



WATER-QUALITY CHARACTERISTICS OF STREAMS IN THE TREYBURN DEVELOPMENT AREA OF FALLS LAKE WATERSHED, NORTH CAROLINA, 1988-93

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CONVERSION FACTORS, TEMPERATURE, VERTICAL DATUM, AND ABBREVIATIONS

<i>Multiply</i>	<i>By</i>	<i>To obtain</i>
Length		
inch (in.)	25.4	millimeter
foot (ft)	.3048	meter
mile (mi)	1.609	kilometer
square mile (mi ²)	2.590	square kilometer
Area		
acre	.4047	hectare
Flow		
cubic foot per second (ft ³ /s)	.02832	cubic meter per second
cubic foot per second per square mile [(ft ³ /s)/mi ²]	.01093	cubic meter per second per square kilometer

Temperature: Water temperature in degrees Celsius (C) may be converted to degrees Fahrenheit (F) as follows:

$$^{\circ}\text{F} = 1.8\ ^{\circ}\text{C} + 32$$

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Water year: The period October 1 through September 30, determined by the calendar year in which it ends.

Abbreviations used in this report in addition to those shown above:

BTM	Bottom sediment
EMC	North Carolina Environmental Management Commission
GC/FID	gas chromatograph/flame ionization detector
GC/MS	gas chromatograph/mass spectrometer
gm/kg	gram per kilogram
in/yr	inch per year
mg/L	milligram per liter
µg/g	microgram per gram
µg/kg	microgram per kilogram
µg/L	microgram per liter
µS/cm	microsiemens per centimeter (specific conductance)
MBAS	Methylene blue active substances
NSW	nutrient-sensitive waters
ton/mi ²	ton per square mile
USGS	U.S. Geological Survey
<	less than
--	no data

WATER-QUALITY CHARACTERISTICS OF STREAMS IN THE TREYBURN DEVELOPMENT AREA OF FALLS LAKE WATERSHED, NORTH CAROLINA, 1988-93

By Ronald G. Garrett and Jerad D. Bales

ABSTRACT

Treyburn is a 5,400-acre planned, mixed-use community located in the Falls Lake watershed in the upper Neuse River Basin of North Carolina. Development began in 1986 and grew to approximately 1,100 acres of residential, industrial, and recreational facilities by July 1994; the remaining land is forested and abandoned agricultural areas.

From February 1988 through 1993, hydrologic data were collected at 17 study sites in or near the Treyburn development. The collected hydrologic data included measurements of streamflow, physical and chemical properties, and suspended sediment, and concentrations of major dissolved constituents, nutrients, metals and minor constituents, and organic compounds.

Continuous streamflow data were collected at five sites. Streamflow in the study basin was approximately 40 percent lower in 1992 and 40 percent higher in 1993 than the long-term annual mean of the long-term discharge records at Flat River near Bahama. From 1988 to 1992, the annual maximum discharge was less than the 5-year flood recurrence interval at four of the five sites. Flood recurrence intervals for the 1993 water year at the five study sites were between the 5- and 25-year recurrence interval.

Maximum specific conductance measured at the sites located within the development was 212 microsiemens per centimeter compared to 168 microsiemens per centimeter at sites upstream from the development, with the exception of one site which was affected by wastewater discharges

and had a maximum value of 604 microsiemens per centimeter.

Median pH values for most sites were between 6.9 and 7.1. The minimum pH value observed was at an industrial land-use site, but the next lowest pH values were observed at background sites.

Dissolved-oxygen concentrations less than the State standard of 4 milligrams per liter were observed at only three study sites. About 10 percent of the observed dissolved-oxygen concentrations at two of the sites were less than 6 milligrams per liter.

The maximum suspended-sediment concentrations ranged from 1,520 milligrams per liter at the study sites within the development to 885 milligrams per liter at sites upstream from the development. Mean suspended-sediment concentrations at the study sites during runoff events generally were less than mean concentrations measured in basins during previous investigations.

The chemical composition of water at all study sites was similar with respect to major dissolved constituents with the exception of one site, which is influenced by releases from a wastewater-treatment plant. Calcium was the predominant cation with bicarbonate being the major anion at all sites except the site affected by wastewater discharges, which had sodium and sulfate as the predominant cation and anion, respectively.

Mean total nitrogen concentrations at sites in the Treyburn development ranged from 0.5 to 0.8 milligram per liter. Mean total nitrogen

concentrations at sites outside the Treyburn development were equal to or greater than those at the Treyburn sites; the highest concentration was observed at the site influenced by wastewater discharges. Mean total phosphorus concentrations ranged from 0.03 to 0.10 milligram per liter at the study sites, whereas background total phosphorus concentrations were about 0.03 milligram per liter. Maximum instantaneous yields for nitrogen and phosphorus at the Treyburn development study sites were 0.140 and 0.024 ton per square mile, respectively, compared to 0.109 and 0.016 ton per square mile, respectively, at the study sites outside of the development.

Total aluminum, iron, and manganese were detected most frequently and represented the highest concentrations of the metals and minor constituents analyzed. Because maximum concentrations of these elements occurred during high-flow conditions when the suspended-sediment concentrations were also high, it is apparent that soils are the primary sources of these constituents. The standard in North Carolina for iron in freshwater of 1,000 micrograms per liter was exceeded at all sites. Metal concentrations generally were highest at two sites--one is an industrial land-use site and the other is located downstream from a wastewater-treatment plant outfall and urbanized areas. North Carolina standards for cadmium, copper, silver, and mercury were exceeded at two or more sites.

Of the 200 organic compounds analyzed, dichloro-difluoromethane and methylene chloride were detected most often in water at the study sites. There were no compounds in concentrations above the method detection limit at three sites. The most common compounds detected in the bottom sediment were DDE, DDD, and DDT; one or more of these compounds were detected at eight of the study sites.

INTRODUCTION

Treyburn is a 5,400-acre planned, mixed-use development located in the Falls Lake watershed in the upper Neuse River Basin of North Carolina (fig. 1). Development began in 1986 and by July 1994 had grown to approximately 1,100 acres of residential,

industrial, and recreational facilities, with the remaining land being forested or abandoned agricultural areas (Larry Pool and Associates, P.A., Registered Land Surveyors, oral commun., July 1994).

Three water-supply reservoirs, Lake Michie to the north, Falls Lake to the southeast, and Little River to the west, lie just outside of the Treyburn boundaries. The streams in the Treyburn area were classified by the North Carolina Environmental Management Commission (EMC) in 1993 as WS III, meaning they are located in a low to moderately developed water-supply watershed. Much of the area in the Treyburn development also is classified as water-quality critical area. "Critical area" is defined in the Neuse River Basinwide Water-Quality Management Plan as an area that is 0.5 mile (mi) wide and drains to water supplies from normal pool elevation of reservoirs, or an area that is 0.5 mi wide and drains to a river intake (North Carolina Department of Environment, Health, and Natural Resources, 1993).

The WS III classification requires that (1) buffer areas be left along perennial waters, (2) no new landfills be allowed in the critical area, (3) no new discharging landfills be outside the critical area, (4) no new sludge or petroleum contaminated soils application be allowed in the critical area, and (5) a hazardous-material containment plan and structure be required for new industries. Lot sizes allowed for residential homes in the critical area are 1 acre; 0.5-acre residential lots are allowed outside of the critical area.

Streams and reservoirs in the Treyburn development drainage area also have a supplemental classification of "nutrient-sensitive waters" (NSW). Nutrient-sensitive waters require additional nutrient management because they are subject to excessive growth of microscopic or macroscopic vegetation (North Carolina Department of Environment, Health, and Natural Resources, 1993).

The Treyburn development was designed to minimize adverse effects on water quality. However, because of the size of the development and its proximity to the water-supply reservoirs, there was a need to evaluate the effects of the ongoing land-use conversion on water quality. In response to this need, the U.S. Geological Survey (USGS) in cooperation with the City of Durham began a study in February 1988 to determine water-quality characteristics of surface waters in and around the Treyburn development area. Data collection at selected sites in this development is ongoing (August 1994).

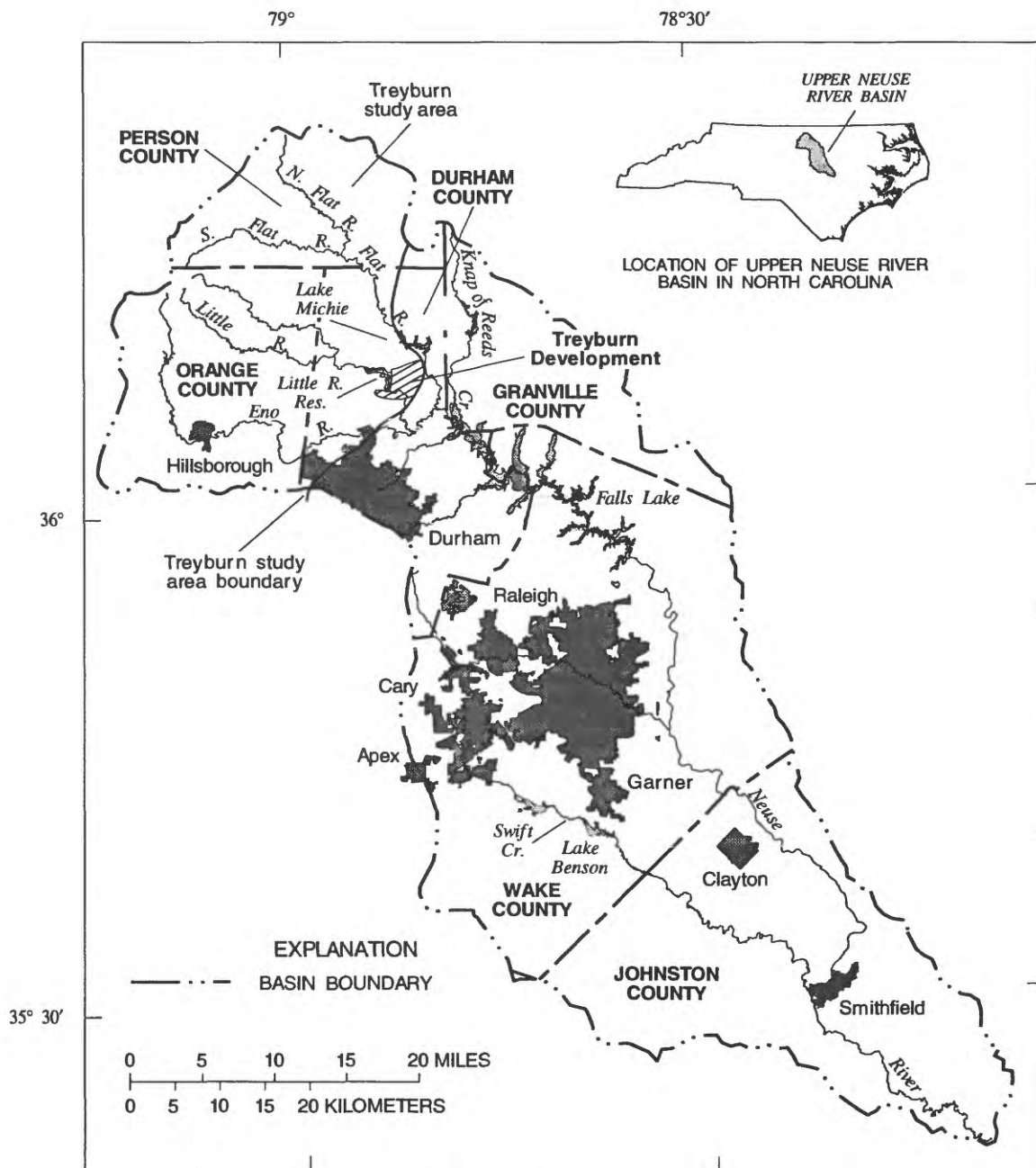


Figure 1.--The Treyburn study area in the upper Neuse River Basin of North Carolina.

Purpose and Scope

The purpose of this report is to describe water-quality characteristics in streams which flow in or near the Treyburn development and to present some observations about streamwater quality in association with varying types of land use. This report includes data collected from February 1988 through September 1993.

Statistical summary tables present the results of nearly 400 analyses for dissolved constituents, nutrients, and metals and minor constituents in water; and about 100 analyses for organic compounds in water and bottom sediments for 17 study sites. Continuous streamflow data were collected at 5 sites. Discussions include the analytical results for selected constituents at selected sites that are representative of various land uses in the study area.

Acknowledgments

This report was prepared in cooperation with the City of Durham. Beginning in October 1988, water-quality data collected at sites 4T, 5T, 11T, and 15T (fig. 2) were collected as part of the Triangle Area Water Supply Monitoring Project study.

Study Area

The Treyburn development is located north of the city of Durham in the Falls Lake watershed in the upper Neuse River Basin (figs. 1 and 2). The principal municipalities in the area are the cities of Durham and Raleigh (fig. 1). The population of these cities increased about 40 percent between 1980 and 1989. In 1989, they had a combined total population of approximately 350,000 (North Carolina Office of State Budget and Management, 1990).

Three major streams to Falls Lake flow near or through Treyburn (fig. 2). The Little River flows through the development before merging with the Eno River, which is south of Treyburn. The drainage area at the mouth of the Little River is 105 square miles (mi^2), and the drainage area of the Eno River just below the confluence of the Eno and Little Rivers is 255 mi^2 . The Flat River, located east of Treyburn, flows southward into Falls Lake where the drainage area of Flat River is 175 mi^2 .

Three water-supply reservoirs lie just outside of the development boundary. Lake Michie to the north and the Little River reservoir to the west supply water

to the city of Durham; Falls Lake, the largest of the three reservoirs, is located downstream from the Treyburn development and is the water supply for the city of Raleigh. Runoff from the Treyburn development eventually reaches Falls Lake through the Eno and Flat Rivers. The Treyburn development area constitutes approximately 1 percent of the total drainage area for Falls Lake. Lake Michie receives no runoff from the development, and the Little River reservoir receives only minor runoff from the residential and undeveloped areas of Treyburn.

The climate of the study area is characterized by hot, humid summers, mild winters, and long growing seasons. The mean monthly temperature ranges from about 35 °F in January to 80 °F in July. Precipitation in the study area averages about 45 inches per year (in/yr) (National Oceanic and Atmospheric Administration, 1988-92). The topography is gently sloping to moderately steep, with a range in elevation of 300 feet (ft) above mean sea level in the low lands in the south to approximately 600 ft in the northern part of the study area. The area is underlain by three bedrock units--granite in the north, shale and sandstone in the central and south, and slates in the west (Kirby, 1976). The soils in the area are predominantly sandy clay loam, silty clay, and firm clay. The soils in the study area are described as moderately well drained in the northern section, to poorly drained in the southern section (Kirby, 1976).

Land Use

In July 1994, Treyburn consisted of approximately 1,100 acres of residential, industrial, and recreational development, including a 210-acre golf course and 4,300 acres of forested and abandoned agricultural areas (Larry Pool and Associates, P.A., Registered Land Surveyors, oral commun., July 1994). Originally, the majority of land in the development was cleared for agricultural use; however, as agricultural activities ceased, mixed forests of oak, hickory, and pine developed.

In 1985, the major land uses in Treyburn were approximately 15 percent agricultural and 85 percent mixed forest (Zoning Application for a Mixed Land Use Project, Treyburn, Durham County, North Carolina, written commun., 1985). Originally, about 45 percent of Treyburn was proposed for commercial development (fig. 3; table 1) and about 20 percent was proposed for residential development; completion of

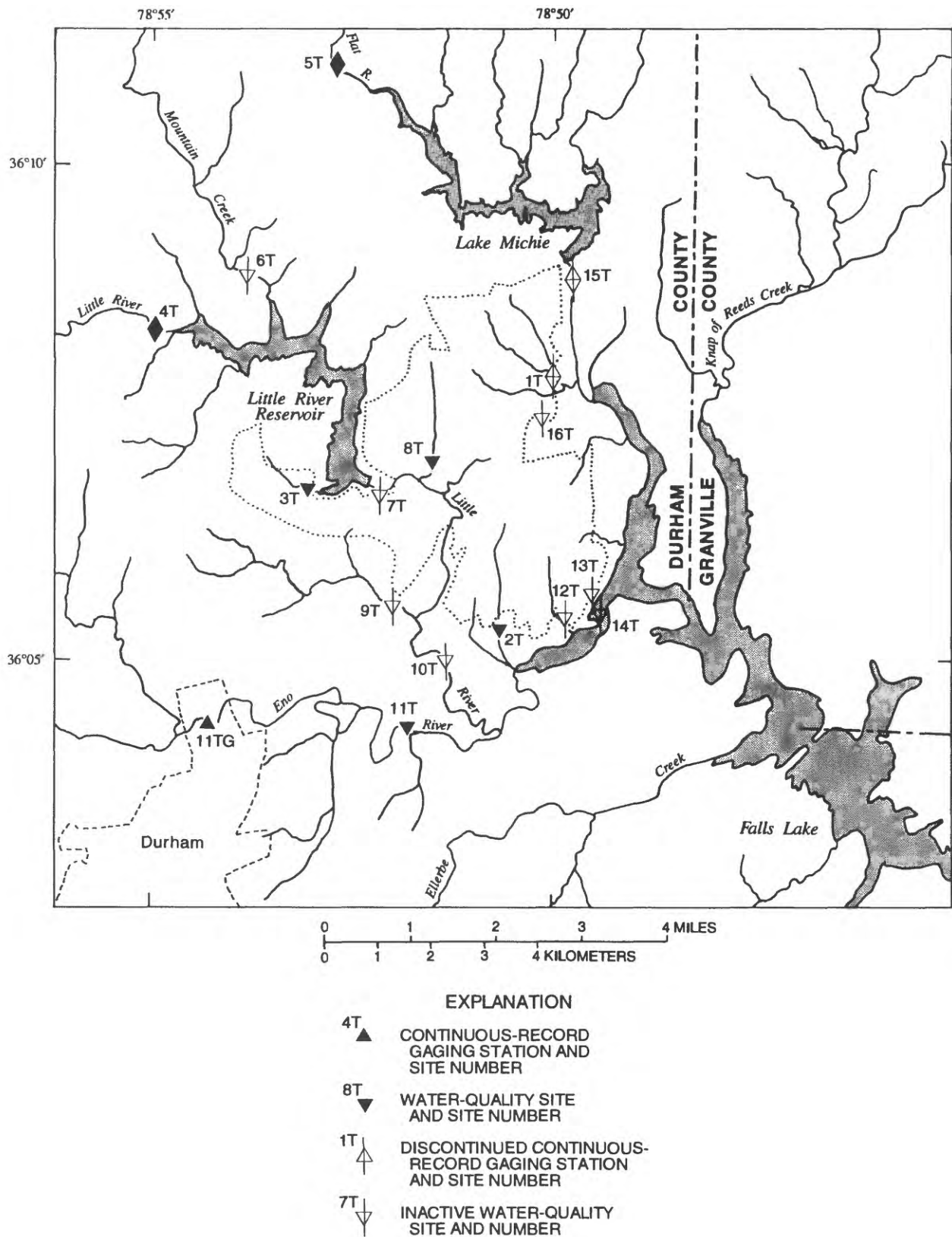


Figure 2.--Study sites in the Treyburn study area of Durham County, North Carolina.

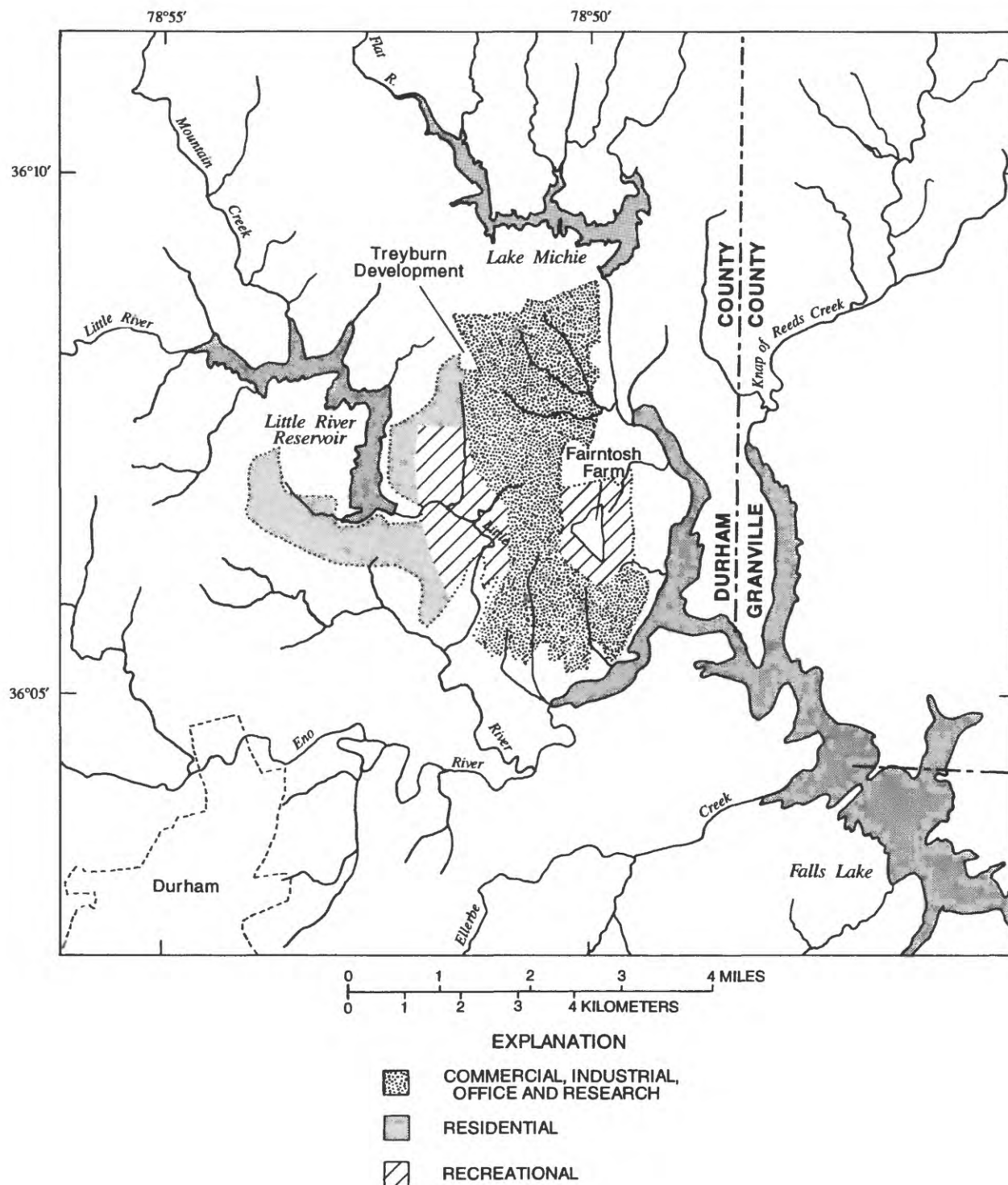


Figure 3.--Proposed 1986 land-use plan for the Treyburn development, North Carolina.

Table 1. Proposed 1986 land-use plan for the Treyburn development, Durham County, North Carolina

Proposed land use	Acres (approximate)
Commercial, industrial, office, and research	2,319
Residential	1,100
Recreational	1,069
Easements	684
Total	15,172

¹Zoning Application for a Mixed Land Use Project, Treyburn, Durham County, North Carolina, 1985.

the development was planned for about the year 2006 (Zoning Application for a Mixed Land Use Project, Appendix A, Treyburn, Durham County, North Carolina, written commun., February 1985). In 1994, however, land use in the Treyburn development area was approximately 20 percent residential, industrial, and recreational and approximately 80 percent consisting of mixed forest and abandoned agriculture lands. In the Eno River, Little River, and Flat River Basins upstream from Treyburn, the major land uses were approximately 65 percent forest and 30 percent agriculture and pasture, with the remaining 5 percent being urban land use (Simmons, 1993).

DATA COLLECTION

From February 1988 through September 1993, hydrologic data were collected at 17 monitoring sites in or near the Treyburn study area (fig. 2; table 2). The hydrologic data included measurements of streamflow, physical and chemical properties, concentrations of major dissolved constituents, nutrients, concentrations of metals and minor constituents, and organic compounds in water and bottom sediments.

During the initial phase of the study, data were collected at all monitoring sites in or near the study area (fig. 2). As development in the area progressed, the original monitoring network was changed to only include sites in the areas that were most affected by land-use changes. As of April 1995, the network consists of six monitoring sites in or near the study area.

Study Sites

Sites were designated as either primary (where data were collected at regular intervals) or miscellaneous (where data collection was less intensive than at the primary sites). Site selection was based on planned development in Treyburn (Zoning Application for a Mixed Land Use Project, Treyburn, Durham County, North Carolina, written commun., 1985). The three primary sites in Treyburn were initially chosen to characterize water-quality conditions from the different land uses in the development. Site 1T was located in a basin which was planned primarily for research land use; industrial uses were planned for the basin upstream from site 2T; and 3T was located in a basin planned for residential use (fig. 2). These three sites were selected to provide water-quality data representative of the three soil types in the development and could serve as long-term monitoring sites in three different land-use areas of Treyburn. During the second year of the study, site 8T was activated as a primary monitoring site in order to characterize water-quality conditions from an area with both residential and recreational development. Development in Treyburn was slower than originally planned, and land-use changes occurred only in the basins upstream from sites 2T and 8T during the study period.

Sites 1T, 2T, 3T and 8T (fig. 2) were primary monitoring sites, located either in Treyburn or near the boundary of the development. Runoff from these four sites originated entirely from the Treyburn development. Soils in the small basins upstream from these sites are relatively uniform. Basins upstream from sites 1T and 8T had soils formed in material derived from granite. Shale- and sandstone-derived soils are predominant in the basin upstream from site 2T, and soils derived from slates are dominant in the 3T basin. Sites 4T, 5T, 6T, and 11T were primary monitoring sites located upstream from the development to characterize water-quality conditions at sites not affected by the Treyburn development. Land use and soils in the larger basins upstream from these sites was uniform.

Typically, the primary monitoring sites were sampled six times per year for major constituents, nutrients, and trace metals in water; samples were collected over a representative range of streamflow. Samples for analyses of organic compounds generally were collected once per year at low-flow and twice per year during runoff conditions. Continuous discharge

Table 2. Types of data collected in the Treyburn study area of Falls Lake watershed, February 1988 through September 1993

[mi², square miles; P, primary station; SR, State Road; --, no data; C, continuous; mi, mile; M, miscellaneous station]

Site number (fig. 2)	Station name and number ¹	Drainage area (mi ²)	Station type	Land use	Continuous discharge	Physical and chemical properties (water)	Major dissolved constituents (water)	Major nutrients (water)	Metals and minor constituents (water)	Metals and minor constituents (bottom sediments)	Organic compounds (water)	Organic compounds (bottom sediments)
1T	Flat River tributary near Willardville, 0208650112	1.1	P	Mixed forest	3/88-9/90	2/88-9/91	7/89-9/91	2/88-9/91	7/89-9/91	2/88-6/90	2/88-9/91	2/88-6/90
2T	Eno River tributary at SR1004 near Fairmont, 0208527100	.6	P	Industrial	--	2/88-9/93	7/89-9/93	2/88-9/93	7/89-9/93	2/88-6/90	2/88-9/93	2/88-6/90
3T	Little River tributary near Durham, 0208524170	1.0	P	Mixed forest and residential	--	2/88-9/93	7/89-9/93	2/88-9/93	7/89-9/93	2/88-6/90	2/88-9/93	2/88-6/90
4T	Little River at SR1461 near Orange Factory, 0208521324	78.2	P	Upper Neuse Basin mixed forest and agriculture	C ² 10/87-9/93	2/88-9/93	7/89-9/93	2/88-9/93	7/89-9/93	2/88-6/90	2/88-9/93	2/88-6/90
5T	Flat River near Bahama, 02085500	149	P	Upper Neuse Basin mixed forest and agriculture	7/25-9/93	2/88-9/93	7/89-9/93	2/88-9/93	7/89-9/93	2/88-6/90	2/88-9/93	2/88-6/90
6T	Mountain Creek at SR1617 near Bahama, 0208524090	8.0	P	Upper Neuse Basin mixed forest and agriculture	--	2/88-9/91	7/89-9/91	2/88-9/91	7/89-9/91	2/88-6/90	2/88-9/91	2/88-6/90
7T	Little River below dam near Fairmont, 0208524850	97.8	M	Reservoir - outfall	--	10/88-6/91	7/89-6/91	10/88-6/91	7/89-6/91	--	10/88-6/91	--
8T	Little River tributary, 0.3 mi above mouth at Fairmont, 0208524930 ³	.6	M/P	Recreation/ Residential	--	2/88-9/93	7/89-9/93	2/88-9/93	7/89-9/93	--	2/88-9/93	--

¹ U.S. Geological Survey downstream order number.

² Gage relocated during October 1987 due to impoundment of Little River reservoir. Discharge data prior to October 1987 were from 0208522000, Little River near Orange Factory, drainage area 80.4 mi², October 1963 through 1987.

³ Formerly published as 0208524950, Little River tributary at Fairmont.

Table 2. Types of data collected in the Treyburn study area of Falls Lake watershed, February 1988 through September 1993--Continued

[mi², square miles; P, primary station; SR, State Road; --, no data; C, continuous; mi, mile; M, miscellaneous station]

Site number (fig. 2)	Station name and number ¹	Drain- age area (mi ²)	Sta- tion type	Land use	Continuous discharge	Physical and chemical properties (water)	Metals					
							Major dissolved constituents (water)	Major nutrients (water)	Metals and minor con- stituents (water)	Metals and minor con- stituents (bottom sediments)	Organic com- pounds (water)	Organic compounds (bottom sediments)
9T	Cabin Branch above mouth near Fairmont, 0208525105	3.5	M	Residential	--	2/88-6/89	--	2/88-6/89	--	--	2/88-6/89	--
10T	Little River near Weaver, 02085262	100	M	Mixed-forest	--	2/88-6/89	--	2/88-6/89	--	2/88-6/89	--	--
11T	Eno River near Weaver, 02085079	148.0	P	Upper Neuse Basin mixed forest, residential	C ⁴ 8/63-9/93	2/88-9/93	7/89-9/93	2/88-9/93	7/89-9/93	2/88-6/89	2/88-9/93	2/88-6/90
11TG	Eno River near Durham, 02085070	141	M	Upper Neuse Basin mixed forest, residential	C 8/63-9/93	--	--	--	--	--	--	--
12T	Eno River tributary near Fairmont, 0208527550	.4	M	Mixed forest	--	2/88-6/89	--	2/88-6/89	--	--	--	--
13T	Eno River tributary above mouth near Cozart, 0208528420	.1	M	Industrial	--	2/88-6/89	--	2/88-6/89	--	2/88-6/89	2/88-6/89	2/88-6/89
14T	Eno River near Willardville, 02085284	259	M	Residential/ industrial	--	2/88-6/89	--	2/88-6/89	--	2/88-6/89	--	--
15T	Flat River at dam near Bahama, 02086500	168	M	Reservoir - outfall	C 2/27-9/59 8/61-9/66 10/82-9/90 10/92-9/93	2/88-6/91	7/89-6/91	2/88-6/91	7/89-6/91	--	2/88-6/91	--
16T	Flat River tributary above mouth near Willardville, 0208651170	.6	M	Mixed forest	--	2/88-6/89	--	2/88-6/89	--	--	--	--

⁴ Discharge values for 11T from gage at site 11TG.

also was recorded at sites 1T, 4T, 5T, 11TG and 15T (fig. 2).

Sites 7T, 9T, 10T, 12T, 13T, 14T, 15T, and 16T (fig. 2) were operated as miscellaneous sites. Sampling frequencies at these sites ranged from every 2 months to once per year for major constituents, nutrients, trace metals, and organic compounds in water (table 2). Bottom-sediment samples for trace metals and organic compounds were collected at least once during the study period at all sites except 7T, 8T, 9T, 11TG, 12T, 15T, and 16T (fig. 2).

Sample Collection and Field Analyses

Water samples were collected at each study site and analyzed for a wide range of constituents. Information on sample handling and analytical procedures is described by Garrett and others (1994).

Water samples for inorganic analysis were collected using the depth-integrated, equal-width increment method, composited in a polycarbonate churn splitter, and processed and preserved as described by Edwards and Glysson (1988) and Ward and Harr (1990). Samples for analysis of dissolved constituents were filtered through a 142-millimeter (mm) diameter, 0.45-micron pore-size membrane filter. The filter was placed in a polycarbonate filter holder and the sample was pumped through with a peristaltic pump. Samples for organic analysis were collected at midstream using a weighted, open-mouth sampler or as a grab sample by hand. Bottom-sediment samples were collected at midstream with a BMH60 bottom-sediment sampler or by manually scooping the material into the sample container.

Water temperature, pH, specific conductance, and dissolved-oxygen concentration were measured in the field at the time of sample collection. Field instruments were calibrated and results were documented on a daily basis as part of the USGS quality-assurance program. Also, as part of the quality-assurance program, equipment blank and duplicate samples were routinely collected and analyzed.

Laboratory Procedures

Samples collected during the study period were analyzed by the USGS National Water-Quality Laboratory in Denver, Colorado. The analytical methods used by the USGS laboratory are documented in Wershaw and others (1987), Fishman and Friedman (1989), Britton and Greeson (1989), and Fishman

(1993). Suspended-sediment concentrations were determined in the USGS District sediment laboratory in Raleigh, North Carolina, by methods and procedures documented by Guy (1969). Analytical procedures and method detection limits for chemical constituents in water analyzed by the USGS National Water-Quality Laboratory during this study are described by Garrett and others (1994).

STREAMFLOW CHARACTERISTICS

Continuous streamflow data were collected at study sites 1T, 4T, 5T, 11TG, and 15T (fig. 2) during the study period. Sites 5T, 11TG, and 15T are long-term streamflow sites; site 5T has the longest period of record of the three sites dating from 1925 (table 2). Site 1T was the only streamflow gage located within the Treyburn development area during the study period. The gage was in operation from March 1988 through September 1990. Operation of the gage was discontinued because the anticipated development in the basin upstream from site 1T had not occurred and there were no immediate plans for development in the basin. During the period of operation at 1T, zero flow was observed approximately 20 percent of the time.

Streamflow conditions in the study area are described based on data from site 5T, which is the site with the longest period of record. Extreme streamflow conditions occurred at site 5T (fig. 2) in 1992 and 1993. The 1992 annual mean discharge of 82 cubic feet per second (ft^3/s) was approximately 40 percent lower than the long-term annual mean discharge of $143 \text{ ft}^3/\text{s}$. Except for January, monthly mean discharge in 1992 was lower than average (fig. 4). Although flows were lower than normal during May through September (fig. 4), the 1993 annual mean discharge of $206 \text{ ft}^3/\text{s}$ was approximately 40 percent higher than the long-term annual mean of $143 \text{ ft}^3/\text{s}$. Similar conditions are assumed to have existed throughout the study area during the same period.

Giese and Mason (1993) indicated that the long-term mean annual runoff for the study area is between 0.9 and 1.0 cubic foot per second per square mile [$(\text{ft}^3/\text{s})/\text{mi}^2$]. Streamflow statistics including the annual runoff for the five sites are given in table 3. The annual runoff for water years 1988 and 1992 was between 0.3 and $0.6 (\text{ft}^3/\text{s})/\text{mi}^2$; whereas, the runoff for water years 1989 and 1993 was between 1.2 and $1.5 (\text{ft}^3/\text{s})/\text{mi}^2$. The mean annual runoff for the five study sites for water years 1988 through 1993 was $1.0 (\text{ft}^3/\text{s})/\text{mi}^2$.

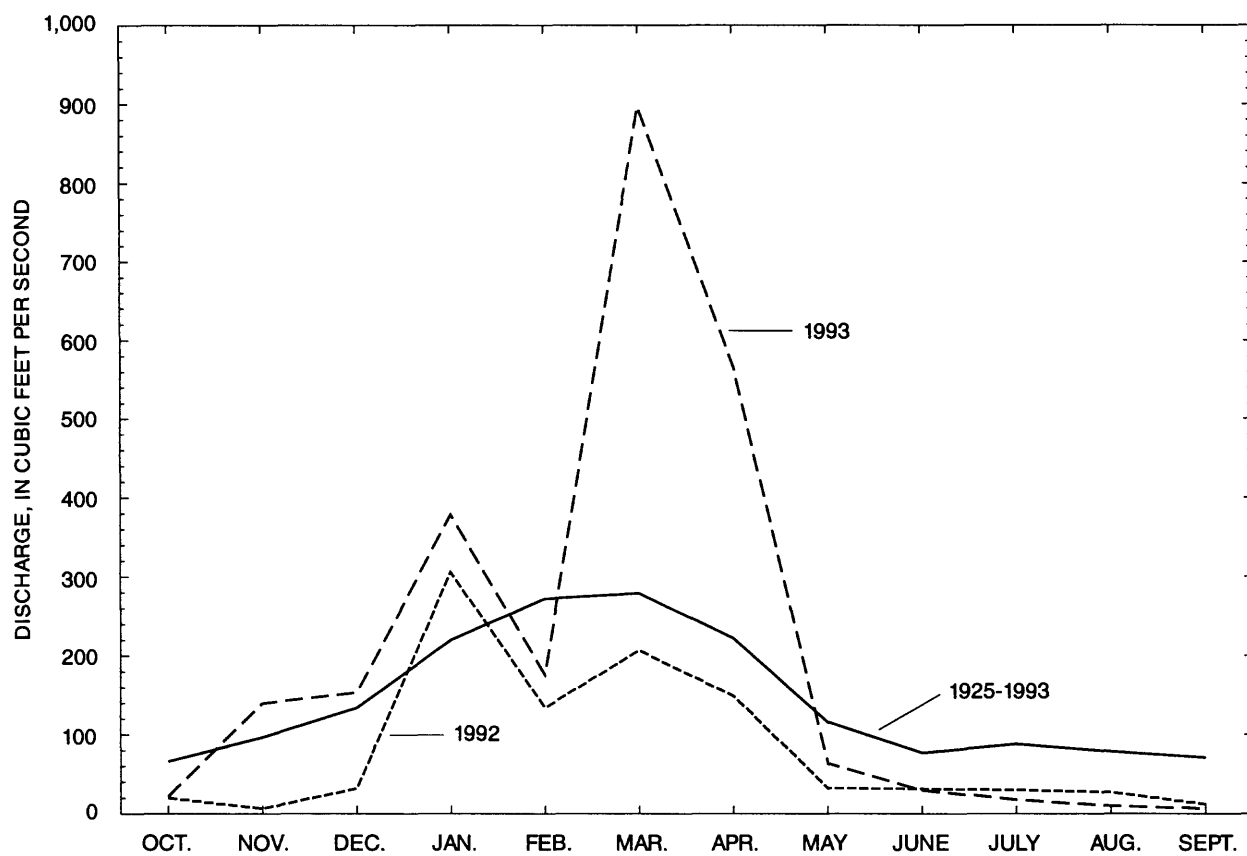


Figure 4.--Monthly mean discharge at site 5T in the Treyburn study area for water years 1992 and 1993 and mean monthly discharge for water years 1925-93.

Table 3. Streamflow statistics at selected Treyburn study sites, water years 1988-93

[ft³/s, cubic foot per second; --, insufficient data to compute statistics; (ft³/s)/mi², cubic foot per second per square mile]

Site number (fig. 2)	Annual mean discharge (ft ³ /s)					
	1988	1989	1990	1991	1992	1993
1T	--	1.3	1.5	--	--	--
4T	31	105	89	72	47	103
5T	61	209	151	115	82	206
11TG	65	191	157	130	88	171
15T	47	244	189	--	--	230
Annual runoff [(ft ³ /s)/mi ²]						
1T	--	1.2	1.4	--	--	--
4T	.4	1.3	1.2	.9	.6	1.3
5T	.4	1.4	1.0	.8	.6	1.4
11TG	.5	1.4	1.1	.9	.6	1.2
15T	.3	1.5	1.1	--	--	1.4
Annual maximum discharge (ft ³ /s)						
1T	¹ 18	98	82	--	--	--
4T	615	4,170	1,950	3,040	4,800	7,380
5T	1,280	6,720	2,770	5,970	7,600	14,200
11TG	1,140	6,090	2,920	4,310	5,490	8,810
15T	1,260	7,650	3,350	--	--	14,900
Annual minimum discharge (ft ³ /s)						
1T	¹ .00	.00	.00	--	--	--
4T	.00	.52	.52	.11	--	.26
5T	.68	2.4	.68	.68	--	.58
11TG	.72	.71	.91	2.4	.57	2.0
15T	.00	.00	.01	--	--	.01

¹Period of record is March 1988 through September 1988.

Table 4. Flood and low-flow magnitudes for selected recurrence intervals at long-term, unregulated sites in the Treyburn study area

[ft³/s, cubic foot per second; mi², square mile; yr, year; 7Q10, annual minimum 7-day consecutive low flow which, on average, will be exceeded in 9 out of 10 years; --, not applicable, station is regulated]

Site	Drainage area (mi ²)	Flood-flow magnitude (ft ³ /s) at stated recurrence interval					Low flow			Method ¹	
		2-yr	5-yr	10-yr	25-yr	100-yr	7Q2	30Q2	7Q10	Flood flow	Low flow
1T	1.1	150	260	360	500	760	0.04	0.07	0.01	A	C
4T	80.4	3,230	5,200	6,630	8,550	11,600	2.6	4.4	.2	B	D
5T	149.0	6,960	10,400	12,900	16,100	21,400	5.2	8.9	1.0	B	D
11TG	141.0	4,550	8,030	10,800	14,600	21,300	Regulated			B	--

¹Method: A. Regional regression relations (Gunter and others, 1987).

B. Log pearson type III distribution fit to observed flows.

C. Median value of gaged basins in the same hydrologic area, adjusted for drainage area (Giese and Mason, 1993).

D. Analysis of gage record.

Flood and low-flow magnitudes for selected recurrence intervals at unregulated sites in the study area are presented in table 4. During water years 1988-92, the annual maximum discharges at sites 1T, 4T, 5T, and 11TG (fig. 2) were less than the 5-year flood recurrence interval (Gunter and others, 1987). The annual maximum discharge at site 1T for that period was less than the 2-year recurrence interval. The annual maximum discharges for the 1993 water year ranged between 5- and 25-year recurrence intervals at all of the study sites.

The potential for streams in the area to sustain low-flow as defined by Giese and Mason (1993) is low to intermediate as a result of the low permeability of the rock types in the area. The annual minimum discharges at sites 1T, 4T, and 5T (fig. 2) ranged from 0 to 2.4 ft³/s; whereas, the low-flow 7Q10 for the sites ranged from 0.01 to 1.0 ft³/s (table 4). The low-flow 7Q10 is defined as the annual minimum 7-day consecutive low flow which, on average, will be exceeded in 9 out of 10 years. Annual minimum discharges of zero flow were observed at sites 1T, 4T, and 15T (fig. 2).

WATER-QUALITY CHARACTERISTICS

Water-quality samples were collected and field measurements were made at 16 sites in and around Treyburn during 1988-93 (table 2). Analyses were performed on water and bed-material samples. Types of analyses varied among sites, but concentrations of as many as 15 major nutrient constituents, 15 metals and minor constituents, and approximately 200 organic compounds were analyzed. Statistical summaries of the water-quality data are presented in tables 9-24 at the back of this report. The statistical summaries were

prepared using programs developed by the USGS (Maddy and others, 1992). If the total number of observations above and below the method detection limit is greater than 1 but less than or equal to 5, only the maximum and minimum values are reported in the tables. If only one observation is available, the value is reported as the maximum value.

Discussions of selected chemical constituents for selected study sites are presented in this section. Information on physical and chemical characteristics and organic compounds for the study sites are described.

Physical and Chemical Properties

Physical properties described at the study sites include specific conductance, pH, water temperature, dissolved-oxygen (DO) concentrations, color, and suspended-sediment concentrations. Specific conductance is a measure of the ionic strength of water and is an indicator of the amount of mineral matter dissolved in water. Thus, higher concentrations of dissolved constituents produce greater values of specific conductance. Specific conductance at two of the Treyburn development sites (1T and 3T) was essentially the same as at sites 4T and 5T, which are upstream from the development and primarily include forests and pasture land (fig. 5). Highest specific-conductance values (maximum and median) were observed at site 11T, which is located approximately 3.5 mi downstream from a wastewater-treatment plant outfall. The basin upstream from site 11T also includes several urban areas. The maximum observed specific conductance at site 2T, located in the industrial land-use basin in Treyburn, was exceeded only by values at 11T (fig. 5). However, median specific-conductance values at site 2T were similar to those observed at the background sites 1T and 3T, indicating that the high value could have been the result of an isolated event or episode. The second highest median specific-conductance values in the study area were observed at site 8T, which receives drainage from a residential area and a golf course. The sources of the relatively high median specific-conductance values observed at site 6T (third highest in the study basin), located upstream from Treyburn, could be agricultural activities in the basin or septic tank drainage.

Median pH values at most sites were between 6.5 and 7.1 (fig. 5). The minimum pH observed (5.2)

was at site 2T (industrial land use), but the next lowest pH values were at sites 1T and 3T, which were background sites.

The only sites with observed DO concentrations less than 4 milligrams per liter (mg/L) (established in North Carolina as the minimum instantaneous State standard) were 2T, 5T, and 15T. Site 15T is located just downstream from Lake Michie and could be affected by releases of DO-depleted waters from the reservoir.

Suspended Sediment

Suspended-sediment concentrations in streams are affected by several factors including soil characteristics, topography, stream discharge, land use, and rainfall intensity. Because samples in this study were collected at varying flow conditions, a wide range of suspended-sediment concentrations was observed at each of the study sites. The maximum concentration of suspended sediment observed at the four primary monitoring sites located within the development was 1,520 mg/L at site 1T. The minimum concentration was less than 1 mg/L at sites 1T and 2T. Although the drainage basin upstream from site 1T is undeveloped, the stream channel at the site consists mainly of medium to coarse sand. This material becomes suspended during high flows, which accounts for the high suspended-sediment concentration observed. Suspended sediment collected at site 1T generally was coarser than that collected at other sites (fig. 6).

The maximum suspended-sediment concentration at the primary sites located upstream from the development was 885 mg/L at site 5T. The minimum concentration observed at these sites was less than 1 mg/L at site 6T. Suspended sediment generally consisted of fines (less than 0.062 mm) at site 5T, which has the largest drainage areas of the five sites for which size analyses were performed (fig. 6). Mean concentrations at the study sites typically were less than mean suspended-sediment concentrations measured during runoff events in undeveloped basins that were relatively unaffected by development as defined by Simmons and Heath (1982).

Because of the absence of continuous discharge data for sites within the development area, calculations of suspended-sediment yields were not possible. Simmons (1993) estimated the annual sediment yield

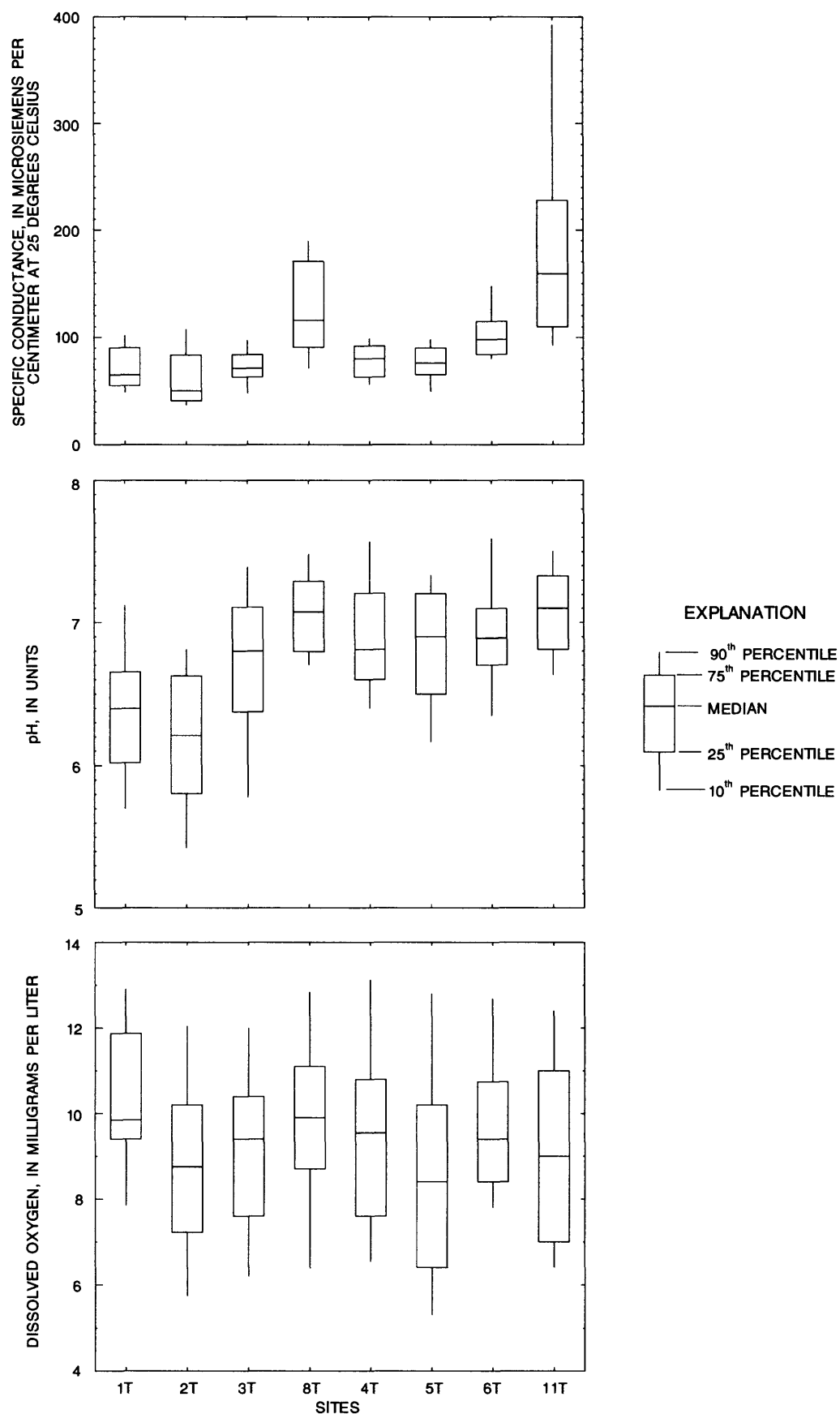


Figure 5.--Specific conductance, pH, and dissolved-oxygen values in water at selected Treyburn study sites, North Carolina, February 1988 through September 1993.

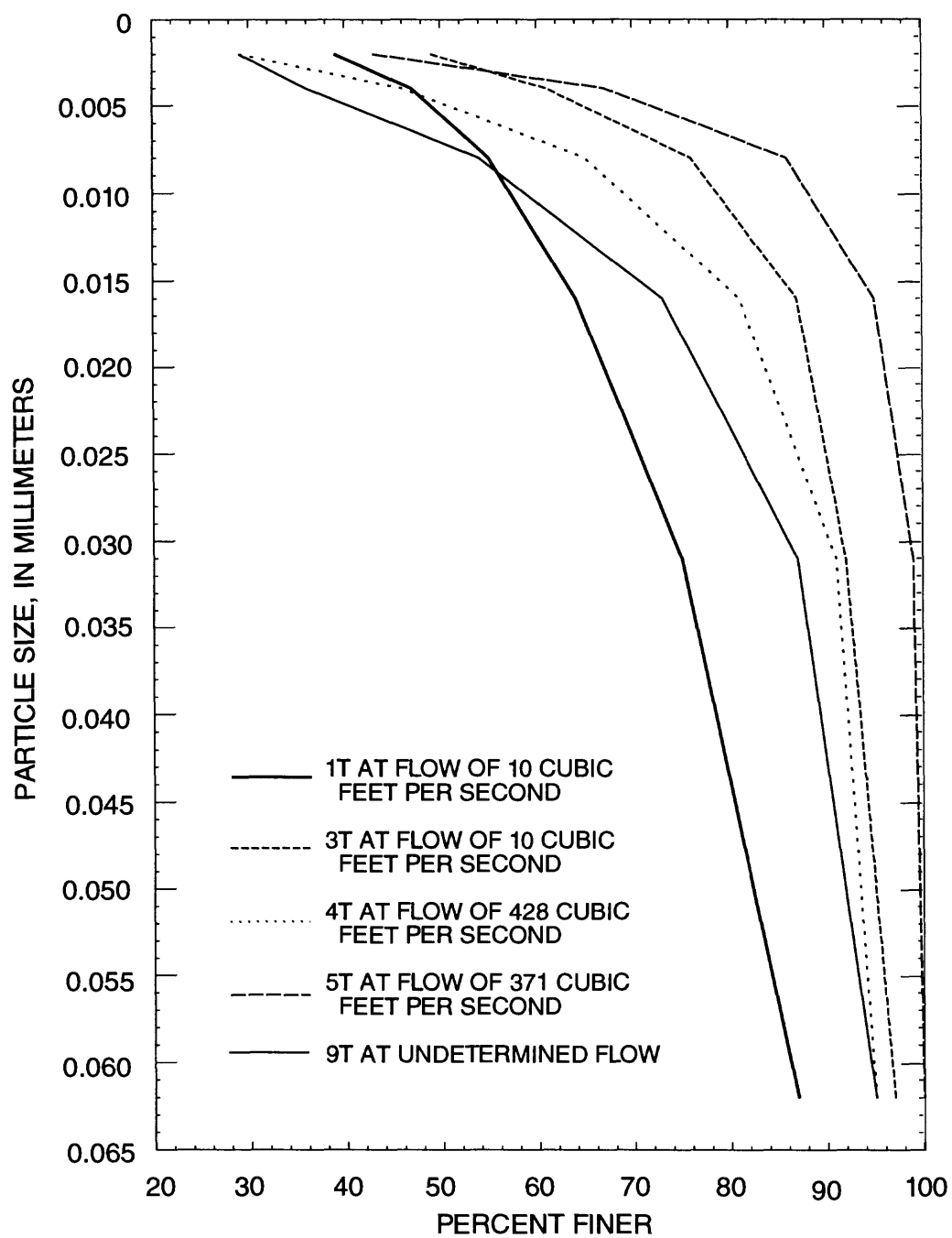


Figure 6.--Particle-size distribution for suspended-sediment samples collected at selected Treyburn study sites, North Carolina, April and August 1988.

for sites 5T and 11TG as 190 and 160 tons per square mile (tons/mi²), respectively. Land use in each of the two basins was approximately 65 percent forested, 30 percent agriculture and pasture, and 5 percent urban (Simmons, 1993).

Chemical Characteristics

Chemical characteristics described in this section are (1) major-dissolved constituents, (2) major nutrients, (3) metals and minor constituents, and (4) organic compounds. Chemical quality in the study streams is related to upstream land use and flow conditions. Concentrations are discussed with respect to water-quality standards and to concentrations in streams draining small, undeveloped basins.

Background water-quality characteristics of North Carolina streams, as described by Simons and Heath (1982), are typical of basins that are 90 to 100-percent forested and relatively unaffected by human activities. Background water quality, in the absence of any human influences, is primarily governed by topography and by chemical characteristics of the soils and geologic formations within the basin. Consequently, five geochemical zones characterized by similar water-quality conditions were identified by Simmons and Heath (1982). The Treyburn project area lies within their geochemical zone II, which coincides with the Carolina Slate Belt and the Durham and Wadesboro Triassic Basins. The rocks of this zone primarily consist of slate and schist.

Major Dissolved Constituents

Major dissolved constituents include the cations sodium, calcium, magnesium, and potassium, and the anions bicarbonate, sulfate, and chloride. The chemical composition of the water is similar at all of the primary study sites with the exception of 11T (fig. 7), which is influenced by releases from a wastewater-treatment plant. Generally, calcium is the predominant cation in the surface waters of geochemical zone II; this was also true at the study sites (table 5; fig. 7). The mean calcium concentration at site 8T (residential and golf course land use) was greater than at site 11T (downstream from wastewater-treatment plant outfall). Elevated sodium and potassium concentrations occurred during one event at site 2T (industrial), but mean concentrations for the two cations at site 2T generally were less than mean concentrations at the other study sites.

Bicarbonate was the predominant anion at all of the study sites (table 5; fig. 7), but was a smaller percentage of the total anion concentration at site 11T than at the other sites (fig. 7). The maximum bicarbonate concentration and the highest mean concentration was observed at site 8T. Mean and maximum sulfate concentrations also were higher at sites 2T and 8T than at all other sites except 11T; but the mean sulfate concentration at 11T was about 3 to 4 times greater than at sites 2T and 8T. Generally, mean cation and anion concentrations were greatest at site 11T, with sodium and sulfate being the predominant of these, respectively. Maximum mean concentrations at sites 8T and 2T typically were greater than maximum concentrations at the remaining study sites (table 5).

Major Nutrients

Nutrients play an important role in streamwater quality because they are required by aquatic plants for growth. Concentrations of nitrogen and phosphorus are especially important in streams that are tributaries to reservoirs because of the potential supply of nutrients to support algal growths in the lake water.

Mean total nitrogen concentrations at the four primary monitoring sites (1T, 2T, 3T, and 8T) within Treyburn development ranged from 0.5 mg/L at site 8T to 0.8 mg/L at sites 2T and 3T (table 5; fig. 8). Mean total nitrogen concentrations at the sites outside of Treyburn (4T, 5T, 6T, 11T) were equal to or greater than concentrations at the Treyburn study area sites (fig. 8), with the highest concentration at 11T, which is downstream from the wastewater-treatment plant. Nutrient concentrations were measured in six tributaries to Falls Lake during 1982-87, including site 11T (Garrett, 1990). The mean total nitrogen concentration at site 11T during 1982-87 was 1.7 mg/L, and mean concentrations at the other sites ranged from 1.1 to 12 mg/L. Background total nitrogen concentration in geochemical zone II is 0.5 mg/L (table 5). Total nitrogen concentrations in water that drains from the Treyburn development are equal to (site 8T) or slightly greater (sites 2T and 3T) than the background value. Total mean nitrogen concentrations from the Treyburn development sites also are substantially less than total mean nitrogen concentrations reported in other streams in the Falls Lake watershed (Garrett, 1994).

Mean total phosphorus concentrations ranged from 0.03 mg/L at site 1T to 0.10 mg/L at site 11T;

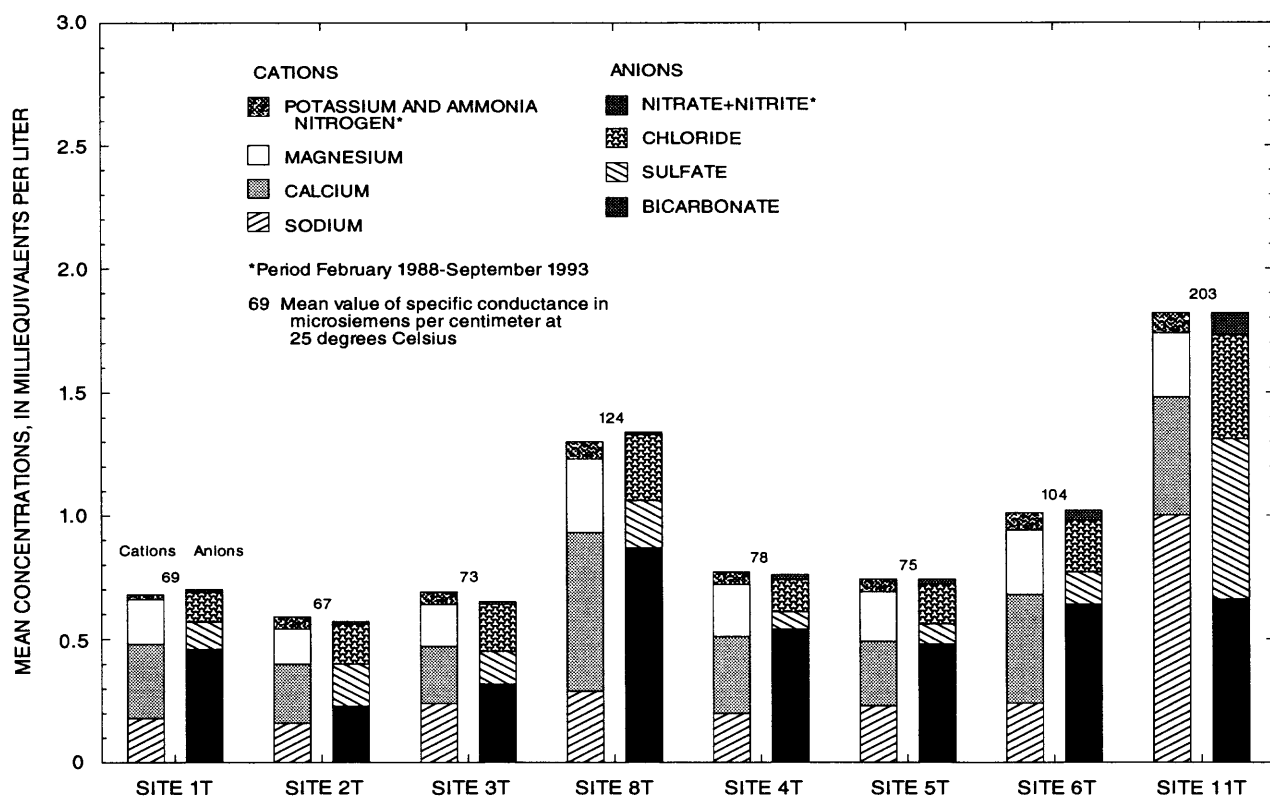


Figure 7.--Mean composition of water at selected Treyburn study sites, July 1989 through September 1993.

Table 5. Mean concentrations of selected constituents at selected Treyburn study sites, water years 1988-93, and mean background concentrations in geochemical zone II (Simmons and Heath, 1982)
[mg /L, milligram per liter]

Site number (fig. 1)	Land use	Mean constituent concentrations						Suspended sediment mg/L
		Calcium ¹ mg/L	Magnesium ¹ mg/L	Sulfate ¹ mg/L	Chloride ¹ mg/L	Nitrogen, total mg/L	Phosphorus, total mg/L	
1T	Mixed forest	6.0	2.2	5.2	4.3	0.6	0.03	100
2T	Industrial	4.8	1.7	8.2	5.7	.8	.06	34
3T	Mixed forest and residential	4.6	2.1	6.4	6.9	.8	.07	17
4T	Upper Neuse Basin, mixed forest and agriculture	6.3	2.6	3.6	4.7	.8	.07	75
5T	Upper Neuse Basin, mixed forest and agricultural	5.3	2.4	3.9	5.5	.9	.07	112
6T	Upper Neuse Basin, mixed forest and agriculture	8.9	3.1	6.4	7.6	1.1	.08	41
8T	Recreational/residential	12.9	3.7	9.2	9.5	.5	.04	17
11T	Upper Neuse Basin, mixed forest and residential	9.6	3.1	31	15	1.9	.10	28
Geo-chemical zone II	90-percent forested	4.1	1.7	4.7	3.8	.5	.03	² 110

¹Period of record for Treyburn sites, July 1989 through September 1993.

²Mean concentrations are for runoff samples only.

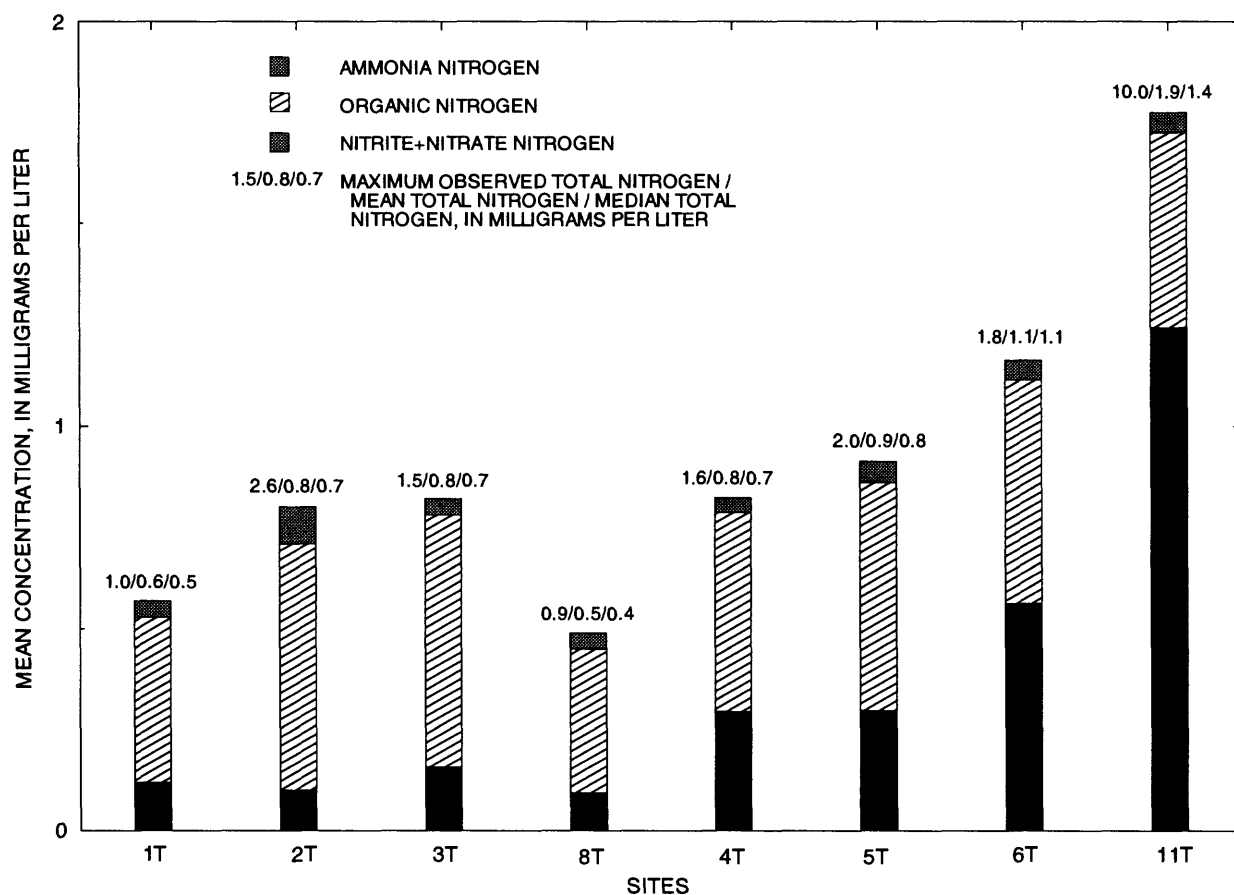


Figure 8.--Mean composition of nitrogen species in water at selected Treyburn study sites, February 1988 through September 1993.

background phosphorus concentration is 0.03 mg/L as defined in table 5 for geochemical zone II. Garrett (1990) reported mean total phosphorus concentrations between 0.07 and 3.3 mg/L in the six tributaries to Falls Lake during 1982-87 that included a mean concentration of 0.49 mg/L at site 11T. The phosphate detergent ban, which became effective in January 1988, has resulted in significantly decreased mean total phosphorus concentrations in waters downstream from wastewater-treatment plant outflows (0.10 mg/L at site 11T).

Because flows in the streams draining Treyburn development are relatively low (measured, maximum flows between 2.6 ft³/s at site 8T and 37 ft³/s at site 3T), total export of instantaneous nutrient loads from these sites is also relatively low compared to instantaneous loads measured in the larger streams draining the study area (sites 4T, 5T, 6T, and 11T) (table 6). The maximum instantaneous yield for nitrogen and phosphorus at the Treyburn development sites was 0.140 and 0.024 ton/mi², respectively, at site 3T compared to 0.109 and 0.016 ton/mi², respectively, at site 5T, which is located outside of the Treyburn development (tables 2 and 6). The lowest maximum instantaneous yield for nitrogen and phosphorus at the Treyburn development sites was 0.007 and 0.002 ton/mi², respectively, at site 8T compared to 0.015 and 0.003 ton/mi² at site 6T, located outside the Treyburn development (table 6). Annual mean loads and yields computed from a continuous record of streamflow would likely be somewhat less than the maximum instantaneous observations reported here.

Table 6. Maximum observed instantaneous nutrient load and yield at selected Treyburn study sites, February 1988 through September 1993

[ton/d, ton per day; ton/mi², ton per square mile]

Site	Maximum observed instantaneous load, ton/d		Maximum observed instantaneous yield, ton/mi ²	
	Total nitrogen	Total phosphorus	Total nitrogen	Total phosphorus
1T	0.027	0.003	0.025	0.003
2T	.049	.003	.082	.005
3T	.140	.024	.140	.024
8T	.004	.001	.007	.002
4T	5.1	1.0	.065	.013
5T	16	2.4	.109	.016
6T	.122	.026	.015	.003
11T	4.9	.64	.033	.004

Using more comprehensive data than were available for this study, Garrett (1990) reported annual loads of total nitrogen ranging from 130 to 250 tons, and annual loads of total phosphorus ranging from 21 to 38 tons for site 11T during water years 1983-86. Garrett also reported annual loads and yields for a site on the Little River (drainage area of 80.4 mi²) just downstream from site 4T (drainage area of 78.2 mi²). During water years 1982-87, mean annual yields for total nitrogen and total phosphorus for the Little River at site 4T were 1.4 tons/mi², and 0.1 ton/mi², respectively (Garrett, 1990). These values are much less than the annual instantaneous yields observed at site 4T during this study.

Metals and Minor Constituents

Aluminum, iron, and manganese were the most commonly detected metals and had the highest concentrations in the waters at the study sites (table 7). The maximum aluminum concentration observed during the study was 8,000 micrograms per liter (µg/L) at site 1T (fig. 9). The maximum observed iron concentration at the primary study sites from July 1989 through September 1993 was 13,000 µg/L at site 1T, which occurred during high-flow conditions. The maximum manganese concentration at the study sites was 1,800 µg/L at site 6T, which also occurred during high flows (table 7; fig. 9). Typically, sites 1T, 2T, 5T, and 6T had the highest concentrations of these metals (fig. 9). The highest mean concentrations of iron (2,550 µg/L) and aluminum (1,360 µg/L) were at site 5T. Site 2T had the second highest mean concentrations of iron (2,130 µg/L) and manganese (330 µg/L), and site 6T had the highest mean concentration of manganese (380 µg/L). Because maximum concentrations of these elements occurred during high-flow conditions when the suspended-sediment concentrations were also high, it is apparent that soils are the primary sources of these constituents. Site 8T (the residential/golf course site) had the lowest mean concentrations of iron (830 µg/L) and aluminum (290 µg/L), but a mean concentration of 180 µg/L for manganese was third highest among the sites.

The North Carolina State standard for freshwater for iron (1,000 µg/L) was exceeded at all sites, and the mean iron concentration was greater than the standard at all sites except 8T (table 7). There are no State standards for aluminum and manganese.

Table 7. Statistical summary of total concentrations of metals and minor constituents in streamwater at selected Treyburn study sites, July 1989 through September 1993

[If the total number of observations above and below the detection limit is greater than 1 and less than or equal to 5, only the maximum and minimum are reported. µg/L, microgram per liter; *, no water-quality standards; Med, median; Min, minimum; max, maximum; --, insufficient data; <, less than]

Constituents	Statistic	Site 1T ¹		Site 2T	Site 3T	Site 4T	Site 5T	Site 6T ¹	Site 8T	Site 11T	North Carolina water-quality standards for all freshwaters ²
		Treyburn, background	Treyburn, industrial	Treyburn, background	Upper Neuse, mixed forest and agriculture	Upper Neuse, mixed forest and agriculture	Upper Neuse, mixed forest and agriculture	Upper Neuse, mixed forest and agriculture	Treyburn, recreation/residential	Upper Neuse, mixed forest, residential	
Aluminum, total, µg/L	Number of samples	12	21	22	14	13	12	13	23	23	*
	Mean	1,190	660	440	1,070	1,360	3,890	290	580	580	
	Med	170	390	330	500	620	140	200	470	470	
	Min-max	20 - 8,000	80 - 2,400	20 - 2,600	50 - 4,000	140 - 4,700	<10 - 4,600	20 - 1,400	130 - 2,700	130 - 2,700	
Arsenic, total, µg/L	Number of samples	12	21	22	14	13	12	13	23	23	50
	Mean	--	3.8	--	--	--	--	--	--	--	
	Med	<1	<1	<1	<1	<1	<1	<1	<1	<1	
	Min-max	<1 - 1	<1 - 11	<1 - 1	<1 - 1	<1 - 1	<1 - 1	<1 - 1	<1 - 1	<1 - 1	
Cadmium, total, µg/L	Number of samples	12	21	22	17	16	12	13	23	23	2
	Mean	--	--	--	--	--	--	--	--	--	
	Med	<1	<1	<1	<1	<1	<1	<1	<1	<1	
	Min-max	<1 - 3	<1 - 13	<1 - 2	<1 - 1	<1 - 1	<1 - 1	<1 - 1	<1 - 1	<1 - 2	
Chromium, total, µg/L	Number of samples	12	21	22	17	16	12	13	23	23	50
	Mean	--	3.1.8	3.1.0	3.1.3	3.1.7	--	3.8	1.1	1.1	
	Med	<1	1	<1	<1	<1	<1	<1	<1	<1	
	Min-max	<1 - 7	<1 - 8	<1 - 5	<1 - 4	<1 - 6	<1 - 4	<1 - 3	<1 - 6	<1 - 6	
Cobalt, total, µg/L	Number of samples	12	21	22	14	13	12	13	23	23	*
	Mean	3.1.1	3.1.1	3.8	3.1.0	3.1.2	3.9	--	3.1.0	3.1.0	
	Med	<1	1	<1	1	1	<1	<1	<1	<1	
	Min-max	<1 - 4	<1 - 2	<1 - 2	<1 - 2	<1 - 3	<1 - 3	<1 - 2	<1 - 3	<1 - 3	
Copper, total, µg/L	Number of samples	12	20	21	17	16	12	12	23	23	7
	Mean	3.3	3.2.3	3.1.8	3.2.5	3.3.2	3.2.6	3.2.0	4.2	4.2	
	Med	2	2	1	2	2	3	2	3	3	
	Min-max	1 - 9	<1 - 6	<1 - 5	<1 - 6	<1 - 7	<1 - 5	<1 - 7	<1 - 7	<1 - 12	
Iron, total, µg/L	Number of samples	12	21	22	17	16	12	13	23	23	1,000
	Mean	2,040	2,130	1,480	1,910	2,550	1,950	830	1,070	1,070	
	Med	570	1,800	1,350	1,400	1,250	995	670	850	850	
	Min-max	210 - 13,000	580 - 5,800	350 - 3,300	360 - 6,700	520 - 8,300	190 - 7,100	400 - 1,900	250 - 4,000	250 - 4,000	

Table 7. Statistical summary of total concentrations of metals and minor constituents in streamwater at selected Treyburn study sites, July 1989 through September 1993--Continued

[If the total number of observations above and below the detection limit is greater than 1 and less than or equal to 5, only the maximum and minimum are reported. µg/L, microgram per liter; -, no water-quality standards; Med, median; Min, minimum; max, maximum; --, insufficient data; <, less than]

Constituents	Statistic	Site 1T ¹					Site 4T			Site 5T			Site 6T ¹		Site 8T		Site 11T		North Carolina water-quality standards for all freshwaters ²
		Treyburn, background	Treyburn, industrial	Treyburn, background	Upper Neuse, mixed forest and agriculture	Upper Neuse, mixed forest and agriculture	Treyburn, background		Upper Neuse, mixed forest and agriculture	Treyburn, background		Upper Neuse, mixed forest and agriculture	Treyburn, background		Treyburn, background		Upper Neuse, mixed forest and agriculture	Upper Neuse, mixed forest and agriculture	
Lead, total, µg/L	Number of samples	12	21	22	17	16	22	17	16	22	17	16	12	13	23	23	23	25	
	Mean	3 1.8	3 2.4	3 1.5	3 1.6	3 2.3	3 1.5	3 1.6	3 2.3	3 1.5	3 1.6	3 2.3	3 2.1	3 1.6	3 2.4	3 2.4	3 2.4		
	Med	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2		
Manganese, total, µg/L	Min-max	<1 - 6	<1 - 7	<1 - 5	<1 - 4	<1 - 8	<1 - 5	<1 - 4	<1 - 8	<1 - 5	<1 - 4	<1 - 8	<1 - 7	<1 - 7	<1 - 7	<1 - 10	<1 - 10		
	Number of samples	12	21	22	17	16	22	17	16	22	17	16	12	13	23	23	23	*	
	Mean	78	330	110	120	160	110	120	160	110	120	160	380	180	110	110	110		
Mercury, total, µg/L	Med	50	170	85	50	100	85	50	100	85	50	100	235	180	90	90	90		
	Min-max	20 - 410	40 - 1,700	20 - 320	20 - 610	20 - 580	20 - 320	20 - 610	20 - 580	20 - 320	20 - 610	20 - 580	40 - 1,800	30 - 290	50 - 510	50 - 510	50 - 510		
Molybdenum, total, µg/L	Number of samples	11	21	22	17	16	22	17	16	22	17	16	12	13	23	23	23	.012	
	Mean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	Med	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Nickel, total, µg/L	Min-max	<1 - 2	<1 - 1	<1 - 4	<1 - 1	<1 - 1	<1 - 4	<1 - 1	<1 - 1	<1 - 4	<1 - 1	<1 - 1	<1 - 1	<1 - 1	<1 - 2	<1 - 2	<1 - 2	*	
	Number of samples	12	21	22	14	13	22	14	13	22	14	13	12	13	23	23	23		
	Mean	3 1.3	3 2.3	3 1.0	3 1.3	3 1.6	3 1.0	3 1.3	3 1.6	3 1.0	3 1.3	3 1.6	3 1.3	3 1.2	3 2.0	3 2.0	3 2.0	88	
Selenium, total, µg/L	Med	1	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2		
	Min-max	<1 - 4	<1 - 5	<1 - 3	<1 - 3	<1 - 3	<1 - 3	<1 - 3	<1 - 3	<1 - 3	<1 - 3	<1 - 3	<1 - 2	<1 - 2	<1 - 6	<1 - 6	<1 - 6		
Silver, total, µg/L	Number of samples	12	21	22	14	13	22	14	13	22	14	13	12	13	23	23	23	5	
	Mean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	Med	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Zinc, total, µg/L	Min-max	<1 - 4	<1 - 4	<1 - 4	<1 - 4	<1 - 4	<1 - 4	<1 - 4	<1 - 4	<1 - 4	<1 - 4	<1 - 4	<1 - 5	<1 - 4	<1 - 4	<1 - 4	<1 - 4	.06	
	Number of samples	12	21	22	17	16	22	17	16	22	17	16	12	13	23	23	23	50	
	Mean	--	3 9.2	3 8.2	--	3 7.0	3 8.2	--	3 7.0	3 8.2	--	3 7.0	--	3 9.8	3 13.5	3 13.5	3 13.5		
	Med	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10		
	Min-max	<10 - 20	<10 - 40	<10 - 30	<10 - 20	<10 - 20	<10 - 30	<10 - 20	<10 - 20	<10 - 30	<10 - 20	<10 - 20	<10 - 20	<10 - 20	<10 - 30	<10 - 30	<10 - 30		

¹ Period of record, July 1989 through September 1991.

² North Carolina Department of Environment, Health, and Natural Resources, 1993.

³ Value is estimated by using a log-probability regression to calculate the values of data below the detection limit.

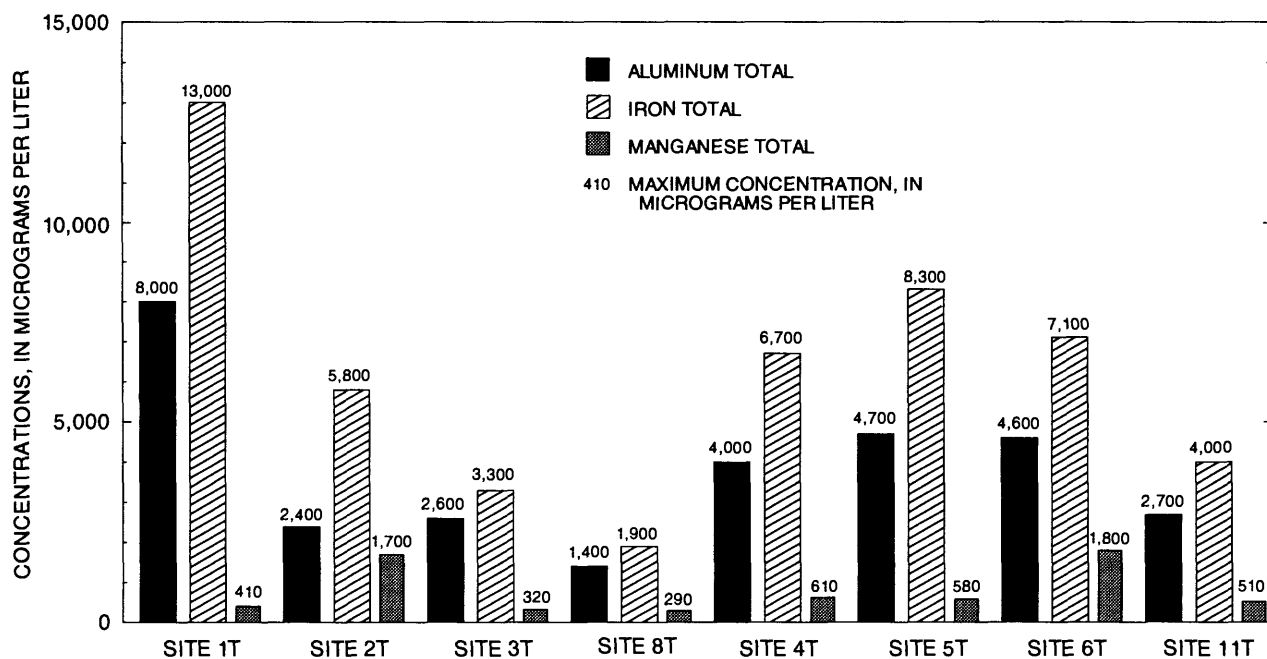


Figure 9.--Maximum aluminum, iron, and manganese concentrations in water at selected Treyburn study sites, July 1989 through September 1993.

The concentration of the minor constituent arsenic was 1 µg/L or less at all sites except 2T, where the maximum concentration was 11 µg/L, which is well below the State standard of 50 µg/L (table 7). Cadmium concentrations also were highest at 2T, where the maximum concentration of 13 µg/L was 6.5 times the standard of 2 µg/L. The cadmium standard was equalled or exceeded at background sites 1T and 3T, and also at site 11T. Chromium, cobalt, and copper were detected in water samples from all primary sites; chromium levels were several times less than the standard, and there is no standard for cobalt. The copper standard of 7 µg/L was equalled or exceeded in samples from sites 1T, 5T, 8T, and 11T. Lead, nickel, and zinc also were detected in samples from all primary sites, although standards were not exceeded. The highest zinc concentration was observed in samples from site 2T; the highest lead concentration occurred in samples from 11T. Silver was detected in samples from sites 6T (5 µg/L) and 11T (2 µg/L); in both cases, the standard of 0.06 µg/L was exceeded. Mercury was detected in samples at sites 2T, 3T, 4T, 5T, and 11T at concentrations ranging from 0.1 to 0.4 µg/L, which exceed the standard of 0.012 µg/L. Selenium was not detected at any of the sites, and molybdenum concentrations were less than or equal to 2 µg/L; the standard for selenium is 5 µg/L, and no standard has been established for molybdenum (table 7).

Total metal concentrations in water generally were highest at sites 2T (industrial) and 11T (downstream from a wastewater-treatment plant outfall and urban areas). State standards for copper, cadmium, silver, and mercury were exceeded at two or more sites.

Bottom-material samples from six of the primary sites (table 2) were analyzed for selected metals as listed in tables at the back of this report. All metals analyzed were above the method detection limit at one or more sites; however, detection limits were not the same for each metal. Arsenic and copper were detected at all sites at concentrations less than 10 micrograms per gram (µg/g); however, cadmium was detected at only one site (site 5T: 1 µg/g). Chromium concentrations also were less than 10 µg/g, except at sites 4T (40 µg/g) and 5T (20 µg/g). Samples from site 4T also had the highest concentrations of iron (26,000 µg/g) and manganese (15,000 µg/g). Lead was detected at two sites (5T and 6T). Zinc was present at all sites, with concentrations that ranged from 20 to 40 µg/g. Similarly, mercury was detected in samples from all sites at very low concentrations (0.01-0.03 µg/g).

Organic Compounds

Approximately 100 samples were collected during the study period to determine the presence of organic compounds. Samples were analyzed for total organic carbon and approximately 200 organic compounds, which included acid and base/neutral extractable compounds, volatile organic compounds, organochlorine and organophosphorus insecticides and selected herbicides. Beginning in July 1989, the gas chromatograph/flame ionization detector (GC/FID) analysis was used as a screening technique for those organic compounds which are extractable from the sample by an organic solvent. This analysis provides semi-quantitative data and is best used as a reconnaissance tool. Approximately 90 GC/FID scans were analyzed with approximately five follow-up analyses performed. The follow-up analyses were performed using gas chromatograph/mass spectrometer (GC/MS) techniques to identify and quantify specific compounds. No water samples were collected for organic analyses at sites 10T, 12T, 14T, and 16T. Samples for organic analysis of bottom sediment were collected only at sites 1T, 2T, 3T, 4T, 5T, 6T, 11T, and 13T.

Dichloro-difluoromethane, which is used as an aerosol propellant and a refrigerant, was the organic compound most commonly detected in water at sites 1T, 2T, 3T, 4T, and 5T (maximum observed concentration was 2.1 µg/L at site 1T). Methylene chloride, which is used as a component of paint removers, as well as a degreaser and a propellant for aerosols, was detected in samples from sites 3T, 4T, 5T, and 6T (table 8) where maximum concentrations were 0.2 µg/L at each site. These two compounds are commonly associated with low-level laboratory contamination or contamination resulting from sample handling. During the study period, an analyzed quality-assurance blank sample indicated that no such contamination was present.

Tetrachloroethylene, which is primarily used as a dry-cleaning solvent, was detected in samples at sites 2T (where the maximum concentration was 2 µg/L), 5T, and 9T. Several pesticides were detected at larger stream sites (4T, 5T, and 11T), as well as at site 9T (table 8). There were no organic compounds above method detection limits in water samples from sites 8T, 13T, and 15T.

Table 8. Organic compounds detected in water and bottom-sediment samples from the Treyburn study sites, February 1988 through September 1993

[µg/L, microgram per liter; µg/kg, microgram per kilogram; <, less than. Compound class: VOC, volatile organic compound; ABN, acid-base/neutral compound; OCL, organochlorine compound; ONC, organonitrogen compound]

Site number (fig. 1)	Organic compound (water)			Organic compound (bottom sediments)		
	Name/compound class	Total number of samples analyzed	Minimum-maximum, in µg/L	Name and compound class	Total number of samples	Minimum-maximum, in µg/kg
1T	Dichloro-difluoromethane - VOC	10	< 0.2 -2.1	bis(2-Ethylhexyl) phthalate - ABN	4	<200-240 < .1 - .1
				DDE - OCL	4	
2T	Dichloro-difluoromethane - VOC	9	< .2 - .3	DDD - OCL	3	< .1 - .4
	Tetrachloroethylene - VOC	9	< .2 -2	DDE - OCL	3	< .1 - .2
				DDT - OCL	3	< .1 - .1
3T	Dichloro-difluoromethane - VOC	9	< .2 - .6	Chlordane - OCL	4	<1.0 - 1.0
	Methylene chloride - VOC	9	< .2 - .2	DDD - OCL	4	< .1 - .2
				DDE - OCL	4	< .1 - .4
				bis(2-Ethylhexyl) phthalate - ABN	4	<200-850
4T	Lindane - OCL	17	<.001- .001	DDD - OCL	5	< .1 - .1
	Benzene - ABN	17	< .2 - .3	DDE - OCL	5	< .1 - .1
	Dichloro-difluoromethane - VOC	17	< .2 -1.0	bis(2-Ethylhexyl) phthalate - ABN	5	<200-720
	Methylene chloride- VOC	9	< .2 - .2			
5T	Lindane - OCL	18	<.001 - .001	DDD - OCL	5	< .1 - .8
	Dichloro-difluoromethane - VOC	18	< .2 - .4	DDE - OCL	5	< .1 - 1.0
	Methylene chloride - VOC	18	< .2 - .2	DDT - OCL	5	< .1 - .4
	Tetrachloroethylene - VOC	18	< .2 - 1.4	bis(2-Ethylhexyl) phthalate - ABN	5	<200 - 1,800
	Trichlorofluoromethane - VOC	18	< .2 - .3			
6T	Methylene chloride - VOC	2	< .2 - .2	DDE - OCL	1	.1
				DDT - OCL	1	.1
7T	Dichloro-difluoromethane - VOC	8	< .2 - .7	No samples collected		
8T	No values above detection limits			No samples collected		
9T	2,4-D - OCL	1	0.7	No samples collected		
	Chloroform - VOC	2	< .2 - .3			
	Dichloro-difluoromethane - VOC	2	< .2 - .2			
	Tetrachloroethylene - VOC	2	< .2 - .3			
	Trichloroethylene - VOC	2	< .2 - 6			
	1,2-Transdichloroethene - VOC	2	< .2 - .2			
11T	Diazinon - OCL	14	< .01 - .13	Chlordane - OCL	1	1.0
	Dieldrin - OCL	17	<.001 - .001	DDE - OCL	1	.1
	Endrin - OCL	17	<.001 - .002			
	Heptachlor epoxide - OCL	17	<.001 - .001			
	Lindane - OCL	17	<.001 - .005			
	Malathion - OCL	14	< .01 - .01			
	Chloroform - VOC	9	< .2 - .3			
	Chlorpyrifos - OCL	8	< .01 - .02			
	Simazine - ONC	2	< .05 - .06			
13T	No values above detection limits			Chlordane - OCL	2	<1.0 - 1.0
				DDE - OCL	2	< .1 - .4
				Dieldrin - OCL	2	< .1 - .2
				Heptachlor epoxide - OCL	2	< .1 - .5
15T	No values above detection limits			No samples collected		

The most commonly detected compound in bottom sediments was DDE, and the second most common compounds detected were DDD and DDT. DDE and DDD are degradation products of DDT, which was previously used as an insecticide. These compounds are extremely persistent in the environment and most frequently occur adsorbed onto sediments. At least one of these compounds was detected at sites 1T, 2T, 3T, 4T, 5T, 6T, 11T, and 13T (table 8). Of these three compounds, the maximum concentration observed at the study sites was 1.0 microgram per kilogram ($\mu\text{g/kg}$) of DDE at site 5T. The maximum concentration detected in streambed samples from sites located within the Treyburn development was 0.4 $\mu\text{g/kg}$ of DDE at sites 3T and 13T. Bis(2-Ethylhexyl) phthalate, which is used as a plasticizer for synthetic rubbers, was detected at sites 1T, 3T, 4T, and 5T.

In general, concentrations of organic compounds in water and bottom sediments were lower in samples from the Treyburn development sites than from the other sites in the study area. However, the number of samples collected and analyzed for these compounds was relatively low at sites 2T and 8T.

SUMMARY AND CONCLUSIONS

The Treyburn development is a 5,400-acre, planned, mixed-use community located in the Falls Lake watershed in the upper Neuse River Basin of North Carolina. The development began in 1986, and in July 1994, it consisted of approximately 1,100 acres of residential, industrial, and recreational facilities, with the remaining land being forested and abandoned agricultural areas. Treyburn was designed to minimize adverse effects of development on water quality. However, because of the size of the development and its proximity to three water supply reservoirs, quantification of the effects of ongoing land-use conversion on water quality, was necessary.

From February 1988 through September 1993, hydrologic data were collected at 17 study sites in or near the Treyburn development. Hydrologic data included measurements of streamflow, physical and chemical properties of water, and concentrations of major dissolved constituents, nutrients, metals and minor constituents, and organic compounds.

Continuous streamflow data were collected at five sites. Streamflow in the study basin during water years 1992 and 1993 reflected unusually dry and wet climatic conditions, respectively. Based on long-term

discharge records at site 5T, streamflow was approximately 40 percent lower in 1992, and approximately 40 percent greater in 1993 than the long-term annual mean of $143 \text{ ft}^3/\text{s}$. The long-term mean annual runoff for the study area is between 0.9 and $1.0 (\text{ft}^3/\text{s})/\text{mi}^2$. The annual runoff at the five sites for water years 1988 and 1992 was between 0.3 and $0.6 (\text{ft}^3/\text{s})/\text{mi}^2$; whereas, the runoff for water years 1989 and 1993 was between 1.2 and $1.5 (\text{ft}^3/\text{s})/\text{mi}^2$. The mean annual runoff for the five study sites for the study period was $1.0 (\text{ft}^3/\text{s})/\text{mi}^2$, which is normal.

During water years 1988 through 1992, the annual maximum discharges at sites 1T, 4T, 5T, and 11TG were less than the 5-year flood recurrence interval. The annual maximum discharges for the 1993 water year ranged between 5- and 25-year recurrence intervals at all the study sites.

The potential for streams in the study area to sustain low flow is low to intermediate because of the low permeability of the rock types in the area. The annual minimum discharges at sites 1T, 4T, and 5T ranged from 0 to $2.4 \text{ ft}^3/\text{s}$, whereas the low-flow 7Q10 for the sites ranged from 0.1 to $1.0 \text{ ft}^3/\text{s}$.

Specific conductance at two of the Treyburn development sites (1T and 3T) was similar to that at sites 4T and 5T, which are upstream from the development and primarily include forests and pasture land. The highest specific-conductance values were observed in samples from site 11T, which is approximately 3.5 mi downstream from a wastewater-treatment plant outfall. The maximum observed specific conductance at site 2T, which is located in the industrial land-use basin, was exceeded only by values at 11T.

Median pH values at most sites were between 6.5 and 7.1. The minimum pH observed (5.2) was at site 2T (industrial land use); the next lowest pH values were at sites 1T and 3T.

The only sites with observed DO concentrations less than 4 mg/L were 2T, 5T, and 15T. About 10 percent of the observed DO concentrations at sites 2T and 5T were less than 6 mg/L .

Because samples were collected at varying flow conditions, a wide range of suspended-sediment concentrations was observed at the study sites. The maximum concentration observed at the sites in the Treyburn development was $1,520 \text{ mg/L}$ at site 1T, compared to a maximum concentration of 885 mg/L at site 5T, which is upstream from the development.

Mean suspended-sediment concentrations at the study sites generally were less than concentrations measured during runoff events in basins which were relatively unaffected by the development.

The chemical composition of water at all study sites was similar with respect to major dissolved constituents with the exception of site 11T, which is influenced by releases from a wastewater-treatment plant. Calcium was the predominant cation with bicarbonate being the major anion at all sites except 11T, which had sodium and sulfate as the predominant cation and anion, respectively. Generally, mean cation and anion concentrations were greatest at site 11T, and maximum mean concentrations at sites 8T (residential and golf course) and 2T (industrial) typically were greater than maximum concentrations at the remaining study sites.

Mean nitrogen concentrations at the four primary monitoring sites (1T, 2T, 3T, and 8T) within the Treyburn development ranged from 0.5 mg/L, at site 8T, to 0.8 mg/L, at sites 2T and 3T. Mean total nitrogen concentrations at the sites outside of Treyburn (4T, 5T, 6T, 11T) were equal to or greater than concentrations at the Treyburn sites, with the highest concentration at 11T. Background concentration for total nitrogen in geochemical zone II was 0.5 mg/L; mean total nitrogen concentration in water draining from Treyburn sites was similar to or slightly greater than this background level.

Mean total phosphorus concentrations ranged from 0.03 mg/L (site 1T) to 0.10 mg/L (site 11T), whereas background phosphorus concentration was about 0.03 mg/L. From 1982-87 mean total phosphorus concentrations between 0.07 and 3.3 mg/L occurred in six tributaries to Falls Lake, including a mean concentration of 0.49 mg/L at site 11T.

The maximum instantaneous yields for nitrogen and phosphorus at the Treyburn sites were 0.140 and 0.024 ton/mi², respectively, at site 3T compared to 0.109 and 0.016 ton/mi² at site 5T, which is located outside the Treyburn development. The minimum instantaneous yield for nitrogen and phosphorus at the Treyburn sites was 0.007 and 0.002 ton/mi², respectively, at site 8T compared to 0.015 and 0.003 ton/mi², respectively, at site 6T located outside the Treyburn development.

The metals, aluminum, iron, and manganese were detected most frequently and had the highest concentrations of the metals and minor constituents

that were analyzed. The maximum aluminum concentration observed was 8,000 µg/L at site 1T. The maximum observed iron concentration at the primary sites was 13,000 µg/L at site 1T, which occurred during overland runoff. The maximum manganese concentration observed was 1,800 µg/L in a sample from site 6T. Samples from site 8T, the residential/golf course site, had the lowest mean iron (830 µg/L) and aluminum (290 µg/L) concentrations, but had one of the highest mean manganese (180 µg/L) concentrations. The State standard of 1,000 µg/L for iron was exceeded at all sites, and the mean iron concentration was greater than the standard at all sites except 8T. There are no State standards for aluminum or manganese.

Concentrations of minor constituents generally were highest at sites 2T (industrial) and 11T (downstream from a wastewater-treatment plant outfall and urbanized areas). State standards for cadmium, copper, silver, and mercury were exceeded at two or more sites.

Approximately 100 samples were collected and analyzed for about 200 organic compounds in water and bottom sediments. Dichloro-difluoromethane was the most common organic compound detected in water at sites 1T, 2T, 3T, 4T, and 5T. The maximum observed concentration was 2.1 µg/L at site 1T. Methylene chloride was detected at sites 3T, 4T, 5T, and 6T, where maximum concentrations were 0.2 µg/L at each site. There were no organic compounds above the method detection limits in water samples at sites 8T, 13T, and 15T.

The organic compound most commonly detected in bottom sediments was DDE, and the second most frequently detected compounds were DDD and DDT. At least one of these compounds was detected at eight of the study sites; the maximum concentration of DDE (1.0 µg/kg) was observed at site 5T. In general, concentrations of organic compounds in water and bottom sediments were lower at the developed Treyburn sites than at the other sites.

Comparisons of available water-quality data for the Treyburn sites with water-quality data from study sites upstream from the development indicate that the Treyburn development has not had a major effect on water quality in the study area. In an effort to characterize future effects on water quality associated with development, monitoring at selected study sites is continuing.

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DATA TABLES

Table 9.--Statistical summary of water-quality data, February 1988 through September 1991

Site 1T, Flat River tributary near Willardville

[Location.--Latitude 36°07'54", longitude 78°50'00", Durham County, at Secondary Road 1680, and 1.5 mi southeast of Willardville; USGS downstream order number 0208650112.]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	26	24.000	0.070	3.429	21.200	2.700	0.675	0.285	0.080
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	26	105.000	38.000	69.423	105.000	90.250	65.500	54.500	40.450
00400	PH, FIELD (STANDARD PH UNITS)	26	7.200	5.400	--	7.165	6.625	6.450	6.000	5.470
00010	WATER TEMPERATURE (°C)	26	23.000	3.000	13.212	22.475	19.250	13.250	8.375	3.350
00300	OXYGEN, DISSOLVED (mg/L)	24	13.300	7.300	10.325	13.300	11.875	9.850	9.400	7.400
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	22	138.000	85.000	98.591	134.250	104.750	94.500	91.000	85.000
80154	SUSPENDED SEDIMENT (mg/L)	25	1520.000	<1.000	99.920	1129.101	78.000	11.000	4.500	1.600
70337	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.002 mm	1	39.000	--	--	--	--	--	--	--
70338	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.004 mm	1	47.000	--	--	--	--	--	--	--
70339	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.008 mm	1	55.000	--	--	--	--	--	--	--
70340	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.016 mm	1	64.000	--	--	--	--	--	--	--
70341	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.031 mm	1	75.000	--	--	--	--	--	--	--
70342	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.062 mm	1	87.000	--	--	--	--	--	--	--
80164	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.062 mm	2	1.000	1.000	--	--	--	--	--	--
80165	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.125 mm	2	4.000	3.000	--	--	--	--	--	--
80166	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.250 mm	2	13.000	11.000	--	--	--	--	--	--
80167	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.500 mm	2	46.000	27.000	--	--	--	--	--	--
80168	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 1.000 mm	2	78.000	47.000	--	--	--	--	--	--
80169	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 2.000 mm	2	88.000	85.000	--	--	--	--	--	--

Table 9.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 1T, Flat River tributary near Willardville

[Location.--Latitude 36°07'54", longitude 78°50'00", Durham County, at Secondary Road 1680, and 1.5 mi southeast of Willardville; USGS downstream order number 0208650112. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR DISSOLVED CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	14	16.000	0.150	2.939	16.000	2.700	1.000	0.485	0.150
00080	COLOR (PLATINUM-COBALT UNITS)	14	220.000	8.000	65.357	220.000	110.000	40.000	14.250	8.000
00900	HARDNESS, TOTAL (mg/L as CaCO ₃)	14	37.000	15.000	24.214	37.000	29.500	23.000	18.750	15.000
00915	CALCIUM, DISSOLVED (mg/L as Ca)	14	9.100	3.800	6.021	9.100	7.275	5.750	4.775	3.800
00925	MAGNESIUM, DISSOLVED (mg/L as Mg)	14	3.500	1.400	2.236	3.500	2.725	2.150	1.675	1.400
00930	SODIUM, DISSOLVED (mg/L as Na)	14	5.300	2.900	4.100	5.300	5.000	4.200	3.325	2.900
00935	POTASSIUM, DISSOLVED (mg/L as K)	14	2.300	0.500	0.936	2.300	0.950	0.800	0.575	0.500
² 90410	ALKALINITY, LAB (mg/L as CaCO ₃)	14	41.000	10.000	23.143	41.000	29.500	23.500	16.250	10.000
00945	SULFATE, DISSOLVED (mg/L as SO ₄)	14	9.800	<1.000	5.192*	9.800	6.700	5.000	3.900	1.600
00940	CHLORIDE, DISSOLVED (mg/L as Cl)	14	7.900	2.500	4.250	7.900	5.225	3.750	3.275	2.500
00950	FLUORIDE, DISSOLVED (mg/L as F)	14	0.300	<0.100	0.093*	0.300	0.100	<0.100	<0.100	<0.100
00955	SILICA, DISSOLVED (mg/L as SiO ₂)	14	24.000	10.000	16.071	24.000	20.000	16.500	12.250	10.000
70300	DISSOLVED SOLIDS, RESIDUE as 180 °C (mg/L)	14	83.000	42.000	62.143	83.000	66.750	61.500	57.500	42.000

¹Period July 1989 through September 1991.

²To convert to bicarbonate, mg/L alkalinity as CaCO₃ x 1.22 = mg/L of bicarbonate.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 9.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 1T, Flat River tributary near Willardville

[Location--Latitude 36°07'54", longitude 78°50'00", Durham County, at Secondary Road 1680, and 1.5 mi southeast of Willardville; USGS downstream order number 0208650112. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	26	24.000	0.070	3.429	21.200	2.700	0.675	0.285	0.080
00615	NITROGEN, NITRITE, TOTAL (mg/L as N)	6	0.050	0.010	0.027	0.050	0.050	0.020	0.010	0.010
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	24	0.600	<0.050	0.120*	0.200	0.200	<0.100	<0.100	<0.050
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	24	0.230	<0.010	0.040*	0.080	0.050	0.030	0.020	<0.010
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	19	0.750	0.180	0.408	0.750	0.460	0.380	0.270	0.180
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	23	0.800	<0.200	0.404*	0.800	0.500	0.400	0.200	<0.200
00600	NITROGEN, TOTAL (mg/L as N)	19	1.000	0.200	0.559	1.000	0.800	0.500	0.400	0.200
00665	PHOSPHORUS, TOTAL (mg/L as P)	24	0.100	<0.010	0.032*	0.090	0.040	0.020	0.010	<0.010
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	24	0.110	<0.010	0.021*	0.100	0.020	0.010	<0.010	<0.010

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Table 9.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 1T, Flat River tributary near Willardville

[Location--Latitude 36°07'54", longitude 78°50'00", Durham County, at Secondary Road 1680, and 1.5 mi southeast of Willardville; USGS downstream order number 0208650112. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS¹

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	14	16.000	0.150	2.939	16.000	2.700	1.000	0.485	0.150
01105	ALUMINUM, TOTAL (µg/L as Al)	12	8000.000	20.000	1194.167	8000.000	1435.000	170.000	75.000	20.000
01002	ARSENIC, TOTAL (µg/L as As)	12	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01027	CADMIUM, TOTAL (µg/L as Cd)	12	3.000	<1.000	--	3.000	<1.000	<1.000	<1.000	<1.000
01034	CHROMIUM, TOTAL (µg/L as Cr)	12	7.000	<1.000	--	7.000	1.000	<1.000	<1.000	<1.000
01037	COBALT, TOTAL (µg/L as Co)	12	4.000	<1.000	1.082*	4.000	1.000	<1.000	<1.000	<1.000
01042	COPPER, TOTAL (µg/L as Cu)	12	9.000	1.000	3.250	9.000	4.750	2.000	2.000	1.000
01045	IRON, TOTAL (µg/L as Fe)	12	13000.000	210.000	2037.500	13000.000	1925.000	570.000	490.000	210.000
01051	LEAD, TOTAL (µg/L as Pb)	12	6.000	<1.000	1.782*	6.000	2.000	1.000	1.000	1.000
01055	MANGANESE, TOTAL (µg/L as Mn)	12	410.000	20.000	78.333	410.000	70.000	50.000	30.000	20.000
71900	MERCURY, TOTAL (µg/L as Hg)	11	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
01062	MOLYBDENUM, TOTAL (µg/L as Mo)	12	2.000	<1.000	--	2.000	<1.000	<1.000	<1.000	<1.000
01067	NICKEL, TOTAL (µg/L as Ni)	12	4.000	<1.000	1.280*	4.000	1.000	1.000	<1.000	<1.000
01147	SELENIUM, TOTAL (µg/L as Se)	12	<2.000	<1.000	--	<2.000	<1.000	<1.000	<1.000	<1.000
01077	SILVER, TOTAL (µg/L as Ag)	9	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01092	ZINC, TOTAL (µg/L as Zn)	12	20.000	<10.000	--	20.000	<10.000	<10.000	<10.000	<10.000

¹Period July 1989 through September 1991.

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Table 9.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 1T, Flat River tributary near Willardville

[Location--Latitude 36°07'54", longitude 78°50'00", Durham County, at Secondary Road 1680, and 1.5 mi southeast of Willardville; USGS downstream order number 0208650112. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS - BOTTOM SEDIMENTS

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01003	ARSENIC, (µg/g as As)	6	5.000	2.000	3.500	5.000	4.250	4.000	2.000	2.000
01028	CADMIUM, (µg/g as Cd)	6	<10.000	<1.000	--	<10.000	<10.000	<1.000	<1.000	<1.000
01029	CHROMIUM, (µg/g as Cr)	6	7.000	4.000	5.667	7.000	7.000	5.500	4.750	4.000
01043	COPPER, (µg/g as Cu)	6	3.000	<1.000	2.667*	3.000	3.000	3.000	2.000	2.000
01170	IRON, (µg/g as Fe)	6	6700.000	2500.000	4816.667	6700.000	5950.000	5100.000	3475.000	2500.000
01052	LEAD, (µg/g as Pb)	6	<100.000	<10.000	--	<100.000	<100.000	<10.000	<10.000	<10.000
01053	MANGANESE, (µg/g as Mn)	6	6800.000	110.000	1265.000	6800.000	1865.000	170.000	117.500	110.000
71921	MERCURY, (µg/g as Hg)	6	0.020	<0.010	0.013*	0.020	0.020	0.010	0.010	0.010
01093	ZINC, (µg/g as Zn)	6	20.000	<10.000	10.056*	20.000	10.000	9.000	5.000	5.000

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Table 9.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 1T, Flat River tributary near Willardville

[Location.--Latitude 36°07'54", longitude 78°50'00", Durham County, at Secondary Road 1680, and 1.5 mi southeast of Willardville; USGS downstream order number 0208650112. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	26	24.000	0.070	3.429	21.200	2.700	0.675	0.285	0.080
00680	CARBON ORGANIC, TOTAL (mg/L)	24	16.000	1.500	5.988	16.000	8.775	3.850	2.275	1.525
00693	CARBON, TOTAL BTM (gm/kg)	3	2.300	1.200	--	--	--	--	--	--
39330	ALDRIN, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39333	ALDRIN, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39350	CHLORDANE, TOTAL (µg/L)	10	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39351	CHLORDANE, BTM (µg/kg)	4	<1.000	<1.000	--	--	--	--	--	--
39360	DDD, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39363	DDD, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39365	DDE, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39368	DDE, BTM (µg/kg)	4	0.100	<0.100	--	--	--	--	--	--
39370	DDT, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39373	DDT, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39570	DIAZINON, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39571	DIAZINON, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39380	DIELDRIN, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39383	DIELDRIN, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39388	ENDOSULFAN, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39389	ENDOSULFAN, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39390	ENDRIN, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39393	ENDRIN, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39398	ETHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39399	ETHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39516	PCB, TOTAL (µg/L)	10	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39519	PCB, BTM (µg/kg)	4	<1.000	<1.000	--	--	--	--	--	--
39250	PCN, TOTAL (µg/L)	10	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39251	PCN, BTM (µg/kg)	4	<1.000	<1.000	--	--	--	--	--	--
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39423	HEPTACHLOR EPOXIDE, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39410	HEPTACHLOR, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39413	HEPTACHLOR, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39340	LINDANE, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39343	LINDANE, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39530	MALATHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39531	MALATHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39480	METHOXYCHLOR, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39481	METHOXYCHLOR, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39600	METHYL PARATHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39601	METHYL PARATHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39790	METHYL TRITHION, TOTAL (µg/L)	9	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39791	METHYL TRITHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39755	MIREX, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39758	MIREX, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39540	PARATHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39541	PARATHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39034	PERTHANE, TOTAL (µg/L)	10	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
81886	PERTHANE, BTM (µg/kg)	4	<1.000	<1.000	--	--	--	--	--	--
39400	TOXAPHENE, TOTAL (µg/L)	10	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
39403	TOXAPHENE, BTM (µg/kg)	4	<10.000	<10.000	--	--	--	--	--	--
39786	TRITHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39787	TRITHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
34030	BENZENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32104	BROMOFORM, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34301	CHLOROBENZENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34311	CHLOROETHANE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32106	CHLOROFORM, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34418	METHYLCHLORIDE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	10	2.100	<0.200	--	2.100	<0.200	<0.200	<0.200	<0.200
34371	ETHYLBENZENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34413	METHYL BROMIDE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	10	0.200	<0.200	--	0.200	<0.200	<0.200	<0.200	<0.200
77128	STYRENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34010	TOLUENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34488	TRICHLOROFLUOROMETHANE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39175	VINYL CHLORIDE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
81551	XYLENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34496	1,1-DICHLOROETHANE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34506	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34511	1,1,2-TRICHLOROETHANE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200

Table 9.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 1T, Flat River tributary near Willardville

[Location.--Latitude 36°07'54", longitude 78°50'00", Durham County, at Secondary Road 1680, and 1.5 mi southeast of Willardville; USGS downstream order number 0208650112.
NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34536	O-CHLORO-BENZENE, TOTAL (µg/L)	10	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
32103	1,2-DICHLOROETHANE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34541	1,2-DICHLOROPROPANE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34561	1,3-DICHLOROPROPENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34546	1,2-TRANS-DICHLOROETHENE, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (µg/L)	10	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34205	ACENAPHTHENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34208	ACENAPHTHENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34200	ACENAPHTHYLENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34203	ACENAPHTHYLENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34220	ANTHRACENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34223	ANTHRACENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34526	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34529	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34247	BENZO(A)PYRENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34230	BENZO(B)FLUORANTHENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34233	BENZO(B)FLUORANTHENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34521	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34524	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34242	BENZO(K)FLUORANTHENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34245	BENZO(K)FLUORANTHENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34292	N-BUTYL BENZYL PHTHALATE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34452	PARACHLOROMETACRESOL, TOTAL (µg/L)	5	<30.000	<30.000	--	--	--	--	--	--
34455	PARACHLOROMETACRESOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
34320	CHRYSENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34323	CHRYSENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
39110	DI-N-BUTYL PHTHALATE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34596	DI-N-OCTYL PHTHALATE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34599	DI-N-OCTYL PHTHALATE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34559	1,2,5,6-DIBENZANTHRACENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34336	DIETHYL PHTHALATE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34339	DIETHYL PHTHALATE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34341	DIMETHYL PHTHALATE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34344	DIMETHYL PHTHALATE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34657	4,6-DINITRO-ORTHCRESOL, TOTAL (µg/L)	5	<30.000	<30.000	--	--	--	--	--	--
34376	FLUORANTHENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34379	FLUORANTHENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34381	FLUORENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34384	FLUORENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
39700	HEXACHLOROBENZENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
39701	HEXACHLOROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
39702	HEXACHLOROBUTADIENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
39705	HEXACHLOROBUTADIENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34396	HEXACHLOROETHANE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34399	HEXACHLOROETHANE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34406	INDENO (1,2,3-CD) PYRENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34408	ISOPHORONE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34411	ISOPHORONE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34433	N-NITROSODIPHENYLAMINE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34696	NAPHTHALENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34445	NAPHTHALENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34447	NITROBENZENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34450	NITROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34438	N-NITROSODIMETHYLAMINE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
39032	PENTACHLOROPHENOL, TOTAL (µg/L)	5	<30.000	<30.000	--	--	--	--	--	--
39061	PENTACHLOROPHENOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
34461	PHENANTHRENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34464	PHENANTHRENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34694	PHENOL (C6H-5OH), TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34695	PHENOL (C6H-5OH), BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34469	PYRENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34472	PYRENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34551	1,2,4-TRICHLOROBENZENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34554	1,2,4-TRICHLOROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	10	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
34569	1,3-DICHLOROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	10	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
34574	1,4-DICHLOROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--

Table 9.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 1T, Flat River tributary near Willardville

[Location.--Latitude 36°07'54", longitude 78°50'00", Durham County, at Secondary Road 1680, and 1.5 mi southeast of Willardville; USGS downstream order number 0208650112. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34278	BIS(2-CHLOROETHOXY)METHANE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34273	BIS-2-CHLOROETHYL ETHER, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34283	BIS(2-CHLOROISOPROPYL) ETHER, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34581	2-CHLORONAPHTHALENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34586	2-CHLOROPHENOL, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
39100	BIS(2-ETHYLHEXYL) PHTHALATE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34591	2-NITROPHENOL, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34594	2-NITROPHENOL, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34601	2,4-DICHLOROPHENOL, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34606	2,4-DIMETHYLPHENOL, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34616	2,4-DINITROPHENOL, TOTAL (µg/L)	5	<20.000	<20.000	--	--	--	--	--	--
34611	2,4-DINITROTOLUENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34614	2,4-DINITROTOLUENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34621	2,4,6-TRICHLOROPHENOL, TOTAL (µg/L)	5	<20.000	<20.000	--	--	--	--	--	--
34626	2,6-DINITROTOLUENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34629	2,6-DINITROTOLUENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34636	4-BROMOPHENYL ETHER, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34644	4-CHLOROPHENYL PHENYL ETHER, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34646	4-NITROPHENOL, TOTAL (µg/L)	5	<30.000	<30.000	--	--	--	--	--	--
34649	4-NITROPHENOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
34286	BIS(2-CHLOROISOPROPYL) ETHER, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34281	BIS(2-CHLOROETHOXY) METHANE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34276	BIS(2-CHLOROETHYL) ETHER, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
39102	BIS(2-ETHYLHEXYL) PHTHALATE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34250	BENZO-A-PYRENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34639	4-BROMOPHENYL PHENYL ETHER, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34295	N-BUTYLBENZYL PHTHALATE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34589	2-CHLOROPHENOL, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34584	2-CHLORONAPHTHALENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34604	2,4-DICHLOROPHENOL, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34609	2,4-DP, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34660	4,6-DINITRO-ORTHOCHRESOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
34619	2,4-DINITROPHENOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
39112	DI-N-BUTYL PHTHALATE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34389	HEXACHLOROCYCLOPENTADIENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34441	N-NITROSODIMETHYLAMINE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34436	N-NITROSODIPHENYLAMINE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34431	N-NITROSODI-N-PROPYLAMINE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34624	2,4,6-TRICHLOROPHENOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
34539	1,2-DICHLOROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
38932	CHLORPYRIFOS, TOTAL (µg/L)	3	<0.010	<0.010	--	--	--	--	--	--
39011	DISYSTON, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39023	PHORATE, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39040	DEF, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
82614	FONOFOS (DYFONATE) WATER, TOTAL (µg/L)	3	<0.010	<0.010	--	--	--	--	--	--

Table 10.--Statistical summary of water-quality data, February 1988 through September 1993

Site 2T, Eno River tributary at SR 1004 near Fairtosh

[Location.--Latitude 36°05'17", longitude 78°50'42", Durham County, at Secondary Road 1004, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527100. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	37	18.000	0.000	2.073	16.200	2.100	0.270	0.045	0.000
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	37	212.000	33.000	63.946	142.700	83.500	50.000	40.500	33.000
00400	PH, FIELD (STANDARD pH UNITS)	37	7.600	5.200	--	7.060	6.600	6.200	5.800	5.290
00010	WATER TEMPERATURE (°C)	35	23.000	3.000	13.429	22.200	19.000	12.500	9.500	3.800
00300	OXYGEN, DISSOLVED (mg/L)	32	13.200	3.100	8.734	12.810	10.200	8.750	7.225	4.595
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	31	120.000	36.000	81.581	112.800	90.000	79.000	73.000	51.000
80154	SUSPENDED SEDIMENT (mg/L)	29	243.000	<1.000	34.276	192.500	41.000	17.000	7.500	1.000
80164	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.062 mm	2	1.000	1.000	--	--	--	--	--	--
80165	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.125 mm	2	3.000	2.000	--	--	--	--	--	--
80166	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.250 mm	2	16.000	13.000	--	--	--	--	--	--
80167	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.500 mm	2	72.000	44.000	--	--	--	--	--	--
80168	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 1.000 mm	2	98.000	79.000	--	--	--	--	--	--
80169	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 2.000 mm	1	94.000	--	--	--	--	--	--	--

Table 10.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 2T, Eno River tributary at SR 1004 near Fairtosh

[Location.--Latitude 36°05'17", longitude 78°50'42", Durham County, at Secondary Road 1004, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527100. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR DISSOLVED CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	25	18.000	0.000	1.901	15.390	2.100	0.370	0.060	0.003
00080	COLOR (PLATINUM-COBALT UNITS)	25	150.000	21.000	74.520	150.000	105.000	65.000	50.000	22.200
00900	HARDNESS, TOTAL (mg/L as CaCO ₃)	25	52.000	8.000	18.800	47.500	29.000	14.000	10.000	8.300
00915	CALCIUM, DISSOLVED (mg/L as Ca)	25	13.000	2.100	4.772	12.100	7.550	3.400	2.500	2.130
00925	MAGNESIUM, DISSOLVED (mg/L as Mg)	25	4.700	0.760	1.675	4.160	2.450	1.300	0.960	0.763
00930	SODIUM, DISSOLVED (mg/L as Na)	25	15.000	1.500	3.712	12.450	4.100	3.100	2.300	1.620
00935	POTASSIUM, DISSOLVED (mg/L as K)	25	9.200	0.700	1.828	8.090	2.200	1.100	0.800	0.700
290410	ALKALINITY, LAB (mg/L as CaCO ₃)	25	31.000	3.200	11.520	31.000	13.500	7.800	4.750	3.290
00945	SULFATE, DISSOLVED (mg/L as SO ₄)	25	48.000	1.000	8.220	43.800	7.100	5.000	3.150	1.120
00940	CHLORIDE, DISSOLVED (mg/L as Cl)	25	22.000	0.500	5.660	18.700	6.400	4.500	3.000	0.980
00950	FLUORIDE, DISSOLVED (mg/L as F)	25	0.200	<0.100	0.080*	0.200	0.100	<0.100	<0.100	<0.100
00955	SILICA, DISSOLVED (mg/L as SiO ₂)	25	15.000	3.400	8.980	14.700	10.000	9.300	7.550	3.760
70300	DISSOLVED SOLIDS, RESIDUE as 180 °C (mg/L)	25	143.000	30.000	57.600	127.100	67.000	50.000	44.000	30.300

¹Period July 1989 through September 1993.

²To convert to bicarbonate, mg/L alkalinity as CaCO₃ x 1.22 = mg/L of bicarbonate.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 10.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 2T, Eno River tributary at SR 1004 near Fairtosh

[Location.--Latitude 36°05'17", longitude 78°50'42", Durham County, at Secondary Road 1004, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527100. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	37	18.000	0.000	2.073	16.200	2.100	0.270	0.045	0.000
00615	NITROGEN, NITRITE, TOTAL (mg/L as N)	13	0.060	<0.010	0.019*	0.060	0.020	0.010	0.010	<0.010
00613	NITROGEN, NITRITE, DISSOLVED (mg/L as N)	5	0.020	<0.010	--	--	--	--	--	--
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	31	0.800	<0.050	0.101*	0.300	0.100	<0.100	<0.100	<0.050
00631	NO ₂ + NO ₃ , DISSOLVED (mg/L as N)	5	0.390	0.110	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	31	1.100	0.010	0.091	0.542	0.080	0.050	0.030	0.010
00608	NITROGEN AMMONIA, DISSOLVED (mg/L as N)	5	0.390	0.020	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	35	2.300	0.180	0.608	1.340	0.700	0.560	0.410	0.196
00607	NITROGEN ORGANIC, DISSOLVED (mg/L as N)	4	0.410	0.250	--	--	--	--	--	--
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	36	2.300	0.200	0.689	1.875	0.800	0.600	0.425	0.200
00623	NITROGEN AMMONIA + ORGANIC, DISSOLVED (mg/L as N)	5	0.800	<0.200	--	--	--	--	--	--
00600	NITROGEN, TOTAL (mg/L as N)	35	2.600	0.300	0.799	2.360	0.900	0.700	0.500	0.300
00665	PHOSPHORUS, TOTAL (mg/L as P)	36	0.360	0.010	0.060	0.241	0.060	0.040	0.023	0.010
00666	PHOSPHORUS, DISSOLVED (mg/L as P)	5	0.060	<0.010	--	--	--	--	--	--
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	31	0.370	<0.010	0.036*	0.200	0.030	0.020	0.010	<0.010
00671	PHOSPHORUS ORTHO, DISSOLVED (mg/L as P)	5	0.020	<0.010	--	--	--	--	--	--

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 10.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 2T, Eno River tributary at SR 1004 near Fairtosh

[Location.--Latitude 36°05'17", longitude 78°50'42", Durham County, at Secondary Road 1004, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527100. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	25	18.000	0.000	1.901	15.390	2.100	0.370	0.060	0.003
01105	ALUMINUM, TOTAL (µg/L as Al)	21	2400.000	80.000	659.048	2350.001	780.000	390.000	305.000	90.000
01002	ARSENIC, TOTAL (µg/L as As)	21	11.000	<1.000	0.816*	2.000	<1.000	<1.000	<1.000	<1.000
01027	CADMIUM, TOTAL (µg/L as Cd)	21	13.000	<1.000	--	2.000	<1.000	<1.000	<1.000	<1.000
01034	CHROMIUM, TOTAL (µg/L as Cr)	21	8.000	<1.000	1.769*	4.000	2.000	1.000	<1.000	<1.000
01037	COBALT, TOTAL (µg/L as Co)	21	2.000	<1.000	1.063*	2.000	1.000	1.000	<1.000	<1.000
01042	COPPER, TOTAL (µg/L as Cu)	20	6.000	<1.000	2.258*	5.000	3.000	2.000	<1.000	<1.000
01045	IRON, TOTAL (µg/L as Fe)	21	5800.000	580.000	2130.476	5720.001	3050.000	1800.000	790.000	584.000
01051	LEAD, TOTAL (µg/L as Pb)	21	7.000	<1.000	2.352*	4.000	3.000	2.000	1.000	<1.000
01055	MANGANESE, TOTAL (µg/L as Mn)	21	1700.000	40.000	329.524	1640.001	405.000	170.000	95.000	45.000
71900	MERCURY, TOTAL (µg/L as Hg)	21	0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
01062	MOLYBDENUM, TOTAL (µg/L as Mo)	21	1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01067	NICKEL, TOTAL (µg/L as Ni)	21	5.000	<1.000	2.261*	3.000	3.000	2.000	2.000	<1.000
01147	SELENIUM, TOTAL (µg/L as Se)	21	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01077	SILVER, TOTAL (µg/L as Ag)	19	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01092	ZINC, TOTAL (µg/L as Zn)	21	40.000	<10.000	9.241*	20.000	10.000	<10.000	<10.000	<10.000

¹Period July 1989 through September 1993.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 10.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 2T, Eno River tributary at SR 1004 near Fairtosh

[Location.--Latitude 36°05'17", longitude 78°50'42", Durham County, at Secondary Road 1004, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527100. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS - BOTTOM SEDIMENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01003	ARSENIC, (µg/g as As)	3	2.000	1.000	--	--	--	--	--	--
01028	CADMIUM, (µg/g as Cd)	3	<10.000	<1.000	--	--	--	--	--	--
01029	CHROMIUM, (µg/g as Cr)	3	6.000	2.000	--	--	--	--	--	--
01043	COPPER, (µg/g as Cu)	3	1.000	<1.000	--	--	--	--	--	--
01170	IRON, (µg/g as Fe)	3	570.000	120.000	--	--	--	--	--	--
01052	LEAD, (µg/g as Pb)	3	<100.000	<10.000	--	--	--	--	--	--
01053	MANGANESE, (µg/g as Mn)	3	470.000	13.000	--	--	--	--	--	--
71921	MERCURY, (µg/g as Hg)	3	0.010	<0.010	--	--	--	--	--	--
01093	ZINC, (µg/g as Zn)	3	20.000	<10.000	--	--	--	--	--	--

Table 10.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 2T, Eno River tributary at SR 1004 near Fairtosh

[Location.--Latitude 36°05'17", longitude 78°50'42", Durham County, at Secondary Road 1004, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527100. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	37	18.000	0.000	2.073	16.200	2.100	0.270	0.045	0.000
00680	CARBON ORGANIC, TOTAL (mg/L)	36	19.000	5.300	10.492	17.300	14.000	11.000	7.125	5.385
00693	CARBON, TOTAL BTM (gm/kg)	3	3.700	0.900	--	--	--	--	--	--
39330	ALDRIN, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39333	ALDRIN, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39350	CHLORDANE, TOTAL (µg/L)	12	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39351	CHLORDANE, BTM (µg/kg)	3	<1.000	<1.000	--	--	--	--	--	--
39360	DDD, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39363	DDD, BTM (µg/kg)	3	0.400	<0.100	--	--	--	--	--	--
39365	DDE, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39368	DDE, BTM (µg/kg)	3	0.200	<0.100	--	--	--	--	--	--
39370	DDT, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39373	DDT, BTM (µg/kg)	3	0.100	<0.100	--	--	--	--	--	--
39570	DIAZINON, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39571	DIAZINON, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39380	DIELDRIN, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39383	DIELDRIN, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39388	ENDOSULFAN, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39389	ENDOSULFAN, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39390	ENDRIN, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39393	ENDRIN, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39398	ETHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39399	ETHION, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39516	PCB, TOTAL (µg/L)	12	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39519	PCB, BTM (µg/kg)	3	<1.000	<1.000	--	--	--	--	--	--
39250	PCN, TOTAL (µg/L)	12	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39251	PCN, BTM (µg/kg)	3	<1.000	<1.000	--	--	--	--	--	--
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39423	HEPTACHLOR EPOXIDE, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--

Table 10.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 2T, Eno River tributary at SR 1004 near Fairtosh

[Location.--Latitude 36°05'17", longitude 78°50'42", Durham County, at Secondary Road 1004, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527100. NOTE Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
39410	HEPTACHLOR, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39413	HEPTACHLOR, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39340	LINDANE, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39343	LINDANE, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39530	MALATHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39531	MALATHION, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39480	METHOXYCHLOR, TOTAL (µg/L)	12	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39481	METHOXYCHLOR, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39600	METHYL PARATHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39601	METHYL PARATHION, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39790	METHYL TRITHION, TOTAL (µg/L)	8	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39791	METHYL TRITHION, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39755	MIREX, TOTAL (µg/L)	12	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39758	MIREX, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39540	PARATHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39541	PARATHION, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
39034	PERTHANE, TOTAL (µg/L)	12	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
81886	PERTHANE, BTM (µg/kg)	3	<1.000	<1.000	--	--	--	--	--	--
39400	TOXAPHENE, TOTAL (µg/L)	12	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
39403	TOXAPHENE, BTM (µg/kg)	3	<10.000	<10.000	--	--	--	--	--	--
39786	TRITHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39787	TRITHION, BTM (µg/kg)	3	<0.100	<0.100	--	--	--	--	--	--
34030	BENZENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32104	BROMOFORM, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34301	CHLOROBENZENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34311	CHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32106	CHLOROPFORM, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34418	METHYLCHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	9	0.300	<0.200	--	0.300	<0.200	<0.200	<0.200	<0.200
34371	ETHYLBENZENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34413	METHYL BROMIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
77128	STYRENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	9	2.000	<0.200	--	2.000	<0.200	<0.200	<0.200	<0.200
34010	TOLUENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34488	TRICHLOROFLUOROMETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39175	VINYL CHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
81551	XYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34496	1,1-DICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34506	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34511	1,1,2-TRICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34536	O-CHLORO-BENZENE, TOTAL (µg/L)	9	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
32103	1,2-DICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34541	1,2-DICHLOROPROPANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34561	1,3-DICHLOROPROPENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34546	1,2-TRANS-DICHLOROETHENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34205	ACENAPHTHENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34208	ACENAPHTHENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34200	ACENAPHTHYLENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34203	ACENAPHTHYLENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34220	ANTHRACENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34223	ANTHRACENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34526	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), TOTAL (µg/L)	5	<10.000	<5.000	--	--	--	--	--	--
34529	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), BTM (µg/kg)	3	<400.000	<400.000	--	--	--	--	--	--
34247	BENZO(A)PYRENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34230	BENZO(B)FLUORANTHENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34233	BENZO(B)FLUORANTHENE, BTM (µg/kg)	3	<400.000	<400.000	--	--	--	--	--	--
34521	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34524	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), BTM (µg/kg)	3	<400.000	<400.000	--	--	--	--	--	--
34242	BENZO(K)FLUORANTHENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34245	BENZO(K)FLUORANTHENE, BTM (µg/kg)	3	<400.000	<400.000	--	--	--	--	--	--
34292	N-BUTYL BENZYL PHTHALATE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34452	PARACHLOROMETACRESOL, TOTAL (µg/L)	5	<30.000	<30.000	--	--	--	--	--	--
34455	PARACHLOROMETACRESOL, BTM (µg/kg)	3	<600.000	<600.000	--	--	--	--	--	--
34320	CHRYSENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34323	CHRYSENE, BTM (µg/kg)	3	<400.000	<400.000	--	--	--	--	--	--
39110	DI-N-BUTYL PHTHALATE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34596	DI-N-OCTYL PHTHALATE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34599	DI-N-OCTYL PHTHALATE, BTM (µg/kg)	3	<400.000	<400.000	--	--	--	--	--	--
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34559	1,2,5,6-DIBENZANTHRACENE, BTM (µg/kg)	3	<400.000	<400.000	--	--	--	--	--	--
34336	DIETHYL PHTHALATE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34339	DIETHYL PHTHALATE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--

Table 10.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 2T, Eno River tributary at SR 1004 near Fairtosh

[Location.--Latitude 36°05'17", longitude 78°50'42", Durham County, at Secondary Road 1004, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527100. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34341	DIMETHYL PHTHALATE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34344	DIMETHYL PHTHALATE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34657	4,6-DINITRO-ORTHOCHRESOL, TOTAL (µg/L)	5	<30.000	<30.000	--	--	--	--	--	--
34376	FLUORANTHENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34379	FLUORANTHENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34381	FLUORENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34384	FLUORENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
39700	HEXACHLOROBENZENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
39701	HEXACHLOROBENZENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
39702	HEXACHLOROBUTADIENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
39705	HEXACHLOROBUTADIENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34396	HEXACHLOROETHANE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34399	HEXACHLOROETHANE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (µg/L)	5	<10.000	<10.000	--	--	--	--	--	--
34406	INDENO (1,2,3-CD) PYRENE, BTM (µg/kg)	3	<400.000	<400.000	--	--	--	--	--	--
34408	ISOPHORONE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34411	ISOPHORONE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34433	N-NITROSODIPHENYLAMINE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34696	NAPHTHALENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34445	NAPHTHALENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34447	NITROBENZENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34450	NITROBENZENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34438	N-NITROSODIMETHYLAMINE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
39032	PENTACHLOROPHENOL, TOTAL (µg/L)	5	<30.000	<30.000	--	--	--	--	--	--
39061	PENTACHLOROPHENOL, BTM (µg/kg)	3	<600.000	<600.000	--	--	--	--	--	--
34461	PHENANTHRENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34464	PHENANTHRENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34694	PHENOL (C6H-5OH), TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34695	PHENOL (C6H-5OH), BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34469	PYRENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34472	PYRENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34551	1,2,4-TRICHLOROBENZENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34554	1,2,4-TRICHLOROBENZENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	9	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
34569	1,3-DICHLOROBENZENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	9	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
34574	1,4-DICHLOROBENZENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34278	BIS(2-CHLOROETHOXY)METHANE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34273	BIS-2-CHLOROETHYL ETHER, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34283	BIS(2-CHLOROISOPROPYL)ETHER TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34581	2-CHLORONAPHTHALENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34586	2-CHLOROPHENOL, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
39100	BIS(2-ETHYLHEXYL) PHTHALATE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34591	2-NITROPHENOL, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34594	2-NITROPHENOL, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34601	2,4-DICHLOROPHENOL, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34606	2,4-DIMETHYLPHENOL, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34616	2,4-DINITROPHENOL, TOTAL (µg/L)	5	<20.000	<20.000	--	--	--	--	--	--
34611	2,4-DINITROTOLUENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34614	2,4-DINITROTOLUENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34621	2,4,6-TRICHLOROPHENOL, TOTAL (µg/L)	5	<20.000	<20.000	--	--	--	--	--	--
34626	2,6-DINITROTOLUENE, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34629	2,6-DINITROTOLUENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34636	4-BROMOPHENYL ETHER, TOTAL (µg/L)	5	<5.000	<5.000	--	--	--	--	--	--
34644	4-CHLOROPHENYL PHENYL ETHER, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34646	4-NITROPHENOL, TOTAL (µg/L)	5	<30.000	<30.000	--	--	--	--	--	--
34649	4-NITROPHENOL, BTM (µg/kg)	3	<600.000	<600.000	--	--	--	--	--	--
34286	BIS(2-CHLOROISOPROPYL) ETHER, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34281	BIS(2-CHLOROETHOXY) METHANE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34276	BIS(2-CHLOROETHYL) ETHER, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
39102	BIS(2-ETHYLHEXYL) PHTHALATE, BTM (µg/kg)	3	480.000	<200.000	--	--	--	--	--	--
34250	BENZO-A-PYRENE, BTM (µg/kg)	3	<400.000	<400.000	--	--	--	--	--	--
34639	4-BROMOPHENYL PHENYL ETHER, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34295	N-BUTYLBENZYL PHTHALATE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34589	2-CHLOROPHENOL, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34584	2-CHLORONAPHTHALENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34604	2,4-DICHLOROPHENOL, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34609	2,4-DP, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34660	4,6-DINITRO-ORTHOCHRESOL, BTM (µg/kg)	3	<600.000	<600.000	--	--	--	--	--	--
34619	2,4-DINITROPHENOL, BTM (µg/kg)	3	<600.000	<600.000	--	--	--	--	--	--
39112	DI-N-BUTYL PHTHALATE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34389	HEXACHLOROCYCLOPENTADIENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34441	N-NITROSODIMETHYLAMINE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34436	N-NITROSODIPHENYLAMINE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34431	N-NITROSODI-N-PROPYLAMINE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34624	2,4,6-TRICHLOROPHENOL, BTM (µg/kg)	3	<600.000	<600.000	--	--	--	--	--	--
34539	1,2-DICHLOROBENZENE, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
38932	CHLORPYRIFOS, TOTAL (µg/L)	4	<0.010	<0.010	--	--	--	--	--	--
39011	DISYSTON, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39023	PHORATE, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39040	DEF, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	7	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
82614	FONOFOS (DYFONATE) WATER, TOTAL (µg/L)	4	<0.010	<0.010	--	--	--	--	--	--

Table 11.--Statistical summary of water-quality data, February 1988 through September 1993

Site 3T, Little River tributary near Durham

[Location--Latitude 36°06'45", longitude 78°53'00", Durham County, 0.6 mi above mouth, and 6.8 mi north of Durham; USGS downstream order number 0208524170.]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	36	37.000	0.000	3.624	24.250	3.300	0.285	0.032	0.000
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	34	102.000	40.000	72.559	100.500	84.250	70.500	63.000	44.500
00400	PH, FIELD (STANDARD pH UNITS)	36	7.800	5.700	--	7.460	7.075	6.800	6.400	5.700
00010	WATER TEMPERATURE (°C)	34	24.000	4.000	15.059	22.500	20.000	15.000	11.125	5.125
00300	OXYGEN, DISSOLVED (mg/L)	29	12.900	4.800	9.169	12.650	10.400	9.400	7.600	5.200
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	28	108.000	53.000	89.607	107.100	98.750	91.500	82.250	58.400
80154	SUSPENDED SEDIMENT (mg/L)	28	92.000	3.000	16.929	74.900	21.250	11.500	6.250	3.450
70337	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.002 mm	1	49.000	--	--	--	--	--	--	--
70338	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.004 mm	1	61.000	--	--	--	--	--	--	--
70339	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.008 mm	1	76.000	--	--	--	--	--	--	--
70340	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.016 mm	1	87.000	--	--	--	--	--	--	--
70341	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.031 mm	1	92.000	--	--	--	--	--	--	--
70342	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.062 mm	1	97.000	--	--	--	--	--	--	--
80164	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.062 mm	2	0.000	--	--	--	--	--	--	--
80165	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.125 mm	2	1.000	0.000	--	--	--	--	--	--
80166	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.250 mm	2	2.000	1.000	--	--	--	--	--	--
80167	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.500 mm	2	6.000	6.000	--	--	--	--	--	--
80168	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 1.000 mm	2	20.000	12.000	--	--	--	--	--	--
80169	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 2.000 mm	2	38.000	20.000	--	--	--	--	--	--

Table 11.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 3T, Little River tributary near Durham

[Location--Latitude 36°06'45", longitude 78°53'00", Durham County, 0.6 mi above mouth, and 6.8 mi north of Durham; USGS downstream order number 0208524170. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR DISSOLVED CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	25	37.000	0.000	3.388	30.700	2.700	0.290	0.060	0.000
00080	COLOR (PLATINUM-COBALT UNITS)	25	150.000	5.000	73.200	147.000	105.000	70.000	42.500	8.600
00900	HARDNESS, TOTAL (mg/L as CaCO ₃)	25	31.000	13.000	19.920	30.400	22.000	19.000	16.500	13.300
00915	CALCIUM, DISSOLVED (mg/L as Ca)	25	7.100	3.000	4.576	7.040	5.150	4.300	3.800	3.060
00925	MAGNESIUM, DISSOLVED (mg/L as Mg)	25	3.200	1.300	2.056	3.110	2.300	2.100	1.700	1.330
00930	SODIUM, DISSOLVED (mg/L as Na)	25	7.600	2.900	5.480	7.450	6.300	5.700	4.600	3.020
00935	POTASSIUM, DISSOLVED (mg/L as K)	25	3.300	0.900	1.848	3.270	2.250	1.700	1.400	0.930
² 90410	ALKALINITY, LAB (mg/L as CaCO ₃)	25	32.000	5.000	16.172	31.100	21.000	13.000	11.000	6.080
00945	SULFATE, DISSOLVED (mg/L as SO ₄)	25	16.000	2.400	6.412	14.500	8.200	6.200	4.000	2.460
00940	CHLORIDE, DISSOLVED (mg/L as Cl)	24	11.000	2.800	6.867	10.750	9.025	6.600	4.725	2.975
00950	FLUORIDE, DISSOLVED (mg/L as F)	25	0.300	<0.100	0.101*	0.200	0.100	<0.100	<0.100	<0.100
00955	SILICA, DISSOLVED (mg/L as SiO ₂)	24	17.000	4.100	7.325	15.750	7.975	6.800	5.500	4.150
70300	DISSOLVED SOLIDS, RESIDUE as 180 °C (mg/L)	24	77.000	34.000	58.833	76.250	65.000	60.500	52.000	36.750

¹Period July 1989 through September 1993.²To convert to bicarbonate, mg/L alkalinity as CaCO₃ x 1.22 = mg/L of bicarbonate.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 11.--Statistical summary of water-Quality data, February 1988 through September 1993--Continued

Site 3T, Little River tributary near Durham

[Location--Latitude 36°06'45", longitude 78°53'00", Durham County, 0.6 mi above mouth, and 6.8 mi north of Durham; USGS downstream order number 0208524170.

NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	36	37.000	0.000	3.624	24.250	3.300	0.285	0.032	0.000
00615	NITROGEN, NITRITE, TOTAL (mg/L as N)	13	0.030	<0.010	0.011*	0.030	0.010	0.010	<0.010	<0.010
00613	NITROGEN, NITRITE, DISSOLVED (mg/L as N)	4	0.020	<0.010	--	--	--	--	--	--
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	31	0.700	<0.050	0.158*	0.700	0.190	0.100	<0.100	<0.050
00631	NO ₂ + NO ₃ , DISSOLVED (mg/L as N)	4	0.180	0.110	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	31	0.350	<0.010	0.040*	0.080	0.040	0.030	0.020	<0.010
00608	NITROGEN AMMONIA, DISSOLVED (mg/L as N)	4	0.050	0.030	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	34	1.200	0.280	0.623	1.050	0.835	0.570	0.457	0.280
00607	NITROGEN ORGANIC, DISSOLVED (mg/L as N)	4	0.550	0.270	--	--	--	--	--	--
00625	NITROGEN AMMONIA+ORGANIC, TOTAL (mg/L as N)	35	1.200	0.200	0.651	1.200	0.900	0.600	0.500	0.280
00623	NITROGEN AMMONIA + ORGANIC, DISSOLVED (mg/L as N)	4	0.600	0.300	--	--	--	--	--	--
00600	NITROGEN, TOTAL (mg/L as N)	34	1.500	0.300	0.793	1.425	0.987	0.715	0.507	0.300
00665	PHOSPHORUS, TOTAL (mg/L as P)	35	0.240	0.020	0.071	0.208	0.100	0.050	0.030	0.020
00666	PHOSPHORUS, DISSOLVED (mg/L as P)	4	0.040	<0.010	--	--	--	--	--	--
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	31	0.170	<0.010	0.037*	0.140	0.040	0.020	0.020	<0.010
00671	PHOSPHORUS ORTHO, DISSOLVED (mg/L as P)	4	0.030	0.010	--	--	--	--	--	--

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 11.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 3T, Little River tributary near Durham

[Location--Latitude 36°06'45", longitude 78°53'00", Durham County, 0.6 mi above mouth, and 6.8 mi north of Durham; USGS downstream order number 0208524170. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	25	37.000	0.000	3.388	30.700	2.700	0.290	0.060	0.000
01105	ALUMINUM, TOTAL (µg/L as Al)	22	2600.000	20.000	436.364	2328.497	465.000	330.000	217.500	24.500
01002	ARSENIC, TOTAL (µg/L as As)	22	1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01027	CADMIUM, TOTAL (µg/L as Cd)	22	2.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01034	CHROMIUM, TOTAL (µg/L as Cr)	22	5.000	<1.000	0.975*	3.000	1.000	<1.000	<1.000	<1.000
01037	COBALT, TOTAL (µg/L as Co)	22	2.000	<1.000	0.841*	1.000	1.000	<1.000	<1.000	<1.000
01042	COPPER, TOTAL (µg/L as Cu)	21	5.000	<1.000	1.833*	4.000	3.000	1.000	1.000	<1.000
01045	IRON, TOTAL (µg/L as Fe)	22	3300.000	350.000	1483.636	3270.000	2300.000	1350.000	800.000	365.000
01051	LEAD, TOTAL (µg/L as Pb)	22	5.000	<1.000	1.507*	3.000	2.000	1.000	<1.000	<1.000
01055	MANGANESE, TOTAL (µg/L as Mn)	22	320.000	20.000	110.000	320.000	122.500	85.000	60.000	21.500
71900	MERCURY, TOTAL (µg/L as Hg)	22	0.400	<0.100	--	0.200	<0.100	<0.100	<0.100	<0.100
01062	MOLYBDENUM, TOTAL (µg/L as Mo)	22	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01067	NICKEL, TOTAL (µg/L as Ni)	22	3.000	<1.000	1.046*	2.000	1.000	1.000	<1.000	<1.000
01147	SELENIUM, TOTAL (µg/L as Se)	22	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01077	SILVER, TOTAL (µg/L as Ag)	20	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01092	ZINC, TOTAL (µg/L as Zn)	22	30.000	<10.000	8.213*	20.000	<10.000	<10.000	<10.000	<10.000

¹Period July 1989 through September 1993.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 11.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 3T, Little River tributary near Durham

[Location--Latitude 36°06'45", longitude 78°53'00", Durham County, 0.6 mi above mouth, and 6.8 mi north of Durham; USGS downstream order number 0208524170.

NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS - BOTTOM SEDIMENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01003	ARSENIC, (µg/g as As)	4	4.000	3.000	--	--	--	--	--	--
01028	CADMIUM, (µg/g as Cd)	4	<10.000	<1.000	--	--	--	--	--	--
01029	CHROMIUM, (µg/g as Cr)	4	5.000	2.000	--	--	--	--	--	--
01043	COPPER, (µg/g as Cu)	4	5.000	2.000	--	--	--	--	--	--
01170	IRON, (µg/g as Fe)	4	8000.000	4500.000	--	--	--	--	--	--
01052	LEAD, (µg/g as Pb)	4	<100.000	<10.000	--	--	--	--	--	--
01053	MANGANESE, (µg/g as Mn)	4	5500.000	240.000	--	--	--	--	--	--
71921	MERCURY, (µg/g as Hg)	4	0.030	<0.010	--	--	--	--	--	--
01093	ZINC, (µg/g as Zn)	4	40.000	20.000	--	--	--	--	--	--

Table 11.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 3T, Little River tributary near Durham

[Location.--Latitude 36°06'45", longitude 78°53'00", Durham County, 0.6 mi above mouth, and 6.8 mi north of Durham; USGS downstream order number 0208524170.

NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	36	37.000	0.000	3.624	24.250	3.300	0.285	0.032	0.000
00680	CARBON ORGANIC, TOTAL (mg/L)	35	24.000	4.100	11.08	20.800	13.000	10.000	7.600	4.580
00693	CARBON, TOTAL BTM (gm/kg)	3	8.500	1.900	--	--	--	--	--	--
39330	ALDRIN, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39333	ALDRIN, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39350	CHLORDANE, TOTAL (µg/L)	12	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39351	CHLORDANE, BTM (µg/kg)	4	1.000	<1.000	--	--	--	--	--	--
39360	DDD, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39363	DDD, BTM (µg/kg)	4	0.200	<0.100	--	--	--	--	--	--
39365	DDE, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39368	DDE, BTM (µg/kg)	4	0.400	<0.100	--	--	--	--	--	--
39370	DDT, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39373	DDT, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39570	DIAZINON, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39571	DIAZINON, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39380	DIELDRIN, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39383	DIELDRIN, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39388	ENDOSULFAN, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39389	ENDOSULFAN, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39390	ENDRIN, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39393	ENDRIN, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39398	ETHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39399	ETHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39516	PCB, TOTAL (µg/L)	12	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39519	PCB, BTM (µg/kg)	4	<1.000	<1.000	--	--	--	--	--	--
39250	PCN, TOTAL (µg/L)	12	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39251	PCN, BTM (µg/kg)	4	<1.000	<1.000	--	--	--	--	--	--
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39423	HEPTACHLOR EPOXIDE, BTM (µg/kg)	4	0.100	<0.100	--	--	--	--	--	--
39410	HEPTACHLOR, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39413	HEPTACHLOR, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39340	LINDANE, TOTAL (µg/L)	12	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.010	<0.010
39343	LINDANE, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39530	MALATHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39531	MALATHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39480	METHOXYCHLOR, TOTAL (µg/L)	12	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39481	METHOXYCHLOR, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39600	METHYL PARATHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39601	METHYL PARATHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39790	METHYL TRITHION, TOTAL (µg/L)	8	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39791	METHYL TRITHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39755	MIREX, TOTAL (µg/L)	12	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39758	MIREX, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39540	PARATHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39541	PARATHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
39034	PERTHANE, TOTAL (µg/L)	12	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
81886	PERTHANE, BTM (µg/kg)	4	<1.000	<1.000	--	--	--	--	--	--
39400	TOXAPHENE, TOTAL (µg/L)	12	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
39403	TOXAPHENE, BTM (µg/kg)	4	<10.000	<10.000	--	--	--	--	--	--
39786	TRITHION, TOTAL (µg/L)	10	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39787	TRITHION, BTM (µg/kg)	4	<0.100	<0.100	--	--	--	--	--	--
34030	BENZENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32104	BROMOFORM, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34301	CHLOROBENZENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34311	CHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32106	CHLOROFORM, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34418	METHYLCHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	9	0.600	<0.200	--	0.600	<0.200	<0.200	<0.200	<0.200
34371	ETHYLBENZENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34413	METHYL BROMIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	9	0.200	<0.200	--	0.200	<0.200	<0.200	<0.200	<0.200
77128	STYRENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34010	TOLUENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34488	TRICHLOROFLUOROMETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39175	VINYL CHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
81551	XYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34496	1,1-DICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34506	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34511	1,1,2-TRICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34536	O-CHLORO-BENZENE, TOTAL (µg/L)	9	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200

Table 11.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 3T, Little River tributary near Durham

[Location.--Latitude 36°06'45", longitude 78°53'00", Durham County, 0.6 mi above mouth, and 6.8 mi north of Durham; USGS downstream order number 0208524170.

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ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
32103	1,2-DICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34541	1,2-DICHLOROPROPANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34561	1,3-DICHLOROPROPENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34546	1,2-TRANSDICHLOROETHENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34205	ACENAPHTHENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34208	ACENAPHTHENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34200	ACENAPHTHYLENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34203	ACENAPHTHYLENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34220	ANTHRACENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34223	ANTHRACENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34526	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), TOTAL (µg/L)	4	<10.000	<5.000	--	--	--	--	--	--
34529	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34247	BENZO(A)PYRENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34230	BENZO(B)FLUORANTHENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34233	BENZO(B)FLUORANTHENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34521	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34524	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34242	BENZO(K)FLUORANTHENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34245	BENZO(K)FLUORANTHENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34292	N-BUTYL BENZYL PHTHALATE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34452	PARACHLOROMETACRESOL, TOTAL (µg/L)	4	<30.000	<30.000	--	--	--	--	--	--
34455	PARACHLOROMETACRESOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
34320	CHRYSENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34323	CHRYSENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
39110	DI-N-BUTYL PHTHALATE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34596	DI-N-OCTYL PHTHALATE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34599	DI-N-OCTYL PHTHALATE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34559	1,2,5,6-DIBENZANTHRACENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34336	DIETHYL PHTHALATE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34339	DIETHYL PHTHALATE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34341	DIMETHYL PHTHALATE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34344	DIMETHYL PHTHALATE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34657	4,6-DINITRO-ORTHOCRESOL, TOTAL (µg/L)	4	<30.000	<30.000	--	--	--	--	--	--
34376	FLUORANTHENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34379	FLUORANTHENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34381	FLUORENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34384	FLUORENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
39700	HEXACHLOROBENZENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
39701	HEXACHLOROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
39702	HEXACHLOROBUTADIENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
39705	HEXACHLOROBUTADIENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34396	HEXACHLOROETHANE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34399	HEXACHLOROETHANE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34406	INDENO (1,2,3-CD) PYRENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34408	ISOPHORONE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34411	ISOPHORONE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34433	N-NITROSODIPHENYLAMINE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34696	NAPHTHALENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34445	NAPHTHALENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34447	NITROBENZENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34450	NITROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34438	N-NITROSODIMETHYLAMINE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
39032	PENTACHLOROPHENOL, TOTAL (µg/L)	4	<30.000	<30.000	--	--	--	--	--	--
39061	PENTACHLOROPHENOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
34461	PHENANTHRENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34464	PHENANTHRENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34694	PHENOL (C6H-5OH), TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--

Table 11.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 3T, Little River tributary near Durham

[Location.--Latitude 36°06'45", longitude 78°53'00", Durham County, 0.6 mi above mouth, and 6.8 mi north of Durham; USGS downstream order number 0208524170.

NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34695	PHENOL (C6H-5OH), BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34469	PYRENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34472	PYRENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34551	1,2,4-TRICHLOROBENZENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34554	1,2,4-TRICHLOROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	9	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
34569	1,3-DICHLOROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	9	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
34574	1,4-DICHLOROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34278	BIS(2-CHLOROETHOXY)METHANE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34273	BIS-2-CHLOROETHYL ETHER, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34283	BIS(2-CHLOROISOPROPYL) ETHER, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34581	2-CHLORONAPHTHALENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34586	2-CHLOROPHENOL, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
39100	BIS(2-ETHYLHEXYL) PHTHALATE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34591	2-NITROPHENOL, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34594	2-NITROPHENOL, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34601	2,4-DICHLOROPHENOL, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34606	2,4-DIMETHYLPHENOL, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34616	2,4-DINITROPHENOL, TOTAL (µg/L)	4	<200.000	<20.000	--	--	--	--	--	--
34611	2,4-DINITROTOLUENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34614	2,4-DINITROTOLUENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34621	2,4,6-TRICHLOROPHENOL, TOTAL (µg/L)	4	<20.000	<20.000	--	--	--	--	--	--
34626	2,6-DINITROTOLUENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34629	2,6-DINITROTOLUENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34636	4-BROMOPHENYL ETHER, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34644	4-CHLOROPHENYL PHENYL ETHER, BTM (µg/kg)	3	<200.000	<200.000	--	--	--	--	--	--
34646	4-NITROPHENOL, TOTAL (µg/L)	4	<30.000	<30.000	--	--	--	--	--	--
34649	4-NITROPHENOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
34286	BIS(2-CHLOROISOPROPYL) ETHER, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34281	BIS(2-CHLOROETHOXY) METHANE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34276	BIS(2-CHLOROETHYL) ETHER, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
39102	BIS(2-ETHYLHEXYL) PHTHALATE, BTM (µg/kg)	4	850.000	<200.000	--	--	--	--	--	--
34250	BENZO-A-PYRENE, BTM (µg/kg)	4	<400.000	<400.000	--	--	--	--	--	--
34639	4-BROMOPHENYL PHENYL ETHER, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34295	N-BUTYLBENZYL PHTHALATE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34589	2-CHLOROPHENOL, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34584	2-CHLORONAPHTHALENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34604	2,4-DICHLOROPHENOL, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34609	2,4-DP, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34660	4,6-DINITRO-ORTHOCHRESOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
34619	2,4-DINITROPHENOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
39112	DI-N-BUTYL PHTHALATE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34389	HEXACHLOROCYCLOPENTADIENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34441	N-NITROSODIMETHYLAMINE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34436	N-NITROSODIPHENYLAMINE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34431	N-NITROSODI-N-PROPYLAMINE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
34624	2,4,6-TRICHLOROPHENOL, BTM (µg/kg)	4	<600.000	<600.000	--	--	--	--	--	--
34539	1,2-DICHLOROBENZENE, BTM (µg/kg)	4	<200.000	<200.000	--	--	--	--	--	--
38932	CHLORPYRIFOS, TOTAL (µg/L)	4	<0.010	<0.010	--	--	--	--	--	--
39011	DISYSTON, TOTAL (µg/L)	6	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39023	PHORATE, TOTAL (µg/L)	6	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39040	DEF, TOTAL (µg/L)	6	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	7	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
82614	FONOFOS (DYPONATE) WATER, TOTAL (µg/L)	4	<0.010	<0.010	--	--	--	--	--	--

Table 12.--Statistical summary of water-quality data, February 1988 through September 1993

Site 4T, Little River at SR 1461 near Orange Factory

[Location.--Latitude 36°08'30", latitude 78°55'10", Durham County, at Secondary Road 1461, and 1.8 mi northwest of Orange Factory; USGS downstream order number 0208521324.]

PHYSICAL AND CHEMICAL PROPERTIES

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	42	1900.000	0.270	166.620	964.000	192.750	23.500	6.950	0.851
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	42	115.000	47.000	78.095	112.750	92.000	79.000	62.750	47.900
00400	PH, FIELD (STANDARD pH UNITS)	42	8.100	6.100	--	7.940	7.200	6.800	6.600	6.315
00010	WATER TEMPERATURE (°C)	42	29.000	1.000	16.476	27.000	22.000	16.500	11.000	2.375
00300	OXYGEN, DISSOLVED (mg/L)	40	16.400	4.600	9.565	13.300	10.800	9.550	7.600	6.020
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	28	129.000	59.000	95.929	126.750	105.750	96.500	85.250	63.950
80154	SUSPENDED SEDIMENT (mg/L)	29	476.000	2.000	75.379	396.000	141.000	12.000	4.500	2.000
70337	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.002 mm	2	58.000	29.000	--	--	--	--	--	--
70338	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.004 mm	2	80.000	46.000	--	--	--	--	--	--
70339	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.008 mm	2	93.000	65.000	--	--	--	--	--	--
70340	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.016 mm	2	99.000	81.000	--	--	--	--	--	--
70341	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.031 mm	2	100.000	91.000	--	--	--	--	--	--
70342	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.062 mm	2	100.000	95.000	--	--	--	--	--	--
80164	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.062 mm	3	1.000	0.000	--	--	--	--	--	--
80165	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.125 mm	3	5.000	0.000	--	--	--	--	--	--
80166	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.250 mm	3	19.000	1.000	--	--	--	--	--	--
80167	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.500 mm	3	59.000	3.000	--	--	--	--	--	--
80168	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 1.000 mm	3	90.000	12.000	--	--	--	--	--	--
80169	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 2.000 mm	3	97.000	27.000	--	--	--	--	--	--

Table 12.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 4T, Little River at SR 1461 near Orange Factory

[Location.--Latitude 36°08'30", latitude 78°55'10", Durham County, at Secondary Road 1461, and 1.8 mi northwest of Orange Factory; USGS downstream order number 0208521324. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR DISSOLVED CONSTITUENTS¹

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	26	982.000	0.560	100.391	765.701	101.750	19.500	5.625	1.344
00080	COLOR (PLATINUM-COBALT UNITS)	14	180.000	13.000	74.357	180.000	125.000	60.000	20.750	13.000
00900	HARDNESS, TOTAL (mg/L as CaCO ₃)	17	39.000	16.000	26.588	39.000	31.000	26.000	20.000	16.000
00915	CALCIUM, DISSOLVED (mg/L as Ca)	17	9.400	3.700	6.335	9.400	7.550	6.100	4.700	3.700
00925	MAGNESIUM, DISSOLVED (mg/L as Mg)	17	3.800	1.600	2.588	3.800	3.100	2.500	1.950	1.600
00930	SODIUM, DISSOLVED (mg/L as Na)	17	5.900	2.200	4.553	5.900	5.450	5.000	3.550	2.200
00935	POTASSIUM, DISSOLVED (mg/L as K)	17	3.800	1.000	1.841	3.800	2.300	1.600	1.200	1.000
² 90410	ALKALINITY, LAB (mg/L as CaCO ₃)	17	47.000	12.000	27.294	47.000	35.000	26.000	16.500	12.000
00945	SULFATE, DISSOLVED (mg/L as SO ₄)	17	7.000	1.400	3.571	7.000	4.750	3.700	1.900	1.400
00940	CHLORIDE, DISSOLVED (mg/L as Cl)	17	6.300	3.400	4.700	6.300	5.300	4.500	4.050	3.400
00950	FLUORIDE, DISSOLVED (mg/L as F)	17	0.300	<0.100	0.098*	0.300	0.100	0.100	<0.100	<0.100
00955	SILICA, DISSOLVED (mg/L as SiO ₂)	14	17.000	5.000	10.929	17.000	15.000	10.400	8.275	5.000
70300	DISSOLVED SOLIDS, RESIDUE at 180 °C (mg/L)	17	74.000	37.000	56.647	74.000	62.000	59.000	49.500	37.000

¹Period July 1989 through September 1993.

²To convert to bicarbonate, mg/L alkalinity as CaCO₃ x 1.22 = mg/L of bicarbonate.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 12.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 4T, Little River at SR 1461 near Orange Factory

[Location--Latitude 36°08'30", latitude 78°55'10", Durham County, at Secondary Road 1461, and 1.8 mi northwest of Orange Factory; USGS downstream order number 0208521324. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	42	1900.000	0.270	166.620	964.000	192.750	23.500	6.950	0.851
00615	NITROGEN, NITRITE, TOTAL (mg/L as N)	4	0.010	<0.010	--	--	--	--	--	--
00613	NITROGEN, NITRITE, DISSOLVED (mg/L as N)	1	<0.010	--	--	--	--	--	--	--
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	26	0.700	<0.100	0.296*	0.500	0.400	0.300	0.100	<0.100
00631	NO ₂ + NO ₃ , DISSOLVED (mg/L as N)	4	0.440	0.059	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	26	0.160	<0.010	0.036*	0.110	0.040	0.020	0.010	<0.010
00608	NITROGEN AMMONIA, DISSOLVED (mg/L as N)	4	0.020	0.020	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	30	1.100	0.180	0.491	0.996	0.628	0.435	0.290	0.180
00607	NITROGEN ORGANIC, DISSOLVED (mg/L as N)	1	0.280	--	--	--	--	--	--	--
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	30	1.100	0.200	0.523	1.045	0.725	0.450	0.300	0.200
00623	NITROGEN AMMONIA + ORGANIC, DISSOLVED (mg/L as N)	1	0.300	--	--	--	--	--	--	--
00600	NITROGEN, TOTAL (mg/L as N)	30	1.600	0.300	0.801	1.545	1.100	0.700	0.600	0.333
00665	PHOSPHORUS, TOTAL (mg/L as P)	30	0.230	0.010	0.066	0.214	0.090	0.040	0.030	0.015
00666	PHOSPHORUS, DISSOLVED (mg/L as P)	1	0.040	--	--	--	--	--	--	--
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	26	0.110	<0.010	0.029*	0.080	0.030	0.020	0.010	<0.010
00671	PHOSPHORUS ORTHO, DISSOLVED (mg/L as P)	1	0.030	--	--	--	--	--	--	--

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 12.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 4T, Little River at SR 1461 near Orange Factory

[Location--Latitude 36°08'30", latitude 78°55'10", Durham County, at Secondary Road 1461, and 1.8 mi northwest of Orange Factory; USGS downstream order number 0208521324. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS¹

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	26	982.000	0.560	100.391	765.701	101.750	19.500	5.625	1.344
01105	ALUMINUM, TOTAL (µg/L as Al)	14	4000.000	50.000	1065.000	4000.000	1650.000	500.000	100.000	50.000
01002	ARSENIC, TOTAL (µg/L as As)	14	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01027	CADMIUM, TOTAL (µg/L as Cd)	17	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01034	CHROMIUM, TOTAL (µg/L as Cr)	17	4.000	<1.000	1.257*	4.000	1.000	<1.000	<1.000	<1.000
01037	COBALT, TOTAL (µg/L as Co)	14	2.000	<1.000	1.043*	2.000	1.000	1.000	<1.000	<1.000
01042	COPPER, TOTAL (µg/L as Cu)	17	6.000	<1.000	2.534*	6.000	4.000	2.000	1.000	<1.000
01045	IRON, TOTAL (µg/L as Fe)	17	6700.000	360.000	1910.588	6700.000	2100.000	1400.000	400.000	360.000
01051	LEAD, TOTAL (µg/L as Pb)	17	4.000	<1.000	1.572*	4.000	2.000	1.000	<1.000	<1.000
01055	MANGANESE, TOTAL (µg/L as Mn)	17	610.000	20.000	118.824	610.000	125.000	50.000	30.000	20.000
71900	MERCURY, TOTAL (µg/L as Hg)	17	0.100	<0.100	--	0.100	<0.100	<0.100	<0.100	<0.100
01062	MOLYBDENUM, TOTAL (µg/L as Mo)	14	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01067	NICKEL, TOTAL (µg/L as Ni)	17	3.000	<1.000	1.313*	3.000	2.000	1.000	1.000	<1.000
01147	SELENIUM, TOTAL (µg/L as Se)	14	<3.000	<1.000	--	<3.000	<1.000	<1.000	<1.000	<1.000
01077	SILVER, TOTAL (µg/L as Ag)	15	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01092	ZINC, TOTAL (µg/L as Zn)	17	20.000	<10.000	--	20.000	<10.000	<10.000	<10.000	<10.000

¹Period July 1989 through September 1993.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 12.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 4T, Little River at SR 1461 near Orange Factory

[Location--Latitude 36°08'30", latitude 78°55'10", Durham County, at Secondary Road 1461, and 1.8 mi northwest of Orange Factory; USGS downstream order number 0208521324. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS - BOTTOM SEDIMENTS

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01003	ARSENIC, (µg/g as As)	4	7.000	6.000	--	--	--	--	--	--
01028	CADMIUM, (µg/g as Cd)	4	<10.000	<1.000	--	--	--	--	--	--
01029	CHROMIUM, (µg/g as Cr)	4	40.000	10.000	--	--	--	--	--	--
01043	COPPER, (µg/g as Cu)	4	8.000	3.000	--	--	--	--	--	--
01170	IRON, (µg/g as Fe)	4	26000.000	7300.000	--	--	--	--	--	--
01052	LEAD, (µg/g as Pb)	4	20.000	<10.000	--	--	--	--	--	--
01053	MANGANESE, (µg/g as Mn)	4	15000.000	430.000	--	--	--	--	--	--
71921	MERCURY, (µg/g as Hg)	4	0.020	<0.010	--	--	--	--	--	--
01093	ZINC, (µg/g as Zn)	4	30.000	20.000	--	--	--	--	--	--

Table 12.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 4T, Little River at SR 1461 near Orange Factory

[Location.--Latitude 36°08'30", latitude 78°55'10", Durham County, at Secondary Road 1461, and 1.8 mi northwest of Orange Factory; USGS downstream order number 0208521324. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	42	1900.000	0.270	166.620	964.000	192.750	23.500	6.950	0.851
00680	CARBON ORGANIC, TOTAL (mg/L)	27	38.000	3.000	9.500	31.200	11.000	7.000	4.900	3.280
00693	CARBON, TOTAL BTM (gm/kg)	3	2.300	1.800	--	--	--	--	--	--
39330	ALDRIN, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39333	ALDRIN, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39350	CHLORDANE, TOTAL (µg/L)	17	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39351	CHLORDANE, BTM (µg/kg)	5	<1.000	<1.000	--	--	--	--	--	--
39360	DDD, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39363	DDD, BTM (µg/kg)	5	0.100	<0.100	--	--	--	--	--	--
39365	DDE, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39368	DDE, BTM (µg/kg)	5	0.100	<0.100	--	--	--	--	--	--
39370	DDT, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39373	DDT, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39570	DIAZINON, TOTAL (µg/L)	17	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39571	DIAZINON, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39380	DIELDRIN, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39383	DIELDRIN, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39388	ENDOSULFAN, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39389	ENDOSULFAN, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39390	ENDRIN, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39393	ENDRIN, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39398	ETHION, TOTAL (µg/L)	17	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39399	ETHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39516	PCB, TOTAL (µg/L)	17	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39519	PCB, BTM (µg/kg)	5	<1.000	<1.000	--	--	--	--	--	--
39250	PCN, TOTAL (µg/L)	17	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39251	PCN, BTM (µg/kg)	5	<1.000	<1.000	--	--	--	--	--	--
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39423	HEPTACHLOR EPOXIDE, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39410	HEPTACHLOR, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39413	HEPTACHLOR, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39340	LINDANE, TOTAL (µg/L)	17	0.001	<0.001	--	0.001	<0.010	<0.010	<0.001	<0.001
39343	LINDANE, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39530	MALATHION, TOTAL (µg/L)	17	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39531	MALATHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39480	METHOXYCHLOR, TOTAL (µg/L)	17	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39481	METHOXYCHLOR, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39600	METHYL PARATHION, TOTAL (µg/L)	17	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39601	METHYL PARATHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39790	METHYL TRITHION, TOTAL (µg/L)	16	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39791	METHYL TRITHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39755	MIREX, TOTAL (µg/L)	17	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39758	MIREX, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39540	PARATHION, TOTAL (µg/L)	17	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39541	PARATHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39034	PERTHANE, TOTAL (µg/L)	17	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
81886	PERTHANE, BTM (µg/kg)	5	<1.000	<1.000	--	--	--	--	--	--
39400	TOXAPHENE, TOTAL (µg/L)	17	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
39403	TOXAPHENE, BTM (µg/kg)	5	<10.000	<10.000	--	--	--	--	--	--
39786	TRITHION, TOTAL (µg/L)	17	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39787	TRITHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
34030	BENZENE, TOTAL (µg/L)	17	0.300	<0.200	--	0.300	<0.200	<0.200	<0.200	<0.200
32104	BROMOFORM, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34301	CHLOROBENZENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34311	CHLOROETHANE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32106	CHLOROFORM, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34418	METHYLCHLORIDE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	17	1.000	<0.200	--	1.000	<0.200	<0.200	<0.200	<0.200
34371	ETHYLBENZENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34413	METHYL BROMIDE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	17	0.200	<0.200	--	0.200	<0.200	<0.200	<0.200	<0.200
77128	STYRENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34010	TOLUENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34488	TRICHLOROFUOROMETHANE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39175	VINYL CHLORIDE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
81551	XYLENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34496	1,1-DICHLOROETHANE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34506	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200

Table 12.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 4T, Little River at SR 1461 near Orange Factory

[Location.--Latitude 36°08'30", latitude 78°55'10", Durham County, at Secondary Road 1461, and 1.8 mi northwest of Orange Factory; USGS downstream order number 0208521324. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34511	1,1,2-TRICHLOROETHANE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34536	O-CHLORO-BENZENE, TOTAL (µg/L)	18	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
32103	1,2-DICHLOROETHANE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34541	1,2-DICHLOROPROPANE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34561	1,3-DICHLOROPROPENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34546	1,2-TRANSDICHLOROETHENE, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (µg/L)	17	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34205	ACENAPHTHENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34208	ACENAPHTHENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34200	ACENAPHTHYLENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34203	ACENAPHTHYLENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34220	ANTHRACENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34223	ANTHRACENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34526	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), TOTAL (µg/L)	4	<10.000	<5.000	--	--	--	--	--	--
34529	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34247	BENZO(A)PYRENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34230	BENZO(B)FLUORANTHENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34233	BENZO(B)FLUORANTHENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34521	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34524	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34242	BENZO(K)FLUORANTHENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34245	BENZO(K)FLUORANTHENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34292	N-BUTYL BENZYL PHTHALATE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34452	PARACHLOROMETACRESOL, TOTAL (µg/L)	4	<30.000	<30.000	--	--	--	--	--	--
34455	PARACHLOROMETACRESOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
34320	CHRYSENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34323	CHRYSENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
39110	DI-N-BUTYL PHTHALATE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34596	DI-N-OCTYL PHTHALATE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34599	DI-N-OCTYL PHTHALATE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34559	1,2,5,6-DIBENZANTHRACENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34336	DIETHYL PHTHALATE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34339	DIETHYL PHTHALATE, BTM (µg/kg)	5	<400.000	<200.000	--	--	--	--	--	--
34341	DIMETHYL PHTHALATE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34344	DIMETHYL PHTHALATE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34657	4,6-DINITRO-ORTHO-CRESOL, TOTAL (µg/L)	4	<30.000	<30.000	--	--	--	--	--	--
34376	FLUORANTHENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34379	FLUORANTHENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34381	FLUORENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34384	FLUORENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
39700	HEXACHLOROBENZENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
39701	HEXACHLOROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
39702	HEXACHLOROBUTADIENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
39705	HEXACHLOROBUTADIENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34396	HEXACHLOROETHANE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34399	HEXACHLOROETHANE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (µg/L)	4	<10.000	<10.000	--	--	--	--	--	--
34406	INDENO (1,2,3-CD) PYRENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34408	ISOPHORONE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34411	ISOPHORONE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34433	N-NITROSODIPHENYLAMINE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34696	NAPHTHALENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34445	NAPHTHALENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34447	NITROBENZENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34450	NITROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34438	N-NITROSODIMETHYLAMINE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
39032	PENTACHLOROPHENOL, TOTAL (µg/L)	4	<30.000	<30.000	--	--	--	--	--	--
39061	PENTACHLOROPHENOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
34461	PHENANTHRENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34464	PHENANTHRENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34694	PHENOL (C6H-5OH), TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34695	PHENOL (C6H-5OH), BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34469	PYRENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34472	PYRENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34551	1,2,4-TRICHLOROBENZENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34554	1,2,4-TRICHLOROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	18	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
34569	1,3-DICHLOROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--

Table 12.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 4T, Little River at SR 1461 near Orange Factory

[Location.--Latitude 36°08'30", latitude 78°55'10", Durham County, at Secondary Road 1461, and 1.8 mi northwest of Orange Factory; USGS downstream order number 0208521324. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	18	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
34574	1,4-DICHLOROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34278	BIS(2-CHLOROETHOXY)METHANE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34273	BIS-2-CHLOROETHYL ETHER, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34283	BIS(2-CHLOROISOPROPYL)ETHER, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34581	2-CHLORONAPHTHALENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34586	2-CHLOROPHENOL, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
39100	BIS(2-ETHYLHEXYL) PHTHALATE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34591	2-NITROPHENOL, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34594	2-NITROPHENOL, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34601	2,4-DICHLOROPHENOL, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34606	2,4-DIMETHYLPHENOL, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34616	2,4-DINITROPHENOL, TOTAL (µg/L)	4	<20.000	<20.000	--	--	--	--	--	--
34611	2,4-DINITROTOLUENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34614	2,4-DINITROTOLUENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34621	2,4,6-TRICHLOROPHENOL, TOTAL (µg/L)	4	<20.000	<20.000	--	--	--	--	--	--
34626	2,6-DINITROTOLUENE, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34629	2,6-DINITROTOLUENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34636	4-BROMOPHENYL ETHER, TOTAL (µg/L)	4	<5.000	<5.000	--	--	--	--	--	--
34644	4-CHLOROPHENYL PHENYL ETHER, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34646	4-NITROPHENOL, TOTAL (µg/L)	4	<30.000	<30.000	--	--	--	--	--	--
34649	4-NITROPHENOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
34286	BIS(2-CHLOROISOPROPYL) ETHER, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34281	BIS(2-CHLOROETHOXY) METHANE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34276	BIS(2-CHLOROETHYL) ETHER, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
39102	BIS(2-ETHYLHEXYL) PHTHALATE, BTM (µg/kg)	5	720.000	<200.000	--	--	--	--	--	--
34250	BENZO-A-PYRENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34639	4-BROMOPHENYL PHENYL ETHER, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34295	N-BUTYLBENZYL PHTHALATE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34589	2-CHLOROPHENOL, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34584	2-CHLORONAPHTHALENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34604	2,4-DICHLOROPHENOL, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34609	2,4-DP, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34660	4,6-DINITRO-ORTHO-CRESOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
34619	2,4-DINITROPHENOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
39112	DI-N-BUTYL PHTHALATE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34389	HEXACHLOROCYCLOPENTADIENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34441	N-NITROSODIMETHYLAMINE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34436	N-NITROSODIPHENYLAMINE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34431	N-NITROSODI-N-PROPYLAMINE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34624	2,4,6-TRICHLOROPHENOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
34539	1,2-DICHLOROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
38932	CHLORPYRIFOS, TOTAL (µg/L)	6	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39011	DISYSTON, TOTAL (µg/L)	11	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39023	PHORATE, TOTAL (µg/L)	11	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39040	DEF, TOTAL (µg/L)	11	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	15	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
82614	FONOFOS (DYPONATE) WATER, TOTAL (µg/L)	6	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010

Table 13.--Statistical summary of water-quality data, February 1988 through September 1993

Site 5T, Flat River near Bahama

[Location.--Latitude 36°10'57", longitude 78°52'44", Durham County, 0.5 mi above Lake Michie, and 1.25 mi north of Bahama; USGS downstream order number 02085500.]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	40	4280.000	0.900	330.660	2471.998	258.000	65.500	20.750	1.755
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	40	101.000	44.000	74.150	100.950	87.750	73.500	65.000	44.150
00400	PH, FIELD (STANDARD pH UNITS)	41	7.900	6.000	--	7.490	7.200	6.900	6.500	6.010
00010	WATER TEMPERATURE (°C)	41	29.500	1.000	16.817	27.350	22.250	18.000	10.500	2.750
00300	OXYGEN, DISSOLVED (mg/L)	39	13.700	3.300	8.495	13.100	10.200	8.400	6.400	4.200
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	27	106.000	41.000	85.148	105.200	97.000	88.000	77.000	43.400
80154	SUSPENDED SEDIMENT (mg/L)	27	885.000	4.000	111.778	706.999	149.000	17.000	9.000	4.800
70337	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.002 mm	1	43.000	--	--	--	--	--	--	--
70338	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.004 mm	1	67.000	--	--	--	--	--	--	--
70339	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.008 mm	1	86.000	--	--	--	--	--	--	--
70340	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.016 mm	1	95.000	--	--	--	--	--	--	--
70341	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.031 mm	1	99.000	--	--	--	--	--	--	--
70342	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.062 mm	1	100.000	--	--	--	--	--	--	--
80164	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.062 mm	3	5.000	0.000	--	--	--	--	--	--
80165	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.125 mm	3	9.000	0.000	--	--	--	--	--	--
80166	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.250 mm	3	24.000	1.000	--	--	--	--	--	--
80167	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.500 mm	3	72.000	3.000	--	--	--	--	--	--
80168	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 1.000 mm	3	95.000	17.000	--	--	--	--	--	--
80169	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 2.000 mm	3	98.000	38.000	--	--	--	--	--	--

Table 13.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 5T, Flat River near Bahama

[Location.--Latitude 36°10'57", longitude 78°52'44", Durham County, 0.5 mi above Lake Michie, and 1.25 mi north of Bahama; USGS downstream order number 02085500. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR DISSOLVED CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	24	1940.000	0.900	171.950	1542.500	123.250	60.000	20.750	1.850
00080	COLOR (PLATINUM-COBALT UNITS)	13	250.000	25.000	75.231	250.000	115.000	50.000	30.500	25.000
00900	HARDNESS, TOTAL (mg/L as CaCO ₃)	15	29.000	16.000	23.000	29.000	28.000	24.000	18.000	16.000
00915	CALCIUM, DISSOLVED (mg/L as Ca)	16	6.700	3.800	5.325	6.700	6.175	5.500	4.200	3.800
00925	MAGNESIUM, DISSOLVED (mg/L as Mg)	16	3.200	1.700	2.363	3.200	2.800	2.350	1.825	1.700
00930	SODIUM, DISSOLVED (mg/L as Na)	16	6.600	3.000	5.150	6.600	5.775	5.400	4.375	3.000
00935	POTASSIUM, DISSOLVED (mg/L as K)	16	3.700	1.100	2.056	3.700	2.850	1.750	1.500	1.100
² 90410	ALKALINITY, LAB (mg/L as CaCO ₃)	16	35.000	13.000	23.563	35.000	30.750	23.500	15.000	13.000
00945	SULFATE, DISSOLVED (mg/L as SO ₄)	16	6.500	<1.000	3.859*	6.500	5.000	3.300	2.800	1.600
00940	CHLORIDE, DISSOLVED (mg/L as Cl)	16	10.000	<0.500	5.514*	10.000	6.000	5.200	4.400	3.200
00950	FLUORIDE, DISSOLVED (mg/L as F)	16	0.300	<0.100	0.121*	0.300	0.200	0.100	<0.100	<0.100
00955	SILICA, DISSOLVED (mg/L as SiO ₂)	13	16.000	6.900	11.162	16.000	14.500	11.000	8.250	6.900
70300	DISSOLVED SOLIDS, RESIDUE AT 180 °C (mg/L)	16	68.000	46.000	57.625	68.000	63.500	55.000	52.500	46.000

¹Period July 1989 through September 1993.²To convert to bicarbonate, mg/L alkalinity as CaCO₃ x 1.22 = mg/L of bicarbonate.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 13.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 5T, Flat River near Bahama

[Location.--Latitude 36°10'57", longitude 78°52'44", Durham County, 0.5 mi above Lake Michie, and 1.25 mi north of Bahama; USGS downstream order number 02085500.

NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	40	4280.000	0.900	330.660	2471.998	258.000	65.500	20.750	1.755
00615	NITROGEN,NITRITE, TOTAL (mg/L as N)	3	0.030	0.010	--	--	--	--	--	--
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	25	0.600	<0.100	0.298*	0.500	0.400	0.300	0.200	<0.100
00631	NO ₂ + NO ₃ , DISSOLVED (mg/L as N)	3	0.310	0.082	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	25	0.140	<0.010	0.052*	0.120	0.060	0.040	0.020	<0.010
00608	NITROGEN AMMONIA, DISSOLVED (mg/L as N)	3	0.060	0.030	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	27	1.800	0.170	0.563	1.520	0.860	0.470	0.270	0.174
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	28	1.800	0.200	0.596	1.485	0.925	0.500	0.300	0.200
00600	NITROGEN, TOTAL (mg/L as N)	27	2.000	0.380	0.877	1.840	1.200	0.800	0.500	0.388
00665	PHOSPHORUS, TOTAL (mg/L as P)	28	0.250	0.010	0.071	0.232	0.097	0.050	0.040	0.019
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	25	0.110	<0.010	0.034*	0.080	0.040	0.020	0.020	<0.010

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 13.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 5T, Flat River near Bahama

[Location.--Latitude 36°10'57", longitude 78°52'44", Durham County, 0.5 mi above Lake Michie, and 1.25 mi north of Bahama; USGS downstream order number 02085500. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE ft ³ /s	25	1940.000	0.900	165.456	1463.001	117.500	56.000	18.500	2.040
01105	ALUMINUM, TOTAL (µg/L as Al)	13	4700.000	140.000	1357.692	4700.000	2300.000	620.000	240.000	140.000
01002	ARSENIC, TOTAL (µg/L as As)	13	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01027	CADMIUM, TOTAL (µg/L as Cd)	16	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01034	CHROMIUM, TOTAL (µg/L as Cr)	16	6.000	<1.000	1.679*	6.000	2.000	<1.000	<1.000	<1.000
01037	COBALT, TOTAL (µg/L as Co)	13	3.000	<1.000	1.235*	3.000	2.000	1.000	<1.000	<1.000
01042	COPPER, TOTAL (µg/L as Cu)	16	7.000	<1.000	3.196*	7.000	4.000	2.000	2.000	<1.000
01045	IRON, TOTAL (µg/L as Fe)	16	8300.000	520.000	2549.375	8300.000	4300.000	1250.000	850.000	520.000
01051	LEAD, TOTAL (µg/L as Pb)	16	8.000	<1.000	2.321*	8.000	3.000	1.000	1.000	<1.000
01055	MANGANESE, TOTAL (µg/L as Mn)	16	580.000	20.000	158.750	580.000	245.000	100.000	65.000	20.000
71900	MERCURY, TOTAL (µg/L as Hg)	16	0.200	<0.100	--	0.200	<0.100	<0.100	<0.100	<0.100
01062	MOLYBDENUM, TOTAL (µg/L as Mo)	13	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01067	NICKEL, TOTAL (µg/L as Ni)	16	3.000	<1.000	1.594*	3.000	2.000	1.000	<1.000	<1.000
01147	SELENIUM, TOTAL (µg/L as Se)	13	<2.000	<1.000	--	<2.000	<1.000	<1.000	<1.000	<1.000
01077	SILVER, TOTAL (µg/L as Ag)	14	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01092	ZINC, TOTAL (µg/L as Zn)	16	20.00	<10.000	7.043*	20.000	10.000	<10.000	<10.000	<10.000

¹Period July 1989 through September 1993.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 13.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 5T, Flat River near Bahama

[Location.--Latitude 36°10'57", longitude 78°52'44", Durham County, 0.5 mi above Lake Michie, and 1.25 mi north of Bahama; USGS downstream order number 02085500. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS - BOTTOM SEDIMENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01003	ARSENIC, (µg/g as As)	5	5.000	2.000	--	--	--	--	--	--
01028	CADMIUM, (µg/g as Cd)	5	1.000	<1.000	--	--	--	--	--	--
01029	CHROMIUM, (µg/g as Cr)	5	20.000	6.000	--	--	--	--	--	--
01043	COPPER, (µg/g as Cu)	5	6.000	3.000	--	--	--	--	--	--
01170	IRON, (µg/g as Fe)	5	10000.000	4100.000	--	--	--	--	--	--
01052	LEAD, (µg/g as Pb)	5	<100.000	<10.000	--	--	--	--	--	--
01053	MANGANESE, (µg/g as Mn)	5	5900.000	170.000	--	--	--	--	--	--
71921	MERCURY, (µg/g as Hg)	5	0.020	<0.010	--	--	--	--	--	--
01093	ZINC, (µg/g as Zn)	5	30.000	10.000	--	--	--	--	--	--

Table 13.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 5T, Flat River near Bahama

[Location.--Latitude 36°10'57", longitude 78°52'44", Durham County, 0.5 mi above Lake Michie, and 1.25 mi north of Bahama; USGS downstream order number 02085500.

NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	40	4280.000	0.900	330.660	2471.998	258.000	65.500	20.750	1.755
00680	CARBON ORGANIC, TOTAL (mg/L)	25	27.000	3.300	8.788	25.200	12.000	6.100	5.100	3.630
00693	CARBON, TOTAL BTM (gm/kg)	3	4.600	1.300	--	--	--	--	--	--
39330	ALDRIN, TOTAL (µg/L)	18	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39333	ALDRIN, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39350	CHLORDANE, TOTAL (µg/L)	18	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39351	CHLORDANE, BTM (µg/kg)	5	<1.000	<1.000	--	--	--	--	--	--
39360	DDD, TOTAL (µg/L)	18	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39363	DDD, BTM (µg/kg)	5	0.800	<0.100	--	--	--	--	--	--
39365	DDE, TOTAL (µg/L)	18	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39368	DDE, BTM (µg/kg)	5	1.000	<0.100	--	--	--	--	--	--
39370	DDT, TOTAL (µg/L)	18	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39373	DDT, BTM (µg/kg)	5	0.400	<0.100	--	--	--	--	--	--
39570	DIAZINON, TOTAL (µg/L)	19	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39571	DIAZINON, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39380	DIELDRIN, TOTAL (µg/L)	18	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39383	DIELDRIN, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39388	ENDOSULFAN, TOTAL (µg/L)	18	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39389	ENDOSULFAN, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39390	ENDRIN, TOTAL (µg/L)	18	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39393	ENDRIN, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39398	ETHION, TOTAL (µg/L)	19	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39399	ETHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39516	PCB, TOTAL (µg/L)	18	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39519	PCB, BTM (µg/kg)	5	<1.000	<1.000	--	--	--	--	--	--
39250	PCN, TOTAL (µg/L)	18	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39251	PCN, BTM (µg/kg)	5	<1.000	<1.000	--	--	--	--	--	--
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	18	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39423	HEPTACHLOR EPOXIDE, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39410	HEPTACHLOR, TOTAL (µg/L)	18	<0.010	<0.001	--	<0.010	<0.010	<0.010	<0.001	<0.001
39413	HEPTACHLOR, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39340	LINDANE, TOTAL (µg/L)	18	0.001	<0.001	--	0.001	<0.010	<0.010	<0.001	<0.001
39343	LINDANE, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39530	MALATHION, TOTAL (µg/L)	19	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39531	MALATHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39480	METHOXYCHLOR, TOTAL (µg/L)	18	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39481	METHOXYCHLOR, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39600	METHYL PARATHION, TOTAL (µg/L)	19	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39601	METHYL PARATHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39790	METHYL TRITHION, TOTAL (µg/L)	18	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39791	METHYL TRITHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39755	NIREX, TOTAL (µg/L)	18	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39758	NIREX, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39540	PARATHION, TOTAL (µg/L)	19	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39541	PARATHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
39034	PERTHANE, TOTAL (µg/L)	18	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
81886	PERTHANE, BTM (µg/kg)	5	<1.000	<1.000	--	--	--	--	--	--
39400	TOXAPHENE, TOTAL (µg/L)	18	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
39403	TOXAPHENE, BTM (µg/kg)	5	<10.000	<10.000	--	--	--	--	--	--
39786	TRITHION, TOTAL (µg/L)	19	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39787	TRITHION, BTM (µg/kg)	5	<0.100	<0.100	--	--	--	--	--	--
34030	BENZENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32104	BROMOFORM, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34301	CHLOROBENZENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34311	CHLOROETHANE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32106	CHLOROFORM, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34418	METHYLCHLORIDE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	18	0.400	<0.200	--	0.400	<0.200	<0.200	<0.200	<0.200
34371	ETHYLBENZENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34413	METHYL BROMIDE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	18	0.200	<0.200	--	0.200	<0.200	<0.200	<0.200	<0.200
77128	STYRENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	18	1.400	<0.200	--	1.400	<0.200	<0.200	<0.200	<0.200
34010	TOLUENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34488	TRICHLOROFLUOROMETHANE, TOTAL (µg/L)	18	0.300	<0.200	--	0.300	<0.200	<0.200	<0.200	<0.200
39175	VINYL CHLORIDE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
81551	XYLENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34496	1,1-DICHLOROETHANE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34506	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200

Table 13.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 5T, Flat River near Bahama

[Location.--Latitude 36°10'57", longitude 78°52'44", Durham County, 0.5 mi above Lake Michie, and 1.25 mi north of Bahama; USGS downstream order number 02085500.
NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34511	1,1,2-TRICHLOROETHANE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34536	O-CHLORO-BENZENE, TOTAL (µg/L)	19	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
32103	1,2-DICHLOROETHANE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34541	1,2-DICHLOROPROPANE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34561	1,3-DICHLOROPROPENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34546	1,2-TRANSDICHLOROETHENE, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (µg/L)	18	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34205	ACENAPHTHENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34208	ACENAPHTHENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34200	ACENAPHTHYLENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34203	ACENAPHTHYLENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34220	ANTHRACENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34223	ANTHRACENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34526	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), TOTAL (µg/L)	8	<10.000	<5.000	--	<10.000	<10.000	<5.000	<5.000	<5.000
34529	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34247	BENZO(A)PYRENE, TOTAL (µg/L)	8	<10.000	<10.000	--	<10.000	<10.000	<10.000	<10.000	<10.000
34230	BENZO(B)FLUORANTHENE, TOTAL (µg/L)	8	<10.000	<10.000	--	<10.000	<10.000	<10.000	<10.000	<10.000
34233	BENZO(B)FLUORANTHENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34521	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), TOTAL (µg/L)	8	<10.000	<10.000	--	<10.000	<10.000	<10.000	<10.000	<10.000
34524	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34242	BENZO(K)FLUORANTHENE, TOTAL (µg/L)	8	<10.000	<10.000	--	<10.000	<10.000	<10.000	<10.000	<10.000
34245	BENZO(K)FLUORANTHENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34292	N-BUTYL BENZYL PHTHALATE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34452	PARACHLOROMETACRESOL, TOTAL (µg/L)	8	<30.000	<30.000	--	<30.000	<30.000	<30.000	<30.000	<30.000
34455	PARACHLOROMETACRESOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
34320	CHRYSENE, TOTAL (µg/L)	8	<10.000	<10.000	--	<10.000	<10.000	<10.000	<10.000	<10.000
34323	CHRYSENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
39110	DI-N-BUTYL PHTHALATE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34596	DI-N-OCTYL PHTHALATE, TOTAL (µg/L)	8	<10.000	<10.000	--	<10.000	<10.000	<10.000	<10.000	<10.000
34599	DI-N-OCTYL PHTHALATE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (µg/L)	8	<10.000	<10.000	--	<10.000	<10.000	<10.000	<10.000	<10.000
34559	1,2,5,6-DIBENZANTHRACENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34336	DIETHYL PHTHALATE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34339	DIETHYL PHTHALATE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34341	DIMETHYL PHTHALATE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34344	DIMETHYL PHTHALATE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34657	4,6-DINITRO-ORTHO-CRESOL, TOTAL (µg/L)	8	<30.000	<30.000	--	<30.000	<30.000	<30.000	<30.000	<30.000
34376	FLUORANTHENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34379	FLUORANTHENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34381	FLUORENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34384	FLUORENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
39700	HEXACHLORO-BENZENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
39701	HEXACHLORO-BENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
39702	HEXACHLOROBUTADIENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
39705	HEXACHLOROBUTADIENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34396	HEXACHLOROETHANE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34399	HEXACHLOROETHANE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (µg/L)	8	<10.000	<10.000	--	<10.000	<10.000	<10.000	<10.000	<10.000
34406	INDENO (1,2,3-CD) PYRENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34408	ISOPHORONE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34411	ISOPHORONE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34433	N-NITROSODIPHENYLAMINE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34696	NAPHTHALENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34445	NAPHTHALENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34447	NITROBENZENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34450	NITROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34438	N-NITROSODIMETHYLAMINE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
39032	PENTACHLOROPHENOL, TOTAL (µg/L)	8	<30.000	<30.000	--	<30.000	<30.000	<30.000	<30.000	<30.000
39061	PENTACHLOROPHENOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
34461	PHENANTHRENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34464	PHENANTHRENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34694	PHENOL (C6H-5OH), TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34695	PHENOL (C6H-5OH), BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34469	PYRENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34472	PYRENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34551	1,2,4-TRICHLOROBENZENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34554	1,2,4-TRICHLOROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	19	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200

Table 13.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 5T, Flat River near Bahama

[Location.--Latitude 36°10'57", longitude 78°52'44", Durham County, 0.5 mi above Lake Michie, and 1.25 mi north of Bahama; USGS downstream order number 02085500.

NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34569	1,3-DICHLOROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	19	<5.000	<0.200	--	<5.000	<0.200	<0.200	<0.200	<0.200
34574	1,4-DICHLOROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34278	BIS(2-CHLOROETHOXY)METHANE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34273	BIS-2-CHLOROETHYL ETHER, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34283	BIS(2-CHLOROISOPROPYL)ETHER, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34581	2-CHLORONAPHTHALENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34586	2-CHLOROPHENOL, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
39100	BIS(2-ETHYLHEXYL) PHTHALATE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34591	2-NITROPHENOL, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34594	2-NITROPHENOL, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34601	2,4-DICHLOROPHENOL, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34606	2,4-DIMETHYLPHENOL, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34616	2,4-DINITROPHENOL, TOTAL (µg/L)	8	<20.000	<20.000	--	<20.000	<20.000	<20.000	<20.000	<20.000
34611	2,4-DINITROTOLUENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34614	2,4-DINITROTOLUENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34621	2,4,6-TRICHLOROPHENOL, TOTAL (µg/L)	8	<20.000	<20.000	--	<20.000	<20.000	<20.000	<20.000	<20.000
34626	2,6-DINITROTOLUENE, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34629	2,6-DINITROTOLUENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34636	4-BROMOPHENYL ETHER, TOTAL (µg/L)	8	<5.000	<5.000	--	<5.000	<5.000	<5.000	<5.000	<5.000
34644	4-CHLOROPHENYL PHENYL ETHER, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34646	4-NITROPHENOL, TOTAL (µg/L)	8	<30.000	<30.000	--	<30.000	<30.000	<30.000	<30.000	<30.000
34649	4-NITROPHENOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
34286	BIS(2-CHLOROISOPROPYL) ETHER, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34281	BIS(2-CHLOROETHOXY) METHANE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34276	BIS(2-CHLOROETHYL) ETHER, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
39102	BIS(2-ETHYLHEXYL) PHTHALATE, BTM (µg/kg)	5	1800.000	<200.000	--	--	--	--	--	--
34250	BENZO-A-PYRENE, BTM (µg/kg)	5	<400.000	<400.000	--	--	--	--	--	--
34639	4-BROMOPHENYL PHENYL ETHER, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34295	N-BUTYLBENZYL PHTHALATE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34589	2-CHLOROPHENOL, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34584	2-CHLORONAPHTHALENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34604	2,4-DICHLOROPHENOL, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34609	2,4-DP, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34660	4,6-DINITRO-ORTHOCHRESOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
34619	2,4-DINITROPHENOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
39112	DI-N-BUTYL PHTHALATE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34389	HEXACHLOROCYCLOPENTADIENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34441	N-NITROSODIMETHYLAMINE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34436	N-NITROSODIPHENYLAMINE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34431	N-NITROSODI-N-PROPYLAMINE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
34624	2,4,6-TRICHLOROPHENOL, BTM (µg/kg)	5	<600.000	<600.000	--	--	--	--	--	--
34539	1,2-DICHLOROBENZENE, BTM (µg/kg)	5	<200.000	<200.000	--	--	--	--	--	--
38932	CHLORPYRIFOS, TOTAL (µg/L)	6	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39011	DISYSTON, TOTAL (µg/L)	11	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39023	PHORATE, TOTAL (µg/L)	11	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39040	DEF, TOTAL (µg/L)	11	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	15	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
82614	FOFONOS (DYFONATE) WATER, TOTAL (µg/L)	6	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010

Table 14.--Statistical summary of water-quality data, February 1988 through September 1991

Site 6T, Mountain Creek at SR 1617 near Bahama

[Location.--Latitude 36°08'58", longitude 78°53'49", Durham County, at Secondary Road 1617, and 1.6 mi southwest of Bahama; USGS downstream order number 0208524090.]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	18	41.000	0.000	9.281	41.000	12.875	4.450	1.020	0.000
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	19	168.000	72.000	103.737	168.000	115.000	98.000	84.000	72.000
00400	PH, FIELD (STANDARD pH UNITS)	19	7.600	6.100	--	7.600	7.100	6.900	6.700	6.100
00010	WATER TEMPERATURE (°C)	19	23.000	3.000	15.158	23.000	20.000	16.000	11.500	3.000
00300	OXYGEN, DISSOLVED (mg/L)	17	13.000	7.800	9.771	13.000	10.750	9.400	8.400	7.800
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	16	110.000	82.000	96.188	110.000	102.000	95.500	91.000	82.000
80154	SUSPENDED SEDIMENT (mg/L)	17	195.000	<1.000	41.000	195.000	44.500	8.000	2.500	1.000

Table 14.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 6T, Mountain Creek at SR 1617 near Bahama

[Location.--Latitude 36°08'58", longitude 78°53'49", Durham County, at Secondary Road 1617, and 1.6 mi southwest of Bahama; USGS downstream order number 0208524090. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR DISSOLVED CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	11	41.000	0.000	9.491	41.000	9.500	5.100	0.780	0.000
00080	COLOR (PLATINUM-COBALT UNITS)	12	250.000	15.000	60.583	250.000	77.500	43.500	18.500	15.000
00900	HARDNESS, TOTAL (mg/L as CaCO ₃)	11	51.000	25.000	35.182	51.000	46.000	31.000	27.000	25.000
00915	CALCIUM, DISSOLVED (mg/L as Ca)	12	13.000	6.200	8.875	13.000	11.450	7.700	6.925	6.200
00925	MAGNESIUM, DISSOLVED (mg/L as Mg)	12	4.400	2.200	3.058	4.400	3.700	2.850	2.425	2.200
00930	SODIUM, DISSOLVED (mg/L as Na)	12	6.600	4.300	5.550	6.600	6.475	5.750	4.625	4.300
00935	POTASSIUM, DISSOLVED (mg/L as K)	12	7.700	1.300	2.783	7.700	3.225	2.250	1.525	1.300
² 90410	ALKALINITY, LAB (mg/L as CaCO ₃)	12	59.000	19.000	31.917	59.000	42.000	27.500	21.250	19.000
00945	SULFATE, DISSOLVED (mg/L as SO ₄)	12	15.000	<1.000	6.403*	15.000	7.000	5.900	4.300	3.400
00940	CHLORIDE, DISSOLVED (mg/L as Cl)	12	14.000	5.400	7.592	14.000	8.225	7.400	5.825	5.400
00950	FLUORIDE, DISSOLVED (mg/L as F)	12	0.200	<0.100	0.099*	0.200	0.100	<0.100	<0.100	<0.100
00955	SILICA, DISSOLVED (mg/L as SiO ₂)	12	15.000	7.000	11.858	15.000	14.000	12.500	9.425	7.000
70300	DISSOLVED SOLIDS, RESIDUE as 180 °C (mg/L)	12	106.000	46.000	71.500	106.000	81.000	69.000	62.500	46.000

¹Period July 1989 through September 1991.²To convert to bicarbonate, mg/L alkalinity as CaCO₃ x 1.22 = mg/L of bicarbonate.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 14.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 6T, Mountain Creek at SR 1617 near Bahama

[Location.--Latitude 36°08'58", longitude 78°53'49", Durham County, at Secondary Road 1617, and 1.6 mi southwest of Bahama; USGS downstream order number 0208524090. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	18	41.000	0.000	9.281	41.000	12.875	4.450	1.020	0.000
00615	NITROGEN, NITRITE, TOTAL (mg/L as N)	4	0.070	<0.010	--	--	--	--	--	--
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	19	0.9000	<0.100	0.562*	0.900	0.600	0.600	0.500	0.360
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	19	0.150	<0.010	0.049*	0.150	0.080	0.040	0.020	<0.010
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	16	1.200	0.200	0.553	1.200	0.787	0.430	0.280	0.200
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	19	1.300	<0.200	0.532*	1.300	0.800	0.400	0.300	<0.200
00600	NITROGEN, TOTAL (mg/L as N)	16	1.800	0.400	1.141	1.800	1.375	1.050	0.870	0.400
00665	PHOSPHORUS, TOTAL (mg/L as P)	19	0.300	<0.010	0.078*	0.300	0.110	0.030	0.020	0.010
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	19	0.210	<0.010	0.039*	0.210	0.050	0.020	0.010	<0.010

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 14.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 6T, Mountain Creek at SR 1617 near Bahama

[Location.--Latitude 36°08'58", longitude 78°53'49", Durham County, at Secondary Road 1617, and 1.6 mi southwest of Bahama; USGS downstream order number 0208524090. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	11	41.000	0.000	9.491	41.000	9.500	5.100	0.780	0.000
01105	ALUMINUM, TOTAL (µg/L as Al)	12	4600.000	<10.000	888.813*	4600.000	820.000	140.000	90.000	20.000
01002	ARSENIC, TOTAL (µg/L as As)	12	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01027	CADMIUM, TOTAL (µg/L as Cd)	12	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01034	CHROMIUM, TOTAL (µg/L as Cr)	12	4.000	<1.000	--	4.000	1.000	<1.000	<1.000	<1.000
01037	COBALT, TOTAL (µg/L as Co)	12	3.000	<1.000	0.937*	3.000	1.000	<1.000	<1.000	<1.000
01042	COPPER, TOTAL (µg/L as Cu)	12	5.000	<1.000	2.563*	5.000	3.000	3.000	1.000	1.000
01045	IRON, TOTAL (µg/L as Fe)	12	7100.000	190.000	1952.500	7100.000	2275.000	995.000	610.000	190.000
01051	LEAD, TOTAL (µg/L as Pb)	12	7.000	<1.000	2.111*	7.000	2.000	1.000	1.000	1.000
01055	MANGANESE, TOTAL (µg/L as Mn)	12	1800.000	40.000	378.333	1800.000	272.500	235.000	145.000	40.000
71900	MERCURY, TOTAL (µg/L as Hg)	12	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
01062	MOLYBDENUM, TOTAL (µg/L as Mo)	12	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01067	NICKEL, TOTAL (µg/L as Ni)	12	2.000	<1.000	1.271*	2.000	2.000	1.000	1.000	<1.000
01147	SELENIUM, TOTAL (µg/L as Se)	12	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01077	SILVER, TOTAL (µg/L as Ag)	10	5.000	<1.000	--	5.000	<1.000	<1.000	<1.000	<1.000
01092	ZINC, TOTAL (µg/L as Zn)	12	20.000	<10.000	--	20.000	<10.000	<10.000	<10.000	<10.000

¹Period July 1989 through September 1991.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 14.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 6T, Mountain Creek at SR 1617 near Bahama

[Location.--Latitude 36°08'58", longitude 78°53'49", Durham County, at Secondary Road 1617, and 1.6 mi southwest of Bahama; USGS downstream order number 0208524090. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS - BOTTOM SEDIMENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01003	ARSENIC, (µg/g as As)	1	5.000	--	--	--	--	--	--	--
01028	CADMIUM, (µg/g as Cd)	1	<1.000	--	--	--	--	--	--	--
01029	CHROMIUM, (µg/g as Cr)	1	20.000	--	--	--	--	--	--	--
01043	COPPER, (µg/g as Cu)	1	7.000	--	--	--	--	--	--	--
01170	IRON, (µg/g as Fe)	1	17000.000	--	--	--	--	--	--	--
01052	LEAD, (µg/g as Pb)	1	20.000	--	--	--	--	--	--	--
01053	MANGANESE, (µg/g as Mn)	1	1000.000	--	--	--	--	--	--	--
71921	MERCURY, (µg/g as Hg)	1	0.020	--	--	--	--	--	--	--
01093	ZINC, (µg/g as Zn)	1	20.000	--	--	--	--	--	--	--

Table 14.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 6T, Mountain Creek at SR 1617 near Bahama

[Location.--Latitude 36°08'58", longitude 78°53'49", Durham County, at Secondary Road 1617, and 1.6 mi southwest of Bahama; USGS downstream order number 0208524090. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	18	41.000	0.000	9.281	41.000	12.875	4.450	1.020	0.000
00680	CARBON ORGANIC, TOTAL (mg/L)	19	15.000	2.800	6.579	15.000	9.400	4.900	3.500	2.800
39330	ALDRIN, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39333	ALDRIN, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39350	CHLORDANE, TOTAL (µg/L)	5	<0.100	<0.100	--	--	--	--	--	--
39351	CHLORDANE, BTM (µg/kg)	1	<1.000	--	--	--	--	--	--	--
39360	DDD, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39363	DDD, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39365	DDE, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39368	DDE, BTM (µg/kg)	1	0.100	--	--	--	--	--	--	--
39370	DDT, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39373	DDT, BTM (µg/kg)	1	0.100	--	--	--	--	--	--	--
39570	DIAZINON, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39571	DIAZINON, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39380	DIELDRIN, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39383	DIELDRIN, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39388	ENDOSULFAN, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39389	ENDOSULFAN, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39390	ENDRIN, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39393	ENDRIN, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39398	ETHION, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39399	ETHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39516	PCB, TOTAL (µg/L)	5	<0.100	<0.100	--	--	--	--	--	--
39519	PCB, BTM (µg/kg)	1	<1.000	--	--	--	--	--	--	--
39250	PCN, TOTAL (µg/L)	5	<0.100	<0.100	--	--	--	--	--	--
39251	PCN, BTM (µg/kg)	1	<1.000	--	--	--	--	--	--	--
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39423	HEPTACHLOR EPOXIDE, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39410	HEPTACHLOR, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39413	HEPTACHLOR, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39340	LINDANE, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39343	LINDANE, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39530	MALATHION, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39531	MALATHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39480	METHOXYCHLOR, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39481	METHOXYCHLOR, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39600	METHYL PARATHION, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39601	METHYL PARATHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39790	METHYL TRITHION, TOTAL (µg/L)	4	<0.010	<0.010	--	--	--	--	--	--
39791	METHYL TRITHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39755	MIREX, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39758	MIREX, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39540	PARATHION, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39541	PARATHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39034	PERTHANE, TOTAL (µg/L)	5	<0.100	<0.100	--	--	--	--	--	--
81886	PERTHANE, BTM (µg/kg)	1	<1.000	--	--	--	--	--	--	--
39400	TOXAPHENE, TOTAL (µg/L)	5	<1.000	<1.000	--	--	--	--	--	--
39403	TOXAPHENE, BTM (µg/kg)	1	<10.000	--	--	--	--	--	--	--
39786	TRITHION, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39787	TRITHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
34030	BENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32104	BROMOFORM, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34301	CHLOROBENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34311	CHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32106	CHLOROFORM, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34418	METHYLCHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34371	ETHYLBENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34413	METHYL BROMIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
77128	STYRENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34010	TOLUENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34488	TRICHLOROFLUOROMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
39175	VINYL CHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
81551	XYLENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--

Table 14.--Statistical summary of water-quality data, February 1988 through September 1991--Continued

Site 6T, Mountain Creek at SR 1617 near Bahama

[Location.--Latitude 36°08'58", longitude 78°53'49", Durham County, at Secondary Road 1617, and 1.6 mi southwest of Bahama; USGS downstream order number 0208524090. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34511	1,1-DICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34516	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34536	1,1-DICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32103	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34541	1,1-DICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34561	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34546	1,1-DICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34576	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34208	ACENAPHTHENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34203	ACENAPHTHYLENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34223	ANTHRACENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34529	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34233	BENZO(B)FLUORANTHENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34524	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34245	BENZO(K)FLUORANTHENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34455	PARACHLOROMETACRESOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
34323	CHRYSENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34599	DI-N-OCTYL PHTHALATE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34559	1,2,5,6-DIBENZANTHRACENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34339	DIETHYL PHTHALATE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34344	DIMETHYL PHTHALATE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34379	FLUORANTHENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34384	FLUORENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
39701	HEXACHLOROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
39705	HEXACHLOROBTADIENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34399	HEXACHLOROETHANE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34406	INDENO (1,2,3-CD) PYRENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34411	ISOPHORONE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34445	NAPHTHALENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34450	NITROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
39061	PENTACHLOROPHENOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
34464	PHENANTHRENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34695	PHENOL (C6H-5OH), BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34472	PYRENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34554	1,2,4-TRICHLOROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34569	1,3-DICHLOROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34574	1,4-DICHLOROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34594	2-NITROPHENOL, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34614	2,4-DINITROTOLUENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34629	2,6-DINITROTOLUENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34649	4-NITROPHENOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
34286	BIS(2-CHLOROISOPROPYL) ETHER, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34281	BIS(2-CHLOROETHOXY) METHANE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34276	BIS(2-CHLOROETHYL) ETHER, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
39102	BIS(2-ETHYLHEXYL) PHTHALATE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34250	BENZO-A-PYRENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34639	4-BROMOPHENYL PHENYL ETHER, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34295	N-BUTYLBENZYL PHTHALATE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34589	2-CHLOROPHENOL, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34584	2-CHLORONAPHTHALENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34604	2,4-DICHLOROPHENOL, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34609	2,4-DP, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34660	4,6-DINITRO-ORTHOCRESOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
34619	2,4-DINITROPHENOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
39112	DI-N-BUTYL PHTHALATE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34389	HEXACHLOROCYCLOPENTADIENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34441	N-NITROSODIMETHYLAMINE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34436	N-NITROSODIPHENYLAMINE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34431	N-NITROSODI-N-PROPYLAMINE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34624	2,4,6-TRICHLOROPHENOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
34539	1,2-DICHLOROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
38932	CHLORPYRIFOS, TOTAL (µg/L)	3	<0.010	<0.010	--	--	--	--	--	--
39011	DISYSTON, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39023	PHORATE, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39040	DEF, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
82614	FONOPOS (DYFONATE) WATER, TOTAL (µg/L)	3	<0.010	<0.010	--	--	--	--	--	--

Table 15.--Statistical summary of water-quality data, October 1988 through June 1991

Site 7T, Little River below dam near Fairntosh

[Location.--Latitude 36°06'43", longitude 78°52'08", Durham County, 4.0 mi above Secondary Road 1004, and 1.1 mi northeast of Fairntosh; USGS downstream order number 0208524850.]

PHYSICAL AND CHEMICAL PROPERTIES

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00095	SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{cm}$ at 25 °C)	31	135.000	54.000	87.000	132.000	100.000	87.000	69.000	56.400
00400	PH, FIELD (STANDARD pH UNITS)	31	7.800	6.400	--	7.740	7.300	7.100	6.900	6.400
00010	WATER TEMPERATURE (°C)	32	28.500	5.500	17.391	28.175	24.750	16.500	11.250	7.125
00300	OXYGEN, DISSOLVED (mg/L)	31	14.600	5.600	9.900	13.700	11.400	10.200	8.300	6.440
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	30	122.000	68.000	101.967	119.800	108.250	103.000	95.500	79.550
80154	SUSPENDED SEDIMENT (mg/L)	25	31.000	1.000	9.880	28.300	14.000	8.000	4.500	1.300

Table 15.--Statistical summary of water-quality data, October 1988 through June 1991--Continued

Site 7T, Little River below dam near Fairntosh

[Location.--Latitude 36°06'43", longitude 78°52'08", Durham County, 4.0 mi above Secondary Road 1004, and 1.1 mi northeast of Fairntosh; USGS downstream order number 0208524850. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR DISSOLVED CONSTITUENTS¹

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00080	COLOR (PLATINUM-COBALT UNITS)	24	85.000	13.000	39.167	82.500	58.750	33.500	20.500	13.000
00900	HARDNESS, TOTAL (mg/L as CaCO_3)	24	51.000	19.000	31.583	50.250	38.500	32.500	22.250	19.250
00915	CALCIUM, DISSOLVED (mg/L as Ca)	24	15.000	4.700	8.667	14.750	10.750	9.200	5.525	4.700
00925	MAGNESIUM, DISSOLVED (mg/L as Mg)	24	3.300	1.800	2.392	3.250	2.775	2.300	2.025	1.825
00930	SODIUM, DISSOLVED (mg/L as Na)	24	5.500	3.000	4.225	5.475	4.675	4.150	3.800	3.050
00935	POTASSIUM, DISSOLVED (mg/L as K)	24	2.500	1.300	1.950	2.475	2.275	1.900	1.700	1.350
290410	ALKALINITY, LAB (mg/L as CaCO_3)	24	52.000	16.000	30.583	51.250	36.500	32.500	21.250	16.250
00945	SULFATE, DISSOLVED (mg/L as SO_4)	24	7.000	3.000	4.958	7.000	6.100	5.000	4.000	3.050
00940	CHLORIDE, DISSOLVED (mg/L as Cl)	24	6.000	3.700	4.796	5.975	5.200	4.800	4.350	3.700
00950	FLUORIDE, DISSOLVED (mg/L as F)	24	0.300	<0.100	0.107*	0.200	0.100	0.100	<0.100	<0.100
00955	SILICA, DISSOLVED (mg/L as SiO_2)	24	12.000	2.600	8.817	12.000	10.000	9.100	8.225	2.800
70300	DISSOLVED SOLIDS, RESIDUE AT 180 °C (mg/L)	23	90.000	31.000	63.174	89.600	73.000	61.000	53.000	33.600
38260	DETERGENTS, MBAS (mg/L)	16	0.120	0.030	0.051	0.120	0.060	0.040	0.040	0.030

¹Period July 1989 through June 1991.

²To convert to bicarbonate, mg/L alkalinity as $\text{CaCO}_3 \times 1.22 = \text{mg/L}$ of bicarbonate.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 15.--Statistical summary of water-quality data, October 1988 through June 1991--Continued

Site 7T, Little River below dam near Fairmtoosh

[Location.--Latitude 36°06'43", longitude 78°52'08", Durham County, 4.0 mi above Secondary Road 1004, and 1.1 mi northeast of Fairmtoosh; USGS downstream order number 0208524850. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00615	NITROGEN, NITRITE, TOTAL (mg/L as N)	32	0.030	<0.010	0.014*	0.030	0.020	0.010	<0.010	<0.010
00613	NITROGEN, NITRITE, DISSOLVED (mg/L as N)	9	0.010	<0.010	--	0.010	0.010	<0.010	<0.010	<0.010
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	32	0.400	<0.100	0.206*	0.400	0.300	0.200	<0.100	<0.100
00631	NO ₂ + NO ₃ , DISSOLVED (mg/L as N)	32	0.400	<0.100	0.220*	0.400	0.300	0.200	<0.100	<0.100
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	32	0.330	0.010	0.065	0.213	0.070	0.050	0.032	0.016
00608	NITROGEN AMMONIA, DISSOLVED (mg/L as N)	32	0.310	<0.010	0.061*	0.140	0.070	0.050	0.030	<0.010
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	30	2.400	0.220	0.585	1.537	0.608	0.520	0.450	0.280
00607	NITROGEN ORGANIC, DISSOLVED (mg/L as N)	27	1.000	0.280	0.489	0.940	0.560	0.440	0.370	0.284
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	32	2.500	0.200	0.641	1.460	0.700	0.600	0.500	0.265
00623	NITROGEN AMMONIA + ORGANIC, DISSOLVED (mg/L as N)	30	1.100	0.300	0.563	0.990	0.600	0.500	0.475	0.300
00600	NITROGEN, TOTAL (mg/L as N)	30	2.600	0.500	0.832	1.775	0.900	0.745	0.600	0.500
00665	PHOSPHORUS, TOTAL (mg/L as P)	32	0.130	0.010	0.042	0.117	0.050	0.040	0.020	0.010
00666	PHOSPHORUS, DISSOLVED (mg/L as P)	32	0.060	<0.010	0.020*	0.050	0.030	0.020	<0.010	<0.010
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	32	0.100	<0.010	0.017*	0.050	0.020	0.010	<0.010	<0.010
00671	PHOSPHORUS ORTHO, DISSOLVED (mg/L as P)	32	0.070	<0.010	0.013*	0.030	0.020	<0.030	<0.010	<0.010

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 15.--Statistical summary of water-quality data, October 1988 through June 1991--Continued

Site 7T, Little River below dam near Fairmtoosh

[Location.--Latitude 36°06'43", longitude 78°52'08", Durham County, 4.0 mi above Secondary Road 1004, and 1.1 mi northeast of Fairmtoosh; USGS downstream order number 0208524850. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01105	ALUMINUM, TOTAL (µg/L as Al)	9	940.000	20.000	188.889	940.000	150.000	120.000	50.000	20.000
01002	ARSENIC, TOTAL (µg/L as As)	9	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01027	CADMIUM, TOTAL (µg/L as Cd)	9	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01034	CHROMIUM, TOTAL (µg/L as Cr)	9	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01037	COBALT, TOTAL (µg/L as Co)	9	1.000	<1.000	--	1.000	1.000	<1.000	<1.000	<1.000
01042	COPPER, TOTAL (µg/L as Cu)	9	4.000	1.000	2.222	4.000	3.000	2.000	1.500	1.000
01045	IRON, TOTAL (µg/L as Fe)	9	1500.000	190.000	456.667	1500.000	505.000	340.000	215.000	190.000
01051	LEAD, TOTAL (µg/L as Pb)	9	7.000	<1.000	1.316*	7.000	1.000	1.000	<1.000	<1.000
01055	MANGANESE, TOTAL (µg/L as Mn)	9	560.000	150.000	302.222	560.000	355.000	310.000	210.000	150.000
71900	MERCURY, TOTAL (µg/L as Hg)	9	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
01062	MOLYBDENUM, TOTAL (µg/L as Mo)	9	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01067	NICKEL, TOTAL (µg/L as Ni)	9	3.000	<1.000	1.263*	3.000	2.000	1.000	<1.000	<1.000
01147	SELENIUM, TOTAL (µg/L as Se)	9	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01077	SILVER, TOTAL (µg/L as Ag)	9	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01092	ZINC, TOTAL (µg/L as Zn)	9	10.000	<10.000	--	10.000	<10.000	<10.000	<10.000	<10.000

¹Period July 1989 through June 1991.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 15.--Statistical summary of water-quality data, October 1988 through June 1991--Continued

Site 7T, Little River below dam near Fairtosh

[Location.--Latitude 36°06'43", longitude 78°52'08", Durham County, 4.0 mi above Secondary Road 1004, and 1.1 mi northeast of Fairtosh; USGS downstream order number 0208524850. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00680	CARBON ORGANIC, TOTAL (mg/L)	32	9.300	5.200	6.919	9.105	7.650	6.800	6.125	5.265
39330	ALDRIN, TOTAL (µg/L)	8	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39350	CHLORDANE, TOTAL (µg/L)	8	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39360	DDD, TOTAL (µg/L)	8	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39365	DDE, TOTAL (µg/L)	8	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39370	DDT, TOTAL (µg/L)	8	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39570	DIAZINON, TOTAL (µg/L)	7	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39380	DIELDRIN, TOTAL (µg/L)	8	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39388	ENDOSULFAN, TOTAL (µg/L)	8	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39390	ENDRIN, TOTAL (µg/L)	8	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39398	ETHION, TOTAL (µg/L)	7	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39516	PCB, TOTAL (µg/L)	8	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39250	PCN, TOTAL (µg/L)	8	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	8	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39410	HEPTACHLOR, TOTAL (µg/L)	8	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39340	LINDANE, TOTAL (µg/L)	8	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39530	MALATHION, TOTAL (µg/L)	7	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39480	METHOXYCHLOR, TOTAL (µg/L)	8	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39600	METHYL PARATHION, TOTAL (µg/L)	7	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39790	METHYL TRITHION, TOTAL (µg/L)	7	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39755	MIREX, TOTAL (µg/L)	8	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39540	PARATHION, TOTAL (µg/L)	7	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39034	PERTHANE, TOTAL (µg/L)	8	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39400	TOXAPHENE, TOTAL (µg/L)	8	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
39786	TRITHION (µg/L)	7	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
34030	BENZENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32104	BROMOFORM, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34301	CHLOROBENZENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34311	CHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32106	CHLOROFORM, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34418	METHYL CHLORIDE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	8	0.700	<0.200	--	0.700	<0.200	<0.200	<0.200	<0.200
34371	ETHYLBENZENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34413	METHYL BROMIDE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
77128	STYRENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34010	TOLUENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34488	TRICHLOROFLUOROMETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39175	VINYL CHLORIDE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
81551	XYLENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34496	1,1-DICHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34506	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34511	1,1,2-TRICHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34536	O-CHLORO-BENZENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32103	1,2-DICHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34541	1,2-DICHLOROPROPANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34561	1,3-DICHLOROPROPENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34546	1,2-TRANS-DICHLOROETHENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34205	ACENAPHTHENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34200	ACENAPHTHYLENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34220	ANTHRACENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34526	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), TOTAL (µg/L)	1	<10.000	--	--	--	--	--	--	--
34247	BENZO(A)PYRENE, TOTAL (µg/L)	1	<10.000	--	--	--	--	--	--	--
34230	BENZO(B)FLUORANTHENE, TOTAL (µg/L)	1	<10.000	--	--	--	--	--	--	--
34521	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), TOTAL (µg/L)	1	<10.000	--	--	--	--	--	--	--
34242	BENZO(K)FLUORANTHENE, TOTAL (µg/L)	1	<10.000	--	--	--	--	--	--	--
34292	N-BUTYL BENZYL PHTHALATE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34452	PARACHLOROMETACRESOL, TOTAL (µg/L)	1	<30.000	--	--	--	--	--	--	--
34320	CHRYSENE, TOTAL (µg/L)	1	<10.000	--	--	--	--	--	--	--
39110	DI-N-BUTYL PHTHALATE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34596	DI-N-OCTYL PHTHALATE, TOTAL (µg/L)	1	<10.000	--	--	--	--	--	--	--
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (µg/L)	1	<10.000	--	--	--	--	--	--	--
34336	DIETHYL PHTHALATE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34341	DIMETHYL PHTHALATE, TOTAL (µg/L)	5	<5.000	--	--	--	--	--	--	--

Table 15.--Statistical summary of water-quality data, October 1988 through June 1991--Continued

Site 7T, Little River below dam near Fairntosh

[Location.--Latitude 36°06'43", longitude 78°52'08", Durham County, 4.0 mi above Secondary Road 1004, and 1.1 mi northeast of Fairntosh; USGS downstream order number 0208524850. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34657	4,6-DINITRO-ORTHOCHRESOL, TOTAL (µg/L)	1	<30.000	--	--	--	--	--	--	--
34376	FLUORANTHENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34381	2-CHLORONAPHTHALENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
39700	HEXACHLOROBENZENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
39702	HEXACHLOROBUTADIENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34396	HEXACHLOROETHANE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (µg/L)	1	<10.000	--	--	--	--	--	--	--
34408	ISOPHORONE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34433	N-NITROSODIPHENYLAMINE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34696	NAPHTHALENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34447	NAPHTHALENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34438	N-NITROSODIMETHYLAMINE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
39032	PENTACHLOROPHENOL, TOTAL (µg/L)	1	<30.000	--	--	--	--	--	--	--
34461	PHENANTHRENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34694	PHENOL (C6H-5OH), TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34469	PYRENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34551	1,2,4-TRICHLOROBENZENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34278	BIS(2-CHLOROETHOXY)METHANE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34273	BIS-2-CHLOROETHYL ETHER, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34283	BIS(2-CHLOROISOPROPYL)ETHER, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34581	2-CHLORONAPHTHALENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34586	2-CHLOROPHENOL, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
39100	BIS(2-ETHYLHEXYL) PHTHALATE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34591	2-NITROPHENOL, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34601	2,4-DICHLOROPHENOL, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34606	2,4-DIMETHYLPHENOL, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34616	2,4-DINITROPHENOL, TOTAL (µg/L)	1	<20.000	--	--	--	--	--	--	--
34611	2,4-DINITROTOLUENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34621	2,4,6-TRICHLOROPHENOL, TOTAL (µg/L)	1	<20.000	--	--	--	--	--	--	--
34626	2,6-DINITROTOLUENE, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34636	4-BROMOPHENYL ETHER, TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34646	4-NITROPHENOL, TOTAL (µg/L)	1	<30.000	--	--	--	--	--	--	--
38932	CHLORPYRIFOS, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39011	DISYSTON, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39023	PHORATE, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
39040	DEF, TOTAL (µg/L)	5	<0.010	<0.010	--	--	--	--	--	--
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
82614	PONOFOS (DYFONATE) WATER, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--

Table 16.--Statistical summary of water-quality data, February 1988 through September 1993

Site 8T, Little River tributary, 0.3 mile above mouth, at Fairntosh

[Location.--Latitude 36°06'59", longitude 78°51'28", Durham County, 0.3 mi above mouth, and 0.8 mi northeast of Fairntosh; USGS downstream order number 0208524930.]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	14	2.600	0.000	0.516	2.600	0.600	0.185	0.027	0.000
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	18	195.000	33.000	126.778	195.000	170.750	116.000	90.750	33.000
00400	PH, FIELD (STANDARD pH UNITS)	18	7.700	6.700	--	7.700	7.300	7.100	6.800	6.700
00010	WATER TEMPERATURE (°C)	18	23.500	4.000	14.861	23.500	20.125	15.000	9.750	4.000
00300	OXYGEN, DISSOLVED (mg/L)	15	12.900	5.900	9.773	12.900	11.100	9.900	8.700	5.900
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	15	115.000	53.000	94.667	115.000	103.000	97.000	91.000	53.000
80154	SUSPENDED SEDIMENT (mg/L)	9	75.000	2.000	17.222	75.000	20.500	11.000	4.000	2.000

Table 16.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 8T, Little River tributary, 0.3 mile above mouth, at Fairntosh

[Location.--Latitude 36°06'59", longitude 78°51'28", Durham County, 0.3 mi above mouth, and 0.8 mi northeast of Fairntosh; USGS downstream order number 0208524930. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR DISSOLVED CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	14	2.600	0.000	0.516	2.600	0.600	0.185	0.027	0.000
00080	COLOR (PLATINUM-COBALT UNITS)	14	120.000	15.000	42.286	120.000	61.250	30.000	19.250	15.000
00900	HARDNESS, TOTAL (mg/L as CaCO ₃)	14	72.000	24.000	47.571	72.000	65.250	44.000	30.750	24.000
00915	CALCIUM, DISSOLVED (mg/L as Ca)	14	20.000	6.200	12.900	20.000	18.000	12.000	8.275	6.200
00925	MAGNESIUM, DISSOLVED (mg/L as Mg)	14	5.800	2.000	3.714	5.800	4.900	3.400	2.500	2.000
00930	SODIUM, DISSOLVED (mg/L as Na)	14	9.000	3.800	6.629	9.000	8.350	6.450	5.250	3.800
00935	POTASSIUM, DISSOLVED (mg/L as K)	14	4.200	1.400	2.621	4.200	3.550	2.650	1.650	1.400
² 90410	ALKALINITY, LAB (mg/L as CaCO ₃)	14	71.000	18.000	42.500	71.000	59.250	39.000	26.250	18.000
00945	SULFATE, DISSOLVED (mg/L as SO ₄)	14	17.000	<1.000	9.167*	17.000	10.000	9.200	7.300	6.100
00940	CHLORIDE, DISSOLVED (mg/L as Cl)	14	16.000	<0.500	9.456*	16.000	13.000	7.800	5.800	4.900
00950	FLUORIDE, DISSOLVED (mg/L as F)	14	0.200	<0.100	0.106*	0.2000	0.100	0.100	<0.100	<0.100
00955	SILICA, DISSOLVED (mg/L as SiO ₂)	14	17.000	9.200	13.943	17.000	15.250	14.500	12.750	9.200
70300	DISSOLVED SOLIDS, RESIDUE AT 180 °C (mg/L)	14	122.000	62.000	90.786	122.000	110.250	86.000	75.000	62.000

¹Period July 1989 through September 1993.²To convert to bicarbonate, mg/L alkalinity as CaCO₃ x 1.22 = mg/L of bicarbonate.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 16.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 8T, Little River tributary, 0.3 mile above mouth, at Fairntosh

[Location.--Latitude 36°06'59", longitude 78°51'28", Durham County, 0.3 mi above mouth, and 0.8 mi northeast of Fairntosh; USGS downstream order number 0208524930. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	14	2.600	0.000	0.516	2.600	0.600	0.185	0.027	0.000
00615	NITROGEN, NITRITE, TOTAL (mg/L as N)	7	0.040	<0.010	--	0.040	0.020	0.010	<0.010	<0.010
00613	NITROGEN, NITRITE, DISSOLVED (mg/L as N)	4	0.020	<0.010	--	--	--	--	--	--
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	14	0.300	<0.050	0.094*	0.300	0.096	0.076	<0.100	<0.050
00631	NO ₂ + NO ₃ , DISSOLVED (mg/L as N)	4	0.100	<0.050	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	14	0.130	<0.010	0.040*	0.130	0.050	0.030	0.020	0.010
00608	NITROGEN AMMONIA, DISSOLVED (mg/L as N)	4	0.030	0.010	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	13	0.760	0.170	0.356	0.760	0.460	0.280	0.215	0.170
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	18	0.800	<0.200	0.321*	0.800	0.400	0.300	<0.200	<0.200
00623	NITROGEN AMMONIA + ORGANIC, DISSOLVED (mg/L as N)	4	<0.200	<0.200	--	--	--	--	--	--
00600	NITROGEN, TOTAL (mg/L as N)	13	0.900	0.200	0.465	0.900	0.690	0.390	0.300	0.200
00665	PHOSPHORUS, TOTAL (mg/L as P)	18	0.130	<0.010	0.040*	0.130	0.050	0.030	0.020	0.010
00666	PHOSPHORUS, DISSOLVED (mg/L as P)	4	0.020	<0.010	--	--	--	--	--	--
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	14	0.140	<0.010	0.029*	0.140	0.030	0.020	0.010	<0.010
00671	PHOSPHORUS ORTHO, DISSOLVED (mg/L as P)	4	0.010	<0.010	--	--	--	--	--	--

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 16.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 8T, Little River tributary, 0.3 mile above mouth, at Fairtosh

[Location.--Latitude 36°06'59", longitude 78°51'28", Durham County, 0.3 mi above mouth, and 0.8 mi northeast of Fairtosh; USGS downstream order number 0208524930. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	14	2.600	0.000	0.516	2.600	0.600	0.185	0.027	0.000
01105	ALUMINUM, TOTAL (µg/L as Al)	13	1400.000	20.000	290.000	1400.000	345.000	200.000	110.000	20.000
01002	ARSENIC, TOTAL (µg/L as As)	13	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01027	CADMIUM, TOTAL (µg/L as Cd)	13	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01034	CHROMIUM, TOTAL (µg/L as Cr)	13	3.000	<1.000	0.797*	3.000	1.000	<1.000	<1.000	<1.000
01037	COBALT, TOTAL (µg/L as Co)	13	2.000	<1.000	--	2.000	<1.000	<1.000	<1.000	<1.000
01042	COPPER, TOTAL (µg/L as Cu)	12	7.000	<1.000	2.045*	7.000	2.000	2.000	<1.000	<1.000
01045	IRON, TOTAL (µg/L as Fe)	13	1900.000	400.000	827.692	1900.000	1020.000	670.000	520.000	400.000
01051	LEAD, TOTAL (µg/L as Pb)	13	7.000	<1.000	1.626*	7.000	2.000	1.000	<1.000	<1.000
01055	MANGANESE, TOTAL (µg/L as Mn)	13	290.000	30.000	175.385	290.000	230.000	180.000	110.000	30.000
71900	MERCURY, TOTAL (µg/L as Hg)	13	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
01062	MOLYBDENUM, TOTAL (µg/L as Mo)	13	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01067	NICKEL, TOTAL (µg/L as Ni)	13	2.000	<1.000	1.157*	2.000	2.000	1.000	<1.000	<1.000
01147	SELENIUM, TOTAL (µg/L as Se)	13	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01077	SILVER, TOTAL (µg/L as Ag)	13	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01092	ZINC, TOTAL (µg/L as Zn)	13	30.000	<10.000	9.780*	30.000	10.000	<10.000	<10.000	<10.000

¹Period July 1989 through September 1993.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 16.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 8T, Little River tributary, 0.3 mile above mouth, at Fairtosh

[Location.--Latitude 36°06'59", longitude 78°51'28", Durham County, 0.3 mi above mouth, and 0.8 mi northeast of Fairtosh; USGS downstream order number 0208524930. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	14	2.600	0.000	0.516	2.600	0.600	0.185	0.027	0.000
00680	CARBON ORGANIC, TOTAL (mg/L)	17	9.200	2.700	5.435	9.200	6.350	5.200	4.350	2.700
39330	ALDRIN, TOTAL (µg/L)	3	<0.010	<0.001	--	--	--	--	--	--
39350	CHLORDANE, TOTAL (µg/L)	3	<0.100	<0.100	--	--	--	--	--	--
39360	DDD, TOTAL (µg/L)	3	<0.010	<0.001	--	--	--	--	--	--
39365	DDE, TOTAL (µg/L)	3	<0.010	<0.001	--	--	--	--	--	--
39370	DDT, TOTAL (µg/L)	3	<0.010	<0.001	--	--	--	--	--	--
39570	DIAZINON, TOTAL (µg/L)	1	<0.010	--	--	--	--	--	--	--
39380	DIELDRIN, TOTAL (µg/L)	3	<0.010	<0.001	--	--	--	--	--	--
39388	ENDOSULFAN, TOTAL (µg/L)	3	<0.010	<0.001	--	--	--	--	--	--
39390	ENDRIN, TOTAL (µg/L)	3	<0.010	<0.001	--	--	--	--	--	--
39398	ETHION, TOTAL (µg/L)	1	<0.010	--	--	--	--	--	--	--
39516	PCB, TOTAL (µg/L)	3	<0.100	<0.100	--	--	--	--	--	--
39250	PCN, TOTAL (µg/L)	3	<0.100	<0.100	--	--	--	--	--	--
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	3	<0.010	<0.001	--	--	--	--	--	--
39410	HEPTACHLOR, TOTAL (µg/L)	3	<0.010	<0.001	--	--	--	--	--	--
39340	LINDANE, TOTAL (µg/L)	3	<0.010	<0.001	--	--	--	--	--	--
39530	MALATHION, TOTAL (µg/L)	1	<0.010	--	--	--	--	--	--	--
39480	METHOXYCHLOR, TOTAL (µg/L)	3	<0.010	<0.010	--	--	--	--	--	--
39600	METHYL PARATHION, TOTAL (µg/L)	1	<0.010	--	--	--	--	--	--	--
39755	MIREX, TOTAL (µg/L)	3	<0.010	<0.010	--	--	--	--	--	--
39540	PARATHION, TOTAL (µg/L)	1	<0.010	--	--	--	--	--	--	--
39034	PERTHANE, TOTAL (µg/L)	3	<0.100	<0.100	--	--	--	--	--	--
39400	TOXAPHENE, TOTAL (µg/L)	3	<1.000	<1.000	--	--	--	--	--	--
39786	TRITHION (µg/L)	1	<0.010	--	--	--	--	--	--	--
38932	CHLORPYRIFOS, TOTAL (µg/L)	1	<0.010	--	--	--	--	--	--	--
39011	DISYSTON, TOTAL (µg/L)	1	<0.010	--	--	--	--	--	--	--
39023	PHORATE, TOTAL (µg/L)	1	<0.010	--	--	--	--	--	--	--
39040	DEF, TOTAL (µg/L)	1	<0.010	--	--	--	--	--	--	--
82614	PHONOS (DYFONATE) WATER, TOTAL (µg/L)	1	<0.010	--	--	--	--	--	--	--

Table 17.--Statistical summary of water-quality data, February 1988 through June 1989

Site 9T, Cabin Branch above mouth near Fairntosh

[Location.--Latitude 36°05'31", longitude 78°51'57", Durham County, 0.3 mi above mouth, and 1.2 mi southwest of Fairntosh; USGS downstream number 0208525105.]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00095	SPECIFIC CONDUCTANCE (µS/cm at 25 °C)	6	149.000	60.000	95.833	149.000	125.750	89.000	67.500	60.000
00400	PH, FIELD (STANDARD pH UNITS)	6	7.100	5.500	--	7.100	6.875	6.150	5.950	5.500
00010	WATER TEMPERATURE (°C)	6	20.000	2.500	9.583	20.000	13.250	9.500	4.375	2.500
00300	OXYGEN, DISSOLVED (mg/L)	6	15.000	6.200	10.250	15.000	13.050	10.300	7.025	6.200
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	6	119.000	68.000	88.333	119.000	100.250	89.500	69.500	68.000
80154	SUSPENDED SEDIMENT (mg/L)	5	544.000	18.000	--	--	--	--	--	--
70337	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.002 mm	1	29.000	--	--	--	--	--	--	--
70338	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.004 mm	1	36.000	--	--	--	--	--	--	--
70339	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.008 mm	1	54.000	--	--	--	--	--	--	--
70340	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.016 mm	1	73.000	--	--	--	--	--	--	--
70341	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.031 mm	1	87.000	--	--	--	--	--	--	--
70342	SUSPENDED SEDIMENT, FALL DIAMETER PERCENT FINER THAN 0.062 mm	1	95.000	--	--	--	--	--	--	--

Table 17.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 9T, Cabin Branch above mouth near Fairntosh

[Location.--Latitude 36°05'31", longitude 78°51'57", Durham County, 0.3 mi above mouth, and 1.2 mi southwest of Fairntosh; USGS downstream number 0208525105. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	5	0.400	<0.100	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	5	0.100	0.020	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	5	0.860	0.280	--	--	--	--	--	--
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	5	0.900	0.300	--	--	--	--	--	--
00600	NITROGEN, TOTAL (mg/L as N)	5	1.300	0.300	--	--	--	--	--	--
00665	PHOSPHORUS, TOTAL (mg/L as P)	5	0.150	0.030	--	--	--	--	--	--
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	5	0.090	<0.010	--	--	--	--	--	--

Table 17.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 9T, Cabin Branch above mouth near Fairntosh

[Location.--Latitude 36°05'31", longitude 78°51'57", Durham County, 0.3 mi above mouth, and 1.2 mi southwest of Fairntosh; USGS downstream number 0208525105. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00680	CARBON ORGANIC, TOTAL (mg/L)	4	15.000	5.100	--	--	--	--	--	--
39330	ALDRIN, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39350	CHLORDANE, TOTAL (µg/L)	2	<0.100	<0.100	--	--	--	--	--	--
39360	DDD, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39365	DDE, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39370	DDT, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39570	DIAZINON, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39380	DIELDRIN, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39388	ENDOSULFAN, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39390	ENDRIN, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39398	ETHION, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39516	PCB, TOTAL (µg/L)	2	<0.100	<0.100	--	--	--	--	--	--
39250	PCN, TOTAL (µg/L)	2	<0.100	<0.100	--	--	--	--	--	--
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39410	HEPTACHLOR, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39340	LINDANE, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39530	MALATHION, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39480	METHOXYCHLOR, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39600	METHYL PARATHION, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39790	METHYL TRITHION, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39755	MIREX, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39540	PARATHION, TOTAL (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
39034	PETHANE, TOTAL (µg/L)	2	<0.100	<0.100	--	--	--	--	--	--
39400	TOXAPHENE, TOTAL (µg/L)	2	<1.000	<1.000	--	--	--	--	--	--
39786	TRITHION (µg/L)	2	<0.010	<0.010	--	--	--	--	--	--
34030	BENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32104	BROMOFORM, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34301	CHLOROBENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34311	CHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32106	CHLOROFORM, TOTAL (µg/L)	2	0.300	<0.200	--	--	--	--	--	--
34418	METHYL CHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	2	0.200	<0.200	--	--	--	--	--	--
34371	ETHYLBENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34413	METHYL BROMIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
77128	STYRENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	2	0.300	<0.200	--	--	--	--	--	--
34010	TOLUENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	2	6.000	<0.200	--	--	--	--	--	--
34488	TRICHLOROFLUOROMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
39175	VINYL CHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
81551	XYLENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34496	1,1-DICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34506	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34511	1,1,2-TRICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34536	O-CHLORO-BENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32103	1,2-DICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34541	1,2-DICHLOROPROPANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34561	1,3-DICHLOROPROPENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34546	1,2-TRANS-DICHLOROETHENE, TOTAL (µg/L)	2	0.200	<0.200	--	--	--	--	--	--
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34205	ACENAPHTHENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34200	ACENAPHTHYLENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34220	ANTHRACENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34526	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), TOTAL (µg/L)	1	<5.000	--	--	--	--	--	--	--
34247	BENZO(A)PYRENE, TOTAL (µg/L)	2	<10.000	<10.000	--	--	--	--	--	--
34230	BENZO(B)FLUORANTHENE, TOTAL (µg/L)	2	<10.000	<10.000	--	--	--	--	--	--
34521	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), TOTAL (µg/L)	2	<10.000	<10.000	--	--	--	--	--	--
34242	BENZO(K)FLUORANTHENE, TOTAL (µg/L)	2	<10.000	<10.000	--	--	--	--	--	--
34292	N-BUTYL BENZYL PHTHALATE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--

Table 17.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 9T, Cabin Branch above mouth near Fairtosh

[Location.--Latitude 36°05'31", longitude 78°51'57", Durham County, 0.3 mi above mouth, and 1.2 mi southwest of Fairtosh; USGS downstream number 0208525105. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34452	PARACHLOROMETACRESOL, TOTAL (µg/L)	2	<30.000	<30.000	--	--	--	--	--	--
34320	CHRYSENE, TOTAL (µg/L)	2	<10.000	<10.000	--	--	--	--	--	--
39110	DI-N-BUTYL PHTHALATE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34596	DI-N-OCTYL PHTHALATE, TOTAL (µg/L)	2	<10.000	<10.000	--	--	--	--	--	--
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (µg/L)	2	<10.000	<10.000	--	--	--	--	--	--
34336	DIETHYL PHTHALATE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34341	DIMETHYL PHTHALATE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34657	4,6-DINITRO-ORTHCRESOL, TOTAL (µg/L)	2	<30.000	<30.000	--	--	--	--	--	--
34376	FLUORANTHENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34381	2-CHLORONAPHTHALENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
39700	HEXACHLOROBENZENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
39702	HEXACHLOROBUTADIENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34396	HEXACHLOROETHANE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (µg/L)	2	<10.000	<10.000	--	--	--	--	--	--
34408	ISOPHORONE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34433	N-NITROSODIPHENYLAMINE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34696	NAPHTHALENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34447	NAPHTHALENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34438	N-NITROSODIMETHYLAMINE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
39032	PENTACHLOROPHENOL, TOTAL (µg/L)	2	<30.000	<30.000	--	--	--	--	--	--
34461	PHENANTHRENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34694	PHENOL (C6H-5OH), TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34469	PYRENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34551	1,2,4-TRICHLOROBENZENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34278	BIS(2-CHLOROETHOXY)METHANE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34273	BIS-2-CHLOROETHYL ETHER, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34283	BIS(2-CHLOROISOPROPYL) ETHER, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34581	2-CHLORONAPHTHALENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34586	2-CHLOROPHENOL, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
39100	BIS(2-ETHYLHEXYL) PHTHALATE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34591	2-NITROPHENOL, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34601	2,4-DICHLOROPHENOL, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34606	2,4-DIMETHYLPHENOL, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34616	2,4-DINITROPHENOL, TOTAL (µg/L)	2	<20.000	<20.000	--	--	--	--	--	--
34611	2,4-DINITROTOLUENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34621	2,4,6-TRICHLOROPHENOL, TOTAL (µg/L)	2	<20.000	<20.000	--	--	--	--	--	--
34626	2,6-DINITROTOLUENE, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34636	4-BROMOPHENYL ETHER, TOTAL (µg/L)	2	<5.000	<5.000	--	--	--	--	--	--
34646	4-NITROPHENOL, TOTAL (µg/L)	2	<30.000	<30.000	--	--	--	--	--	--
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--

Table 18.--Statistical summary of water-quality data, February 1988 through June 1989

Site 10T, Little River near Weaver

[Location.--Latitude 36°04'56", longitude 78°51'25", Durham County, at bridge on Secondary Road 1004, 1.5 mi above mouth, and 2.5 mi northeast of Weaver; USGS downstream order number 02085262.]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	1	76.000	--	--	--	--	--	--	--
00400	PH, FIELD (STANDARD pH UNITS)	2	6.700	6.300	--	--	--	--	--	--
00010	WATER TEMPERATURE (°C)	1	4.000	--	--	--	--	--	--	--
00300	OXYGEN, DISSOLVED (mg/L)	2	12.000	7.700	--	--	--	--	--	--
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	1	91.000	--	--	--	--	--	--	--
80154	SUSPENDED SEDIMENT (mg/L)	1	17.000	--	--	--	--	--	--	--

Table 18.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 10T, Little River near Weaver

[Location.--Latitude 36°04'56", longitude 78°51'25", Durham County, at bridge on Secondary Road 1004, 1.5 mi above mouth, and 2.5 mi northeast of Weaver; USGS downstream order number 02085262.]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	1	0.500	--	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	1	0.070	--	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	1	0.430	--	--	--	--	--	--	--
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	1	0.500	--	--	--	--	--	--	--
00600	NITROGEN, TOTAL (mg/L as N)	1	1.000	--	--	--	--	--	--	--
00665	PHOSPHORUS, TOTAL (mg/L as P)	1	0.060	--	--	--	--	--	--	--
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	1	0.020	--	--	--	--	--	--	--

Table 18.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 10T, Little River near Weaver

[Location.--Latitude 36°04'56", longitude 78°51'25", Durham County, at bridge on Secondary Road 1004, 1.5 mi above mouth, and 2.5 mi northeast of Weaver; USGS downstream order number 02085262. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS - BOTTOM SEDIMENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01003	ARSENIC, (μg/g as As)	2	3.000	1.000	--	--	--	--	--	--
01028	CADMIUM, (μg/g as Cd)	2	<10.000	<1.000	--	--	--	--	--	--
01029	CHROMIUM, (μg/g as Cr)	2	6.000	5.000	--	--	--	--	--	--
01043	COPPER, (μg/g as Cu)	2	5.000	<10.000	--	--	--	--	--	--
01170	IRON, (μg/g as Fe)	2	7000.000	6300.000	--	--	--	--	--	--
01052	LEAD, (μg/g as Pb)	2	10.000	<100.000	--	--	--	--	--	--
01053	MANGANESE, (μg/g as Mn)	2	470.000	190.000	--	--	--	--	--	--
71921	MERCURY, (μg/g as Hg)	2	0.100	0.050	--	--	--	--	--	--
01093	ZINC, (μg/g as Zn)	2	20.000	20.000	--	--	--	--	--	--

Table 18.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 10T, Little River near Weaver

[Location.--Latitude 36°04'56", longitude 78°51'25", Durham County, at bridge on Secondary Road 1004, 1.5 mi above mouth, and 2.5 mi northeast of Weaver; USGS downstream order number 02085262.]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00693	CARBON, TOTAL BTM (gm/kg)	1	4.000	--	--	--	--	--	--	--

Table 19.--Statistical summary of water-quality data, February 1988 through September 1993

Site 11T, Eno River near Weaver

[Location.--Latitude 36°04'19", longitude 78°51'47", Durham County, at bridge on Secondary Road 1004, 1.3 mi above Little River, and 1.5 mi northeast of Weaver; USGS downstream order number 02085079.]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	64	1390.000	2.900	138.395	556.250	150.250	70.500	26.250	5.425
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	63	604.000	60.000	195.175	424.800	228.000	159.000	110.000	86.400
00400	PH, FIELD (STANDARD pH UNITS)	65	7.600	5.900	--	7.600	7.350	7.100	6.800	6.400
00010	WATER TEMPERATURE (°C)	64	27.000	4.000	15.773	25.750	22.500	15.750	9.250	4.625
00300	OXYGEN, DISSOLVED (mg/L)	62	13.600	5.300	9.105	13.100	11.000	9.000	7.000	5.645
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	60	141.000	61.000	89.550	104.950	97.750	91.000	80.000	69.100
80154	SUSPENDED SEDIMENT (mg/L)	59	233.000	1.000	27.915	111.000	26.000	12.000	6.000	2.000
80164	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.062 mm	1	1.000	--	--	--	--	--	--	--
80165	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.125 mm	1	1.000	--	--	--	--	--	--	--
80166	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.250 mm	1	7.000	--	--	--	--	--	--	--
80167	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.500 mm	1	47.000	--	--	--	--	--	--	--
80168	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 1.000 mm	1	92.000	--	--	--	--	--	--	--

Table 19.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 11T, Eno River near Weaver

[Location.--Latitude 36°04'19", longitude 78°51'47", Durham County, at bridge on Secondary Road 1004, 1.3 mi above Little River, and 1.5 mi northeast of Weaver; USGS downstream order number 02085079. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR DISSOLVED CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	54	1390.000	2.900	139.913	595.750	123.500	65.500	25.000	4.800
00080	COLOR (PLATINUM-COBALT UNITS)	53	250.000	12.000	58.491	151.000	67.500	50.000	27.000	13.700
00900	HARDNESS, TOTAL (mg/L as CaCO ₃)	53	73.000	18.000	36.943	66.000	40.000	35.000	27.500	23.400
00915	CALCIUM, DISSOLVED (mg/L as Ca)	53	22.000	4.600	9.615	19.300	11.000	8.400	6.800	5.580
00925	MAGNESIUM, DISSOLVED (mg/L as Mg)	53	4.600	1.700	3.138	4.430	3.650	3.100	2.550	2.270
00930	SODIUM, DISSOLVED (mg/L as Na)	53	69.000	4.000	22.853	59.100	28.500	18.000	10.000	5.910
00935	POTASSIUM, DISSOLVED (mg/L as K)	53	6.600	0.100	3.034	6.260	3.850	2.700	1.900	1.500
² 90410	ALKALINITY, LAB (mg/L as CaCO ₃)	53	61.000	15.000	33.019	50.900	39.500	33.000	24.500	19.400
00945	SULFATE, DISSOLVED (mg/L as SO ₄)	53	110.000	5.300	31.011	82.500	38.000	25.000	13.500	7.430
00940	CHLORIDE, DISSOLVED (mg/L as Cl)	53	45.000	4.200	15.409	44.000	19.000	10.000	8.250	5.870
00950	FLUORIDE, DISSOLVED (mg/L as F)	53	0.400	<0.100	0.162*	0.400	0.200	0.100	0.100	<0.100
00955	SILICA, DISSOLVED (mg/L as SiO ₂)	53	14.000	2.300	10.249	13.300	12.000	11.000	9.200	4.720
70300	DISSOLVED SOLIDS, RESIDUE AT 180 °C (mg/L)	53	284.000	44.000	122.226	243.200	154.500	100.000	77.500	57.900
38260	DETERGENTS, MBAS (mg/L)	15	0.120	0.020	0.050	0.120	0.060	0.050	0.030	0.020

¹Period July 1989 through September 1993.

²To convert to bicarbonate, mg/L alkalinity as CaCO₃ x 1.22 = mg/L of bicarbonate.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 19.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 11T, Eno River near Weaver

[Location.--Latitude 36°04'19", longitude 78°51'47", Durham County, at bridge on Secondary Road 1004, 1.3 mi above Little River, and 1.5 mi northeast of Weaver; USGS downstream order number 02085079. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	64	1390.000	2.900	138.395	556.250	150.250	70.500	26.250	5.425
00615	NITROGEN, NITRITE, TOTAL (mg/L as N)	48	0.110	<0.010	0.022*	0.060	0.030	0.020	0.010	<0.010
00613	NITROGEN, NITRITE, DISSOLVED (mg/L as N)	35	0.120	<0.010	0.026*	0.070	0.040	0.020	0.010	<0.010
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	49	9.100	0.230	1.244	3.050	1.700	0.800	0.500	0.300
00631	NO ₂ + NO ₃ , DISSOLVED (mg/L as N)	59	9.200	0.100	1.325	3.000	1.800	0.880	0.510	0.320
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	49	0.120	0.010	0.050	0.115	0.070	0.050	0.030	0.010
00608	NITROGEN AMMONIA, DISSOLVED (mg/L as N)	59	0.220	0.010	0.057	0.130	0.070	0.050	0.030	0.010
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	61	1.900	0.160	0.481	0.975	0.570	0.440	0.350	0.231
00607	NITROGEN ORGANIC, DISSOLVED (mg/L as N)	50	1.400	0.090	0.450	0.896	0.483	0.435	0.348	0.176
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	64	1.900	0.200	0.525	1.025	0.600	0.500	0.400	0.200
00623	NITROGEN AMMONIA + ORGANIC, DISSOLVED (mg/L as N)	54	1.400	0.200	0.493	0.925	0.525	0.500	0.400	0.200
00600	NITROGEN, TOTAL (mg/L as N)	60	10.000	0.600	1.875	3.700	2.575	1.400	1.025	0.700
00665	PHOSPHORUS, TOTAL (mg/L as P)	64	1.100	0.010	0.099	0.178	0.110	0.075	0.052	0.020
00666	PHOSPHORUS, DISSOLVED (mg/L as P)	59	1.000	<0.010	0.071*	0.160	0.070	0.040	0.030	<0.010
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	49	0.950	0.010	0.072	0.150	0.070	0.050	0.030	0.020
00671	PHOSPHORUS ORTHO, DISSOLVED (mg/L as P)	59	0.880	<0.010	0.057*	0.130	0.060	0.040	0.020	<0.010

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 19.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 11T, Eno River near Weaver

[Location.--Latitude 36°04'19", longitude 78°51'47", Durham County, at bridge on Secondary Road 1004, 1.3 mi above Little River, and 1.5 mi northeast of Weaver; USGS downstream order number 02085079. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	55	1390.000	2.900	137.969	594.800	123.000	62.000	26.000	4.900
01105	ALUMINUM, TOTAL (µg/L as Al)	23	2700.000	130.000	576.957	2499.999	630.000	470.000	220.000	132.000
01002	ARSENIC, TOTAL (µg/L as As)	23	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01027	CADMIUM, TOTAL (µg/L as Cd)	23	2.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01034	CHROMIUM, TOTAL (µg/L as Cr)	23	6.000	<1.000	1.121*	4.000	1.000	<1.000	<1.000	<1.000
01037	COBALT, TOTAL (µg/L as Co)	23	3.000	<1.000	0.959*	2.000	1.000	<1.000	<1.000	<1.000
01042	COPPER, TOTAL (µg/L as Cu)	23	12.000	2.000	4.174	11.400	5.000	3.000	3.000	2.000
01045	IRON, TOTAL (µg/L as Fe)	23	4000.000	250.000	1072.609	3619.999	1200.000	850.000	740.000	270.000
01051	LEAD, TOTAL (µg/L as Pb)	23	10.000	<1.000	2.360*	6.000	3.000	2.000	<1.000	<1.000
01055	MANGANESE, TOTAL (µg/L as Mn)	23	510.000	50.000	112.609	448.000	120.000	90.000	60.000	50.000
71900	MERCURY, TOTAL (µg/L as Hg)	23	0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
01062	MOLYBDENUM, TOTAL (µg/L as Mo)	23	2.000	<1.000	0.750*	2.000	1.000	<1.000	<1.000	<1.000
01067	NICKEL, TOTAL (µg/L as Ni)	23	6.000	<1.000	2.043*	5.000	3.000	2.000	1.000	<1.000
01147	SELENIUM, TOTAL (µg/L as Se)	23	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01077	SILVER, TOTAL (µg/L as Ag)	23	2.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01092	ZINC, TOTAL (µg/L as Zn)	23	30.000	<10.000	13.465*	30.000	20.000	10.000	<10.000	<10.000

¹Period July 1989 through September 1993.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 19.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 11T, Eno River near Weaver

[Location.--Latitude 36°04'19", longitude 78°51'47", Durham County, at bridge on Secondary Road 1004, 1.3 mi above Little River, and 1.5 mi northeast of Weaver; USGS downstream order number 02085079.]

METALS AND MINOR CONSTITUENTS - BOTTOM SEDIMENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01003	ARSENIC, (µg/g as As)	1	2.000	--	--	--	--	--	--	--
01028	CADMIUM, (µg/g as Cd)	2	<10.000	<1.000	--	--	--	--	--	--
01029	CHROMIUM, (µg/g as Cr)	2	30.000	20.000	--	--	--	--	--	--
01043	COPPER, (µg/g as Cu)	2	10.000	5.000	--	--	--	--	--	--
01170	IRON, (µg/g as Fe)	2	12000.000	7100.000	--	--	--	--	--	--
01052	LEAD, (µg/g as Pb)	2	<100.000	<10.000	--	--	--	--	--	--
01053	MANGANESE, (µg/g as Mn)	2	420.000	200.000	--	--	--	--	--	--
71921	MERCURY, (µg/g as Hg)	1	0.030	--	--	--	--	--	--	--
01093	ZINC, (µg/g as Zn)	2	30.000	30.000	--	--	--	--	--	--

Table 19.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 11T, Eno River near Weaver

[Location.--Latitude 36°04'19", longitude 78°51'47", Durham County, at bridge on Secondary Road 1004, 1.3 mi above Little River, and 1.5 mi northeast of Weaver; USGS downstream order number 02085079. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	64	1390.000	2.900	138.395	556.250	150.250	70.500	26.250	5.425
00680	CARBON ORGANIC, TOTAL (mg/L)	62	22.000	3.300	6.223	10.655	6.800	5.750	4.975	3.445
00693	CARBON, TOTAL BTM (gm/kg)	1	1.800	--	--	--	--	--	--	--
39330	ALDRIN, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.001	<0.001	<0.001	<0.001
39333	ALDRIN, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39350	CHLORDANE, TOTAL (µg/L)	17	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39351	CHLORDANE, BTM (µg/kg)	1	1.000	--	--	--	--	--	--	--
39360	DDD, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.001	<0.001	<0.001	<0.001
39363	DDD, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39365	DDE, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.001	<0.001	<0.001	<0.001
39368	DDE, BTM (µg/kg)	1	0.100	--	--	--	--	--	--	--
39370	DDT, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.001	<0.001	<0.001	<0.001
39373	DDT, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39570	DIAZINON, TOTAL (µg/L)	14	0.130	<0.010	0.018*	0.130	0.020	<0.010	<0.010	<0.010
39571	DIAZINON, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39380	DIELDRIN, TOTAL (µg/L)	17	0.001	<0.001	--	0.001	<0.010	<0.001	<0.001	<0.001
39383	DIELDRIN, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39388	ENDOSULFAN, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.001	<0.001	<0.001	<0.001
39389	ENDOSULFAN, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39390	ENDRIN, TOTAL (µg/L)	17	0.002	<0.001	--	0.002	<0.001	<0.001	<0.001	<0.001
39393	ENDRIN, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39398	ETHION, TOTAL (µg/L)	14	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39399	ETHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39516	PCB, TOTAL (µg/L)	17	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39519	PCB, BTM (µg/kg)	1	<1.000	--	--	--	--	--	--	--
39250	PCN, TOTAL (µg/L)	17	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39251	PCN, BTM (µg/kg)	1	<1.000	--	--	--	--	--	--	--
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	17	0.001	<0.001	--	0.001	<0.001	<0.001	<0.001	<0.001
39423	HEPTACHLOR EPOXIDE, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39410	HEPTACHLOR, TOTAL (µg/L)	17	<0.010	<0.001	--	<0.010	<0.001	<0.001	<0.001	<0.001
39413	HEPTACHLOR, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39340	LINDANE, TOTAL (µg/L)	17	0.005	<0.001	0.001*	0.005	0.001	<0.010	<0.001	<0.001
39343	LINDANE, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39530	MALATHION, TOTAL (µg/L)	14	0.010	<0.010	--	0.010	<0.010	<0.010	<0.010	<0.010
39531	MALATHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39480	METHOXYCHLOR, TOTAL (µg/L)	17	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39481	METHOXYCHLOR, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39600	METHYL PARATHION, TOTAL (µg/L)	14	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39601	METHYL PARATHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39790	METHYL TRITHION, TOTAL (µg/L)	8	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39791	METHYL TRITHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39755	MIREX, TOTAL (µg/L)	17	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39758	MIREX, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39540	PARATHION, TOTAL (µg/L)	14	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39541	PARATHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
39034	PETHANE, TOTAL (µg/L)	17	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
81886	PETHANE, BTM (µg/kg)	1	<1.000	--	--	--	--	--	--	--
39400	TOXAPHENE, TOTAL (µg/L)	17	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
39403	TOXAPHENE, BTM (µg/kg)	1	<10.000	--	--	--	--	--	--	--
39786	TRITHION, TOTAL (µg/L)	14	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39787	TRITHION, BTM (µg/kg)	1	<0.100	--	--	--	--	--	--	--
34030	BENZENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32104	BROMOFORM, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34301	CHLOROBENZENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34311	CHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32106	CHLOROFORM, TOTAL (µg/L)	9	0.300	<0.200	--	0.300	0.200	<0.200	<0.200	<0.200
34418	METHYLCHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	9	<0.300	<0.200	--	<0.300	<0.200	<0.200	<0.200	<0.200
34371	ETHYLBENZENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34413	METHYL BROMIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
77128	STYRENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34010	TOLUENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34488	TRICHLOROFLUOROMETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39175	VINYL CHLORIDE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
81551	XYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34496	1,1-DICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34506	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34511	1,1,2-TRICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34536	O-CHLORO-BENZENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200

Table 19.--Statistical summary of water-quality data, February 1988 through September 1993--Continued

Site 11T, Eno River near Weaver

[Location.--Latitude 36°04'19", longitude 78°51'47", Durham County, at bridge on Secondary Road 1004, 1.3 mi above Little River, and 1.5 mi northeast of Weaver; USGS downstream order number 02085079. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
32103	1,2-DICHLOROETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34541	1,2-DICHLOROPROPANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34561	1,3-DICHLOROPROPENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34546	1,2-TRISDICHLOROETHENE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34208	ACENAPHTHENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34203	ACENAPHTHYLENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34223	ANTHRACENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34529	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34233	BENZO(B)FLUORANTHENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34524	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34245	BENZO(K)FLUORANTHENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34455	PARACHLOROMETACRESOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
34323	CHRYSENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34599	DI-N-OCTYL PHTHALATE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34559	1,2,5,6-DIBENZANTHRACENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34339	DIETHYL PHTHALATE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34344	DIMETHYL PHTHALATE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34379	FLUORANTHENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34384	FLUORENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
39701	HEXACHLOROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
39705	HEXACHLOROBUTADIENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34399	HEXACHLOROETHANE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34406	INDENO (1,2,3-CD) PYRENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34411	ISOPHORONE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34445	NAPHTHALENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34450	NITROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
39061	PENTACHLOROPHENOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
34464	PHENANTHRENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34695	PHENOL (C6H5OH), TOTAL (µg/L)	1	<200.000	--	--	--	--	--	--	--
34472	PYRENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34554	1,2,4-TRICHLOROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34569	1,3-DICHLOROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34574	1,4-DICHLOROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34594	2-NITROPHENOL, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34614	2,4-DINITROTOLUENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34629	2,6-DINITROTOLUENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34644	4-CHLOROPHENYL PHENYL ETHER, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34649	4-NITROPHENOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
34286	BIS(2-CHLOROISOPROPYL) ETHER, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34281	BIS(2-CHLOROETHOXY) METHANE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34276	BIS(2-CHLOROETHYL) ETHER, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
39102	BIS(2-ETHYLHEXYL) PHTHALATE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34250	BENZO-A-PYRENE, BTM (µg/kg)	1	<400.000	--	--	--	--	--	--	--
34639	4-BROMOPHENYL PHENYL ETHER, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34295	N-BUTYLBENZYL PHTHALATE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34589	2-CHLOROPHENOL, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34584	2-CHLORONAPHTHALENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34604	2,4-DICHLOROPHENOL, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34609	2,4-DP, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34660	4,6-DINITRO-ORTHO-CRESOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
34619	2,4-DINITROPHENOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
39112	DI-N-BUTYL PHTHALATE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34389	HEXACHLOROCYCLOPENTADIENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34441	N-NITROSODIMETHYLAMINE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34436	N-NITROSODIPHENYLAMINE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34431	N-NITROSODI-N-PROPYLAMINE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
34624	2,4,6-TRICHLOROPHENOL, BTM (µg/kg)	1	<600.000	--	--	--	--	--	--	--
34539	1,2-DICHLOROBENZENE, BTM (µg/kg)	1	<200.000	--	--	--	--	--	--	--
38932	CHLORPYRIFOS, TOTAL (µg/L)	8	0.020	<0.010	--	0.020	<0.010	<0.010	<0.010	<0.010
39011	DISYSTON, TOTAL (µg/L)	12	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39023	PHORATE, TOTAL (µg/L)	12	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39040	DEF, TOTAL (µg/L)	12	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	9	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
82614	FONOFOS (DYFONATE) WATER, TOTAL (µg/L)	8	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 20.--Statistical summary of water-quality data, February 1988 through June 1989

Site 12T, Eno River tributary near Fairtosh

[Location.--Latitude 36°05'35", longitude 78°50'00", Durham County, 0.5 mi above mouth, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527550.]

PHYSICAL AND CHEMICAL PROPERTIES

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	3	56.000	40.000	--	--	--	--	--	--
00400	PH, FIELD (STANDARD pH UNITS)	3	6.600	6.100	--	--	--	--	--	--
00010	WATER TEMPERATURE (°C)	3	19.000	3.000	--	--	--	--	--	--
00300	OXYGEN, DISSOLVED (mg/L)	3	12.300	6.900	--	--	--	--	--	--
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	3	91.000	75.000	--	--	--	--	--	--
80154	SUSPENDED SEDIMENT (mg/L)	2	9.000	2.000	--	--	--	--	--	--

Table 20.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 12T, Eno River tributary near Fairtosh

[Location.--Latitude 36°05'35", longitude 78°50'00", Durham County, 0.5 mi above mouth, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527550. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	3	<0.100	<0.100	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	3	0.040	<0.010	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	3	0.460	0.300	--	--	--	--	--	--
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	3	0.500	0.300	--	--	--	--	--	--
00600	NITROGEN, TOTAL (mg/L as N)	3	0.500	0.300	--	--	--	--	--	--
00665	PHOSPHORUS, TOTAL (mg/L as P)	3	0.030	0.030	--	--	--	--	--	--
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	3	0.010	<0.010	--	--	--	--	--	--

Table 20.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 12T, Eno River tributary near Fairtosh

[Location.--Latitude 36°05'35", longitude 78°50'00", Durham County, 0.5 mi above mouth, and 1.3 mi southeast of Fairtosh; USGS downstream order number 0208527550.]

ORGANIC COMPOUNDS

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00680	CARBON ORGANIC, TOTAL (mg/L)	2	13.000	7.600	--	--	--	--	--	--

Table 21.--Statistical summary of water-quality data, February 1988 through June 1989

Site 13T, Eno River tributary above mouth near Cozart

[Location.--Latitude 36°05'41", longitude 78°49'31", Durham County, 0.2 mi above mouth, and 2.5 mi west of Cozart; USGS downstream order number 0208528420.]

PHYSICAL AND CHEMICAL PROPERTIES

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00095	SPECIFIC CONDUCTANCE (µS/cm at 25 °C)	3	130.000	81.000	--	--	--	--	--	--
00400	PH, FIELD (STANDARD pH UNITS)	3	7.400	6.200	--	--	--	--	--	--
00010	WATER TEMPERATURE (°C)	3	21.000	3.000	--	--	--	--	--	--
00300	OXYGEN, DISSOLVED (mg/L)	2	12.000	9.500	--	--	--	--	--	--
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	2	95.000	71.000	--	--	--	--	--	--
80154	SUSPENDED SEDIMENT (mg/L)	2	10.000	3.000	--	--	--	--	--	--
80164	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.062 mm	1	1.000	--	--	--	--	--	--	--
80165	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.125 mm	1	2.000	--	--	--	--	--	--	--
80166	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.250 mm	1	10.000	--	--	--	--	--	--	--
80167	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 0.500 mm	1	50.000	--	--	--	--	--	--	--
80168	BED MATERIAL, SIEVE DIAMETER PERCENT FINER THAN 1.000 mm	1	93.000	--	--	--	--	--	--	--

Table 21.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 13T, Eno River tributary above mouth near Cozart

[Location.--Latitude 36°05'41", longitude 78°49'31", Durham County, 0.2 mi above mouth, and 2.5 mi west of Cozart; USGS downstream order number 0208528420.]

NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	3	<0.100	<0.100	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	3	0.310	0.020	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	3	2.000	0.180	--	--	--	--	--	--
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	3	2.300	0.200	--	--	--	--	--	--
00600	NITROGEN, TOTAL (mg/L as N)	3	2.300	0.200	--	--	--	--	--	--
00665	PHOSPHORUS, TOTAL (mg/L as P)	3	0.130	0.020	--	--	--	--	--	--
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	3	0.050	<0.010	--	--	--	--	--	--

Table 21.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 13T, Eno River tributary above mouth near Cozart

[Location.--Latitude 36°05'41", longitude 78°49'31", Durham County, 0.2 mi above mouth, and 2.5 mi west of Cozart; USGS downstream order number 0208528420. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS - BOTTOM SEDIMENTS

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01003	ARSENIC, (µg/g as As)	2	2.000	1.000	--	--	--	--	--	--
01028	CADMIUM, (µg/g as Cd)	2	<10.000	<1.000	--	--	--	--	--	--
01029	CHROMIUM, (µg/g as Cr)	2	6.000	2.000	--	--	--	--	--	--
01043	COPPER, (µg/g as Cu)	2	1.000	<10.000	--	--	--	--	--	--
01170	IRON, (µg/g as Fe)	2	9000.000	1400.000	--	--	--	--	--	--
01052	LEAD, (µg/g as Pb)	2	20.000	<100.000	--	--	--	--	--	--
01053	MANGANESE, (µg/g as Mn)	2	1200.000	50.000	--	--	--	--	--	--
71921	MERCURY, (µg/g as Hg)	2	0.040	<0.010	--	--	--	--	--	--
01093	ZINC, (µg/g as Zn)	2	30.000	10.000	--	--	--	--	--	--

Table 21.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 13T, Eno River tributary above mouth near Cozart

[Location.--Latitude 36°05'41", longitude 78°49'31", Durham County, 0.2 mi above mouth, and 2.5 mi west of Cozart; USGS downstream order number 0208528420.]

NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00680	CARBON ORGANIC, TOTAL (mg/L)	2	11.000	5.300	--	--	--	--	--	--
00693	CARBON, ORGANIC + INORGANIC, TOTAL, BTM (gm/kg)	2	30.000	0.700	--	--	--	--	--	--
39333	ALDRIN, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39351	CHLORDANE, BTM (µg/kg)	2	1.000	<1.000	--	--	--	--	--	--
39363	DDD, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39368	DDE, BTM (µg/kg)	2	0.400	<0.100	--	--	--	--	--	--
39373	DDT, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39571	DIAZINON, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39383	DIELDRIN, BTM (µg/kg)	2	0.200	<0.100	--	--	--	--	--	--
39389	ENDOSULFAN, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39393	ENDRIN, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39399	ETHION, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39519	PCB, BTM (µg/kg)	2	<1.000	<1.000	--	--	--	--	--	--
39251	PCN, BTM (µg/kg)	2	<1.000	<1.000	--	--	--	--	--	--
39423	HEPTACHLOR EPOXIDE, BTM (µg/kg)	2	0.500	<0.100	--	--	--	--	--	--
39413	HEPTACHLOR, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39343	LINDANE, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39531	MALATHION, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39481	METHOXYCHLOR, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39601	METHYL PARATHION, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39791	METHYL TRITHION, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39758	MIREX, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
39541	PARATHION, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
81886	PERTHANE, BTM (µg/kg)	2	<1.000	<1.000	--	--	--	--	--	--
39403	TOXAPHENE, BTM (µg/kg)	2	<10.000	<10.000	--	--	--	--	--	--
39787	TRITHION, BTM (µg/kg)	2	<0.100	<0.100	--	--	--	--	--	--
34030	BENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32104	BROMOFORM, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34301	CHLOROBENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34311	CHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32106	CHLOROFORM, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34418	METHYL CHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34371	ETHYLBENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34413	METHYL BROMIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
77128	STYRENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34010	TOLUENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34488	TRICHLOROFLUOROMETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
39175	VINYL CHLORIDE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
81551	XYLENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34496	1,1-DICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34506	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34511	1,1,2-TRICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (µg/L)	2	<1.000	<0.200	--	--	--	--	--	--
34536	O-CHLORO-BENZENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
32103	1,2-DICHLOROETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34541	1,2-DICHLOROPROPANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34561	1,3-DICHLOROPROPENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34546	1,2-TRANS-DICHLOROETHENE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34208	ACENAPHTHENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34203	ACENAPHTHYLENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34223	ANTHRACENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34529	BENZO(A)ANTHRACENE (1,2-BENZANTHRACENE), BTM (µg/kg)	2	<400.000	<400.000	--	--	--	--	--	--
34233	BENZO(B)FLUORANTHENE, BTM (µg/kg)	2	<400.000	<400.000	--	--	--	--	--	--
34524	BENZO(G,H,I)PERYLENE (1,12-BENZOPERYLENE), BTM (µg/kg)	2	<400.000	<400.000	--	--	--	--	--	--
34245	BENZO(K)FLUORANTHENE, BTM (µg/kg)	2	<400.000	<400.000	--	--	--	--	--	--
34455	PARACHLOROMETACRESOL, BTM (µg/kg)	2	<600.000	<600.000	--	--	--	--	--	--
34323	CHRYSENE, BTM (µg/kg)	2	<400.000	<400.000	--	--	--	--	--	--
34599	DI-N-OCTYL PHTHALATE, BTM (µg/kg)	2	<400.000	<400.000	--	--	--	--	--	--

Table 21.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 13T, Eno River tributary above mouth near Cozart

[Location.--Latitude 36°05'41", longitude 78°49'31", Durham County, 0.2 mi above mouth, and 2.5 mi west of Cozart; USGS downstream order number 0208528420.

NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
34559	1,2,5,6-DIBENZANTHRACENE, BTM (µg/kg)	2	<400.000	<400.000	--	--	--	--	--	--
34339	DIETHYL PHTHALATE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34344	DIMETHYL PHTHALATE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34379	FLUORANTHENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34384	FLUORENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
39701	HEXACHLOROBENZENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
39705	HEXACHLOROBUTADIENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34399	HEXACHLOROETHANE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34406	INDENO (1,2,3-CD) PYRENE, BTM (µg/kg)	2	<400.000	<400.000	--	--	--	--	--	--
34411	ISOPHORONE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34445	NAPHTHALENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34450	NITROBENZENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
39061	PENTACHLOROPHENOL, BTM (µg/kg)	2	<600.000	<600.000	--	--	--	--	--	--
34464	PHENANTHRENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34695	PHENOL (C6H-5OH), TOTAL (µg/L)	2	<200.000	<200.000	--	--	--	--	--	--
34472	PYRENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34554	1,2,4-TRICHLOROBENZENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34569	1,3-DICHLOROBENZENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--
34574	1,4-DICHLOROBENZENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34594	2-NITROPHENOL, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34614	2,4-DINITROTOLUENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34629	2,6-DINITROTOLUENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34644	4-CHLOROPHENYL PHENYL ETHER, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34649	4-NITROPHENOL, BTM (µg/kg)	2	<600.000	<600.000	--	--	--	--	--	--
34286	BIS(2-CHLOROISOPROPYL) ETHER, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34281	BIS(2-CHLOROETHOXY) METHANE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34276	BIS(2-CHLOROETHYL) ETHER, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
39102	BIS(2-ETHYLHEXYL) PHTHALATE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34250	BENZO-A-PYRENE, BTM (µg/kg)	2	<400.000	<400.000	--	--	--	--	--	--
34639	4-BROMOPHENYL PHENYL ETHER, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34295	N-BUTYLBENZYL PHTHALATE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34589	2-CHLOROPHENOL, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34584	2-CHLORONAPHTHALENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34604	2,4-DICHLOROPHENOL, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34609	2,4-DP, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34660	4,6-DINITRO-ORTHOCHRESOL, BTM (µg/kg)	2	<600.000	<600.000	--	--	--	--	--	--
34619	2,4-DINITROPHENOL, BTM (µg/kg)	2	<600.000	<600.000	--	--	--	--	--	--
39112	DI-N-BUTYL PHTHALATE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34389	HEXACHLOROCYCLOPENTADIENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34441	N-NITROSODIMETHYLAMINE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34436	N-NITROSODIPHENYLAMINE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34431	N-NITROSODI-N-PROPYLAMINE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
34624	2,4,6-TRICHLOROPHENOL, BTM (µg/kg)	2	<600.000	<600.000	--	--	--	--	--	--
34539	1,2-DICHLOROBENZENE, BTM (µg/kg)	2	<200.000	<200.000	--	--	--	--	--	--
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	2	<0.200	<0.200	--	--	--	--	--	--

Table 22.--Statistical summary of water-quality data, February 1988 through June 1989

Site 14T, Eno River near Willardville

[Location.--Latitude 36°05'31", longitude 78°49'27", Durham County, at bridge on Secondary Road 1632, 0.75 mi above Flat River, and 4 mi southeast of Willardville; USGS downstream order number 02085284.]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00095	SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{cm}$ at 25 °C)	1	80.000	--	--	--	--	--	--	--
00400	PH, FIELD (STANDARD pH UNITS)	2	7.300	6.300	--	--	--	--	--	--
00010	WATER TEMPERATURE (°C)	2	19.000	4.500	--	--	--	--	--	--
00300	OXYGEN, DISSOLVED (mg/L)	1	12.400	--	--	--	--	--	--	--
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	1	96.000	--	--	--	--	--	--	--
80154	SUSPENDED SEDIMENT (mg/L)	1	97.000	--	--	--	--	--	--	--

Table 22.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 14T, Eno River near Willardville

[Location.--Latitude 36°05'31", longitude 78°49'27", Durham County, at bridge on Secondary Road 1632, 0.75 mi above Flat River, and 4 mi southeast of Willardville; USGS downstream order number 02085284.]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	1	0.500	--	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	1	0.040	--	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	1	0.560	--	--	--	--	--	--	--
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	1	0.600	--	--	--	--	--	--	--
00600	NITROGEN, TOTAL (mg/L as N)	1	1.100	--	--	--	--	--	--	--
00665	PHOSPHORUS, TOTAL (mg/L as P)	1	0.100	--	--	--	--	--	--	--
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	1	0.040	--	--	--	--	--	--	--

Table 22.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 14T, Eno River near Willardville

[Location.--Latitude 36°05'31", longitude 78°49'27", Durham County, at bridge on Secondary Road 1632, 0.75 mi above Flat River, and 4 mi southeast of Willardville; USGS downstream order number 02085284. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS - BOTTOM SEDIMENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
01003	ARSENIC, ($\mu\text{g}/\text{g}$ as As)	1	<1.000	--	--	--	--	--	--	--
01028	CADMIUM, ($\mu\text{g}/\text{g}$ as Cd)	2	<10.000	<1.000	--	--	--	--	--	--
01029	CHROMIUM, ($\mu\text{g}/\text{g}$ as Cr)	2	20.000	4.000	--	--	--	--	--	--
01043	COPPER, ($\mu\text{g}/\text{g}$ as Cu)	2	4.000	<10.000	--	--	--	--	--	--
01170	IRON, ($\mu\text{g}/\text{g}$ as Fe)	2	6400.000	6200.000	--	--	--	--	--	--
01052	LEAD, ($\mu\text{g}/\text{g}$ as Pb)	2	<100.000	<10.000	--	--	--	--	--	--
01053	MANGANESE, ($\mu\text{g}/\text{g}$ as Mn)	2	140.000	110.000	--	--	--	--	--	--
71921	MERCURY, ($\mu\text{g}/\text{g}$ as Hg)	1	0.020	--	--	--	--	--	--	--
01093	ZINC, ($\mu\text{g}/\text{g}$ as Zn)	2	20.000	10.000	--	--	--	--	--	--

Table 22.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 14T, Eno River near Willardville

[Location.--Latitude 36°05'31", longitude 78°49'27", Durham County, at bridge on Secondary Road 1632, 0.75 mi above Flat River, and 4 mi southeast of Willardville; USGS downstream order number 02085284.]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00693	CARBON, ORGANIC + INORGANIC, TOTAL, BTM (gm/kg)	1	6.100	--	--	--	--	--	--	--

Table 23.--Statistical summary of water-quality data, February 1988 through June 1991

Site 1ST, Flat River at dam near Bahama

[Location.--Latitude 36°08'55", longitude 78°49'43", Durham County, 900 ft below Durham municipal dam, 3 mi southeast of Bahama, and 5 mi above mouth; USGS downstream order number 02086500.]

PHYSICAL AND CHEMICAL PROPERTIES

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	34	2420.000	0.010	202.305	1024.250	193.000	84.000	36.500	0.017
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	35	105.000	40.000	67.457	101.000	76.000	65.000	57.000	42.400
00400	PH, FIELD (STANDARD pH UNITS)	35	8.000	5.700	--	7.760	7.200	7.000	6.600	6.020
00010	WATER TEMPERATURE (°C)	35	26.000	5.000	14.557	26.000	19.000	14.000	9.500	5.800
00300	OXYGEN, DISSOLVED (mg/L)	35	13.300	2.400	8.183	12.900	10.200	8.500	6.500	2.720
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	34	106.000	26.000	80.029	105.250	99.250	87.500	64.500	28.250
80154	SUSPENDED SEDIMENT (mg/L)	32	59.000	2.000	16.906	55.750	23.500	8.000	5.250	2.000

Table 23.--Statistical summary of water-quality data, February 1988 through June 1991--Continued

Site 1ST, Flat River at dam near Bahama

[Location.--Latitude 36°08'55", longitude 78°49'43", Durham County, 900 ft below Durham municipal dam, 3 mi southeast of Bahama, and 5 mi above mouth; USGS downstream order number 02086500. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR DISSOLVED CONSTITUENTS¹

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	24	2420.000	0.020	214.045	1950.500	127.500	72.500	39.750	0.027
00080	COLOR (PLATINUM-COBALT UNITS)	25	130.000	27.000	73.040	130.000	105.000	65.000	55.000	27.300
00900	HARDNESS, TOTAL (mg/L as CaCO ₃)	25	35.000	14.000	20.520	34.700	22.500	20.000	17.500	14.300
00915	CALCIUM, DISSOLVED (mg/L as Ca)	25	9.400	3.400	4.908	9.220	5.200	4.700	4.150	3.400
00925	MAGNESIUM, DISSOLVED (mg/L as Mg)	25	2.900	1.300	1.996	2.900	2.250	1.900	1.750	1.360
00930	SODIUM, DISSOLVED (mg/L as Na)	25	5.300	2.100	4.152	5.240	4.750	4.300	3.650	2.400
00935	POTASSIUM, DISSOLVED (mg/L as K)	25	3.000	1.200	1.960	2.970	2.350	1.900	1.500	1.260
290410	ALKALINITY, LAB (mg/L as CaCO ₃)	25	39.000	9.400	18.416	38.100	20.000	17.000	14.500	9.580
00945	SULFATE, DISSOLVED (mg/L as SO ₄)	25	8.000	2.900	5.244	7.820	6.350	5.100	4.200	2.930
00940	CHLORIDE, DISSOLVED (mg/L as Cl)	25	6.400	3.400	4.828	6.340	5.400	4.700	4.200	3.460
00950	FLUORIDE, DISSOLVED (mg/L as F)	25	0.400	<0.100	0.106*	0.200	0.100	0.100	<0.100	<0.100
00955	SILICA, DISSOLVED (mg/L as SiO ₂)	25	12.000	4.800	9.496	12.000	11.000	10.000	8.500	5.010
70300	DISSOLVED SOLIDS, RESIDUE AT 180 °C (mg/L)	24	66.000	28.000	50.667	65.500	56.000	52.500	43.500	28.250
38260	DETERGENTS, MBAS (mg/L)	15	0.070	0.010	0.039	0.070	0.050	0.030	0.030	0.010

¹Period July 1989 through June 1991.

²To convert to bicarbonate, mg/L alkalinity as CaCO₃ x 1.22 = mg/L of bicarbonate.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 23.--Statistical summary of water-quality data, February 1988 through June 1991--Continued

Site 1ST, Flat River at dam near Bahama

[Location.--Latitude 36°08'55", longitude 78°49'43", Durham County, 900 ft below Durham municipal dam, 3 mi southeast of Bahama, and 5 mi above mouth; USGS downstream order number 02086500. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARA-METER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	34	2420.000	0.010	202.305	1024.250	193.000	84.000	36.500	0.017
00615	NITROGEN, NITRITE, TOTAL (mg/L as N)	33	0.040	<0.010	0.015*	0.040	0.020	0.010	0.010	<0.010
00613	NITROGEN, NITRITE, DISSOLVED (mg/L as N)	10	0.010	<0.010	0.010*	0.010	0.010	0.010	<0.010	<0.010
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	34	0.500	<0.100	0.232*	0.400	0.400	0.200	0.100	<0.100
00631	NO ₂ + NO ₃ , DISSOLVED (mg/L as N)	34	0.460	<0.100	0.240*	0.440	0.330	0.200	0.130	<0.100
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	33	0.330	<0.010	0.118*	0.280	0.140	0.110	0.060	<0.010
00608	NITROGEN AMMONIA, DISSOLVED (mg/L as N)	32	0.310	0.010	0.108	0.297	0.168	0.095	0.042	0.010
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	33	0.940	0.220	0.513	0.905	0.610	0.480	0.390	0.227
00607	NITROGEN ORGANIC, DISSOLVED (mg/L as N)	27	0.990	0.270	0.495	0.886	0.590	0.470	0.390	0.270
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	35	1.000	0.200	0.623	0.920	0.700	0.600	0.500	0.280
00623	NITROGEN AMMONIA + ORGANIC, DISSOLVED (mg/L as N)	29	1.000	0.300	0.597	1.000	0.700	0.600	0.500	0.300
00600	NITROGEN, TOTAL (mg/L as N)	33	1.200	0.400	0.855	1.200	1.100	0.900	0.700	0.470
00665	PHOSPHORUS, TOTAL (mg/L as P)	35	0.180	0.020	0.054	0.148	0.060	0.050	0.030	0.020
00666	PHOSPHORUS, DISSOLVED (mg/L as P)	34	0.080	<0.010	0.025*	0.050	0.030	0.020	0.020	<0.010
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	34	0.100	<0.010	0.025*	0.080	0.030	0.020	<0.010	<0.010
00671	PHOSPHORUS ORTHO, DISSOLVED (mg/L as P)	34	0.080	<0.010	0.016*	0.060	0.020	0.010	<0.010	<0.010

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 23.--Statistical summary of water-quality data, February 1988 through June 1991--Continued

Site 15T, Flat River at dam near Bahama

[Location.--Latitude 36°08'55", longitude 78°49'43", Durham County, 900 ft below Durham municipal dam, 3 mi southeast of Bahama, and 5 mi above mouth; USGS downstream order number 02086500. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

METALS AND MINOR CONSTITUENTS¹

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	24	2420.000	0.020	214.045	1950.500	127.500	72.500	39.750	0.027
01105	ALUMINUM, TOTAL (µg/L as Al)	10	3000.000	30.000	639.000	3000.000	710.000	485.000	122.500	30.000
01002	ARSENIC, TOTAL (µg/L as As)	10	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01027	CADMIUM, TOTAL (µg/L as Cd)	10	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01034	CHROMIUM, TOTAL (µg/L as Cr)	10	3.000	<1.000	--	3.000	1.000	<1.000	<1.000	<1.000
01037	COBALT, TOTAL (µg/L as Co)	10	2.000	<1.000	0.869*	2.000	1.000	<1.000	<1.000	<1.000
01042	COPPER, TOTAL (µg/L as Cu)	10	5.000	2.000	3.100	5.000	4.000	3.000	2.000	2.000
01045	IRON, TOTAL (µg/L as Fe)	10	3400.000	390.000	1122.000	3400.000	1250.000	855.000	612.5000	390.000
01051	LEAD, TOTAL (µg/L as Pb)	10	7.000	<1.000	2.136*	7.000	3.000	1.000	1.000	1.000
01055	MANGANESE, TOTAL (µg/L as Mn)	10	580.000	70.000	252.000	580.000	417.500	210.000	77.500	70.000
71900	MERCURY, TOTAL (µg/L as Hg)	10	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
01062	MOLYBDENUM, TOTAL (µg/L as Mo)	10	1.000	<1.000	--	1.000	<1.000	<1.000	<1.000	<1.000
01067	NICKEL, TOTAL (µg/L as Ni)	10	2.000	<1.000	1.700*	2.000	2.000	2.000	1.000	1.000
01147	SELENIUM, TOTAL (µg/L as Se)	10	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01077	SILVER, TOTAL (µg/L as Ag)	10	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
01092	ZINC, TOTAL (µg/L as Zn)	10	<10.000	<10.000	--	<10.000	<10.000	<10.000	<10.000	<10.000

¹Period July 1989 through June 1991.

*Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

Table 23.--Statistical summary of water-quality data, February 1988 through June 1991--Continued

Site 15T, Flat River at dam near Bahama

[Location.--Latitude 36°08'55", longitude 78°49'43", Durham County, 900 ft below Durham municipal dam, 3 mi southeast of Bahama, and 5 mi above mouth; USGS downstream order number 02086500. NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

ORGANIC COMPOUNDS

PARAM- ETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00061	INSTANTANEOUS DISCHARGE (ft ³ /s)	34	2420.000	0.010	202.305	1024.250	193.000	84.000	36.500	0.017
00680	CARBON ORGANIC, TOTAL (mg/L)	33	12.000	4.600	7.588	10.460	8.800	7.600	6.100	4.880
39330	ALDRIN, TOTAL (µg/L)	9	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39350	CHLORDANE, TOTAL (µg/L)	9	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39360	DDD, TOTAL (µg/L)	9	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39365	DDE, TOTAL (µg/L)	9	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39370	DDT, TOTAL (µg/L)	9	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39570	DIAZINON, TOTAL (µg/L)	9	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39380	DIELDRIN, TOTAL (µg/L)	9	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39388	ENDOSULFAN, TOTAL (µg/L)	9	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39390	ENDRIN, TOTAL (µg/L)	9	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39398	ETHION, TOTAL (µg/L)	9	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39516	PCB, TOTAL (µg/L)	9	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39250	PCN, TOTAL (µg/L)	9	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39420	HEPTACHLOR EPOXIDE, TOTAL (µg/L)	9	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39410	HEPTACHLOR, TOTAL (µg/L)	9	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39340	LINDANE, TOTAL (µg/L)	9	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
39530	MALATHION, TOTAL (µg/L)	9	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39480	METHOXYCHLOR, TOTAL (µg/L)	9	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39600	METHYL PARATHION, TOTAL (µg/L)	9	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39790	METHYL TRITHION, TOTAL (µg/L)	8	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39755	MIREX, TOTAL (µg/L)	9	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39540	PARATHION, TOTAL (µg/L)	9	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39034	PERTHANE, TOTAL (µg/L)	9	<0.100	<0.100	--	<0.100	<0.100	<0.100	<0.100	<0.100
39400	TOXAPHENE, TOTAL (µg/L)	9	<1.000	<1.000	--	<1.000	<1.000	<1.000	<1.000	<1.000
39786	TRITHION (µg/L)	9	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
34030	BENZENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32104	BROMOFORM, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32102	CARBON TETRACHLORIDE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34301	CHLOROBENZENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32105	CHLORODIBROMOMETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34311	CHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32106	CHLOROFORM, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34418	METHYL CHLORIDE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34704	CIS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32101	DICHLOROBROMOMETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34668	DICHLORODIFLUOROMETHANE, TOTAL (µg/L)	8	<0.300	<0.200	--	<0.300	<0.200	<0.200	<0.200	<0.200
34371	ETHYLBENZENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34413	METHYL BROMIDE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34423	METHYLENE CHLORIDE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
77128	STYRENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34475	TETRACHLOROETHYLENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34010	TOLUENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34699	TRANS 1,3-DICHLOROPROPENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39180	TRICHLOROETHYLENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34488	TRICHLOROFLUOROMETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
39175	VINYL CHLORIDE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
81551	XYLENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34501	1,1-DICHLOROETHYLENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34496	1,1-DICHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34506	1,1,1-TRICHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34511	1,1,2-TRICHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34536	O-CHLORO-BENZENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
32103	1,2-DICHLOROETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34541	1,2-DICHLOROPROPANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34561	1,3-DICHLOROPROPENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34546	1,2-TRANS-DICHLOROETHENE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34566	1,3-DICHLOROBENZENE WATER, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
34571	1,4-DICHLOROBENZENE WATER, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
38932	CHLORPYRIFOS, TOTAL (µg/L)	3	<0.010	<0.010	--	--	--	--	--	--
39011	DISYSTON, TOTAL (µg/L)	7	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39023	PHORATE, TOTAL (µg/L)	7	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
39040	DEF, TOTAL (µg/L)	7	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010
77651	1,2-DIBROMOETHANE, TOTAL (µg/L)	8	<0.200	<0.200	--	<0.200	<0.200	<0.200	<0.200	<0.200
82614	FONOFOS (DYFONATE) WATER, TOTAL (µg/L)	3	<0.010	<0.010	--	--	--	--	--	--

Table 24.--Statistical summary of water-quality data, February 1988 through June 1989

Site 16T, Flat River tributary above mouth near Willardville

[Location.--Latitude 36°07'31", longitude 78°49'55", Durham County, 0.4 mi above mouth, and 1.8 mi southeast of Willardville; USGS downstream order number 0208651170.]

PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00095	SPECIFIC CONDUCTANCE (μS/cm at 25 °C)	3	135.000	76.000	--	--	--	--	--	--
00400	PH, FIELD (STANDARD pH UNITS)	3	7.300	6.400	--	--	--	--	--	--
00010	WATER TEMPERATURE (°C)	2	21.000	3.000	--	--	--	--	--	--
00300	OXYGEN, DISSOLVED (mg/L)	2	8.300	8.200	--	--	--	--	--	--
00301	OXYGEN, DISSOLVED (PERCENT OF SATURATION)	2	94.000	61.000	--	--	--	--	--	--
80154	SUSPENDED SEDIMENT (mg/L)	2	5.000	<1.000	--	--	--	--	--	--

Table 24.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 16T, Flat River tributary above mouth near Willardville

[Location.--Latitude 36°07'31", longitude 78°49'55", Durham County, 0.4 mi above mouth, and 1.8 mi southeast of Willardville; USGS downstream order number 0208651170.
NOTE: Multiple detection limits during the period of record may result in different values flagged with a "<".]

MAJOR NUTRIENTS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00630	NO ₂ + NO ₃ , TOTAL (mg/L as N)	3	<0.100	<0.100	--	--	--	--	--	--
00610	NITROGEN AMMONIA, TOTAL (mg/L as N)	3	<0.010	<0.010	--	--	--	--	--	--
00605	NITROGEN ORGANIC, TOTAL (mg/L as N)	3	0.300	0.200	--	--	--	--	--	--
00625	NITROGEN AMMONIA + ORGANIC, TOTAL (mg/L as N)	3	0.300	0.200	--	--	--	--	--	--
00600	NITROGEN, TOTAL (mg/L as N)	3	0.300	0.200	--	--	--	--	--	--
00665	PHOSPHORUS, TOTAL (mg/L as P)	3	0.020	0.010	--	--	--	--	--	--
70507	PHOSPHORUS ORTHO, TOTAL (mg/L as P)	3	<0.010	<0.010	--	--	--	--	--	--

Table 24.--Statistical summary of water-quality data, February 1988 through June 1989--Continued

Site 16T, Flat River tributary above mouth near Willardville

[Location.--Latitude 36°07'31", longitude 78°49'55", Durham County, 0.4 mi above mouth, and 1.8 mi southeast of Willardville; USGS downstream order number 0208651170.]

ORGANIC COMPOUNDS

PARAMETER CODE	PROPERTY OR CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
		SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN	95%	75%	50% (median)	25%	5%
00680	CARBON ORGANIC, TOTAL (mg/L)	2	8.400	6.100	--	--	--	--	--	--