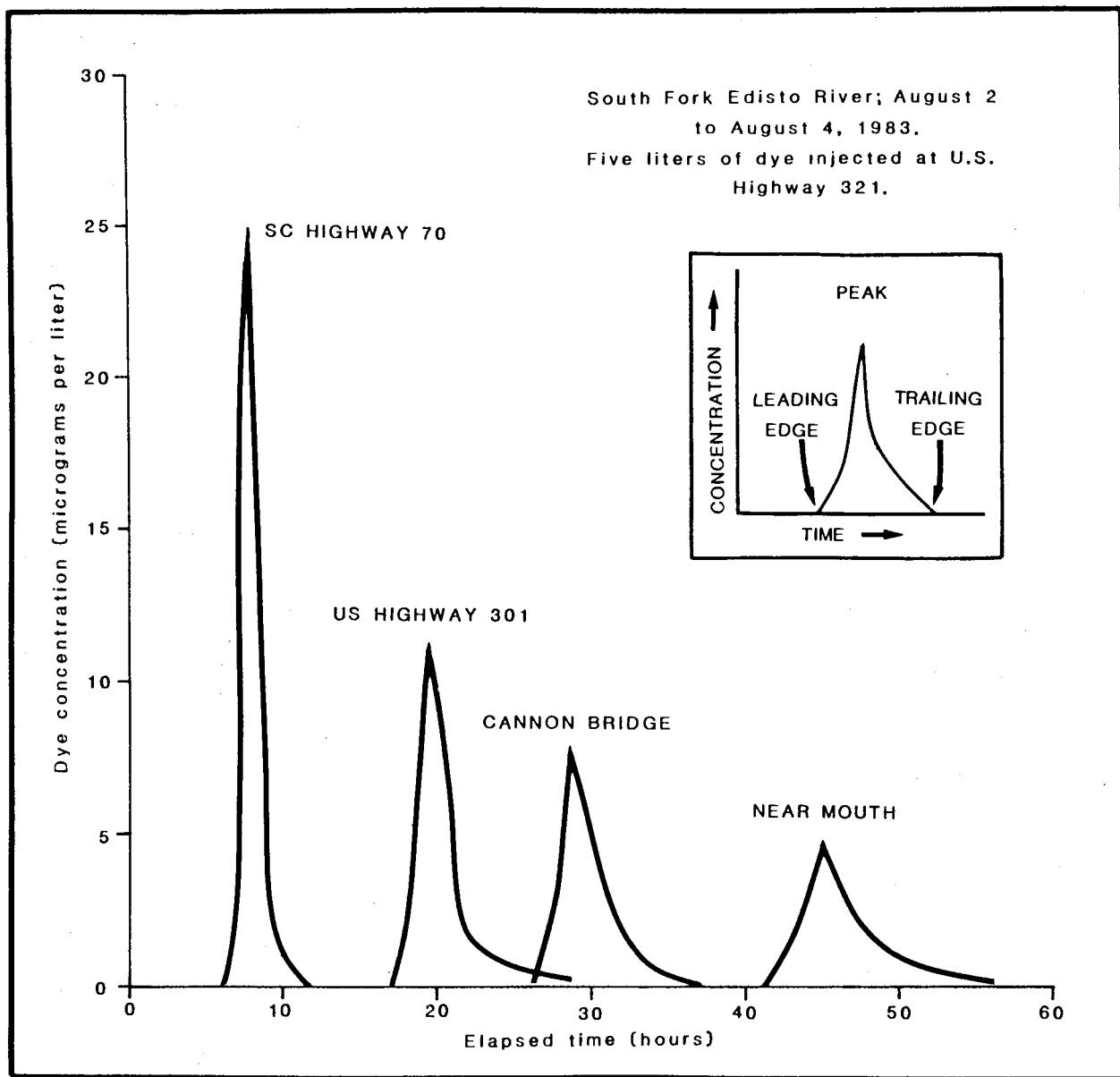


Figure 4. Typical time - concentration curves for an injection of dye.

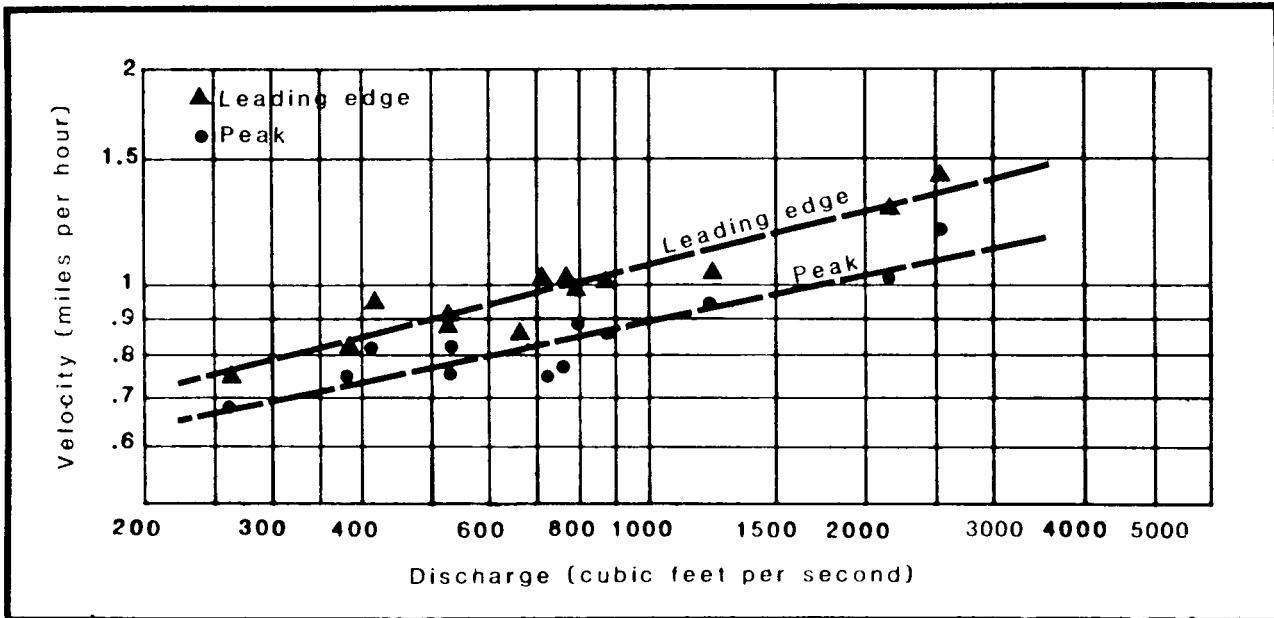


Figure 5. Observed relation of discharge to velocity of dye clouds in the study segments.

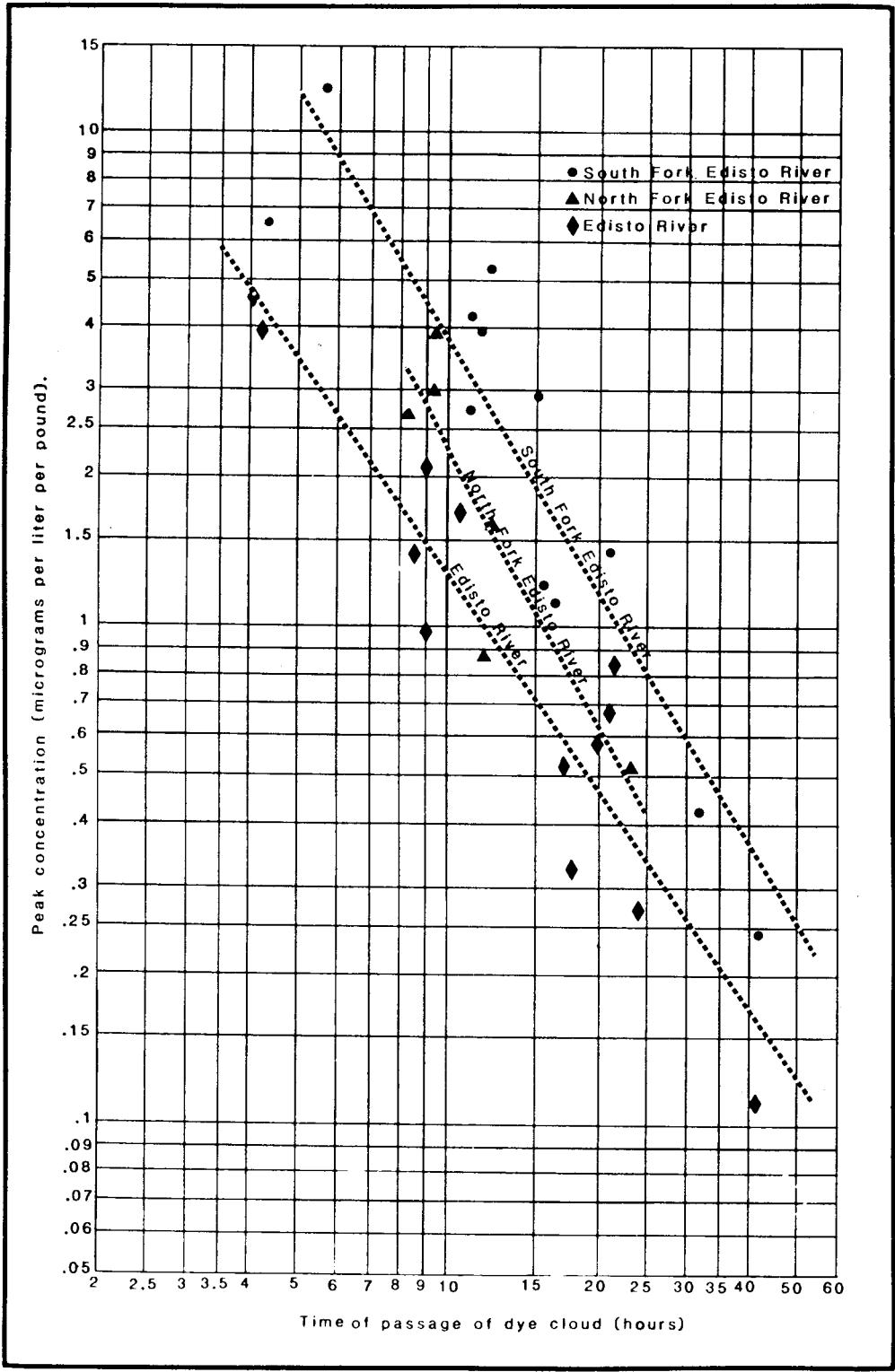


Figure 6. Observed passage time - peak concentration relations for the study segments.

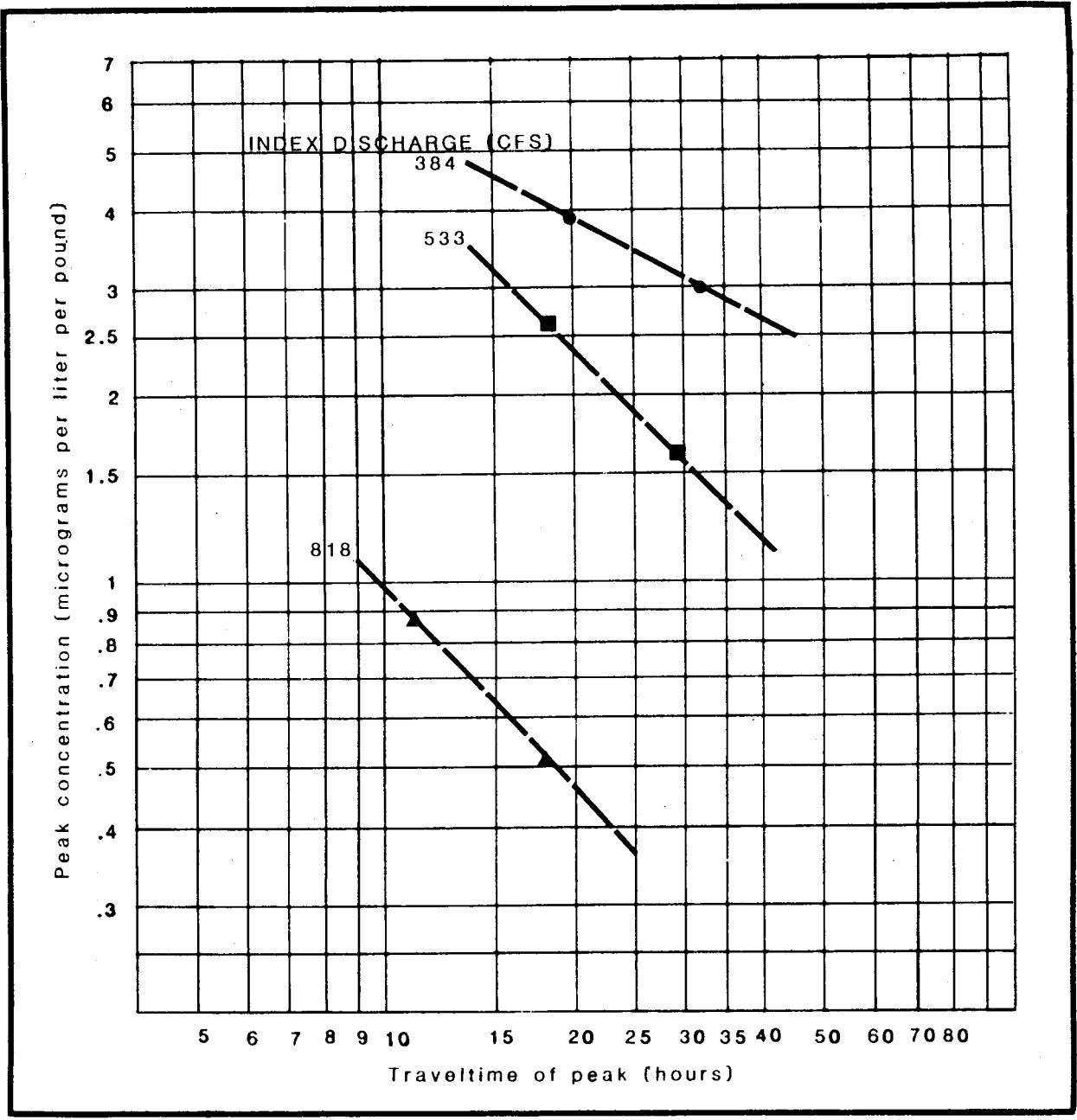


Figure 7. Observed traveltimes - peak concentration relations for the North Fork Edisto River.

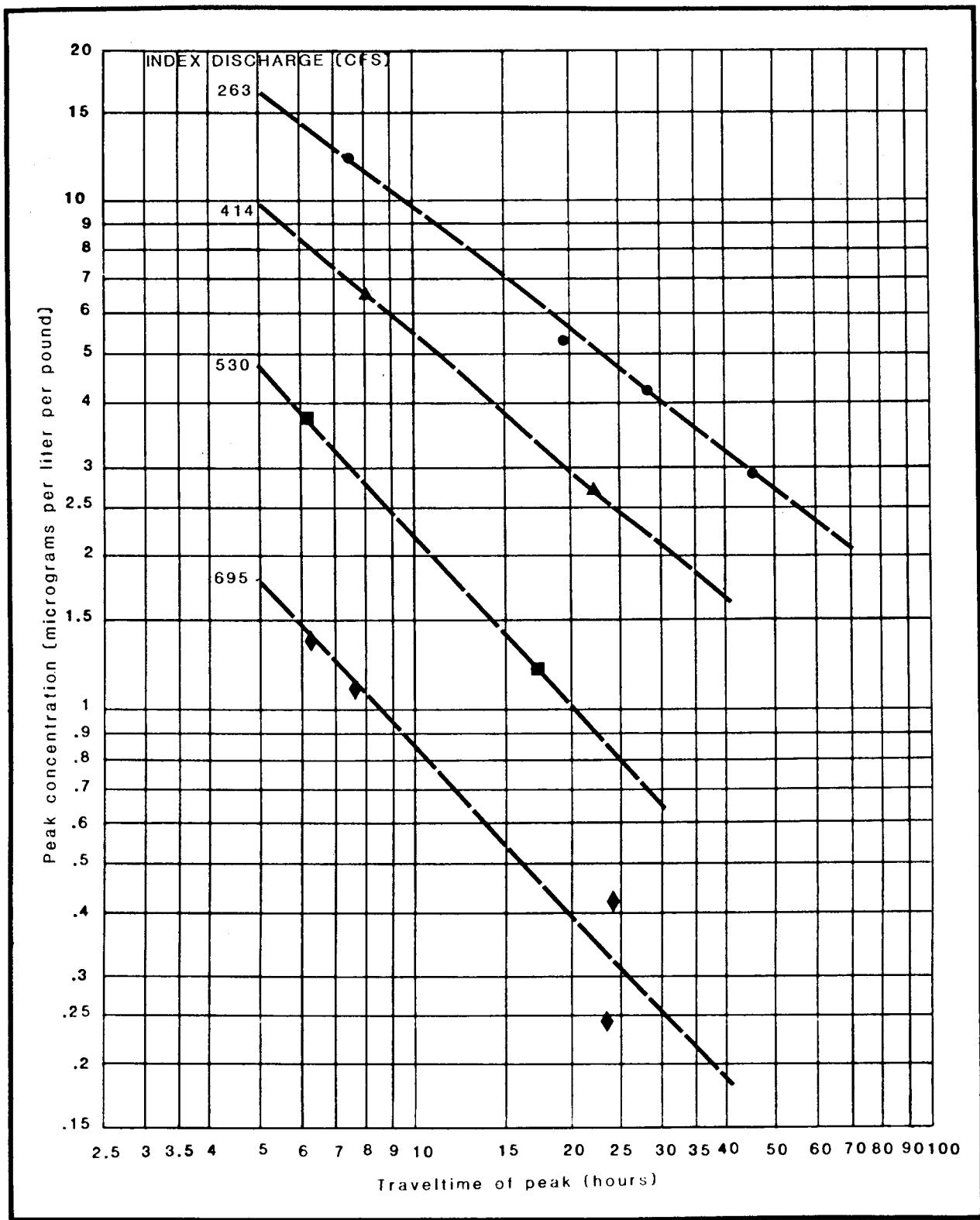


Figure 8. Observed traveltimes - peak concentration relations for the South Fork Edisto River.

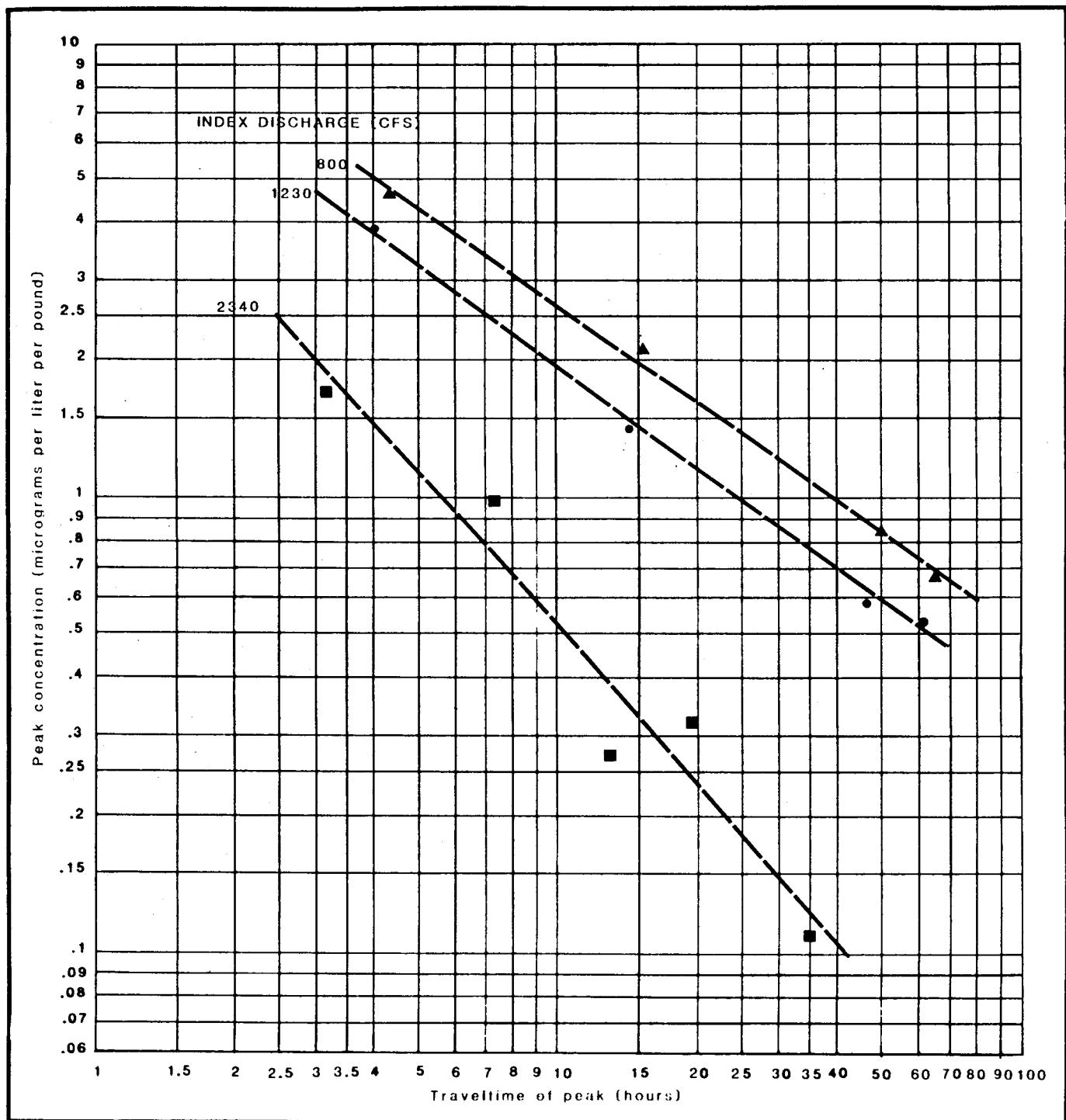


Figure 9. Observed travertime - peak concentration relations of the Edisto River.

PROCEDURE FOR DETERMINING TRAVELTIME AND DISPERSION
OF A SOLUBLE CONTAMINANT

The procedure for predicting traveltimes and peak concentrations on any of the three segments, North Fork Edisto River, South Fork Edisto River, or the Edisto River, for a spill on the same segment, is quite simple. When predictions for the Edisto River are needed for a spill occurring on either the North Fork or South Fork Edisto Rivers, the procedure is slightly more complicated. In general, the procedure is as follows:

- (1) Determine the index discharge at the appropriate USGS gaging station(s) for the day of the spill. Stations are located at U.S. Highway 301 on the North Fork Edisto River, U.S. Highway 321 on the South Fork Edisto River, and at S.C. Highway 61 on the Edisto River. When predictions are needed only for the segment into which the spill occurred, only one index discharge is needed, that being from the station located on the affected segment. Otherwise, discharges are needed from all three stations. Observations of river stage are made daily by the National Weather Service at the stations on the North Fork Edisto River and Edisto River, and are available from the Columbia office. Observations of stage of the South Fork Edisto River are more difficult to obtain, but assistance may be requested from the Columbia offices of the USGS, the Water Resources Commission, or the S.C. Department of Health and Environmental Control.

The index discharge for the Edisto River is that at the USGS index station near Givhans plus the withdrawal made upstream by the City of Charleston. This diversion varies, and can be obtained from the Commissioners of Public Works.

Stage readings at any of the three stations can be converted to discharge by use of Table 5. Discharges obtained in this manner will be instantaneous discharges and are not necessarily equal to the average flow rate for the date of the spill. However, the error introduced should be minor, since these rivers do not normally rise or fall rapidly. A better estimate of index discharge during periods of changing stages can be obtained by averaging instantaneous discharges for the day of the spill and for the following day.

- (2) Determine the distance between the location of the spill and the point of concern downstream, from Table 6.
- (3) Determine the velocities of the leading edge and peak from Figure 10.
- (4) For arrival times at the downstream point, calculate traveltimes by dividing the distance by the velocities of the leading edge and peak, and add to the time of occurrence of the spill.

- (5) For the particular index discharge and traveltimes of the peak, determine the peak concentration (in micrograms per liter per pound of contaminant spilled) from Figure 11, 12, or 13. Multiplying this value by the total pounds of pure contaminant gives the expected peak concentration in micrograms per liter. The total pounds of contaminant is the weight of pure contaminant released, and not necessarily the total weight of the spilled material.
- (6) Determine the passage time for the peak concentration [from Step (5), in micrograms per liter per pound] using Figure 14. This value is the time required after arrival of the leading edge until concentrations fall to either 0.2 microgram per liter or ten percent of the peak, whichever is less.

For predictions at a point on the Edisto River, when the spill occurred on either the North Fork Edisto or South Fork Edisto Rivers, the procedure is as follows:

- (A) Determine the traveltimes of the leading edge and peak, and the peak concentration, at the confluence of the North Fork Edisto and South Fork Edisto Rivers, using the procedure described above.
- (B) Determine the traveltimes for the Edisto River from the confluence to the desired point downstream. These values can be added to the corresponding traveltimes of the leading edge and peak for the appropriate fork to obtain arrival times.
- (C) Multiply the peak concentration [from Step (A), in micrograms per liter per pound] by a dilution factor, which is simply the ratio of the index discharge of the affected segment (either the North Fork or South Fork) to the combined index discharges of both the North Fork and South Fork Edisto Rivers.
- (D) For this peak concentration, using Figure 13, determine the "equivalent traveltimes" for the main stem.
- (E) Add the equivalent traveltime to the traveltimes of the peak for the Edisto River [from Step (B)]. Again using Figure 13, for this total equivalent traveltimes, determine the peak concentration in micrograms per liter per pound. The expected peak concentration can be obtained by multiplying this value by the total pounds of pure contaminant. Please note that the equivalent traveltime is for use in determining the peak only, and not for use in determining arrival times [see Step (B)].
- (F) With the peak concentration from Step (E), passage time can be obtained from Figure 14.

The following example illustrates the use of both procedures.

Example: A spill of 500 pounds of a soluble contaminant occurs at the Seaboard Coast Line crossing of the North Fork Edisto River at Orangeburg at noon on March 1. What will be the peak concentration and the times of arrival of the leading edge, peak, and trailing edge at County Road 63 on the North Fork Edisto River, and at the Charleston water intake on the Edisto River?

Solution: From the appropriate sources, the stages at index stations on the North Fork Edisto, South Fork Edisto, and Edisto Rivers are found to be 4.5, 5.9, and 4.4 feet, respectively. From Table 5, the index discharges are then 540, 554, and 1,320 cfs, respectively. The withdrawal by Charleston is 90 cfs, and thus the index discharge for the Edisto River is 1,410 cfs.

From Table 6, the distance between the point of the spill and County Road 63 is 23.1 miles, and the distance to the mouth of the North Fork is 26.9 miles. The distance from the confluence of the North Fork and South Fork Edisto Rivers to the Charleston intake is found to be 58.8 miles.

For the North Fork Edisto River, velocities of the leading edge and peak, from Figure 10, are found to be 0.90 and 0.79 miles per hour, respectively. For the Edisto River, corresponding velocities are found to be approximately 1.2 and 0.95 miles per hour, also from Figure 10. Calculated traveltimes and arrival times are listed below.

From SCL RR To:	Distance (miles)	Leading Edge			Peak		
		Velocity (mph)	Traveltme (hours)	Time of Arrival	Velocity (mph)	Traveltme (hours)	Time of Arrival
County Rd. 63	23.1	0.90	26	2 PM, March 2	0.79	29	5 PM, March 2
Mouth	26.9	0.90	30	6 PM, March 2	0.79	34	10 PM, March 2
From Mouth of North Fork to intake	58.8	1.2	49	7 PM, March 4	.95	62	noon, March 5

Total traveltme to
Charleston intake

79

96

At County Road 63, the peak concentration can be determined from Figure 11, for a traveltime of the peak of 29 hours. Note that the line for an index discharge of 540 cfs has been sketched in the approximate location. This peak, of 1.6 micrograms per liter per pound, is then multiplied by 500 pounds, the total amount of contaminant, giving a peak of 800 micrograms per liter. From Figure 14, the passage time is found to be 12 hours. Thus at County Road 63, the solute cloud will arrive at 2 P.M. on March 2, peak at 5 P.M. with a concentration of approximately 800 micrograms per liter, and by 2 A.M. on March 3, concentrations will have fallen to 0.2 microgram per liter.

At the mouth of the North Fork Edisto River, after a traveltime of 34 hours, the peak will be approximately 1.4 micrograms per liter per pound, from Figure 11. The dilution factor, as defined earlier, is calculated to be 0.49. Multiplying the peak of 1.4 by this factor gives 0.69 microgram per liter per pound.

From Figure 13, for this peak of 0.69, for an index discharge of the Edisto River of approximately 1,410 cfs, the equivalent traveltime is found to be 29 hours. Adding to this the traveltime of 62 hours to the Charleston intake, the total equivalent traveltime is approximately 91 hours. Again from Figure 13, for 91 hours, the peak is expected to be 0.28 microgram per liter per pound. Multiplying by 500 pounds gives a peak of 140 micrograms per liter. The passage time, from Figure 14, is approximately 29 hours.

Thus at the Charleston water supply intake, the contaminant will arrive at 7 P.M. on March 4, will peak at 140 micrograms per liter at approximately noon on March 5, and will fall to 0.2 microgram per liter by approximately midnight on March 5.

TABLE 5. Stage-discharge relations at index gaging stations on the study segments.

Stage*	Discharge, in cfs, at index station:		
	North Fork Edisto River at Orangeburg (feet)	South Fork Edisto River near Denmark (U.S. Hwy. 321)	Edisto River near Givhans (S.C. Hwy 61)
	(U.S. Hwy. 301)		
1.5			500
2.0			600
2.5	300		704
3.0	350		850
3.5	400	191	1000
4.0	470	244	1150
4.5	540	305	1360
5.0	640	375	1580
5.5	740	450	1810
6.0	880	580	2050
6.5	1040	910	2320
7.0	1240	1590	2600
7.5	1470		2950
8.0			3320

*Synonymous with the term "gage height".

Note: These relations are subject to change, and should be checked with the U.S. Geological Survey.

TABLE 6. Distances to selected points along the study segments.

<u>Location</u>	<u>River Miles Above Mouth</u>	<u>Location</u>	<u>River Miles Above Mouth</u>
<u>EDISTO RIVER</u>			
S.C. Highway 61	59.9	Cannon Bridge	11.8
Charleston intake	60.4	U.S. Highway 301	18.4
Four Hole Swamp	62.3	Roberts Swamp	20.0
Poorly Branch	69.2	Seaboard Coastline RR	23.6
Indian Field Swamp	72.8	Sucksand Branch	24.4
Skull Branch	73.3	S.C. Highway 70	26.1
Stokes Bridge	74.1	Hays Mill Creek	27.9
U.S. Highway 15	83.1	U.S. Highway 321	31.1
Canadys Power Plant	83.7		
Interstate Highway 95	87.0	<u>SOUTH FORK EDISTO RIVER</u>	
Brickhouse Branch	89.5	Cannon Bridge	11.8
Cattle Creek	93.8	U.S. Highway 301	18.4
Box Branch	98.4	Roberts Swamp	20.0
Bush Branch	100.0	Seaboard Coastline RR	23.6
U.S. Highway 21	105.0	Sucksand Branch	24.4
Brier Creek	109.2	S.C. Highway 70	26.1
Pen Branch	112.2	Hays Mill Creek	27.9
U.S. Highway 78	115.0	U.S. Highway 321	31.1
Betty Branch	116.0		
Southern RR	118.8	<u>NORTH FORK EDISTO RIVER</u>	
Confluence of North Fork	119.2	Orangeburg County Road 63	3.8
Edisto and South Fork Edisto Rivers		Cooper Swamp	10.1
		Rowesville Bridge (Orangeburg County Road 39)	12.3
		Dry Swamp	12.7
		Anderson Branch	19.2
		Seaboard Coastline RR	26.9
		U.S. Highway 301	27.5

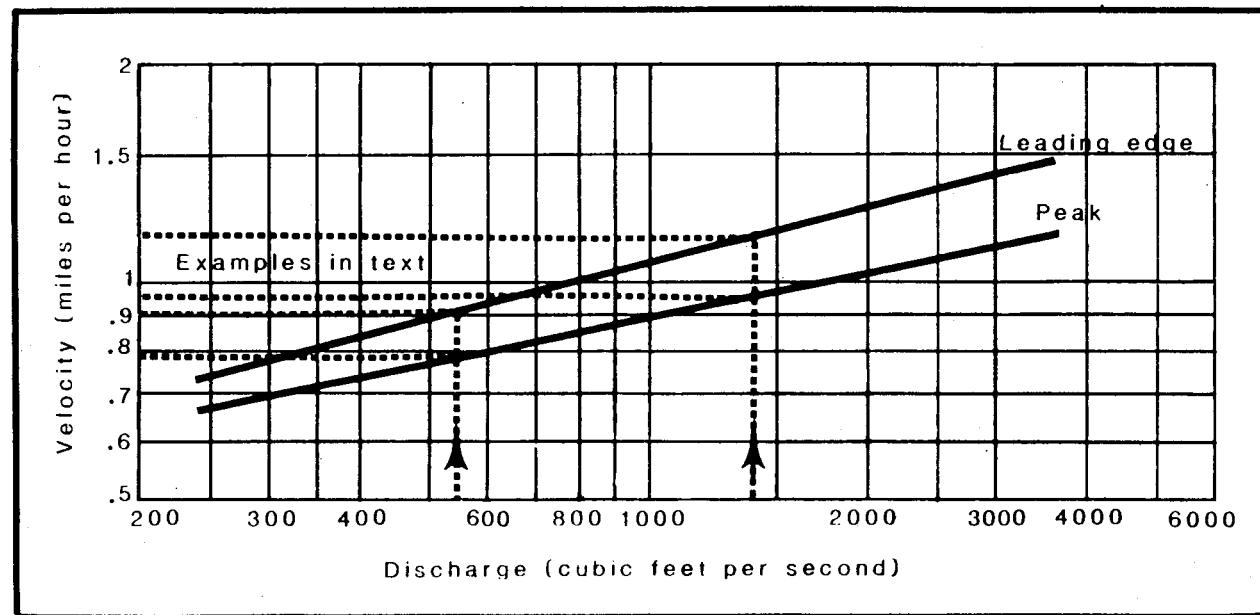


Figure 10. Discharge - velocity relations for prediction of traveltim.

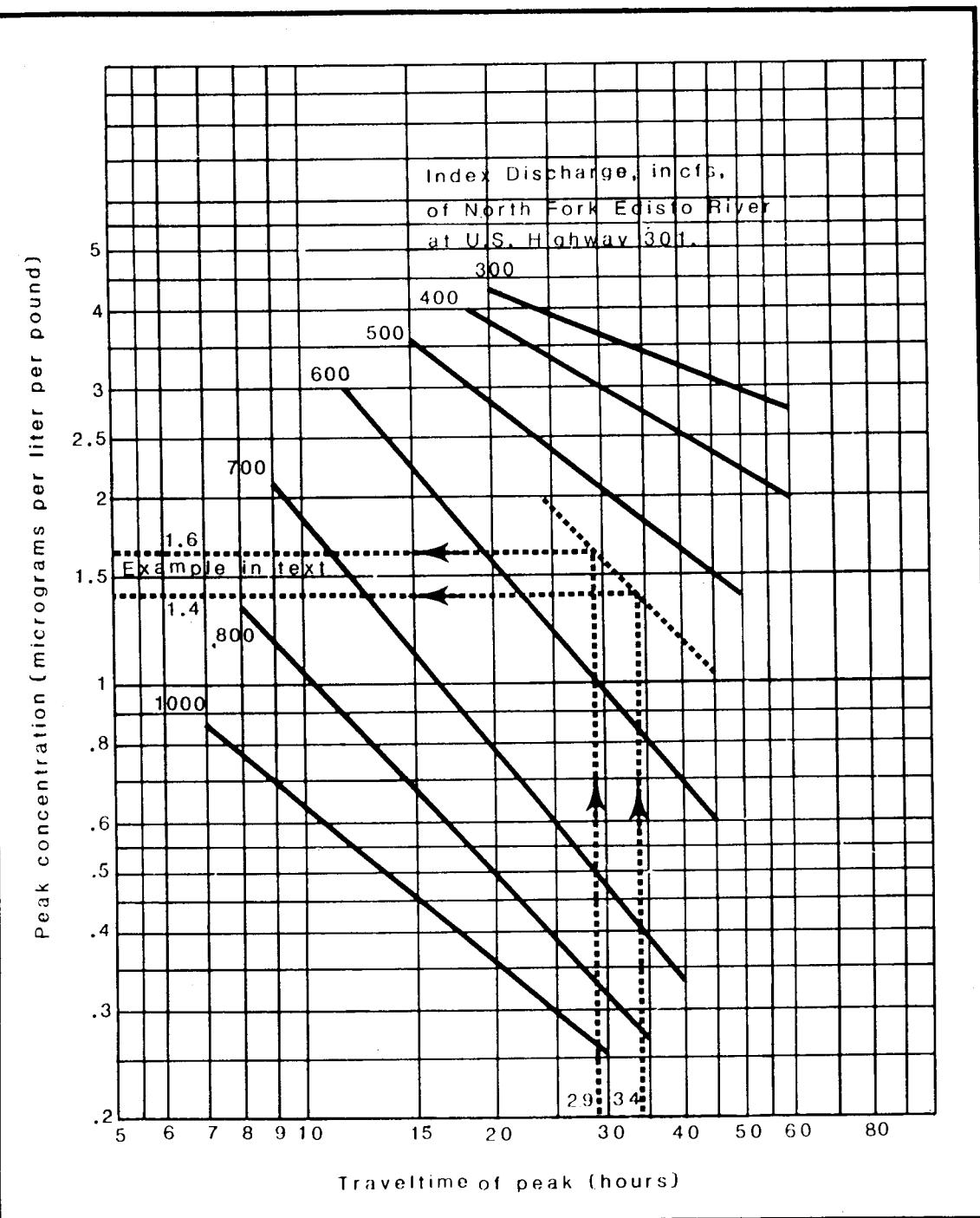


Figure 11. Traveltimetime - peak concentration relations for prediction of dispersion in the North Fork Edisto River.

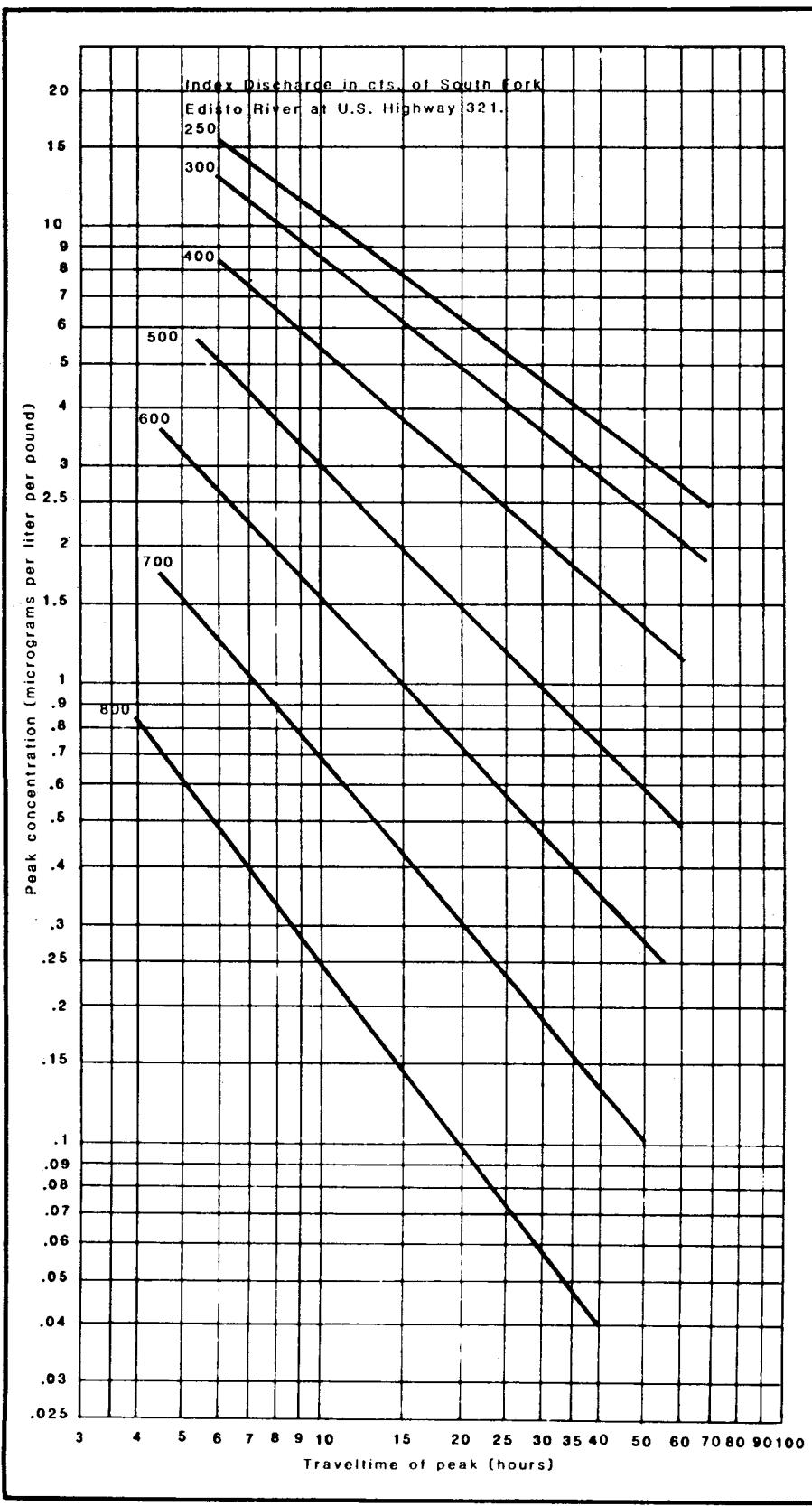


Figure 12. Traveltimetime - peak concentration relations for the prediction of dispersion in the South Fork Edisto River.

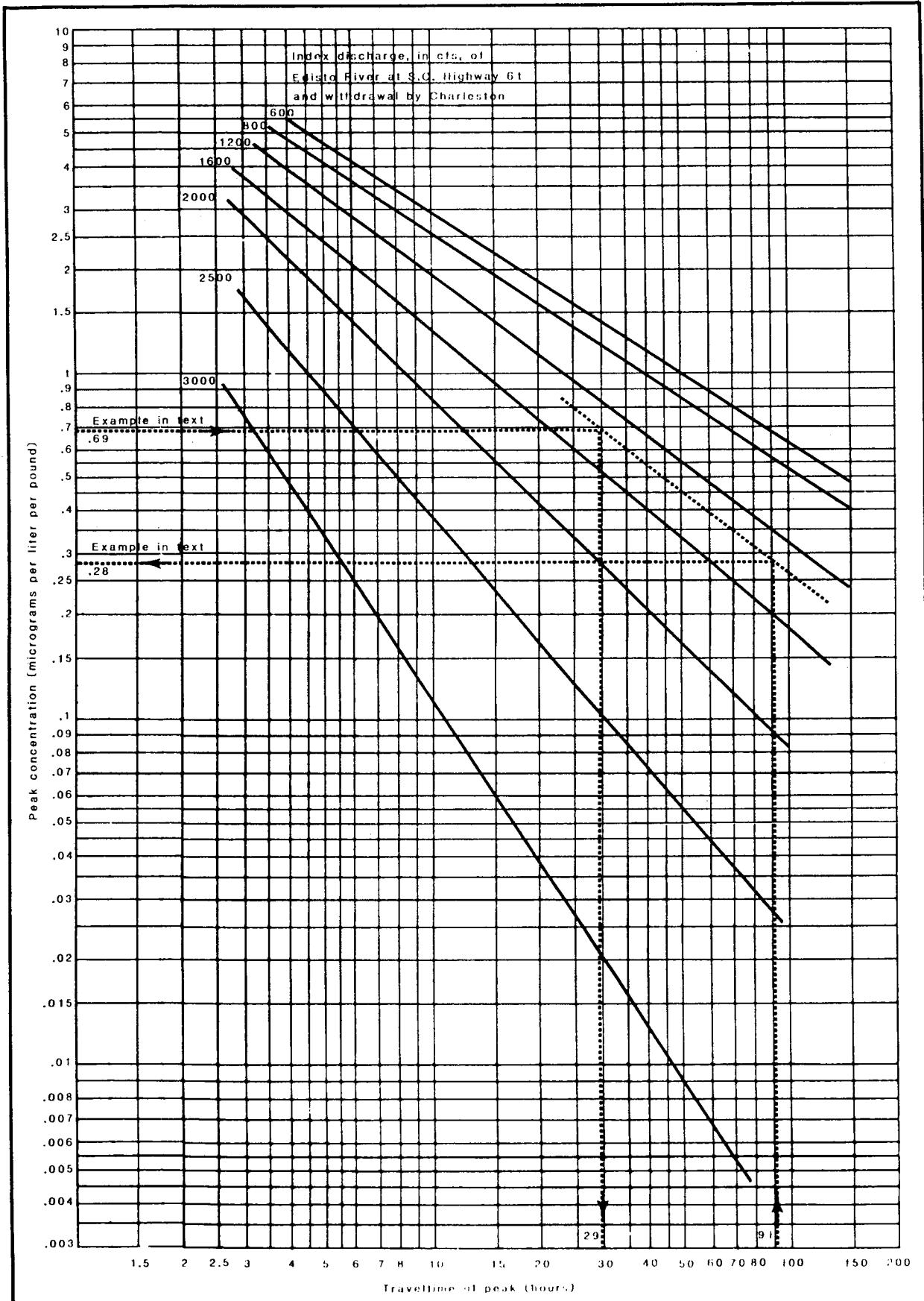


Figure 13. Traveltime - peak concentration relations for prediction of dispersion in the Edisto River.

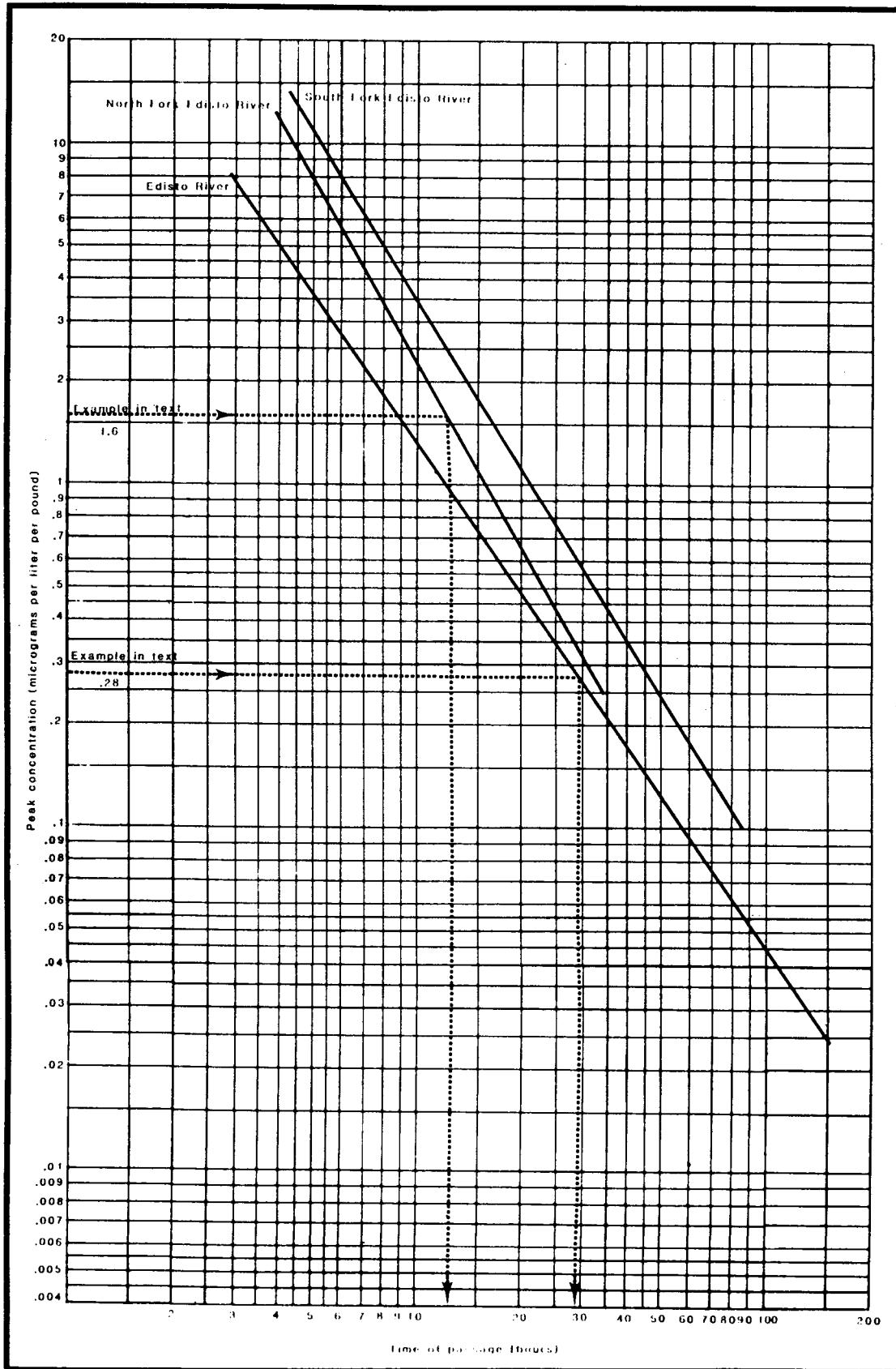


Figure 14. Passage time - peak concentration relations for prediction of traveltime.

LIMITATIONS

Predictions of traveltimes and dispersion characteristics by the procedure outlined are limited to soluble materials, since the behavior of non-soluble materials may not be similar. Analyses were made as if any solute was totally conservative and for this reason, actual peak concentrations may be less than predicted. Predictions of the time at which contaminant concentrations will fall to acceptable levels are particularly subject to error, since the observed passage times varied so widely (Figure 6). Thus allowances should be made when predicting traveltimes of the trailing edge. Caution is urged in estimating traveltimes and dispersion values at discharges outside the ranges included, or beyond the geographic limits of the study. Field studies were conducted under generally steady flow conditions, during which changes in discharges were relatively small. Estimates made for periods of rapidly changing conditions may be subject to considerable error.

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APPENDIX A
Current-meter Measurements of Streamflow

Explanation

Discharge measurements were made with a Price-type current meter, in accordance with U.S. Geological Survey standards (Buchanan and Somers, 1969). Detailed data for each measurement are included herein. Definitions of terms and explanations of computational procedures are as follows:

- COEF - A correction factor for conditions where the flow was not perpendicular to the measuring section; the cosine of the angle between the direction of flow and a line perpendicular to the measuring section.
- STA - The distance in feet, from some point at the edge of the channel or beyond, to stations at which depth and velocity measurements were made.
- WIDTH - For each station, the width, in feet, over which the measured velocity was applied, calculated as the sum of one-half the distance to the previous station plus one-half the distance to the next station. For the measurement as a whole, WIDTH is the total width of the channel.
- DEPTH - The measured depth of water at the particular station, in feet.
- REV - The number of revolutions of the current meter in some period of time.
- SEC - The number of seconds required for the current meter to register the specified number of revolutions.
- VEL - The computed velocity, in feet per second, from the equation for the particular meter used. $VEL = (2.18 \times REV/SEC) + 0.02$
When more than one value of VEL is listed, the upper value is that taken at a depth of 20 percent of the total depth, and the lower value is that taken at a depth of 80 percent of the total depth. When only one value of VEL is listed, the measurement was taken at 60 percent of the total depth.
- Avg - The average velocity; either the single velocity at 60 percent of the depth, or the mean of the velocities at 20 and 80 percent of the depth, in feet per second.
- ADJ - The average velocity adjusted for non-perpendicular flow direction, calculated as COEF x Avg.
- AREA - The cross-sectional area, in square feet, over which the adjusted velocity was to be applied, calculated as WIDTH x DEPTH; for the measurement as a whole, AREA is the sum of the individual areas.

Q - The discharge, in cubic feet per second; calculated for each station as ADJ x AREA. The total discharge is the sum of the individual discharges at each station.

SECTIONS - The total number of stations at which depth and velocity measurements were made.

AVG VELOCITY - The average velocity, in feet per second, for the measurement, calculated as (Total Q)/(Total AREA).

North Fork Edisto River at Orangeburg Co. Rd. 39 November 9, 1982

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	Avg	Adj	AREA	Q
1.00	35.0	2.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	40.0	5.0	1.9	25.	43.	1.287	1.287	1.287	9.50	12.23
0.98	45.0	5.0	7.1	30.	49.	1.355	0.850	0.833	35.50	29.50
0.97	50.0	4.0	10.8	30.	45.	1.473	1.080	1.048	43.20	45.27
0.98	53.0	3.0	10.9	30.	43.	1.541	1.295	1.269	32.70	41.49
0.98	56.0	3.0	10.1	30.	43.	1.541	1.476	1.447	30.30	43.83
0.98	59.0	2.0	10.3	25.	44.	1.259	1.320	1.294	20.60	26.66
1.00	60.0	0.5	10.3	19.	44.	0.949	0.995	0.995	5.15	5.13
<hr/>										
EDGE OF WATER										
1.00	62.0	0.5	12.0	19.	43.	0.971	0.867	0.867	6.00	5.20
0.98	63.0	2.0	12.0	25.	43.	1.287	1.140	1.126	24.00	27.03
1.00	66.0	3.0	11.7	20.	44.	1.011				
1.00	69.0	3.0	11.6	15.	43.	0.780				
1.00	72.0	3.0	10.8	25.	45.	1.287	1.173	1.173	34.80	40.81
0.99	75.0	3.0	9.7	20.	44.	1.259	1.171	1.159	29.10	33.74
0.99	78.0	3.0	8.0	20.	41.	1.083				
0.98	81.0	3.0	8.0	20.	46.	0.968	1.143	1.120	24.00	26.88
0.98	84.0	4.0	7.4	20.	48.	0.928	1.042	1.021	29.60	30.22
1.00	89.0	3.0	7.7	15.	49.	0.687	0.725	0.725	23.10	16.75
1.00	90.0	0.5	8.0	11.	44.	0.520	0.549	0.549	4.00	2.20
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EDGE OF WATER										
1.00	92.0	0.5	9.0	15.	52.	0.649	0.614	0.619	4.50	2.79
0.90	93.0	3.0	8.7	20.	52.	0.858	0.819	0.737	26.10	19.25
0.85	98.0	4.5	7.3	15.	50.	0.674	0.337	0.286	32.85	9.41
1.00	102.0	11.0	3.5	10.	49.	0.465	0.465	0.465	38.50	17.90
1.00	120.0	9.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
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SECTIONS	WIDTH						Avg Velocity		Area	Q
24	81.0						0.984		546.799	538.062

North Fork Edisto River at Orangeburg Co. Rd. 63 November 9, 1982

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	Avg	Adj	Area	Q
1.00	20.0	5.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.96	30.0	7.5	0.8	20.	48.	0.968	0.636	0.612	51.00	31.23
0.90	35.0	4.0	8.2	20.	47.	0.948	0.903	0.867	32.80	28.44
0.94	38.0	3.0	8.8	20.	52.	0.858	0.843	0.895	26.40	22.21
0.92	41.0	3.0	9.3	15.	41.	0.948				
0.90	44.0	3.5	9.0	15.	44.	0.763	0.781	0.703	31.50	22.14
0.90	48.0	4.0	9.3	15.	43.	0.780	0.885	0.796	37.20	29.02
0.90	52.0	4.0	9.3	20.	45.	0.989				
0.92	56.0	3.5	8.9	25.	45.	1.231	1.336	1.229	31.15	38.30
0.94	59.0	3.0	8.5	30.	40.	1.442	1.427	1.341	25.50	34.20
0.96	62.0	3.0	7.1	30.	43.	1.411				
0.90	65.0	3.0	6.8	30.	48.	1.382				
0.97	68.0	3.0	6.3	25.	41.	1.349				
0.98	71.0	3.0	5.8	30.	44.	1.506	1.444	1.415	17.40	24.03
0.98	74.0	3.5	5.0	30.	48.	1.382	1.447	1.418	19.60	27.80
0.98	78.0	4.0	5.3	25.	42.	1.318	1.577	1.554	21.20	32.34
0.92	82.0	4.0	5.1	30.	43.	1.541				
0.90	86.0	4.0	4.7	30.	40.	1.442	1.442	1.340	20.40	27.33
0.94	90.0	5.0	4.5	25.	50.	1.110	1.170	1.100	22.50	24.70
0.96	96.0	6.0	3.5	15.	43.	0.780	0.687	0.660	21.00	13.85
0.96	102.0	5.0	1.1	15.	45.	0.747	0.747	0.717	5.50	3.94
1.00	106.0	2.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
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SECTIONS	WIDTH						Avg Velocity		Area	Q
22	86.0						1.026		504.449	522.745

North Fork Edisto River at Orangeburg Co. Rd. 39 January 9, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	25.0	5.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	35.0	7.5	1.9	25.	42.	1.318	1.318	1.318	14.25	18.78
0.98	40.0	5.0	2.8	40.	42.	2.096	1.856	1.818	14.00	25.46
				30.	41.	1.015				
0.98	45.0	4.0	3.2	50.	48.	2.290	1.403	1.375	32.80	45.09
				10.	44.	0.515				
0.96	48.0	3.0	10.2	50.	49.	2.244	1.760	1.695	30.60	51.87
				25.	43.	1.287				
0.96	51.0	3.0	11.7	40.	42.	2.096	1.876	1.801	35.10	63.20
				30.	40.	1.055				
0.96	54.0	3.0	11.7	50.	48.	2.290	2.193	2.106	35.10	73.91
				40.	42.	2.096				
0.97	57.0	3.0	10.8	25.	42.	1.318	1.660	1.610	32.40	52.16
				40.	44.	2.002				
0.97	60.0	3.0	12.2	40.	46.	1.916	1.711	1.666	30.60	60.74
				30.	44.	1.506				
0.98	63.0	3.0	13.0	40.	43.	2.048	1.777	1.742	39.00	67.92
				30.	44.	1.506				
0.98	66.0	3.0	13.0	40.	46.	1.916	1.649	1.616	39.00	63.02
				25.	40.	1.382				
0.99	69.0	3.0	12.8	40.	45.	1.958	1.732	1.715	38.40	65.85
				30.	44.	1.506				
0.99	72.0	3.0	12.2	40.	47.	1.875	1.770	1.753	38.60	64.15
				40.	53.	1.065				
1.00	75.0	3.0	11.2	40.	44.	2.002	1.722	1.722	33.60	57.85
				30.	46.	1.442				
1.00	78.0	3.0	10.8	40.	49.	1.800	1.670	1.670	32.40	54.11
				30.	43.	1.341				
0.99	81.0	3.0	9.9	30.	42.	1.577	1.653	1.637	29.70	48.62
				40.	51.	1.730				
0.98	84.0	3.0	8.7	25.	45.	1.231	1.423	1.395	20.10	36.40
				30.	41.	1.615				
0.99	87.0	3.0	8.1	25.	46.	1.205	1.435	1.421	24.30	34.52
				40.	53.	1.665				
0.98	90.0	2.0	8.6	15.	59.	0.574	0.951	0.932	17.20	16.03
				30.	50.	1.328				
0.97	91.0	0.5	8.6	8.	59.	0.297	0.499	0.484	4.30	2.08
				25.	80.	0.701				
EDGE OF WATER										
0.97	92.0	0.5	8.0	10.	55.	0.416	0.521	0.505	4.00	2.02
				25.	90.	0.626				
0.97	93.0	3.0	8.5	20.	55.	0.813	1.022	0.991	25.50	25.28
				25.	45.	1.231				
1.00	98.0	0.0	7.0	10.	55.	0.416	0.466	0.466	42.00	19.57
				10.	44.	0.515				
1.00	105.0	9.0	2.8	20.	54.	0.827	0.590	0.590	25.20	17.54
				10.	40.	0.565				
1.00	116.0	89.5	1.6	5.	40.	0.292	0.292	0.292	143.20	41.89
				70.	0.	0.000	0.000	0.000	0.00	0.00

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SECTIONS	WIDTH	Avg Velocity	Area	Q
26	258.0	1.274	791.349	1008.060

North Fork Edisto River at Orangeburg Co. Rd. 63 January 13, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	Avg	ADJ	AREA	Q
1.00	15.0	7.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.92	30.0	10.0	8.2	15.	55.	0.014	0.508	0.467	32.00	38.33
0.97	35.0	4.0	9.0	25.	44.	1.259	1.146	1.112	38.40	42.70
0.97	38.0	3.0	10.4	25.	43.	1.287	1.117	1.084	31.20	33.82
0.98	41.0	3.0	10.9	25.	42.	1.318	1.123	1.100	32.70	35.93
0.99	44.0	3.0	10.0	25.	42.	1.318	1.133	1.121	37.10	41.60
0.99	48.0	4.0	10.0	25.	43.	1.155	1.269	1.250	43.20	54.27
0.98	52.0	4.0	10.4	30.	41.	1.382	1.015	1.374	1.340	43.00
0.97	56.0	3.5	10.5	25.	40.	1.382	1.208	1.172	36.75	43.07
0.98	59.0	3.0	9.8	30.	41.	1.615	1.494	1.469	29.40	43.18
0.99	62.0	3.0	9.3	30.	40.	1.655	1.292	1.279	27.90	35.68
0.99	65.0	3.0	8.2	40.	48.	1.837	1.720	1.709	24.00	42.03
0.99	68.0	3.0	7.3	40.	49.	1.837	1.726	1.709	23.40	39.93
0.98	71.0	3.0	7.2	40.	49.	1.910	1.740	1.711	21.60	36.97
0.98	74.0	3.5	7.1	40.	49.	1.837	1.707	1.673	24.85	41.57
0.96	78.0	4.0	6.7	30.	42.	1.577	1.655	1.610	1.551	26.40
0.90	82.0	4.0	6.5	40.	56.	1.577	1.764	1.782	1.710	26.00
0.94	86.0	4.0	6.1	40.	50.	1.800	1.800	1.800	1.800	44.47
0.92	90.0	5.0	6.3	30.	40.	1.958	1.879	1.766	24.40	43.04
0.90	96.0	6.0	5.1	30.	52.	1.655	1.655	1.523	31.50	47.90
0.85	102.0	5.0	2.5	20.	41.	1.278	1.083	1.097	0.932	13.75
1.00	107.0	25.5	1.2	7.	54.	0.303	0.303	0.303	30.60	9.20
1.00	153.0	23.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
EDGE OF WATER										
1.00	190.0	12.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	215.0	27.5	0.8	0.	70.	0.000	0.000	0.000	22.00	0.00
1.00	245.0	15.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
EDGE OF WATER										
1.00	30.0	13.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.92	57.0	10.5	4.0	10.	50.	0.450	0.374	0.344	50.00	22.72
0.98	63.0	6.0	5.0	5.	54.	0.222	0.248	0.243	30.00	7.28
0.98	69.0	6.0	4.0	7.	43.	0.273	0.345	0.349	24.00	8.37
0.98	75.0	18.5	0.8	5.	40.	0.257	0.257	0.252	14.80	3.73
0.98	106.0	27.5	2.0	5.	40.	0.292	0.292	0.287	55.00	15.70
0.98	130.0	14.5	4.1	7.	40.	0.401	0.388	0.380	59.45	22.61
0.99	135.0	6.0	3.0	10.	54.	0.424	0.408	0.404	18.00	7.27
1.00	142.0	3.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
SECTIONS	WIDTH					Avg Velocity		Area	Q	
35	30.50					0.940		969.598	911.417	

North Fork Edisto River at Orangeburg Co. Rd. 39 October 11, 1983

CUEF	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
EDGE OF WATER										
1.00	35.0	3.0	3.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.90	42.0	6.0	1.0	15.	30.	0.070	0.070	0.070	6.00	3.80
0.90	47.0	4.0	1.0	10.	40.	0.070	0.070	0.070	29.20	9.60
0.90	50.0	2.5	0.1	25.	40.	0.020	0.020	0.020	22.70	23.40
0.90	52.0	2.0	0.5	25.	40.	0.020	0.020	0.020	19.00	18.80
0.90	54.0	2.0	0.9	25.	40.	0.020	0.020	0.020	17.80	14.40
0.98	56.0	2.0	0.1	20.	40.	1.030	1.070	1.030	18.20	13.70
0.98	58.0	2.0	0.8	20.	40.	1.030	1.030	1.030	19.60	18.40
1.00	60.0	1.5	10.4	10.	40.	0.040	0.040	0.040	15.60	12.20
1.00	61.0	0.5	10.0	15.	40.	0.070	0.070	0.070	5.00	2.90
EDGE OF WATER										
1.00	62.0	1.0	11.0	15.	43.	0.070	0.070	0.070	11.00	7.70
0.92	64.0	2.0	10.7	20.	43.	1.030	0.920	0.920	21.40	18.20
0.90	66.0	2.0	10.2	20.	40.	1.010	1.010	0.910	20.40	18.60
0.92	68.0	2.0	9.9	20.	41.	1.030	0.970	0.970	19.30	17.60
0.94	70.0	2.0	9.4	20.	43.	0.990	0.920	0.920	18.80	16.20
0.96	72.0	2.0	9.1	20.	52.	0.860	0.860	0.860	18.20	17.50
0.94	74.0	2.0	8.8	20.	43.	1.030	1.000	0.940	17.60	16.50
0.94	76.0	2.5	8.2	20.	42.	1.060	1.060	0.960	20.50	17.60
0.92	79.0	3.0	7.7	20.	50.	0.970	0.950	0.970	23.10	20.10
0.92	82.0	3.0	7.1	20.	44.	1.010	1.010	0.960	21.30	16.80
0.94	85.0	3.5	6.7	15.	40.	0.840	0.840	0.840	23.40	18.50
0.94	89.0	4.5	6.5	15.	40.	0.700	0.700	0.710	29.20	20.70
0.90	94.0	5.0	7.0	15.	44.	0.760	0.690	0.740	35.00	23.40
0.90	99.0	8.0	5.7	15.	40.	0.800	0.800	0.850	45.00	25.10
1.00	110.0	5.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00

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SECTIONS	WIDTH	Avg Velocity	Area	Q
25	74.0	0.798	478.399	381.699

North Fork Edisto River at Orangeburg Co. Rd. 63 October 11, 1983

EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	Avg	AJJ	AREA	Q
1.00	20.0	7.0	0.0	0.	70.	0.0000	0.0000	0.000	0.00	0.00
0.99	34.0	10.0	0.9	10.	92.	0.0539	0.0600	0.033	69.00	43.70
0.94	40.0	5.0	0.0	15.	43.	0.780	0.637	0.588	0.553	22.50
0.94	44.0	4.0	0.0	10.	42.	0.539	0.505	0.510	0.505	19.21
0.98	48.0	3.5	0.1	15.	50.	0.456	0.574	0.531	0.515	25.95
0.96	51.0	2.5	0.0	20.	45.	0.409	0.675	0.654	0.610	21.50
0.90	53.0	2.0	0.9	15.	40.	0.037	0.948	0.910	17.80	16.20
0.97	55.0	2.0	0.9	20.	42.	1.058	1.049	1.011	0.981	17.80
0.97	57.0	2.0	0.7	20.	44.	1.034	1.011	0.914	0.887	17.40
0.98	59.0	2.0	0.1	15.	41.	0.618	1.011	0.879	0.801	10.20
0.98	61.0	2.0	0.8	20.	42.	0.747	1.058	0.887	0.864	13.50
0.98	63.0	2.0	0.2	15.	47.	1.016	1.032	1.050	1.029	12.40
0.98	65.0	2.0	0.5	20.	40.	0.963	1.058	0.948	0.929	13.00
0.98	67.0	2.0	0.3	20.	44.	0.837	1.011	0.896	0.878	12.00
0.98	69.0	2.0	0.1	15.	43.	1.070	1.011	0.970	0.957	11.67
0.97	71.0	2.0	0.1	20.	43.	1.032	1.021	0.990	12.20	12.08
0.97	73.0	2.0	0.7	20.	49.	0.910	1.050	1.045	1.013	11.40
0.98	75.0	2.5	5.4	20.	49.	0.910	1.080	1.064	1.042	13.50
0.98	78.0	3.0	4.4	20.	47.	1.080	1.145	1.122	14.70	16.49
0.99	81.0	3.0	4.7	20.	40.	1.110	1.152	1.054	1.044	14.10
0.97	84.0	3.0	4.8	20.	47.	0.976	1.180	1.095	1.062	14.40
0.94	87.0	3.0	4.2	20.	44.	1.011	1.180	1.045	1.034	12.00
0.99	90.0	3.0	3.9	20.	49.	0.910	1.180	1.119	1.108	11.70
0.99	93.0	5.0	3.9	20.	43.	1.034	0.938	0.929	0.950	18.11
1.00	100.0	3.5	0.0	0.	70.	0.0000	0.0000	0.000	0.00	0.00
				0.	70.	0.0000				

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SECTIONS	WIDTH	Avg Velocity	Area	Q
25	80.0	0.832	461.949	384.524

South Fork Edisto River at S.C. Hwy. 70

December 8, 1982

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	64.0	3.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.90	70.0	8.0	1.9	5.	43.	0.273	0.273	0.246	15.20	3.74
0.90	80.0	7.0	4.8	20.	47.	0.948	0.811	0.730	33.60	24.52
0.90	84.0	4.0	5.2	25.	48.	1.155	0.999	0.899	20.80	18.70
0.90	88.0	4.0	5.1	30.	48.	1.382	1.042	0.938	20.40	19.13
0.90	92.0	4.0	5.3	15.	48.	0.701				
0.90	96.0	4.0	5.7	15.	48.	0.308	0.380	0.348	21.20	7.37
0.90	100.0	5.0	5.1	10.	42.	0.539	0.539	0.485	25.50	12.37
0.90	106.0	6.0	4.7	15.	52.	0.649	0.577	0.519	28.20	14.63
0.90	112.0	6.0	7.0	10.	45.	0.504				
0.90	118.0	6.0	4.9	30.	41.	0.552				
0.90	124.0	6.0	7.1	25.	51.	1.015	1.352	1.217	29.40	35.77
0.90	130.0	6.0	7.0	10.	43.	0.527	0.663	0.596	42.60	25.41
0.90	136.0	6.0	7.0	15.	42.	0.799				
0.90	142.0	5.0	8.2	20.	50.	1.083	0.997	0.897	41.00	36.77
0.90	146.0	4.0	8.3	25.	41.	0.910				
0.90	150.0	4.0	8.6	40.	51.	1.349	1.264	1.138	33.20	37.78
0.90	154.0	4.0	8.7	25.	49.	1.180				
0.90	158.0	4.0	7.7	20.	52.	1.730	1.443	1.298	34.40	44.00
0.90	162.0	4.0	6.9	15.	41.	1.155				
0.90	166.0	4.0	7.4	20.	49.	1.132	1.030	0.927	34.80	32.27
0.90	170.0	4.0	7.5	20.	52.	0.928				
0.90	174.0	4.0	7.8	25.	47.	0.858	0.838	0.754	30.80	23.23
0.90	178.0	5.0	7.4	25.	42.	0.818				
0.90	184.0	6.0	4.7	15.	43.	0.910	1.010	0.909	27.60	25.09
1.00	190.0	3.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
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SECTIONS	WIDTH					Avg Velocity		Area	Q	
26	126.0					0.777		743.499	577.673	

South Fork Edisto River at U.S. Hwy. 301

December 8, 1982

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	225.0	2.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.80	220.0	7.5	3.0	15.	42.	0.799	0.463	0.370	22.50	8.33
				3.	61.	0.127				
0.80	210.0	8.0	5.1	25.	44.	1.259	1.140	0.917	40.80	37.41
0.75	204.0	6.0	4.9	30.	40.	1.442	1.170	0.882	29.40	25.92
0.70	198.0	6.0	5.7	30.	40.	1.442	1.094	0.760	34.20	26.19
0.60	192.0	6.0	5.8	40.	50.	1.764	1.003	0.962	34.80	33.47
0.60	180.0	6.0	5.2	40.	40.	1.837	1.707	1.024	31.20	31.95
0.60	180.0	6.0	4.9	40.	45.	1.958	1.749	1.050	29.40	30.80
0.60	174.0	6.0	4.0	40.	45.	1.958	1.700	1.020	27.60	28.15
0.60	168.0	6.0	4.7	40.	44.	2.002	1.722	1.033	28.20	29.13
0.60	162.0	6.0	4.5	40.	42.	2.096	1.876	1.125	27.00	30.34
0.60	156.0	6.0	5.4	30.	40.	1.655				
0.60	150.0	6.0	7.8	40.	41.	1.231				
0.60	144.0	6.0	6.2	40.	43.	1.231				
0.60	138.0	6.0	5.8	40.	40.	1.813	1.087	37.20	40.45	
0.70	132.0	6.0	5.5	40.	40.	1.916	1.475	1.032	33.00	34.07
0.85	126.0	6.0	5.3	40.	49.	1.800	1.543	1.312	31.80	41.72
0.80	120.0	6.0	5.8	30.	45.	1.473	1.366	1.093	22.80	24.91
0.80	114.0	8.0	4.8	25.	40.	1.259	1.205	1.032	0.825	31.09
0.85	104.0	12.0	4.0	10.	40.	0.494	0.539	0.458	48.00	21.98
1.00	90.0	7.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
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SECTIONS	WIDTH					Avg Velocity		Area	Q	
21	135.0					0.934		633.299	591.684	

South Fork Edisto River at S.C. Hwy. 70

January 13, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	60.0	5.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.75	70.0	10.0	1.8	15.	52.	0.649	0.649	0.487	18.00	8.70
0.85	80.0	9.0	5.3	25.	45.	1.231	1.053	0.895	47.70	42.69
0.85	88.0	7.0	5.4	40.	51.	1.730	1.420	1.207	37.80	45.62
0.85	94.0	6.0	5.5	20.	40.	1.110	0.910	1.021	0.868	33.00
0.85	100.0	6.0	5.7	15.	45.	0.747	0.755	0.642	34.20	21.95
0.85	106.0	6.0	4.7	20.	50.	0.892	0.819	0.696	28.20	19.64
0.85	112.0	6.0	7.4	25.	46.	1.205	0.953	0.810	44.40	35.96
0.85	118.0	6.0	7.4	15.	48.	0.701	1.259	0.887	0.754	44.40
0.85	124.0	6.0	8.0	10.	55.	0.416	0.617	0.524	48.00	25.17
0.85	130.0	6.0	7.6	15.	40.	0.837	0.856	0.728	45.60	33.19
0.85	136.0	6.0	7.8	20.	51.	0.875	0.910	0.939	0.798	46.80
0.85	142.0	6.0	8.8	30.	45.	1.473	1.395	1.186	52.80	62.63
0.85	148.0	6.0	8.4	40.	42.	1.318				
0.85	154.0	6.0	9.0	20.	44.	1.910	1.463	1.244	50.40	62.68
0.85	160.0	6.0	8.1	20.	47.	1.011				
0.85	166.0	6.0	7.4	25.	44.	1.259	1.273	1.082	44.40	48.04
0.85	172.0	6.0	7.4	30.	44.	1.287				
0.85	178.0	6.0	7.8	30.	47.	1.506	1.459	1.240	44.40	55.06
0.85	184.0	8.0	5.2	20.	43.	1.034	0.799	0.680	41.60	28.27
1.00	194.0	5.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
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SECTIONS	WIDTH					Avg Velocity		Area	Q	
21	134.0					0.901		811.099	730.715	

January 13, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	32.0	16.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	64.0	34.0	1.1	3.	44.	0.169	0.169	0.169	37.40	6.31
0.80	100.0	23.0	5.2	15.	52.	0.649	0.743	0.594	119.60	71.10
0.70	110.0	9.0	6.4	25.	46.	0.837				
				10.	41.	1.205	0.878	0.615	57.60	35.41
0.70	118.0	7.0	4.7	40.	50.	1.764	1.573	1.101	32.90	36.23
0.65	124.0	6.0	6.0	40.	43.	2.048	1.618	1.052	36.00	37.86
0.60	130.0	6.0	6.3	40.	40.	2.200	1.907	1.144	37.80	43.26
				30.	41.	1.615				
0.60	136.0	6.0	6.5	50.	48.	2.290	2.063	1.238	39.00	48.29
0.60	142.0	6.0	7.0	50.	45.	1.837	2.069	1.241	42.00	52.14
0.60	148.0	5.0	8.2	50.	44.	1.697	2.055	1.233	41.00	50.57
0.60	152.0	4.0	8.2	50.	49.	2.244	1.911	1.146	32.80	37.60
0.60	156.0	4.0	6.4	40.	40.	2.200	1.888	1.133	25.60	29.01
0.60	160.0	5.0	5.5	50.	45.	1.577	1.926	1.156	27.50	31.78
0.60	166.0	6.0	5.7	50.	43.	1.411	2.214	1.329	34.20	45.44
0.60	172.0	6.0	5.8	60.	52.	2.553	1.875			
0.60	178.0	6.0	5.5	40.	45.	2.534	2.246	1.347	34.80	46.89
0.60	184.0	6.0	5.7	50.	44.	1.958	2.496	1.349	33.00	44.53
0.60	190.0	6.0	6.9	50.	48.	2.002	2.120	1.272	34.20	43.51
0.70	196.0	7.0	7.4	25.	40.	1.800	1.382			
0.70	204.0	8.0	5.9	40.	45.	1.382	1.540	1.078	47.20	50.87
0.75	212.0	8.0	6.1	30.	42.	1.697	1.577	1.121	48.80	54.69
0.75	220.0	9.0	4.0	15.	48.	1.411	1.494			
				20.	44.	0.701	0.856	0.642	36.00	23.11
1.00	230.0	5.0	0.0	0.	70.	1.011	0.000	0.000	0.00	0.00
EDGE OF WATER										
1.00	350.0	25.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	400.0	50.0	0.5	3.	51.	0.148	0.148	0.148	25.00	3.70
1.00	450.0	50.0	0.6	0.	70.	0.000	0.000	0.000	30.00	0.00
1.00	500.0	60.0	0.7	3.	46.	0.162	0.162	0.162	42.00	6.81
0.90	570.0	45.0	1.0	10.	53.	0.431	0.431	0.388	45.00	17.47
1.00	590.0	10.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
EDGE OF WATER										
1.00	20.0	16.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	52.0	40.0	0.5	10.	56.	0.409	0.409	0.409	20.00	8.19
0.90	100.0	36.5	0.6	3.	70.	0.113	0.113	0.102	21.90	2.24
0.85	125.0	25.0	0.8	10.	45.	0.504	0.504	0.429	20.00	8.57
0.75	150.0	38.5	1.4	10.	48.	0.474	0.474	0.356	53.90	19.17
0.99	202.0	50.0	1.8	15.	55.	0.614	0.614	0.608	90.00	54.76
1.00	250.0	24.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
SECTIONS	WIDTH					Avg Velocity		Area	0	
36	668.0					0.808		1238.398	1001.103	

South Fork Edisto River at Cannon Bridge

May 11, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	7.0	3.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	14.0	7.5	0.9	20.	46.	0.968	0.968	0.968	6.75	6.53
1.00	22.0	4.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
EDGE OF WATER										
1.00	15.0	19.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.90	53.0	22.5	4.3	7.	45.	0.359	0.331	0.298	96.75	28.40
0.90	60.0	6.0	5.4	20.	46.	0.968	0.948	0.853	32.40	27.64
0.90	65.0	5.0	5.5	20.	48.	0.928				
0.90	70.0	5.0	6.4	25.	40.	1.110	1.133	1.019	27.50	28.03
0.90	75.0	5.0	6.7	25.	44.	1.259	1.320	1.188	32.00	38.73
0.92	80.0	5.0	7.1	30.	44.	1.318	1.225	1.102	33.50	36.93
0.94	85.0	5.0	7.9	30.	43.	1.541	1.451	1.402	39.50	55.37
0.96	90.0	4.5	9.1	30.	42.	1.577	1.447	1.389	40.95	56.90
0.98	94.0	4.0	9.8	30.	40.	1.655	1.564	1.533	39.20	60.09
0.98	98.0	4.0	10.4	40.	49.	1.800	1.702	1.668	41.60	69.41
0.98	102.0	4.0	11.1	40.	55.	1.605				
0.98	106.0	3.5	11.8	30.	43.	1.697	1.619	1.586	44.40	70.44
0.98	109.0	3.0	11.9	40.	52.	1.541				
0.98	112.0	3.0	11.0	30.	48.	1.382	1.543	1.509	33.00	49.79
0.98	115.0	3.0	12.0	30.	47.	1.697	1.411	1.190	1.166	36.00
0.96	118.0	3.5	11.0	25.	48.	1.442	1.155	1.180	1.133	38.50
0.96	122.0	5.0	9.2	20.	40.	1.205				
0.98	128.0	7.0	5.9	20.	44.	1.110	1.110	1.066	46.00	49.02
0.98	136.0	9.0	3.5	10.	43.	0.979	0.979	0.960	41.30	39.64
1.00	146.0	5.0	0.0	0.	70.	0.527				
EDGE OF WATER						0.000	0.000	0.000	0.00	0.00
1.00	14.0	3.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	20.0	8.0	1.5	7.	41.	0.392	0.392	0.392	12.00	4.71
1.00	30.0	29.0	0.6	10.	47.	0.484	0.484	0.484	17.40	8.42
1.00	78.0	34.0	0.7	3.	46.	0.162	0.162	0.162	23.80	3.86
1.00	98.0	10.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
SECTIONS	WIDTH					Avg Velocity			Area	0
29	230.0					1.095			826.549	905.093

South Fork Edisto River near Mouth

May 11, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	Avg	Adj	Area	Q
1.00	205.0	7.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.96	190.0	12.5	4.0	30.	43.	1.541	1.524	1.463	50.00	73.13
0.94	180.0	7.5	5.3	40.	46.	1.506				
0.90	175.0	5.0	5.1	40.	50.	1.916	1.840	1.729	39.75	68.74
0.92	170.0	5.0	4.4	40.	40.	1.764	2.096	1.739	1.565	39.92
0.94	165.0	5.0	4.4	40.	50.	1.473				
0.96	160.0	5.0	5.4	40.	52.	1.764	1.349	1.697	1.029	43.98
0.96	155.0	5.0	6.3	30.	44.	1.506				
0.98	150.0	5.0	6.1	30.	46.	1.800	1.442	1.442	1.413	30.50
1.00	145.0	5.0	6.8	30.	46.	1.442	1.442	1.276	1.276	43.09
1.00	140.0	5.0	6.8	40.	47.	1.110	1.875	1.527	1.527	43.38
1.00	135.0	5.0	6.3	40.	43.	2.045				
1.00	130.0	4.5	7.3	40.	42.	0.661				
1.00	125.0	3.5	6.8	40.	47.	2.096	1.875	1.980	1.980	65.23
1.00	120.0	3.5	6.8	40.	47.	1.875				
1.00	123.0	3.0	6.7	40.	43.	1.837	2.048	1.962	1.962	20.10
1.00	120.0	3.0	5.9	40.	47.	1.875				
1.00	117.0	3.0	5.5	40.	45.	1.958				
1.00	114.0	4.0	5.0	40.	45.	1.837	1.875	1.856	1.856	44.17
1.00	109.0	6.0	4.5	30.	41.	2.002				
1.00	102.0	5.5	4.1	25.	42.	0.162	1.318	0.254	0.254	27.00
1.00	98.0	2.0	0.0	0.	70.	0.183	0.325	0.254	22.55	5.73
1.00	94.0	2.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
SECTIONS	WIDTH					Avg Velocity			Area	0
21	107.0					1.553			528.249	820.142 + 5% = 861

South Fork Edisto River at Cannon Bridge

June 2, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	Avg	Adj	Area	Q
1.00	48.0	3.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	54.0	6.0	2.7	5.	41.	0.286	0.322	0.322	16.20	5.22
0.99	60.0	6.0	3.7	15.	52.	0.649	0.637	0.631	22.20	14.00
0.97	66.0	6.0	4.0	15.	54.	0.626				
0.98	72.0	6.0	4.9	20.	42.	0.799	0.765	0.742	24.00	17.30
0.98	78.0	6.0	5.2	20.	46.	0.731				
0.98	78.0	6.0	5.2	20.	51.	0.875				
0.97	84.0	5.0	6.2	15.	40.	0.837				
0.97	84.0	5.0	6.2	20.	44.	1.011	0.951	0.923	31.00	28.01
0.96	88.0	4.0	7.3	20.	50.	0.892				
0.96	92.0	4.0	8.0	20.	46.	0.948	0.855	0.821	29.20	23.98
0.96	92.0	4.0	8.0	15.	44.	0.968	0.865	0.831	32.00	26.59
0.97	96.0	4.0	8.6	20.	45.	0.989	1.023	0.993	34.40	34.15
0.97	100.0	3.5	9.3	25.	47.	1.058				
0.94	103.0	3.0	9.7	20.	41.	1.180	1.156	1.121	32.55	36.49
0.92	106.0	3.0	9.9	25.	48.	1.132				
0.94	109.0	3.0	10.2	25.	47.	1.083	1.071	1.006	29.10	29.29
0.94	112.0	3.0	10.6	20.	40.	1.058				
0.94	115.0	3.0	9.3	20.	47.	1.110				
0.92	118.0	3.0	9.1	20.	42.	1.155	1.133	1.042	29.70	30.95
0.90	121.0	3.5	7.3	20.	44.	0.910				
0.90	125.0	5.0	5.2	20.	52.	1.011	0.979	0.881	25.55	22.52
0.90	131.0	6.0	3.5	15.	59.	0.948				
1.00	137.0	5.0	1.3	3.	42.	0.574	0.539	0.485	21.00	10.19
1.00	141.0	2.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
SECTIONS	WIDTH					Avg Velocity			Area	Q
22	93.0					0.874			537.599	469.605

South Fork Edisto River near Mouth

June 3, 1983

COEF EDGE OF WATER	STA	WDFN	DEPTH	REV	SEC	VEL	Avg	Adj	Area	Q
1.00	80.0	3.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	70.0	7.0	1.9	25.	40.	1.207	1.207	1.207	14.25	15.00
1.00	65.0	5.0	2.2	25.	40.	1.302	1.302	1.302	11.00	13.21
1.00	60.0	5.0	3.1	30.	41.	1.050	1.050	1.050	15.00	24.40
1.00	55.0	5.0	3.0	30.	43.	1.054				
1.00	50.0	4.0	3.5	40.	51.	1.053	1.070	1.070	14.00	24.71
1.00	47.0	3.0	4.2	40.	48.	1.053	1.077	1.077	12.00	19.07
1.00	44.0	3.0	4.7	40.	48.	1.050	1.053	1.053	14.10	20.13
1.00	41.0	3.0	5.0	40.	42.	1.050	1.050	1.050	10.00	31.17
1.00	38.0	2.5	5.4	40.	43.	1.050	1.050	1.050	10.00	21.71
1.00	35.0	2.0	5.1	25.	44.	1.050	1.050	1.050	10.20	17.00
1.00	34.0	2.0	5.0	40.	45.	1.050	1.050	1.050	11.00	18.87
1.00	32.0	2.0	5.1	40.	47.	1.048	1.072	1.072	11.00	19.63
1.00	30.0	2.0	5.0	40.	46.	1.048	1.082	1.082	11.00	21.21
1.00	28.0	2.0	5.3	40.	45.	1.050	1.050	1.050	12.00	21.14
1.00	26.0	2.0	5.5	25.	44.	1.050	1.050	1.050	13.00	18.00
1.00	24.0	2.0	7.5	40.	44.	1.050	1.050	1.050	15.00	21.15
1.00	22.0	2.0	8.4	30.	41.	1.051	1.0410	1.0410	16.80	21.25
1.00	20.0	2.0	9.3	30.	47.	1.0411	1.0223	1.0223	18.60	22.74
1.00	18.0	2.0	9.2	25.	43.	1.0411	1.0004	1.0004	18.40	18.47
1.00	16.0	3.0	0.1	25.	40.	1.0411	1.0155	1.0155	24.30	18.22
1.00	12.0	5.0	4.7	10.	44.	1.0345	1.0345	1.0345	23.50	9.01
1.00	8.0	3.0	0.0	0.	70.	1.0319	1.0319	1.0319	0.00	0.00
=====	=====	=====	=====	=====	=====	0.000	0.000	0.000	0.00	0.00
SECTIONS	WIDTH					Avg Velocity			Area	Q
23	74.0					1.303			310.950	430.215

South Fork Edisto River at S.C. Hwy. 70

August 2, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	70.0	2.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.92	75.0	7.5	2.7	10.	40.	0.565	0.399	0.367	20.25	7.44
0.92	85.0	10.0	3.0	15.	50.	0.674	0.565	0.520	35.00	18.19
0.85	95.0	10.0	3.7	15.	55.	0.614	0.604	0.513	37.00	19.00
0.85	105.0	10.0	3.7	10.	49.	0.465	0.515	0.438	37.00	16.19
0.85	115.0	8.0	5.8	15.	43.	0.780	0.692	0.588	46.40	27.30
0.80	121.0	6.0	5.7	3.	44.	0.169	0.244	0.195	34.20	6.67
0.80	127.0	6.0	5.9	7.	51.	0.319	0.359	0.281	35.40	9.97
0.90	133.0	6.0	5.7	5.	52.	0.230	0.369	0.332	34.20	11.35
0.90	139.0	6.0	5.9	10.	42.	0.539	0.582	0.524	35.40	18.55
0.85	145.0	5.0	6.9	20.	49.	0.910	0.874	0.743	34.50	25.62
0.85	149.0	4.0	5.4	20.	40.	1.110	0.984	0.837	21.60	18.07
0.85	153.0	4.0	6.7	15.	60.	0.565	0.640	0.544	26.80	14.59
0.85	157.0	4.0	6.6	15.	47.	0.716	0.731	0.652	26.40	14.64
0.85	161.0	4.0	5.8	15.	54.	0.626	0.631	0.537	23.20	12.45
0.85	165.0	5.0	6.0	15.	53.	0.637	0.763	0.569	0.484	30.00
0.85	171.0	6.0	6.0	20.	51.	0.875	0.679	0.577	36.00	20.79
0.85	177.0	6.0	6.2	15.	42.	0.799	0.669	0.568	37.20	21.15
0.85	183.0	5.5	3.2	5.	52.	0.230	0.177	0.151	17.60	2.66
1.00	188.0	2.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
SECTIONS	WIDTH					Avg Velocity			Area	Q
20	118.0					0.491			568.149	279.136

South Fork Edisto River at U.S. Hwy. 301

August 2, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	93.0	2.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.60	98.0	7.5	1.9	15.	54.	0.526	0.526	0.375	14.25	5.35
0.60	108.0	10.0	2.9	10.	46.	0.494	0.721	0.432	29.00	12.54
0.70	118.0	8.0	2.7	30.	46.	1.442	1.176	0.823	21.60	17.78
0.80	124.0	6.0	3.0	20.	49.	0.910	1.541	1.336	1.069	18.00
0.75	130.0	6.0	3.5	30.	44.	1.506	1.270	0.953	21.00	20.00
0.75	136.0	5.0	3.4	30.	40.	1.655	1.533	1.150	17.00	19.55
0.70	140.0	4.0	3.9	40.	51.	1.411	1.730	1.480	1.036	15.60
0.70	144.0	4.0	4.4	40.	51.	1.730	1.524	1.067	17.60	18.77
0.65	148.0	4.0	5.0	40.	50.	1.764	1.337	0.869	20.00	17.38
0.60	152.0	4.0	4.5	25.	43.	1.287	1.259	0.755	18.00	13.60
0.60	156.0	4.0	3.0	25.	40.	1.231	1.382	1.294	0.776	14.40
0.60	160.0	5.0	2.8	25.	46.	1.205	1.382	1.233	0.740	14.00
0.60	166.0	6.0	2.6	20.	41.	1.083	1.411	1.397	0.838	15.60
0.60	172.0	6.0	2.7	30.	45.	1.382	1.473	1.339	0.803	16.20
0.60	178.0	6.0	3.4	25.	46.	1.205	1.362	1.246	0.748	20.40
0.60	184.0	6.0	3.4	30.	44.	1.906	1.248	0.749	23.40	17.52
0.65	190.0	6.0	4.5	20.	45.	0.989	1.382	1.186	0.771	27.00
0.70	196.0	6.0	4.3	20.	44.	1.011	0.661	0.681	0.477	25.80
0.70	202.0	6.0	3.2	25.	46.	1.205	0.927	0.649	19.20	12.46
0.70	208.0	7.0	3.4	15.	52.	0.649	1.058	0.887	0.621	23.80
0.70	216.0	7.0	2.1	15.	51.	0.716	0.661	0.661	0.463	14.70
1.00	222.0	3.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
SECTIONS	WIDTH					Avg Velocity			Area	Q
23	129.0					0.757			406.549	307.926

South Fork Edisto River at Cannon Bridge

August 3, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	Avg	Auj	AREA	Q
1.00	50.0	4.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.80	58.0	7.0	2.1	10.	44.	0.515	0.515	0.412	14.70	0.00
0.90	64.0	6.0	2.4	15.	56.	0.604	0.604	0.543	14.40	7.40
0.90	70.0	6.0	3.5	15.	51.	0.661	0.650	0.495	21.00	10.40
				10.	52.	0.439				
0.95	76.0	6.0	3.5	15.	50.	0.674	0.561	0.533	21.00	11.10
				10.	51.	0.447				
0.99	82.0	5.0	4.4	15.	51.	0.661	0.563	0.557	22.00	12.20
0.99	86.0	4.0	5.3	15.	45.	0.747	0.764	0.756	21.20	16.03
0.99	90.0	4.0	6.2	15.	43.	0.780				
0.99	94.0	3.5	7.2	15.	45.	0.747	0.847	0.839	25.20	21.14
0.98	97.0	3.0	7.7	20.	47.	0.948				
0.98	100.0	3.0	8.1	20.	44.	1.011				
0.98	103.0	3.0	8.3	20.	50.	0.892	0.951	0.932	24.30	22.60
0.98	106.0	3.0	8.8	20.	45.	1.011				
0.98	109.0	3.0	8.9	20.	45.	0.908	0.968	0.948	26.70	25.30
0.98	112.0	3.0	8.1	20.	43.	1.034	0.981	0.961	24.30	23.30
0.98	115.0	3.0	8.7	20.	45.	0.928				
0.97	118.0	3.0	7.7	20.	45.	0.928	0.993	0.963	23.10	22.25
0.96	121.0	3.0	6.0	20.	51.	0.875	0.921	0.884	15.00	15.42
0.90	124.0	4.0	4.4	15.	40.	0.908				
0.85	129.0	5.5	2.3	15.	45.	0.731	0.731	0.621	12.05	7.50
1.00	135.0	3.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
SECTIONS	WIDTH					Avg Velocity			AREA	Q
21	85.0					0.780			411.444	220.960

South Fork Edisto River near Mouth

August 4, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	Avg	Auj	AREA	Q
1.00	15.0	2.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	19.0	3.0	0.4	10.	40.	0.474	0.354	0.354	24.10	0.30
1.00	22.0	3.0	7.3	10.	45.	0.504	0.567	0.507	21.90	5.34
1.00	25.0	3.0	5.0	25.	45.	1.231	0.917	0.917	15.00	13.70
1.00	28.0	3.0	5.2	25.	45.	1.231	1.034	1.034	24.50	25.44
1.00	31.0	3.0	5.2	30.	47.	1.411	1.211	1.211	24.50	29.50
1.00	34.0	3.0	7.1	25.	44.	1.259	1.103	1.103	23.10	25.48
1.00	37.0	3.0	7.2	25.	45.	1.318	1.170	1.170	21.00	25.40
1.00	40.0	3.0	7.0	25.	45.	1.034	1.318	1.318	21.00	24.45
1.00	43.0	3.0	6.0	20.	44.	1.011	1.110	1.110	15.00	19.70
1.00	46.0	3.0	6.2	20.	45.	0.989	1.000	1.000	15.00	18.60
1.00	49.0	3.0	5.0	20.	44.	1.011	1.034	1.034	16.80	17.50
1.00	52.0	3.0	5.0	20.	42.	1.058				
1.00	55.0	3.0	4.7	20.	41.	1.011	1.011	1.011	15.00	15.16
1.00	58.0	3.0	4.0	25.	41.	1.053	1.059	1.059	14.10	14.93
1.00	61.0	3.0	4.0	25.	44.	1.259	1.232	1.232	15.50	10.60
1.00	64.0	3.0	4.0	30.	47.	1.411	1.308	1.308	12.00	15.70
1.00	67.0	3.0	3.7	25.	40.	1.205				
1.00	70.0	4.0	3.0	20.	41.	1.259	1.171	1.171	11.10	13.00
1.00	75.0	6.0	2.3	15.	45.	1.011	1.011	1.011	15.00	9.60
1.00	82.0	3.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
SECTIONS	WIDTH					Avg Velocity			AREA	Q
21	67.0					0.950			335.344	330.868

Edisto River at U.S. Hwy. 78

May 31, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	444.0	4.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	452.0	9.0	3.4	20.	40.	1.110	1.170	1.170	30.60	35.82
1.00	462.0	9.0	7.5	30.	47.	1.231	1.397	1.397	67.50	94.30
1.00	470.0	8.0	8.2	25.	40.	1.382	1.318	1.288	65.60	84.50
1.00	478.0	8.0	8.1	25.	42.	1.259	1.318	1.412	64.80	91.50
0.97	486.0	8.0	8.0	25.	45.	1.349	1.290	1.251	64.00	80.10
0.99	494.0	8.0	7.8	20.	42.	1.058	1.131	1.120	62.40	69.89
1.00	502.0	8.0	8.5	25.	41.	1.205	1.349	1.463	68.00	99.50
0.99	510.0	8.0	7.6	25.	43.	1.287	1.246	1.234	60.80	75.00
1.00	518.0	9.0	7.0	20.	46.	0.968	0.898	0.898	63.00	56.55
1.00	528.0	11.0	6.5	20.	45.	0.827	0.989	0.894	71.50	63.90
1.00	540.0	13.0	5.9	15.	42.	0.799	0.910	0.792	76.70	60.74
0.20	554.0	14.0	8.7	15.	50.	0.674	0.716	0.777	121.80	18.92
0.20	568.0	14.0	1.9	20.	48.	0.928	0.928	0.186	26.60	4.94
0.30	582.0	14.0	2.2	25.	47.	1.180	1.180	0.354	30.80	10.90
0.50	596.0	14.0	6.4	25.	46.	1.205	0.835	0.417	89.60	37.40
0.50	610.0	14.0	5.7	25.	48.	0.465	1.155	1.167	0.584	79.80
0.60	624.0	12.0	8.8	20.	46.	0.968	1.028	0.617	105.60	65.14
0.60	634.0	10.0	5.9	25.	51.	1.089	1.287	0.764	59.00	45.06
0.50	644.0	10.0	6.0	20.	40.	1.110	1.214	0.607	60.00	36.41
0.50	654.0	13.0	5.2	20.	52.	0.858	0.946	0.473	67.60	31.98
0.20	670.0	16.0	5.7	15.	46.	1.034	0.731	0.128	91.20	11.70
1.00	686.0	8.0	0.0	10.	41.	0.552	0.000	0.000	0.00	0.00
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SECTIONS	WIDTH					Avg Velocity			Area	Q
23	242.0					0.785			1426.898	1120.825

Edisto River at U.S. Hwy. 15

June 1, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	Avg	ADJ	AREA	Q
1.00	90.0	3.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
1.00	96.0	7.0	1.4	15.	46.	0.731	0.731	0.731	9.89	7.16
0.98	104.0	8.0	3.1	20.	45.	0.989	0.631	0.619	24.80	15.34
0.98	112.0	8.0	3.8	25.	49.	0.273	1.132	0.972	0.953	30.40
0.99	120.0	8.0	4.9	20.	55.	0.813	1.259	1.195	1.183	38.40
0.99	128.0	8.0	5.2	25.	49.	1.132	1.506	1.444	1.430	41.60
1.00	136.0	8.0	5.1	25.	42.	1.382	1.318	1.318	40.80	53.76
1.00	144.0	8.0	4.1	15.	45.	0.747	0.837	0.837	32.80	27.47
1.00	152.0	8.0	4.9	20.	48.	0.928	1.037	1.392	1.392	39.20
1.00	160.0	8.0	6.9	30.	42.	0.948	1.577	1.119	1.119	55.20
1.00	168.0	8.0	7.4	30.	41.	0.661	1.615	1.226	1.226	59.20
1.00	176.0	7.0	8.7	30.	43.	0.837	1.541	1.287	1.287	60.90
1.00	182.0	6.0	10.2	40.	47.	1.034	1.875	1.589	1.589	61.20
1.00	188.0	6.0	10.8	30.	51.	1.302	0.749	1.207	1.207	64.80
1.00	194.0	6.0	9.0	7.	42.	1.615	0.383	0.733	0.733	54.00
1.00	200.0	6.0	9.0	20.	41.	1.083	0.280	0.413	0.413	54.00
1.00	206.0	6.0	9.2	10.	42.	0.539	1.655	1.655	1.655	55.20
1.00	212.0	6.0	9.6	40.	50.	1.764	1.557	1.557	1.557	57.60
1.00	218.0	7.0	9.1	25.	41.	1.349	0.821	0.821	63.70	52.29
1.00	226.0	8.0	6.8	7.	40.	0.292	0.401	0.559	0.559	54.40
0.98	234.0	8.0	5.0	25.	48.	0.716	1.155	0.991	0.972	40.00
1.00	242.0	8.0	2.4	20.	54.	0.827	0.359	0.359	19.20	6.89
1.00	250.0	4.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
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SECTIONS	WIDTH					Avg Velocity			Area	Q
23	160.0					1.099			957.199	1051.785

Edisto River at Stokes Bridge

June 1, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	40.0	4.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.97	48.0	8.0	6.7	25.	51.	1.089	0.720	0.698	53.60	37.44
0.96	56.0	8.0	8.5	25.	42.	1.318	1.024	0.983	68.00	66.86
0.97	64.0	8.0	6.9	30.	44.	0.731	1.506	1.356	1.315	55.20
0.96	72.0	8.0	6.1	40.	51.	1.205	1.730	1.586	1.522	48.80
0.94	80.0	7.0	6.0	40.	44.	1.442	2.002	1.789	1.682	42.00
0.92	88.0	6.0	7.7	40.	42.	1.577	2.096	1.785	1.642	46.20
0.94	92.0	6.0	6.8	40.	44.	1.473	2.002	1.789	1.682	40.80
0.94	98.0	6.0	6.0	50.	49.	1.577	2.244	1.950	1.833	36.00
0.94	104.0	6.0	6.0	50.	48.	1.655	2.290	2.103	1.977	36.00
0.94	110.0	6.0	6.4	50.	46.	1.916	2.389	2.152	2.023	38.40
0.94	116.0	6.0	7.3	50.	47.	1.916	2.338	1.958	1.840	43.80
0.94	122.0	6.0	7.7	40.	40.	1.577	2.200	1.907	1.793	46.20
0.94	128.0	6.0	6.5	40.	43.	1.615	2.048	1.982	1.863	39.00
0.94	134.0	6.0	6.7	40.	45.	1.916	1.958	1.844	1.733	40.20
0.94	140.0	6.0	6.7	40.	51.	1.730	1.601	1.505	40.20	60.52
0.96	146.0	6.0	4.7	25.	40.	1.473	1.382	1.307	1.254	28.20
1.00	152.0	7.0	4.6	25.	45.	1.231	1.155	1.083	1.083	32.20
1.00	160.0	12.0	1.0	15.	45.	0.747	0.747	0.747	12.00	8.96
1.00	176.0	8.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
SECTIONS	WIDTH					Avg Velocity			Area	Q
20	136.0					1.509			746.799	1126.609

Edisto River at U.S. Hwy. 78

October 13, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	20.0	2.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.75	25.0	12.5	2.6	0.	70.	0.000	0.375	0.518	0.388	32.50
0.40	45.0	20.0	4.0	15.	51.	0.661	0.968	0.883	0.353	80.00
0.40	65.0	17.5	4.8	25.	46.	1.205	1.246	0.498	84.00	41.87
0.90	80.0	12.5	5.7	25.	48.	1.287	1.155	1.180	1.062	71.25
0.85	90.0	10.0	3.9	25.	43.	1.205	1.287	1.238	1.052	39.00
0.92	100.0	10.0	6.7	20.	40.	1.110	0.937	0.862	67.00	57.73
0.60	110.0	10.0	2.9	15.	44.	0.763	0.910	0.813	0.488	29.00
0.40	120.0	10.0	1.9	15.	47.	0.716	1.442	1.442	0.577	19.00
0.50	130.0	10.0	2.0	40.	45.	1.442	1.958	1.958	0.979	20.00
0.40	140.0	8.0	2.5	40.	47.	1.958	1.875	1.875	0.750	20.00
0.94	146.0	3.5	6.0	40.	47.	1.875	0.875	1.053	0.990	21.00
1.00	147.0	0.5	6.0	15.	40.	1.231	0.837	0.846	0.846	3.00
1.00	153.0	0.5	5.0	8.	41.	0.854				
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
SECTIONS	WIDTH					Avg Velocity			Area	Q
25	228.0					0.955			942.949	900.165

Edisto River at Stokes Bridge

October 15, 1983

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	45.0	1.5	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.90	48.0	4.0	5.3	15.	52.	0.649	0.461	0.415	21.20	8.80
0.90	53.0	5.0	7.0	20.	41.	0.273	0.883	0.797	35.00	27.89
0.85	58.0	5.0	4.8	25.	49.	0.687	1.132	1.021	0.868	24.00
0.94	63.0	5.0	5.7	25.	44.	0.910	1.254	1.048	0.985	28.50
0.94	68.0	5.0	5.5	30.	45.	0.837	1.473	1.231	1.157	27.50
0.94	73.0	5.0	5.1	30.	40.	0.989	1.655	1.471	1.383	25.50
0.94	78.0	5.0	5.1	30.	40.	1.287	1.655	1.457	1.369	25.50
0.94	83.0	5.0	5.6	40.	49.	1.800	1.574	1.480	28.00	41.44
0.85	88.0	5.0	7.5	40.	52.	1.349	1.697	1.451	1.233	37.50
0.92	93.0	5.0	5.8	40.	48.	1.205	1.837	1.624	1.494	29.00
0.92	98.0	5.0	5.4	40.	43.	2.048	1.473	1.761	1.620	27.00
0.90	103.0	5.0	5.5	40.	36.	1.916	1.916	1.765	1.589	27.50
0.90	108.0	5.0	5.7	40.	41.	1.615	1.875	1.629	1.466	28.50
0.90	113.0	5.0	6.1	40.	45.	1.958	1.411	1.685	1.516	30.50
0.85	118.0	4.5	6.7	40.	43.	2.048	1.349	1.745	1.483	30.15
0.98	122.0	4.0	6.5	50.	58.	1.442	1.899	1.565	1.534	26.00
0.94	126.0	4.5	5.6	40.	47.	1.231	1.875	1.612	1.516	25.20
0.90	131.0	5.0	5.6	40.	49.	1.349	1.800	1.670	1.503	28.00
0.92	136.0	5.0	5.4	30.	43.	1.541	1.615	1.596	1.468	27.00
0.94	141.0	5.0	5.4	25.	41.	1.577	1.349	1.192	1.120	27.00
0.94	146.0	6.0	3.7	20.	43.	1.034	1.318	1.225	1.151	22.20
0.96	153.0	6.5	3.1	20.	48.	1.132	0.928	0.701	0.673	20.15
1.00	159.0	3.0	0.0	10.	48.	0.474	0.000	0.000	0.00	0.00
				0.	70.	0.000				

SECTIONS	WIDTH	Avg Velocity	Area	Q
24	114.0	1.278	600.900	767.949

Edisto River at U.S. Hwy. 78

January 4, 1984

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	10.0	5.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.85	20.0	15.0	5.9	15.	41.	0.818	0.605	0.514	88.50	45.51
				7.	41.	0.392				
0.60	40.0	20.0	8.1	20.	44.	1.011	0.905	0.543	162.00	87.93
0.60	60.0	20.0	8.1	25.	51.	1.089	1.018	0.611	162.00	98.97
0.60	80.0	18.0	9.9	25.	41.	1.349	1.318	0.791	178.20	140.96
0.80	96.0	13.0	9.5	30.	44.	1.506	1.490	1.192	123.50	147.19
0.75	106.0	10.0	7.3	25.	40.	1.473	1.382	1.040	73.00	81.02
0.70	116.0	10.0	5.3	25.	43.	1.577	1.321	0.925	53.00	49.02
0.60	126.0	12.0	4.6	30.	44.	1.411	1.602	0.961	55.20	53.05
0.90	140.0	12.0	8.0	40.	52.	1.697	1.231	1.030	105.60	108.78
1.00	150.0	10.0	10.0	30.	47.	1.058	1.018	1.018	106.00	107.96
0.98	160.0	10.0	8.7	20.	40.	0.626	1.110	1.230	87.00	104.83
0.97	170.0	10.0	8.5	25.	41.	1.349	1.473	1.674	1.624	85.00
0.96	180.0	10.0	7.7	30.	45.	1.875	1.382	1.327	77.00	102.19
0.96	190.0	9.0	8.4	30.	40.	1.259	1.655	1.709	1.641	75.60
0.94	198.0	7.0	9.8	40.	50.	1.764	1.958	1.937	1.820	68.60
1.00	204.0	6.0	8.1	25.	41.	1.916	1.349	1.252	1.252	48.60
0.98	210.0	6.0	8.0	30.	41.	1.155	1.615	1.635	1.602	48.00
0.98	216.0	7.0	9.4	30.	40.	1.655	1.577	1.525	1.495	65.80
0.98	224.0	8.0	10.9	40.	52.	1.473	1.697	1.767	1.731	87.20
0.99	232.0	8.0	9.0	30.	45.	1.837	1.473	1.380	1.366	76.80
1.00	240.0	8.0	9.7	25.	43.	1.287	1.506	1.524	1.524	77.60
1.00	248.0	8.0	5.8	30.	43.	1.541	1.506	1.397	1.397	46.40
1.00	256.0	6.0	2.0	20.	40.	1.110	1.110	1.110	15.60	17.32
1.00	260.0	2.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
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SECTIONS	WIDTH					Avg Velocity		Area		Q
25	250.0					1.122		1966.198		2206.820

Edisto River at U.S. Hwy. 15

January 5, 1984

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	72.0	10.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.99	92.0	14.0	3.0	25.	44.	1.259	0.995	0.985	50.40	49.63
1.00	100.0	9.0	4.0	30.	47.	1.411	1.013	1.013	43.20	43.76
0.98	110.0	10.0	5.0	40.	46.	0.614	2.002	1.579	1.547	67.00
1.00	120.0	9.0	7.0	40.	48.	1.155	2.147	1.794	1.794	65.70
0.99	128.0	8.0	7.0	40.	46.	1.442	2.200	1.907	1.888	62.40
0.99	136.0	8.0	7.0	30.	41.	1.615	2.290	2.045	2.024	56.00
0.99	144.0	8.0	6.0	40.	49.	1.800	2.441	2.139	2.096	69.80
0.99	152.0	8.0	7.0	40.	45.	1.958	2.441	1.423	1.409	56.80
0.98	160.0	8.0	8.0	50.	45.	1.615	2.441	2.139	2.096	64.00
0.98	168.0	8.0	9.0	50.	45.	1.837	2.441	2.139	2.096	72.80
0.99	176.0	8.0	9.0	50.	41.	2.076	2.166	2.144	76.80	164.65
0.99	184.0	8.0	10.0	50.	42.	2.013	2.355	2.331	87.20	203.28
0.99	192.0	8.0	10.0	40.	42.	2.096	2.290	1.110	1.455	1.440
0.99	200.0	8.0	10.0	40.	49.	1.800	0.484	0.411	0.407	87.20
0.99	208.0	8.0	12.0	50.	46.	2.389	1.965	1.945	102.40	199.18
1.00	216.0	8.0	12.0	30.	43.	1.541	2.045	2.045	96.00	196.32
1.00	224.0	8.0	8.0	40.	42.	2.096	1.739	1.739	70.40	122.45
1.00	232.0	8.0	7.0	30.	44.	1.506	1.444	1.444	61.60	88.97
1.00	240.0	10.0	5.0	20.	51.	0.875	0.762	0.762	54.00	41.14
1.00	252.0	10.0	2.0	15.	52.	0.649	0.338	0.338	20.00	6.76
1.00	260.0	4.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
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SECTIONS	WIDTH					Avg Velocity			Area	Q
22	188.0					1.645			1323.499	2176.635

Edisto River at Stokes Bridge

January 5, 1984

COEF EDGE OF WATER	STA	WIDTH	DEPTH	REV	SEC	VEL	AVG	ADJ	AREA	Q
1.00	23.0	8.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
0.90	39.0	12.5	2.0	15.	40.	0.837	0.550	0.495	35.00	17.32
0.90	48.0	9.0	9.0	30.	40.	0.262	1.442	0.990	0.891	81.90
0.90	57.0	9.0	7.0	40.	49.	0.539	1.800	1.727	1.555	67.50
0.90	66.0	8.0	9.0	40.	43.	2.048	1.794	1.615	76.80	124.03
0.90	75.0	7.0	9.0	30.	43.	1.541	2.290	2.027	1.824	68.00
0.90	80.0	7.0	10.0	50.	44.	1.764	2.446	2.148	1.933	71.40
0.90	87.0	6.0	11.0	50.	43.	2.553	2.325	2.092	69.60	145.62
0.90	92.0	5.0	10.0	50.	45.	2.048	1.941	2.221	1.999	52.50
0.90	97.0	5.0	10.0	40.	44.	2.002	2.553	2.422	2.180	51.00
0.90	102.0	5.0	10.0	50.	48.	2.290	2.424	2.180	52.50	111.16
0.90	107.0	5.0	9.0	60.	47.	2.800	2.545	2.291	49.00	112.25
0.90	112.0	5.0	10.0	60.	45.	2.290	2.490	2.050	2.390	53.00
0.92	117.0	5.0	10.0	30.	40.	2.389	2.448	2.430	53.50	130.33
0.92	122.0	5.0	10.0	50.	43.	2.553	2.394	2.207	54.50	120.25
0.92	127.0	5.0	10.0	30.	43.	2.244	2.076	2.380	2.195	53.50
0.92	132.0	5.0	10.0	50.	43.	2.553	2.277	2.095	53.50	112.10
0.94	137.0	6.0	10.0	50.	41.	2.602	2.290	2.158	63.00	135.96
0.94	144.0	7.0	8.0	50.	42.	2.676	2.013	2.307	2.169	62.30
0.94	151.0	8.0	7.0	40.	44.	2.002	2.002	1.782	1.675	58.40
0.94	160.0	10.0	3.0	25.	44.	1.259	1.113	1.046	34.00	35.58
1.00	171.0	9.5	2.0	15.	52.	0.549	0.561	0.561	27.05	15.47
1.00	179.0	4.0	0.0	0.	70.	0.000	0.000	0.000	0.00	0.00
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SECTIONS	WIDTH					Avg Velocity			Area	Q
23	156.0					1.849			1189.049	2197.994

APPENDIX B
Sampling Times, Concentrations and Calculations
of Percentage Recovery

Explanation of Terms

TIME - The time at which the water sample was taken.

OBS CONC - The observed dye concentration of the sample, in micrograms per liter, as determined with a fluorometer.

BKGR CONC - The background concentration, in micrograms per liter, present prior to the effect of the injected dye.

STUDY CONC - The concentration resulting from the dye injection, calculated as OBS CONC - BKGR CONC.

AVG CONC - The average of the study concentrations of the particular sample and of the previous sample.

MIN - The elapsed time between samples, in minutes.

AREA - The area of the time-concentration curve enclosed, in micrograms per liter-minutes, calculated as AVG CONC x MIN.

Total Area - The total area enclosed by the time-concentration curve, in micrograms per liter-minutes.

Percent Recovered - The percentage of dye injected which passed the sampling site during the sampling period.

DYE RECOVERY CALCULATION

STATION NORTH FORK EDISTO R. AT ROAD 39
 BEGINNING DATE 821109
 ENDING DATE 821109
 GAGE HEIGHT 12.67
 RIVER DISCHARGE WAS 538 CFS 4.2 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	Avg CONC	MIN	AREA
1010	0.110	0.11		0.000	0.000	0	0.000
1020	0.120	0.11		0.010	0.005	10	0.050
1030	0.160	0.11		0.050	0.030	10	0.300
1040	0.240	0.11		0.130	0.090	10	0.900
1050	0.340	0.11		0.230	0.180	10	1.800
1100	0.450	0.11		0.340	0.285	10	2.850
1110	0.700	0.11		0.590	0.465	10	4.650
1120	1.000	0.11		0.890	0.740	10	7.400
1130	1.500	0.11		1.390	1.140	10	11.400
1140	2.000	0.11		1.890	1.640	10	16.400
1150	2.400	0.11		2.290	2.090	10	20.900
1200	2.700	0.11		2.590	2.440	10	24.400
1210	3.200	0.11		3.090	2.840	10	28.400
1220	3.400	0.11		3.290	3.190	10	31.900
1230	3.500	0.11		3.390	3.340	10	33.400
1240	3.500	0.11		3.390	3.390	10	33.900
1250	3.400	0.11		3.290	3.340	10	33.400
1300	3.300	0.11		3.190	3.240	10	32.400
1320	2.900	0.11		2.790	2.990	20	59.800
1340	2.200	0.11		2.090	2.440	20	48.800
1400	1.800	0.11		1.690	1.890	20	37.800
1420	1.700	0.11		1.590	1.640	20	32.800
1440	1.400	0.11		1.290	1.440	20	28.800
1500	1.200	0.11		1.090	1.190	20	23.800
1520	1.000	0.11		0.890	0.990	20	19.800
1540	0.920	0.11		0.810	0.850	20	17.000
1600	0.800	0.11		0.690	0.750	20	15.000
1620	0.680	0.11		0.570	0.630	20	12.600
1640	0.650	0.11		0.540	0.555	20	11.100
1720	0.540	0.11		0.430	0.485	40	19.400
1905	0.300	0.11		0.190	0.310	105	32.550
2020	0.280	0.11		0.170	0.180	75	13.500

TOTAL AREA = 657.200

PERCENT RECOVERED = 60.002

DYE RECOVERY CALCULATION

STATION NORTH FORK EDISTO R. AT ROAD 63
 BEGINNING DATE 821109
 ENDING DATE 821110
 GAGE HEIGHT 12.46
 RIVER DISCHARGE WAS 522 CFS 4.2 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
1920	0.080	0.08		0.000	0.000	0	0.000
2000	0.090	0.08		0.010	0.005	40	0.200
2030	0.130	0.08		0.050	0.030	30	0.900
2100	0.240	0.08		0.160	0.105	30	3.150
2130	0.580	0.08		0.500	0.330	30	9.900
2200	1.100	0.08		1.020	0.760	30	22.800
2230	1.700	0.08		1.620	1.320	30	39.600
2300	2.100	0.08		2.020	1.820	30	54.600
2330	2.200	0.08		2.120	2.070	30	62.100
2400	2.100	0.08		2.020	2.070	30	62.100
30	1.800	0.08		1.720	1.870	30	56.100
100	1.600	0.08		1.520	1.620	30	48.600
200	1.400	0.08		1.320	1.420	60	85.200
300	0.800	0.08		0.720	1.020	60	61.200
400	0.720	0.08		0.640	0.680	60	40.800
500	0.640	0.08		0.560	0.600	60	36.000
600	0.500	0.08		0.420	0.490	60	29.400
700	0.400	0.08		0.320	0.370	60	22.200
800	0.360	0.08		0.280	0.300	60	18.000
900	0.280	0.08		0.200	0.240	60	14.400

TOTAL AREA = 667.250

PERCENT RECOVERED = 59.106

DYE RECOVERY CALCULATION

STATION N. FORK EDISTO R. AT ROAD 39
 BEGINNING DATE 830109
 ENDING DATE 830110
 GAGE HEIGHT 11.66
 RIVER DISCHARGE WAS 1010 CFS 6 LITERS OF DYE WERE USED

TIME	OBS CONC	-	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
850	0.120		0.12		0.000	0.000	0	0.000
900	0.160		0.12		0.040	0.020	10	0.200
910	0.200		0.12		0.080	0.060	10	0.600
920	0.240		0.12		0.120	0.100	10	1.000
930	0.330		0.12		0.210	0.165	10	1.650
940	0.390		0.12		0.270	0.240	10	2.400
950	0.510		0.12		0.390	0.330	10	3.300
1000	0.550		0.12		0.430	0.410	10	4.100
1010	0.640		0.12		0.520	0.475	10	4.750
1020	0.780		0.12		0.660	0.590	10	5.900
1030	0.900		0.12		0.780	0.720	10	7.200
1040	0.900		0.12		0.780	0.780	10	7.800
1050	1.100		0.12		0.980	0.880	10	8.800
1100	1.200		0.12		1.080	1.030	10	10.300
1110	1.200		0.12		1.080	1.080	10	10.800
1120	1.200		0.12		1.080	1.080	10	10.800
1130	1.400		0.12		1.280	1.180	10	11.800
1140	1.300		0.12		1.180	1.230	10	12.300
1150	1.400		0.12		1.280	1.230	10	12.300
1200	1.400		0.12		1.280	1.280	10	12.800
1220	1.300		0.12		1.180	1.230	20	24.600
1240	1.300		0.12		1.180	1.180	20	23.600
1300	1.300		0.12		1.180	1.180	20	23.600
1330	1.200		0.12		1.080	1.130	30	33.900
1400	1.100		0.12		0.980	1.030	30	30.900
1500	0.920		0.12		0.800	0.890	60	53.400
1600	0.800		0.12		0.680	0.740	60	44.400
2015	0.420		0.12		0.300	0.490	255	124.950
830	0.240		0.12		0.120	0.210	735	154.350

TOTAL AREA = 642.500

PERCENT RECOVERED = 57.815

DYE RECOVERY CALCULATION

STATION N. FORK EDISTO R. AT RD. 63
 BEGINNING DATE 830113
 ENDING DATE 830113
 GAGE HEIGHT 10.76
 RIVER DISCHARGE WAS 913 CFS 7 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	STUDY CONC	AVG CONC	MIN	AREA
810	0.120	0.12	0.000	0.000	0	0.000
820	0.120	0.12	0.000	0.000	10	0.000
830	0.140	0.12	0.020	0.010	10	0.100
840	0.170	0.12	0.050	0.035	10	0.350
850	0.260	0.12	0.140	0.095	10	0.950
900	0.390	0.12	0.270	0.205	10	2.050
910	0.540	0.12	0.420	0.345	10	3.450
920	0.700	0.12	0.580	0.500	10	5.000
930	0.890	0.12	0.770	0.675	10	6.750
940	1.100	0.12	0.980	0.875	10	8.750
950	1.300	0.12	1.180	1.080	10	10.800
1000	1.500	0.12	1.380	1.280	10	12.800
1010	1.700	0.12	1.580	1.480	10	14.800
1020	1.700	0.12	1.580	1.580	10	15.800
1030	1.900	0.12	1.780	1.680	10	16.800
1040	2.000	0.12	1.880	1.830	10	18.300
1050	2.100	0.12	1.980	1.930	10	19.300
1100	2.200	0.12	2.080	2.030	10	20.300
1110	2.100	0.12	1.980	2.030	10	20.300
1120	2.200	0.12	2.080	2.030	10	20.300
1130	2.200	0.12	2.080	2.080	10	20.800
1140	2.100	0.12	1.980	2.030	10	20.300
1150	2.200	0.12	2.080	2.030	10	20.300
1200	2.100	0.12	1.980	2.030	10	20.300
1210	2.000	0.12	1.880	1.930	10	19.300
1220	2.000	0.12	1.880	1.880	10	18.800
1230	2.000	0.12	1.880	1.880	10	18.800
1240	1.900	0.12	1.780	1.830	10	18.300
1250	1.800	0.12	1.680	1.730	10	17.300
1300	1.700	0.12	1.580	1.630	10	16.300
1320	1.650	0.12	1.530	1.555	20	31.100
1340	1.500	0.12	1.380	1.455	20	29.100
1400	1.400	0.12	1.280	1.330	20	26.600
1500	1.050	0.12	0.930	1.105	60	66.300
1530	0.900	0.12	0.780	0.855	30	25.650
1725	0.620	0.12	0.500	0.640	115	73.600
1945	0.350	0.12	0.230	0.365	140	51.100
2030	0.320	0.12	0.200	0.215	45	9.675

TOTAL AREA = 700.525

PERCENT RECOVERED = 65.123

DYE RECOVERY CALCULATION

STATION NORTH FORK EDISTO R. AT ROAD 39
 BEGINNING DATE 831011
 ENDING DATE 831011
 GAGE HEIGHT 13.51
 RIVER DISCHARGE WAS 382 CFS 3 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
920	0.100	0.1		0.000	0.000	0	0.000
940	0.110	0.1		0.010	0.005	20	0.100
1000	0.120	0.1		0.020	0.015	20	0.300
1020	0.140	0.1		0.040	0.030	20	0.600
1040	0.280	0.1		0.180	0.110	20	2.200
1100	0.690	0.1		0.590	0.385	20	7.700
1120	1.600	0.1		1.500	1.045	20	20.900
1140	2.800	0.1		2.700	2.100	20	42.000
1200	3.900	0.1		3.800	3.250	20	65.000
1220	4.700	0.1		4.600	4.200	20	84.000
1240	4.700	0.1		4.600	4.600	20	92.000
1300	4.500	0.1		4.400	4.500	20	90.000
1345	2.800	0.1		2.700	3.550	45	159.750
1400	2.400	0.1		2.300	2.500	15	37.500
1430	1.600	0.1		1.500	1.900	30	57.000
1600	0.660	0.1		0.560	1.030	90	92.700
1700	0.530	0.1		0.430	0.495	60	29.700
1830	0.340	0.1		0.240	0.335	90	30.150
2115	0.230	0.1		0.130	0.185	165	30.525

TOTAL AREA = 842.125

PERCENT RECOVERED = 76.429

DYE RECOVERY CALCULATION

STATION NORTH FORK EDISTO R. AT ROAD 63
 BEGINNING DATE 831011
 ENDING DATE 831012
 GAGE HEIGHT 13.43
 RIVER DISCHARGE WAS 385 CFS 3 LITERS OF DYE WERE USED

TIME	OBS	BKGR	STUDY	AVG	MIN	AREA
	CONC	CONC	=	CONC		
2130	0.180	0.18	0.000	0.000	0	0.000
2200	0.420	0.18	0.240	0.120	30	3.600
2230	0.810	0.18	0.630	0.435	30	13.050
2300	1.600	0.18	1.420	1.025	30	30.750
2330	2.500	0.18	2.320	1.870	30	56.100
2400	3.000	0.18	2.820	2.570	30	77.100
30	3.200	0.18	3.020	2.920	30	87.600
100	2.800	0.18	2.620	2.820	30	84.600
200	1.900	0.18	1.720	2.170	60	130.200
300	1.300	0.18	1.120	1.420	60	85.200
400	0.800	0.18	0.620	0.870	60	52.200
500	0.600	0.18	0.420	0.520	60	31.200
630	0.420	0.18	0.240	0.330	90	29.700
800	0.320	0.18	0.140	0.190	90	17.100

TOTAL AREA = 698.400

PERCENT RECOVERED = 63.883

DYE RECOVERY CALCULATION

STATION S. FORK EDISTO R. AT SC 70
 BEGINNING DATE 821208
 ENDING DATE 821208
 GAGE HEIGHT 21.36
 RIVER DISCHARGE WAS 578 CFS 6.2 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	= STUDY CONC	AVG			AREA
				CONC	MIN		
730	0.120	0.12	0.000	0.000	0		0.000
735	0.140	0.12	0.020	0.010	5		0.050
740	0.200	0.12	0.080	0.050	5		0.250
745	0.330	0.12	0.210	0.145	5		0.725
750	0.590	0.12	0.470	0.340	5		1.700
755	0.900	0.12	0.780	0.625	5		3.125
800	1.800	0.12	1.680	1.230	5		6.150
805	2.900	0.12	2.780	2.230	5		11.150
810	4.100	0.12	3.980	3.380	5		16.900
815	5.400	0.12	5.280	4.630	5		23.150
820	5.800	0.12	5.680	5.480	5		27.400
825	7.000	0.12	6.880	6.280	5		31.400
830	8.100	0.12	7.980	7.430	5		37.150
835	9.000	0.12	8.880	8.430	5		42.150
840	9.200	0.12	9.080	8.980	5		44.900
845	9.200	0.12	9.080	9.080	5		45.400
850	9.200	0.12	9.080	9.080	5		45.400
855	8.800	0.12	8.680	8.880	5		44.400
900	8.700	0.12	8.580	8.630	5		43.150
910	7.800	0.12	7.680	8.130	10		81.300
920	6.600	0.12	6.480	7.080	10		70.800
930	5.700	0.12	5.580	6.030	10		60.300
940	4.800	0.12	4.680	5.130	10		51.300
950	4.000	0.12	3.880	4.280	10		42.800
1000	3.400	0.12	3.280	3.580	10		35.800
1010	2.800	0.12	2.680	2.980	10		29.800
1020	2.400	0.12	2.280	2.480	10		24.800
1030	2.200	0.12	2.080	2.180	10		21.800
1100	1.600	0.12	1.480	1.780	30		53.400
1130	1.200	0.12	1.080	1.280	30		38.400
1200	0.900	0.12	0.780	0.930	30		27.900
1230	0.800	0.12	0.680	0.730	30		21.900
1330	0.600	0.12	0.480	0.580	60		34.800
1500	0.400	0.12	0.280	0.380	90		34.200
1700	0.420	0.12	0.300	0.290	120		34.800
1900	0.320	0.12	0.200	0.250	120		30.000

TOTAL AREA = 1118.650

PERCENT RECOVERED =

74.331

DYE RECOVERY CALCULATION

STATION S. FORK EDISTO R. AT U.S. 301
 BEGINNING DATE 821208
 ENDING DATE 821209
 GAGE HEIGHT 13.09
 RIVER DISCHARGE WAS 592 CFS 6.2 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	STUDY CONC	AVG CONC	MIN	AREA
1645	0.120	0.12	0.000	0.000	0	0.000
1700	0.160	0.12	0.040	0.020	15	0.300
1715	0.200	0.12	0.080	0.060	15	0.900
1730	0.300	0.12	0.180	0.130	15	1.950
1745	0.500	0.12	0.380	0.280	15	4.200
1800	0.720	0.12	0.600	0.490	15	7.350
1815	1.000	0.12	0.880	0.740	15	11.100
1830	1.250	0.12	1.130	1.005	15	15.075
1845	1.500	0.12	1.380	1.255	15	18.825
1900	1.600	0.12	1.480	1.430	15	21.450
1915	1.750	0.12	1.630	1.555	15	23.325
1930	1.750	0.12	1.630	1.630	15	24.450
1945	1.700	0.12	1.580	1.605	15	24.075
2000	1.500	0.12	1.380	1.480	15	22.200
2030	1.400	0.12	1.280	1.330	30	39.900
2100	1.300	0.12	1.180	1.230	30	36.900
2130	1.200	0.12	1.080	1.130	30	33.900
2238	1.000	0.12	0.880	0.980	68	66.640
2301	0.920	0.12	0.800	0.840	23	19.320
2324	0.900	0.12	0.780	0.790	23	18.170
2347	0.780	0.12	0.660	0.720	23	16.560
2410	0.820	0.12	0.700	0.680	23	15.640
2433	0.780	0.12	0.660	0.680	23	15.640
56	0.750	0.12	0.630	0.645	23	14.835
119	0.740	0.12	0.620	0.625	23	14.375
142	0.720	0.12	0.600	0.610	23	14.030
205	0.700	0.12	0.580	0.590	23	13.570
228	0.640	0.12	0.520	0.550	23	12.650
251	0.620	0.12	0.500	0.510	23	11.730
314	0.610	0.12	0.490	0.495	23	11.385
337	0.560	0.12	0.440	0.465	23	10.695
400	0.540	0.12	0.420	0.430	23	9.890
423	0.500	0.12	0.380	0.400	23	9.200
446	0.480	0.12	0.360	0.370	23	8.510
509	0.490	0.12	0.370	0.365	23	8.395
532	0.470	0.12	0.350	0.360	23	8.280
555	0.440	0.12	0.320	0.335	23	7.705
618	0.410	0.12	0.290	0.305	23	7.015
800	0.360	0.12	0.240	0.265	102	27.030
947	0.300	0.12	0.180	0.210	107	22.470

TOTAL AREA = 649.635

PERCENT RECOVERED =

44.212

DYE RECOVERY CALCULATION

STATION S. FORK EDISTO R. AT SC 70
 BEGINNING DATE 830113
 ENDING DATE 830114
 GAGE HEIGHT 20.94
 RIVER DISCHARGE WAS 732 CFS 16 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	Avg CONC	MIN	AREA
830	0.080	0.08	=	0.000	0.000	0	0.000
850	0.100	0.08	=	0.020	0.010	20	0.200
900	0.330	0.08	=	0.250	0.135	10	1.350
910	1.050	0.08	=	0.970	0.610	10	6.100
920	2.300	0.08	=	2.220	1.595	10	15.950
930	4.300	0.08	=	4.220	3.220	10	32.200
940	5.700	0.08	=	5.620	4.920	10	49.200
950	6.700	0.08	=	6.620	6.120	10	61.200
1000	7.200	0.08	=	7.120	6.870	10	68.700
1010	7.400	0.08	=	7.320	7.220	10	72.200
1020	7.200	0.08	=	7.120	7.220	10	72.200
1030	7.200	0.08	=	7.120	7.120	10	71.200
1040	6.800	0.08	=	6.720	6.920	10	69.200
1100	6.000	0.08	=	5.920	6.320	20	126.400
1120	5.400	0.08	=	5.320	5.620	20	112.400
1140	4.900	0.08	=	4.720	5.020	20	100.400
1200	4.000	0.08	=	3.920	4.320	20	86.400
1220	3.400	0.08	=	3.320	3.620	20	72.400
1240	2.800	0.08	=	2.720	3.020	20	60.400
1300	2.500	0.08	=	2.420	2.570	20	51.400
1320	2.200	0.08	=	2.120	2.270	30	63.100
1500	1.600	0.08	=	1.520	1.820	90	163.800
1700	1.100	0.08	=	1.020	1.270	120	152.400
1920	0.670	0.08	=	0.590	0.805	140	112.700
2215	0.680	0.08	=	0.600	0.595	175	104.125
40	0.540	0.08	=	0.460	0.530	145	76.850
600	0.280	0.08	=	0.200	0.330	320	105.600

TOTAL AREA = 1913.075

PERCENT RECOVERED =

62.382

DYE RECOVERY CALCULATION

STATION S. FORK EDISTO R. AT U.S. 301
 BEGINNING DATE 830113
 ENDING DATE 830115
 GAGE HEIGHT 11.95
 RIVER DISCHARGE WAS 1000 CFS 16 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	STUDY CONC	AVG CONC	MIN	AREA
1830	0.080	0.08	0.000	0.000	0	0.000
1850	0.130	0.08	0.050	0.025	20	0.500
1910	0.200	0.08	0.120	0.085	20	1.700
1930	0.280	0.08	0.200	0.160	20	3.200
1950	0.360	0.08	0.280	0.240	20	4.800
2010	0.480	0.08	0.400	0.340	20	6.800
2030	0.550	0.08	0.470	0.435	20	8.700
2050	0.600	0.08	0.520	0.495	20	9.900
2110	0.720	0.08	0.640	0.580	20	11.600
2130	0.780	0.08	0.700	0.670	20	13.400
2147	0.840	0.08	0.760	0.730	17	12.410
2214	0.940	0.08	0.860	0.810	27	21.870
2240	1.000	0.08	0.920	0.890	26	23.140
2307	1.100	0.08	1.020	0.970	27	26.190
2334	1.100	0.08	1.020	1.020	27	27.540
2400	1.200	0.08	1.120	1.070	26	27.820
27	1.200	0.08	1.120	1.120	27	30.240
54	1.200	0.08	1.120	1.120	27	30.240
120	1.200	0.08	1.120	1.120	26	29.120
147	1.200	0.08	1.120	1.120	27	30.240
214	1.200	0.08	1.120	1.120	27	30.240
240	1.300	0.08	1.220	1.170	26	30.420
307	1.300	0.08	1.220	1.220	27	32.940
334	1.200	0.08	1.120	1.170	27	31.590
427	1.200	0.08	1.120	1.120	53	59.360
520	1.100	0.08	1.020	1.070	53	56.710
614	1.000	0.08	0.920	0.970	54	52.360
707	1.000	0.08	0.920	0.920	53	49.760
1000	0.960	0.08	0.880	0.900	173	155.700
1430	0.560	0.08	0.480	0.680	270	183.600
1800	0.480	0.08	0.400	0.440	210	92.400
900	0.240	0.08	0.160	0.280	900	252.000
1200	0.210	0.08	0.150	0.145	180	26.100

TOTAL AREA = 1371.610

PERCENT RECOVERED = 61.101

DYE RECOVERY CALCULATION

STATION S. FORK EDISTO R. AT CANNON BRIDGE
 BEGINNING DATE 830510
 ENDING DATE 830511
 GAGE HEIGHT 9.43
 RIVER DISCHARGE WAS 907 CFS 25 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	Avg CONC	MIN	AREA
2145	0.180	0.18		0.000	0.000	0	0.000
2210	2.500	0.18		2.320	1.160	25	29.000
2220	4.300	0.18		4.120	3.220	10	32.200
2240	7.700	0.18		7.520	5.820	20	116.400
2250	9.000	0.18		8.820	8.170	10	81.700
2300	10.000	0.18		9.820	9.320	10	93.200
2310	10.000	0.18		9.820	9.820	10	98.200
2320	11.000	0.18		10.820	10.320	10	103.200
2330	11.000	0.18		10.820	10.820	10	108.200
2340	11.000	0.18		10.820	10.820	10	108.200
2350	10.500	0.18		10.320	10.570	10	105.700
2400	10.000	0.18		9.820	10.070	10	100.700
20	9.600	0.18		9.420	9.620	20	192.400
40	8.500	0.18		8.320	8.870	20	177.400
100	8.000	0.18		7.820	8.070	20	161.400
120	7.000	0.18		6.820	7.320	20	146.400
140	6.000	0.18		5.820	6.320	20	126.400
224	4.400	0.18		4.220	5.020	44	220.880
248	3.800	0.18		3.620	3.920	24	94.080
312	3.400	0.18		3.220	3.420	24	82.080
336	2.900	0.18		2.720	2.970	24	71.280
400	2.500	0.18		2.320	2.520	24	60.480
424	1.900	0.18		1.720	2.020	24	48.480
448	1.700	0.18		1.520	1.620	24	38.880
512	1.700	0.18		1.520	1.520	24	36.480
536	1.550	0.18		1.370	1.445	24	34.680
600	1.400	0.18		1.220	1.295	24	31.080
624	1.250	0.18		1.070	1.145	24	27.480
648	1.150	0.18		0.970	1.020	24	24.480
736	1.000	0.18		0.820	0.895	48	42.960
800	0.890	0.18		0.710	0.765	24	18.360
824	0.860	0.18		0.680	0.695	24	16.680
848	0.750	0.18		0.570	0.625	24	15.000
912	0.700	0.18		0.520	0.545	24	13.080
936	0.670	0.18		0.490	0.505	24	12.120
1000	0.640	0.18		0.460	0.475	24	11.400
1024	0.600	0.18		0.420	0.440	24	10.560
1048	0.550	0.18		0.370	0.395	24	9.480
1112	0.490	0.18		0.310	0.340	24	8.160
1415	0.340	0.18		0.160	0.235	183	43.005

TOTAL AREA = 2751.065

PERCENT RECOVERED =

71.160

DYE RECOVERY CALCULATION

STATION S. FORK EDISTO R. NEAR MOUTH
 BEGINNING DATE 830511
 ENDING DATE 830512
 GAGE HEIGHT 2.68
 RIVER DISCHARGE WAS 862 CFS 25 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
920	0.150	0.15		0.000	0.000	0	0.000
940	0.200	0.15		0.050	0.025	20	0.500
1000	0.240	0.15		0.090	0.070	20	1.400
1020	0.320	0.15		0.170	0.130	20	2.600
1040	0.540	0.15		0.390	0.280	20	5.600
1100	0.600	0.15		0.450	0.420	20	8.400
1130	1.200	0.15		1.050	0.750	30	22.500
1200	1.600	0.15		1.450	1.250	30	37.500
1230	2.050	0.15		1.900	1.675	30	50.250
1300	2.500	0.15		2.350	2.125	30	63.750
1330	2.700	0.15		2.550	2.450	30	73.500
1400	3.000	0.15		2.850	2.700	30	81.000
1430	3.000	0.15		2.850	2.850	30	85.500
1500	3.100	0.15		2.950	2.900	30	87.000
1600	3.200	0.15		3.050	3.000	60	180.000
1710	2.900	0.15		2.750	2.900	70	203.000
1755	2.800	0.15		2.650	2.700	45	121.500
1840	2.600	0.15		2.450	2.550	45	114.750
1925	2.400	0.15		2.250	2.350	45	105.750
2010	2.200	0.15		2.050	2.150	45	96.750
2055	2.000	0.15		1.850	1.950	45	87.750
2140	1.800	0.15		1.650	1.750	45	78.750
2225	1.700	0.15		1.550	1.600	45	72.000
2310	1.500	0.15		1.350	1.450	45	65.250
2355	1.400	0.15		1.250	1.300	45	58.500
40	1.250	0.15		1.100	1.175	45	52.875
125	1.100	0.15		0.950	1.025	45	46.125
210	1.000	0.15		0.850	0.900	45	40.500
255	0.900	0.15		0.750	0.800	45	36.000
340	0.860	0.15		0.710	0.730	45	32.850
425	0.800	0.15		0.650	0.680	45	30.600
510	0.720	0.15		0.570	0.610	45	27.450
555	0.640	0.15		0.490	0.530	45	23.850
640	0.610	0.15		0.460	0.475	45	21.375
725	0.590	0.15		0.440	0.450	45	20.250
810	0.560	0.15		0.410	0.425	45	19.125
855	0.520	0.15		0.370	0.390	45	17.550
1000	0.440	0.15		0.290	0.330	65	21.450
1900	0.320	0.15		0.180	0.235	540	126.900

TOTAL AREA = 2220.400

PERCENT RECOVERED = 54.568

DYE RECOVERY CALCULATION

STATION S. FORK EDISTO R. AT CANNON BRIDGE
 BEGINNING DATE 830602
 ENDING DATE 830602
 GAGE HEIGHT 11.12
 RIVER DISCHARGE WAS 471 CFS 5 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	Avg CONC	MIN	AREA
830	0.090	0.09		0.000	0.000	0	0.000
840	0.130	0.09		0.040	0.020	10	0.200
850	0.300	0.09		0.210	0.125	10	1.250
900	0.940	0.09		0.850	0.530	10	5.300
910	2.300	0.09		2.210	1.530	10	15.300
920	4.600	0.09		4.510	3.360	10	33.600
930	7.200	0.09		7.110	5.810	10	58.100
940	9.800	0.09		9.710	8.410	10	84.100
950	12.000	0.09		11.910	10.810	10	108.100
1000	12.000	0.09		11.910	11.910	10	119.100
1010	12.000	0.09		11.910	11.910	10	119.100
1020	10.500	0.09		10.410	11.160	10	111.600
1030	6.600	0.09		6.510	8.460	20	169.200
1100	4.000	0.09		3.910	5.210	20	104.200
1120	2.300	0.09		2.210	3.060	20	61.200
1140	1.300	0.09		1.210	1.710	20	34.200
1200	0.800	0.09		0.710	0.960	20	17.200
1230	0.540	0.09		0.450	0.580	30	17.400
1300	0.300	0.09		0.210	0.330	30	9.900
1330	0.260	0.09		0.170	0.190	30	5.700

TOTAL AREA = 1076.750

PERCENT RECOVERED =

72.294

DYE RECOVERY CALCULATION

STATION S. FORK EDISTO R. NEAR MOUTH
 BEGINNING DATE 830602
 ENDING DATE 830603
 GAGE HEIGHT 4.84
 RIVER DISCHARGE WAS 438 CFS 5 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
2035	0.090	0.09		0.000	0.000	0	0.000
2059	0.110	0.09		0.020	0.010	24	0.240
2123	0.120	0.09		0.030	0.025	24	0.600
2147	0.200	0.09		0.110	0.070	24	1.680
2211	0.560	0.09		0.470	0.290	24	6.960
2235	1.400	0.09		1.310	0.890	24	21.360
2259	2.700	0.09		2.610	1.960	24	47.040
2323	4.200	0.09		4.110	3.360	24	80.640
2347	5.000	0.09		4.910	4.510	24	108.240
11	5.000	0.09		4.910	4.910	24	117.840
35	4.500	0.09		4.410	4.660	24	111.840
59	3.800	0.09		3.710	4.060	24	97.440
123	2.900	0.09		2.810	3.260	24	78.240
147	2.300	0.09		2.210	2.510	24	60.240
211	1.900	0.09		1.810	2.010	24	48.240
235	1.600	0.09		1.510	1.660	24	39.840
750	0.310	0.09		0.220	0.865	315	272.475
950	0.200	0.09		0.110	0.165	120	19.800

TOTAL AREA = 1112.715

PERCENT RECOVERED = 69.475

DYE RECOVERY CALCULATION

STATION SOUTH FORK EDISTO R. AT SC 70
 BEGINNING DATE 830802
 ENDING DATE 830802
 GAGE HEIGHT 23.00
 RIVER DISCHARGE WAS 277 CFS 5 LITERS OF DYE WERE USED

TIME	OBS CONC	-	BKGR CONC	=	STUDY CONC	Avg CONC	MIN	AREA
700	0.050		0.05		0.000	0.000	0	0.000
720	0.060		0.05		0.010	0.005	20	0.100
725	0.100		0.05		0.050	0.030	5	0.150
730	0.220		0.05		0.170	0.110	5	0.550
735	0.500		0.05		0.450	0.310	5	1.550
740	1.100		0.05		1.050	0.750	5	3.750
745	2.000		0.05		1.950	1.500	5	7.500
750	3.300		0.05		3.250	2.600	5	13.000
755	5.000		0.05		4.950	4.100	5	20.500
800	8.800		0.05		8.750	6.850	5	34.250
805	10.500		0.05		10.450	9.600	5	48.000
810	14.500		0.05		14.450	12.450	5	62.250
815	18.000		0.05		17.950	16.200	5	81.000
820	20.000		0.05		19.950	18.950	5	94.750
825	23.000		0.05		22.950	21.450	5	107.250
830	24.000		0.05		23.950	23.450	5	117.250
835	25.000		0.05		24.950	24.450	5	122.250
840	24.500		0.05		24.450	24.700	5	123.500
850	22.500		0.05		22.450	23.450	10	234.500
900	18.500		0.05		18.450	20.450	10	204.500
910	15.000		0.05		14.950	16.700	10	167.000
920	11.000		0.05		10.950	12.950	10	129.500
930	8.000		0.05		7.950	9.450	10	94.500
940	6.200		0.05		6.150	7.050	10	70.500
950	4.500		0.05		4.450	5.300	10	53.000
1000	3.300		0.05		3.250	3.850	10	38.500
1015	2.300		0.05		2.250	2.750	15	41.250
1030	1.500		0.05		1.450	1.850	15	27.750
1045	1.100		0.05		1.050	1.250	15	18.750
1100	0.760		0.05		0.710	0.880	15	13.200
1130	0.480		0.05		0.430	0.570	30	17.100
1200	0.320		0.05		0.270	0.350	30	10.500
1230	0.260		0.05		0.210	0.240	30	7.200

TOTAL AREA = 1965.350

PERCENT RECOVERED =

77.605

DYE RECOVERY CALCULATION

STATION S. FORK EDISTO R. AT US 301
 BEGINNING DATE 830802
 ENDING DATE 830803
 GAGE HEIGHT 14.99
 RIVER DISCHARGE WAS 308 CFS 5 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	STUDY CONC	AVG CONC	MIN	AREA
1745	0.060	0.06	0.000	0.000	0	0.000
1800	0.080	0.06	0.020	0.010	15	0.150
1815	0.170	0.06	0.110	0.065	15	0.975
1830	0.480	0.06	0.420	0.265	15	3.975
1845	1.200	0.06	1.140	0.780	15	11.700
1900	2.700	0.06	2.640	1.890	15	28.350
1915	4.400	0.06	4.340	3.490	15	52.350
1935	7.600	0.06	7.540	5.940	20	118.800
1945	8.900	0.06	8.840	8.190	10	81.900
2000	10.000	0.06	9.940	9.390	15	140.850
2015	11.000	0.06	10.940	10.440	15	156.600
2030	11.000	0.06	10.940	10.940	15	164.100
2049	10.000	0.06	9.940	10.440	19	198.360
2113	8.300	0.06	8.240	9.090	24	218.160
2137	5.500	0.06	5.440	6.840	24	164.160
2201	3.500	0.06	3.440	4.440	24	106.560
2225	2.500	0.06	2.440	2.940	24	70.560
2249	1.800	0.06	1.740	2.090	24	50.160
2313	1.300	0.06	1.240	1.490	24	35.760
2338	1.000	0.06	0.940	1.090	25	27.250
2	0.820	0.06	0.760	0.850	24	20.400
155	0.460	0.06	0.400	0.580	113	65.540
430	0.290	0.06	0.230	0.315	155	48.825
530	0.260	0.06	0.200	0.215	60	12.900

TOTAL AREA = 1778.385

PERCENT RECOVERED = 78.081

DYE RECOVERY CALCULATION

STATION : SOUTH EDISTO R. AT CANNON BRIDGE
 BEGINNING DATE : 820803
 ENDING DATE : 830803
 GAGE HEIGHT : 12.38
 RIVER DISCHARGE WAS : 320 CFS
 5 LITERS OF DYE WERE USED

TIME	OBS CONC	-	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
241	0.070		0.07		0.000	0.000	0	0.000
305	0.120		0.07		0.050	0.025	24	0.600
329	0.320		0.07		0.250	0.150	24	3.600
353	0.910		0.07		0.840	0.545	24	13.080
418	2.400		0.07		2.330	1.585	25	39.625
442	4.000		0.07		3.930	3.130	24	75.120
506	6.600		0.07		6.530	5.230	24	125.520
530	7.800		0.07		7.730	7.130	24	171.120
555	7.600		0.07		7.530	7.630	25	190.750
619	7.600		0.07		7.530	7.530	24	180.720
643	5.600		0.07		5.530	6.530	24	156.720
707	5.200		0.07		5.130	5.330	24	127.920
732	4.000		0.07		3.930	4.530	25	113.250
756	2.800		0.07		2.730	3.330	24	79.920
840	1.600		0.07		1.530	2.130	44	93.720
914	0.900		0.07		0.830	1.180	34	40.120
938	0.760		0.07		0.690	0.760	24	18.240
1003	0.660		0.07		0.590	0.640	25	16.000
1027	0.580		0.07		0.510	0.550	24	13.200
1051	0.510		0.07		0.440	0.475	24	11.400
1115	0.450		0.07		0.380	0.410	24	9.840
1139	0.400		0.07		0.330	0.355	24	8.520
1203	0.360		0.07		0.290	0.310	24	7.440
1228	0.350		0.07		0.280	0.285	25	7.125
1252	0.310		0.07		0.240	0.260	24	6.240
1340	0.280		0.07		0.210	0.225	48	10.800
1404	0.240		0.07		0.170	0.190	24	4.560

TOTAL AREA = 1525.150

PERCENT RECOVERED = 69.572

DYE RECOVERY CALCULATION

STATION SOUTH FORK EDISTO R. NEAR MOUTH
 BEGINNING DATE 830803
 ENDING DATE 830804
 GAGE HEIGHT 5.56
 RIVER DISCHARGE WAS 332 CFS 5 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
1758	0.050	0.05		0.000	0.000	0	0.000
1822	0.090	0.05		0.040	0.020	24	0.480
1847	0.160	0.05		0.110	0.075	25	1.875
1911	0.680	0.05		0.630	0.370	24	8.880
1935	1.300	0.05		1.250	0.940	24	22.560
1959	1.400	0.05		1.350	1.300	24	31.200
2023	2.000	0.05		1.950	1.650	24	39.600
2047	3.000	0.05		2.950	2.450	24	58.800
2112	3.800	0.05		3.750	3.350	25	83.750
2137	4.400	0.05		4.350	4.050	25	101.250
2201	4.600	0.05		4.550	4.450	24	106.800
2225	4.500	0.05		4.450	4.500	24	108.000
2249	4.000	0.05		3.950	4.200	24	100.800
2338	2.900	0.05		2.850	3.400	49	166.600
2	2.300	0.05		2.250	2.550	24	61.200
26	2.000	0.05		1.950	2.100	24	50.400
50	1.700	0.05		1.650	1.800	24	43.200
114	1.400	0.05		1.350	1.500	24	36.000
138	1.100	0.05		1.050	1.200	24	28.800
203	1.000	0.05		0.950	1.000	25	25.000
227	0.900	0.05		0.850	0.900	24	21.600
650	0.350	0.05		0.300	0.575	263	151.225
810	0.290	0.05		0.240	0.270	80	21.600
900	0.250	0.05		0.200	0.220	50	11.000

TOTAL AREA = 1280.620

PERCENT RECOVERED = 60.608

DYE RECOVERY CALCULATION

STATION EDISTO R. AT US 78
 BEGINNING DATE 830530
 ENDING DATE 830531
 GAGE HEIGHT 19.90
 RIVER DISCHARGE WAS 1130 CFS 15 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
1900	0.120	0.12		0.000	0.000	0	0.000
1910	0.140	0.12		0.020	0.010	10	0.100
1920	0.200	0.12		0.080	0.050	10	0.500
1925	0.790	0.12		0.670	0.375	5	1.875
1930	2.300	0.12		2.180	1.425	5	7.125
1935	5.100	0.12		4.980	3.580	5	17.900
1940	10.000	0.12		9.880	7.430	5	37.150
1945	16.000	0.12		15.880	12.880	5	64.400
1950	21.000	0.12		20.880	18.380	5	91.900
1955	24.000	0.12		23.880	22.380	5	111.900
2000	26.000	0.12		25.880	24.880	5	124.400
2005	26.500	0.12		26.380	26.130	5	130.650
2010	26.000	0.12		25.880	26.130	5	130.650
2015	25.000	0.12		24.880	25.380	5	126.900
2020	23.000	0.12		22.880	23.880	5	119.400
2030	17.000	0.12		16.880	19.880	10	198.800
2040	12.000	0.12		11.880	14.380	10	143.800
2050	7.600	0.12		7.480	9.680	10	96.800
2107	4.100	0.12		3.980	5.730	17	97.410
2133	1.600	0.12		1.480	2.730	26	70.980
2200	0.850	0.12		0.730	1.105	27	29.835
2227	0.560	0.12		0.440	0.585	27	15.795
2253	0.400	0.12		0.280	0.360	26	9.360
2320	0.320	0.12		0.200	0.240	27	6.480
2347	0.310	0.12		0.190	0.195	27	5.265
14	0.290	0.12		0.170	0.180	27	4.860

TOTAL AREA = 1644.235

PERCENT RECOVERED =

88.286

DYE RECOVERY CALCULATION

STATION EDISTO R. AT US 21
 BEGINNING DATE 830531
 ENDING DATE 830531
 GAGE HEIGHT 2.99
 RIVER DISCHARGE WAS 1220 CFS 15 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
345	0.150	0.15		0.000	0.000	0	0.000
400	0.160	0.15		0.010	0.005	15	0.075
415	0.210	0.15		0.060	0.035	15	0.525
430	0.320	0.15		0.170	0.115	15	1.725
445	0.810	0.15		0.660	0.415	15	6.225
500	1.500	0.15		1.350	1.005	15	15.075
515	2.700	0.15		2.550	1.950	15	29.250
530	4.100	0.15		3.950	3.250	15	48.750
545	5.800	0.15		5.650	4.800	15	72.000
600	7.200	0.15		7.050	6.350	15	95.250
615	8.100	0.15		7.950	7.500	15	112.500
630	8.600	0.15		8.450	8.200	15	123.000
645	8.400	0.15		8.250	8.350	15	125.250
700	8.100	0.15		7.950	8.100	15	121.500
731	5.100	0.15		4.950	6.450	31	199.950
757	4.500	0.15		4.350	4.650	26	120.900
824	2.000	0.15		1.850	3.100	27	83.700
851	2.000	0.15		1.850	1.850	27	49.950
917	1.400	0.15		1.250	1.550	26	40.300
944	1.200	0.15		1.050	1.150	27	31.050
1011	0.800	0.15		0.650	0.850	27	22.950
1038	0.680	0.15		0.530	0.590	27	15.930
1104	0.520	0.15		0.370	0.450	26	11.700
1131	0.460	0.15		0.310	0.340	27	9.180
1158	0.380	0.15		0.230	0.270	27	7.290
1224	0.360	0.15		0.210	0.220	26	5.720
1251	0.360	0.15		0.210	0.210	27	5.670
1318	0.280	0.15		0.130	0.170	27	4.590
1344	0.210	0.15		0.060	0.095	26	2.470

TOTAL AREA = 1362.475

PERCENT RECOVERED = 78.984

DYE RECOVERY CALCULATION

STATION EDISTO R. AT STOKES BRIDGE
 BEGINNING DATE 830601
 ENDING DATE 830602
 GAGE HEIGHT 15.92
 RIVER DISCHARGE WAS 1130 CFS 15 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
930	0.120	0.12		0.000	0.000	0	0.000
1010	0.160	0.12		0.040	0.020	40	0.800
1030	0.210	0.12		0.090	0.065	20	1.300
1100	0.290	0.12		0.170	0.130	30	3.900
1130	0.460	0.12		0.340	0.255	30	7.650
1200	0.740	0.12		0.620	0.480	30	14.400
1230	1.300	0.12		1.180	0.900	30	27.000
1300	1.700	0.12		1.580	1.380	30	41.400
1321	2.100	0.12		1.980	1.780	21	37.380
1346	2.600	0.12		2.480	2.230	25	55.750
1412	3.000	0.12		2.880	2.680	26	69.680
1438	3.400	0.12		3.280	3.080	26	80.080
1504	3.400	0.12		3.280	3.280	26	85.280
1529	3.300	0.12		3.180	3.230	25	80.750
1555	3.200	0.12		3.080	3.130	26	81.380
1621	2.900	0.12		2.780	2.930	26	76.180
1646	2.600	0.12		2.480	2.630	25	65.750
1712	2.300	0.12		2.180	2.330	26	60.580
1738	2.100	0.12		1.980	2.080	26	54.080
1804	1.800	0.12		1.680	1.830	26	47.580
1829	1.600	0.12		1.480	1.580	25	39.500
1855	1.500	0.12		1.380	1.430	26	37.180
1921	1.300	0.12		1.180	1.280	26	33.280
1946	1.100	0.12		0.980	1.080	25	27.000
2012	1.000	0.12		0.880	0.930	26	24.180
2215	0.690	0.12		0.570	0.725	123	89.175
30	0.510	0.12		0.390	0.480	135	64.800
830	0.240	0.12		0.120	0.255	480	122.400

TOTAL AREA = 1328.435

PERCENT RECOVERED =

71.329

DYE RECOVERY CALCULATION

STATION EDISTO R. AT SC 61
 BEGINNING DATE 830601
 ENDING DATE 830602
 GAGE HEIGHT 3.77
 RIVER DISCHARGE WAS 1180 CFS 15 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
2354	0.130	0.13		0.000	0.000	0	0.000
37	0.150	0.13		0.020	0.010	43	0.430
120	0.230	0.13		0.100	0.060	43	2.580
203	0.350	0.13		0.220	0.160	43	6.880
246	0.700	0.13		0.570	0.395	43	16.985
319	1.000	0.13		0.870	0.720	43	30.960
402	1.400	0.13		1.270	1.070	43	46.010
445	1.550	0.13		1.420	1.345	43	57.835
528	1.900	0.13		1.770	1.595	43	68.585
611	1.900	0.13		1.770	1.770	43	76.110
654	1.850	0.13		1.720	1.745	43	75.035
737	1.600	0.13		1.470	1.595	43	68.585
820	1.400	0.13		1.270	1.370	43	58.910
903	1.200	0.13		1.070	1.170	43	50.310
946	1.000	0.13		0.870	0.970	43	41.710
1029	0.830	0.13		0.700	0.785	43	33.755
1112	0.720	0.13		0.590	0.645	43	27.735
1155	0.620	0.13		0.490	0.540	43	23.220
1238	0.550	0.13		0.420	0.455	43	19.565
1321	0.500	0.13		0.370	0.395	43	16.985
1404	0.450	0.13		0.320	0.345	43	14.835
1500	0.380	0.13		0.250	0.285	56	15.960
1730	0.330	0.13		0.200	0.225	150	33.750

TOTAL AREA = 786.730

PERCENT RECOVERED = 44.112

DYE RECOVERY CALCULATION

STATION EDISTO R. AT US 78
 BEGINNING DATE 831013
 ENDING DATE 831013
 GAGE HEIGHT 21.34
 RIVER DISCHARGE WAS 899 CFS 12 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	= STUDY CONC	Avg CONC	MIN	AREA
1620	0.120	0.12	0.000	0.000	0	0.000
1625	0.130	0.12	0.010	0.005	5	0.025
1630	0.170	0.12	0.050	0.030	5	0.150
1635	1.000	0.12	0.880	0.465	5	2.325
1640	1.500	0.12	1.380	1.130	5	5.650
1645	3.900	0.12	3.780	2.580	5	12.900
1650	8.300	0.12	8.180	5.980	5	29.900
1655	13.000	0.12	12.880	10.530	5	52.650
1700	19.000	0.12	18.880	15.880	5	79.400
1705	24.000	0.12	23.880	21.380	5	106.900
1710	27.000	0.12	26.880	25.380	5	126.900
1715	28.000	0.12	27.880	27.380	5	136.900
1720	29.000	0.12	28.880	28.380	5	141.900
1725	29.000	0.12	28.880	28.880	5	144.400
1730	27.000	0.12	26.880	27.880	5	139.400
1740	21.000	0.12	20.880	23.880	10	238.800
1750	17.000	0.12	16.880	18.880	10	188.800
1800	12.000	0.12	11.880	14.380	10	143.800
1810	7.300	0.12	7.180	9.530	10	95.300
1820	5.100	0.12	4.980	6.080	10	60.800
1830	3.500	0.12	3.380	4.180	10	41.800
1840	2.300	0.12	2.180	2.780	10	27.800
1900	1.200	0.12	1.080	1.630	20	32.600
1930	0.590	0.12	0.470	0.775	30	23.250
2000	0.390	0.12	0.270	0.370	30	11.100
2030	0.290	0.12	0.170	0.220	30	6.600

TOTAL AREA = 1850.050

PERCENT RECOVERED =

98.788

DYE RECOVERY CALCULATION

STATION EDISTO R. AT US 21
 BEGINNING DATE 831014
 ENDING DATE 831014
 GAGE HEIGHT 1.79
 RIVER DISCHARGE WAS 857 CFS 12 LITERS OF DYE WERE USED

TIME	OBS	BKGR	=	STUDY	AVG	MIN	AREA
	CONC	CONC		CONC	CONC		
150	0.150	0.15		0.000	0.000	0	0.000
210	0.270	0.15		0.120	0.060	20	1.200
230	0.710	0.15		0.560	0.340	20	6.800
245	1.500	0.15		1.350	0.955	15	14.325
300	2.600	0.15		2.450	1.900	15	28.500
315	4.600	0.15		4.450	3.450	15	51.750
330	6.400	0.15		6.250	5.350	15	80.250
345	8.000	0.15		7.850	7.050	15	105.750
400	9.200	0.15		9.050	8.450	15	126.750
415	10.000	0.15		9.850	9.450	15	141.750
430	11.000	0.15		10.850	10.350	15	155.250
445	10.000	0.15		9.850	10.350	15	155.250
500	9.200	0.15		9.050	9.450	15	141.750
530	6.400	0.15		6.250	7.650	30	229.500
600	4.500	0.15		4.350	5.300	30	159.000
630	2.900	0.15		2.750	3.550	30	106.500
700	1.800	0.15		1.650	2.200	30	66.000
730	1.100	0.15		0.950	1.300	30	39.000
800	0.770	0.15		0.620	0.785	30	23.550
900	0.600	0.15		0.450	0.535	60	32.100
1000	0.460	0.15		0.310	0.380	60	22.800
1100	0.320	0.15		0.170	0.240	60	14.400

TOTAL AREA = 1702.175

PERCENT RECOVERED = 86.645

DYE RECOVERY CALCULATION

STATION EDISTO RIVER AT STOKES BRIDGE
 BEGINNING DATE 831015
 ENDING DATE 831016
 GAGE HEIGHT 17.06
 RIVER DISCHARGE WAS 768 CFS 12 LITERS OF DYE WERE USED

TIME	OBS CONC	-	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
900	0.120		0.12		0.000	0.000	0	0.000
930	0.150		0.12		0.030	0.015	30	0.450
1000	0.190		0.12		0.070	0.050	30	1.500
1030	0.290		0.12		0.170	0.120	30	3.600
1100	0.460		0.12		0.340	0.255	30	7.650
1130	0.740		0.12		0.620	0.480	30	14.400
1200	1.100		0.12		0.980	0.800	30	24.000
1230	1.700		0.12		1.580	1.280	30	38.400
1300	2.300		0.12		2.180	1.880	30	56.400
1330	2.900		0.12		2.780	2.480	30	74.400
1400	3.400		0.12		3.280	3.030	30	90.900
1430	3.700		0.12		3.580	3.430	30	102.900
1500	3.700		0.12		3.580	3.580	30	107.400
1530	3.700		0.12		3.580	3.580	30	107.400
1600	3.300		0.12		3.180	3.380	30	101.400
1700	2.500		0.12		2.380	2.780	60	166.800
1800	1.800		0.12		1.680	2.030	60	121.800
1855	1.400		0.12		1.280	1.480	55	81.400
1955	1.100		0.12		0.980	1.130	60	67.800
2155	0.720		0.12		0.600	0.790	120	94.800
700	0.290		0.12		0.170	0.385	545	209.825
905	0.260		0.12		0.140	0.155	125	19.375

TOTAL AREA = 1492.600

PERCENT RECOVERED = 68.087

DYE RECOVERY CALCULATION

STATION EDISTO R. AT SC 61
 BEGINNING DATE 831015
 ENDING DATE 831016
 GAGE HEIGHT 2.49
 RIVER DISCHARGE WAS 812 CFS 12 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
15	0.180	0.18		0.000	0.000	0	0.000
45	0.240	0.18		0.060	0.030	30	0.900
115	0.220	0.18		0.040	0.050	30	1.500
145	0.280	0.18		0.100	0.070	30	2.100
215	0.390	0.18		0.210	0.155	30	4.650
245	0.570	0.18		0.390	0.300	30	9.000
315	0.750	0.18		0.570	0.480	30	14.400
345	1.100	0.18		0.920	0.745	30	22.350
415	1.400	0.18		1.220	1.070	30	32.100
445	1.800	0.18		1.620	1.420	30	42.600
515	2.100	0.18		1.920	1.770	30	53.100
545	2.400	0.18		2.220	2.070	30	62.100
615	2.600	0.18		2.420	2.320	30	69.600
645	2.700	0.18		2.520	2.470	30	74.100
715	2.700	0.18		2.520	2.520	30	75.600
745	2.700	0.18		2.520	2.520	30	75.600
842	2.400	0.18		2.220	2.370	57	135.090
942	1.900	0.18		1.720	1.970	60	118.200
1042	1.600	0.18		1.420	1.570	60	94.200
1142	1.200	0.18		1.020	1.220	60	73.200
1242	1.000	0.18		0.820	0.920	60	55.200
1342	0.870	0.18		0.690	0.755	60	45.300
1512	0.690	0.18		0.510	0.600	90	54.000
1642	0.550	0.18		0.370	0.440	90	39.600
1812	0.470	0.18		0.290	0.330	90	29.700
1900	0.440	0.18		0.260	0.275	48	13.200
2255	0.310	0.18		0.130	0.195	235	45.825

TOTAL AREA = 1243.215

PERCENT RECOVERED = 59.960

DYE RECOVERY CALCULATION

STATION EDISTO R. AT U.S. 78
 BEGINNING DATE 840104
 ENDING DATE 840104
 GAGE HEIGHT 17.44
 RIVER DISCHARGE WAS 2210 CFS 50 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	Avg CONC	MIN	AREA
1000	0.070	0.07		0.000	0.000	0	0.000
1005	0.080	0.07		0.010	0.005	5	0.025
1015	0.120	0.07		0.050	0.030	10	0.300
1020	0.600	0.07		0.530	0.290	5	1.450
1025	3.400	0.07		3.330	1.930	5	9.650
1030	10.500	0.07		10.430	6.880	5	34.400
1035	21.000	0.07		20.930	15.680	5	78.400
1040	27.500	0.07		27.430	24.180	5	120.900
1045	34.000	0.07		33.930	30.680	5	153.400
1050	38.000	0.07		37.930	35.930	5	179.650
1055	36.000	0.07		35.930	36.930	5	184.650
1100	34.000	0.07		33.930	34.930	5	174.650
1110	28.500	0.07		28.430	31.180	10	311.800
1120	21.500	0.07		21.430	24.930	10	249.300
1130	17.000	0.07		16.930	17.180	10	191.800
1140	12.500	0.07		12.430	14.680	10	146.800
1150	9.700	0.07		9.630	11.030	10	110.300
1200	8.500	0.07		8.430	9.030	10	90.300
1215	6.000	0.07		5.930	7.180	15	107.700
1230	4.900	0.07		4.830	5.380	15	80.700
1300	3.000	0.07		2.930	3.880	30	116.400
1330	2.100	0.07		2.030	2.480	30	74.400
1400	1.800	0.07		1.730	1.880	30	56.400
1525	1.200	0.07		1.130	1.430	65	121.550
1700	0.760	0.07		0.690	0.910	95	96.450
1900	0.380	0.07		0.310	0.500	120	60.000
2100	0.250	0.07		0.180	0.245	120	29.400

TOTAL AREA = 2770.775

PERCENT RECOVERED =

87.290

DYE RECOVERY CALCULATION

STATION EDISTO R. AT US 21
 BEGINNING DATE 840104
 ENDING DATE 840105
 GAGE HEIGHT 5.7
 RIVER DISCHARGE WAS 2300 CFS 50 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	STUDY CONC	AVG CONC	MIN	AREA
1715	0.070	0.07	0.000	0.000	0	0.000
1730	0.100	0.07	0.030	0.015	15	0.225
1745	0.250	0.07	0.180	0.105	15	1.575
1800	0.400	0.07	0.330	0.255	15	3.825
1815	0.800	0.07	0.730	0.530	15	7.950
1830	1.200	0.07	1.130	0.930	15	13.950
1845	2.000	0.07	1.930	1.530	15	22.950
1900	2.700	0.07	2.630	2.280	15	34.200
1915	3.300	0.07	3.230	2.930	15	43.950
1930	4.200	0.07	4.130	3.680	15	55.200
1945	5.000	0.07	4.930	4.530	15	67.950
2000	5.300	0.07	5.230	5.080	15	76.200
2015	5.800	0.07	5.730	5.480	15	82.200
2030	6.000	0.07	5.930	5.830	15	87.450
2045	6.100	0.07	6.030	5.980	15	89.700
2102	5.800	0.07	5.730	5.880	17	99.960
2129	5.700	0.07	5.630	5.680	27	153.360
2156	5.400	0.07	5.330	5.480	27	147.960
2223	5.000	0.07	4.930	5.130	27	138.510
2250	4.600	0.07	4.530	4.730	27	127.710
2317	4.100	0.07	4.030	4.280	27	115.560
2344	3.600	0.07	3.530	3.780	27	102.060
11	2.950	0.07	2.880	3.205	27	86.535
38	2.800	0.07	2.730	2.805	27	75.735
105	2.700	0.07	2.630	2.680	27	72.360
132	2.400	0.07	2.330	2.480	27	66.960
159	2.300	0.07	2.230	2.280	27	61.560
226	2.050	0.07	1.980	2.105	27	56.835
253	1.900	0.07	1.830	1.905	27	51.435
320	1.700	0.07	1.630	1.730	27	46.710
347	1.550	0.07	1.480	1.555	27	41.985
414	1.400	0.07	1.330	1.405	27	37.935
441	1.350	0.07	1.280	1.305	27	35.235
508	1.250	0.07	1.180	1.230	27	33.210
535	1.200	0.07	1.130	1.155	27	31.185
629	0.960	0.07	0.890	1.010	54	54.540
656	0.920	0.07	0.850	0.870	27	23.490
920	0.630	0.07	0.560	0.705	144	101.520
1300	0.430	0.07	0.360	0.460	220	101.200
1830	0.260	0.07	0.190	0.275	320	90.750

TOTAL AREA = 2541.625

PERCENT RECOVERED =

83.731

DYE RECOVERY CALCULATION

STATION EDISTO R AT U.S. 15
 BEGINNING DATE 840105
 ENDING DATE 840107
 GAGE HEIGHT 17.14
 RIVER DISCHARGE WAS 2150 CFS 50 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	STUDY CONC	AVG		AREA
				CONC	MIN	
1030	0.060	0.06	0.000	0.000	0	0.000
1100	0.070	0.06	0.010	0.005	30	0.150
1130	0.090	0.06	0.030	0.020	30	0.600
1200	0.120	0.06	0.060	0.045	30	1.350
1247	0.260	0.06	0.200	0.130	47	6.110
1315	0.440	0.06	0.380	0.290	28	8.120
1342	0.520	0.06	0.460	0.420	27	11.340
1409	0.640	0.06	0.580	0.520	27	14.040
1437	0.800	0.06	0.740	0.660	28	18.480
1504	0.930	0.06	0.870	0.805	27	21.735
1531	1.150	0.06	1.090	0.980	27	26.460
1559	1.300	0.06	1.240	1.165	28	32.620
1626	1.400	0.06	1.340	1.290	27	34.830
1653	1.500	0.06	1.440	1.390	27	37.530
1721	1.600	0.06	1.540	1.490	28	41.720
1745	1.700	0.06	1.640	1.590	24	38.160
1805	1.950	0.06	1.890	1.765	23	40.595
1834	1.900	0.06	1.840	1.865	29	54.085
1924	1.850	0.06	1.790	1.815	50	90.750
2013	1.900	0.06	1.840	1.815	49	88.935
2103	1.900	0.06	1.840	1.840	50	92.000
2152	1.850	0.06	1.790	1.815	49	88.935
2241	1.800	0.06	1.740	1.765	49	86.485
2331	1.750	0.06	1.690	1.715	50	85.750
20	1.700	0.06	1.640	1.665	49	81.585
110	1.600	0.06	1.540	1.590	50	79.500
159	1.600	0.06	1.540	1.540	49	75.460
248	1.450	0.06	1.390	1.465	49	71.785
338	1.400	0.06	1.340	1.365	50	68.250
427	1.300	0.06	1.240	1.290	49	63.210
516	1.250	0.06	1.190	1.215	49	59.535
605	1.150	0.06	1.090	1.140	49	55.860
939	0.820	0.06	0.760	0.925	214	197.950
1133	0.790	0.06	0.730	0.745	114	84.930
1327	0.600	0.06	0.540	0.635	114	72.390
1521	0.500	0.06	0.440	0.490	114	55.860
1715	0.490	0.06	0.430	0.435	114	49.590
1909	0.400	0.06	0.340	0.385	114	43.890
2103	0.340	0.06	0.260	0.310	114	35.340
2257	0.330	0.06	0.270	0.275	114	31.350
51	0.300	0.06	0.240	0.255	114	29.070
245	0.280	0.06	0.220	0.260	114	26.220
439	0.260	0.06	0.200	0.210	114	23.940

TOTAL AREA = 2124.495

PERCENT RECOVERED =

65.174

DYE RECOVERY CALCULATION

STATION EDISTO R. AT STOKES BRIDGE
 BEGINNING DATE 840109
 ENDING DATE 840109
 GAGE HEIGHT 13.7
 RIVER DISCHARGE WAS 2000 CFS 29 LITERS OF DYE WERE USED

TIME	OBS CONC	BKGR CONC	=	STUDY CONC	AVG CONC	MIN	AREA
550	0.100	0.1		0.000	0.000	0	0.000
600	1.000	0.1		0.900	0.450	10	4.500
610	2.000	0.1		1.900	1.400	10	14.000
620	4.500	0.1		4.400	3.150	10	31.500
630	6.500	0.1		6.400	5.400	10	54.000
640	11.000	0.1		10.900	8.650	10	86.500
650	16.000	0.1		15.900	13.400	10	134.000
700	18.000	0.1		17.900	16.900	10	169.000
710	19.500	0.1		19.400	18.650	10	186.500
720	20.000	0.1		19.900	19.650	10	196.500
730	19.500	0.1		19.400	19.650	10	196.500
740	18.500	0.1		18.400	18.900	10	189.000
800	15.000	0.1		14.900	16.650	20	333.000
820	11.500	0.1		11.400	13.150	20	263.000
840	8.500	0.1		8.400	9.900	20	198.000
900	6.300	0.1		6.200	7.300	20	146.000
916	4.800	0.1		4.700	5.450	16	87.200
942	3.900	0.1		3.800	4.250	26	110.500
1008	2.400	0.1		2.300	3.050	26	79.300
1034	1.750	0.1		1.650	1.975	26	51.350
1100	1.400	0.1		1.300	1.475	26	38.350
1126	1.050	0.1		0.950	1.125	26	29.250
1152	0.800	0.1		0.700	0.825	26	21.450
1218	0.660	0.1		0.560	0.630	26	16.380
1244	0.520	0.1		0.420	0.490	26	12.740
1310	0.450	0.1		0.350	0.385	26	10.010
1336	0.370	0.1		0.270	0.310	26	8.060
1500	0.300	0.1		0.200	0.235	84	19.740

TOTAL AREA = 2686.330

PERCENT RECOVERED =

98.169

DYE RECOVERY CALCULATION

STATION EDISTO R. AT SC HWY 61
 BEGINNING DATE 840109
 ENDING DATE 840110
 GAGE HEIGHT 6.8
 RIVER DISCHARGE WAS 2560 CFS
 39 LITERS OF DYE WERE USED

TIME	OBS CONC	-	BKGR CONC	=	STUDY CONC	Avg CONC	MIN	AREA
1540	0.100		0.10		0.000	0.000	0	0.000
1556	0.170		0.10		0.070	0.035	16	0.560
1620	0.160		0.10		0.060	0.065	24	1.560
1644	0.220		0.10		0.120	0.090	24	2.160
1708	0.470		0.10		0.370	0.245	24	5.880
1732	1.200		0.10		1.100	0.735	24	17.640
1756	1.900		0.10		1.800	1.450	24	34.800
1820	2.950		0.10		2.850	2.325	24	55.800
1844	4.000		0.10		3.900	3.375	24	81.000
1908	4.900		0.10		4.800	4.350	24	104.400
1932	5.100		0.10		5.000	4.900	24	117.600
1956	5.100		0.10		5.000	5.000	24	120.000
2020	4.800		0.10		4.700	4.850	24	116.400
2044	4.500		0.10		4.400	4.550	24	109.200
2125	3.800		0.10		3.700	4.050	41	166.050
2215	2.700		0.10		2.600	3.150	50	157.500
2305	2.000		0.10		1.900	2.250	50	112.500
2356	1.600		0.10		1.500	1.700	51	86.700
46	1.200		0.10		1.100	1.300	50	65.000
136	0.930		0.10		0.830	0.965	50	48.250
227	0.800		0.10		0.700	0.765	51	39.015
317	0.700		0.10		0.600	0.650	50	32.500
407	0.620		0.10		0.520	0.560	50	28.000
458	0.550		0.10		0.450	0.485	51	24.735
548	0.470		0.10		0.370	0.410	50	20.500
638	0.430		0.10		0.330	0.350	50	17.500
729	0.380		0.10		0.280	0.305	51	15.555
819	0.350		0.10		0.250	0.265	50	13.250
910	0.320		0.10		0.220	0.235	51	11.985
1100	0.280		0.10		0.180	0.200	110	22.000

TOTAL AREA = 1628.040

PERCENT RECOVERED = 76.169