1974

Water Resources Data for North Carolina

Part 2. Water Quality Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the North Carolina Department of Natural and Economic Resources and with other Federal Agencies

CALENDAR FOR WATER YEAR 1974

1973

OCTOBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
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28	29	30	31			

NOVEMBER

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DECEMBER

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30	31					

1974

JANUARY

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27	28	29	30	31		

FEBRUARY

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17	18	19	20	21	22	23
24	25	26	27	28		

MARCH

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24	25	26	27	28	29	30
31						

APRIL

S	M	T	W	T	F	S
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7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

MAY

S	M	T	W	T	F	S
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JUNE

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JULY

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21	22	23	24	25	26	27
28	29	30	31			

AUGUST

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18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
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22	23	24	25	26	27	28
29	30					

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North Carolina Department of Natural and Economic Resources
Environmental Protection Agency

Water resources records, 1974, for North Carolina are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for North Carolina
   Part 1. Surface Water Records

2. Water Resources Data for North Carolina
   Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
436 Century Station Post Office Building
300 Fayetteville Street
Raleigh, North Carolina 27602

1975

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WATER RESOURCES DATA FOR NORTH CAROLINA, 1974

Part 2. Water Quality Records

INTRODUCTION

Water resources investigations of the U.S. Geological Survey include the collection of water-quality data on the chemical and physical characteristics of surface- and ground-water supplies of the Nation. Data on the quality of surface waters in North Carolina for the 1974 water year are presented in this report. These data were collected by the Water Resources Division of the U.S. Geological Survey under the direction of Ralph C. Heath, district chief.

Water-quality data on chemical, physical, and biological characteristics of surface water were collected from designated sampling sites at predetermined intervals at some sites and at random intervals at others. At several sites, data were recorded graphically or on punched paper tape at 30- or 60-minute intervals. Records are given for 74 stations of which 23 are continuous record stations, and 51 are miscellaneous sites. Locations of these surface-water quality sampling stations are shown in Figure 1 (see pages 12 and 13). The data published represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in North Carolina.

The Geological Survey has published records of chemical quality, water temperatures, and sediment since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Beginning with the 1964 water year, water-quality records have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year. These records will be published later in Geological Survey water-supply papers.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

North Carolina Department of Natural and Economic Resources
Environmental Protection Agency.
The Tennessee Valley Authority furnished daily water temperatures at three stations.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System of units (SI) on page 21.

Acre-foot (AC-FT, ac-ft) is a quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or about 1,233 cubic metres.

Bed material is the shifting portion of fragmented alluvial material of which the streambed is composed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,445 cubic metres, and represents a runoff of approximately 0.0372 inches from 1 square mile or 0.3468 millimetre from 1 square kilometre.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 millilitres is determined by the immediate or delayed incubation membrane filter method.

Cubic foot per second (CFS,cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic metres per second.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Mean discharge is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Drainage area of a stream at a specified location is that area, measured in horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per litre (UG/L,ug/l) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (litre) of water. One thousand micrograms per litre is equivalent to one milligram per litre.

Milligrams per litre (MG/L,mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre represents the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying by the factors in table 1, page 5. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, p. 5.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimetres (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*...	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH_4^{+1}...	.05544	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*...	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2})..	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*.	.03640
Carbonate (CO_3^{-2})..	.03333	Nickel (Ni^{+2})*....	.03406
Chloride (Cl^{-1})....	.02821	Nitrate (NO_3^{-1})...	.01613
Chromium (Cr^{+6})*...	.11539	Nitrite (NO_2^{-1})...	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3}).	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1})...	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1}).....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*.	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2})...	.02082
Hydroxide (OH^{-1})...	.05880	Zinc (Zn^{+2})*.....	.03060

*Constituent reported in micrograms per litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-505	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-296	1.49
170 -185	1.1	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Plankton is the floating (or weakly swimming) animal or plant life in a body of water consisting chiefly of minute plants (as diatoms and blue-green algae) and of minute animals (as protozoan, entomostracans, and various larvae).

Sediment is solid material that originates mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per litre of water-sediment mixture mg/l.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per litre) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff". Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs.

These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network is an accounting network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-to-year basis and (2) to detect and assess long-term changes in stream quality.

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides includes insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as in insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one the the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Radiochemical program is a network of regularly sampled water quality stations where additional samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in ug/l (micrograms per litre), radium as radium - 226 in PC/L, (pCi/l, picocuries per litre), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per litre (ug/l). Gross alpha and beta radioactivity associated with the fine grained (silt and clay sized) sediments in the samples are also determined.

A picocurie (PC,pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of water-quality stations in the front of this report the rank of tributaries

is indicated by indention, each indention representing one rank.

As an added means of identification, each water-quality station, gaging station, partial-record station, and miscellaneous sampling site has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of all types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 03460000 which appears just to left of the station name includes the 2-digit part number "03" plus the 6-digit downstream order number "460000". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 2 (South Atlantic Slope basins) and Part 3 (Ohio River basin). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF WATER QUALITY RECORDS

Collection and computation of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads. Discharge records for streams in North Carolina are published in the report "Water Resources Data for North Carolina, 1974, Part 1. Surface Water Records".

The locations of the surface-water quality sampling stations are shown in Figure 1 (see pages 12 and 13).

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data,

extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

Water-quality information is presented for chemical quality, biological, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium adsorption ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water temperature data were collected by thermograph or temperature recorder, from which daily maximums and minimums are obtained, or from hand-thermometer readings at the time samples are collected for chemical-constituent analysis. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per litre (mg/l) and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. To convert temperature in degrees Celsius to degrees Fahrenheit, see table 3, p. 15.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per litre instead of milligrams per litre. (See "Definitions of Terms," p. 2).

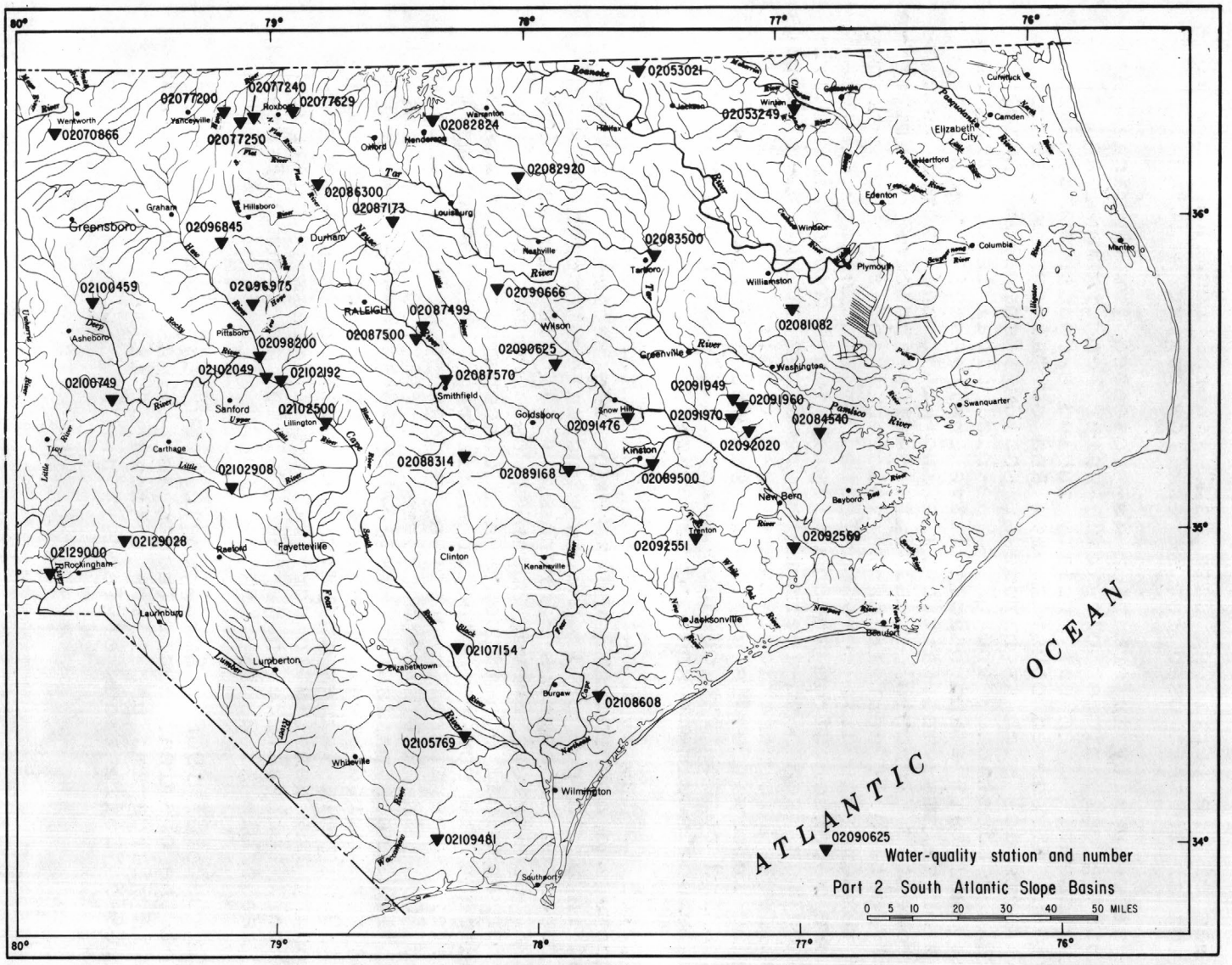

Figure 1. Map of eastern part of North Carolina showing locations of water-quality stations.

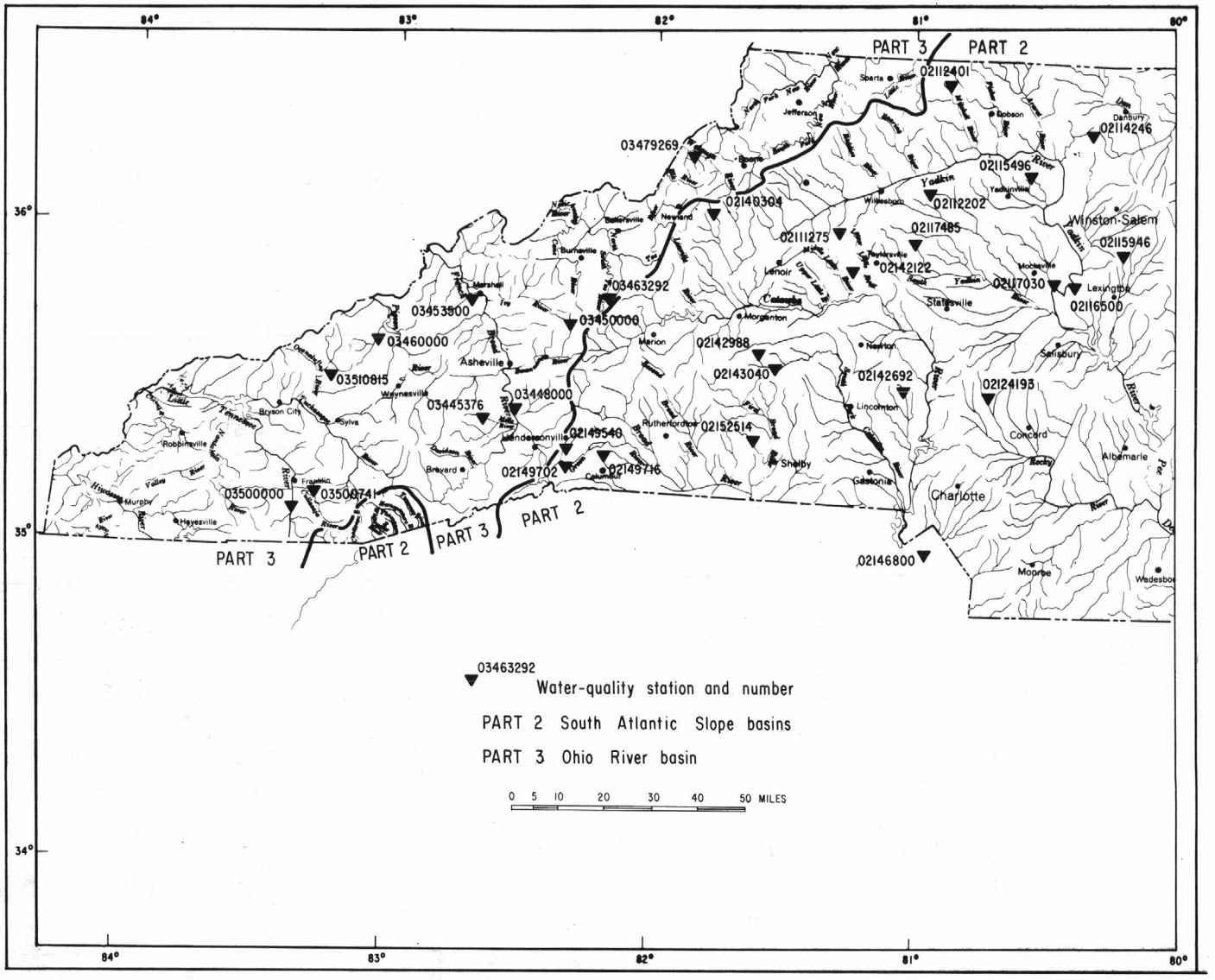

Figure 2. Map of western part of North Carolina showing locations of water-quality stations.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman. The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar, Lamar, Goerlitz, and Law, and Goerlitz and Brown. The collection and analysis of aquatic, biological and microbiological samples are described by Slack and others.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The value reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

At chemical quality stations where monitors (water-quality recorders) are installed, the records consist of daily maximum and minimum values for each constituent measured. More detailed records (hourly values) may be obtained from the district office of the U.S. Geological Survey at the address given on page II of this report.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.6	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*C = 5/9 (°F - 32) or °F = 9/5 (°C) +32.

Temperature

Water temperatures are measured at some of the water-quality stations. At stations where continuously-recording thermographs are used, the records consist of maximum and minimum temperatures for each day and month. For daily stations, the water temperatures are taken at about the same time each day when the same is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment discharge for other periods of similar water discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream. Instantaneous suspended-sediment data are shown for many stations (all are stream-gaging stations) in the table, "Analyses of Samples Collected at Miscellaneous Sites", at the end of each part number. If the station is a chemical-quality station, these periodic suspended-sediment data are included under the chemical-quality data for the station in the main body of the report.

WATER-SUPPLY PAPERS

Table 4 below, shows the annual series of water-supply papers that give information on quality of surface waters in North Carolina. Data for the South Atlantic slope and eastern

Gulf of Mexico basins are given in Part 2; and the Ohio River basin in Part 3.

Table 4.--Water-supply-paper numbers and part, water years 1941-71

Year	Part 2	Part 3	Year	Part 2	Part 3
1941	942	942	1956	1450	1450
1942	950	950	1957	1520	1520
1943	970	970	1958	1571	1571
1944	1022	1022	1959	1641	1642
1945	1030	1030	1960	1741	1742
1946	1050	1050	1961	1881	1882
1947	1102	1102	1962	1941	1942
1948	1132	1132	1963	1947	1948
1949	1162	1162	1964	1954	1955
1950	1186	1186	1965	1961	1962
1951	1197	1197	1966	1991	1992
1952	1250	1250	1967	2011	2012
1953	1290	1290	1968	2092	2093
1954	1350	1350	1969	2142	2143
1955	1400	1400	1970	2152	A2153
			1971	A2163	A2163

A In press.

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Table 5.--Factors for converting English units to International System units (SI)

FACTORS FOR CONVERTING ENGLISH UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
	Length	
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
yards (yd)	.9144	metres (m)
rods	5.0292	metres (m)
miles (mi)	1.609	kilometres (km)
	Area	
acres	4047	square metres (m^2)
	.4047	*hectares (ha)
	.4047	square hectometres (hm^2)
	.004047	square kilometres (km^2)
square miles (mi^2)	2.590	square kilometres (km^2)
	Volume	
gallons (gal)	3.785	**litres (l)
	3.785	cubic decimetres (dm^3)
	3.785×10^{-3}	cubic metres (m^3)
million gallons (10^6 gal)	3785	cubic metres (m^3)
	3.785×10^{-3}	cubic hectometres (hm^3)
cubic feet (ft^3)	28.32	cubic decimetres (dm^3)
	.02832	cubic metres (m^3)
cfs-days [$(ft^3/s) \cdot d$]	2447	cubic metres (m^3)
	2.447×10^{-3}	cubic hectometres (hm^3)
acre-feet (acre-ft)	1233	cubic metres (m^3)
	1.233×10^{-3}	cubic hectometres (hm^3)
	1.233×10^{-6}	cubic kilometres (km^3)
	Flow	
cubic feet per second (ft^3/s)	28.32	litres per second (l/s)
	28.32	cubic decimetres per second (dm^3/s)
	.02832	cubic metres per second (m^3/s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	.06309	cubic decimetres per second (dm^3/s)
	6.309×10^{-5}	cubic metres per second (m^3/s)
million gallons per day (mgd)	43.81	cubic decimetres per second (dm^3/s)
	.04381	cubic metres per second (m^3/s)
	Mass	
tons (short)	.9072	tonnes (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p.15, 1972 edition.

**The unit litre is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.

02077200 HYCO CREEK NEAR LEASBURG, N. C.

LOCATION.--Lat 36°24'07", long 79°12'13", Caswell County, temperature recorder at gaging station on right bank 10 ft (3 m) upstream from bridge on U. S. Highway 158, 1.5 mi (2.4 km) upstream from Kilgore Creek, and 2.5 mi (4.0 km) west of Leasburg.

DRAINAGE AREA.--44.0 mi^2 (114.0 km^2).

PERIOD OF RECORD.--Water temperatures: May 1964 to September 1974. Prior to October 1967, published as "North Hyco".

EXTREMES.--1973-74:
Water temperatures: Maximum, 25.0°C July 10, 11; minimum, 1.0°C December 18, 19, 20.

Period of record:
Water temperatures: Maximum, 26.5°C June 22, 1964 and on several days during June and July 1969, July 23, 24, 25, 1972; minimum, freezing point on several days during winter months in most years.

REMARKS.--Miscellaneous chemical data published for water years, 1959, 1965-67; 1959 data published as 02077202 North Hyco Creek near Leasburg.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	18.0	11.5	10.5	8.5	7.0	8.5	8.0	10.0	9.5	10.0	7.0
2	18.0	17.0	11.0	9.0	8.0	6.0	8.5	7.0	10.5	9.5	11.5	9.5
3	18.5	18.0	13.0	10.5	6.5	5.0	7.0	6.5	10.5	10.5	13.5	11.0
4	19.0	17.0	13.0	10.5	8.5	5.5	7.0	6.5	10.5	8.5	15.5	13.5
5	19.0	16.5	11.5	10.5	11.0	8.5	7.0	7.0	8.5	5.5	15.5	15.0
6	19.0	16.5	10.5	8.5	11.0	9.0	7.0	7.0	6.0	5.5	15.5	15.0
7	16.5	14.5	8.5	6.0	9.0	7.0	9.0	7.0	9.0	6.0	17.0	14.5
8	15.5	15.0	6.5	6.5	7.0	6.0	9.0	7.0	9.5	8.0	18.5	15.5
9	16.5	15.5	9.0	8.5	6.0	5.5	8.0	7.0	8.0	5.5	18.5	16.0
10	17.0	16.5	8.5	5.5	6.0	5.5	9.0	8.0	6.0	5.5	18.5	16.5
11	17.0	16.0	6.0	3.5	6.0	4.5	11.5	9.0	6.0	5.5	18.0	13.5
12	16.5	14.5	5.5	3.5	4.5	4.0	11.5	9.0	6.5	5.5	13.5	10.0
13	15.0	13.0	7.0	4.5	4.0	4.0	9.0	5.0	8.5	6.5	10.0	9.0
14	15.5	14.0	8.5	5.5	5.5	4.0	5.0	3.5	9.5	8.0	10.0	8.0
15	15.5	13.0	10.0	7.0	6.0	5.5	5.0	3.5	9.5	9.0	10.0	7.0
16	15.0	14.0	10.5	9.5	5.5	4.5	7.0	5.0	9.0	6.0	10.5	10.0
17	15.0	12.0	9.5	7.0	4.5	2.0	9.0	7.0	7.0	5.5	10.5	9.0
18	13.5	9.5	7.0	5.0	2.0	1.0	9.0	9.0	8.0	6.5	9.5	8.5
19	10.5	9.5	8.5	6.5	1.0	1.0	9.5	9.0	9.0	8.0	10.5	9.0
20	11.0	9.5	8.5	6.5	3.5	1.0	9.5	9.5	10.5	9.0	10.5	10.5
21	12.0	11.0	9.5	7.0	4.0	3.5	10.0	9.5	10.5	9.0	12.0	9.5
22	12.0	10.0	10.0	9.0	4.0	3.0	10.0	9.0	13.5	9.5	11.0	9.5
23	11.5	10.0	10.0	8.5	3.5	3.0	10.0	9.0	13.5	10.5	11.0	9.5
24	11.5	10.0	11.5	9.5	4.0	3.5	10.5	10.0	10.5	9.5	12.0	11.0
25	11.5	10.0	13.0	11.0	5.0	4.0	10.0	9.5	9.5	8.5	12.0	8.0
26	11.5	9.5	13.0	11.0	8.5	5.0	9.5	9.0	8.5	5.5	9.0	6.5
27	11.0	10.0	13.5	11.5	10.5	8.5	12.0	9.0	6.0	4.5	11.0	9.0
28	11.5	10.5	14.0	13.5	10.5	8.0	12.0	12.0	8.0	5.5	14.5	11.0
29	12.0	11.0	13.5	10.5	8.0	5.5	12.0	11.5	---	---	14.5	11.5
30	11.0	10.0	10.5	8.0	8.0	6.5	11.5	11.0	---	---	11.0	10.0
31	10.5	10.0	---	---	8.0	8.0	11.0	10.0	---	---	13.5	11.0
MONTH	19.0	9.5	14.0	3.5	11.0	1.0	12.0	3.5	13.5	4.5	18.5	6.5

02077200 HYCO CREEK NEAR LEASBURG, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	12.0	22.0	20.0	21.0	20.0	22.0	20.0	23.5	22.0	24.0	23.5
2	17.0	15.5	21.0	16.5	20.5	20.5	23.5	21.5	22.0	22.0	24.0	23.5
3	17.0	15.5	18.0	15.5	20.5	19.0	24.5	23.0	23.5	22.0	23.5	23.0
4	18.0	16.5	18.5	16.5	19.0	18.5	24.5	23.5	23.5	23.5	23.0	20.5
5	18.0	17.0	18.5	14.5	19.0	18.5	24.5	23.5	21.0	21.0	20.5	19.0
6	17.0	14.0	15.5	13.5	20.0	19.0	23.5	23.0	21.0	21.0	19.5	18.0
7	14.5	11.0	16.0	15.0	20.0	19.0	24.0	23.0	21.0	21.0	18.5	18.5
8	13.5	13.0	15.5	14.5	19.5	19.5	24.5	23.5	21.0	21.0	18.5	18.5
9	13.5	12.0	16.5	15.5	21.0	19.0	24.5	23.5	21.5	21.0	19.5	18.5
10	12.0	10.0	16.5	16.5	23.5	21.0	25.0	24.0	21.5	21.5	20.0	19.5
11	13.5	11.0	17.0	16.5	23.5	22.0	25.0	24.5	21.5	21.0	21.0	20.0
12	14.5	13.5	17.0	17.0	23.5	21.0	24.5	23.0	21.0	20.5	21.5	21.0
13	16.5	14.5	17.0	16.0	21.5	19.5	23.5	21.0	22.0	21.0	23.5	21.5
14	18.5	16.5	18.5	16.5	21.0	20.0	23.0	21.0	23.0	21.5	23.5	23.0
15	19.5	18.5	19.5	18.5	21.0	20.0	24.0	22.0	23.5	22.0	23.0	21.5
16	19.0	16.0	21.0	19.5	21.0	21.0	24.0	23.5	23.5	22.0	21.5	20.0
17	17.0	14.5	22.0	21.0	21.0	20.0	24.0	23.0	23.0	22.0	20.0	20.0
18	16.0	13.5	23.0	22.0	20.5	19.0	23.5	23.0	23.0	22.0	20.0	19.5
19	15.5	14.5	23.0	21.0	21.0	19.0	23.5	23.5	23.0	21.0	20.0	19.0
20	17.0	14.5	21.5	21.0	22.0	21.0	23.5	22.0	21.5	21.5	20.0	19.0
21	18.0	14.5	21.0	19.0	23.0	21.5	23.5	22.0	21.5	20.5	20.0	19.0
22	18.5	16.5	20.0	19.0	24.0	23.0	22.0	19.5	21.5	21.0	20.0	18.5
23	20.0	18.0	20.5	20.0	24.5	23.5	21.0	20.0	22.0	21.5	18.5	16.0
24	19.5	15.0	21.0	19.5	24.5	22.0	21.0	20.5	23.0	22.0	16.0	14.5
25	15.5	13.5	21.0	20.0	22.0	20.0	22.0	21.0	23.5	22.0	14.5	14.0
26	15.5	13.5	21.0	19.0	20.5	20.0	23.5	22.0	23.5	23.0	15.0	14.0
27	15.0	14.5	19.0	17.0	20.0	20.0	24.0	23.0	24.0	23.5	15.5	14.5
28	19.5	16.0	17.0	16.0	20.0	19.5	24.5	23.5	24.0	23.5	18.0	15.5
29	21.0	18.5	19.5	17.0	19.5	19.0	24.5	23.0	24.5	24.0	19.5	18.0
30	22.0	19.5	20.0	19.5	20.5	19.5	24.5	23.5	24.5	24.0	19.5	17.0
31	---	---	21.0	19.5	---	---	24.5	22.0	24.5	23.5	---	---
MONTH	22.0	10.0	23.0	13.5	24.5	18.5	25.0	19.5	24.5	20.5	24.0	14.0
YEAR	25.0	1.0										

02077240 DOUBLE CREEK NEAR ROSEVILLE, N. C.

LOCATION.--Lat 36°21'44", long 79°05'48", Person County, temperature recorder at gaging station on left bank 21 ft (6 m) downstream from culvert on Secondary Road 1166, 1.0 mi (1.6 km) upstream from Mill Creek, and 3.0 mi (4.8 km) northwest of Roseville.

DRAINAGE AREA.--7.47 mi^2 (19.35 km^2).

PERIOD OF RECORD.--Water temperatures: May 1964 to April 1969, January 1970 to August 1973, March 1974 to September 1974.

EXTREMES.--March to September 1974:
Water temperatures: Maximum, 23.0°C August 29; minimum, 10°C March 22, 23, 26, April 7.

Period of record:
Water temperatures: Maximum, 29.5°C June 21, 22, 1964; minimum, freezing point on many days during most years.

REMARKS.--Miscellaneous chemical data published for water years 1966-67.

TEMPERATURE (DEG. C) OF WATER, MARCH TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	12.0	10.0
23	---	---	---	---	---	---	---	---	---	---	11.5	10.0
24	---	---	---	---	---	---	---	---	---	---	11.5	11.0
25	---	---	---	---	---	---	---	---	---	---	11.5	10.5
26	---	---	---	---	---	---	---	---	---	---	11.0	10.0
27	---	---	---	---	---	---	---	---	---	---	11.0	10.5
28	---	---	---	---	---	---	---	---	---	---	13.0	11.0
29	---	---	---	---	---	---	---	---	---	---	13.0	12.0
30	---	---	---	---	---	---	---	---	---	---	13.5	11.0
31	---	---	---	---	---	---	---	---	---	---	15.5	11.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

02077240 DOUBLE CREEK NEAR ROSEVILLE, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, MARCH TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	11.5	19.5	17.0	---	---	18.0	17.0	20.0	19.5	21.5	20.5
2	18.5	16.0	19.5	15.5	---	---	18.5	18.0	20.5	20.0	21.0	20.5
3	18.0	14.0	19.0	15.0	---	---	19.5	18.5	20.5	20.0	22.0	20.5
4	18.0	16.5	19.0	16.0	18.5	16.0	20.0	19.5	21.0	20.5	21.5	19.5
5	18.0	16.5	16.5	15.0	18.5	15.5	20.0	19.5	20.5	20.5	19.5	18.0
6	16.5	13.5	16.5	14.5	19.0	17.0	20.0	19.5	20.5	20.0	18.5	17.0
7	16.0	10.0	16.5	14.5	19.0	16.5	19.5	19.0	20.5	19.5	18.5	18.5
8	15.0	13.5	16.5	14.0	18.5	18.0	19.5	19.0	20.0	19.0	18.5	18.0
9	14.0	12.0	16.5	14.5	20.0	16.5	20.0	19.0	20.0	19.0	19.0	18.0
10	14.0	10.5	16.0	15.0	21.5	19.0	20.0	19.5	20.0	19.5	19.5	18.0
11	14.5	11.0	16.5	15.0	21.0	19.5	20.0	19.5	20.0	19.0	19.5	19.0
12	15.0	13.0	16.5	16.0	20.5	17.0	20.0	19.5	19.5	18.5	20.5	19.0
13	16.5	14.5	16.5	14.0	19.0	16.5	19.5	17.0	21.0	19.0	20.5	19.0
14	18.0	15.5	18.0	14.0	19.0	17.0	19.0	17.0	21.0	19.5	20.5	19.0
15	18.5	16.5	19.0	16.0	19.5	17.0	20.0	19.0	21.0	20.0	19.5	19.0
16	18.0	14.0	19.5	17.0	---	---	20.5	19.0	21.0	20.0	19.0	16.5
17	16.5	13.5	21.0	18.0	---	---	20.5	18.5	21.0	19.5	18.0	18.0
18	16.5	13.0	21.0	19.0	17.0	15.0	20.5	19.0	21.5	20.5	19.0	18.0
19	16.5	13.5	20.0	18.5	18.0	15.0	20.5	19.5	21.5	21.0	19.0	16.5
20	17.0	13.5	19.5	18.0	18.5	17.0	20.5	19.0	21.0	20.0	18.5	16.5
21	17.0	13.5	18.5	16.0	18.5	17.0	20.5	19.0	20.5	19.0	19.0	16.5
22	17.0	15.5	19.0	16.5	18.5	18.0	19.0	18.5	20.5	19.5	19.0	15.5
23	18.5	16.5	19.0	18.0	19.0	18.5	19.0	18.5	21.0	19.5	15.5	13.5
24	18.0	14.0	19.5	16.5	19.0	17.0	19.0	18.5	21.0	20.0	14.5	12.0
25	15.5	12.0	19.0	16.5	18.0	16.5	19.5	19.0	21.0	20.0	14.5	12.0
26	16.5	12.0	18.5	16.0	17.0	16.5	19.5	19.5	21.0	20.0	14.5	12.0
27	17.0	13.0	16.5	15.5	18.0	18.0	19.5	19.5	22.0	20.5	14.5	13.5
28	18.5	14.0	16.0	14.5	17.0	16.0	20.0	20.0	21.5	20.5	16.5	14.5
29	20.0	16.0	18.0	16.0	16.5	16.0	20.0	20.0	23.0	21.0	19.0	17.0
30	20.0	17.0	18.0	18.0	17.0	16.0	20.0	20.0	22.0	21.0	18.0	14.5
31	---	---	19.0	17.0	---	---	20.5	20.0	22.0	21.0	---	---
MONTH	20.0	10.0	21.0	14.0	21.5	15.0	20.5	17.0	23.0	18.5	22.0	12.0
YEAR	23.0	10.0										

02077250 SOUTH HYCO CREEK NEAR ROSEVILLE, N. C.

LOCATION.--Lat 36°23'12", long 79°06'22", Person County, temperature recorder at gaging station on right bank at downstream side of bridge on U. S. Highway 158, 1.2 mi (1.9 km) downstream from Double Creek, and 4.2 mi (6.8 km) northwest of Roseville.

DRAINAGE AREA.--55 mi^2 (140 km^2), approximately.

PERIOD OF RECORD.--Water temperatures: January 1967 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum, 25.5°C on several days during July; minimum, 1.5°C December 17-20.

Period of record:
Water temperatures: Maximum, 30.5°C Aug. 22, 1968; minimum, freezing point on many days in January and February 1968 and 1973.

REMARKS.--Miscellaneous chemical data published for water years 1966-67.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	19.5	13.0	11.5	10.0	9.0	9.0	8.0	10.0	8.5	10.5	7.0
2	19.5	19.0	13.0	10.5	9.5	8.0	9.0	7.0	10.0	9.5	11.5	9.0
3	20.5	19.5	14.0	12.0	8.0	6.0	7.0	6.0	10.5	9.5	13.5	11.0
4	20.0	19.0	14.0	12.0	10.0	8.0	8.0	7.0	9.5	8.0	15.0	12.0
5	20.0	19.0	13.5	11.5	13.0	10.0	8.0	7.0	8.0	4.5	14.5	14.0
6	20.0	18.5	11.5	9.5	13.0	10.5	8.0	7.0	5.5	4.5	14.5	13.5
7	18.5	16.0	10.0	8.0	10.5	8.0	9.5	8.0	8.5	5.0	16.5	13.5
8	17.0	16.5	10.0	8.5	8.5	7.0	9.5	6.0	8.5	6.0	18.0	14.5
9	18.5	17.0	11.0	10.0	8.0	7.0	8.0	6.0	6.0	4.5	18.0	14.5
10	19.0	18.0	10.0	8.0	8.0	6.5	9.0	8.0	5.5	3.5	18.0	14.5
11	19.0	17.0	8.0	5.5	8.0	5.5	11.5	9.0	5.5	4.5	16.5	11.0
12	18.0	16.0	8.0	5.5	5.5	4.5	11.5	8.0	5.5	3.5	11.0	9.0
13	16.5	14.5	8.5	6.5	5.5	4.5	8.0	4.0	8.0	5.0	10.0	7.0
14	17.0	16.0	10.0	8.0	7.0	5.5	4.0	3.0	8.5	8.0	9.5	6.0
15	17.0	14.5	11.5	9.5	6.5	5.5	5.5	3.5	8.5	8.0	10.5	6.5
16	16.5	15.0	13.0	11.5	5.5	3.5	8.0	5.5	8.0	5.0	10.5	10.0
17	16.5	14.5	12.0	9.0	3.5	1.5	10.0	8.0	6.5	4.5	10.5	8.0
18	14.5	11.5	9.5	8.0	1.5	1.5	10.0	8.5	6.5	5.0	10.0	7.0
19	13.0	11.5	10.5	9.0	1.5	1.5	10.0	8.5	8.0	6.5	11.0	9.5
20	13.0	11.0	10.0	9.0	3.5	1.5	10.0	10.0	10.0	8.0	11.0	10.5
21	14.0	13.0	11.0	10.0	5.0	2.0	10.5	10.0	10.0	6.5	11.0	10.0
22	14.0	12.0	12.0	11.0	5.0	3.5	10.5	8.5	13.0	9.0	11.0	8.5
23	14.0	12.0	12.0	10.0	4.0	3.0	10.5	8.5	12.0	9.0	11.0	8.5
24	14.0	12.0	12.0	10.5	5.0	4.0	10.5	10.5	10.0	7.0	11.5	10.0
25	14.0	12.0	14.0	12.0	5.5	5.0	10.5	9.0	8.5	6.5	10.5	6.5
26	13.5	11.0	14.0	12.0	10.0	5.5	9.0	9.0	7.0	3.5	9.0	6.0
27	13.5	11.5	14.5	13.0	10.5	10.0	12.0	9.0	5.5	3.5	11.0	9.0
28	13.5	12.0	15.0	14.5	10.0	7.0	13.0	11.5	7.0	4.5	15.0	11.0
29	14.0	13.0	14.5	10.5	7.0	5.5	13.5	11.0	---	---	15.0	10.0
30	13.0	11.5	10.5	8.5	8.5	6.5	11.5	10.0	---	---	11.0	9.5
31	12.0	11.0	---	---	8.5	8.0	11.0	9.0	---	---	13.5	10.0
MONTH	20.5	11.0	15.0	5.5	13.0	1.5	13.5	3.0	13.0	3.5	18.0	6.0

02077250 SOUTH HYCO CREEK NEAR ROSEVILLE, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	11.0	22.0	19.0	20.5	19.5	23.0	20.5	24.0	23.0	24.0	23.5
2	17.0	15.5	20.0	15.5	20.0	19.0	24.5	21.5	23.5	22.0	24.0	23.5
3	16.0	14.0	17.0	14.5	19.0	18.0	25.5	23.0	24.5	22.0	23.5	23.5
4	17.0	16.0	19.0	16.0	19.0	16.5	25.5	23.5	24.5	23.0	23.5	21.0
5	16.5	15.0	18.0	14.0	19.0	16.5	25.0	24.0	23.5	21.5	21.0	20.0
6	15.0	12.0	15.5	13.5	19.0	18.0	24.5	23.5	22.0	21.5	20.0	19.0
7	13.5	9.5	15.5	14.0	19.0	18.0	24.5	23.5	21.5	21.0	19.0	19.0
8	13.5	12.0	15.5	13.5	19.0	18.5	25.0	23.5	21.5	21.0	19.5	19.0
9	13.0	11.0	15.5	14.5	20.5	18.0	25.0	23.5	22.0	21.0	20.0	19.0
10	13.5	9.0	15.0	14.5	23.0	20.0	25.5	24.0	22.0	21.5	21.0	19.5
11	14.5	9.5	15.5	14.5	22.0	20.5	25.5	24.0	22.0	21.5	22.0	21.0
12	14.5	12.0	16.0	15.5	22.0	19.5	24.5	23.0	22.0	21.0	23.0	21.0
13	16.0	14.5	16.0	14.5	20.5	18.5	23.5	20.5	23.5	22.0	23.5	21.5
14	18.0	15.5	17.0	14.5	20.0	18.5	24.0	21.0	23.5	22.0	23.5	21.5
15	19.5	17.0	19.0	16.5	20.5	19.0	24.5	22.0	24.0	23.0	22.0	21.0
16	18.0	14.5	19.5	18.5	20.5	19.5	24.5	23.5	24.0	23.0	21.0	19.0
17	15.5	13.5	21.0	19.0	20.0	18.5	24.5	23.0	23.5	23.0	21.0	20.0
18	16.0	12.0	22.0	20.0	20.0	17.0	24.5	23.0	24.0	23.0	21.0	19.5
19	16.5	13.5	21.0	19.0	21.0	16.0	24.5	23.5	24.0	22.0	20.5	18.5
20	17.0	13.5	20.0	19.0	23.0	20.0	24.0	23.0	22.0	22.0	20.5	18.5
21	18.0	13.5	19.0	17.0	23.0	21.0	24.5	23.0	22.0	21.5	20.5	18.5
22	18.0	15.5	19.5	18.0	24.0	22.0	23.0	20.0	22.0	21.5	20.5	18.5
23	20.0	16.5	19.5	19.0	24.5	23.0	22.0	20.5	23.0	22.0	18.5	16.0
24	18.0	13.5	20.0	18.0	24.0	21.0	22.0	21.0	23.0	22.0	16.0	14.0
25	16.5	11.5	20.0	18.5	22.0	20.0	23.5	22.0	23.5	23.0	16.0	14.0
26	16.5	12.0	20.0	18.0	21.0	20.0	24.0	23.0	23.5	23.0	16.0	14.0
27	18.0	13.5	18.0	16.0	21.0	20.5	24.5	23.5	24.0	23.5	16.0	15.0
28	20.0	14.5	16.5	15.0	20.5	19.5	25.5	23.5	24.0	23.5	18.0	15.5
29	21.5	16.5	19.0	16.5	20.0	19.0	25.0	23.5	24.5	23.5	19.5	18.0
30	22.0	18.0	19.5	19.0	21.5	19.0	25.5	24.0	24.5	24.0	19.5	16.0
31	---	---	21.0	18.5	---	---	25.5	23.5	24.5	23.5	---	---
MONTH	22.0	9.0	22.0	13.5	24.5	16.5	25.5	20.0	24.5	21.0	24.0	14.0
YEAR	25.5	1.5										

02083500 TAR RIVER AT TARBORO, N. C.

LOCATION.--Lat 35°53'38", long 77°32'00", Edgecombe County, at gaging station near right bank on downstream end of pier of bridge on U.S. Highway 64 in Tarboro, 6.5 mi (10.5 km) downstream from Fishing Creek, and 49.2 mi (79.2 km) upstream from Pamlico River at Washington.

DRAINAGE AREA.--2,140 mi^2 (5,540 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1944 to September 1945, October 1953 to September 1954, October 1961 to September 1967, water years 1968-73 (partial-record station), July 1973 to September 1974.
Water temperatures: October 1944 to September 1945, October 1953 to September 1954, October 1961 to September 1967, July 1973 to September 1974.
Sediment records: January 1958 to December 1967.

EXTREMES.--July 1973 to September 1974:
Specific conductance: Maximum, 154 micromhos Oct. 13, 1973; minimum, 53 micromhos Sept. 12, 1974.
Water temperatures: Maximum, 27.0°C July 23, 24, 25, 31, Aug. 3, 1973, June 15, July 5, 10, 16, 17, 31, 1974, Aug. 30, 31, 1974; minimum, 4.0°C Dec. 19, 20, 23, 24, 25, 1973.

Period of record:
Dissolved solids (1944-45, 1953-54, 1961-67): Maximum, 111 mg/l Oct. 22-31, 1963; minimum, 40 mg/l (calculated) Aug. 21-31, 1967.
Hardness (1944-45, 1953-54, 1961-67): Maximum, 33 mg/l Nov. 4, 1963; minimum, 9 mg/l Jan. 21-31, 1954.
Specific conductance (1961-67, 1973-74): Maximum daily, 270 micromhos Nov. 4, 1963; minimum daily, 34 micromhos Aug. 22, 1967.
Water temperatures: Maximum, 30.0°C Aug. 30, 1966; minimum, freezing point on several days in 1963 and 1966.
Sediment concentrations: Maximum daily, 465 mg/l June 22, 1967; minimum daily, 2 mg/l Dec. 2, 1965, Sept. 15-18, 1966 and Dec. 4, 1967.
Sediment discharge: Maximum daily, 6,130 tons May 12, 1958; minimum daily, 1 ton on several days in 1963 and 1966.

REMARKS.--Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
OCT.											
26...	0910	455	3.3	1500	450	--	260	220	40	--	6.6
JAN.											
15...	1305	2480	13	1900	330	--	25	0	25	--	4.0
APR.											
16...	1245	2260	9.7	1600	170	2400	70	41	29	140	5.6
JULY											
05...	0905	478	5.6	1000	380	2400	190	110	83	160	10
AUG.											
07...	1045	1660	9.1	1700	340	--	330	280	54	--	6.1
08...	1105	4670	12	4300	590	--	490	480	12	--	4.7
12...	1125	4530	11	--	--	--	--	--	--	--	5.5
15...	1155	1710	13	1500	480	--	460	410	50	--	5.9
19...	1415	728	13	--	--	--	--	--	--	--	7.2

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.											
26...	2.4	12	3.1	42	0	34	8.0	8.5	.2	.29	.25
JAN.											
15...	2.0	6.0	1.9	12	0	10	12	7.6	.1	.25	.23
APR.											
16...	2.1	6.0	1.3	24	0	20	7.2	6.6	.2	.24	.24
JULY											
05...	2.4	7.6	2.1	36	--	30	8.4	6.3	.2	.03	.05
AUG.											
07...	2.1	8.0	2.5	26	--	21	8.0	8.1	.3	.33	.33
08...	1.6	6.5	2.3	20	--	16	6.9	5.5	.2	.24	.24
12...	1.5	4.4	2.3	13	--	11	10	5.0	.2	.22	.22
15...	1.5	6.2	2.1	16	--	13	11	6.2	.3	.20	.20
19...	1.8	7.2	2.3	22	--	18	9.1	7.8	.3	.35	.35

02083500 TAR RIVER AT TARBORO, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS_ SOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM DEP. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)
OCT.											
26...	--	--	--	--	--	--	.58	--	.48	--	.87
JAN.											
15...	--	.11	.04	.05	.00	.33	.09	.00	.37	--	.34
APR.											
16...	.0	.08	.04	.05	.34	.33	.42	.05	.37	750	.66
JULY											
05...	.0	.00	.01	.01	.84	.34	.84	.49	.35	330	.87
AUG.											
07...	--	.08	.07	.09	.92	.62	1.0	.31	.69	--	1.3
08...	--	.05	.05	.06	.89	.67	.94	.22	.72	--	1.2
12...	--	.07	.03	.04	1.0	.52	1.1	.55	.55	--	1.3
15...	--	.06	.03	.04	.74	.44	.80	.33	.47	--	1.0
19...	--	.04	.02	.03	.86	.49	.90	.39	.51	--	1.3

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (P04) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT.											
26...	3.9	.29	--	.15	--	--	--	--	65	.09	79.9
JAN.											
15...	1.5	.05	.06	.04	.07	.02	--	79	54	.11	529
APR.											
16...	2.9	.10	.03	.02	.02	.01	260	52	52	.07	317
JULY											
05...	3.9	.04	.12	.05	.02	.04	160	68	61	.09	87.8
AUG.											
07...	5.9	.24	.28	.09	.10	.09	--	69	57	.09	309
08...	5.2	.23	.18	.07	.09	.06	--	70	50	.10	883
12...	5.8	.13	.15	.06	.08	.05	--	86	46	.12	1050
15...	4.4	.14	.18	.07	.09	.06	--	88	56	.12	407
19...	5.5	.16	.25	.10	.11	.08	--	99	60	.13	195

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
26...	26	0	46	1.0	132	6.2	16.5	--	20	9.2	42
JAN.											
15...	18	8	39	.6	93	5.7	7.0	60	--	12.0	38
APR.											
16...	23	3	35	.5	77	6.4	18.0	60	--	8.7	15
JULY											
05...	35	5	31	.6	100	6.3	27.0	30	--	8.1	29
AUG.											
07...	24	3	39	.7	86	6.6	--	30	--	--	10
08...	18	2	40	.7	66	6.7	--	100	--	--	6.4
12...	20	9	30	.4	62	6.1	--	90	--	--	17
15...	21	8	36	.6	75	5.8	23.5	80	--	6.9	41
19...	25	7	36	.6	82	6.5	25.0	80	--	6.6	11

DATE	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CAD-MIUM (CD) (UG/L)
OCT.												
26...	--	--	--	10	8.0	--	--	2	2	0	--	<10
JAN.												
15...	2900	.00	.83	13	12	--	.0	1	0	3	--	0
APR.												
16...	4000	--	--	12	11	5.7	.0	6	0	8	25	0
JULY												
05...	530000	--	--	15	6.7	2.9	.0	0	0	0	1	1
AUG.												
07...	--	--	--	10	10	--	.0	1	0	1	--	1
08...	--	--	--	13	12	--	.0	2	1	1	--	0
12...	--	--	--	14	12	--	.0	--	--	--	--	--
15...	--	--	--	45	17	--	.0	1	0	1	--	1
19...	--	--	--	14	11	--	.0	--	--	--	--	--

02083500 TAR RIVER AT TARBORO, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SUS-PENDED CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL CHROMIUM (CR) (UG/L)	SUS-PENDED CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DEPOSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
OCT.												
26...	9	1	--	0	0	0	--	<50	46	4	--	<10
JAN.												
15...	0	0	--	0	0	0	--	1	0	4	--	4
APR.												
16...	0	0	20	0	0	0	4	0	0	1	0	5
JULY												
05...	0	1	<10	<10	<10	0	<10	4	0	4	<10	8
AUG.												
07...	0	1	--	<10	<10	0	--	3	0	3	--	7
08...	0	0	--	20	20	0	--	3	2	1	--	9
12...	--	--	--	--	--	--	--	--	--	--	--	--
15...	0	2	--	30	29	1	--	0	0	5	--	10
19...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DEPOSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DEPOSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
OCT.										
26...	4	6	--	<100	93	7	--	.0	.0	.0
JAN.										
15...	0	4	--	10	3	7	--	.0	.0	.0
APR.										
16...	3	2	16	25	24	1	0	.1	.0	.1
JULY										
05...	2	6	<10	3	0	3	<10	.6	.0	.8
AUG.										
07...	0	10	--	14	0	14	--	.4	.2	.2
08...	7	2	--	0	0	0	--	.6	.4	.2
15...	8	2	--	12	12	0	--	.0	.0	.1

DATE	TOTAL MERCURY IN BOTTOM DEPOSITS (UG/G)	TOTAL SELENIUM (SE) (UG/L)	SUS-PENDED SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	TOTAL SELENIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DEPOSITS (UG/G)
OCT.									
26...	--	6	0	6	--	30	0	30	--
JAN.									
15...	--	0	0	0	--	80	70	10	--
APR.									
16...	.1	3	0	3	24	70	60	10	28
JULY									
05...	.1	0	0	0	0	3	3	0	20
AUG.									
07...	--	7	0	7	--	20	0	40	--
08...	--	4	0	4	--	20	10	6	--
15...	--	0	0	0	--	0	0	7	--

02083500 TAR RIVER AT TARBORO, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	74	78
2	---	---	---	---	---	---	---	---	---	---	78	83
3	---	---	---	---	---	---	---	---	---	---	85	81
4	---	---	---	---	---	---	---	---	---	---	73	81
5	---	---	---	---	---	---	---	---	---	---	70	76
6	---	---	---	---	---	---	---	---	---	---	67	73
7	---	---	---	---	---	---	---	---	---	---	55	87
8	---	---	---	---	---	---	---	---	---	---	57	91
9	---	---	---	---	---	---	---	---	---	---	64	94
10	---	---	---	---	---	---	---	---	---	---	74	95
11	---	---	---	---	---	---	---	---	---	---	74	95
12	---	---	---	---	---	---	---	---	---	---	71	89
13	---	---	---	---	---	---	---	---	---	---	65	89
14	---	---	---	---	---	---	---	---	---	---	50	93
15	---	---	---	---	---	---	---	---	---	---	61	105
16	---	---	---	---	---	---	---	---	---	78	62	100
17	---	---	---	---	---	---	---	---	---	77	64	102
18	---	---	---	---	---	---	---	---	---	81	65	83
19	---	---	---	---	---	---	---	---	---	85	57	85
20	---	---	---	---	---	---	---	---	---	82	58	99
21	---	---	---	---	---	---	---	---	---	80	55	102
22	---	---	---	---	---	---	---	---	---	82	56	104
23	---	---	---	---	---	---	---	---	---	79	41	108
24	---	---	---	---	---	---	---	---	---	81	44	98
25	---	---	---	---	---	---	---	---	---	81	46	110
26	---	---	---	---	---	---	---	---	---	80	53	94
27	---	---	---	---	---	---	---	---	---	82	56	98
28	---	---	---	---	---	---	---	---	---	88	65	102
29	---	---	---	---	---	---	---	---	---	83	64	122
30	---	---	---	---	---	---	---	---	---	81	68	133
31	---	---	---	---	---	---	---	---	---	84	76	---
MONTH	---	---	---	---	---	---	---	---	---	---	63	95

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	100	125	77	60	68	67	95	82	102	86	90
2	121	116	121	80	58	70	64	98	87	102	90	88
3	104	135	119	74	57	71	64	100	86	102	102	87
4	96	128	127	69	63	70	65	105	87	101	124	85
5	94	120	106	80	64	69	65	100	92	92	124	107
6	132	115	110	75	66	75	65	95	86	98	112	75
7	105	125	114	73	68	75	65	90	92	92	95	70
8	107	115	110	72	70	76	62	95	98	88	85	65
9	131	108	148	78	71	79	67	85	144	88	75	62
10	119	137	146	76	67	81	73	88	97	98	70	62
11	106	135	106	75	65	77	72	90	96	99	66	55
12	106	112	104	72	69	78	73	95	94	102	72	53
13	154	134	100	70	70	78	74	85	99	100	69	58
14	96	132	102	75	72	80	75	87	100	105	73	66
15	130	112	102	77	74	83	73	85	100	117	79	68
16	126	122	102	76	75	75	73	80	106	115	72	75
17	109	134	110	77	69	75	80	72	100	102	84	79
18	108	130	99	78	65	70	85	78	110	102	88	78
19	134	130	100	81	61	70	90	78	100	106	84	84
20	140	120	88	78	61	66	87	79	110	131	88	94
21	111	125	93	76	62	68	85	76	102	114	88	96
22	125	115	93	83	61	67	85	72	112	136	82	99
23	111	131	81	82	64	69	85	70	106	111	81	83
24	117	110	85	80	62	74	95	76	84	136	86	80
25	106	121	72	74	64	65	95	77	96	106	87	84
26	104	137	71	76	62	65	95	78	95	123	88	98
27	113	120	82	76	64	69	95	75	108	106	72	103
28	108	112	85	68	66	69	105	69	107	102	88	106
29	95	110	85	74	---	70	97	73	112	109	90	107
30	110	117	80	70	---	66	95	78	105	90	94	100
31	96	---	78	67	---	66	---	82	---	88	91	---
MONTH	114	122	101	75	65	72	79	84	100	105	87	82

YEAR MAX 154 MIN 53 MEAN 91

02083500 TAR RIVER AT TARBORO, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	26.0	26.0
2	---	---	---	---	---	---	---	---	---	---	26.0	26.0
3	---	---	---	---	---	---	---	---	---	---	27.0	26.0
4	---	---	---	---	---	---	---	---	---	---	26.0	26.0
5	---	---	---	---	---	---	---	---	---	---	26.0	25.0
6	---	---	---	---	---	---	---	---	---	---	26.0	25.0
7	---	---	---	---	---	---	---	---	---	---	25.0	26.0
8	---	---	---	---	---	---	---	---	---	---	25.0	26.0
9	---	---	---	---	---	---	---	---	---	---	25.0	25.0
10	---	---	---	---	---	---	---	---	---	---	25.0	24.0
11	---	---	---	---	---	---	---	---	---	---	26.0	23.0
12	---	---	---	---	---	---	---	---	---	---	26.0	23.0
13	---	---	---	---	---	---	---	---	---	---	25.0	23.0
14	---	---	---	---	---	---	---	---	---	---	25.0	24.0
15	---	---	---	---	---	---	---	---	---	---	26.0	24.0
16	---	---	---	---	---	---	---	---	---	25.5	25.0	24.0
17	---	---	---	---	---	---	---	---	---	25.0	25.0	23.0
18	---	---	---	---	---	---	---	---	---	24.0	25.0	23.0
19	---	---	---	---	---	---	---	---	---	25.0	23.0	22.0
20	---	---	---	---	---	---	---	---	---	25.0	24.0	22.0
21	---	---	---	---	---	---	---	---	---	25.0	25.0	22.0
22	---	---	---	---	---	---	---	---	---	26.0	24.0	21.0
23	---	---	---	---	---	---	---	---	---	27.0	22.0	22.0
24	---	---	---	---	---	---	---	---	---	27.0	22.0	23.0
25	---	---	---	---	---	---	---	---	---	27.0	22.0	23.0
26	---	---	---	---	---	---	---	---	---	25.0	23.0	22.0
27	---	---	---	---	---	---	---	---	---	26.0	23.0	22.0
28	---	---	---	---	---	---	---	---	---	26.0	24.0	22.0
29	---	---	---	---	---	---	---	---	---	26.0	25.5	24.0
30	---	---	---	---	---	---	---	---	---	26.0	26.0	22.0
31	---	---	---	---	---	---	---	---	---	27.0	26.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	25.0	23.5

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	14.0	11.0	10.0	13.0	8.0	12.0	20.0	21.0	23.0	25.0	26.0
2	22.0	14.0	10.0	10.0	12.0	9.0	14.0	20.0	21.5	24.0	25.0	26.0
3	23.0	14.0	8.0	9.0	12.0	10.0	15.0	19.0	21.0	25.0	25.0	26.0
4	23.0	15.0	9.0	9.0	11.0	12.0	17.0	19.0	20.0	26.0	25.0	25.0
5	23.0	15.0	11.0	8.0	9.0	14.0	18.0	18.0	21.0	27.0	25.0	23.0
6	22.0	11.0	12.0	8.0	7.0	15.0	17.0	16.0	21.0	26.0	24.0	23.0
7	20.0	10.0	10.0	8.0	9.0	15.0	15.0	16.0	22.0	26.0	24.0	23.0
8	20.0	10.0	10.0	8.0	9.0	16.0	15.0	16.0	21.0	25.0	24.0	21.0
9	20.0	12.0	8.0	8.0	7.0	17.0	15.0	17.0	23.0	26.0	24.0	20.0
10	20.0	9.0	8.0	8.0	7.0	17.0	14.0	17.0	23.0	27.0	23.0	20.0
11	19.0	9.0	7.0	10.0	6.0	16.0	13.0	18.0	24.0	26.0	22.0	21.0
12	18.0	7.0	7.0	10.0	6.0	14.0	14.0	19.0	24.0	25.0	22.0	22.0
13	17.0	7.0	6.0	9.0	6.0	11.0	15.0	18.0	24.0	25.0	22.0	22.0
14	18.0	9.0	7.0	7.0	7.0	10.0	16.0	18.0	23.0	26.0	24.0	23.0
15	18.0	13.0	7.0	6.0	8.0	10.0	18.0	19.0	27.0	25.0	23.0	23.0
16	17.0	13.0	6.0	7.0	7.0	10.0	18.0	20.0	24.0	27.0	23.0	23.0
17	16.0	10.0	5.5	9.0	6.0	11.0	17.0	21.0	23.0	27.0	24.0	22.0
18	15.0	10.0	5.0	9.0	6.0	10.0	16.0	22.0	23.0	26.0	25.0	22.0
19	14.0	10.0	4.0	9.0	6.0	10.0	16.0	23.5	23.0	26.0	25.0	21.0
20	14.0	10.0	4.0	9.0	7.0	12.0	16.0	22.5	25.0	26.0	25.0	22.0
21	15.0	10.0	6.0	10.0	8.0	11.0	16.0	22.0	25.0	23.0	25.0	23.0
22	15.0	13.0	6.0	10.0	10.0	11.0	17.0	21.0	26.0	23.0	25.0	21.0
23	15.0	11.0	4.0	10.0	10.0	11.0	18.0	22.0	26.0	24.0	25.0	19.0
24	16.0	11.0	4.0	11.0	10.0	12.0	18.0	21.0	24.0	24.0	24.0	17.0
25	17.0	13.0	4.0	11.0	10.0	11.0	16.0	22.0	22.0	24.0	25.0	17.0
26	16.0	15.0	5.0	10.0	9.0	9.0	15.0	21.5	23.0	25.0	26.0	17.0
27	16.0	15.0	7.0	11.0	7.0	9.0	16.0	19.0	22.0	25.0	25.0	18.0
28	16.0	10.5	8.0	12.0	7.0	11.0	16.0	18.0	21.0	25.0	26.0	19.0
29	17.0	10.5	8.0	13.0	---	12.0	18.0	19.0	21.0	26.0	26.0	20.0
30	15.0	11.0	8.0	13.0	---	12.0	20.0	20.0	21.0	26.0	27.0	20.0
31	14.0	---	9.0	13.0	---	11.0	---	20.0	---	27.0	27.0	---
MONTH	18.0	11.5	7.0	9.5	8.5	12.0	16.0	19.5	23.0	25.5	24.5	21.5

YEAR MAX 27.0 MIN 4.0 MEAN 16.5

02083500 TAR RIVER AT TARBORO, N. C.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.				
26...	0910	455	38	47
JAN.				
15...	1305	2480	30	201
APR.				
16...	1245	2260	454	2770
JULY				
05...	0905	478	31	40
AUG.				
07...	1045	1660	78	350
08...	1105	4670	98	1240
12...	1125	4530	52	636
15...	1155	1710	35	162
19...	1415	728	59	116

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
SEP.											
04...	1235	509	37	--	6.0	28.0	5.8	<25	--	1.0	390
10...	1200	350	31	--	6.1	27.0	5.4	30	--	2.8	--
17...	1200	567	39	--	6.0	27.0	5.2	27	--	2.5	<10
25...	1315	306	41	--	6.1	27.0	5.8	27	--	2.3	500
OCT.											
04...	1615	259	51	--	6.1	26.0	5.0	<25	--	1.7	110
10...	1100	224	--	--	--	25.0	5.7	30	--	1.4	20
18...	1530	256	--	--	--	23.0	6.0	<25	--	3.2	40
22...	1400	185	--	--	--	22.0	6.2	<25	--	2.1	170
31...	1315	251	--	--	--	18.0	5.9	<25	--	2.0	260
NOV.											
05...	1130	239	39	--	6.1	16.0	6.5	<25	--	2.7	270
19...	1100	269	--	--	--	--	--	<25	--	1.7	40
27...	1145	262	38	--	6.1	15.0	7.1	26	--	1.6	60
DEC.											
13...	1015	1250	--	--	--	--	--	27	--	2.8	1600
JAN.											
03...	1105	3320	--	--	--	--	--	<25	--	2.7	450
17...	1215	1950	--	--	--	--	--	<25	--	1.4	680
24...	1445	2240	38	--	6.0	12.0	9.1	--	27	1.9	2200
FEB.											
11...	1030	3350	31	--	5.5	6.0	9.0	--	<25	1.8	540
21...	1430	6830	44	--	6.1	11.0	9.1	--	38	1.4	920
MAR.											
05...	1300	1890	41	--	6.1	14.0	9.3	--	<25	2.6	220
14...	1050	1260	--	--	6.3	13.0	7.9	--	38	2.3	1400
21...	1120	3600	--	--	6.1	13.0	8.3	--	27	1.5	600
28...	1140	3410	40	--	6.0	16.0	8.6	--	30	1.4	450
APR.											
25...	1200	1140	35	--	6.5	15.0	7.8	--	<25	3.4	600
30...	1100	856	45	--	6.5	21.0	7.0	--	27	1.7	220
MAY											
16...	1150	2800	--	--	--	20.0	7.4	--	32	4.2	3600
JUNE											
04...	1220	1640	36	--	7.3	21.0	7.3	--	<25	1.7	580
17...	1640	620	32	--	6.3	26.0	7.4	--	<25	2.7	910
26...	1550	630	--	80	--	23.0	6.1	--	35	2.2	470
JULY											
23...	1000	257	--	140	--	27.0	5.3	--	--	2.1	340
AUG.											
22...	1615	1310	--	105	--	24.0	6.5	--	--	1.9	15000
27...	1030	609	--	95	--	24.0	6.2	--	--	2.0	7000
SEP.											
04...	1515	651	28	--	7.1	24.0	6.0	--	--	1.2	530
10...	1500	5150	17	--	6.6	24.0	6.6	--	--	2.3	1100
18...	1500	728	--	--	--	24.0	7.6	--	--	2.6	560
26...	1530	708	28	84	6.9	19.0	9.1	--	--	1.3	150

02084540 DURHAM CREEK AT EDWARD, N. C.

LOCATION.--Lat 35°19'25", long 76°52'26", Beaufort County, temperature recorder at gaging station on left bank 5 ft (2 m) downstream from bridge on Secondary Road 1949, at Edward, and 6.8 mi (10.9 km) upstream from mouth.

DRAINAGE AREA.--21 mi^2 (54 km^2), approximately.

PERIOD OF RECORD.--Water temperatures: October 1965 to May 1974 (discontinued).

EXTREMES.--October 1973 to May 1974:
Water temperatures: Maximum recorded, 24.0°C Oct. 1; minimum, 4.5°C Dec 19, Feb. 10, 11, 12, 27.

Period of record:
Water temperatures: Maximum, 31.0°C July 13, 1966; minimum, freezing point on many days in January 1970 and Feb. 13, 1973.

REMARKS.--Miscellaneous chemical data published for water years 1950-54, 1956, 1957, 1959, 1960, 1966, 1967.

TEMPERATURE (DEG. C) OF WATER, OCTOBER 1973 TO MAY 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.0	24.0	14.0	13.5	11.5	10.0	14.5	13.0	15.5	13.5	11.0	8.5
2	23.5	23.0	14.5	13.5	10.0	9.5	14.0	10.5	13.5	12.0	13.0	10.0
3	23.5	23.0	15.0	13.5	9.5	9.0	10.5	9.5	14.0	13.0	15.0	12.0
4	23.5	23.0	14.5	14.0	9.5	9.0	10.0	9.5	12.0	11.0	16.0	14.0
5	23.0	22.0	15.0	13.5	11.5	9.5	10.0	9.0	11.0	8.5	18.0	15.5
6	23.0	21.5	13.5	11.0	11.5	11.0	9.5	9.0	9.0	6.5	18.0	16.5
7	21.5	21.0	11.5	10.5	11.5	10.0	10.5	9.5	11.0	9.0	19.0	17.0
8	21.0	20.0	13.5	11.5	10.5	10.0	10.5	9.5	11.0	9.0	19.5	18.0
9	21.0	20.5	14.5	13.5	12.0	10.0	11.0	9.5	9.0	6.5	19.5	18.5
10	21.0	20.0	12.0	10.0	11.5	10.0	13.5	11.0	6.5	4.5	19.0	18.0
11	20.0	19.5	10.0	9.5	10.5	7.0	15.0	13.5	6.5	4.5	19.0	14.5
12	19.5	19.0	9.0	8.0	7.0	5.5	15.0	12.0	6.5	4.5	14.5	11.5
13	19.0	18.0	9.5	7.0	7.0	5.5	12.0	8.0	8.5	5.5	11.5	9.5
14	18.5	18.0	11.0	8.0	9.0	7.0	8.0	5.0	9.0	8.5	11.0	8.5
15	18.5	17.0	13.5	9.5	9.0	8.0	8.5	6.5	9.0	8.0	11.0	8.5
16	18.5	17.0	14.5	11.5	9.0	8.5	10.5	9.0	8.0	6.5	11.0	10.0
17	18.0	16.5	11.5	9.5	9.0	7.0	11.0	10.5	8.0	6.5	11.0	10.0
18	16.5	15.0	10.0	8.0	6.5	5.0	11.0	10.5	8.0	6.5	12.0	9.0
19	15.5	14.5	12.0	10.0	5.0	4.5	11.0	10.5	9.5	8.0	15.0	10.0
20	15.5	14.0	11.5	9.5	9.0	5.0	11.0	11.0	11.0	10.0	15.0	13.5
21	16.5	14.5	13.5	9.5	11.0	9.5	12.0	11.0	11.0	10.0	15.0	12.0
22	17.0	14.5	15.5	12.0	10.0	6.5	12.0	11.0	13.5	10.5	15.0	13.5
23	17.0	15.0	13.0	10.5	6.5	5.5	12.0	10.5	13.5	11.0	13.5	11.0
24	17.0	15.5	14.0	10.5	5.5	5.0	13.5	12.0	11.0	10.0	17.0	12.0
25	18.0	16.5	16.5	11.0	6.5	5.5	13.5	12.0	11.0	10.0	17.0	9.5
26	18.0	16.5	15.5	13.5	10.0	6.5	12.0	11.5	10.0	6.5	10.0	9.0
27	17.0	15.5	17.0	14.0	11.0	9.5	15.5	12.0	6.5	4.5	10.5	10.0
28	17.0	15.0	17.0	15.0	11.0	10.0	16.5	15.5	8.5	5.0	13.0	10.5
29	17.0	15.5	16.5	12.0	10.0	8.0	16.5	16.0	---	---	14.0	12.0
30	15.5	14.5	12.0	10.5	10.0	9.0	16.0	15.5	---	---	14.0	13.5
31	14.5	13.5	---	---	13.0	10.0	15.5	15.5	---	---	14.5	13.0
MONTH	24.0	13.5	17.0	7.0	13.0	4.5	16.5	6.0	15.5	4.5	19.5	8.5

02084540 DURHAM CREEK AT EDWARD, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, OCTOBER 1973 TO MAY 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	13.0	20.5	20.5	---	---	---	---	---	---	---	---
2	18.5	16.5	20.5	19.5	---	---	---	---	---	---	---	---
3	19.5	17.0	20.0	19.0	---	---	---	---	---	---	---	---
4	20.5	19.5	20.0	19.5	---	---	---	---	---	---	---	---
5	20.5	20.0	20.0	18.0	---	---	---	---	---	---	---	---
6	20.0	16.0	18.0	16.0	---	---	---	---	---	---	---	---
7	16.0	13.5	16.0	15.0	---	---	---	---	---	---	---	---
8	15.5	13.5	15.5	14.5	---	---	---	---	---	---	---	---
9	15.5	14.5	16.0	15.5	---	---	---	---	---	---	---	---
10	14.5	13.0	16.5	16.0	---	---	---	---	---	---	---	---
11	14.5	11.0	18.0	16.5	---	---	---	---	---	---	---	---
12	15.5	13.5	18.0	18.0	---	---	---	---	---	---	---	---
13	16.5	15.5	18.0	18.0	---	---	---	---	---	---	---	---
14	18.5	15.5	18.0	18.0	---	---	---	---	---	---	---	---
15	19.0	18.0	18.0	18.0	---	---	---	---	---	---	---	---
16	19.0	18.0	19.0	18.0	---	---	---	---	---	---	---	---
17	18.0	16.5	20.0	19.0	---	---	---	---	---	---	---	---
18	16.5	15.5	21.0	20.0	---	---	---	---	---	---	---	---
19	16.5	16.0	21.0	21.0	---	---	---	---	---	---	---	---
20	16.5	15.5	21.0	21.0	---	---	---	---	---	---	---	---
21	15.5	14.0	21.0	20.0	---	---	---	---	---	---	---	---
22	17.0	15.5	20.0	20.0	---	---	---	---	---	---	---	---
23	18.5	17.0	---	---	---	---	---	---	---	---	---	---
24	16.5	16.5	---	---	---	---	---	---	---	---	---	---
25	16.5	14.5	---	---	---	---	---	---	---	---	---	---
26	14.5	13.5	---	---	---	---	---	---	---	---	---	---
27	16.0	14.5	---	---	---	---	---	---	---	---	---	---
28	17.0	15.5	---	---	---	---	---	---	---	---	---	---
29	19.0	17.0	---	---	---	---	---	---	---	---	---	---
30	20.5	19.0	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	20.5	11.0	---	---	---	---	---	---	---	---	---	---

02087500 NEUSE RIVER NEAR CLAYTON, N. C.

LOCATION.--Lat 35°38'50", long 78°24'21", Johnston County, at gaging station on left bank at bridge on State Highway 42, 2.3 mi (3.7 km) upstream from Mill Creek, and 3 mi (4.8 km) east of Clayton.

DRAINAGE AREA.--1,140 mi^2 (2,950 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1943 to September 1944, water years 1964-73 (partial-record station), July 1973 to September 1974.
Water temperatures: October 1943 to September 1944, July 1973 to September 1974.

EXTREMES.--July 1973 to September 1974:
Specific conductance: Maximum, 280 micromhos Oct. 17, Nov. 21; minimum, 49 micromhos Sept. 9, 1974.
Water temperatures: Maximum, 28.0°C Sept. 1, 11, 1973, Aug. 1, 17, 18, 31, 1974; minimum, 3.0°C Dec. 19.

Period of record:
Dissolves solids (1943-44): Maximum, 103 mg/l Jan. 1-10, 21-31, 1956; minimum, 47 mg/l Feb. 11-20, 1944.
Hardness (1943-44): Maximum, 26 mg/l Oct. 1-10, 1943; minimum, 14 mg/l Feb. 11-20, 21-31, Apr. 11-20, 1944.
Water temperatures: Maximum, 29.5°C June 18, July 25-28, 1944; minimum, freezing point Dec. 19, 1943.

REMARKS.--Miscellaneous chemical data published for water years 1947, 1949, 1955, 1958-63. Unpublished data for October 1955 to February 1956 are available in district office at Raleigh. Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
OCT.											
30...	0915	220	19	910	--	--	650	50	600	--	9.6
JAN.											
15...	0920	884	14	1500	330	--	75	32	43	--	5.8
29...	0945	4690	4.9	15000	460	--	250	220	30	--	4.5
30...	0930	6270	9.7	4900	210	--	160	100	60	--	4.5
FEB.											
01...	1025	3110	12	2800	300	--	100	60	40	--	5.0
APR.											
04...	1330	1350	13	1400	340	18000	70	37	33	71	5.0
MAY											
12...	1345	1900	12	2700	360	--	200	200	0	--	5.6
13...	1530	4200	9.8	9000	350	--	320	300	25	--	6.0
16...	1000	3420	11	--	--	--	--	--	--	--	6.4
20...	0930	812	15	1400	390	--	83	58	25	--	7.2
JUNE											
21...	0945	348	17	710	270	1500	160	0	170	60	9.4
AUG.											
04...	1530	572	14	2200	270	--	500	340	160	--	7.8
04...	1820	2000	12	17000	460	--	2200	1800	400	--	5.0
04...	2130	3140	7.1	20000	950	--	1900	1100	810	--	4.1
05...	0920	2370	9.1	--	--	--	--	--	--	--	4.1
06...	1020	980	12	2200	210	--	300	210	88	--	5.9
07...	0925	4580	9.1	10000	230	--	580	480	96	--	4.6
07...	1420	5190	9.6	9900	290	--	770	610	160	--	5.1
08...	1015	4540	8.1	--	--	--	--	--	--	--	3.9
10...	1600	980	12	1500	450	--	150	120	28	--	5.8
14...	1155	475	13	--	--	--	--	--	--	--	6.9

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.											
30...	2.8	37	4.7	70	--	57	13	41	.4	.66	.68
JAN.											
15...	2.3	8.9	2.3	27	0	22	12	9.9	.1	1.0	.59
29...	1.6	6.1	2.1	23	0	19	9.0	6.0	.2	.57	.39
30...	1.6	5.5	2.2	16	0	13	11	5.1	.2	.45	.30
FEB.											
01...	1.9	6.9	2.3	24	0	20	11	7.0	.2	.51	.32
APR.											
04...	2.0	9.2	1.6	24	0	20	10	7.7	.3	.52	.50
MAY											
12...	1.9	7.0	2.0	25	--	21	7.1	5.9	.3	.60	.52
13...	1.9	5.2	2.1	16	--	13	7.2	5.7	.3	.49	.37
16...	1.9	6.8	2.2	20	--	16	7.7	10	.3	.41	.39
20...	2.2	10	2.5	28	--	23	7.7	11	.4	1.0	1.0
JUNE											
21...	2.6	18	3.2	34	--	28	8.5	19	.4	1.3	1.3
AUG.											
04...	2.0	21	3.2	34	--	28	13	24	.1	.90	.86
04...	1.7	19	2.9	24	--	20	11	22	.2	.87	.70
04...	1.0	9.7	2.4	14	--	11	7.3	10	.1	--	--
05...	.9	7.5	2.3	15	--	12	6.7	6.9	.1	.39	.35
06...	1.5	9.7	2.9	22	--	18	10	12	.2	--	--
07...	1.0	7.2	2.4	18	--	15	6.3	6.7	.1	.38	.34
07...	1.4	8.5	2.7	18	--	15	7.1	11	.2	.50	.43
08...	1.3	7.1	2.4	16	--	13	7.9	5.1	.3	--	--
10...	2.0	9.2	2.2	21	--	17	12	10	.2	.54	.54
14...	2.8	12	3.0	34	--	28	15	9.5	.3	--	--

02087500 NEUSE RIVER NEAR CLAYTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	SUSPENDED KJEL. NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM DEP. (MG/KG)	TOTAL NITROGEN (N) (MG/L)
OCT.											
30...	--	--	--	--	--	--	4.9	--	4.6	--	5.6
JAN.											
15...	--	.20	.01	.01	.79	.66	.99	.32	.67	--	2.0
29...	--	.11	.02	.03	.63	.24	.74	.48	.26	--	1.3
30...	--	.13	.02	.03	.33	.43	.46	.01	.45	--	.91
FEB.											
01...	--	.11	.10	.13	.00	.37	.06	.00	.47	--	.57
APR.											
04...	.3	.43	.43	.55	.13	.18	.56	.00	.61	1500	1.1
MAY											
12...	--	.18	.24	.31	.37	.16	.55	.15	.40	--	1.2
13...	--	.06	.12	.15	.31	.16	.37	.09	.28	--	.86
16...	--	.31	.27	.35	.38	.34	.69	.08	.61	--	1.1
20...	--	.59	.57	.73	1.1	.43	1.7	.70	1.0	--	2.7
JUNE											
21...	.0	.00	.00	.00	1.7	1.3	1.7	.40	1.3	97	3.0
AUG.											
04...	--	.77	.67	.86	1.2	.73	2.0	.60	1.4	--	2.9
04...	--	.37	.36	.46	3.4	.64	3.8	2.8	1.0	--	4.7
04...	--	--	--	--	--	--	--	--	--	--	--
05...	--	.22	.13	.17	1.5	.50	1.7	1.1	.63	--	2.1
06...	--	--	--	--	--	--	--	--	--	--	--
07...	--	.17	.06	.08	1.8	.59	2.0	1.4	.65	--	2.4
07...	--	.15	.05	.06	1.8	.66	1.9	1.2	.71	--	2.4
08...	--	--	--	--	--	--	--	--	--	--	--
10...	--	.28	.22	.28	1.1	.78	1.4	.40	1.0	--	1.9
14...	--	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO PHOSPHATE (PO4) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM DEPOSITS (MG/KG)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
OCT.											
30...	25	2.2	--	2.0	--	--	--	--	163	.22	96.8
JAN.											
15...	8.8	.50	.80	.30	.30	.26	--	82	72	.11	196
29...	5.8	.40	.12	.06	.18	.04	--	57	48	.08	722
30...	4.0	.25	.12	.08	.09	.04	--	89	49	.12	1510
FEB.											
01...	2.5	.22	.25	.11	.18	.08	--	90	60	.12	756
APR.											
04...	4.8	.26	.58	.25	.22	.19	280	70	64	.10	255
MAY											
12...	5.1	.35	.46	.18	.18	.15	--	54	55	.07	277
13...	3.8	.44	.18	.08	.16	.06	--	78	48	.11	885
16...	4.9	.32	.34	.14	.15	.11	--	72	56	.10	665
20...	12	.48	.92	.35	.32	.30	--	76	70	.10	167
JUNE											
21...	13	.78	2.1	.78	.60	.69	110	122	95	.17	115
AUG.											
04...	13	.75	1.5	.51	.57	.50	--	119	108	.16	184
04...	21	2.0	.74	.25	.39	.24	--	120	87	.16	648
04...	--	--	--	--	--	--	--	55	50	.07	466
05...	9.3	.45	.31	.11	.21	.10	--	50	47	.07	320
06...	--	--	--	--	--	--	--	77	65	.10	204
07...	11	.58	.28	.10	.21	.09	--	70	47	.10	866
07...	11	.72	.34	.12	.23	.11	--	84	55	.11	1180
08...	--	--	--	--	--	--	--	59	44	.08	723
10...	8.6	.38	.71	.23	.26	.23	--	76	64	.10	201
14...	--	--	--	--	--	--	--	103	79	.14	132

02087500 NEUSE RIVER NEAR CLAYTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
30...	36	0	66	2.7	280	6.4	13.0	--	5	5.0	45
JAN.											
15...	24	2	42	.8	120	6.2	6.0	30	--	11.2	27
29...	18	0	39	.6	85	6.3	12.0	100	--	9.8	18
30...	18	5	37	.6	80	6.2	12.8	100	--	9.6	16
FEB.											
01...	20	0	39	.7	85	6.2	11.5	60	--	8.9	24
APR.											
04...	21	1	47	.9	105	6.4	17.0	50	--	7.9	15
MAY											
12...	22	1	38	.7	103	6.5	18.2	40	--	8.0	13
13...	23	10	31	.5	90	6.3	19.1	100	--	8.6	13
16...	24	7	36	.6	105	6.3	18.2	90	--	8.0	16
20...	27	4	42	.8	125	6.5	21.0	30	--	8.7	14
JUNE											
21...	34	6	51	1.3	160	6.6	23.6	10	--	3.8	14
AUG.											
04...	28	0	59	1.7	160	6.5	--	40	--	--	17
04...	19	0	64	1.9	140	6.4	25.0	100	--	5.2	15
04...	14	3	55	1.1	78	6.2	23.0	200	--	5.2	14
05...	14	2	49	.9	65	6.3	23.0	200	--	6.2	12
06...	21	3	46	.9	94	6.4	24.0	70	--	--	14
07...	16	1	46	.8	62	6.6	23.5	200	--	--	7.2
07...	19	4	46	.9	78	6.5	24.0	200	--	6.0	9.1
08...	15	2	46	.8	67	6.5	22.0	300	--	6.7	8.1
10...	23	6	44	.8	100	6.5	23.0	50	--	6.5	11
14...	29	1	44	1.0	131	6.7	23.0	60	--	5.4	11

DATE	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MATERIAL (C) (G/KG)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DEPOSITS (UG/G)	TOTAL CADMIUM (CD) (UG/L)
OCT.												
30...	--	--	--	17	15	--	--	3	1	2	--	<10
JAN.												
15...	200	5.0	14	11	9.4	--	.0	6	6	0	--	0
29...	--	--	--	10	8.9	--	.0	5	4	1	--	0
30...	--	--	--	12	11	--	.0	0	0	3	--	0
FEB.												
01...	--	--	--	11	7.7	--	.0	10	7	3	--	0
APR.												
04...	1900	--	--	8.0	6.6	19	.0	8	1	7	3	1
MAY												
12...	--	--	--	58	--	--	.0	3	3	0	--	1
13...	--	--	--	15	11	--	.0	0	0	1	--	1
16...	--	--	--	25	12	--	.0	--	--	--	--	--
20...	--	--	--	53	20	--	.0	2	2	0	--	1
JUNE												
21...	9100	--	--	21	8.3	1.7	.1	4	2	2	1	0
AUG.												
04...	--	--	--	12	7.7	--	.0	1	0	1	--	1
04...	--	--	--	6.5	2.8	--	.0	2	1	1	--	2
04...	--	--	--	--	--	--	--	2	2	0	--	0
05...	--	--	--	12	10	--	.0	--	--	--	--	--
06...	--	--	--	--	--	--	--	1	0	1	--	2
07...	--	--	--	8.0	8.0	--	.0	2	1	1	--	2
07...	--	--	--	13	11	--	.0	2	1	1	--	1
10...	--	--	--	15	13	--	.0	1	1	0	--	1

02087500 NEUSE RIVER NEAR CLAYTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
OCT.												
30...	6	4	--	0	0	0	--	<25	23	2	--	20
JAN.												
15...	0	1	--	0	0	0	--	1	0	4	--	5
29...	0	8	--	0	0	0	--	0	0	0	--	2
30...	0	0	--	0	0	1	--	2	2	0	--	10
FEB.												
01...	0	1	--	0	0	2	--	1	1	0	--	8
APR.												
04...	1	0	1	0	0	1	26	4	4	0	10	5
MAY												
12...	0	2	--	1	1	0	--	4	0	4	--	20
13...	0	2	--	3	3	0	--	8	4	4	--	31
16...	--	--	--	--	--	--	--	--	--	--	--	--
20...	0	1	--	1	0	2	--	5	1	4	--	8
JUNE												
21...	0	0	<10	0	0	1	<10	0	0	0	<50	10
AUG.												
04...	1	0	--	<10	<10	0	--	4	1	3	--	11
04...	2	0	--	20	20	0	--	0	0	4	--	15
04...	0	0	--	30	30	0	--	18	15	3	--	47
05...	--	--	--	--	--	--	--	--	--	--	--	--
06...	2	0	--	<10	<10	0	--	1	0	3	--	14
07...	2	0	--	<10	<10	0	--	5	1	4	--	22
07...	1	0	--	<10	<10	0	--	6	6	0	--	22
10...	1	0	--	<10	<10	0	--	3	1	2	--	10

DATE	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
OCT.										
30...	10	10	--	500	500	3	--	.0	.0	.0
JAN.										
15...	0	7	--	13	5	8	--	.0	.0	.0
29...	0	39	--	5	1	4	--	.0	.0	.0
30...	8	2	--	30	26	4	--	.0	.0	.0
FEB.										
01...	5	3	--	13	8	5	--	.0	.0	.0
APR.										
04...	0	6	29	16	14	2	40	.0	.0	.0
MAY										
12...	15	5	--	8	1	7	--	.1	.1	.0
13...	26	5	--	10	8	2	--	.2	.0	.2
20...	3	5	--	13	8	5	--	.2	.2	.0
JUNE										
21...	3	7	<10	3	3	0	<100	.0	.0	.3
AUG.										
04...	3	8	--	15	15	0	--	.2	.1	.1
04...	8	7	--	37	37	0	--	.4	.2	.2
04...	37	10	--	84	78	6	--	.3	.3	.0
06...	7	7	--	15	15	0	--	.4	.2	.2
07...	18	4	--	49	49	0	--	.1	.0	.1
07...	18	4	--	41	33	8	--	.1	.1	.0
10...	5	5	--	7	0	10	--	.2	.1	.1

02087500 NEUSE RIVER NEAR CLAYTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL MERCURY IN BOTTOM DEPOSITS (UG/G)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL SELENIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DEPOSITS (UG/G)
OCT.									
30...	--	6	4	2	--	1400	--	--	--
JAN.									
15...	--	4	0	4	--	80	70	10	--
29...	--	8	3	5	--	50	20	30	--
30...	--	0	0	10	--	0	0	0	--
FEB.									
01...	--	12	0	12	--	20	20	0	--
APR.									
04...	.1	3	1	2	0	40	30	10	109
MAY									
12...	--	6	1	5	--	20	10	7	--
13...	--	7	1	6	--	40	40	0	--
20...	--	11	7	4	--	5	2	3	--
JUNE									
21...	.0	0	0	0	0	80	70	10	10
AUG.									
04...	--	6	2	4	--	20	10	10	--
04...	--	8	8	0	--	150	130	20	--
04...	--	10	5	5	--	140	110	30	--
06...	--	6	0	6	--	50	0	60	--
07...	--	9	7	2	--	40	30	8	--
07...	--	5	2	3	--	50	40	8	--
10...	--	2	0	3	--	10	0	10	--

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.				
30...	0915	220	9	5.3
JAN.				
15...	0920	884	23	55
29...	0945	4690	388	4910
30...	0930	6270	125	2120
FEB.				
01...	1025	3110	65	546
APR.				
04...	1330	1350	29	106
MAY				
12...	1345	1900	85	436
13...	1530	4200	270	3060
16...	1000	3420	77	711
20...	0930	812	36	79
JUNE				
21...	0945	348	10	9.4
AUG.				
04...	1530	572	65	100
04...	1820	2000	997	5390
04...	2130	3140	1330	11300
05...	0920	2370	254	1630
06...	1020	980	70	185
08...	1015	4540	570	6990
10...	1600	980	52	138
14...	1155	475	16	21

02087500 NEUSE RIVER NEAR CLAYTON, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	157	159
2	---	---	---	---	---	---	---	---	---	---	116	159
3	---	---	---	---	---	---	---	---	---	---	96	148
4	---	---	---	---	---	---	---	---	---	---	80	138
5	---	---	---	---	---	---	---	---	---	---	85	127
6	---	---	---	---	---	---	---	---	---	---	76	180
7	---	---	---	---	---	---	---	---	---	---	91	180
8	---	---	---	---	---	---	---	---	---	---	128	191
9	---	---	---	---	---	---	---	---	---	---	128	175
10	---	---	---	---	---	---	---	---	---	---	140	170
11	---	---	---	---	---	---	---	---	---	---	149	136
12	---	---	---	---	---	---	---	---	---	---	150	145
13	---	---	---	---	---	---	---	---	---	---	146	164
14	---	---	---	---	---	---	---	---	---	---	115	159
15	---	---	---	---	---	---	---	---	---	---	115	161
16	---	---	---	---	---	---	---	---	---	---	143	159
17	---	---	---	---	---	---	---	---	---	110	148	133
18	---	---	---	---	---	---	---	---	---	120	101	148
19	---	---	---	---	---	---	---	---	---	140	108	154
20	---	---	---	---	---	---	---	---	---	140	77	172
21	---	---	---	---	---	---	---	---	---	144	75	196
22	---	---	---	---	---	---	---	---	---	152	93	198
23	---	---	---	---	---	---	---	---	---	147	90	217
24	---	---	---	---	---	---	---	---	---	135	98	208
25	---	---	---	---	---	---	---	---	---	147	111	198
26	---	---	---	---	---	---	---	---	---	150	117	219
27	---	---	---	---	---	---	---	---	---	164	107	208
28	---	---	---	---	---	---	---	---	---	134	117	185
29	---	---	---	---	---	---	---	---	---	146	140	203
30	---	---	---	---	---	---	---	---	---	153	159	224
31	---	---	---	---	---	---	---	---	---	130	138	---
MONTH	---	---	---	---	---	---	---	---	---	---	116	174

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	220	230	96	71	99	62	151	115	200	198	141
2	223	240	270	95	80	99	71	130	100	212	213	65
3	239	260	238	91	76	99	74	114	105	205	66	68
4	239	270	240	103	74	94	86	110	108	205	61	63
5	212	262	248	100	75	99	91	110	120	208	63	57
6	267	265	216	80	86	114	88	100	130	200	90	59
7	254	260	200	82	86	117	86	90	130	200	69	56
8	244	240	215	85	88	114	78	86	140	205	62	56
9	244	229	133	85	80	116	90	91	130	200	75	49
10	259	222	140	90	73	120	94	99	130	200	96	63
11	265	261	180	90	78	106	93	125	125	200	102	63
12	231	270	175	79	85	104	93	100	121	200	103	63
13	244	271	160	85	94	127	92	61	130	200	114	102
14	245	268	184	85	95	125	97	61	125	200	129	105
15	250	270	146	96	102	120	95	60	125	200	127	104
16	254	245	130	103	95	125	94	96	125	200	133	111
17	280	232	104	107	82	110	100	92	122	230	135	110
18	270	267	135	115	74	99	115	118	130	230	112	116
19	239	251	125	115	75	95	135	92	130	215	117	133
20	223	259	97	110	85	83	125	95	129	200	86	132
21	228	280	102	108	93	80	116	98	125	---	110	131
22	260	185	107	111	82	80	115	125	170	---	112	131
23	265	188	106	71	80	80	111	130	155	---	116	131
24	277	268	95	73	72	80	131	128	162	---	99	131
25	273	270	93	84	70	78	129	120	170	---	105	140
26	250	260	91	74	83	93	130	128	210	---	108	156
27	233	250	102	75	85	94	137	130	210	---	104	152
28	239	240	110	69	94	102	125	80	208	---	104	136
29	248	230	106	61	---	104	116	90	210	---	108	135
30	240	200	105	66	---	80	133	90	210	---	145	121
31	218	---	105	68	---	64	---	130	---	200	141	---
MONTH	247	248	151	89	83	100	103	104	143	---	110	103
YEAR	MAX	280	MIN	49	MEAN	139						

02087500 NEUSE RIVER NEAR CLAYTON, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	26.0	28.0
2	---	---	---	---	---	---	---	---	---	---	25.0	27.0
3	---	---	---	---	---	---	---	---	---	---	25.0	27.0
4	---	---	---	---	---	---	---	---	---	---	25.0	27.0
5	---	---	---	---	---	---	---	---	---	---	25.0	27.0
6	---	---	---	---	---	---	---	---	---	---	25.0	27.0
7	---	---	---	---	---	---	---	---	---	---	26.0	26.0
8	---	---	---	---	---	---	---	---	---	---	26.0	26.0
9	---	---	---	---	---	---	---	---	---	---	26.0	25.0
10	---	---	---	---	---	---	---	---	---	---	27.0	24.0
11	---	---	---	---	---	---	---	---	---	---	26.0	28.0
12	---	---	---	---	---	---	---	---	---	---	26.0	24.0
13	---	---	---	---	---	---	---	---	---	---	26.0	24.0
14	---	---	---	---	---	---	---	---	---	---	26.0	24.0
15	---	---	---	---	---	---	---	---	---	---	26.0	24.0
16	---	---	---	---	---	---	---	---	---	---	27.0	23.0
17	---	---	---	---	---	---	---	---	---	25.0	27.0	24.0
18	---	---	---	---	---	---	---	---	---	25.0	25.0	24.0
19	---	---	---	---	---	---	---	---	---	25.0	25.0	24.0
20	---	---	---	---	---	---	---	---	---	26.0	25.0	24.0
21	---	---	---	---	---	---	---	---	---	26.0	24.0	24.0
22	---	---	---	---	---	---	---	---	---	26.0	24.0	24.0
23	---	---	---	---	---	---	---	---	---	26.0	24.0	24.0
24	---	---	---	---	---	---	---	---	---	26.0	24.0	24.0
25	---	---	---	---	---	---	---	---	---	26.0	24.0	25.0
26	---	---	---	---	---	---	---	---	---	26.0	25.0	25.0
27	---	---	---	---	---	---	---	---	---	26.0	25.0	25.0
28	---	---	---	---	---	---	---	---	---	26.0	25.0	25.0
29	---	---	---	---	---	---	---	---	---	27.0	26.0	25.0
30	---	---	---	---	---	---	---	---	---	26.0	26.0	23.5
31	---	---	---	---	---	---	---	---	---	26.0	27.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	25.5	25.0

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	15.0	11.0	10.0	13.0	9.0	13.0	23.0	22.0	23.0	28.0	26.0
2	24.0	15.0	10.0	8.0	12.0	10.0	15.0	24.0	22.0	22.0	27.0	27.0
3	24.5	15.0	10.0	8.0	13.0	12.0	17.0	26.0	23.0	23.0	25.0	24.0
4	22.0	15.0	12.0	8.0	11.0	14.0	17.0	24.0	22.0	24.0	25.0	23.0
5	21.5	14.5	15.0	8.0	9.0	16.0	17.0	22.0	22.0	23.0	24.0	22.0
6	21.5	11.5	13.0	8.0	8.0	17.0	16.0	17.0	22.0	24.0	23.0	20.0
7	21.0	10.5	10.0	10.0	10.0	18.0	15.0	17.0	22.0	24.0	22.5	20.0
8	20.0	12.0	8.0	10.0	8.0	19.0	15.0	17.0	23.0	24.0	22.0	21.0
9	21.0	13.5	8.0	10.0	8.0	19.0	15.0	18.0	21.0	23.0	24.0	21.0
10	21.0	10.5	8.0	10.0	7.0	17.0	14.0	17.0	21.0	24.0	23.0	20.0
11	21.0	9.0	7.0	11.0	6.0	16.0	14.0	21.0	21.0	23.0	24.0	21.0
12	20.0	8.5	6.0	10.0	7.0	10.0	15.0	19.0	22.0	24.0	24.0	21.0
13	19.5	9.5	6.0	9.0	8.0	13.0	15.0	18.0	21.0	25.0	24.0	22.0
14	19.0	11.0	8.0	8.0	8.0	11.0	18.0	19.0	22.0	24.0	23.0	23.0
15	19.0	13.0	8.0	8.0	8.0	11.0	17.0	19.0	21.0	25.0	22.5	22.0
16	18.5	14.0	5.0	9.0	8.0	11.0	16.0	22.0	21.0	23.0	24.0	21.0
17	17.0	11.5	5.0	10.0	7.0	10.0	16.0	23.0	22.0	25.0	28.0	24.0
18	15.5	10.0	4.0	9.0	6.0	10.0	17.0	24.0	21.0	25.0	28.0	25.0
19	15.5	14.5	3.0	10.0	7.0	10.0	18.0	22.0	22.0	26.0	27.5	21.0
20	15.5	14.5	6.0	11.0	10.0	12.0	18.0	23.0	23.0	27.0	26.0	21.0
21	16.0	12.0	7.0	12.0	10.0	11.0	18.0	22.0	22.0	---	26.5	21.0
22	17.0	12.0	7.0	12.0	11.0	11.0	19.0	21.0	22.0	---	26.0	23.0
23	17.0	12.0	8.0	12.0	10.0	10.0	21.0	21.0	21.0	---	26.0	20.0
24	18.0	11.0	8.0	11.0	10.0	10.0	17.0	22.0	22.0	---	25.5	19.0
25	18.0	11.5	8.0	10.0	8.0	10.0	17.0	22.0	21.0	---	26.0	20.0
26	17.0	12.0	7.0	10.0	7.0	10.0	18.0	20.0	22.0	---	25.5	20.0
27	16.5	17.0	8.0	11.0	8.0	10.0	18.0	22.0	22.0	---	26.5	20.0
28	16.5	16.0	8.0	12.0	8.0	13.0	20.0	18.0	21.0	---	27.0	24.0
29	16.5	14.0	8.0	13.0	---	13.0	21.0	19.0	27.0	---	26.0	24.0
30	14.5	12.0	8.0	13.0	---	12.0	23.0	21.0	23.0	---	27.5	21.5
31	15.5	---	9.0	13.0	---	12.0	---	22.0	---	27.0	28.0	---
MONTH	19.0	12.5	8.0	10.0	9.0	12.5	17.0	21.0	22.0	---	25.5	22.0

YEAR MAX 28.0 MIN 3.0 MEAN 16.5

02087500 NEUSE RIVER NEAR CLAYTON, N. C.--Continued

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
SEP.											
07...	0855	281	--	--	--	18.0	5.2	<25	--	2.9	--
12...	1515	220	32	--	6.6	25.0	9.8	--	--	2.1	60
21...	0855	210	50	--	6.9	21.0	2.9	27	--	3.3	220
26...	1140	175	50	--	7.0	23.0	3.3	<25	--	1.5	<10
OCT.											
05...	0940	194	--	--	--	--	--	26	--	2.8	70
11...	0955	152	57	--	7.1	20.0	2.0	27	--	2.8	3[illegible]
18...	1115	127	--	--	--	--	--	34	--	3.1	1[illegible]
25...	0930	122	--	--	--	--	--	41	--	1.3	30
NOV.											
02...	0925	167	--	--	--	--	--	64	--	3.8	30
08...	1100	139	--	--	--	--	--	<25	--	1.4	770
14...	1645	152	--	--	--	--	--	41	--	3.1	40
21...	1010	155	--	--	--	--	--	30	--	3.4	90
27...	1700	161	--	--	--	--	--	41	--	5.2	150
DEC.											
03...	1445	169	54	--	6.0	13.0	5.8	38	--	3.6	660
10...	1340	914	31	--	7.0	9.0	9.2	34	--	5.8	8200
JAN.											
16...	1530	770	36	--	7.1	11.0	9.2	--	<25	3.8	2100
24...	1515	2580	30	--	7.2	12.0	9.1	--	34	4.6	200[illegible]
FEB.											
08...	0900	1450	11	--	6.7	7.0	9.2	--	27	2.2	30
12...	1315	1510	20	--	7.1	7.0	10.0	--	26	2.6	130
22...	1000	1790	13	--	6.8	10.0	9.5	--	45	2.2	620
MAR.											
01...	0945	914	32	--	7.0	8.0	9.2	--	26	5.2	12000
05...	1400	770	--	--	--	16.0	7.8	--	26	4.4	1500
15...	0940	788	22	--	7.1	9.0	8.5	--	<25	3.9	70
22...	1000	1470	27	--	7.4	11.0	7.4	--	<25	5.7	450
APR.											
05...	0945	1480	27	--	6.8	18.0	6.4	--	27	2.6	860
12...	1115	1250	22	--	6.8	16.0	8.2	--	30	3.0	70
18...	1100	728	35	--	7.5	--	6.5	--	<25	5.8	250
22...	1420	548	30	--	6.4	--	6.3	--	27	4.1	60
MAY											
02...	1636	460	36	--	6.6	19.0	4.3	--	27	7.4	490
10...	0930	1180	28	--	6.6	18.0	6.4	--	<25	5.1	2200
16...	1210	3180	20	--	6.8	19.0	7.3	--	35	2.8	260
23...	1000	848	30	--	6.7	20.0	5.4	--	27	3.8	1400
31...	0815	932	--	--	--	19.0	4.8	--	49	3.6	1300
JUNE											
06...	1630	668	30	200	6.9	23.0	5.1	--	27	3.7	140
11...	1530	455	33	110	6.7	26.0	4.0	--	31	3.0	2600
25...	1600	318	38	--	6.5	25.0	4.4	--	31	4.5	360
JULY											
01...	1515	362	27	165	6.2	26.0	4.9	--	43	3.1	190
08...	1545	285	--	135	--	27.0	4.6	--	--	2.8	1 00
24...	1600	150	--	270	--	25.0	3.7	--	--	2.9	[illegible] 0
30...	1410	178	45	250	6.9	28.0	2.5	--	--	1.6	< 0
AUG.											
27...	1525	686	23	--	6.5	25.0	4.6	--	36	3.3	4000
SEP.											
03...	1515	1870	8	95	6.8	25.0	5.6	--	--	7.8	1 00
11...	1445	6400	17	--	6.5	22.0	7.9	--	--	1.6	1[illegible]
17...	1340	455	28	--	7.1	23.5	9.2	--	--	3.1	15[illegible]
26...	1400	348	38	146	6.9	19.0	6.0	--	--	1.9	
30...	1600	395	33	120	7.1	20.0	5.4	--	--	3.2	[illegible]

02089500 NEUSE RIVER AT KINSTON, N. C.

LOCATION.--Lat 35°15'29", long 77°35'09", Lenoir County, at gaging station on left bank at Kinston, 600 ft (183 m) downstream from bridge on State Highway 11, and 90 mi (145 km) upstream from mouth.

DRAINAGE AREA.--2,690 mi^2 (6,970 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1949 to September 1950, January 1955 to September 1956, October 1958 to September 1967, July 1973 to September 1974.
Water temperatures: October 1949 to September 1950, January 1955 to September 1956, July 1973 to September 1974.

EXTREMES.--July 1973 to September 1974:
Specific conductance: Maximum, 185 micromhos Nov. 30; minimum, 49 micromhos Aug. 12.
Water temperatures: Maximum, 28.0°C July 31, August 1, 1973; minimum, 4.0°C Dec. 19.

Period of record:
Specific conductance (1955-56, 1973-74): Maximum, 185 micromhos Nov. 30, 1973; minimum, 47 micromhos Mar. 25, 1956.
Water temperatures: Maximum, 33.5°C July 3, 1956; minimum, 2.0°C Jan. 18, Feb. 14, 1955, Jan. 5, 1956.

REMARKS.--Water-quality samples are collected from highway bridge 600 ft (183 m) upstream from gaging station. Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
OCT.											
26...	1215	295	10	650	110	--	150	90	60	--	8.5
JAN.											
16...	1000	3060	12	1700	330	--	22	0	29	--	6.2
JULY											
05...	1315	840	12	1300	260	1600	130	130	0	180	6.7
AUG.											
05...	1206	4000	7.1	1400	230	--	90	44	46	--	4.1
07...	1255	5620	6.8	--	--	--	--	--	--	--	3.6
08...	1235	7190	6.5	--	--	--	--	--	--	--	3.6
12...	1345	10400	6.6	1300	440	--	74	39	35	--	4.3
19...	1200	6320	8.6	--	--	--	--	--	--	--	5.5
22...	1150	4000	9.8	2000	410	--	130	47	83	--	3.8

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.											
26...	2.5	17	3.7	40	0	33	12	17	.2	.66	.62
JAN.											
16...	2.5	7.1	2.3	16	0	13	14	8.9	.1	.58	.59
JULY											
05...	2.1	13	2.8	32	--	26	9.1	14	.3	.50	.51
AUG.											
05...	1.1	4.6	2.0	8	--	7	8.2	5.9	.1	.36	.36
07...	1.2	4.3	2.1	8	--	7	7.9	5.7	.0	--	--
08...	1.2	3.8	2.0	9	--	7	7.2	5.3	.1	.34	.36
12...	1.1	4.3	2.4	8	--	7	8.0	5.1	.2	.27	.27
19...	1.4	4.6	2.2	12	--	10	7.3	6.6	.2	.40	.40
22...	1.6	5.4	2.5	14	--	11	9.5	6.7	.2	.55	.55

02089500 NEUSE RIVER AT KINSTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS_ SOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM DEP. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)
OCT.											
26...	--	--	--	--	--	--	.64	--	.48	--	1.3
JAN.											
16...	--	.04	.11	.14	.06	.35	.10	.00	.46	--	.78
JULY											
05...	1.0	.06	.02	.03	1.1	.61	1.2	.57	.63	85	1.7
AUG.											
05...	--	.06	.06	.08	.91	.48	.97	.43	.54	--	1.3
07...	--	--	--	--	--	--	--	--	--	--	--
08...	--	.07	.02	.03	.86	.76	.93	.15	.78	--	1.3
12...	--	.05	.02	.03	.77	.70	.82	.10	.72	--	1.1
19...	--	.06	.09	.12	.94	.55	1.0	.36	.64	--	1.4
22...	--	.09	.04	.05	.76	.45	.85	.36	.49	--	1.4

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT.											
26...	5.8	.33	--	.22	--	--	--	92	91	.13	73.3
JAN.											
16...	3.5	.22	.06	.16	.04	.02	--	77	64	.10	636
JULY											
05...	7.5	.38	.43	.14	.35	.14	88	92	76	.13	209
AUG.											
05...	5.9	.22	.37	.09	.12	.12	--	44	37	.06	475
07...	--	--	--	--	--	--	--	58	36	.08	880
08...	5.6	.16	.25	.09	.11	.08	--	61	34	.08	1180
12...	4.8	.13	.21	.08	.10	.07	--	68	36	.09	1910
19...	6.2	.15	.21	.08	.11	.07	--	65	42	.09	1110
22...	6.2	.23	.21	.08	.12	.07	--	80	48	.11	864

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
26...	32	0	51	1.3	160	6.6	19.0	--	9	9.1	16
JAN.											
16...	26	13	35	.6	110	6.3	9.0	30	--	10.4	13
JULY											
05...	25	0	49	1.1	125	8.0	28.0	40	--	9.1	.5
AUG.											
05...	15	8	37	.5	58	6.2	24.0	100	--	7.0	8.1
07...	14	7	36	.5	54	6.2	--	100	--	--	8.1
08...	14	7	33	.4	50	5.9	--	100	--	--	18
12...	15	9	34	.5	48	5.9	--	100	--	--	16
19...	20	10	31	.5	62	6.0	24.0	100	--	5.7	19
22...	16	5	42	.7	70	6.2	24.0	80	--	6.0	14

DATE	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CAD-MIUM (CD) (UG/L)
OCT.												
26...	--	--	--	7.0	12	--	--	0	0	0	--	<10
JAN.												
16...	400	5.0	10	18	1.0	--	.5	3	0	3	--	0
JULY												
05...	130000	12	22	27	10	.3	.0	0	0	0	1	1
AUG.												
05...	--	--	--	17	12	--	.0	2	1	1	--	0
08...	--	--	--	20	19	--	.0	--	--	--	--	--
12...	--	--	--	19	19	--	.0	1	0	1	--	1
19...	--	--	--	16	15	--	.0	--	--	--	--	--
22...	--	--	--	12	11	--	.0	1	0	1	--	0

02089500 NEUSE RIVER AT KINSTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
OCT.												
26...	10	0	--	0	0	0	--	<50	50	0	--	<10
JAN.												
16...	0	0	--	0	0	0	--	1	0	4	--	6
JULY												
05...	1	0	<10	<10	<9	1	<10	4	0	4	<10	7
AUG.												
05...	0	0	--	10	9	1	--	0	0	0	--	7
08...	--	--	--	--	--	--	--	--	--	--	--	--
12...	0	1	--	<10	<9	1	--	4	1	3	--	9
19...	--	--	--	--	--	--	--	--	--	--	--	--
22...	0	0	--	20	19	1	--	7	0	11	--	9

DATE	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
OCT.										
26...	6	4	--	<100	96	4	--	.0	.0	.0
JAN.										
16...	0	6	--	13	9	4	--	.0	.0	.0
JULY										
05...	0	3	<10	5	2	3	<10	.1	.0	.6
AUG.										
05...	0	10	--	0	0	4	--	.1	.0	.1
12...	4	5	--	9	2	7	--	--	--	.1
22...	5	4	--	9	6	3	--	.1	.0	.1

DATE	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
OCT.									
26...	--	5	0	5	--	10	0	10	--
JAN.									
16...	--	4	0	4	--	60	60	0	--
JULY									
05...	.1	0	0	0	0	20	20	0	20
AUG.									
05...	--	4	2	2	--	30	30	5	--
12...	--	0	0	0	--	100	100	0	--
22...	--	0	0	0	--	140	140	4	--

02089500 NEUSE RIVER AT KINSTON, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	97	93
2	---	---	---	---	---	---	---	---	---	---	97	95
3	---	---	---	---	---	---	---	---	---	---	91	98
4	---	---	---	---	---	---	---	---	---	---	89	95
5	---	---	---	---	---	---	---	---	---	---	100	97
6	---	---	---	---	---	---	---	---	---	---	100	103
7	---	---	---	---	---	---	---	---	---	---	98	111
8	---	---	---	---	---	---	---	---	---	---	80	117
9	---	---	---	---	---	---	---	---	---	---	72	118
10	---	---	---	---	---	---	---	---	---	---	66	117
11	---	---	---	---	---	---	---	---	---	---	72	107
12	---	---	---	---	---	---	---	---	---	---	74	112
13	---	---	---	---	---	---	---	---	---	---	76	108
14	---	---	---	---	---	---	---	---	---	---	80	106
15	---	---	---	---	---	---	---	---	---	---	92	111
16	---	---	---	---	---	---	---	---	---	82	82	116
17	---	---	---	---	---	---	---	---	---	82	93	123
18	---	---	---	---	---	---	---	---	---	83	100	121
19	---	---	---	---	---	---	---	---	---	84	102	129
20	---	---	---	---	---	---	---	---	---	70	99	121
21	---	---	---	---	---	---	---	---	---	61	98	124
22	---	---	---	---	---	---	---	---	---	67	100	125
23	---	---	---	---	---	---	---	---	---	65	90	124
24	---	---	---	---	---	---	---	---	---	72	76	154
25	---	---	---	---	---	---	---	---	---	76	65	131
26	---	---	---	---	---	---	---	---	---	82	71	120
27	---	---	---	---	---	---	---	---	---	84	82	119
28	---	---	---	---	---	---	---	---	---	88	85	112
29	---	---	---	---	---	---	---	---	---	83	90	122
30	---	---	---	---	---	---	---	---	---	85	89	121
31	---	---	---	---	---	---	---	---	---	90	89	---
MONTH	---	---	---	---	---	---	---	---	---	---	87	115

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	154	180	99	75	66	66	92	67	88	65	86
2	130	154	180	102	70	70	64	96	66	93	74	93
3	98	145	180	99	70	73	60	98	67	104	58	87
4	122	151	160	97	70	77	60	99	72	100	61	83
5	121	166	155	91	70	80	59	97	76	115	57	92
6	128	172	160	89	66	82	62	90	81	106	63	89
7	165	177	160	83	73	83	62	101	77	107	58	84
8	140	172	155	78	69	82	63	94	79	106	54	68
9	141	164	130	87	71	80	65	87	81	97	51	65
10	135	165	120	91	72	84	68	88	85	104	50	66
11	160	170	115	89	71	88	70	88	89	99	51	69
12	145	170	150	93	76	92	70	82	89	92	49	64
13	150	167	150	94	74	88	72	78	95	98	50	60
14	140	163	140	94	72	88	74	82	101	93	52	59
15	151	152	130	91	77	90	73	74	99	90	52	54
16	151	155	120	89	70	85	64	68	99	93	55	62
17	150	161	120	90	75	80	66	64	101	91	57	64
18	150	172	115	94	75	80	62	66	102	96	59	68
19	149	172	120	91	74	82	65	70	100	104	61	70
20	151	166	135	93	71	80	67	70	69	106	61	80
21	152	170	110	97	72	77	71	73	64	111	65	85
22	152	157	105	96	70	76	70	79	67	110	71	86
23	159	158	110	96	68	72	75	86	73	112	76	88
24	158	172	110	96	65	72	82	81	75	101	81	89
25	152	176	105	100	68	70	79	80	82	116	76	93
26	151	172	95	98	66	73	78	85	86	122	78	88
27	156	170	85	80	68	73	84	70	84	94	74	85
28	160	160	85	81	66	68	84	77	88	89	82	87
29	177	165	85	83	---	68	84	79	90	86	81	86
30	159	185	90	76	---	67	92	72	92	82	81	86
31	159	---	97	78	---	65	---	68	---	75	82	---
MONTH	147	165	127	91	71	78	70	82	83	99	64	78
YEAR	MAX	185	MIN	49	MEAN	96						

02089500 NEUSE RIVER AT KINSTON, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	28.0	27.5
2	---	---	---	---	---	---	---	---	---	---	27.5	27.5
3	---	---	---	---	---	---	---	---	---	---	27.0	27.5
4	---	---	---	---	---	---	---	---	---	---	27.0	27.5
5	---	---	---	---	---	---	---	---	---	---	27.5	27.0
6	---	---	---	---	---	---	---	---	---	---	27.0	26.0
7	---	---	---	---	---	---	---	---	---	---	26.5	27.0
8	---	---	---	---	---	---	---	---	---	---	25.0	27.0
9	---	---	---	---	---	---	---	---	---	---	25.5	27.5
10	---	---	---	---	---	---	---	---	---	---	26.0	26.0
11	---	---	---	---	---	---	---	---	---	---	26.0	24.5
12	---	---	---	---	---	---	---	---	---	---	27.0	24.5
13	---	---	---	---	---	---	---	---	---	---	27.0	24.0
14	---	---	---	---	---	---	---	---	---	---	27.5	25.5
15	---	---	---	---	---	---	---	---	---	---	28.0	24.5
16	---	---	---	---	---	---	---	---	---	27.0	26.5	24.0
17	---	---	---	---	---	---	---	---	---	25.0	27.5	24.0
18	---	---	---	---	---	---	---	---	---	24.0	26.5	24.0
19	---	---	---	---	---	---	---	---	---	25.0	26.0	23.5
20	---	---	---	---	---	---	---	---	---	25.0	26.0	23.0
21	---	---	---	---	---	---	---	---	---	25.0	26.0	23.0
22	---	---	---	---	---	---	---	---	---	26.0	26.0	22.5
23	---	---	---	---	---	---	---	---	---	26.5	24.0	23.5
24	---	---	---	---	---	---	---	---	---	26.0	24.0	24.0
25	---	---	---	---	---	---	---	---	---	26.0	24.0	25.5
26	---	---	---	---	---	---	---	---	---	25.5	24.0	23.0
27	---	---	---	---	---	---	---	---	---	26.0	24.5	23.0
28	---	---	---	---	---	---	---	---	---	27.0	25.5	23.0
29	---	---	---	---	---	---	---	---	---	26.0	26.0	23.0
30	---	---	---	---	---	---	---	---	---	27.0	27.0	24.5
31	---	---	---	---	---	---	---	---	---	28.0	27.5	---
MONTH	---	---	---	---	---	---	---	---	---	---	26.0	25.0

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	13.0	13.5	12.0	13.0	9.0	12.5	20.0	23.0	22.0	25.0	26.0
2	23.5	13.0	11.5	12.0	13.5	11.0	16.0	20.0	22.0	24.0	25.0	26.0
3	23.5	14.0	9.0	10.5	14.0	10.5	15.5	20.0	21.0	25.0	25.0	25.5
4	23.0	14.5	10.0	11.0	12.0	12.0	18.0	23.0	20.0	25.0	25.0	25.0
5	23.5	15.5	14.0	8.5	10.0	14.0	18.5	20.0	21.0	26.0	24.0	22.0
6	22.0	12.0	13.0	9.0	11.0	16.0	16.5	17.0	21.0	25.0	24.0	22.0
7	21.0	10.5	11.0	11.0	12.0	16.0	16.0	18.0	21.0	25.0	23.0	22.0
8	21.0	12.0	11.5	8.5	9.5	18.5	15.5	17.0	21.0	23.0	23.0	21.0
9	21.5	13.0	10.0	10.0	8.0	18.0	16.0	18.5	22.0	24.0	23.0	21.0
10	21.0	9.5	9.5	11.0	8.0	18.0	13.0	18.5	24.0	24.0	23.0	21.0
11	20.0	8.5	8.5	12.0	8.0	17.0	16.0	19.0	22.0	26.0	22.0	21.0
12	19.0	6.5	6.0	11.0	6.5	15.0	15.0	20.0	21.0	26.0	22.0	22.0
13	18.0	7.5	9.0	8.0	8.0	12.0	15.5	17.0	25.0	24.0	22.0	23.0
14	19.0	8.5	8.0	7.0	8.5	10.0	17.0	20.5	25.0	25.0	22.0	22.0
15	18.0	10.5	8.0	8.0	7.5	13.5	18.0	19.5	22.0	25.0	23.0	22.0
16	18.0	15.0	7.0	8.5	7.0	13.0	18.0	20.0	21.0	25.0	23.0	22.0
17	18.0	10.0	6.0	10.0	8.0	12.0	17.0	21.0	22.0	25.0	23.0	22.0
18	15.0	9.0	6.0	9.5	7.0	10.0	16.5	21.0	22.0	25.0	23.0	21.0
19	15.0	12.0	4.0	9.5	9.0	12.0	19.0	21.0	23.0	25.0	23.0	21.0
20	15.0	11.5	7.5	10.0	9.0	13.5	18.0	20.5	23.0	25.0	24.0	22.0
21	15.5	11.5	8.0	12.5	9.0	14.0	19.0	20.5	24.0	24.0	24.0	23.5
22	16.0	14.0	7.0	11.0	11.0	13.0	18.0	20.0	23.0	23.0	24.0	21.0
23	16.5	12.0	5.0	11.5	9.5	12.0	19.0	22.0	25.0	22.0	24.0	18.5
24	17.0	13.0	5.0	12.5	10.5	12.5	17.0	22.0	22.0	23.0	23.5	16.5
25	17.5	15.0	6.5	11.0	10.0	12.5	16.0	22.0	23.0	24.0	23.0	17.5
26	17.0	16.0	7.0	12.0	8.0	11.0	16.0	23.0	23.0	24.0	24.0	17.5
27	18.5	17.0	9.0	14.0	8.5	12.0	17.0	20.0	22.0	25.0	24.5	17.5
28	17.5	17.5	8.0	13.5	8.0	12.0	21.0	20.0	21.0	24.0	25.0	20.0
29	18.5	15.0	8.0	13.5	---	12.5	18.5	20.0	21.0	25.0	26.0	21.0
30	13.0	10.5	9.5	14.0	---	12.5	20.0	21.5	21.0	25.0	26.0	18.5
31	13.0	---	13.5	13.5	---	12.5	---	20.5	---	25.0	26.0	---
MONTH	18.5	12.5	8.5	11.0	9.5	13.0	17.0	20.0	22.0	24.5	24.0	21.5
YEAR	MAX	26.0	MIN	4.0	MEAN	17.0						

02089500 NEUSE RIVER AT KINSTON, N. C.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.				
26...	1215	295	15	12
JAN.				
16...	1000	3060	31	256
JULY				
05...	1315	840	34	77
AUG.				
05...	1206	4000	49	529
07...	1255	5620	46	698
08...	1255	7190	36	699
12...	1345	10400	40	1120
19...	1200	6320	21	358
22...	1150	4000	42	454

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
Sep.											
04...	**1500**	**641**	**34**	--	**5.5**	**29.0**	**6.4**	**<25**	--	**4.9**	**230**
10...	**1430**	**658**	**39**	--	**5.8**	**30.0**	**5.8**	**26**	--	**3.7**	--
18...	**0630**	**648**	**31**	--	**6.0**	**25.0**	**5.8**	**53**	--	**4.6**	**160**
25...	**1130**	**484**	**29**	--	**5.5**	**25.0**	**5.6**	**<25**	--	**2.8**	**200**
OCT.											
04...	1510	630	36	--	6.0	25.0	6.3	<25	--	2.3	1500
09...	1415	439	38	--	6.0	25.0	6.1	<25	--	2.2	690
15...	1000	382	36	--	6.1	23.0	5.9	<25	--	2.3	2200
22...	1130	325	37	--	5.9	21.0	6.1	<25	--	1.9	620
31...	1030	331	38	--	6.0	16.0	5.1	<25	--	1.9	60
NOV.											
05...	1410	322	37	--	6.0	16.0	7.8	<25	--	1.8	380
15...	1020	274	51	--	6.0	14.0	7.0	26	--	2.2	90
19...	1305	286	--	--	--	--	--	26	--	1.9	510
27...	1445	391	44	--	6.2	18.0	6.9	26	--	2.4	550
DEC.											
03...	1225	361	--	--	--	--	--	<25	--	2.1	490
13...	1220	1260	--	--	--	--	--	<25	--	1.7	1500
JAN.											
03...	1330	2590	--	--	--	--	--	30	--	1.1	450
17...	1100	2640	--	--	--	--	--	<25	--	1.1	50
24...	1700	1810	37	--	5.8	12.0	8.9	--	30	2.3	290
FEB.											
11...	1220	6710	40	--	5.5	6.0	8.8	--	<25	2.3	120
21...	1200	4950	48	--	6.4	11.0	9.4	--	<25	1.0	900
MAR.											
05...	1000	3010	38	--	6.1	14.0	9.0	--	26	2.7	40000
21...	1340	3990	--	--	6.4	14.0	8.4	--	<25	1.8	530
28...	0900	5210	38	--	6.0	15.0	8.4	--	30	1.5	960
APR.											
11...	1545	6230	31	--	6.1	16.0	8.9	--	<25	3.0	6000
22...	1315	3250	41	--	6.3	18.0	8.3	--	50	1.2	1200
30...	1230	1400	41	--	6.7	21.0	7.0	--	<25	2.5	90
MAY											
29...	1240	2970	41	--	6.5	22.0	7.8	--	32	2.7	1200
JUNE											
04...	1520	3310	41	--	6.3	22.0	6.4	--	35	1.2	2100
17...	1430	908	35	--	6.5	25.0	7.4	--	27	5.0	800
JULY											
02...	1300	1080	--	155	--	27.0	6.3	--	27	4.0	240
24...	1030	836	35	160	6.5	27.0	6.3	--	--	2.3	1400
AUG.											
22...	1145	4010	39	105	5.7	24.0	5.4	--	--	2.0	6200
27...	1550	2970	--	100	--	26.0	5.9	--	--	--	4300
SEP.											
03...	1400	1820	35	120	6.5	27.0	5.8	--	--	1.9	3700

02090625 TURNER SWAMP NEAR EUREKA, N. C.

LOCATION.--Lat 35° 4[illegible]10", long 77°52'40", Wayne County, at gaging station on right bank at downstream side of bridge on Secondary Road 1505, 2.0 mi (3.2 km) north of Eureka, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--[illegible]2.1 mi² (5.[illegible] km²) approximately.

PERIOD OF RECORD.--Chemical analyses: July 1973 to September 1974.
Water temperatures: July 1973 to September 1974.

EXTREMES.--July 1973 to September 1974:
Specific conductance: Maximum, 89 micromhos Dec. 9, 1973; minimum, 35 micromhos Aug. 6, 1974.
Water temperatures: Maximum, 25.0°C July 21, 1973, July 1, 1974; minimum, 4.0°C Feb. 10, 1974.

REMARKS.--Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
OCT.											
30...	1130	.49	12	380	200	--	20	10	10	--	2.5
JAN.											
16...	1320	1.3	11	750	200	--	25	0	25	--	4.5
APR.											
04...	1020	3.4	7.4	--	300	4000	20	0	35	15	1.7
JUNE											
21...	1130	.98	10	340	130	5100	25	8	17	30	2.7
AUG.											
04...	1645	4.0	10	1100	340	--	29	0	33	--	3.1
05...	1055	12	9.1	1800	460	--	37	8	29	--	3.1
05...	1620	400	2.1	2900	280	--	37	20	17	--	1.4
05...	1704	600	1.4	1200	230	--	29	9	20	--	1.7
05...	1900	350	1.6	820	240	--	31	11	20	--	3.0
05...	2131	180	2.4	480	370	--	25	0	25	--	3.2
06.	0045	105	3.1	--	--	--	--	--	--	--	3.8
06...	1150	29	5.1	750	540	--	45	3	42	--	3.5

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.											
30...	.8	6.0	1.3	12	--	10	3.8	6.7	.0	.43	.43
JAN.											
16...	1.2	6.0	1.2	7	0	6	5.4	8.7	.1	.56	.57
APR.											
04...	.8	5.0	1.1	7	0	6	4.6	6.8	.2	.44	.44
JUNE											
21...	1.4	4.5	1.0	7	--	6	3.2	10	.1	.68	.67
AUG.											
04...	.5	4.6	1.1	8	--	7	4.6	6.2	.1	.31	.30
05...	.7	3.7	1.2	6	--	5	5.5	5.8	.1	.20	.18
05...	.4	.7	1.2	4	--	3	3.5	1.4	.1	.08	.08
05...	.3	.2	1.2	4	--	3	3.7	.8	.1	.05	.05
05...	.3	.6	1.3	4	--	3	4.2	5.1	.1	.10	.08
05...	.5	.6	1.2	3	--	2	5.4	1.7	.1	.08	.07
06...	6	1.3	1.3	3	--	2	6.4	2.1	.2	--	--
06...	.7	2.0	1.3	3	--	2	6.6	3.5	.2	.22	.45

DATE	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	SUSPENDED KJEL. NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM DEP. (MG/KG)	TOTAL NITROGEN (N) (MG/L)
OCT.											
30...	--	--	--	--	--	--	.61	--	.34	--	1.0
JAN.											
16...	--	.04	.06	.08	.29	.24	.33	.03	.30	--	.89
APR.											
04...	.4	.09	.04	.05	.21	.22	.30	.04	.26	2900	.74
JUNE											
21...	3.0	.02	.05	.06	.19	.15	.21	.01	.20	2900	.89
AUG.											
04...	--	.03	.00	.00	.72	.52	.75	.23	.52	--	1.1
05...	--	.02	.03	.04	1.5	.94	1.5	.93	.57	--	1.7
05...	--	.02	.00	.00	1.3	.40	1.3	.90	.40	--	1.4
05...	--	.03	.00	.00	1.2	.48	1.2	.72	.48	--	1.3
05...	--	.03	.00	.00	.97	.55	1.0	.45	.55	--	1.1
05...	--	.03	.01	.01	.95	.70	.99	.28	.71	--	1.1
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	.03	.10	.13	1.1	.60	1.1	.40	.70	--	1.3

02090625 TURNER SWAMP NEAR EUREKA, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT.											
30...	4.6	.06	--	.05	--	--	--	43	39	.06	.06
JAN.											
16...	3.9	.02	.00	.01	.02	.00	--	58	44	.08	.20
APR.											
04...	3.3	.04	.00	.02	.02	.00	150	49	33	.07	.45
JUNE											
21...	3.9	.06	.09	.04	.05	.03	470	63	37	.09	.17
AUG.											
04...	4.7	.08	.06	.03	.05	.02	--	49	36	.07	.53
05...	7.5	.14	.15	.03	.06	.05	--	56	33	.08	1.89
05...	6.1	.17	.09	.05	.06	.03	--	29	13	.04	31.3
05...	5.5	.21	.15	.05	.09	.05	--	35	12	.05	56.7
05...	4.9	.23	.31	.08	.12	.10	--	41	19	.06	38.7
05...	4.7	.13	.18	.06	.08	.06	--	58	18	.08	26.2
05...	--	--	--	--	--	--	--	57	20	.08	16.2
06...	5.8	.12	.21	.07	.08	.07	--	57	27	.08	4.46

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
30...	10	0	54	.8	55	6.1	11.0	--	3	10.2	15
JAN.											
16...	16	10	42	.7	68	5.8	12.0	40	--	10.6	18
APR.											
04...	8	2	55	.8	60	5.5	17.0	60	--	8.1	35
JUNE											
21...	13	7	42	.6	47	6.2	20.0	40	--	8.1	7.1
AUG.											
04...	10	3	47	.6	48	5.7	21.0	80	--	7.2	26
05...	11	6	40	.5	45	5.5	21.0	100	--	7.2	30
05...	5	2	19	.1	18	5.5	23.0	100	--	8.4	20
05...	5	2	6	.0	15	5.4	22.0	100	--	8.3	25
05...	9	5	11	.1	18	5.4	22.0	100	--	7.5	25
05...	10	8	10	.1	23	5.1	22.0	200	--	7.3	38
06...	12	10	17	.2	26	5.1	--	200	--	--	38
06...	12	9	25	.3	36	5.0	23.5	200	--	6.9	48

DATE	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CAD-MIUM (CD) (UG/L)
OCT.												
30...	--	--	--	7.0	7.5	--	--	1	0	1	--	10
JAN.												
16...	97	.83	2.5	6.5	4.8	--	.0	7	6	1	--	0
APR.												
04...	140	20	22	12	12	16	.0	7	1	6	1	0
JUNE												
21...	140	1.5	3.9	19	3.8	56	.0	0	0	3	5	2
AUG.												
04...	--	--	--	15	7.3	--	.0	1	0	1	--	0
05...	--	--	--	14	13	--	.0	1	0	1	--	0
05...	--	--	--	15	9.7	--	.0	2	1	1	--	0
05...	--	--	--	20	17	--	.0	1	0	1	--	0
05...	--	--	--	20	20	--	.0	1	0	1	--	2
05...	--	--	--	33	19	--	.0	1	0	1	--	1
06...A	--	--	--	39	21	--	.0	1	0	1	--	1

A Sample collected at 1150.

02090625 TURNER SWAMP NEAR EUREKA, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
OCT.												
30...	10	0	--	0	0	0	--	<25	25	0	--	<10
JAN.												
16...	0	1	--	0	0	0	--	1	0	4	--	3
APR.												
04...	0	0	0	0	0	1	9	5	5	0	5	4
JUNE												
21...	0	2	<10	0	0	1	<10	5	0	6	<50	1
AUG.												
04...	0	0	--	<10	<8	2	--	0	0	0	--	0
05...	0	1	--	<10	<9	1	--	0	0	1	--	0
05...	0	0	--	50	49	1	--	0	0	0	--	1
05...	0	0	--	<10	<9	1	--	0	0	0	--	1
05...	2	0	--	<10	<10	0	--	0	0	1	--	4
05...	1	0	--	10	10	0	--	1	0	5	--	5
06... A	0	1	--	10	10	0	--	0	0	0	--	4

DATE	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
OCT.										
30...	6	4	--	<100	97	3	--	2.5	2.5	.0
JAN.										
16...	0	3	--	5	0	7	--	.0	.0	.0
APR.										
04...	1	3	3	5	0	7	<11	.4	.0	.4
JUNE										
21...	0	5	<10	9	3	6	<100	.2	.1	.1
AUG.										
04...	0	3	--	0	0	0	--	.2	.1	.1
05...	0	2	--	0	0	4	--	.2	.0	.2
05...	0	1	--	1	1	0	--	.2	.0	.2
05...	0	2	--	0	0	0	--	.2	.0	.2
05...	0	4	--	13	13	0	--	.2	.1	.1
05...	2	3	--	10	10	0	--	.1	.0	.1
06... A	0	5	--	8	5	3	--	.4	.2	.2

DATE	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
OCT.									
30...	--	5	0	5	--	20	0	20	--
JAN.									
16...	--	2	0	2	--	90	80	7	--
APR.									
04...	.0	5	4	1	0	30	20	10	27
JUNE									
21...	.1	0	0	0	2	0	0	0	20
AUG.									
04...	--	3	1	2	--	20	20	0	--
05...	--	8	7	1	--	20	10	8	--
05...	--	5	3	2	--	20	0	160	--
05...	--	6	0	6	--	20	20	2	--
05...	--	7	7	0	--	7	0	10	--
05...	--	12	2	10	--	5	0	10	--
06... A	--	10	3	7	--	40	20	20	--

A Sample collected at 1150.

02090625 TURNER SWAMP NEAR EUREKA, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	45	46
2	---	---	---	---	---	---	---	---	---	---	48	46
3	---	---	---	---	---	---	---	---	---	---	45	45
4	---	---	---	---	---	---	---	---	---	---	48	46
5	---	---	---	---	---	---	---	---	---	---	45	46
6	---	---	---	---	---	---	---	---	---	---	45	45
7	---	---	---	---	---	---	---	---	---	---	46	46
8	---	---	---	---	---	---	---	---	---	---	44	49
9	---	---	---	---	---	---	---	---	---	---	45	49
10	---	---	---	---	---	---	---	---	---	---	44	46
11	---	---	---	---	---	---	---	---	---	---	45	46
12	---	---	---	---	---	---	---	---	---	---	45	46
13	---	---	---	---	---	---	---	---	---	---	49	46
14	---	---	---	---	---	---	---	---	---	---	50	56
15	---	---	---	---	---	---	---	---	---	---	45	49
16	---	---	---	---	---	---	---	---	---	---	46	49
17	---	---	---	---	---	---	---	---	---	44	44	47
18	---	---	---	---	---	---	---	---	---	47	45	55
19	---	---	---	---	---	---	---	---	---	46	45	62
20	---	---	---	---	---	---	---	---	---	45	45	52
21	---	---	---	---	---	---	---	---	---	44	44	49
22	---	---	---	---	---	---	---	---	---	45	44	48
23	---	---	---	---	---	---	---	---	---	45	45	48
24	---	---	---	---	---	---	---	---	---	46	45	51
25	---	---	---	---	---	---	---	---	---	46	44	54
26	---	---	---	---	---	---	---	---	---	45	45	54
27	---	---	---	---	---	---	---	---	---	44	46	54
28	---	---	---	---	---	---	---	---	---	45	44	54
29	---	---	---	---	---	---	---	---	---	47	46	54
30	---	---	---	---	---	---	---	---	---	46	45	53
31	---	---	---	---	---	---	---	---	---	46	47	---
MONTH	---	---	---	---	---	---	---	---	---	---	45	50

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	54	53	65	54	50	47	45	46	48	52	46
2	54	53	51	66	55	50	46	49	46	50	36	48
3	53	56	51	66	54	50	46	47	44	49	49	45
4	54	58	50	65	55	50	47	46	44	48	52	47
5	57	51	53	65	55	50	43	46	45	47	48	47
6	54	57	53	64	55	49	45	48	48	48	35	48
7	51	56	51	64	56	53	45	46	46	49	38	47
8	51	53	59	66	58	51	46	45	45	50	43	48
9	54	56	89	64	57	50	46	46	49	49	46	48
10	52	56	69	65	55	48	46	47	48	50	45	48
11	50	53	61	63	55	49	47	48	58	49	46	48
12	51	56	58	60	54	53	46	47	49	50	48	48
13	51	58	57	59	55	52	44	46	50	49	53	47
14	51	56	74	59	56	51	44	46	49	50	46	48
15	53	56	61	65	56	51	44	47	47	49	49	48
16	50	63	78	55	50	48	44	46	48	49	48	48
17	50	55	74	54	52	50	45	45	48	47	40	48
18	50	56	68	53	53	50	43	48	49	47	43	49
19	50	75	64	55	53	52	44	48	48	46	45	49
20	52	62	63	53	54	49	44	46	47	46	46	48
21	53	63	73	55	52	50	43	47	48	50	45	47
22	53	67	72	54	58	49	45	47	38	47	43	47
23	53	59	64	53	54	49	46	46	47	48	45	48
24	56	63	65	52	54	49	46	46	36	47	45	48
25	54	63	61	56	54	48	46	47	44	48	46	48
26	50	55	59	56	53	47	47	46	46	50	46	48
27	53	55	61	55	51	50	46	46	46	58	47	47
28	50	55	59	55	50	49	47	46	46	54	47	49
29	60	57	59	57	---	49	48	48	47	51	45	49
30	54	53	57	56	---	46	47	46	48	48	46	48
31	54	---	64	55	---	47	---	46	---	48	51	---
MONTH	53	58	62	59	54	50	45	47	47	49	46	48
YEAR	MAX	89	MIN	35	MEAN	51						

02090625 TURNER SWAMP NEAR EUREKA, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	22.0	23.0
2	---	---	---	---	---	---	---	---	---	---	23.0	23.0
3	---	---	---	---	---	---	---	---	---	---	22.0	21.0
4	---	---	---	---	---	---	---	---	---	---	22.0	21.0
5	---	---	---	---	---	---	---	---	---	---	22.0	21.0
6	---	---	---	---	---	---	---	---	---	---	22.0	20.0
7	---	---	---	---	---	---	---	---	---	---	22.0	22.0
8	---	---	---	---	---	---	---	---	---	---	21.0	23.0
9	---	---	---	---	---	---	---	---	---	---	21.0	22.0
10	---	---	---	---	---	---	---	---	---	---	21.0	20.0
11	---	---	---	---	---	---	---	---	---	---	22.0	19.0
12	---	---	---	---	---	---	---	---	---	---	22.0	21.0
13	---	---	---	---	---	---	---	---	---	---	22.0	20.0
14	---	---	---	---	---	---	---	---	---	---	24.0	20.0
15	---	---	---	---	---	---	---	---	---	---	23.0	21.0
16	---	---	---	---	---	---	---	---	---	---	22.0	20.0
17	---	---	---	---	---	---	---	---	---	22.0	21.0	20.0
18	---	---	---	---	---	---	---	---	---	20.0	21.0	19.0
19	---	---	---	---	---	---	---	---	---	22.0	21.0	18.0
20	---	---	---	---	---	---	---	---	---	23.0	21.0	19.0
21	---	---	---	---	---	---	---	---	---	25.0	21.0	19.0
22	---	---	---	---	---	---	---	---	---	22.0	20.0	19.0
23	---	---	---	---	---	---	---	---	---	22.0	20.0	20.0
24	---	---	---	---	---	---	---	---	---	21.0	20.0	20.0
25	---	---	---	---	---	---	---	---	---	20.0	20.0	20.0
26	---	---	---	---	---	---	---	---	---	22.0	21.0	20.0
27	---	---	---	---	---	---	---	---	---	23.0	21.0	20.0
28	---	---	---	---	---	---	---	---	---	21.0	21.0	21.0
29	---	---	---	---	---	---	---	---	---	23.0	22.0	22.0
30	---	---	---	---	---	---	---	---	---	23.0	22.0	20.0
31	---	---	---	---	---	---	---	---	---	23.0	23.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	21.5	20.5

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	15.0	13.0	13.0	12.0	12.0	18.0	19.0	20.0	25.0	21.0	23.0
2	20.0	15.0	10.0	9.0	13.0	15.0	18.0	15.0	20.0	19.0	20.0	23.0
3	21.0	16.0	10.0	10.0	14.0	15.0	20.0	18.0	20.0	22.0	21.0	24.0
4	21.0	15.0	13.0	10.0	10.0	18.0	20.0	16.0	20.0	22.0	21.0	20.0
5	20.0	15.0	16.0	9.0	9.0	18.0	18.0	15.0	20.0	22.0	20.0	19.0
6	18.0	11.0	13.0	10.0	11.0	18.0	12.0	15.0	19.0	22.0	22.0	20.0
7	18.0	9.0	10.0	11.0	10.0	18.0	15.0	12.0	20.0	21.0	21.0	20.0
8	17.0	12.0	9.0	11.0	10.0	20.0	15.0	12.0	18.0	20.0	22.0	21.0
9	16.0	13.0	14.0	10.0	8.0	18.0	19.0	18.0	20.0	21.0	21.0	20.0
10	18.0	11.0	10.0	14.0	4.0	19.0	12.0	18.0	21.0	22.0	21.0	20.0
11	18.0	8.0	8.0	15.0	5.0	12.0	12.0	18.0	20.0	22.0	20.0	20.0
12	16.0	10.0	6.0	12.0	10.0	12.0	12.0	14.0	20.0	20.0	20.0	22.0
13	16.0	10.0	8.0	7.0	14.0	10.0	18.0	18.0	20.0	20.0	20.0	21.0
14	16.0	13.0	10.0	7.0	13.0	11.0	18.0	18.0	20.0	21.0	20.0	22.0
15	18.0	15.0	10.0	10.0	10.0	11.0	20.0	18.0	20.0	21.0	20.0	20.0
16	16.0	15.0	9.0	10.0	8.0	11.0	18.0	20.0	20.0	21.0	20.0	20.0
17	14.0	10.0	7.0	12.0	10.0	11.0	18.0	20.0	20.0	21.0	20.0	20.0
18	14.0	10.0	5.0	11.0	9.0	11.0	15.0	20.0	20.0	21.0	22.0	20.0
19	13.0	13.0	7.0	12.0	10.0	13.0	15.0	20.0	20.0	21.0	22.0	20.0
20	13.0	13.0	10.0	12.0	11.0	14.0	12.0	18.0	20.0	21.0	22.0	21.0
21	15.0	13.0	10.0	15.0	10.0	15.0	18.0	17.0	21.0	19.0	22.0	21.0
22	15.0	15.0	7.0	13.0	15.0	14.0	18.0	20.0	21.0	19.0	24.0	19.0
23	15.0	13.0	7.0	15.0	11.0	12.0	18.0	19.0	21.0	19.0	22.0	18.0
24	16.0	15.0	9.0	13.0	12.0	15.0	15.0	19.0	20.0	20.0	22.0	18.0
25	16.0	17.0	10.0	10.0	10.0	9.0	12.0	20.0	20.0	20.0	21.0	18.0
26	23.0	17.0	13.0	13.0	9.0	10.0	12.0	18.0	20.0	20.0	21.0	18.0
27	17.0	19.0	13.0	15.0	10.0	15.0	15.0	16.0	20.0	20.0	21.0	18.0
28	20.0	18.0	15.0	15.0	11.0	10.0	15.0	18.0	20.0	20.0	21.0	20.0
29	16.0	13.0	10.0	15.0	---	15.0	18.0	20.0	20.0	20.0	24.0	20.0
30	12.0	11.0	14.0	15.0	---	10.0	20.0	20.0	20.0	20.0	23.0	18.0
31	16.0	---	10.0	15.0	---	15.0	---	20.0	---	21.0	22.0	---
MONTH	17.0	13.5	10.0	12.0	10.5	14.0	16.0	17.5	20.0	20.5	21.5	20.0
YEAR	MAX	25.0	MIN	4.0	MEAN	16.0						

02090625 TURNER SWAMP NEAR EUREKA, N. C.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.				
30...	1130	.49	7	.01
JAN.				
16...	1320	1.3	8	.03
APR.				
04...	1020	3.4	13	.12
JUNE				
21...	1130	.98	7	.02
AUG.				
04...	1645	4.0	28	.30
05...	1055	12	89	3.0
05...	1620	400	252	272
05...	1704	600	273	442
05...	1900	350	80	76
05...	2131	180	25	12
06...	0045	105	484	137
06...	1150	29	20	1.6

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
SEP.											
04...	1355	.54	34	--	5.9	28.0	5.4	27	--	.3	170
10...	1310	.57	38	--	6.1	29.0	5.8	<25	--	.4	90
18...	0715	.52	30	--	5.3	25.0	5.9	<25	--	.5	100
25...	1300	.54	27	--	5.2	25.0	6.0	<25	--	.9	<10
OCT.											
04...	1615	.54	29	--	5.5	25.0	6.3	<25	--	.9	40
09...	1615	.49	34	--	5.8	25.0	6.5	<25	--	.6	50
15...	1000	.49	30	--	5.5	23.0	5.9	<25	--	.1	140
22...	1245	.47	36	--	5.8	23.0	6.2	<25	--	.3	60
31...	1215	.49	34	--	5.8	16.0	6.1	<25	--	.9	60
NOV.											
05...	1240	.47	39	--	6.1	16.0	8.1	<25	--	1.0	180
15...	1135	.49	46	--	5.8	14.0	6.7	<25	--	1.2	190
19...	1210	.80	--	--	--	--	--	30	--	6.7	610
27...	1300	.54	40	--	6.2	18.0	6.8	<25	--	1.0	270
DEC.											
13...	1115	.64	--	--	--	--	--	<25	--	.5	270
JAN.											
03...	1205	2.0	--	--	--	--	--	26	--	.7	30
17...	1345	1.2	--	--	--	--	--	<25	--	1.0	2000
24...	1015	10	42	--	6.1	12.0	8.6	--	<25	.8	70
FEB.											
21...	1330	3.5	46	--	6.2	11.0	9.0	--	<25	1.1	<10
MAR.											
05...	1115	1.7	36	--	6.9	14.0	8.8	--	<25	2.5	10
21...	1240	3.7	--	--	5.7	13.0	8.1	--	<25	1.1	20
28...	1030	1.1	41	--	6.2	16.0	8.1	--	34	1.0	2900
APR.											
30...	1130	1.4	23	--	6.0	20.0	6.8	--	<25	.8	130
MAY											
29...	1625	2.0	39	--	5.5	22.0	6.8	--	32	1.6	60
JUNE											
04...	1340	3.4	32	--	5.8	18.0	7.4	--	35	.5	210
17...	1545	5.7	31	--	5.1	24.0	6.7	--	31	1.6	2600
AUG.											
22...	1445	9.0	--	70	--	23.0	6.9	--	--	1.0	90
SEP.											
03...	1500	1.1	37	98	6.3	26.0	6.4	--	--	2.0	50
16...	1605	.98	--	65	--	19.0	7.3	--	--	1.8	30

02091970 CREEPING SWAMP NEAR VANCEBORO, N. C.

LOCATION.--Lat 35°23'30", long 77°12'46", Craven County, at gaging station on left bank at downstream side of bridge on State Highway 43, 1.0 mi (1.6 km) upstream from mouth, and 7.9 mi (12.7 km) northwest of Vanceboro.

DRAINAGE AREA.--27 mi^2 (70 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: July to September 1974.
Water temperatures: July to September 1974.

EXTREMES.--July to September 1974:
Specific conductance: Maximum, 104 micromhos July 31; minimum, 37 micromhos Aug. 26.
Water temperatures: Maximum, 26.0°C Aug. 30; minimum, 17.0°C Sept. 24.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
JULY 31...	1030	.97	8.9	2000	870	280	10	270	11	1.8	4.4	1.8

DATE	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)
JULY 31...	8	7	31	5.8	.3	.07	.10	.11	.17	.22	.89	.57

DATE	TOTAL KJELDAHL NITROGEN (N) (MG/L)	SUSPENDED KJEL. NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO PHOSPHATE (PO4) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
JULY 31...	1.0	.26	.74	1.1	4.7	.08	.06	.03	.06	.02	88	71

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
JULY 31...	.12	.23	35	28	20	.3	110	4.9	23.0	200	1.5	161

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
JULY 31...	29	14	.0	2	1	1	1	0

02091970 CREEPING SWAMP NEAR VANCEBORO, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
JULY								
31...	1	40	39	1	11	6	5	4

DATE	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)
JULY							
31...	1	3	23	0	27	.1	.0

DATE	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JULY							
31...	.1	6	4	2	40	30	10

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.				
03...	0915	.06	43	.01
DEC.				
17...	1400	40	19	2.1
JAN.				
17...	1300	12	6	.19
FEB.				
04...	0945	91	22	5.4
14...	1030	26	4	.28
MAR.				
14...	1330	11	9	.27
APR.				
17...	1015	74	8	1.6
MAY				
15...	1000	10	15	.40
JUNE				
17...	1330	2.3	10	.06
JULY				
28...	1800	10	100	2.9
31...	1030	.97	34	.09
AUG.				
16...	0600	95	18	4.6
23...	1020	95	30	7.7

02091970 CREEPING SWAMP NEAR VANCEBORO, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	102	41
2	---	---	---	---	---	---	---	---	---	---	98	42
3	---	---	---	---	---	---	---	---	---	---	87	44
4	---	---	---	---	---	---	---	---	---	---	83	41
5	---	---	---	---	---	---	---	---	---	---	69	40
6	---	---	---	---	---	---	---	---	---	---	59	42
7	---	---	---	---	---	---	---	---	---	---	83	41
8	---	---	---	---	---	---	---	---	---	---	64	41
9	---	---	---	---	---	---	---	---	---	---	64	43
10	---	---	---	---	---	---	---	---	---	---	56	44
11	---	---	---	---	---	---	---	---	---	---	55	43
12	---	---	---	---	---	---	---	---	---	---	56	46
13	---	---	---	---	---	---	---	---	---	---	53	44
14	---	---	---	---	---	---	---	---	---	---	46	49
15	---	---	---	---	---	---	---	---	---	---	45	48
16	---	---	---	---	---	---	---	---	---	---	43	46
17	---	---	---	---	---	---	---	---	---	---	44	58
18	---	---	---	---	---	---	---	---	---	---	43	60
19	---	---	---	---	---	---	---	---	---	---	43	64
20	---	---	---	---	---	---	---	---	---	---	40	67
21	---	---	---	---	---	---	---	---	---	---	41	56
22	---	---	---	---	---	---	---	---	---	---	39	57
23	---	---	---	---	---	---	---	---	---	---	39	52
24	---	---	---	---	---	---	---	---	---	---	41	46
25	---	---	---	---	---	---	---	---	---	---	39	49
26	---	---	---	---	---	---	---	---	---	---	37	50
27	---	---	---	---	---	---	---	---	---	---	40	52
28	---	---	---	---	---	---	---	---	---	---	40	54
29	---	---	---	---	---	---	---	---	---	---	40	56
30	---	---	---	---	---	---	---	---	---	---	41	79
31	---	---	---	---	---	---	---	---	---	104	42	---
MONTH	---	---	---	---	---	---	---	---	---	---	54	50

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	23.0	25.0
2	---	---	---	---	---	---	---	---	---	---	24.0	25.0
3	---	---	---	---	---	---	---	---	---	---	24.0	25.0
4	---	---	---	---	---	---	---	---	---	---	24.0	24.0
5	---	---	---	---	---	---	---	---	---	---	23.0	25.0
6	---	---	---	---	---	---	---	---	---	---	24.0	23.0
7	---	---	---	---	---	---	---	---	---	---	22.0	23.0
8	---	---	---	---	---	---	---	---	---	---	22.0	23.0
9	---	---	---	---	---	---	---	---	---	---	22.0	24.0
10	---	---	---	---	---	---	---	---	---	---	22.0	24.0
11	---	---	---	---	---	---	---	---	---	---	22.0	25.0
12	---	---	---	---	---	---	---	---	---	---	20.0	25.0
13	---	---	---	---	---	---	---	---	---	---	20.0	25.0
14	---	---	---	---	---	---	---	---	---	---	21.0	25.0
15	---	---	---	---	---	---	---	---	---	---	22.0	24.0
16	---	---	---	---	---	---	---	---	---	---	23.0	23.0
17	---	---	---	---	---	---	---	---	---	---	23.0	24.0
18	---	---	---	---	---	---	---	---	---	---	23.0	22.0
19	---	---	---	---	---	---	---	---	---	---	23.0	21.0
20	---	---	---	---	---	---	---	---	---	---	23.0	24.0
21	---	---	---	---	---	---	---	---	---	---	23.0	25.0
22	---	---	---	---	---	---	---	---	---	---	23.0	23.0
23	---	---	---	---	---	---	---	---	---	---	23.0	18.0
24	---	---	---	---	---	---	---	---	---	---	23.0	17.0
25	---	---	---	---	---	---	---	---	---	---	23.0	19.0
26	---	---	---	---	---	---	---	---	---	---	23.0	19.0
27	---	---	---	---	---	---	---	---	---	---	23.0	21.0
28	---	---	---	---	---	---	---	---	---	---	25.0	22.0
29	---	---	---	---	---	---	---	---	---	---	25.0	22.0
30	---	---	---	---	---	---	---	---	---	---	26.0	20.0
31	---	---	---	---	---	---	---	---	---	23.0	25.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	23.0	23.0

02098200 HAW RIVER NEAR HAYWOOD, N. C.

LOCATION.--Lat 35°38'50", long 79°03'54", Chatham County, 0.2 mi (0.3 km) downstream from B. Everett Jordan Dam (under construction), on right bank 1.3 mi (2.1 km) upstream from bridge on U.S. Highway 1, 2.1 mi (3.4 km) north of Haywood, and 3.9 mi(6.3 km) upstream from mouth.

DRAINAGE AREA.--1,700 mi^2 (4,400 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1973 to September 1974.
Water temperatures: July 1973 to September 1974.

EXTREMES.--July 1973 to September 1974:
Specific conductance: Maximum, 572 micromhos Nov. 11; minimum, 58 micromhos Sept. 8, 1974.
Water temperatures: Maximum, 31°C Aug. 31, 1973; minimum, 2.0°C Dec. 19.

REMARKS.--Water quality samples collected at bridge 1.3 mi (2.1 km) downstream from station. Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
OCT.											
25...	1545	200	10	610	170	--	80	30	50	--	12
JAN.											
16...	1030	680	15	1500	250	--	100	29	71	--	8.1
APR.											
03...	1300	1650	12	2100	220	15000	90	7	83	120	5.5
JUNE											
19...	0845	790	14	2700	70	13000	140	73	67	310	10
AUG.											
04...	2015	950	12	6200	80	--	250	230	17	--	10
07...	1045	7330	8.4	10000	140	--	300	250	50	--	6.9
08...	1215	4370	9.4	2200	200	--	290	260	33	--	6.6
10...	1735	2180	10	--	--	--	--	--	--	--	7.6
14...	1000	810	16	--	--	--	--	--	--	--	6.9
21...	1220	843	14	910	270	--	110	93	17	--	7.2
29...	0845	500	13	1300	430	13000	110	100	10	580	9.7

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.											
25...	4.6	74	7.4	117	0	96	39	59	.8	2.1	2.1
JAN.											
16...	3.1	11	2.3	33	0	27	14	11	.2	.86	.75
APR.											
03...	2.2	8.5	1.5	26	0	21	12	5.6	.3	.48	.50
JUNE											
19...	3.3	24	4.0	44	--	36	18	17	.4	1.9	2.1
AUG.											
04...	3.6	43	5.0	74	--	61	27	32	.5	1.4	1.4
07...	1.9	5.0	2.7	20	--	16	9.8	4.8	.3	.83	.58
08...	2.1	7.7	3.0	22	--	18	12	6.8	.3	.78	.68
10...	2.2	9.4	2.6	28	--	23	12	8.1	.3	.53	.49
14...	2.4	14	3.3	30	--	25	13	13	.5	--	--
21...	3.4	20	.3	44	--	36	18	14	.4	1.4	1.3
29...	3.6	30	5.0	60	--	49	20	24	.3	1.4	1.4

02098200 HAW RIVER NEAR HAYWOOD, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS_ SOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM DEP. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)
OCT.											
25...	--	--	--	--	--	--	1.5	--	1.2	--	3.6
JAN.											
16...	--	.08	.13	.17	.21	.31	.29	.00	.44	--	1.2
APR.											
03...	.3	.12	.07	.09	.25	.24	.37	.06	.31	1000	.85
JUNE											
19...	.0	.00	.15	.19	1.1	.66	1.1	.29	.81	490	3.0
AUG.											
04...	--	.09	.02	.03	1.3	.82	1.4	.56	.84	--	2.8
07...	--	.08	.23	.30	1.4	.49	1.5	.78	.72	--	2.3
08...	--	.08	.10	.13	1.1	.48	1.2	.62	.58	--	2.0
10...	--	.04	.04	.05	.86	.51	.90	.35	.55	--	1.4
14...	--	--	--	--	--	--	--	--	--	--	--
21...	--	.02	.00	.00	.90	.75	.92	.17	.75	--	2.3
29...	.0	.02	.07	.09	.97	.77	.99	.15	.84	990	2.4

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT.											
25...	16	1.9	--	1.8	--	--	--	276	265	.38	149
JAN.											
16...	5.1	.25	.49	.20	.24	.16	--	97	85	.13	178
APR.											
03...	3.8	.18	.25	.12	.14	.08	150	76	63	.10	339
JUNE											
19...	13	.82	1.9	.69	.69	.62	230	134	113	.18	286
AUG.											
04...	12	1.4	3.0	1.2	1.1	.99	--	191	170	.26	490
07...	10	.63	.28	.10	.23	.09	--	71	50	.10	1410
08...	8.8	.51	.55	.20	.28	.18	--	91	59	.12	1070
10...	6.3	.38	.49	.18	.21	.16	--	92	66	.13	542
14...	--	--	--	--	--	--	--	105	84	.14	230
21...	10	.56	1.2	.46	.42	.38	--	139	99	.19	316
29...	11	.75	1.7	.64	.62	.57	470	155	136	.21	209

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
25...	49	0	73	4.6	448	7.3	16.0	--	5	9.6	9.4
JAN.											
16...	33	6	40	.8	140	6.6	8.0	20	--	12.1	13
APR.											
03...	23	2	43	.8	110	6.3	15.5	100	--	8.9	21
JUNE											
19...	39	2	54	1.7	190	7.1	22.0	60	--	8.0	5.6
AUG.											
04...	40	0	67	3.0	280	7.2	25.0	90	--	7.2	7.5
07...	25	9	28	.4	74	6.7	23.5	100	--	--	6.4
08...	25	7	37	.7	86	7.0	22.5	100	--	7.9	3.5
10...	28	5	39	.8	98	6.8	23.5	60	--	7.7	7.1
14...	27	3	49	1.2	122	7.0	24.5	30	--	7.6	4.8
21...	32	0	57	1.5	173	7.2	24.0	30	--	7.4	4.4
29...	39	0	59	2.1	235	7.0	27.0	20	--	7.3	9.6

02098200 HAW RIVER NEAR HAYWOOD, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CAD-MIUM (CD) (UG/L)
OCT.												
25...	--	--	--	12	15	--	--	0	0	0	--	<10
JAN.												
16...	1600	--	--	5.5	5.5	--	.0	4	3	1	--	0
APR.												
03...	1600	17	21	10	7.6	4.0	.0	3	0	3	3	0
JUNE												
19...	2600	1.5	23	9.0	--	3.6	.1	0	0	0	8	1
AUG.												
04...	--	--	--	11	12	--	.0	3	1	2	--	1
07...	--	--	--	12	10	--	.0	2	1	1	--	1
08...	--	--	--	13	16	--	.0	1	0	1	--	1
10...	--	--	--	14	6.1	--	.0	--	--	--	--	--
21...	--	--	--	8.4	9.8	--	.0	1	0	1	--	0
29...	--	--	--	11	8.8	5.4	10	2	0	2	3	10

DATE	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
OCT.												
25...	10	0	--	60	20	40	--	50	49	1	--	20
JAN.												
16...	0	1	--	0	0	1	--	1	0	4	--	7
APR.												
03...	0	0	1	0	0	1	79	5	5	0	16	4
JUNE												
19...	1	0	<10	0	0	1	20	3	3	0	<50	9
AUG.												
04...	0	2	--	30	27	3	--	5	0	5	--	20
07...	0	2	--	70	69	1	--	8	3	5	--	34
08...	0	2	--	20	16	4	--	5	2	3	--	19
10...	--	--	--	--	--	--	--	--	--	--	--	--
21...	0	1	--	20	17	3	--	11	0	16	--	9
29...	6	4	<10	60	35	25	260	13	2	11	20	11

02098200 HAW RIVER NEAR HAYWOOD, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
OCT.										
25...	7	13	--	<100	97	3	--	.0	.0	.0
JAN.										
16...	0	9	--	14	2	12	--	.0	.0	.0
APR.										
03...	0	4	20	9	7	2	11	.0	.0	.0
JUNE										
19...	4	5	10	3	2	1	<100	.2	.0	.2
AUG.										
04...	17	3	--	14	14	0	--	.1	.0	.1
07...	21	13	--	28	28	0	--	.1	.0	.1
08...	15	4	--	18	18	0	--	.1	.0	.1
21...	3	6	--	6	4	2	--	.0	.0	.1
29...	5	6	20	10	2	8	<10	.1	.1	.0

DATE	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
OCT.									
25...	--	5	0	8	--	40	0	60	--
JAN.									
16...	--	9	9	0	--	60	50	7	--
APR.									
03...	.2	7	5	2	0	40	40	0	63
JUNE									
19...	.1	0	0	0	0	7	0	7	90
AUG.									
04...	--	0	0	0	--	20	20	4	--
07...	--	1	0	1	--	40	0	40	--
08...	--	0	0	0	--	20	10	10	--
21...	--	0	0	0	--	50	50	4	--
29...	.1	0	0	0	0	50	40	6	80

02098200 HAW RIVER NEAR HAYWOOD, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	132	240
2	---	---	---	---	---	---	---	---	---	---	120	240
3	---	---	---	---	---	---	---	---	---	---	123	235
4	---	---	---	---	---	---	---	---	---	---	265	275
5	---	---	---	---	---	---	---	---	---	---	185	314
6	---	---	---	---	---	---	---	---	---	---	123	325
7	---	---	---	---	---	---	---	---	---	---	106	347
8	---	---	---	---	---	---	---	---	---	---	98	347
9	---	---	---	---	---	---	---	---	---	---	102	314
10	---	---	---	---	---	---	---	---	---	---	110	314
11	---	---	---	---	---	---	---	---	---	---	128	299
12	---	---	---	---	---	---	---	---	---	---	152	292
13	---	---	---	---	---	---	---	---	---	---	165	286
14	---	---	---	---	---	---	---	---	---	---	184	314
15	---	---	---	---	---	---	---	---	---	---	192	325
16	---	---	---	---	---	---	---	---	---	---	202	341
17	---	---	---	---	---	---	---	---	---	---	222	330
18	---	---	---	---	---	---	---	---	---	150	228	402
19	---	---	---	---	---	---	---	---	---	98	315	391
20	---	---	---	---	---	---	---	---	---	109	126	363
21	---	---	---	---	---	---	---	---	---	153	100	308
22	---	---	---	---	---	---	---	---	---	111	150	260
23	---	---	---	---	---	---	---	---	---	109	150	249
24	---	---	---	---	---	---	---	---	---	130	130	259
25	---	---	---	---	---	---	---	---	---	152	128	250
26	---	---	---	---	---	---	---	---	---	167	146	240
27	---	---	---	---	---	---	---	---	---	167	160	235
28	---	---	---	---	---	---	---	---	---	198	177	239
29	---	---	---	---	---	---	---	---	---	225	200	265
30	---	---	---	---	---	---	---	---	---	245	216	319
31	---	---	---	---	---	---	---	---	---	204	243	---
MONTH	---	---	---	---	---	---	---	---	---	---	164	297

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	325	452	330	95	79	112	80	184	110	180	350	210
2	400	494	335	93	88	124	82	168	155	150	380	230
3	390	530	320	87	100	133	82	156	110	130	380	163
4	380	510	300	97	91	138	99	208	99	120	320	93
5	430	426	285	96	96	146	101	143	110	119	290	101
6	495	395	325	106	112	136	100	155	120	120	100	102
7	471	447	335	108	93	131	117	118	121	130	79	75
8	420	406	340	107	101	148	94	116	130	139	99	58
9	390	437	240	108	98	170	93	139	139	170	90	66
10	410	374	310	127	89	172	95	135	150	179	90	62
11	452	572	155	126	84	170	96	90	171	170	110	66
12	442	337	180	130	85	159	98	91	185	170	135	78
13	410	328	135	118	92	153	99	71	193	189	130	92
14	410	312	145	118	100	142	102	71	180	201	120	104
15	390	281	145	112	110	136	108	74	200	210	145	110
16	358	302	130	120	115	159	112	77	210	220	128	125
17	340	364	151	121	122	159	118	86	200	230	125	138
18	332	395	175	145	96	159	124	115	190	230	150	141
19	340	416	130	160	97	136	122	122	212	232	175	138
20	348	421	143	158	86	117	136	114	140	235	210	147
21	379	359	140	158	97	142	151	98	131	260	175	186
22	410	344	119	108	104	128	131	90	140	270	160	176
23	452	364	99	94	101	138	135	112	179	273	200	180
24	468	410	99	99	80	136	135	112	210	270	200	187
25	447	440	85	91	90	136	137	129	210	280	180	196
26	416	390	86	85	84	110	153	116	191	305	170	198
27	385	360	91	106	90	108	176	112	185	330	200	177
28	369	330	91	80	106	123	175	96	185	338	220	163
29	395	390	93	69	---	136	179	98	298	329	225	210
30	447	355	102	75	---	108	186	98	140	300	204	260
31	510	---	108	71	---	78	---	101	---	311	211	---
MONTH	407	398	185	109	96	137	121	116	166	219	186	141

YEAR MAX 572 MIN 58 MEAN 191

02098200 HAW RIVER NEAR HAYWOOD, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	24.5	27.0
2	---	---	---	---	---	---	---	---	---	---	25.0	30.0
3	---	---	---	---	---	---	---	---	---	---	25.0	27.5
4	---	---	---	---	---	---	---	---	---	---	25.5	25.0
5	---	---	---	---	---	---	---	---	---	---	25.0	26.0
6	---	---	---	---	---	---	---	---	---	---	24.0	26.0
7	---	---	---	---	---	---	---	---	---	---	24.5	26.5
8	---	---	---	---	---	---	---	---	---	---	25.0	27.0
9	---	---	---	---	---	---	---	---	---	---	25.0	27.0
10	---	---	---	---	---	---	---	---	---	---	26.0	26.0
11	---	---	---	---	---	---	---	---	---	---	26.5	27.0
12	---	---	---	---	---	---	---	---	---	---	26.0	27.0
13	---	---	---	---	---	---	---	---	---	---	27.5	23.0
14	---	---	---	---	---	---	---	---	---	---	27.5	25.0
15	---	---	---	---	---	---	---	---	---	---	27.0	23.0
16	---	---	---	---	---	---	---	---	---	---	27.0	23.0
17	---	---	---	---	---	---	---	---	---	---	27.0	23.0
18	---	---	---	---	---	---	---	---	---	22.5	26.5	23.0
19	---	---	---	---	---	---	---	---	---	22.5	25.5	22.0
20	---	---	---	---	---	---	---	---	---	23.0	24.0	22.0
21	---	---	---	---	---	---	---	---	---	25.0	24.0	21.0
22	---	---	---	---	---	---	---	---	---	26.5	23.0	21.0
23	---	---	---	---	---	---	---	---	---	26.5	23.0	24.0
24	---	---	---	---	---	---	---	---	---	25.5	22.5	22.0
25	---	---	---	---	---	---	---	---	---	25.0	22.5	25.0
26	---	---	---	---	---	---	---	---	---	25.5	25.0	22.5
27	---	---	---	---	---	---	---	---	---	25.0	25.0	23.0
28	---	---	---	---	---	---	---	---	---	25.5	25.0	24.0
29	---	---	---	---	---	---	---	---	---	27.0	30.0	23.0
30	---	---	---	---	---	---	---	---	---	27.0	28.0	24.0
31	---	---	---	---	---	---	---	---	---	27.0	31.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	25.5	24.5

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	13.0	11.0	9.0	11.0	7.0	11.5	21.0	22.0	22.0	26.0	26.0
2	21.5	15.0	10.0	9.0	11.0	9.0	13.0	20.0	22.5	23.5	27.0	26.0
3	23.5	15.0	8.0	8.0	11.5	10.0	15.0	18.5	21.0	25.5	25.5	25.0
4	22.0	15.5	8.0	8.0	10.5	12.0	17.0	20.0	19.0	27.0	25.5	23.0
5	22.0	14.0	11.0	7.0	7.0	14.0	12.5	17.0	20.5	26.0	23.5	21.0
6	22.0	14.0	11.0	7.0	7.0	15.0	15.0	15.0	21.0	25.0	23.0	20.0
7	23.0	12.0	10.0	8.0	8.0	16.0	13.0	16.0	22.0	25.0	22.0	23.5
8	22.0	12.0	9.0	7.0	8.0	16.0	13.5	15.0	22.5	25.0	22.0	19.0
9	20.0	12.5	8.0	7.0	6.0	17.0	14.0	16.5	22.5	26.0	22.0	19.0
10	20.0	12.0	8.0	8.0	6.0	18.0	12.0	17.0	24.0	27.0	22.0	19.5
11	22.0	9.0	5.0	10.0	6.0	17.0	12.0	17.0	25.0	27.5	22.0	20.0
12	20.0	7.5	4.5	10.0	5.0	13.0	12.0	17.5	25.0	26.5	22.5	20.0
13	20.0	7.0	5.0	7.0	5.0	11.0	14.0	17.0	24.0	25.0	23.5	20.5
14	19.0	7.0	5.0	6.0	7.5	10.0	15.0	17.0	24.0	27.5	24.0	23.0
15	19.0	10.0	6.0	6.0	8.0	9.5	17.0	17.0	23.5	25.0	25.0	24.0
16	19.0	11.0	6.0	8.0	6.0	12.0	17.0	18.0	24.0	27.0	25.0	22.0
17	18.0	11.0	4.0	8.0	6.0	10.0	16.0	19.0	23.0	26.0	24.0	23.0
18	18.0	9.5	3.0	8.5	5.5	9.0	16.5	22.0	21.0	26.0	25.0	22.0
19	17.0	9.0	2.0	10.0	7.0	9.5	15.5	22.0	22.0	26.0	25.0	22.0
20	16.0	9.0	2.5	10.0	7.5	11.0	16.0	21.0	23.0	26.0	26.0	22.0
21	16.0	11.0	6.0	10.5	8.0	11.0	16.0	20.5	25.0	25.0	24.0	23.5
22	19.0	11.0	4.0	10.0	10.0	10.0	18.0	20.5	25.5	24.5	24.0	21.5
23	17.0	12.5	4.0	10.0	10.0	10.0	18.5	21.0	26.0	24.5	25.0	19.0
24	17.0	14.0	3.0	10.0	10.0	10.5	18.0	20.5	25.0	24.0	25.0	18.0
25	17.0	13.0	4.0	10.0	8.0	10.0	15.0	20.5	24.0	23.0	26.0	16.0
26	17.5	14.0	5.0	10.0	6.0	8.0	15.0	20.0	23.0	24.0	26.0	16.5
27	16.0	14.0	8.0	10.0	5.0	9.0	16.5	18.0	23.5	25.5	26.0	17.5
28	16.0	16.0	6.0	12.0	5.0	12.0	18.0	17.5	21.0	25.5	27.0	19.0
29	15.5	14.0	5.0	12.0	---	13.0	19.0	17.5	21.5	26.0	27.0	21.5
30	15.0	13.0	7.0	12.0	---	10.0	20.0	19.0	20.5	26.0	27.5	19.5
31	13.0	---	8.0	12.0	---	12.0	---	19.5	---	26.0	26.5	---
MONTH	19.0	12.0	6.5	9.0	7.5	11.5	15.5	18.5	23.0	25.5	24.5	21.0
YEAR	MAX	27.5	MIN	2.0	MEAN	16.0						

02098200 HAW RIVER NEAR HAYWOOD, N. C.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.				
25...	1545	200	9	4.9
DEC.				
21...	1135	5100	265	36500
21...	1315	5400	274	3990
JAN.				
16...	1030	680	20	37
APR.				
03...	1300	1650	60	267
JUNE				
19...	0845	790	95	203
AUG.				
04...	2015	950	215	551
08...	1215	4370	169	1990
10...	1735	2180	103	606
14...	1000	810	29	63
21...	1220	843	57	130
29...	0845	500	8	11

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
SEP.											
13...	1015	300	80	--	7.5	24.0	7.5	35	--	1.8	<10
19...	1445	270	80	--	7.4	23.0	7.5	35	--	2.8	40
27...	1230	185	80	--	7.8	24.0	9.5	<25	--	2.0	40
OCT.											
18...	1400	--	71	--	7.5	16.0	9.3	26	--	2.6	30
24...	1330	--	72	--	6.9	18.0	8.3	46	--	2.0	60
31...	1000	--	100	--	7.6	13.0	8.1	42	--	2.3	220
NOV.											
09...	1135	--	85	--	7.3	13.0	9.0	37	--	1.9	50
16...	1210	--	--	--	--	--	--	52	--	2.0	30
30...	1245	--	--	--	--	--	--	31	--	2.6	120
DEC.											
07...	1155	--	75	--	7.4	8.0	9.7	38	--	3.7	300
13...	1405	--	71	--	7.2	6.0	10.4	27	--	3.5	9000
JAN.											
10...	1200	--	30	--	6.9	10.0	11.4	--	--	--	--
18...	0950	--	--	--	--	--	--	<25	--	2.7	210
FEB.											
07...	1230	1700	9	--	6.8	10.0	10.3	--	<25	.5	--
15...	1005	1210	28	--	7.1	7.0	10.1	--	<25	2.8	910
22...	1115	2100	25	--	7.0	11.0	9.0	--	38	3.0	1500
MAR.											
01...	1130	1310	40	--	7.1	9.5	10.4	--	<25	3.3	590
05...	1515	1120	43	--	7.2	18.0	10.3	--	<25	3.6	300
22...	1030	1980	26	--	7.0	10.0	10.5	--	<25	3.6	860
26...	1400	1310	--	--	--	10.0	10.6	--	27	2.4	330
APR.											
03...	1015	2570	93	--	6.8	17.0	8.5	--	30	2.7	610
09...	0930	2160	23	--	6.9	13.5	9.4	--	<25	2.9	1200
19...	0900	1550	32	--	7.1	17.0	8.6	--	<25	2.2	90
22...	1530	1070	35	--	7.2	18.0	9.0	--	<25	1.4	70
MAY											
01...	1200	630	45	--	7.6	23.5	8.5	--	<25	3.3	<10
15...	1310	4400	15	--	6.8	20.0	7.7	--	42	2.9	410
23...	1240	1220	30	--	7.0	21.0	6.7	--	<25	2.9	900
30...	0930	2340	25	--	7.1	20.0	7.6	--	53	2.3	390
JUNE											
06...	1545	1360	38	--	7.4	23.0	8.0	--	<25	5.2	640
13...	1720	1060	--	--	--	23.5	8.4	--	<25	3.3	20
21...	1115	1080	61	--	7.5	23.0	8.1	--	<25	1.1	--
26...	1150	1300	55	--	7.4	21.5	8.1	--	27	2.2	30
JULY											
23...	1410	410	59	--	7.6	22.0	7.0	--	--	2.4	50
AUG.											
01...	1430	1900	94	400	8.1	29.0	7.0	--	--	2.7	10
27...	1252	480	52	232	7.4	27.0	6.9	--	--	2.9	40
SEP.											
05...	0930	2880	--	--	--	20.5	8.2	--	--	1.0	3200
12...	1430	5700	21	--	6.5	25.0	8.1	--	--	3.1	250
17...	1230	710	39	--	7.3	23.5	8.8	--	--	2.6	110
26...	1045	500	45	150	7.7	17.0	9.3	--	--	1.2	90
30...	1330	1700	54	220	7.7	19.0	8.2	--	--	1.8	1200

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.

LOCATION.--Lat 34°24'15", long 78°17'38", Bladen County, water-quality recorder on right bank near downstream end of Lock No. 1, 200 ft (60 m) downstream from gaging station, 1.3 mi (2.1 km) upstream from Natmore Creek, 2.0 mi (3.2 km) upstream from bridge on State Highway 141, 4.6 mi (7.4 km) southeast of Kelly, and at mile 67 (108 km).

DRAINAGE AREA.--5,220 mi^2 (13,520 km^2).

PERIOD OF RECORD.--Chemical analyses: January 1973 to September 1974.
Water temperatures: January 1973 to September 1974.

EXTREMES.--1973-74:
Specific conductance: Maximum recorded, 220 micromhos Dec. 18; minimum recorded, 42 micromhos Aug. 31, Sept. 1.
Water temperatures: Maximum, 28.0°C July 19; minimum, 5.0°C Dec. 23-26.

Period of record:
Specific conductance: Maximum, 220 micromhos Dec. 18, 1973; minimum, 41 micromhos Feb. 6, 1973.
Water temperatures: Maximum, 29.5°C on several days during August and September 1973; minimum, 3.0°C Jan. 15, 1973.

REMARKS.--Water-quality recorder malfunction April, May, and June 1974. Water-quality recorder installed May 18, 1973. Quality-water data available for period 1956-73 for station 2 mi (3.2 km) downstream, 02105771 Cape Fear River near Acme. Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
OCT.												
31...	1030	818	4.1	--	--	--	--	--	--	--	5.0	2.1
NOV.												
29...	1100	1080	5.7	--	--	--	--	--	--	--	6.5	2.9
DEC.												
27...	1100	5020	--	--	--	--	--	--	--	--	--	--
JAN.												
15...	1200	3980	--	--	--	--	--	--	--	--	--	--
FEB.												
13...	1300	11400	--	--	--	--	--	--	--	--	--	--
MAR.												
05...	1050	3980	9.1	1100	260	--	120	45	75	--	4.1	1.6
APR.												
03...	1230	16500	8.4	2100	250	12000	130	97	33	66	4.0	1.6
MAY												
21...	1105	5660	8.8	1400	270	--	110	10	100	--	5.0	1.3
JUNE												
20...	1130	5940	7.1	2000	180	10000	75	42	33	840	7.2	1.6
JULY												
23...	1145	2530	8.2	640	410	--	130	0	370	--	2.3	1.7
AUG.												
27...	1120	5570	9.0	1300	630	--	90	23	67	--	3.3	1.4
SEP.												
17...	1100	2840	9.6	1700	420	5100	130	10	120	210	4.4	1.6

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	AMMONIA NITROGEN (N) (MG/L)
OCT.												
31...	18	2.7	32	0	26	12	15	.2	.71	--	--	--
NOV.												
29...	25	3.1	48	0	39	16	21	.1	.98	--	--	--
DEC.												
27...	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
15...	--	--	--	--	--	--	--	--	--	--	--	--
FEB.												
13...	--	--	--	--	--	--	--	--	--	--	--	--
MAR.												
05...	6.1	1.4	16	0	13	8.9	6.3	.0	.14	.12	--	.02
APR.												
03...	6.2	1.4	15	0	12	9.4	4.8	.0	.41	.43	1.3	.15
MAY												
21...	5.4	1.5	14	--	11	8.3	4.9	.3	.41	.59	--	.09
JUNE												
20...	8.8	2.0	20	--	16	8.1	6.9	.2	.65	.63	23	.15
JULY												
23...	9.7	2.7	16	--	13	9.5	7.8	.4	.60	.60	--	.28
AUG.												
27...	7.7	1.8	16	--	13	8.6	8.2	.2	.45	.50	--	.11
SEP.												
17...	5.0	2.3	23	--	19	8.4	4.2	.2	.39	.39	.0	.13

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM DEP. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT. 31...	--	--	--	--	1.4	--	--	--	2.1	9.3	.30
NOV. 29...	--	--	--	--	.92	--	--	--	1.9	8.4	.43
DEC. 27...	--	--	--	--	--	--	--	--	--	--	--
JAN. 15...	--	--	--	--	--	--	--	--	--	--	--
FEB. 13...	--	--	--	--	--	--	--	--	--	--	--
MAR. 05...	.01	.01	.22	.05	.24	.18	.06	--	.38	1.7	.01
APR. 03...	.09	.12	.33	.39	.48	.00	.48	1900	.89	3.9	.12
MAY 21...	.08	.10	.45	.50	.54	.00	.58	--	.95	4.2	.16
JUNE 20...	.11	.14	.70	.51	.85	.23	.62	2300	1.5	6.6	.17
JULY 23...	.27	.35	.56	.53	.84	.04	.80	--	1.4	6.4	.20
AUG. 27...	.11	.14	.78	.82	.89	.00	.93	--	1.3	5.9	.17
SEP. 17...	.15	.19	.68	.48	.81	.18	.63	750	1.2	5.3	.15

DATE	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
OCT. 31...	--	--	--	--	--	85	87	75	.12	188	22
NOV. 29...	--	--	--	--	--	113	120	104	.15	336	5
DEC. 27...	--	--	--	--	--	--	75	--	--	--	60
JAN. 15...	--	--	--	--	--	--	70	--	--	--	18
FEB. 13...	--	--	--	--	--	--	67	--	--	--	32
MAR. 05...	.03	.01	.00	.01	--	58	57	46	.08	619	30
APR. 03...	.25	.13	.10	.08	230	55	58	44	.07	2450	66
MAY 21...	.21	.09	.12	.07	--	58	57	43	.08	886	44
JUNE 20...	.31	.12	.15	.10	1300	61	71	52	.08	939	70
JULY 23...	.43	.15	.15	.14	--	66	61	51	.09	451	15
AUG. 27...	.40	.15	.13	.13	--	68	67	48	.09	1020	23
SEP. 17...	.15	.06	.09	.05	440	93	--	48	.13	713	--

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
31...	21	0	61	1.7	140	6.1	18.0	--	10	8.8	41
NOV.											
29...	28	0	63	2.1	181	6.1	14.0	--	20	9.4	61
DEC.											
27...	--	--	--	--	--	--	7.0	--	--	--	--
JAN.											
15...	--	--	--	--	--	--	--	--	--	--	--
FEB.											
13...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
05...	17	4	42	.6	65	6.2	11.5	70	30	10.1	16
APR.											
03...	17	4	42	.7	75	6.6	15.0	80	5	9.3	6.0
MAY											
21...	18	6	37	.6	80	6.2	22.0	80	30	7.9	14
JUNE											
20...	25	8	41	.8	90	6.2	26.0	60	--	6.9	20
JULY											
23...	13	0	57	1.2	80	6.4	27.0	50	9	6.6	10
AUG.											
27...	14	1	51	.9	69	6.8	25.5	100	2	6.9	41
SEP.											
17...	18	0	35	.5	65	6.2	23.5	100	30	7.0	23

DATE	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON CHLOROPHYLL A MG/SQ M	PERIPHYTON CHLOROPHYLL B MG/SQ M	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
OCT.										
31...	4900	--	--	8300	30	40	--	--	--	--
NOV.										
29...	1900	--	--	1500	20	20	--	--	--	--
DEC.										
27...	--	--	--	--	--	--	1.5	3.1	--	--
MAR.										
05...	2200	--	--	10000	<10	90	--	--	3.9	3.3
APR.										
03...	1300	.3	.1	--	330	160	.80	22	--	34
MAY										
21...	1800	--	--	--	120	130	--	--	8.8	10
JUNE										
20...	3100	--	--	16000	590	20	1.5	3.1	41	16
JULY										
23...	1200	--	--	--	130	30	--	--	20	19
AUG.										
27...	1200	--	--	--	120	170	--	--	--	20
SEP.										
17...	180	--	--	--	--	100	--	--	10	13

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	ORGANIC CARBON IN BED MATERIAL (C) (G/KG)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DEPOSITS (UG/G)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DEPOSITS (UG/G)
OCT.										
31...	--	--	--	--	--	--	--	--	--	--
NOV.										
29...	--	--	--	--	--	--	--	--	--	--
DEC.										
27...	--	--	--	--	--	--	--	--	--	--
MAR.										
05...	--	.0	3	0	6	--	1	0	4	--
APR.										
03...	10	.0	8	1	7	4	0	0	0	1
MAY										
21...	--	.0	7	6	1	--	0	0	0	--
JUNE										
20...	14	.0	0	0	0	11	0	0	0	<10
JULY										
23...	--	.0	2	1	1	--	0	0	2	--
AUG.										
27...	--	.0	1	0	1	--	1	0	1	--
SEP.										
17...	3.2	.0	1	0	1	2	1	0	2	<10

DATE	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DEPOSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
OCT.									
31...	--	--	--	--	--	--	--	--	--
NOV.									
29...	--	--	--	--	--	--	--	--	--
DEC.									
27...	--	--	--	--	--	--	--	--	--
MAR.									
05...	2	2	0	--	6	0	9	--	3
APR.									
03...	0	0	1	34	4	4	0	10	4
MAY									
21...	1	1	0	--	0	0	3	--	8
JUNE									
20...	0	0	2	80	3	3	0	<50	7
JULY									
23...	<10	<9	1	--	0	0	0	--	5
AUG.									
27...	<10	<8	2	--	5	0	5	--	8
SEP.									
17...	10	9	1	10	4	2	2	<10	7

DATE	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DEPOSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DEPOSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)
OCT.									
31...	--	--	--	--	--	--	--	--	--
NOV.									
29...	--	--	--	--	--	--	--	--	--
DEC.									
27...	--	--	--	--	--	--	--	--	--
JAN.									
15...	--	--	--	--	--	--	--	--	--
FEB.									
13...	--	--	--	--	--	--	--	--	--
MAR.									
05...	0	6	--	11	10	1	--	.2	.2
APR.									
03...	0	5	15	19	14	5	80	.0	.0
MAY									
21...	0	8	--	9	0	9	--	110	.1
JUNE									
20...	2	5	20	4	3	1	<100	.2	.0
JULY									
23...	3	2	--	1	0	2	--	.1	.0
AUG.									
27...	5	3	--	17	2	15	--	.1	.1
SEP.									
17...	3	4	<10	3	2	1	20	.0	.0

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 31...	--	--	--	--	--	--	--	--	--
NOV. 29...	--	--	--	--	--	--	--	--	--
DEC. 27...	--	--	--	--	--	--	--	--	--
JAN. 15...	--	--	--	--	--	--	--	--	--
FEB. 13...	--	--	--	--	--	--	--	--	--
MAR. 05...	.0	--	12	3	9	--	40	30	6
APR. 03...	.0	.1	7	5	2	0	40	40	0
MAY 21...	.2	--	8	1	7	--	10	10	0
JUNE 20...	.2	.3	0	0	0	1	60	50	7
JULY 23...	.3	--	8	0	8	--	20	10	10
AUG. 27...	.0	--	0	0	0	--	50	30	20
SEP. 17...	.2	.1	0	0	0	0	20	10	8

DATE	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED URANIUM (U) (UG/L)
OCT. 31...	--	<.9	1.3	4.0	.6	3.2	.5	.03	.04
NOV. 29...	--	<1.5	<.4	4.3	.8	3.4	.7	.05	.04
DEC. 27...	--	<.8	3.1	4.6	2.6	3.6	2.4	.05	.03
JAN. 15...	--	.9	1.0	3.6	.8	2.9	.7	.08	.02
FEB. 13...	--	2.4	2.4	4.3	1.6	3.4	1.4	.03	.03
MAR. 05...	--	<.9	1.9	3.7	1.5	2.9	1.3	.03	.05
APR. 03...	74	1.7	2.9	4.5	4.2	3.6	3.5	.03	.09
MAY 21...	--	1.7	3.3	4.0	2.8	3.2	2.4	.04	.06
JUNE 20...	80	.7	1.5	4.1	1.7	3.3	1.5	.07	.05
JULY 23...	--	<.8	<.4	4.2	<.4	3.4	<.4	.03	.03
AUG. 27...	--	1.0	2.1	4.5	1.5	3.6	1.3	.06	.08
SEP. 17...	20	--	--	--	--	--	--	--	--

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	127	120	124	138	130	135	188	181	184	99	91	96
2	125	120	125	139	132	136	191	183	186	100	82	93
3	129	124	127	145	139	142	206	193	198	90	79	83
4	130	126	129	148	145	147	202	194	198	104	88	92
5	126	120	124	169	146	153	201	197	200	114	106	112
6	119	118	119	161	151	156	201	189	194	146	85	112
7	122	119	120	173	162	167	206	193	199	136	85	112
8	121	119	120	177	169	174	199	183	190	125	78	99
9	127	121	124	188	168	180	183	171	177	103	78	95
10	131	127	130	173	167	169	171	167	169	104	83	93
11	135	131	134	172	163	168	174	165	169	95	83	87
12	137	135	136	169	155	159	193	174	184	101	88	93
13	141	136	139	157	154	156	189	182	187	97	87	94
14	144	141	142	160	156	158	187	168	179	98	87	93
15	141	137	140	162	158	159	184	168	175	110	93	99
16	137	133	135	158	155	156	184	169	176	135	100	116
17	133	131	132	161	154	156	201	169	181	117	98	109
18	136	131	134	163	155	157	220	202	212	118	112	116
19	140	136	139	170	163	167	201	161	181	130	106	115
20	142	138	140	168	158	164	157	115	131	113	93	104
21	139	136	138	158	140	151	114	105	108	107	93	100
22	147	140	144	147	145	146	115	101	109	102	94	98
23	147	143	146	148	143	146	123	101	111	100	91	95
24	145	140	142	163	146	156	132	123	128	113	94	101
25	140	137	138	177	162	171	132	112	126	146	117	132
26	141	136	139	178	173	176	121	108	112	167	108	127
27	145	140	142	177	171	175	109	102	105	126	91	105
28	146	143	145	183	177	180	104	98	101	150	97	117
29	143	138	140	200	182	188	100	94	98	175	103	142
30	163	138	143	203	186	193	101	78	97	149	122	139
31	140	138	139	---	---	---	102	95	98	165	94	116
MONTH	163	118	134	203	130	161	220	78	157	175	78	106

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	205	86	139	129	69	93	---	---	---	---	---	---
2	129	102	110	124	71	96	---	---	---	---	---	---
3	---	---	---	162	71	111	77	73	75	---	---	---
4	---	---	---	157	71	121	91	78	85	---	---	---
5	---	---	---	76	71	75	---	---	---	---	---	---
6	---	---	---	97	75	84	---	---	---	---	---	---
7	---	---	---	91	74	82	---	---	---	---	---	---
8	---	---	---	82	70	79	---	---	---	---	---	---
9	---	---	---	99	75	85	---	---	---	---	---	---
10	---	---	---	86	77	82	---	---	---	---	---	---
11	---	---	---	97	86	92	---	---	---	---	---	---
12	---	---	---	115	98	107	---	---	---	---	---	---
13	92	80	85	126	115	122	---	---	---	---	---	---
14	91	80	85	127	119	124	---	---	---	---	---	---
15	79	73	75	133	125	129	---	---	---	---	---	---
16	74	70	72	140	133	138	---	---	---	---	---	---
17	75	64	71	142	136	138	---	---	---	---	---	---
18	71	66	68	145	137	141	---	---	---	---	---	---
19	69	66	68	163	135	151	---	---	---	---	---	---
20	106	70	89	150	130	140	---	---	---	---	---	---
21	136	90	114	129	123	126	---	---	---	---	---	---
22	138	118	129	126	119	122	---	---	---	---	---	---
23	116	73	95	126	120	123	---	---	---	---	---	---
24	114	71	87	205	119	156	---	---	---	---	---	---
25	104	78	95	172	133	149	---	---	---	---	---	---
26	120	103	110	132	125	127	---	---	---	---	---	---
27	195	82	149	129	126	128	---	---	---	---	---	---
28	161	73	114	127	124	125	---	---	---	---	---	---
29	---	---	---	123	111	115	---	---	---	---	---	---
30	---	---	---	118	113	114	---	---	---	---	---	---
31	---	---	---	116	110	113	---	---	---	103	75	90
MONTH	---	---	---	205	69	116	---	---	---	---	---	---

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	84	70	77	86	76	80	62	56	59	44	42	43
2	---	---	---	86	82	84	73	62	69	---	---	---
3	---	---	---	82	81	81	83	74	80	---	---	---
4	---	---	---	83	81	82	90	83	88	---	---	---
5	89	84	85	87	82	85	93	84	88	---	---	---
6	95	85	89	91	86	88	87	66	73	---	---	---
7	81	66	---	99	90	94	87	62	72	130	84	111
8	83	81	---	106	98	103	89	54	69	83	58	71
9	85	83	---	105	100	102	85	61	67	66	55	59
10	85	80	---	137	106	123	61	52	55	58	46	51
11	80	73	---	140	117	133	53	50	51	47	45	46
12	77	73	---	115	93	104	53	52	53	49	46	48
13	79	71	---	91	83	86	55	52	53	51	49	50
14	71	68	---	85	82	82	53	51	52	52	50	51
15	75	69	---	85	82	84	52	51	51	53	51	52
16	75	71	---	83	75	80	54	51	52	57	53	55
17	71	70	---	74	64	69	57	53	55	56	54	55
18	75	70	---	66	64	65	56	53	54	59	56	57
19	86	75	---	68	66	67	54	53	54	57	57	57
20	88	74	---	71	68	69	53	51	52	57	56	57
21	74	66	---	75	71	73	53	49	51	56	54	55
22	68	66	---	79	75	77	51	48	50	55	54	55
23	70	68	---	80	78	79	55	49	52	56	54	55
24	74	70	---	79	76	77	55	51	53	55	53	54
25	77	74	---	77	75	76	51	50	51	57	53	55
26	78	77	---	77	75	76	65	51	57	59	55	57
27	77	75	---	77	71	74	70	60	65	60	59	59
28	77	76	76	70	65	67	60	52	57	65	60	62
29	83	77	80	73	66	70	51	45	48	69	64	67
30	83	76	81	70	65	67	45	43	44	71	69	70
31	---	---	---	67	62	66	43	42	42	---	---	---
MONTH	95	66	---	140	62	83	93	42	59	130	42	58

CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	26.0	25.5	25.5	19.5	18.5	19.0	14.0	13.5	14.0	9.0	8.5	8.5
2	26.0	25.5	26.0	19.5	18.0	19.0	14.0	13.5	13.5	9.5	9.0	9.0
3	26.0	25.5	26.0	18.5	17.5	18.0	13.5	13.0	13.0	10.0	9.0	9.5
4	26.0	26.0	26.0	18.0	17.5	18.0	13.0	13.0	13.0	9.5	9.5	9.5
5	26.5	26.0	26.0	18.0	17.5	18.0	14.0	13.0	13.5	9.5	9.0	9.5
6	26.0	25.5	26.0	18.5	17.0	18.0	13.5	13.0	13.5	9.5	9.0	9.5
7	25.5	25.0	25.5	18.0	17.5	17.5	13.5	13.0	13.5	9.5	9.5	9.5
8	25.0	25.0	25.0	18.5	17.5	18.0	13.0	12.5	12.5	9.5	9.5	9.5
9	25.0	24.5	25.0	20.0	18.0	18.5	12.5	12.0	12.5	9.5	9.0	9.5
10	25.0	24.5	24.5	18.5	17.5	18.0	12.0	11.5	12.0	10.0	9.5	9.5
11	24.5	24.0	24.0	17.5	16.0	16.5	11.5	11.0	11.5	10.5	10.0	10.0
12	24.0	23.5	23.5	16.0	13.5	14.5	11.0	10.0	10.5	10.5	10.0	10.5
13	23.5	23.0	23.5	14.0	13.5	13.5	10.0	10.0	10.0	10.0	9.5	10.0
14	23.5	23.0	23.0	14.0	13.0	13.5	10.0	9.0	9.5	9.5	9.5	9.5
15	23.0	22.5	23.0	14.0	13.5	13.5	9.5	9.0	9.0	9.5	9.5	9.5
16	23.0	22.5	22.5	14.0	13.5	14.0	9.5	9.0	9.0	10.0	9.5	9.5
17	22.5	21.5	22.0	14.0	13.5	13.5	8.5	8.0	8.5	10.0	10.0	10.0
18	22.5	21.0	21.5	13.5	13.0	13.5	8.0	7.0	7.5	10.0	10.0	10.0
19	22.5	20.5	21.0	14.0	13.0	13.5	7.0	6.5	6.5	10.0	9.5	9.5
20	21.5	20.5	21.0	13.5	13.5	13.5	7.0	6.5	6.5	10.0	9.5	9.5
21	20.5	20.0	20.5	13.5	13.5	13.5	7.5	7.0	7.0	10.0	10.0	10.0
22	20.0	20.0	20.0	14.5	13.5	14.0	7.0	6.0	6.5	10.5	10.0	10.0
23	20.5	20.0	20.0	14.5	14.0	14.0	5.5	5.0	5.5	11.0	10.5	11.0
24	20.0	20.0	20.0	14.0	13.5	14.0	6.0	5.0	5.5	11.5	11.0	11.5
25	20.0	19.5	20.0	14.5	13.5	14.0	5.0	5.0	5.0	11.5	11.5	11.5
26	20.0	19.5	19.5	15.0	14.0	14.5	5.5	5.0	5.5	11.5	11.0	11.5
27	19.5	19.5	19.5	15.0	14.5	15.0	6.5	5.5	6.0	12.0	11.5	12.0
28	20.5	19.5	20.0	15.5	15.0	15.0	6.5	6.5	6.5	12.0	12.0	12.0
29	20.0	19.5	19.5	15.0	14.5	14.5	7.0	6.5	6.5	12.0	11.5	12.0
30	20.0	19.0	19.5	14.5	14.0	14.5	7.0	7.0	7.0	12.5	12.0	12.0
31	19.5	19.5	19.5	---	---	---	8.0	7.5	8.0	12.5	12.0	12.5
MONTH	26.5	19.0	22.5	20.0	13.0	15.5	14.0	5.0	9.5	12.5	8.5	10.0

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.0	12.5	12.5	9.5	9.0	9.5	13.5	12.5	13.0	21.0	20.5	20.5
2	13.0	12.5	13.0	9.5	9.0	9.5	13.0	12.5	12.5	21.0	20.5	21.0
3	13.5	13.0	13.0	10.0	9.5	9.5	13.5	13.0	13.0	21.0	20.5	21.0
4	13.0	12.5	12.5	10.5	9.5	10.0	15.5	14.0	14.5	22.0	21.0	21.5
5	12.0	11.5	12.0	11.5	10.5	11.0	16.0	15.5	16.0	21.5	20.5	21.0
6	11.5	11.0	11.0	12.5	11.5	12.0	16.5	16.0	16.5	20.5	20.5	20.5
7	11.0	10.5	11.0	13.5	12.5	13.0	17.0	16.0	16.5	21.0	20.5	20.5
8	10.5	10.0	10.5	14.5	13.5	14.0	16.5	15.5	16.0	21.0	20.5	21.0
9	10.0	9.5	9.5	15.5	14.5	15.0	15.5	14.5	15.0	21.0	20.5	21.0
10	9.5	8.5	9.0	16.5	15.5	16.0	14.5	14.0	14.5	21.0	20.5	20.5
11	8.5	7.5	8.0	16.5	16.5	16.5	15.0	14.5	14.5	20.5	20.0	20.0
12	7.5	7.5	7.5	16.5	15.5	15.5	14.5	14.0	14.0	20.5	20.0	20.0
13	8.0	7.0	7.5	15.5	15.0	15.5	14.5	13.5	14.0	20.0	19.5	20.0
14	8.0	7.5	7.5	15.5	15.0	15.0	15.0	14.5	14.5	19.5	18.5	19.0
15	8.0	8.0	8.0	15.0	14.5	15.0	16.0	15.0	15.5	19.0	18.5	18.5
16	8.0	7.5	7.5	15.0	14.5	15.0	17.0	16.0	16.5	19.0	18.5	18.5
17	8.0	7.5	7.5	14.5	14.0	14.0	17.5	16.5	17.0	20.0	18.5	19.5
18	8.0	7.5	8.0	13.5	13.0	13.0	17.5	17.0	17.0	20.5	20.0	20.5
19	8.0	7.5	7.5	13.0	12.5	12.5	18.0	17.0	17.5	21.5	20.5	21.0
20	7.5	7.5	7.5	13.0	12.5	13.0	18.0	17.5	18.0	22.0	21.0	21.5
21	8.5	7.5	8.0	13.5	13.0	13.0	18.0	17.5	18.0	22.5	21.5	22.0
22	9.5	8.5	9.0	13.5	12.5	13.0	18.0	17.5	18.0	23.0	22.0	22.5
23	10.0	9.5	9.5	13.0	12.5	13.0	18.5	18.0	18.0	23.0	22.5	23.0
24	10.5	9.5	10.0	13.5	13.0	13.0	18.5	18.0	18.5	23.0	22.5	23.0
25	11.0	10.5	10.5	13.5	12.5	13.0	18.0	18.0	18.0	23.5	23.0	23.0
26	10.5	10.0	10.0	12.5	12.0	12.5	18.0	18.0	18.0	23.0	23.0	23.0
27	9.5	9.5	9.5	12.0	12.0	12.0	18.5	18.0	18.5	23.0	22.0	22.5
28	9.5	9.0	9.5	12.5	12.0	12.5	19.0	18.5	18.5	22.5	22.0	22.0
29	---	---	---	12.5	12.0	12.0	20.0	19.0	19.5	22.0	21.0	22.0
30	---	---	---	12.5	11.5	12.0	20.5	20.0	20.0	21.0	20.0	20.5
31	---	---	---	13.5	12.5	12.5	---	---	---	20.5	20.0	20.5
MONTH	13.5	7.0	9.5	16.5	9.0	13.0	20.5	12.5	16.5	23.5	18.5	21.0

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.5	20.5	21.0	25.5	24.5	25.0	26.5	26.0	26.0	26.5	25.5	26.0
2	22.0	21.0	21.5	25.5	25.0	25.5	26.5	26.0	26.5	26.0	23.0	24.0
3	22.0	21.5	22.0	25.5	25.0	25.5	26.5	26.0	26.5	23.0	23.0	23.0
4	22.5	21.5	22.0	26.0	25.5	25.5	26.5	26.0	26.5	22.5	22.5	22.5
5	22.5	22.0	22.5	26.5	25.5	26.0	26.5	26.0	26.0	22.5	20.0	21.5
6	23.0	22.5	22.5	26.5	25.5	26.0	26.0	24.5	25.0	25.0	16.0	21.0
7	23.0	22.5	23.0	26.0	25.5	26.0	24.5	23.0	23.5	24.5	23.0	24.0
8	23.0	22.5	23.0	26.0	26.0	26.0	23.0	22.5	23.0	23.0	21.0	22.0
9	23.5	23.0	23.0	26.5	25.5	26.0	22.5	22.5	22.5	21.0	20.5	21.0
10	24.5	23.5	24.0	26.5	26.0	26.5	22.5	22.0	22.5	20.5	20.0	20.0
11	25.0	24.5	24.5	27.0	26.0	26.5	22.5	22.0	22.5	20.5	19.5	20.0
12	25.5	25.0	25.0	27.0	26.5	27.0	22.5	22.0	22.5	20.5	20.5	20.5
13	26.0	25.0	25.5	27.0	26.5	26.5	23.0	22.5	22.5	21.5	20.5	21.0
14	25.5	25.0	25.0	27.5	26.5	27.0	23.0	22.5	23.0	22.0	21.0	21.5
15	25.5	25.0	25.0	27.5	26.5	27.0	23.0	23.0	23.0	22.5	22.0	22.5
16	25.5	25.0	25.0	27.5	26.5	27.0	23.5	23.0	23.5	22.5	22.0	22.5
17	25.5	25.0	25.5	27.0	26.5	27.0	24.0	23.5	23.5	23.0	22.5	22.5
18	26.5	25.5	26.0	27.0	26.5	27.0	24.5	23.5	24.0	23.0	22.5	22.5
19	26.5	25.5	26.0	28.0	27.0	27.0	25.0	24.0	24.5	23.0	22.5	22.5
20	25.5	24.5	25.0	27.5	27.0	27.5	25.0	24.5	25.0	23.0	22.5	23.0
21	25.0	24.0	24.5	27.5	26.5	27.0	24.5	24.0	24.5	23.5	23.0	23.5
22	25.0	25.0	25.0	27.0	26.5	26.5	24.0	23.5	23.5	23.5	23.0	23.0
23	25.5	25.0	25.5	26.5	26.0	26.5	24.0	23.5	23.5	23.0	22.5	22.5
24	25.5	25.5	25.5	26.5	25.5	26.0	24.0	24.0	24.0	22.5	21.5	22.0
25	25.5	25.5	25.5	26.5	26.0	26.5	24.5	23.5	24.0	21.0	21.0	21.0
26	25.5	25.0	25.5	26.5	26.0	26.5	25.0	24.5	24.5	21.0	20.5	21.0
27	25.0	25.0	25.0	26.5	26.0	26.5	25.0	25.0	25.0	21.0	20.5	20.5
28	25.0	23.5	24.5	26.5	26.0	26.0	25.0	25.0	25.0	21.5	20.5	21.0
29	24.5	23.5	24.0	27.0	26.0	26.0	25.0	25.0	25.0	22.0	21.0	21.5
30	24.5	24.0	24.5	26.5	26.0	26.5	25.5	25.0	25.5	21.5	21.0	21.5
31	---	---	---	26.5	26.0	26.5	26.0	25.5	25.5	---	---	---
MONTH	26.5	20.5	24.0	28.0	24.5	26.5	26.5	22.0	24.5	26.5	16.0	22.0
YEAR	28.0	5.0	18.0									

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .062 MM
OCT. 31...	1030	818	21	47	100
NOV. 29...	1100	1080	30	89	100
MAR. 05...	1050	3980	41	437	100
APR. 03...	1230	16500	70	3120	--
MAY 21...	1105	5660	44	669	100
JUNE 20...	1130	5940	126	1940	100
JULY 23...	1145	2530	15	102	100
AUG. 27...	1120	5570	21	316	100
SEP. 17...	1100	2840	25	192	100

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, N. C.--Continued

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
SEP.											
05...	1415	1010	5	--	6.9	29.0	7.5	<25	--	2.2	<10
10...	1210	1290	25	--	7.2	25.0	5.7	26	--	1.2	10
20...	1615	1620	25	--	7.0	26.0	7.3	<25	--	2.8	30
26...	1430	888	22	--	7.0	25.0	6.7	<25	--	1.2	<10
OCT.											
05...	1215	912	--	--	--	--	--	<25	--	2.9	<10
11...	1300	807	0	--	--	26.0	7.4	<25	--	2.4	30
18...	1420	785	--	--	--	--	--	26	--	2.1	130
25...	1200	730	--	--	--	--	--	26	--	4.4	10
30...	1600	829	--	--	--	--	--	<25	--	.3	10
NOV.											
08...	1400	936	--	--	--	--	--	<25	--	2.0	<10
14...	1410	852	--	--	--	--	--	<25	--	.9	20
21...	1300	876	--	--	--	--	--	<25	--	.7	50
27...	1310	1080	--	--	7.0	20.0	8.3	27	--	3.8	20
DEC.											
12...	1410	4060	9	--	6.7	10.0	8.7	--	--	1.3	480
JAN.											
17...	1615	3030	25	--	7.0	13.0	9.8	--	<25	1.2	90
FEB.											
07...	1455	13800	12	--	6.6	12.0	8.2	--	27	.9	470
21...	1300	12700	11	--	6.8	12.0	10.5	--	30	1.3	530
MAR.											
06...	1300	3710	15	--	6.9	15.0	9.0	--	27	.9	40
14...	1400	2900	18	--	6.8	15.0	7.5	--	<25	1.3	60
21...	1630	5690	22	--	6.7	17.0	8.9	--	<25	1.8	280
28...	1315	6610	20	--	7.5	15.0	8.8	--	34	1.0	180
APR.											
05...	1210	9120	17	--	6.6	19.0	7.2	--	31	1.0	230
11...	1230	9750	--	--	6.5	16.0	8.8	--	27	1.9	170
17...	1230	6570	16	--	6.6	15.0	9.2	--	310	2.1	--
24...	1255	2990	19	--	6.5	19.0	9.1	--	<25	1.3	<10
MAY											
02...	1140	1780	--	--	--	21.0	8.4	--	27	3.3	<10
09...	1130	4510	18	--	6.6	21.0	8.7	--	<25	2.6	190
16...	1145	14500	18	--	6.4	23.0	7.1	--	26	3.0	310
21...	1145	5660	18	--	6.4	24.0	7.6	--	27	1.9	370
JUNE											
06...	1220	5320	21	--	6.7	27.0	6.9	--	27	1.4	400
12...	1700	1980	--	--	--	27.0	7.4	--	<25	1.5	40
19...	1530	6750	18	--	6.1	26.0	7.3	--	42	1.9	2000
27...	1230	1880	21	170	6.1	25.0	7.2	--	27	1.3	17000
JULY											
11...	1150	2120	--	--	--	30.0	6.7	--	--	3.0	340
18...	1100	1090	--	--	--	--	6.4	--	--	2.2	10
30...	1130	1500	--	--	--	29.0	5.9	--	--	1.5	120
AUG.											
28...	1330	4410	25	30	6.3	28.0	6.7	--	--	1.0	20
SEP.											
11...	0944	19900	14	60	6.6	25.0	6.6	--	--	1.2	60000
11...	1310	20000	--	320	6.8	28.0	7.5	--	--	1.6	200
18...	1100	3710	13	55	7.1	24.0	7.2	--	--	1.3	1300
25...	1130	2470	30	320	6.7	23.0	7.8	--	--	1.5	50
26...	1430	2310	16	65	6.2	24.0	7.1	--	--	.9	20

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.

LOCATION.--Lat 35°51'24", long 80°23'10", Davidson County, water-quality recorder at gaging station near left bank on downstream end of pier of bridge on U. S. Highway 64, 1.5 mi (2.4 km) south of Yadkin College, 6.2 mi (10.0 km) downstream from Reedy Creek, and 295 mi (475 km) upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--2,280 mi^2 (5,910 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1943 to September 1944, October 1950 to September 1951, October 1955 to September 1967, water years 1968-70 (partial-record station), October 1970 to September 1974.
Water temperatures: October 1943 to September 1944, October 1950 to September 1951, October 1955 to September 1967, October 1970 to September 1974.
Sediment records: January 1951 to September 1974.

EXTREMES.--1973-74:
Specific conductance: Maximum, 95 micromhos Oct. 29; minimum, 35 micromhos Apr. 5, 8.
Water temperatures: Maximum, 26.0°C Aug. 27; minimum, 4.0°C Dec. 19-25, Feb. 26, 27.
Sediment concentrations: Maximum daily, 1,610 mg/l Apr. 5; minimum daily, 12 mg/l Nov. 14, 19, 20.
Sediment discharge: Maximum daily, 117,000 tons Apr. 5; minimum daily, 61 tons Nov. 19, 20.

Period of record:
Dissolved solids (1943-44, 1950-51, 1955-67): Maximum, 85 mg/l Nov. 1-10, 1950; minimum, 32 mg/l Mar. 21-31, 1944.
Hardness (1943-44, 1950-51, 1955-67): Maximum, 26 mg/l Mar. 6, 1959; minimum, 8 mg/l Dec. 25, 1962.
Specific conductance (1955-67, 1970-74): Maximum daily, 815 micromhos Aug. 26, 1971; minimum daily, 20 micromhos Nov. 2, 16, 28, Dec. 1, 6, 7, 1971.
Dissolved oxygen (1970-73): Maximum recorded, 13.0 mg/l Jan. 21, 1971; minimum recorded, 0.0 mg/l Oct. 15, 16, 1970.
Water temperatures: Maximum, 31.0°C Aug. 24, 1959; minimum, freezing point on many days during most winter months.
Sediment concentrations: Maximum daily, 2,970 mg/l May 26, 1952; minimum daily, 1 mg/l Dec. 3, 1953.
Sediment discharge: Maximum daily, 182,000 tons June 22, 1972; minimum daily, 3 tons Dec. 3, 1953.

REMARKS.--Miscellaneous chemical data published for water years 1947-49, 1955. Because of equipment malfunctions, once-daily observer data are used instead of water-quality recorder data. Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
OCT.											
24...	1310	1890	14	980	140	--	20	0	20	--	4.1
JAN.											
21...	1200	12800	4.5	360000	550	--	580	520	63	--	3.6
21...	1905	19500	6.9	4200	400	--	580	530	50	--	3.0
22...	0425	22600	6.3	300000	250	--	20	0	38	--	3.0
23...	1010	7340	8.8	110000	210	--	150	140	13	--	3.2
APR.											
04...	1030	3940	13	2300	90	21000	60	43	17	53	3.3
JUNE											
19...	1000	2820	13	5000	90	18000	190	190	0	290	4.4
AUG.											
05...	1600	19900	6.9	36000	90	--	560	520	40	--	2.1
07...	1840	5300	10	24000	150	--	360	340	20	--	1.7

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.											
24...	1.4	6.2	2.3	31	--	25	4.0	3.7	.1	.43	.43
JAN.											
21...	1.3	3.5	2.4	20	0	16	5.1	3.0	.1	.50	.42
21...	1.2	2.5	2.4	11	0	9	5.4	1.6	.1	.39	.33
22...	1.1	2.3	2.4	12	0	10	5.6	2.5	.1	.44	.40
23...	1.2	3.1	2.1	14	0	11	4.5	3.1	.1	.51	.49
APR.											
04...	1.3	5.0	1.6	20	0	16	3.8	4.3	.2	.35	.36
JUNE											
19...	1.1	3.9	1.9	22	--	18	2.7	2.8	.1	.50	.47
AUG.											
05...	1.1	1.6	2.8	10	--	8	5.2	1.8	.3	1.0	.78
07...	1.0	2.8	2.3	14	--	11	4.8	2.8	.3	.39	.38

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS_ SOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM DEP. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)
OCT.											
24...	--	--	--	--	--	--	.51	--	.23	--	.94
JAN.											
21...	--	.35	1.0	1.3	.00	.00	.12	.00	.31	--	.62
21...	--	.35	.32	.41	.65	.00	1.0	.75	.25	--	1.4
22...	--	.36	.08	.10	.53	.12	.89	.69	.20	--	1.3
23...	--	.17	.07	.09	.00	.23	.08	.00	.30	--	.59
APR.											
04...	.2	.15	.10	.13	.07	.17	.22	.00	.27	1500	.57
JUNE											
19...	4.0	.00	.01	.01	.80	.22	.80	.57	.23	580	1.3
AUG.											
05...	--	.15	.03	.04	2.3	.40	2.4	2.0	.43	--	3.4
07...	--	.09	.04	.05	1.6	.29	1.7	1.4	.33	--	2.1

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT.											
24...	4.2	.35	--	.25	--	--	--	50	51	.07	255
JAN.											
21...	2.7	.34	.80	.02	.20	.26	--	33	38	.04	1140
21...	6.2	.31	.67	.01	.28	.22	--	33	32	.04	1740
22...	5.9	.19	.64	.01	.23	.21	--	59	32	.08	3600
23...	2.6	.22	.09	.04	.07	.03	--	35	36	.05	694
APR.											
04...	2.5	.08	.18	.09	.09	.06	150	46	44	.06	489
JUNE											
19...	5.8	.13	.31	.11	.08	.10	220	39	41	.05	297
AUG.											
05...	15	.71	.00	.01	.22	.00	--	46	30	.06	2470
07...	9.3	.56	.09	.04	.12	.03	--	42	35	.06	601

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
24...	16	0	42	.7	90	6.6	15.5	--	9	9.8	12
JAN.											
21...	14	0	30	.4	60	6.4	11.0	200	--	10.6	13
21...	12	3	26	.3	50	6.3	9.0	300	--	10.6	8.8
22...	12	2	25	.3	42	6.4	9.5	300	--	10.6	7.6
23...	13	2	30	.4	57	6.1	10.0	200	--	10.6	18
APR.											
04...	14	0	41	.6	61	6.5	16.0	20	--	9.5	10
JUNE											
19...	16	0	32	.4	60	6.3	20.0	10	--	8.4	18
AUG.											
05...	10	2	21	.2	38	6.1	24.0	500	--	7.6	13
07...	8	0	35	.4	44	6.2	22.0	400	--	--	14

DATE	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDED CAD-MIUM (CD) (UG/L)
OCT.											
24...	--	5.0	4.5	--	--	3	0	3	--	<10	10
JAN.											
21...	--	16	5.3	--	.0	9	4	5	--	0	0
21...	--	10	6.6	--	.0	7	7	0	--	0	0
22...	--	16	13	--	.0	8	8	0	--	0	0
23...	--	4.4	2.1	--	.0	0	0	3	--	0	0
APR.											
04...	560	18	--	5.8	.0	6	0	7	2	0	0
JUNE											
19...	5500	37	26	3.1	.0	0	0	0	3	0	0
AUG.											
05...	--	12	7.2	--	.0	2	1	1	--	1	0
07...	--	10	6.0	--	.0	2	1	1	--	0	0

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
OCT.											
24...	0	--	0	0	0	--	<25	25	0	--	20
JAN.											
21...	1	--	40	37	3	--	13	12	1	--	33
21...	0	--	40	40	0	--	11	10	1	--	27
22...	0	--	30	27	3	--	0	0	0	--	0
23...	0	--	0	0	2	--	3	2	1	--	11
APR.											
04...	1	0	0	0	2	33	3	3	0	18	6
JUNE											
19...	0	<10	0	0	1	20	0	0	0	<50	9
AUG.											
05...	1	--	10	10	0	--	15	12	3	--	23
07...	0	--	10	10	0	--	12	9	3	--	19

DATE	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
OCT.										
24...	9	11	--	<100	96	4	--	.0	.0	.0
JAN.										
21...	23	10	--	18	15	3	--	.0	.0	.0
21...	22	5	--	0	0	0	--	.0	.0	.0
22...	0	3	--	0	0	0	--	.0	.0	.0
23...	7	4	--	8	6	2	--	.0	.0	.0
APR.										
04...	3	3	25	9	0	9	35	.0	.0	.1
JUNE										
19...	7	2	10	3	2	1	<100	.4	.2	.2
AUG.										
05...	15	8	--	30	17	13	--	.1	.0	.1
07...	17	2	--	21	8	13	--	.1	.0	.1

DATE	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
OCT.									
24...	--	5	0	5	--	30	0	30	--
JAN.									
21...	--	3	3	0	--	110	100	10	--
21...	--	0	0	4	--	90	90	0	--
22...	--	0	0	0	--	110	100	7	--
23...	--	7	0	20	--	50	50	0	--
APR.									
04...	.1	7	2	5	0	30	30	0	73
JUNE									
19...	.1	0	0	0	1	10	7	3	40
AUG.									
05...	--	2	1	1	--	70	30	40	--
07...	--	0	0	0	--	8	0	20	--

02116500 YADKIN RIVER AT YADKIN COLLEGE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	74	53	48	55	54	44	47	62	43	60	82
2	58	74	57	50	59	54	49	51	53	47	70	64
3	52	70	59	49	55	54	50	53	45	53	68	60
4	50	69	56	60	51	52	49	51	44	53	69	55
5	55	63	52	55	50	53	35	50	50	54	44	52
6	59	60	47	52	52	56	38	50	64	56	43	66
7	64	59	42	53	60	59	38	47	58	45	43	48
8	65	66	44	50	58	55	35	46	49	44	46	47
9	64	73	58	53	53	60	39	48	47	43	50	46
10	61	71	46	55	53	56	45	54	45	49	53	52
11	58	68	46	55	51	54	48	49	45	54	47	56
12	70	65	50	55	51	53	50	50	49	54	47	55
13	70	62	55	50	54	60	48	49	53	55	51	61
14	66	60	58	52	53	50	47	43	58	56	52	56
15	69	67	56	51	55	54	44	45	58	57	52	60
16	65	71	59	52	55	60	42	49	61	58	60	57
17	64	70	61	55	56	58	42	55	53	56	68	58
18	71	67	53	55	55	51	47	53	47	60	58	72
19	73	69	59	58	51	51	48	51	50	62	58	64
20	72	65	67	55	54	55	48	51	56	63	58	67
21	70	59	61	51	55	55	47	46	60	62	52	69
22	67	71	52	49	55	55	46	50	52	61	59	71
23	55	56	47	49	52	50	44	51	53	59	65	66
24	63	60	47	51	49	51	45	53	50	59	68	64
25	72	60	48	55	45	49	49	53	49	59	64	72
26	70	53	53	55	46	55	50	51	52	62	66	70
27	70	57	48	53	53	53	55	55	56	61	60	70
28	71	55	48	50	53	56	47	47	57	60	63	70
29	65	59	45	52	---	56	45	51	57	51	66	65
30	60	53	46	50	---	59	46	55	45	54	62	57
31	64	---	50	55	---	51	---	57	---	56	70	---
MONTH	66	64	52	53	53	55	45	50	53	55	59	62
YEAR	MAX	95	MIN	35	MEAN	56						

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	13.0	10.0	4.0	9.0	8.0	12.0	14.0	22.0	22.0	24.0	24.0
2	14.0	13.0	10.0	6.0	9.0	9.0	13.0	15.0	20.0	23.0	24.0	25.0
3	14.0	14.0	9.0	7.0	11.0	10.0	14.0	15.0	19.0	25.0	23.0	23.0
4	15.0	13.0	9.0	8.0	9.0	9.0	15.0	17.0	19.0	24.0	24.0	22.0
5	20.0	14.0	11.0	6.0	8.0	12.0	14.0	15.0	19.0	23.0	21.0	18.0
6	20.0	13.0	12.0	7.0	9.0	12.0	13.0	14.0	21.0	23.0	22.0	19.0
7	19.0	12.0	11.0	4.0	10.0	14.0	12.0	14.0	20.0	22.0	20.0	19.0
8	14.0	9.0	9.0	8.0	8.0	13.0	11.0	14.0	20.0	23.0	21.0	19.0
9	14.0	12.0	8.0	8.0	7.0	10.0	10.0	15.0	20.0	23.0	21.0	18.0
10	21.0	10.0	8.0	10.0	9.0	13.0	10.0	15.0	22.0	23.0	21.0	19.0
11	20.0	9.0	7.0	12.0	8.0	14.0	11.0	15.0	21.0	24.0	20.0	21.0
12	15.0	9.0	7.0	10.0	9.0	16.0	12.0	17.0	22.0	24.0	20.0	22.0
13	16.0	8.0	7.0	9.0	7.0	9.0	13.0	17.0	21.0	23.0	23.0	23.0
14	15.0	8.0	7.0	9.0	7.0	9.0	15.0	14.0	20.0	23.0	22.0	22.0
15	14.0	12.0	8.0	8.0	7.0	9.0	15.0	15.0	20.0	25.0	23.0	22.0
16	13.0	13.0	9.0	6.0	9.0	9.0	14.0	13.0	20.0	25.0	24.0	20.0
17	13.0	12.0	8.0	9.0	8.0	9.0	14.0	22.0	19.0	24.0	23.0	20.0
18	17.0	9.0	9.0	9.0	8.0	9.0	13.0	22.0	19.0	24.0	24.0	19.0
19	15.0	10.0	9.0	9.0	9.0	9.0	13.0	22.0	20.0	24.0	23.0	19.0
20	15.0	10.0	9.0	9.0	7.0	9.0	13.0	21.0	21.0	24.0	23.0	20.0
21	17.0	10.0	9.0	10.0	7.0	9.0	14.0	15.0	21.0	24.0	22.0	22.0
22	14.0	10.0	9.0	11.0	9.0	9.0	14.0	15.0	21.0	23.0	23.0	19.0
23	13.0	10.0	9.0	10.0	9.0	9.0	15.0	15.0	23.0	22.0	24.0	17.0
24	14.0	11.0	9.0	10.0	7.0	9.0	14.0	20.0	22.0	23.0	24.0	15.0
25	15.0	13.0	9.0	9.0	9.0	9.0	13.0	20.0	21.0	21.0	24.0	15.0
26	15.0	13.0	9.0	9.0	9.0	7.0	14.0	14.0	20.0	23.0	24.0	15.0
27	15.0	13.0	9.0	11.0	9.0	9.0	17.0	15.0	20.0	23.0	25.0	17.0
28	14.0	15.0	9.0	12.0	9.0	10.0	15.0	17.0	19.0	24.0	25.0	17.0
29	14.0	13.0	9.0	11.0	---	9.0	15.0	17.0	19.0	24.0	25.0	18.0
30	14.0	13.0	9.0	10.0	---	9.0	15.0	15.0	19.0	24.0	25.0	16.0
31	13.0	---	9.0	9.0	---	9.0	---	20.0	---	24.0	24.0	---
MEAN	17.5	11.5	9.0	8.0	8.5	10.0	13.5	14.0	20.5	23.5	23.0	19.5
MAX	21.0	25.0	12.0	12.0	11.0	16.0						

02116500 YADKIN RIVER AT YADKIN COLLEGE--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			ECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2320	78	489	2030	27	148	2530	55	376
2	4250	200	2300	2120	22	126	2210	25	149
3	5750	495	7680	2050	20	111	2110	25	142
4	3780	349	3560	1970	19	101	2080	28	157
5	2970	122	978	2020	25	136	2220	30	180
6	2420	70	457	2000	21	113	7880	638	13600
7	2300	58	360	1980	20	107	5750	462	7170
8	2260	69	421	1930	21	109	4060	232	2540
9	2360	70	446	1920	23	119	6210	540	9050
10	2310	68	424	1940	16	84	7860	549	11700
11	2250	72	437	1900	29	149	4620	321	4000
12	2190	58	343	1900	20	103	3330	141	1270
13	2150	45	261	1940	15	79	3060	102	843
14	2100	38	215	1980	12	64	3320	102	914
15	2040	45	248	1940	15	79	3020	105	856
16	1990	65	349	1960	20	106	2980	105	845
17	1940	38	199	1940	20	105	3380	120	1100
18	1940	51	267	1900	15	77	3160	140	1190
19	1920	29	150	1890	12	61	2670	99	714
20	1900	27	139	1880	12	61	3560	90	865
21	1920	42	218	1900	20	103	17100	1360	62800
22	1930	115	599	2150	55	319	16100	845	36700
23	1900	28	144	2480	72	482	6340	425	7280
24	1890	22	112	2210	40	239	4520	218	2660
25	1900	19	97	2100	35	198	3610	218	2120
26	1890	21	107	2000	31	167	3460	160	1490
27	1880	31	157	2060	29	161	16700	1310	59100
28	1860	26	131	2340	50	316	13500	510	18600
29	2480	210	1410	3070	140	1160	8080	560	12200
30	2520	80	544	3160	130	1110	8600	445	10300
31	2160	46	268	--	--	--	5290	459	6560
TOTAL	73470	--	23510	62660	--	6293	179310	--	277471

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DA
1	10200	659	18100	3990	335	3610	3480	190	1790
2	8390	540	12200	3880	280	2930	3390	182	1670
3	7000	500	9450	3950	250	2670	3340	170	1530
4	5630	390	5930	4540	265	3290	3210	160	1390
5	5270	265	3770	4100	197	2180	3230	149	1300
6	4780	225	2900	3630	165	1620	3370	140	1270
7	4310	210	2440	4960	249	3330	3340	135	1220
8	3920	210	2220	5610	351	5320	3300	128	1140
9	4120	215	2390	6260	435	7350	3070	120	995
10	4900	230	3040	4710	380	4830	3000	113	915
11	4360	230	2710	4050	238	2600	2940	104	826
12	4130	235	2620	3780	162	1650	2940	125	992
13	3740	185	1870	3570	120	1160	3180	154	1320
14	3390	170	1550	3350	105	950	3450	160	1490
15	3240	170	1490	3480	120	1130	3310	115	1030
16	3290	120	1070	3690	159	1580	2970	122	978
17	3220	139	1210	4480	195	2360	3190	152	1310
18	3040	120	985	4150	153	1710	3020	95	775
19	2970	115	922	4050	130	1420	2920	105	828
20	2940	110	873	4190	105	1190	3060	105	868
21	12500	1070	36100	3840	105	1090	4560	225	2780
22	18500	760	38000	4210	232	2640	7750	780	16300
23	6870	490	9090	6860	455	8430	4840	485	6340
24	4830	410	5350	6220	545	9150	4050	373	4080
25	4590	420	5210	4760	375	4820	3570	302	2910
26	6160	590	9810	3910	255	2690	3350	254	2330
27	6900	455	8480	3650	211	2080	3240	225	1970
28	6210	410	6870	3570	200	1930	3230	200	1740
29	6600	500	8910	--	--	--	3870	300	3130
30	5350	395	5710	--	--	--	11400	770	23700
31	4270	375	4320	--	--	--	10600	685	19500
TOTAL	175620	--	215500	121440	--	85710	124190	--	108537

02116500 YADKIN RIVER AT YADKIN COLLEGE--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5360	480	6950	3260	105	924	4070	272	2990
2	4730	410	5240	3220	112	974	4490	425	5150
3	4170	385	4330	3380	139	1270	5630	525	7980
4	6130	555	9190	3470	140	1310	3890	362	3800
5	26900	1610	117000	3370	144	1310	3330	264	2370
6	32800	435	38500	3580	191	1900	3020	220	1790
7	13300	315	11300	3720	199	2000	3000	200	1620
8	10400	305	8550	3380	162	1480	4900	469	6200
9	10600	370	10600	4640	580	7270	4600	350	4350
10	6330	265	4530	6370	640	11000	3500	220	2080
11	4920	228	3030	4390	500	5930	3700	235	2350
12	4630	220	2750	4320	445	5190	3600	220	2140
13	4770	220	2830	6230	537	9030	3300	249	2220
14	5040	225	3060	5280	515	7340	3000	165	1340
15	4920	220	2920	4480	354	4280	3100	151	1260
16	4500	210	2550	3640	270	2650	3500	270	2550
17	4370	205	2420	3360	208	1690	3700	384	3890
18	5660	525	8020	3250	193	1690	3100	430	3600
19	4360	485	5710	3680	308	3060	2800	192	1450
20	3970	322	3450	4300	399	4630	2660	165	1190
21	3790	241	2470	4000	500	5400	3710	239	2390
22	3720	200	2010	3450	330	3070	3610	331	3230
23	3980	239	2570	3700	420	4200	3270	329	2900
24	4290	340	3940	4620	370	4620	3000	288	2330
25	3940	271	2880	3750	248	2510	2700	161	1170
26	3460	257	2400	3310	205	1830	2650	114	816
27	3450	229	2130	3900	315	3320	2700	105	765
28	3570	168	1620	3910	260	2740	2700	118	860
29	3380	112	1020	3380	209	1910	3500	147	1390
30	3360	105	953	3140	164	1390	4500	594	7220
31	--	--	--	3020	129	1040	--	--	--
TOTAL	204800	--	274933	121600	--	107158	105230	--	83391

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3500	230	2170	1990	94	505	2320	108	677
2	2700	145	1060	1910	93	480	2360	171	1090
3	2580	115	801	1920	79	410	2360	192	1220
4	2590	155	1080	4000	760	8210	3520	295	2810
5	2470	137	914	14700	1300	51600	3740	360	3640
6	3130	212	1790	6930	600	11200	5090	470	6460
7	5190	430	6030	5590	915	13800	17700	1260	60200
8	4390	460	5430	4420	439	5240	9950	710	19100
9	3620	375	3670	4870	335	4400	5570	419	6300
10	3050	178	1470	4520	341	4160	3620	242	2370
11	2790	178	1340	4060	265	2900	3120	155	1310
12	2760	180	1340	3240	220	1920	3740	230	2320
13	2710	170	1240	3030	145	1190	3180	200	1720
14	2460	140	930	3010	145	1180	2850	165	1270
15	2340	103	651	2770	150	1120	2640	160	1140
16	2290	100	618	2550	80	551	2580	128	892
17	2250	93	565	2480	78	522	2450	99	655
18	2270	83	509	2460	79	525	2540	91	624
19	2180	98	577	2390	84	542	2590	102	713
20	2150	98	569	2610	107	754	2290	78	482
21	2200	98	582	2830	115	879	2230	70	421
22	2340	117	739	2340	95	600	2330	58	365
23	2150	75	435	2190	73	432	2180	51	300
24	2040	98	540	2190	70	414	2090	51	288
25	2610	122	860	2140	60	347	2060	51	284
26	2270	158	968	2170	68	398	2080	52	292
27	2340	159	1000	2120	65	372	2060	65	362
28	2930	270	2140	2010	65	353	2320	85	532
29	2530	205	1400	2010	60	326	2850	188	1450
30	2500	170	1150	2110	67	382	2730	128	943
31	2140	140	809	2170	83	486	--	--	--
TOTAL	83470	--	43397	103730	--	116198	107140	--	120230

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1462660
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1462428

02116500 YADKIN RIVER AT YADKIN COLLEGE--Continued

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
SEP.										
05...	**1040**	**2350**	**17**	**6.1**	**25.0**	**7.1**	**<25**	**--**	**1.4**	**3000**
11...	**1710**	**2770**	**11**	**6.2**	**28.0**	**8.0**	**<25**	**--**	**1.9**	**240**
17...	**1205**	**2550**	**12**	**6.3**	**21.0**	**8.0**	**<25**	**--**	**1.6**	**500**
26...	**1530**	**2140**	**14**	**6.5**	**23.0**	**7.7**	**<25**	**--**	**1.0**	**70**
OCT.										
04...	1540	3460	15	6.2	23.0	6.9	38	--	2.6	25000
09...	1645	2470	15	7.2	20.0	9.0	<25	--	1.0	570
15...	1020	2060	17	6.6	19.0	8.5	--	--	--	--
23...	1240	1880	17	7.5	16.0	9.7	<25	--	.8	20
31...	1120	2130	18	7.2	13.0	9.8	<25	--	1.5	850
NOV.										
08...	1105	1900	24	7.1	11.0	10.6	--	--	--	100
13...	1410	1990	21	7.0	9.0	11.4	<25	--	1.4	260
19...	1150	1890	--	--	--	--	<25	--	1.3	70
28...	1125	2280	--	--	--	--	<25	--	2.5	500
DEC.										
06...	1340	9800	--	--	--	--	<25	--	3.8	6400
10...	1510	7260	--	--	--	--	<25	--	3.1	5600
JAN.										
07...	1310	4300	13	6.8	11.0	10.9	<25	--	1.5	310
17...	1320	3260	19	6.9	10.0	12.7	<25	--	1.6	360
24...	1135	4920	14	6.5	13.0	10.3	--	--	--	380
31...	1310	4250	18	6.7	12.0	11.4	--	--	--	470
FEB.										
05...	1320	4030	20	6.6	8.0	9.8	--	<25	.9	180
14...	1240	3360	19	6.6	9.0	12.1	--	<25	1.6	130
18...	1105	4150	15	6.3	7.0	11.4	--	--	--	30
26...	1340	3880	18	6.8	6.0	11.4	--	<25	1.8	70
MAR.										
06...	1040	3430	18	6.7	14.0	9.2	--	<25	2.4	440
12...	1230	2970	17	6.3	11.0	9.4	--	<25	2.5	90
20...	1040	3080	18	6.5	10.0	9.0	--	<25	2.0	6400
28...	1305	3250	18	6.6	15.0	10.4	--	<25	1.7	120
APR.										
02...	1230	4820	12	6.6	17.0	9.0	--	<25	2.6	430
11...	1005	5020	25	7.4	12.0	9.8	--	<25	1.4	700
18...	1000	6620	16	7.3	13.0	9.2	--	27	3.0	3200
25...	1105	3980	--	7.2	14.0	9.2	--	<25	1.7	500
MAY										
01...	1220	3160	19	6.9	19.0	8.1	--	--	--	150
02...	1225	3160	19	6.8	19.0	7.9	--	<25	2.3	190
06...	1040	3600	20	7.4	15.0	9.5	--	<25	2.2	540
14...	1015	5060	--	--	20.0	9.0	--	34	--	5100
22...	1150	3400	14	6.7	23.0	8.0	--	<25	2.4	2200
29...	0945	3470	15	7.1	19.0	7.4	--	<25	2.1	1000

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
JUNE										
04...	1005	3780	--	--	--	21.0	7.7	50	2.9	4900
10...	0940	3440	15	40	7.0	23.0	7.6	<25	2.0	720
19...	1015	2840	--	44	--	21.0	8.0	<25	1.0	1800
25...	0915	2640	--	48	--	22.0	7.4	31	2.4	5000
JULY										
08...	1435	3760	--	43	--	25.0	6.9	--	2.1	6000
15...	0850	2400	--	90	--	24.0	7.1	--	2.0	310
22...	1020	2420	--	61	--	23.0	7.1	--	2.2	700
29...	1125	2530	15	--	6.5	25.0	6.8	--	1.5	1000
AUG.										
05...	1100	17400	--	--	--	22.0	7.0	--	--	26000
19...	1310	2400	--	45	--	25.0	7.2	--	2.4	--
26...	0935	2280	--	70	--	25.0	6.7	--	3.5	240
SEP.										
03...	1335	2620	--	55	--	25.0	6.8	--	--	3400
10...	0910	3640	--	50	--	21.0	7.8	--	--	2100
16...	1430	2580	15	40	6.7	23.0	7.4	--	2.6	--
23...	1330	2140	19	40	6.6	17.0	8.2	--	--	1050
30...	1425	2620	--	50	--	20.0	8.0	--	--	1400

02117030 HUMPY CREEK NEAR FORK, N. C.

LOCATION.--Lat 35°51'17", long 80°26'24", Davie County, at gaging station on left bank 9 ft (2.7 m) upstream from culvert on Secondary Road 1813, 1.9 mi (3.1 km) south of Fork, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--1.05 mi^2 (2.72 km^2).

PERIOD OF RECORD.--Chemical analyses: July 1973 to June 1974 (discontinued).
Water temperatures: July 1973 to June 1974 (discontinued).

EXTREMES.--July 1973 to June 1974:
Specific conductance: Maximum, 176 micromhos June 30, 1974; minimum, 32 micromhos March 30, 1974.
Water temperatures: Maximum, 27.0°C May 21, 1974; minimum, 4.0°C Dec. 20, 1973.

REMARKS.--Station was established as natural water-quality site but was discontinued in June 1974 because of quality changes in upstream basin. Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
OCT.											
24...	1500	.42	28	830	230	--	10	0	10	--	4.7
JAN.											
16...	1230	.88	22	1100	250	--	50	7	43	--	4.5
APR.											
04...	1300	1.2	20	1500	140	18000	50	17	33	35	3.0

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.											
24...	1.4	6.2	1.5	30	0	25	2.7	4.7	.2	.21	.16
JAN.											
16...	1.2	4.4	1.4	27	0	22	3.0	3.1	.1	.44	.25
APR.											
04...	1.2	3.7	1.2	18	0	15	4.0	2.3	.3	.20	.20

DATE	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	SUSPENDED KJEL. NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM DEP. (MG/KG)	TOTAL NITROGEN (N) (MG/L)
OCT.											
24...	--	--	--	--	--	--	.29	--	.19	--	.50
JAN.											
16...	--	.09	.06	.08	.20	.25	.29	.00	.31	--	.73
APR.											
04...	.0	.07	.05	.06	.09	.12	.16	.00	.17	900	.36

DATE	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO PHOSPHATE (PO4) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM DEPOSITS (MG/KG)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
OCT.											
24...	2.2	.10	--	.05	--	--	--	59	64	.08	.07
JAN.											
16...	3.2	.05	.00	.02	.04	.00	--	61	55	.08	.14
APR.											
04...	1.6	.03	.06	.03	.05	.02	86	52	46	.07	.17

02117030 HUMPY CREEK NEAR FORK, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT. 24...	18	0	41	.6	56	6.5	16.0	--	9	9.3	15
JAN. 16...	16	0	35	.5	52	6.8	9.5	20	--	10.2	6.8
APR. 04...	12	0	37	.5	45	6.8	16.0	40	--	9.4	4.6

DATE	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MATERIAL (C) (G/KG)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DEPOSITS (UG/G)	TOTAL CADMIUM (CD) (UG/L)
OCT. 24...	--	--	--	3.5	5.0	--	--	4	2	2	--	<10
JAN. 16...	--	--	--	3.4	.6	--	.4	12	12	0	--	0
APR. 04...	150	.00	.00	6.2	--	.0	.0	8	3	5	1	1

DATE	SUSPENDED CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DEPOSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
OCT. 24...	10	0	--	10	10	0	--	<25	25	0	--	<10
JAN. 16...	0	1	--	0	0	0	--	1	0	4	--	5
APR. 04...	0	1	0	0	0	0	1	5	4	1	<5	4

DATE	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DEPOSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DEPOSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)
OCT. 24...	9	1	--	<100	100	0	--	.0	.0	.0
JAN. 16...	0	7	--	5	1	4	--	.0	.0	.0
APR. 04...	3	1	1	11	7	4	10	.0	.0	.1

DATE	TOTAL MERCURY IN BOTTOM DEPOSITS (UG/G)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL SELENIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DEPOSITS (UG/G)
OCT. 24...	--	5	1	4	--	10	0	10	--
JAN. 16...	--	4	0	4	--	20	0	20	--
APR. 04...	.0	12	10	2	0	40	40	0	5

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 24...	1500	.42	13	.01
JAN. 16...	1230	.88	12	.03
APR. 04...	1300	1.2	24	.08

02117030 HUMPY CREEK NEAR FORK, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	48	63
2	---	---	---	---	---	---	---	---	---	---	53	62
3	---	---	---	---	---	---	---	---	---	---	43	63
4	---	---	---	---	---	---	---	---	---	---	46	60
5	---	---	---	---	---	---	---	---	---	---	50	68
6	---	---	---	---	---	---	---	---	---	---	51	70
7	---	---	---	---	---	---	---	---	---	---	48	65
8	---	---	---	---	---	---	---	---	---	---	54	56
9	---	---	---	---	---	---	---	---	---	---	54	58
10	---	---	---	---	---	---	---	---	---	---	54	63
11	---	---	---	---	---	---	---	---	---	---	60	57
12	---	---	---	---	---	---	---	---	---	---	54	61
13	---	---	---	---	---	---	---	---	---	---	54	60
14	---	---	---	---	---	---	---	---	---	---	59	57
15	---	---	---	---	---	---	---	---	---	---	54	59
16	---	---	---	---	---	---	---	---	---	---	50	59
17	---	---	---	---	---	---	---	---	---	---	55	57
18	---	---	---	---	---	---	---	---	---	---	55	59
19	---	---	---	---	---	---	---	---	---	54	57	58
20	---	---	---	---	---	---	---	---	---	55	58	57
21	---	---	---	---	---	---	---	---	---	54	52	57
22	---	---	---	---	---	---	---	---	---	54	68	59
23	---	---	---	---	---	---	---	---	---	43	56	59
24	---	---	---	---	---	---	---	---	---	48	56	59
25	---	---	---	---	---	---	---	---	---	54	52	57
26	---	---	---	---	---	---	---	---	---	52	61	57
27	---	---	---	---	---	---	---	---	---	49	61	60
28	---	---	---	---	---	---	---	---	---	54	64	64
29	---	---	---	---	---	---	---	---	---	54	62	58
30	---	---	---	---	---	---	---	---	---	55	64	58
31	---	---	---	---	---	---	---	---	---	54	72	---
MONTH	---	---	---	---	---	---	---	---	---	---	56	60

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), OCTOBER 1973 TO JUNE 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	63	53	37	47	50	54	51	50	---	---	---
2	52	58	54	40	46	55	42	52	54	---	---	---
3	54	63	52	37	45	51	44	52	96	---	---	---
4	56	69	51	54	45	53	42	54	104	---	---	---
5	56	63	54	57	45	57	39	47	56	---	---	---
6	57	58	52	46	42	54	42	50	62	---	---	---
7	64	65	61	38	50	59	43	59	64	---	---	---
8	57	58	52	39	49	51	57	49	49	---	---	---
9	59	58	46	40	48	50	50	40	140	---	---	---
10	57	55	48	38	64	56	41	46	62	---	---	---
11	59	56	59	47	46	55	53	42	71	---	---	---
12	57	58	48	49	47	51	50	41	50	---	---	---
13	57	67	46	51	55	51	50	116	60	---	---	---
14	57	76	53	40	45	59	46	49	52	---	---	---
15	60	69	57	40	47	55	45	44	59	---	---	---
16	57	66	55	51	47	50	48	69	53	---	---	---
17	61	63	54	41	45	49	44	53	52	---	---	---
18	64	58	59	44	48	51	43	52	64	---	---	---
19	95	71	55	47	43	50	47	92	58	---	---	---
20	57	59	37	45	45	49	51	53	46	---	---	---
21	67	59	37	40	53	49	47	78	60	---	---	---
22	56	65	41	39	41	51	140	52	47	---	---	---
23	58	60	45	45	47	42	51	63	52	---	---	---
24	58	63	60	40	45	42	48	55	55	---	---	---
25	57	57	57	39	53	45	46	45	154	---	---	---
26	64	54	41	40	47	42	65	44	150	---	---	---
27	60	53	48	45	52	48	132	67	176	---	---	---
28	60	53	43	39	45	54	144	44	90	---	---	---
29	63	68	46	40	---	42	48	47	52	---	---	---
30	59	65	53	60	---	32	48	60	176	---	---	---
31	64	---	44	54	---	50	---	49	---	---	---	---
MONTH	60	62	50	44	48	50	57	55	77	---	---	---

02117030 HUMPY CREEK NEAR FORK, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	22.0	22.0
2	---	---	---	---	---	---	---	---	---	---	22.0	24.0
3	---	---	---	---	---	---	---	---	---	---	22.0	22.0
4	---	---	---	---	---	---	---	---	---	---	22.0	22.5
5	---	---	---	---	---	---	---	---	---	---	22.0	22.5
6	---	---	---	---	---	---	---	---	---	---	22.0	23.0
7	---	---	---	---	---	---	---	---	---	---	22.0	22.0
8	---	---	---	---	---	---	---	---	---	---	23.5	21.0
9	---	---	---	---	---	---	---	---	---	---	22.5	21.0
10	---	---	---	---	---	---	---	---	---	---	22.0	21.0
11	---	---	---	---	---	---	---	---	---	---	23.0	21.0
12	---	---	---	---	---	---	---	---	---	---	23.5	20.0
13	---	---	---	---	---	---	---	---	---	---	21.5	21.5
14	---	---	---	---	---	---	---	---	---	---	23.0	23.0
15	---	---	---	---	---	---	---	---	---	---	22.0	21.0
16	---	---	---	---	---	---	---	---	---	---	22.0	21.5
17	---	---	---	---	---	---	---	---	---	---	20.5	23.0
18	---	---	---	---	---	---	---	---	---	---	23.5	21.0
19	---	---	---	---	---	---	---	---	---	21.0	22.0	20.5
20	---	---	---	---	---	---	---	---	---	22.0	21.0	24.0
21	---	---	---	---	---	---	---	---	---	22.0	20.0	20.5
22	---	---	---	---	---	---	---	---	---	24.0	20.5	21.0
23	---	---	---	---	---	---	---	---	---	21.0	20.5	22.0
24	---	---	---	---	---	---	---	---	---	21.0	21.0	21.0
25	---	---	---	---	---	---	---	---	---	21.0	19.5	22.0
26	---	---	---	---	---	---	---	---	---	21.0	22.0	21.5
27	---	---	---	---	---	---	---	---	---	21.0	22.0	21.0
28	---	---	---	---	---	---	---	---	---	21.0	24.0	20.0
29	---	---	---	---	---	---	---	---	---	22.0	23.5	21.0
30	---	---	---	---	---	---	---	---	---	22.0	23.5	19.5
31	---	---	---	---	---	---	---	---	---	20.0	23.5	---
MONTH	---	---	---	---	---	---	---	---	---	---	22.0	21.5

TEMPERATURE (DEG. C) OF WATER, OCTOBER 1973 TO JUNE 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	13.0	17.0	11.0	12.0	12.5	14.0	19.0	20.0	---	---	---
2	22.0	15.0	16.0	7.0	14.0	18.0	21.0	19.0	20.0	---	---	---
3	20.0	18.0	15.0	9.0	16.0	19.0	18.0	18.0	20.0	---	---	---
4	20.0	13.0	18.0	12.0	11.0	16.0	14.0	17.0	24.0	---	---	---
5	21.0	17.0	19.0	11.0	8.0	16.0	10.0	15.0	22.0	---	---	---
6	21.0	14.0	11.0	10.0	7.0	17.0	18.0	19.0	22.0	---	---	---
7	21.0	13.0	10.0	11.5	10.0	16.0	12.0	23.0	21.0	---	---	---
8	20.0	15.0	9.0	9.0	7.0	22.0	14.0	15.0	23.0	---	---	---
9	22.0	11.0	9.0	9.5	11.0	22.0	10.0	17.0	24.0	---	---	---
10	23.0	10.0	15.0	14.0	10.0	19.0	18.0	17.0	22.0	---	---	---
11	20.5	11.0	14.0	11.0	8.0	14.0	16.0	18.0	22.0	---	---	---
12	20.0	11.0	13.0	15.0	9.0	12.0	25.0	17.5	22.0	---	---	---
13	21.0	10.5	14.0	9.0	12.0	12.0	22.0	18.0	21.0	---	---	---
14	21.0	16.0	14.0	7.0	10.0	12.0	25.0	21.0	25.0	---	---	---
15	18.0	17.0	15.0	8.0	9.0	11.0	26.0	19.5	24.0	---	---	---
16	21.0	15.0	13.0	15.0	6.0	10.0	24.0	26.0	20.0	---	---	---
17	14.5	14.0	15.0	14.0	8.0	9.0	14.0	22.0	24.0	---	---	---
18	14.0	16.0	5.0	19.0	9.0	12.0	17.0	22.0	26.0	---	---	---
19	17.0	17.0	7.0	14.0	10.0	16.0	26.0	23.0	19.0	---	---	---
20	21.0	16.0	4.0	17.0	11.0	12.0	24.0	22.0	26.0	---	---	---
21	20.5	16.5	6.0	14.0	12.0	8.0	26.0	27.0	21.0	---	---	---
22	21.0	15.0	8.0	13.0	12.0	14.0	26.0	20.0	21.0	---	---	---
23	15.5	17.0	10.0	15.0	12.0	14.0	26.0	22.0	24.0	---	---	---
24	17.0	19.0	11.0	12.0	14.0	23.0	15.0	22.0	20.0	---	---	---
25	15.0	19.0	11.0	10.5	8.0	6.0	22.0	24.0	25.0	---	---	---
26	17.0	18.0	17.0	14.0	10.0	8.0	20.0	17.0	25.0	---	---	---
27	17.0	19.0	11.0	16.0	11.0	12.0	26.0	22.0	20.0	---	---	---
28	15.0	19.5	14.0	13.0	9.0	14.0	26.0	17.0	20.0	---	---	---
29	14.0	17.0	15.0	13.0	---	10.0	22.0	19.0	20.0	---	---	---
30	14.0	15.0	14.0	15.0	---	17.0	20.0	20.0	20.0	---	---	---
31	14.0	---	11.0	12.5	---	10.0	---	24.0	---	---	---	---
MONTH	18.5	15.5	12.5	12.5	10.0	14.0	20.0	20.0	22.0	---	---	---

02117030 HUMPY CREEK NEAR FORK, N. C.--Continued

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
SEP.											
05...	1200	.49	26	--	7.4	23.0	8.1	<25	--	1.0	120
11...	1800	.36	22	--	6.8	22.0	8.0	<25	--	.3	200
17...	1250	.46	17	--	6.8	21.0	8.1	<25	--	.9	500
26...	1615	.30	15	--	6.7	21.0	7.9	<25	--	.4	1000
OCT.											
04...	1730	.46	19	--	6.7	23.0	8.7	<25	--	.8	1000
09...	1545	.44	23	--	7.6	20.0	8.8	<25	--	1.0	480
15...	1100	.40	19	--	6.4	15.0	9.8	<25	--	.1	340
23...	1145	.40	23	--	7.7	14.0	9.6	<25	--	.7	320
31...	1230	.54	23	--	6.8	13.0	9.0	<25	--	.8	240
NOV.											
08...	0945	.42	25	--	6.7	9.0	10.0	<25	--	.5	840
13...	1500	.42	22	--	6.9	11.0	9.1	<25	--	1.0	260
19...	1045	.42	--	--	--	--	--	<25	--	1.4	270
28...	1045	.45	--	--	--	--	--	<25	--	1.1	60
DEC.											
06...	1615	.44	--	--	--	--	--	<25	--	.5	870
10...	1550	.70	--	--	--	--	--	<25	--	1.6	110
JAN.											
07...	1215	1.2	15	--	6.6	13.0	10.6	<25	--	.8	240
17...	1400	.84	24	--	6.8	14.0	11.5	<25	--	.6	150
24...	1015	1.3	19	--	6.5	11.0	10.0	<25	--	.7	240
FEB.											
05...	1345	1.2	14	--	6.4	9.0	11.5	--	<25	1.8	180
14...	1005	.99	14	--	6.5	9.0	10.6	--	<25	.8	460
18...	0945	1.3	15	--	6.7	7.0	11.9	--	<25	.4	190
26...	1015	.99	25	--	6.5	5.0	12.0	--	<25	.1	30
MAR.											
06...	0945	.88	22	--	6.9	12.0	9.7	--	<25	1.4	310
12...	1030	.74	20	--	6.3	--	10.0	--	<25	.8	100
20...	0945	1.3	24	--	6.3	12.0	9.6	--	<25	.8	780
25...	1515	1.4	17	--	6.4	8.0	12.4	--	<25	1.5	610
APR.											
02...	1100	1.6	13	--	6.9	--	9.1	--	<25	1.1	420
11...	1130	1.1	8	--	6.4	13.0	10.1	--	<25	.8	150
18...	1040	1.0	18	--	7.1	12.0	9.8	--	<25	.9	210
25...	1145	.88	--	--	7.1	13.0	10.2	--	<25	.5	630
MAY											
02...	1305	.84	17	--	7.1	15.0	9.5	--	<25	1.3	780
07...	1115	1.0	16	--	6.8	14.0	10.4	--	<25	.9	680
14...	0935	1.3	--	--	--	16.0	9.2	--	<25	1.3	200
22...	1025	.80	18	--	6.9	18.0	8.6	--	<25	.5	250
29...	0910	1.1	18	--	6.7	18.0	--	--	<25	1.3	1300
JUNE											
04...	1040	.91	--	30	--	18.0	10.7	--	<25	<.1	620
10...	0905	.74	55	40	7.3	19.0	9.2	--	< 25	1.0	650
19...	0850	.68	--	37	--	18.0	9.8	--	27	.5	680
25...	0940	.66	--	40	--	18.0	9.4	--	< 25	.8	230
JULY											
08...	1250	.63	--	45	--	22.0	9.2	--	--	1.0	1300
15...	0815	.57	--	45	--	18.0	8.8	--	--	1.0	850
22...	1100	.52	--	48	--	18.0	9.6	--	--	1.1	400
29...	1150	.52	22	--	6.5	22.0	8.0	--	--	.4	30
AUG.											
19...	1350	.52	--	50	--	22.0	7.7	--	--	.8	10
26...	1010	.52	--	50	--	21.0	7.5	--	--	1.2	370
SEP.											
03...	1245	.74	--	50	--	24.0	7.9	--	--	2.4	7
16...	1430	.54	21	35	6.4	20.0	7.5	--	--	2.0	--
23...	1420	.57	18	25	6.6	16.0	8.6	--	--	.3	370
30...	1400	.52	--	45	--	18.0	8.4	--	< 25	.6	430

02129000 PEE DEE RIVER NEAR ROCKINGHAM, N. C.

LOCATION.--Lat 34°56'46", long 79°52'11", Richmond County, at gaging station on left bank at bridge on U. S. Highway 74, 2.5 mi (4.0 km) upstream from Falling Creek, 3.3 mi (5.3 km) downstream from Blewett Falls hydroelectric plant, 6 mi (9.7 km) west of Rockingham, and 192 mi (309 km) upstream from mouth in Winyah Bay.

DRAINAGE AREA.--6,870 mi^2 (17,790 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1946 to September 1948, October 1957 to September 1967, water years 1968-69, 1973 (partial-record station), October 1969 to September 1972, July to September 1973, March to September 1974.
Water temperatures.--October 1946 to September 1948, October 1957 to September 1967, July to September 1973, March to September 1974.

EXTREMES.--July to September 1973, March to September 1974.
Specific conductance: Maximum, 95 micromhos Sept. 4, 1974; minimum, 58 micromhos Apr. 12, May 14, 1974.
Water temperatures: Maximum, 30.0°C on several days during July, August, and September 1973; minimum, 12.0°C Mar. 17, 25, 29, 1974.

Period of record:
Dissolved solids (1946-48, 1957-67): Maximum, 84 mg/l Jan. 1-31, 1966; minimum, 38 mg/l Mar. 1-10, 1948.
Hardness (1946-48, 1957-67): Maximum, 27 mg/l Mar. 1-14, 1963; minimum, 11 mg/l Feb. 1-10, 1958.
Specific conductance (1957-67, 1973-74): Maximum daily, 152 micromhos Nov. 17, 1959; minimum daily, 41 micromhos Mar. 17, 1964.
Water temperatures: Maximum, 29.5°C Sept. 1, 2, 1962; minimum, freezing point on many days in 1961-62.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1955-56. Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
APR. 17...	1100	11900	11	2400	190	4500	67	42	25	190	4.4
JUNE 17...	1100	1030	9.9	650	50	2400	140	120	17	120	5.3
AUG. 29...	1200	7940	11	1300	70	6500	190	130	63	380	4.7

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
APR. 17...	1.8	6.0	1.4	17	0	14	6.8	4.8	.1	.50	.49
JUNE 17...	1.5	6.2	2.0	26	--	21	5.9	5.0	.2	.38	.38
AUG. 29...	1.9	7.2	2.3	24	--	20	6.2	5.6	.5	.36	.37

DATE	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	SUSPENDED KJEL. NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM DEP. (MG/KG)	TOTAL NITROGEN (N) (MG/L)
APR. 17...	.5	.09	.02	.03	.18	.22	.27	.03	.24	280	.77
JUNE 17...	10	.05	.10	.13	.30	.23	.35	.02	.33	140	.73
AUG. 29...	.0	.07	.07	.09	.54	.25	.61	.29	.32	560	.97

02129000 PEE DEE RIVER NEAR ROCKINGHAM, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
APR. 17...	3.4	.09	.03	.02	.08	.01	120	68	47	.09	2020
JUNE 17...	3.2	.04	.03	.03	.03	.01	62	42	49	.06	77.1
AUG. 29...	4.3	.09	.06	.04	.03	.02	250	66	51	.09	1400

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
APR. 17...	18	4	39	.6	80	6.8	16.0	100	9.4	4.3
JUNE 17...	19	0	38	.6	70	6.7	23.0	7	6.2	8.3
AUG. 29...	20	0	41	.7	75	6.0	27.0	20	4.9	38

DATE	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CAD-MIUM (CD) (UG/L)
APR. 17...	1100	6.9	9.2	5.4	4.1	4.4	.0	10	10	0	14	0
JUNE 17...	1000	3.1	33	7.7	3.0	.2	.0	0	0	0	2	1
AUG. 29...	--	--	--	8.5	5.8	6.1	3.4	2	1	1	3	4

DATE	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
APR. 17...	0	0	20	0	0	0	8	0	0	0	0	6
JUNE 17...	1	0	<10	0	0	1	<10	3	3	0	<50	7
AUG. 29...	3	1	<10	10	9	1	10	11	11	0	<10	6

DATE	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
APR. 17...	3	3	3	21	21	0	0	.0	.0	.0
JUNE 17...	5	2	<10	3	2	1	<100	.1	.0	.2
AUG. 29...	6	0	<10	15	15	0	<10	.0	.0	.0

DATE	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
APR. 17...	.1	5	1	4	18	20	20	0	28
JUNE 17...	.0	0	0	0	0	7	0	7	60
AUG. 29...	.0	0	0	0	0	0	0	6	120

02129000 PEE DEE RIVER NEAR ROCKINGHAM, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	85	68
2	---	---	---	---	---	---	---	---	---	---	81	71
3	---	---	---	---	---	---	---	---	---	---	69	72
4	---	---	---	---	---	---	---	---	---	---	70	72
5	---	---	---	---	---	---	---	---	---	---	71	75
6	---	---	---	---	---	---	---	---	---	---	66	82
7	---	---	---	---	---	---	---	---	---	---	72	78
8	---	---	---	---	---	---	---	---	---	---	70	76
9	---	---	---	---	---	---	---	---	---	---	74	73
10	---	---	---	---	---	---	---	---	---	---	61	75
11	---	---	---	---	---	---	---	---	---	---	66	78
12	---	---	---	---	---	---	---	---	---	---	68	87
13	---	---	---	---	---	---	---	---	---	---	62	84
14	---	---	---	---	---	---	---	---	---	---	67	76
15	---	---	---	---	---	---	---	---	---	---	70	76
16	---	---	---	---	---	---	---	---	---	---	69	75
17	---	---	---	---	---	---	---	---	---	---	68	74
18	---	---	---	---	---	---	---	---	---	82	74	63
19	---	---	---	---	---	---	---	---	---	80	72	75
20	---	---	---	---	---	---	---	---	---	71	71	78
21	---	---	---	---	---	---	---	---	---	68	84	82
22	---	---	---	---	---	---	---	---	---	66	89	85
23	---	---	---	---	---	---	---	---	---	70	76	80
24	---	---	---	---	---	---	---	---	---	62	70	---
25	---	---	---	---	---	---	---	---	---	70	72	---
26	---	---	---	---	---	---	---	---	---	68	69	---
27	---	---	---	---	---	---	---	---	---	69	66	---
28	---	---	---	---	---	---	---	---	---	68	67	---
29	---	---	---	---	---	---	---	---	---	69	74	---
30	---	---	---	---	---	---	---	---	---	68	71	---
31	---	---	---	---	---	---	---	---	---	72	70	---
MONTH	---	---	---	---	---	---	---	---	---	---	71	---

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), MARCH TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	67	75	68	68	74	71
2	---	---	---	---	---	---	71	65	68	68	89	72
3	---	---	---	---	---	---	67	69	66	65	79	73
4	---	---	---	---	---	---	64	63	75	79	83	95
5	---	---	---	---	---	---	74	63	76	79	85	84
6	---	---	---	---	---	---	65	62	70	74	71	73
7	---	---	---	---	---	76	64	67	68	72	63	65
8	---	---	---	---	---	69	62	66	72	70	62	70
9	---	---	---	---	---	68	61	67	66	74	72	66
10	---	---	---	---	---	70	64	65	73	70	71	66
11	---	---	---	---	---	74	66	64	70	74	76	68
12	---	---	---	---	---	74	58	65	72	67	73	64
13	---	---	---	---	---	74	63	66	70	69	69	67
14	---	---	---	---	---	75	65	58	75	66	67	66
15	---	---	---	---	---	74	65	67	74	65	63	64
16	---	---	---	---	---	76	67	60	73	65	67	64
17	---	---	---	---	---	74	64	59	74	66	67	65
18	---	---	---	---	---	74	61	59	80	70	69	74
19	---	---	---	---	---	78	63	61	80	65	71	70
20	---	---	---	---	---	92	67	77	78	68	62	71
21	---	---	---	---	---	84	63	66	78	68	81	78
22	---	---	---	---	---	76	60	66	70	66	77	73
23	---	---	---	---	---	73	63	65	80	68	69	72
24	---	---	---	---	---	75	61	65	80	85	69	68
25	---	---	---	---	---	77	63	79	78	72	67	74
26	---	---	---	---	---	82	61	69	82	76	67	70
27	---	---	---	---	---	76	63	69	76	75	67	78
28	---	---	---	---	---	69	64	61	74	74	69	70
29	---	---	---	---	---	70	65	65	71	74	70	70
30	---	---	---	---	---	67	66	67	72	72	72	67
31	---	---	---	---	---	67	---	68	---	70	71	---
MONTH	---	---	---	---	---	75	64	66	74	71	71	71

02129000 PEE DEE RIVER NEAR ROCKINGHAM, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	28.5	30.0
2	---	---	---	---	---	---	---	---	---	---	27.0	30.0
3	---	---	---	---	---	---	---	---	---	---	27.0	30.0
4	---	---	---	---	---	---	---	---	---	---	26.5	30.0
5	---	---	---	---	---	---	---	---	---	---	27.0	29.0
6	---	---	---	---	---	---	---	---	---	---	26.5	29.5
7	---	---	---	---	---	---	---	---	---	---	28.0	29.0
8	---	---	---	---	---	---	---	---	---	---	27.5	30.0
9	---	---	---	---	---	---	---	---	---	---	29.0	30.0
10	---	---	---	---	---	---	---	---	---	---	29.0	29.0
11	---	---	---	---	---	---	---	---	---	---	28.5	28.5
12	---	---	---	---	---	---	---	---	---	---	28.0	28.5
13	---	---	---	---	---	---	---	---	---	---	30.0	28.0
14	---	---	---	---	---	---	---	---	---	---	30.0	27.0
15	---	---	---	---	---	---	---	---	---	---	30.0	27.0
16	---	---	---	---	---	---	---	---	---	---	30.0	26.0
17	---	---	---	---	---	---	---	---	---	---	29.5	26.0
18	---	---	---	---	---	---	---	---	---	27.5	28.5	26.5
19	---	---	---	---	---	---	---	---	---	25.5	28.5	27.0
20	---	---	---	---	---	---	---	---	---	25.0	28.5	27.0
21	---	---	---	---	---	---	---	---	---	26.0	28.0	27.0
22	---	---	---	---	---	---	---	---	---	30.0	27.0	27.0
23	---	---	---	---	---	---	---	---	---	27.5	27.0	27.0
24	---	---	---	---	---	---	---	---	---	26.5	27.5	---
25	---	---	---	---	---	---	---	---	---	26.5	27.0	---
26	---	---	---	---	---	---	---	---	---	26.5	28.0	---
27	---	---	---	---	---	---	---	---	---	27.5	26.5	---
28	---	---	---	---	---	---	---	---	---	27.5	29.0	---
29	---	---	---	---	---	---	---	---	---	27.5	28.5	---
30	---	---	---	---	---	---	---	---	---	28.5	27.0	---
31	---	---	---	---	---	---	---	---	---	27.0	29.5	---
MONTH	---	---	---	---	---	---	---	---	---	---	28.0	---

TEMPERATURE (DEG. C) OF WATER, MARCH TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	16.0	22.0	25.0	27.0	27.0	26.0
2	---	---	---	---	---	---	16.0	21.0	22.0	26.0	27.0	28.0
3	---	---	---	---	---	---	17.0	21.0	24.0	26.0	27.0	28.0
4	---	---	---	---	---	---	16.0	20.0	25.0	26.0	26.0	26.0
5	---	---	---	---	---	---	16.0	20.0	23.0	26.0	26.0	25.0
6	---	---	---	---	---	---	14.0	19.0	24.0	26.0	25.0	25.0
7	---	---	---	---	---	14.0	14.0	19.0	25.0	26.0	26.0	24.0
8	---	---	---	---	---	14.0	14.0	19.0	24.0	27.0	26.0	24.0
9	---	---	---	---	---	15.0	13.0	19.0	26.0	27.0	26.0	26.0
10	---	---	---	---	---	13.0	14.0	19.0	25.0	27.0	25.0	26.0
11	---	---	---	---	---	13.0	15.0	21.0	25.0	27.0	26.0	26.0
12	---	---	---	---	---	13.0	15.0	21.0	24.0	25.0	25.0	26.0
13	---	---	---	---	---	13.0	16.0	21.0	25.0	26.0	26.0	27.0
14	---	---	---	---	---	13.0	16.0	21.0	25.0	26.0	26.0	26.0
15	---	---	---	---	---	13.0	18.0	21.0	26.0	28.0	26.0	26.0
16	---	---	---	---	---	13.0	18.0	21.0	26.0	28.0	26.0	27.0
17	---	---	---	---	---	12.0	17.0	22.0	26.0	28.0	27.0	26.0
18	---	---	---	---	---	13.0	17.0	22.0	26.0	28.0	29.0	27.0
19	---	---	---	---	---	14.0	18.0	22.0	26.0	28.0	27.0	27.0
20	---	---	---	---	---	13.0	18.0	22.0	26.0	27.0	26.0	27.0
21	---	---	---	---	---	14.0	18.0	22.0	26.0	28.0	27.0	24.0
22	---	---	---	---	---	14.0	18.0	23.0	27.0	28.0	27.0	23.0
23	---	---	---	---	---	14.0	19.0	23.0	28.0	27.0	26.0	23.0
24	---	---	---	---	---	13.0	18.0	22.0	26.0	26.5	26.0	23.0
25	---	---	---	---	---	12.0	18.0	21.0	26.0	27.0	28.0	23.0
26	---	---	---	---	---	13.0	19.0	22.0	26.0	28.0	28.0	24.0
27	---	---	---	---	---	13.0	19.0	22.0	25.0	26.0	27.0	23.0
28	---	---	---	---	---	14.0	19.0	22.0	24.0	29.0	28.0	23.0
29	---	---	---	---	---	12.0	19.0	23.0	26.0	28.0	28.0	24.0
30	---	---	---	---	---	13.0	20.0	23.0	27.0	27.0	28.0	24.0
31	---	---	---	---	---	14.0	---	23.0	---	27.0	27.0	---
MONTH	---	---	---	---	---	13.5	17.0	21.5	25.5	27.0	26.5	25.0

02129000 PEE DEE RIVER NEAR ROCKINGHAM, N. C.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
APR.				
17...	1100	11900	40	1290
JUNE				
17...	1100	1030	19	53
AUG.				
29...	1200	7940	25	536

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
MAR.									
20...	1030	10100	22	6.8	14.0	10.1	<25	1.1	10
27...	1020	10100	21	7.1	12.0	9.5	<25	2.1	<10

02143040 JACOB FORK AT RAMSEY, N. C.

LOCATION.--Lat 35°35'26", long 81°34'02", Burke County, at gaging station on left bank 16 ft (5 m) downstream from bridge on Secondary Road 1924, 0.6 mi (1.0 km) downstream from Queen Creek, and 0.6 mi (1.0 km) north of Ramsey.

DRAINAGE AREA.--25.4 mi^2 (65.8 km^2).

PERIOD OF RECORD.--Chemical analysis: July to September 1974.
Water temperatures: July to September 1974.

EXTREMES.--July to September 1974:
Specific conductance: Maximum, 29 micromhos Aug. 25; minimum, 18 micromhos July 17, Aug. 4, 10, Sept. 28.
Water temperatures: Maximum, 21.0°C Aug. 31, Sept. 2; minimum, 14.0°C Sept. 26.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
JULY											
12...	1500	50	8.7	1000	60	--	33	16	17	--	2.8
SEP.											
12...	1240	27	9.6	780	70	5100	10	10	0	70	1.9

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)
JULY											
12...	.5	1.2	.9	8	7	2.8	1.4	.0	.06	.04	--
SEP.											
12...	.9	1.2	.9	9	7	1.6	1.2	.1	.04	.04	.0

DATE	AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	SUSPENDED KJEL. NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM DEP. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)
JULY											
12...	.00	.01	.01	.10	.15	.10	.00	.16	--	.16	.71
SEP.											
12...	.03	.05	.06	.25	.15	.28	.08	.20	95	.32	1.4

DATE	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO PHOSPHATE (PO4) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM DEPOSITS (MG/KG)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
JULY										
12...	.00	.00	.01	.01	.00	--	24	22	.03	3.24
SEP.										
12...	.02	.00	.00	.01	.00	52	23	22	.03	1.68

02143040 JACOB FORK AT RAMSEY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
JULY										
12...	9	2	20	.2	19	6.6	20.0	20	--	3.2
SEP.										
12...	8	1	21	.2	21	6.8	20.0	30	8.6	2.3

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MATERIAL (C) (G/KG)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DEPOSITS (UG/G)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)
JULY											
12...	21	8.9	--	.0	0	0	0	--	0	0	1
SEP.											
12...	2.6	3.1	2.2	.0	2	1	1	2	0	0	0

DATE	TOTAL CADMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DEPOSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
JULY										
12...	--	0	0	1	--	8	7	1	--	5
SEP.										
12...	<10	<10	<9	1	10	2	0	2	10	5

DATE	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DEPOSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DEPOSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)
JULY										
12...	4	1	--	18	10	8	--	.0	.0	.0
SEP.										
12...	2	3	<10	1	0	4	<10	.0	.0	.0

DATE	TOTAL MERCURY IN BOTTOM DEPOSITS (UG/G)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL SELENIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DEPOSITS (UG/G)
JULY									
12...	--	7	0	7	--	20	20	0	--
SEP.									
12...	.0	0	0	0	0	0	0	6	<10

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
JULY				
12...	1500	50	24	3.2
SEP.				
12...	1240	27	14	1.0

02143040 JACOB FORK AT RAMSEY, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	22	22
2	---	---	---	---	---	---	---	---	---	---	22	26
3	---	---	---	---	---	---	---	---	---	---	24	24
4	---	---	---	---	---	---	---	---	---	---	18	27
5	---	---	---	---	---	---	---	---	---	---	19	23
6	---	---	---	---	---	---	---	---	---	---	21	23
7	---	---	---	---	---	---	---	---	---	---	22	21
8	---	---	---	---	---	---	---	---	---	---	21	21
9	---	---	---	---	---	---	---	---	---	---	21	23
10	---	---	---	---	---	---	---	---	---	---	18	22
11	---	---	---	---	---	---	---	---	---	---	20	25
12	---	---	---	---	---	---	---	---	---	---	19	22
13	---	---	---	---	---	---	---	---	---	---	22	26
14	---	---	---	---	---	---	---	---	---	---	23	25
15	---	---	---	---	---	---	---	---	---	---	21	26
16	---	---	---	---	---	---	---	---	---	25	22	26
17	---	---	---	---	---	---	---	---	---	18	27	22
18	---	---	---	---	---	---	---	---	---	28	25	22
19	---	---	---	---	---	---	---	---	---	22	22	25
20	---	---	---	---	---	---	---	---	---	21	22	23
21	---	---	---	---	---	---	---	---	---	21	23	26
22	---	---	---	---	---	---	---	---	---	21	23	27
23	---	---	---	---	---	---	---	---	---	23	22	24
24	---	---	---	---	---	---	---	---	---	21	22	27
25	---	---	---	---	---	---	---	---	---	24	29	25
26	---	---	---	---	---	---	---	---	---	23	22	25
27	---	---	---	---	---	---	---	---	---	26	23	24
28	---	---	---	---	---	---	---	---	---	22	25	18
29	---	---	---	---	---	---	---	---	---	22	26	22
30	---	---	---	---	---	---	---	---	---	21	25	22
31	---	---	---	---	---	---	---	---	---	22	23	---
MONTH	---	---	---	---	---	---	---	---	---	---	22	24

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	20.0	20.0
2	---	---	---	---	---	---	---	---	---	---	19.5	21.0
3	---	---	---	---	---	---	---	---	---	---	20.0	20.0
4	---	---	---	---	---	---	---	---	---	---	20.0	19.5
5	---	---	---	---	---	---	---	---	---	---	19.0	19.0
6	---	---	---	---	---	---	---	---	---	---	20.0	18.0
7	---	---	---	---	---	---	---	---	---	---	19.0	18.0
8	---	---	---	---	---	---	---	---	---	---	20.0	17.5
9	---	---	---	---	---	---	---	---	---	---	19.0	17.0
10	---	---	---	---	---	---	---	---	---	---	19.0	17.5
11	---	---	---	---	---	---	---	---	---	---	19.0	19.0
12	---	---	---	---	---	---	---	---	---	---	19.0	20.0
13	---	---	---	---	---	---	---	---	---	---	19.0	20.0
14	---	---	---	---	---	---	---	---	---	---	19.5	20.0
15	---	---	---	---	---	---	---	---	---	---	20.0	20.0
16	---	---	---	---	---	---	---	---	---	20.0	20.0	19.0
17	---	---	---	---	---	---	---	---	---	19.0	20.0	19.0
18	---	---	---	---	---	---	---	---	---	19.0	20.0	18.0
19	---	---	---	---	---	---	---	---	---	20.0	20.0	17.0
20	---	---	---	---	---	---	---	---	---	19.0	20.0	17.0
21	---	---	---	---	---	---	---	---	---	19.0	20.0	17.0
22	---	---	---	---	---	---	---	---	---	19.0	19.5	17.0
23	---	---	---	---	---	---	---	---	---	19.0	19.5	15.0
24	---	---	---	---	---	---	---	---	---	18.5	20.0	16.0
25	---	---	---	---	---	---	---	---	---	19.0	20.0	15.0
26	---	---	---	---	---	---	---	---	---	19.0	20.5	14.0
27	---	---	---	---	---	---	---	---	---	20.0	20.0	16.0
28	---	---	---	---	---	---	---	---	---	20.0	20.5	17.5
29	---	---	---	---	---	---	---	---	---	20.0	20.5	18.0
30	---	---	---	---	---	---	---	---	---	20.0	20.5	15.0
31	---	---	---	---	---	---	---	---	---	20.0	21.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	20.0	18.0

02146800 SUGAR CREEK NEAR FORT MILL, S. C.

LOCATION.--Lat 35°00'21", long 80°54'09", York County, at bridge on State Highway 160, 0.7 mi (1.1 km) downstream from Clems Branch, and 2.6 mi (4.2 km) east of Fort Mill.

DRAINAGE AREA.--262 mi^2 (679 km^2).

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972, water year 1973 (partial-record station), July 1973 to September 1974.
Water temperatures: July 1973 to September 1974.

EXTREMES.--July 1973 to September 1974:
Specific conductance: Maximum, 445 micromhos Sept. 1, 1974; minimum, 68 micromhos Aug. 16, 1974.
Water temperatures: Maximum, 27.0°C Sept. 1, 1973, July 31, 1974; minimum, 4.0°C Dec. 23.

REMARKS.--Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
NOV.											
01...	1000	168	19	5400	380	--	630	40	590	--	18
JAN.											
15...	1200	196	20	150	100	--	100	0	300	--	14
21...	0750	882	17	410000	0	--	1400	1100	350	--	14
21...	1405	2300	7.7	450000	600	--	1200	1000	200	--	9.0
21...	2130	3050	8.9	290000	300	--	600	430	170	--	8.4
22...	0955	1120	13	240000	50	--	580	360	220	--	9.4
23...	1440	360	16	470000	100	--	380	100	280	--	14
APR.											
03...	1215	222	20	2500	60	12000	300	30	270	150	14
MAY											
12...	1200	242	--	--	100	--	--	--	200	--	--
12...	1445	939	15	50000	330	--	1500	1200	300	--	14
12...	1800	1800	--	--	240	--	--	--	200	--	--
12...	2250	2310	7.4	42000	160	--	1000	820	180	--	11
13...	0500	1160	--	29000	180	--	670	490	180	--	--
13...	1315	382	--	16000	50	--	560	330	230	--	--
JUNE											
20...	1045	103	22	2000	0	5400	330	0	330	200	19
SEP.											
28...	0835	1140	6.5	56000	170	--	1500	1500	40	--	6.8
28...	1405	2640	--	29000	130	--	700	540	160	--	--
28...	2120	3730	6.7	17000	80	--	480	340	140	--	9.3
29...	0240	2210	--	21000	130	--	440	280	160	--	--
29...	0920	523	13	13000	110	--	510	250	260	--	11

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
NOV.											
01...	5.1	48	9.0	109	0	89	41	32	.7	1.0	1.3
JAN.											
15...	6.6	23	4.5	104	0	85	25	18	.4	1.1	.62
21...	4.7	23	4.9	90	0	74	29	16	.4	.85	.62
21...	3.0	7.1	2.8	44	0	36	14	6.8	.2	.62	.47
21...	3.0	5.5	2.7	28	0	23	14	5.7	.2	.72	.42
22...	3.7	8.3	2.8	48	0	39	17	7.6	.2	1.4	.50
23...	5.1	19	3.9	77	0	34	26	18	.1	1.9	.64
APR.											
03...	5.0	21	3.8	78	0	64	26	13	.5	.86	.94
MAY											
12...	--	--	--	74	--	61	--	--	--	1.4	1.2
12...	5.8	24	5.2	86	--	71	26	15	.7	1.1	.89
12...	--	--	--	46	--	38	--	--	--	--	--
12...	2.4	7.7	3.2	38	--	31	11	5.5	.5	.63	.56
13...	--	--	--	44	--	36	--	--	--	--	--
13...	--	--	--	50	--	41	--	--	--	--	--
JUNE											
20...	5.0	48	7.0	106	--	87	46	33	.9	3.2	3.3
SEP.											
28...	1.8	8.0	3.3	39	--	32	11	6.1	.3	.51	.39
28...	--	--	--	29	--	24	--	--	--	--	--
28...	2.2	5.7	3.3	33	--	27	12	5.7	.2	.53	.55
29...	--	--	--	34	--	28	--	--	--	--	--
29...	3.7	13	4.0	50	--	41	22	10	.2	--	--

02146800 SUGAR CREEK NEAR FORT MILL, S. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NITRITE PLUS NITHATE IN BOT. DEP. (MG/KG)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS_ SOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM DEP. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)
NOV.											
01...	--	--	--	--	--	--	14	--	11	--	15
JAN.											
15...	--	4.9	3.3	4.3	.60	2.5	5.5	.00	5.8	--	6.6
21...	--	4.2	4.2	5.4	1.8	.00	6.0	2.4	3.6	--	6.9
21...	--	1.0	1.5	1.9	1.0	.20	2.0	.30	1.7	--	2.6
21...	--	.86	.18	.23	.34	.92	1.2	.10	1.1	--	1.9
22...	--	.41	.05	.06	1.1	.44	1.5	1.0	.49	--	2.9
23...	--	1.6	.44	.57	.00	2.3	.08	.00	2.7	--	2.0
APR.											
03...	.1	3.5	3.5	4.5	.00	.80	3.2	.00	4.3	800	4.1
MAY											
12...	--	3.9	4.1	5.3	1.0	.00	4.9	2.3	2.6	--	6.3
12...	--	4.8	5.0	6.4	1.3	.00	6.1	1.8	4.3	--	7.2
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	.86	1.0	1.3	.34	.00	1.2	.59	.61	--	1.8
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
JUNE											
20...	19	6.3	6.1	7.9	.60	.60	6.9	.20	6.7	130	10
SEP.											
28...	--	.97	1.1	1.4	3.0	.50	4.0	2.4	1.6	--	4.5
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	.48	.41	.53	1.2	.57	1.7	.72	.98	--	2.2
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (P04) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
NOV.											
01...	66	3.9	--	3.3	--	--	--	250	228	.34	113
JAN.											
15...	29	1.9	5.5	1.9	1.8	1.8	--	174	176	.24	92.1
21...	30	1.2	5.5	1.5	1.4	1.8	--	153	167	.21	364
21...	12	1.5	.46	.22	.23	.15	--	73	78	.10	453
21...	8.5	.81	1.0	.12	.36	.33	--	67	66	.09	552
22...	13	.78	.61	.23	.37	.20	--	90	89	.12	272
23...	8.8	1.1	2.2	.78	.81	.72	--	140	123	.19	136
APR.											
03...	18	1.1	3.0	1.0	1.1	.98	310	138	154	.19	82.7
MAY											
12...	28	2.6	3.7	1.2	1.3	1.2	--	--	--	--	--
12...	32	4.9	3.7	1.3	1.2	1.2	--	200	163	.27	507
12...	--	--	--	--	--	--	--	--	--	--	--
12...	8.1	1.3	.43	.22	.41	.14	--	80	72	.11	499
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
JUNE											
20...	45	3.0	8.6	3.0	3.0	2.8	710	242	234	.33	67.3
SEP.											
28...	20	1.6	.58	.20	.22	.19	--	75	63	.10	231
28...	--	--	--	--	--	--	--	--	--	--	--
28...	9.9	.63	.43	.17	.24	.14	--	70	62	.10	705
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	157	102	.21	222

02146800 SUGAR CREEK NEAR FORT MILL, S. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
NOV.											
01...	66	0	57	2.6	381	7.2	13.0	--	40	5.0	11
JAN.											
15...	62	0	42	1.3	290	7.2	7.0	10	--	--	10
21...	54	0	45	1.4	240	7.1	13.5	20	--	9.1	11
21...	35	0	29	.5	130	7.2	14.0	200	--	7.3	4.4
21...	33	10	25	.4	110	7.1	13.5	300	--	8.1	3.6
22...	39	0	30	.6	146	7.2	11.0	200	--	7.9	4.8
23...	56	22	40	1.1	240	7.3	13.0	10	--	8.5	26
APR.											
03...	56	0	43	1.2	240	6.4	19.0	20	--	6.4	50
MAY											
12...	--	--	--	--	228	6.5	23.0	--	--	--	37
12...	59	0	44	1.4	250	6.4	22.0	80	--	5.1	55
12...	--	--	--	--	130	6.5	21.0	--	--	5.3	23
12...	37	6	29	.5	110	6.7	20.0	500	--	5.3	12
13...	--	--	--	--	125	6.9	18.0	--	--	6.5	8.9
13...	--	--	--	--	150	6.8	20.0	--	--	6.0	13
JUNE											
20...	68	0	58	2.5	400	6.2	25.0	7	--	5.0	107
SEP.											
28...	24	0	38	.7	110	6.7	20.0	400	--	6.3	12
28...	--	--	--	--	95	6.8	22.5	--	--	6.6	7.4
28...	32	5	25	.4	95	7.2	22.0	600	--	6.9	3.3
29...	--	--	--	--	120	6.8	21.5	--	--	6.2	8.6
29...	43	2	37	.9	170	6.9	22.5	200	--	7.0	10

DATE	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MATERIAL (C) (G/KG)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DEPOSITS (UG/G)	TOTAL CADMIUM (CD) (UG/L)
NOV.												
01...	--	--	--	16	17	--	--	18	1	17	--	<10
JAN.												
15...	--	--	--	11	8.2	--	.1	17	17	0	--	0
21...	--	--	--	5.6	4.4	--	.0	18	14	4	--	1
21...	--	--	--	1.0	.9	--	.4	13	10	3	--	0
21...	--	--	--	14	8.0	--	.0	13	7	6	--	1
22...	--	--	--	13	9.5	--	.0	31	27	4	--	1
23...	--	--	--	8.0	6.6	--	.1	10	7	3	--	0
APR.												
03...	740	17	22	24	12	1.2	.1	35	23	12	2	1
MAY												
12...	--	--	--	58	45	--	.1	5	4	1	--	--
12...	--	--	--	38	16	--	.0	3	0	3	--	3
12...	--	--	--	--	--	--	--	2	0	2	--	--
12...	--	--	--	22	12	--	.0	3	0	3	--	1
13...	--	--	--	--	--	--	--	0	0	0	--	2
13...	--	--	--	--	--	--	--	0	0	2	--	1
JUNE												
20...	8000	3.9	12	46	31	2.1	.1	5	0	7	16	1
SEP.												
28...	--	--	--	30	20	--	.0	25	22	3	--	0
28...	--	--	--	--	--	--	--	3	0	3	--	1
28...	--	--	--	30	6.0	--	.0	12	9	3	--	0
29...	--	--	--	--	--	--	--	3	1	2	--	0
29...	--	--	--	--	--	--	--	9	4	5	--	1

02146800 SUGAR CREEK NEAR FORT MILL, S. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
NOV.												
01...	9	1	--	30	20	10	--	<25	21	4	--	20
JAN.												
15...	0	1	--	0	0	1	--	1	0	5	--	8
21...	0	7	--	80	75	5	--	0	0	3	--	7
21...	0	0	--	70	68	2	--	14	12	2	--	120
21...	0	1	--	30	29	1	--	0	0	2	--	2
22...	1	0	--	20	18	2	--	7	5	2	--	38
23...	0	2	--	0	0	4	--	3	--	--	--	13
APR.												
03...	0	1	0	0	0	0	51	5	4	1	10	6
MAY												
12...	--	3	--	1	0	2	--	--	--	6	--	--
12...	0	3	--	19	17	2	--	9	3	6	--	110
12...	--	2	--	10	8	2	--	--	--	6	--	--
12...	0	3	--	9	7	2	--	7	3	4	--	120
13...	0	3	--	13	11	2	--	11	5	6	--	97
13...	0	3	--	3	3	0	--	9	3	6	--	57
JUNE												
20...	1	0	<10	20	19	1	20	5	5	0	<50	11
SEP.												
28...	0	1	--	80	80	0	--	32	32	0	--	80
28...	1	0	--	20	19	1	--	17	17	0	--	44
28...	0	1	--	20	20	0	--	17	15	2	--	35
29...	0	0	--	30	30	0	--	11	9	2	--	29
29...	0	1	--	<10	<10	0	--	13	11	2	--	22

DATE	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
NOV.										
01...	10	10	--	<100	79	21	--	.1	.1	.0
JAN.										
15...	1	7	--	31	24	7	--	.0	.0	.0
21...	0	18	--	54	43	11	--	.5	.5	.0
21...	120	1	--	40	40	0	--	.0	.0	.0
21...	0	5	--	3	1	2	--	.1	.1	.0
22...	30	8	--	40	38	2	--	.0	.0	.0
23...	2	11	--	22	19	3	--	.0	.0	.0
APR.										
03...	1	5	6	26	25	1	10	.0	.0	.0
MAY										
12...	--	7	--	--	--	7	--	.2	.1	.1
12...	95	15	--	38	22	16	--	.1	.0	.1
12...	--	8	--	--	--	18	--	.3	.2	.1
12...	110	9	--	38	33	5	--	.1	.0	.1
13...	87	10	--	29	22	7	--	.3	.1	.2
13...	49	8	--	33	28	5	--	.4	.1	.3
JUNE										
20...	3	8	10	21	20	1	<100	.2	.0	.3
SEP.										
28...	68	12	--	110	110	4	--	.0	.0	.0
28...	33	11	--	99	94	5	--	.5	.4	.1
28...	27	8	--	110	110	5	--	.1	.1	.0
29...	23	6	--	63	60	3	--	.0	.0	.0
29...	17	5	--	55	51	4	--	.1	.1	.0

02146800 SUGAR CREEK NEAR FORT MILL, S. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL MERCURY IN BOTTOM DEPOSITS (UG/G)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL SELENIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DEPOSITS (UG/G)
NOV.									
01...	--	6	0	6	--	150	40	110	--
JAN.									
15...	--	12	2	10	--	40	30	10	--
21...	--	25	1	24	--	650	580	70	--
21...	--	0	0	0	--	300	270	30	--
21...	--	0	0	2	--	140	90	50	--
22...	--	0	0	0	--	190	130	60	--
23...	--	0	0	0	--	80	0	90	--
APR.									
03...	.5	3	0	3	0	70	60	10	45
MAY									
12...	--	--	--	7	--	--	--	10	--
12...	--	9	5	4	--	500	460	40	--
12...	--	--	--	5	--	--	--	10	--
12...	--	10	5	5	--	380	360	20	--
13...	--	10	3	7	--	210	190	20	--
13...	--	7	3	4	--	110	80	30	--
JUNE									
20...	.1	0	0	0	0	40	0	40	40
SEP.									
28...	--	0	0	0	--	270	250	20	--
28...	--	0	0	0	--	170	130	40	--
28...	--	0	0	0	--	120	100	20	--
29...	--	0	0	0	--	90	50	40	--
29...	--	0	0	0	--	70	50	20	--

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV.				
01...	1000	168	75	34
JAN.				
15...	1200	196	43	23
21...	0750	882	1150	2740
21...	1405	2300	2240	13900
21...	2130	3050	54	445
22...	0955	1120	356	1080
MAY				
12...	1200	242	731	478
12...	1445	939	1330	3370
12...	1800	1800	2210	10700
12...	2250	2310	1300	8110
13...	0500	1160	883	2770
13...	1315	382	492	507
JUNE				
20...	1045	103	48	13
SEP.				
28...	0835	1140	2120	6530
28...	1405	2640	900	6420
28...	2120	3730	551	5550
29...	0240	2210	980	5850
29...	0920	523	306	432

02146800 SUGAR CREEK NEAR FORT MILL, S. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	285	380
2	---	---	---	---	---	---	---	---	---	---	285	380
3	---	---	---	---	---	---	---	---	---	---	298	340
4	---	---	---	---	---	---	---	---	---	---	105	290
5	---	---	---	---	---	---	---	---	---	---	180	252
6	---	---	---	---	---	---	---	---	---	---	95	320
7	---	---	---	---	---	---	---	---	---	---	185	374
8	---	---	---	---	---	---	---	---	---	---	260	429
9	---	---	---	---	---	---	---	---	---	---	285	319
10	---	---	---	---	---	---	---	---	---	---	300	341
11	---	---	---	---	---	---	---	---	---	---	315	253
12	---	---	---	---	---	---	---	---	---	---	300	346
13	---	---	---	---	---	---	---	---	---	---	180	407
14	---	---	---	---	---	---	---	---	---	---	240	143
15	---	---	---	---	---	---	---	---	---	---	278	134
16	---	---	---	---	---	---	---	---	---	---	245	237
17	---	---	---	---	---	---	---	---	---	---	320	275
18	---	---	---	---	---	---	---	---	---	---	155	281
19	---	---	---	---	---	---	---	---	---	278	312	319
20	---	---	---	---	---	---	---	---	---	265	280	363
21	---	---	---	---	---	---	---	---	---	275	310	358
22	---	---	---	---	---	---	---	---	---	285	310	363
23	---	---	---	---	---	---	---	---	---	272	315	374
24	---	---	---	---	---	---	---	---	---	149	225	347
25	---	---	---	---	---	---	---	---	---	165	240	325
26	---	---	---	---	---	---	---	---	---	240	260	341
27	---	---	---	---	---	---	---	---	---	235	281	369
28	---	---	---	---	---	---	---	---	---	268	270	391
29	---	---	---	---	---	---	---	---	---	240	315	407
30	---	---	---	---	---	---	---	---	---	250	335	425
31	---	---	---	---	---	---	---	---	---	250	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	259	329

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	289	438	390	89	223	268	161	320	342	315	370	445
2	200	244	390	130	201	273	192	330	351	338	130	140
3	210	371	380	171	90	295	208	310	216	362	95	245
4	295	336	325	209	119	260	239	250	279	400	108	335
5	352	319	340	198	157	260	94	290	333	370	100	360
6	350	318	210	220	117	300	104	270	360	160	160	385
7	370	325	275	200	110	310	192	212	351	120	200	70
8	360	394	340	161	106	310	198	285	230	82	235	125
9	330	394	240	231	106	300	104	325	324	170	140	198
10	340	354	180	173	157	289	150	210	351	225	110	220
11	360	377	230	220	180	260	203	275	328	278	202	255
12	359	359	285	226	191	260	218	285	360	181	240	285
13	405	331	325	253	223	270	227	130	364	280	260	105
14	400	325	225	237	233	280	172	205	387	330	250	232
15	390	360	275	231	207	290	187	270	184	331	220	305
16	353	394	285	253	222	300	198	315	297	340	68	298
17	400	412	160	275	95	270	213	320	180	348	135	110
18	430	429	210	286	164	270	218	360	252	398	245	115
19	372	394	255	297	138	270	229	360	324	390	210	230
20	410	360	310	200	148	260	268	320	373	390	240	280
21	409	383	150	154	175	295	276	280	162	415	289	305
22	383	428	155	121	180	201	250	350	247	370	310	315
23	352	371	215	187	106	270	260	300	301	380	325	270
24	350	383	235	226	172	290	265	155	315	390	338	310
25	410	354	240	165	180	270	280	255	310	390	350	340
26	440	342	240	114	182	205	328	290	325	405	345	350
27	420	336	235	121	223	260	354	250	355	190	330	370
28	440	348	270	149	233	280	374	185	301	180	390	115
29	192	405	280	92	---	170	322	260	369	278	400	160
30	200	354	275	147	---	100	328	300	288	330	345	220
31	290	---	130	193	---	125	---	310	---	360	370	---
MONTH	350	365	260	191	166	260	227	277	305	306	242	250

YEAR MAX 445 MIN 68 MEAN 267

02146800 SUGAR CREEK NEAR FORT MILL, S. C.--Continued

TEMPERATURE (DEG. C) OF WATER, JULY TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	25.0	27.0
2	---	---	---	---	---	---	---	---	---	---	25.0	25.0
3	---	---	---	---	---	---	---	---	---	---	25.0	25.0
4	---	---	---	---	---	---	---	---	---	---	24.0	25.0
5	---	---	---	---	---	---	---	---	---	---	25.0	25.0
6	---	---	---	---	---	---	---	---	---	---	24.0	25.0
7	---	---	---	---	---	---	---	---	---	---	25.0	25.0
8	---	---	---	---	---	---	---	---	---	---	25.0	25.5
9	---	---	---	---	---	---	---	---	---	---	25.0	25.0
10	---	---	---	---	---	---	---	---	---	---	25.0	25.0
11	---	---	---	---	---	---	---	---	---	---	25.0	24.0
12	---	---	---	---	---	---	---	---	---	---	25.0	24.0
13	---	---	---	---	---	---	---	---	---	---	25.0	24.0
14	---	---	---	---	---	---	---	---	---	---	25.0	24.0
15	---	---	---	---	---	---	---	---	---	---	25.0	24.0
16	---	---	---	---	---	---	---	---	---	---	25.0	23.0
17	---	---	---	---	---	---	---	---	---	---	25.0	22.0
18	---	---	---	---	---	---	---	---	---	---	24.0	23.0
19	---	---	---	---	---	---	---	---	---	24.0	24.0	24.0
20	---	---	---	---	---	---	---	---	---	25.0	24.0	22.0
21	---	---	---	---	---	---	---	---	---	25.0	25.0	23.0
22	---	---	---	---	---	---	---	---	---	25.0	25.0	22.0
23	---	---	---	---	---	---	---	---	---	25.0	23.0	23.0
24	---	---	---	---	---	---	---	---	---	25.0	24.0	23.0
25	---	---	---	---	---	---	---	---	---	24.0	24.0	24.0
26	---	---	---	---	---	---	---	---	---	25.0	25.0	23.0
27	---	---	---	---	---	---	---	---	---	25.0	25.0	23.0
28	---	---	---	---	---	---	---	---	---	25.0	25.0	23.0
29	---	---	---	---	---	---	---	---	---	25.0	25.0	25.0
30	---	---	---	---	---	---	---	---	---	25.0	25.0	24.0
31	---	---	---	---	---	---	---	---	---	25.0	25.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	24.5	24.0

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	15.0	10.0	5.0	10.0	10.0	13.0	20.0	23.0	21.0	24.0	24.0
2	21.0	14.0	10.0	5.0	13.0	13.0	15.0	20.0	23.0	22.0	22.0	23.0
3	22.0	14.0	9.0	9.0	14.0	13.0	15.0	19.0	21.0	24.0	23.0	24.0
4	23.0	15.0	11.0	11.0	11.0	14.0	16.0	19.0	20.0	23.0	23.0	23.0
5	22.0	17.0	15.0	10.0	10.0	15.0	14.0	18.0	20.5	23.0	23.0	20.0
6	23.0	15.0	13.0	10.0	10.0	16.0	12.0	15.0	22.0	23.0	22.0	19.0
7	20.0	13.0	12.0	11.0	11.0	16.0	10.0	16.0	22.0	24.0	22.0	18.0
8	20.0	13.0	10.0	10.0	11.0	17.0	11.0	16.0	22.0	23.0	22.0	18.0
9	20.0	15.0	10.0	10.0	9.0	17.0	10.0	17.0	22.0	24.0	22.0	19.0
10	20.0	11.0	8.0	12.0	8.0	17.0	11.0	18.0	23.0	24.0	24.0	20.0
11	20.0	8.0	8.0	14.0	8.0	16.0	12.0	19.0	23.0	25.0	22.0	22.0
12	20.0	8.0	6.0	14.0	7.0	14.0	13.0	21.0	23.0	25.0	22.0	23.0
13	20.0	8.0	7.0	10.0	10.0	12.0	15.0	17.0	23.0	23.0	23.0	22.0
14	20.0	10.0	9.0	6.0	10.0	10.0	18.0	18.0	23.0	23.0	23.0	23.0
15	20.0	13.0	8.0	8.0	12.0	11.0	18.0	20.0	21.0	24.0	24.0	23.0
16	20.0	15.0	8.0	12.0	10.0	11.0	16.0	20.0	22.0	25.0	21.0	22.0
17	18.0	12.0	5.0	14.0	7.0	11.0	15.0	22.0	21.0	25.0	23.0	19.0
18	15.0	9.0	5.0	12.0	10.0	10.0	15.0	15.0	20.0	26.0	25.0	20.0
19	15.0	10.0	8.0	11.0	8.0	12.0	15.0	21.0	21.0	25.0	24.0	20.0
20	15.0	12.0	6.0	12.0	11.0	17.0	17.5	20.0	23.0	25.0	23.0	20.0
21	15.0	15.0	7.0	14.0	10.0	15.0	17.0	18.0	22.0	24.0	22.0	20.0
22	15.0	15.0	5.0	11.0	14.0	12.0	18.0	22.0	23.0	23.0	23.0	21.0
23	16.0	14.0	4.0	12.0	10.0	11.0	18.0	20.0	24.0	22.0	23.0	17.0
24	16.0	14.0	6.0	14.0	10.0	12.0	18.0	20.0	22.0	22.0	23.0	15.0
25	16.0	15.0	7.0	14.0	10.0	11.0	13.0	21.0	21.0	24.0	23.0	14.0
26	16.0	16.0	10.0	11.0	6.0	8.0	14.0	21.0	21.0	26.0	24.0	15.0
27	17.0	16.0	13.0	11.0	7.0	10.0	15.0	18.0	21.0	24.0	24.0	17.0
28	16.0	18.0	10.0	15.0	10.0	12.0	17.0	18.0	20.0	23.0	26.0	20.0
29	16.0	14.0	8.0	14.0	---	12.0	18.0	19.0	21.0	25.0	25.0	21.0
30	14.0	10.0	11.0	14.0	---	10.0	20.0	21.0	20.0	24.0	25.0	20.0
31	14.0	---	10.0	13.0	---	11.0	---	22.0	---	27.0	24.0	---
MONTH	18.5	13.0	8.5	11.5	10.0	13.0	15.0	19.0	22.0	24.0	23.0	20.0

YEAR MAX 27.0 MIN 4.0 MEAN 16.5

02146800 SUGAR CREEK NEAR FORT MILL, S. C.--Continued

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
SEP.											
05...	1445	63	85	--	7.4	26.0	3.1	<25	--	6.6	860
11...	1300	66	90	--	7.0	29.0	4.9	38	--	4.7	3200
17...	1030	142	85	--	7.0	23.0	4.5	<25	--	7.2	42000
25...	1730	90	85	--	6.9	23.0	3.9	34	--	--	31000
OCT.											
04...	1300	125	81	--	7.4	24.0	3.5	49	--	5.9	20000
10...	1045	111	101	--	7.1	21.0	3.2	34	--	7.7	40000
18...	0930	86	90	--	6.9	20.0	4.8	49	--	11	50000
23...	1130	87	66	--	6.1	15.0	3.5	26	--	8.0	40000
31...	1215	94	75	--	6.4	15.0	4.9	34	--	7.4	80000
NOV.											
08...	1700	88	103	--	7.0	13.0	4.5	64	--	11	150000
13...	1045	94	94	--	7.5	15.0	6.5	52	--	6.6	13000
19...	1100	97	123	--	7.3	15.0	5.8	48	--	7.2	5000
28...	1300	100	--	--	--	--	--	53	--	13	4000
DEC.											
06...	1430	200	--	--	--	--	--	57	--	7.9	6400
10...	1200	186	--	--	--	--	--	27	--	8.3	3100
JAN.											
07...	1640	1000	85	--	7.6	12.0	8.7	38	--	>8.2	5100
17...	1330	158	72	--	7.1	14.0	7.1	34	--	5.2	1500
23...	1550	360	--	--	--	--	--	--	--	--	--
FEB.											
12...	1445	335	--	--	--	--	--	--	--	--	--
18...	1055	545	--	--	--	--	--	--	--	--	--
26...	1230	273	--	--	--	--	--	--	--	--	--
MAR.											
07...	1505	176	97	--	7.4	18.0	5.2	--	34	7.3	860
07...	1730	172	79	--	7.1	17.0	4.7	--	<25	7.4	1100
12...	1440	158	84	--	7.2	12.0	6.0	--	<25	4.5	4300
20...	1415	298	79	--	7.1	13.0	5.6	--	<25	17	3100
27...	1400	180	78	--	7.3	13.0	7.3	--	<25	8.1	1000
APR.											
03...	1430	204	69	--	7.0	20.0	6.7	--	<25	>7.3	2800
08...	1515	322	59	--	6.8	12.0	7.6	--	31	5.5	5000
23...	1430	148	89	--	7.2	20.0	5.6	--	27	>8.2	1600
30...	0930	107	97	--	7.2	20.0	4.7	--	34	6.4	650
MAY											
13...	1330	357	43	--	6.8	24.0	6.0	--	58	5.0	17000
21...	1230	125	85	--	6.9	24.0	4.8	--	50	16	1600
23...	1230	193	63	--	6.9	20.0	4.8	--	31	18	4200
29...	1330	159	75	280	6.8	22.0	5.0	--	32	11	3200
JUNE											
04...	1530	119	85	300	7.1	21.0	4.9	--	43	12	2200
11...	1100	111	93	370	7.1	22.0	4.5	--	31	1.7	2400
17...	1030	335	41	200	6.8	21.0	4.8	--	74	6.5	13000
JULY											
01...	1500	90	78	315	7.0	23.0	4.8	--	31	5.4	170
02...	1430	92	84	390	7.0	24.0	4.7	--	27	6.5	2700
10...	0900	237	46	210	6.9	25.0	5.0	--	--	4.4	10000
15...	1400	98	83	390	7.1	25.0	4.8	--	--	3.9	3000
22...	1345	92	88	380	7.1	23.0	4.2	--	--	5.8	5000
AUG.											
01...	1630	84	85	460	7.3	25.0	4.6	--	--	4.3	5000
22...	1230	125	78	340	7.1	23.0	4.8	--	--	5.8	2700
29...	1030	176	98	425	7.2	22.0	3.2	--	--	4.4	3800
SEP.											
03...	1200	118	72	275	7.1	25.0	4.6	--	--	6.1	2000
09...	0945	324	53	175	7.4	20.0	5.2	--	--	4.2	5400
17...	1015	1020	26	90	6.9	20.0	7.1	--	--	6.1	40000
26...	0945	125	89	300	7.3	14.0	7.8	--	--	4.1	1840
30...	1400	216	56	205	7.0	19.0	6.2	--	--	2.0	6500

02149540 PULLIAM CREEK NEAR TRYON, N. C.

LOCATION.--Lat 35°16'54", long 82°20'15", Polk County, temperature recorder at gaging station at end of foot trail, 135 ft (41 m) upstream from small tributary, 0.4 mi (0.6 km) upstream from mouth, 1.0 mi (1.6 km) downstream from bridge on Secondary Road 1154, and 7.5 mi (12.1 km) northwest of Tryon.

DRAINAGE AREA.--2.27 mi^2 (5.88 km^2).

PERIOD OF RECORD.--Water temperatures: July 1972 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum, 21.0°C June 10, July 3, 8, 9; minimum, freezing point on many days during November, December, January, and February.

Period of record:
Water temperatures: Maximum, 21.0°C June 10, July 3, 8, 9, 1973; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.5	15.5	16.0	9.0	4.5	6.5	8.5	4.0	5.5	6.5	4.5	6.0
2	16.5	15.5	16.5	9.5	4.0	6.5	5.5	2.0	4.0	4.0	4.0	4.0
3	16.0	15.0	16.0	11.0	5.5	8.5	7.0	0.5	4.0	4.5	4.0	4.0
4	16.0	14.5	16.0	11.5	8.5	10.0	10.5	6.5	9.0	6.0	4.5	5.5
5	16.0	14.5	16.0	13.0	7.0	10.0	11.0	8.5	10.5	6.0	5.0	5.5
6	16.5	14.0	15.5	6.5	4.0	5.0	8.5	4.0	6.0	6.5	4.5	5.5
7	15.5	11.0	13.5	5.0	3.5	4.0	4.0	3.0	3.0	6.5	4.0	6.5
8	15.5	14.0	15.0	8.5	5.0	6.5	3.0	3.0	3.0	4.0	1.5	2.5
9	16.5	14.0	15.0	8.5	4.0	7.0	3.0	3.0	3.0	6.5	3.5	4.5
10	16.5	14.5	15.5	3.5	0.0	1.5	3.0	1.0	1.5	9.5	6.5	8.0
11	16.0	14.5	16.0	1.5	0.0	0.5	0.5	0.0	0.0	10.0	9.0	9.5
12	15.0	13.5	14.0	4.0	0.0	1.5	0.5	0.0	0.5	8.5	1.5	4.5
13	14.5	10.5	12.5	6.5	0.0	3.0	1.0	0.5	1.0	1.0	0.0	0.5
14	16.0	13.5	14.5	8.5	2.0	5.0	2.0	1.0	1.5	0.0	0.0	0.0
15	15.0	10.5	13.0	10.0	5.0	7.5	2.0	1.5	2.0	5.5	0.0	2.5
16	14.5	11.5	13.0	10.0	5.0	7.5	1.5	1.0	1.5	8.5	4.0	5.5
17	12.0	8.0	9.5	5.5	1.5	3.5	0.5	0.0	0.0	12.0	8.5	9.5
18	10.5	5.5	8.0	6.0	0.0	3.0	0.0	0.0	0.0	8.0	6.5	7.5
19	11.5	7.0	9.0	8.5	3.5	6.0	0.0	0.0	0.0	10.5	7.0	8.5
20	12.0	6.5	9.5	9.0	5.0	7.0	0.0	0.0	0.0	9.0	5.5	7.5
21	12.0	8.5	10.0	8.5	6.5	8.0	0.5	0.0	0.0	11.5	8.0	9.5
22	11.5	8.0	10.0	9.0	5.5	7.0	0.0	0.0	0.0	10.5	5.0	7.5
23	12.0	8.0	10.0	9.5	4.0	6.5	0.5	0.0	0.0	11.5	6.0	8.5
24	11.5	7.0	9.5	11.5	6.0	9.0	1.0	0.0	0.5	12.0	10.0	11.0
25	11.5	6.5	9.0	13.5	10.5	11.5	1.0	1.0	1.0	11.0	10.0	10.5
26	13.0	8.0	10.0	10.5	9.0	10.0	8.0	1.0	5.0	9.5	9.0	9.0
27	12.0	8.0	10.0	13.0	10.5	11.5	8.0	5.0	6.5	13.5	9.5	11.0
28	11.0	9.0	10.0	13.0	8.0	12.0	4.5	3.0	3.5	11.5	8.5	10.5
29	9.5	5.0	7.0	7.0	3.5	4.5	5.0	1.5	3.0	10.0	5.5	8.0
30	8.5	3.5	6.0	6.5	1.0	3.5	5.0	4.5	5.0	10.5	5.5	7.5
31	7.0	6.5	7.0	---	---	---	5.5	5.0	5.0	10.0	3.5	6.5
MONTH	16.5	3.5	12.0	13.5	0.0	6.5	11.0	0.0	2.5	13.5	0.0	6.5

02149540 PULLIAM CREEK NEAR TRYON, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.0	3.5	6.5	11.5	3.5	7.0	18.0	7.5	12.0	18.0	14.0	16.0
2	11.5	8.0	10.0	13.5	6.0	9.0	18.0	12.5	14.5	16.0	13.0	14.5
3	12.0	5.5	9.5	14.5	6.0	10.0	14.0	11.5	13.5	19.5	12.0	15.5
4	5.5	2.0	4.0	15.0	9.5	11.5	14.5	13.0	13.5	16.0	14.0	15.5
5	5.5	0.5	2.5	15.0	10.0	12.5	15.0	8.5	12.0	15.0	10.5	13.0
6	6.0	1.5	3.5	16.5	11.0	13.5	11.0	6.0	8.0	15.5	8.5	11.5
7	8.5	6.5	7.5	17.5	10.5	14.0	13.5	4.0	8.0	15.0	9.0	12.0
8	8.5	2.0	5.5	18.0	10.5	14.0	9.5	9.0	9.0	14.5	8.0	11.0
9	3.0	0.0	1.0	18.0	9.5	13.5	9.0	5.5	7.0	16.0	13.0	14.5
10	3.5	0.0	1.0	17.5	10.5	14.0	13.0	3.5	7.5	18.0	13.5	15.5
11	4.0	0.5	1.5	14.5	10.0	11.5	13.5	4.5	8.5	18.5	15.0	16.5
12	6.5	0.0	2.5	13.5	7.5	10.5	13.0	9.5	11.0	17.5	14.0	16.5
13	8.5	1.0	4.5	12.5	7.0	9.0	16.5	12.0	14.0	16.5	11.0	13.5
14	9.0	6.0	7.5	10.5	2.5	6.0	17.5	13.5	15.0	18.0	10.5	14.0
15	8.5	6.0	7.5	11.0	3.0	6.5	14.5	11.0	13.0	18.5	13.5	16.0
16	6.0	3.0	3.5	10.0	5.5	8.0	15.0	7.0	11.0	19.0	14.5	17.0
17	6.5	2.0	4.0	7.0	3.0	4.5	14.0	8.5	10.5	19.5	15.5	17.5
18	6.5	1.5	4.0	7.5	2.0	4.5	15.5	6.0	10.5	20.5	16.0	18.0
19	8.0	4.0	5.5	13.5	5.0	8.5	16.5	6.5	11.5	20.0	16.5	18.5
20	9.0	4.0	6.0	14.0	10.0	11.5	16.5	7.0	11.5	18.0	16.0	17.0
21	9.5	1.5	5.5	11.0	5.5	8.5	16.5	9.5	12.5	16.5	16.0	16.5
22	10.5	5.5	8.5	10.0	3.0	6.0	15.0	13.0	13.5	18.0	15.5	16.5
23	8.0	3.0	5.0	9.0	2.5	5.5	17.5	11.0	14.0	18.5	16.5	17.5
24	8.5	1.5	4.5	9.5	5.0	7.0	13.5	8.5	10.5	19.5	16.0	17.5
25	3.5	0.0	0.5	5.5	3.0	3.5	15.0	5.5	10.0	19.0	15.5	17.0
26	3.0	0.0	0.5	11.0	3.0	6.0	16.5	6.5	11.5	16.5	14.0	15.0
27	6.0	0.0	2.0	9.0	5.5	7.5	18.0	8.5	13.0	16.0	13.5	14.5
28	7.5	0.0	3.0	14.5	7.5	10.5	18.5	10.0	14.0	16.5	11.5	14.0
29	---	---	---	11.5	8.0	9.5	19.5	12.0	16.0	19.0	14.0	16.0
30	---	---	---	14.0	8.0	10.5	20.0	13.5	16.5	18.0	16.0	17.0
31	---	---	---	14.5	6.0	10.0	---	---	---	19.5	16.0	18.0
MONTH	12.0	0.0	4.5	18.0	2.0	9.0	20.0	3.5	11.5	20.5	8.0	15.5

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	17.5	18.0	19.5	16.0	16.0	18.0	15.0	16.5	18.0	16.5	17.0
2	19.0	17.5	18.0	20.0	17.5	18.5	18.0	16.5	17.0	19.0	16.5	18.0
3	19.0	14.5	17.0	21.0	18.0	19.5	17.5	16.5	17.0	18.0	16.5	17.0
4	18.5	15.0	16.5	19.5	18.0	19.0	18.0	16.0	17.0	16.0	15.0	15.5
5	18.0	13.5	15.5	20.0	18.5	19.5	18.0	16.0	17.0	15.0	13.0	14.0
6	18.0	16.0	17.0	19.5	18.5	19.0	16.5	16.0	16.5	14.0	12.0	13.0
7	18.5	16.5	17.5	20.5	18.5	19.5	16.5	15.5	16.0	14.5	14.0	14.0
8	18.5	17.5	18.0	21.0	19.0	19.5	16.5	16.0	16.5	15.5	14.5	15.0
9	20.5	18.0	19.0	21.0	19.0	20.0	18.0	15.5	17.0	16.5	14.0	15.5
10	21.0	18.0	19.5	20.5	19.0	19.5	18.0	16.0	17.0	16.5	14.5	15.5
11	19.5	16.5	18.0	20.0	17.0	19.0	16.5	15.5	16.0	18.0	15.5	16.5
12	18.5	15.5	17.0	18.0	15.5	16.5	17.5	16.0	17.0	18.0	15.0	16.0
13	18.5	14.0	16.5	18.0	15.5	16.5	18.0	16.0	17.0	18.0	15.5	16.5
14	18.5	14.5	16.5	18.5	15.5	17.0	18.0	15.5	17.0	17.0	16.0	16.5
15	19.5	16.5	18.0	19.0	15.5	17.0	18.0	16.0	16.5	16.5	16.0	16.0
16	19.0	16.5	18.0	19.0	16.0	17.5	18.0	15.5	16.5	16.5	14.0	15.5
17	17.5	14.0	15.5	19.0	16.0	17.5	18.0	16.0	17.0	15.5	14.5	15.0
18	17.5	13.0	15.0	19.0	16.5	17.5	18.0	15.5	16.5	16.0	13.0	14.5
19	19.0	13.5	16.5	18.0	16.0	17.0	18.0	15.0	17.0	15.5	11.0	13.0
20	19.5	17.5	18.0	18.5	16.0	17.5	18.0	16.5	17.0	15.5	11.5	13.0
21	18.5	16.5	17.5	18.5	15.5	17.0	18.0	16.0	16.5	16.0	13.0	14.5
22	20.5	18.0	19.0	17.5	15.5	16.5	17.0	14.5	15.5	15.0	11.5	13.0
23	20.0	18.5	19.0	15.5	15.5	15.5	18.0	14.5	16.0	11.5	8.5	10.0
24	18.5	16.0	17.0	16.5	15.0	16.0	16.0	15.0	16.0	10.0	7.0	8.0
25	17.5	15.0	16.5	17.5	15.5	16.5	18.0	16.0	17.0	10.5	7.0	8.5
26	17.5	13.5	15.5	18.0	15.5	17.0	19.0	16.5	18.0	12.0	7.0	10.0
27	15.5	15.5	16.0	18.0	16.5	17.0	19.0	16.5	18.0	13.0	11.0	11.5
28	17.5	15.0	15.5	18.5	16.5	17.5	19.0	17.0	18.0	15.0	13.0	14.0
29	17.5	14.5	15.5	18.5	16.0	17.5	19.0	17.0	18.5	15.0	12.0	14.0
30	15.5	14.5	15.0	19.0	16.0	17.5	19.5	18.0	18.5	11.5	9.0	10.5
31	---	---	---	18.5	14.5	16.5	18.5	17.0	18.0	---	---	---
MONTH	21.0	13.0	17.0	21.0	14.5	17.5	19.5	14.5	17.0	19.0	7.0	14.0
YEAR	21.0	0.0	11.5									

02149702 GREEN RIVER NEAR SALUDA, N. C.

LOCATION.--Lat 35°18'20", long 82°16'31", Polk County, temperature recorder at gaging station on left bank 90 ft (27 m) upstream from bridge on Secondary Road 1151, 0.5 mi (0.8 km) downstream from Laurel Branch, and 6.5 mi (10.5 km) northeast of Saluda.

DRAINAGE AREA.--104 mi^2 (269 km^2).

PERIOD OF RECORD.--Water temperatures: August 1972 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum, 22.0°C Aug. 25; minimum, 7.0°C on many days during February and March.

Period of record:
Water temperatures: Maximum, 23.0°C Aug. 19, 20, 21, 1972; minimum, 2.0°C Jan. 13, 14, 15, 1973.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	19.0	11.5	11.0	10.5	10.0	10.0	10.0	9.5	9.0	7.0	7.0
2	19.5	19.0	12.0	11.0	10.0	10.0	10.0	10.0	9.5	9.0	8.0	7.0
3	20.5	19.5	12.0	11.5	10.0	9.0	10.0	10.0	10.0	9.5	8.0	8.0
4	20.0	18.5	13.5	12.0	12.0	10.0	10.0	10.0	9.5	8.5	9.0	8.0
5	20.0	19.0	14.0	13.5	12.0	12.0	10.0	10.0	8.5	8.0	9.0	9.0
6	19.0	18.5	13.5	11.0	12.0	10.5	10.0	10.0	8.0	8.0	9.5	9.0
7	18.5	18.0	11.0	11.0	10.5	10.5	10.0	10.0	8.5	8.0	9.5	9.5
8	18.5	18.0	11.0	11.0	10.5	10.5	10.0	10.0	8.0	8.0	10.0	9.5
9	19.0	18.0	11.5	11.0	10.5	10.5	10.5	10.0	8.0	7.0	10.5	10.0
10	19.0	18.5	11.0	9.5	10.5	9.5	11.0	10.5	7.0	7.0	11.0	10.5
11	18.5	18.5	9.5	9.0	9.5	9.5	11.5	11.0	7.0	7.0	10.5	9.5
12	18.5	18.0	9.0	9.0	9.5	9.5	11.5	10.5	7.0	7.0	9.5	9.0
13	18.0	18.0	9.5	9.0	9.5	9.5	10.5	10.0	7.0	7.0	9.0	9.0
14	18.5	18.0	10.0	9.0	9.5	9.5	10.0	10.0	8.0	7.0	9.0	8.0
15	18.5	16.0	11.0	9.5	9.5	9.5	10.0	10.0	8.0	8.0	8.0	7.0
16	17.0	16.0	11.0	10.5	9.5	9.5	10.0	10.0	8.0	7.0	8.5	8.0
17	16.5	15.5	11.0	9.5	9.5	9.5	10.0	9.5	7.0	7.0	8.5	7.0
18	15.5	13.5	9.5	9.0	9.5	9.5	9.5	9.5	7.0	7.0	8.0	7.0
19	13.5	13.5	10.0	9.0	9.5	9.5	9.5	9.5	7.0	7.0	9.0	8.0
20	13.5	13.5	10.5	10.0	9.5	9.5	9.5	9.0	7.0	7.0	9.5	9.0
21	14.0	13.5	10.5	10.5	9.5	9.5	9.5	9.0	7.0	7.0	9.5	9.0
22	13.5	13.5	11.0	10.5	9.5	9.5	9.5	9.0	8.5	7.0	9.0	8.0
23	14.0	13.5	11.0	10.5	9.5	9.5	9.0	9.0	8.5	7.0	8.0	7.0
24	13.5	13.5	12.0	11.0	9.5	9.5	9.5	9.0	7.0	7.0	8.5	8.0
25	13.5	13.5	13.5	12.0	9.5	9.5	9.5	9.5	7.0	7.0	8.0	7.0
26	13.5	13.5	13.5	13.5	10.0	9.5	9.5	9.5	7.0	7.0	8.0	7.0
27	13.5	13.5	13.5	13.5	10.0	10.0	10.0	9.5	7.0	7.0	8.0	8.0
28	13.5	13.5	13.5	13.5	10.0	10.0	10.0	10.0	7.0	7.0	9.5	8.0
29	13.5	13.5	13.5	11.0	10.0	10.0	10.0	9.5	---	---	9.5	9.0
30	13.5	11.0	11.0	10.5	10.0	10.0	9.5	9.5	---	---	9.5	9.0
31	11.5	11.5	---	---	10.0	10.0	9.5	9.5	---	---	9.5	9.0
MONTH	20.5	11.0	14.0	9.0	12.0	9.0	11.5	9.0	10.0	7.0	11.0	7.0

02149702 GREEN RIVER NEAR SALUDA, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.0	11.5	11.0	16.0	16.0	18.0	16.5	20.0	19.0	21.0	20.5
2	11.0	10.5	11.0	11.0	16.5	16.0	18.0	17.0	20.0	19.5	21.5	20.5
3	13.0	11.0	11.5	11.0	16.5	16.0	19.5	18.0	20.0	19.0	21.5	21.0
4	11.0	11.0	11.5	11.5	16.5	16.0	19.5	18.5	19.5	19.0	21.0	20.0
5	11.0	11.0	11.5	11.0	16.5	15.5	19.0	18.5	19.5	19.0	20.0	19.0
6	11.0	9.0	11.5	10.0	16.5	16.0	18.5	18.5	19.5	18.5	19.0	18.0
7	9.5	8.5	11.5	10.0	16.5	16.0	19.0	18.5	18.5	18.5	19.0	18.5
8	9.5	9.0	11.5	10.0	16.5	16.0	19.5	18.5	18.5	18.5	19.0	19.0
9	9.0	8.5	11.5	11.0	18.0	15.5	19.5	18.5	19.0	18.5	19.5	19.0
10	9.0	8.5	11.5	11.5	18.0	16.5	19.5	18.5	19.0	18.5	19.5	19.5
11	9.0	8.5	12.0	11.5	18.0	16.5	19.0	18.5	19.0	18.5	21.0	19.5
12	9.5	9.0	12.0	12.0	18.0	16.5	19.5	19.0	19.0	18.5	21.5	20.0
13	10.5	9.5	12.0	11.0	18.0	15.5	20.0	19.0	19.5	18.5	21.0	20.0
14	11.0	10.5	12.0	11.0	18.0	16.0	20.0	19.0	19.5	18.5	20.5	20.0
15	11.0	10.5	12.0	12.0	18.0	16.5	20.0	19.0	19.5	19.0	20.0	20.0
16	10.5	9.0	13.0	12.0	18.0	16.5	20.0	19.0	20.0	19.0	20.0	19.5
17	10.0	9.0	13.0	12.0	16.5	15.5	20.0	19.0	20.0	20.0	20.0	19.5
18	10.0	9.0	13.5	13.0	16.5	15.5	20.0	19.0	20.5	19.5	20.0	19.0
19	11.0	9.0	14.5	13.0	18.0	15.5	20.0	19.0	21.0	20.0	20.0	18.5
20	10.0	9.5	14.5	14.0	18.0	16.5	20.0	19.0	21.0	20.0	19.5	18.0
21	11.0	10.0	14.0	14.0	17.0	16.5	20.0	19.0	21.0	20.0	20.0	19.0
22	10.5	10.5	14.0	14.0	18.0	16.5	19.5	19.0	21.5	19.5	20.0	18.0
23	11.0	10.5	15.5	15.5	18.0	18.0	19.0	18.5	21.0	19.5	18.0	16.5
24	11.0	9.5	16.0	15.0	18.0	17.0	18.5	18.5	21.0	20.0	17.0	16.5
25	10.0	9.0	16.0	15.5	18.0	16.0	19.0	18.5	22.0	20.0	16.5	16.5
26	11.0	9.5	16.0	15.5	18.0	15.5	19.5	19.0	21.0	21.0	16.5	16.5
27	11.0	10.0	15.5	14.5	18.0	16.0	20.0	19.5	21.0	20.5	18.0	16.5
28	11.0	10.0	15.0	14.5	17.0	15.5	20.5	19.5	21.0	21.0	18.0	16.5
29	11.5	11.0	16.0	14.5	18.0	15.5	20.0	19.5	21.0	20.5	17.0	16.5
30	11.5	11.0	16.0	15.5	18.0	16.0	20.5	19.5	21.0	20.5	16.5	16.0
31	---	---	16.5	15.5	---	---	20.0	19.0	21.0	20.5	---	---
MONTH	13.0	8.5	16.5	10.0	18.0	15.5	20.5	16.5	22.0	18.5	21.5	16.0
YEAR	22.0	7.0										

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
CHOWAN RIVER BASIN										
02053021 - JACKS SWAMP NR PLEASANT HILL N C (LAT 36 30 55 LONG 077 32 35)										
OCT., 1973										
16...	1235	20	2.3	.9	4.7	3.3	12	0	10	5.9
02053249 - DEEP CREEK AT N C 45 NR COFIELD N C (LAT 36 22 25 LONG 076 56 00)										
OCT., 1973										
16...	1605	25	3.9	1.9	8.8	3.0	15	0	12	4.4
ROANOKE RIVER BASIN										
02070806 - HUFFINES MILL CR NR BETHANY N C (LAT 36 20 00 LONG 079 51 26)										
OCT., 1973										
19...	0945	17	2.4	1.2	4.0	2.1	19	0	16	1.0
JUNE, 1974										
27...	1930	19	2.3	1.0	3.2	1.3	17	0	14	.7
02077629 - MAYO CREEK TRIB NEAR ALLENSVILLE N C (LAT 36 23 55 LONG 078 54 05)										
OCT., 1973										
17...	1300	21	3.3	1.3	7.2	2.3	34	0	28	.5
02081082 - HARDISON CREEK NR ROBERSON STORE N C (LAT 35 43 20 LONG 076 57 30)										
OCT., 1973										
18...	0900	9.6	2.3	1.1	5.5	2.7	3	0	2	9.4
PAMLICO RIVER BASIN										
02082824 - FISHING CREEK NEAR MIDDLEBURG N C (LAT 36 23 06 LONG 078 19 05)										
OCT., 1973										
18...	1055	22	2.1	1.2	6.3	2.9	18	0	15	2.0
JUNE, 1974										
27...	1130	20	2.7	.8	5.3	1.8	17	0	14	2.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)
CHOWAN RIVER BASIN--Continued										
02053021 - JACKS SWAMP NR PLEASANT HILL N C (LAT 36 30 55 LONG 077 32 35)										
OCT., 1973 16...	5.7	.4	--	--	--	--	--	--	--	--
02053249 - DEEP CREEK AT N C 45 NR COFIELD N C (LAT 36 22 25 LONG 076 56 00)										
OCT., 1973 16...	11	.1	--	--	--	--	--	--	--	--
ROANOKE RIVER BASIN--Continued										
02070806 - HUFFINES MILL CK NR BETHANY N C (LAT 36 20 00 LONG 079 51 26)										
OCT., 1973 19...	2.1	.1	--	--	--	--	--	--	--	--
JUNE, 1974 27...	1.3	.1	--	--	--	--	--	--	--	--
02077629 - MAYO CREEK TRIB NEAR ALLENSVILLE N C (LAT 36 23 55 LONG 078 54 05)										
OCT., 1973 17...	3.3	.1	--	--	--	--	--	--	--	--
02081082 - HARDISON CREEK NR ROBERSON STORE N C (LAT 35 43 20 LONG 076 57 30)										
OCT., 1973 18...	5.2	.1	--	--	--	--	--	--	--	--
PAMLICO RIVER BASIN--Continued										
02082824 - FISHING CREEK NEAR MIDDLEBURG N C (LAT 36 23 06 LONG 078 19 05)										
OCT., 1973 18...	4.1	.1	--	--	--	--	--	--	--	--
JUNE, 1974 27...	3.8	.1	.50	.49	.01	.00	.39	.29	.40	.11

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
CHOWAN RIVER BASIN--Continued										
02053021 - JACKS SWAMP NR PLEASANT HILL N C (LAT 36 30 55 LONG 077 32 35)										
OCT., 1973 16...	--	--	--	--	--	--	--	--	49	49
02053249 - DEEP CREEK AT N C 45 NR COFIELD N C (LAT 36 22 25 LONG 076 56 00)										
OCT., 1973 16...	--	--	--	--	--	--	--	--	80	66
ROANOKE RIVER BASIN--Continued										
02070806 - HUFFINES MILL CR NR BETHANY N C (LAT 36 20 00 LONG 079 51 26)										
OCT., 1973 19...	--	--	--	--	--	--	--	--	39	39
JUNE, 1974 27...	--	--	--	--	--	--	--	--	43	37
02077629 - MAYO CREEK TRIB NEAR ALLENSVILLE N C (LAT 36 23 55 LONG 078 54 05)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	52	56
02081082 - HARDISON CREEK NR ROBERSON STORE N C (LAT 35 43 20 LONG 076 57 30)										
OCT., 1973 18...	--	--	--	--	--	--	--	--	67	37
PAMLICO RIVER BASIN--Continued										
02082824 - FISHING CREEK NEAR MIDDLEBURG N C (LAT 36 23 06 LONG 078 19 05)										
OCT., 1973 18...	--	--	--	--	--	--	--	--	38	50
JUNE, 1974 27...	.29	.90	4.0	.06	.03	.02	.04	.01	48	47

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	CARBON DIOXIDE (CO2) (MG/L)
CHOWAN RIVER BASIN--Continued										
02053021 - JACKS SWAMP NR PLEASANT HILL N C (LAT 36 30 55 LONG 077 32 35)										
OCT., 1973 16...	.07	9	0	43	.7	41	7.2	15.5	80	1.2
02053249 - DEEP CREEK AT N C 45 NR COFIELD N C (LAT 36 22 25 LONG 076 56 00)										
OCT., 1973 16...	.11	18	5	47	.9	74	7.0	17.5	10	2.4
ROANOKE RIVER BASIN--Continued										
02070806 - HUFFINES MILL CR NR BETHANY N C (LAT 36 20 00 LONG 079 51 26)										
OCT., 1973 19...	.05	11	0	39	.5	41	6.2	9.5	5	.2
JUNE, 1974 27...	.06	10	0	38	.4	38	7.0	18.5	30	2.7
02077629 - MAYO CREEK TRIB NEAR ALLENSVILLE N C (LAT 36 23 55 LONG 078 54 05)										
OCT., 1973 17...	.07	14	0	49	.9	58	7.9	13.0	10	.7
02081082 - HARDISON CREEK NR ROBERSON STORE N C (LAT 35 43 20 LONG 076 57 30)										
OCT., 1973 18...	.09	10	8	47	.7	47	5.6	13.0	30	12
PAMLICO RIVER BASIN--Continued										
02082824 - FISHING CREEK NEAR MIDDLEBURG N C (LAT 36 23 06 LONG 078 19 05)										
OCT., 1973 18...	.05	10	0	50	.9	51	6.9	10.5	5	3.6
JUNE, 1974 27...	.07	10	0	48	.7	50	6.6	20.0	40	6.8

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
PAMLICO RIVER BASIN--Continued										
02082920 - WHITE OAK SWAMP NEAR ACTON N C (LAT 36 09 59 LONG 078 00 05)										
OCT., 1973 17...	1445	23	4.3	2.5	6.7	3.7	31	0	25	5.3
NEUSE RIVER BASIN										
02086300 - ROCKY CREEK NEAR BAHAMA N C (LAT 36 10 30 LONG 078 49 20)										
OCT., 1973 17...	1045	7.6	6.0	5.0	7.7	1.7	54	0	44	4.0
02087173 - HORSE CREEK TRIB AT SR 1140 NR POCOMOKE N C (LAT 36 02 33 LONG 078 31 03)										
OCT., 1973 17...	1755	24	2.5	2.0	4.9	2.1	28	0	23	1.5
JUNE, 1974 27...	1030	24	4.0	1.7	4.4	1.2	26	0	21	4.6
02087499 - NEUSE RIVER TRIB ABOVE SR 1705 NEAR CLAYTON N C (LAT 35 39 05 LONG 078 24 11)										
NOV., 1973 08...	1050	17	3.7	2.4	4.4	3.0	24	0	20	3.0
02088314 - BEAVERDAM CREEK NEAR DOBBERSVILLE N C (LAT 35 17 56 LONG 078 15 57)										
NOV., 1973 08...	1600	11	1.2	1.4	4.2	1.8	8	0	7	5.6
02089168 - MILL CREEK NEAR SEVENS SPRINGS N C (LAT 35 14 14 LONG 077 52 57)										
OCT., 1973 16...	1345	9.0	.8	.7	2.6	1.3	0	0	0	6.5
02090666 - WHITE OAK SWAMP NEAR MOUNT PLEASANT N C (LAT 35 48 55 LONG 078 04 42)										
OCT., 1973 17...	1145	6.3	1.6	1.2	5.2	2.0	9	0	7	2.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)
PAMLICO RIVER BASIN--Continued										
02082920 - WHITE OAK SWAMP NEAR ACTON N C (LAT 36 09 59 LONG 078 00 05)										
OCT., 1973 17...	4.1	.1	--	--	--	--	--	--	--	--
NEUSE RIVER BASIN--Continued										
02086300 - ROCKY CREEK NEAR BAHAMA N C (LAT 36 10 30 LONG 078 49 20)										
OCT., 1973 17...	5.1	.1	--	--	--	--	--	--	--	--
02087173 - HORSE CREEK TRIB AT SR 1140 NR POCOMOKE N C (LAT 36 02 33 LONG 078 31 03)										
OCT., 1973 17...	1.6	.1	--	--	--	--	--	--	--	--
JUNE, 1974 27...	1.7	.1	--	--	--	--	--	--	--	--
02087499 - NEUSE RIVER TRIB ABOVE SR 1705 NEAR CLAYTON N C (LAT 35 39 05 LONG 078 24 11)										
NOV., 1973 08...	2.9	.1	--	--	--	--	--	--	--	--
02088314 - BEAVERDAM CREEK NEAR DOBBERSVILLE N C (LAT 35 17 56 LONG 078 15 57)										
NOV., 1973 08...	5.4	.1	--	--	--	--	--	--	--	--
02089168 - MILL CREEK NEAR SEVENS SPRINGS N C (LAT 35 14 14 LONG 077 52 57)										
OCT., 1973 16...	3.6	.1	--	--	--	--	--	--	--	--
02090666 - WHITE OAK SWAMP NEAR MOUNT PLEASANT N C (LAT 35 48 55 LONG 078 04 42)										
OCT., 1973 17...	5.4	.1	--	--	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
PAMLICO RIVER BASIN--Continued										
02082920 - WHITE OAK SWAMP NEAR ACTON N C (LAT 36 09 59 LONG 078 00 05)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	61	65
NEUSE RIVER BASIN--Continued										
02086300 - ROCKY CREEK NEAR BAHAMA N C (LAT 36 10 30 LONG 078 49 20)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	84	64
02087173 - HORSE CREEK TRIB AT SR 1140 NR PUCOMOKE N C (LAT 36 02 33 LONG 078 31 03)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	43	53
JUNE, 1974 27...	--	--	--	--	--	--	--	--	49	55
02087499 - NEUSE RIVER TRIB ABOVE SR 1705 NEAR CLAYTON N C (LAT 35 39 05 LONG 078 24 11)										
NOV., 1973 08...	--	--	--	--	--	--	--	--	45	48
02088314 - BEAVERDAM CREEK NEAR DOBBERSVILLE N C (LAT 35 17 56 LONG 078 15 57)										
NOV., 1973 08...	--	--	--	--	--	--	--	--	46	35
02089168 - MILL CREEK NEAR SEVENS SPRINGS N C (LAT 35 14 14 LONG 077 52 57)										
OCT., 1973 16...	--	--	--	--	--	--	--	--	21	25
02090666 - WHITE OAK SWAMP NEAR MOUNT PLEASANT N C (LAT 35 48 55 LONG 078 04 42)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	25	28

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	CARBON DIOXIDE (CO2) (MG/L)
PAMLICO RIVER BASIN--Continued										
02082920 - WHITE OAK SWAMP NEAR ACTON N C (LAT 36 09 59 LONG 078 00 05)										
OCT., 1973										
17...	.08	21	0	36	.6	60	7.4	14.0	20	2.0
NEUSE RIVER BASIN--Continued										
02086300 - ROCKY CREEK NEAR BAHAMA N C (LAT 36 10 30 LONG 078 49 20)										
OCT., 1973										
17...	.11	36	0	31	.6	115	8.3	13.0	5	.4
02087173 - HORSE CREEK TRIB AT SR 1140 NR POCOMOKE N C (LAT 36 02 33 LONG 078 31 03)										
OCT., 1973										
17...	.06	14	0	38	.6	54	7.2	13.5	5	2.6
JUNE, 1974										
27...	.07	17	0	34	.5	53	7.0	20.0	20	4.2
02087499 - NEUSE RIVER TRIB ABOVE SR 1705 NEAR CLAYTON N C (LAT 35 39 05 LONG 078 24 11)										
NOV., 1973										
08...	.06	19	0	29	.4	54	6.7	10.5	10	7.7
02088314 - BEAVERDAM CREEK NEAR DOBBERSVILLE N C (LAT 35 17 56 LONG 078 15 57)										
NOV., 1973										
08...	.06	9	2	45	.6	37	6.8	11.5	40	2.0
02089168 - MILL CREEK NEAR SEVENS SPRINGS N C (LAT 35 14 14 LONG 077 52 57)										
OCT., 1973										
16...	.03	5	5	46	.5	46	4.3	18.0	0	.0
02090666 - WHITE OAK SWAMP NEAR MOUNT PLEASANT N C (LAT 35 48 55 LONG 078 04 42)										
OCT., 1973										
17...	.03	9	2	50	.8	42	6.8	15.0	10	2.3

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
NEUSE RIVER BASIN--Continued										
02091476 - RAINBOW CREEK AT US 258 NEAR BROWNTOWN N C (LAT 35 24 00 LONG 077 34 50)										
OCT., 1973 16...	1300	11	1.8	1.0	3.9	1.9	4	0	3	5.3
02091949 - CLAYFOOT SWAMP NEAR SHELMERDINE N C (LAT 35 27 16 LONG 077 13 12)										
OCT., 1973 17...	1600	14	4.0	1.0	5.8	2.4	12	0	10	5.9
02092551 - CROOKED RUN AT SR 1123 NEAR TRENTON N C (LAT 35 02 25 LONG 077 22 07)										
OCT., 1973 10...	1230	6.0	3.7	.6	3.1	.9	4	0	3	13
02092569 - BRICE CREEK AT SR 1100 AT CROATAN N C (LAT 34 57 56 LONG 076 58 26)										
OCT., 1973 17...	1500	6.5	5.0	.6	3.9	.4	10	0	8	12
CAPE FEAR RIVER BASIN										
02096845 - CANE CREEK NEAR BUCKHORN N C (LAT 36 01 19 LONG 079 10 29)										
OCT., 1973 16...	1130	23	7.1	3.0	5.9	1.3	44	0	36	1.5
02096975 - WARD CREEK NEAR BYNUM N C (LAT 35 46 40 LONG 079 05 44)										
OCT., 1973 17...	1030	29	6.2	2.7	7.7	1.6	44	0	36	2.0
02100459 - SANDY CREEK AT MELANCTON N C (LAT 35 50 40 LONG 079 39 40)										
NOV., 1973 08...	1100	24	6.7	3.0	5.9	2.2	39	0	32	5.0
JUNE, 1974 27...	1345	11	5.0	2.3	3.0	2.6	16	0	13	8.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)
NEUSE RIVER BASIN--Continued										
02091476 - RAINBOW CREEK AT US 258 NEAR BROWNTOWN N C (LAT 35 24 00 LONG 077 34 50)										
OCT., 1973 16...	4.0	.1	--	--	--	--	--	--	--	--
02091949 - CLAYFOOT SWAMP NEAR SHELMERDINE N C (LAT 35 27 16 LONG 077 13 12)										
OCT., 1973 17...	8.4	.1	--	--	--	--	--	--	--	--
02092551 - CROOKED RUN AT SR 1123 NEAR TRENTON N C (LAT 35 02 25 LONG 077 22 07)										
OCT., 1973 10...	4.3	.2	--	--	--	--	--	--	--	--
02092569 - BRICE CREEK AT SR 1100 AT CROATAN N C (LAT 34 57 56 LONG 076 58 26)										
OCT., 1973 17...	5.3	.1	--	--	--	--	--	--	--	--
CAPE FEAR RIVER BASIN--Continued										
02096845 - CANE CREEK NEAR BUCKHORN N C (LAT 36 01 19 LONG 079 10 29)										
OCT., 1973 16...	4.2	.2	--	--	--	--	--	--	--	--
02096975 - WARD CREEK NEAR BYNUM N C (LAT 35 46 40 LONG 079 05 44)										
OCT., 1973 17...	5.2	.1	--	--	--	--	--	--	--	--
02100459 - SANDY CREEK AT MELANCTON N C (LAT 35 50 40 LONG 079 39 40)										
NOV., 1973 08...	3.7	.1	--	--	--	--	--	--	--	--
JUNE, 1974 27...	2.8	.1	1.1	.95	.08	.08	.80	.52	.88	.28

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NEUSE RIVER BASIN--Continued										
02091476 - RAINBOW CREEK AT US 258 NEAR BROWNTOWN N C (LAT 35 24 00 LONG 077 34 50)										
OCT., 1973 16...	--	--	--	--	--	--	--	--	32	31
02091949 - CLAYFOOT SWAMP NEAR SHELMERDINE N C (LAT 35 27 16 LONG 077 13 12)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	56	48
02092551 - CROOKED RUN AT SR 1123 NEAR TRENTON N C (LAT 35 02 25 LONG 077 22 07)										
OCT., 1973 10...	--	--	--	--	--	--	--	--	80	34
02092569 - BRICE CREEK AT SR 1100 AT CROATAN N C (LAT 34 57 56 LONG 076 58 26)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	80	39
CAPE FEAR RIVER BASIN--Continued										
02096845 - CANE CREEK NEAR BUCKHORN N C (LAT 36 01 19 LONG 079 10 29)										
OCT., 1973 16...	--	--	--	--	--	--	--	--	74	68
02096975 - WARD CREEK NEAR BYNUM N C (LAT 35 46 40 LONG 079 05 44)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	68	76
02100459 - SANDY CREEK AT MELANCTON N C (LAT 35 50 40 LONG 079 39 40)										
NOV., 1973 08...	--	--	--	--	--	--	--	--	67	70
JUNE, 1974 27...	.60	2.0	8.8	.07	.12	.05	.13	.04	59	47

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	CARBON DIOXIDE (CO2) (MG/L)
NEUSE RIVER BASIN--Continued										
02091476 - RAINBOW CREEK AT US 258 NEAR BROWNTOWN N C (LAT 35 24 00 LONG 077 34 50)										
OCT., 1973 16...	.04	9	5	43	.6	36	6.0	17.0	20	6.4
02091949 - CLAYFOOT SWAMP NEAR SHELMERDINE N C (LAT 35 27 16 LONG 077 13 12)										
OCT., 1973 17...	.08	14	4	42	.7	60	6.5	15.5	40	6.1
02092551 - CROOKED RUN AT SR 1123 NEAR TRENTON N C (LAT 35 02 25 LONG 077 22 07)										
OCT., 1973 10...	.11	12	8	34	.4	39	5.1	16.0	200	51
02092569 - BRICE CREEK AT SR 1100 AT CROATAN N C (LAT 34 57 56 LONG 076 58 26)										
OCT., 1973 17...	.11	15	7	35	.4	40	6.4	15.0	200	6.4
CAPE FEAR RIVER BASIN--Continued										
02096845 - CANE CREEK NEAR BUCKHORN N C (LAT 36 01 19 LONG 079 10 29)										
OCT., 1973 16...	.10	30	0	29	.5	80	7.3	13.6	5	3.5
02096975 - WARD CREEK NEAR BYNUM N C (LAT 35 46 40 LONG 079 05 44)										
OCT., 1973 17...	.09	27	0	37	.7	80	7.4	12.0	5	2.8
02100459 - SANDY CREEK AT MELANCTON N C (LAT 35 50 40 LONG 079 39 40)										
NOV., 1973 08...	.09	29	0	29	.5	74	7.5	14.0	5	2.0
JUNE, 1974 27...	.08	22	9	21	.3	65	6.2	19.5	400	16

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
CAPE FEAR RIVER BASIN--Continued										
02100749 - DEEP RIVER TRIB #4 NEAR JUGTOWN N C (LAT 35 29 10 LONG 079 36 13)										
OCT., 1973										
17...	1310	19	5.0	1.6	4.4	1.5	31	0	25	4.0
JUNE, 1974										
27...	1230	14	8.0	3.8	7.2	2.4	33	0	27	6.9
02102908 - FLAT CREEK NEAR INVERNESS N C (LAT 35 10 54 LONG 079 10 40)										
OCT., 1973										
18...	1410	5.2	.4	.3	1.5	.4	3	0	2	5.0
02107154 - SOUTH RIVER TRIB AT N C 41 AT TOMAHAWK N C (LAT 34 42 15 LONG 078 20 25)										
OCT., 1973										
17...	1835	5.4	.5	.4	2.3	.6	0	0	0	5.6
02108608 - LILLINGTON CREEK NEAR ST HELENA N C (LAT 34 30 27 LONG 077 48 57)										
OCT., 1973										
17...	1540	6.2	4.8	1.1	4.4	1.8	14	0	11	11
WACCAMAW RIVER BASIN										
02109481 - JUNIPER CREEK AT N C 211 NEAR PROSPECT N C (LAT 34 06 07 LONG 078 18 25)										
OCT., 1973										
18...	1140	2.2	.6	.4	2.1	.1	0	0	0	16
PEE DEE RIVER BASIN										
02111275 - BIG WARRIOR CREEK SUBTRIB NEAR BOOMER N C (LAT 36 03 04 LONG 081 15 47)										
NOV., 1973										
09...	1230	17	2.6	.9	3.0	1.3	16	0	13	2.0
02112202 - GRAYS CREEK NEAR CLINGMAN N C (LAT 36 10 27 LONG 080 58 03)										
NOV., 1973										
09...	1030	12	2.3	.8	2.5	2.4	12	0	10	4.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)
CAPE FEAR RIVER BASIN--Continued										
02100749 - DEEP RIVER TRIB #4 NEAR JUGTOWN N C (LAT 35 29 10 LONG 079 36 13)										
OCT., 1973 17...	2.2	.1	--	--	--	--	--	--	--	--
JUNE, 1974 27...	9.2	.1	--	--	--	--	--	--	--	--
02102908 - FLAT CREEK NEAR INVERNESS N C (LAT 35 10 54 LONG 079 10 40)										
OCT., 1973 18...	.7	.1	--	--	--	--	--	--	--	--
02107154 - SOUTH RIVER TRIB AT N C 41 AT TOMAHAWK N C (LAT 34 42 15 LONG 078 20 25)										
OCT., 1973 17...	3.3	.1	--	--	--	--	--	--	--	--
02108608 - LILLINGTON CREEK NEAR ST HELENA N C (LAT 34 30 27 LONG 077 48 57)										
OCT., 1973 17...	8.4	.3	--	--	--	--	--	--	--	--
WACCAMAW RIVER BASIN--Continued										
02109481 - JUNIPER CREEK AT N C 211 NEAR PROSPECT N C (LAT 34 06 07 LONG 078 18 25)										
OCT., 1973 18...	5.2	.1	--	--	--	--	--	--	--	--
PEE DEE RIVER BASIN--Continued										
02111275 - BIG WARRIOR CREEK SUBTRIB NEAR BOOMER N C (LAT 36 03 04 LONG 081 15 47)										
NOV., 1973 09...	1.1	1.6	--	--	--	--	--	--	--	--
02112202 - GRAYS CREEK NEAR CLINGMAN N C (LAT 36 10 27 LONG 080 58 03)										
NOV., 1973 09...	2.4	.8	--	--	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
CAPE FEAR RIVER BASIN--Continued										
02100749 - DEEP RIVER TRIB #4 NEAR JUGTOWN N C (LAT 35 29 10 LONG 079 36 13)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	39	53
JUNE, 1974 27...	--	--	--	--	--	--	--	--	83	68
02102908 - FLAT CREEK NEAR INVERNESS N C (LAT 35 10 54 LONG 079 10 40)										
OCT., 1973 18...	--	--	--	--	--	--	--	--	8	15
02107154 - SOUTH RIVER TRIB AT N C 41 AT TOMAHAWK N C (LAT 34 42 15 LONG 078 20 25)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	20	18
02108608 - LILLINGTON CREEK NEAR ST HELENA N C (LAT 34 30 27 LONG 077 48 57)										
OCT., 1973 17...	--	--	--	--	--	--	--	--	111	45
WACCAMAW RIVER BASIN--Continued										
02109481 - JUNIPER CREEK AT N C 211 NEAR PROSPECT N C (LAT 34 06 07 LONG 078 18 25)										
OCT., 1973 18...	--	--	--	--	--	--	--	--	60	27
PEE DEE RIVER BASIN--Continued										
02111275 - BIG WARRIOR CREEK SUBTRIB NEAR BOOMER N C (LAT 36 03 04 LONG 081 15 47)										
NOV., 1973 09...	--	--	--	--	--	--	--	--	32	37
02112202 - GRAYS CREEK NEAR CLINGMAN N C (LAT 36 10 27 LONG 080 58 03)										
NOV., 1973 09...	--	--	--	--	--	--	--	--	32	33

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	CARBON DIOXIDE (CO2) (MG/L)
CAPE FEAR RIVER BASIN--Continued										
02100749 - DEEP RIVER TRIB #4 NEAR JUGTOWN N C (LAT 35 29 10 LONG 079 36 13)										
OCT., 1973										
17...	.05	19	0	31	.4	55	7.5	14.5	5	1.6
JUNE, 1974										
27...	.11	36	9	29	.5	103	7.0	20.5	40	5.3
02102908 - FLAT CREEK NEAR INVERNESS N C (LAT 35 10 54 LONG 079 10 40)										
OCT., 1973										
18...	.01	2	0	54	.4	9	7.5	12.5	20	.2
02107154 - SOUTH RIVER TRIB AT N C 41 AT TOMAHAWK N C (LAT 34 42 15 LONG 078 20 25)										
OCT., 1973										
17...	.03	3	3	58	.6	25	4.7	16.5	50	.0
02108608 - LILLINGTON CREEK NEAR ST HELENA N C (LAT 34 30 27 LONG 077 48 57)										
OCT., 1973										
17...	.15	17	5	34	.5	53	6.2	16.0	400	14
WACCAMAW RIVER BASIN--Continued										
02109481 - JUNIPER CREEK AT N C 211 NEAR PROSPECT N C (LAT 34 06 07 LONG 078 18 25)										
OCT., 1973										
18...	.08	3	3	58	.5	59	4.0	16.0	300	.0
PEE DEE RIVER BASIN--Continued										
02111275 - BIG WARRIOR CREEK SUBTRIB NEAR BOOMER N C (LAT 36 03 04 LONG 081 15 47)										
NOV., 1973										
09...	.04	10	0	36	.4	22	7.2	11.0	5	1.6
02112202 - GRAYS CREEK NEAR CLINGMAN N C (LAT 36 10 27 LONG 080 58 03)										
NOV., 1973										
09...	.04	9	0	31	.4	25	7.5	11.0	5	.6

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
PEE DEE RIVER BASIN--Continued										
02112401 - ENDICOTT CREEK NEAR BLEVINS STORE N C (LAT 36 28 15 LONG 080 50 06)										
OCT., 1973										
24...	1730	7.5	1.1	.8	1.5	.8	9	0	7	1.5
02114256 - EAST PRONG LITTLE YADKIN R TRIB NEAR CAPELLA N C (LAT 36 21 49 LONG 080 21 08)										
OCT., 1973										
18...	1615	19	2.0	1.0	3.6	2.1	20	0	16	.5
JUNE, 1974										
27...	1800	18	2.3	.8	2.8	1.5	16	0	13	3.0
02115496 - LITTLE FORBUSH CREEK NEAR FORBUSH N C (LAT 36 11 13 LONG 080 34 59)										
OCT., 1973										
25...	0900	9.5	2.0	1.1	2.6	1.6	12	0	10	3.0
02115946 - FRYES CREEK TRIB AT SR 1506 NEAR MIDWAY N C (LAT 35 57 30 LONG 080 14 32)										
OCT., 1973										
18...	1100	11	4.4	1.8	5.0	3.2	29	0	24	3.0
JUNE, 1974										
27...	1600	22	4.7	1.5	5.0	1.9	28	0	23	2.2
02117485 - OLIN CREEK AT SR 1868 NEAR UNION GROVE N C (LAT 35 59 15 LONG 080 55 16)										
OCT., 1973										
24...	0945	9.7	1.4	.9	2.8	1.4	11	0	9	.7
02124193 - PARK CREEK AT SR 1614 NEAR KANNAPOLIS N C (LAT 35 29 53 LONG 080 42 58)										
NOV., 1973										
09...	0800	26	5.7	2.0	6.1	3.5	37	0	30	2.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)
PEE DEE RIVER BASIN--Continued										
02112401 - ENDICOTT CREEK NEAR BLEVINS STORE N C (LAT 36 28 15 LONG 080 50 06)										
OCT., 1973										
24...	.1	.1	--	--	--	--	--	--	--	--
02114256 - EAST PRONG LITTLE YADKIN R TRIB NEAR CAPELLA N C (LAT 36 21 49 LONG 080 21 08)										
OCT., 1973										
18...	1.5	.1	--	--	--	--	--	--	--	--
JUNE, 1974										
27...	1.0	.1	.09	.05	.00	.01	.03	.13	.03	.00
02115496 - LITTLE FORBUSH CREEK NEAR FORBUSH N C (LAT 36 11 13 LONG 080 34 59)										
OCT., 1973										
25...	1.1	.1	--	--	--	--	--	--	--	--
02115946 - FRYES CREEK TRIB AT SR 1506 NEAR MIDWAY N C (LAT 35 57 30 LONG 080 14 32)										
OCT., 1973										
18...	3.3	.2	--	--	--	--	--	--	--	--
JUNE, 1974										
27...	2.6	.2	--	--	--	--	--	--	--	--
02117485 - OLIN CREEK AT SR 1868 NEAR UNION GROVE N C (LAT 35 59 15 LONG 080 55 16)										
OCT., 1973										
24...	1.0	.1	--	--	--	--	--	--	--	--
02124193 - PARK CREEK AT SR 1614 NEAR KANNAPOLIS N C (LAT 35 29 53 LONG 080 42 58)										
NOV., 1973										
09...	2.3	1.0	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
PEE DEE RIVER BASIN--Continued										
02112401 - ENDICOTT CREEK NEAR BLEVINS STORE N C (LAT 36 28 15 LONG 080 50 06)										
OCT., 1973 24...	--	--	--	--	--	--	--	--	18	18
02114256 - EAST PRONG LITTLE YADKIN R TRIB NEAR CAPELLA N C (LAT 36 21 49 LONG 080 21 08)										
OCT., 1973 18...	--	--	--	--	--	--	--	--	34	40
JUNE, 1974 27...	.14	.12	.53	.02	.03	.02	.01	.01	22	38
02115496 - LITTLE FORBUSH CREEK NEAR FORBUSH N C (LAT 36 11 13 LONG 080 34 59)										
OCT., 1973 25...	--	--	--	--	--	--	--	--	25	27
02115946 - FRYES CREEK TRIB AT SR 1506 NEAR MIDWAY N C (LAT 35 57 30 LONG 080 14 32)										
OCT., 1973 18...	--	--	--	--	--	--	--	--	44	46
JUNE, 1974 27...	--	--	--	--	--	--	--	--	61	54
02117485 - OLIN CREEK AT SR 1868 NEAR UNION GROVE N C (LAT 35 59 15 LONG 080 55 16)										
OCT., 1973 24...	--	--	--	--	--	--	--	--	35	23
02124193 - PARK CREEK AT SR 1614 NEAR KANNAPOLIS N C (LAT 35 29 53 LONG 080 42 58)										
NOV., 1973 09...	--	--	--	--	--	--	--	--	57	67

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	CARBON DIOXIDE (CO2) (MG/L)
PEE DEE RIVER BASIN--Continued										
02112401 - ENDICOTT CREEK NEAR BLEVINS STORE N C (LAT 36 28 15 LONG 080 50 06)										
OCT., 1973										
24...	.02	6	0	32	.3	17	6.9	13.5	5	1.8
02114256 - EAST PRONG LITTLE YADKIN R TRIB NEAR CAPELLA N C (LAT 36 21 49 LONG 080 21 08)										
OCT., 1973										
18...	.05	9	0	40	.5	33	7.3	13.0	5	1.6
JUNE, 1974										
27...	.03	9	0	36	.4	34	6.9	18.0	20	3.2
02115496 - LITTLE FORBUSH CREEK NEAR FORBUSH N C (LAT 36 11 13 LONG 080 34 59)										
OCT., 1973										
25...	.03	10	0	33	.4	29	7.3	8.0	5	1.0
02115946 - FRYES CREEK TRIB AT SR 1506 NEAR MIDWAY N C (LAT 35 57 30 LONG 080 14 32)										
OCT., 1973										
18...	.06	18	0	33	.5	58	7.3	10.5	5	2.3
JUNE, 1974										
27...	.08	18	0	35	.5	59	7.1	19.0	20	3.6
02117485 - OLIN CREEK AT SR 1868 NEAR UNION GROVE N C (LAT 35 59 15 LONG 080 55 16)										
OCT., 1973										
24...	.05	7	0	40	.5	22	6.9	11.5	5	2.2
02124193 - PARK CREEK AT SR 1614 NEAR KANNAPOLIS N C (LAT 35 29 53 LONG 080 42 58)										
NOV., 1973										
09...	.08	22	0	33	.6	69	7.5	12.0	20	1.9

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
PEE DEE RIVER BASIN--Continued										
02129028 - BONES FORK CREEK NEAR HOFFMAN N C (LAT 35 01 26 LONG 079 38 02)										
NOV., 1973										
09...	1200	5.1	.5	.4	1.5	.5	3	0	2	2.0
SANTEE RIVER BASIN										
02140304 - WILSON CREEK NEAR GRAGG N C (LAT 37 05 49 LONG 081 48 28)										
OCT., 1973										
23...	1700	6.7	2.1	.6	2.2	.3	6	0	5	3.0
AUG., 1974										
08...	1230	5.3	1.9	.3	.6	.4	2	--	2	5.7
02142122 - LOWER LITTLE R TRIB AT SR 1124 NR TAYLORSVILLE N (LAT 35 53 24 LONG 081 13 52)										
OCT., 1973										
24...	1130	6.9	2.0	.6	1.7	2.3	8	0	7	1.5
02142692 - KILLIAN CREEK AT SR 1349 NEAR DENVER N C (LAT 35 32 10 LONG 080 03 13)										
OCT., 1973										
25...	1415	20	3.5	1.3	4.1	2.8	23	0	19	2.0
02142988 - HENRY FORK TRIB AT SR 1924 NR PLEASANT GROVE N C (LAT 35 39 07 LONG 081 36 28)										
OCT., 1973										
25...	0830	8.9	1.3	1.0	1.8	1.0	8	0	7	5.3
02149716 - SILVER CREEK NEAR MILL SPRING N C (LAT 35 18 35 LONG 082 12 10)										
OCT., 1973										
24...	1515	19	3.1	1.5	3.2	1.4	22	0	18	1.0
02152514 - LITTLE HARRIS CREEK AT SR 1821 NEAR CAMPBELL N C (LAT 35 22 34 LONG 081 35 45)										
OCT., 1973										
24...	1815	10	1.6	1.1	2.2	2.6	11	0	9	4.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)
PEE DEE RIVER BASIN--Continued										
02129028 - BONES FORK CREEK NEAR HOFFMAN N C (LAT 35 01 26 LONG 079 38 02)										
NOV., 1973										
09...	1.8	.1	--	--	--	--	--	--	--	--
SANTEE RIVER BASIN--Continued										
02140304 - WILSON CREEK NEAR GRAGG N C (LAT 37 05 49 LONG 081 48 28)										
OCT., 1973										
23...	1.6	.1	--	--	--	--	--	--	--	--
AUG., 1974										
08...	.0	.1	.35	.35	.00	.00	.40	.24	.40	.16
02142122 - LOWER LITTLE R TRIB AT SR 1124 NR TAYLORSVILLE N (LAT 35 53 24 LONG 081 13 52)										
OCT., 1973										
24...	2.6	.1	--	--	--	--	--	--	--	--
02142692 - KILLIAN CREEK AT SR 1349 NEAR DENVER N C (LAT 35 32 10 LONG 080 03 13)										
OCT., 1973										
25...	2.4	.2	--	--	--	--	--	--	--	--
02142988 - HENRY FORK TRIB AT SR 1924 NR PLEASANT GROVE N C (LAT 35 39 07 LONG 081 36 28)										
OCT., 1973										
25...	.3	.1	--	--	--	--	--	--	--	--
02149716 - SILVER CREEK NEAR MILL SPRING N C (LAT 35 18 35 LONG 082 12 10)										
OCT., 1973										
24...	.9	.1	--	--	--	--	--	--	--	--
02152514 - LITTLE HARRIS CREEK AT SR 1821 NEAR CAMPBELL N C (LAT 35 22 34 LONG 081 35 45)										
OCT., 1973										
24...	1.3	.1	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
PEE DEE RIVER BASIN--Continued										
02129028 - BONES FORK CREEK NEAR HOFFMAN N C (LAT 35 01 26 LONG 079 38 02)										
NOV., 1973 09...	--	--	--	--	--	--	--	--	20	13
SANTEE RIVER BASIN--Continued										
02140304 - WILSON CREEK NEAR GRAGG N C (LAT 37 05 49 LONG 081 48 28)										
OCT., 1973 23...	--	--	--	--	--	--	--	--	30	20
AUG., 1974 08...	.24	.75	3.3	.01	.03	.02	.00	.01	31	15
02142122 - LOWER LITTLE R TRIB AT SR 1124 NR TAYLORSVILLE N (LAT 35 53 24 LONG 081 13 52)										
OCT., 1973 24...	--	--	--	--	--	--	--	--	17	22
02142692 - KILLIAN CREEK AT SR 1349 NEAR DENVER N C (LAT 35 32 10 LONG 080 03 13)										
OCT., 1973 25...	--	--	--	--	--	--	--	--	45	48
02142988 - HENRY FORK TRIB AT SR 1924 NR PLEASANT GROVE N C (LAT 35 39 07 LONG 081 36 28)										
OCT., 1973 25...	--	--	--	--	--	--	--	--	18	24
02149716 - SILVER CREEK NEAR MILL SPRING N C (LAT 35 18 35 LONG 082 12 10)										
OCT., 1973 24...	--	--	--	--	--	--	--	--	34	41
02152514 - LITTLE HARRIS CREEK AT SR 1821 NEAR CAMPBELL N C (LAT 35 22 34 LONG 081 35 45)										
OCT., 1973 24...	--	--	--	--	--	--	--	--	24	28

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	CARBON DIOXIDE (CO2) (MG/L)
PEE DEE RIVER BASIN--Continued										
02129028 - BONES FORK CREEK NEAR HOFFMAN N C (LAT 35 01 26 LONG 079 38 02)										
NOV.. 1973										
09...	.03	3	0	48	.4	9	6.0	15.0	30	4.8
SANTEE RIVER BASIN--Continued										
02140304 - WILSON CREEK NEAR GRAGG N C (LAT 37 05 49 LONG 081 48 28)										
OCT.. 1973										
23...	.04	8	3	37	.3	19	6.7	8.5	5	1.9
AUG.. 1974										
08...	.04	6	4	17	.1	21	5.0	13.0	40	32
02142122 - LOWER LITTLE R TRIB AT SR 1124 NR TAYLORSVILLE N (LAT 35 53 24 LONG 081 13 52)										
OCT.. 1973										
24...	.02	7	1	26	.3	19	7.6	15.5	5	.3
02142692 - KILLIAN CREEK AT SR 1349 NEAR DENVER N C (LAT 35 32 10 LONG 080 03 13)										
OCT.. 1973										
25...	.06	14	0	34	.5	45	7.3	15.5	0	1.8
02142988 - HENRY FORK TRIB AT SR 1924 NR PLEASANT GROVE N C (LAT 35 39 07 LONG 081 36 28)										
OCT.. 1973										
25...	.02	7	1	31	.3	21	7.4	9.5	10	.5
02149716 - SILVER CREEK NEAR MILL SPRING N C (LAT 35 18 35 LONG 082 12 10)										
OCT.. 1973										
24...	.05	14	0	31	.4	39	7.4	16.0	5	1.4
02152514 - LITTLE HARRIS CREEK AT SR 1421 NEAR CAMPBELL N C (LAT 35 22 34 LONG 081 35 45)										
OCT.. 1973										
24...	.03	9	0	29	.3	30	6.6	15.5	5	4.4

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)

NEUSE RIVER BASIN

02087570 - NEUSE RIVER AT SMITHFIELD, N.C. (LAT 35 30 46 LONG 078 21 00)

DEC., 1973				
21...	1100	1260	98	333
21...	1300	1460	100	395

02091960 - CREEPING SWAMP NEAR CALICO N C (LAT 35 25 42 LONG 077 11 12)

DEC., 1973				
17...	1500	20	2	.11
JAN., 1974				
17...	1445	1.4	2	.01
FEB.				
04...	1040	50	5	.67
14...	1130	8.1	1	.02
MAR.				
14...	1440	1.7	4	.02
APR.				
17...	1110	27	5	.36
MAY				
15...	1045	2.4	13	.08
JUNE				
17...	1430	.26	17	.01
JULY				
31...	1315	.01	15	.00
AUG.				
23...	1120	14	10	.38

02092020 - PALMETTO SWAMP NEAR VANCEBORO N C (LAT 35 20 18 LONG 077 10 16)

NOV., 1973				
26...	1400	.07	8	.00
DEC.				
17...	1430	52	24	3.4
JAN., 1974				
17...	1400	5.7	4	.06
FEB.				
04...	1000	74	43	8.6
14...	1100	14	5	.19
MAR.				
14...	1400	7.5	12	.24
APR.				
17...	1020	34	13	1.2
MAY				
15...	1030	3.5	21	.20
JUNE				
17...	1400	.05	14	.00
AUG.				
23...	1050	330	22	20

CAPE FEAR RIVER BASIN

02102049 - DEEP RIVER AT US HIGHWAY 1 AT MONCURE N C (LAT 35 37 LONG 079 06)

DEC., 1973				
21...	1120	3030	192	1570
21...	1305	3350	200	1810

02102192 - BUCKHORN CREEK NR CORINTH, N.C. (LAT 35 34 18 LONG 078 58 09)

DEC., 1973				
21...	1040	238	130	84
21...	1205	233	109	69

02102500 - CAPE FEAR RIVER AT LILLINGTON, N. C. (LAT 35 24 30 LONG 078 48 48)

DEC., 1973				
21...	1000	5540	139	2080
21...	1200	7230	172	3360

03448000 FRENCH BROAD RIVER AT BENT CREEK, N. C.

LOCATION.--Lat 35°37'07", long 82°35'35", Buncombe County, temperature recorder on right bank opposite gaging station, 50 ft (15 m) downstream from Bent Creek, 0.5 mi (0.8 km) southeast of village of Bent Creek, 6.2 mi (10.0 km) upstream from Hominy Creek, 6.7 mi (10.8 km) south of Asheville, and at mile 157.7 (253.7 km).

DRAINAGE AREA.--676 mi^2 (1751 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1967, water years 1971-72 (partial-record station). Water temperatures: October 1968 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum, 23.0°C July 15, 30; minimum, recorded, 4.0°C Feb. 26, 27.

Period of record:
Water temperatures: Maximum, 25.5°C July 17, 1970; minimum, freezing point on several days during most winters.

REMARKS.--Miscellaneous chemical data published for water years 1955-57. Samples for the 1972 water year were collected by USGS personnel 3.0 mi (4.8 km) upstream at Long Shoals bridge (03447861 French Broad River near Arden), and the analyses were made and furnished by the Tennessee Valley Authority. Chemical data published for Long Shoals bridge for 1954 water year. Temperature data for current year were furnished by the Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	18.0	11.5	9.0	---	---	---	---	9.5	8.5	8.5	6.0
2	18.5	18.0	11.5	9.5	---	---	---	---	9.5	8.5	10.0	8.5
3	19.0	18.0	13.0	9.5	---	---	---	---	10.5	9.5	11.0	10.0
4	19.5	18.0	13.0	10.5	---	---	---	---	10.0	8.0	12.0	10.5
5	20.0	18.0	14.0	11.5	---	---	---	---	8.0	6.5	12.0	11.5
6	19.5	18.0	12.0	10.0	---	---	---	---	6.5	6.5	13.0	11.5
7	18.5	17.0	10.0	9.0	---	---	---	---	8.0	6.5	14.5	13.0
8	18.5	17.0	10.5	9.0	---	---	9.5	8.0	9.0	8.0	15.0	13.5
9	19.0	17.0	10.5	8.5	---	---	8.5	8.0	8.0	6.5	15.0	13.5
10	19.5	18.0	---	---	---	---	10.5	8.5	6.5	5.5	14.5	13.5
11	19.0	18.0	---	---	---	---	11.5	10.5	6.0	5.0	14.0	13.0
12	18.5	17.0	---	---	---	---	11.0	9.0	6.0	5.0	13.5	12.0
13	17.0	16.0	---	---	---	---	9.0	6.0	6.5	5.5	13.0	11.0
14	18.0	16.0	---	---	---	---	6.0	5.5	8.5	6.5	11.5	10.0
15	18.0	15.0	---	---	---	---	7.0	5.5	10.0	8.5	11.0	9.5
16	16.5	14.5	---	---	---	---	9.0	7.0	9.5	8.0	10.5	9.0
17	15.0	12.0	---	---	---	---	10.5	9.0	8.0	6.5	9.5	8.5
18	14.5	11.5	---	---	---	---	10.0	9.5	7.0	6.5	9.0	7.0
19	14.5	11.0	---	---	---	---	10.0	9.5	8.0	7.0	10.0	8.0
20	14.5	11.5	---	---	---	---	10.5	10.0	8.5	7.0	12.0	10.0
21	15.0	11.5	---	---	---	---	10.5	10.0	9.0	8.0	12.0	10.5
22	15.0	12.0	---	---	---	---	10.5	10.0	10.0	9.0	10.5	10.0
23	15.0	13.0	---	---	---	---	10.0	9.5	9.5	8.0	10.0	9.0
24	15.5	13.0	---	---	---	---	10.5	9.5	8.5	7.0	9.5	8.5
25	15.5	13.0	---	---	---	---	11.5	10.5	8.0	5.0	8.5	7.0
26	15.0	12.0	---	---	---	---	11.5	11.0	5.0	4.0	9.5	7.0
27	15.0	12.0	---	---	---	---	12.0	11.0	5.0	4.0	10.0	9.5
28	13.0	11.5	---	---	---	---	11.5	11.0	6.0	5.0	11.5	9.5
29	11.5	10.5	---	---	---	---	11.0	10.5	---	---	11.5	11.0
30	11.5	10.0	---	---	---	---	10.5	10.0	---	---	11.0	10.5
31	10.0	9.5	---	---	---	---	10.0	9.0	---	---	11.0	10.0
MONTH	20.0	9.5	---	---	---	---	---	---	10.5	4.0	15.0	6.0

03448000 FRENCH BROAD RIVER AT BENT CREEK, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	10.5	17.0	16.0	18.0	16.5	19.5	16.5	21.5	20.0	20.5	19.5
2	15.0	13.5	16.0	15.0	18.5	16.5	20.0	18.0	21.5	20.0	20.5	19.0
3	14.5	14.0	16.0	14.5	19.0	16.5	20.5	19.0	20.5	19.0	20.0	19.0
4	14.5	13.5	16.5	15.5	19.0	17.0	20.0	19.0	19.0	19.0	19.5	18.5
5	14.0	12.0	15.5	14.0	18.5	16.5	19.5	19.0	19.5	19.0	19.0	18.0
6	13.5	11.0	14.0	13.0	18.0	16.5	19.0	18.5	19.0	18.5	18.0	16.5
7	11.5	10.0	14.5	13.0	17.0	16.5	19.5	18.5	18.5	18.0	16.5	16.0
8	11.0	10.0	14.5	13.0	17.0	16.5	21.0	19.0	18.0	18.0	18.5	16.5
9	10.0	9.5	15.0	13.5	18.5	16.5	20.5	19.5	18.5	18.0	20.0	17.0
10	10.0	9.0	16.5	14.5	20.5	18.0	21.0	19.0	18.5	18.0	20.0	18.5
11	10.5	9.5	17.0	15.5	20.0	18.5	21.0	19.5	18.5	18.0	20.5	18.5
12	11.0	10.5	16.5	15.5	18.5	18.0	21.0	19.0	18.5	18.0	21.0	19.0
13	13.0	11.0	15.5	15.0	19.0	16.5	21.5	19.5	19.0	18.0	20.0	19.0
14	14.0	13.0	15.5	14.5	19.0	16.5	22.0	19.5	19.5	18.5	20.0	19.0
15	14.0	13.0	16.5	15.0	18.5	17.0	23.0	20.0	19.5	18.5	19.5	18.5
16	13.0	12.0	18.0	16.0	19.0	18.0	22.0	20.5	20.0	19.0	19.5	18.0
17	13.0	11.5	18.5	16.5	18.5	17.0	22.0	20.0	20.5	19.0	18.5	18.0
18	12.0	11.0	19.0	17.0	18.5	16.0	22.0	20.0	20.5	19.0	20.0	17.0
19	13.0	11.5	19.0	16.5	19.0	16.0	21.0	20.0	20.5	19.0	20.0	17.0
20	14.0	12.0	18.5	16.5	19.5	17.0	22.0	19.5	20.0	19.0	19.5	17.0
21	14.5	13.0	16.5	16.0	19.0	18.0	22.0	20.0	20.0	18.5	18.5	17.0
22	14.5	13.5	17.0	15.5	20.0	18.0	21.5	20.0	19.5	18.5	18.5	16.5
23	15.0	13.5	18.0	16.0	20.0	18.5	20.0	19.0	20.0	18.5	17.0	15.0
24	14.0	12.0	18.5	16.5	19.5	18.0	20.0	18.5	20.0	18.5	16.0	14.0
25	13.5	11.5	18.5	17.0	19.0	17.0	20.5	19.0	20.5	19.0	14.5	13.5
26	14.0	11.5	17.0	15.5	18.5	16.5	21.0	19.5	21.0	19.0	15.5	13.0
27	15.0	13.0	15.5	15.0	18.0	16.5	21.5	19.5	21.0	19.0	15.0	14.5
28	15.5	14.0	16.0	14.5	17.0	15.5	22.0	20.0	21.0	19.5	16.0	15.0
29	16.5	14.5	17.0	15.0	17.0	15.0	22.0	20.0	21.0	19.5	18.0	15.5
30	18.0	15.5	17.0	16.0	18.5	16.0	23.0	20.0	21.5	19.5	16.5	15.0
31	---	---	18.0	16.0	---	---	22.0	20.0	20.5	19.5	---	---
MONTH	18.0	9.0	19.0	13.0	20.5	15.0	23.0	16.5	21.5	18.0	21.0	13.0
YEAR	23.0	4.0										

03453500 FRENCH BROAD RIVER AT MARSHALL, N. C.

LOCATION.--Lat 35°47'10", long 82°39'39", Madison County, at gaging station on right bank 0.7 mi (1.1 km) upstream from Hayes Creek, 1 mi (1.6 km) downstream from Ivy River, 1.5 mi (2.4 km) southeast of Marshall, and at mile 126.7 (203.9 km).

DRAINAGE AREA.--1,332 mi^2 (3,450 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1967, August 1973 to September 1974. Water temperatures: October 1957 to September 1967, August 1973 to September 1974.

EXTREMES.--August 1973 to September 1974:
Specific conductance: Maximum, 205 micromhos Nov. 21; minimum, 42 micromhos Dec. 28, Apr. 6.
Water temperatures: Maximum, 24.0°C Aug. 14, 28, Sept. 7, 8, 1973, July 17, 1974; minimum, freezing point on Dec. 18, 1973.

Period of record:
Specific conductance: Maximum, 270 micromhos Oct. 24, 31, 1963; minimum, 39 micromhos Mar. 31, 1960.
Water temperatures: Maximum, 28.5°C Aug. 8, 1964; minimum, freezing point during most winters.

REMARKS.--Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)
OCT.											
10...	1445	1450	11	1300	230	--	60	60	0	--	8.3
NOV.											
06...	1215	1080	11	560	230	--	30	0	30	--	10
DEC.											
26...	1230	5940	5.3	--	70	--	33	16	17	--	6.0
26...	1430	10100	3.9	19000	250	--	290	270	14	--	4.6
26...	1550	12700	8.1	36000	250	--	640	620	20	--	5.1
26...	1840	15200	7.3	66000	380	--	230	160	67	--	4.5
27...	0655	13000	3.7	--	250	--	33	16	17	--	4.0
JUNE											
14...	1550	2260	11	1200	170	3400	50	17	33	110	7.2

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.											
10...	1.6	20	1.8	32	0	26	42	4.8	.0	1.5	.52
NOV.											
06...	1.7	22	2.0	35	0	29	42	5.4	.0	.39	.37
DEC.											
26...	.6	8.1	1.5	18	0	15	17	4.6	.1	.54	.44
26...	2.0	6.9	1.6	16	0	13	14	4.7	1.2	.65	.45
26...	1.8	6.2	2.1	13	0	11	14	3.4	.0	.84	.48
26...	1.9	4.8	2.9	13	0	11	13	3.6	.0	1.1	.57
27...	1.2	3.2	2.4	10	0	8	9.4	2.5	.1	.63	.52
JUNE											
14...	1.3	11	1.5	22	--	18	20	3.0	.1	.30	.33

DATE	TOTAL NITRITE PLUS NITRATE IN HOT. DEP. (MG/KG)	AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	DISSOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	SUSPENDED KJEL. NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM DEP. (MG/KG)	TOTAL NITROGEN (N) (MG/L)
OCT.											
10...	--	--	--	--	--	--	.31	--	.42	--	1.8
NOV.											
06...	--	.42	.29	.37	.24	.37	.66	--	.66	--	1.1
DEC.											
26...	--	.19	.16	.21	.20	.00	.39	.25	.14	--	.93
26...	--	.13	.11	.14	.45	.07	.59	.41	.18	--	1.2
26...	--	.05	.05	.06	.00	.05	.00	.00	.10	--	.64
26...	--	.13	.08	.10	1.3	.21	1.4	1.1	.29	--	2.5
27...	--	.10	.16	.21	.37	.08	.47	.23	.24	--	1.1
JUNE											
14...	4.0	.00	.05	.06	.35	.27	.36	.04	.32	8.0	.66

03453500 FRENCH BROAD RIVER AT MARSHALL, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (P04) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT.											
10...	8.0	.17	--	.14	--	--	--	109	108	.15	427
NOV.											
06...	4.6	.16	.37	.12	.14	.12	--	125	112	.17	364
DEC.											
26...	4.1	.05	.12	.04	.08	.04	--	60	54	.08	962
26...	5.5	.06	.12	.03	.18	.04	--	60	47	.08	1640
26...	3.7	.57	.80	.48	.26	.26	--	74	47	.10	2540
26...	11	.03	.28	.05	.48	.09	--	45	45	.06	1850
27...	4.9	.07	.18	.02	.32	.06	--	43	34	.06	1510
JUNE											
14...	2.9	.10	.12	.05	.04	.04	120	61	66	.08	372

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
10...	27	1	60	1.7	160	6.1	20.0	--	20	8.9	41
NOV.											
06...	32	3	58	1.7	195	6.9	11.0	10	7	12.8	7.1
DEC.											
26...	17	3	48	.8	78	6.6	7.5	20	--	--	7.2
26...	20	7	41	.7	66	6.4	8.0	20	--	--	10
26...	20	9	37	.6	61	6.2	8.5	50	--	--	13
26...	19	8	31	.5	59	6.1	8.5	70	--	--	17
27...	15	7	28	.4	44	6.5	8.0	50	--	--	5.1
JUNE											
14...	23	5	49	1.0	90	7.0	22.5	3	--	8.1	3.5

DATE	TOTAL PHYTO-PLANK-TON (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CAD-MIUM (CD) (UG/L)
OCT.												
10...	--	--	--	6.5	3.5	--	--	0	0	0	--	<10
NOV.												
06...	--	--	--	--	--	--	.0	0	0	0	--	<10
DEC.												
26...	--	--	--	15	5.3	--	.3	2	0	9	--	3
26...	--	--	--	11	11	--	.0	4	0	6	--	3
26...	--	--	--	17	8.5	--	.2	10	8	2	--	0
26...	--	--	--	31	3.3	--	.0	10	4	6	--	0
27...	--	--	--	15	9.1	--	.0	4	0	6	--	3
JUNE												
14...	5000	2.3	10	7.7	4.1	.2	.0	1	1	0	1	0

03453500 FRENCH BROAD RIVER AT MARSHALL, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
OCT.												
10...	10	0	--	0	0	0	--	<25	25	0	--	<10
NOV.												
06...	10	0	--	0	0	0	--	<50	50	0	--	10
DEC.												
26...	0	3	--	3	3	0	--	2	2	0	--	5
26...	1	2	--	8	7	1	--	6	5	1	--	16
26...	0	0	--	30	30	0	--	11	8	3	--	33
26...	0	1	--	60	59	1	--	6	6	0	--	0
27...	0	3	--	9	9	0	--	7	7	0	--	14
JUNE												
14...	0	0	<10	0	0	1	<10	0	0	0	<50	5

DATE	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
OCT.										
10...	8	2	--	<50	48	2	--	.0	.0	.0
NOV.										
06...	5	5	--	<100	97	3	--	.5	.0	.5
DEC.										
26...	6	0	--	31	7	24	--	.0	.0	.0
26...	15	1	--	38	11	27	--	.0	.0	.0
26...	32	1	--	3	0	3	--	.2	.2	.0
26...	0	1	--	1	0	6	--	.3	.3	.0
27...	13	1	--	35	8	27	--	.0	.0	.0
JUNE										
14...	2	3	<10	0	0	2	<100	.2	.1	.1

DATE	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
OCT.									
10...	--	8	2	6	--	100	50	50	--
NOV.									
06...	--	7	0	7	--	90	60	30	--
DEC.									
26...	--	28	22	6	--	150	140	10	--
26...	--	23	19	4	--	220	190	30	--
26...	--	9	1	8	--	220	170	50	--
26...	--	14	3	11	--	6900	6800	70	--
27...	--	29	9	20	--	350	330	20	--
JUNE									
14...	.0	0	0	0	0	250	200	50	70

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.				
10...	1445	1450	23	90
NOV.				
06...	1215	1080	11	32
DEC.				
26...	1230	5940	207	3320
26...	1430	10100	811	22100
26...	1550	12700	1340	45900
26...	1840	15200	2410	98900
27...	0655	13000	792	27800
JUNE				
14...	1550	2260	42	256

03453500 FRENCH BROAD RIVER AT MARSHALL, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), AUGUST TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	110	158
2	---	---	---	---	---	---	---	---	---	---	112	147
3	---	---	---	---	---	---	---	---	---	---	99	151
4	---	---	---	---	---	---	---	---	---	---	106	141
5	---	---	---	---	---	---	---	---	---	---	101	151
6	---	---	---	---	---	---	---	---	---	---	93	161
7	---	---	---	---	---	---	---	---	---	---	100	172
8	---	---	---	---	---	---	---	---	---	---	109	166
9	---	---	---	---	---	---	---	---	---	---	108	153
10	---	---	---	---	---	---	---	---	---	---	104	130
11	---	---	---	---	---	---	---	---	---	---	108	99
12	---	---	---	---	---	---	---	---	---	---	106	130
13	---	---	---	---	---	---	---	---	---	---	102	143
14	---	---	---	---	---	---	---	---	---	---	103	153
15	---	---	---	---	---	---	---	---	---	---	83	132
16	---	---	---	---	---	---	---	---	---	---	106	124
17	---	---	---	---	---	---	---	---	---	---	114	113
18	---	---	---	---	---	---	---	---	---	---	115	127
19	---	---	---	---	---	---	---	---	---	---	90	127
20	---	---	---	---	---	---	---	---	---	---	93	130
21	---	---	---	---	---	---	---	---	---	---	107	131
22	---	---	---	---	---	---	---	---	---	---	114	145
23	---	---	---	---	---	---	---	---	---	---	118	155
24	---	---	---	---	---	---	---	---	---	---	130	148
25	---	---	---	---	---	---	---	---	---	---	126	138
26	---	---	---	---	---	---	---	---	---	---	125	140
27	---	---	---	---	---	---	---	---	---	---	116	132
28	---	---	---	---	---	---	---	---	---	---	131	157
29	---	---	---	---	---	---	---	---	---	---	134	164
30	---	---	---	---	---	---	---	---	---	---	144	156
31	---	---	---	---	---	---	---	---	---	---	143	---
MONTH	---	---	---	---	---	---	---	---	---	---	111	142

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	177	79	64	70	75	61	89	96	99	133	128
2	102	179	90	50	75	79	70	103	96	103	137	129
3	93	168	98	55	69	84	69	102	92	107	158	103
4	94	177	110	58	61	78	68	102	89	115	70	98
5	106	165	116	65	67	88	47	102	100	95	60	120
6	112	171	79	69	70	88	42	84	109	86	65	123
7	127	171	68	65	68	88	43	88	109	69	68	122
8	131	174	72	66	72	89	52	88	90	85	65	111
9	144	177	90	68	76	90	60	98	86	80	73	108
10	144	171	96	70	74	88	57	97	89	82	67	111
11	148	174	94	71	73	91	62	101	95	93	72	124
12	153	171	109	75	80	94	66	98	103	92	67	113
13	159	160	105	71	80	93	68	70	99	94	80	100
14	159	171	116	77	84	87	55	70	103	103	77	104
15	148	177	105	80	86	88	51	80	113	108	85	111
16	159	173	104	79	74	96	60	86	103	112	82	125
17	152	171	100	78	68	95	70	94	100	118	82	138
18	164	171	105	83	74	89	82	90	103	122	83	145
19	196	177	109	89	73	87	84	100	120	115	84	147
20	175	165	105	95	82	84	82	93	120	114	86	157
21	170	205	97	80	75	80	90	96	110	110	94	155
22	166	104	71	67	76	68	88	101	99	119	95	155
23	151	81	71	75	58	63	113	94	89	124	105	145
24	175	86	75	72	53	70	105	90	104	126	105	150
25	180	114	83	67	56	74	100	85	103	127	103	152
26	172	125	98	74	73	82	94	88	116	122	108	156
27	191	135	51	76	66	86	94	93	112	85	112	152
28	184	109	42	61	74	88	104	80	101	117	115	148
29	177	68	48	60	---	90	97	85	91	122	120	120
30	170	66	65	64	---	70	95	94	94	110	118	109
31	175	---	60	65	---	57	---	101	---	125	126	---
MONTH	152	151	87	71	72	83	74	92	101	106	93	129

YEAR MAX 205 MIN 42 MEAN 101

03453500 FRENCH BROAD RIVER AT MARSHALL, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, AUGUST TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	23.0	23.0
2	---	---	---	---	---	---	---	---	---	---	21.0	23.0
3	---	---	---	---	---	---	---	---	---	---	22.0	22.0
4	---	---	---	---	---	---	---	---	---	---	23.0	23.0
5	---	---	---	---	---	---	---	---	---	---	22.0	23.0
6	---	---	---	---	---	---	---	---	---	---	22.0	23.0
7	---	---	---	---	---	---	---	---	---	---	23.0	24.0
8	---	---	---	---	---	---	---	---	---	---	22.0	24.0
9	---	---	---	---	---	---	---	---	---	---	22.0	23.0
10	---	---	---	---	---	---	---	---	---	---	22.0	22.0
11	---	---	---	---	---	---	---	---	---	---	22.0	22.0
12	---	---	---	---	---	---	---	---	---	---	23.0	20.0
13	---	---	---	---	---	---	---	---	---	---	23.0	21.0
14	---	---	---	---	---	---	---	---	---	---	24.0	21.0
15	---	---	---	---	---	---	---	---	---	---	22.0	20.0
16	---	---	---	---	---	---	---	---	---	---	22.0	20.0
17	---	---	---	---	---	---	---	---	---	---	22.0	20.0
18	---	---	---	---	---	---	---	---	---	---	22.0	20.0
19	---	---	---	---	---	---	---	---	---	---	21.0	21.0
20	---	---	---	---	---	---	---	---	---	---	21.0	20.0
21	---	---	---	---	---	---	---	---	---	---	20.0	20.0
22	---	---	---	---	---	---	---	---	---	---	20.0	20.0
23	---	---	---	---	---	---	---	---	---	---	20.0	21.0
24	---	---	---	---	---	---	---	---	---	---	20.0	21.0
25	---	---	---	---	---	---	---	---	---	---	21.0	23.0
26	---	---	---	---	---	---	---	---	---	---	22.0	20.0
27	---	---	---	---	---	---	---	---	---	---	22.0	21.0
28	---	---	---	---	---	---	---	---	---	---	24.0	20.0
29	---	---	---	---	---	---	---	---	---	---	24.0	21.0
30	---	---	---	---	---	---	---	---	---	---	23.0	22.0
31	---	---	---	---	---	---	---	---	---	---	23.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	22.0	21.5

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	10.0	9.0	9.0	7.0	7.0	10.0	18.0	20.0	19.0	22.0	22.0
2	20.0	9.0	8.0	8.0	10.0	9.0	14.0	18.0	18.0	20.0	23.0	22.0
3	19.0	11.0	8.0	9.0	11.0	10.0	14.0	17.0	19.0	22.0	22.0	22.0
4	19.0	13.0	10.0	10.0	9.0	11.0	15.0	17.0	19.0	21.0	20.0	19.0
5	20.0	14.0	12.0	10.0	5.0	12.0	12.0	17.0	17.0	21.0	20.0	18.0
6	19.0	10.0	10.0	10.0	7.0	12.0	10.0	13.0	19.0	21.0	20.0	18.0
7	18.0	9.0	9.0	10.0	8.0	14.0	10.0	13.0	19.0	20.0	18.0	18.0
8	20.0	14.0	8.0	8.0	8.0	14.0	11.0	12.0	19.0	20.0	19.0	19.0
9	19.0	12.0	7.0	9.0	6.0	15.0	9.0	15.0	19.0	21.0	19.0	19.0
10	20.0	8.0	7.0	10.0	6.0	15.0	9.0	16.0	20.0	21.0	20.0	20.0
11	18.0	7.0	3.0	13.0	5.0	15.0	9.0	17.0	20.0	21.0	20.0	21.0
12	16.0	8.0	4.0	9.0	5.0	13.0	12.0	18.0	19.0	21.0	20.0	21.0
13	17.0	8.0	6.0	7.0	5.0	10.0	13.0	15.0	17.0	21.0	20.0	20.0
14	18.0	8.0	6.0	6.0	9.0	9.0	14.0	14.0	19.0	21.0	20.0	21.0
15	16.0	9.0	6.0	7.0	10.0	9.0	14.0	16.0	19.0	22.0	20.0	20.0
16	16.0	10.0	6.0	8.0	9.0	11.0	13.0	17.0	19.0	23.0	21.0	19.0
17	14.0	8.0	2.0	10.0	6.0	8.0	12.0	19.0	18.0	24.0	21.0	20.0
18	12.0	7.0	0.0	11.0	7.0	8.0	11.0	19.0	17.0	23.0	21.0	19.0
19	13.0	9.0	2.0	10.0	8.0	6.0	11.0	20.0	18.0	22.0	21.0	19.0
20	12.0	10.0	4.0	12.0	7.0	10.0	11.0	19.0	20.0	21.0	20.0	18.0
21	13.0	13.0	4.0	12.0	7.0	11.0	13.0	19.0	20.0	23.0	19.0	19.0
22	14.0	10.0	2.0	10.0	10.0	6.0	15.0	18.0	20.0	22.0	20.0	18.0
23	14.0	10.0	3.0	10.0	9.0	7.0	14.0	18.0	21.0	23.0	20.0	19.0
24	14.0	4.0	5.0	11.0	9.0	9.0	13.0	18.0	20.0	21.0	20.0	16.0
25	13.0	14.0	6.0	12.0	5.0	6.0	11.0	19.0	18.0	22.0	21.0	14.0
26	14.0	11.0	7.0	13.0	3.0	7.0	12.0	18.0	18.0	22.0	21.0	15.0
27	14.0	15.0	8.5	12.0	3.0	9.0	13.0	16.0	18.0	21.0	22.0	17.0
28	15.0	16.0	8.0	13.0	5.0	10.0	15.0	17.0	17.0	22.0	22.0	17.0
29	14.0	11.0	8.0	11.0	---	11.0	16.0	17.0	17.0	22.0	23.0	18.0
30	10.0	17.0	8.0	10.0	---	11.0	16.0	18.0	18.0	22.0	22.0	19.0
31	11.0	---	9.0	10.0	---	9.0	---	18.0	---	22.0	22.0	---
MONTH	16.0	10.5	6.5	10.0	7.0	10.0	12.5	17.0	18.5	21.5	20.5	19.0
YEAR	MAX	24.0	MIN	0.0	MEAN	14.0						

03453500 FRENCH BROAD RIVER AT MARSHALL, N. C.--Continued

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
SEP.											
04...	1100	1210	19	--	7.3	24.0	7.7	<25	--	1.2	200
10...	1030	3500	13	--	6.3	22.0	7.0	56	--	7.4	34000
17...	1515	1330	15	--	6.3	23.0	8.7	<25	--	2.1	300
24...	0940	1270	18	--	6.1	20.0	7.8	<25	--	1.7	200
OCT.											
04...	0825	2220	15	--	6.1	17.0	8.3	38	--	2.7	7400
08...	1100	1440	19	--	7.1	19.0	8.4	<25	--	1.6	390
17...	1300	1130	29	--	7.4	14.0	9.6	<25	--	1.8	880
24...	1440	1050	31	--	8.0	16.0	9.7	<25	--	1.9	2700
30...	1015	1210	32	--	7.5	10.0	10.3	<25	--	1.9	520
NOV.											
06...	1120	1060	30	--	7.8	10.0	10.8	<25	--	1.5	230
15...	1145	995	29	--	6.9	10.0	11.9	30	--	1.8	2500
19...	1540	1020	34	--	8.3	11.0	10.7	34	--	2.9	240
26...	1000	1460	--	--	--	--	--	<25	--	2.0	1100
DEC.											
03...	1455	1940	--	--	--	--	--	<25	--	1.9	3200
13...	1400	2000	--	--	--	--	--	<25	--	--	--
JAN.											
10...	1200	4650	--	--	--	--	--	<25	--	--	--
15...	0925	3460	14	--	7.2	6.0	11.5	<25	--	2.4	1500
24...	1300	3460	17	--	7.0	11.0	10.9	--	<25	2.9	3500
29...	1225	4810	12	--	6.1	11.0	11.2	--	<25	3.1	2200
FEB.											
04...	1110	5570	15	--	6.8	8.0	10.2	--	<25	1.6	2000
18...	1000	4170	12	--	7.0	5.0	11.5	--	<25	1.6	1600
26...	1100	4300	12	--	6.8	2.0	12.5	--	<25	2.5	3200
MAR.											
05...	1130	2920	16	--	7.3	13.0	9.6	--	26	3.1	1900
11...	1325	2580	16	--	7.0	15.0	10.1	--	<25	1.3	2100
20...	1420	3760	13	--	6.7	12.0	11.0	--	<25	3.0	4800
28...	1230	2750	17	--	7.1	12.0	10.7	--	<25	3.8	1200
APR.											
03...	1445	3790	14	--	7.2	18.0	9.7	--	<25	2.2	1300
10...	1515	4860	12	--	7.2	11.0	11.4	--	<25	2.0	2300
15...	0915	5810	11	--	7.0	14.0	9.3	--	34	2.4	1400
22...	0910	3220	16	--	7.1	15.0	9.3	--	<25	1.5	1300
MAY											
01...	1355	2580	16	82	7.1	20.0	9.2	--	<25	2.1	460
09...	0945	3090	15	71	7.2	16.0	9.1	--	<25	2.2	380
15...	1430	3660	14	70	7.3	21.0	8.6	--	26	2.1	1200
20...	1225	2830	13	72	7.0	21.0	8.3	--	<25	2.2	1900
28...	1440	3680	13	63	7.3	19.0	9.9	--	<25	4.9	3400
JUNE											
03...	1340	2980	15	80	7.3	21.0	7.8	--	<25	1.1	1400
10...	1730	2960	15	100	6.8	22.0	8.0	--	<25	2.1	<10
17...	1250	2560	14	--	7.2	21.0	8.7	--	<25	2.6	2000
24...	2530	2040	17	--	6.9	20.0	8.1	--	27	1.8	740
JULY											
01...	1500	1980	17	--	6.6	22.0	8.2	--	<25	2.1	580
08...	1100	3420	17	98	6.8	23.0	7.8	--	31	1.8	3400
15...	1430	1870	20	160	7.5	24.0	7.5	--	--	2.6	550
22...	1500	1630	--	130	--	23.0	7.8	--	--	1.9	--
29...	1315	1880	19	--	7.3	25.0	8.4	--	--	1.6	990
AUG.											
20...	1450	2460	11	48	7.1	22.0	8.2	--	--	1.3	5300
27...	1000	1850	18	--	7.4	22.0	8.0	--	--	2.4	1500
SEP.											
02...	1600	1670	13	42	7.2	22.0	8.5	--	--	1.7	1700
10...	0925	1830	18	--	7.3	20.5	8.2	--	--	1.2	490
18...	1510	1590	21	39	7.1	20.0	8.9	--	--	2.2	1600
30...	1530	1760	17	44	7.1	17.0	8.3	--	41	2.1	1600

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.
(Hydrologic bench-mark and pesticide station)

LOCATION.--Lat 35°40'02", long 83°04'23", Haywood County, in Great Smoky Mountains National Park, temperature recorder at gaging station on left bank 20 ft (6 m) downstream from bridge on State Highway 284, 500 ft (152 m) upstream from Little Cataloochee Creek, 2 mi (3.2 km) north of Cataloochee, and 3.7 mi (6.0 km) upstream from mouth.

DRAINAGE AREA.--49.2 mi^2 (127.4 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1962 to September 1971, water years 1972-73 (partial-record station). August 1973 to September 1974.
Water temperatures: October 1962 to September 1974.

EXTREMES.--August 1973 to September 1974:
Specific conductance: Maximum, 43 micromhos June 13; minimum, 14 micromhos on several days during December and May.
Water temperatures: Maximum, 16.0°C Aug. 29, 30, 31, 1974; minimum, 0.5°C Feb. 27.

Period of record:
Water temperatures: Maximum, 20.5°C June 22, 1964; minimum, freezing point on several days during winter months of most years.

REMARKS.--Miscellaneous chemical data published for 1945 water year. Chemical and biological data shown in last table were furnished by the North Carolina Department of Natural and Economic Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)
OCT.												
11...	0935	38	8.8	70	40	--	10	10	0	--	1.1	.3
NOV.												
07...	1215	36	8.5	50	20	--	0	0	10	--	2.1	.4
DEC.												
26...	1125	325	5.6	450	100	--	0	0	0	--	1.3	.5
26...	1240	600	5.8	--	100	--	13	13	0	--	3.0	.4
26...	1415	1240	3.6	--	200	--	13	0	25	--	1.0	.5
26...	2315	550	4.9	250	100	--	0	0	0	--	1.4	.4
MAR.												
05...	0930	130	7.5	300	10	12000	0	0	0	110	1.4	.3
MAY												
07...	1030	262	6.7	30	30	--	0	0	0	--	3.6	.2
JUNE												
14...	1210	95	8.3	50	10	6200	17	0	17	120	3.2	.4
AUG.												
27...	1301	50	8.7	70	20	--	0	0	17	--	2.6	.5

DATE	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)
OCT.												
11...	2.0	.8	8	0	7	2.7	1.2	.0	--	.63	.12	--
NOV.												
07...	1.8	.6	8	0	7	1.8	.4	.0	--	.05	.04	--
DEC.												
26...	1.0	.6	10	0	8	1.5	.7	1.3	--	.21	.20	--
26...	1.0	.7	8	0	7	.3	.0	.1	--	.23	.21	--
26...	1.0	.9	8	0	7	.0	.0	.1	--	.32	.20	--
26...	.8	.7	8	0	7	2.0	.1	.0	--	.36	.36	--
MAR.												
05...	1.1	.5	6	0	5	.8	1.2	.1	.46	.47	.13	.0
MAY												
07...	.9	.6	5	--	4	.8	.9	.1	.16	.16	.17	--
JUNE												
14...	.5	.7	7	--	6	.8	.6	.1	.15	.15	.14	.5
AUG.												
27...	.9	.2	7	--	6	1.7	2.0	.1	.14	.14	.14	--

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS_ SOLVED AMMONIA (NH4) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM DEP. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.												
11...	--	--	--	--	--	.09	--	.14	--	.72	3.2	.11
NOV.												
07...	.01	.00	.00	.10	.11	.11	--	.11	--	.16	.71	.02
DEC.												
26...	.03	.01	.01	.04	.05	.07	.01	.06	--	.28	1.2	.01
26...	.01	.01	.01	.11	.13	.12	.00	.14	--	.35	1.6	.01
26...	.01	.02	.03	.79	.12	.80	.66	.14	--	1.1	5.0	.01
26...	.01	.01	.01	.08	.05	.09	.03	.06	--	.45	2.0	.01
MAR.												
05...	.09	.09	.12	.48	.27	.57	.21	.36	700	1.0	4.6	.15
MAY												
07...	.01	.00	.00	.07	.04	.08	.04	.04	--	.24	1.1	.02
JUNE												
14...	.00	.02	.03	.11	.11	.11	.00	.13	76	.26	1.2	.01
AUG.												
27...	.00	.00	.00	.10	.07	.10	.03	.07	--	.24	1.1	.01

DATE	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)
OCT.												
11...	--	.05	--	--	--	--	20	21	.03	2.15	<1	4
NOV.												
07...	.06	.02	.03	.02	--	15	--	20	.02	1.46	--	7
DEC.												
26...	.06	.01	.03	.02	--	17	--	19	.02	14.9	--	5
26...	.09	.01	.04	.03	--	14	--	16	.02	22.7	--	9
26...	.09	.01	.05	.03	--	20	--	12	.03	67.0	--	5
26...	.03	.01	.02	.01	--	42	--	16	.06	62.4	--	5
MAR.												
05...	.15	.06	.10	.05	86	26	--	17	.04	9.13	--	5
MAY												
07...	.03	.00	.01	.01	--	38	--	16	.05	26.9	--	10
JUNE												
14...	.03	.01	.01	.01	150	12	--	18	.02	3.08	--	10
AUG.												
27...	.03	.01	.01	.01	--	23	18	20	.03	3.10	1	9

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
11...	0	47	.4	18	7.1	13.0	--	2	9.7	.3	1.0
NOV.											
07...	0	34	.3	17	7.1	6.0	8	0	14.3	--	1.0
DEC.											
26...	0	26	.2	14	7.0	7.0	20	--	13.5	--	1.6
26...	3	18	.1	16	6.5	9.0	20	--	11.2	--	4.0
26...	0	28	.2	18	6.4	9.0	30	--	10.0	--	5.1
26...	0	22	.2	18	6.2	8.0	10	--	10.2	--	8.1
MAR.											
05...	0	31	.2	14	6.5	9.5	9	--	12.3	--	3.0
MAY											
07...	6	16	.1	14	7.4	8.8	3	--	13.2	--	.3
JUNE											
14...	4	9	.1	14	6.4	13.5	3	--	9.2	--	4.5
AUG.											
27...	3	18	.1	16	6.7	16.0	7	--	10.8	.3	1.1

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL PHYTOPLANKTON (CELLS PER ML)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MATERIAL (C) (G/KG)	CYANIDE (CN) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	ALDRIN (UG/L)
OCT.												
11...	--	--	6	--	--	--	2.5	1.5	--	--	--	.00
NOV.												
07...	--	--	--	--	--	--	5.0	4.5	--	--	.0	--
DEC.												
26...	--	--	--	--	--	--	7.1	7.1	--	--	.0	--
26...	--	--	--	--	--	--	16	4.1	--	--	.0	--
26...	--	--	--	--	--	--	23	3.5	--	--	.0	--
26...	--	--	--	--	--	--	7.6	4.5	--	--	.1	--
MAR.												
05...	--	--	100	--	--	--	--	7.7	1.7	.00	.0	--
MAY												
07...	--	900	4	12	--	--	5.1	1.5	--	.00	--	--
JUNE												
14...	430	--	--	--	40	42	37	28	1.2	--	.0	--
AUG.												
27...	--	260	20	70	--	--	1.5	3.6	--	--	.0	--

DATE	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	CHLORDANE (UG/L)	CHLORDANE IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)	DIAZINON (UG/L)	DIELDRIN (UG/L)	DIELDRIN IN BOTTOM DEPOSITS (UG/KG)
OCT.												
11...	.0	.0	0	.00	.0	.00	.0	.00	.0	.00	.00	.0
NOV.												
07...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
MAR.												
05...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
07...	--	--	--	--	--	--	--	--	--	--	--	--
JUNE												
14...	--	--	--	--	--	--	--	--	--	--	--	--
AUG.												
27...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	PCB (UG/L)
OCT.												
11...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.00	.00	.0
NOV.												
07...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
MAR.												
05...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
07...	--	--	--	--	--	--	--	--	--	--	--	--
JUNE												
14...	--	--	--	--	--	--	--	--	--	--	--	--
AUG.												
27...	--	--	--	--	--	--	--	--	--	--	--	--

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	PCB IN BOTTOM DEPOSITS (UG/KG)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DEPOSITS (UG/G)	TOTAL BARIUM (BA) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
OCT.											
11...	0	.00	.00	.00	2	0	4	--	--	<10	10
NOV.											
07...	--	--	--	--	0	0	0	--	--	<10	10
DEC.											
26...	--	--	--	--	7	0	8	--	--	3	0
26...	--	--	--	--	10	0	11	--	--	0	0
26...	--	--	--	--	7	6	1	--	--	0	0
26...	--	--	--	--	11	5	6	--	--	0	0
MAR.											
05...	--	--	--	--	9	0	11	1	0	2	0
MAY											
07...	--	--	--	--	0	0	0	--	0	1	0
JUNE											
14...	--	--	--	--	3	3	0	2	--	0	0
AUG.											
27...	--	--	--	--	0	0	1	--	--	1	0

DATE	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DEPOSITS (UG/G)	TOTAL COPPER (CU) (UG/L)
OCT.											
11...	0	--	0	0	0	--	<25	25	0	--	<10
NOV.											
07...	0	--	0	0	0	--	<50	50	0	--	0
DEC.											
26...	3	--	3	2	1	--	0	0	1	--	3
26...	3	--	2	2	0	--	3	3	0	--	0
26...	3	--	3	2	1	--	0	0	0	--	0
26...	1	--	0	0	0	--	3	3	0	--	4
MAR.											
05...	4	1	0	0	0	5	4	0	9	5	2
MAY											
07...	1	--	0	0	0	--	12	11	1	--	1
JUNE											
14...	0	<10	0	0	1	<10	0	0	0	<50	4
AUG.											
27...	1	--	<10	<10	0	--	2	0	2	--	5

DATE	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DEPOSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DEPOSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)
OCT.										
11...	10	0	--	<50	50	0	--	.0	.0	.0
NOV.										
07...	0	4	--	<100	100	0	--	.1	.1	.0
DEC.										
26...	3	0	--	31	6	25	--	.0	.0	.1
26...	0	4	--	33	6	27	--	.0	.0	.0
26...	0	5	--	35	10	25	--	.0	.0	.0
26...	3	1	--	2	0	3	--	.0	.0	.0
MAR.										
05...	1	1	4	19	19	0	10	.1	.1	.0
MAY										
07...	0	2	--	5	3	2	--	.2	.1	.1
JUNE										
14...	4	0	<10	1	0	1	<100	.1	.0	.1
AUG.										
27...	3	2	--	5	0	5	--	.1	.1	.0

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL MERCURY IN BOTTOM DEPOSITS (UG/G)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL SELENIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.									
11...	--	8	2	6	--	--	10	0	20
NOV.									
07...	--	4	1	3	--	--	0	0	0
DEC.									
26...	--	25	18	7	--	--	4	0	40
26...	--	29	17	12	--	--	4	0	4
26...	--	28	0	28	--	--	40	30	7
26...	--	20	14	6	--	--	20	10	10
MAR.									
05...	.0	3	0	10	0	--	20	20	0
MAY									
07...	--	5	1	4	--	3	0	0	3
JUNE									
14...	.0	6	1	5	0	--	3	0	3
AUG.									
27...	--	0	0	0	--	--	30	30	0

DATE	TOTAL ZINC IN BOTTOM DEPOSITS (UG/G)	DISSOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUSPENDED GROSS ALPHA AS U-NAT. (UG/L)	DISSOLVED GROSS BETA AS CS-137 (PC/L)	SUSPENDED GROSS BETA AS CS-137 (PC/L)	DISSOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUSPENDED GROSS BETA AS SR90 /Y90 (PC/L)	DISSOLVED RA-226 (RADON METHOD) (PC/L)	DISSOLVED URANIUM (U) (UG/L)
OCT.									
11...	--	.6	<.4	1.4	<.4	1.2	<.4	.07	.01
NOV.									
07...	--	--	--	--	--	--	--	--	--
DEC.									
26...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
MAR.									
05...	24	--	--	--	--	--	--	--	--
MAY									
07...	--	--	--	--	--	--	--	--	--
JUNE									
14...	20	--	--	--	--	--	--	--	--
AUG.									
27...	--	<.4	<.4	1.2	<.4	1.1	<.4	.03	<.01

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), AUGUST TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	21
2	---	---	---	---	---	---	---	---	---	---	24	19
3	---	---	---	---	---	---	---	---	---	---	28	21
4	---	---	---	---	---	---	---	---	---	---	18	20
5	---	---	---	---	---	---	---	---	---	---	22	21
6	---	---	---	---	---	---	---	---	---	---	20	22
7	---	---	---	---	---	---	---	---	---	---	21	21
8	---	---	---	---	---	---	---	---	---	---	26	22
9	---	---	---	---	---	---	---	---	---	---	20	19
10	---	---	---	---	---	---	---	---	---	---	20	21
11	---	---	---	---	---	---	---	---	---	---	20	28
12	---	---	---	---	---	---	---	---	---	---	20	30
13	---	---	---	---	---	---	---	---	---	---	20	22
14	---	---	---	---	---	---	---	---	---	---	18	24
15	---	---	---	---	---	---	---	---	---	---	20	21
16	---	---	---	---	---	---	---	---	---	---	23	20
17	---	---	---	---	---	---	---	---	---	---	21	22
18	---	---	---	---	---	---	---	---	---	---	20	20
19	---	---	---	---	---	---	---	---	---	---	24	20
20	---	---	---	---	---	---	---	---	---	---	20	21
21	---	---	---	---	---	---	---	---	---	---	18	21
22	---	---	---	---	---	---	---	---	---	---	23	20
23	---	---	---	---	---	---	---	---	---	---	20	21
24	---	---	---	---	---	---	---	---	---	---	21	20
25	---	---	---	---	---	---	---	---	---	---	22	21
26	---	---	---	---	---	---	---	---	---	---	21	19
27	---	---	---	---	---	---	---	---	---	---	19	21
28	---	---	---	---	---	---	---	---	---	---	22	22
29	---	---	---	---	---	---	---	---	---	---	26	25
30	---	---	---	---	---	---	---	---	---	---	22	23
31	---	---	---	---	---	---	---	---	---	---	20	---
MONTH	---	---	---	---	---	---	---	---	---	---	21	22

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	17	16	16	18	18	18	23	21	20	16	19
2	21	18	15	18	21	27	19	16	25	17	22	19
3	21	17	16	17	17	19	19	17	18	18	20	17
4	39	17	16	18	17	37	20	22	19	20	24	16
5	22	19	20	15	18	23	16	28	27	26	18	16
6	21	19	14	17	18	20	17	19	26	20	19	17
7	23	18	14	20	19	22	20	15	19	21	17	16
8	22	18	15	22	18	17	19	16	19	17	18	17
9	25	16	17	17	20	20	20	18	18	22	22	17
10	23	17	14	17	20	19	23	15	29	20	20	17
11	23	17	16	22	19	20	20	14	17	17	20	17
12	26	16	25	19	16	23	20	31	31	24	23	17
13	34	16	16	21	17	18	22	17	43	17	20	17
14	22	17	14	16	21	23	18	15	22	18	18	16
15	26	18	14	31	23	17	19	14	20	20	18	16
16	24	18	15	19	24	17	18	16	19	23	17	16
17	25	17	14	21	33	17	18	15	24	22	24	17
18	28	19	18	22	18	17	19	19	21	28	17	16
19	37	17	15	20	24	19	31	15	23	20	20	16
20	22	20	16	24	24	22	23	17	18	24	20	16
21	21	17	17	19	29	21	23	18	23	25	17	16
22	21	28	17	18	17	19	23	16	22	26	24	16
23	26	17	14	16	20	19	22	16	25	22	17	16
24	21	18	14	17	18	21	22	15	24	21	19	15
25	26	17	14	18	18	20	20	14	18	24	18	15
26	27	17	14	18	25	17	21	23	23	22	20	15
27	22	18	16	20	18	17	21	17	19	21	17	16
28	28	22	25	21	18	23	16	20	19	21	18	17
29	22	15	16	21	---	19	18	17	21	21	23	17
30	22	16	31	21	---	19	20	26	17	19	20	16
31	17	---	14	19	---	21	---	18	---	23	20	---
MONTH	25	18	17	19	20	20	20	18	22	21	20	16
YEAR	MAX	43	MIN	14	MEAN	20						

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.5	8.0	6.0	9.0	5.5	5.5	8.0	12.5	13.0	12.0	14.5	15.5
2	15.5	7.0	5.0	6.5	8.0	7.0	10.5	12.5	13.0	13.0	15.5	15.0
3	14.5	8.0	6.0	9.0	9.0	6.5	9.5	12.0	12.0	13.5	15.5	14.5
4	13.0	9.0	10.0	9.0	5.0	8.5	11.0	12.0	10.0	14.5	15.0	14.0
5	14.0	11.5	11.0	7.0	2.0	9.5	9.0	12.0	11.0	14.5	15.0	13.5
6	14.0	6.0	7.0	7.0	5.0	9.0	5.5	8.0	12.0	14.5	14.5	13.5
7	14.5	6.0	5.0	8.0	7.5	9.5	5.0	7.5	12.0	14.5	14.0	13.5
8	14.0	6.5	5.5	5.0	7.0	9.0	8.0	7.5	12.0	14.5	15.0	15.0
9	13.0	9.0	6.0	7.5	2.0	9.0	6.0	10.0	13.0	14.5	15.0	14.5
10	13.0	3.5	4.5	9.5	1.5	9.5	4.5	10.0	14.0	14.5	15.0	15.0
11	13.0	1.5	2.0	10.5	3.5	11.0	6.0	11.0	13.0	14.0	15.0	15.0
12	12.0	2.0	4.0	6.0	2.0	10.5	8.5	12.5	12.0	14.5	15.0	15.0
13	11.5	3.0	5.5	4.5	3.0	7.5	9.5	9.5	14.0	14.0	15.0	14.5
14	14.0	4.5	5.0	5.5	7.0	4.5	10.5	12.0	11.5	11.0	14.5	15.0
15	10.0	7.0	5.0	8.0	7.0	4.5	9.0	11.5	12.0	14.0	14.5	15.0
16	11.0	8.0	5.5	7.0	6.0	8.0	6.5	11.5	13.0	15.0	15.0	14.5
17	10.0	3.5	2.0	7.5	4.0	4.0	7.5	12.5	10.5	15.0	15.0	14.5
18	9.0	4.0	1.0	8.0	3.0	2.5	5.5	12.5	9.5	15.0	14.0	12.0
19	9.0	6.0	2.0	8.5	5.5	5.0	6.5	13.0	11.0	15.0	14.5	11.0
20	9.0	6.5	5.5	8.0	4.5	8.5	7.0	12.5	14.5	15.0	14.0	12.0
21	10.0	9.5	4.0	10.0	4.0	10.0	9.0	13.5	13.5	14.5	15.0	13.0
22	10.0	6.0	1.0	5.5	7.5	5.0	10.5	13.0	14.0	14.0	14.0	13.0
23	10.0	6.0	2.0	6.5	4.5	5.5	9.5	13.0	15.0	15.0	13.5	10.0
24	9.0	8.5	3.5	8.0	4.0	7.0	8.0	13.0	13.0	15.0	14.0	9.0
25	9.0	11.5	5.5	10.0	2.5	3.0	5.5	12.5	12.0	15.0	14.5	10.0
26	9.0	10.5	8.0	10.5	6.0	6.0	6.5	11.5	10.0	15.5	15.0	11.0
27	9.0	12.5	7.5	10.0	0.5	7.0	7.5	10.5	11.5	15.5	15.0	11.5
28	11.0	12.0	4.5	8.5	3.0	8.0	9.5	9.0	11.0	15.0	15.5	13.0
29	9.0	6.5	4.5	7.5	---	7.0	10.5	11.5	11.0	14.5	16.0	14.0
30	8.0	4.0	6.5	6.5	---	8.0	10.5	12.5	11.0	15.5	16.0	9.5
31	8.0	---	8.0	5.5	---	6.0	---	12.0	---	13.5	16.0	---
MONTH	11.5	7.0	5.0	7.5	4.5	7.0	8.0	11.5	12.0	14.5	15.0	13.0
YEAR	MAX	16.0	MIN	0.5	MEAN	10.0						

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.				
11...	0935	38	15	1.5
NOV.				
07...	1215	36	2	.19
DEC.				
26...	1125	325	20	18
26...	1240	600	66	107
26...	1415	1240	232	777
26...	2315	550	12	18
MAR.				
05...	0930	130	2	.70
JUNE				
14...	1210	95	9	2.3
AUG.				
27...	1301	50	34	4.6

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

WATER QUALITY DATA FURNISHED BY NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
PERIOD SEPTEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALKALINITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
SEP.											
04...	1550	43	5	--	6.9	18.0	8.5	<25	--	.1	<10
10...	1400	67	5	--	6.3	18.0	10.1	<25	--	.4	20
17...	1130	49	4	--	5.4	16.0	10.6	<25	--	.8	<10
24...	1310	44	5	--	7.0	16.0	9.1	<25	--	.3	<10
OCT.											
04...	1300	41	5	--	6.2	16.0	9.4	<25	--	.6	10
08...	1430	39	6	--	6.6	16.0	9.3	--	--	.6	<10
18...	1430	35	9	--	7.6	8.0	10.8	<25	--	.6	<10
25...	1315	33	8	--	7.3	9.0	10.5	<25	--	.3	<10
30...	1330	41	8	--	7.3	8.0	10.6	<25	--	.4	<10
NOV.											
06...	1545	41	7	--	7.0	7.5	10.6	<25	--	.2	<10
15...	0935	36	8	--	7.6	7.0	11.7	--	--	--	--
19...	1145	37	8	--	7.3	7.0	10.3	<25	--	1.4	10
26...	1000	62	--	--	--	--	--	<25	--	.4	<10
DEC.											
06...	1350	218	--	--	--	--	--	<25	--	.4	<10
12...	0945	93	--	--	--	--	--	<25	--	--	--
JAN.											
07...	1125	375	--	--	--	--	--	30	--	.1	<10
15...	1220	300	4	--	6.4	9.0	10.7	<25	--	.8	<10
24...	0930	138	6	--	6.7	10.0	10.3	--	<25	1.1	<10
29...	1015	215	7	--	6.9	8.0	10.8	--	<25	1.1	10
FEB.											
04...	1215	435	5	--	6.6	5.0	11.4	--	<25	.3	<10
18...	1230	194	5	--	6.9	5.0	12.0	--	<25	.7	<10
MAR.											
04...	1245	147	19	--	6.7	10.0	10.9	--	<25	1.1	<10
11...	1030	131	6	--	7.4	11.0	10.4	--	<25	.2	<10
18...	1515	115	--	--	7.4	6.0	11.9	--	30	.9	<10
28...	1005	169	6	--	6.8	9.0	10.4	--	<25	.5	<10
APR.											
03...	1015	179	5	--	6.9	12.0	9.9	--	<25	1.0	<10
10...	1045	321	4	--	6.8	6.0	11.6	--	<25	.7	<10
15...	1255	359	6	--	7.3	11.0	10.1	--	<25	1.2	<10
22...	1215	167	6	--	6.9	13.0	10.0	--	<25	.2	<10
MAY											
01...	0930	113	6	13	6.9	14.0	9.5	--	<25	.7	20
09...	1500	189	4	11	7.2	14.0	9.5	--	<25	.5	<10
15...	0945	176	6	10	7.0	14.0	9.6	--	22	.6	10
20...	1015	143	5	16	6.9	14.0	9.3	--	<25	1.1	20
28...	1200	179	5	15	6.8	12.0	10.1	--	<25	2.6	<10
JUNE											
03...	1100	194	6	25	7.4	15.0	9.3	--	46	.9	<10
10...	1100	118	8	30	6.9	16.0	8.9	--	<25	1.0	90
17...	1000	91	6	13	7.1	12.0	9.6	--	< 25	.4	<10
24...	1100	81	7	--	6.8	14.0	9.0	--	< 25	1.1	10
JULY											
01...	1100	69	8	--	6.8	15.0	9.4	--	< 25	1.0	<10
08...	1000	95	5	14	6.6	16.0	9.1	--	< 25	.5	<10
15...	1030	66	8	30	6.7	16.0	9.2	--	--	.9	20
22...	0930	61	--	30	--	16.0	8.8	--	--	.5	<10
29...	1025	53	5	--	7.0	17.0	8.9	--	--	1.1	20
AUG.											
02...	1230	47	4	30	6.8	17.0	9.1	--	--	1.1	850
20...	1130	60	4	25	6.8	18.0	9.1	--	--	.5	10
27...	1300	50	6	16	7.0	16.0	10.8	--	--	.3	20
SEP.											
10...	1350	48	5	--	7.1	17.0	9.0	--	--	1.0	20
18...	1100	47	4	28	6.4	13.5	9.4	--	--	.8	16
26...	1330	40	6	--	6.9	13.0	9.9	--	--	.4	40
30...	1130	39	8	35	7.2	11.0	9.6	--	--	.6	20

03479269 WATAUGA RIVER AT BEECH CREEK, N. C.

LOCATION.--Lat 36°16'10", long 81°53'02", Watauga County, on right bank 50 ft (15 m) upstream from bridge on Secondary Road 1200, 0.6 mi (1.0 km) upstream from Beech Creek, 1.0 mi (1.6 km) northeast of village of Beech Creek, 6.1 mi (9.8 km) downstream from gaging station, and at mile 58.3 (93.8 km).

DRAINAGE AREA.--126 mi^2 (326 km^2).

PERIOD OF RECORD.--Water temperatures: July 1971 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum, 25.5°C July 28; minimum, freezing point on several days during December and February.

Period of record:
Water temperatures: Maximum, 26.0°C July 9, Aug. 29, 30, 31, Sept. 2, 1973; minimum, freezing point on many days during winter period.

REMARKS.--Temperature data furnished by the Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.5	16.0	9.0	7.0	6.5	5.0	8.0	6.5	8.5	5.0	9.0	4.5
2	18.0	15.5	9.0	6.5	6.0	5.0	6.5	5.5	9.0	8.5	10.0	8.0
3	18.5	16.5	11.5	9.0	5.0	3.5	9.0	6.0	9.5	8.5	11.5	9.0
4	19.0	16.5	13.0	10.5	8.5	5.0	9.0	9.0	8.5	4.5	13.0	9.5
5	19.0	18.0	12.0	9.5	11.0	8.5	9.0	7.0	5.0	1.5	12.0	10.0
6	18.5	16.0	9.0	5.0	10.0	6.0	8.5	8.0	5.5	4.5	11.0	9.0
7	17.0	15.0	5.5	5.0	6.0	4.0	8.0	6.5	7.0	5.5	14.0	11.0
8	17.0	16.0	9.0	5.5	5.0	3.5	6.5	4.5	7.0	3.5	14.5	11.5
9	18.0	15.5	9.0	5.0	3.5	3.0	9.0	5.0	3.5	1.5	14.5	11.5
10	18.5	16.5	5.0	1.5	3.5	3.0	10.5	8.5	3.5	0.5	14.0	12.0
11	17.0	15.5	3.0	0.5	3.0	0.0	10.5	9.0	3.5	1.5	13.0	10.5
12	17.0	15.0	3.5	1.0	1.0	0.0	9.0	4.0	4.0	0.5	11.5	10.0
13	16.5	14.5	5.5	3.0	4.0	1.0	4.0	3.5	6.0	2.0	11.0	8.5
14	17.0	15.5	8.0	4.0	4.0	4.0	5.0	3.5	6.0	8.0	9.0	5.0
15	16.0	13.5	9.5	6.0	4.0	4.0	8.0	5.0	8.5	7.0	9.0	5.0
16	15.0	13.0	9.5	6.5	4.0	3.0	9.5	8.0	8.5	4.0	9.0	6.0
17	14.0	10.5	9.0	5.5	3.0	0.0	10.0	9.0	4.5	3.0	6.0	4.0
18	10.5	8.5	5.5	3.0	0.0	0.0	10.0	8.5	5.0	2.0	5.5	2.0
19	11.0	9.0	7.0	5.5	0.0	0.0	8.5	8.5	6.5	5.0	10.0	5.5
20	12.0	9.5	8.5	6.0	4.0	0.0	9.0	8.5	6.5	5.5	11.0	9.5
21	13.5	10.5	8.0	8.0	4.0	1.0	9.0	8.5	7.0	4.5	10.0	6.5
22	13.5	11.0	8.5	6.5	1.0	0.0	8.5	6.0	8.0	5.5	9.0	5.0
23	13.0	11.0	8.5	6.0	3.5	1.0	9.0	6.5	6.0	3.0	9.5	5.5
24	13.5	11.0	10.0	8.0	4.0	3.5	9.5	9.0	6.0	3.5	9.5	6.0
25	13.0	10.5	10.5	9.5	5.0	4.0	10.5	9.5	6.0	0.5	6.5	4.5
26	12.0	10.0	10.5	9.0	7.0	5.0	10.5	10.5	1.0	0.0	6.5	5.0
27	12.0	10.0	13.0	10.5	8.0	7.0	11.5	10.0	3.5	0.0	8.5	6.0
28	12.0	11.0	13.0	8.5	7.0	4.0	11.0	9.0	4.5	2.0	10.5	8.5
29	11.0	8.0	8.5	5.0	5.5	4.0	9.5	8.0	---	---	10.5	9.0
30	8.0	6.5	5.5	3.0	6.5	5.5	9.5	7.0	---	---	10.0	8.5
31	7.0	6.5	---	---	8.0	6.0	9.0	6.0	---	---	10.5	6.0
MONTH	19.5	6.5	13.0	0.5	11.0	0.0	11.5	3.5	9.5	0.0	14.5	2.0

03479269 WATAUGA RIVER AT BEECH CREEK, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	7.0	20.0	18.5	16.5	15.5	18.5	15.5	23.5	20.0	21.5	20.0
2	14.5	11.5	18.5	13.0	16.0	15.5	20.0	16.5	22.0	20.5	21.0	19.5
3	15.0	11.0	17.0	12.0	18.0	14.0	20.0	18.5	21.5	18.0	19.5	18.5
4	15.0	11.5	16.0	14.5	18.5	15.5	20.5	18.0	18.5	17.0	18.5	16.5
5	11.5	10.0	14.5	10.5	19.0	15.5	20.0	18.5	20.5	18.0	17.0	16.0
6	10.0	6.5	14.0	9.5	18.0	16.0	19.0	17.0	20.0	18.5	16.5	15.0
7	11.5	6.5	14.5	10.5	17.0	15.0	21.0	18.0	20.5	18.0	16.0	15.0
8	11.5	9.5	15.5	10.5	16.0	15.5	20.5	19.5	20.0	18.5	17.0	15.5
9	10.0	6.0	15.5	13.5	18.5	15.0	20.5	18.5	20.5	18.0	18.5	16.5
10	9.5	5.0	15.0	14.0	18.5	15.5	21.5	19.0	20.5	19.5	19.5	17.0
11	11.5	8.0	18.0	13.5	18.5	15.5	19.5	19.0	19.5	18.5	19.0	16.0
12	11.5	10.5	16.5	13.0	17.0	15.5	21.5	18.5	20.5	18.0	18.5	16.5
13	14.5	11.5	15.0	10.5	16.5	14.5	21.5	19.5	22.0	19.0	18.5	16.0
14	15.0	13.0	16.5	11.5	19.0	15.5	24.0	19.0	21.5	20.0	18.0	16.5
15	15.0	11.5	17.0	14.5	18.0	15.0	24.5	19.5	22.0	20.0	18.0	16.5
16	13.0	9.5	19.5	15.0	16.5	15.0	24.0	20.5	20.5	19.0	18.0	15.5
17	13.0	10.0	20.5	17.0	16.0	14.5	24.0	20.0	20.0	18.5	17.0	15.5
18	13.0	9.0	20.5	18.5	17.0	13.5	24.5	20.5	21.0	19.0	18.0	15.0
19	13.0	10.0	19.5	18.0	19.0	15.0	23.5	21.0	21.0	18.5	18.5	16.0
20	14.5	10.0	19.0	16.5	19.0	17.0	24.5	20.0	20.5	18.5	18.5	16.0
21	16.0	13.0	17.0	16.0	18.5	17.0	24.0	20.0	21.0	18.5	17.0	16.0
22	15.5	14.0	17.0	15.5	19.0	16.5	23.5	19.0	22.0	18.5	16.5	15.0
23	15.0	13.5	17.0	16.0	19.0	16.0	22.0	20.0	22.0	19.0	16.0	14.0
24	13.5	9.5	19.5	15.5	16.0	15.0	21.0	19.0	23.0	19.5	14.0	11.0
25	13.0	8.5	19.5	16.5	18.5	15.5	24.0	19.5	23.0	20.0	13.0	10.5
26	15.5	11.0	17.0	14.0	18.0	15.5	24.0	21.0	23.5	20.0	15.5	13.0
27	17.0	13.0	15.5	13.5	18.0	15.5	24.0	20.0	23.5	20.5	15.0	14.5
28	19.0	14.5	17.0	13.5	15.5	14.0	25.5	21.5	23.0	20.5	16.5	15.0
29	20.5	16.0	19.0	15.5	15.5	13.5	24.5	21.0	23.0	20.5	17.0	15.0
30	21.0	17.0	18.5	16.5	18.0	14.0	24.0	20.0	23.0	20.5	15.5	13.0
31	---	---	19.5	16.5	---	---	24.5	19.5	21.5	20.0	---	---
MONTH	21.0	5.0	20.5	9.5	19.0	13.5	25.5	15.5	23.5	17.0	21.5	10.5
YEAR	25.5	0.0										

03500000 LITTLE TENNESSEE RIVER NEAR PRENTISS, N. C.

LOCATION.--Lat 35°08'57", long 83°22'46", Macon County, temperature recorder at gaging station on left bank 600 ft (183 m) upstream from Owensby Branch, 0.5 mi (0.8 km) upstream from Cartoogechaye Creek, 2 mi (3.2 km) north of Prentiss, and at mile 119.5 (192.3 km).

DRAINAGE AREA.--140 mi^2 (363 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1953, water years 1968-73 (discontinued, partial-record station.).
Water temperatures: October 1952 to September 1953, October 1968 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum, 20.5°C on several days during July and August; minimum, 1.5°C Dec. 18, 22.

Period of record:
Dissolved solids (1952-53): Maximum, 33 mg/l Mar. 1-10, 1953; minimum, 19 mg/l Feb. 20-28, 1953.
Hardness (1952-53): Maximum, 10 mg/l Oct. 1-10, Nov. 1-10, 1952, Feb. 11-19, 1953; minimum, 5 mg/l on many days during March, April, June, and July 1953.
Water temperatures: Maximum, 25.5°C July 6, 12-14, 1953; minimum, freezing point Dec. 16, 1968, Jan. 8-12, 22, 1970.

REMARKS.--Miscellaneous chemical data published for water years 1946, 1955-67. Temperature records for October 1968 to September 1974 furnished by the Tennessee Valley Authority.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	18.0	10.5	8.5	9.5	8.5	11.0	10.0	9.5	8.5	10.5	7.0
2	19.0	17.0	10.5	8.5	9.5	8.5	10.0	8.5	11.0	9.5	11.0	9.5
3	19.5	18.0	11.0	8.5	8.5	8.0	11.0	9.5	11.5	11.0	12.0	10.5
4	19.0	18.0	13.0	10.0	11.5	8.5	11.0	11.0	11.0	7.0	13.0	11.0
5	19.5	18.0	14.5	13.0	13.5	11.5	11.5	10.5	7.0	6.0	13.0	11.5
6	19.5	18.0	13.0	10.0	11.5	8.5	10.5	9.0	9.0	7.0	13.5	11.5
7	18.5	16.5	10.0	9.0	8.5	7.0	10.5	9.5	10.0	9.0	14.5	13.0
8	18.5	17.0	10.5	9.5	8.0	7.0	9.5	7.0	10.5	8.5	14.5	13.0
9	18.5	16.5	11.5	10.5	8.5	7.0	10.0	8.5	8.5	5.5	14.0	12.0
10	19.0	17.0	10.5	7.0	8.0	6.0	12.0	10.0	6.0	5.0	14.5	12.0
11	18.0	16.0	7.0	5.0	6.0	4.0	12.0	11.5	6.5	5.5	14.0	13.0
12	17.0	15.5	7.0	4.5	5.0	4.0	11.5	7.0	6.5	5.0	13.0	11.5
13	16.0	14.5	8.0	5.0	8.0	5.5	7.0	5.5	8.0	6.0	12.0	11.0
14	16.5	15.0	9.0	6.0	8.0	6.5	6.5	6.0	10.0	8.0	11.5	9.5
15	15.5	13.5	11.0	8.0	7.0	6.5	9.0	6.5	10.5	9.5	10.5	9.0
16	15.0	13.5	11.5	10.0	7.0	6.0	11.5	9.0	10.5	8.5	10.5	9.5
17	14.0	11.5	9.5	7.0	6.0	3.0	11.0	10.0	8.5	7.0	9.5	7.0
18	12.0	9.5	8.5	6.0	3.5	1.5	11.0	10.0	8.0	6.0	8.5	6.0
19	13.0	9.5	10.0	7.0	4.0	3.0	11.0	10.0	8.5	8.0	10.5	8.0
20	13.5	10.5	11.0	8.5	6.5	4.0	11.0	10.0	9.0	8.0	12.0	10.5
21	13.5	10.5	11.5	11.0	6.5	3.5	11.0	10.5	9.0	7.0	12.0	10.0
22	14.0	11.0	11.0	10.0	3.5	1.5	10.5	9.0	10.0	8.5	10.0	8.0
23	14.0	12.0	10.5	9.5	4.5	2.0	10.0	9.0	8.5	6.0	9.5	8.0
24	14.0	11.5	13.0	10.5	6.0	4.5	11.5	10.0	8.0	6.0	10.5	9.0
25	13.5	11.0	14.0	13.0	8.0	5.0	12.0	11.5	8.0	4.0	10.0	8.0
26	13.5	10.5	14.0	13.0	11.0	8.0	12.0	12.0	4.5	2.0	11.0	7.0
27	13.0	10.0	15.0	14.0	10.0	8.5	12.0	11.5	6.0	4.0	11.0	10.0
28	12.0	11.5	15.0	13.0	8.5	6.5	11.5	11.0	7.0	5.0	13.0	10.0
29	11.5	9.5	13.0	8.5	8.5	6.0	11.0	10.0	---	---	12.0	10.5
30	9.5	8.5	8.5	7.0	9.0	8.5	10.5	9.5	---	---	12.0	11.0
31	9.5	8.5	---	---	10.5	9.0	9.5	8.5	---	---	12.0	10.0
MONTH	19.5	8.5	15.0	4.5	13.5	1.5	12.0	5.5	11.5	2.0	14.5	6.0

03500000 LITTLE TENNESSEE RIVER NEAR PRENTISS, N. C.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	11.0	16.5	15.5	16.5	16.0	18.0	16.0	20.5	18.5	19.0	18.5
2	15.0	13.5	15.5	15.0	17.0	16.0	18.5	16.5	20.5	19.0	19.5	18.5
3	15.0	13.5	16.5	14.5	18.0	16.0	18.5	17.0	19.5	18.5	19.0	18.0
4	14.5	13.5	16.5	15.5	17.0	16.0	18.5	18.0	19.0	18.0	18.5	17.0
5	13.5	11.5	15.5	13.5	17.0	15.5	18.0	17.0	18.5	17.0	18.0	16.5
6	13.0	9.0	14.0	12.0	16.5	15.5	19.0	17.0	18.5	17.0	16.5	16.0
7	11.0	8.5	14.0	12.0	16.0	15.5	19.0	18.0	18.0	16.5	16.5	16.0
8	11.0	10.0	14.0	12.0	16.5	15.5	19.0	18.0	17.0	16.5	18.0	16.0
9	10.5	9.0	15.0	13.5	17.0	16.0	18.5	18.0	18.0	16.5	18.5	17.0
10	10.5	8.0	16.0	14.0	18.0	16.5	18.5	17.0	18.0	16.5	19.0	17.0
11	11.0	9.5	16.0	15.0	17.0	16.0	18.5	17.0	18.0	17.0	19.0	17.0
12	11.0	10.5	16.5	15.0	16.5	15.5	19.5	17.0	18.5	16.5	19.0	18.0
13	13.5	11.0	16.0	13.0	16.0	15.0	20.0	18.5	18.0	17.0	18.5	17.0
14	14.0	13.0	15.0	13.0	16.5	15.0	20.5	18.5	18.0	17.0	18.0	18.0
15	14.0	11.5	15.5	14.5	16.5	15.5	20.5	18.5	18.0	16.5	18.5	17.0
16	12.0	10.0	16.0	14.5	17.0	16.0	20.0	18.5	18.0	17.0	18.5	17.0
17	12.0	10.5	16.5	15.0	16.5	15.0	20.0	18.0	18.5	17.0	18.0	16.5
18	11.5	9.5	17.0	15.5	15.5	14.0	20.0	18.5	18.5	17.0	17.0	15.5
19	13.0	10.0	17.0	16.0	16.5	14.5	20.0	19.0	18.5	17.0	17.0	15.5
20	13.5	11.0	17.0	15.5	18.0	16.0	20.0	18.5	18.5	17.0	17.0	15.5
21	14.0	12.0	17.0	15.5	17.0	16.5	20.5	19.0	18.0	16.0	17.0	16.0
22	14.0	13.0	16.5	15.0	19.0	16.5	20.5	19.0	16.5	15.5	16.5	15.5
23	14.5	12.0	17.0	15.5	18.5	17.0	19.5	18.0	18.0	16.5	15.5	13.5
24	14.0	11.5	18.0	16.0	17.0	16.0	19.0	17.0	18.5	17.0	14.5	13.0
25	13.0	10.0	17.0	15.5	16.5	15.5	20.0	18.5	18.5	18.0	13.5	12.0
26	13.5	11.0	16.5	14.0	16.0	14.5	19.5	19.0	19.0	18.0	15.0	13.0
27	14.5	11.5	15.5	13.5	15.5	14.5	19.0	19.0	19.0	18.5	15.5	14.5
28	15.5	13.5	15.0	13.5	15.5	14.5	20.0	18.5	19.0	18.5	16.5	15.0
29	16.0	14.0	16.0	14.5	16.0	14.5	20.5	19.5	19.0	18.5	18.0	16.5
30	16.5	14.5	16.0	15.5	17.0	15.0	20.5	19.0	20.0	18.5	16.5	14.0
31	---	---	16.5	15.5	---	---	20.0	18.5	19.5	18.5	---	---
MONTH	16.5	8.0	18.0	12.0	19.0	14.0	20.5	16.0	20.5	15.5	19.5	12.0
YEAR	20.5	1.5										

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
TENNESSEE RIVER BASIN										
03445376 - NORTH FORK MILLS RIVER ABOVE MILLS RIVER N C (LAT 35 24 25 LONG 082 38 47)										
OCT., 1973										
23...	0925	7.6	1.2	.5	1.2	.9	8	0	7	5.6
AUG., 1974										
08...	0945	6.8	.8	.4	.8	.5	6	--	5	1.5
03450000 - BEETREE CREEK NEAR SWANNANOA N C (LAT 35 39 11 LONG 082 24 20)										
OCT., 1973										
23...	1430	9.9	1.6	.8	1.0	1.2	8	0	7	1.3
AUG., 1974										
08...	0945	7.6	1.1	.6	1.0	.5	6	--	5	2.4
03463292 - LOCUST CREEK NEAR CELO N C (LAT 35 48 42 LONG 082 11 52)										
OCT., 1973										
23...	1330	5.9	.9	.5	1.0	.9	7	0	6	3.0
AUG., 1974										
08...	1615	6.7	3.0	.3	.8	.5	6	--	5	2.7
03500741 - PEEKS CREEK AT SR 1678 NEAR GNEISS N C (LAT 35 07 08 LONG 083 17 40)										
OCT., 1973										
23...	1215	9.2	.7	.4	1.3	.8	8	0	7	1.0
AUG., 1974										
08...	1245	6.6	1.4	.3	.9	.6	6	--	5	.8
03510815 - MINGUS CREEK AT RAVENSWOOD N C (LAT 35 31 12 LONG 083 18 30)										
OCT., 1973										
23...	1420	8.5	1.0	.3	1.3	1.8	7	0	6	1.5
AUG., 1974										
08...	1425	8.2	.8	.3	.9	.7	7	--	6	.8

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	SUS-PENDED KJEL. NITRO-GEN (N) (MG/L)
TENNESSEE RIVER BASIN--Continued										
03445376 - NORTH FORK MILLS RIVER ABOVE MILLS RIVER N C (LAT 35 24 25 LONG 082 38 47)										
OCT.. 1973										
23...	.3	.2	--	--	--	--	--	--	--	--
AUG.. 1974										
08...	.7	.5	.05	.06	.00	.00	.12	.06	.12	.06
03450000 - BEETREE CREEK NEAR SWANNANOA N C (LAT 35 39 11 LONG 082 24 20)										
OCT.. 1973										
23...	1.0	.0	--	--	--	--	--	--	--	--
AUG.. 1974										
08...	.8	.0	--	--	--	--	--	--	--	--
03463292 - LOCUST CREEK NEAR CELO N C (LAT 35 48 42 LONG 082 11 52)										
OCT.. 1973										
23...	.1	.1	--	--	--	--	--	--	--	--
AUG.. 1974										
08...	.7	.1	--	--	--	--	--	--	--	--
03500741 - PEEKS CREEK AT SR 1678 NEAR GNEISS N C (LAT 35 07 08 LONG 083 17 40)										
OCT.. 1973										
23...	.1	.1	--	--	--	--	--	--	--	--
AUG.. 1974										
08...	.0	.2	--	--	--	--	--	--	--	--
03510815 - MINGUS CREEK AT RAVENSWOOD N C (LAT 35 31 12 LONG 083 18 30)										
OCT.. 1973										
23...	1.1	.1	--	--	--	--	--	--	--	--
AUG.. 1974										
08...	.3	.2	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (P04) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
TENNESSEE RIVER BASIN--Continued										
03445376 - NORTH FORK MILLS RIVER ABOVE MILLS RIVER N C (LAT 35 24 25 LONG 082 38 47)										
OCT., 1973 23...	--	--	--	--	--	--	--	--	5	21
AUG., 1974 08...	.06	.17	.75	.01	.03	.01	.00	.01	13	15
03450000 - BEETREE CREEK NEAR SWANNANOA N C (LAT 35 39 11 LONG 082 24 20)										
OCT., 1973 23...	--	--	--	--	--	--	--	--	13	21
AUG., 1974 08...	--	--	--	--	--	--	--	--	17	17
03463292 - LOCUST CREEK NEAR CELO N C (LAT 35 48 42 LONG 082 11 52)										
OCT., 1973 23...	--	--	--	--	--	--	--	--	14	16
AUG., 1974 08...	--	--	--	--	--	--	--	--	30	18
03500741 - PEEKS CREEK AT SR 1678 NEAR GNEISS N C (LAT 35 07 08 LONG 083 17 40)										
OCT., 1973 23...	--	--	--	--	--	--	--	--	18	18
AUG., 1974 08...	--	--	--	--	--	--	--	--	14	14
03510815 - MINGUS CREEK AT RAVENSWOOD N C (LAT 35 31 12 LONG 083 18 30)										
OCT., 1973 23...	--	--	--	--	--	--	--	--	17	19
AUG., 1974 08...	--	--	--	--	--	--	--	--	10	16

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	CARBON DIOXIDE (CO2) (MG/L)
TENNESSEE RIVER BASIN--Continued										
03445376 - NORTH FORK MILLS RIVER ABOVE MILLS RIVER N C (LAT 35 24 25 LONG 082 38 47)										
OCT., 1973										
23...	.01	5	0	30	.2	14	7.1	10.0	5	1.0
AUG., 1974										
08...	.02	4	0	29	.2	13	6.3	15.6	7	4.8
03450000 - BEETREE CREEK NEAR SWANNANOA N C (LAT 35 39 11 LONG 082 24 20)										
OCT., 1973										
23...	.02	7	1	20	.2	21	6.9	12.0	5	1.6
AUG., 1974										
08...	.02	5	0	27	.2	16	6.4	15.0	4	3.8
03463292 - LOCUST CREEK NEAR CELO N C (LAT 35 48 42 LONG 082 11 52)										
OCT., 1973										
23...	.02	4	0	29	.2	13	7.6	11.5	10	.3
AUG., 1974										
08...	.04	9	4	16	.1	17	6.4	16.0	20	3.8
03500741 - PEEKS CREEK AT SR 1678 NEAR GNEISS N C (LAT 35 07 08 LONG 083 17 40)										
OCT., 1973										
23...	.02	3	0	39	.3	13	7.2	11.4	5	.8
AUG., 1974										
08...	.02	5	0	26	.2	13	6.4	15.8	7	3.8
03510815 - MINGUS CREEK AT RAVENSWOOD N C (LAT 35 31 12 LONG 083 18 30)										
OCT., 1973										
23...	.02	4	0	32	.3	12	7.0	11.8	5	1.1
AUG., 1974										
08...	.01	3	0	32	.2	12	6.3	15.6	4	5.6

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