

WATER-QUALITY DATA FROM RECONNAISSANCE SURVEYS OF SELECTED ESTUARIES IN
SOUTHERN NEW JERSEY, JULY-OCTOBER 1989

By R. Edward Hickman

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CONVERSION FACTORS

<u>Multiply</u>	<u>By</u>	<u>To obtain</u>
centimeter	0.3927	inch
meter	39.37	inch
meter	3.281	foot
kilometer	3,281	foot
kilometer	0.6214	mile
square kilometer	0.3861	square mile

<u>Multiply</u>	<u>By</u>	<u>To obtain</u>
foot	0.3048	meter
mile	1.609	kilometer

Temperature Conversion

degrees Celsius (°C) °F = (1.8)x(°C) + 32 degrees Fahrenheit (°F)

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ABSTRACT

Water-quality characteristics are presented for the estuaries of the Metedeconk, Toms, Great Egg Harbor, Tuckahoe, and Maurice Rivers. Temperature, specific conductance, pH, transparency (Secchi disk depth), and concentrations of dissolved oxygen and suspended sediment were measured.

Water-quality characteristics of each estuary were measured during monthly longitudinal profiles during July-October 1989. Measurements on the Metedeconk and Toms Rivers were made during morning and afternoon in July-October and August-October, respectively; measurements on the Great Egg Harbor and Tuckahoe Rivers were made during high and low tides in July-October, and on the Maurice River were made during high and low tides in July. Additional field measurements were made on tidal tributaries of the Great Egg Harbor and Tuckahoe Rivers.

INTRODUCTION

Surface-water diversions from coastal streams are potential sources to help meet present and future demand for freshwater in southern New Jersey. Increased withdrawal rates are planned for the existing diversion on the Metedeconk River, and potential sites for additional diversions have been identified near the heads of tide of other selected streams.

Freshwater diversions may increase the salinity in the estuaries of these rivers, and increases in salinity could cause undesirable changes in estuarine water quality. The estuary of each river is the downstream, tidal reach in which the freshwater discharged by the river mixes with the saltwater of the ocean.

Water-quality data are needed to gain information about the processes controlling estuarine water quality and to determine how water quality will be affected by diversions. Some water-quality data collected during the 1970's are given in reports by Makai (1978, undated a, and undated b).

This report presents water-quality data measured during reconnaissance surveys of the estuaries of the Metedeconk, Toms, Great Egg Harbor, Tuckahoe, and Maurice Rivers in southern New Jersey during July-October 1989. The purpose of the estuarine surveys was to collect preliminary water-quality information that will aid in planning a more extensive project to determine the changes in water quality resulting from existing and proposed freshwater diversions. Temperature, specific conductance, pH, transparency (Secchi disk depth), and concentrations of dissolved oxygen and suspended sediment were measured.

This study was done by the U.S. Geological Survey (USGS) in cooperation with the New Jersey Department of Environmental Protection and Energy. Personnel of the New Jersey Geological Survey (NJGS) of the New Jersey Department of Environmental Protection and Energy worked with those of the

U.S. Geological Survey to make the field measurements presented in this report. NJGS also provided the boat that was used.

DESCRIPTION OF THE STUDY AREA

Estuaries of the Metedeconk and Toms Rivers

The estuaries of the Metedeconk and Toms Rivers are part of the Barnegat Bay estuarine system (fig. 1). Each estuary consists of a downstream embayment and a narrow channel upstream from the head of the embayment (figs. 2 and 3). Both embayments have a nearly uniform water depth of 1.5 to 2.0 meters at mean low water (U.S. Department of Commerce, 1986b), and a mean range of tide of about 0.15 meters (U.S. Department of Commerce, 1988). The heads of tide were taken from New Jersey State tidelands maps (State of New Jersey, undated a and undated b).

The Metedeconk River estuary is 9.4 kilometers long and has a maximum width of about 1.1 kilometers (fig. 2). The drainage area at the mouth, 205 square kilometers, was determined from 1:24,000-scale topographic maps by use of a planimeter; the mouth of the Metedeconk River as designated in this report is different from that in Velnich (1984). Brick Township currently withdraws freshwater just downstream from the head of tide.

The Toms River estuary is 11 kilometers long and has a maximum width of about 1.6 kilometers at its mouth (fig. 3). The drainage area at the mouth is 497 square kilometers (Velnich, 1984).

Estuaries of the Great Egg Harbor and Tuckahoe Rivers

The estuaries of the Great Egg Harbor and Tuckahoe River are tributary to the Great Egg Harbor Bay which discharges to the Atlantic Ocean (fig. 4). Both estuaries are surrounded by extensive salt-marsh wetlands. The mean range of tide is 1.1 meters in the Great Egg Harbor Bay and 1.2 meters in the Great Egg Harbor River at Mays Landing (U.S. Department of Commerce, 1988).

The Great Egg Harbor River estuary extends 23 kilometers upstream from the Bay to the head of tide at the outlet of Lake Lenape at Mays Landing (fig. 5). It has a maximum width of about 0.6 kilometers and a maximum depth of about 11 meters at mean low water (U.S. Department of Commerce, 1986a). The drainage area at the mouth is 899 square kilometers (Velnich, 1984).

The Tuckahoe River estuary extends 22 kilometers from the mouth of the river to Route 49 near Head of River (fig. 5). It has a maximum width of about 0.5 kilometers and a maximum depth of about 10 meters at mean low water (U.S. Department of Commerce, 1986a). The drainage area at the mouth is 264 square kilometers (Velnich, 1984).

Water-quality measurements also were made in the Great Egg Harbor Bay, Middle River, Patcong Creek, and Cedar Swamp Creek. Middle River is a tributary of the Great Egg Harbor River, Patcong Creek is a tributary of the

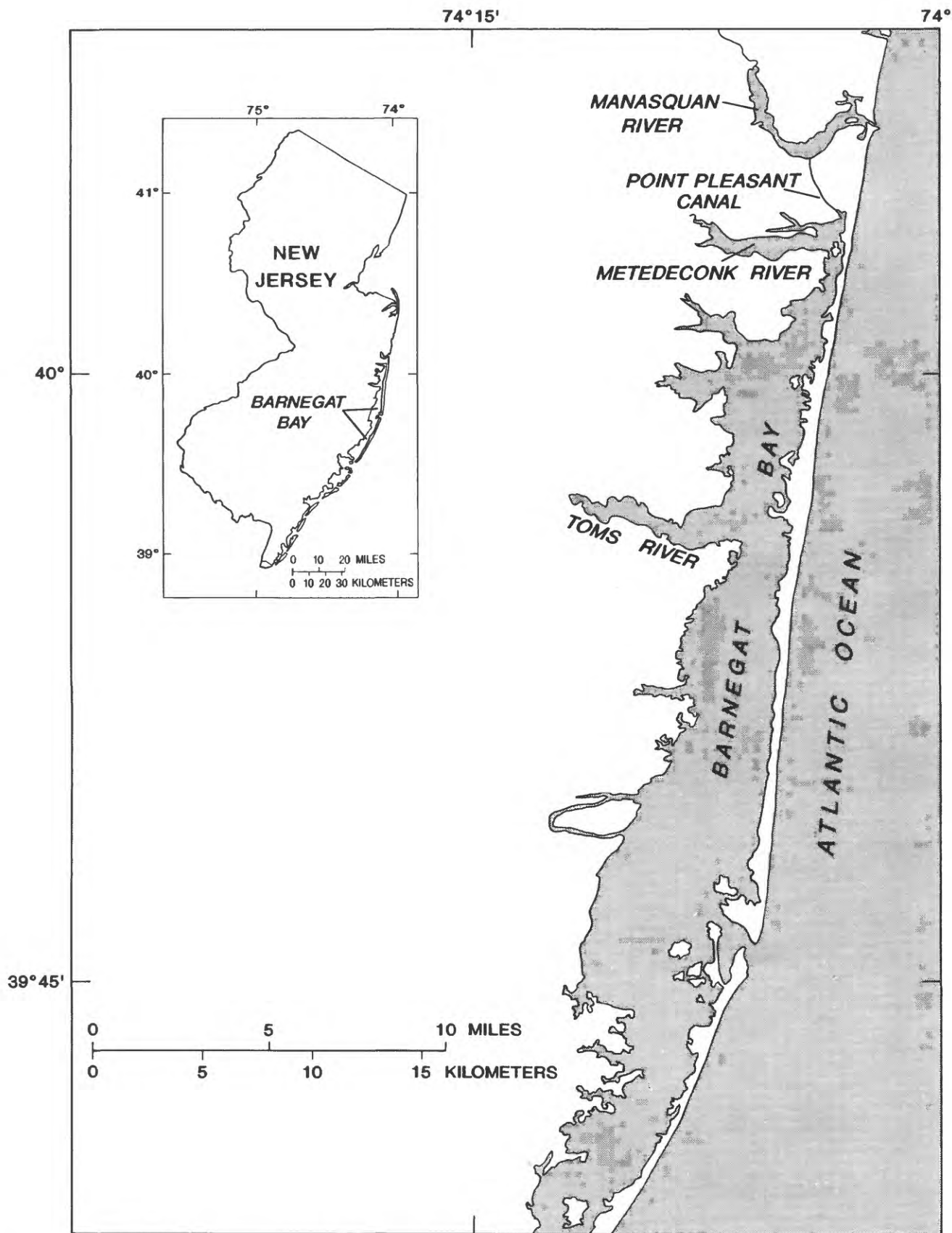


Figure 1.--Locations of Barnegat Bay and the estuaries of the Metedeconk and Toms Rivers.

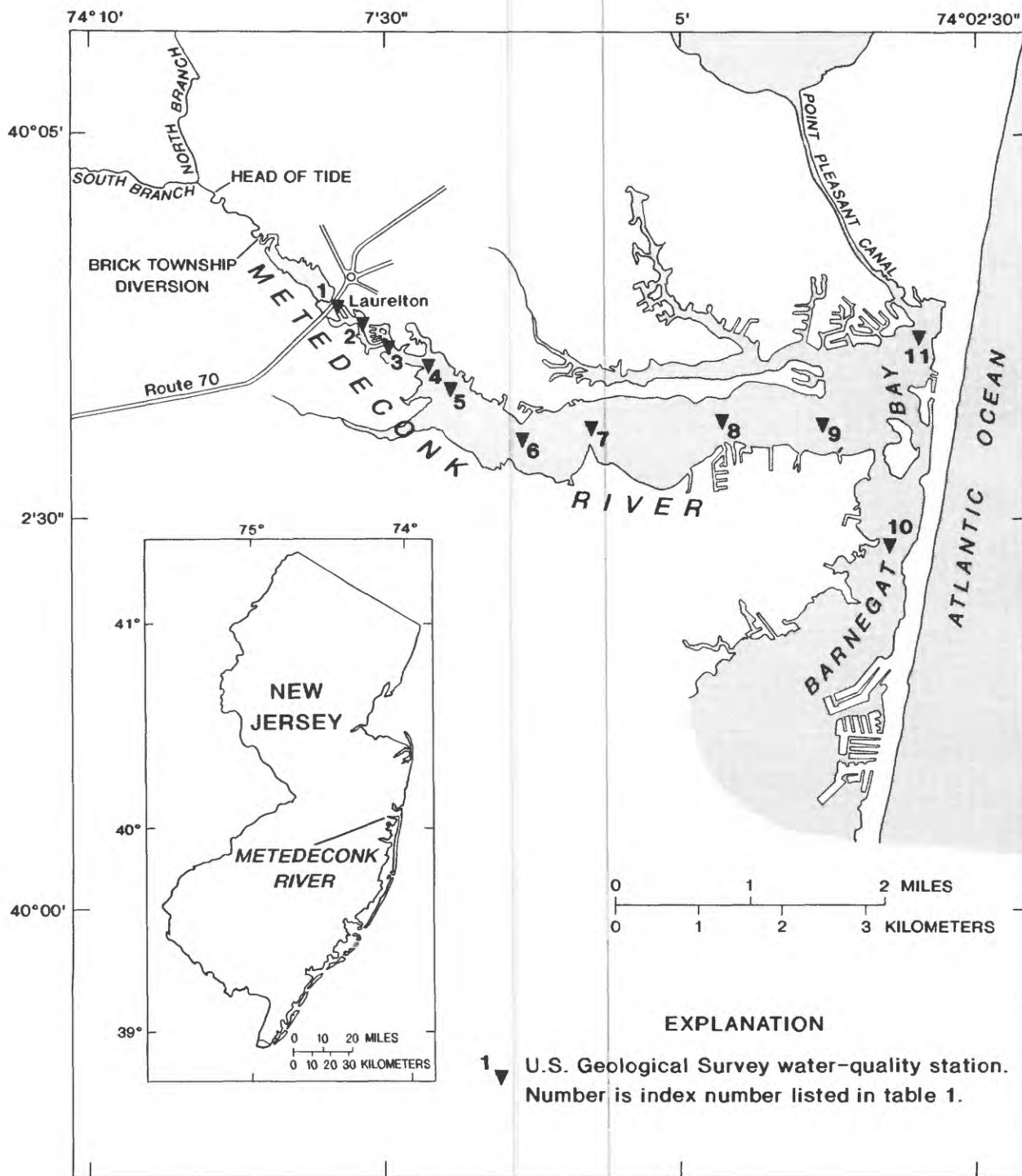


Figure 2.--Water-quality stations in and near the estuary of the Metedeconk River.

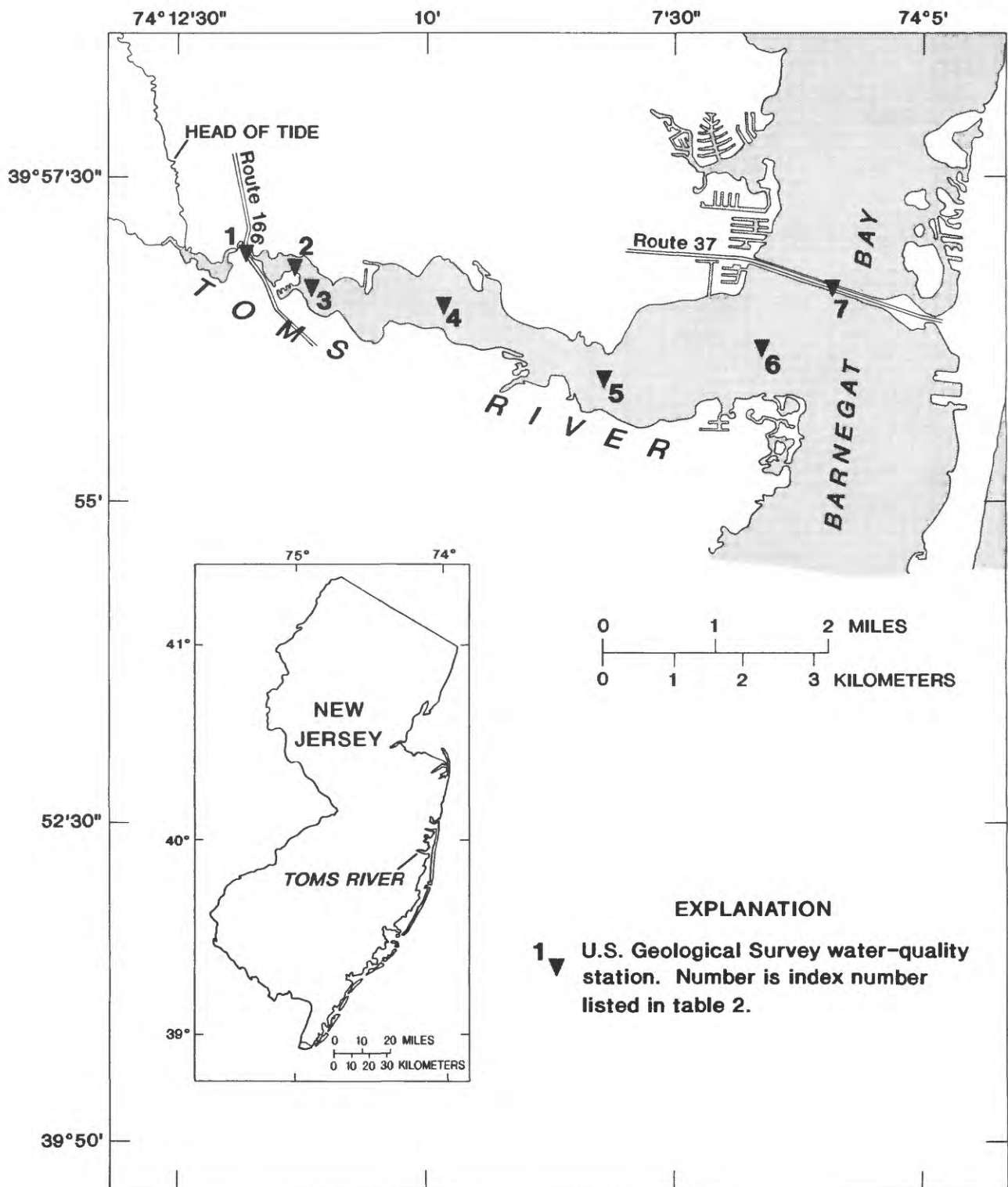


Figure 3.--Water-quality stations in and near the estuary of Toms River.

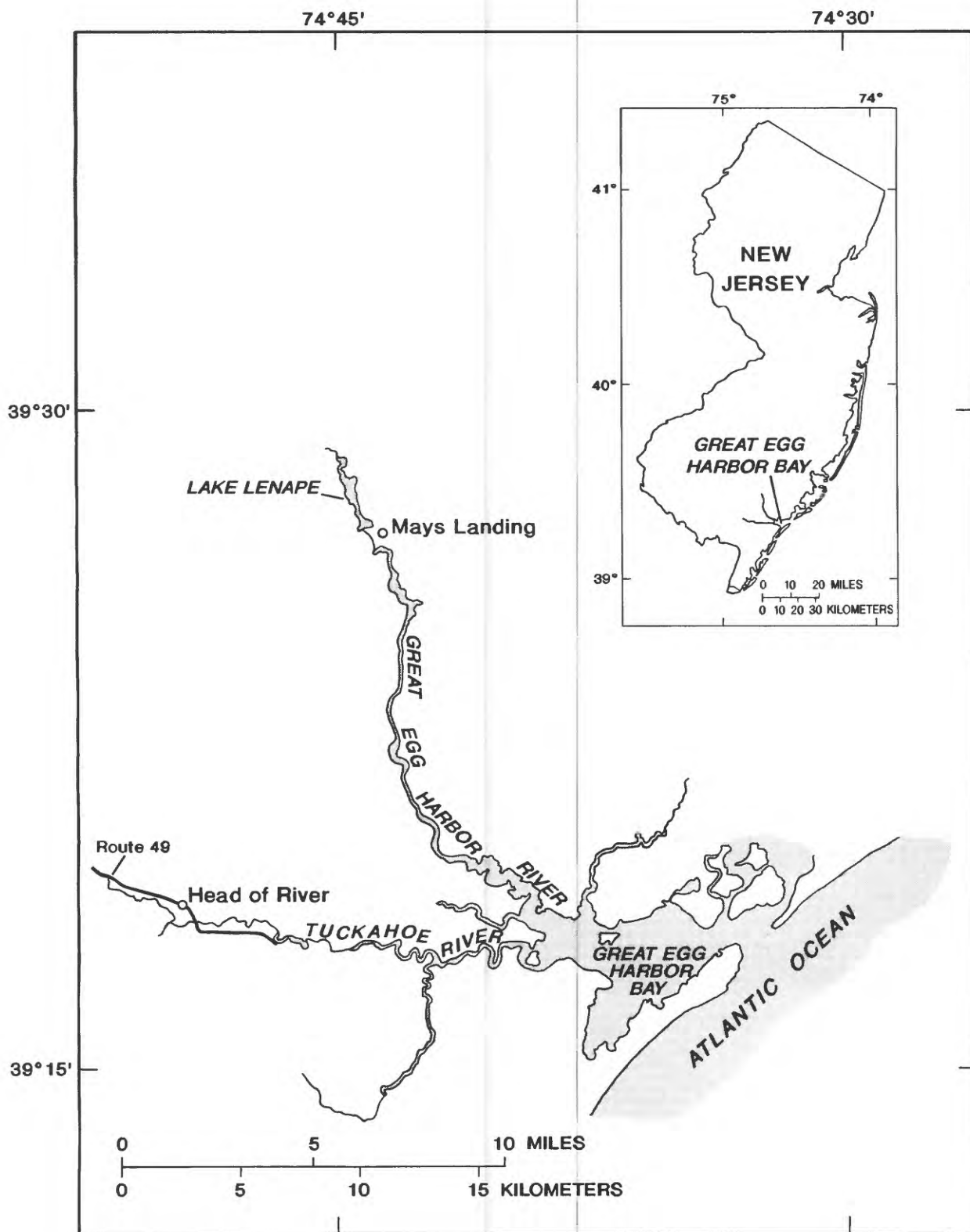


Figure 4.--Locations of the Great Egg Harbor Bay and the Great Egg Harbor and Tuckahoe Rivers.

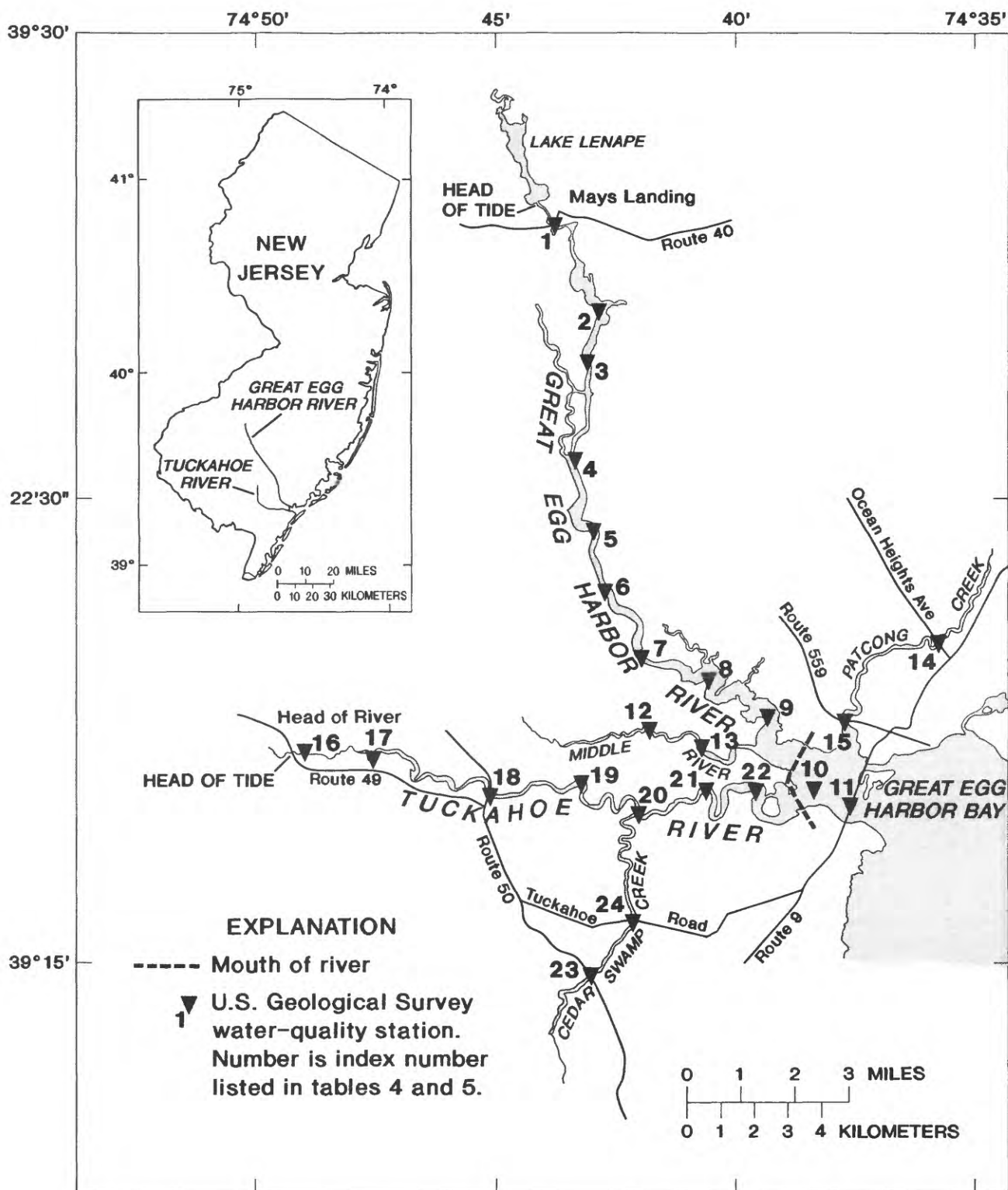


Figure 5.--Water-quality stations in and near the estuaries of the Great Egg Harbor and Tuckahoe Rivers.

Great Egg Harbor Bay, and Cedar Swamp Creek is a tributary of the Tuckahoe River (fig. 5).

Estuary of the Maurice River

The Maurice River estuary extends 39 kilometers upstream from the Delaware Bay to the head of tide at the outlet of Union Lake at Millville (fig. 6). Its maximum width is approximately 0.5 kilometers, and its maximum depth is about 11 meters at mean low water (U.S. Department of Commerce, 1985). It is surrounded by extensive salt-marsh wetlands. The ranges of mean tide near Port Norris and at Millville are 1.7 and 1.8 meters, respectively (U.S. Department of Commerce, 1988). The drainage area at the mouth is 989 square kilometers (Velnich, 1982).

FIELD AND LABORATORY METHODS

For each estuary, water-quality measurements were made on one day per month. Data were collected on the Metedeconk River during July-October, on the Toms River during August-October, on the Great Egg Harbor and Tuckahoe Rivers during July-October, and on the Maurice River during July. On each day, measurements were made during two longitudinal profiles conducted upstream either in the marked navigational channel or, if there was no marked channel, in the largest unmarked channel as indicated by navigation charts (U.S. Department of Commerce, 1985, 1986a, and 1986b), buoys and daymarkers, and depth measurements.

Profiles of the Toms and Metedeconk Rivers were conducted during morning and afternoon. Profiles of the Metedeconk River began at the 2 stations in Barnegat Bay and ended at the Route 70 bridge in Laurelton (fig. 2; table 1). Profiles of the Toms River began at the Route 37 bridge in Barnegat Bay and ended at the Route 166 bridge in Toms River (fig. 3; table 2). Between profiles, additional water-quality measurements were made at some stations in order to determine the bank-to-bank variation in water quality.

Profiles of the Great Egg Harbor, Tuckahoe, and Maurice Rivers were conducted during high and low tides; tide slack was followed upstream. Predicted times of high and low tide in the Great Egg Harbor Bay and River and in the Maurice River are given in table 3 so that the reader can compare times of sampling with predicted times of high and low tide; corresponding values for the Tuckahoe River were not available. Profiles of the Great Egg Harbor and Tuckahoe Rivers began in the Great Egg Harbor Bay at the Route 9 bridge (fig. 5); stations are listed in tables 4 and 5. Profiles of the Great Egg Harbor River ended at Mays Landing. The furthest upstream station included in the profile of the Tuckahoe River is just downstream from the Route 49 bridge. Measurements at stations in Cedar Swamp Creek (table 5), Patcong Creek (table 4) and Middle River (table 4) were conducted between slack-tide profiles of either the Great Egg Harbor or Tuckahoe Rivers. Profiles of the Maurice River began at Bivalve and ended at Millville (fig. 6); these stations are listed in table 6.

The location in each cross-section was estimated from observations made from the boat as well as from depth soundings and examination of charts (U.S. Department of Commerce, 1985, 1986a, and 1986b). The depth of the

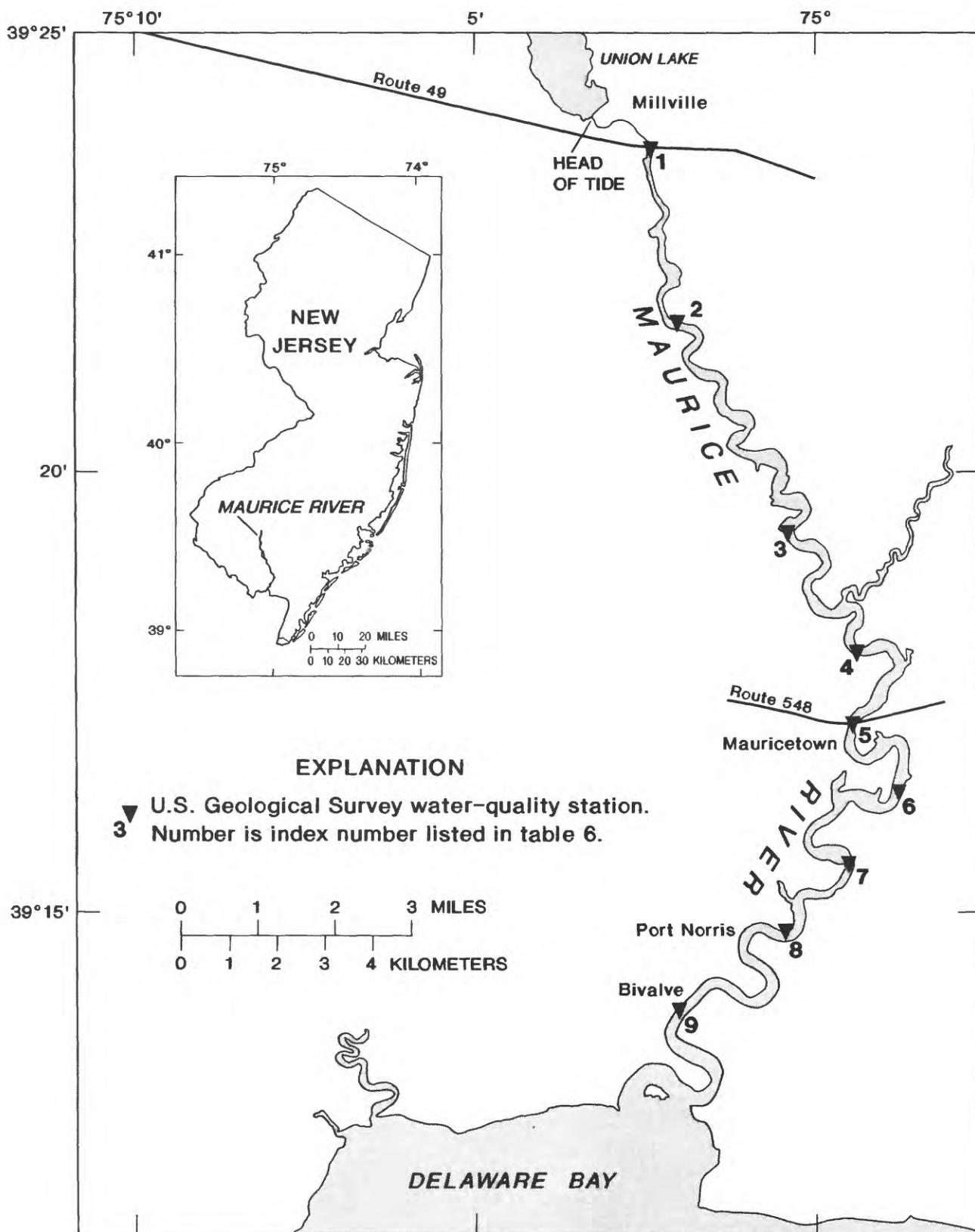


Figure 6.--Water-quality stations in and near the estuary of Maurice River.

Table 1.--Water-quality stations in and near the Metedeconk River estuary

[Unless stated otherwise, latitude and longitude designate the center of the main channel in the cross section; latitude and longitude are in degrees, minutes, and seconds; the main channel is the channel marked for navigation or, if there are no navigational marks, the largest channel; location of main-channel measurements in cross section is given in percentage of distance from right to left bank, looking upstream; Rt, Route]

Index number (fig. 2)	Station number	Station name	Lat- itude	Long- itude	Main-channel measurements	
					Location in cross section	Water depth at mean low water (meters)
<u>Metedeconk River</u>						
1	01408155	at Laurelton	400358	740801	25	1.5
2	400353074074900	1,200 feet downstream of Rt 70 at Laurelton	400353	740749	50	1.5
3	400343074073400	0.6 miles down- stream of Rt 70 at Laurelton	400343	740734	50	1.5
4	400337074071600	near Laurelton	400337	740716	50	1.5
5	400322074070600	upstream of Cedar Bridge Branch at Cedarwood	400322	740706	50	2.0
6	400307074063000	at Breton Woods	400307	740630	50	2.5
7	400313074055200	at Eagle Point at Adamston	400313	740552	50	2.0
8	400314074044500	at Metedeconk	400314	740445	50	2.0
9	400311074035200	at West Manto- loking	400311	740352	50	2.0
<u>Barnegat Bay</u>						
10	01408168	at Mantoloking	¹ 400224	740325	50	2.0
11	400350074030300	at Bayhead Harbor at Bayhead	400350	740303	25	4.0

¹ Latitude and longitude designate a point in the cross section near its eastern end.

² The Metedeconk River flows through two openings under Rt 70. Measurements were made in the middle of the right opening, looking upstream.

Table 2.--Water-quality stations in and near the Toms River estuary

[Unless stated otherwise, latitude and longitude designate the center of the main channel in the cross section; latitude and longitude are in degrees, minutes, and seconds; the main channel is the channel marked for navigation or, if there are no navigational marks, the largest channel; location of main-channel measurements in cross section is given in percentage of distance from right to left bank, looking upstream; Rt, Route]

Index number (fig. 3)	Station number	Station name	Lat- itude	Long- itude	Main-channel measurements	
					Location in cross section	Water depth at mean low water (meters)
<u>Toms River</u>						
1	01408700	at Toms River	395701	741156	² 75	1.5
2	01408719	at Cedar Point at South Toms River	395655	741123	40	2.5
3	01408720	at Beachwood	395642	741117	50	2.0
4	01408730	at Pine Beach	395636	740956	60	2.0
5	01408740	at Island Heights	395616	740820	50	2.0
6	01408745	at mouth near Gilford Park	395602	740645	60	2.0
<u>Barnegat Bay</u>						
7	01408200	at Bay Shore ¹	395656	740652	60	2.0

¹ Latitude and longitude designate a point in the cross section at its western end.

² The Toms River flows through two openings under Rt 166. Measurements were made in the middle of the left opening, looking upstream.

Table 3.--Predicted times of high and low tides during water-quality profiles of the Great Egg Harbor, Tuckahoe, and Maurice Rivers

[Predicted times of high and low tides are reported as Eastern Daylight Savings time in 2400-hour format; times were determined from U.S. Department of Commerce (1988); (L) is low tide; (H) is high tide]

Date (1989)	Site	<u>Predicted times of high and low tides</u>	
		First profile	Second profile
July 24	Great Egg Harbor Bay	0745 (L)	1350 (H)
	Great Egg Harbor River at Mays Landing	0924 (L)	1532 (H)
July 25	Great Egg Harbor Bay	0841 (L)	1446 (H)
July 26	Maurice River near Port Norris	1047 (L)	1701 (H)
	Maurice River at Millville	1232 (L)	1824 (H)
Aug. 21	Great Egg Harbor Bay	0631 (L)	1233 (H)
	Great Egg Harbor River at Mays Landing	0810 (L)	1415 (H)
Aug. 22	Great Egg Harbor Bay	0720 (L)	1328 (H)
Sept. 18	Great Egg Harbor Bay	1117 (H)	1759 (L)
	Great Egg Harbor River at Mays Landing	1259 (H)	1938 (L)
Sept. 21	Great Egg Harbor Bay	0753 (L)	1403 (H)
Oct. 16	Great Egg Harbor Bay	1004 (H)	1653 (L)
Oct. 17	Great Egg Harbor Bay	1053 (H)	1743 (L)
	Great Egg Harbor River at Mays Landing	1235 (H)	1922 (L)

Table 4.--Water-quality stations in and near the Great Egg Harbor River estuary

[Unless stated otherwise, latitude and longitude designate the center of the main channel in the cross section; latitude and longitude are in degrees, minutes, and seconds; the main channel is the channel marked for navigation or, if there are no navigational marks, the largest channel; location of main-channel measurements in cross section is given in percentage of distance from right to left bank, looking upstream]

Index number (fig. 5)	Station number	Station name	Lat- itude	Long- itude	Main-channel measurements	
					Location in cross section	Water depth at mean low water (meters)
<u>Great Egg Harbor River</u>						
1	01411170	at Mays Landing	392713	744404	50	1.5
2	01411205	at Gravelly Run	392538	744254	60	2.0
3	01411210	at Catawba	392440	744306	60	2.5
4	01411225	near Estellville	392311	744328	50	3.0
5	01411235	at Scull Landing	392200	744259	50	5.0
6	01411239	near Gibson Landing	392101	744242	75	5.0
7	01411246	near English Creek Landing	391950	744153	60	5.0
8	01411260	at English Creek Landing	391938	744035	80	5.0
9	01411268	at Jeffers Landing	391903	743918	80	11.0
<u>Great Egg Harbor Bay</u>						
10	391747074381700	near Beesleys Point	391747	743817	75	9.0
11	01411315	at Beesleys Point ¹	391718	743750	70	12.0
<u>Middle River</u>						
12	391847074415600	near English Creek	391847	744156	50	7.0
13	391827074404800	near Jeffers Landing	391827	744048	50	7.0

¹ Latitude and longitude designate a point near the left end of the cross section, looking upstream.

Table 4.--Water-quality stations in and near the Great Egg Harbor River estuary--continued

[Unless stated otherwise, latitude and longitude designate the center of the main channel in the cross section; latitude and longitude are in degrees, minutes, and seconds; the main channel is the channel marked for navigation or, if there are no navigational marks, the largest channel; location of main-channel measurements in cross section is given in percentage of distance from right to left bank, looking upstream]

Index number (fig. 5)	Station number	Station name	Lat- itude	Long- itude	Main-channel measurements	
					Location in cross section	Water depth at mean low water (meters)
<u>Patcong Creek</u>						
14	392009074354700	near Linwood	392009	743547	50	3.0
15	391855074374500	at mouth near Somers Point	391855	743745	50	7.0

Table 5.--Water-quality stations in and near the Tuckahoe River estuary

[Unless stated otherwise, latitude and longitude designate the center of the main channel in the cross section; latitude and longitude are in degrees, minutes, and seconds; the main channel is the channel marked for navigation or, if there are no navigational marks, the largest channel; location of main-channel measurements in cross section is given in percentage of distance from right to left bank, looking upstream; Rt, Route]

Index number (fig. 5)	Station number	Station name	Lat- itude	Long- itude	Main-channel measurements	
					Location in cross section	Water depth at mean low water (meters)
<u>Tuckahoe River</u>						
16	391823074490200	1,100 feet down- stream of Rt 49 at Head of River	391823	744902	50	1.0
17	391817074473600	near Marshallville	391817	744736	50	1.0
18	391742074450900	at Route 50 bridge at Tuckahoe	391742	744509	50	5.0
19	391754074431000	near Tuckahoe	391754	744310	50	4.0
20	391726074420300	near Middletown	391726	744203	75	6.0
21	391750074403800	at tower bases near Middletown	391750	744038	50	11.0
22	391747074393200	near Beesleys Point	391747	743932	75	6.0
<u>Cedar Swamp Creek</u>						
23	391450074430300	at Petersburg	391450	744303	50	1.5
24	391543074420900	near Middletown	391543	744209	50	5.0

Table 6.--Water-quality stations in and near the Maurice River estuary

[Unless stated otherwise, latitude and longitude designate the center of the main channel in the cross section; latitude and longitude are in degrees, minutes, and seconds; the main channel is the channel marked for navigation or, if there are no navigational marks, the largest channel; location of main-channel measurements in cross section is given in percentage of distance from right to left bank, looking upstream]

Index number (fig. 6)	Station number	Station name	Lat- itude	Long- itude	Main-channel measurements	
					Location in cross section	Water depth at mean low water (meters)
<u>Maurice River</u>						
1	01411900	at Millville	392343	750227	50	3.0
2	01411915	near Laurel Lake	392141	750206	50	3.0
3	01412025	at Buckshutem	391918	750023	50	3.0
4	01412100	at Bricksboro	391800	745856	50	8.0
5	01412130	at Mauricetown	391709	745932	50	9.0
6	01412134	at Dorchester	391627	745849	50	6.0
7	01412140	at Leesburg	391531	745932	50	12.0
8	01412144	at 4 Star Marina near Port Norris	391445	750021	50	8.0
9	01412150	at Bivalve	391342	750212	50	6.0

water column was measured with a weighted line marked in meters. Depth was recorded to the nearest half-meter.

A Hydrolab Surveyor II¹ water-quality meter was used to measure temperature, specific conductance, pH, and concentration of dissolved oxygen. The meter's sonde was lowered into the water column to the selected depth, and values registered on the deck unit. Water-quality measurements were made at more than one depth at most sites.

The water-quality meter was calibrated at the beginning and end of each day. Measurements of atmospheric pressure, which were made as part of the instrument calibration, were used to determine dissolved-oxygen concentration as a percentage of the saturation concentration.

Point samples were collected at selected depths with a Wildlife Supply Company Beta Bottle and sent to the U.S. Geological Survey Sediment Laboratory in Harrisburg, Pennsylvania, for determination of suspended-sediment concentration. Laboratory methods are described by Guy (1969). Water transparency was measured with a 20-centimeter limnological Secchi disk.

DESCRIPTION OF THE WATER-QUALITY DATA

The water-quality data for stations in and near the estuaries of the Metedeconk, Toms, Great Egg Harbor, Tuckahoe, and Maurice Rivers are listed in appendixes A through E, respectively. In each appendix, stations are listed in downstream order; the order is stated at the beginning of the appendix.

Except for transparency, each water-quality value is identified by station, date, time, bank-to-bank location in the cross-section, and sample depth; transparency has no associated sample depth. Time is local time reported in 2400-hour format. Times prior to October 22, 1989 are reported as Eastern Daylight Savings Time; times including and after this date are reported as Eastern Standard Time. The location of the samples in the cross-section is indicated by the percentage of the distance from the right to the left bank, looking upstream; cross-section locations for channel samples are given in tables 1, 2, 4, 5, and 6. For channel measurements, values of the water-column depth at mean low water are given in tables 1, 2, 4, 5, and 6. Sample depths of 0.0 meters indicate that the probes of the water-quality meter were held just beneath the water surface. Water temperature is rounded to the nearest 0.5 degrees Celsius; pH is in standard units; specific conductance is in microsiemens per centimeter at 25 degrees Celsius; suspended-sediment concentration is in milligrams per liter; transparency is in meters of Secchi disk depth. Dissolved-oxygen concentration is in milligrams per liter and in percentage of saturation; the percentage of saturation was calculated from values of water temperature, specific conductance, and atmospheric pressure. A method for calculating salinity from specific conductance can be found in Miller and others (1988).

¹The use of brand or company names in this report is for identification purposes only and does not constitute endorsement by the U.S. Geological Survey.

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APPENDIXES

Appendix A. Water-quality data collected at stations in and near the estuary of the Metedeconk River

The following table contains water-quality data collected at stations in and near the Metedeconk River estuary. For each station, the station number and station name are given. Data for selected properties and constituents are listed for each observation. Missing data are represented with a double dash. The stations for which data are included in appendix A are listed below:

Station number	Station name
01408155	Metedeconk River at Laurelton
400353074074900	Metedeconk River 1,200 feet downstream of Route 70 at Laurelton
400343074073400	Metedeconk River 0.6 miles downstream of Route 70 at Laurelton
400337074071600	Metedeconk River near Laurelton
400322074070600	Metedeconk River upstream of Cedar Bridge Branch at Cedarwood
400307074063000	Metedeconk River at Breton Woods
400313074055200	Metedeconk River at Eagle Point at Adamston
400314074044500	Metedeconk River at Metedeconk
400311074035200	Metedeconk River at West Mantoloking
01408168	Barnegat Bay at Mantoloking
400350074030300	Barnegat Bay at Bayhead Harbor at Bayhead

Other symbols and abbreviations used in appendix A are listed below:

Symbols and abbreviations	Definitions
SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	sample location in cross-section, as percentage of bank-to-bank distance from right to left bank looking upstream
m	meters
deg C	degrees Celsius
mg/L	milligrams per liter
μ S/cm	microsiemens per centimeter at 25 degrees Celsius
%	percent

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
27...	1040	25.0	--	--	--	--	--	--	1.09	--
27...	1041	25.0	0.0	25.0	6.3	6.4	78	114	--	--
27...	1042	25.0	.5	25.0	6.3	6.4	78	114	--	7
27...	1043	25.0	1.0	25.0	6.4	6.3	77	115	--	--
27...	1640	25.0	--	--	--	--	--	--	.76	--
27...	1641	25.0	0	29.5	--	--	--	--	--	--
27...	1642	25.0	.5	28.5	--	--	--	2,240	--	--
27...	1643	25.0	1.0	27.5	--	--	--	6,330	--	--
27...	1644	25.0	1.5	27.5	--	--	--	9,740	--	--
AUG.										
23...	1017	25.0	--	--	--	--	--	--	.61	--
23...	1018	25.0	0	23.0	6.1	5.5	65	184	--	--
23...	1019	25.0	.5	23.0	6.2	5.5	65	189	--	8
23...	1020	25.0	1.0	23.0	6.2	5.5	65	190	--	--
23...	1021	25.0	1.5	23.0	6.3	5.7	67	193	--	--
23...	1630	25.0	0	27.0	6.6	8.7	110	678	--	--
23...	1631	25.0	.5	27.0	6.7	8.5	108	643	--	--
23...	1632	25.0	1.0	26.5	6.6	8.0	103	6,750	--	13
23...	1633	25.0	1.5	25.5	6.7	4.4	59	24,500	--	--
SEPT.										
28...	0945	25.0	--	--	--	--	--	--	.89	--
28...	0946	25.0	0	14.0	5.6	7.7	75	86	--	--
28...	0947	25.0	.5	14.0	5.6	7.7	75	86	--	3
28...	0948	25.0	1.0	14.0	5.5	7.6	74	86	--	--
28...	1530	25.0	--	--	--	--	--	--	.91	--
28...	1531	25.0	0	17.5	6.0	9.1	95	86	--	--
28...	1532	25.0	.5	17.5	5.9	9.1	95	86	--	5
28...	1533	25.0	1.0	17.5	5.9	9.2	96	86	--	--
OCT.										
23...	1115	25.0	--	--	--	--	--	--	.69	--
23...	1116	25.0	0	11.5	5.6	8.8	79	81	--	--
23...	1117	25.0	.5	--	--	--	--	--	--	7
23...	1118	25.0	1.0	11.0	5.7	8.8	79	81	--	--
23...	1640	25.0	--	--	--	--	--	--	.74	--
23...	1641	25.0	0	13.0	5.7	9.0	84	82	--	--
23...	1642	25.0	1.0	13.0	5.8	9.0	84	83	--	6
23...	1643	25.0	2.0	13.0	5.8	9.0	84	84	--	--

APPENDIX A
400353074074900 - METEDECONK RIVER 1,200 FEET DOWNSTREAM OF ROUTE 70 AT LAURELTON

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
27...	1108	50.0	--	--	--	--	--	--	0.81	--
27...	1109	50.0	0.0	26.5	6.2	6.4	81	1,660	--	--
27...	1110	50.0	.5	26.5	6.3	6.2	78	1,950	--	--
27...	1111	50.0	1.0	25.5	6.4	5.2	65	4,300	--	--
AUG.										
23...	1010	50.0	0	24.0	6.2	5.6	67	1,300	--	--
23...	1011	50.0	.5	24.0	6.3	5.6	68	3,800	--	--
23...	1012	50.0	1.0	24.0	6.3	4.2	51	4,300	--	--
23...	1013	50.0	1.5	25.5	6.5	1.1	15	27,200	--	--
23...	1615	50.0	0	27.5	6.6	7.4	95	2,860	--	--
23...	1616	50.0	.5	26.5	6.6	7.4	94	3,000	--	--
23...	1617	50.0	1.0	26.0	6.9	6.2	78	5,700	--	--
23...	1618	50.0	1.5	26.0	7.3	6.0	82	28,100	--	--
SEPT.										
28...	0930	50.0	0	14.0	5.9	7.5	73	150	--	--
28...	0931	50.0	.5	14.0	5.7	7.5	73	132	--	--
28...	0932	50.0	1.0	14.0	5.7	7.5	73	150	--	--
28...	0933	50.0	1.5	17.5	6.3	5.1	57	20,600	--	--
28...	1520	50.0	0	16.5	5.9	8.5	88	271	--	--
28...	1521	50.0	.5	16.5	6.0	8.5	88	255	--	--
28...	1522	50.0	1.0	16.5	6.3	8.3	86	360	--	--
28...	1523	50.0	1.5	16.5	6.8	5.6	62	20,200	--	--
OCT.										
23...	1130	50.0	0	11.5	5.7	8.7	78	95	--	--
23...	1131	50.0	.5	11.5	5.7	8.8	79	95	--	--
23...	1132	50.0	1.0	11.5	5.7	8.7	78	94	--	--
23...	1133	50.0	1.4	11.0	5.8	8.7	78	94	--	--

APPENDIX A
400343074073400 - METEDECONK RIVER 0.6 MILES DOWNSTREAM OF ROUTE 70 AT LAURELTON

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
AUG. 1989										
23...	1000	50.0	0.0	24.0	6.3	4.8	58	2,000	--	--
23...	1001	50.0	.5	24.5	6.5	2.8	37	21,000	--	--
23...	1002	50.0	1.0	25.5	6.6	1.1	15	28,200	--	--
23...	1605	50.0	0	27.0	7.2	8.6	112	9,900	--	--
23...	1606	50.0	.5	27.0	7.6	9.2	121	13,000	--	--
23...	1607	50.0	1.0	26.0	7.4	6.6	90	28,300	--	--
SEPT.										
28...	0915	50.0	0	14.0	5.8	7.3	71	299	--	--
28...	0916	50.0	.5	14.5	5.7	8.5	85	4,500	--	--
28...	0917	50.0	1.0	18.5	6.9	6.0	71	25,700	--	--
28...	0918	50.0	1.4	19.0	6.9	5.7	68	26,400	--	--
28...	1515	50.0	0	17.0	6.0	8.4	87	691	--	--
28...	1516	50.0	.5	17.0	6.3	8.2	85	1,300	--	--
28...	1517	50.0	1.0	19.0	7.4	7.8	93	26,200	--	--
OCT.										
23...	1140	50.0	0	11.5	5.7	8.6	77	110	--	--
23...	1141	50.0	.5	11.0	5.7	8.5	76	113	--	--
23...	1142	50.0	1.0	11.0	5.7	8.5	76	113	--	--

APPENDIX A
400337074071600 - METEDECONK RIVER NEAR LAURELTON

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
AUG. 1989										
23...	0940	50.0	0.0	24.5	6.7	5.4	66	2,000	--	--
23...	0941	50.0	.5	25.5	7.2	5.5	75	27,700	--	--
23...	0942	50.0	.90	25.5	7.0	4.1	56	28,400	--	--
23...	1600	50.0	0	26.5	7.5	7.7	104	21,500	--	--
23...	1601	50.0	.5	26.0	7.5	7.2	97	23,400	--	--
23...	1602	50.0	1.0	25.5	7.1	4.3	59	30,600	--	--
SEPT.										
28...	0900	50.0	0	14.5	6.2	7.7	77	4,100	--	--
28...	0901	50.0	.5	19.0	7.1	6.4	76	25,900	--	--
28...	0902	50.0	1.0	19.0	6.8	4.4	53	28,200	--	--
28...	1500	50.0	0	17.0	6.6	9.4	99	3,000	--	--
28...	1501	50.0	.5	18.0	7.4	11.2	123	10,000	--	--
28...	1502	50.0	1.0	19.5	7.9	9.0	107	24,900	--	--
OCT.										
23...	1150	50.0	0	11.5	6.0	8.3	76	1,580	--	--
23...	1151	50.0	.5	13.5	7.0	7.7	80	24,900	--	--
23...	1152	50.0	1.0	13.5	7.0	7.5	79	27,000	--	--

APPENDIX A
400322074070600 - METEDECONK RIVER UPSTREAM OF CEDAR BRIDGE BRANCH AT CEDARWOOD

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
AUG. 1989										
23...	0930	50.0	--	--	--	--	--	--	0.74	--
23...	0931	50.0	0.0	25.5	7.3	7.1	94	22,700	--	--
23...	0932	50.0	.5	25.5	7.4	5.8	79	27,900	--	--
23...	0933	50.0	1.0	25.0	7.1	3.6	49	29,700	--	9
23...	0934	50.0	1.5	25.0	6.8	2.0	27	29,700	--	--
23...	1550	50.0	--	--	--	--	--	--	.69	--
23...	1551	50.0	0	27.0	7.7	8.5	116	23,000	--	--
23...	1552	50.0	.5	26.5	7.7	8.4	115	23,400	--	--
23...	1553	50.0	1.0	26.0	7.7	7.4	102	28,200	--	7
23...	1554	50.0	1.5	25.0	6.8	1.8	25	31,400	--	--
SEPT.										
28...	0850	50.0	--	--	--	--	--	--	.66	--
28...	0851	50.0	0	15.0	6.6	8.2	84	7,400	--	--
28...	0852	50.0	.5	18.5	7.3	7.2	85	27,600	--	--
28...	0853	50.0	1.0	19.0	6.8	4.7	57	29,600	--	4
28...	0854	50.0	1.5	19.5	6.6	2.0	24	30,700	--	--
28...	1450	50.0	--	--	--	--	--	--	.66	--
28...	1451	50.0	0	19.5	8.1	12.6	146	17,900	--	--
28...	1452	50.0	.5	19.5	8.1	12.6	147	18,600	--	--
28...	1453	50.0	1.0	19.5	7.8	11.0	130	22,600	--	8
28...	1454	50.0	1.6	19.0	7.4	7.1	86	29,100	--	--
OCT.										
23...	1055	50.0	--	--	--	--	--	--	1.09	--
23...	1056	50.0	0	12.0	6.3	8.3	76	2,800	--	--
23...	1057	50.0	.5	13.5	7.0	7.8	81	26,000	--	--
23...	1058	50.0	1.0	14.0	7.1	7.6	80	27,000	--	7
23...	1059	50.0	1.5	14.0	7.0	7.2	77	28,300	--	--
23...	1100	50.0	2.0	14.5	6.8	3.0	33	31,600	--	--
23...	1630	50.0	--	--	--	--	--	--	.79	--
23...	1631	50.0	0	14.5	6.6	8.3	83	11,500	--	--
23...	1632	50.0	.5	14.5	6.6	8.3	83	11,500	--	--
23...	1633	50.0	1.0	14.5	6.6	8.3	83	12,500	--	8
23...	1634	50.0	1.5	14.5	6.8	7.1	73	19,600	--	--
23...	1635	50.0	2.0	14.0	6.9	5.9	62	26,200	--	--

APPENDIX A
400307074063000 - METEDECONK RIVER AT BRETON WOODS

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
27...	1020	50.0	--	--	--	--	--	--	0.66	--
27...	1021	50.0	0.0	27.5	7.5	7.8	106	20,000	--	--
27...	1022	50.0	.5	27.0	7.4	7.1	97	22,900	--	--
27...	1023	50.0	1.0	26.5	6.9	2.4	33	27,300	--	--
27...	1024	50.0	1.5	26.0	6.6	.6	8	28,800	--	--
27...	1025	50.0	2.0	25.5	6.7	.4	5	28,800	--	--
27...	1240	5.00	0	29.5	7.9	9.3	129	16,000	--	--
27...	1241	5.00	.5	28.5	7.7	9.2	127	18,500	--	--
27...	1242	5.00	1.0	28.0	7.8	8.5	119	24,100	--	--
27...	1243	50.0	0	29.0	7.8	9.3	131	22,300	--	--
27...	1244	50.0	.5	28.5	7.8	8.7	122	22,400	--	--
27...	1245	50.0	1.0	27.0	7.5	6.8	94	25,900	--	--
27...	1246	95.0	0	28.5	8.0	10.0	140	23,100	--	--
27...	1247	95.0	.5	28.0	7.9	9.5	132	23,300	--	--
27...	1248	95.0	1.0	27.0	7.3	5.9	81	25,100	--	--
27...	1615	50.0	--	--	--	--	--	--	.56	--
27...	1616	50.0	0	29.5	8.1	--	--	23,000	--	--
27...	1617	50.0	.5	29.5	8.1	--	--	23,200	--	--
27...	1618	50.0	1.0	28.5	7.9	--	--	23,900	--	8
27...	1619	50.0	1.5	28.5	7.8	--	--	24,700	--	--
27...	1620	50.0	2.0	27.0	7.2	--	--	26,100	--	--
AUG.										
23...	1320	5.00	0	26.5	7.9	9.6	132	26,400	--	--
23...	1321	5.00	.5	26.5	7.9	9.5	131	26,500	--	--
23...	1322	5.00	1.0	25.0	7.8	7.5	102	29,500	--	--
23...	1330	50.0	0	26.5	8.0	9.8	135	26,400	--	--
23...	1331	50.0	.5	26.5	8.0	9.8	135	26,600	--	--
23...	1332	50.0	1.3	26.0	7.9	9.2	127	28,400	--	--
23...	1333	50.0	2.0	25.0	7.2	4.5	62	33,000	--	--
23...	1340	80.0	0	26.5	7.9	9.9	137	27,000	--	--
23...	1341	80.0	.5	26.5	7.9	9.8	135	27,000	--	--
23...	1342	80.0	1.3	25.5	7.8	8.1	110	27,800	--	--
23...	1343	80.0	2.0	25.0	7.1	3.2	44	33,000	--	--
OCT.										
23...	1045	50.0	0.0	12.5	6.8	8.2	81	17,300	--	--
23...	1046	50.0	.5	12.5	6.8	8.2	81	17,300	--	--
23...	1047	50.0	1.0	12.5	7.1	8.4	85	24,100	--	--
23...	1048	50.0	1.5	13.5	7.1	7.5	79	27,000	--	--
23...	1049	50.0	2.0	14.5	7.1	5.4	60	34,700	--	--
23...	1050	50.0	2.3	14.5	7.1	4.5	50	35,300	--	--
23...	1620	50.0	0	13.5	6.9	8.8	89	17,900	--	--
23...	1621	50.0	.5	13.5	6.9	8.8	89	17,900	--	--
23...	1622	50.0	1.0	13.5	6.9	8.2	84	21,100	--	--
23...	1623	50.0	1.5	13.5	7.1	7.8	81	25,800	--	--
23...	1624	50.0	2.0	14.5	7.1	4.7	51	31,300	--	--
23...	1625	50.0	2.4	15.0	7.0	4.3	48	37,300	--	--

APPENDIX A
400313074055200 - METEDECONK RIVER AT EAGLE POINT AT ADAMSTON

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
27...	1005	50.0	--	--	--	--	--	--	0.74	--
27...	1006	50.0	0.0	27.0	7.6	7.8	107	22,100	--	--
27...	1007	50.0	.5	27.0	7.6	7.7	105	22,200	--	--
27...	1008	50.0	1.0	26.5	7.3	5.0	68	25,500	--	15
27...	1009	50.0	1.5	26.5	7.2	4.5	62	28,300	--	--
27...	1010	50.0	2.0	26.0	7.0	1.6	22	30,400	--	--
27...	1600	50.0	--	--	--	--	--	--	.61	--
27...	1601	50.0	0	29.0	8.2	--	--	22,700	--	--
27...	1602	50.0	.5	29.0	8.2	--	--	22,700	--	--
27...	1603	50.0	1.0	28.5	8.1	--	--	23,500	--	7
27...	1604	50.0	1.5	28.0	7.4	--	--	25,700	--	--
27...	1605	50.0	2.0	26.0	7.0	--	--	29,600	--	--
AUG.										
23...	0911	50.0	--	--	--	--	--	--	.91	--
23...	0912	50.0	0	25.0	7.7	7.9	106	26,800	--	--
23...	0913	50.0	.5	25.0	7.7	7.8	105	26,900	--	--
23...	0914	50.0	1.0	25.0	7.6	6.9	93	28,500	--	5
23...	0915	50.0	1.5	25.0	7.2	4.8	66	32,300	--	--
23...	0916	50.0	2.0	24.5	7.1	4.2	58	33,500	--	--
23...	1525	50.0	--	--	--	--	--	--	.81	--
23...	1526	50.0	0	26.5	8.0	10.0	138	27,500	--	--
23...	1527	50.0	.5	26.5	8.0	10.0	138	27,500	--	--
23...	1528	50.0	1.0	26.5	8.0	8.8	122	27,600	--	8
23...	1529	50.0	1.5	25.5	7.4	7.1	96	27,700	--	--
23...	1530	50.0	2.0	24.5	7.2	3.8	52	33,900	--	--
SEPT.										
28...	0835	50.0	--	--	--	--	--	--	.69	--
28...	0836	50.0	0	15.0	6.9	8.9	93	13,000	--	--
28...	0837	50.0	.5	15.5	6.9	9.6	101	14,200	--	--
28...	0838	50.0	1.0	18.0	7.4	7.9	92	26,400	--	5
28...	0839	50.0	1.5	18.0	7.2	6.4	76	30,800	--	--
28...	0840	50.0	2.0	18.5	7.0	2.3	28	32,200	--	--
28...	1435	50.0	--	--	--	--	--	--	.81	--
28...	1436	50.0	0	18.0	8.1	12.5	140	16,100	--	--
28...	1437	50.0	.5	18.0	8.1	12.8	144	16,300	--	--
28...	1438	50.0	1.0	18.0	8.2	13.2	149	16,900	--	4
28...	1439	50.0	1.5	17.5	7.8	10.3	119	25,900	--	--
28...	1440	50.0	2.0	19.0	6.8	1.5	18	32,000	--	--
OCT.										
23...	1030	50.0	--	--	--	--	--	--	.91	--
23...	1031	50.0	0.0	12.0	6.6	8.3	79	11,300	--	--
23...	1032	50.0	.5	12.0	6.7	8.0	77	16,900	--	--
23...	1033	50.0	1.0	13.5	7.1	8.0	83	26,000	--	7
23...	1034	50.0	1.5	13.5	7.1	7.6	80	27,800	--	--
23...	1035	50.0	2.0	14.5	7.0	4.9	54	34,600	--	--
23...	1610	50.0	--	--	--	--	--	--	.91	--
23...	1611	50.0	0	14.0	6.8	9.1	92	15,200	--	--
23...	1612	50.0	.5	14.0	6.9	9.1	92	16,600	--	--
23...	1613	50.0	1.0	13.0	7.1	8.4	86	23,600	--	5
23...	1614	50.0	1.5	13.5	7.1	7.8	82	26,700	--	--
23...	1615	50.0	2.0	14.0	7.1	7.0	75	30,200	--	--
23...	1616	50.0	2.3	14.5	7.1	6.4	69	31,700	--	--

APPENDIX A
400314074044500 - METEDECONK RIVER AT METEDECONK

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
27...	0951	50.0	--	--	--	--	--	--	0.76	--
27...	0952	50.0	0.0	27.0	7.7	7.2	99	24,400	--	--
27...	0953	50.0	.5	27.0	7.6	6.9	95	24,500	--	--
27...	0954	50.0	1.0	27.0	7.6	6.6	91	24,800	--	10
27...	0955	50.0	1.5	26.5	7.4	5.5	75	26,500	--	--
27...	0956	50.0	2.0	26.0	7.2	4.3	59	29,500	--	--
27...	1550	50.0	--	--	--	--	--	--	.58	--
27...	1551	50.0	0	29.0	--	--	--	24,800	--	--
27...	1552	50.0	.5	28.5	--	--	--	24,900	--	--
27...	1553	50.0	1.0	28.5	--	--	--	24,900	--	9
27...	1554	50.0	1.5	28.5	--	--	--	25,000	--	--

APPENDIX A
400311074035200 - METEDECONK RIVER AT WEST MANTOLOKING

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
27...	0927	50.0	--	--	--	--	--	--	0.71	--
27...	0928	50.0	0.0	26.5	7.6	7.1	97	25,300	--	--
27...	0929	50.0	.5	26.5	7.6	7.0	96	25,300	--	--
27...	0930	50.0	1.0	26.5	7.6	6.7	92	25,300	--	13
27...	0931	50.0	1.5	26.5	7.4	5.9	81	26,600	--	--
27...	1540	50.0	--	--	--	--	--	--	.43	--
27...	1541	50.0	0	28.5	7.8	7.9	111	23,800	--	--
27...	1542	50.0	1.0	28.0	7.8	8.3	116	24,700	--	18
27...	1543	50.0	2.0	18.0	7.7	7.1	83	25,700	--	--
AUG.										
23...	0900	50.0	--	--	--	--	--	--	.91	--
23...	0901	50.0	0	25.0	7.7	7.5	101	29,500	--	--
23...	0902	50.0	.5	25.0	7.7	7.4	100	29,700	--	--
23...	0903	50.0	1.0	25.0	7.7	7.4	100	29,700	--	4
23...	0904	50.0	1.5	24.5	7.6	6.0	81	30,300	--	--
23...	1220	90.0	0	26.0	7.6	7.2	99	28,900	--	--
23...	1221	90.0	.5	26.0	7.7	7.7	106	28,900	--	--
23...	1222	90.0	1.0	25.5	7.7	7.3	99	29,400	--	--
23...	1225	50.0	0	26.0	7.7	7.7	105	26,200	--	--
23...	1226	50.0	.5	25.5	7.7	7.8	106	27,400	--	--
23...	1227	50.0	1.0	25.0	7.6	7.0	95	30,600	--	--
23...	1235	25.0	0	26.0	7.8	8.3	114	29,300	--	--
23...	1236	25.0	.5	26.0	7.8	8.2	113	29,600	--	--
23...	1237	25.0	1.0	26.0	7.8	8.1	111	29,400	--	--
23...	1500	50.0	--	--	--	--	--	--	.64	--
23...	1501	50.0	0	25.5	7.6	7.3	101	31,000	--	--
23...	1502	50.0	.5	25.0	7.6	6.8	93	33,600	--	--
23...	1503	50.0	1.0	25.0	7.6	7.0	98	35,700	--	10
23...	1504	50.0	1.5	24.5	7.4	5.9	82	36,900	--	--
SEPT.										
28...	0820	50.0	--	--	--	--	--	--	.91	--
28...	0821	50.0	0.0	15.0	7.5	9.9	106	19,000	--	--
28...	0822	50.0	.5	15.5	7.6	9.8	106	21,300	--	--
28...	0823	50.0	1.0	16.5	7.5	8.9	101	26,900	--	3
28...	0824	50.0	1.4	16.5	7.4	8.5	97	27,700	--	--
28...	1420	50.0	--	--	--	--	--	--	.94	--
28...	1421	50.0	0	17.5	7.9	11.8	128	10,000	--	--
28...	1422	50.0	.5	17.5	7.9	11.2	126	18,600	--	--
28...	1423	50.0	1.0	17.5	7.8	10.1	117	28,100	--	7
28...	1424	50.0	1.6	18.0	7.6	8.8	107	36,200	--	--
OCT.										
23...	1020	50.0	--	--	--	--	--	--	1.02	--
23...	1021	50.0	0	11.0	6.9	8.8	85	19,600	--	--
23...	1022	50.0	.5	11.0	7.0	8.8	85	19,600	--	--
23...	1023	50.0	1.0	12.0	7.2	8.3	82	22,000	--	7
23...	1024	50.0	1.5	12.0	7.2	8.2	82	26,700	--	--
23...	1600	50.0	--	--	--	--	--	--	.99	--
23...	1601	50.0	0	13.0	7.2	9.1	93	23,400	--	--
23...	1602	50.0	.5	13.0	7.3	9.0	92	24,300	--	--
23...	1603	50.0	1.0	13.0	7.3	8.8	90	25,100	--	13
23...	1604	50.0	1.8	13.0	7.2	7.1	73	27,100	--	--

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
27...	0900	50.0	--	--	--	--	--	--	0.58	--
27...	0901	50.0	0.0	26.5	7.3	6.1	83	23,700	--	--
27...	0902	50.0	1.0	26.5	7.3	5.8	79	23,900	--	14
27...	0903	50.0	2.0	26.5	7.3	5.8	79	23,900	--	--
27...	1500	50.0	--	--	--	--	--	--	.46	--
27...	1501	50.0	0	28.0	7.7	7.9	110	22,100	--	--
27...	1502	50.0	1.0	28.0	7.7	7.9	110	22,100	--	16
27...	1503	50.0	2.0	28.0	7.7	7.6	105	22,200	--	--
AUG.										
23...	0815	50.0	--	--	--	--	--	--	.64	--
23...	0816	50.0	0	25.0	7.4	6.8	89	21,000	--	--
23...	0817	50.0	.5	25.0	7.4	6.7	88	22,500	--	--
23...	0818	50.0	1.0	25.0	7.4	6.7	88	22,700	--	8
23...	0819	50.0	1.5	25.0	7.4	6.7	88	23,000	--	--
23...	0820	50.0	2.0	25.0	7.4	6.7	88	23,100	--	--
23...	1410	50.0	--	--	--	--	--	--	.64	--
23...	1411	50.0	0	26.0	7.7	7.2	98	27,200	--	--
23...	1412	50.0	.5	26.0	7.7	7.5	102	27,200	--	16
23...	1413	50.0	1.0	26.0	7.7	7.5	102	27,300	--	--
23...	1414	50.0	1.8	25.5	7.7	7.4	101	27,400	--	--
SEPT.										
28...	0740	50.0	--	--	--	--	--	--	.74	--
28...	0741	50.0	0	15.5	7.5	9.5	105	24,500	--	--
28...	0742	50.0	.5	15.5	7.5	9.4	103	24,200	--	--
28...	0743	50.0	1.0	16.0	7.5	9.2	102	25,300	--	7
28...	0744	50.0	1.5	16.0	7.5	9.1	101	25,400	--	--
28...	0745	50.0	2.0	16.0	7.5	9.0	101	25,800	--	--
28...	1320	50.0	--	--	--	--	--	--	.91	--
28...	1321	50.0	0	17.0	7.8	9.9	113	25,700	--	--
28...	1322	50.0	.5	17.0	7.8	9.9	113	25,800	--	--
28...	1323	50.0	1.0	17.0	7.8	9.9	113	25,900	--	7
28...	1324	50.0	1.5	17.0	7.8	9.9	113	25,900	--	--
28...	1325	50.0	2.0	17.0	7.8	9.9	113	25,900	--	--
OCT.										
23...	0925	50.0	--	--	--	--	--	--	.86	--
23...	0926	50.0	0.0	11.5	7.2	8.7	86	25,000	--	--
23...	0927	50.0	.5	11.5	7.2	8.7	86	24,800	--	--
23...	0928	50.0	1.0	11.5	7.2	8.7	86	25,000	--	10
23...	0929	50.0	1.5	11.5	7.2	8.7	86	25,100	--	--
23...	0930	50.0	2.0	11.5	7.2	8.9	88	25,300	--	--
23...	0931	50.0	2.5	11.5	7.2	8.9	88	25,400	--	--
23...	1445	50.0	--	--	--	--	--	--	.86	--
23...	1446	50.0	0	13.0	7.4	9.5	97	23,300	--	--
23...	1447	50.0	.5	13.0	7.4	9.4	96	24,400	--	--
23...	1448	50.0	1.0	13.0	7.4	9.4	96	24,700	--	10
23...	1449	50.0	1.5	13.0	7.4	9.4	96	24,700	--	--
23...	1450	50.0	2.0	13.0	7.4	9.5	97	24,800	--	--
23...	1451	50.0	2.3	13.0	7.4	9.5	97	24,800	--	--

APPENDIX A
400350074030300 - BARNEGAT BAY AT BAYHEAD HARBOR AT BAYHEAD

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
27...	0925	25.0	--	--	--	--	--	--	0.64	--
27...	0926	25.0	0.0	26.0	7.4	6.3	86	26,500	--	--
27...	0927	25.0	2.0	26.0	7.3	5.4	74	27,700	--	12
27...	0928	25.0	3.0	25.0	7.2	4.6	63	30,800	--	--
27...	1520	25.0	--	--	--	--	--	--	.56	--
27...	1521	25.0	0	27.5	7.4	7.1	99	25,800	--	--
27...	1522	25.0	2.0	26.0	--	6.7	94	32,300	--	17
AUG.										
23...	0840	25.0	--	--	--	--	--	--	.64	--
23...	0841	25.0	0	24.5	7.4	6.5	87	26,700	--	--
23...	0842	25.0	1.0	24.5	7.4	6.1	82	29,200	--	--
23...	0843	25.0	2.0	24.0	7.3	5.8	78	30,500	--	10
23...	0844	25.0	3.0	24.5	7.4	6.1	82	30,200	--	--
23...	0845	25.0	3.5	24.0	7.4	5.8	78	31,300	--	--
23...	0846	25.0	4.0	24.0	7.4	5.7	77	32,100	--	--
23...	1425	25.0	--	--	--	--	--	--	.99	--
23...	1426	25.0	0	25.0	7.5	6.5	90	34,400	--	--
23...	1427	25.0	.5	23.0	7.4	5.5	76	42,200	--	--
23...	1428	25.0	1.0	22.5	7.4	5.3	73	43,800	--	--
23...	1429	25.0	1.5	22.5	7.4	5.3	73	43,800	--	--
23...	1430	25.0	3.5	22.5	7.4	5.3	73	44,500	--	--
SEPT.										
28...	0800	25.0	--	--	--	--	--	--	.91	--
28...	0801	25.0	0	17.0	7.4	8.0	94	32,700	--	--
28...	0802	25.0	.5	17.5	7.4	7.5	91	38,500	--	--
28...	0803	25.0	1.0	17.5	7.4	7.5	91	38,800	--	--
28...	0804	25.0	2.0	18.0	7.4	7.9	95	35,600	--	7
28...	0805	25.0	3.0	18.0	7.4	7.5	91	37,200	--	--
28...	0806	25.0	4.0	18.0	7.4	7.5	92	38,900	--	--
28...	0807	25.0	4.4	18.0	7.4	7.5	92	38,900	--	--
28...	1350	25.0	--	--	--	--	--	--	1.04	--
28...	1351	25.0	0	18.0	7.8	10.2	119	25,600	--	--
28...	1352	25.0	.5	18.0	7.8	10.3	120	26,200	--	--
28...	1353	25.0	1.0	18.0	7.8	10.1	118	27,600	--	--
28...	1354	25.0	2.0	18.0	7.8	10.1	118	28,000	--	5
28...	1355	25.0	3.0	18.0	7.7	9.3	113	34,400	--	--
28...	1356	25.0	4.0	18.0	7.6	9.1	111	36,200	--	--
OCT.										
23...	0955	25.0	--	--	--	--	--	--	1.02	--
23...	0956	25.0	0.0	11.5	7.1	8.7	86	24,200	--	--
23...	0957	25.0	.5	11.5	7.2	8.4	83	24,600	--	--
23...	0958	25.0	1.0	11.5	7.2	8.4	84	26,700	--	--
23...	0959	25.0	2.0	12.0	7.3	8.2	83	27,900	--	7
23...	1000	25.0	3.0	12.0	7.3	8.1	82	28,200	--	--
23...	1001	25.0	4.0	12.5	7.4	7.6	79	31,800	--	--
23...	1510	25.0	--	--	--	--	--	--	1.02	--
23...	1511	25.0	0	13.0	7.3	8.4	86	26,400	--	--
23...	1512	25.0	.5	13.0	7.3	8.0	83	28,500	--	--
23...	1513	25.0	1.0	13.0	7.4	7.9	83	29,200	--	--
23...	1514	25.0	2.0	13.0	7.4	7.8	82	29,400	--	9
23...	1515	25.0	3.0	13.0	7.4	7.8	82	29,300	--	--
23...	1516	25.0	4.0	13.0	7.4	7.9	83	29,300	--	--

Appendix B. Water-quality data collected at stations in and near the estuary of the Toms River

The following table contains water-quality data collected at stations in and near the Toms River estuary. For each station, the station number and station name are given. Data for selected properties and constituents are listed for each observation. Missing data are represented with a double dash. The stations for which data are included in appendix B are listed below:

Station number	Station name
01408700	Toms River at Toms River
01408719	Toms River at Cedar Point at South Toms River
01408720	Toms River at Beachwood
01408730	Toms River at Pine Beach
01408740	Toms River at Island Heights
01408745	Toms River at mouth near Gilford Park
01408200	Barnegat Bay at Bay Shore

Other symbols and abbreviations used in appendix B are listed below:

Symbols and abbreviations	Definitions
SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	sample location in cross-section, as percentage of bank-to-bank distance from right to left bank looking upstream
m	meters
deg C	degrees Celsius
mg/L	milligrams per liter
μ S/cm	microsiemens per centimeter at 25 degrees Celsius
%	percent

01408700 APPENDIX B
- TOMS RIVER AT TOMS RIVER

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
AUG. 1989										
24...	0950	75.0	--	--	--	--	--	--	0.79	--
24...	0951	75.0	0.0	20.5	5.1	6.3	71	--	--	--
24...	0952	75.0	.5	21.5	5.0	6.1	70	79	--	--
24...	0953	75.0	1.0	21.5	5.0	6.1	70	79	--	6
24...	1600	75.0	--	--	--	--	--	--	.81	--
24...	1601	75.0	0	22.5	4.9	6.9	81	77	--	--
24...	1602	75.0	.5	22.5	4.9	6.8	79	77	--	5
24...	1603	75.0	1.0	22.5	5.0	6.8	79	77	--	--
SEPT.										
25...	1135	75.0	--	--	--	--	--	--	.74	--
25...	1136	75.0	0	16.0	4.2	7.0	70	73	--	--
25...	1137	75.0	.5	16.0	4.2	7.0	70	73	--	--
25...	1138	75.0	1.0	16.0	4.1	7.0	70	73	--	6
25...	1735	75.0	--	--	--	--	--	--	.58	--
25...	1736	75.0	0	16.0	4.4	7.2	73	74	--	--
25...	1737	75.0	.5	16.0	4.0	7.2	73	74	--	--
25...	1738	75.0	1.0	16.0	4.1	7.2	73	74	--	6
OCT.										
24...	1100	75.0	--	--	--	--	--	--	.74	--
24...	1101	75.0	0	10.0	4.2	8.2	72	72	--	--
24...	1102	75.0	.5	--	--	--	--	--	--	7
24...	1103	75.0	1.2	10.0	4.2	8.2	72	72	--	--
24...	1700	75.0	--	--	--	--	--	--	.64	--
24...	1701	75.0	0	11.5	4.3	8.2	74	72	--	--
24...	1702	75.0	.5	--	--	--	--	--	--	6
24...	1703	75.0	1.3	11.5	4.3	8.3	75	73	--	--

01408719 APPENDIX B
- TOMS RIVER AT CEDAR POINT AT SOUTH TOMS RIVER

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
OCT. 1989										
24...	1040	40.0	0.0	11.0	4.5	7.8	70	1,000	--	--
24...	1041	40.0	.5	11.0	5.0	7.8	70	2,120	--	--
24...	1042	40.0	1.0	11.5	5.9	7.2	66	7,000	--	--
24...	1043	40.0	1.5	13.5	6.5	5.5	56	19,800	--	--
24...	1044	40.0	2.2	14.0	6.5	5.7	59	20,900	--	--
24...	1640	40.0	0	12.0	4.7	8.2	76	1,100	--	--
24...	1641	40.0	.5	12.0	4.7	8.1	75	1,150	--	--
24...	1642	40.0	1.0	12.0	5.3	7.8	72	2,000	--	--
24...	1643	40.0	1.5	12.0	5.5	6.3	59	8,000	--	--
24...	1644	40.0	2.0	14.0	6.7	6.1	63	20,600	--	--
24...	1645	40.0	2.4	13.5	6.7	6.5	67	20,700	--	--

01408720 - TOMS RIVER AT BEACHWOOD

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
AUG. 1989										
24...	0930	50.0	--	--	--	--	--	--	0.79	--
24...	0931	50.0	0.0	20.5	6.5	7.1	80	90	--	--
24...	0932	50.0	.5	24.5	6.3	6.1	75	5,740	--	--
24...	0933	50.0	1.0	25.0	6.5	3.1	39	10,300	--	7
24...	0934	50.0	1.5	25.0	6.5	2.3	29	13,700	--	--
24...	1545	50.0	--	--	--	--	--	--	.74	--
24...	1546	50.0	0	25.5	6.3	6.6	82	5,170	--	--
24...	1547	50.0	.5	25.5	6.3	6.6	82	5,660	--	--
24...	1548	50.0	1.0	25.0	6.3	6.3	79	6,150	--	7
24...	1549	50.0	1.5	24.5	6.3	2.4	30	10,500	--	--
24...	1550	50.0	1.8	25.0	6.3	1.8	23	11,900	--	--
SEPT.										
25...	1115	50.0	--	--	--	--	--	--	.69	--
25...	1116	50.0	0	17.5	3.4	6.4	67	3,000	--	--
25...	1117	50.0	.5	17.5	3.4	6.4	67	3,190	--	--
25...	1118	50.0	1.0	19.5	4.6	5.2	58	10,000	--	10
25...	1119	50.0	1.5	21.0	5.3	4.3	50	15,700	--	--
25...	1120	50.0	1.7	21.5	6.2	1.9	23	17,100	--	--
25...	1715	50.0	--	--	--	--	--	--	.66	--
25...	1716	50.0	0	18.0	5.4	7.0	74	2,450	--	--
25...	1717	50.0	.5	18.0	5.3	7.0	74	2,820	--	--
25...	1718	50.0	1.0	18.0	5.4	6.9	74	3,530	--	6
25...	1719	50.0	1.5	19.5	6.0	3.8	42	10,000	--	--
25...	1720	50.0	1.9	20.5	6.2	2.2	26	15,400	--	--
OCT.										
24...	1030	50.0	--	--	--	--	--	--	.64	--
24...	1031	50.0	0	12.5	5.6	8.0	75	3,450	--	--
24...	1032	50.0	.5	11.5	5.7	7.5	69	5,000	--	--
24...	1033	50.0	1.0	13.5	6.5	5.7	57	16,000	--	8
24...	1034	50.0	1.5	13.5	6.7	6.5	67	21,000	--	--
24...	1035	50.0	1.9	13.5	6.7	6.4	65	21,000	--	--
24...	1630	50.0	--	--	--	--	--	--	.61	--
24...	1631	50.0	0	13.5	5.7	8.0	77	4,000	--	--
24...	1632	50.0	.5	13.5	5.7	8.0	77	4,000	--	--
24...	1633	50.0	1.0	13.5	5.8	7.9	76	4,170	--	7
24...	1634	50.0	1.5	14.0	6.5	5.4	56	20,200	--	--
24...	1635	50.0	2.0	13.5	6.6	6.8	70	20,800	--	--

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
AUG. 1989										
24...	0915	60.0	--	--	--	--	--	--	0.81	--
24...	0916	60.0	0.0	23.5	6.7	7.0	83	500	--	--
24...	0917	60.0	.5	24.5	6.6	6.4	79	8,500	--	--
24...	0918	60.0	1.0	24.5	6.6	6.2	77	8,890	--	7
24...	0919	60.0	1.4	25.5	6.7	4.9	62	8,900	--	--
24...	0920	60.0	1.9	25.5	6.6	3.5	45	13,600	--	--
24...	1245	95.0	0	25.0	6.5	7.2	90	7,030	--	--
24...	1246	95.0	.5	25.0	6.5	7.1	88	7,040	--	--
24...	1247	95.0	1.0	24.5	6.5	5.6	70	8,110	--	--
24...	1248	95.0	1.3	25.0	6.4	2.8	35	11,000	--	--
24...	1250	60.0	0	25.5	6.7	7.1	90	8,550	--	--
24...	1251	60.0	.5	25.5	6.8	7.1	90	8,690	--	--
24...	1252	60.0	1.0	25.5	6.8	7.0	89	9,760	--	--
24...	1253	60.0	1.5	25.5	6.6	2.9	37	13,400	--	--
24...	1254	60.0	1.8	25.5	6.5	2.6	34	14,200	--	--
24...	1300	10.0	0	26.0	7.0	7.4	95	10,000	--	--
24...	1301	10.0	.5	26.0	6.9	7.0	90	10,300	--	--
24...	1530	60.0	--	--	--	--	--	--	.69	--
24...	1531	60.0	0	26.0	6.8	7.0	89	9,010	--	--
24...	1532	60.0	.5	26.0	6.8	7.0	89	9,300	--	--
24...	1533	60.0	1.0	26.0	6.8	6.9	88	9,220	--	10
24...	1534	60.0	1.5	25.5	6.5	2.3	30	12,500	--	--
24...	1535	60.0	2.0	25.5	6.5	2.0	26	13,800	--	--
SEPT.										
25...	1100	60.0	--	--	--	--	--	--	.61	--
25...	1101	60.0	0.0	18.5	5.5	7.1	77	8,370	--	--
25...	1102	60.0	.5	18.5	5.5	6.9	75	8,860	--	--
25...	1103	60.0	1.0	19.0	6.0	6.9	77	13,600	--	8
25...	1104	60.0	1.5	20.0	6.1	6.2	72	20,200	--	--
25...	1430	10.0	0	19.5	5.9	7.6	84	8,290	--	--
25...	1431	10.0	.5	19.5	6.0	7.5	83	8,290	--	--
25...	1432	10.0	.8	19.5	5.9	7.4	82	8,340	--	--
25...	1435	60.0	0	19.5	6.1	6.7	75	10,500	--	--
25...	1436	60.0	.5	19.5	6.1	6.7	75	10,500	--	--
25...	1437	60.0	1.0	19.5	6.1	6.2	70	10,800	--	--
25...	1438	60.0	1.5	21.0	6.3	3.6	43	18,100	--	--
25...	1439	60.0	1.8	20.5	6.5	4.7	56	19,400	--	--
25...	1450	95.0	0	19.5	5.8	7.1	79	8,400	--	--
25...	1451	95.0	.5	19.5	5.9	6.9	77	8,890	--	--
25...	1452	95.0	1.0	20.0	6.0	6.4	72	10,600	--	--
25...	1453	95.0	1.5	21.0	6.2	3.4	40	17,700	--	--
25...	1700	60.0	--	--	--	--	--	--	.56	--
25...	1701	60.0	0	19.5	6.5	7.4	83	9,450	--	--
25...	1702	60.0	.5	19.5	6.4	7.4	83	9,730	--	--
25...	1703	60.0	1.0	20.0	6.4	7.0	79	11,200	--	8
25...	1704	60.0	1.5	20.5	6.5	3.1	36	16,000	--	--
25...	1705	60.0	2.0	20.5	6.8	4.3	51	20,000	--	--
OCT.										
24...	1010	60.0	--	--	--	--	--	--	.56	--
24...	1011	60.0	0	11.5	5.4	7.9	72	3,060	--	--
24...	1012	60.0	.5	12.0	6.0	8.2	77	7,000	--	--
24...	1013	60.0	1.0	13.0	6.8	8.6	86	17,700	--	8
24...	1014	60.0	1.5	12.5	7.1	8.7	88	22,000	--	--
24...	1015	60.0	2.0	13.0	7.0	7.7	78	23,200	--	--
24...	1615	60.0	--	--	--	--	--	--	.58	--
24...	1616	60.0	0	14.5	6.5	8.7	88	11,300	--	--
24...	1617	60.0	.5	14.5	6.5	8.6	87	11,300	--	--
24...	1618	60.0	1.0	14.5	6.6	8.2	83	14,000	--	8
24...	1619	60.0	1.5	13.0	7.0	7.9	80	21,100	--	--
24...	1620	60.0	2.0	13.0	6.9	6.9	71	23,000	--	--

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
AUG. 1989										
24...	0855	50.0	--	--	--	--	--	--	0.79	--
24...	0856	50.0	0.0	25.0	6.9	6.7	84	8,000	--	--
24...	0857	50.0	.5	25.0	6.9	6.6	83	10,900	--	--
24...	0858	50.0	1.0	25.0	6.9	6.5	82	11,700	--	7
24...	0859	50.0	1.5	25.0	7.0	5.8	74	14,300	--	--
24...	0900	50.0	1.8	25.5	7.0	5.8	75	14,700	--	--
24...	1215	20.0	0	26.0	7.2	7.3	95	12,700	--	--
24...	1216	20.0	.5	26.0	7.2	7.4	96	12,700	--	--
24...	1225	50.0	0	25.5	6.9	7.0	89	10,700	--	--
24...	1226	50.0	.5	25.5	6.9	7.0	89	10,700	--	--
24...	1227	50.0	1.0	25.5	6.9	6.8	87	10,700	--	--
24...	1228	50.0	1.5	25.5	6.8	6.2	79	11,600	--	--
24...	1230	95.0	0	25.5	7.0	7.3	93	10,300	--	--
24...	1231	95.0	.5	25.5	7.0	7.3	93	10,300	--	--
24...	1232	95.0	1.0	25.5	6.9	7.3	93	10,300	--	--
24...	1518	50.0	--	--	--	--	--	--	.76	--
24...	1519	50.0	0	26.5	7.2	7.8	101	11,200	--	--
24...	1520	50.0	.5	26.0	7.2	7.6	98	11,400	--	--
24...	1521	50.0	1.0	26.0	7.2	7.5	97	11,500	--	8
24...	1522	50.0	1.6	26.0	7.2	7.2	93	11,900	--	--
SEPT.										
25...	1040	50.0	--	--	--	--	--	--	.61	--
25...	1041	50.0	0.0	18.5	5.6	7.3	77	11,000	--	--
25...	1042	50.0	.5	18.5	5.9	7.0	77	12,200	--	--
25...	1043	50.0	1.0	20.0	6.5	6.5	76	19,700	--	6
25...	1044	50.0	1.5	20.0	6.6	6.0	71	22,500	--	--
25...	1045	50.0	2.0	20.0	6.6	6.3	75	22,500	--	--
25...	1500	20.0	0	19.5	6.5	8.2	93	11,700	--	--
25...	1501	20.0	.5	19.5	6.5	8.3	94	11,700	--	--
25...	1510	50.0	0	19.5	6.5	8.2	92	11,900	--	--
25...	1511	50.0	.5	19.5	6.5	8.1	91	12,000	--	--
25...	1512	50.0	1.0	20.0	6.6	6.3	73	18,900	--	--
25...	1513	50.0	1.5	20.0	7.0	6.0	71	21,300	--	--
25...	1514	50.0	1.7	20.0	7.0	6.1	72	21,400	--	--
25...	1520	95.0	0	19.5	6.8	8.4	95	13,200	--	--
25...	1521	95.0	.5	19.5	6.8	8.4	95	13,400	--	--
25...	1522	95.0	0.8	19.5	6.8	8.4	95	13,600	--	--
25...	1645	50.0	--	--	--	--	--	--	.63	--
25...	1646	50.0	0	19.5	7.1	8.5	96	13,300	--	--
25...	1647	50.0	.5	19.5	7.1	8.5	96	14,200	--	--
25...	1648	50.0	1.0	19.5	7.1	8.3	94	14,700	--	8
25...	1649	50.0	1.5	20.0	7.1	5.9	69	20,200	--	--
25...	1650	50.0	1.8	20.0	7.1	5.8	68	20,600	--	--
OCT.										
24...	1000	50.0	--	--	--	--	--	--	.61	--
24...	1001	50.0	0.0	12.0	5.9	8.3	78	6,370	--	--
24...	1002	50.0	.5	12.0	6.0	8.3	78	7,690	--	--
24...	1003	50.0	1.0	12.5	7.4	9.5	96	22,400	--	6
24...	1004	50.0	1.5	13.0	7.3	9.1	93	22,700	--	--
24...	1005	50.0	1.9	13.0	7.1	7.2	73	23,500	--	--
24...	1430	95.0	0	14.0	6.2	8.6	85	6,940	--	--
24...	1431	95.0	.5	13.5	6.5	8.8	86	10,000	--	--
24...	1432	95.0	1.0	13.0	7.1	8.9	90	21,000	--	--
24...	1433	95.0	1.3	12.5	7.1	8.8	89	22,600	--	--
24...	1440	50.0	0	14.5	6.2	8.7	87	8,380	--	--
24...	1441	50.0	.5	14.5	6.3	8.6	86	8,440	--	--
24...	1442	50.0	1.0	12.5	7.1	9.3	93	18,900	--	--
24...	1443	50.0	1.5	13.0	7.2	8.1	83	23,100	--	--
24...	1444	50.0	1.8	13.0	7.0	7.3	75	23,600	--	--
24...	1445	20.0	0	16.0	6.6	9.4	97	9,500	--	--
24...	1446	20.0	.5	16.0	6.6	9.4	97	11,600	--	--
24...	1447	20.0	1.0	16.0	6.6	9.4	99	13,000	--	--
24...	1600	50.0	--	--	--	--	--	--	.61	--
24...	1601	50.0	0	15.0	6.6	9.4	96	11,600	--	--
24...	1602	50.0	.5	15.0	6.7	9.4	96	12,100	--	--
24...	1603	50.0	1.0	14.5	7.0	8.9	92	18,200	--	6
24...	1604	50.0	1.5	13.0	7.2	8.9	90	21,000	--	--
24...	1605	50.0	2.0	13.0	7.1	7.7	79	23,600	--	--

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
AUG. 1989										
24...	0840	60.0	--	--	--	--	--	--	0.64	--
24...	0841	60.0	0.0	25.0	7.3	6.7	85	13,000	--	--
24...	0842	60.0	.5	25.0	7.3	6.7	86	15,200	--	--
24...	0843	60.0	1.0	25.0	7.3	6.6	84	15,200	--	8
24...	0844	60.0	1.5	25.0	7.2	6.3	81	15,700	--	--
24...	0845	60.0	1.8	24.5	7.2	6.3	81	15,700	--	--
24...	1500	60.0	--	--	--	--	--	--	.58	--
24...	1501	60.0	0	26.0	7.6	7.8	102	15,000	--	--
24...	1502	60.0	.5	26.0	7.6	7.8	102	15,100	--	--
24...	1503	60.0	1.0	26.0	7.6	7.7	101	15,100	--	13
24...	1504	60.0	1.5	26.0	7.5	7.5	98	15,200	--	--
SEPT.										
25...	1025	60.0	--	--	--	--	--	--	.66	--
25...	1026	60.0	0	18.0	6.2	7.9	87	13,300	--	--
25...	1027	60.0	.5	18.0	6.3	7.7	85	15,700	--	--
25...	1028	60.0	1.0	19.0	6.6	6.8	78	20,100	--	8
25...	1029	60.0	1.5	19.0	6.6	6.0	70	21,800	--	--
25...	1030	60.0	1.8	19.5	6.7	5.7	67	22,700	--	--
25...	1630	60.0	--	--	--	--	--	--	.61	--
25...	1631	60.0	0	19.0	7.5	8.6	98	17,600	--	--
25...	1632	60.0	.5	19.0	7.4	8.6	98	17,700	--	--
25...	1633	60.0	1.0	19.5	7.4	7.6	88	19,800	--	10
25...	1634	60.0	1.5	19.5	7.3	6.9	81	21,900	--	--
25...	1635	60.0	2.0	20.0	7.2	6.3	74	22,600	--	--
OCT.										
24...	0945	60.0	--	--	--	--	--	--	.76	--
24...	0946	60.0	0.0	12.0	6.3	8.7	82	9,500	--	--
24...	0947	60.0	.5	12.0	6.7	9.0	87	14,700	--	--
24...	0948	60.0	1.0	12.5	7.0	9.3	93	19,300	--	7
24...	0949	60.0	1.5	12.5	7.2	8.2	83	23,500	--	--
24...	0950	60.0	2.0	12.5	7.1	7.4	75	24,200	--	--
24...	1420	90.0	0	13.5	7.0	9.9	100	16,600	--	--
24...	1421	90.0	.5	13.5	7.3	10.1	102	17,200	--	--
24...	1422	90.0	.8	13.0	7.3	9.4	95	21,700	--	--
24...	1500	5.00	0	15.5	7.1	10.0	104	16,400	--	--
24...	1501	5.00	.5	15.5	7.1	10.0	104	16,400	--	--
24...	1502	5.00	1.0	15.5	7.1	10.2	107	16,600	--	--
24...	1503	5.00	1.6	13.0	7.3	8.8	91	24,100	--	--
24...	1540	60.0	--	--	--	--	--	--	.64	--
24...	1541	60.0	0	14.5	7.0	9.8	100	16,000	--	--
24...	1542	60.0	.5	14.5	7.0	9.8	101	16,200	--	--
24...	1543	60.0	1.0	13.0	7.4	9.2	94	21,900	--	5
24...	1544	60.0	1.5	13.0	7.4	9.2	94	23,400	--	--
24...	1545	60.0	2.0	13.0	7.2	8.1	83	24,300	--	--

01408200 APPENDIX B
- BARNEGAT BAY AT BAY SHORE

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
AUG. 1989										
24...	0826	60.0	--	--	--	--	--	--	0.61	--
24...	0827	60.0	0.0	25.0	7.4	6.4	82	16,400	--	--
24...	0828	60.0	.5	25.0	7.4	6.3	81	16,600	--	--
24...	0829	60.0	1.0	25.0	7.4	6.3	81	16,600	--	10
24...	0830	60.0	1.5	25.0	7.4	6.3	81	16,600	--	--
24...	1404	60.0	--	--	--	--	--	--	.46	--
24...	1405	60.0	0	25.5	7.6	7.8	102	17,000	--	--
24...	1406	60.0	.5	25.5	7.6	7.9	103	17,000	--	--
24...	1407	60.0	1.1	26.0	7.6	7.6	100	17,100	--	23
24...	1408	60.0	1.7	26.0	7.6	7.4	97	17,100	--	--
SEPT.										
25...	1006	60.0	--	--	--	--	--	--	.66	--
25...	1007	60.0	0	18.5	6.9	8.5	97	19,400	--	--
25...	1008	60.0	.5	17.5	7.0	8.5	95	19,400	--	--
25...	1009	60.0	1.0	17.5	7.0	8.5	95	19,900	--	5
25...	1010	60.0	1.5	17.5	7.0	8.2	92	20,400	--	--
25...	1011	60.0	1.8	18.0	7.0	7.6	86	22,000	--	--
25...	1620	60.0	--	--	--	--	--	--	.51	--
25...	1621	60.0	0	19.0	7.7	9.0	103	20,600	--	--
25...	1622	60.0	.5	19.0	7.6	8.9	102	20,800	--	--
25...	1623	60.0	1.0	18.5	7.6	8.7	100	21,000	--	24
25...	1624	60.0	1.5	18.5	7.6	8.6	99	21,100	--	--
25...	1625	60.0	1.8	18.5	7.6	8.6	99	21,100	--	--
OCT.										
24...	0925	60.0	--	--	--	--	--	--	.61	--
24...	0926	60.0	0	12.0	6.8	9.2	88	13,100	--	--
24...	0927	60.0	.5	12.0	7.3	9.8	96	19,300	--	--
24...	0928	60.0	1.0	12.5	7.4	9.9	98	20,000	--	8
24...	0929	60.0	1.5	12.5	7.4	9.6	97	24,400	--	--
24...	0930	60.0	2.0	12.5	7.3	9.5	96	24,400	--	--
24...	1520	60.0	--	--	--	--	--	--	.81	--
24...	1521	60.0	0	13.0	7.5	10.4	105	19,200	--	--
24...	1522	60.0	.5	13.0	7.5	10.2	103	20,200	--	--
24...	1523	60.0	1.0	13.0	7.5	10.1	102	21,200	--	10
24...	1524	60.0	1.7	13.0	7.5	9.5	97	24,300	--	--

Appendix C. Water-quality data collected at stations in and near the estuary of the Great Egg Harbor River

The following table contains water-quality data collected at stations in and near the Great Egg Harbor River estuary. For each station, the station number and station name are given. Data for selected properties and constituents are listed for each observation. Missing data are represented with a double dash. The stations for which data are included in appendix C are listed below:

Station number	Station name
01411170	Great Egg Harbor River at Mays Landing
01411205	Great Egg Harbor River at Gravelly Run
01411210	Great Egg Harbor River at Catawba
01411225	Great Egg Harbor River near Estellville
01411235	Great Egg Harbor River at Scull Landing
01411239	Great Egg Harbor River near Gibson Landing
01411246	Great Egg Harbor River near English Creek Landing
01411260	Great Egg Harbor River at English Creek Landing
01411268	Great Egg Harbor River at Jeffers Landing
391747074381700	Great Egg Harbor Bay near Beesleys Point
01411315	Great Egg Harbor Bay at Beesleys Point
391847074415600	Middle River near English Creek
391827074404800	Middle River near Jeffers Landing
392009074354700	Patcong Creek near Linwood
391855074374500	Patcong Creek at mouth near Somers Point

Other symbols and abbreviations used in appendix C are listed below:

Symbols and abbreviations	Definitions
SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	sample location in cross-section, as percentage of bank-to-bank distance from right to left bank looking upstream
m	meters
deg C	degrees Celsius
mg/L	milligrams per liter
μ S/cm	microsiemens per centimeter at 25 degrees Celsius
%	percent

01411170 APPENDIX C
- GREAT EGG HARBOR RIVER AT MAYS LANDING

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
24...	1015	50.0	--	--	--	--	--	--	0.43	--
24...	1016	50.0	0.0	24.0	4.9	7.0	84	57	--	--
24...	1017	50.0	1.0	24.0	4.8	7.0	84	56	--	13
24...	1610	50.0	--	--	--	--	--	--	.41	--
24...	1611	50.0	0	25.0	4.9	6.5	80	58	--	--
24...	1612	50.0	1.0	25.0	4.8	6.4	78	57	--	9
24...	1613	50.0	2.0	25.0	4.8	6.4	78	57	--	--
AUG.										
21...	0850	50.0	--	--	--	--	--	--	.33	--
21...	0851	50.0	0	23.0	4.7	7.1	83	57	--	--
21...	0852	50.0	1.0	23.0	4.8	7.1	83	57	--	9
21...	0853	50.0	1.5	23.0	4.8	7.1	83	57	--	--
21...	1435	50.0	--	--	--	--	--	--	.33	--
21...	1436	50.0	0	23.0	4.9	7.0	82	58	--	--
21...	1437	50.0	1.0	23.0	4.9	7.0	82	58	--	9
21...	1438	50.0	2.0	23.0	4.9	7.0	82	60	--	--
SEPT.										
18...	1335	50.0	--	--	--	--	--	--	.69	--
18...	1336	50.0	0	22.0	5.8	8.0	93	56	--	--
18...	1337	50.0	1.0	--	--	--	--	--	--	5
18...	1338	50.0	2.0	22.0	5.8	7.8	90	56	--	--
18...	1339	50.0	3.5	22.0	5.9	7.8	90	57	--	--
18...	1940	50.0	0	22.0	5.7	7.6	88	57	--	--
18...	1941	50.0	1.5	22.0	5.7	7.5	87	56	--	4
OCT.										
17...	1315	50.0	--	--	--	--	--	--	.76	--
17...	1316	50.0	0	17.0	5.2	8.8	92	58	--	--
17...	1317	50.0	1.5	17.0	5.2	8.7	90	58	--	6
17...	1318	50.0	3.8	16.5	5.2	8.5	88	59	--	--
17...	1940	50.0	0	17.5	5.3	8.3	87	60	--	--
17...	1941	50.0	.5	--	--	--	--	--	--	5
17...	1942	50.0	1.5	17.5	5.3	8.4	88	60	--	--

01411205 - GREAT EGG HARBOR RIVER AT GRAVELLY RUN

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
SEPT. 1989										
18...	1310	60.0	0.0	23.0	6.0	5.7	67	1,990	--	--
18...	1311	60.0	1.5	23.0	6.0	5.6	66	2,140	--	--
18...	1312	60.0	2.5	23.0	6.0	5.4	64	2,330	--	--
OCT.										
17...	1255	60.0	1.5	18.5	5.6	7.3	78	672	--	--

01411210 APPENDIX C
- GREAT EGG HARBOR RIVER AT CATAWBA

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
24...	0945	60.0	--	--	--	--	--	--	0.38	--
24...	0946	60.0	0.0	24.5	4.9	5.9	71	58	--	--
24...	0947	60.0	1.5	24.5	4.8	6.0	72	57	--	23
24...	0948	60.0	3.0	24.0	4.7	5.9	71	57	--	--
24...	1545	60.0	--	--	--	--	--	--	.36	--
24...	1546	60.0	0	26.5	5.4	4.8	60	146	--	--
24...	1547	60.0	2.0	26.0	5.4	4.7	59	149	--	23
24...	1548	60.0	4.0	26.0	5.3	4.7	59	145	--	--
AUG.										
21...	0830	60.0	--	--	--	--	--	--	.33	--
21...	0831	60.0	0	23.0	4.9	6.3	74	59	--	--
21...	0832	60.0	1.0	23.0	4.9	6.4	75	59	--	15
21...	0833	60.0	2.0	23.5	4.9	6.6	78	59	--	--
21...	1415	60.0	--	--	--	--	--	--	.33	--
21...	1416	60.0	0	24.0	5.7	5.4	65	324	--	--
21...	1417	60.0	2.0	24.0	5.7	5.2	62	349	--	15
21...	1418	60.0	3.5	24.0	5.9	5.3	63	350	--	--
SEPT.										
18...	1300	60.0	--	--	--	--	--	--	.76	--
18...	1301	60.0	0	23.5	6.3	5.3	64	6,000	--	--
18...	1302	60.0	1.5	23.5	6.3	5.1	62	6,600	--	6
18...	1303	60.0	3.0	23.5	6.3	5.2	63	7,030	--	--
18...	1920	60.0	0	22.0	5.6	6.2	72	330	--	--
18...	1921	60.0	1.5	22.0	5.6	6.3	73	304	--	17
18...	1922	60.0	3.0	22.0	5.7	6.3	73	287	--	--
OCT.										
17...	1245	60.0	--	--	--	--	--	--	.53	--
17...	1246	60.0	0	18.5	6.0	7.0	76	3,280	--	--
17...	1247	60.0	2.5	18.5	6.0	7.0	76	3,280	--	12
17...	1248	60.0	4.7	18.5	6.1	7.0	76	3,300	--	--
17...	1900	60.0	0	18.0	5.3	7.6	81	101	--	--
17...	1901	60.0	1.0	--	--	--	--	--	--	23
17...	1902	60.0	2.0	18.0	5.3	7.7	82	96	--	--

01411225 - GREAT EGG HARBOR RIVER NEAR ESTELLVILLE

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
24...	1535	50.0	2.5	27.0	6.4	4.2	53	1,300	--	--
AUG.										
21...	1405	50.0	2.0	24.5	6.5	5.0	61	2,070	--	--
SEPT.										
18...	1250	50.0	2.0	23.5	6.5	4.7	59	15,400	--	--
OCT.										
17...	1230	50.0	2.0	19.0	6.4	6.8	76	10,200	--	--
17...	1850	50.0	1.0	18.5	5.4	7.7	83	203	--	--

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
24...	0920	50.0	--	--	--	--	--	--	0.33	--
24...	0921	50.0	0.0	25.5	5.2	5.4	67	126	--	--
24...	0922	50.0	4.0	25.5	5.1	5.0	62	126	--	32
24...	0923	50.0	7.0	25.5	5.1	5.0	62	127	--	--
24...	1525	50.0	--	--	--	--	--	--	.46	--
24...	1526	50.0	0	27.5	6.3	4.2	54	3,050	--	--
24...	1527	50.0	2.0	27.0	6.2	4.2	54	4,660	--	--
24...	1528	50.0	3.0	--	--	--	--	--	--	17
24...	1529	50.0	4.0	27.0	6.3	4.1	53	5,960	--	--
AUG.										
21...	0810	50.0	--	--	--	--	--	--	.30	--
21...	0811	50.0	0	24.0	5.3	5.3	63	204	--	--
21...	0812	50.0	2.0	24.0	5.3	5.3	63	200	--	19
21...	0813	50.0	4.0	24.0	5.3	5.2	62	211	--	--
21...	1350	50.0	--	--	--	--	--	--	.46	--
21...	1351	50.0	0	24.5	6.5	5.1	63	5,640	--	--
21...	1352	50.0	3.0	25.0	6.6	4.9	61	7,170	--	13
21...	1353	50.0	5.0	25.0	6.7	4.9	61	7,210	--	--
SEPT.										
18...	1230	50.0	--	--	--	--	--	--	.97	--
18...	1231	50.0	0	23.5	6.6	4.8	61	16,500	--	--
18...	1232	50.0	.5	24.0	6.6	4.5	57	19,100	--	--
18...	1233	50.0	5.0	24.0	6.7	4.4	57	22,700	--	11
18...	1234	50.0	9.0	24.0	6.7	4.4	57	22,700	--	--
18...	1900	50.0	0	23.0	6.1	5.5	66	4,150	--	--
18...	1901	50.0	2.0	23.0	6.1	5.5	66	4,640	--	19
18...	1902	50.0	3.7	23.0	6.2	5.6	67	4,880	--	--
OCT.										
17...	1220	50.0	--	--	--	--	--	--	.74	--
17...	1221	50.0	0	19.0	6.6	6.7	77	18,100	--	--
17...	1222	50.0	2.0	19.0	6.6	6.7	77	18,000	--	17
17...	1223	50.0	4.0	19.0	6.6	6.8	78	18,000	--	--
17...	1840	50.0	0	19.0	5.8	7.2	78	1,170	--	--
17...	1841	50.0	1.5	19.0	5.8	7.1	77	1,240	--	22
17...	1842	50.0	3.0	19.0	5.9	7.1	77	1,370	--	--

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
24...	1515	75.0	3.0	27.5	6.7	4.3	57	9,640	--	--
AUG.										
21...	0805	75.0	2.5	24.0	5.6	5.2	62	367	--	--
21...	1345	75.0	3.0	25.0	6.9	5.0	63	11,800	--	--
SEPT.										
18...	1230	75.0	3.0	23.5	6.8	4.4	58	26,200	--	--
18...	1900	75.0	2.5	23.5	6.2	5.3	64	7,300	--	--
OCT.										
17...	1215	75.0	3.0	19.0	6.7	6.6	77	22,000	--	--
17...	1830	75.0	2.5	19.0	6.0	7.0	77	2,780	--	--

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
24...	0906	60.0	0.0	26.5	5.9	4.7	59	756	--	--
24...	0907	60.0	2.0	26.0	5.9	4.3	54	1,010	--	25
24...	0908	60.0	4.5	26.0	5.8	4.2	53	1,030	--	--
24...	1505	60.0	--	--	--	--	--	--	0.74	--
24...	1506	60.0	0	28.0	6.8	4.6	62	14,200	--	--
24...	1507	60.0	3.0	27.5	6.7	4.4	59	15,500	--	14
24...	1508	60.0	5.0	27.5	6.7	4.3	58	15,700	--	--
AUG.										
21...	0800	60.0	--	--	--	--	--	--	.41	--
21...	0801	60.0	0	24.5	6.0	4.9	59	1,450	--	--
21...	0802	60.0	2.0	24.5	6.0	4.5	55	2,030	--	20
21...	0803	60.0	4.0	24.5	6.1	4.5	55	2,060	--	--
21...	1330	60.0	--	--	--	--	--	--	.71	--
21...	1331	60.0	0	25.0	6.9	5.3	68	16,100	--	--
21...	1332	60.0	3.0	25.0	6.9	5.2	67	17,500	--	15
21...	1333	60.0	5.0	25.0	6.9	5.2	67	17,400	--	--
SEPT.										
18...	1215	60.0	--	--	--	--	--	--	.79	--
18...	1216	60.0	0	23.5	6.9	4.7	60	22,000	--	--
18...	1217	60.0	.5	23.5	--	--	--	30,000	--	--
18...	1218	60.0	3.0	23.5	6.9	4.5	59	30,200	--	19
18...	1219	60.0	6.0	23.5	6.9	4.6	61	30,200	--	--
18...	1845	60.0	0	23.5	6.4	5.0	62	12,800	--	--
18...	1846	60.0	2.8	23.5	6.4	4.9	61	13,400	--	9
18...	1847	60.0	4.0	23.5	6.4	4.8	60	13,900	--	--
OCT.										
17...	1200	60.0	--	--	--	--	--	--	.74	--
17...	1201	60.0	0	19.0	6.9	6.8	81	26,700	--	--
17...	1202	60.0	4.0	--	--	--	--	--	--	33
17...	1203	60.0	5.0	19.0	6.9	6.7	80	27,800	--	--
17...	1204	60.0	7.4	19.0	6.9	6.7	80	27,900	--	--
17...	1820	60.0	0	19.0	6.2	6.9	76	6,800	--	--
17...	1821	60.0	2.5	19.0	6.3	6.8	76	7,460	--	21
17...	1822	60.0	4.5	19.5	6.4	6.5	73	8,760	--	--

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
24...	0858	80.0	2.5	26.5	--	--	--	2,670	--	--
24...	1500	80.0	3.0	27.5	7.0	4.6	63	20,300	--	--
AUG.										
21...	0750	80.0	3.0	24.5	6.3	4.8	59	4,500	--	--
21...	1325	80.0	3.0	25.0	7.0	5.5	72	21,000	--	--
SEPT.										
18...	1210	80.0	3.0	23.5	7.0	4.7	63	33,900	--	--
18...	1840	80.0	3.0	24.0	6.5	4.8	61	17,600	--	--
OCT.										
17...	1150	80.0	3.0	19.0	7.0	6.7	81	31,400	--	--
17...	1810	80.0	2.5	19.0	6.5	7.1	80	12,000	--	--

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
24...	0845	80.0	--	--	--	--	--	--	0.56	--
24...	0846	80.0	0.0	27.0	6.7	4.9	64	7,890	--	--
24...	0847	80.0	1.0	27.0	6.5	4.5	58	7,890	--	--
24...	0848	80.0	2.0	26.5	6.4	4.4	57	8,790	--	--
24...	0849	80.0	3.0	26.5	6.4	4.3	56	9,180	--	--
24...	0850	80.0	4.0	26.5	6.4	4.3	56	9,530	--	--
24...	0851	80.0	5.0	26.5	6.4	4.3	56	9,780	--	23
24...	0852	80.0	6.0	26.5	6.4	4.3	56	9,810	--	--
24...	0853	80.0	7.0	26.5	6.4	4.3	56	9,790	--	--
24...	0854	80.0	10.0	26.5	6.5	4.4	58	12,200	--	--
24...	1440	80.0	--	--	--	--	--	--	.76	--
24...	1441	80.0	0	28.5	7.0	5.2	72	19,100	--	--
24...	1442	80.0	1.0	27.5	7.3	5.6	78	26,500	--	--
24...	1443	80.0	3.0	27.5	7.3	5.1	73	31,500	--	--
24...	1444	80.0	6.0	27.5	7.2	5.0	71	32,100	--	17
24...	1445	80.0	10.0	27.5	7.3	5.0	71	32,400	--	--
AUG.										
21...	0740	80.0	--	--	--	--	--	--	.64	--
21...	0741	80.0	0	25.0	6.5	4.8	60	9,420	--	--
21...	0742	80.0	3.0	25.0	6.5	4.7	59	10,100	--	15
21...	0743	80.0	6.0	25.0	6.6	4.8	61	11,900	--	--
21...	1310	80.0	--	--	--	--	--	--	.64	--
21...	1311	80.0	0	25.0	7.2	6.0	80	25,700	--	--
21...	1312	80.0	4.5	25.0	7.3	5.4	73	32,000	--	12
21...	1313	80.0	8.0	25.0	7.3	5.4	74	32,700	--	--
SEPT.										
18...	1200	80.0	--	--	--	--	--	--	.94	--
18...	1201	80.0	0	23.0	7.3	5.1	70	40,800	--	--
18...	1202	80.0	5.0	23.0	7.3	5.0	69	41,100	--	15
18...	1203	80.0	9.0	23.0	7.3	5.0	69	41,500	--	--
18...	1830	80.0	0	23.5	6.7	4.8	62	24,800	--	--
18...	1831	80.0	6.0	23.5	6.7	4.7	61	25,800	--	28
18...	1832	80.0	10.0	23.5	6.7	4.7	61	26,200	--	--
OCT.										
17...	1130	80.0	--	--	--	--	--	--	0.76	--
17...	1131	80.0	0.0	19.0	7.2	7.4	93	38,800	--	--
17...	1132	80.0	5.0	--	--	--	--	--	--	29
17...	1133	80.0	6.0	19.0	7.3	6.7	84	40,400	--	--
17...	1134	80.0	8.0	19.0	7.3	6.7	84	40,400	--	--
17...	1800	80.0	0	19.5	6.7	6.7	78	19,200	--	--
17...	1801	80.0	5.3	19.5	6.7	6.6	77	19,800	--	25
17...	1802	80.0	10.5	19.5	6.7	6.7	79	21,200	--	--

APPENDIX C
391747074381700 - GREAT EGG HARBOR BAY NEAR BEESLEYS POINT

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
24...	0840	75.0	4.0	--	--	--	--	15,500	--	--
24...	1430	75.0	5.0	26.5	--	--	--	40,700	--	--
25...	0918	75.0	4.5	27.5	6.5	4.1	54	14,600	--	--
25...	1520	75.0	5.0	27.0	7.5	7.0	100	39,100	--	--
AUG.										
21...	0730	75.0	3.0	25.0	6.7	4.9	63	16,600	--	--
21...	1300	75.0	5.0	24.5	7.5	5.6	78	41,600	--	--
22...	0800	75.0	4.5	25.0	6.6	5.0	64	16,700	--	--
22...	1400	75.0	5.0	24.5	7.3	5.4	76	43,200	--	--
SEPT.										
18...	1150	75.0	5.0	22.5	7.5	5.6	78	45,100	--	--
18...	1820	75.0	5.0	23.5	6.9	4.9	66	33,400	--	--
21...	0805	75.0	4.0	23.0	6.4	5.1	63	16,000	--	--
21...	1415	75.0	0	25.5	7.2	5.7	78	33,600	--	--
21...	1416	75.0	1.0	25.0	--	--	--	33,800	--	--
21...	1417	75.0	2.0	24.5	--	--	--	34,900	--	--
21...	1418	75.0	3.0	24.0	--	--	--	35,900	--	--
21...	1419	75.0	5.0	23.5	7.4	6.0	82	39,400	--	--
21...	1420	75.0	9.0	23.5	7.4	6.0	82	39,600	--	--
OCT.										
16...	1030	75.0	5.5	17.5	7.5	6.6	83	46,000	--	--
16...	1710	75.0	4.5	19.0	7.0	6.3	76	28,500	--	--
17...	1115	75.0	4.5	18.0	7.4	7.1	90	45,300	--	--
17...	1755	75.0	4.5	19.5	6.9	6.6	79	26,200	--	--

01411315

- GREAT EGG HARBOR BAY AT BEESLEYS POINT

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
24...	0814	70.0	--	--	--	--	--	--	0.71	--
24...	0815	70.0	0.5	27.0	6.7	4.5	60	16,600	--	12
24...	0816	70.0	1.0	27.0	6.6	4.4	59	16,100	--	--
24...	0817	70.0	2.0	27.0	6.6	4.4	59	16,600	--	--
24...	0818	70.0	3.0	27.0	6.6	4.4	59	17,300	--	--
24...	0819	70.0	4.0	27.0	6.6	4.4	59	17,600	--	--
24...	0820	70.0	5.0	27.0	6.6	4.4	59	17,800	--	--
24...	0821	70.0	6.0	27.0	6.6	4.4	59	18,100	--	32
24...	0822	70.0	7.0	27.0	6.6	4.4	60	18,400	--	--
24...	0823	70.0	8.0	27.0	6.6	4.4	60	18,600	--	--
24...	0824	70.0	9.0	27.0	6.7	4.4	60	19,500	--	--
24...	0825	70.0	11.0	--	--	--	--	--	--	47
24...	1409	70.0	--	--	--	--	--	--	1.24	--
24...	1410	70.0	0	27.5	7.7	6.6	97	38,900	--	--
24...	1411	70.0	.5	--	--	--	--	--	--	12
24...	1412	70.0	5.0	26.0	7.7	6.2	90	41,600	--	16
24...	1413	70.0	9.0	26.0	7.8	6.5	94	42,300	--	14
25...	0859	70.0	--	--	--	--	--	--	.76	--
25...	0900	70.0	0	27.5	6.5	4.3	56	13,800	--	--
25...	0901	70.0	.5	--	--	--	--	--	--	16
25...	0902	70.0	5.0	27.5	6.5	4.1	54	16,100	--	15
25...	0903	70.0	8.0	27.5	6.5	4.1	55	17,200	--	28
25...	0904	70.0	9.0	27.5	6.5	4.1	54	17,100	--	--
25...	1429	10.0	--	--	--	--	--	--	1.07	--
25...	1430	10.0	0	26.5	7.6	8.1	116	40,900	--	--
25...	1431	10.0	1.5	26.5	7.6	8.1	116	41,100	--	--
25...	1432	10.0	3.0	26.5	7.6	8.1	116	41,500	--	--
25...	1459	70.0	--	--	--	--	--	--	1.04	--
25...	1500	70.0	0	28.0	7.5	7.9	114	37,400	--	--
25...	1501	70.0	5.5	27.0	7.6	7.5	107	40,300	--	17
25...	1502	70.0	8.0	26.5	7.6	7.6	109	40,900	--	--

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
AUG. 1989										
21...	0719	70.0	--	--	--	--	--	--	0.74	--
21...	0720	70.0	0.0	25.0	6.7	4.9	63	16,900	--	--
21...	0721	70.0	6.0	25.0	6.7	4.8	62	19,000	--	18
21...	0722	70.0	10.0	25.0	6.7	4.9	64	19,500	--	--
21...	1240	10.0	0	24.0	7.6	5.8	81	43,900	--	--
21...	1241	10.0	2.0	23.5	7.7	5.7	80	44,600	--	--
21...	1242	10.0	3.5	23.5	7.7	5.7	80	44,900	--	--
21...	1249	70.0	--	--	--	--	--	--	.84	--
21...	1250	70.0	0	24.5	7.5	5.8	81	40,200	--	--
21...	1251	70.0	6.0	24.0	7.6	5.7	80	42,700	--	27
21...	1252	70.0	10.0	24.0	7.6	5.7	80	43,200	--	--
22...	0744	70.0	--	--	--	--	--	--	.69	--
22...	0745	70.0	0	25.0	6.6	5.3	68	16,500	--	--
22...	0746	70.0	5.0	25.0	6.6	5.1	66	18,800	--	20
22...	0747	70.0	10.0	25.0	6.6	5.1	66	19,300	--	--
22...	1344	70.0	--	--	--	--	--	--	1.07	--
22...	1345	70.0	0	25.0	7.3	5.7	80	41,600	--	--
22...	1346	70.0	5.0	24.0	7.3	5.4	76	44,100	--	15
22...	1347	70.0	9.0	24.0	7.3	5.4	76	44,400	--	--
SEPT.										
18...	1119	10.0	--	--	--	--	--	--	1.52	--
18...	1120	10.0	0.0	22.5	7.6	6.0	83	46,100	--	--
18...	1121	10.0	2.0	22.5	7.6	6.0	83	46,400	--	--
18...	1122	10.0	3.5	22.5	7.6	5.9	82	46,300	--	--
18...	1139	70.0	--	--	--	--	--	--	1.27	--
18...	1140	70.0	0	23.0	7.5	5.7	79	44,500	--	--
18...	1141	70.0	6.0	22.5	7.5	5.6	78	45,500	--	15
18...	1142	70.0	10.0	22.5	7.5	5.7	79	45,600	--	--
18...	1800	70.0	0	23.5	6.9	4.9	66	33,000	--	--
18...	1801	70.0	6.0	23.5	6.9	4.9	66	33,400	--	29
18...	1802	70.0	11.5	23.5	7.0	4.9	66	34,300	--	--
21...	0754	70.0	--	--	--	--	--	--	.97	--
21...	0755	70.0	0	23.0	6.9	5.2	62	5,670	--	--
21...	0756	70.0	.5	23.0	6.5	5.1	63	17,100	--	--
21...	0757	70.0	6.0	23.5	6.5	5.0	63	19,000	--	34
21...	0758	70.0	10.0	23.5	6.5	4.9	62	19,200	--	--
21...	1403	70.0	--	--	--	--	--	--	1.24	--
21...	1404	70.0	0	24.0	7.4	6.2	85	37,600	--	--
21...	1405	70.0	5.5	23.5	7.5	6.4	88	41,400	--	16
21...	1406	70.0	10.0	23.5	7.5	7.0	96	41,500	--	--
OCT.										
16...	1000	10.0	0	17.5	7.6	7.1	90	47,000	--	--
16...	1001	10.0	2.0	17.5	7.6	7.1	90	47,000	--	--
16...	1002	10.0	4.2	17.5	7.6	7.1	90	47,000	--	--
16...	1019	70.0	--	--	--	--	--	--	1.47	--
16...	1020	70.0	0	17.5	7.5	6.7	84	46,200	--	--
16...	1021	70.0	6.5	17.5	7.5	6.6	83	46,600	--	19
16...	1022	70.0	11.0	17.5	7.5	6.6	83	46,500	--	--
16...	1659	70.0	--	--	--	--	--	--	.64	--
16...	1700	70.0	0	19.0	7.0	6.3	76	29,500	--	--
16...	1701	70.0	6.0	19.5	7.1	6.3	77	30,700	--	67
16...	1702	70.0	10.0	19.5	7.1	6.6	81	31,200	--	--
17...	1100	70.0	0	18.5	7.4	7.0	89	45,400	--	--
17...	1101	70.0	6.5	18.0	7.4	6.8	86	46,100	--	15
17...	1102	70.0	11.0	18.0	7.4	6.8	86	46,300	--	--
17...	1745	70.0	0	19.5	7.0	6.7	81	27,500	--	--
17...	1746	70.0	5.0	--	--	--	--	--	--	57
17...	1747	70.0	6.0	19.5	7.0	6.7	82	29,100	--	--
17...	1748	70.0	9.0	19.5	7.0	6.6	80	29,300	--	--

APPENDIX C
391847074415600 - MIDDLE RIVER NEAR ENGLISH CREEK LANDING

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
25...	1236	50.0	--	--	--	--	--	--	0.64	--
25...	1237	50.0	0.0	28.5	6.5	3.6	48	13,200	--	--
25...	1238	50.0	3.0	28.5	6.5	3.6	48	13,200	--	--
25...	1239	50.0	5.0	28.5	6.5	3.6	48	13,200	--	--
AUG.										
21...	1110	50.0	0	25.0	6.7	4.1	53	15,700	--	--
21...	1111	50.0	3.0	25.0	6.8	4.2	54	15,700	--	--
21...	1112	50.0	5.0	25.5	6.8	4.2	54	15,700	--	--
SEPT.										
18...	1725	50.0	0	24.0	6.6	4.0	52	25,500	--	--
18...	1726	50.0	4.0	24.0	6.6	4.0	52	25,600	--	--
18...	1727	50.0	6.0	24.0	6.6	4.1	54	25,700	--	--
OCT.										
17...	1700	50.0	--	--	--	--	--	--	.51	--
17...	1701	50.0	0	21.0	6.6	5.7	68	18,400	--	--
17...	1702	50.0	2.0	21.0	6.6	5.7	68	18,400	--	--
17...	1703	50.0	4.0	21.0	6.6	5.8	69	18,600	--	--

391827074404800 - MIDDLE RIVER NEAR JEFFERS LANDING

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
25...	1228	--	--	--	--	--	--	--	0.53	--
25...	1229	50.0	0.0	28.0	6.5	4.2	55	12,600	--	--
25...	1230	50.0	3.0	28.0	6.4	4.2	55	12,600	--	--
25...	1231	50.0	5.0	28.0	6.4	4.2	55	12,600	--	--
AUG.										
21...	1054	50.0	0	25.0	6.8	5.1	66	17,900	--	--
21...	1055	50.0	3.0	25.0	6.8	5.1	66	18,100	--	--
21...	1056	50.0	6.0	25.0	6.8	5.1	66	18,100	--	--
SEPT.										
18...	1713	50.0	0	24.0	6.6	4.1	54	27,300	--	--
18...	1714	50.0	5.0	24.0	6.6	4.3	57	28,300	--	--
18...	1715	50.0	9.5	24.0	6.6	4.3	57	28,600	--	--
OCT.										
17...	1645	50.0	--	--	--	--	--	--	.48	--
17...	1646	50.0	0	20.5	6.7	6.1	73	21,500	--	--
17...	1647	50.0	3.0	20.5	6.7	6.1	73	21,800	--	--
17...	1648	50.0	6.0	20.5	6.7	6.2	74	21,800	--	--

APPENDIX C
392009074354700 - PATCONG CREEK NEAR LINWOOD

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
24...	1300	50.0	--	--	--	--	--	--	0.38	--
24...	1301	50.0	0.0	28.0	6.8	3.9	53	14,900	--	--
24...	1302	50.0	1.5	28.0	6.7	3.9	53	14,900	--	--
24...	1303	50.0	3.0	28.0	6.6	3.9	53	14,900	--	--
AUG.										
22...	1310	50.0	0	25.5	6.6	5.1	67	20,000	--	--
22...	1311	50.0	2.5	25.5	6.6	5.2	68	20,200	--	55
22...	1312	50.0	4.0	25.5	6.6	5.1	67	20,200	--	--
SEPT.										
21...	1340	50.0	--	--	--	--	--	--	.74	--
21...	1341	50.0	0	24.0	6.6	4.5	58	19,500	--	--
21...	1342	50.0	1.5	24.0	6.6	4.8	61	19,500	--	21
21...	1343	50.0	3.2	24.0	6.6	4.5	58	19,600	--	--

391855074374500 - PATCONG CREEK AT MOUTH NEAR SOMERS POINT

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
24...	1240	50.0	--	--	--	--	--	--	0.79	--
24...	1241	50.0	0.0	28.0	7.2	5.3	76	29,900	--	--
24...	1242	50.0	3.0	27.5	7.2	5.2	74	31,700	--	--
24...	1243	50.0	7.0	27.0	7.3	5.2	74	33,000	--	--
AUG.										
22...	1330	50.0	--	--	--	--	--	--	.94	--
22...	1331	50.0	2.5	25.0	7.1	5.4	76	40,100	--	--
SEPT.										
21...	1321	50.0	--	--	--	--	--	--	1.04	--
21...	1322	50.0	0	24.5	7.0	5.4	72	31,400	--	--
21...	1323	50.0	3.5	24.0	7.1	5.4	73	32,900	--	--
21...	1324	50.0	4.5	24.0	7.1	5.6	75	33,000	--	--
21...	1325	50.0	6.3	24.0	7.1	5.4	73	33,800	--	--

Appendix D. Water-quality data collected at stations in and near the estuary of the Tuckahoe River

The following table contains water-quality data collected at stations in and near the Tuckahoe River estuary. For each station, the station number and station name are given. Data for selected properties and constituents are listed for each observation. Missing data are represented with a double dash. The stations for which data are included in appendix D are listed below:

Station number	Station name
391823074490200	Tuckahoe River 1,100 feet downstream of Route 49 at Head of River
391817074473600	Tuckahoe River near Marshallville
391742074450900	Tuckahoe River at Route 50 bridge at Tuckahoe
391754074431000	Tuckahoe River near Tuckahoe
391726074420300	Tuckahoe River near Middletown
391750074403800	Tuckahoe River at tower bases near Middletown
391747074393200	Tuckahoe River near Beesleys Point
391450074430300	Cedar Swamp Creek at Petersburg
391543074420900	Cedar Swamp Creek near Middletown

Other symbols and abbreviations used in appendix D are listed below:

Symbols and abbreviations	Definitions
SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	sample location in cross-section, as percentage of bank-to-bank distance from right to left bank looking upstream
m	meters
deg C	degrees Celsius
mg/L	milligrams per liter
μ S/cm	microsiemens per centimeter at 25 degrees Celsius
%	percent

APPENDIX D
391823074490200 - TUCKAHOE RIVER 1,100 FEET DOWNSTREAM OF ROUTE 49 AT HEAD OF RIVER

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
OCT. 1989										
16...	1240	50.0	--	--	--	--	--	--	1.40	--
16...	1241	50.0	0.0	16.5	4.7	7.3	75	47	--	--
16...	1242	50.0	.5	16.0	4.7	7.3	74	60	--	--
16...	1243	50.0	1.0	15.5	4.5	7.7	78	50	--	--
16...	1244	50.0	2.0	15.0	4.5	7.9	78	51	--	--

391817074473600 - TUCKAHOE RIVER NEAR MARSHALLVILLE

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
25...	1100	50.0	--	--	--	--	--	--	0.53	--
25...	1101	50.0	0.0	24.0	4.7	4.5	53	64	--	--
25...	1102	50.0	.5	24.0	4.7	4.6	54	58	--	--
25...	1650	50.0	--	--	--	--	--	--	.38	--
25...	1651	50.0	0	28.5	5.6	4.1	52	413	--	--
25...	1652	50.0	1.5	28.0	5.5	3.9	49	437	--	--
AUG.										
22...	0925	50.0	--	--	--	--	--	--	.69	--
22...	0926	50.0	.5	22.5	4.4	4.7	54	55	--	8
22...	1525	50.0	--	--	--	--	--	--	.51	--
22...	1526	50.0	0	26.0	5.5	4.6	57	411	--	--
22...	1527	50.0	2.0	25.5	5.5	4.5	55	411	--	13
22...	1528	50.0	3.5	25.5	5.7	4.5	55	474	--	--
SEPT.										
21...	0945	50.0	--	--	--	--	--	--	.56	--
21...	0946	50.0	0	21.5	4.2	4.4	50	60	--	--
21...	0947	50.0	1.0	21.5	4.2	4.4	50	61	--	8
21...	0948	50.0	2.0	21.5	4.2	4.5	51	60	--	--
21...	1540	50.0	--	--	--	--	--	--	.53	--
21...	1541	50.0	0	23.5	4.6	4.0	47	83	--	--
21...	1542	50.0	2.0	22.5	4.6	4.0	47	82	--	8
21...	1543	50.0	3.5	22.5	4.6	4.0	47	87	--	--
OCT.										
16...	1200	50.0	--	--	--	--	--	--	.61	--
16...	1201	50.0	0	18.0	5.9	6.4	68	855	--	--
16...	1202	50.0	1.0	--	--	--	--	--	--	14
16...	1203	50.0	2.2	18.0	6.0	6.3	67	1,110	--	--
16...	1835	50.0	--	--	--	--	--	--	.53	--
16...	1836	50.0	0	18.5	5.0	6.0	64	95	--	--
16...	1837	50.0	1.0	18.5	5.1	6.0	64	91	--	6

APPENDIX D
391742074450900 - TUCKAHOE RIVER AT ROUTE 50 BRIDGE AT TUCKAHOE

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
25...	1025	50.0	--	--	--	--	--	--	0.48	--
25...	1026	50.0	0.0	27.5	5.6	3.5	44	638	--	--
25...	1027	50.0	2.0	27.0	5.5	3.4	42	620	--	--
25...	1028	50.0	4.0	27.0	5.5	3.5	43	614	--	--
25...	1625	50.0	--	--	--	--	--	--	.56	--
25...	1626	50.0	0	28.5	6.5	3.8	49	4,940	--	--
25...	1627	50.0	3.0	28.0	6.4	3.7	48	5,140	--	--
25...	1628	50.0	5.0	28.0	6.4	3.7	48	5,190	--	--
AUG.										
22...	0850	50.0	--	--	--	--	--	--	.43	--
22...	0851	50.0	0	24.0	5.4	4.4	53	378	--	--
22...	0852	50.0	2.5	24.0	5.4	4.4	53	377	--	21
22...	0853	50.0	4.5	24.0	5.5	4.3	51	376	--	--
22...	1500	50.0	--	--	--	--	--	--	.66	--
22...	1501	50.0	0	26.0	6.3	4.3	54	4,730	--	--
22...	1502	50.0	3.5	25.5	6.4	4.2	52	4,890	--	12
22...	1503	50.0	6.0	25.5	6.4	4.2	52	4,900	--	--
SEPT.										
21...	0900	50.0	--	--	--	--	--	--	.61	--
21...	0901	50.0	0	21.5	4.4	4.1	47	100	--	--
21...	0902	50.0	3.0	21.5	4.4	4.1	47	95	--	12
21...	0903	50.0	4.5	21.5	4.4	4.1	47	100	--	--
21...	1515	50.0	--	--	--	--	--	--	.58	--
21...	1516	50.0	0	23.5	6.0	4.3	51	2,560	--	--
21...	1517	50.0	2.5	23.5	6.0	4.2	50	2,790	--	10
21...	1518	50.0	4.5	23.5	6.1	4.2	50	2,760	--	--
OCT.										
16...	1130	50.0	--	--	--	--	--	--	.48	--
16...	1131	50.0	0	18.0	6.4	5.9	64	6,540	--	--
16...	1132	50.0	3.0	18.0	6.4	5.9	64	6,730	--	17
16...	1133	50.0	6.0	18.0	6.6	5.9	64	6,720	--	--
16...	1810	50.0	--	--	--	--	--	--	.48	--
16...	1811	50.0	0	19.0	6.0	6.3	69	1,270	--	--
16...	1812	50.0	2.0	19.0	6.0	6.3	69	1,290	--	20
16...	1813	50.0	4.4	19.5	6.0	6.3	69	1,280	--	--

APPENDIX D
391754074431000 - TUCKAHOE RIVER NEAR TUCKAHOE

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
25...	1014	50.0	--	--	--	--	--	--	0.53	--
25...	1015	50.0	2.0	27.0	6.1	3.4	43	2,270	--	--
25...	1611	50.0	--	--	--	--	--	--	.51	--
25...	1612	50.0	0	28.5	6.6	4.4	57	7,250	--	--
25...	1613	50.0	3.0	28.0	6.5	4.1	53	8,120	--	--
25...	1614	50.0	5.0	28.0	6.5	4.2	55	8,240	--	--
AUG.										
22...	0840	50.0	--	--	--	--	--	--	.51	--
22...	0841	50.0	2.0	24.5	6.0	4.4	53	1,680	--	--
22...	1450	50.0	--	--	--	--	--	--	.66	--
22...	1451	50.0	2.0	25.5	6.5	4.5	57	8,380	--	--
SEPT.										
21...	0850	50.0	--	--	--	--	--	--	.56	--
21...	0851	50.0	1.5	22.0	5.2	4.1	47	540	--	--
21...	1510	50.0	--	--	--	--	--	--	.79	--
21...	1511	50.0	2.0	24.0	6.4	4.1	50	7,400	--	--
OCT.										
16...	1120	50.0	3.0	18.0	6.8	6.5	73	15,500	--	--
16...	1800	50.0	--	--	--	--	--	--	.51	--
16...	1801	50.0	2.0	19.0	6.4	6.1	67	3,620	--	--

APPENDIX D
391726074420300 - TUCKAHOE RIVER NEAR MIDDLETOWN

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
25...	1000	75.0	--	--	--	--	--	--	0.56	--
25...	1001	75.0	0.0	27.5	6.3	3.0	38	5,500	--	--
25...	1002	75.0	2.0	27.5	6.2	2.8	36	5,510	--	--
25...	1003	75.0	3.0	27.5	6.2	2.8	36	5,530	--	--
25...	1600	75.0	--	--	--	--	--	--	.64	--
25...	1601	75.0	0	28.5	6.8	5.2	69	13,200	--	--
25...	1602	75.0	2.0	28.5	6.7	4.6	62	14,400	--	--
AUG.										
22...	0830	75.0	--	--	--	--	--	--	.56	--
22...	0831	75.0	0	25.0	6.3	4.3	53	4,400	--	--
22...	0832	75.0	1.5	25.0	6.3	3.5	43	4,890	--	14
22...	1440	75.0	--	--	--	--	--	--	.69	--
22...	1441	75.0	0	26.0	6.7	5.2	68	19,000	--	--
22...	1442	75.0	1.5	26.0	6.7	5.2	68	19,100	--	34
22...	1443	75.0	3.0	26.0	6.7	5.1	67	18,900	--	--
SEPT.										
21...	0835	75.0	--	--	--	--	--	--	.71	--
21...	0836	75.0	0	22.5	5.9	4.6	54	2,640	--	--
21...	0837	75.0	.5	22.5	5.9	5.0	59	3,110	--	--
21...	0838	75.0	1.0	--	--	--	--	3,180	--	--
21...	0839	75.0	1.5	22.5	6.0	3.4	40	4,830	--	11
21...	0840	75.0	2.4	23.0	6.0	3.3	39	4,960	--	--
21...	1545	75.0	--	--	--	--	--	--	.99	--
21...	1546	75.0	0	24.5	6.6	4.6	58	14,100	--	--
21...	1547	75.0	2.0	24.5	6.6	4.7	59	15,800	--	13
21...	1548	75.0	3.0	24.5	6.6	4.7	60	16,400	--	--
21...	1549	75.0	5.0	24.5	6.7	4.8	61	16,700	--	--
OCT.										
16...	1100	75.0	--	--	--	--	--	--	.66	--
16...	1101	75.0	0	18.0	7.0	6.2	73	27,200	--	--
16...	1102	75.0	3.0	18.0	7.0	6.2	73	28,800	--	65
16...	1103	75.0	5.0	18.0	7.0	6.2	73	29,400	--	--
16...	1740	75.0	--	--	--	--	--	--	.46	--
16...	1741	75.0	0	19.5	6.5	6.0	67	8,000	--	--
16...	1742	75.0	3.0	19.5	6.5	6.0	67	8,140	--	38
16...	1743	75.0	6.6	20.0	6.6	5.9	67	10,200	--	--

APPENDIX D
391750074403800 - TUCKAHOE RIVER AT TOWER BASES NEAR MIDDLETOWN

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
25...	0950	50.0	--	--	--	--	--	--	0.58	--
25...	0951	50.0	0.0	28.0	6.4	3.4	44	7,080	--	--
25...	0952	50.0	2.0	27.5	6.4	3.4	44	7,110	--	--
25...	0953	50.0	3.0	27.5	6.3	3.4	44	7,200	--	--
25...	1545	50.0	--	--	--	--	--	--	.76	--
25...	1546	50.0	0	29.0	6.8	5.1	70	19,800	--	--
25...	1547	50.0	4.0	29.0	6.8	5.0	69	20,200	--	--
AUG.										
22...	0820	50.0	--	--	--	--	--	--	.51	--
22...	0821	50.0	3.5	25.0	6.4	4.2	52	6,850	--	--
22...	1425	50.0	--	--	--	--	--	--	.79	--
22...	1426	50.0	5.5	26.0	6.8	5.4	72	24,700	--	--
SEPT.										
21...	0825	50.0	--	--	--	--	--	--	.71	--
21...	0826	50.0	5.0	23.0	6.1	4.0	48	6,400	--	--
21...	1445	50.0	0	24.5	6.8	5.1	66	21,800	--	--
21...	1446	50.0	3.0	24.5	6.8	5.1	66	21,800	--	--
21...	1447	50.0	6.0	24.5	6.8	5.2	68	22,200	--	--
OCT.										
16...	1055	50.0	4.0	18.0	7.2	6.1	74	35,100	--	--
16...	1735	50.0	--	--	--	--	--	--	.43	--
16...	1736	50.0	6.0	19.5	6.7	6.1	70	14,200	--	--

APPENDIX D
391747074393200 - TUCKAHOE RIVER NEAR BEESLEYS POINT

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989										
25...	0930	75.0	--	--	--	--	--	--	0.53	--
25...	0931	75.0	0.0	27.5	6.4	3.9	51	10,200	--	--
25...	0932	75.0	1.0	27.5	6.4	3.8	49	10,200	--	--
25...	0933	75.0	2.0	27.5	6.4	3.8	49	10,300	--	--
25...	0934	75.0	3.0	27.5	6.4	3.8	49	10,800	--	--
25...	1530	75.0	--	--	--	--	--	--	.91	--
25...	1531	75.0	0	29.0	7.0	5.8	81	22,400	--	--
25...	1532	75.0	4.0	28.5	7.1	5.9	83	29,200	--	--
25...	1533	75.0	7.0	28.0	7.1	5.9	83	31,100	--	--
AUG.										
22...	0810	75.0	--	--	--	--	--	--	.48	--
22...	0811	75.0	0	25.0	6.4	4.6	58	9,950	--	--
22...	0812	75.0	2.0	25.0	6.4	4.5	57	10,100	--	32
22...	0813	75.0	3.5	25.0	6.5	4.5	57	10,100	--	--
22...	1410	75.0	--	--	--	--	--	--	.86	--
22...	1411	75.0	0	26.0	7.0	5.6	77	31,200	--	--
22...	1412	75.0	3.0	25.5	7.1	5.4	75	34,100	--	16
22...	1413	75.0	5.0	25.5	7.1	5.3	73	34,700	--	--
SEPT.										
21...	0815	75.0	--	--	--	--	--	--	.91	--
21...	0816	75.0	0	23.0	6.3	4.4	52	3,150	--	--
21...	0817	75.0	.5	23.0	6.3	4.3	52	9,470	--	--
21...	0818	75.0	2.0	23.0	6.3	4.3	52	9,500	--	8
21...	0819	75.0	3.5	23.0	6.3	4.3	52	9,620	--	--
21...	1430	75.0	--	--	--	--	--	--	1.14	--
21...	1431	75.0	0	25.0	6.9	5.4	71	25,000	--	--
21...	1432	75.0	3.5	24.0	7.0	5.2	69	28,800	--	20
21...	1433	75.0	6.5	24.0	7.0	5.3	71	30,100	--	--
OCT.										
16...	1040	75.0	--	--	--	--	--	--	.89	--
16...	1041	75.0	0	18.5	7.3	6.3	78	38,400	--	--
16...	1042	75.0	3.0	18.0	7.4	6.2	77	41,400	--	24
16...	1043	75.0	5.0	18.0	7.4	6.3	78	41,300	--	--
16...	1720	75.0	--	--	--	--	--	--	.46	--
16...	1721	75.0	0	19.5	6.8	6.1	72	21,400	--	--
16...	1722	75.0	2.5	19.5	6.8	6.1	72	21,500	--	47
16...	1723	75.0	5.0	19.5	6.9	6.2	73	21,500	--	--

APPENDIX D
391450074430300 - CEDAR SWAMP CREEK AT PETERSBURG

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDEd (mg/L)
JULY 1989										
25...	1200	50.0	--	--	--	--	--	--	0.36	--
25...	1201	50.0	0.0	27.5	6.2	1.8	23	2,510	--	--
25...	1202	50.0	1.5	26.5	6.1	1.6	20	2,510	--	--
AUG.										
22...	1040	50.0	--	--	--	--	--	--	.25	--
22...	1041	50.0	.5	24.5	5.9	2.6	31	1,740	--	--
SEPT.										
21...	1100	50.0	--	--	--	--	--	--	.33	--
21...	1101	50.0	0	23.0	5.5	2.6	30	1,350	--	--
21...	1102	50.0	.8	22.5	5.5	2.5	29	1,380	--	--
21...	1103	50.0	1.4	22.5	5.5	2.5	29	1,400	--	--
OCT.										
16...	1400	50.0	--	--	--	--	--	--	.64	--
16...	1401	50.0	0	19.0	6.5	6.0	67	8,000	--	--
16...	1402	50.0	1.5	19.0	6.5	6.0	67	8,140	--	--
16...	1403	50.0	3.0	18.5	6.7	6.0	66	9,100	--	--

391543074420900 - CEDAR SWAMP CREEK NEAR MIDDLETOWN

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDEd (mg/L)
JULY 1989										
25...	1145	50.0	--	--	--	--	--	--	0.43	--
25...	1146	50.0	0.0	27.0	6.3	1.8	23	3,970	--	--
25...	1147	50.0	2.5	27.0	6.2	1.7	21	4,020	--	--
25...	1148	50.0	4.5	27.0	6.2	1.7	21	4,030	--	--
AUG.										
22...	1025	50.0	--	--	--	--	--	--	.33	--
22...	1026	50.0	0	24.5	6.1	2.4	29	3,380	--	--
22...	1027	50.0	2.5	24.5	6.1	2.4	29	3,420	--	--
22...	1028	50.0	4.0	24.5	6.1	2.4	29	3,490	--	--
SEPT.										
21...	1050	50.0	--	--	--	--	--	--	.36	--
21...	1051	50.0	0	23.0	5.8	2.4	28	3,110	--	--
21...	1052	50.0	2.5	23.0	5.8	2.4	28	3,160	--	--
21...	1053	50.0	5.0	23.0	5.8	2.4	28	3,130	--	--
OCT.										
16...	1345	50.0	--	--	--	--	--	--	.64	--
16...	1346	50.0	0	19.0	6.8	6.4	74	17,300	--	--
16...	1347	50.0	3.0	18.5	6.7	6.3	72	18,000	--	--
16...	1348	50.0	5.0	18.5	6.8	6.2	71	20,400	--	--

Appendix E. Water-quality data collected at stations in and near the estuary of the Maurice River

The following table contains water-quality data collected at stations in and near the Maurice River estuary. For each station, the station number and station name are given. Data for selected properties and constituents are listed for each observation. Missing data are represented with a double dash. The stations for which data are included in appendix E are listed below:

Station number	Station name
01411900	Maurice River at Millville
01411915	Maurice River near Laurel Lake
01412025	Maurice River at Buckshutem
01412100	Maurice River at Bricksboro
01412130	Maurice River at Mauricetown
01412134	Maurice River at Dorchester
01412140	Maurice River at Leesburg
01412144	Maurice River at 4 Star Marina near Port Norris
01412150	Maurice River at Bivalve

Other symbols and abbreviations used in appendix E are listed below:

Symbols and abbreviations	Definitions
SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	sample location in cross-section, as percentage of bank-to-bank distance from right to left bank looking upstream
m	meters
deg C	degrees Celsius
mg/L	milligrams per liter
μ S/cm	microsiemens per centimeter at 25 degrees Celsius
%	percent

01411900 APPENDIX E
- MAURICE RIVER AT MILLVILLE

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
26...	1300	50.0	--	--	--	--	--	--	0.28	--
26...	1301	50.0	0.0	28.0	6.5	7.0	89	91	--	--
26...	1302	50.0	1.5	--	--	--	--	--	--	37
26...	1303	50.0	2.5	28.0	6.5	7.0	89	91	--	--
26...	1751	50.0	--	--	--	--	--	--	.36	--
26...	1752	50.0	0	29.5	6.5	8.5	111	89	--	--
26...	1753	50.0	2.5	28.5	6.4	7.3	94	90	--	14
26...	1754	50.0	4.0	27.5	6.4	6.9	87	91	--	--

01411915 - MAURICE RIVER NEAR LAUREL LAKE

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
26...	1242	50.0	--	--	--	--	--	--	0.43	--
26...	1243	50.0	0.0	27.5	6.3	6.5	82	99	--	--
26...	1244	50.0	2.0	27.0	6.2	6.5	81	94	--	25
26...	1730	50.0	--	--	--	--	--	--	.41	--
26...	1731	50.0	0	27.5	6.2	5.7	72	100	--	--
26...	1732	50.0	2.0	27.5	6.2	5.6	71	100	--	21
26...	1733	50.0	4.0	27.5	6.3	5.6	71	100	--	--

01412025 - MAURICE RIVER AT BUCKSHUTEM

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
26...	1220	50.0	--	--	--	--	--	--	0.33	--
26...	1221	50.0	0.0	27.0	6.2	5.1	64	104	--	--
26...	1222	50.0	2.5	27.0	6.1	5.1	64	103	--	47
26...	1223	50.0	5.0	27.0	6.1	5.1	64	103	--	--
26...	1705	50.0	--	--	--	--	--	--	.33	--
26...	1706	50.0	0	28.0	6.1	4.5	57	289	--	--
26...	1707	50.0	1.5	28.0	6.1	4.4	56	288	--	64
26...	1708	50.0	3.0	28.0	6.2	4.4	56	287	--	--

01412110

APPENDIX E
MAURICE RIVER AT BRICKSBORO

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989 26...	1657	50.0	5.0	28.0	6.3	3.9	50	1,090	--	--

01412130 - MAURICE RIVER AT MAURICETOWN

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989 26...	1200	50.0	--	--	--	--	--	--	0.36	--
26...	1201	50.0	0.0	27.5	6.2	4.4	56	215	--	--
26...	1202	50.0	5.0	27.5	6.1	4.3	54	200	--	55
26...	1203	50.0	8.0	27.5	6.2	4.4	55	200	--	--
26...	1645	50.0	--	--	--	--	--	--	.33	--
26...	1646	50.0	0	28.0	6.2	3.8	49	2,480	--	--
26...	1647	50.0	5.5	28.0	6.2	3.9	50	2,480	--	65
26...	1648	50.0	9.0	28.0	6.4	3.9	50	2,490	--	--

01412134 - MAURICE RIVER AT DORCHESTER

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μ S/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDED (mg/L)
JULY 1989 26...	1150	50.0	3.0	27.5	6.3	3.9	49	441	--	--
26...	1635	50.0	3.5	28.0	6.4	3.8	49	4,800	--	--

01412140 APPENDIX E
- MAURICE RIVER AT LEESBURG

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
26...	1124	50.0	--	--	--	--	--	--	0.36	--
26...	1125	50.0	0.0	27.5	6.2	3.8	48	1,390	--	--
26...	1126	50.0	6.0	27.5	6.2	3.8	48	1,460	--	60
26...	1127	50.0	9.3	27.5	6.2	3.8	48	1,450	--	--
26...	1618	50.0	--	--	--	--	--	--	.33	--
26...	1619	50.0	0	28.5	6.5	3.9	52	11,000	--	--
26...	1620	50.0	5.5	28.5	6.6	3.8	50	10,900	--	66
26...	1621	50.0	10.0	28.5	6.6	4.0	53	11,700	--	--

01412144 - MAURICE RIVER AT 4 STAR MARINA NEAR PORT NORRIS

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
26...	1115	50.0	3.0	27.5	6.2	3.7	47	2,720	--	--
26...	1611	50.0	5.0	28.5	6.7	4.2	57	14,500	--	--

01412150 - MAURICE RIVER AT BIVALVE

WATER-QUALITY DATA

DATE	TIME (HOURS)	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	SAMP- LING DEPTH (m)	TEMPER- ATURE WATER (deg C)	PH (STAND- ARD UNITS)	OXYGEN, DIS- SOLVED (mg/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- DUCT- ANCE (μS/cm)	TRANS- PAR- ENCY (SECCHI DISK) (m)	SEDI- MENT, SUS- PENDE (mg/L)
JULY 1989										
26...	1100	50.0	--	--	--	--	--	--	0.33	--
26...	1101	50.0	0.0	27.5	6.3	3.6	47	6,820	--	--
26...	1102	50.0	3.0	27.5	6.3	3.6	47	6,940	--	78
26...	1103	50.0	6.0	27.5	6.3	3.6	47	7,000	--	--
26...	1600	50.0	--	--	--	--	--	--	.33	--
26...	1601	50.0	0	29.0	6.8	5.1	70	17,400	--	--
26...	1602	50.0	4.0	29.0	6.8	5.0	69	18,600	--	81
26...	1603	50.0	7.0	29.0	6.8	4.8	66	18,300	--	--