1974

Water Resources Data for Maryland and Delaware

Part 2. Water Quality Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the States of Maryland and Delaware and with other agencies

CALENDAR FOR WATER YEAR 1974

1973

OCTOBER

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

NOVEMBER

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DECEMBER

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1974

JANUARY

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27	28	29	30	31		

FEBRUARY

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MARCH

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31						

APRIL

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MAY

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JUNE

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30						

JULY

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21	22	23	24	25	26	27
28	29	30	31			

AUGUST

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4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

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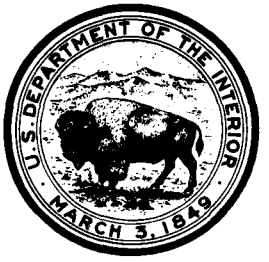

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the States of Maryland and Delaware and with other agencies

Prepared in cooperation with

Delaware Geological Survey
Maryland Geological Survey
Maryland National Capital Park and Planning Commission
District of Columbia Department of Environmental Services
Washington Suburban Sanitary Commission
Soil Conservation Service
U. S. Department of Agriculture
Environmental Protection Agency

Water resources records, 1974 for Maryland and Delaware are in the following reports of the U. S. Geological Survey:

1. Water Resources Data for Maryland and Delaware
   Part 1. Surface Water Records

2. Water Resources Data for Maryland and Delaware
   Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U. S. Geological Survey
8809 Satyr Hill Road
Parkville, Maryland 21234

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WATER-QUALITY STATIONS IN DOWNSTREAM ORDER FOR WHICH RECORDS ARE PUBLISHED

(Letters after station name designate type of data; (c) chemical; (t) water temperature; (s) sediment)

WATER RESOURCES DATA FOR MARYLAND AND DELAWARE, 1974

Part 2. Water Quality Records

INTRODUCTION

Water resources data for the 1974 water year for Maryland and Delaware include records of data for the chemical and physical characteristics of surface water. Data on the quality of surface water (chemical, temperature, and sediment) were collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly or less frequently, and at some sites data were recorded on punched paper tape at 15-, 30-, or 60-minute intervals. Locations of surface water-quality stations are shown in Figure 1. A few pertinent stations (not included above) in bordering States are also included. The records were collected by the Water Resources Division of the U. S. Geological Survey under the direction of W. F. White, district chief, Parkville, Md., and N. H. Beamer, district Chief, Harrisburg, Pa. These data represent that portion of the National Water Data System collected by the U. S. Geological Survey and cooperating State and Federal agencies in Maryland and Delaware.

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

COOPERATION

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

Delaware Geological Survey, R. R. Jordan, State geologist.

Maryland Geological Survey, K. N. Weaver, director.

Maryland National Capital Park and Planning Commission, J. F. Downs, acting executive director.

Washington Suburban Sanitary Commission, R. J. McLeod, general manager.

District of Columbia Department of Environmental Services, W. C. McKinney, director.

Assistance in the form of funds was given by the Water Quality Office, Environmental Protection Agency and the Soil Conservation Service, U. S. Department of Agriculture, in collecting records for 14 stations and 1 station respectively, which are published in this report.

DEFINITION OF TERMS

Terms related to water-quality and hydrologic data, as used in this report are defined below. See also table 3, "Factors for converting English units to International System (SI) units" on page 13.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Benthic organisms (invertebrates) are animals inhabiting the bottom of an aquatic environment. They include a number of different types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are frequently used as indicators of environmental quality because many have restricted mobility during their aquatic life phase, as well as a relatively long lifespan which allows for response to prevailing and changing water-quality conditions. Many benthic organisms inhabit specific types of environments which, if changed, result in changes in the composition of the benthic community.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per litre, used for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash weight is the weight or amount of residue present after the residue from the dry weight determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash weight values of zooplankton and phytoplankton are expressed in g/m^3 (grams per cubic metre), and periphyton and benthic organisms in g/m^2 (grams per square metre).

Dry weight refers to the weight of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the weight remains unchanged. This weight represents the total organic matter, ash and sediment, in the sample. Dry weight values are expressed in the same units as ash weight.

Organic weight or volatile weight of the living substance is the difference between the dry weight and the ash weight, and represents the actual weight of the living matter. The organic weight is expressed in the same units as for ash and dry weights.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or about 2,447 cubic metres, and represents a runoff of approximately 0.0372 inch (0.945 millimetre) from 1 square mile (2.590 square kiometres).

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Continuing record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken once or more times daily.
3. When sediment discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

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

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

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

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)."

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

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

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

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

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

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

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

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

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*....	0.11119	Iron (Fe^{+3})*.....	0.05372
Ammonia as NH^{+1}.....	.05544	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})	.01639	Magnesium (Mg^{+2})....	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*...	.03640
Carbonate (CO_3^{-2})...	.03333	Nickel (Ni^{+2})*.....	.03406
Chloride (Cl^{-1}).....	.02821	Nitrate (NO_3^{-1}).....	.01613
Chromium (Cr^{+6})*....	.11539	Nitrite (NO_2^{-1}).....	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3})...	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1}).....	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1}).....	.04350
Fluoride (F^{-1}).....	.05264	Sulfate (SO_4^{-2}).....	.02082
Hydrogen (H^{+1}).....	.99209	Zinc (Zn^{+2})*.....	.03060

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

Organism is any living entity, such as an insect, phytoplankter or zooplankter.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multi-celled and counted according to the number of contained cells per sample volume, usually millilitres (ml) or litres (l).

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square metres (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually millilitres (ml) or litres (l). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

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

Particle-size is the diameter, in millimetres (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet), bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water, that is, the river water at the time and point of sampling (Guy, 1969).

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

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

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969). All particle size analyses in this report were performed in distilled water and chemically dispersed unless noted otherwise.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Picocurie (PC/L, pCi/l) is one millionth of the amount of radioactivity represented by a microcurie, which is the quantity of radiation represented by one millionth of a gram of radium-226. A picocurie of radium results in 2.22 disintegration per minute.

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per millilitre (cells/ml).

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per millilitre (cells/ml).

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

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

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

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time (Colby and Hembree, 1955).

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

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

Seston is the total suspended particulate matter in water. The concentration of particulate matter has a profound effect upon the optical properties of the water, and upon the concentration of dissolved materials in the water. Their concentrations are expressed in milligrams per litre (mg/l).

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

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

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

Substrate is the physical surface upon which an organism lives.

Natural substrates refers to any naturally occurring emersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The use of artificial substrates simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexagenia
Species	Hexagenia limbata

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

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each water-quality station, gaging station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 01481500 which appears just to the left of the station name includes the 2-digit part number "01" plus the 6-digit downstream order number "481500." In this report the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 1 (North Atlantic Slope basins) and Part 3 (Ohio River basin). The station numbers shown on Figure 1 are the first four digits of the downstream order number plus the fifth or the fifth and sixth digits when required to distinguish the stations.

COLLECTION AND EXAMINATION OF DATA

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

The data in this report includes a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

Water-quality information is presented for chemical quality, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, specific conductance, and pH. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder furnished information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U. S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now

reported in milligrams per litre (mg/l) and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per millions and milligrams per litre can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. To convert temperature in degrees Celsius to degrees Fahrenheit, see table 2 below.

Table 2.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

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

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in mircrograms per litre instead of milligrams per litre (see "Definitions of Terms," p. 4.)

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and the mixing of the stream. Some must be sampled at several verticals across the channel to determine accurately the solute load.

Temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken at about the same time each day when sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day.

Sediment

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

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

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment are included.

PUBLICATIONS

The annual series of water-supply papers that give information on quality of surface waters in Maryland and Delaware are listed below.

Year	WSP No.	Year	WSP No.
1946	1050	1960	1741 --
1948	1132	1961	1881 --
1949	1162	1962	1941 --
1950	1186	1963	1947, 1948
1951	1197	1964	1954, 1955
1952	1250	1965	1961, 1962
1953	1290	1966	1991, 1992
1954	1350	1967	2011, 2012
1955	1400	1968	2091, 2093
1956	1450	1969	2141, A2143
1957	1520	1970	A2151, A2153
1958	1571	1971	A2161, A2163
1959	1641		

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Table 3.--Factors for converting English units to International System (SI) units

The following factors may be used to convert the English units published herein to the International System of Units (SI).

Multiply English units	By	To obtain SI units
	Length	
feet (ft)	.3048	metres (m)
miles (mi)	1.609	kilometres (km)
	Area	
square miles (sq mi)	2.590	square kilometres (km^2)
	Volume	
gallons (gal)	3.785	litres (l)
	3.785×10^{-3}	cubic metres (m^3)
million gallons (mg)	3785	cubic metres (m^3)
	3.785×10^{-3}	cubic hectometres (hm^3)
cubic feet	2.832×10^{-2}	cubic metres (m^3)
cfs-day	2447	cubic metres (m^3)
	2.447×10^{-3}	cubic hectometres (hm^3)
	Flow	
cubic feet per second (cfs)	28.32	litres per second (l/s)
	2.832×10^{-2}	cubic metres per second (m^3/s)
gallons per minute (gpm)	6.309×10^{-2}	litres per second (l/s)
	$.06309 \times 10^{-3}$	cubic metres per second (m^3/s)
million gallons per day (mgd)	3785×10^{3}	litres per day (l/d)
	4.381×10^{-2}	cubic metres per second (m^3/s)
	Mass	
ton (short)	.9072	tonne (t)

NORTH ATLANTIC SLOPE BASINS

DELAWARE BAY

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, N. J.

LOCATION.--Lat 39°18'19", long 75°22'37", Cumberland County, water-quality recorder on light ship in bay opposite Bombay Hook Island, Del., and 3.0 miles (4.8 km) south southwest of mouth of Cohansey River, N. J.

PERIOD OF RECORD.--Chemical analyses: April 1969 to September 1974.
Water temperatures: October 1970 to September 1974.

REMARKS.--Missing continuous water-quality records result of malfunction of sensor or sampling mechanism. Observed extremes of specific conductance and water temperature available in the WRD district office at Trenton, N. J.

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

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24920	17360	---	23080	15640	20550	25080	16130	21200	12300	5090	9100
2	---	---	---	20690	14680	18360	26710	19430	22770	12680	5550	9430
3	---	---	---	20920	15080	18600	26540	17990	22760	15710	5020	10490
4	---	---	---	22480	16360	19360	26200	18980	22920	14560	7400	11900
5	---	---	---	22840	15220	20060	26710	22360	24670	17630	8700	14190
6	---	---	---	24460	14320	22100	25400	19700	23280	19250	11150	15790
7	---	---	---	23900	18710	22260	24040	18710	22570	20580	12620	17150
8	---	---	---	26370	20470	23800	26540	19610	23780	18980	12300	15390
9	---	---	---	26540	22000	23950	29420	20800	24970	20250	12920	16330
10	---	---	---	26370	21160	23550	24760	18080	21830	20470	12860	16720
11	---	---	---	27220	22240	24540	25240	17270	20890	20250	12920	16940
12	---	---	---	27220	21760	24930	23760	16520	20320	17810	12050	15270
13	---	---	---	26880	21520	24500	24460	16760	20570	17090	9120	13960
14	---	---	---	27050	20360	23850	22720	16060	19690	17810	11060	14840
15	---	---	---	27220	20690	---	20360	13500	17720	16060	10220	13520
16	26880	22360	---	25080	19520	22590	19810	14260	17750	16760	8520	13330
17	26540	22000	24090	24760	18530	22260	23080	11720	19760	18530	12400	15490
18	26540	21520	24180	25400	18440	22780	19700	13900	17590	19070	12250	15840
19	27390	20470	24350	24760	20470	23030	21400	14740	18460	19520	8670	15740
20	26040	21760	24410	27050	21160	24560	23340	16360	20220	19250	12400	---
21	26710	22000	24470	27730	22240	25500	23200	13040	18580	20920	14620	18020
22	26540	22960	24760	27050	22600	25210	15010	6350	11130	19700	14140	17270
23	26710	22000	24470	27390	22240	25190	13450	5520	9890	19160	14380	16990
24	26710	22720	24600	27900	22120	25400	13960	5520	9700	19520	13150	16580
25	28280	23200	25560	27050	21280	24510	13600	6040	10290	18440	12860	16010
26	29610	24760	26930	28280	22120	24790	14680	6960	10800	17360	11680	15160
27	26880	22840	25300	27900	21640	25590	12920	5520	9380	16760	10460	13740
28	28280	23620	25900	27050	21760	24810	13200	5330	9400	16130	9420	13680
29	29800	25400	27230	24760	18350	---	13350	4870	8770	15430	8390	13000
30	26040	20250	23800	23200	16130	21190	10540	3500	7550	23480	8700	13550
31	24760	18890	22440	---	---	---	11760	4680	8160	16360	8800	12810
MONTH	---	---	---	28280	14320	23140	29420	3500	17330	23480	5020	14610

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14380	7800	10530	17810	13150	15560	15290	7140	11810	17810	12740	15960
2	15500	6040	12170	19250	11960	16200	16760	10580	13610	19160	12620	16630
3	19250	11150	15190	19920	10940	16940	16060	10220	13720	19160	13720	16760
4	18980	12860	16770	20690	13300	17360	15780	9290	13240	20140	13100	16030
5	20250	14320	17000	17720	12560	15660	13500	7530	11040	20470	13250	16970
6	22120	14320	18120	18800	12450	15890	13350	5740	9590	20580	14800	17800
7	22000	15640	18520	20250	10780	16680	13500	5590	8910	19920	13100	16800
8	22600	15780	19200	18890	10940	15910	10740	4730	7550	19920	14260	17060
9	23200	14260	19080	19430	12860	16620	12050	5170	8860	20800	14320	17140
10	20690	14320	18220	19810	12500	15710	9920	3930	7320	18620	12680	16090
11	21160	11760	16870	18620	11060	15200	11250	4870	7770	17360	11500	15190
12	19520	11300	16190	19160	11100	15220	10900	4680	8100	19160	13150	16160
13	19520	12400	16910	16920	8770	14220	11500	4350	8510	17270	11020	14020
14	19700	13040	16630	17090	9670	13320	11550	6350	9030	16200	9060	13200
15	20140	13600	17460	19520	11020	14720	11640	5850	8310	14680	8330	12210
16	19520	11840	16780	18620	12450	15580	13550	4430	8470	14940	7880	11910
17	22360	14440	18490	17990	11960	14710	15290	5040	10070	15500	7610	12320
18	22960	15990	20120	15990	9250	12570	16200	7990	12590	17000	9190	12950
19	23340	17540	20950	19520	8890	14950	18980	10740	14740	17630	9960	13990
20	22840	19520	21160	19920	14380	17080	18260	13040	15860	18890	11720	14590
21	23080	18080	20710	21640	15290	17850	16920	11600	14730	18710	12800	14900
22	23620	18710	20830	18620	11300	15620	16060	10030	12870	19340	12680	15250
23	20920	13780	16770	18890	12980	16120	16200	10740	13000	20470	12680	15890
24	19250	14200	16510	18530	12980	16290	17540	10380	13480	19520	10940	16270
25	19810	13960	17570	17810	11400	15170	18980	10780	15180	19700	10940	16460
26	19520	13450	16870	17810	11200	15130	20250	12620	16640	21040	12150	16610
27	20030	12920	17070	16840	10620	14080	19520	12300	16460	21160	10940	17660
28	19430	12680	16420	17090	9880	14020	18710	11550	15810	20360	13600	18010
29	---	---	---	18260	12920	15920	17270	11840	15340	20470	12500	17250
30	---	---	---	19920	14940	17490	17990	12500	15380	21040	14080	17940
31	---	---	---	18710	8990	14270	---	---	---	22000	14680	17990
MONTH	23620	6040	17470	21640	8770	15550	20250	3930	11930	22000	7610	15740

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, N. J.--Continued

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

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20140	13500	17650	23900	19340	21660	26880	24180	---	27390	22000	24370
2	21520	14620	17660	23760	17450	21600	---	---	---	27390	22000	24300
3	21160	14380	18110	23340	18890	21190	---	---	---	26880	21280	24750
4	21520	14740	17850	23620	17990	21040	---	---	---	24760	20250	23000
5	20030	14440	17520	23480	17900	21020	25880	21520	---	25560	20920	23700
6	20580	13040	17250	23480	19340	21350	26880	22120	24570	26040	21400	24290
7	20580	16680	18520	23480	18530	21390	26370	21040	24030	26200	19920	23690
8	22240	15220	18900	23620	18440	21430	25720	21640	23790	25080	16280	22190
9	21760	13250	18440	23900	18710	21670	28850	22960	25470	25400	17180	21500
10	20800	14140	18220	24180	18440	21780	28090	23480	25930	24760	15990	21240
11	21640	16360	19220	24040	20920	22670	26880	22120	---	24920	15430	21400
12	22360	17810	19670	24920	21280	23450	26880	20920	---	25560	17000	22270
13	22240	17360	20010	26540	19920	23770	27730	21040	24920	25720	19160	22420
14	23620	17900	21390	27730	21040	24710	28470	22480	25620	26040	18800	22450
15	24760	19340	22070	28090	22600	25520	29420	23080	26010	26880	19520	23440
16	24040	19610	21900	28850	23080	25810	29420	23620	26460	26040	18800	22690
17	23760	19610	21600	30010	24600	26960	28470	20470	25870	26200	19250	22720
18	24320	19250	21460	28850	23760	26590	28660	23200	26090	25560	19340	22670
19	23900	18620	21300	28090	23340	25820	29230	22840	26190	25560	19340	22670
20	23200	18260	20630	28280	23620	26090	29230	22960	26150	25080	17630	22210
21	22840	17270	20320	29610	24040	27090	29040	23900	26500	24040	18170	21410
22	23080	17990	20650	29610	24180	26860	29040	23620	26340	24180	16840	20240
23	24040	18890	21460	28850	24180	26710	27560	22120	25130	23760	16200	20960
24	25080	19810	22550	28470	24320	26590	25880	20580	23790	26540	18170	21980
25	25560	20030	22940	28660	24320	26270	26710	20580	23740	27560	18890	23060
26	24460	20030	22820	28280	24180	26410	27220	20140	23940	27050	18800	23150
27	24320	16680	21470	27730	23760	25800	26370	21040	23830	27220	21040	24260
28	24920	20920	22820	27900	22960	25600	25240	19430	23150	28280	21640	24960
29	23900	18620	21940	28470	22600	25760	25720	19520	23200	26710	20470	24600
30	23620	18170	21330	27900	23480	25880	25880	20690	23180	24040	18890	22100
31	---	---	---	27730	22840	25580	26540	21400	23950	---	---	---
MONTH	25560	13040	20250	30010	17450	24320	29420	19430	---	28280	15430	22820

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

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.0	21.0	21.5	15.5	15.0	15.0	10.5	9.5	10.0	5.0	4.5	4.5
2	---	---	---	15.5	14.5	15.0	9.5	8.5	9.0	4.5	4.0	4.5
3	---	---	---	15.0	14.5	15.0	9.5	8.5	9.0	4.5	4.0	4.0
4	---	---	---	14.5	14.0	14.5	9.5	9.0	9.5	4.5	4.0	4.5
5	---	---	---	14.5	13.5	14.0	10.0	9.5	10.0	4.5	4.0	4.0
6	---	---	---	13.5	13.0	---	10.0	9.5	10.0	4.5	4.0	4.0
7	---	---	---	13.0	12.0	---	10.0	9.5	9.5	4.5	4.0	4.5
8	---	---	---	13.0	12.0	12.5	9.5	9.0	9.5	4.5	4.0	4.0
9	---	---	---	12.0	11.5	---	9.5	8.5	9.0	4.5	4.0	4.0
10	---	---	---	11.5	10.5	11.0	9.0	8.5	9.0	4.5	4.0	4.0
11	---	---	---	11.0	10.0	10.0	8.5	8.0	8.0	4.5	4.0	4.0
12	---	---	---	10.5	9.5	10.0	8.0	8.0	8.0	4.0	3.5	3.5
13	---	---	---	10.0	9.5	---	8.0	8.0	8.0	3.5	3.0	3.0
14	---	---	---	10.0	9.5	10.0	8.0	8.0	8.0	3.0	3.0	3.0
15	---	---	---	10.5	10.0	---	8.0	7.0	7.5	3.0	3.0	3.0
16	20.0	19.5	---	10.5	10.0	10.0	8.0	6.5	7.0	3.5	3.0	3.0
17	19.0	17.0	18.5	10.0	9.5	9.5	6.5	5.0	6.0	3.5	3.0	3.0
18	18.5	18.0	18.0	9.5	9.0	---	5.5	4.5	5.0	3.0	3.0	3.0
19	18.0	17.0	17.5	10.0	9.5	9.5	5.0	4.0	4.5	3.0	3.0	3.0
20	17.0	16.5	17.0	10.0	9.5	9.5	5.0	4.5	4.5	3.0	3.0	3.0
21	17.0	16.5	17.0	9.5	9.5	---	5.0	4.5	5.0	3.5	3.0	3.0
22	17.0	16.5	17.0	10.0	9.5	---	4.5	4.5	4.5	4.0	3.0	3.5
23	17.0	16.5	17.0	10.0	10.0	---	4.5	4.0	4.5	4.0	3.0	3.5
24	18.0	16.5	17.0	10.0	10.0	---	4.5	4.0	4.5	4.0	4.0	4.0
25	17.0	16.5	17.0	10.5	10.0	---	4.5	4.0	4.0	4.5	4.0	4.0
26	17.0	16.5	17.0	11.0	10.5	---	4.5	4.0	4.5	4.5	4.0	4.0
27	17.0	16.5	16.5	11.0	10.5	---	5.0	4.5	4.5	5.5	4.5	5.0
28	16.5	16.0	16.5	11.5	11.0	---	5.5	4.5	5.0	5.0	5.0	5.0
29	16.5	16.0	16.5	11.5	10.5	11.0	5.0	4.5	5.0	5.5	5.0	5.0
30	16.5	15.5	15.5	10.5	10.0	---	5.0	4.5	5.0	6.0	5.0	5.0
31	15.5	15.0	15.5	---	---	---	5.0	4.5	4.5	6.0	5.5	5.5
MONTH	---	---	---	15.5	9.0	---	10.5	4.0	7.0	6.0	3.0	4.0

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, N. J.--Continued

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

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

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.5	19.0	19.0	23.0	21.5	22.0	26.5	25.5	25.5	28.0	27.0	27.0
2	19.5	18.5	19.0	23.5	22.0	22.5	26.0	25.5	---	27.0	27.0	27.0
3	19.5	18.5	19.0	24.0	23.0	23.0	---	---	---	27.0	26.5	26.5
4	19.5	19.0	19.0	24.5	23.5	23.5	---	---	---	26.5	24.5	26.0
5	20.0	19.0	19.5	24.5	24.0	24.0	26.5	26.5	---	26.0	25.0	25.5
6	20.5	19.5	19.5	25.0	24.0	24.0	26.0	24.5	26.0	25.0	24.0	24.5
7	20.0	19.5	19.5	25.5	24.0	24.5	26.0	25.5	26.0	24.0	23.5	24.0
8	20.5	19.5	20.0	26.5	24.5	25.0	26.0	25.5	25.5	24.0	23.0	23.5
9	22.0	19.5	20.5	26.5	25.0	25.5	25.5	25.0	25.5	24.0	23.0	23.5
10	23.0	20.5	21.0	26.0	25.5	26.0	25.5	24.5	25.0	24.0	23.5	23.5
11	22.0	21.0	21.5	26.0	25.5	26.0	25.0	24.0	---	24.0	24.0	24.0
12	22.0	21.5	21.5	25.5	24.5	25.0	26.0	25.0	---	24.5	24.0	24.0
13	23.0	21.0	21.5	25.5	24.5	25.0	26.5	25.0	25.5	25.0	24.0	24.5
14	23.0	21.5	21.5	26.0	24.5	25.0	26.0	25.0	25.5	24.5	24.0	24.5
15	23.0	21.5	22.0	26.0	25.0	25.5	26.0	25.5	26.0	24.5	24.0	24.0
16	23.0	22.0	22.0	26.0	25.0	25.5	26.0	26.0	26.0	24.0	23.5	23.5
17	23.5	22.0	22.5	25.5	24.5	25.0	26.0	26.0	26.0	24.0	23.5	23.5
18	23.5	22.0	23.0	25.5	25.0	25.0	26.0	26.0	26.0	24.0	23.5	23.5
19	23.5	23.0	23.0	26.0	25.0	25.0	26.0	26.0	26.0	24.0	23.5	23.5
20	24.0	23.0	23.0	25.5	25.0	25.0	26.5	24.5	26.0	24.0	23.5	23.5
21	24.0	23.5	23.5	25.5	24.5	24.5	26.5	26.0	26.0	24.0	23.5	23.5
22	24.5	23.5	24.0	25.0	24.5	24.5	26.5	26.0	26.0	23.5	23.0	23.0
23	24.0	23.5	23.5	25.0	24.5	24.5	26.5	24.5	26.0	23.0	21.5	22.0
24	23.5	23.0	23.5	24.5	24.0	24.0	27.0	24.5	26.5	21.5	20.5	21.0
25	23.0	23.0	23.0	24.5	24.0	24.0	26.5	24.5	26.5	21.0	20.0	20.5
26	23.0	22.0	22.5	24.5	24.0	24.0	26.5	24.5	26.5	21.0	20.0	20.5
27	23.0	22.0	22.0	24.0	24.0	24.0	26.5	24.5	26.5	21.0	20.5	20.5
28	21.5	21.0	21.5	25.0	24.0	24.0	28.0	26.5	26.5	21.0	21.0	21.0
29	21.5	21.0	21.0	25.5	24.5	24.5	28.0	26.5	27.0	21.0	21.0	21.0
30	23.0	21.0	21.5	25.5	24.5	25.0	28.0	27.0	27.0	21.0	20.5	20.5
31	---	---	---	26.0	25.0	25.5	28.0	26.5	27.0	---	---	---
MONTH	24.5	18.5	21.5	26.5	21.5	24.5	28.0	24.0	26.0	28.0	20.0	23.5

01477800 SHELLPOT CREEK AT WILMINGTON, DEL.

LOCATION.--Lat 39°45'39", long 75°31'10", New Castle County, at gaging station 100 ft (30 m) east of intersection of 44th and Pine Streets in Clifton Park, 700 ft (213 m) downstream from highway bridge on North Market Street in Wilmington, 0.2 mile (0.3 km) downstream from Matson Run, and 2.3 miles (3.7 km) upstream from mouth.

DRAINAGE AREA.--7.46 sq mi (19.32 sq km).

PERIOD OF RECORD.--Chemical analyses: February to September 1974.

CHEMICAL ANALYSES, FEBRUARY TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
FEB.							
11...	1125	3.0	468	--	1.0	.5	--
MAR.							
01...	1320	17	335	--	9.0	7.0	--
25...	1045	4.2	265	--	-2.5	4.5	--
APR.							
15...	1025	6.9	224	--	15.0	13.0	--
MAY							
06...	1025	2.2	265	--	12.5	12.0	--
27...	1005	2.0	275	--	15.0	14.5	--
JULY							
08...	1015	1.4	240	--	25.0	22.0	--
29...	1220	1.1	260	8.0	26.5	23.0	10.9
AUG.							
19...	1400	.85	236	--	26.5	23.5	--
SEP.							
09...	1150	2.9	251	7.6	23.0	19.0	9.3
30...	1115	1.8	233	7.8	15.0	14.0	9.1

01479197 MILL CREEK AT MILL CREEK ROAD AT HOCKESSIN, DEL.

LOCATION.--Lat 39°46'49", long 75°41'50", New Castle County, at downstream side of bridge on Mill Creek Road, 0.5 mile (0.8 km) south of Hockessin, and about 7.6 mi (12.2 km) upstream from mouth.

DRAINAGE AREA.--3.69 sq mi (9.56 sq km), 0.15 sq mi (0.39 sq km) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: April to September 1974.

CHEMICAL ANALYSES, APRIL TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
APR.							
03...	1355	4.2	265	--	22.0	13.5	--
15...	1150	4.6	207	--	13.5	12.5	--
MAY							
06...	1135	2.7	204	--	15.5	12.5	--
27...	1120	1.8	204	--	18.0	14.0	--
JULY							
08...	1135	1.1	207	--	25.0	20.0	--
29...	1440	.38	189	7.5	26.5	21.0	8.3
AUG.							
19...	1620	.41	217	--	24.5	21.0	--
SEP.							
09...	1345	1.0	222	7.5	21.5	17.5	8.5
30...	1320	.80	221	7.8	17.0	13.0	9.0

01480000 RED CLAY CREEK AT WOODDALE, DEL.

LOCATION.--Lat 39°45'52", long 75°38'08", New Castle County, temperature recorder at gaging station on right bank 12 ft (4 m) upstream from bridge on State Highway 48, 0.3 mile (0.5 km) south of Wooddale, 2.3 miles (3.7 km) north of Marshallton, and 4.9 miles (7.9 km) upstream from mouth.

DRAINAGE AREA.--47.0 sq mi (121.7 sq km).

PERIOD OF RECORD.--Water temperatures: April 1953 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum, 25.5°C July 10, Aug. 29, 30; minimum, freezing point Dec. 18, 19, Jan. 14.

Period of record:
Water temperatures: Maximum, 30.5°C July 17, Aug. 2, 6, 1955, July 19, 1963; minimum, freezing point on many days during winter periods.

CHEMICAL ANALYSIS, FEBRUARY 1974 TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)
FEB. 12...	1220	53	244	6.0	1.5
MAR. 12...	1205	53	244	7.0	7.5
APR. 16...	1435	89	244	15.0	13.5
MAY 28...	1305	52	282	18.0	15.5
AUG. 19...	1530	30	306	26.0	23.5

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

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

01480000 RED CLAY CREEK AT WOODDALE, DEL.--Continued

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	6.5	20.0	17.5	18.5	18.0	22.0	19.5	23.5	21.5	25.0	23.5
2	10.5	8.5	18.5	15.0	18.5	17.5	22.5	20.0	23.0	22.0	24.5	23.0
3	13.5	9.0	15.0	13.0	18.0	16.5	23.5	21.5	23.0	21.5	23.0	22.0
4	15.0	13.0	15.5	13.0	19.5	17.0	25.0	22.5	24.0	22.5	22.0	19.0
5	14.5	13.5	15.0	12.0	20.5	18.0	24.5	22.0	23.0	22.0	19.0	17.5
6	13.5	11.0	13.5	12.0	20.0	18.0	22.5	21.5	22.5	21.0	18.5	18.0
7	11.5	8.5	13.5	11.0	20.0	18.5	23.5	21.5	22.0	20.5	18.0	16.5
8	11.5	10.5	14.0	10.5	19.0	18.5	24.0	22.0	21.0	20.0	18.5	17.0
9	11.0	9.0	14.0	12.5	21.5	18.5	25.0	22.5	21.5	20.5	19.5	18.0
10	10.5	7.5	15.5	13.5	23.5	21.0	25.5	24.0	22.0	21.0	20.0	18.5
11	12.0	8.5	16.0	13.5	24.0	22.5	24.5	22.5	21.5	19.5	20.5	19.5
12	13.5	10.5	16.0	15.0	23.0	20.5	22.5	20.5	21.5	19.0	21.0	20.0
13	13.5	12.5	15.0	13.0	21.0	19.0	22.0	20.0	21.0	20.0	22.0	20.5
14	13.5	12.5	16.5	12.5	20.5	18.5	23.5	20.5	23.0	20.5	21.5	19.5
15	14.5	13.0	20.0	15.5	21.0	19.0	24.5	23.0	24.0	21.5	19.5	17.0
16	14.5	12.0	20.5	18.0	21.5	20.5	24.5	22.5	23.0	21.0	18.0	17.0
17	14.5	11.0	21.5	18.0	21.5	19.5	23.0	21.0	24.0	22.5	18.5	17.5
18	15.0	11.5	21.5	19.0	21.0	19.5	23.0	21.5	24.0	22.0	18.5	17.5
19	14.5	11.5	20.5	18.0	21.5	19.0	24.5	22.5	23.5	22.5	19.0	18.0
20	13.5	9.5	18.0	16.0	22.0	21.0	24.0	22.0	24.0	22.0	20.5	18.5
21	15.0	10.5	18.0	15.5	23.0	21.5	22.0	20.0	23.0	21.5	20.5	20.0
22	17.0	13.5	20.0	16.5	23.0	21.0	22.0	20.0	23.0	22.5	20.0	17.0
23	17.0	15.5	20.0	19.0	22.0	18.0	21.5	20.0	24.0	22.5	17.0	14.0
24	15.5	13.0	19.5	17.5	18.0	17.5	21.0	20.0	24.5	23.0	14.0	12.5
25	14.5	11.5	19.0	17.5	18.0	17.5	21.0	19.5	24.0	21.5	13.0	12.0
26	16.0	12.0	18.0	16.0	17.5	17.0	21.0	20.5	22.0	21.5	14.5	13.0
27	16.5	12.5	16.5	15.5	18.0	17.0	23.0	21.0	23.0	21.5	15.5	14.0
28	17.0	13.5	16.5	15.0	17.5	16.5	23.5	22.0	24.0	22.5	17.0	15.0
29	19.5	15.5	17.0	16.0	18.0	16.0	24.5	22.5	25.5	23.5	18.0	16.5
30	20.0	17.0	18.5	17.0	20.5	17.5	23.5	22.0	25.5	24.5	17.5	15.5
31	---	---	18.5	17.5	---	---	23.5	21.5	24.5	23.5	---	---
MONTH	20.0	6.5	21.5	10.5	24.0	16.0	25.5	19.5	25.5	19.0	25.0	12.0

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA.

LOCATION.--Lat 39°52'09", long 75°35'35", Delaware County, at gaging station located on left bank 27 ft (8 m) upstream from Pennsylvania Railroad Bridge at Chadds Ford, and 1,200 ft (366 m) downstream from highway bridge on U. S. Highway 1. Sediment samples collected at Pennsylvania Railroad Bridge.

DRAINAGE AREA.--287 sq mi (743 sq km).

PERIOD OF RECORD.--Chemical analyses: March 1964 to September 1974.
Water temperatures: October 1964 to September 1974.
Sediment records: July 1963 to September 1974.

EXTREMES.--1973-74:
Specific conductance: Maximum, 326 micromhos Feb. 8; minimum, 127 micromhos Dec. 21.
Dissolved oxygen: Maximum, 15.3 mg/l Nov. 21; minimum, 5.4 mg/l Sept. 2.
pH: Maximum, 9.1 May 6, 7; minimum, 6.4 Jan. 29, 30, July 1.
Water temperatures: Maximum, 27.0°C July 10; minimum, freezing point Dec. 17.
Sediment concentrations: Maximum daily, 800 mg/l Dec. 21; minimum daily, 4 mg/l Nov. 20-22, 24, Dec. 4.
Sediment discharge: Maximum daily, 11,400 tons (10,300 t) Dec. 21; minimum daily, 1.5 tons (1.4 t) Nov. 20, 24.

Period of record:
Specific conductance (1965-74): Maximum, 445 micromhos Oct. 25, 1971; minimum, 71 micromhos June 23, 1972.
Dissolved oxygen (1971-74): Maximum, 16.5 mg/l Jan. 13, 1973; minimum, 7.7 May 31, 1972.
pH (1965-66, 1972-74): Maximum, 9.1 May 6, 7, 1974; minimum, 6.4 Jan. 29, 30, July 1, 1974.
Water temperatures: Maximum, 29.0°C Aug. 9, 17, 1965; minimum daily, freezing point on many days during winter periods.
Sediment concentrations: Maximum daily, 2,000 mg/l (estimated) Feb. 8, 1965; minimum daily, 1 mg/l on many days.
Sediment discharge: Maximum daily, 20,000 tons (18,100 t) (estimated) Feb. 8, 1965; minimum daily, 0 tons (0 t) Oct. 7, 8, 1967.

REMARKS.--Unpublished records of specific conductance, pH, and temperature of sediment samples available in the WRD district office at Harrisburg, Pa. Sediment data from 01481500 Brandywine Creek at Wilmington, Del., are used in computation of sediment records. Streamflow records for the current water year are published in Part 1 of this report.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)	TOTAL INORGANIC CARBON (C) (MG/L)
OCT.										
01...	1100	179	220	7.2	17.5	9.6	210	11	--	14
09...	1100	157	235	7.1	16.0	9.0	190	--	--	--
10...	0800	164	233	7.5	--	--	--	--	--	--
15...	1300	143	250	7.4	16.0	11.2	240	11	--	15
23...	1130	103	265	7.2	12.0	13.2	E110	.0	--	17
29...	1200	194	260	7.4	12.5	11.4	E510	3.0	--	--
NOV.										
05...	1400	179	260	7.0	9.5	11.4	190	4.0	--	--
11...	1430	150	260	7.0	6.0	13.2	310	2.5	--	--
19...	1300	140	270	7.3	7.5	12.4	150	5.0	--	--
26...	1400	143	260	7.0	11.0	11.3	390	7.5	--	--
DEC.										
03...	1400	143	260	7.6	5.0	13.8	550	4.0	--	--
10...	1130	555	185	7.2	6.5	11.8	E1900	10	--	--
18...	1045	230	240	7.4	1.0	14.2	360	4.0	--	--
26...	1030	415	240	7.4	5.0	12.7	800	5.0	--	--
JAN.										
07...	0930	470	220	7.0	3.5	13.2	630	.5	--	--
15...	1330	470	245	7.0	3.5	13.5	170	--	.5	--
21...	1030	465	240	7.4	5.0	13.0	200	2.0	--	--
28...	1045	540	220	7.6	7.5	11.8	600	2.5	--	--
FEB.										
04...	1115	440	255	7.1	3.0	13.6	E36000	8.0	--	--
12...	1330	366	--	--	4.5	--	--	--	2.0	--
19...	1000	350	240	7.3	4.0	12.4	--	--	--	--
26...	1100	376	250	7.3	2.0	13.7	--	--	2.5	--
MAR.										
04...	1600	376	220	8.2	11.0	12.4	E44	--	3.5	--
11...	1500	360	220	7.6	8.5	12.2	270	--	4.0	--
18...	1145	385	210	7.1	5.0	13.0	E700	--	16	--
25...	1330	390	225	7.1	6.5	12.2	E7800	--	6.0	--
APR.										
01...	1300	820	190	7.3	6.5	11.8	2100	--	10	--
08...	1400	540	210	7.5	10.5	10.8	165	--	1.0	--
16...	1225	685	195	6.8	11.5	10.3	--	--	4.5	--
23...	1230	645	210	7.4	15.5	8.7	130	--	7.0	--
29...	1135	460	210	7.3	16.0	9.3	230	--	7.0	--
MAY										
06...	1700	390	215	8.3	14.0	11.4	1150	--	7.5	--

E ESTIMATED

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	DISSOLVED ORGANIC CARBON (C) (MG/L)
MAY									
13...	1540	1056	150	6.5	14.0	9.2	E21000	--	--
28...	1400	342	230	7.5	15.5	9.1	E130	--	--
JUNE									
03...	1030	395	220	6.8	16.0	8.4	E1800	--	--
10...	1130	290	250	7.5	22.0	7.6	E1600	2.7	3.5
17...	1600	304	250	7.8	23.0	8.2	1300	2.4	2.4
26...	1045	445	200	7.0	16.5	8.4	5300	--	--
JULY									
01...	1400	366	240	6.4	22.0	7.6	--	3.3	2.4
08...	1310	264	220	7.0	24.6	8.0	560	--	--
15...	1500	214	245	8.1	26.0	8.4	--	--	--
23...	1630	181	250	7.9	22.0	8.4	--	--	3.6
29...	1315	189	240	7.7	24.5	8.5	--	3.7	--
AUG.									
05...	1130	309	230	7.3	23.5	6.6	2300	3.9	5.2
12...	1440	185	270	7.6	22.5	8.8	E3700	3.1	2.3
20...	1140	177	240	7.3	22.5	7.0	780	5.0	--
26...	1525	189	225	6.8	23.0	7.3	400	--	2.7
SEP.									
04...	1125	100	165	6.8	20.0	7.2	--	--	--
09...	1250	254	220	7.0	20.5	7.9	5800	7.8	5.6
17...	1115	160	260	7.0	18.0	8.9	E2800	4.4	3.5
23...	1130	164	255	6.7	17.0	9.0	E15000	3.1	--
30...	1250	300	235	7.2	16.5	8.3	--	--	--

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

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	240	228	231	227	211	220	252	236	242	231	227	229
2	234	218	227	229	227	228	254	244	249	230	225	227
3	227	215	222	232	227	230	257	247	252	232	220	226
4	230	220	223	235	229	232	259	253	256	246	216	227
5	238	228	233	261	231	244	254	194	234	262	228	242
6	239	230	235	262	254	258	198	186	---	235	229	233
7	242	235	239	265	254	258	231	200	214	231	225	229
8	242	234	237	262	256	259	244	232	238	227	223	225
9	240	233	235	---	---	---	239	186	217	224	199	216
10	238	230	---	---	---	---	192	173	180	289	220	233
11	236	229	---	---	---	---	217	193	207	316	271	296
12	237	228	233	257	254	---	235	216	225	272	219	230
13	244	233	238	262	252	258	235	226	231	230	221	226
14	241	233	237	257	252	255	225	199	215	233	227	230
15	247	237	241	259	252	255	213	204	207	234	228	231
16	248	240	244	259	251	254	228	199	221	241	228	233
17	246	239	243	256	250	254	238	222	228	235	221	230
18	244	241	243	260	251	256	256	225	242	228	217	223
19	247	243	244	263	256	260	261	239	255	235	221	227
20	249	240	246	262	255	259	287	254	269	257	230	240
21	251	242	248	259	251	255	263	127	167	230	172	209
22	251	248	250	258	251	256	198	141	173	210	174	191
23	258	242	249	261	252	257	226	198	211	231	199	222
24	248	239	243	251	240	246	214	209	212	235	225	229
25	249	243	246	257	242	252	215	208	210	241	212	228
26	245	240	---	256	251	253	232	147	206	216	213	214
27	252	247	---	254	251	253	178	139	156	218	214	216
28	248	243	---	260	244	254	213	180	201	217	212	213
29	245	171	---	249	240	245	227	214	222	217	213	215
30	196	170	184	240	231	234	232	224	228	221	213	217
31	211	195	203	---	---	---	234	227	230	219	199	215
MONTH	258	170	235	265	211	249	287	127	220	316	172	227

E ESTIMATED

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA.--Continued

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

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	233	199	222	270	256	263	187	171	179	218	210	214
2	229	224	226	261	248	253	200	188	197	217	203	207
3	252	226	235	253	249	251	203	197	200	216	206	212
4	251	229	241	256	217	242	206	185	200	220	212	216
5	276	230	255	228	219	224	189	172	181	221	215	218
6	258	232	241	232	225	228	194	184	189	220	216	219
7	249	230	236	228	221	225	208	194	203	224	219	222
8	326	251	301	229	223	226	208	203	206	227	209	222
9	257	243	248	230	221	227	202	146	164	206	197	202
10	265	243	---	224	218	222	180	162	174	230	207	215
11	---	---	---	220	211	215	190	180	187	212	202	209
12	---	---	---	222	213	219	199	190	197	221	170	211
13	---	---	---	230	221	226	199	131	184	164	128	147
14	---	---	---	228	224	226	168	130	148	203	166	188
15	229	226	---	232	227	229	180	170	176	214	201	208
16	230	223	227	234	214	227	199	180	190	224	213	217
17	230	221	227	219	209	215	201	195	198	228	221	224
18	229	219	224	219	203	210	200	194	198	231	224	227
19	230	221	225	227	210	224	202	197	199	228	221	225
20	259	227	242	232	222	227	202	197	199	231	223	226
21	240	224	229	222	197	214	203	197	200	229	224	227
22	230	221	226	195	169	180	201	196	199	233	223	228
23	239	228	233	208	188	201	207	199	204	231	214	225
24	237	229	232	211	209	210	202	198	200	220	214	218
25	237	227	232	217	211	215	206	201	204	229	220	224
26	281	229	242	217	212	215	208	203	205	235	230	232
27	288	262	272	222	217	219	206	200	204	232	225	229
28	280	261	270	219	215	217	212	204	207	231	225	229
29	---	---	---	226	214	220	219	206	213	235	228	231
30	---	---	---	213	166	200	222	215	218	235	230	232
31	---	---	---	172	150	161	---	---	---	235	230	232
MONTH	326	199	240	270	150	220	222	130	194	235	128	217

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	238	224	231	235	231	---	263	236	251	257	246	253
2	230	210	215	239	224	231	261	244	256	271	253	258
3	224	220	---	232	223	228	245	215	225	270	238	255
4	224	220	---	235	227	230	223	200	217	246	148	174
5	230	221	226	241	160	214	245	215	233	230	184	209
6	228	223	226	230	200	222	260	237	247	247	218	238
7	231	223	227	230	220	227	264	257	261	237	201	221
8	240	227	234	239	216	226	271	256	263	224	199	210
9	235	227	231	233	215	225	276	263	268	245	224	237
10	247	232	240	238	226	231	291	270	279	261	244	252
11	250	238	245	234	224	228	282	264	270	263	253	258
12	245	238	242	241	225	232	286	273	279	280	258	268
13	246	239	242	240	235	238	287	276	281	276	258	266
14	244	235	239	237	230	233	286	279	281	267	254	260
15	239	234	237	234	230	---	285	273	277	262	252	257
16	246	233	240	---	---	---	286	276	280	264	245	252
17	248	225	238	---	---	---	288	267	281	264	259	261
18	241	232	237	244	234	---	255	172	186	269	256	261
19	245	233	240	251	237	243	235	191	211	277	265	269
20	251	243	246	241	231	236	260	236	250	281	264	272
21	261	198	240	239	228	233	264	255	260	274	260	267
22	236	175	192	242	232	235	278	266	271	266	259	262
23	187	164	176	249	235	241	275	270	271	258	246	252
24	203	188	199	251	238	245	275	265	269	253	243	247
25	219	192	206	245	235	241	243	150	204	263	252	255
26	209	188	198	238	225	231	235	214	229	278	264	270
27	216	209	213	244	231	236	260	226	244	281	264	273
28	220	209	214	244	234	239	266	260	262	275	191	262
29	218	213	---	254	233	241	273	255	262	195	165	176
30	---	---	---	248	226	236	290	270	275	236	191	215
31	---	---	---	233	216	223	289	258	272	---	---	---
MONTH	261	164	226	254	160	233	291	150	255	281	148	247

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA.--Continued

pH (UNITS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.4	7.1	7.3	7.2	6.7	6.9	7.2	7.0	7.1	---	---	---
2	7.5	7.3	7.4	7.1	6.7	6.9	7.2	7.0	7.1	---	---	---
3	7.4	7.3	---	7.0	6.8	6.9	7.7	7.0	7.3	---	---	---
4	7.4	7.3	---	7.0	6.8	6.9	7.7	7.5	7.6	---	---	---
5	7.4	7.2	---	7.2	6.9	7.0	7.7	7.6	---	---	---	---
6	7.4	7.1	7.3	7.1	7.0	7.0	---	---	---	---	---	---
7	7.4	7.1	7.3	7.1	7.0	7.0	---	---	---	7.0	6.9	---
8	7.5	7.3	7.4	7.3	7.0	7.0	---	---	---	7.0	6.9	7.0
9	7.5	7.0	7.3	7.2	6.9	---	---	---	---	6.9	6.8	6.9
10	7.2	7.0	---	---	---	---	7.7	7.2	---	6.9	6.8	6.8
11	7.1	6.9	---	---	---	---	7.7	7.3	7.5	6.8	6.8	6.8
12	7.4	6.7	7.0	7.2	7.0	---	7.7	7.3	7.5	6.9	6.8	6.9
13	7.3	6.9	7.1	7.2	7.0	7.1	8.3	7.3	7.6	7.0	6.9	6.9
14	7.3	7.1	7.2	7.2	6.9	7.1	8.2	7.6	7.9	7.0	7.0	7.0
15	7.4	6.9	7.2	7.2	6.9	7.1	7.7	7.3	7.6	7.2	6.9	7.1
16	7.4	7.1	7.2	7.2	6.9	7.1	7.6	7.3	7.5	7.2	7.0	7.2
17	7.3	7.0	7.2	7.2	7.0	7.1	7.8	7.5	7.7	7.3	7.2	7.2
18	7.3	7.0	7.2	7.3	6.9	7.1	7.7	7.4	---	7.5	7.2	7.2
19	7.3	6.9	7.2	7.3	7.0	---	---	---	---	7.3	7.0	7.2
20	7.5	7.0	7.3	---	---	---	---	---	---	7.2	7.2	7.2
21	7.4	7.0	7.2	---	---	---	---	---	---	7.7	7.0	7.3
22	7.1	6.8	7.0	---	---	---	---	---	---	7.8	7.6	---
23	7.8	6.8	7.4	---	---	---	---	---	---	---	---	---
24	7.8	7.5	7.7	---	---	---	---	---	---	---	---	---
25	7.7	7.5	7.6	---	---	---	---	---	---	---	---	---
26	7.8	7.6	7.7	7.1	7.0	---	7.4	7.3	---	---	---	---
27	7.7	7.3	7.5	7.1	6.9	7.1	---	---	---	---	---	---
28	7.7	7.3	7.5	7.8	7.0	7.4	---	---	---	6.5	6.5	---
29	8.9	7.5	8.1	7.0	6.9	7.0	---	---	---	6.6	6.4	6.5
30	7.6	6.7	7.1	7.3	6.9	7.0	---	---	---	6.8	6.4	6.6
31	7.2	6.7	6.9	---	---	---	---	---	---	7.0	6.8	6.9
MONTH	8.9	6.7	7.3	---	---	---	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.0	6.8	6.9	8.0	7.1	7.6	7.3	6.9	7.1	8.0	7.0	7.3
2	6.9	6.8	6.9	7.7	7.1	7.5	7.4	7.1	7.2	8.0	7.0	7.4
3	6.9	6.8	6.9	8.3	7.5	7.8	7.5	7.2	7.3	8.0	7.2	7.6
4	7.0	6.9	6.9	8.6	7.3	8.0	7.9	7.2	7.6	8.6	7.1	7.7
5	7.1	6.9	7.0	8.4	7.6	7.9	8.0	7.9	8.0	9.0	7.8	8.3
6	7.1	6.9	7.0	8.2	7.5	7.8	7.9	7.1	7.3	9.1	8.2	8.7
7	7.1	6.9	7.0	8.4	7.5	8.0	7.7	7.3	7.5	9.1	8.2	8.6
8	7.1	7.0	7.1	8.2	7.6	7.9	7.6	7.4	7.5	8.4	7.9	8.1
9	7.1	7.0	7.1	7.8	7.5	7.6	7.4	7.1	7.2	8.6	7.9	8.1
10	7.1	7.0	---	8.2	7.4	7.7	7.3	7.2	7.2	8.5	7.7	8.1
11	---	---	---	8.0	7.5	7.7	8.2	7.2	7.6	8.3	7.7	7.9
12	---	---	---	8.0	7.1	7.6	8.1	7.4	7.9	8.0	7.1	7.5
13	---	---	---	8.0	7.3	7.7	7.4	7.0	7.2	6.9	6.6	6.8
14	---	---	---	8.0	7.4	7.8	7.2	7.0	---	6.8	6.5	6.7
15	7.3	7.2	---	8.2	7.4	7.8	7.5	7.2	7.3	7.0	6.7	6.9
16	7.1	6.9	7.0	8.0	7.1	7.5	7.1	6.8	---	7.0	6.6	6.9
17	7.2	6.8	7.0	7.2	7.0	7.1	7.1	6.8	6.9	7.2	6.8	7.0
18	7.3	6.9	7.1	7.8	7.0	7.4	7.3	6.8	7.0	7.2	6.9	7.1
19	7.6	7.1	7.4	7.8	7.1	7.5	7.1	6.8	7.0	7.1	7.0	7.1
20	7.7	7.3	7.5	8.0	7.2	7.6	7.7	6.9	7.2	7.8	7.0	7.4
21	8.0	7.4	7.7	8.0	6.9	7.3	7.9	6.9	7.4	8.0	7.4	7.7
22	7.8	7.3	7.5	7.0	6.8	6.9	8.0	6.9	7.5	8.2	7.5	7.8
23	8.0	7.4	7.6	7.2	6.9	7.0	8.1	7.0	7.6	7.8	7.4	7.5
24	8.0	7.5	7.7	7.3	6.9	7.1	8.2	7.3	7.7	7.6	7.4	7.5
25	7.9	7.4	7.7	7.4	7.0	7.2	8.4	7.4	7.9	7.6	7.4	7.5
26	8.0	7.5	7.7	7.5	7.0	7.2	8.3	7.4	7.9	7.6	7.4	7.5
27	7.9	7.2	7.5	7.7	7.1	7.4	8.3	7.3	7.8	7.5	7.4	7.5
28	7.7	7.1	7.4	7.9	7.0	7.5	8.4	7.3	7.9	7.5	7.0	7.3
29	---	---	---	7.7	7.2	7.3	8.2	7.3	7.8	7.5	7.4	7.4
30	---	---	---	7.1	6.9	7.0	8.2	7.3	7.8	7.6	7.3	7.4
31	---	---	---	6.9	6.8	6.9	---	---	---	7.5	7.4	7.5
MONTH	8.0	6.8	7.3	8.6	6.8	7.5	8.4	6.8	7.5	9.1	6.5	7.5

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA.--Continued

pH (UNITS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.4	7.3	7.3	6.7	6.4	---	7.7	7.3	7.5	7.2	6.8	7.0
2	7.3	7.3	7.3	6.7	6.5	6.6	7.7	7.3	7.5	7.0	6.8	6.9
3	7.5	7.1	7.4	6.7	6.5	6.6	7.4	7.2	7.3	7.1	6.8	6.9
4	7.8	7.3	7.5	6.7	6.5	---	7.3	7.2	7.3	7.1	6.7	6.9
5	8.0	7.7	7.8	---	---	---	7.6	7.2	7.4	7.2	7.1	7.1
6	8.0	7.4	7.7	---	---	---	7.5	7.3	7.4	7.3	7.2	7.3
7	7.8	7.4	7.6	---	---	---	7.5	7.4	7.4	7.4	7.2	7.3
8	7.7	7.6	7.7	---	---	---	7.6	7.4	7.5	7.5	7.2	7.3
9	7.9	7.6	7.7	---	---	---	7.6	7.4	7.5	7.4	7.0	7.3
10	8.2	7.7	7.9	8.0	6.9	---	7.7	7.4	7.6	7.3	7.1	7.2
11	8.1	7.5	7.8	7.3	6.8	7.1	7.6	7.3	7.5	7.3	7.2	7.3
12	8.2	7.3	7.6	7.5	6.8	7.1	7.8	7.4	7.6	7.3	7.2	7.2
13	8.0	7.4	7.7	7.5	6.9	7.2	7.9	7.5	7.7	7.3	7.2	7.2
14	7.8	7.0	7.3	7.6	6.9	7.2	8.1	7.5	7.8	7.2	7.1	7.2
15	7.4	6.8	7.1	7.3	6.9	---	8.3	7.6	8.0	7.2	7.0	7.1
16	7.2	6.7	7.0	---	---	---	8.3	7.6	8.0	7.3	7.0	7.2
17	8.0	6.8	7.6	---	---	---	8.1	7.5	7.9	7.4	7.0	7.2
18	7.8	7.1	7.6	8.3	7.9	---	7.4	7.2	7.3	7.5	7.0	7.3
19	7.8	7.0	7.5	8.2	7.6	7.8	7.4	7.2	7.3	7.6	7.0	7.4
20	7.7	7.4	7.6	7.9	7.4	7.6	7.6	7.4	7.5	7.6	7.1	7.4
21	7.7	7.4	7.5	7.8	7.3	7.6	7.5	7.3	7.4	7.5	7.1	7.3
22	7.4	7.3	7.4	8.0	7.4	7.7	7.3	7.1	7.3	7.2	7.0	7.1
23	7.4	7.1	---	8.0	7.5	7.7	7.3	7.1	7.2	7.2	6.8	7.0
24	7.1	7.0	---	7.8	7.3	7.4	7.4	7.0	7.2	7.2	6.8	7.0
25	7.1	7.0	---	7.6	7.3	7.4	7.0	6.7	6.8	7.2	6.8	7.0
26	---	---	---	7.7	7.3	7.4	6.9	6.7	6.8	7.3	6.8	7.1
27	---	---	---	7.8	7.4	7.5	6.9	6.7	6.8	7.3	6.9	7.2
28	---	---	---	7.9	7.4	7.6	7.1	6.8	6.9	7.2	6.7	7.0
29	---	---	---	8.2	7.4	7.8	7.2	6.8	7.0	6.8	6.6	6.7
30	---	---	---	7.9	7.3	7.5	7.1	6.8	7.0	7.4	6.6	7.1
31	---	---	---	7.5	7.2	7.4	7.1	6.8	7.0	---	---	---
MONTH	8.2	6.7	---	---	---	---	8.3	6.7	7.4	7.6	6.6	7.1

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.0	8.7	9.4	12.1	10.9	11.8	---	---	---	---	---	---
2	9.7	8.5	9.1	12.4	11.6	12.0	---	---	---	---	---	---
3	9.1	8.2	8.6	11.8	11.3	11.6	13.7	12.9	---	---	---	---
4	9.0	7.8	8.4	12.3	11.6	12.0	13.6	12.3	13.0	---	---	---
5	8.8	7.6	8.2	12.9	12.1	---	12.2	9.2	10.8	---	---	---
6	9.3	8.0	8.7	---	---	---	10.1	9.2	9.6	---	---	---
7	9.6	8.5	9.1	---	---	---	11.2	10.2	10.9	13.2	12.6	---
8	9.5	8.2	9.0	---	---	---	11.7	11.2	11.6	13.2	11.9	12.6
9	11.6	8.2	9.9	---	---	---	11.8	11.2	11.6	---	---	---
10	11.5	10.8	---	---	---	---	11.7	11.0	11.3	---	---	---
11	---	---	---	---	---	---	11.5	10.8	11.2	---	---	---
12	---	---	---	13.4	12.8	---	12.3	11.4	11.9	---	---	---
13	---	---	---	13.3	12.1	12.8	12.4	11.8	12.1	---	---	---
14	---	---	---	12.0	10.9	11.5	11.6	10.0	10.7	---	---	---
15	11.2	10.3	---	11.1	9.7	10.4	10.8	10.3	10.6	13.7	13.1	---
16	11.7	9.7	10.7	10.1	9.0	9.6	11.1	10.6	10.8	13.1	12.0	12.6
17	12.6	10.3	11.5	11.7	9.8	10.8	12.4	11.2	11.9	12.0	11.7	11.8
18	13.1	11.4	12.3	12.8	11.1	12.1	12.3	12.2	---	13.4	11.9	12.7
19	13.9	12.0	13.0	13.2	11.8	12.5	---	---	---	13.5	12.4	13.0
20	13.5	12.3	12.9	15.0	12.9	13.9	---	---	---	12.4	12.2	12.3
21	13.5	11.4	12.7	15.3	13.7	14.4	---	---	---	12.4	12.0	---
22	13.6	11.9	12.7	14.6	13.0	13.6	---	---	---	---	---	---
23	13.7	12.2	12.9	14.3	12.1	13.1	---	---	---	---	---	---
24	13.5	12.1	12.8	13.7	12.2	12.7	---	---	---	---	---	---
25	13.8	12.1	12.9	13.1	11.5	12.1	---	---	---	---	---	---
26	13.4	11.9	12.6	11.5	10.9	11.2	---	---	---	---	---	---
27	13.3	10.2	12.0	11.4	10.7	11.0	---	---	---	---	---	---
28	13.6	11.4	12.4	10.6	9.7	10.2	---	---	---	---	---	---
29	11.8	9.4	11.2	9.9	9.7	---	---	---	---	---	---	---
30	11.6	10.6	11.2	---	---	---	---	---	---	---	---	---
31	12.3	11.6	12.1	---	---	---	---	---	---	---	---	---
MONTH	13.9	7.6	11.1	---	---	---	---	---	---	---	---	---

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	12.0	11.0	---	10.0	8.7	9.3
2	---	---	---	---	---	---	11.2	10.4	10.9	11.0	8.9	9.8
3	---	---	---	---	---	---	10.6	9.9	10.4	11.4	8.7	10.0
4	13.7	12.8	---	---	---	---	9.7	8.8	9.2	11.4	9.0	10.1
5	14.6	12.8	13.5	---	---	---	9.2	8.7	9.0	12.2	9.6	10.8
6	14.9	13.1	13.6	---	---	---	10.4	9.3	9.8	12.3	9.8	11.0
7	13.0	12.3	---	---	---	---	11.2	10.3	10.8	10.7	9.0	9.9
8	---	---	---	---	---	---	10.6	9.2	10.0	9.2	8.1	8.7
9	---	---	---	---	---	---	9.8	8.9	9.3	9.7	7.7	8.6
10	---	---	---	---	---	---	9.6	8.6	9.1	8.6	7.4	7.9
11	---	---	---	12.3	11.3	---	10.1	9.2	9.6	9.9	7.8	8.8
12	---	---	---	12.7	10.3	11.4	9.9	9.1	9.5	8.4	7.6	8.0
13	---	---	---	13.2	11.0	12.1	9.0	8.3	8.6	9.1	8.9	---
14	---	---	---	13.7	12.0	12.7	9.2	8.6	8.9	9.5	8.4	9.1
15	---	---	---	13.5	11.5	12.3	9.7	8.8	9.3	8.7	7.8	8.3
16	---	---	---	---	---	---	10.7	9.5	9.9	8.7	7.4	7.9
17	---	---	---	---	---	---	10.3	8.8	9.6	8.4	6.9	7.7
18	---	---	---	13.0	11.9	---	10.2	8.6	9.4	8.2	6.5	7.4
19	---	---	---	12.7	11.0	11.8	11.4	9.2	10.0	8.7	7.0	7.7
20	---	---	---	12.5	10.6	11.6	12.6	10.9	11.6	9.6	7.6	8.6
21	---	---	---	11.8	9.9	10.7	11.5	9.6	10.6	9.9	8.1	9.0
22	---	---	---	13.2	11.2	12.5	10.3	8.1	9.1	9.9	7.9	8.8
23	---	---	---	13.2	12.4	12.8	8.1	7.0	---	7.9	7.1	7.5
24	---	---	---	12.2	10.9	11.6	---	---	---	8.4	7.4	7.8
25	---	---	---	12.7	11.6	12.2	---	---	---	8.6	7.4	8.0
26	---	---	---	12.8	11.3	12.2	11.6	9.9	---	8.8	7.8	8.3
27	---	---	---	11.9	10.5	11.1	11.7	9.1	10.3	9.0	8.0	8.4
28	---	---	---	---	---	---	11.5	8.9	10.1	9.2	8.3	8.7
29	---	---	---	---	---	---	10.0	8.2	9.1	8.5	7.9	8.2
30	---	---	---	---	---	---	11.1	7.9	9.4	8.4	7.6	8.0
31	---	---	---	---	---	---	---	---	---	8.0	7.3	7.7

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.4	7.0	7.3	7.6	7.1	---	8.4	6.3	7.3	7.5	5.6	6.4
2	7.6	6.9	7.3	7.8	6.9	7.3	8.1	6.3	7.0	6.5	5.4	6.0
3	8.6	7.6	---	8.0	6.7	7.3	6.7	5.9	6.3	8.1	6.3	7.3
4	8.7	7.9	---	8.2	6.5	7.3	6.5	5.7	6.0	7.8	7.0	7.3
5	8.7	7.4	8.0	7.6	6.5	6.8	7.5	5.8	6.5	7.9	7.4	7.6
6	8.9	7.3	8.0	7.9	6.6	7.2	7.4	6.2	6.8	7.7	7.4	7.6
7	8.6	7.3	7.9	8.2	6.6	7.3	7.3	6.3	6.7	8.2	7.8	8.0
8	8.6	7.5	7.9	8.4	6.6	7.5	7.7	6.3	7.1	7.9	7.4	7.7
9	8.7	7.4	8.0	8.5	6.2	7.3	7.6	6.5	7.0	8.0	7.2	7.6
10	8.0	6.5	7.3	8.6	6.8	7.8	7.6	6.3	7.1	8.2	7.4	7.7
11	8.4	5.8	7.0	8.7	6.2	7.5	8.0	6.6	7.2	8.1	7.3	7.7
12	8.4	6.2	7.2	9.1	6.8	7.8	8.9	6.7	7.7	8.3	7.2	7.6
13	8.3	5.8	6.9	9.5	7.0	8.2	8.9	7.1	7.9	8.3	7.0	7.6
14	8.5	6.2	7.1	9.5	6.9	8.1	8.8	6.8	7.8	8.1	6.8	7.4
15	8.9	6.7	7.7	7.9	6.3	---	9.5	6.6	8.1	9.1	7.3	8.2
16	7.0	6.2	6.5	---	---	---	9.8	6.8	8.2	9.6	7.9	8.7
17	8.0	6.9	---	---	---	---	8.6	6.1	7.3	9.9	7.8	8.8
18	7.9	6.4	7.1	9.0	7.4	---	6.4	5.5	6.0	9.8	7.8	8.8
19	8.1	6.5	7.3	8.2	6.2	7.0	6.5	5.7	6.0	10.1	7.7	8.9
20	7.7	6.3	6.9	7.9	5.7	6.7	7.6	6.0	6.9	10.0	7.6	8.7
21	7.3	5.9	6.5	8.0	5.9	6.9	8.1	6.5	7.2	9.0	6.8	7.9
22	6.2	5.8	6.0	7.8	6.0	6.8	7.7	6.5	7.0	8.7	6.7	7.7
23	7.0	6.0	6.5	8.2	5.9	6.9	8.1	6.3	7.1	10.1	7.3	8.7
24	7.9	7.0	7.5	7.3	6.5	6.8	8.5	6.4	7.3	11.1	8.8	9.9
25	8.2	7.6	7.9	8.1	6.6	7.3	6.8	6.5	6.7	11.4	9.4	10.3
26	8.3	8.2	---	7.9	6.6	7.2	7.4	6.3	6.8	11.2	9.1	10.0
27	---	---	---	8.0	6.5	7.2	7.9	6.7	7.2	10.5	8.4	9.3
28	---	---	---	7.9	6.1	6.9	8.2	6.6	7.2	9.2	7.6	8.2
29	---	---	---	9.2	6.6	7.8	8.3	6.2	7.1	7.9	7.2	7.6
30	---	---	---	7.5	6.5	7.0	7.5	5.8	6.6	8.4	7.6	8.1
31	---	---	---	8.0	6.2	7.0	7.5	5.6	6.5	---	---	---
MONTH	8.9	5.8	---	9.5	5.7	7.3	9.8	5.5	7.0	11.4	5.4	8.1

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA.--Continued

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

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

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.0	5.5	6.0	8.5	6.5	7.0	8.0	5.5	6.5	15.0	13.0	13.5
2	5.5	4.5	5.0	8.0	6.0	6.5	10.0	7.0	8.5	15.0	11.5	13.5
3	4.0	3.0	3.5	9.5	6.5	7.5	13.5	9.0	11.0	14.5	12.0	13.0
4	3.0	2.0	---	12.0	9.0	10.0	15.0	13.5	14.0	13.0	11.0	12.0
5	---	---	---	12.0	11.5	12.0	15.0	13.5	14.5	13.0	10.0	11.5
6	---	---	---	11.5	10.0	10.5	13.5	10.0	11.5	13.5	10.0	11.5
7	---	---	---	13.0	9.5	11.0	11.0	8.5	10.0	13.5	12.0	13.0
8	---	---	---	12.0	10.5	11.5	11.0	10.0	10.5	15.5	13.0	14.0
9	---	---	---	10.5	8.0	9.0	10.0	8.0	8.5	16.5	13.5	15.0
10	---	---	---	10.0	8.0	8.5	9.5	6.0	7.5	16.0	15.0	15.5
11	---	---	---	9.0	6.5	8.0	11.0	8.0	9.5	16.5	12.0	14.0
12	---	---	---	8.5	7.0	8.0	13.5	10.0	11.5	16.5	14.5	16.0
13	---	---	---	7.0	5.0	5.5	14.5	13.0	13.5	14.5	13.0	13.5
14	---	---	---	6.0	4.0	5.0	14.5	13.0	14.0	16.5	12.0	14.0
15	4.5	3.5	---	6.5	5.0	5.5	14.5	13.5	14.0	20.0	15.5	18.0
16	3.5	1.5	2.0	8.5	6.5	7.5	14.5	11.0	13.0	21.5	18.5	20.0
17	4.0	2.0	3.0	8.0	5.5	6.5	14.5	11.5	13.0	23.0	19.5	21.0
18	4.0	2.0	3.0	8.0	3.5	5.5	15.0	10.5	13.5	22.0	20.5	21.5
19	5.0	3.5	4.0	9.0	6.5	7.5	15.0	11.5	13.0	21.0	19.0	19.5
20	6.5	5.0	5.5	10.0	8.0	9.0	13.5	9.5	11.5	19.0	16.5	18.0
21	6.5	4.5	5.5	10.0	8.5	9.0	15.5	11.0	13.5	19.0	16.0	17.5
22	10.0	6.0	7.5	8.5	5.5	7.0	18.0	14.5	16.0	20.5	17.0	18.5
23	10.0	6.5	8.0	10.0	6.0	7.5	18.0	15.0	16.0	20.5	19.5	20.0
24	6.5	4.5	5.5	11.5	10.0	10.5	14.5	11.5	12.5	20.5	18.5	19.5
25	5.5	3.5	4.5	10.5	6.5	8.0	13.5	10.0	12.0	19.5	18.0	19.0
26	4.0	1.0	3.0	8.0	5.0	6.5	14.5	11.0	13.0	18.5	16.5	17.0
27	4.0	1.5	3.0	9.0	6.5	8.0	15.5	12.0	14.0	16.5	15.5	15.5
28	6.5	3.5	5.0	10.5	8.5	9.5	16.5	13.0	15.0	16.5	14.5	15.5
29	---	---	---	10.0	6.5	8.0	19.5	15.5	17.5	16.5	16.0	16.0
30	---	---	---	6.0	6.0	6.0	18.5	15.0	16.0	19.0	16.5	17.5
31	---	---	---	6.0	4.5	5.0	---	---	---	19.0	18.0	18.5
MONTH	---	---	---	13.0	3.5	8.0	19.5	5.5	12.5	23.0	10.0	16.0

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA.--Continued

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

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.0	18.0	18.5	23.5	20.5	22.0	25.0	22.0	24.0	25.5	23.5	24.5
2	18.5	16.5	17.5	23.5	20.5	22.0	24.5	23.0	23.5	25.0	23.0	24.0
3	19.0	15.5	17.0	25.0	22.0	23.5	24.0	22.0	23.0	23.5	21.5	22.5
4	20.5	17.0	19.0	26.5	24.5	25.5	25.0	23.5	24.0	22.0	19.5	20.5
5	21.0	19.0	20.0	25.5	22.0	23.5	24.5	23.0	23.5	19.5	18.0	19.0
6	21.0	19.0	20.0	24.5	23.0	24.0	24.0	22.0	23.0	19.0	18.0	18.5
7	20.5	19.0	19.5	25.5	23.5	24.5	23.0	21.5	22.0	18.0	16.5	17.0
8	19.5	18.5	19.0	26.0	23.5	25.0	21.5	20.5	21.0	19.5	17.0	18.5
9	22.0	18.5	20.0	26.5	24.0	25.0	23.0	20.5	21.5	20.5	19.0	19.5
10	25.0	21.5	23.0	27.0	25.0	26.0	23.5	21.0	22.0	21.5	19.5	20.5
11	25.0	24.0	24.5	25.5	23.0	24.5	23.0	20.0	21.5	21.5	20.5	21.0
12	25.0	21.5	23.0	24.0	21.5	22.5	23.0	20.0	21.5	22.0	20.5	21.0
13	25.0	23.5	24.5	24.0	20.5	22.5	23.0	20.5	21.5	24.0	21.0	22.5
14	24.5	21.0	22.0	25.0	21.0	23.0	24.5	21.0	23.0	23.5	21.0	22.5
15	21.0	19.5	20.5	25.5	24.0	---	25.0	22.0	23.5	20.5	19.0	19.5
16	21.5	20.0	20.5	---	---	---	24.5	21.5	23.5	19.5	18.0	19.0
17	23.0	20.0	21.5	---	---	---	24.5	23.0	23.5	20.0	18.0	19.0
18	22.0	20.0	21.0	24.5	24.0	---	24.0	21.0	23.0	20.0	18.0	19.0
19	22.0	19.5	21.0	25.5	23.5	24.5	24.5	22.0	23.5	20.0	18.5	19.5
20	23.5	21.0	22.0	25.0	23.0	24.0	24.5	21.5	23.5	21.0	19.0	20.0
21	23.5	22.0	22.5	24.0	21.0	22.5	24.5	22.0	23.5	22.0	20.5	21.0
22	23.5	21.0	22.5	23.5	20.5	22.0	24.0	23.0	23.5	20.0	18.5	19.0
23	23.5	18.5	20.0	22.0	20.5	21.5	25.0	23.0	24.0	18.5	15.5	17.0
24	19.0	17.0	18.0	21.5	20.0	20.5	25.5	23.5	24.5	15.5	13.0	14.0
25	18.5	17.0	18.0	21.0	19.0	20.0	24.5	21.5	23.0	14.0	11.5	13.0
26	18.5	16.5	17.0	21.5	20.5	21.0	24.0	23.0	23.5	15.5	13.0	14.0
27	19.0	18.0	18.5	23.5	21.0	22.0	24.5	22.0	23.0	16.5	14.0	15.0
28	18.0	16.0	17.0	24.5	23.0	23.5	25.5	23.5	24.5	17.0	15.0	16.0
29	19.0	15.5	17.0	25.5	23.0	24.5	26.5	24.5	25.5	19.0	18.0	18.5
30	21.5	18.5	20.0	24.5	23.0	24.0	26.5	25.0	25.5	18.0	16.0	16.5
31	---	---	---	25.0	23.0	24.0	25.5	24.0	24.5	---	---	---
MONTH	25.0	15.5	20.0	27.0	19.0	23.0	26.5	20.0	23.5	25.5	11.5	19.0

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

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	183	18	8.9	226	18	11	157	7	3.0
2	206	30	17	194	15	7.9	150	6	2.4
3	252	40	27	179	13	6.3	147	6	2.4
4	194	17	8.9	168	15	6.8	147	4	1.6
5	176	18	8.6	172	25	12	625	90	152
6	161	15	6.5	172	10	4.6	725	90	176
7	157	13	5.5	168	8	3.6	283	20	15
8	157	15	6.4	161	8	3.5	230	12	7.5
9	157	16	6.8	164	7	3.1	695	75	141
10	172	16	7.4	157	7	3.0	640	65	112
11	172	12	5.6	154	6	2.5	311	8	6.7
12	157	11	4.7	157	7	3.0	252	6	4.1
13	157	14	5.9	154	7	2.9	234	5	3.2
14	154	13	5.4	157	8	3.4	475	30	38
15	150	13	5.3	150	8	3.2	311	10	8.4
16	150	11	4.5	150	11	4.5	256	7	4.8
17	143	11	4.2	140	8	3.0	269	10	7.3
18	143	10	3.9	140	7	2.6	234	12	7.6
19	143	10	3.9	143	5	1.9	222	11	6.6
20	147	10	4.0	143	4	1.5	260	15	11
21	147	10	4.0	147	4	1.6	5260	800	11400
22	143	9	3.5	147	4	1.6	1470	145	576
23	143	8	3.1	147	5	2.0	605	30	49
24	143	7	2.7	143	4	1.5	490	25	33
25	140	6	2.3	150	5	2.0	420	20	23
26	143	6	2.3	150	6	2.4	1500	110	446
27	140	6	2.3	150	7	2.8	2830	210	1600
28	140	7	2.6	206	17	9.5	770	50	104
29	575	85	132	252	20	14	585	25	39
30	695	135	253	179	12	5.8	525	20	28
31	260	35	25	--	--	--	485	16	21
TOTAL	6000	--	583.2	4920	--	133.5	21563	--	15029.6

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA.--Continued

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

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	550	17	25	465	10	13	440	13	15
2	465	12	15	465	8	10	400	15	16
3	495	13	17	485	7	9.2	390	8	8.4
4	775	40	84	450	7	8.5	371	7	7.0
5	570	15	23	415	8	9.0	356	6	5.8
6	500	12	16	390	8	8.4	337	6	5.5
7	475	12	15	410	15	17	333	5	4.5
8	465	16	20	415	11	12	328	5	4.4
9	450	45	55	380	9	9.2	371	9	9.0
10	480	46	60	361	8	7.8	435	10	12
11	860	60	139	385	10	10	366	8	7.9
12	895	38	92	361	8	7.8	337	8	7.3
13	560	11	17	380	8	8.2	328	7	6.2
14	480	10	13	405	10	11	314	7	5.9
15	490	10	13	376	7	7.1	309	6	5.0
16	500	9	12	347	6	5.6	366	17	17
17	560	10	15	356	7	6.7	575	40	62
18	515	9	13	347	6	5.6	380	12	12
19	475	8	10	361	5	4.9	352	11	10
20	500	10	14	480	20	26	337	10	9.1
21	1000	160	432	395	8	8.5	705	60	114
22	1060	115	329	425	10	11	760	95	195
23	660	60	107	460	20	25	450	24	29
24	590	35	56	366	8	7.9	415	16	18
25	550	20	30	376	6	6.1	380	12	12
26	525	16	23	366	6	5.9	371	9	9.0
27	605	19	31	347	6	5.6	361	8	7.8
28	550	16	24	366	8	7.9	352	9	8.6
29	530	15	21	--	--	--	366	9	8.9
30	500	14	19	--	--	--	930	95	239
31	480	14	18	--	--	--	2160	300	1750
TOTAL	18110	--	1758	11135	--	274.9	14675	--	2621.3

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	870	52	122	415	11	12	395	10	11
2	695	22	41	390	14	15	371	10	10
3	635	20	34	510	30	41	376	10	10
4	790	70	149	460	20	25	319	10	8.6
5	870	60	141	405	15	16	291	12	9.4
6	780	55	116	405	12	13	273	12	8.8
7	580	10	16	410	13	14	268	12	8.7
8	565	15	23	385	10	10	286	15	12
9	1730	220	1030	385	8	8.3	291	15	12
10	885	63	151	590	40	64	277	14	10
11	675	30	55	480	15	19	259	13	9.1
12	625	21	35	750	100	203	241	12	7.8
13	1330	120	431	1770	380	1820	241	12	7.8
14	1220	145	478	570	45	69	241	15	9.8
15	780	30	63	475	15	19	259	16	11
16	670	15	27	430	18	21	356	35	34
17	610	16	26	405	16	17	314	29	25
18	580	17	27	405	13	14	246	23	15
19	565	17	26	376	12	12	228	21	13
20	555	15	22	361	12	12	224	20	12
21	525	14	20	342	11	10	356	85	82
22	510	15	21	337	9	8.2	640	240	415
23	595	16	26	490	30	40	905	280	684
24	530	11	16	455	25	31	540	120	175
25	480	9	12	371	20	20	570	85	131
26	460	9	11	337	20	18	440	32	38
27	450	8	9.7	328	15	13	385	25	26
28	440	9	11	328	14	12	425	50	57
29	440	10	12	319	15	13	615	70	116
30	430	10	12	333	18	16	380	25	26
31	--	--	--	314	15	13	--	--	--
TOTAL	20870	--	3163.7	14331	--	2618.5	11012	--	1995.0

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA.--Continued

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

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	347	24	22	189	12	6.1	164	15	6.6
2	309	27	23	202	14	7.6	177	14	6.7
3	291	20	16	505	60	82	228	18	11
4	273	19	14	309	40	33	725	210	411
5	352	25	24	314	42	36	255	52	36
6	337	20	18	232	21	13	206	30	17
7	273	15	11	210	16	9.1	545	65	96
8	246	13	8.6	202	17	9.3	328	39	35
9	232	12	7.5	198	15	8.0	246	30	20
10	224	11	6.7	210	16	9.1	219	27	16
11	210	9	5.1	181	16	7.8	198	22	12
12	206	8	4.4	172	16	7.4	202	20	11
13	198	7	3.7	164	15	6.6	202	19	10
14	198	8	4.3	164	11	4.9	241	24	16
15	202	10	5.5	152	7	2.9	202	20	11
16	202	10	5.5	145	8	3.1	177	18	8.6
17	181	10	4.9	237	50	32	164	16	7.1
18	181	9	4.4	615	210	349	160	12	5.2
19	219	10	5.9	210	43	24	152	10	4.1
20	193	8	4.2	177	20	9.6	152	12	4.9
21	172	7	3.3	164	16	7.1	160	11	4.8
22	164	7	3.1	160	12	5.2	202	14	7.6
23	164	6	2.7	181	12	5.9	160	11	4.8
24	202	15	8.2	181	15	7.3	141	8	3.0
25	228	18	11	380	70	72	141	6	2.3
26	198	15	8.0	189	32	16	141	6	2.3
27	189	13	6.6	177	22	11	137	5	1.8
28	185	11	5.5	156	17	7.2	356	65	62
29	181	10	4.9	156	18	7.6	910	235	577
30	366	33	33	181	20	9.8	300	40	32
31	219	18	11	185	17	8.5	--	--	--
TOTAL	7142	--	296.0	6898	--	818.1	7591	--	1442.8

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 144247
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 30734.6

01481500 BRANDYWINE CREEK AT WILMINGTON, DEL.

LOCATION.--Lat 39°46'09", long 75°34'25", New Castle County, at gaging station on right bank in Rockford Park, 0.2 mile (0.3 km) downstream from Henry Clay Bridge, in Wilmington, and 4.2 miles (6.8 km) upstream from mouth. Sediment samples are collected at the Henry Clay Bridge.
DRAINAGE AREA.--314 sq mi (813 sq km).
PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1950, November 1951 to September 1952, October 1956 to September 1974.
Water temperatures: November 1956 to September 1961, February 1971 to September 1973.
Sediment records: December 1946 to September 1961, July 1962 to September 1974.
EXTREMES.--1973-1974:
Sediment concentrations: Maximum daily, 725 mg/l Dec. 21; minimum daily, 3 mg/l Jan. 19, 20.
Sediment discharge: Maximum daily, 9,570 tons (8,680 t) Dec. 21, minimum daily, 2.1 tons (1.9 t) Dec. 4.
Period of record:
Water temperatures (1956-61, 1971-73): Maximum, 30.0°C June 17, 1957; minimum, freezing point on many days during winter periods.
Sediment concentrations: Maximum daily, 1,700 mg/l Feb. 14, 1966, minimum daily, 1 mg/l on many days.
Sediment discharge: Maximum daily, 35,700 tons (32,400 t), corrected, Feb. 14, 1971 (corrected); minimum daily, less than 0.50 ton (0.45 t) on many days.
REMARKS.--Published and unpublished chemical-quality data and specific conductance, pH, and temperature of sediment samples available in WRD office at Parkville, Md. Streamflow records for the current water year are published in Part 1 of this report. Sediment data for station 01481000 Brandywine Creek at Chadds Ford, Pa., are used in computation of sediment records.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
FEB.								
01...	1215	511	8.1	2400	260	15	6.3	7.7
MAR.								
01...	1045	477	--	--	--	--	--	--
APR.								
01...	1000	1040	--	--	--	--	--	--
MAY								
01...	0950	472	6.4	450	70	16	6.6	8.8
JUNE								
03...	1020	429	--	--	--	--	--	--
JULY								
03...	1016	309	--	--	--	--	--	--
10...	0925	233	8.4	1600	150	18	7.2	9.5
AUG.								
02...	1140	177	--	--	--	--	--	--
SEP.								
03...	1125	225	--	--	--	--	--	--

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB.									
01...	2.2	47	39	20	14	.2	2.6	--	97
MAR.									
01...	--	--	--	--	--	--	--	--	--
APR.									
01...	--	--	--	--	--	--	--	--	--
MAY									
01...	2.1	50	41	20	13	.1	2.1	.13	98
JUNE									
03...	--	--	--	--	--	--	--	--	--
JULY									
03...	--	--	--	--	--	--	--	--	--
10...	1.6	56	46	22	15	.2	1.9	.19	110
AUG.									
02...	--	--	--	--	--	--	--	--	--
SEP.									
03...	--	--	--	--	--	--	--	--	--

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)
FEB.								
01...	63	25	193	7.5	3.5	5.0	--	--
MAR.								
01...	--	--	220	--	8.5	4.5	--	--
APR.								
01...	--	--	170	--	7.0	5.0	--	--
MAY								
01...	67	26	207	7.6	18.5	18.5	2	--
JUNE								
03...	--	--	180	--	20.5	16.5	--	--
JULY								
03...	--	--	220	7.3	29.5	23.0	--	8.0
10...	75	29	211	7.7	--	26.5	1	6.9
AUG.								
02...	--	--	225	7.3	26.5	25.0	--	8.0
SEP.								
03...	--	--	231	7.8	24.0	23.5	--	8.5

01481500 BRANDYWINE CREEK AT WILMINGTON, DEL.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
MAR. 31...	0700	3660	4.0	704	6960	39	55	74
APR. 09...	0700	2020	8.0	421	2300	35	49	64
SEP. 29...	0700	1930	19.0	397	2070	39	50	62

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
MAR. 31...	87	97	98	99	99	100	--
APR. 09...	71	88	89	90	91	94	100
SEP. 29...	70	75	76	77	83	95	100

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

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	199	12	6.4	245	25	17	167	15	6.8
2	209	24	14	217	14	8.2	161	11	4.8
3	292	35	28	196	15	7.9	154	9	3.7
4	199	14	7.5	182	11	5.4	154	5	2.1
5	176	11	5.2	184	15	7.5	656	145	257
6	172	10	4.6	188	8	4.1	1040	120	337
7	171	9	4.2	177	6	2.9	376	30	30
8	171	7	3.2	167	6	2.7	281	17	13
9	173	10	4.7	170	7	3.2	756	75	153
10	184	12	6.0	164	7	3.1	846	65	148
11	180	12	5.8	161	7	3.0	406	17	19
12	177	12	5.7	161	7	3.0	310	13	11
13	178	13	6.2	160	6	2.6	294	15	12
14	177	12	5.7	161	6	2.6	644	45	78
15	171	11	5.1	155	8	3.3	419	23	26
16	170	8	3.7	155	10	4.2	324	15	13
17	171	10	4.6	146	11	4.3	337	11	10
18	171	11	5.1	148	10	4.0	290	9	7.0
19	169	11	5.0	153	10	4.1	265	7	5.0
20	171	12	5.5	153	10	4.1	400	20	22
21	164	11	4.9	154	9	3.7	4890	725	9570
22	163	11	4.8	158	6	2.6	2090	225	1270
23	163	10	4.4	157	6	2.5	705	40	76
24	165	10	4.5	157	8	3.4	571	25	39
25	161	7	3.0	161	9	3.9	489	22	29
26	167	7	3.2	163	11	4.8	1230	95	315
27	166	7	3.1	153	11	4.5	3260	195	1720
28	167	9	4.1	213	14	8.1	879	45	107
29	648	125	219	319	20	17	652	10	18
30	898	130	315	204	16	8.8	584	8	13
31	302	30	24	--	--	--	531	7	10
TOTAL	6845	--	726.2	5282	--	156.5	24161	--	14325.4

01481500 BRANDYWINE CREEK AT WILMINGTON, DEL.--Continued

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

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	608	11	18	521	7	9.8	477	14	18
2	515	9	13	522	6	8.5	450	12	15
3	517	12	17	556	6	9.0	429	10	12
4	840	25	57	507	6	8.2	420	10	11
5	631	14	24	477	5	6.4	404	11	12
6	535	11	16	455	5	6.1	381	9	9.3
7	510	11	15	476	9	12	383	9	9.3
8	489	9	12	487	7	9.2	378	9	9.2
9	479	30	39	446	6	7.2	415	8	9.0
10	516	32	45	431	5	5.8	477	16	21
11	956	40	103	454	7	8.6	416	12	13
12	1100	35	104	430	6	7.0	382	8	8.3
13	616	18	30	447	5	6.0	369	7	7.0
14	509	11	15	476	7	9.0	355	6	5.8
15	527	8	11	445	6	7.2	350	6	5.7
16	531	7	10	418	5	5.6	466	28	35
17	594	6	9.6	426	5	5.8	668	45	31
18	550	4	5.9	420	4	4.5	435	25	29
19	495	3	4.0	420	5	5.7	395	13	14
20	521	3	4.2	542	10	15	380	10	10
21	976	150	395	458	7	8.7	806	80	174
22	1450	135	529	474	14	18	1070	85	246
23	755	50	102	520	24	34	545	32	47
24	670	23	42	408	9	9.9	495	28	37
25	623	15	25	411	7	7.8	455	20	25
26	586	10	16	406	6	6.6	437	13	15
27	668	20	36	390	5	5.3	505	12	16
28	626	12	20	412	10	11	411	10	11
29	597	10	16	--	--	--	417	9	10
30	559	9	14	--	--	--	1060	70	200
31	532	9	13	--	--	--	2730	425	3130
TOTAL	20081	--	1760.7	12835	--	257.9	17361	--	4245.6

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1080	80	233	476	12	15	430	20	23
2	861	30	70	447	10	12	425	17	20
3	813	20	44	570	40	62	432	19	22
4	897	60	145	539	25	36	364	18	18
5	1070	50	144	470	18	23	327	18	16
6	967	45	117	469	13	16	311	17	14
7	767	18	37	481	15	19	297	15	12
8	745	13	26	441	14	17	313	16	14
9	2150	280	1630	443	14	17	320	18	16
10	1060	60	172	630	50	85	306	18	15
11	876	30	71	569	18	28	281	13	9.9
12	818	23	51	856	85	196	258	11	7.7
13	1320	130	463	2120	205	1170	263	15	11
14	1530	150	620	647	35	61	254	14	9.6
15	808	55	120	531	15	22	272	17	12
16	725	20	39	485	17	22	419	45	51
17	668	18	32	451	15	18	376	35	36
18	639	17	29	452	14	17	275	25	19
19	623	17	29	423	12	14	249	20	13
20	614	16	27	405	10	11	245	18	12
21	585	16	25	386	9	9.4	349	40	38
22	572	15	23	380	9	9.2	661	110	196
23	654	18	32	577	30	47	947	390	997
24	602	14	23	550	25	37	604	160	261
25	547	12	18	430	20	23	540	75	109
26	521	14	20	387	20	21	494	30	40
27	511	15	21	375	18	18	421	23	26
28	505	14	19	375	18	18	437	40	47
29	501	12	16	366	16	16	641	65	112
30	491	12	16	383	20	21	433	25	29
31	--	--	--	364	18	18	--	--	--
TOTAL	24520	--	4312	16478	--	2098.6	11944	--	2206.2

01481500 BRANDYWINE CREEK AT WILMINGTON, DEL.--Continued

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

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	387	20	21	199	12	6.4	177	12	5.7
2	346	25	23	194	10	5.2	182	14	6.9
3	318	18	15	508	40	55	265	37	26
4	298	20	16	309	27	23	733	115	228
5	352	45	43	386	45	47	295	50	40
6	404	35	38	251	19	13	225	30	18
7	303	25	20	233	15	9.4	595	70	112
8	265	20	14	217	15	8.8	393	35	37
9	247	18	12	210	14	7.9	275	27	20
10	237	15	9.6	220	19	11	237	13	8.3
11	222	14	8.4	192	18	9.3	221	11	6.6
12	217	14	8.2	180	15	7.3	230	13	8.1
13	206	12	6.7	173	14	6.5	245	15	9.9
14	204	12	6.6	172	14	6.5	291	18	14
15	202	10	5.5	164	10	4.4	229	17	11
16	215	10	5.8	155	9	3.8	193	15	7.8
17	187	8	4.0	168	30	14	176	16	7.6
18	186	8	4.0	648	85	149	176	14	6.7
19	213	12	6.9	237	38	24	170	12	5.5
20	202	14	7.6	189	25	13	167	12	5.4
21	179	12	5.8	173	19	8.9	173	12	5.6
22	175	12	5.7	166	15	6.7	225	16	9.7
23	173	10	4.7	414	45	50	179	14	6.8
24	227	18	11	184	20	9.9	158	14	6.0
25	252	17	12	433	40	47	158	10	4.3
26	209	17	9.6	257	30	21	158	9	3.8
27	202	17	9.3	218	25	15	155	6	2.5
28	197	15	8.0	177	20	9.6	327	115	102
29	190	15	7.7	170	18	8.3	1020	230	633
30	400	35	38	188	21	11	363	70	69
31	246	20	13	197	15	8.0	--	--	--
TOTAL	7661	--	400.1	7582	--	619.9	8391	--	1427.2

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 163141
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 32536.3

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL.

LOCATION.--Lat 39°41'18", long 75°31'06", New Castle County, at center of the navigational channel at bridge between Pigeon Point, Del. and Deepwater Point, N. J. Water-quality recorder (39°41'21", 75°31'19") at tidal gaging station located on channel side of west tower of south bridge.

DRAINAGE AREA.--11,030 sq mi (28,570 sq km).

PERIOD OF RECORD.--Chemical analyses: July 1955 to September 1974.
Water temperatures: October 1956 to September 1974.

EXTREMES.--1973-74:
Specific conductance: Maximum, 7,180 micromhos July 29; minimum, 100 micromhos on many days.
Dissolved oxygen: Minimum, 0.0 mg/l July 8.
Water temperatures: Maximum, 28.0°C July 10.

Period of record:
Specific conductance: Maximum, 14,600 micromhos Oct. 6, 1957; minimum, 100 micromhos on many days.
Dissolved oxygen (1962-74): Maximum, 13.5 mg/l Dec. 29, 1969; minimum, 0.0 mg/l on many days during summer.
Water temperatures (1956-74): Maximum, 31.0°C Aug. 9, 1968; minimum, freezing point on many days during winter periods.

REMARKS.--Samples collected approximately 3 feet from surface. Records of discharge are available for 01463500 Delaware River at Trenton, N. J. in, "Water Resources Data for New Jersey, Part 1, Surface Water Records."

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

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3440	1500	2460	3550	890	2280	---	---	---	---	---	---
2	3640	1580	2460	2370	810	---	---	---	---	200	200	---
3	3050	1440	2310	---	---	---	3760	1400	---	200	200	200
4	3080	1320	2160	---	---	---	3520	1120	2260	240	200	202
5	2770	1380	2130	2920	840	---	3920	1160	2460	240	200	208
6	2970	1090	2010	2240	560	1390	3080	640	1840	280	200	232
7	3090	1190	1990	2440	560	1390	2280	560	1320	240	200	---
8	3170	1200	2050	3520	100	1610	2360	480	1180	---	---	---
9	3240	1290	2220	2840	100	1360	3200	600	1490	---	---	---
10	3100	1310	2270	3320	600	1640	1760	440	850	---	---	---
11	3740	1520	2590	4640	720	2100	1080	360	577	---	---	---
12	3620	1550	2670	5160	760	2460	1080	400	507	---	---	---
13	3780	1540	2620	5600	880	2640	1240	400	547	---	---	---
14	3700	1500	2610	5400	1040	---	920	360	503	---	---	---
15	3360	1590	2540	---	---	---	480	360	427	---	---	---
16	3500	1610	2560	---	---	---	480	360	420	---	---	---
17	3440	1670	2550	---	---	---	480	360	422	---	---	---
18	3550	1800	2630	---	---	---	440	360	398	---	---	---
19	3450	1680	2560	---	---	---	480	360	402	---	---	---
20	3290	1910	2670	---	---	---	800	280	407	---	---	---
21	3400	1700	2610	---	---	---	480	360	382	---	---	---
22	3310	1880	2640	---	---	---	360	320	352	320	220	---
23	3300	1850	2610	---	---	---	360	320	325	300	200	236
24	3480	1910	---	---	---	---	320	320	320	260	200	---
25	---	---	---	---	---	---	320	320	320	---	---	---
26	---	---	---	5960	1960	---	320	320	320	---	---	---
27	---	---	---	5840	1360	3450	320	320	---	---	---	---
28	---	---	---	1600	1600	---	---	---	---	360	280	---
29	---	---	---	---	---	---	---	---	---	340	260	303
30	---	---	---	---	---	---	---	---	---	340	240	289
31	2060	1730	---	---	---	---	---	---	---	320	240	265
MONTH	3780	1090	---	---	---	---	3920	280	---	---	---	---

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL.--Continued

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

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	260	220	240	---	---	---	580	100	277	940	100	369
2	260	200	237	---	---	---	540	180	262	960	200	438
3	240	220	---	---	---	---	320	160	240	1320	180	631
4	---	---	---	---	---	---	500	180	256	1000	100	---
5	---	---	---	---	---	---	440	100	241	---	---	---
6	---	---	---	---	---	---	300	140	215	---	---	---
7	---	---	---	---	---	---	340	120	238	500	180	---
8	---	---	---	---	---	---	320	160	240	1000	340	---
9	---	---	---	---	---	---	380	100	230	---	---	---
10	---	---	---	---	---	---	320	120	235	---	---	---
11	---	---	---	---	---	---	280	140	211	---	---	---
12	---	---	---	---	---	---	320	100	208	---	---	---
13	---	---	---	---	---	---	320	100	193	300	200	---
14	---	---	---	---	---	---	340	140	216	420	180	268
15	---	---	---	---	---	---	360	100	234	320	180	259
16	---	---	---	---	---	---	360	100	231	320	220	267
17	---	---	---	---	---	---	380	100	230	320	200	258
18	---	---	---	---	---	---	340	140	225	300	200	258
19	---	---	---	---	---	---	300	120	202	360	220	279
20	---	---	---	---	---	---	520	100	229	560	200	273
21	---	---	---	---	---	---	340	100	221	840	200	327
22	---	---	---	---	---	---	340	120	238	820	180	353
23	---	---	---	---	---	---	520	120	257	740	180	374
24	---	---	---	---	---	---	660	100	277	840	200	419
25	---	---	---	---	---	---	620	100	274	1120	200	445
26	---	---	---	480	180	---	420	100	246	1180	200	527
27	---	---	---	320	120	247	780	100	265	1520	240	667
28	---	---	---	320	160	250	620	160	310	1560	220	713
29	---	---	---	380	180	264	900	180	344	1540	200	614
30	---	---	---	820	100	325	840	100	356	1340	180	497
31	---	---	---	880	100	301	---	---	---	1200	180	502
MONTH	---	---	---	---	---	---	900	100	247	1560	100	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1240	180	508	4020	620	2010	5780	2420	4010	3260	1820	2490
2	980	180	426	3980	560	2000	5900	2220	4110	2480	1700	2270
3	1200	200	498	4000	540	2000	6720	2180	4140	2500	1060	1940
4	1260	180	474	3880	760	2140	5740	1940	3710	3220	540	1710
5	1200	200	478	4060	820	2300	4860	1500	3220	2740	500	1620
6	1180	100	492	3460	620	1990	4300	1520	2940	2360	440	1360
7	1240	200	584	3460	760	2010	3880	1620	---	1980	340	1150
8	1340	180	626	3340	760	2040	---	---	---	1480	240	858
9	1520	220	661	3720	960	2320	---	---	---	1040	280	623
10	1540	220	790	3400	1280	2480	---	---	---	1420	200	528
11	---	---	---	3340	1680	2730	---	---	---	2260	220	663
12	---	---	---	2700	2480	2560	5280	1600	---	2120	220	757
13	---	---	---	2840	2620	2770	5520	1580	3100	1460	200	668
14	---	---	---	2940	2800	2840	5460	1600	3160	1500	220	428
15	---	---	---	4240	1020	2730	5860	1540	3220	580	240	393
16	---	---	---	4800	980	2450	5920	1560	3370	560	500	531
17	3540	240	---	5060	1160	2720	5160	1780	3600	580	560	573
18	3540	320	1440	5780	1200	3030	5900	1780	3660	560	500	540
19	3080	380	1560	4980	1300	3160	5620	1580	3540	2580	440	1010
20	3780	220	1670	5480	1300	3240	5320	1700	3520	2400	380	1330
21	3680	400	1800	5900	1660	3690	5500	1800	3720	2420	280	1350
22	3600	540	1920	6600	1860	4000	5340	1860	3710	2720	460	1190
23	4000	580	2090	6220	2060	4260	5000	1300	3360	1980	360	1170
24	4360	600	2240	6820	2540	4420	4420	1420	2960	2320	440	1330
25	3760	580	2180	6360	2320	4310	4580	1320	2820	2600	680	1490
26	3520	580	2130	6460	2500	4390	4860	1440	2950	2960	580	1520
27	3880	520	2030	6420	2500	4360	4420	1620	2920	3000	680	1590
28	3660	800	2160	7000	2700	4470	4200	1380	2690	3020	620	1660
29	3980	540	2140	7180	2820	4690	4060	1260	2590	2420	300	1400
30	4320	600	2070	6680	2660	4510	4080	1260	2570	1760	200	---
31	---	---	---	6240	2600	4240	3700	1220	2340	---	---	---
MONTH	4360	100	---	7180	540	3120	6720	1220	3280	3260	200	1180

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL.--Continued

pH (UNITS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	6.6	6.4	---
3	---	---	---	---	---	---	6.6	6.4	---	6.5	6.4	6.5
4	---	---	---	---	---	---	6.5	6.3	6.4	6.6	6.4	6.5
5	---	---	---	6.7	6.5	---	6.8	6.3	6.5	6.6	6.4	6.5
6	---	---	---	6.6	6.5	6.5	6.5	6.3	6.4	6.5	6.4	6.5
7	---	---	---	6.7	6.5	6.6	6.6	6.3	6.5	6.5	6.2	6.4
8	---	---	---	7.1	6.5	6.6	6.6	6.4	6.5	6.4	6.2	6.3
9	---	---	---	7.0	6.5	6.6	6.6	6.3	6.5	6.4	6.2	6.3
10	---	---	---	6.7	6.5	6.6	6.7	6.4	6.6	6.4	6.3	6.3
11	---	---	---	6.8	6.5	6.6	6.8	6.6	6.7	6.3	6.2	6.3
12	---	---	---	6.8	6.6	6.7	6.8	6.7	6.8	6.5	6.3	6.4
13	---	---	---	6.8	6.6	6.7	6.8	6.7	6.8	6.4	6.3	6.4
14	---	---	---	6.8	6.6	---	6.8	6.7	6.8	6.4	6.3	6.4
15	---	---	---	---	---	---	6.8	6.7	6.8	6.4	6.3	6.4
16	---	---	---	---	---	---	6.8	6.7	6.8	6.4	6.2	6.3
17	---	---	---	---	---	---	6.9	6.7	6.8	6.5	6.3	6.4
18	---	---	---	---	---	---	6.9	6.7	6.8	6.4	6.3	6.3
19	---	---	---	---	---	---	6.9	6.7	6.8	6.4	6.2	6.3
20	---	---	---	---	---	---	6.8	6.7	---	6.5	6.2	6.4
21	---	---	---	---	---	---	---	---	---	6.4	6.3	6.3
22	---	---	---	---	---	---	---	---	---	6.5	6.2	6.4
23	---	---	---	---	---	---	---	---	---	6.5	6.3	6.4
24	---	---	---	---	---	---	---	---	---	6.5	6.4	6.5
25	---	---	---	---	---	---	---	---	---	6.4	6.4	6.4
26	---	---	---	6.7	6.4	---	---	---	---	6.4	6.3	6.4
27	---	---	---	6.7	6.3	6.5	---	---	---	6.9	6.3	6.4
28	---	---	---	6.4	6.4	---	---	---	---	6.5	6.3	6.4
29	---	---	---	---	---	---	---	---	---	6.6	6.3	6.4
30	---	---	---	---	---	---	---	---	---	6.5	6.3	6.4
31	---	---	---	---	---	---	---	---	---	6.6	6.4	6.5
MONTH	---	---	---	---	---	---	---	---	---	6.9	6.2	6.4

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.6	6.5	6.5	---	---	---	6.9	6.7	6.9	6.6	6.4	6.5
2	6.6	6.4	6.5	---	---	---	6.9	6.6	6.8	6.6	6.4	6.5
3	6.6	6.5	---	---	---	---	6.8	6.5	6.7	6.6	6.2	6.4
4	---	---	---	---	---	---	6.9	6.6	6.8	6.5	6.4	---
5	---	---	---	---	---	---	6.8	6.0	6.7	---	---	---
6	---	---	---	---	---	---	6.9	6.8	6.8	---	---	---
7	---	---	---	---	---	---	6.9	6.8	6.8	6.5	6.2	---
8	---	---	---	---	---	---	6.9	6.7	6.8	6.6	6.3	---
9	---	---	---	---	---	---	6.8	6.5	6.7	---	---	---
10	---	---	---	---	---	---	6.9	6.8	6.9	---	---	---
11	---	---	---	---	---	---	6.9	6.5	6.7	---	---	---
12	---	---	---	---	---	---	6.7	6.2	6.5	---	---	---
13	---	---	---	6.6	6.4	---	6.6	6.1	6.4	6.6	6.4	---
14	---	---	---	6.7	6.5	6.6	6.6	6.2	6.4	6.6	6.4	6.5
15	---	---	---	6.9	6.5	6.7	6.6	6.2	6.4	6.9	6.5	6.7
16	---	---	---	7.1	6.5	6.8	6.6	6.5	6.5	6.6	6.4	6.6
17	---	---	---	7.1	6.8	---	6.6	6.5	6.6	6.7	6.3	6.5
18	---	---	---	---	---	---	6.6	6.4	6.5	6.7	6.2	6.5
19	---	---	---	---	---	---	6.6	6.5	6.6	6.6	6.2	6.4
20	---	---	---	---	---	---	6.6	6.4	6.5	6.7	6.2	6.4
21	---	---	---	---	---	---	6.5	6.4	6.5	6.7	6.1	6.4
22	---	---	---	---	---	---	6.6	6.4	6.5	6.7	6.2	6.4
23	---	---	---	---	---	---	6.7	6.5	6.6	6.6	6.3	6.4
24	---	---	---	---	---	---	6.6	6.5	6.6	6.5	6.0	6.3
25	---	---	---	---	---	---	6.7	6.4	6.6	6.4	6.2	6.3
26	---	---	---	6.8	6.6	---	6.7	6.4	6.6	6.4	6.1	6.3
27	---	---	---	6.9	6.6	6.7	6.8	6.4	6.6	6.4	6.2	6.3
28	---	---	---	6.7	6.6	6.7	6.6	6.4	6.6	6.3	6.0	6.2
29	---	---	---	6.8	6.6	6.7	6.6	6.4	6.5	6.4	6.0	6.2
30	---	---	---	6.9	6.4	6.6	6.6	6.0	6.5	6.5	6.0	6.2
31	---	---	---	6.9	6.7	6.8	---	---	---	6.3	6.0	6.2
MONTH	---	---	---	---	---	---	6.9	6.0	6.6	6.9	6.0	---

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL.--Continued

pH (UNITS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.3	5.3	5.9	6.4	6.1	6.3	---	---	---	---	---	---
2	6.3	5.8	6.1	6.4	6.1	6.2	---	---	---	---	---	---
3	6.3	6.0	6.1	6.4	6.1	6.2	---	---	---	---	---	---
4	6.4	5.9	6.1	6.3	6.1	6.2	---	---	---	---	---	---
5	6.3	5.8	6.1	6.3	6.0	6.2	---	---	---	---	---	---
6	6.3	5.9	6.1	6.2	6.0	6.1	---	---	---	---	---	---
7	6.3	5.9	6.1	6.2	6.0	6.1	---	---	---	---	---	---
8	6.2	5.8	6.0	6.2	6.0	6.1	---	---	---	---	---	---
9	6.3	6.0	6.1	6.2	6.1	6.1	---	---	---	---	---	---
10	6.3	6.0	6.1	6.3	6.0	6.2	---	---	---	---	---	---
11	---	---	---	6.4	6.1	6.3	---	---	---	---	---	---
12	---	---	---	6.5	6.1	6.3	---	---	---	---	---	---
13	---	---	---	6.5	6.2	6.3	---	---	---	---	---	---
14	---	---	---	6.6	6.2	6.3	---	---	---	---	---	---
15	---	---	---	6.6	6.2	6.4	---	---	---	---	---	---
16	---	---	---	6.6	6.3	6.4	---	---	---	---	---	---
17	6.7	6.3	---	6.6	6.3	6.4	---	---	---	---	---	---
18	6.7	6.3	6.4	6.7	6.4	6.5	---	---	---	---	---	---
19	6.6	6.3	6.4	6.6	6.4	6.5	---	---	---	---	---	---
20	6.7	6.3	6.5	6.7	6.5	6.6	---	---	---	---	---	---
21	6.7	6.4	6.5	6.8	6.5	6.6	---	---	---	---	---	---
22	6.7	6.4	6.5	6.7	6.4	6.5	---	---	---	---	---	---
23	6.7	6.4	6.6	6.6	6.4	6.5	---	---	---	---	---	---
24	6.7	6.4	6.5	6.6	6.4	6.5	---	---	---	---	---	---
25	6.6	6.1	6.4	6.6	6.0	6.4	---	---	---	---	---	---
26	6.3	5.9	6.2	6.5	6.4	6.5	---	---	---	---	---	---
27	6.3	6.0	6.2	6.5	6.3	6.4	---	---	---	---	---	---
28	6.4	6.0	6.2	6.5	6.4	6.4	---	---	---	---	---	---
29	6.4	6.1	6.3	6.6	6.3	6.4	---	---	---	---	---	---
30	6.5	6.1	6.3	6.5	6.3	6.4	---	---	---	---	---	---
31	---	---	---	6.4	6.3	6.3	---	---	---	---	---	---
MONTH	6.7	5.3	---	6.8	6.0	6.3	---	---	---	---	---	---

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.0	1.7	3.5	---	---	---	---	---	---	---	---	---
2	6.0	2.4	3.9	---	---	---	---	---	---	---	---	---
3	5.3	1.9	3.5	---	---	---	7.2	2.2	---	---	---	---
4	4.9	1.7	3.0	---	---	---	5.6	1.2	3.3	---	---	---
5	5.3	1.6	3.2	7.2	4.2	---	6.2	0.8	3.5	---	---	---
6	5.0	1.8	3.5	6.6	3.9	5.1	4.8	0.9	2.7	---	---	---
7	5.4	1.9	3.3	7.9	4.9	5.9	3.7	1.1	2.0	9.7	8.8	---
8	5.7	1.8	3.4	11.1	4.0	6.4	4.4	1.2	2.6	9.9	9.4	9.6
9	5.4	1.7	3.5	12.8	4.0	6.0	9.6	3.8	6.4	9.8	9.1	9.5
10	4.7	1.0	3.0	8.1	4.4	5.9	7.1	5.6	6.5	9.7	9.1	9.5
11	6.0	1.8	3.7	9.6	5.0	6.7	7.2	5.4	6.5	9.6	8.9	9.4
12	5.3	1.5	3.5	9.3	5.0	6.9	8.2	7.1	7.6	9.4	8.6	9.1
13	5.6	1.1	3.6	10.4	5.1	7.3	9.2	7.4	8.1	9.4	8.6	9.0
14	6.2	2.1	4.1	9.2	4.6	---	10.2	8.6	9.0	9.4	8.7	9.1
15	7.3	2.3	4.7	---	---	---	10.3	8.9	9.5	9.5	8.8	9.2
16	7.6	2.9	5.1	---	---	---	10.7	9.2	10.0	9.4	8.9	9.1
17	7.8	3.2	5.3	---	---	---	11.0	10.9	---	9.2	8.5	8.8
18	8.2	3.7	5.8	---	---	---	---	---	---	8.8	8.2	8.5
19	8.1	3.2	5.7	---	---	---	9.4	8.4	---	8.9	8.2	8.6
20	7.9	3.9	6.2	---	---	---	8.3	7.7	---	8.7	8.0	8.4
21	8.1	3.2	6.0	---	---	---	---	---	---	8.9	8.4	8.6
22	7.5	3.4	5.7	---	---	---	---	---	---	9.5	8.4	9.0
23	6.8	2.8	5.1	---	---	---	---	---	---	10.0	9.5	9.7
24	6.6	2.1	---	---	---	---	---	---	---	10.3	9.8	10.0
25	---	---	---	---	---	---	---	---	---	10.2	9.5	9.9
26	---	---	---	8.0	2.3	---	---	---	---	9.7	9.3	9.6
27	---	---	---	8.1	0.9	4.2	---	---	---	9.9	9.2	9.5
28	---	---	---	2.5	2.5	---	---	---	---	9.3	8.3	8.8
29	---	---	---	---	---	---	---	---	---	9.0	8.3	8.6
30	---	---	---	---	---	---	---	---	---	9.0	8.4	8.6
31	---	---	---	---	---	---	---	---	---	9.2	8.3	8.8
MONTH	---	---	---	---	---	---	---	---	---	10.3	8.0	---

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.6	9.1	9.3	---	---	---	9.7	8.7	9.3	5.8	4.2	5.2
2	9.9	9.2	9.5	---	---	---	9.3	8.3	8.8	6.5	4.5	5.6
3	10.0	9.8	---	---	---	---	8.6	8.1	8.3	6.0	4.4	5.5
4	---	---	---	---	---	---	8.6	8.0	8.2	5.7	3.2	---
5	---	---	---	---	---	---	8.6	8.0	8.3	---	---	---
6	---	---	---	---	---	---	8.5	8.1	8.3	---	---	---
7	---	---	---	---	---	---	8.4	8.2	8.3	6.2	4.5	---
8	---	---	---	---	---	---	8.8	8.1	8.4	6.3	5.3	---
9	---	---	---	---	---	---	8.7	8.5	8.6	---	---	---
10	---	---	---	---	---	---	9.2	8.5	8.8	---	---	---
11	---	---	---	---	---	---	9.2	8.5	8.8	---	---	---
12	---	---	---	---	---	---	8.8	8.2	8.5	---	---	---
13	---	---	---	7.7	6.7	---	8.7	7.8	8.3	6.3	3.7	---
14	---	---	---	8.6	6.2	7.8	8.2	7.7	7.9	7.2	3.6	5.4
15	---	---	---	9.4	7.4	8.3	8.3	7.7	8.0	7.6	3.7	5.4
16	---	---	---	9.2	7.3	---	8.6	8.1	8.4	6.7	3.7	4.9
17	---	---	---	---	---	---	8.4	8.0	8.2	6.9	3.7	5.0
18	---	---	---	---	---	---	8.2	7.8	8.0	7.4	3.4	4.9
19	---	---	---	---	---	---	7.9	7.6	7.8	7.3	3.4	5.1
20	---	---	---	---	---	---	7.8	7.1	7.5	7.6	3.3	5.4
21	---	---	---	---	---	---	7.5	6.6	7.2	7.5	3.5	5.7
22	---	---	---	---	---	---	7.3	6.2	6.8	7.4	3.5	5.4
23	---	---	---	---	---	---	7.4	5.8	6.6	6.6	3.1	4.7
24	---	---	---	---	---	---	7.1	5.7	6.6	5.4	2.6	4.1
25	---	---	---	---	---	---	7.7	5.6	6.7	4.8	2.2	3.7
26	---	---	---	8.5	7.8	---	7.2	5.3	6.4	4.8	2.1	3.6
27	---	---	---	8.6	7.9	8.1	7.2	5.2	6.3	4.2	2.2	3.2
28	---	---	---	8.4	7.7	8.0	6.6	5.0	6.1	4.1	2.0	3.1
29	---	---	---	8.9	7.8	8.3	6.1	4.6	5.6	5.5	2.3	3.9
30	---	---	---	9.8	8.7	9.3	6.1	4.4	5.3	5.5	2.6	3.8
31	---	---	---	9.6	8.9	9.3	---	---	---	5.7	2.5	3.8
MONTH	---	---	---	---	---	---	9.7	4.4	7.7	7.6	2.0	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.0	2.2	3.7	6.1	3.7	4.8	3.4	1.7	2.6	3.2	0.7	2.0
2	5.6	1.7	3.2	5.7	2.8	4.1	4.1	1.5	2.8	3.8	0.6	2.0
3	5.4	2.2	3.4	5.8	2.1	3.4	4.5	2.6	3.7	4.3	1.1	2.6
4	5.2	1.7	3.0	4.9	1.4	2.6	5.0	3.2	4.3	4.6	1.3	2.9
5	4.8	1.5	2.8	5.0	1.3	2.7	5.0	3.0	4.1	5.1	1.9	3.4
6	4.9	1.2	2.6	3.9	0.2	1.6	4.5	2.6	3.8	5.0	2.0	3.6
7	5.5	2.4	3.8	2.8	0.2	1.3	4.1	2.2	---	6.4	2.7	4.5
8	6.3	3.8	4.8	2.6	0.0	1.1	---	---	---	5.0	1.7	3.7
9	6.1	3.2	4.4	2.7	0.1	1.3	---	---	---	3.7	1.0	2.5
10	5.0	2.8	---	3.3	0.2	1.7	---	---	---	2.5	0.5	1.4
11	---	---	---	4.9	0.8	2.7	---	---	---	3.1	0.4	1.1
12	---	---	---	5.9	1.7	3.8	5.4	3.0	---	1.9	0.6	1.0
13	---	---	---	5.8	2.6	4.2	5.4	2.9	3.7	1.8	0.8	1.1
14	---	---	---	6.0	2.8	4.2	5.0	2.6	3.4	3.8	1.2	2.4
15	---	---	---	4.1	2.2	3.3	5.0	2.3	3.2	4.0	1.7	2.9
16	---	---	---	4.4	2.0	3.0	4.8	2.0	3.0	3.5	1.8	2.9
17	5.2	2.3	---	4.4	2.0	3.2	4.6	2.2	3.2	3.4	2.0	2.6
18	5.0	1.4	2.8	4.6	2.2	3.2	4.7	1.8	2.9	2.4	2.1	2.3
19	4.5	0.7	2.5	4.0	1.8	3.0	3.8	1.3	2.4	3.5	2.2	2.6
20	5.0	1.3	2.5	4.2	1.6	3.2	4.6	1.2	2.7	3.4	1.5	2.5
21	3.9	0.5	2.1	4.6	2.3	3.6	5.1	1.3	3.1	4.4	2.0	2.8
22	3.7	0.2	1.7	4.5	2.1	3.4	4.5	2.0	3.2	5.6	2.6	3.2
23	3.6	0.4	2.1	4.2	1.9	3.2	4.2	2.0	3.1	5.4	2.8	4.0
24	4.4	0.7	2.5	4.3	2.0	3.3	3.5	1.3	2.4	5.9	3.9	4.9
25	4.6	0.8	2.7	4.1	1.8	3.0	3.6	1.2	2.2	6.1	4.0	4.8
26	4.5	0.5	2.6	3.7	1.7	2.8	5.4	1.1	2.5	6.0	3.8	4.5
27	4.1	0.3	2.1	3.5	1.6	2.6	4.7	1.5	2.8	5.3	3.4	4.2
28	7.8	1.5	4.4	3.6	1.6	2.4	3.9	1.5	2.5	5.4	3.2	4.0
29	6.6	4.2	5.3	4.5	1.4	2.7	3.6	1.3	2.2	4.4	2.6	3.6
30	7.2	3.9	5.0	3.9	1.9	2.9	3.7	1.1	2.2	4.2	2.3	---
31	---	---	---	3.5	1.7	2.6	3.6	0.9	2.1	---	---	---
MONTH	7.8	0.2	---	6.1	0.0	2.9	5.4	0.9	3.0	6.4	0.4	3.0

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL.--Continued

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

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.0	20.5	21.0	15.0	14.0	14.5	---	---	---	---	---	---
2	21.0	20.5	20.5	15.0	14.0	---	---	---	---	5.0	4.0	---
3	21.5	20.5	21.0	---	---	---	10.0	9.0	---	5.0	4.0	4.5
4	21.5	21.0	21.5	---	---	---	10.0	9.0	9.5	5.0	4.0	4.5
5	21.5	21.0	21.5	14.5	13.5	---	10.0	9.0	9.5	4.5	4.0	4.0
6	21.5	20.5	21.0	14.0	12.0	13.5	10.5	9.5	10.0	4.5	4.0	4.0
7	21.0	20.5	20.5	13.5	11.0	12.0	10.0	9.5	9.5	4.5	3.5	4.0
8	21.0	20.5	20.5	12.0	10.5	11.5	10.0	9.0	9.5	4.0	3.5	4.0
9	21.0	20.0	20.5	15.5	10.5	11.5	9.0	8.0	8.5	3.5	3.0	3.5
10	21.0	20.0	20.5	11.5	10.0	10.5	9.5	8.5	9.0	3.5	2.0	3.0
11	20.5	20.0	20.0	10.5	9.0	10.0	9.0	8.5	8.5	3.5	3.0	3.0
12	20.5	19.5	20.0	10.5	9.0	9.5	8.5	8.0	8.5	3.5	3.0	3.0
13	20.0	19.5	20.0	10.5	9.0	9.5	8.0	7.0	7.5	3.0	2.0	2.5
14	20.0	19.5	19.5	10.5	9.5	---	8.0	7.0	7.5	3.0	1.5	2.0
15	19.5	19.0	19.0	---	---	---	7.0	6.5	7.0	2.0	1.5	2.0
16	19.0	18.5	19.0	---	---	---	6.5	6.0	6.0	3.0	1.5	2.0
17	18.5	17.0	18.0	---	---	---	6.0	6.0	---	3.0	2.0	2.0
18	18.0	16.5	17.0	---	---	---	---	---	---	2.0	1.5	1.5
19	17.0	16.0	16.5	---	---	---	5.5	5.0	---	2.0	1.5	2.0
20	16.5	15.5	16.0	---	---	---	6.0	4.5	5.0	2.0	1.5	2.0
21	16.5	15.5	16.0	---	---	---	6.0	4.5	5.0	3.0	1.5	2.0
22	16.5	15.5	15.5	---	---	---	4.5	3.5	4.0	4.0	2.0	3.0
23	16.0	15.5	15.5	---	---	---	3.5	3.0	3.0	4.5	3.5	3.5
24	16.0	15.5	---	---	---	---	3.0	2.0	3.0	4.5	3.5	4.0
25	---	---	---	---	---	---	3.0	2.0	2.5	4.5	3.5	4.0
26	---	---	---	10.5	9.5	---	3.5	2.0	3.0	5.0	4.0	4.5
27	---	---	---	11.0	9.5	10.0	3.5	3.5	---	6.0	4.0	5.0
28	---	---	---	9.5	9.5	---	---	---	---	5.5	4.5	5.0
29	---	---	---	---	---	---	---	---	---	5.5	5.0	5.0
30	---	---	---	---	---	---	---	---	---	6.0	5.0	5.5
31	15.0	15.0	---	---	---	---	---	---	---	6.5	5.0	6.0
MONTH	21.5	15.0	---	---	---	---	---	---	---	6.5	1.5	3.5

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

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL.--Continued

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

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

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL.

LOCATION.--Lat 39°30'03", long 75°34'07", New Castle County, water-quality recorder located on platform about 0.4 mile (0.6 km) downstream from Reedy Island near Port Penn.

DRAINAGE AREA.--11,222 sq mi (29,065 sq km), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1974.
Water temperatures: February 1970 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum, 27.0°C July 10, Aug. 31, Sept. 1; minimum, 0.5°C Jan. 18, Feb. 10, 11.

Period of record:
Water temperatures: Maximum, 29.0°C Aug. 10-12, Sept. 3, 1973; minimum, freezing point on many days during winter periods.

REMARKS.--Missing continuous water-quality records result of malfunction of sensor or sampling mechanism.

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

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	14320	12320	13570	---	---	---	---	---	---
2	---	---	---	12120	10480	11230	---	---	---	---	---	---
3	---	---	---	10360	9520	10100	---	---	---	---	---	---
4	---	---	---	11200	10000	10710	14600	7680	---	---	---	---
5	---	---	---	13920	10720	11740	16080	7960	11320	---	---	---
6	---	---	---	13280	12360	12850	13400	5520	9060	---	---	---
7	---	---	---	14920	6080	11560	12320	5240	8630	---	---	---
8	---	---	---	18200	6200	11670	12520	7520	9410	---	---	---
9	---	---	---	16240	7520	10890	16080	8240	11940	---	---	---
10	---	---	---	15440	6800	9810	12560	8920	10480	---	---	---
11	---	---	---	17160	7080	10950	9160	6760	8080	6240	1440	---
12	15160	8600	---	16280	7720	11070	8560	5880	7020	3760	1240	2220
13	14880	8080	10690	14720	7880	10720	8760	5640	7030	2560	1000	1510
14	13400	6920	9870	12760	7840	9910	---	---	---	4960	1000	2040
15	13240	9680	11000	13320	7840	10010	---	---	---	1840	840	1180
16	15680	8640	11030	11640	7240	9710	---	---	---	2880	840	1350
17	13280	9360	---	10360	7000	8190	---	---	---	5520	760	2640
18	---	---	---	10480	6720	---	---	---	---	6840	1000	3400
19	---	---	---	---	---	---	---	---	---	8400	1160	3470
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	7000	1680	---
24	---	---	---	---	---	---	---	---	---	5720	1240	2370
25	16680	10320	---	---	---	---	---	---	---	4640	1200	2770
26	19000	10640	14310	---	---	---	---	---	---	2680	1440	2080
27	16760	10280	13010	---	---	---	---	---	---	3200	1800	2360
28	16160	10600	12700	---	---	---	---	---	---	2040	1200	1580
29	18560	12480	15150	---	---	---	---	---	---	1520	840	1160
30	16800	15280	15890	---	---	---	---	---	---	1200	520	810
31	15280	14320	14750	---	---	---	---	---	---	1200	400	817
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL.--Continued

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

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	640	100	375	---	---	---	---	---	---	6240	1320	2880
2	3000	100	669	---	---	---	---	---	---	6360	1440	2940
3	7800	280	3040	---	---	---	---	---	---	5080	1720	3170
4	10320	1440	5320	---	---	---	10160	3200	---	4280	2000	2770
5	9040	3200	5830	---	---	---	6240	3160	4970	6360	1880	3240
6	10920	3520	6380	---	---	---	4760	2840	3880	7000	2160	3730
7	12360	5120	7630	---	---	---	3520	3040	---	7720	1880	3560
8	11160	5320	7350	---	---	---	---	---	---	7440	1960	3770
9	10480	6440	8470	---	---	---	---	---	---	7160	2280	3640
10	10040	6400	7840	---	---	---	---	---	---	5520	2080	3210
11	9800	6560	7860	---	---	---	240	200	---	4320	1840	2920
12	7600	5240	6540	---	---	---	240	200	232	5880	2120	3550
13	9040	5000	6550	---	---	---	240	240	240	4360	1480	2310
14	7280	5080	5800	---	---	---	280	240	245	3720	1160	2100
15	7720	4960	6220	---	---	---	360	240	252	2360	760	1370
16	8200	6040	7120	---	---	---	2520	240	563	1840	480	895
17	13440	6720	---	---	---	---	4560	280	1450	2960	520	1220
18	---	---	---	---	---	---	5720	360	1990	4960	520	1340
19	---	---	---	---	---	---	7440	720	2410	5800	640	1850
20	---	---	---	---	---	---	5600	960	2560	5800	760	2020
21	---	---	---	---	---	---	5680	2520	3730	4960	1040	2230
22	---	---	---	---	---	---	3480	1640	2280	5520	1000	2170
23	---	---	---	---	---	---	3120	960	1780	5680	1040	1970
24	---	---	---	---	---	---	2560	960	1310	5800	1120	2690
25	---	---	---	---	---	---	5000	1200	2220	5000	1480	2500
26	---	---	---	---	---	---	8520	1320	3300	3920	1760	2610
27	---	---	---	---	---	---	6960	1440	3050	4080	1920	2930
28	---	---	---	---	---	---	6400	1440	---	4000	2520	3140
29	---	---	---	---	---	---	---	---	---	4960	2200	3190
30	---	---	---	---	---	---	4320	1360	---	6880	1880	3510
31	---	---	---	---	---	---	---	---	---	6600	2200	3810
MONTH	---	---	---	---	---	---	---	---	---	7720	480	2680

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6280	2120	3730	9920	4800	6620	13840	8840	11470	12320	9800	10770
2	6640	2160	3350	9800	4720	6530	14080	8160	10010	12200	10480	---
3	7880	2320	3870	8680	4680	6130	12560	7120	9140	---	---	---
4	7960	2280	3970	9320	4320	5710	10600	5880	7820	---	---	---
5	6600	2400	3620	8840	4360	5810	9040	5520	7100	11600	8960	---
6	6800	2240	3370	8200	4080	5480	9080	4840	6840	9920	5600	7440
7	6200	2560	3810	8960	4120	5800	10600	4880	6710	8600	7080	---
8	7160	2840	4740	8920	4080	6440	10200	4640	7200	---	---	---
9	8080	2800	4980	10520	4800	7380	9000	4680	6560	---	---	---
10	7800	3160	4950	10960	4880	7410	11720	5200	7870	---	---	---
11	9920	3520	6110	10040	4760	7060	11480	5360	8550	10640	3440	---
12	10160	3800	6770	10920	5480	7920	14160	5920	8960	11240	3520	6000
13	11160	4280	7420	11840	5840	8690	15600	7680	10370	10480	3640	5930
14	11200	4760	7890	14800	6720	9790	13960	7320	9640	9600	3560	5390
15	11440	5480	7990	18720	6600	11510	13600	7080	9020	10360	3680	6350
16	10960	6720	8480	18800	7440	11850	15800	7440	9700	11440	3920	6130
17	10560	5680	7530	18960	7720	11980	14600	8040	10380	9880	3720	5990
18	12040	6200	7740	17520	8600	12350	14600	7560	10480	8480	3960	5770
19	11720	7800	9490	18080	10840	13130	15280	7560	10490	7080	4080	5240
20	11680	6520	8580	14920	10520	12320	15440	7680	10680	7560	4240	5460
21	11280	6240	7980	15840	14240	15090	13280	7720	9970	8040	4240	5610
22	9440	4280	6380	17000	9160	14090	12800	7800	9960	8160	3560	4850
23	8720	4480	5970	15480	8720	11530	11520	7440	9670	8360	3640	5090
24	8160	5520	---	14640	8920	11360	11960	7760	9550	10280	3760	6480
25	---	---	---	13640	8480	10800	12040	7120	8910	12360	5240	8340
26	---	---	---	13400	8360	10630	11040	8280	---	12440	5440	8360
27	10080	5040	---	12960	8800	10540	---	---	---	13000	5160	8170
28	10800	5520	7360	13480	9640	11140	15440	8320	---	12360	5320	8040
29	10520	5040	7560	14240	9080	10980	13960	8000	10210	11040	5280	7620
30	10840	4800	6860	13520	12320	13020	11840	6920	9020	8320	3720	5110
31	---	---	---	13400	11840	12720	12320	8120	9690	---	---	---
MONTH	12040	2120	6170	18960	4080	9740	15800	4640	9140	13000	3440	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL.--Continued

pH (UNITS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	7.0	6.6	6.9
2	---	---	---	---	---	---	---	---	---	7.1	6.8	6.9
3	---	---	---	---	---	---	---	---	---	7.2	6.7	7.0
4	---	---	---	---	---	---	---	---	---	7.1	6.9	7.0
5	---	---	---	---	---	---	---	---	---	7.3	6.9	7.1
6	---	---	---	---	---	---	---	---	---	7.3	6.9	7.1
7	---	---	---	---	---	---	---	---	---	7.2	6.8	7.0
8	---	---	---	---	---	---	---	---	---	7.1	6.8	6.9
9	---	---	---	---	---	---	---	---	---	7.2	6.8	7.0
10	---	---	---	---	---	---	---	---	---	7.2	6.7	7.0
11	---	---	---	---	---	---	---	---	---	6.8	6.5	6.7
12	---	---	---	---	---	---	---	---	---	7.1	6.6	6.8
13	---	---	---	---	---	---	---	---	---	6.7	6.3	6.5
14	---	---	---	---	---	---	---	---	---	6.7	6.3	6.5
15	---	---	---	---	---	---	---	---	---	6.6	6.3	6.5
16	---	---	---	---	---	---	6.6	6.3	---	6.6	6.2	6.5
17	---	---	---	---	---	---	6.8	6.3	6.5	6.6	6.1	6.4
18	---	---	---	---	---	---	6.9	6.4	6.6	6.5	6.2	6.4
19	---	---	---	---	---	---	7.0	6.5	6.7	6.7	6.4	6.5
20	---	---	---	---	---	---	6.9	6.6	6.7	6.7	6.4	6.6
21	---	---	---	---	---	---	6.8	6.5	6.7	6.7	6.5	6.6
22	---	---	---	---	---	---	6.8	6.6	6.7	6.7	6.5	---
23	---	---	---	---	---	---	6.9	6.7	6.8	---	---	---
24	---	---	---	---	---	---	6.8	6.7	6.8	---	---	---
25	---	---	---	---	---	---	7.0	6.7	6.9	---	---	---
26	---	---	---	---	---	---	7.2	6.8	7.0	---	---	---
27	---	---	---	---	---	---	7.1	6.9	7.0	---	---	---
28	---	---	---	---	---	---	7.1	6.9	---	---	---	---
29	---	---	---	---	---	---	---	---	---	7.0	6.8	---
30	---	---	---	---	---	---	6.9	6.7	---	6.9	6.6	6.8
31	---	---	---	---	---	---	---	---	---	6.9	6.6	6.8
MONTH	---	---	---	---	---	---	---	---	---	7.3	6.1	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL.--Continued

pH (UNITS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	JUNE			JULY			AUGUST			SEPTEMRER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.9	6.6	6.8	7.7	6.8	7.2	7.1	6.6	6.9	7.1	7.0	7.0
2	6.8	6.6	6.7	7.6	6.8	7.1	6.8	6.4	6.6	7.1	7.0	---
3	6.8	6.5	6.7	7.6	6.7	7.0	6.9	6.6	6.7	---	---	---
4	7.0	6.5	6.9	7.1	6.6	6.8	6.8	6.7	6.7	---	---	---
5	7.0	6.7	6.9	7.0	6.7	6.8	7.0	6.6	6.8	---	---	---
6	7.1	6.7	6.9	6.9	6.7	6.8	7.0	6.6	---	---	---	---
7	7.1	6.8	7.0	6.9	6.6	6.7	---	---	---	---	---	---
8	7.3	7.0	7.2	6.8	6.6	---	---	---	---	---	---	---
9	7.3	6.9	7.1	---	---	---	---	---	---	---	---	---
10	7.3	6.9	7.1	---	---	---	---	---	---	---	---	---
11	7.3	6.8	7.1	---	---	---	---	---	---	7.0	6.6	---
12	7.4	7.1	7.2	---	---	---	6.9	6.7	---	7.0	6.6	6.7
13	7.5	7.0	7.3	---	---	---	6.9	6.6	6.7	6.9	6.6	6.7
14	7.5	7.1	7.3	---	---	---	6.8	6.6	6.7	6.9	6.6	6.7
15	7.6	7.1	7.4	---	---	---	6.8	6.5	6.6	6.9	6.6	6.8
16	7.6	7.4	7.5	---	---	---	6.8	6.4	6.6	6.9	6.6	6.7
17	7.5	7.2	7.4	---	---	---	6.8	6.6	6.7	6.9	6.5	6.7
18	7.3	7.1	---	7.7	7.2	7.4	6.8	6.6	6.7	6.9	6.5	6.7
19	---	---	---	7.5	7.1	7.3	7.1	6.5	6.8	6.9	6.5	6.7
20	---	---	---	7.4	7.1	7.2	7.2	6.9	7.1	6.9	6.6	6.8
21	7.2	6.9	---	7.5	7.2	7.4	7.1	6.9	7.0	6.9	6.5	6.7
22	7.1	6.7	6.9	7.5	7.1	7.3	7.1	6.9	7.0	7.0	6.7	6.8
23	7.1	6.6	6.8	7.3	7.1	7.2	7.1	6.9	7.0	7.1	6.8	6.9
24	6.9	6.6	6.8	7.3	7.0	7.2	7.1	6.9	7.0	7.3	6.9	7.1
25	6.9	6.7	6.8	7.1	6.9	7.0	7.1	6.9	7.0	7.3	7.0	7.1
26	6.9	6.7	6.8	7.1	6.9	7.0	7.0	6.9	---	7.7	7.0	7.3
27	7.1	6.9	6.8	7.1	6.9	7.0	---	---	---	7.8	7.4	7.6
28	7.5	6.7	7.2	7.1	6.9	7.0	7.2	7.0	---	7.7	6.7	7.3
29	7.4	6.9	7.1	7.2	6.9	7.0	7.2	7.0	7.1	8.2	7.1	7.6
30	7.6	6.8	7.1	7.1	6.9	7.1	7.1	7.0	7.1	7.5	7.2	7.4
31	---	---	---	7.1	6.9	7.0	7.2	7.0	7.1	---	---	---
MONTH	7.6	6.5	7.0	---	---	---	7.2	6.4	---	---	---	---

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	10.3	9.1	---	---	---	---
5	---	---	---	---	---	---	10.2	9.1	9.7	---	---	---
6	---	---	---	---	---	---	10.0	8.8	9.4	---	---	---
7	---	---	---	---	---	---	9.8	7.6	9.0	---	---	---
8	---	---	---	---	---	---	9.8	8.1	9.0	---	---	---
9	---	---	---	---	---	---	10.1	9.2	9.8	---	---	---
10	---	---	---	---	---	---	9.9	7.6	9.0	---	---	---
11	---	---	---	---	---	---	9.5	7.4	8.5	11.4	10.4	---
12	8.2	7.0	---	---	---	---	10.1	6.0	8.2	10.9	10.4	10.7
13	8.1	6.4	7.3	---	---	---	8.8	6.9	---	11.2	10.4	11.0
14	8.1	6.9	7.4	---	---	---	---	---	---	11.4	10.8	11.1
15	8.4	7.0	7.6	---	---	---	---	---	---	11.5	10.9	11.2
16	9.0	7.2	8.1	---	---	---	---	---	---	11.9	10.9	11.5
17	8.4	7.5	---	---	---	---	---	---	---	11.9	11.5	11.7
18	---	---	---	---	---	---	---	---	---	12.3	11.7	12.0
19	---	---	---	---	---	---	---	---	---	12.0	11.0	11.6
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	11.5	10.2	---
24	---	---	---	---	---	---	---	---	---	11.5	10.2	10.7
25	---	---	---	---	---	---	---	---	---	11.2	9.8	10.5
26	---	---	---	---	---	---	---	---	---	10.5	9.4	10.0
27	---	---	---	---	---	---	---	---	---	10.2	9.2	9.9
28	---	---	---	---	---	---	---	---	---	10.1	9.3	9.7
29	---	---	---	---	---	---	---	---	---	10.0	9.3	9.7
30	---	---	---	---	---	---	---	---	---	9.8	8.8	9.2
31	---	---	---	---	---	---	---	---	---	10.3	8.3	8.9
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.0	8.6	---	---	---	---	---	---	---	8.0	7.2	7.7
2	---	---	---	---	---	---	---	---	---	8.2	7.7	7.9
3	---	---	---	11.9	11.4	---	---	---	---	8.1	7.4	7.8
4	---	---	---	11.5	11.0	---	---	---	---	8.2	7.4	7.7
5	---	---	---	---	---	---	---	---	---	8.5	7.5	7.9
6	---	---	---	---	---	---	---	---	---	8.5	7.1	7.6
7	---	---	---	---	---	---	---	---	---	7.8	6.9	7.3
8	---	---	---	---	---	---	---	---	---	7.8	6.7	7.3
9	---	---	---	---	---	---	---	---	---	8.0	7.0	7.5
10	---	---	---	---	---	---	---	---	---	7.6	6.8	7.2
11	---	---	---	---	---	---	---	---	---	7.3	6.6	7.1
12	---	---	---	---	---	---	---	---	---	7.6	6.8	7.2
13	---	---	---	---	---	---	---	---	---	7.3	6.5	6.9
14	---	---	---	---	---	---	---	---	---	7.2	6.4	6.9
15	---	---	---	---	---	---	---	---	---	7.6	6.4	7.0
16	---	---	---	---	---	---	---	---	---	8.0	6.2	7.1
17	---	---	---	---	---	---	---	---	---	7.4	6.2	6.8
18	---	---	---	---	---	---	---	---	---	7.1	6.0	6.5
19	11.9	11.5	---	---	---	---	---	---	---	6.8	5.8	6.3
20	11.9	11.7	---	---	---	---	---	---	---	7.1	5.6	6.4
21	---	---	---	---	---	---	---	---	---	7.1	5.7	6.4
22	---	---	---	---	---	---	---	---	---	7.1	5.7	6.4
23	---	---	---	---	---	---	---	---	---	6.4	5.5	6.0
24	---	---	---	---	---	---	---	---	---	6.0	4.9	5.5
25	---	---	---	---	---	---	8.8	8.3	---	5.9	4.7	5.3
26	---	---	---	---	---	---	9.1	8.1	8.5	5.5	4.9	5.2
27	---	---	---	---	---	---	8.8	7.9	8.3	5.4	4.6	5.0
28	---	---	---	---	---	---	8.5	7.8	---	5.4	4.6	5.1
29	---	---	---	---	---	---	---	---	---	5.7	5.0	5.5
30	---	---	---	---	---	---	7.9	7.2	---	6.1	5.0	5.5
31	---	---	---	---	---	---	---	---	---	6.5	5.2	5.8
MONTH	---	---	---	---	---	---	---	---	---	8.5	4.6	6.6

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.4	5.3	6.0	7.0	6.0	6.4	5.8	4.7	5.1	5.7	4.6	5.2
2	6.5	5.1	5.8	6.7	5.7	6.2	5.5	4.7	5.1	5.5	4.7	---
3	6.8	5.6	6.1	6.6	5.5	6.0	5.6	4.8	5.1	---	---	---
4	6.8	5.5	6.0	6.8	5.3	5.9	5.7	4.9	5.2	---	---	---
5	6.4	5.5	6.0	6.1	5.3	5.7	5.7	4.6	5.1	---	---	---
6	6.7	5.6	6.2	6.1	5.1	5.6	5.7	4.4	4.8	---	---	---
7	7.3	6.3	6.8	6.2	4.9	5.3	5.2	4.4	4.8	---	---	---
8	7.5	6.7	7.0	5.7	4.7	5.2	4.9	4.3	4.6	---	---	---
9	7.5	6.5	7.0	5.9	4.6	5.1	4.8	4.0	4.4	---	---	---
10	7.4	6.4	6.9	5.5	4.4	5.0	5.5	4.2	4.9	---	---	---
11	7.5	6.3	6.9	6.0	4.5	5.4	5.5	4.9	5.2	---	---	---
12	7.3	6.4	6.8	6.5	5.3	5.9	6.1	4.8	5.4	6.2	4.7	5.4
13	7.8	6.4	7.1	6.5	5.5	6.0	6.0	5.3	5.6	5.9	4.6	5.2
14	7.8	6.5	7.3	6.3	5.5	5.9	5.9	5.1	5.4	6.2	4.0	5.4
15	7.9	6.6	7.4	6.0	5.3	5.7	6.0	4.9	5.4	6.3	2.5	5.2
16	7.8	7.1	7.3	6.0	5.0	5.5	5.9	4.8	5.3	6.5	5.0	5.8
17	7.8	6.6	7.1	6.5	5.1	5.6	5.6	4.8	5.2	6.5	5.0	5.8
18	7.1	5.7	6.4	6.1	5.2	5.6	5.5	4.6	5.0	6.4	5.0	5.7
19	6.7	5.3	5.9	5.9	5.0	5.4	5.7	4.1	5.0	6.4	4.8	5.7
20	6.2	5.2	5.7	6.4	5.3	5.6	5.8	4.6	5.2	6.3	5.1	5.7
21	5.7	4.8	5.3	6.7	5.3	5.8	6.1	4.7	5.3	6.7	5.3	5.9
22	5.8	4.4	5.0	6.2	5.1	5.7	5.7	4.8	5.3	6.9	5.4	6.3
23	5.1	4.4	4.9	6.0	5.2	5.6	5.8	4.8	5.3	7.9	6.2	7.1
24	5.3	4.4	5.0	5.8	5.1	5.5	5.4	4.8	5.1	8.5	7.2	7.9
25	5.3	4.5	4.9	5.7	5.0	5.3	5.6	4.5	5.1	8.1	7.6	7.9
26	5.2	4.3	4.8	5.7	5.0	5.3	5.6	4.7	---	7.9	7.1	7.5
27	5.9	4.2	5.1	5.7	4.8	5.3	---	---	---	7.6	6.9	7.2
28	6.8	5.5	6.3	5.7	4.8	5.3	6.1	5.5	---	7.6	6.9	7.3
29	7.0	6.1	6.4	6.0	4.8	5.4	6.0	5.3	5.6	7.5	6.8	7.2
30	6.7	5.9	6.4	6.1	5.0	5.5	5.9	5.1	5.5	7.5	6.7	7.2
31	---	---	---	6.2	4.8	5.3	6.0	5.0	5.4	---	---	---
MONTH	7.9	4.2	6.2	7.0	4.4	5.6	6.1	4.0	5.2	---	---	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL.--Continued

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

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

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

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL.--Continued

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

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	19.5	19.5	---	---	---	26.5	25.5	26.0	27.0	26.0	26.5
2	19.5	19.0	19.5	---	---	---	26.0	25.5	25.5	26.0	26.0	---
3	20.5	19.0	19.5	---	---	---	26.0	25.5	26.0	---	---	---
4	20.0	19.0	19.5	---	---	---	26.0	25.5	26.0	---	---	---
5	20.5	19.5	20.0	---	---	---	26.0	25.5	---	---	---	---
6	20.5	19.5	20.0	---	---	---	---	---	---	---	---	---
7	20.0	19.5	20.0	---	---	---	---	---	---	---	---	---
8	20.5	19.5	20.0	26.0	25.5	---	---	---	---	---	---	---
9	21.0	19.5	20.5	26.5	25.0	26.0	---	---	---	---	---	---
10	21.5	20.0	21.0	27.0	25.5	26.0	---	---	---	---	---	---
11	22.0	20.5	21.0	26.5	25.5	25.5	---	---	---	24.0	23.5	---
12	22.0	21.0	21.0	25.5	25.0	25.5	25.5	24.5	---	24.5	23.5	24.0
13	22.0	21.0	21.0	26.0	25.0	25.5	25.5	24.5	25.0	25.0	24.0	24.5
14	22.0	21.0	21.5	26.5	25.0	25.5	26.0	24.5	25.0	24.5	23.5	24.0
15	22.0	21.0	21.5	26.5	25.5	26.0	26.0	25.0	25.5	24.0	23.5	23.5
16	22.0	21.5	21.5	26.5	25.5	25.5	26.0	25.0	25.5	24.0	23.0	23.5
17	23.0	21.5	22.0	26.5	25.0	25.5	26.0	25.0	25.5	24.0	23.5	23.5
18	23.5	21.5	22.0	26.5	25.0	25.5	26.5	25.0	25.5	24.0	23.0	23.5
19	23.5	21.5	22.5	26.5	25.5	25.5	26.0	25.5	25.5	24.0	23.0	23.5
20	23.5	22.0	23.0	26.0	25.0	25.5	26.0	25.5	26.0	24.0	23.5	23.5
21	23.5	22.0	23.0	26.0	24.5	25.0	26.0	25.5	25.5	24.0	23.0	23.5
22	24.0	23.0	23.5	25.5	25.0	25.5	26.0	25.5	25.5	23.5	23.0	23.0
23	23.5	22.0	22.5	25.5	24.5	25.0	26.5	25.5	25.5	23.0	20.5	22.0
24	22.0	21.5	22.0	25.0	24.5	24.5	26.5	25.5	26.0	21.0	20.0	21.0
25	22.0	21.5	21.5	25.0	24.0	24.5	26.5	25.5	26.0	21.0	20.5	20.5
26	21.5	21.0	21.5	24.5	24.0	24.5	26.0	25.5	---	20.5	20.0	20.5
27	23.0	21.0	---	25.5	24.5	24.5	---	---	---	21.0	20.0	20.0
28	---	---	---	26.0	24.5	25.0	26.0	25.5	---	20.5	20.0	20.0
29	---	---	---	26.0	24.5	25.0	26.0	25.5	25.5	21.0	20.5	20.5
30	---	---	---	26.0	24.5	25.5	26.5	25.5	26.0	20.5	20.0	20.0
31	---	---	---	26.5	25.0	25.5	27.0	26.0	26.0	---	---	---
MONTH	24.0	19.0	21.0	---	---	---	---	---	---	---	---	---

01483200 BLACKBIRD CREEK AT BLACKBIRD, DEL.

LOCATION.--Lat 39°21'58", long 75°40'10", New Castle County, at gaging station 15 ft (5 m) downstream from highway bridge, 0.5 mile (0.8 km) upstream from Barlow Branch, 0.6 mile (1.0 km) southwest of Blackbird, 5.6 miles (9.0 km) northwest of Smyrna, and 13.8 miles (22.2 km) upstream from mouth.

DRAINAGE AREA.--3.85 sq mi (9.97 sq km).

PERIOD OF RECORD.--Chemical analyses: February to September 1974.

CHEMICAL ANALYSES, FEBRUARY TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)
FEB. 14...	0940	8.3	102	6.5	3.0
MAR. 14...	0915	3.0	90	1.0	5.5
APR. 18...	0920	5.7	90	15.0	14.5
MAY 30...	0925	3.3	80	19.5	18.5
JULY 18...	0940	.61	88	24.5	25.0
AUG. 21...	0915	.62	98	22.5	23.5

01483700 ST. JONES RIVER AT DOVER, DEL.

LOCATION.--Lat 39°09'49", long 75°31'10", Kent County, at gaging station 150 ft (46 m) upstream from Division Street Bridge in Dover, 1,950 feet (594 m) downstream from Silver Lake, and 12.5 miles (20.1 km) upstream from mouth.

DRAINAGE AREA.--31.9 sq mi (82.6 sq km).

PERIOD OF RECORD.--Chemical analyses: February 1965 to September 1972, October 1973 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
JAN.								
02...	0910	98	--	--	--	--	--	--
FEB.								
01...	1455	52	13	2500	230	12	2.7	7.1
MAR.								
01...	1535	37	--	--	--	--	--	--
APR.								
01...	1430	198	--	--	--	--	--	--
MAY								
01...	1320	23	11	1300	80	10	2.6	9.4
JUNE								
03...	1340	212	--	--	--	--	--	--
JULY								
01...	1455	52	--	--	--	--	--	--
09...	1330	21	14	1400	90	8.2	2.4	7.3
AUG.								
02...	1555	6.2	--	--	--	--	--	--
SEP.								
03...	1500	21	--	--	--	--	--	--

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
JAN.									
02...	--	--	--	--	--	--	--	--	--
FEB.									
01...	2.2	18	15	23	10	.2	.96	--	79
MAR.									
01...	--	--	--	--	--	--	--	--	--
APR.									
01...	--	--	--	--	--	--	--	--	--
MAY									
01...	2.4	26	21	18	11	.2	.84	.10	77
JUNE									
03...	--	--	--	--	--	--	--	--	--
JULY									
01...	--	--	--	--	--	--	--	--	--
09...	2.3	26	21	19	8.2	.3	.02	.17	75
AUG.									
02...	--	--	--	--	--	--	--	--	--
SEP.									
03...	--	--	--	--	--	--	--	--	--

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)
JAN.								
02...	--	--	126	--	-2.0	4.0	--	--
FEB.								
01...	41	26	122	6.5	6.0	8.5	--	--
MAR.								
01...	--	--	135	--	10.0	7.0	--	--
APR.								
01...	--	--	95	--	16.0	8.0	--	--
MAY								
01...	36	14	142	6.9	21.5	21.0	40	--
JUNE								
03...	--	--	84	--	22.5	19.5	--	--
JULY								
01...	--	--	112	--	25.0	23.5	--	--
09...	30	9	107	8.9	--	30.0	60	10.6
AUG.								
02...	--	--	130	6.7	32.0	27.0	--	6.0
SEP.								
03...	--	--	152	7.5	30.0	28.0	--	9.1

01484100 BEAVERDAM BRANCH AT HOUSTON, DEL.

LOCATION.--Lat 38°54'20", long 75°30'49", Kent County, at gaging station 15 ft (5 m) upstream from bridge on State Highway 384, 0.8 mile (1.3 km) south of Houston, 2,000 ft (610 m) upstream from unnamed stream, and 1.2 miles (1.9 km) upstream from Blairs Pond and mouth.

DRAINAGE AREA.--2.83 sq mi (7.33 sq km).

PERIOD OF RECORD.--Chemical analyses: December 1973 to September 1974.

CHEMICAL ANALYSES, DECEMBER 1973 TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
DEC. 26...	1105	3.7	83	--	19.5	11.5	--
JAN. 07...	1500	4.6	82	--	6.5	9.0	--
FEB. 06...	1430	4.0	76	--	.0	7.5	--
MAR. 15...	1525	3.5	72	6.5	15.5	12.0	--
APR. 23...	1425	4.5	75	--	19.5	16.5	--
JUNE 10...	1530	4.0	76	6.0	32.0	18.5	7.0
JULY 16...	1520	.89	67	6.2	27.5	19.0	7.0
AUG. 27...	1410	1.3	65	6.4	30.0	19.0	7.0

BROADKILL RIVER BASIN

01484300 SOWBRIDGE BRANCH NEAR MILTON, DEL.

LOCATION.--Lat 38°48'51", long 75°19'39", Sussex County, at gaging station at downstream side of highway bridge, 1 mile (1.6 km) downstream from Reynolds Pond, 2.5 miles (4.0 km) north of Milton, and 0.7 mile (1.1 km) upstream from mouth.

DRAINAGE AREA.--7.08 sq mi (18.34 sq km).

PERIOD OF RECORD.--Chemical analyses: December 1973 to September 1974.

CHEMICAL ANALYSES, DECEMBER 1973 TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
DEC. 19...	1225	8.5	84	--	-2.5	.0	--
JAN. 08...	1220	12	89	--	-2.5	2.0	--
FEB. 13...	1130	11	88	--	12.0	4.5	--
MAR. 12...	1135	10	87	6.8	6.0	8.5	--
APR. 19...	1300	10	80	6.8	23.0	18.0	--
JUNE 04...	1355	16	74	6.5	23.5	22.0	7.5
JULY 17...	1455	5.8	81	6.5	27.0	27.0	7.4
AUG. 20...	1340	3.0	92	6.6	27.0	25.0	7.0

INDIAN RIVER BASIN

01484500 STOCKLEY BRANCH AT STOCKLEY, DEL.

LOCATION--Lat 38°38'19", long 75°20'31", Sussex County, at gaging station at highway bridge in Stockley, 4.4 miles (7.1 km) southeast of Georgetown, and 1.6 miles (2.6 km) upstream from mouth.

DRAINAGE AREA.--5.24 sq mi (13.57 sq km).

PERIOD OF RECORD.--Chemical analyses: December 1973 to September 1974.

CHEMICAL ANALYSES, DECEMBER 1973 TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
DEC.							
19...	1420	4.7	114	--	-1.0	4.0	--
JAN.							
08...	1620	12	98	--	.0	6.5	--
FEB.							
13...	1330	7.3	112	--	10.5	8.0	--
MAR.							
12...	1350	6.5	95	6.2	6.5	8.5	--
APR.							
23...	1235	6.9	90	--	18.5	16.0	--
JUNE							
04...	1540	6.1	97	6.2	25.5	16.0	6.2
JULY							
22...	1555	1.8	95	6.5	23.5	17.0	7.0
AUG.							
20...	1545	2.2	91	6.2	24.5	18.5	7.6

POCOMOKE RIVER BASIN

01485000 POCOMOKE RIVER NEAR WILLARDS, MD.

LOCATION.--Lat 38°23'20", long 75°19'30", Worcester County, at gaging station 30 ft (9 m) downstream from bridge on State Highway 346, 0.6 mile (1.0 km) upstream from Burnt Mill Branch, 1.3 miles (2.1 km) east of Willards, 1.3 miles (2.1 km) west of Whalesville, and 50.3 miles (80.9 km) upstream from mouth.

DRAINAGE AREA.--60.5 sq mi (156.7 sq km).

PERIOD OF RECORD.--Chemical analyses: December 1973 to September 1974.

CHEMICAL ANALYSES, DECEMBER 1973 TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
DEC.							
22...	1530	391	121	--	-1.0	5.0	--
27...	1200	128	124	--	19.0	11.5	--
JAN.							
09...	1700	182	119	--	4.0	6.0	--
FEB.							
14...	1805	73	116	--	8.0	8.5	--
MAR.							
13...	1645	45	108	7.0	1.5	7.0	--
APR.							
23...	1545	61	97	6.0	21.0	16.0	--
JUNE							
05...	1505	94	114	5.6	25.5	17.5	6.5
JULY							
18...	1530	9.6	81	6.6	30.0	20.5	7.0
AUG.							
21...	1340	25	92	6.4	26.0	19.5	7.0

01485500 NASSAWANGO CREEK NEAR SNOW HILL, MD.

LOCATION.--Lat 38°13'44", long 75°28'19", Worcester County, at gaging station 15 ft (5 m) downstream from bridge on State Highway 12, 0.5 mile (0.8 km) upstream from Furnace Branch, 0.6 mile (1.0 km) downstream from Millville Creek, 5.5 miles (8.8 km) northwest of Snow Hill, and 7.3 miles (11.7 km) upstream from mouth.

DRAINAGE AREA.--44.9 sq mi (116.3 sq km).

PERIOD OF RECORD.--Chemical analyses: December 1973 to September 1974.

CHEMICAL ANALYSES, DECEMBER 1973 TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
DEC.							
22...	1235	273	80	--	-1.0	5.0	--
JAN.							
09...	1130	106	73	--	7.5	3.0	--
FEB.							
14...	1410	41	70	--	9.5	5.5	--
MAR.							
13...	1125	38	63	6.0	1.5	4.5	--
APR.							
23...	1145	35	60	5.4	18.0	16.0	--
JUNE							
05...	1040	91	80	5.2	22.5	15.0	6.8
JULY							
18...	1215	2.2	69	6.1	24.0	18.0	4.8
AUG.							
21...	1025	18	83	5.6	25.0	19.0	7.0

WICOMICO RIVER BASIN

01486500 BEAVERDAM CREEK NEAR SALISBURY, MD.

LOCATION.--Lat 38°21'05", long 75°34'11", Wicomico County, at gaging station, 0.6 mile (1.0 km) upstream from Beaglin Branch, 2 miles (3 km) southeast of Salisbury, and 0.8 mile (1.3 km) upstream from mouth.

DRAINAGE AREA.--19.5 sq mi (50.2 sq km).

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.								
18...	1320	13	12	1300	110	4.0	1.5	8.0
NOV.								
09...	0940	10	16	2800	460	3.5	1.4	7.6
DEC.								
22...	0930	142	8.9	3600	480	4.5	2.0	5.0
27...	1400	26	--	--	--	--	--	--
JAN.								
10...	0930	46	11	2400	450	4.0	1.5	5.4
FEB.								
13...	1705	24	14	410	20	4.0	1.5	6.8
14...	1045	25	--	--	--	--	--	--
22...	1420	28	--	--	--	--	--	--
MAR.								
14...	1110	22	14	1600	150	4.2	1.5	7.6
26...	1420	24	--	--	--	--	--	--
APR.								
23...	0950	24	13	530	40	4.5	1.6	7.0
JUNE								
06...	1000	20	14	700	70	5.4	1.6	7.6
JULY								
22...	1135	7.0	5.4	700	30	3.5	1.4	9.1
AUG.								
21...	1530	9.5	11	580	50	4.0	2.0	7.4

01486500 BEAVERDAM CREEK NEAR SALISBURY, MD.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.									
18...	1.9	22	18	2.6	9.9	.2	1.2	--	51
NOV.									
09...	2.0	22	18	2.5	8.9	.3	1.1	--	53
DEC.									
22...	2.8	7	6	19	9.0	.2	1.2	--	55
27...	--	--	--	--	--	--	--	--	--
JAN.									
10...	2.2	10	8	8.0	8.2	.1	1.2	--	45
FEB.									
13...	1.8	14	11	5.0	9.2	.1	1.8	--	49
14...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
MAR.									
14...	1.8	17	14	2.7	9.3	.0	1.7	--	49
26...	--	--	--	--	--	--	--	--	--
APR.									
23...	1.8	17	14	4.1	8.7	.1	1.4	.02	49
JUNE									
06...	2.0	15	12	6.2	8.3	.1	.83	.03	53
JULY									
22...	1.8	29	24	2.3	9.0	.0	.13	.02	47
AUG.									
21...	2.2	16	13	7.5	7.3	.1	.32	.03	49

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPER-ATURE (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)
OCT.								
18...	16	0	84	6.9	15.0	15.0	--	--
NOV.								
09...	15	0	80	6.7	6.5	8.5	--	--
DEC.								
22...	19	14	83	5.6	-2.5	3.5	--	--
27...	--	--	86	--	17.5	9.0	--	--
JAN.								
10...	16	8	81	6.9	1.5	4.5	--	--
FEB.								
13...	16	5	87	6.7	16.5	10.0	--	--
14...	--	--	90	--	8.0	7.5	--	--
22...	--	--	85	--	15.5	11.5	--	--
MAR.								
14...	17	3	88	7.0	2.0	7.0	--	--
26...	--	--	82	6.5	10.5	12.0	--	--
APR.								
23...	18	4	82	6.6	18.0	18.0	20	--
JUNE								
06...	20	8	81	6.6	21.5	21.5	60	7.5
JULY								
22...	15	0	84	7.8	23.0	25.0	23	8.9
AUG.								
21...	18	5	80	7.2	25.5	25.5	30	8.8

01487000 NANTICOKE RIVER NEAR BRIDGEVILLE, DEL.

LOCATION.--Lat 38°43'45", long 75°33'41", Sussex County, at gaging station, 1,100 feet (335 m) downstream from Gum Branch, 2.5 miles (4.0 km) southeast of Bridgeville, and 50.5 miles (81.3 km) upstream from mouth.

DRAINAGE AREA.--75.4 sq mi (195.3 sq km).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1972, December 1973 to September 1974.

CHEMICAL ANALYSES, DECEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
DEC. 18...	1305	59	--	--	--	--	--	--
JAN. 07...	1150	125	--	--	--	--	--	--
FEB. 06...	1215	93	17	380	50	4.1	1.8	6.0
MAR. 22...	1700	178	--	--	--	--	--	--
APR. 23...	1105	115	--	--	--	--	--	--
MAY 02...	1500	95	15	800	60	5.0	2.0	7.5
JUNE 10...	1310	84	--	--	--	--	--	--
JULY 09...	0945	48	16	1100	90	5.0	2.0	8.1
AUG. 19...	1245	36	--	--	--	--	--	--
SEP. 12...	1045	36	--	--	--	--	--	--

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
DEC. 18...	--	--	--	--	--	--	--	--	--
JAN. 07...	--	--	--	--	--	--	--	--	--
FEB. 06...	1.7	12	10	6.0	7.9	.0	2.6	--	50
MAR. 22...	--	--	--	--	--	--	--	--	--
APR. 23...	--	--	--	--	--	--	--	--	--
MAY 02...	1.9	12	10	5.8	8.5	.1	2.4	.07	52
JUNE 10...	--	--	--	--	--	--	--	--	--
JULY 09...	2.0	18	15	5.8	8.7	.1	2.1	.10	57
AUG. 19...	--	--	--	--	--	--	--	--	--
SEP. 12...	--	--	--	--	--	--	--	--	--

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)
DEC. 18...	--	--	86	--	-4.0	2.5	--	--
JAN. 07...	--	--	86	--	6.0	6.5	--	--
FEB. 06...	18	8	89	7.0	1.5	4.0	--	--
MAR. 22...	--	--	82	6.2	10.5	12.0	--	--
APR. 23...	--	--	93	--	18.5	16.5	--	--
MAY 02...	21	11	90	6.6	--	14.5	6	--
JUNE 10...	--	--	92	6.2	33.0	23.0	--	7.3
JULY 09...	21	6	94	6.2	29.5	21.5	2	5.5
AUG. 19...	--	--	98	6.4	26.0	20.5	--	--
SEP. 12...	--	--	173	6.2	27.5	20.0	--	--

01488500 MARSHYHOPE CREEK NEAR ADAMSVILLE, DEL.

LOCATION.--Lat 38°50'59", long 75°40'24", Kent County, at gaging station 45 ft (14 m) upstream from highway bridge, 1.4 miles (2.3 km) upstream from Cattail Branch, 1.6 miles (2.6 km) northeast of Adamsville, and 4.9 miles (7.9 km) northwest of Greenwood.

DRAINAGE AREA.--43.9 sq mi (113.7 sq km). Area at site used prior to Oct. 1, 1971, 44.8 sq mi (116.0 sq km).

PERIOD OF RECORD.--Chemical analyses: December 1973 to September 1974.

CHEMICAL ANALYSES, DECEMBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
DEC. 21...	1055	686	--	--	--	--	--	--
JAN. 11...	1145	231	--	--	--	--	--	--
FEB. 07...	1020	71	22	5100	350	4.6	1.6	6.1
MAR. 15...	1345	41	--	--	--	--	--	--
APR. 22...	1500	48	--	--	--	--	--	--
MAY 02...	1415	41	20	1800	120	6.0	1.7	7.8
JUNE 07...	1250	72	--	--	--	--	--	--
JULY 09...	1145	27	24	3100	140	6.5	.8	7.9
AUG. 26...	1500	21	--	--	--	--	--	--

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
DEC. 21...	--	--	--	--	--	--	--	--	--
JAN. 11...	--	--	--	--	--	--	--	--	--
FEB. 07...	1.3	13	11	14	8.3	.1	.84	--	64
MAR. 15...	--	--	--	--	--	--	--	--	--
APR. 22...	--	--	--	--	--	--	--	--	--
MAY 02...	1.2	17	14	9.3	8.7	.2	.98	.03	63
JUNE 07...	--	--	--	--	--	--	--	--	--
JULY 09...	1.2	17	14	11	8.5	.1	.81	.06	68
AUG. 26...	--	--	--	--	--	--	--	--	--

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)
DEC. 21...	--	--	61	--	4.0	10.0	--	--
JAN. 11...	--	--	79	--	2.5	4.5	--	--
FEB. 07...	18	7	89	6.3	1.5	6.0	--	--
MAR. 15...	--	--	90	6.5	9.5	9.5	--	--
APR. 22...	--	--	97	--	24.0	20.5	--	--
MAY 02...	22	8	94	6.5	--	14.5	20	--
JUNE 07...	--	--	92	6.4	18.5	17.0	--	7.4
JULY 09...	20	6	98	6.4	34.0	25.5	30	7.7
AUG. 26...	--	--	99	6.5	25.5	24.5	--	8.7

01489000 FAULKNER BRANCH AT FEDERALSBURG, MD.

LOCATION.--Lat 38°42'44", long 75°47'34", Caroline County, at gaging station 25 ft (8 m) downstream from highway bridge on Nichols Road, 1.6 miles (2.6 km) northwest of Federalsburg, and 0.9 mile (1.4 km) upstream from mouth.

DRAINAGE AREA.--7.10 sq mi (18.39 sq km).

PERIOD OF RECORD.--Chemical analyses: December 1973 to September 1974.

CHEMICAL ANALYSES, DECEMBER 1973 TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
DEC.							
21...	1245	76	107	--	2.0	8.5	--
26...	1515	14	150	--	15.5	10.5	--
JAN.							
11...	1020	22	140	--	3.5	5.5	--
FEB.							
15...	1720	10	134	--	2.5	6.0	--
MAR.							
15...	1045	5.6	138	6.6	4.5	4.5	--
APR.							
22...	1055	6.9	132	6.6	21.0	16.0	--
JUNE							
07...	1100	7.2	148	6.4	17.5	15.5	7.5
JULY							
19...	1455	1.7	146	6.6	29.5	20.0	7.0
AUG.							
22...	1500	1.9	146	6.8	27.0	20.0	7.1

TRANSQUAKING RIVER BASIN

01490000 CHICAMACOMICO RIVER NEAR SALEM, MD.

LOCATION.--Lat 38°30'43", long 75°52'51", Dorchester County, at gaging station 30 ft (9 m) downstream from Big Mill Pond dam, 1.6 miles (2.6 km) east of Salem, 3.5 miles (5.6 km) northwest of Vienna, and 13 miles (21 km) upstream from mouth.

DRAINAGE AREA.--15.0 sq mi (38.8 sq km).

PERIOD OF RECORD.--Chemical analyses: December 1973 to September 1974.

CHEMICAL ANALYSES, DECEMBER 1973 TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
DEC.							
21...	1610	161	65	--	-1.0	8.0	--
JAN.							
10...	1330	42	75	--	1.5	4.0	--
FEB.							
15...	1200	20	72	--	-2.0	4.0	--
MAR.							
14...	1345	16	65	6.6	5.5	5.5	--
APR.							
22...	1350	14	68	6.8	23.0	17.5	--
JUNE							
06...	1340	17	57	5.4	25.5	22.5	7.2
JULY							
19...	1100	5.4	64	6.2	27.0	25.5	6.5
AUG.							
22...	1120	5.3	64	6.2	26.5	25.0	6.4

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD.

LOCATION.--Lat 38°59'50", long 75°47'09", Caroline County, at gaging station, 0.1 mile (0.2 km) upstream from Gravely Branch, 2 miles (3.2 km) northeast of Greensboro, and 60 miles (97 km) upstream from mouth.

DRAINAGE AREA.--113 sq mi (293 sq km).

PERIOD OF RECORD.--Chemical analyses: February 1965 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.								
24...	0925	19	12	680	30	11	3.4	7.6
NOV.								
23...	1015	35	12	2000	110	13	3.7	5.6
DEC.								
26...	0915	163	15	2900	440	8.0	2.8	5.1
JAN.								
24...	1100	187	14	2400	140	7.7	2.6	4.8
FEB.								
22...	0925	135	15	1800	210	7.5	2.5	5.0
MAR.								
22...	1400	496	7.3	3700	170	6.5	1.9	3.2
APR.								
23...	0810	111	--	--	--	--	--	--
MAY								
02...	1220	63	14	1900	100	9.0	2.6	7.4
23...	1125	130	15	3000	140	7.5	2.0	9.0
JUNE								
24...	0950	76	17	2400	80	9.5	2.8	7.0
JULY								
24...	1310	20	15	1100	70	11	3.2	8.5
AUG.								
23...	1045	22	16	770	10	9.3	3.9	8.7
SEP.								
24...	0935	31	18	930	20	11	2.8	8.5

DATE	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.									
24...	2.1	26	21	15	13	.3	1.8	--	77
NOV.									
23...	2.2	29	24	17	12	.3	1.7	--	80
DEC.									
26...	2.2	7	6	26	8.7	.3	1.1	--	72
JAN.									
24...	2.0	10	8	21	8.4	.2	.69	--	66
FEB.									
22...	1.6	10	8	20	8.9	.1	1.0	--	66
MAR.									
22...	2.4	6	5	19	6.6	.1	.57	--	50
APR.									
23...	--	--	--	--	--	--	--	--	--
MAY									
02...	2.0	17	14	15	12	.2	.96	.08	71
23...	1.9	11	9	17	8.4	.1	.68	.12	66
JUNE									
24...	2.0	19	16	15	11	.2	1.0	.07	74
JULY									
24...	2.2	22	18	17	13	.2	.95	.04	81
AUG.									
23...	2.5	25	21	17	15	.2	1.2	.04	85
SEP.									
24...	2.4	27	22	19	14	.2	.64	.05	89

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPER-ATURE (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)
OCT.								
24...	41	20	140	7.0	8.5	11.0	--	--
NOV.								
23...	48	24	144	7.0	12.0	9.0	--	--
DEC.								
26...	32	26	114	6.0	--	--	--	--
JAN.								
24...	30	22	110	6.4	5.5	7.5	--	--
FEB.								
22...	29	21	108	6.4	15.0	6.5	--	--
MAR.								
22...	24	19	80	7.0	6.5	7.5	--	--
APR.								
23...	--	--	115	--	14.5	17.0	--	--
MAY								
02...	33	19	119	6.7	--	17.5	40	--
23...	27	18	95	6.5	21.0	20.0	70	5.9
JUNE								
24...	35	20	122	6.9	17.0	20.5	60	7.0
JULY								
24...	41	23	146	7.0	23.0	20.0	23	7.7
AUG.								
23...	39	19	150	7.1	25.5	23.0	6	7.2
SEP.								
24...	39	17	146	7.3	9.0	14.0	3	--

CHOPTANK RIVER BASIN

01492000 BEAVERDAM BRANCH AT MATTHEWS, MD.

LOCATION.--Lat 38°48'41", long 75°58'15", Talbot County, at gaging station 50 ft (15 m) upstream from bridge on State Highway 328, 1 mile (2 km) west of Matthews, 6 miles (10 km) northeast of Easton, and 1.2 miles (1.9 km) upstream from mouth.

DRAINAGE AREA.--5.85 sq mi (15.15 sq km).

PERIOD OF RECORD.--Chemical analyses: February to September 1974.

CHEMICAL ANALYSES, FEBRUARY TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	AIR TEMPER-ATURE (DEG C)	TEMPER-ATURE (DEG C)
FEB.					
14...	1320	9.0	132	8.5	6.5
MAR.					
14...	1250	3.4	122	7.5	4.5
APR.					
18...	1340	4.3	112	21.0	14.5
MAY					
30...	1320	6.1	99	20.5	17.0
JULY					
18...	1400	.22	165	27.5	21.0
AUG.					
21...	1330	.42	155	23.5	20.5

01493000 UNICORN BRANCH NEAR MILLINGTON, MD.

LOCATION.--Lat 39°14'59", long 75°51'40", Kent County, at gaging station 20 ft (6 m) upstream from bridge on State Highway 313, 1.4 miles (2.3 km) southwest of Millington, and 0.9 mile (1.4 km) upstream from mouth.

DRAINAGE AREA.--22.3 sq mi (57.8 sq km).

PERIOD OF RECORD.--Chemical analyses: February to September 1974.

CHEMICAL ANALYSES, FEBRUARY TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)
FEB.					
14...	1115	27	122	7.5	4.5
MAR.					
14...	1050	20	119	2.5	5.5
APR.					
18...	1110	28	102	18.5	15.0
MAY					
30...	1105	31	90	21.5	18.5
JULY					
18...	1110	8.8	112	27.5	25.5
AUG.					
21...	1100	12	114	25.0	24.0

CHESTER RIVER BASIN

01493500 MORGAN CREEK NEAR KENNEDYVILLE, MD.

LOCATION.--Lat 39°16'48", long 76°00'54", Kent County, at gaging station 200 ft (61 m) upstream from highway bridge, 2 miles (3 km) southwest of Kennedyville, and 4.5 miles (7.2 km) upstream from mouth.

DRAINAGE AREA.--10.5 sq mi (27.2 km).

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.								
12...	0900	6.7	9.1	2800	350	11	3.1	4.0
NOV.								
07...	1100	7.1	10	2300	440	11	3.7	4.3
JAN.								
11...	0955	28	5.4	3100	560	11	3.7	4.1
FEB.								
15...	1030	10	7.1	3100	530	10	3.0	4.3
MAR.								
15...	0955	7.1	7.4	2500	550	11	3.1	4.5
APR.								
19...	1020	8.8	--	--	--	--	--	--
MAY								
31...	1025	8.8	--	--	--	--	--	--
JUNE								
24...	1125	9.7	9.8	3300	300	12	3.2	4.0
JULY								
19...	0950	5.1	--	--	--	--	--	--
24...	1045	5.3	11	1500	180	11	3.0	10
AUG.								
22...	1020	5.0	--	--	--	--	--	--
23...	1230	6.3	10	1700	140	7.5	2.5	21
SEP.								
24...	1245	4.8	11	1100	130	9.3	2.4	4.5

01493500 MORGAN CREEK NEAR KENNEDYVILLE, MD.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.									
12...	2.3	41	34	3.5	8.8	.3	1.6	--	62
NOV.									
07...	3.6	42	34	5.2	10	.3	1.4	--	69
JAN.									
11...	5.5	31	25	14	11	.2	2.0	--	70
FEB.									
15...	3.1	34	28	6.0	9.8	.1	1.6	--	60
MAR.									
15...	2.3	36	30	4.1	8.4	.1	1.9	--	59
APR.									
19...	--	--	--	--	--	--	--	--	--
MAY									
31...	--	--	--	--	--	--	--	--	--
JUNE									
24...	3.8	39	32	6.6	8.2	.2	1.4	.19	67
JULY									
19...	--	--	--	--	--	--	--	--	--
24...	2.9	41	34	4.5	8.4	.1	2.4	.17	71
AUG.									
22...	--	--	--	--	--	--	--	--	--
23...	3.2	35	29	3.8	8.0	.2	1.1	.08	73
SEP.									
24...	2.8	36	30	3.0	8.2	.2	.88	.05	59

DATE	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPER-ATURE (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)
OCT.								
12...	40	7	118	7.2	13.0	13.0	--	--
NOV.								
07...	43	8	130	7.0	8.5	4.0	--	--
JAN.								
11...	43	17	136	6.7	1.5	2.0	--	--
FEB.								
15...	37	9	142	7.0	-1.0	2.0	--	--
MAR.								
15...	40	11	132	7.1	6.0	2.0	--	--
APR.								
19...	--	--	122	--	18.0	12.0	--	--
MAY								
31...	--	--	122	--	19.5	16.0	--	--
JUNE								
24...	43	11	126	7.0	24.0	17.5	30	7.2
JULY								
19...	--	--	134	--	26.0	21.0	--	--
24...	40	6	116	7.1	--	18.0	24	8.3
AUG.								
22...	--	--	124	--	26.5	20.5	--	--
23...	29	0	117	7.1	29.0	21.5	1	7.5
SEP.								
24...	33	4	117	7.3	12.5	11.0	1	--

01495500 LITTLE ELK CREEK AT CHILDS, MD.

LOCATION.--Lat 39°38'30", long 75°52'00", Cecil County, at highway bridge, 0.2 mile (0.3 km) southeast of Childs, 1.6 miles (2.6 km) upstream from Laurel Run, 2.4 miles (3.9 km) northwest of Elkton, and 6.1 miles (9.8 km) upstream from confluence with Big Elk Creek.

DRAINAGE AREA.--26.8 sq mi (69.4 sq km).

PERIOD OF RECORD.--Chemical analyses: April to September 1974.

CHEMICAL ANALYSES, APRIL TO SEPTEMBER 1974

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
APR.							
17...	1230	38	142	--	16.0	13.0	--
MAY							
06...	1355	27	140	--	16.0	14.0	--
27...	1440	28	149	--	15.5	15.5	--
JULY							
08...	1405	17	150	--	32.5	25.0	--
AUG.							
22...	1305	15	156	--	28.5	22.0	--
SEP.							
09...	1625	23	151	8.3	25.0	20.5	8.9
30...	1510	24	143	7.9	20.0	17.0	9.7

PATAPSCO RIVER BASIN

01587500 SOUTH BRANCH PATAPSCO RIVER AT HENRYTON, MD.

LOCATION.--Lat 39°21'05", long 76°54'50", Howard County, at gaging station at bridge on Henryton Road at Henryton, 1.3 miles (2.1 km) upstream from Piney Run, 2.5 miles (4.0 km) upstream from confluence with North Branch, and 3.2 miles (5.1 km) southeast of Sykesville.

DRAINAGE AREA.--64.4 sq mi (166.8 sq km).

PERIOD OF RECORD.--Chemical analyses: November 1965 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.												
05...	1245	38	6.3	250	40	12	3.6	6.0	3.4	41	34	5.0
NOV.												
13...	1530	36	6.9	250	60	10	3.0	4.5	1.5	31	25	4.5
DEC.												
20...	1420	46	7.3	230	75	8.9	3.0	6.6	1.7	29	24	5.5
JAN.												
24...	1230	109	6.9	380	50	8.9	2.9	4.9	1.7	23	19	7.5
MAR.												
01...	1145	60	5.9	160	50	7.0	2.8	4.6	1.8	22	18	5.7
APR.												
16...	1445	100	3.9	420	50	8.6	2.7	5.4	1.5	24	20	6.4
MAY												
28...	1530	58	7.9	800	90	10	3.2	5.0	1.8	27	22	5.0
JULY												
03...	1425	41	7.2	460	80	11	3.0	5.4	2.0	35	29	5.8

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)
OCT.											
05...	9.6	.3	1.7	--	66	45	11	130	6.7	19.0	--
NOV.											
13...	7.8	.1	2.2	--	54	37	12	111	7.2	8.0	--
DEC.											
20...	11	.2	2.2	--	58	35	11	116	7.2	1.0	--
JAN.											
24...	8.2	.2	2.3	--	53	34	15	103	7.0	6.0	--
MAR.											
01...	8.4	.2	2.3	--	47	29	11	104	7.1	5.5	--
APR.											
16...	8.5	.1	1.8	.04	49	33	13	101	7.2	14.0	2
MAY											
28...	8.8	.0	1.9	.06	55	38	16	116	7.1	17.5	0
JULY											
03...	8.7	.0	1.8	.08	60	40	11	--	--	--	3

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD.

LOCATION.--Lat 39°18'36", long 76°47'39", Howard County, at gaging station on highway bridge, at Hollofield, 0.3 mile (0.5 km) downstream from Dogwood Run, 3.0 miles (4.8 km) north of Ellicott City, and 28 miles (45 km) upstream from mouth.

DRAINAGE AREA.--285 sq mi (738 sq km).

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
DEC.										
04...	0940	66	9.4	100	290	70	14	3.9	6.5	2.3
MAR.										
01...	1510	112	9.0	--	340	90	11	3.5	5.8	1.6
MAY										
15...	1620	138	9.0	--	710	160	12	3.5	5.8	2.2

DATE	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
DEC.										
04...	44	36	7.9	8.8	.3	1.6	.21	.08	76	75
MAR.										
01...	31	25	9.0	9.5	.3	2.2	--	--	--	65
MAY										
15...	37	30	9.6	8.4	.2	1.5	--	.07	--	69

DATE	SUSPENDED SOLIDS (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
DEC.										
04...	6	51	15	1.7	145	7.1	3.0	--	3	13.2
MAR.										
01...	--	42	16	--	126	7.2	7.5	--	--	--
MAY										
15...	--	44	14	--	135	7.6	22.0	10	--	--

DATE	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC.									
04...	1.0	45	.00	0	0	10	0	2	0
MAR.									
01...	--	--	--	--	--	--	--	--	--
MAY									
15...	--	--	--	--	--	--	--	--	--

01595500 NORTH BRANCH POTOMAC RIVER AT KITZMILLER, MD.

LOCATION.--Lat 39°23'38", long 79°10'55", Garrett County, temperature recorder at gaging station on left bank 0.6 mile (1.0 km) downstream from bridge on State Highway 38 in Kitzmiller, 1.5 miles (2.4 km) downstream from Wolfden Run, and at mile 68.9 (110.9 km).
DRAINAGE AREA.--225 sq mi (583 sq km).
PERIOD OF RECORD.--Water temperatures: August 1961 to September 1974.
EXTREMES.--1973-74:
Water temperatures: Maximum, 25.5°C July 28; minimum, freezing point on several days during December.
Period of record:
Water temperatures: Maximum, 32.0°C Aug. 15, 16, 18, 1965; minimum, freezing point on many days during winter periods.

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

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	3.5	18.0	14.5	14.0	13.5	18.5	17.5	24.0	17.5	21.5	18.5
2	10.0	6.0	14.5	10.0	13.5	12.5	20.0	15.5	23.0	19.0	22.5	19.0
3	10.5	6.5	10.5	9.0	15.0	12.5	22.5	18.0	22.5	19.5	20.0	17.5
4	10.5	9.5	13.5	9.0	16.5	13.5	21.5	19.0	22.5	20.0	18.0	15.5
5	10.0	7.0	11.5	8.0	18.0	15.5	20.5	19.0	22.0	18.0	17.0	13.0
6	7.0	5.0	10.5	7.0	18.5	15.0	21.0	18.5	21.5	17.0	15.0	13.5
7	6.5	4.0	11.5	6.5	19.0	16.5	23.0	19.0	24.0	17.5	15.0	13.5
8	6.5	5.5	10.0	6.5	19.0	17.0	23.5	18.5	24.0	22.0	17.5	15.0
9	5.5	4.0	13.0	9.5	22.0	17.5	24.0	19.5	22.5	19.5	18.5	15.5
10	6.0	3.0	16.0	11.0	23.0	18.0	24.0	20.0	22.5	19.0	20.5	16.5
11	7.5	4.5	17.0	10.5	21.0	17.5	24.5	20.5	22.5	17.5	22.0	18.0
12	10.0	6.5	15.0	11.0	19.0	16.0	23.0	17.5	22.5	18.0	22.5	17.5
13	11.0	9.5	12.0	9.5	19.0	14.0	23.5	16.5	22.5	17.5	23.5	19.0
14	12.0	8.5	16.0	10.0	19.5	14.0	24.0	17.5	24.5	19.0	21.0	16.5
15	11.5	8.5	17.5	13.0	19.0	16.0	24.0	20.0	25.0	24.0	18.5	15.5
16	8.5	7.0	19.5	14.5	16.5	15.5	23.0	19.0	25.0	23.5	18.5	14.5
17	10.0	6.0	20.0	15.5	17.5	14.5	24.0	17.0	24.0	23.0	20.0	16.0
18	11.0	7.0	17.0	15.0	18.0	13.0	25.0	19.0	23.0	23.0	17.5	16.0
19	10.5	8.5	15.0	14.0	19.0	13.5	23.0	20.0	23.0	23.0	19.0	14.5
20	11.5	6.5	17.0	13.5	20.0	16.5	24.5	18.5	23.0	22.0	20.0	15.5
21	13.0	8.5	18.5	13.5	20.0	18.0	23.5	17.0	22.5	22.0	18.5	15.0
22	12.5	11.0	19.5	15.0	18.0	16.0	23.5	17.5	22.5	21.0	16.5	13.5
23	13.0	10.5	19.0	16.5	17.0	14.5	20.5	18.0	24.0	18.5	15.0	11.5
24	10.5	6.5	18.0	15.0	14.5	13.5	21.0	17.5	24.0	23.5	14.0	9.0
25	11.0	5.0	15.5	12.5	14.5	14.0	21.5	17.0	24.0	23.5	14.0	9.5
26	13.5	8.0	13.0	11.0	17.0	14.5	21.5	19.0	24.5	23.0	16.0	12.0
27	15.5	9.0	14.0	11.5	16.5	15.0	24.0	18.5	25.0	21.5	17.0	11.0
28	16.5	11.0	15.5	10.0	16.5	15.0	25.5	19.0	24.0	21.5	18.5	15.0
29	18.5	13.0	14.5	13.5	16.0	14.0	25.0	19.0	24.0	19.5	17.0	14.0
30	19.5	14.0	13.5	12.5	19.0	15.0	23.0	19.0	22.5	20.0	15.0	12.5
31	---	---	14.0	13.0	---	---	23.0	17.5	21.0	19.0	---	---
MONTH	19.5	3.0	20.0	6.5	23.0	12.5	25.5	15.5	25.0	17.0	23.5	9.0

01595800 NORTH BRANCH POTOMAC RIVER AT BARNUM, W. VA.

LOCATION.--Lat 39°26'44", 79°06'39", Garrett County, Md., at gaging station, at Barnum, W. Va., 0.4 mile (0.6 km) upstream from Folly Run, and 4.0 miles (6.4 km) southwest of Piedmont, W. Va.

DRAINAGE AREA.--266 sq mi (689 sq km).

PERIOD OF RECORD.--Chemical analyses: April 1967 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT. 16...	1510	715	4.8	9200	34000	1600	34	8.8	2.0	2.1
NOV. 06...	1420	438	5.2	3600	8600	990	24	6.4	2.2	1.1
DEC. 04...	1645	480	4.9	2600	3500	810	18	5.1	2.0	.9
JAN. 22...	1530	1320	4.2	2100	2900	660	19	5.0	2.2	.8
MAR. 25...	1220	466	5.0	--	6500	800	21	6.0	2.0	.9
SEP. 10...	1025	120	6.4	--	320	1300	44	8.2	3.0	1.5

DATE	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 16...	0	0	150	3.7	.2	.57	--	--	--	207
NOV. 06...	0	0	94	3.4	.3	.38	--	--	--	137
DEC. 04...	0	0	76	3.2	.3	.39	.19	.03	139	111
JAN. 22...	0	0	68	3.4	.1	.57	--	--	--	103
MAR. 25...	0	0	94	4.4	.2	.53	--	--	--	134
SEP. 10...	0	0	150	12	.1	.32	--	.03	--	226

DATE	SUSPENDED SOLIDS (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT. 16...	--	120	120	45	400	3.5	14.0	--	--	10.3
NOV. 06...	--	86	86	25	245	4.2	5.0	--	--	12.4
DEC. 04...	22	66	66	25	240	3.8	7.0	--	10	11.8
JAN. 22...	--	68	68	14	220	3.9	7.0	--	--	12.2
MAR. 25...	--	77	77	30	282	3.7	2.0	--	--	--
SEP. 10...	--	140	140	20	370	--	19.5	0	--	--

DATE	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 16...	--	120	--	--	--	--	--	--	--
NOV. 06...	--	0	--	--	--	--	--	--	--
DEC. 04...	.4	0	.01	11	0	0	0	0	120
JAN. 22...	--	1	--	--	--	--	--	--	--
MAR. 25...	--	--	--	--	--	--	--	--	--
SEP. 10...	--	--	--	--	--	--	--	--	--

01600000 NORTH BRANCH POTOMAC RIVER AT PINTO, MD.

LOCATION.--Lat 39°33'59", long 78°50'25", Mineral County, West Virginia, at gaging station on right bank at downstream side of Western Maryland Railway bridge at Pinto, 2.8 miles (4.5 km) downstream from Mill Run and at mile 32.6 (52.5 km).

DRAINAGE AREA.--596 sq mi (1,544 sq km).

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT.											
16...	1700	363	--	--	--	--	--	--	--	--	--
NOV.											
06...	1550	988	--	--	--	--	--	--	--	--	--
DEC.											
05...	0910	699	5.1	2200	2800	910	34	6.9	17	1.8	6
JAN.											
22...	1700	2860	--	--	--	--	--	--	--	--	--
FEB.											
28...	1135	1300	4.5	--	90	600	26	6.0	10	1.5	4
JUNE											
06...	1440	1490	5.6	--	3400	670	28	6.2	8.2	1.7	1
SEP.											
04...	1220	274	5.9	--	1100	910	65	13	20	3.2	21

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	SUSPENDED SOLIDS (MG/L)
OCT.										
16...	--	--	--	--	--	--	--	--	--	--
NOV.										
06...	--	--	--	--	--	--	--	--	--	--
DEC.										
05...	5	96	29	.3	.40	.25	.06	240	193	48
JAN.										
22...	--	--	--	--	--	--	--	--	--	--
FEB.										
28...	3	86	16	.1	.56	--	--	--	152	--
JUNE										
06...	1	98	15	.3	.43	--	.05	--	164	--
SEP.										
04...	17	130	58	.3	3.2	--	.10	--	306	--

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT.										
16...	--	--	--	465	6.7	--	17.0	--	--	8.1
NOV.										
06...	--	--	--	305	6.4	--	7.0	--	--	11.4
DEC.										
05...	110	110	8.4	355	6.5	--	9.0	--	30	11.2
JAN.										
22...	--	--	--	248	5.5	--	7.5	--	--	12.0
FEB.										
28...	90	86	--	268	5.6	5.0	3.0	--	--	--
JUNE										
06...	95	95	--	256	5.3	--	19.0	2	--	--
SEP.										
04...	220	200	--	600	--	--	20.0	40	--	--

DATE	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
16...	--	--	2500	--	--	--	--	--	--	--
NOV.										
06...	--	--	810	--	--	--	--	--	--	--
DEC.										
05...	25	5.0	7	.01	10	0	0	10	2	120
JAN.										
22...	--	--	0	--	--	--	--	--	--	--

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

01603000 NORTH BRANCH POTOMAC RIVER NEAR CUMBERLAND, MD.

LOCATION.--Lat 39°37'16", long 78°46'24", Allegany County, at gaging station, at Wiley Ford Bridge, 2.0 miles (3.2 km) south of Cumberland, 2.1 miles (3.4 km) downstream from Wills Creek, and at mile 19.6 (31.5 km).

DRAINAGE AREA.--875 sq mi (2,266 sq km).

PERIOD OF RECORD.--Chemical analyses: December 1964 to September 1974.
Water temperatures: October 1964 to September 1974.
Sediment records: October 1964 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum 25.5°C Sept. 1; minimum 2.0°C Feb. 28.
Sediment concentrations: Maximum daily, 1,000 mg/l Dec. 27; minimum daily, 4 mg/l Feb. 22, 27.
Sediment discharge: Maximum daily, 38,800 tons (35,200 t) Dec. 27; minimum daily, 4 tons (3.6 t) July 23.

Period of record:
Water temperatures: Maximum, 33.0°C July 13, 14, 1966, July 16, 18, Aug. 19, 23, 1968; minimum freezing point on many days during winter periods.
Sediment concentration: Maximum daily, 1,600 mg/l Feb. 13, 1966; minimum daily, 3 mg/l Aug. 13, 1969.
Sediment discharge: Maximum daily, 61,000 tons (55,300 t) Mar. 6, 1967; minimum daily, 2.1 tons (1.9 t) Aug. 27, 1971.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT.											
17...	0915	743	3.8	--	1700	570	33	6.4	15	2.3	25
NOV.											
07...	0900	950	5.0	--	1700	700	28	6.9	13	2.2	17
DEC.											
05...	1010	1020	5.0	600	1200	730	30	6.5	14	1.7	12
JAN.											
23...	0930	4540	5.0	--	1700	390	18	5.1	4.8	1.3	10
FEB.											
28...	1050	1870	4.3	--	2200	460	26	6.7	9.4	1.6	23
APR.											
01...	1010	2040	5.5	--	1400	350	22	2.5	5.1	1.1	19
JUNE											
06...	1400	2130	6.0	--	2200	420	22	5.7	5.4	1.4	13
AUG.											
01...	1030	262	5.9	--	2500	1600	99	15	40	3.8	56
SEP.											
10...	1410	287	5.3	--	1100	880	54	10	21	2.0	29

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	SUSPENDED SOLIDS (MG/L)
OCT.										
17...	21	69	30	.3	.78	--	--	--	172	--
NOV.										
07...	14	82	22	.3	.57	--	--	--	168	--
DEC.										
05...	10	80	24	.2	.49	.40	.00	209	167	18
JAN.										
23...	8	53	7.5	.2	.80	--	--	--	100	--
FEB.										
28...	19	70	14	.1	.69	--	--	--	143	--
APR.										
01...	16	51	8.6	.1	.78	--	--	--	105	--
JUNE										
06...	11	70	9.4	.3	.47	--	.05	--	127	--
AUG.										
01...	46	250	71	.2	.80	--	.11	--	513	--
SEP.										
10...	24	150	38	.1	.48	--	.07	--	295	--

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT.										
17...	110	88	53	315	7.0	--	14.0	--	--	9.7
NOV.										
07...	98	84	5.6	285	6.9	--	5.5	--	--	12.0
DEC.										
05...	100	92	3.4	315	6.9	--	8.0	--	8	12.2
JAN.										
23...	66	58	--	185	6.6	--	6.0	--	--	12.5
FEB.										
28...	93	74	--	262	6.7	5.0	2.0	--	--	--
APR.										
01...	65	50	--	194	6.8	5.0	4.0	--	--	--
JUNE										
06...	78	68	--	260	6.8	--	19.0	3	--	--
AUG.										
01...	310	260	--	--	--	--	22.0	8	--	--
SEP.										
10...	180	150	--	500	--	--	21.5	4	--	--

01603000 NORTH BRANCH POTOMAC RIVER NEAR CUMBERLAND, MD.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 17...	--	--	2000	--	--	--	--	--	--	--
NOV. 07...	--	--	270	--	--	--	--	--	--	--
DEC. 05...	14	2.8	340	.01	10	0	0	0	0	70
JAN. 23...	--	--	53	--	--	--	--	--	--	--
FEB. 28...	--	--	--	--	--	--	--	--	--	--
APR. 01...	--	--	--	--	--	--	--	--	--	--
JUNE 06...	--	--	--	--	--	--	--	--	--	--
AUG. 01...	--	--	--	--	--	--	--	--	--	--
SEP. 10...	--	--	--	--	--	--	--	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY MEASUREMENT AT 2300)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	18.0	9.0	4.5	5.0	8.0	11.0	13.0	15.5	16.5	23.5	25.5
2	21.0	17.0	9.0	4.5	5.0	9.0	11.0	13.5	15.5	18.5	24.0	21.0
3	21.0	16.5	9.0	4.5	---	10.0	11.0	11.5	15.5	---	24.0	---
4	22.0	10.0	7.0	4.0	4.5	10.0	14.5	10.0	15.5	21.0	24.0	19.0
5	20.0	10.0	5.5	4.0	3.5	10.0	14.5	11.5	15.5	21.0	24.0	19.0
6	---	11.0	11.0	4.5	3.5	10.0	14.5	13.5	---	21.0	24.0	18.5
7	20.0	10.0	7.0	4.5	---	10.0	13.0	12.0	15.5	21.0	24.5	18.5
8	20.0	10.0	5.5	4.5	3.5	---	---	12.0	18.5	---	24.5	18.5
9	21.0	---	5.5	4.5	---	11.0	---	13.5	18.5	24.0	23.5	19.0
10	21.0	10.0	5.5	---	4.0	10.0	14.5	13.5	21.0	23.5	23.5	19.0
11	21.0	10.0	5.5	---	4.0	10.0	---	13.0	18.5	21.0	23.5	---
12	20.0	10.0	5.5	4.0	4.0	10.0	---	15.5	18.0	21.0	23.5	21.0
13	20.0	10.0	5.5	3.5	4.5	9.0	---	15.5	18.0	---	25.5	21.0
14	20.0	13.0	10.0	4.0	4.0	10.0	13.0	15.5	18.0	22.0	24.5	---
15	20.0	11.0	---	4.5	4.5	10.0	13.0	15.5	---	24.0	24.5	21.0
16	20.0	---	---	6.0	6.0	11.0	11.0	15.5	20.0	---	23.0	21.0
17	15.5	11.0	3.5	4.5	6.0	11.0	11.0	15.5	---	25.0	23.5	21.0
18	15.5	---	3.5	4.5	7.0	11.0	11.5	15.5	---	24.0	23.5	21.0
19	15.5	11.0	3.5	4.5	7.0	---	10.5	15.5	21.0	25.0	---	21.0
20	15.5	11.0	---	4.5	7.0	10.0	11.0	---	21.0	25.0	23.5	21.0
21	15.5	11.0	---	4.5	7.0	10.0	13.0	15.5	18.5	25.0	---	21.0
22	15.5	12.0	---	5.0	7.0	10.0	13.0	---	---	24.0	---	---
23	15.5	12.0	---	4.5	7.0	10.0	13.0	---	15.5	24.0	---	21.0
24	15.5	12.0	8.0	4.5	7.0	9.0	13.0	15.5	---	25.0	---	---
25	---	12.0	8.0	4.5	3.0	7.0	11.5	15.5	15.5	22.0	---	20.0
26	15.5	12.0	10.0	4.5	3.0	10.0	11.5	---	16.0	---	---	20.0
27	15.5	12.0	---	5.0	6.0	10.0	13.0	15.5	---	22.0	---	21.0
28	15.5	11.0	7.0	5.0	6.0	---	13.5	15.5	18.0	22.0	---	20.0
29	12.0	10.0	7.0	5.0	---	10.0	12.0	16.5	15.5	22.0	---	19.0
30	12.0	---	6.5	5.0	---	10.0	13.0	---	---	21.0	---	20.0
31	13.5	---	7.0	---	---	10.0	---	16.5	---	22.0	---	---
AVG	18.0	11.5	---	4.5	5.0	10.0	12.5	14.5	---	22.5	---	20.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
OCT. 29...	2345	7230	12.0	1100	21500	58	78

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
OCT. 29...	90	95	95	96	96	98	100

01603000 NORTH BRANCH POTOMAC RIVER NEAR CUMBERLAND, MD.--Continued

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

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	579	31	48	2490	83	558	2150	53	308
2	538	32	46	2400	57	369	1850	30	150
3	890	37	89	1660	31	139	1600	21	91
4	740	17	34	1400	27	102	1070	19	55
5	570	23	35	1320	15	53	1070	20	58
6	490	41	54	1280	12	41	1280	35	121
7	455	34	42	940	11	28	1100	22	65
8	434	31	36	841	10	23	1000	30	81
9	597	45	73	831	11	25	1480	196	832
10	588	40	64	869	15	35	1790	130	628
11	546	35	52	770	10	21	1510	35	143
12	506	73	100	715	10	19	1250	15	51
13	579	96	150	696	13	24	1150	48	149
14	1390	75	281	710	11	21	1180	78	249
15	1260	55	187	699	10	19	1350	75	273
16	455	38	47	709	11	21	1190	80	257
17	720	55	107	850	27	62	1130	66	201
18	498	32	43	770	15	31	978	38	100
19	414	29	32	738	10	20	898	20	48
20	384	21	22	782	8	17	932	25	63
21	790	47	100	763	11	23	1840	92	457
22	760	40	82	811	20	44	2110	105	598
23	353	46	44	634	10	17	1710	56	259
24	278	48	36	842	27	61	1550	21	88
25	260	38	27	907	33	81	1380	8	30
26	248	30	20	909	37	91	3380	365	5150
27	236	26	17	813	25	55	12500	1000	33800
28	297	43	34	2180	76	447	9850	325	8640
29	4720	820	13400	3350	52	470	7110	125	2400
30	4300	510	5920	3000	92	745	6780	140	2560
31	2400	91	590	--	--	--	3840	120	1240
TOTAL	27275	--	21812	35679	--	3662	78008	--	59145

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3630	135	1320	1500	33	134	1460	12	47
2	3180	68	584	1320	31	110	1690	10	46
3	2380	33	212	1370	34	126	2400	46	298
4	3700	48	480	1330	34	122	1980	25	134
5	3230	45	392	1150	32	99	2180	25	147
6	2740	48	355	1080	48	140	2070	26	145
7	2460	33	219	1060	54	155	1670	26	117
8	2080	19	107	1940	104	545	1810	22	108
9	1950	21	111	1390	37	139	2050	16	89
10	4490	113	1460	1210	21	69	1920	15	78
11	11700	215	6790	1160	21	66	1880	20	102
12	9700	140	3670	1070	35	101	1790	49	237
13	6900	33	615	1110	28	84	1650	56	249
14	5360	28	405	1490	27	109	1420	40	153
15	4240	29	332	1730	16	75	1310	30	106
16	2910	42	330	1460	11	43	1300	17	60
17	2990	21	170	1370	8	30	1220	22	72
18	2830	14	107	1210	11	36	1140	25	77
19	2730	14	103	1170	26	82	1090	15	44
20	2950	26	207	1460	20	79	1220	12	40
21	4080	90	991	1630	6	26	1220	9	30
22	5370	72	1040	1620	4	17	1590	30	129
23	4460	40	482	2540	15	103	1350	10	36
24	3580	13	126	2250	7	43	1260	16	54
25	2730	9	66	1770	9	43	1160	16	50
26	2410	18	117	1530	5	21	1080	12	35
27	2250	14	85	1420	4	15	1030	10	28
28	2020	15	82	1760	27	128	962	12	31
29	1880	30	152	--	--	--	932	13	33
30	1580	29	124	--	--	--	1120	15	45
31	1440	25	97	--	--	--	2330	305	1920
TOTAL	113950	--	21331	41100	--	2740	47284	--	4740

01603000 NORTH BRANCH POTOMAC RIVER NEAR CUMBERLAND, MD.--Continued

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

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2030	205	1120	522	24	34	4020	280	3450
2	2030	19	104	506	27	37	6410	349	6360
3	2190	24	142	597	27	44	6370	180	3100
4	4190	166	2720	770	40	83	4030	55	598
5	5570	127	2160	670	10	18	2940	45	357
6	5100	220	3030	579	14	22	2190	35	207
7	2890	150	1170	562	16	24	1720	25	116
8	2340	31	196	546	11	16	1410	13	49
9	3730	49	493	546	20	29	1210	7	23
10	3290	41	364	562	50	76	951	6	15
11	2750	28	208	514	50	69	810	5	11
12	2390	29	187	588	57	90	682	6	11
13	2560	30	209	2190	71	420	620	11	18
14	3070	35	290	2150	18	104	549	6	8.9
15	2620	24	170	1630	10	44	541	12	18
16	2290	29	179	1340	8	29	871	45	106
17	1970	27	144	1140	11	34	1030	68	189
18	1700	17	78	1200	28	91	742	44	88
19	1500	11	45	2010	5	27	564	22	34
20	1320	10	36	1700	5	23	612	24	40
21	1160	9	28	1440	16	62	645	11	19
22	1080	9	26	1260	25	85	1360	39	143
23	1030	8	22	1140	25	77	2400	41	320
24	1040	5	14	1140	31	95	7060	171	3260
25	920	10	25	1110	43	129	4200	107	1210
26	810	21	46	905	25	61	3500	106	1000
27	690	32	60	769	13	27	2450	80	529
28	633	47	80	685	33	61	1890	46	235
29	579	50	78	663	23	41	2080	74	416
30	554	39	58	1660	48	277	1630	65	286
31	--	--	--	1520	49	201	--	--	--
TOTAL	64046	--	13482	32614	--	2430	65487	--	22216.9

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2220	70	420	260	30	21	734	67	142
2	2630	81	575	304	25	21	774	74	189
3	1600	43	186	353	24	23	639	61	115
4	1220	34	112	332	22	20	414	24	27
5	2380	45	302	272	22	16	339	22	20
6	2310	33	206	236	21	13	290	22	17
7	1490	19	76	208	22	12	588	48	83
8	1150	8	25	186	21	11	710	33	63
9	1320	30	107	197	26	14	396	30	32
10	660	12	21	346	43	40	297	18	14
11	562	16	24	290	20	16	248	19	13
12	483	26	34	254	21	14	224	19	11
13	420	27	31	360	35	34	219	20	12
14	378	30	31	360	36	35	248	25	17
15	346	30	28	266	46	33	633	45	77
16	318	26	22	254	50	34	378	16	16
17	290	27	21	346	37	35	297	20	16
18	272	29	21	414	31	35	254	15	10
19	248	27	18	325	31	27	224	15	9.1
20	236	30	19	272	29	21	208	20	11
21	230	24	15	266	25	18	202	25	14
22	208	11	6.2	248	23	15	197	23	12
23	214	7	4.0	242	22	14	192	20	10
24	290	23	18	224	21	13	192	25	13
25	290	27	21	202	21	11	186	46	23
26	378	42	43	325	38	33	175	40	19
27	570	76	117	192	31	16	170	28	13
28	476	50	64	186	29	15	175	18	8.5
29	360	25	24	192	30	16	202	19	10
30	290	38	30	202	34	19	192	19	9.8
31	297	36	29	248	42	28	--	--	--
TOTAL	24136	--	2650.2	8362	--	673	9997	--	1026.4

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 547938
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 155908.5

01613000 POTOMAC RIVER AT HANCOCK, MD.

LOCATION.--Lat 39°41'49", long 78°10'39", Washington County, at U. S. Highway 522 at Hancock, 0.5 mile (0.8 km) upstream from gaging station, 0.3 mile (0.5 km) upstream from Little Tonoloway Creek, 1.6 miles (2.6 km) upstream from Tonoloway Creek (formerly called Great or Big Tonoloway Creek), and at mile 239 (385 km).
DRAINAGE AREA.--4,073 sq mi (10,549 sq km).
PERIOD OF RECORD.--Chemical analyses: July 1969 to June 1974.
Water temperatures: July 1952 to February 1964, July 1966 to September 1974.
EXTREMES.--1973-74:
Water temperatures: Maximum, 28.0°C Aug. 15, 16; minimum, 1.0 on several days during December and January.
Period of record:
Water temperatures: Maximum, 34.0°C July 22, 1952; minimum, freezing point on many days during winter periods.
REMARKS.--Records fair, probably because of friction in recorder. Temperature recorder at gaging station 0.5 mile downstream from sampling site.

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

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	19.5	11.0	10.5	7.5	6.5	4.0	4.0	6.5	5.5	3.5	2.5
2	19.5	16.5	10.5	10.0	6.5	5.5	4.0	3.5	5.5	5.0	3.5	3.5
3	18.5	16.5	10.5	10.0	5.5	5.0	3.5	3.0	5.0	4.0	5.0	3.5
4	18.5	18.5	10.5	10.0	5.0	5.0	3.0	2.5	4.0	3.5	6.5	5.0
5	19.0	18.5	10.5	9.5	6.5	5.0	2.5	2.0	3.5	2.0	8.0	6.5
6	19.0	17.5	9.5	8.5	6.5	6.5	2.0	2.0	2.5	2.0	8.5	8.0
7	18.0	17.0	8.5	7.5	6.5	6.0	2.0	2.0	2.5	2.0	9.5	8.5
8	18.0	17.0	7.5	6.5	6.0	5.0	2.0	1.5	2.5	2.0	9.5	9.5
9	17.5	17.5	6.5	6.0	5.0	3.5	1.5	1.0	2.0	2.0	9.5	9.5
10	18.5	17.5	6.0	5.5	4.0	4.0	1.5	1.0	2.0	2.0	10.0	9.5
11	18.5	17.5	5.5	5.0	4.0	4.0	2.5	1.5	2.0	2.0	10.0	9.0
12	17.5	17.0	5.0	4.5	4.0	3.5	3.5	2.5	2.0	2.0	9.0	8.0
13	18.0	17.0	6.0	4.5	3.5	2.5	3.5	2.5	2.0	1.5	8.0	6.5
14	18.5	17.5	7.5	6.0	2.5	2.5	2.5	1.5	2.5	2.0	6.5	5.5
15	18.0	16.5	9.0	7.5	2.5	2.5	1.5	1.5	2.5	2.5	6.0	5.0
16	17.5	16.5	9.0	8.5	2.5	2.5	3.0	1.5	3.0	2.5	5.5	5.5
17	16.5	13.5	8.5	7.5	2.5	1.0	4.5	3.0	3.0	2.5	5.5	5.0
18	13.5	12.5	7.5	6.0	1.0	1.0	4.5	4.5	2.5	2.0	5.0	4.0
19	12.5	11.0	6.5	6.0	1.0	1.0	4.5	4.5	2.5	2.5	6.0	5.0
20	13.0	11.5	6.5	6.0	1.0	1.0	4.5	4.5	3.5	2.5	6.5	6.0
21	13.0	11.5	6.5	6.5	1.5	1.0	4.5	4.5	4.0	3.5	6.5	6.5
22	12.5	11.5	7.0	6.5	1.0	1.0	5.5	4.5	5.0	4.0	6.5	5.5
23	12.5	11.5	7.0	7.0	1.5	1.0	6.0	5.5	5.0	5.0	7.0	6.0
24	13.0	11.5	7.5	7.0	1.5	1.5	6.0	6.0	5.0	4.5	7.0	6.0
25	13.0	11.5	8.5	7.5	2.0	1.5	6.0	6.0	5.0	4.0	6.0	4.5
26	13.0	11.0	8.5	8.5	3.0	2.0	6.0	5.5	4.0	2.5	5.5	4.5
27	13.5	11.5	9.0	8.5	4.0	3.0	7.0	6.0	2.5	2.0	6.5	5.5
28	12.5	11.5	9.5	9.0	5.5	4.0	6.5	6.5	2.5	2.0	7.5	6.5
29	11.5	11.5	9.5	8.5	5.5	4.5	7.0	6.5	---	---	7.5	6.5
30	11.5	11.5	8.5	7.5	4.5	4.0	7.0	7.0	---	---	6.5	5.0
31	11.5	10.5	---	---	4.0	4.0	7.0	6.0	---	---	5.0	5.0
MONTH	21.0	10.5	11.0	4.5	7.5	1.0	7.0	1.0	6.5	1.5	10.0	2.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	5.0	20.0	18.5	19.5	19.0	22.0	19.5	27.5	24.5	24.5	23.0
2	7.5	6.0	19.5	16.5	19.0	17.5	22.0	20.0	26.5	25.5	24.0	22.5
3	9.0	7.5	16.5	15.0	17.5	15.5	22.5	21.0	26.5	23.0	23.5	22.0
4	10.5	9.0	16.5	15.0	15.5	15.0	24.0	22.5	24.5	23.5	22.0	21.0
5	11.0	10.5	16.0	14.0	17.5	15.5	24.0	23.5	24.5	23.0	21.0	20.0
6	11.0	9.5	14.0	13.5	18.5	17.5	23.5	23.0	24.5	23.0	20.5	18.5
7	9.5	8.5	13.5	12.0	19.5	18.5	23.5	22.5	26.0	23.0	19.0	17.5
8	8.5	8.0	13.5	12.0	20.0	19.5	24.5	23.0	25.0	24.0	19.5	19.0
9	8.0	7.0	13.5	12.5	22.0	20.0	25.5	24.5	24.5	23.0	20.0	19.5
10	7.0	6.0	15.5	13.5	24.0	22.0	25.5	25.5	24.5	23.0	21.5	20.0
11	7.0	6.0	17.0	15.0	24.0	23.0	26.0	25.0	26.0	22.5	23.0	21.0
12	8.5	7.0	17.0	13.5	23.5	22.5	25.5	24.0	24.5	23.0	25.0	23.0
13	10.5	8.5	14.5	13.0	22.5	21.5	25.5	23.5	26.0	22.5	25.0	24.0
14	11.5	10.5	15.5	14.5	23.0	21.5	26.0	24.0	27.5	24.5	25.0	23.5
15	11.5	11.5	16.5	15.5	23.0	22.0	27.0	25.5	28.0	25.0	23.5	22.0
16	11.5	11.0	18.0	16.5	22.0	19.5	26.5	25.0	28.0	24.5	22.0	21.0
17	11.5	10.5	20.0	18.0	20.5	19.5	26.5	23.5	27.0	25.5	23.5	22.0
18	12.0	11.0	20.0	20.0	21.0	20.0	26.5	24.5	27.0	24.5	22.5	22.0
19	12.0	11.5	20.0	19.0	21.5	20.5	27.0	25.5	26.5	24.5	23.0	21.0
20	13.0	11.5	19.5	18.5	23.0	21.5	26.5	24.0	25.0	22.5	24.5	22.5
21	13.5	12.5	19.5	18.5	23.5	23.0	26.0	23.0	25.0	23.5	24.0	22.0
22	13.5	13.5	21.0	19.5	23.5	22.5	25.5	22.5	24.0	23.0	22.0	20.0
23	15.0	13.5	21.0	21.0	23.5	20.0	24.5	22.5	26.0	23.0	21.0	18.5
24	14.5	12.0	21.0	20.5	20.0	19.0	23.5	21.5	26.0	24.0	19.5	16.5
25	12.5	11.0	21.0	20.0	19.0	17.5	23.5	22.0	26.0	24.5	19.0	15.5
26	14.0	12.0	20.0	18.5	17.5	17.0	23.5	22.5	27.0	24.5	20.5	17.0
27	15.0	13.5	18.5	18.0	18.0	17.5	23.5	22.0	27.0	25.0	21.0	17.5
28	16.0	15.0	19.0	17.0	18.0	18.0	25.0	23.0	26.5	25.5	21.0	19.5
29	18.0	16.0	19.0	19.0	18.5	18.0	25.5	23.5	26.5	24.0	22.0	20.5
30	19.0	17.5	19.5	18.5	20.0	18.5	27.0	24.0	26.0	24.5	20.5	18.5
31	---	---	19.5	19.5	---	---	27.0	24.5	24.5	23.0	---	---
MONTH	19.0	5.0	21.0	12.0	24.0	15.0	27.0	19.5	28.0	22.5	25.0	15.5

01614500 CONOCOCHEAGUE CREEK AT FAIRVIEW, MD.

LOCATION.--Lat 39°42'57", long 77°49'28", Washington County, at highway bridge at Fairview, 0.7 mile (1.1 km) downstream from gaging station, 1.3 miles (2.1 km) upstream from Rockdale Run, 6.0 miles (9.7 km) northwest of Hagerstown, and 18.4 miles (29.6 km) upstream from mouth.

DRAINAGE AREA.--495 sq mi (1,282 sq km).

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1974.
Water temperatures: November 1966 to September 1974.
Sediment records: October 1966 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum, 24.0°C July 13, 15, 19, 29; minimum, 2.0°C Dec. 21-26, 28.
Sediment concentrations: Maximum daily, 747 mg/l Oct. 29; minimum daily, 1 mg/l on several days during November, December, January, and March.
Sediment discharge: Maximum daily, 10,500 tons (9,530 t) Oct. 29; minimum daily, 0.65 ton (0.59 t) Aug. 25.

Period of record:
Water temperatures: Maximum, 30°C July 17, 1969; minimum, freezing point on many days during winter periods.
Sediment concentrations: Maximum daily, 1,050 mg/l Oct. 25, 1971; minimum daily, 1 mg/l, on many days during 1967, 1970-74
Sediment discharge: Maximum daily, 73,000 tons (66,200 t) June 23, 1972; minimum daily, 0.17 ton (0.15 t) Nov. 24, 26, 27, 1966.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT.										
16...	1120	270	3.9	--	1100	40	56	13	6.5	2.7
NOV.										
06...	1120	782	6.7	--	240	20	41	9.5	4.4	2.3
DEC.										
03...	1215	267	2.6	100	240	0	48	10	6.2	2.2
JAN.										
22...	1140	3160	6.3	--	3700	170	29	6.5	4.6	2.0
MAR.										
11...	1420	619	4.4	--	150	50	35	8.0	5.0	1.8
JULY										
05...	1530	408	5.5	--	490	300	42	10	5.0	2.1
29...	1140	219	2.4	--	270	40	52	11	7.1	2.5
AUG.										
28...	1345	151	2.9	--	90	10	59	11	7.2	2.5

DATE	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.										
16...	198	162	21	9.2	.3	3.1	--	--	--	210
NOV.										
06...	143	117	17	9.6	.3	2.7	--	--	--	161
DEC.										
03...	166	136	16	9.3	.2	2.2	.16	.10	204	176
JAN.										
22...	91	75	19	7.1	.1	2.4	--	--	--	119
MAR.										
11...	126	103	18	8.8	.2	1.8	--	--	--	143
JULY										
05...	118	97	18	7.6	.3	6.7	--	.30	--	149
29...	187	153	15	20	--	2.6	--	.20	--	202
AUG.										
28...	205	168	21	12	.3	2.8	--	.21	--	217

DATE	SUSPENDED SOLIDS (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)
OCT.										
16...	--	190	31	--	400	7.9	--	14.0	--	--
NOV.										
06...	--	140	24	.2	280	8.0	--	6.0	--	--
DEC.										
03...	4	160	25	.0	330	8.5	--	3.0	--	1
JAN.										
22...	--	99	25	--	225	7.4	--	5.5	--	--
MAR.										
11...	--	120	17	--	264	7.8	5.5	8.0	--	--
JULY										
05...	--	150	49	--	270	7.4	--	23.0	0	--
29...	--	180	22	--	--	--	24.0	22.0	2	--
AUG.										
28...	--	190	24	--	400	--	--	23.5	1	--

01614500 CONOCOCHEAGUE CREEK AT FAIRVIEW, MD.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
16...	9.9	--	210	--	--	--	--	--	--	--
NOV.										
06...	11.5	--	520	--	--	--	--	--	--	--
DEC.										
03...	16.4	1.7	19	.00	0	0	0	0	1	50
JAN.										
22...	12.4	--	1600	--	--	--	--	--	--	--
MAR.										
11...	--	--	--	--	--	--	--	--	--	--
JULY										
05...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
AUG.										
28...	--	--	--	--	--	--	--	--	--	--

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY MEASUREMENT AT 0900)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	11.0	8.0	---	5.0	6.0	8.0	14.0	17.0	---	23.0	20.0
2	17.0	11.0	---	5.0	5.0	11.0	8.0	14.0	17.0	---	22.0	20.0
3	17.0	11.0	7.0	5.0	6.0	11.0	9.0	13.0	18.0	---	22.0	19.0
4	17.0	11.0	7.0	5.0	6.0	11.0	9.0	13.0	18.0	---	22.0	19.0
5	17.0	9.0	9.0	4.0	6.0	10.0	9.0	14.0	18.0	19.0	21.0	20.0
6	17.0	9.0	8.0	5.0	6.0	10.0	9.0	11.0	20.0	19.0	22.0	20.0
7	18.0	9.0	8.0	5.0	5.0	10.0	9.0	12.0	---	20.0	23.0	20.0
8	15.0	9.0	8.0	4.0	5.0	10.0	10.0	10.0	---	19.0	21.0	19.0
9	16.0	9.0	7.0	4.0	4.0	9.0	10.0	13.0	---	19.0	20.0	19.0
10	16.0	7.0	8.0	4.0	5.0	9.0	10.0	13.0	19.0	19.0	21.0	19.0
11	16.0	---	7.0	5.0	6.0	8.0	10.0	14.0	19.0	20.0	20.0	19.0
12	16.0	---	8.0	5.0	6.0	8.0	10.0	13.0	20.0	20.0	19.0	19.0
13	15.0	---	7.0	4.0	6.0	7.0	10.0	---	20.0	24.0	20.0	19.0
14	16.0	9.0	8.0	5.0	7.0	8.0	12.0	12.0	19.0	23.0	20.0	20.0
15	16.0	---	5.0	5.0	6.0	6.0	12.0	14.0	20.0	24.0	20.0	19.0
16	15.0	7.0	7.0	---	6.0	8.0	12.0	14.0	20.0	22.0	19.0	19.0
17	12.0	---	7.0	---	6.0	8.0	12.0	14.0	19.0	23.0	19.0	19.0
18	12.0	---	7.0	---	6.0	9.0	12.0	14.0	20.0	23.0	19.0	19.0
19	12.0	8.0	3.0	---	5.0	7.0	12.0	14.0	20.0	24.0	19.0	19.0
20	12.0	7.0	---	---	6.0	7.0	10.0	14.0	20.0	22.0	20.0	19.0
21	12.0	8.0	2.0	---	6.0	9.0	11.0	14.0	20.0	23.0	20.0	19.0
22	10.0	8.0	2.0	4.0	6.0	9.0	15.0	14.0	20.0	23.0	20.0	19.0
23	10.0	---	2.0	7.0	6.0	9.0	15.0	18.0	19.0	22.0	20.0	16.0
24	10.0	---	2.0	6.0	5.0	---	14.0	18.0	19.0	23.0	20.0	15.0
25	12.0	---	2.0	5.0	4.0	8.0	11.0	19.0	19.0	23.0	20.0	15.0
26	10.0	---	2.0	6.0	---	8.0	11.0	19.0	19.0	22.0	21.0	15.0
27	11.0	9.0	3.0	6.0	6.0	9.0	14.0	16.0	20.0	23.0	21.0	14.0
28	11.0	9.0	2.0	6.0	6.0	9.0	14.0	14.0	20.0	23.0	20.0	14.0
29	11.0	9.0	5.0	6.0	---	9.0	18.0	14.0	20.0	24.0	---	14.0
30	11.0	7.0	7.0	6.0	---	9.0	18.0	15.0	20.0	22.0	21.0	14.0
31	11.0	---	---	6.0	---	6.0	---	15.0	---	23.0	21.0	---
AVG	14.0	---	5.5	---	5.5	8.5	11.5	14.0	19.5	22.0	20.5	18.0

01614500 CONOCOCHEAGUE CREEK AT FAIRVIEW, MD.--Continued

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

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	683	166	306	1770	21	100	277	2	1.5
2	1180	137	524	1360	20	73	257	1	.69
3	1600	155	670	1080	19	55	247	1	.67
4	1030	37	103	878	16	38	247	2	1.3
5	768	8	17	812	10	22	288	2	1.6
6	604	10	16	758	8	16	652	23	40
7	513	11	15	641	5	8.7	575	32	50
8	466	8	10	575	5	7.8	460	8	9.9
9	428	11	13	533	6	8.6	1530	84	493
10	398	13	14	483	5	6.5	2370	89	570
11	373	11	11	447	4	4.8	1520	70	287
12	367	15	15	425	3	3.4	1160	30	94
13	325	15	13	408	3	3.3	984	11	29
14	300	15	12	390	3	3.2	1040	11	31
15	279	20	15	378	1	1.0	961	12	31
16	268	26	19	374	4	4.0	819	10	22
17	256	13	9.0	353	4	3.8	773	6	13
18	251	3	2.0	329	2	1.8	691	3	5.6
19	247	2	1.3	318	4	3.4	713	4	7.7
20	238	2	1.3	310	5	4.2	672	7	13
21	230	3	1.9	292	4	3.2	2990	81	698
22	224	3	1.8	284	2	1.5	2930	20	158
23	220	3	1.8	277	1	.75	1990	16	86
24	217	3	1.8	274	3	2.2	1620	19	83
25	212	4	2.3	284	2	1.5	1350	10	36
26	206	40	22	281	2	1.5	1990	20	107
27	201	135	73	281	2	1.5	5100	46	633
28	197	280	149	310	5	4.2	4570	49	605
29	4660	747	10500	349	6	5.7	3270	38	336
30	6370	310	5670	318	3	2.6	2480	35	234
31	2330	60	377	--	--	--	2020	30	164
TOTAL	25641	--	18587.2	15572	--	393.15	46546	--	4841.96

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1830	18	89	860	25	58	451	10	12
2	1550	14	59	812	56	123	451	8	9.7
3	1400	16	60	794	40	86	455	12	15
4	1750	25	118	740	16	32	433	8	9.4
5	1560	9	38	658	13	23	412	15	17
6	1370	8	30	619	14	23	390	12	13
7	1250	6	20	602	58	94	408	11	12
8	1100	1	3.0	597	17	27	442	9	11
9	1010	1	2.7	548	9	13	478	5	6.5
10	1130	9	27	512	9	12	575	6	9.3
11	1570	28	119	522	9	13	602	5	8.1
12	2010	53	288	493	7	9.3	559	5	7.5
13	1510	30	122	493	7	9.3	522	4	5.6
14	1240	20	67	493	8	11	478	3	3.9
15	1160	20	63	460	15	19	451	1	1.2
16	1360	42	154	429	55	64	460	1	1.2
17	1840	46	229	420	51	58	559	2	3.0
18	1640	30	133	403	18	20	483	6	7.8
19	1440	25	97	408	5	5.5	442	3	3.6
20	1330	19	68	438	3	3.5	425	7	8.0
21	2140	19	110	420	5	5.7	696	53	144
22	3080	105	873	451	16	19	1300	77	270
23	2220	112	671	782	18	38	914	48	118
24	1810	42	205	614	9	15	782	14	30
25	1550	20	84	538	21	31	680	3	5.5
26	1360	19	70	483	48	63	602	4	6.5
27	1340	24	87	451	14	17	559	4	6.0
28	1200	18	58	442	10	12	522	4	5.6
29	1140	19	58	--	--	--	498	6	8.1
30	1020	15	41	--	--	--	1600	200	1420
31	933	20	50	--	--	--	6160	300	4990
TOTAL	46843	--	4093.7	15482	--	904.3	23789	--	7168.5

01614500 CONOCOCHEAGUE CREEK AT FAIRVIEW, MD.--Continued

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

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3400	130	1190	608	10	16	677	20	37
2	2350	90	571	575	10	16	722	20	39
3	1870	25	126	592	10	16	681	35	64
4	3680	78	904	592	43	69	541	15	22
5	3860	74	771	533	51	73	471	20	25
6	2820	52	396	512	29	40	424	16	18
7	2140	35	202	502	23	31	395	13	14
8	1790	15	72	478	5	6.5	371	13	13
9	2290	45	278	512	6	8.3	363	13	13
10	1950	50	263	597	26	42	354	12	11
11	1630	19	84	502	28	38	388	14	15
12	1460	15	59	724	178	443	335	10	9.0
13	1950	74	457	2700	285	2080	305	10	8.2
14	2420	167	1090	1460	245	966	293	8	6.3
15	2030	95	521	1110	97	291	288	15	12
16	1720	62	288	919	42	104	680	475	997
17	1480	36	144	794	29	62	1400	505	1910
18	1330	16	57	731	55	109	741	90	180
19	1210	7	23	707	49	94	530	31	44
20	1110	43	129	650	46	81	455	25	31
21	1000	16	43	563	17	26	447	36	43
22	940	11	28	526	8	11	402	60	65
23	1090	54	159	790	25	53	635	55	110
24	998	60	162	720	45	87	1440	85	330
25	848	61	140	605	35	57	946	82	209
26	782	15	32	528	22	31	908	57	140
27	734	8	16	480	18	23	872	69	162
28	696	10	19	446	10	12	712	60	115
29	674	56	102	422	25	28	690	45	84
30	636	40	69	429	22	25	602	77	125
31	--	--	--	429	15	17	--	--	--
TOTAL	50888	--	8395	21736	--	4955.8	18068	--	4851.5

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	712	126	242	202	58	32	144	19	7.4
2	680	106	195	183	20	9.9	231	65	41
3	512	81	112	204	24	13	228	106	65
4	447	60	72	608	30	49	429	80	93
5	399	50	54	408	16	18	231	25	16
6	382	42	43	281	9	6.8	175	31	15
7	357	55	53	216	9	5.2	357	40	39
8	318	51	44	185	10	5.0	361	30	29
9	299	61	49	170	12	5.5	231	17	11
10	281	46	35	170	10	4.6	196	20	11
11	270	28	20	162	10	4.4	172	24	11
12	254	22	15	151	6	2.4	194	45	24
13	240	21	14	148	7	2.8	318	55	47
14	228	25	15	142	13	5.0	247	29	19
15	228	29	18	137	5	1.8	202	51	28
16	219	90	53	133	5	1.8	178	60	29
17	204	96	53	144	6	2.3	168	27	12
18	194	75	39	146	4	1.6	216	60	35
19	199	61	33	162	4	1.7	158	54	23
20	202	77	42	140	5	1.9	144	35	14
21	183	44	22	131	4	1.4	137	15	5.5
22	175	32	15	123	3	1.0	135	9	3.3
23	172	46	21	125	3	1.0	133	11	4.0
24	175	59	28	125	2	.68	125	11	3.7
25	178	51	25	121	2	.65	121	6	2.0
26	172	17	7.9	119	3	.96	117	6	1.9
27	175	15	7.1	119	3	.96	115	3	.93
28	172	18	8.4	119	4	1.3	117	5	1.6
29	216	13	7.6	121	3	.98	142	15	5.8
30	493	120	160	125	2	.68	123	10	3.3
31	281	119	90	137	19	7.0	--	--	--
TOTAL	9017	--	1593.0	5457	--	191.31	5845	--	601.43

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 284884
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 56576.85

01619500 ANTIETAM CREEK NEAR SHARPSBURG, MD.

LOCATION.--Lat 39°27'01", long 77°43'52", Washington County, at gaging station on left bank 400 ft (120 m) downstream from Burnside Bridge, 1 mile (1.6 km) southeast of Sharpsburg, and 4.0 miles (6.4 km) upstream from mouth. Chemical samples collected from Burnside Bridge.

DRAINAGE AREA.--281 sq mi (728 sq km).

PERIOD OF RECORD.--Chemical analyses: August 1965 to September 1974.
Water temperatures: October 1962 to September 1974.

EXTREMES.--1973-74:
Water temperatures: Maximum, 24.0°C July 9-11; minimum, 2.5°C Dec. 17-20.

Period of record:
Water temperatures: Maximum, 28.0°C on several days in 1963, 1968, and 1969; freezing point on many days during winter periods.

REMARKS.--Temperature records poor, probably because of friction in recorder.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT.										
17...	1240	161	5.3	--	310	40	70	16	11	4.0
NOV.										
07...	1145	196	6.9	--	150	30	65	14	8.5	3.6
DEC.										
03...	1400	146	5.0	100	140	10	68	13	11	3.5
JAN.										
23...	1220	720	7.2	--	1600	90	54	11	6.0	2.7
MAR.										
14...	1515	255	4.9	--	170	30	62	13	6.7	3.0
MAY										
23...	1440	350	7.0	--	1200	70	60	13	6.7	3.2
JULY										
11...	1220	166	6.0	--	220	50	69	15	8.0	3.8
SEP.										
05...	1545	158	8.5	--	480	60	57	12	7.5	4.2

DATE	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.										
17...	245	201	31	17	.3	.54	--	--	--	275
NOV.										
07...	225	185	28	20	.5	3.5	--	--	--	257
DEC.										
03...	230	189	31	15	.4	4.2	.33	.40	273	260
JAN.										
23...	168	138	24	11	.3	3.2	--	--	--	199
MAR.										
14...	217	178	26	13	.2	3.6	--	--	--	236
MAY										
23...	196	161	24	11	.3	3.1	--	.29	--	222
JULY										
11...	220	180	30	15	1.0	3.4	--	.45	--	256
SEP.										
05...	200	164	26	6.5	.3	2.8	--	.34	--	221

01619500 ANTIETAM CREEK NEAR SHARPSBURG, MD.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SUS-PENDED SOLIDS (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
OCT.										
17...	--	240	40	2.8	480	8.1	13.5	--	--	11.0
NOV.										
07...	--	220	35	.2	430	8.1	5.5	--	--	12.1
DEC.										
03...	13	220	35	.0	470	8.4	5.0	--	8	14.6
JAN.										
23...	--	180	42	--	380	7.6	7.0	--	--	12.2
MAR.										
14...	--	210	30	--	444	8.1	7.0	--	--	--
MAY										
23...	--	200	43	--	341	7.8	19.5	2	--	--
JULY										
11...	--	230	54	--	--	--	23.5	1	--	--
SEP.										
05...	--	190	28	--	412	--	18.5	1	--	--

DATE	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.									
17...	--	2300	--	--	--	--	--	--	--
NOV.									
07...	--	80	--	--	--	--	--	--	--
DEC.									
03...	1.3	31	.00	0	0	0	10	1	10
JAN.									
23...	--	420	--	--	--	--	--	--	--
MAR.									
14...	--	--	--	--	--	--	--	--	--
MAY									
23...	--	--	--	--	--	--	--	--	--
JULY									
11...	--	--	--	--	--	--	--	--	--
SEP.									
05...	--	--	--	--	--	--	--	--	--

01619500 ANTIETAM CREEK NEAR SHARPSBURG, MD.--Continued

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

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	17.5	10.0	10.0	8.5	7.5	7.5	7.5	8.5	8.0	8.0	6.5
2	17.5	17.0	10.0	9.5	7.5	6.0	7.5	7.0	8.0	7.5	8.0	8.0
3	17.0	17.0	9.5	9.5	6.0	5.0	7.0	7.0	7.5	7.5	9.5	8.0
4	17.0	17.0	9.5	8.5	6.5	5.0	7.0	7.0	7.5	6.5	11.0	9.5
5	18.0	17.0	8.5	8.0	9.5	6.5	7.0	6.5	6.5	5.0	11.0	11.0
6	18.0	16.0	8.0	6.0	9.5	9.0	6.5	6.5	5.0	5.0	11.0	11.0
7	16.0	15.5	6.0	5.5	9.0	7.5	6.5	6.5	6.0	5.5	12.0	11.0
8	16.0	15.5	5.5	5.5	7.5	7.0	6.5	6.0	6.0	6.0	12.0	12.0
9	16.0	16.0	6.5	6.0	7.0	6.5	6.0	5.5	6.0	5.0	12.0	11.5
10	16.5	16.0	6.5	5.5	6.5	6.0	5.5	5.5	5.0	4.5	11.5	11.5
11	16.5	16.5	5.5	5.0	6.0	5.5	6.0	5.5	5.0	4.5	11.5	10.0
12	16.5	16.0	5.5	5.0	5.5	5.0	6.0	6.0	6.0	5.0	10.0	9.5
13	16.0	16.0	6.5	5.0	5.0	5.0	6.0	5.5	7.0	6.0	9.5	8.0
14	16.5	16.0	9.0	6.5	5.0	5.0	5.5	5.0	7.5	7.0	8.0	7.0
15	16.0	15.0	10.5	9.0	5.0	5.0	6.0	5.0	7.5	7.5	6.5	6.5
16	15.5	15.0	11.0	10.0	5.0	4.5	7.0	6.0	7.5	7.0	8.0	7.0
17	15.0	13.0	10.0	8.0	4.5	2.5	7.5	7.0	7.0	6.5	8.0	7.5
18	13.0	12.0	8.5	7.5	2.5	2.5	7.5	7.0	6.5	6.0	7.5	7.0
19	12.0	12.0	7.5	7.5	2.5	2.5	7.0	7.0	6.0	6.0	8.5	7.5
20	12.0	12.0	7.5	7.5	3.0	2.5	7.0	7.0	7.0	6.0	9.0	8.5
21	12.0	11.5	8.0	7.5	3.0	3.0	7.0	7.0	7.0	7.0	9.0	9.0
22	11.5	11.5	9.5	8.0	3.0	3.0	7.0	7.0	9.5	7.0	9.0	8.0
23	11.5	11.0	9.5	9.5	3.5	3.0	7.5	7.0	9.5	8.5	9.0	8.5
24	11.5	11.0	10.5	9.5	4.5	3.5	7.5	7.5	8.5	7.5	9.0	9.0
25	11.0	11.0	11.0	10.5	5.5	4.5	7.5	7.5	7.5	6.5	9.0	7.5
26	11.5	10.5	11.0	11.0	6.0	5.5	7.5	7.0	6.5	5.5	8.0	7.5
27	10.5	10.5	11.5	11.0	7.0	6.0	8.5	7.5	5.5	5.5	8.5	8.0
28	10.5	10.5	12.5	11.5	8.0	7.0	8.5	8.5	6.5	5.5	10.0	8.5
29	11.5	10.5	12.5	9.5	8.0	8.0	8.5	8.5	---	---	10.0	9.0
30	11.5	11.0	9.5	8.5	8.0	7.5	8.5	8.5	---	---	9.0	7.0
31	11.0	10.0	---	---	8.0	7.5	8.5	8.5	---	---	7.0	7.0
MONTH	18.0	10.0	12.5	5.0	9.5	2.5	8.5	5.0	9.5	4.5	12.0	6.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.0	19.0	18.0	17.0	17.0	20.0	19.0	22.0	21.0	22.5	22.0
2	10.0	8.0	18.5	15.5	17.0	17.0	21.0	20.0	21.0	21.0	22.0	21.5
3	12.5	9.5	15.5	14.5	17.0	17.0	22.5	21.0	21.5	21.0	22.0	21.0
4	13.5	12.5	14.5	14.0	18.0	17.0	23.0	22.5	21.5	21.0	21.0	19.5
5	13.5	13.0	14.5	14.0	19.0	18.0	23.0	22.5	21.5	21.0	19.5	18.5
6	13.0	10.5	14.0	13.0	19.0	19.0	22.5	22.0	21.0	20.5	18.5	18.5
7	10.5	9.0	13.0	12.5	19.0	19.0	23.0	22.0	20.5	20.0	18.5	18.0
8	10.5	10.0	13.0	12.5	19.0	19.0	23.5	23.0	20.5	20.0	18.0	17.5
9	10.0	9.0	13.0	13.0	20.0	19.0	24.0	23.0	20.0	20.0	18.0	17.5
10	9.5	8.5	15.0	13.0	22.0	20.0	24.0	24.0	20.0	19.5	19.5	18.0
11	11.0	9.0	15.5	15.0	22.0	21.5	24.0	23.0	20.5	19.5	20.5	19.5
12	13.0	10.5	16.0	15.5	21.5	20.5	23.0	21.5	20.5	20.0	21.0	20.5
13	14.5	13.0	16.0	15.0	20.5	19.5	22.0	20.5	21.0	20.0	21.0	21.0
14	15.5	14.0	16.5	14.5	19.5	19.5	22.5	21.0	22.5	21.0	21.0	20.0
15	15.5	14.5	18.5	16.5	20.0	19.5	23.0	22.5	22.5	21.5	20.0	19.0
16	14.5	12.5	19.5	18.0	20.0	19.5	23.0	22.5	22.5	21.5	18.5	17.5
17	13.5	11.5	20.5	19.5	19.5	19.0	22.5	21.0	21.5	21.0	18.5	18.0
18	14.0	12.0	20.5	19.5	19.0	19.0	23.0	22.0	22.0	21.5	18.5	18.0
19	14.0	13.0	19.5	17.5	19.5	19.0	23.5	23.0	21.5	21.5	18.0	17.5
20	13.0	12.0	17.5	16.5	21.0	19.5	23.5	22.5	21.5	20.5	19.0	18.0
21	14.5	12.5	18.0	17.0	21.0	21.0	22.5	21.0	21.5	21.0	18.5	18.5
22	14.5	14.0	19.0	18.0	21.0	21.0	21.5	20.0	21.5	21.5	18.5	17.0
23	15.5	14.5	19.5	19.0	21.0	19.0	21.0	20.0	21.5	21.0	17.0	15.0
24	15.5	13.0	19.5	19.0	19.0	18.0	20.0	19.5	22.0	21.5	15.0	13.0
25	13.0	12.0	19.0	18.0	18.0	18.0	20.0	19.5	22.0	21.5	13.0	12.0
26	14.0	12.5	18.0	17.0	18.0	17.5	20.0	20.0	22.5	22.0	14.0	12.5
27	15.0	13.5	17.0	17.0	18.0	17.5	21.0	20.0	22.5	22.5	14.5	14.0
28	15.5	15.0	17.0	16.0	18.0	17.5	22.0	21.0	23.5	23.0	16.0	14.5
29	18.0	15.5	16.5	16.0	17.5	17.5	22.5	21.5	23.5	23.0	17.0	16.0
30	19.0	17.5	17.0	16.5	19.0	17.5	22.5	22.0	23.5	23.0	17.0	15.5
31	---	---	17.0	17.0	---	---	22.0	22.0	23.0	22.5	---	---
MONTH	19.0	7.0	20.5	12.5	22.0	17.0	24.0	19.0	23.5	19.5	22.5	12.0

01638500 POTOMAC RIVER AT POINT OF ROCKS, MD.

LOCATION.--Lat 39°16'25", long 77°32'35", Frederick County, at gaging station at bridge on U. S. Highway 15 at Point of Rocks, 0.3 mile (0.5 km) downstream from Catoctin Creek (Virginia), 6 miles (9.7 km) upstream from Monocacy River and at mile 159.5 (256.6 km).
DRAINAGE AREA.--9,651 sq mi (24,996 sq km).
PERIOD OF RECORD.--Chemical analyses: December 1964 to September 1974.
Water temperatures: October 1960 to September 1974.
Sediment records: October 1960 to September 1974.
EXTREMES.--1973-74:
Water temperatures: Maximum recorded, 28.0°C several days during July and August; minimum recorded, 1.0°C Dec. 19, 20.
Sediment concentrations: Maximum daily, 870 mg/l Dec. 28; minimum daily, 2 mg/l Feb. 13, 17, 18.
Sediment discharge: Maximum daily, 292,000 tons (265,000 t) Dec. 28; minimum daily, 16 tons (15 t) Oct. 28.
Period of record:
Water temperatures: Maximum, 33.5°C Aug. 24, 1964; minimum, freezing point on many days during winter periods.
Sediment concentrations: Maximum daily, 2,350 mg/l Apr. 3, 1970; minimum daily, 1 mg/l on many days most years.
Sediment discharge: Maximum daily, 689,000 tons (625,000 t) June 23, 1972; minimum daily, 2 tons (1.8 t) on many days during 1964, 1966-69.
REMARKS.--Water temperatures measured once daily in field at time of sampling.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT.											
26...	--	2500	1.3	440	50	48	10	13	2.8	120	98
NOV.											
27...	1100	3740	--	--	--	--	--	--	--	--	--
29...	1255	4000	2.1	440	50	37	8.2	7.2	1.5	105	86
JAN.											
08...	1250	15300	5.9	1200	140	31	6.5	5.9	1.5	74	61
FEB.											
06...	1125	9920	5.0	410	80	36	7.3	6.0	1.7	100	82
27...	1345	8850	--	--	--	--	--	--	--	--	--
MAR.											
11...	1400	9610	1.7	850	320	30	6.7	5.5	1.7	78	64
MAY											
22...	--	8140	5.3	1000	90	27	5.8	4.8	1.8	75	62
JULY											
11...	1510	5180	3.4	580	110	32	7.0	6.4	2.1	78	64
SEP.											
04...	1630	3630	8.7	2200	70	47	10	14	3.5	133	109

DATE	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)
OCT.										
26...	63	23	.4	1.4	--	221	--	160	63	2.8
NOV.										
27...	--	--	--	--	--	--	7	--	--	--
29...	40	12	.3	1.1	--	160	--	130	40	--
JAN.										
08...	37	8.3	.1	1.4	--	133	--	100	43	--
FEB.										
06...	35	8.7	.2	1.3	--	149	--	120	38	--
27...	--	--	--	--	--	--	4	--	--	--
MAR.										
11...	35	7.7	.0	.74	--	127	--	100	39	--
MAY										
22...	25	6.2	.1	.92	.07	113	--	91	30	--
JULY										
11...	49	10	.1	.78	.07	148	--	110	45	--
SEP.										
04...	51	17	.2	1.1	.21	217	--	160	49	--

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUSPENDED GROSS ALPHA AS U-NAT. (UG/L)	DISSOLVED GROSS BETA AS CS-137 (PC/L)	SUSPENDED GROSS BETA AS CS-137 (PC/L)	DISSOLVED RA-226 (RADON METHOD) (PC/L)	DISSOLVED URANIUM (U) (UG/L)
OCT.										
26...	391	7.5	14.5	--	--	--	--	--	--	--
NOV.										
27...	--	--	--	--	<1.9	<.4	3.3	<.4	.05	.82
29...	301	7.6	8.5	--	--	--	--	--	--	--
JAN.										
08...	241	7.4	3.0	--	--	--	--	--	--	--
FEB.										
06...	272	7.6	3.0	--	--	--	--	--	--	--
27...	--	--	--	--	4.0	<.4	2.5	.6	.05	.17
MAR.										
11...	230	7.9	10.5	--	--	--	--	--	--	--
MAY										
22...	200	7.2	22.0	1	--	--	--	--	--	--
JULY										
11...	--	--	28.5	2	--	--	--	--	--	--
SEP.										
04...	381	--	23.5	3	--	--	--	--	--	--

01638500 POTOMAC RIVER AT POINT OF ROCKS, MD.--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	11.0	---	---	6.0	6.0	6.0	20.0	---	24.0	28.0	25.0
2	19.0	11.0	7.0	---	6.0	6.0	8.0	16.0	19.0	25.0	26.0	---
3	19.0	---	---	4.0	5.0	8.0	9.0	18.0	20.0	26.0	---	23.0
4	20.0	10.0	8.0	4.0	4.0	---	11.0	18.0	20.0	---	24.0	22.0
5	19.0	9.0	9.0	3.0	4.0	8.0	11.0	15.0	19.0	25.0	24.0	22.0
6	19.0	8.0	---	4.0	3.0	9.0	11.0	15.0	20.0	26.0	25.0	21.0
7	18.0	7.0	---	4.0	4.0	12.0	12.0	16.0	20.0	27.0	26.0	20.0
8	19.0	7.0	5.0	3.0	2.0	12.0	11.0	15.0	20.0	---	---	20.0
9	---	5.0	---	---	2.0	10.0	8.0	14.0	21.0	---	24.0	21.0
10	19.0	5.0	---	3.0	2.0	11.0	8.0	17.0	23.0	27.0	24.0	---
11	18.0	6.0	4.0	3.0	2.0	11.0	10.0	18.0	24.0	26.0	26.0	---
12	17.0	6.0	---	3.0	3.0	---	11.0	---	---	25.0	24.0	23.0
13	18.0	8.0	4.0	3.0	5.0	---	11.0	17.0	---	27.0	26.0	25.0
14	---	9.0	---	3.0	4.0	9.0	14.0	18.0	23.0	28.0	26.0	24.0
15	---	10.0	---	4.0	---	9.0	12.0	19.0	20.0	25.0	---	24.0
16	16.0	8.0	3.0	4.0	3.0	9.0	13.0	20.0	---	25.0	24.0	23.0
17	14.0	9.0	3.0	4.0	---	8.0	13.0	22.0	21.0	26.0	25.0	23.0
18	15.0	7.0	2.0	---	3.0	---	14.0	20.0	23.0	27.0	26.0	25.0
19	14.0	8.0	1.0	5.0	4.0	8.0	12.0	20.0	24.0	26.0	---	---
20	15.0	8.0	1.0	---	5.0	8.0	12.0	21.0	24.0	---	27.0	24.0
21	14.0	---	---	4.0	5.0	7.0	14.0	22.0	23.0	27.0	27.0	24.0
22	---	9.0	---	4.0	5.0	7.0	12.0	22.0	25.0	28.0	25.0	21.0
23	17.0	---	---	6.0	5.0	9.0	14.0	22.0	---	25.0	27.0	20.0
24	17.0	9.0	---	6.0	5.0	8.0	13.0	22.0	---	25.0	28.0	19.0
25	16.0	10.0	---	5.0	---	---	15.0	21.0	---	24.0	27.0	21.0
26	14.0	---	4.5	5.0	---	7.0	15.0	---	---	24.0	26.0	20.0
27	13.0	11.0	---	7.0	5.0	8.0	---	20.0	19.0	26.0	28.0	21.0
28	14.0	10.0	---	7.0	6.0	8.0	---	21.0	19.0	27.0	26.0	21.0
29	12.0	8.0	---	7.0	---	8.0	---	20.0	20.0	28.0	27.0	---
30	11.0	8.0	---	6.0	---	---	21.0	22.0	22.0	27.0	26.0	18.0
31	11.0	---	---	6.0	---	6.0	---	21.0	---	27.0	25.0	---
MONTH	16.0	8.5	---	4.5	4.0	8.5	12.0	19.0	---	26.0	26.0	22.0

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

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2550	19	131	19700	164	8720	7240	29	567
2	3290	31	275	14300	95	3670	7200	16	311
3	3830	39	403	12700	49	1680	6270	13	220
4	6000	57	923	11400	31	954	5660	14	214
5	8030	63	1370	9610	24	623	5370	16	232
6	6890	49	912	8360	19	429	5090	15	206
7	5340	40	577	7630	15	309	5060	11	150
8	4500	30	365	7350	13	258	5400	10	146
9	3940	25	266	6960	16	301	6540	28	494
10	3600	26	253	6270	16	271	11300	56	1840
11	3400	24	220	5760	8	124	18200	68	3340
12	3740	27	273	5530	7	105	15600	38	1600
13	4030	27	294	5250	6	85	12200	22	725
14	3830	19	196	4870	10	131	10200	16	441
15	3460	14	131	4630	11	138	9300	12	301
16	3370	13	118	4410	10	119	8810	9	214
17	3650	11	108	4320	8	93	8660	12	281
18	3340	9	81	4240	7	80	8330	8	180
19	2790	8	60	4120	7	78	7560	5	102
20	2690	9	65	4150	17	190	7490	6	121
21	2610	8	56	4060	16	175	10300	20	600
22	2420	7	46	4060	11	121	33500	102	9930
23	2370	7	45	3830	11	114	47000	170	21600
24	2420	8	52	3910	13	137	32000	62	5530
25	2660	6	43	3830	13	134	23800	21	1350
26	2500	4	27	3710	18	180	22500	60	3860
27	2270	3	18	3770	22	224	53100	440	71500
28	1960	3	16	3910	23	243	125000	870	292000
29	3320	109	1230	3970	20	214	89200	390	102000
30	35400	680	65000	4780	22	284	49800	96	13400
31	32100	344	29800	--	--	--	37100	38	3810
TOTAL	172300	--	103354	191390	--	20184	694780	--	537265

01638500 POTOMAC RIVER AT POINT OF ROCKS, MD.--Continued

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

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	30600	28	2310	13500	12	437	7960	4	86
2	24700	25	1670	12400	9	301	8100	4	87
3	20900	25	1410	11700	6	190	7920	6	128
4	18900	22	1120	11000	6	178	8290	12	269
5	18600	18	904	10500	6	170	10100	14	382
6	18900	18	919	9920	6	161	9730	8	210
7	17000	18	826	9190	5	124	9420	8	203
8	15300	22	909	8770	4	95	9040	10	244
9	14100	16	609	8620	4	93	8730	14	330
10	13500	12	437	9040	4	98	9300	10	251
11	18100	13	648	8550	4	92	9610	11	285
12	37200	89	9530	8140	3	66	9460	12	307
13	44000	137	16300	7880	2	43	9190	11	273
14	33500	67	6060	7960	4	86	8850	10	239
15	26000	40	2810	8250	8	178	8890	10	240
16	22000	24	1430	9490	19	487	8660	8	187
17	19400	19	995	10800	2	58	8510	7	161
18	17700	17	812	9730	2	53	8510	7	161
19	16100	15	652	9150	4	99	8180	9	199
20	14600	15	591	8620	5	116	7920	7	150
21	15000	14	567	8140	4	88	7850	10	212
22	21500	15	871	8210	6	133	9190	15	372
23	30200	50	4080	8400	8	181	11500	20	621
24	27400	50	3700	8620	5	116	12900	21	731
25	23100	38	2370	9840	5	133	11800	18	573
26	20300	26	1430	9690	5	131	10700	15	433
27	19500	20	1050	8920	5	120	9650	11	287
28	19100	18	928	8400	4	91	8890	10	240
29	18000	17	826	--	--	--	8330	12	270
30	16500	21	936	--	--	--	10100	27	766
31	15000	17	689	--	--	--	20200	123	6920
TOTAL	666700	--	68389	263430	--	4118	297480	--	15817

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	27800	97	7280	6030	11	179	5340	18	260
2	23400	45	2840	5660	13	199	8750	38	953
3	19100	30	1550	5630	13	198	30900	172	15800
4	17900	28	1350	5500	13	193	58700	457	72400
5	28600	91	7690	5500	11	163	36400	289	29400
6	37900	203	20800	5660	10	153	22300	113	6900
7	31100	131	11000	5730	12	186	15700	56	2370
8	25000	72	4860	5340	12	173	12500	34	1150
9	21300	31	1780	5180	10	140	10400	26	730
10	21600	26	1520	5370	14	203	9040	24	586
11	23100	25	1560	5310	15	215	8550	24	554
12	18900	24	1220	6150	21	357	7850	21	445
13	17300	23	1070	11300	60	1930	7200	20	389
14	21000	31	1760	22600	76	4640	6300	18	306
15	21800	68	4000	24600	70	4650	5530	17	254
16	18800	40	2030	18000	35	1700	5500	14	208
17	16100	32	1390	13800	27	1010	6570	16	284
18	14100	24	914	11400	29	893	8550	26	600
19	12400	17	569	9760	27	712	7670	22	456
20	11400	14	431	9690	42	1100	6610	27	482
21	10400	13	365	9340	33	832	5700	22	339
22	9570	13	336	8290	23	515	5280	18	257
23	9190	11	273	7920	24	513	5280	20	285
24	9040	11	268	7700	25	520	6750	30	576
25	8470	13	297	7520	27	548	17100	126	6040
26	7990	11	237	6750	26	474	18200	126	6190
27	7520	10	203	6300	26	442	14000	78	2950
28	7030	10	190	5800	22	345	11600	46	1440
29	6570	10	177	5310	20	287	9530	34	875
30	6330	10	171	5060	20	273	8890	30	720
31	--	--	--	4900	16	212	--	--	--
TOTAL	510710	--	78131	263100	--	23955	382690	--	154199

01638500 POTOMAC RIVER AT POINT OF ROCKS, MD.--Continued

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

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9420	32	814	3260	32	282	2090	32	181
2	9420	32	814	2710	29	212	2290	39	241
3	9730	30	788	2420	38	248	2660	51	366
4	8510	27	620	2370	56	358	3370	60	546
5	6710	21	380	2820	70	533	3320	69	619
6	5930	18	288	3090	65	542	3040	82	673
7	6000	26	421	2740	52	385	3090	76	634
8	6470	34	594	2420	45	294	3400	67	615
9	5570	25	376	2420	50	327	3650	72	710
10	5030	17	231	2370	58	371	4720	84	1070
11	4750	16	205	2170	48	281	4870	80	1050
12	4240	22	252	2020	43	235	4290	70	811
13	3650	20	197	2070	47	263	4060	77	844
14	3340	12	108	2140	43	248	4840	83	1080
15	3150	20	170	2050	39	216	3910	62	655
16	2950	33	263	2070	39	218	3480	55	517
17	2820	22	168	2320	46	288	3040	52	427
18	2660	19	136	2980	53	426	3040	55	451
19	2500	20	135	2630	50	355	2900	47	368
20	2350	18	114	2290	52	322	2660	34	244
21	2370	20	128	2320	50	313	2550	36	248
22	2090	22	124	2400	41	266	2420	46	301
23	2070	18	101	2480	41	275	2140	32	185
24	2120	14	80	2770	34	254	2000	34	184
25	2120	20	114	2450	28	185	1910	34	175
26	2090	19	107	2220	24	144	1870	27	136
27	2090	22	124	2220	29	174	1820	25	123
28	2170	27	158	2140	29	168	1740	18	85
29	2320	34	213	2170	26	152	1760	18	86
30	2740	30	222	2400	34	220	1720	20	93
31	3150	35	298	2370	34	218	--	--	--
TOTAL	130530	--	8743	75300	--	8773	88650	--	13718

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 3737060
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1036646

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
JAN. 13...	1505	43500	3.0	145	17000	56	71
JUNE 04...	1650	59900	20.0	402	65000	49	67

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
JAN. 13...	82	91	94	96	98	100
JUNE 04...	81	89	95	96	98	100

01639000 MONOCACY RIVER AT BRIDGEPORT, MD.

LOCATION.--Lat 39°40'43", long 77°14'06", Frederick County, at bridge on Maryland State Highway 97, 60 feet (18 m) upstream from gaging station at Bridgeport, 0.9 mile (1.4 km) upstream from Cattail Branch, 3.4 miles (5.5 km) northwest of Taneytown, 4.8 miles (7.7 km) downstream from confluence of Rock and Marsh Creeks at Pennsylvania-Maryland State line, and 52 miles (83.7 km) upstream from mouth.

DRAINAGE AREA.--173 sq mi (448 sq km).

PERIOD OF RECORD.--Chemical analyses: April 1948 to June 1951, July 1969 to September 1972, October 1973 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
FEB.										
25...	1040	120	--	--	--	--	--	--	--	--
MAR.										
12...	1130	88	--	23	--	7.0	--	9.0	--	2.0
25...	1045	132	--	--	--	--	--	--	--	--
APR.										
08...	1050	261	--	--	--	--	--	--	--	--
22...	1030	130	--	--	--	--	--	--	--	--
MAY										
06...	1100	54	--	--	--	--	--	--	--	--
20...	1030	74	--	--	--	--	--	--	--	--
JUNE										
03...	1030	101	--	--	--	--	--	--	--	--
18...	1015	36	20	--	6.3	--	9.0	--	1.8	--
JULY										
01...	1000	44	--	--	--	--	--	--	--	--
15...	1000	8.0	--	--	--	--	--	--	--	--
29...	1000	13	--	--	--	--	--	--	--	--
AUG.										
12...	0950	8.4	--	--	--	--	--	--	--	--
26...	0945	3.6	--	--	--	--	--	--	--	--
SEP.										
09...	0945	32	--	--	--	--	--	--	--	--
24...	1000	11	25	--	7.4	--	11	--	2.8	--

DATE	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
FEB.										
25...	--	--	--	--	--	1.4	.03	.22	.35	.14
MAR.										
12...	66	54	32	13	.1	.92	.04	.20	.29	.20
25...	--	--	--	--	--	1.2	.04	.13	.16	.10
APR.										
08...	--	--	--	--	--	1.3	.03	.13	.11	.01
22...	--	--	--	--	--	.87	.02	.17	.11	.10
MAY										
06...	--	--	--	--	--	.38	.01	.00	.42	.17
20...	--	--	--	--	--	.64	.02	.09	.48	.16
JUNE										
03...	--	--	--	--	--	1.2	.04	.07	.37	.30
18...	83	68	19	11	--	.05	.01	.05	.42	.22
JULY										
01...	--	--	--	--	--	.63	.02	.05	.33	.37
15...	--	--	--	--	--	.00	.01	.43	.22	.07
29...	--	--	--	--	--	.00	.01	.30	.16	.36
AUG.										
12...	--	--	23	12	--	.00	.01	.34	.24	.43
26...	--	--	--	--	--	.01	.00	.28	.30	.35
SEP.										
09...	--	--	--	--	--	.84	.06	.46	.21	.56
24...	84	69	35	16	--	.38	.01	.18	.24	.34

01639000 MONOCACY RIVER AT BRIDGEPORT, MD.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	SUS-PENDED SOLIDS (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPER-ATURE (DEG C)	TEMPER-ATURE (DEG C)
FEB.										
25...	--	139	--	4	--	--	186	7.2	--	3.5
MAR.										
12...	--	160	--	11	86	32	221	7.7	7.0	7.0
25...	--	107	--	3	--	--	186	7.5	-2.5	5.0
APR.										
08...	--	107	--	8	--	--	155	7.2	12.0	9.0
22...	--	93	9	--	--	--	180	7.5	23.0	15.0
MAY										
06...	--	119	10	--	--	--	202	8.0	12.5	13.0
20...	--	132	9	--	--	--	185	7.2	17.5	18.0
JUNE										
03...	--	132	9	--	--	--	220	7.2	25.0	17.0
18...	.16	121	10	--	--	--	215	6.9	23.5	19.5
JULY										
01...	--	157	9	--	--	--	255	7.5	27.0	20.5
15...	--	135	15	--	--	--	265	7.9	28.5	25.5
29...	--	192	--	--	--	--	310	8.1	24.0	24.0
AUG.										
12...	--	170	4	--	--	--	260	7.9	22.0	21.0
26...	--	179	7	--	--	--	325	7.8	24.5	23.5
SEP.										
09...	--	151	12	--	--	--	240	7.0	19.5	18.5
24...	--	166	12	--	--	--	290	7.8	10.0	12.5

DATE	WEATHER	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	CHLORO-PHYLL A (UG/L)	CHLORO-PHYLL B (UG/L)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB.										
25...	2	17	13.0	15	2.0	2.3	--	52	--	5.0
MAR.										
12...	3	1	12.7	12	1.4	2.4	--	31	280	4.7
25...	2	8	12.0	10	1.6	3.0	--	39	15	4.3
APR.										
08...	3	9	11.0	9	.6	.9	--	150	12	3.1
22...	1	--	10.1	10	1.5	1.3	2.6	130	13	--
MAY										
06...	3	--	10.4	15	2.6	1.6	4.3	150	69	5.1
20...	0	3	7.8	11	.8	2.8	5.4	140	20	3.8
JUNE										
03...	1	8	8.5	11	1.8	2.3	4.6	1400	200	2.9
18...	1	3	7.1	12	1.4	--	--	190	100	3.9
JULY										
01...	1	4	7.5	10	1.4	24	49	770	490	4.7
15...	0	5	7.0	17	2.6	53	120	57	817	6.0
29...	3	10	7.5	17	2.2	170	12	100	8180	4.5
AUG.										
12...	0	7	7.8	16	2.9	77	8.0	60	95	4.9
26...	3	8	7.4	23	2.2	81	8.0	120	270	6.1
SEP.										
09...	3	20	7.1	17	2.2	49	3.0	8700	420	8.2
24...	0	7	9.0	15	6.8	9.4	3.0	220	110	6.6

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

01641810 MONOCACY RIVER NEAR WALKERSVILLE, MD.

LOCATION.--Lat 39°28'47", long 77°23'18", Frederick County at Biggs Ford Bridge on Biggs Ford Road, 2.0 miles (3.2 km) west of Walkersville, 4.7 miles (7.6 km) north of Frederick, 9.3 miles (15.0 km) upstream from Linganore Creek, and 26.5 miles (42.6 km) upstream from mouth.

DRAINAGE AREA.--637 sq mi (1,650 sq km) approximately.

PERIOD OF RECORD.--Chemical analyses: February to September 1974.

REMARKS.--Records of discharge given are based on records for station 01643000 Monocacy River at Jug Bridge near Frederick, adjusted on the basis of the drainage area ratio.

CHEMICAL ANALYSES, FEBRUARY TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
FEB.										
27...	1140	448	0	250	70	--	21	--	5.4	--
MAR.										
14...	1530	378	0	170	20	--	23	--	5.5	--
27...	1035	488	0	160	20	--	19	--	5.3	--
APR.										
09...	1020	3490	1100	1800	190	--	17	--	4.2	--
24...	1005	1140	700	670	30	14	--	4.6	--	4.0
MAY										
08...	1030	388	500	90	30	24	--	4.9	--	4.5
22...	1110	480	300	280	30	22	--	4.9	--	4.4
JUNE										
05...	0945	360	740	1100	1000	22	--	5.4	--	6.5
20...	1030	270	0	930	90	28	--	5.6	--	4.7
JULY										
01...	1200	346	480	800	80	25	--	5.6	--	5.6
22...	1030	104	280	500	80	32	--	6.2	--	6.0
AUG.										
05...	1030	144	410	740	80	26	--	6.2	--	6.0
12...	1150	90	620	730	560	29	--	6.3	--	7.0
26...	1210	108	270	470	70	29	--	5.9	--	5.4
SEP.										
09...	1130	303	450	800	80	23	--	7.6	--	7.2
24...	1300	176	230	350	80	28	--	6.3	--	5.5

DATE	DISSOLVED SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)
FEB.										
27...	5.0	--	1.5	59	48	21	9.2	2.1	.02	.09
MAR.										
14...	5.5	--	1.5	69	57	20	9.3	1.7	.01	.06
27...	5.0	--	1.4	58	48	19	7.9	1.6	.03	.08
APR.										
09...	4.0	--	2.4	43	35	21	5.7	1.4	.04	.34
24...	--	1.7	--	51	42	16	6.8	1.4	.03	.26
MAY										
08...	--	1.2	--	68	56	14	7.5	1.6	.01	.05
22...	--	1.6	--	63	52	14	6.8	1.7	.03	.07
JUNE										
05...	--	2.0	--	68	56	15	9.2	1.9	.03	.01
20...	--	2.4	--	77	63	14	8.3	--	--	--
JULY										
01...	--	2.8	--	77	63	17	9.4	1.8	.03	.07
22...	--	2.2	--	99	81	15	11	1.5	.01	.22
AUG.										
05...	--	2.5	--	96	79	15	11	--	--	--
12...	--	2.4	--	101	83	17	11	1.8	.02	.19
26...	--	2.2	--	96	79	13	10	2.0	.11	.66
SEP.										
09...	--	4.4	--	74	61	21	12	1.5	.04	.33
24...	--	2.9	--	94	77	20	11	2.2	.01	.09

01641810 MONOCACY RIVER NEAR WALKERSVILLE, MD.--Continued

CHEMICAL ANALYSES, FEBRUARY TO SEPTEMBER 1974

DATE	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	SUS-PENDED SOLIDS (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPER-ATURE (DEG C)
FEB.										
27...	.28	.06	--	--	0	75	26	198	7.6	--
MAR.										
14...	.15	.07	119	4	--	80	23	197	8.6	11.5
27...	.11	.05	100	--	1	69	22	180	7.7	6.5
APR.										
09...	.57	.22	133	--	122	60	24	160	7.3	5.5
24...	.20	.08	94	26	--	--	--	162	7.4	9.0
MAY										
08...	.28	.08	115	8	--	--	--	192	8.1	11.0
22...	.21	.10	145	12	--	--	--	180	7.5	27.0
JUNE										
05...	1.1	.15	117	31	--	--	--	200	7.1	26.0
20...	--	--	135	41	--	--	--	225	7.4	28.0
JULY										
01...	.47	.25	145	50	--	--	--	220	8.0	28.5
22...	.00	.12	174	26	--	--	--	260	7.8	25.0
AUG.										
05...	--	.15	150	29	--	--	--	245	7.6	24.0
12...	.21	.18	160	35	--	--	--	260	7.7	25.5
26...	.54	.44	133	22	--	--	--	245	7.8	28.0
SEP.										
09...	.35	.32	153	3	--	--	--	245	7.3	19.0
24...	.27	.17	152	18	--	--	--	260	8.2	16.0

DATE	TEMPER-ATURE (DEG C)	WEATHER	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	CHLORO-PHYLL A (UG/L)	CHLORO-PHYLL B (UG/L)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)
FEB.										
27...	1.0	0	6	14.2	11	.8	.8	--	7	--
MAR.										
14...	6.0	0	--	15.0	8	.3	1.4	--	3	6
27...	6.0	2	2	12.0	7	2.2	.0	--	16	2
APR.										
09...	8.0	3	480	11.2	25	3.7	1.8	--	B5000	B1000
24...	13.5	3	20	9.4	12	1.7	3.3	5.5	3900	260
MAY										
08...	11.5	3	2	11.0	7	1.8	7.9	4.3	52	28
22...	19.5	0	6	8.2	8	.4	.0	.0	280	45
JUNE										
05...	19.0	0	30	8.3	11	1.6	1.2	3.1	680	110
20...	22.0	1	30	7.5	13	1.2	--	--	810	300
JULY										
01...	21.5	0	40	8.3	11	1.8	15	32	B14000	830
22...	22.0	1	20	6.7	8	1.4	61	8.0	110	88
AUG.										
05...	23.0	2	20	6.9	11	1.4	97	.0	6300	B5900
12...	21.5	1	20	7.8	10	1.4	3.6	6.2	230	330
26...	24.0	3	20	7.0	8	1.4	89	8.0	490	810
SEP.										
09...	18.5	3	30	8.3	11	1.6	40	.0	4400	2700
24...	14.5	0	20	10.0	10	1.2	4.3	1.5	9700	100

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
FEB.									
27...	3.8	0	0	0	10	0	0	0	0
MAR.									
14...	3.9	0	<0	0	0	0	0	0	50
27...	2.5	0	0	0	<10	20	2	0	100
APR.									
09...	9.0	0	3	0	10	20	5	0	20
24...	6.0	0	1	0	0	10	2	0	10
MAY									
08...	3.2	0	<1	0	0	10	1	0	160
22...	3.3	0	2	1	0	10	0	0	20
JUNE									
05...	2.9	0	<1	0	10	10	2	0	0
20...	5.7	0	1	0	10	0	6	1	30
JULY									
01...	5.7	0	2	0	<10	10	5	0	20
22...	2.6	0	1	0	10	10	1	0	20
AUG.									
05...	2.2	0	1	0	0	20	1	0	20
12...	4.5	0	1	0	<10	0	2	0	40
26...	4.5	0	1	0	<10	60	2	0	10
SEP.									
09...	8.4	0	2	0	<10	0	2	1	0
24...	4.9	1	<1	0	<10	0	2	1	20

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

01643020 MONOCACY RIVER AT REICH'S FORD BRIDGE, NEAR FREDERICK, MD.
(Formerly published as 01643000 Monocacy River at Jug Bridge, near Frederick, Md.)

LOCATION.--Lat 39°23'16", long 77°22'40", Frederick County, at Reich's Ford Bridge, 1 mile (1.6 km) downstream from U. S. Highway 40, 1.2 miles (1.9 km) downstream from gaging station, 2 miles (3.2 km) southeast of Frederick, and 16.6 miles (26.7 km) upstream from mouth.

DRAINAGE AREA.--817 sq mi (2,116 sq km), upstream from gaging station.

PERIOD OF RECORD.--Chemical analyses: December 1964 to September 1974.
Water temperatures: October 1960 to September 1974.
Sediment records: October 1960 to September 1974.

EXTREMES.--1973-74:
Sediment concentrations: Maximum daily, 636 mg/l Dec. 27; minimum daily, 2 mg/l Dec. 12.
Sediment discharge: Maximum daily, 26,800 tons (24,300 t) Dec. 27; minimum daily, 2.9 tons (2.6 t) Nov. 10.

Period of record:
Water temperatures (1960-72): Maximum, 30.5°C July 2, 12-13, 26, Aug. 27, 1966; minimum, freezing point on many days during winter periods.
Sediment concentrations: Maximum daily, 2,000 mg/l July 10, 1970; minimum daily, 1 mg/l on many days.
Sediment discharge: Maximum daily, 134,000 tons (122,000 t) June 22, 1972; minimum daily, less than 0.50 ton (0.45 t) on many days.

REMARKS.--No appreciable inflow between sampling point and gaging station during periods of heavy local runoff. Records of discharge are given for station 01643000 Monocacy River at Jug Bridge, near Frederick, Md. Water temperatures measured in field at time of sampling.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
OCT.											
17...	1415	169	--	450	100	--	37	--	7.1	--	8.7
NOV.											
07...	1340	686	--	990	220	--	24	--	5.7	--	6.5
DEC.											
05...	1540	268	200	260	70	--	34	--	6.4	--	8.7
JAN.											
23...	1405	2900	--	1400	110	--	18	--	4.5	--	4.3
FEB.											
27...	1500	570	100	470	40	26	--	5.8	--	6.0	--
MAR.											
15...	1030	485	0	150	20	22	--	7.4	--	8.5	--
27...	1220	625	0	240	30	23	--	5.3	--	5.5	--
APR.											
09...	1255	4960	800	1400	150	18	--	4.3	--	3.8	--
24...	1220	1360	1200	1200	140	17	--	4.9	--	4.0	--
MAY											
08...	1230	498	400	140	40	26	--	5.5	--	5.3	--
22...	1310	600	300	480	60	32	--	5.5	--	4.9	--
JUNE											
05...	1215	454	770	1100	70	26	--	5.5	--	6.2	--
20...	1245	348	0	1100	90	27	--	5.6	--	5.5	--
JULY											
01...	1315	444	860	1600	110	30	--	5.9	--	6.3	--
22...	1230	130	180	380	100	42	--	6.9	--	8.2	--
AUG.											
05...	1145	187	510	550	150	34	--	6.8	--	7.8	--
12...	1315	115	730	870	170	36	--	7.0	--	8.8	--
26...	1345	139	280	600	150	38	--	7.2	--	7.9	--
SEP.											
10...	1410	271	890	1200	110	29	--	8.0	--	7.5	--
25...	1045	202	360	480	110	35	--	8.4	--	7.5	--

01643020 MONOCACY RIVER AT REICH'S FORD BRIDGE, NEAR FREDERICK, MD.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL POTASSIUM (K) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT.											
17...	--	3.6	120	98	17	13	.3	2.5	.00	--	--
NOV.											
07...	--	4.2	83	68	12	12	.4	1.7	.00	--	--
DEC.											
05...	--	2.7	107	88	22	14	.3	2.1	.02	.48	--
JAN.											
23...	--	2.1	42	34	24	7.2	.2	2.3	.05	--	--
FEB.											
27...	1.8	--	75	62	21	13	--	2.4	.02	.23	.29
MAR.											
15...	1.8	--	79	65	21	12	--	2.0	.02	.19	.34
27...	1.6	--	70	57	20	9.3	--	1.9	.03	.15	.20
APR.											
09...	2.4	--	50	41	19	6.6	--	1.7	.04	.34	.58
24...	1.8	--	60	49	16	7.5	--	1.7	.03	.41	.21
MAY											
08...	1.5	--	82	67	14	10	--	2.0	.02	.10	.32
22...	1.9	--	74	61	14	8.1	--	1.9	.04	.15	.82
JUNE											
05...	2.3	--	78	64	15	10	--	2.1	.05	.10	.56
20...	3.0	--	92	75	14	10	--	--	--	--	--
JULY											
01...	2.7	--	87	71	17	12	--	2.1	.11	.14	.50
22...	2.6	--	117	96	18	15	--	2.0	.10	.59	.00
AUG.											
05...	2.9	--	114	94	18	14	--	--	--	--	--
12...	2.7	--	113	93	19	16	--	2.1	.13	.59	.29
26...	2.7	--	108	89	17	15	--	1.6	.00	.16	.26
SEP.											
10...	4.2	--	91	75	21	14	--	1.9	.05	.32	.44
25...	3.8	--	111	91	13	14	--	2.4	.04	.36	.40

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	SUSPENDED SOLIDS (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)
OCT.											
17...	--	--	--	--	--	120	23	--	275	7.7	--
NOV.											
07...	--	--	--	--	--	83	15	2.5	190	7.6	--
DEC.											
05...	.34	--	175	--	7	110	23	5.6	285	7.4	--
JAN.											
23...	--	--	--	--	--	63	29	--	165	7.2	--
FEB.											
27...	.26	--	--	--	2	89	27	--	235	7.7	--
MAR.											
15...	.21	--	120	--	12	85	21	--	233	7.9	6.5
27...	.14	--	117	--	2	79	22	--	207	7.7	8.0
APR.											
09...	.23	--	--	--	104	63	22	--	168	7.4	5.5
24...	.13	--	99	45	--	--	--	--	182	7.5	10.0
MAY											
08...	.14	--	128	8	--	--	--	--	225	7.9	15.5
22...	.16	--	159	26	--	--	--	--	205	7.5	31.0
JUNE											
05...	.25	--	129	22	--	--	--	--	235	7.2	28.5
20...	--	--	150	28	--	--	--	--	240	7.4	29.0
JULY											
01...	.32	--	159	66	--	--	--	--	253	8.0	28.5
22...	.33	.31	187	14	--	--	--	--	310	7.7	27.0
AUG.											
05...	.39	--	189	32	--	--	--	--	295	7.5	24.0
12...	.42	--	196	22	--	--	--	--	305	7.6	26.0
26...	.14	--	181	35	--	--	--	--	320	7.7	30.0
SEP.											
10...	.41	--	165	8	--	--	--	--	280	--	25.0
25...	.39	--	185	25	--	--	--	--	320	7.8	15.0

01643020 MONOCACY RIVER AT REICH'S FORD BRIDGE, NEAR FREDERICK, MD.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TEMPERATURE (DEG C)	WEATHER	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT.										
17...	15.0	--	--	8.1	--	--	--	--	B22000	--
NOV.										
07...	9.0	--	--	10.4	--	--	--	--	240	--
DEC.										
05...	8.5	--	6	11.4	--	2.4	--	--	460	--
JAN.										
23...	4.0	--	--	12.9	--	--	--	--	1400	--
FEB.										
27...	3.0	0	9	14.2	8	2.1	.5	--	0	--
MAR.										
15...	5.0	1	1	12.6	10	1.8	1.7	--	10	6
27...	6.5	1	11	12.4	9	2.7	3.7	--	0	0
APR.										
09...	8.0	3	180	11.2	25	3.6	2.9	--	7200	B110
24...	14.0	3	30	9.0	12	2.2	2.9	5.1	2300	52
MAY										
08...	12.5	1	3	11.3	8	2.6	5.5	2.9	B12	84
22...	20.0	0	10	8.6	11	1.1	--	--	660	42
JUNE										
05...	20.0	0	30	8.1	12	2.4	1.0	2.0	340	B33
20...	23.0	3	30	6.8	16	2.6	--	--	1200	B160
JULY										
01...	22.0	1	40	7.5	14	2.7	15	28	630	43
22...	23.0	1	7	7.3	10	3.8	53	47	B85	B14
AUG.										
05...	24.0	2	20	6.1	14	3.7	150	17	B1100	610
12...	23.0	2	20	7.2	13	3.0	2.8	6.0	99	160
26...	25.0	3	30	7.0	14	4.6	50	2.0	B15000	B3000
SEP.										
10...	21.0	1	30	7.3	17	3.4	4.6	.3	1300	1300
25...	13.5	0	20	8.6	13	3.1	52	2.0	1100	200

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	CYANIDE (CN) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
17...	--	--	--	--	--	--	--	--	--	--
NOV.										
07...	--	--	--	--	--	--	--	--	--	--
DEC.										
05...	--	.01	--	--	0	0	0	2	--	40
JAN.										
23...	--	--	--	--	--	--	--	--	--	--
FEB.										
27...	3.3	--	1	1	0	10	0	0	0	20
MAR.										
15...	3.5	--	0	0	0	10	0	0	0	10
27...	3.2	--	0	1	1	0	10	3	0	300
APR.										
09...	7.0	--	0	<1	0	10	10	4	0	10
24...	5.3	--	0	1	0	10	10	2	0	10
MAY										
08...	2.9	--	0	<1	0	0	0	1	0	60
22...	3.8	--	0	2	1	0	10	1	0	20
JUNE										
05...	4.0	--	0	0	1	10	0	5	0	30
20...	5.0	--	0	1	0	<10	0	6	1	30
JULY										
01...	6.5	--	0	2	0	10	10	16	0	20
22...	2.7	--	0	2	1	20	10	4	0	140
AUG.										
05...	4.1	--	0	1	0	0	10	4	0	10
12...	3.4	--	0	1	0	0	0	4	0	20
26...	6.3	--	0	0	0	0	0	6	0	40
SEP.										
10...	7.3	--	0	2	0	10	10	6	1	0
25...	5.0	--	0	1	0	0	0	4	5	10

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

01643020 MONOCACY RIVER AT REICH'S FORD BRIDGE, NEAR FREDERICK, MD.--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	8.0	7.0	21.0	19.0	25.0	---	25.5
2	---	---	---	---	---	7.5	10.0	---	20.0	25.0	---	24.0
3	20.0	---	8.0	---	---	---	---	19.0	20.5	26.0	---	---
4	---	---	---	---	---	---	---	16.0	22.0	28.0	---	22.0
5	---	---	11.0	7.0	---	11.5	14.0	15.0	22.0	---	24.0	28.0
6	---	---	---	---	---	10.5	12.0	13.0	23.0	25.0	25.0	18.0
7	---	9.0	---	---	---	14.0	12.0	14.0	22.0	30.0	26.0	28.0
8	20.0	---	6.0	6.0	---	---	10.0	15.0	22.0	30.0	24.0	28.0
9	---	---	---	---	---	10.0	8.0	15.0	24.0	29.0	---	21.0
10	---	10.0	6.0	---	---	10.5	9.0	16.0	28.0	27.0	26.0	23.0
11	---	---	---	---	3.5	---	11.0	18.0	24.0	26.0	26.0	24.0
12	---	---	---	7.0	5.0	9.0	14.5	16.0	24.0	---	25.0	---
13	---	---	4.0	---	---	8.0	---	15.0	24.0	26.0	26.0	25.0
14	---	11.0	---	---	6.0	8.0	---	17.0	---	27.0	27.0	23.0
15	---	---	5.0	---	5.0	8.0	15.0	22.0	24.0	27.0	---	22.0
16	---	---	5.0	5.0	---	8.0	14.0	22.0	22.0	27.0	25.0	22.0
17	15.0	---	---	---	3.5	---	14.5	---	23.0	27.5	26.0	22.0
18	---	11.0	---	---	---	7.0	16.5	22.5	21.0	---	25.0	22.0
19	---	---	---	---	5.0	9.5	14.0	22.0	23.5	27.0	27.0	23.0
20	---	---	5.0	5.0	---	7.5	14.0	---	25.0	28.0	27.0	23.0
21	---	---	---	---	7.0	8.0	16.0	---	24.0	27.0	26.0	23.0
22	16.5	10.0	---	---	---	8.5	16.0	20.0	25.0	25.0	26.0	20.5
23	---	---	5.0	4.0	6.5	7.0	---	22.0	---	23.0	27.0	18.0
24	---	---	---	---	7.0	9.0	14.0	21.0	21.0	24.0	28.0	16.5
25	---	11.0	---	---	6.0	8.5	15.0	20.0	21.0	24.0	28.0	19.0
26	---	---	---	---	6.0	8.5	17.0	20.0	22.0	24.0	26.0	19.0
27	16.5	12.0	---	6.0	6.5	11.0	18.0	17.0	21.0	26.0	27.0	19.0
28	---	---	---	---	7.0	11.0	17.5	20.5	18.0	27.0	27.5	20.0
29	---	---	---	7.0	---	---	22.0	---	20.0	27.0	28.0	21.0
30	---	11.0	---	7.0	---	5.0	23.0	20.0	23.0	---	26.0	18.0
31	14.0	---	---	---	---	4.0	---	19.0	---	---	27.0	---
MONTH	---	---	---	---	---	8.5	14.0	18.5	22.5	26.5	26.0	22.0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
MAR. 31...	1015	15100	4.0	526	21400	62	77	81	95	99	100

01643020 MONOCACY RIVER AT REICH'S FORD BRIDGE, NEAR FREDERICK, MD.--Continued

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

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	472	17	22	590	16	25	258	18	13
2	408	14	15	575	17	26	223	16	9.6
3	593	26	45	446	16	19	208	14	7.9
4	646	43	75	425	16	18	205	11	6.1
5	404	30	33	762	15	31	235	14	8.9
6	314	26	22	746	14	28	936	68	181
7	265	22	16	709	14	27	693	56	109
8	239	20	13	590	13	21	442	37	44
9	229	20	12	296	6	4.8	1290	237	915
10	226	19	12	268	4	2.9	3150	57	676
11	217	19	11	255	5	3.4	1210	3	9.8
12	211	18	10	239	6	3.9	840	2	4.5
13	205	15	8.3	232	7	4.4	693	4	7.5
14	199	12	6.4	235	9	5.7	797	7	15
15	184	12	6.0	232	9	5.6	856	12	28
16	178	12	5.8	226	9	5.5	656	29	51
17	178	13	6.2	217	9	5.3	585	33	52
18	178	13	6.2	211	9	5.1	440	33	39
19	178	13	6.2	208	11	6.2	550	49	73
20	178	13	6.2	208	12	6.7	600	90	150
21	178	13	6.2	208	12	6.7	6950	558	12000
22	178	12	5.8	211	13	7.4	6840	443	9930
23	178	12	5.8	205	15	8.3	2410	102	701
24	178	12	5.8	199	17	9.1	1870	35	177
25	181	11	5.4	205	22	12	1570	37	157
26	181	11	5.4	214	23	13	4800	95	2060
27	181	9	4.4	220	20	12	15200	636	26800
28	178	7	3.4	239	23	15	4890	126	1660
29	295	20	16	262	21	15	2860	32	247
30	3080	157	1350	282	21	16	2350	22	140
31	913	27	67	--	--	--	1980	19	102
TOTAL	11423	--	1812.5	9915	--	369.0	66587	--	56374.3

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1960	25	132	1080	17	50	571	9	14
2	1720	21	98	986	15	40	610	14	23
3	1350	25	90	1010	13	35	630	14	24
4	2760	127	992	961	9	23	620	11	18
5	2300	64	408	795	5	11	566	14	21
6	1570	42	178	698	4	7.5	510	12	17
7	1370	33	122	709	6	11	481	10	13
8	1230	20	66	735	8	16	543	14	21
9	1090	17	50	661	7	12	642	14	24
10	1390	66	291	600	6	9.7	656	10	18
11	2990	460	3900	722	9	18	657	10	18
12	4910	188	2810	725	18	35	616	9	15
13	2520	59	401	752	22	45	568	6	9.2
14	1720	65	302	806	19	41	488	6	7.9
15	1520	68	279	763	17	35	463	5	6.3
16	1660	63	289	641	15	26	467	5	6.3
17	2950	149	1200	605	11	18	686	15	28
18	1980	124	660	571	11	17	735	9	18
19	1540	97	401	537	11	16	581	10	16
20	1450	71	278	620	8	13	547	10	15
21	3740	306	4900	651	10	18	685	26	57
22	8210	452	12100	636	23	41	1920	85	463
23	3050	80	659	1100	44	127	1090	43	128
24	2380	68	437	806	33	72	882	23	55
25	2040	59	325	651	23	40	777	9	19
26	1700	41	188	605	15	25	687	7	13
27	1710	28	129	566	9	14	639	6	10
28	1720	29	135	556	9	14	607	11	18
29	1530	17	70	--	--	--	597	69	113
30	1330	23	83	--	--	--	3150	512	2100
31	1210	24	78	--	--	--	13500	596	21600
TOTAL	68600	--	32051	20548	--	830.2	36171	--	24908.7

01643020 MONOCACY RIVER AT REICH'S FORD BRIDGE, NEAR FREDERICK, MD.--Continued

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

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4260	101	1230	620	16	27	493	49	65
2	2750	45	334	574	12	19	678	77	141
3	2210	34	203	603	12	20	770	68	141
4	3360	200	2320	642	10	17	578	55	86
5	5270	286	4580	583	8	13	459	32	40
6	3190	100	861	544	6	8.8	403	21	23
7	2090	35	198	531	13	19	360	23	22
8	1790	24	116	502	10	14	341	22	20
9	4230	187	2120	553	14	21	335	15	14
10	3320	58	520	725	23	45	336	11	11
11	2100	25	142	622	17	29	460	33	41
12	1700	25	115	1040	260	1050	433	31	38
13	2920	124	1560	4100	340	3900	358	65	63
14	5210	398	6480	1720	135	676	325	89	78
15	2590	110	780	1120	46	139	313	96	81
16	2110	55	313	985	36	96	396	88	94
17	1680	40	181	739	27	54	841	192	444
18	1550	20	84	714	25	48	624	175	295
19	1420	18	69	712	31	60	412	126	140
20	1230	16	53	639	33	57	356	83	80
21	1120	14	42	663	39	70	348	68	64
22	1040	17	48	580	40	63	368	56	56
23	1270	33	121	942	100	265	424	70	80
24	1380	44	164	797	119	256	595	95	153
25	951	27	69	771	121	252	537	95	138
26	855	19	44	641	82	143	436	65	77
27	792	18	38	569	67	103	428	49	57
28	742	15	30	526	52	74	388	62	65
29	709	15	29	476	37	48	441	132	165
30	673	19	35	494	32	43	508	210	288
31	--	--	--	471	31	39	--	--	--
TOTAL	64512	--	22879	25198	--	7668.8	13744	--	3060

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	499	173	228	181	19	9.3	153	40	17
2	595	75	120	166	19	8.5	904	229	610
3	414	40	45	151	18	7.3	495	118	161
4	332	56	50	151	18	7.3	726	215	418
5	296	70	56	246	39	30	496	126	176
6	306	104	89	252	55	37	276	85	63
7	296	110	88	181	39	19	446	99	119
8	264	107	76	157	36	15	629	128	217
9	244	63	42	151	36	15	388	84	88
10	226	35	21	154	36	15	279	57	43
11	210	28	16	145	49	19	245	50	33
12	196	50	26	133	29	10	241	59	42
13	187	42	21	133	38	14	1400	421	1580
14	181	33	16	130	32	11	3500	450	4500
15	178	27	13	124	24	8.0	820	218	482
16	172	33	15	134	26	9.4	467	75	95
17	169	50	23	150	29	12	361	56	55
18	163	43	19	187	54	28	325	55	48
19	160	29	13	184	45	22	282	47	36
20	160	43	19	148	31	12	253	36	25
21	157	36	15	130	42	15	266	38	27
22	148	31	12	133	40	14	321	53	46
23	145	31	12	139	31	12	290	45	35
24	157	27	11	142	42	16	227	27	17
25	160	42	18	139	46	17	202	26	14
26	166	50	22	139	59	20	195	32	17
27	166	35	16	236	47	34	185	32	16
28	184	29	14	148	29	12	190	33	17
29	214	20	12	124	25	8.4	228	68	45
30	201	21	11	132	24	8.6	236	74	46
31	213	21	12	199	34	18	--	--	--
TOTAL	7159	--	1151	4919	--	483.8	15026	--	9088

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 343802
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 160676.3

01645000 SENECA CREEK AT DAWSONVILLE, MD.

LOCATION.--Lat 39°07'41", long 77°20'13", Montgomery County, at gaging station 60 ft (18 m) downstream from bridge on State Highway 28, 150 ft (46 m) downstream from mouth of Great Seneca Creek, 0.5 mile (0.8 km) east of Dawsonville, and 5.8 miles (9.3 km) upstream from mouth.

DRAINAGE AREA.--101 sq mi (262 sq km).

PERIOD OF RECORD.--Chemical analyses: November 1965 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.												
24...	1335	42	6.6	180	30	9.4	3.3	4.5	2.1	36	30	2.9
NOV.												
26...	1100	43	5.4	210	40	8.8	3.0	4.1	1.5	35	29	3.2
JAN.												
04...	1125	245	8.4	900	100	9.0	3.5	6.6	1.9	23	19	12
FEB.												
05...	1255	88	7.9	220	60	7.8	3.2	4.3	1.4	22	18	7.6
MAR.												
11...	1100	74	6.9	240	50	7.5	3.3	4.7	1.5	27	22	5.9
MAY												
28...	1010	69	8.5	390	70	8.5	3.2	4.5	1.7	35	29	4.0
JUNE												
25...	1015	78	9.5	660	90	12	3.4	5.0	2.6	35	29	9.0
JULY												
09...	1415	48	8.3	1200	170	12	3.4	4.5	3.6	32	26	7.7
AUG.												
26...	1020	28	7.4	700	180	13	3.4	4.5	2.5	44	36	4.6

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)
OCT.											
24...	9.2	.3	1.6	--	56	37	8	100	7.2	11.0	--
NOV.											
26...	6.9	.2	1.3	--	50	34	6	102	7.3	10.0	--
JAN.											
04...	12	.1	1.8	--	65	37	18	123	6.8	4.0	--
FEB.											
05...	8.5	.4	2.1	--	52	33	15	104	7.1	.5	--
MAR.											
11...	8.3	.0	1.8	--	51	32	10	106	7.2	6.5	--
MAY											
28...	6.8	.1	1.7	.02	55	34	6	100	7.5	14.0	2
JUNE											
25...	8.8	.2	2.1	.06	68	44	15	--	--	18.0	6
JULY											
09...	7.9	.1	1.8	.07	63	44	18	--	--	24.5	2
AUG.											
26...	7.2	.2	1.1	.06	65	46	10	120	--	22.0	4

01645500 POTOMAC RIVER AT GREAT FALLS, MD.

LOCATION.--Lat 39°00'03", long 77°14'56", Montgomery County, on left bank in the intake building for the Washington Aqueduct at the diversion dam at Great Falls, and at river mile 126.1 (202.9 km).

DRAINAGE AREA.--11,430 sq mi (29,600 sq km).

PERIOD OF RECORD.--Chemical analyses: February 1973 to September 1974.
Biological analyses: March 1973 to September 1974.
Water temperatures: March 1973 to September 1974.
Specific conductance: March 1973 to September 1974.

EXTREMES: 1973-74:
Water temperature: Maximum, 30.5°C July 9, 10; minimum, 1.0°C Dec. 18, 22.

Period of record:
Water temperature: Maximum, 32.0°C on several days during 1973; minimum, 1.0°C Dec. 18, 22, 1973.

REMARKS.--Records of discharge are given for station 01646500 Potomac River near Washington, D. C. (unadjusted for diversions).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
DEC.												
10...	1130	10100	--	1400	--	75	--	--	--	--	--	--
MAR.												
26...	1220	12600	1.4	210	80	40	10	30	6.8	8.0	1.5	88
APR.												
23...	1400	11400	4.3	--	--	--	--	27	6.7	6.5	1.6	90
MAY												
21...	1100	10600	6.4	--	--	--	--	25	5.0	7.0	1.7	74
JUNE												
19...	1110	9520	1.5	570	30	60	0	29	7.2	9.0	2.1	91
JULY												
31...	1100	2400	2.1	--	--	--	--	28	10	21	2.6	90
AUG.												
28...	1600	2520	.3	--	--	--	--	29	9.3	25	3.1	85
SEP.												
26...	1045	2100	.1	260	50	90	10	34	9.4	15	2.4	105

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)
DEC.												
10...	--	--	--	--	--	--	--	--	--	--	--	--
MAR.												
26...	72	34	8.8	.2	.82	.14	.10	.04	155	134	--	100
APR.												
23...	74	29	7.0	.1	1.1	--	--	.06	131	127	--	95
MAY												
21...	61	26	5.4	.1	.93	--	--	.09	119	113	--	83
JUNE												
19...	75	32	8.5	.2	.48	--	--	.07	152	134	--	100
JULY												
31...	74	57	15	.1	.60	--	--	.09	190	180	--	110
AUG.												
28...	70	72	19	.2	.01	--	--	.08	223	200	16	110
SEP.												
26...	86	42	14	.3	.17	--	--	.07	185	169	--	120

DATE	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	WEATHER	TURBIDITY (JTU)	TOTAL PHYTOPLANKTON (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL A MG/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL B MG/SQ M
DEC.												
10...	--	207	--	--	--	--	--	--	--	--	--	--
MAR.												
26...	31	208	8.1	--	9.0	2	4	--	--	--	--	--
APR.												
23...	21	240	8.2	21.0	18.0	1	8	6800	--	--	--	--
MAY												
21...	22	200	8.0	23.5	21.0	0	7	14000	--	--	--	--
JUNE												
19...	27	255	8.4	30.0	24.5	1	20	45000	--	42	--	--
JULY												
31...	37	290	8.3	29.0	28.0	1	20	100000	--	--	--	--
AUG.												
28...	41	350	8.3	29.0	29.0	1	20	84000	--	--	--	--
SEP.												
26...	37	320	8.8	19.5	19.5	1	6	44000	29	44	20	3.3

01645500 POTOMAC RIVER AT GREAT FALLS, MD.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
DEC.												
10...	--	--	--	0	--	--	--	--	--	3	--	25
MAR.												
26...	0	2	5.3	1	0	0	0	0	0	0	0	10
APR.												
23...	27	24	--	--	--	--	--	--	--	--	--	--
MAY												
21...	67	24	--	--	--	--	--	--	--	--	--	--
JUNE												
19...	92	15	3.5	<1	1	0	0	<10	0	1	0	0
JULY												
31...	96	65	4.5	--	--	--	--	--	--	--	--	--
AUG.												
28...	16	B6800	11	--	--	--	--	--	--	--	--	--
SEP.												
26...	9	330	10	<1	1	0	0	0	0	1	0	10

DATE	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	DISSOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUSPENDED GROSS ALPHA AS U-NAT. (UG/L)	DISSOLVED GROSS BETA AS CS-137 (PC/L)
DEC.												
10...	--	<100	--	<.5	--	--	--	400	--	--	--	--
MAR.												
26...	0	12	3	<.5	<.5	0	--	30	20	--	--	--
APR.												
23...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
21...	--	--	--	--	--	--	--	--	--	--	--	--
JUNE												
19...	0	10	2	<.5	<.5	0	2	30	10	--	--	--
JULY												
31...	--	--	--	--	--	--	--	--	--	--	--	--
AUG.												
28...	--	--	--	--	--	--	--	--	--	<2.5	.9	4.7
SEP.												
26...	0	4	6	<.5	<.5	3	4	20	10	--	--	--

DATE	SUSPENDED GROSS BETA AS CS-137 (PC/L)	DISSOLVED RA-226 (RADON METHOD) (PC/L)	DISSOLVED URANIUM (U) (UG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
DEC.						
10...	--	--	--	--	--	--
MAR.						
26...	--	--	--	11	374	81
APR.						
23...	--	--	--	17	523	81
MAY						
21...	--	--	--	23	658	90
JUNE						
19...	--	--	--	35	900	100
JULY						
31...	--	--	--	27	175	86
AUG.						
28...	.9	.05	.17	28	191	86
SEP.						
26...	--	--	--	17	96	100

B RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT).

01645500 POTOMAC RIVER AT GREAT FALLS, MD.--Continued

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

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	373	350	362	189	139	172	---	---	---	---	---	---
2	362	311	346	204	165	195	---	---	---	---	---	---
3	323	306	317	207	195	205	---	---	---	---	---	---
4	321	283	315	209	201	206	---	---	---	---	---	---
5	336	309	323	212	208	209	264	261	263	---	---	---
6	346	330	340	227	212	219	263	238	249	---	---	---
7	339	324	332	225	219	221	250	230	236	---	---	---
8	341	318	332	225	220	224	245	228	236	---	---	---
9	324	309	316	227	222	224	228	185	213	---	---	---
10	331	323	327	232	225	229	223	180	210	---	---	---
11	328	321	325	240	232	236	215	186	201	200	188	193
12	323	303	314	248	240	244	227	192	215	201	185	195
13	327	313	319	258	248	253	188	175	180	186	162	175
14	332	318	328	264	258	261	194	181	188	161	157	159
15	331	320	325	266	261	264	196	192	194	179	160	164
16	325	319	323	273	266	270	---	---	---	178	170	175
17	327	309	317	274	268	271	---	---	---	186	178	183
18	320	307	312	277	268	273	---	---	---	186	181	183
19	321	309	316	283	271	278	---	---	---	190	184	186
20	323	310	320	292	282	288	---	---	---	194	190	192
21	338	324	331	---	---	---	---	---	---	200	145	178
22	341	311	331	---	---	---	---	---	---	167	128	148
23	339	321	330	---	---	---	---	---	---	188	125	160
24	335	312	327	---	---	---	---	---	---	181	170	175
25	336	320	328	---	---	---	---	---	---	180	170	175
26	337	321	329	---	---	---	---	---	---	185	178	181
27	345	325	337	---	---	---	---	---	---	188	184	186
28	364	338	357	---	---	---	---	---	---	193	189	192
29	369	358	365	---	---	---	---	---	---	196	193	194
30	360	299	332	---	---	---	---	---	---	202	197	200
31	301	140	176	---	---	---	---	---	---	205	203	204
MONTH	373	140	324	---	---	---	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	208	205	207	230	223	225	157	118	130	247	236	243
2	211	208	210	224	215	219	157	148	152	248	241	244
3	213	211	212	218	213	215	162	141	155	249	243	247
4	---	---	---	219	213	216	169	160	165	251	246	249
5	---	---	---	227	219	224	172	148	161	251	246	249
6	---	---	---	228	222	225	163	153	158	254	249	251
7	---	---	---	227	214	221	165	148	157	260	254	256
8	---	---	---	229	214	223	163	155	158	263	260	262
9	---	---	---	229	219	225	157	150	153	269	253	264
10	---	---	---	218	213	215	159	154	156	260	241	252
11	---	---	---	217	209	214	173	158	166	262	255	258
12	---	---	---	212	207	209	178	171	174	261	193	253
13	---	---	---	210	206	208	182	173	178	229	180	208
14	---	---	---	220	208	215	181	144	169	230	159	192
15	---	---	---	215	207	212	170	144	159	246	186	227
16	---	---	---	209	204	206	172	168	170	185	177	182
17	---	---	---	210	201	205	177	171	174	215	187	205
18	---	---	---	212	205	209	187	177	182	210	201	207
19	---	---	---	212	206	210	192	187	190	201	192	195
20	---	---	---	213	206	209	195	187	191	201	192	196
21	---	---	---	213	199	209	201	194	197	207	200	203
22	---	---	---	209	192	204	208	198	202	211	207	209
23	---	---	---	208	192	202	209	199	206	209	204	207
24	---	---	---	208	196	204	213	203	211	211	205	208
25	---	---	---	213	205	207	210	199	205	219	210	214
26	235	225	231	205	199	204	218	208	214	234	220	228
27	238	231	235	205	197	203	229	212	222	229	221	225
28	231	222	225	207	200	205	233	213	229	235	226	228
29	---	---	---	211	202	207	236	229	232	236	227	232
30	---	---	---	203	100	177	239	234	237	235	229	232
31	---	---	---	136	108	128	---	---	---	240	233	237
MONTH	---	---	---	230	100	208	239	118	182	269	159	228

01645500 POTOMAC RIVER AT GREAT FALLS, MD.--Continued

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

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	242	237	240	212	194	207	314	287	301	372	342	359
2	240	204	227	217	208	213	307	298	306	376	347	358
3	268	200	222	224	215	220	316	312	316	357	299	330
4	271	198	247	227	217	221	329	321	329	330	283	307
5	198	149	161	230	215	225	317	312	318	315	272	285
6	152	147	149	226	213	219	326	320	327	317	293	305
7	165	151	158	229	208	217	325	317	329	293	235	265
8	179	166	172	241	223	234	322	315	322	319	273	298
9	192	178	185	249	228	239	332	312	342	321	290	302
10	204	190	197	250	220	235	340	327	349	302	280	288
11	212	202	207	220	215	216	---	---	---	330	300	308
12	217	210	212	234	216	222	---	---	---	349	329	337
13	228	217	222	263	231	247	---	---	---	370	345	361
14	229	226	228	275	249	265	---	---	---	370	322	356
15	229	226	227	256	235	245	---	---	---	322	166	244
16	227	215	220	251	230	243	---	---	---	189	164	170
17	223	211	217	255	226	242	---	---	---	237	189	215
18	234	224	229	255	231	244	---	---	---	264	237	250
19	249	230	240	261	240	253	---	---	---	285	264	275
20	263	243	251	268	254	261	---	---	---	---	---	---
21	252	241	249	282	257	270	---	---	---	---	---	---
22	245	234	239	288	268	278	---	---	---	---	---	---
23	240	201	224	295	266	279	---	---	---	---	---	---
24	254	228	243	280	264	270	---	---	---	---	---	---
25	267	252	257	287	268	280	---	---	---	---	---	---
26	277	242	265	285	267	277	---	---	---	326	321	323
27	242	210	222	294	271	282	---	---	---	362	325	338
28	213	180	194	304	275	290	361	340	352	362	327	342
29	192	183	187	294	263	277	344	328	335	360	348	352
30	204	185	197	283	260	272	340	326	333	369	352	363
31	---	---	---	302	252	280	349	325	341	---	---	---
MONTH	277	147	216	304	194	249	---	---	---	376	164	305

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

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24.0	22.5	23.0	13.5	13.0	13.0	10.5	9.0	---	6.5	6.0	---
2	23.5	21.5	22.5	13.5	12.0	13.0	10.5	9.0	---	6.5	5.5	---
3	23.5	21.5	22.5	14.0	13.0	13.5	10.0	9.0	---	6.0	5.5	---
4	24.0	22.5	23.5	13.5	12.0	13.0	9.0	8.5	---	5.5	5.5	---
5	24.0	23.0	23.5	12.5	11.5	12.0	11.0	9.0	10.0	5.5	5.0	---
6	23.0	21.5	22.0	12.0	10.5	11.0	12.0	11.0	11.0	5.5	5.0	---
7	21.5	20.5	21.0	10.5	9.5	10.0	12.0	10.0	11.0	5.5	5.0	---
8	22.0	20.5	21.0	9.5	9.0	9.5	10.5	9.5	10.0	5.5	5.0	---
9	21.5	21.0	21.5	10.0	9.5	9.5	9.5	7.5	8.5	5.0	4.5	---
10	22.0	21.0	21.5	9.0	8.5	8.5	8.0	7.5	8.0	4.5	4.0	---
11	22.0	20.5	21.0	9.0	7.5	8.0	7.5	6.0	6.5	5.0	4.5	5.0
12	21.5	20.0	20.5	9.0	7.5	8.5	6.0	5.5	6.0	5.0	4.0	4.5
13	21.5	20.0	21.0	11.0	8.0	9.5	6.0	5.5	5.5	4.0	4.0	4.0
14	21.5	20.5	21.0	11.5	10.0	10.5	6.5	6.0	6.0	4.0	4.0	4.0
15	20.5	19.5	20.0	13.0	11.0	12.0	6.0	5.5	6.0	4.5	3.5	4.0
16	20.5	19.5	20.0	13.0	11.5	12.5	6.0	3.5	---	5.0	4.0	4.5
17	19.5	17.5	18.0	11.5	10.5	11.0	3.5	3.0	---	6.0	5.0	5.5
18	17.0	16.0	16.5	10.5	9.5	9.5	3.0	1.0	---	5.5	5.5	5.5
19	17.0	15.5	16.0	10.5	9.5	10.0	2.0	1.5	---	6.0	5.5	5.5
20	17.5	15.5	16.5	11.0	10.5	10.5	3.5	1.5	---	6.0	6.0	6.0
21	17.5	16.5	17.0	11.0	11.0	---	3.5	2.0	---	6.0	6.0	6.0
22	17.5	16.0	17.0	12.0	11.0	---	2.0	1.0	---	6.0	5.5	6.0
23	17.5	16.0	16.5	12.5	11.5	---	2.0	1.5	---	7.0	5.5	6.0
24	17.5	16.5	17.0	12.5	12.0	---	2.5	2.0	---	7.0	7.0	7.0
25	17.5	16.5	17.0	13.5	12.0	---	3.5	2.5	---	7.5	7.0	7.0
26	17.5	16.5	17.0	13.5	13.0	---	5.0	3.5	---	7.0	7.0	7.0
27	17.5	16.5	17.0	13.5	13.0	---	5.5	5.0	---	9.0	7.0	8.5
28	17.5	16.0	16.5	14.0	13.5	---	6.0	5.0	---	9.0	8.5	8.5
29	16.5	16.5	16.5	14.0	11.0	---	7.0	6.0	---	9.0	8.5	9.0
30	16.5	13.5	15.0	11.0	9.5	---	7.5	7.0	---	9.5	9.0	9.0
31	13.5	13.0	13.5	---	---	---	7.0	6.5	---	9.5	9.0	9.0
MONTH	24.0	13.0	19.0	14.0	7.5	---	12.0	1.0	---	9.5	3.5	---

01645500 POTOMAC RIVER AT GREAT FALLS, MD.--Continued

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

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	8.5	9.0	9.0	7.5	8.5	7.5	5.5	6.5	23.0	22.0	22.5
2	8.5	7.0	7.5	9.0	8.5	8.5	9.0	7.5	8.5	22.0	19.0	20.5
3	7.0	6.5	6.5	10.0	8.5	9.0	11.5	9.0	10.0	19.5	17.5	18.5
4	7.0	4.5	---	12.0	9.5	11.0	13.0	11.5	12.0	19.5	17.5	18.5
5	4.5	3.0	---	12.0	11.5	12.0	14.5	13.0	14.0	19.0	17.5	18.0
6	7.0	3.5	---	11.5	11.0	11.0	14.0	12.5	13.0	18.5	16.5	17.0
7	7.5	7.0	---	12.0	10.0	11.0	12.5	11.5	12.0	17.5	15.5	16.5
8	7.0	7.5	---	13.5	12.0	13.0	12.0	11.5	12.0	17.5	15.5	16.5
9	5.5	5.5	---	13.0	12.0	12.0	11.5	10.0	11.0	17.0	15.5	16.0
10	5.0	3.5	---	13.0	11.5	12.0	10.5	9.0	9.5	19.0	15.5	17.0
11	5.5	3.5	---	12.0	11.0	11.5	11.0	9.0	10.0	20.0	17.5	18.5
12	5.5	3.0	---	11.5	11.0	11.0	12.5	10.0	11.0	20.0	17.0	19.0
13	6.0	3.0	---	11.0	9.0	9.5	14.0	12.0	13.0	18.5	16.0	17.0
14	5.5	5.0	---	9.5	7.5	9.0	15.5	13.5	14.5	18.5	16.0	17.0
15	7.5	5.5	---	10.0	8.5	9.0	16.5	15.0	15.5	20.0	17.5	19.0
16	7.5	6.0	---	10.0	9.0	9.5	15.5	14.5	15.0	21.5	18.5	20.0
17	7.0	6.0	---	9.0	7.5	8.5	16.0	14.0	15.0	23.5	20.5	22.0
18	7.5	5.5	---	9.0	7.0	7.5	16.5	14.0	15.0	23.5	22.5	23.0
19	7.0	6.0	---	9.0	8.5	9.0	16.0	15.0	15.5	23.0	21.0	21.5
20	7.0	7.0	---	11.0	9.0	9.5	16.5	14.5	15.5	22.5	20.0	21.0
21	7.5	7.0	---	11.0	9.5	10.0	17.0	14.0	15.5	23.0	20.5	21.5
22	7.0	5.5	---	11.0	9.0	9.5	17.0	15.5	16.5	24.0	21.5	22.5
23	8.0	7.0	---	11.0	9.0	10.0	18.5	16.5	17.5	24.0	23.0	23.5
24	9.0	8.0	---	11.0	10.0	10.0	17.0	15.5	16.0	24.5	22.5	23.5
25	9.0	7.5	---	10.0	8.5	9.0	16.5	14.5	15.5	23.5	22.5	23.0
26	6.5	5.5	6.0	9.0	7.5	8.5	17.5	15.0	16.0	22.5	21.0	21.5
27	6.5	5.0	5.5	11.5	9.5	10.5	19.0	16.0	17.5	21.5	20.5	21.0
28	7.5	5.5	6.5	12.5	10.5	11.5	19.5	17.5	18.0	22.0	19.5	20.5
29	---	---	---	12.0	10.0	11.0	22.0	19.0	20.0	22.5	21.0	21.5
30	---	---	---	10.0	6.5	9.0	23.0	20.5	21.5	23.5	21.5	22.5
31	---	---	---	7.0	6.5	6.5	---	---	---	23.5	22.0	22.5
MONTH	9.0	3.0	---	13.5	6.5	10.0	23.0	5.5	14.0	24.5	15.5	20.0

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.5	22.0	22.0	25.0	22.5	23.5	29.0	27.0	28.0	28.5	27.5	28.0
2	22.0	19.0	20.5	26.0	23.5	25.0	29.0	27.5	28.0	28.5	27.0	27.5
3	21.0	19.0	19.5	27.0	25.0	26.0	28.0	26.5	27.5	28.0	26.0	26.5
4	21.0	19.5	20.5	28.0	26.0	27.0	28.0	26.5	27.0	26.0	24.0	25.0
5	19.5	18.5	19.0	28.0	26.5	27.0	27.0	26.0	26.5	24.5	22.5	23.5
6	20.5	18.5	19.5	27.0	26.5	27.0	27.5	26.0	26.5	24.0	22.0	23.0
7	21.0	19.5	20.0	29.0	26.0	27.5	27.5	26.0	27.0	22.0	20.0	21.0
8	22.0	20.5	21.0	30.0	27.5	28.5	27.5	25.5	26.0	22.5	21.0	21.5
9	24.5	21.5	23.0	30.5	28.5	29.0	26.0	25.5	26.0	23.5	22.0	22.5
10	27.0	24.0	25.0	30.5	29.0	29.5	26.0	25.5	25.5	24.5	22.5	23.5
11	26.5	25.0	26.0	30.0	28.5	29.0	26.5	25.0	25.5	25.5	24.0	24.5
12	26.0	24.5	25.0	29.0	27.0	28.0	26.5	24.5	25.5	27.0	25.0	26.0
13	26.0	23.5	24.5	29.0	26.5	27.5	26.5	25.5	26.0	27.5	25.5	26.5
14	26.0	24.5	25.0	29.5	26.5	28.0	27.5	26.5	27.0	27.5	26.0	26.5
15	26.5	24.5	25.5	29.5	28.0	28.5	28.5	27.5	28.0	26.0	23.0	24.0
16	25.5	24.5	24.5	29.0	27.5	28.5	28.5	27.5	28.0	23.5	21.5	22.5
17	25.5	23.0	24.0	29.5	27.0	28.5	28.0	27.0	27.5	24.0	22.5	23.0
18	25.5	23.5	24.5	29.5	27.5	28.5	27.5	26.5	27.0	24.5	22.5	23.5
19	25.5	23.5	24.5	30.0	28.5	29.5	27.5	26.0	27.0	25.0	23.0	24.0
20	26.0	25.0	25.5	29.5	27.5	28.5	27.0	25.5	26.5	25.5	24.0	24.5
21	26.5	25.0	25.5	28.5	26.5	27.5	27.0	26.0	26.5	26.0	24.5	25.0
22	26.5	25.0	26.0	28.0	26.0	27.0	27.5	26.5	27.0	25.0	22.0	23.0
23	26.0	23.5	24.5	28.0	25.0	26.5	28.5	27.0	27.5	23.5	20.5	21.5
24	24.0	22.5	23.0	25.5	25.0	25.5	29.0	27.5	28.5	20.5	18.5	19.5
25	24.0	22.5	23.0	26.0	25.0	25.5	29.0	27.5	28.5	19.0	17.5	18.5
26	23.0	21.0	22.5	26.0	25.5	25.5	28.5	27.5	28.0	19.5	18.5	19.0
27	22.0	20.5	21.5	27.0	25.5	26.0	28.5	27.5	28.0	20.0	19.5	20.0
28	21.0	20.5	20.5	28.5	27.0	27.5	29.0	28.0	28.5	21.0	20.5	20.5
29	21.0	19.5	20.5	28.5	27.5	28.0	29.0	28.0	28.5	21.5	20.5	21.0
30	23.5	20.0	21.5	28.5	27.0	28.0	29.5	28.0	28.5	21.5	19.0	20.0
31	---	---	---	29.0	27.0	28.0	28.5	27.5	28.0	---	---	---
MONTH	27.0	18.5	23.0	30.5	22.5	27.5	29.5	24.5	27.0	28.5	17.5	23.0

01645500 POTOMAC RIVER AT GREAT FALLS, MD.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

OCCURRENCE OF BENTHIC INVERTEBRATES

Date in:	9/20/73
Date out:	10/18/73
Total count:	27
Benthic invertebrate taxa	Count
ARTHROPODA	
.Crustacea	
..Amphipoda	20
.Insecta	
..Diptera	
...Chironomidae	5
..Ephemeroptera	2

OCCURRENCE OF PHYTOPLANKTON

Date of sample collection	10/18/73	11/8/73	12/10/73	1/11/74	2/26/74	3/26/74	4/23/74	5/21/74	6/19/74	7/31/74	8/28/74	9/26/74
Total count (cells/ml)	3200	440	720	1600	1100	5600	6800	1400	4500	100000	84000	44000
Phytoplankton taxa	Percent of total											
CHLOROPHYTA												
.Chlorophyceae (green algae)												
....Actinastrum	--	--	--	--	--	--	--	--	--	--	--	4
....Ankistrodesmus	--	--	--	--	--	--	19	6	2	--	2	--
....Chlamydomonas	--	--	--	--	--	--	--	--	0	--	--	--
....Coelastrum	--	--	--	--	--	--	--	12	1	--	4	--
....Cosmarium	--	--	--	--	--	--	--	--	0	--	--	--
....Crucigenia	--	--	--	--	--	--	--	--	--	--	5	--
....Dictosphaerium	--	--	--	--	--	--	--	--	--	--	11	7
....Kirchneriella	--	--	--	--	--	--	--	--	--	1	--	--
....Micractinium	--	--	--	--	--	--	--	--	--	6	--	--
....Oocystis	--	--	--	--	--	--	--	--	1	--	--	2
....Pandorina	--	--	--	--	--	--	--	--	1	--	--	--
....Scenedesmus	62	29	17	--	--	--	--	46	14	44	44	10
....Schroederia	--	--	--	--	--	--	--	--	0	--	--	--
....Selenastrum	--	--	--	--	--	--	--	0	--	--	--	--
....Sphaerocystis	--	--	--	--	--	--	--	--	--	--	--	14
CHRYSOPHYTA												
.Bacillariophyceae (diatoms)												
....Achnanthes	--	--	--	--	--	--	--	--	0	--	1	--
....Asteronella	--	--	--	--	--	--	--	0	--	--	--	--
....Coccneis	--	--	--	--	--	--	--	--	--	--	2	--
....Coscinodiscus	--	--	--	--	--	--	--	--	--	--	--	1
....Cycolotella	--	15	--	--	43	25	57	12	37	6	7	15
....Cymbella	--	--	--	--	--	--	--	--	1	--	--	--
....Diatoma	--	--	35	--	--	--	--	--	--	--	--	--
....Gomphonema	--	--	--	--	--	--	--	1	--	--	--	--
....Melosira	--	--	--	--	24	--	--	3	0	--	--	10
....Navicula	--	--	--	--	40	43	--	2	1	--	--	--
....Nitzchia	--	--	--	--	--	--	--	8	2	--	2	--
....Synedra	--	--	--	--	--	18	--	--	--	--	--	--
CYANOPHYTA												
.Myxophceae (blue-green algae)												
....Agmenellum	--	--	--	--	--	--	--	--	3	6	--	--
....Anacystis	--	--	--	--	--	--	--	8	9	20	20	--
....Gloeocapsa	--	--	--	--	--	--	--	--	1	--	--	--
....Lyngbya	--	--	--	75	--	--	--	--	--	--	--	--
....Oscillatoria	--	--	--	--	--	--	--	--	--	--	--	37

PHYLUM
.Class
..Order
...Family
....Genus

01647685 WILLIAMSBURG RUN NEAR OLNEY, MD.

LOCATION.--Lat 39°08'32", long 77°05'48", Montgomery County, on right bank 200 ft (60 m) downstream from vehicle bridge, on golf course of Norbeck Country Club, 0.2 mile (0.3 km) downstream from Cashell Road, 0.5 mile (0.8 km) upstream from mouth, and 1.8 miles (2.9 km) southwest of Olney.

DRAINAGE AREA.--2.25 sq mi (5.83 sq km).

PERIOD OF RECORD.--Sediment records: November 1966 to September 1968, October 1968 to September 1974 (discontinued), partial-record station.

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

DATE	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.			
02...	6.3	268	15
MAR.			
30...	67	362	130
AUG.			
19...	11	129	20
SEP.			
03...	7.7	189	8.7
04...	2.3	17	.11
06...	3.1	25	1.2
07...	11	43	1.3
28...	13	86	9.9

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, FOR SELECTED DAYS, WATER YEAR 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
DEC.							
26...	2000	16	8.0	124	5.4	92	100

01647720 NORTH BRANCH ROCK CREEK NEAR NORBECK, MD.

LOCATION.--Lat 39°06'59", long 77°06'09", Montgomery County, at gaging station 550 ft (168 m) downstream from bridge on Muncaster Mill Road (State Highway 115), 0.7 mile (1.1 km) upstream from Manor Run, 1.5 miles (2.4 km) northwest of Norbeck, and 2 miles (3.2 km) upstream from mouth.

DRAINAGE AREA.--9.73 sq mi (25.20 sq km).

PERIOD OF RECORD.--Sediment records: November 1966 to September 1974 (partial-record station).

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

DATE	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
DEC.			
09...	58	272	77
20...	38	207	105
21...	205	473	384
22...	16	40	1.7
JAN.			
21...	84	605	363
MAR.			
21...	35	350	112
30...	285	884	1250
31...	78	71	26
MAY			
12...	59	404	181
13...	17	55	3.7
JUNE			
02...	51	190	55
AUG.			
19...	58	342	236
20...	6.1	75	1.8
SEP.			
03...	18	162	12
04...	9.3	37	1.7
06...	4.9	11	.51
07...	36	106	22
28...	46	261	109

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, FOR SELECTED DAYS, WATER YEAR 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
DEC.												
26...	1940	239	7.0	295	190	--	--	--	--	--	85	100
JUNE												
02...	1250	151	15.5	344	140	36	47	61	77	89	97	100

01647725 MANOR RUN NEAR NORBECK, MD.

LOCATION.--Lat 39°06'36", long 77°06'00", Montgomery County, at gaging station 100 ft (30 m) downstream from ford on farm lane, 0.5 mile (0.8 km) upstream from mouth and 1.2 miles (1.9 km) west of Norbeck.

DRAINAGE AREA.--1.01 sq mi (2.62 sq km).

PERIOD OF RECORD.--Sediment records: November 1966 to September 1974 (discontinued), partial-record station.

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

DATE	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.			
02...	2.8	35	.69
JAN.			
21...	10	128	22
MAY			
12...	12	163	28
AUG.			
09...	7.9	129	15
19...	16	154	61

01647740 NORTH BRANCH ROCK CREEK NEAR ROCKVILLE, MD.

LOCATION.--Lat 39°06'09", long 77°07'12", Montgomery County, at gaging station 170 ft (52 m) downstream from outlet of Bernard Frank Lake, 370 ft (113 m) upstream from mouth, and 2.4 miles (3.9 km) northeast of Rockville.

DRAINAGE AREA.--12.5 sq mi (32.4 sq km).

PERIOD OF RECORD.--Sediment records: September 1967 to September 1974.

EXTREMES.--1973-74:
Sediment concentrations: Maximum daily, 66 mg/l Apr. 2; minimum daily, 3 mg/l Apr. 19.
Sediment discharge: Maximum daily, 15 tons (14 t) Mar. 31; minimum daily, 0.09 tons (.08 t) Mar. 20, 29.

Period of record:
Sediment concentrations: Maximum daily, 450 mg/l Nov. 2, 1967; minimum daily, 3 mg/l Jan. 24, 1972.
Sediment discharge: Maximum daily, 358 tons (325 t) June 22, 1972; minimum daily, 0 tons (0 t) July 29, 1971.

REMARKS.--Flow regulated by dam above station; drain valve open at times; variable backwater at times from Rock Creek.

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

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.1	16	.22	7.0	14	.26	5.1	17	.23
2	7.1	12	.23	7.0	15	.28	5.1	17	.23
3	12	10	.32	7.0	18	.34	5.1	18	.25
4	9.4	7	.18	6.5	13	.23	5.1	23	.32
5	7.8	9	.19	5.4	10	.15	10	23	.62
6	7.0	12	.23	5.9	16	.25	15	16	.65
7	6.8	15	.28	5.9	14	.22	11	15	.45
8	6.2	18	.30	6.2	15	.25	8.8	15	.36
9	5.9	13	.21	6.8	15	.28	31	24	2.2
10	5.7	11	.17	6.5	13	.23	32	50	4.5
11	5.7	12	.18	6.5	13	.23	21	28	1.6
12	5.4	9	.13	6.3	9	.15	14	22	.83
13	5.1	11	.15	6.2	12	.20	9.9	23	.61
14	5.1	13	.18	7.0	11	.21	9.4	21	.53
15	5.1	14	.19	7.3	9	.18	9.0	21	.51
16	5.1	14	.19	6.5	12	.21	8.1	15	.33
17	4.8	17	.22	5.8	11	.17	8.1	14	.31
18	4.8	29	.38	5.7	13	.20	8.1	13	.28
19	4.8	21	.27	5.5	18	.27	7.8	13	.27
20	4.8	21	.27	5.1	20	.28	10	12	.32
21	4.3	21	.24	5.1	20	.28	77	30	6.6
22	4.3	20	.23	5.1	20	.28	82	41	9.0
23	4.3	32	.37	5.1	19	.26	66	35	6.2
24	4.3	30	.35	4.8	18	.23	52	29	4.1
25	4.3	23	.27	4.8	17	.22	37	24	2.4
26	4.3	23	.27	4.8	16	.21	39	27	2.9
27	4.5	20	.24	4.8	18	.23	60	33	5.3
28	4.5	18	.22	4.8	21	.27	48	28	3.6
29	5.4	15	.22	5.4	21	.31	34	28	2.6
30	7.0	8	.15	5.1	19	.26	23	25	1.6
31	7.0	13	.25	--	--	--	17	22	1.0
TOTAL	177.9	--	7.30	175.9	--	7.14	768.6	--	60.70

01647740 NORTH BRANCH ROCK CREEK NEAR ROCKVILLE, MD.--Continued

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

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	17	25	1.1	13	25	.88	9.8	11	.29
2	15	19	.77	13	21	.74	9.8	11	.29
3	14	20	.76	13	18	.63	9.8	9	.24
4	23	27	1.7	13	20	.70	9.8	8	.21
5	21	24	1.4	12	18	.58	9.4	9	.23
6	17	15	.69	12	20	.65	9.8	7	.19
7	15	14	.57	12	21	.68	9.8	7	.19
8	13	12	.42	11	16	.48	9.8	6	.16
9	14	12	.45	12	15	.49	9.4	6	.15
10	25	11	.74	11	15	.45	9.4	7	.18
11	38	10	1.0	11	14	.42	9.4	8	.20
12	40	10	1.1	11	13	.39	9.4	6	.15
13	29	10	.78	12	13	.42	9.1	7	.17
14	20	12	.65	19	11	.56	8.9	8	.19
15	16	13	.56	18	11	.53	8.5	7	.16
16	15	16	.65	14	11	.42	9.5	8	.18
17	14	16	.60	13	12	.42	8.5	6	.14
18	13	14	.49	13	12	.42	8.5	6	.14
19	12	12	.39	12	10	.32	8.5	5	.11
20	12	11	.36	12	10	.32	8.5	4	.09
21	30	17	1.7	12	10	.32	16	6	.26
22	47	41	5.2	12	11	.36	27	14	1.0
23	33	47	4.2	13	12	.42	19	19	.97
24	24	41	2.7	11	12	.36	14	11	.42
25	23	36	2.2	10	12	.32	12	9	.29
26	22	36	2.1	9.9	12	.32	10	8	.22
27	20	34	1.8	9.9	12	.32	8.9	6	.14
28	19	25	1.3	9.4	11	.28	8.5	5	.11
29	17	26	1.2	--	--	--	8.5	4	.09
30	15	26	1.1	--	--	--	42	9	1.4
31	14	26	.98	--	--	--	90	61	15
TOTAL	647	--	39.66	344.2	--	13.20	440.5	--	23.56

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	81	50	11	8.2	9	.20	7.3	11	.22
2	70	66	12	8.5	7	.16	23	10	.62
3	59	33	5.3	9.3	7	.18	32	9	.78
4	52	36	5.1	9.4	6	.16	22	9	.53
5	51	38	5.2	9.5	7	.18	16	8	.35
6	47	35	4.4	8.1	7	.15	12	9	.29
7	38	27	2.8	7.8	10	.21	8.5	10	.23
8	30	23	1.9	7.8	14	.29	7.9	10	.21
9	44	23	2.7	7.8	13	.27	7.3	10	.20
10	42	20	2.3	8.5	13	.30	7.0	10	.19
11	32	16	1.4	8.5	14	.32	5.9	10	.16
12	23	15	.93	16	14	.60	5.6	10	.15
13	21	16	.91	40	30	3.2	5.6	12	.18
14	24	14	.91	31	34	2.8	5.6	13	.20
15	21	12	.68	20	26	1.4	5.1	14	.19
16	16	10	.43	16	17	.73	6.2	12	.20
17	14	9	.34	12	15	.49	6.5	14	.25
18	12	8	.26	10	12	.32	5.9	16	.25
19	12	3	.10	8.5	12	.28	5.7	16	.25
20	12	4	.13	8.1	11	.24	5.4	20	.29
21	11	5	.15	7.8	14	.29	5.4	21	.31
22	11	4	.12	7.0	15	.28	6.2	20	.33
23	11	5	.15	7.0	10	.19	14	13	.49
24	11	6	.18	7.0	12	.23	13	13	.46
25	9.8	6	.16	7.0	12	.23	9.8	15	.40
26	9.4	6	.15	7.0	13	.25	7.6	24	.49
27	9.4	4	.10	6.8	14	.26	7.6	21	.43
28	8.5	5	.11	6.8	16	.29	7.0	17	.32
29	8.2	6	.13	6.2	15	.25	7.3	13	.26
30	8.2	7	.15	6.8	13	.24	7.0	11	.21
31	--	--	--	6.8	12	.22	--	--	--
TOTAL	798.5	--	60.19	331.6	--	15.21	285.4	--	9.44

01647740 NORTH BRANCH ROCK CREEK NEAR ROCKVILLE, MD.--Continued

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

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.2	11	.18	2.9	17	.13	3.3	24	.21
2	5.4	11	.16	2.9	17	.13	3.3	24	.21
3	5.1	12	.17	3.1	16	.13	7.9	18	.38
4	4.8	11	.14	2.9	14	.11	17	15	.69
5	4.3	11	.13	3.1	14	.12	11	15	.45
6	4.3	10	.12	3.1	13	.11	7.3	16	.32
7	4.3	10	.12	3.1	17	.14	28	11	.79
8	4.3	10	.12	2.9	21	.16	22	10	.59
9	4.0	20	.22	3.8	20	.21	13	9	.32
10	3.5	28	.26	5.4	16	.23	8.5	11	.25
11	3.3	25	.22	4.5	14	.17	6.8	9	.17
12	3.3	24	.21	4.3	17	.20	5.7	9	.14
13	3.1	20	.17	4.0	15	.16	5.1	11	.15
14	2.9	23	.18	3.3	15	.13	4.5	13	.16
15	2.9	24	.19	2.8	16	.12	4.0	13	.14
16	2.7	21	.15	2.3	16	.10	3.8	11	.11
17	2.7	21	.15	2.2	18	.11	3.5	12	.11
18	2.7	28	.20	2.5	20	.14	3.3	13	.12
19	2.7	21	.15	11	16	.44	3.3	12	.11
20	2.7	23	.17	35	13	1.2	3.1	13	.11
21	2.9	51	.40	20	12	.65	3.1	13	.11
22	2.7	34	.25	11	12	.36	2.9	14	.11
23	2.7	19	.14	7.3	14	.28	2.9	16	.13
24	2.5	25	.17	5.7	18	.28	2.9	17	.13
25	2.7	20	.15	4.3	20	.23	2.7	23	.17
26	2.9	20	.16	3.5	23	.22	2.7	23	.17
27	3.1	22	.18	3.3	23	.20	2.5	21	.14
28	3.3	20	.18	2.9	29	.23	13	13	.35
29	3.1	24	.20	3.8	27	.28	27	9	.66
30	3.3	38	.34	3.8	25	.26	16	10	.43
31	3.3	17	.15	3.8	24	.25	--	--	--
TOTAL	107.7	--	5.73	174.5	--	7.48	240.1	--	7.93

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 4491.9
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 257.54

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, FOR SELECTED DAYS, WATER YEAR 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
DEC. 10...	1435	30	7.5	22	1.8	98	100

01649500 NORTHEAST BRANCH ANACOSTIA RIVER AT RIVERDALE, MD.

LOCATION.--Lat 38°57'37", long 76°55'34", Prince Georges County, at gaging station 200 ft (61 m) downstream from bridge on Riverdale Road, 1.8 miles (2.9 km) downstream from Indian Creek, and 1.8 miles (2.9 km) upstream from confluence with Northwest Branch.

DRAINAGE AREA.--72.8 sq mi (188.6 sq km).

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT. 15...	1200	22	--	--	--	--	--	--	--	--
NOV. 05...	1235	90	--	--	--	--	--	--	--	--
DEC. 06...	1300	117	5.8	900	2500	400	13	3.1	28	6.0
JAN. 21...	1300	958	--	--	--	--	--	--	--	--

DATE	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 15...	--	--	--	--	--	--	--	--	--	--
NOV. 05...	--	--	--	--	--	--	--	--	--	--
DEC. 06...	23	19	56	24	.3	1.5	.46	.08	168	148
JAN. 21...	--	--	--	--	--	--	--	--	--	--

DATE	SUSPENDED SOLIDS (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT. 15...	--	--	--	--	370	7.5	17.0	--	11.2
NOV. 05...	--	--	--	--	160	6.9	9.0	--	10.0
DEC. 06...	92	45	26	4.2	250	6.8	11.0	55	10.1
JAN. 21...	--	--	--	--	118	6.6	6.0	--	13.1

DATE	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 15...	--	1000	--	--	--	--	--	--	--
NOV. 05...	--	9000	--	--	--	--	--	--	--
DEC. 06...	4.0	5800	.01	1	0	100	10	23	220
JAN. 21...	--	2800	--	--	--	--	--	--	--

01650050 NORTHWEST BRANCH ANACOSTIA RIVER AT NORWOOD, MD.

LOCATION.--Lat 39°07'36", long 77°01'15", Montgomery County, at gaging station 20 ft (6 m) downstream from bridge on Ednor Road, 0.2 mile (0.3 km) downstream from tributary, 0.4 mile (0.6 km) east of Norwood, 1.6 miles (2.6 km) south of Sandy Spring, and 19 miles (31 km) upstream from confluence with Northeast Branch.

DRAINAGE AREA.--2.45 sq mi (6.35 sq km).

PERIOD OF RECORD.--Sediment records: March 1967 to September 1974 (discontinued), partial-record station.

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

DATE	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
DEC.			
20...	23	177	50
21...	55	330	113
JAN.			
21...	16	183	29
MAR.			
30...	76	509	219
JUNE			
02...	16	239	24
AUG.			
19...	7.7	263	38

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, FOR SELECTED DAYS, WATER YEAR 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
DEC.							
26...	2030	29	7.5	145	11	93	100

01650085 NURSERY RUN AT CLOVERLY, MD.

LOCATION.--Lat 39°07'05", long 77°00'24", Montgomery County, at gaging station 300 ft (90 m) upstream from culvert on Bryants Nursery Road, 350 ft (110 m) upstream from mouth, 0.8 mile (1.3 km) northwest of Cloverly, and 2.4 miles (3.9 km) southeast of Sandy Spring.

DRAINAGE AREA.--0.35 sq mi (0.91 sq km).

PERIOD OF RECORD.--Sediment records: December 1966 to September 1968, October 1968 to September 1974 (discontinued), partial-record station.

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

DATE	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
AUG.			
19...	.69	168	1.4

01650190 BATCHELLORS RUN AT OAKDALE, MD.

LOCATION.--Lat 39°07'21", long 77°03'37", Montgomery County, at gaging station 70 ft (21 m) downstream from bridge on Batchellors Forest Road, 0.6 mile (1.0 km) upstream from mouth, 0.8 mile (1.3 km) southeast of Oakdale, and 1.2 miles (1.9 km) northeast of Norbeck.

DRAINAGE AREA.--0.47 sq mi (1.22 sq km).

PERIOD OF RECORD.--Sediment records: August 1967 to September 1974 (discontinued), partial-record station.

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEARS 1967 TO 1974

DATE	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
AUG., 1967			
04...	1.7	113	2.6
05...	.73	39	.13
JAN., 1968			
14...	12	77	5.0
MAY			
28...	4.3	114	3.2
JUNE			
19...	5.6	170	19
20...	.74	48	.15
27...	1.2	35	.37
28...	.74	22	.06
JUNE, 1969			
02...	.78	186	4.3
03...	1.7	129	2.7
18...	1.0	351	8.4
19...	.47	54	.14
DEC.			
10...	4.8	222	11
11...	1.2	34	.16
APR., 1970			
14...	12	493	38
JULY			
20...	4.7	72	5.2
21...	.72	29	.09
NOV.			
04...	2.4	70	1.9
05...	1.8	24	.29
DEC.			
22...	3.2	47	1.1
FEB., 1972			
03...	5.7	278	16
04...	1.4	22	.12
MAY			
04...	4.2	190	12
AUG.			
27...	1.1	72	1.3
28...	1.4	25	.21
OCT.			
28...	1.9	104	.77
NOV.			
08...	2.5	54	.86
14...	6.6	77	3.8
DEC.			
08...	8.3	134	10
09...	2.7	21	.21
FEB., 1973			
02...	4.8	164	3.8
APR.			
01...	5.3	239	17
02...	2.9	43	.66
JULY			
03...	5.6	97	9.7
04...	1.1	32	.11
20...	7.1	156	11
21...	.48	36	.07
SEP.			
14...	1.2	71	.41
JAN., 1974			
21...	2.8	129	2.0
22...	1.0	145	.39
AUG.			
19...	3.2	303	11
20...	.81	90	.20

01650450 BEL PRE CREEK AT LAYHILL, MD.

LOCATION.--Lat 39°05'27", long 77°03'11", Montgomery County, at gaging station 130 ft (40 m) upstream from bridge on Bel Pre Road, 0.5 mile (0.8 km) west of Layhill, 1.2 miles (1.9 km) upstream from Lutes Run, 1.8 miles (2.9 km) southeast of Norbeck, and 2.9 miles (4.7 km) upstream from mouth.

DRAINAGE AREA.--1.69 sq mi (4.38 sq km).

PERIOD OF RECORD.--Sediment records: November 1962 to September 1974 (discontinued), partial-record station.

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

DATE	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.			
02...	7.5	572	30
03...	.41	360	.40
DEC.			
05...	5.9	374	16
JAN.			
21...	19	658	108
MAR.			
30...	65	680	179
31...	5.7	140	2.2
MAY			
12...	24	334	62
13...	3.0	155	1.3
JUNE			
02...	9.7	249	12
03...	1.2	145	.47
JULY			
29...	4.6	187	31
30...	1.7	216	1.6
AUG.			
09...	1.1	798	106
10...	1.2	120	.39
19...	12	481	70
20...	1.4	415	1.6

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, FOR SELECTED DAYS, WATER YEAR 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
DEC.												
05...	1250	29	14.5	1410	110	55	70	84	95	97	99	100

01650470 LUTES RUN AT LUTES, MD.

LOCATION.--Lat 39°04'24", long 77°03'08", Montgomery County, at gaging station 70 ft (21 m) downstream from Lutes Lane at Lutes, 0.2 mile (0.3 km) upstream from mouth, and 2.7 miles (4.3 km) west of Colesville.

DRAINAGE AREA.--0.47 sq mi (1.22 sq km).

PERIOD OF RECORD.--Sediment records: February 1963 to April 1970, June 1973 to September 1974 (discontinued), partial-record station.

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEARS 1963 TO 1970, 1973, 1974

DATE	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
FEB.. 1963			
20...	2.9	1670	36
21...	.40	300	.40
MAR.			
06...	6.2	8290	262
11...	1.6	342	2.5
12...	6.6	3800	88
19...	2.7	2440	31
20...	1.7	560	4.1
JUNE			
02...	1.2	763	10
03...	7.9	4730	203
NOV.			
06...	6.3	2600	189
07...	3.4	1640	32
JAN.. 1964			
09...	7.7	3450	223
AUG.			
03...	3.4	1190	82
FEB.. 1965			
07...	6.4	2270	94
08...	1.2	140	.60
MAR.			
26...	4.8	614	38
OCT.			
07...	35	1050	351
08...	1.6	150	.60
FEB.. 1966			
13...	19	2360	291
AUG.			
11...	3.4	980	43
NOV.			
28...	3.4	931	16
JAN.. 1967			
27...	2.9	1620	85
MAY			
07...	9.1	1340	67
JUNE			
22...	5.0	289	60
JULY			
20...	5.9	458	73

01650470 LUTES RUN AT LUTES, MD.--Continued

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEARS 1963 TO 1970, 1973, 1974

DATE	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
JULY, 1967			
29...	3.5	173	24
30...	.20	38	.03
AUG.			
03...	4.3	230	38
04...	8.3	458	62
05...	.71	64	.40
OCT.			
25...	3.7	352	32
NOV.			
02...	3.0	240	5.9
JAN., 1968			
14...	11	404	20
MAR.			
17...	5.9	507	28
18...	2.7	206	2.6
MAY			
28...	7.0	419	28
JUNE			
19...	6.2	261	61
JULY			
02...	8.0	317	52
APR., 1970			
02...	3.9	862	51
JUNE, 1973			
29...	4.1	149	31
JULY			
03...	4.5	171	41
SEP.			
14...	5.2	104	3.8
OCT.			
02...	3.3	61	2.0
MAY , 1974			
12...	.64	48	1.2
JUNE			
16...	2.8	73	6.6
26...	.45	22	.16
JULY			
05...	.33	33	.32
29...	2.7	94	15
AUG.			
04...	.26	12	.11
09...	2.9	58	9.3
28...	.31	21	.27
30...	1.4	42	2.7
SEP.			
03...	3.3	63	5.0
06...	4.2	39	1.8
07...	3.1	32	1.2

01650500 NORTHWEST BRANCH ANACOSTIA RIVER NEAR COLESVILLE, MD.

LOCATION.--Lat 39°03'55", long 77°01'48", Montgomery County, at gaging station 400 ft (120 m) upstream from bridge on State Highway 183, 1.5 miles (2.4 km) southwest of Colesville, 3 miles (4.8 km) upstream from Burnt Mills, 10 miles (16.1 km) upstream from Sligo Branch, and 12.5 miles (20.1 km) upstream from confluence with Northeast Branch.

DRAINAGE AREA.--21.1 sq mi (54.6 sq km).

PERIOD OF RECORD.--Sediment records: October 1962 to September 1974.

EXTREMES.--1973-74:
Sediment concentrations: Maximum daily, 803 mg/l Mar. 30; minimum daily, 1 mg/l on several days.
Sediment discharge: Maximum daily, 1,570 tons (1,420 t) Mar. 30; minimum daily, .01 ton (.01 t) Sept. 27.

Period of record:
Sediment concentrations: Maximum daily, 4,340 mg/l Aug. 25, 1965, minimum daily, no flow on several days during August and September 1966.
Sediment discharge: Maximum daily 12,800 tons (11,600 t) June 21, 1972; minimum daily, no flow on several days during August and September 1966.

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

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.0	2	.04	8.8	18	.43	7.9	18	.38
2	53	181	54	7.5	9	.18	7.6	18	.37
3	16	78	3.9	7.4	7	.14	7.7	16	.33
4	12	15	.49	7.3	5	.10	7.7	16	.33
5	8.8	10	.24	12	7	.23	52	133	34
6	8.0	8	.17	8.8	5	.12	18	45	2.2
7	7.6	6	.12	7.7	4	.08	11	18	.53
8	7.6	4	.08	7.6	3	.06	9.9	15	.40
9	7.6	2	.04	14	14	.53	142	425	273
10	7.6	2	.04	8.5	6	.14	22	25	1.5
11	7.6	2	.04	8.0	5	.11	15	15	.61
12	7.2	2	.04	8.0	4	.09	12	10	.32
13	7.2	2	.04	8.0	4	.09	14	8	.30
14	7.2	2	.04	8.0	4	.09	15	7	.28
15	6.8	2	.04	8.0	3	.06	12	6	.19
16	7.6	3	.06	7.9	3	.06	12	6	.19
17	6.8	19	.35	7.7	3	.06	13	5	.18
18	6.5	18	.32	7.9	3	.06	12	5	.16
19	6.5	17	.30	8.0	3	.06	12	5	.16
20	6.5	12	.21	8.0	3	.06	97	290	319
21	6.5	10	.18	8.0	3	.06	386	524	757
22	6.5	8	.14	8.4	3	.07	37	38	3.8
23	6.7	6	.11	8.0	12	.26	24	18	1.2
24	6.8	4	.07	8.0	12	.26	21	10	.57
25	6.8	3	.06	8.0	12	.26	19	7	.36
26	6.5	2	.04	7.6	12	.25	128	259	198
27	6.6	2	.04	8.0	12	.26	59	72	15
28	6.5	2	.04	17	40	1.8	25	17	1.1
29	35	50	4.7	11	30	.89	20	10	.54
30	12	20	.65	8.0	20	.43	19	8	.41
31	8.7	9	.21	--	--	--	23	17	1.6
TOTAL	314.7	--	66.80	261.1	--	7.29	1260.8	--	1614.01

01650500 NORTHWEST BRANCH ANACOSTIA RIVER NEAR COLESVILLE, MD.--Continued

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

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	31	22	2.0	17	125	5.7	15	1	.04
2	19	5	.26	18	90	4.4	17	10	.46
3	29	22	2.1	20	45	2.4	16	5	.22
4	69	79	18	17	25	1.1	16	4	.17
5	24	11	.71	16	20	.86	15	3	.12
6	21	6	.34	16	25	1.1	16	3	.13
7	19	4	.21	20	85	4.6	17	2	.09
8	17	3	.14	18	40	1.9	15	9	.36
9	44	31	5.5	18	15	.73	14	5	.19
10	82	116	35	18	8	.39	14	4	.15
11	101	70	21	17	5	.23	14	4	.15
12	38	17	1.7	17	5	.23	16	2	.09
13	22	8	.48	25	35	2.4	14	2	.08
14	20	6	.32	32	70	6.0	13	1	.04
15	18	5	.24	19	10	.51	13	1	.04
16	19	4	.21	18	5	.24	17	15	.69
17	19	4	.21	19	5	.26	17	12	.55
18	17	4	.18	17	5	.23	14	5	.19
19	17	4	.18	17	5	.23	14	3	.11
20	17	4	.18	17	4	.18	13	2	.07
21	108	455	287	15	4	.16	71	292	108
22	36	45	4.4	24	30	1.9	27	45	3.3
23	24	14	.91	18	10	.49	19	15	.77
24	24	30	1.9	16	5	.22	17	8	.37
25	42	80	9.1	16	3	.13	15	5	.20
26	25	40	2.7	14	2	.08	15	3	.12
27	28	40	3.0	15	2	.08	14	4	.15
28	24	40	2.6	15	1	.04	14	3	.11
29	23	50	3.1	--	--	--	18	16	1.2
30	20	25	1.4	--	--	--	488	803	1570
31	19	25	1.3	--	--	--	90	135	56
TOTAL	1016	--	406.37	509	--	36.79	1088	--	1744.16

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	32	19	1.6	13	3	.11	15	15	.61
2	26	10	.70	13	3	.11	99	244	108
3	23	5	.31	22	22	1.3	26	35	2.5
4	59	132	33	14	7	.26	15	10	.41
5	59	180	34	14	7	.26	13	8	.28
6	31	20	1.7	16	7	.30	12	7	.23
7	23	11	.68	13	7	.25	11	7	.21
8	64	142	59	12	1	.03	11	6	.18
9	117	241	125	18	20	.97	11	6	.18
10	33	25	2.2	15	7	.28	9.8	6	.16
11	25	15	1.0	13	5	.18	9.2	5	.12
12	23	7	.43	126	516	435	8.6	5	.12
13	47	70	8.9	44	88	15	8.2	5	.11
14	30	22	1.8	20	20	1.1	8.2	5	.11
15	24	10	.65	16	8	.35	8.2	4	.09
16	21	7	.40	14	7	.26	30	95	11
17	19	7	.36	13	6	.21	12	37	1.2
18	19	10	.51	12	5	.16	9.0	16	.39
19	18	12	.58	12	4	.13	8.3	4	.09
20	17	11	.50	11	4	.12	8.0	8	.17
21	17	10	.46	11	2	.06	7.8	6	.13
22	17	9	.41	10	2	.05	22	86	19
23	21	8	.45	15	14	.57	29	101	8.2
24	16	7	.30	12	8	.26	13	34	1.2
25	16	50	2.2	10	6	.16	9.9	15	.40
26	15	10	.41	9.8	4	.11	11	15	.45
27	14	6	.23	10	3	.08	11	20	.59
28	14	4	.15	11	3	.09	15	30	1.2
29	14	2	.08	13	10	.35	14	20	.76
30	13	1	.04	14	10	.38	9.9	15	.40
31	--	--	--	11	2	.06	--	--	--
TOTAL	867	--	278.05	557.8	--	458.55	475.1	--	158.49

01650500 NORTHWEST BRANCH ANACOSTIA RIVER NEAR COLESVILLE, MD.--Continued

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

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.7	12	.28	3.8	10	.10	5.1	10	.14
2	7.9	12	.26	3.8	7	.07	5.1	7	.10
3	7.2	10	.19	3.8	5	.05	54	222	47
4	6.5	8	.14	3.8	10	.10	32	154	22
5	7.6	10	.21	4.4	8	.10	7.6	30	.62
6	7.6	9	.18	3.2	6	.05	22	29	5.3
7	6.5	7	.12	6.0	10	.16	116	212	124
8	6.2	5	.08	5.6	8	.12	15	22	.89
9	5.8	5	.08	42	385	135	10	9	.24
10	5.4	5	.07	13	124	5.6	8.8	7	.17
11	5.1	5	.07	5.8	30	.47	8.9	7	.17
12	4.4	4	.05	4.8	25	.32	7.9	5	.11
13	4.1	4	.04	5.1	20	.28	6.5	4	.07
14	4.1	4	.04	4.4	15	.18	8.2	7	.15
15	4.4	4	.05	3.8	10	.10	6.2	5	.08
16	3.5	3	.03	4.4	15	.18	5.8	4	.06
17	3.2	3	.03	8.5	25	.57	5.4	4	.06
18	3.2	3	.03	7.2	20	.39	5.4	3	.04
19	3.8	3	.03	51	436	280	5.4	3	.04
20	4.1	4	.04	18	227	16	5.4	3	.04
21	4.1	4	.04	6.5	20	.35	7.2	6	.12
22	3.2	3	.03	5.8	15	.23	6.2	7	.12
23	3.0	3	.02	6.2	17	.28	4.8	5	.06
24	3.8	4	.04	5.1	12	.17	4.4	4	.05
25	4.0	4	.04	4.4	10	.12	4.8	3	.04
26	3.8	4	.04	11	50	1.5	4.8	2	.03
27	3.8	4	.04	6.2	25	.42	4.4	1	.01
28	3.5	3	.03	5.0	21	.28	33	103	23
29	8.3	116	27	14	40	1.5	10	22	.59
30	21	193	31	11	25	.74	5.4	8	.12
31	4.4	15	.18	6.5	12	.21	--	--	--
TOTAL	172.2	--	60.48	284.1	--	445.64	425.7	--	225.42

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 7231.5
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 5502.05

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, FOR SELECTED DAYS, WATER YEAR 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
DEC. 26...	1910	405	6.5	1140	1250	31	40	48

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
DEC. 26...	57	64	74	87	95	99	100

01651000 NORTHWEST BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD.

LOCATION.--Lat 38°57'09", long 76°58'00", Prince Georges County, at gaging station, on Queens Chapel Road (Maryland State Highway 500), 0.8 mile (1.3 km) downstream from Sligo Branch, 1 mile (1.6 km) west of Hyattsville, and 1.6 miles (2.6 km) upstream from confluence with Northeast Branch.

DRAINAGE AREA.--49.4 sq mi (127.9 sq km).

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT. 15...	1300	11	--	--	--	--	--	--	--	--
NOV. 05...	1325	74	--	--	--	--	--	--	--	--
DEC. 06...	1415	34	7.6	1000	2000	170	13	3.3	5.0	5.1
JAN. 21...	1345	445	--	--	--	--	--	--	--	--

DATE	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 15...	--	--	--	--	--	--	--	--	--	--
NOV. 05...	--	--	--	--	--	--	--	--	--	--
DEC. 06...	36	30	20	8.4	.3	.49	.37	.07	101	81
JAN. 21...	--	--	--	--	--	--	--	--	--	--

DATE	SUSPENDED SOLIDS (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT. 15...	--	--	--	--	175	8.2	18.5	--	14.0
NOV. 05...	--	--	--	--	185	7.1	9.0	--	10.3
DEC. 06...	53	46	17	5.6	130	7.0	10.0	30	10.6
JAN. 21...	--	--	--	--	95	6.9	6.0	--	12.4

DATE	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 15...	--	3600	--	--	--	--	--	--	--
NOV. 05...	--	B14000	--	--	--	--	--	--	--
DEC. 06...	3.7	6000	.00	1	0	0	0	13	320
JAN. 21...	--	7600	--	--	--	--	--	--	--

01653650 PISCATAWAY CREEK NEAR SOUTH PISCATAWAY, MD.

LOCATION.--Lat 38°41'55", long 76°59'12", Prince Georges County, at bridge on State Highway 210, near South Piscataway, 1.4 mile (2.3 km) downstream from gaging station, and 3.4 miles (5.5 km) upstream from mouth.

DRAINAGE AREA.--61 sq mi (158 sq km), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1972 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL ALUM-INUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT. 15...	1045	--	--	--	--	--	--	--	--	--
NOV. 05...	1130	--	--	--	--	--	--	--	--	--
DEC. 06...	1105	6.8	1600	3700	330	11	2.6	7.0	5.0	6
JAN. 21...	1100	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT. 15...	--	--	--	--	--	--	--	--	--
NOV. 05...	--	--	--	--	--	--	--	--	--
DEC. 06...	5	30	13	.3	.98	.56	.16	115	79
JAN. 21...	--	--	--	--	--	--	--	--	--

DATE	SUS-PENDED SOLIDS (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
OCT. 15...	--	--	--	--	185	6.8	15.5	--	8.8
NOV. 05...	--	--	--	--	180	6.8	9.0	--	9.2
DEC. 06...	123	38	33	22	130	6.2	10.5	15	8.6
JAN. 21...	--	--	--	--	126	6.7	6.0	--	11.4

DATE	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 15...	--	160	--	--	--	--	--	--	--
NOV. 05...	--	270	--	--	--	--	--	--	--
DEC. 06...	7.6	6600	.01	0	0	0	10	0	50
JAN. 21...	--	46	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
DELAWARE RIVER BASIN									
01478880 - TRIB. TO WHITE CLAY CR. NR. NEWARK, DEL. (LAT 39 41 01 LONG 075 42 37.01)									
APR., 1974									
17...	1045	2.3	10	1100	470	17	7.1	11	2.6
JULY									
26...	1020	.94	11	530	100	19	7.2	14	4.2
01482310 - DOLL RUN AT RED LION, DEL. (LAT 39 35 53 LONG 075 39 43)									
APR., 1974									
17...	1245	1.3	9.7	380	190	12	7.0	6.3	2.0
JULY									
26...	1205	.60	12	340	80	10	7.0	7.7	2.4
01483170 - TRIB. TO DRAWYER CR. NR. ODESSA, DEL (LAT 39 27 45 LONG 075 41 17.01)									
APR., 1974									
17...	1425	4.9	11	1500	160	11	4.6	5.0	2.4
JULY									
26...	1340	2.7	14	900	150	10	4.7	6.0	3.3
SMYRNA RIVER BASIN									
01483348 - MILL CREEK NEAR SMYRNA, DEL. (LAT 39 16 35 LONG 075 37 29.01)									
APR., 1974									
17...	1720	3.0	14	1100	100	8.8	4.1	5.5	2.0
JULY									
26...	1540	.63	17	1500	90	12	4.4	6.1	2.5
LEIPSIC RIVER BASIN									
01483500 - LEIPSIC RIVER NEAR CHESWOLD, DEL. (LAT 39 13 58 LONG 075 37 57)									
APR., 1974									
18...	1000	12	17	1200	120	17	5.3	11	2.1
JULY									
27...	1440	5.0	24	700	80	20	5.2	18	2.8
ST. JONES RIVER BASIN									
01483675 - CAHOON BRANCH AT DOVER, DEL. (LAT 39 10 05 LONG 075 34 38.01)									
APR., 1974									
18...	1125	7.2	14	880	60	4.7	2.6	7.5	1.8
JULY									
27...	1550	2.6	20	650	40	4.3	2.3	9.9	1.9
MURDERKILL RIVER BASIN									
01484050 - PRATT BRANCH NEAR FELTON, DEL. (LAT 39 00 37 LONG 075 31 46)									
APR., 1974									
18...	1510	3.1	15	540	50	8.0	4.6	6.5	1.9
JULY									
27...	1245	1.7	19	450	60	7.5	4.2	7.8	1.8
MISPILLION RIVER BASIN									
01484125 - TANTROUGH BRANCH AT MILFORD, DEL. (LAT 38 54 34 LONG 075 27 35.01)									
MAY , 1974									
17...	1510	--	13	400	80	6.0	1.8	8.0	1.7
JULY									
31...	1330	--	11	310	100	5.0	1.9	8.0	1.6
01484143 - HAVEN LAKE OUTLET AT MILFORD, DEL. (LAT 38 54 46 LONG 075 26 41.01)									
MAR., 1974									
26...	1150	35	--	--	--	--	--	--	--
APR.									
19...	1400	32	--	--	--	--	--	--	--
MAY									
17...	1715	30	12	490	470	7.0	2.0	8.0	1.7
JUNE									
04...	1115	57	--	--	--	--	--	--	--
JULY									
17...	1205	14	--	--	--	--	--	--	--
31...	1605	12	3.3	320	90	4.8	2.2	8.5	1.7
AUG.									
20...	1120	14	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)
DELAWARE RIVER BASIN									
01478880 - TRIB. TO WHITE CLAY CR. NR. NEWARK, DEL. (LAT 39 41 01 LONG 075 42 37.01)									
APR., 1974									
17...	38	31	23	19	.4	1.9	.03	109	72
JULY									
26...	48	39	29	25	.4	1.5	.05	133	77
01482310 - DOLL RUN AT RED LION, DEL. (LAT 39 35 53 LONG 075 39 43)									
APR., 1974									
17...	12	10	26	16	.1	3.0	.01	85	59
JULY									
26...	11	9	23	18	.1	3.2	.03	86	54
01483170 - TRIB. TO DRAWYER CR. NR. ODESSA, DEL (LAT 39 27 45 LONG 075 41 17.01)									
APR., 1974									
17...	19	16	10	11	.3	3.4	.07	65	46
JULY									
26...	29	24	8.7	12	.1	3.7	.05	73	44
SMYRNA RIVER BASIN									
01483348 - MILL CREEK NEAR SMYRNA, DEL. (LAT 39 16 35 LONG 075 37 29.01)									
APR., 1974									
17...	13	11	16	11	.1	2.6	.11	68	39
JULY									
26...	42	34	15	12	.2	1.6	.29	90	48
LEIPSIC RIVER BASIN									
01483500 - LEIPSIC RIVER NEAR CHESWOLD, DEL. (LAT 39 13 58 LONG 075 37 57)									
APR., 1974									
18...	33	27	21	18	.1	2.6	.15	108	64
JULY									
27...	55	45	22	28	.2	1.3	.07	147	71
ST. JONES RIVER BASIN									
01483675 - CAHOON BRANCH AT DOVER, DEL. (LAT 39 10 05 LONG 075 34 38.01)									
APR., 1974									
18...	16	13	7.8	9.7	.2	1.8	.12	56	22
JULY									
27...	28	23	6.2	9.7	.1	2.0	.23	68	20
MURDERKILL RIVER BASIN									
01484050 - PRATT BRANCH NEAR FELTON, DEL. (LAT 39 00 37 LONG 075 31 46)									
APR., 1974									
18...	11	9	15	11	.2	3.4	.03	68	39
JULY									
27...	17	14	16	11	.1	3.1	.05	76	36
MISPILLION RIVER BASIN									
01484125 - TANTROUGH BRANCH AT MILFORD, DEL. (LAT 38 54 34 LONG 075 27 35.01)									
MAY , 1974									
17...	21	17	5.0	9.3	1.5	1.3	.02	57	22
JULY									
31...	25	21	4.5	9.2	.0	.74	.02	54	20
01484143 - HAVEN LAKE OUTLET AT MILFORD, DEL. (LAT 38 54 46 LONG 075 26 41.01)									
MAR., 1974									
26...	--	--	--	--	--	--	--	--	--
APR.									
19...	--	--	--	--	--	--	--	--	--
MAY									
17...	21	17	4.7	9.7	.1	1.1	.03	56	26
JUNE									
04...	--	--	--	--	--	--	--	--	--
JULY									
17...	--	--	--	--	--	--	--	--	--
31...	28	23	4.8	11	.0	.09	.04	50	21
AUG.									
20...	--	--	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
DELAWARE RIVER BASIN								
01478880 - TRIB. TO WHITE CLAY CR. NR. NEWARK, DEL. (LAT 39 41 01 LONG 075 42 37.01)								
APR., 1974								
17...	41	213	7.1	--	12.5	10	--	--
JULY								
26...	38	250	7.3	21.5	20.0	21	8.5	520
01482310 - DOLL RUN AT RED LION, DEL. (LAT 39 35 53 LONG 075 39 43)								
APR., 1974								
17...	49	174	6.4	--	12.5	2	--	--
JULY								
26...	45	183	6.8	--	15.0	21	8.8	273
01483170 - TRIB. TO DRAWYER CR. NR. ODESSA, DEL (LAT 39 27 45 LONG 075 41 17.01)								
APR., 1974								
17...	31	132	6.8	--	16.5	20	--	--
JULY								
26...	21	148	6.8	--	17.0	24	8.3	340
SMYRNA RIVER BASIN								
01483348 - MILL CREEK NEAR SMYRNA, DEL. (LAT 39 16 35 LONG 075 37 29.01)								
APR., 1974								
17...	28	134	6.5	--	16.5	20	--	--
JULY								
26...	14	146	6.7	26.0	19.0	26	6.5	320
LEIPSIC RIVER BASIN								
01483500 - LEIPSIC RIVER NEAR CHESWOLD, DEL. (LAT 39 13 58 LONG 075 37 57)								
APR., 1974								
18...	37	206	7.1	--	10.5	50	--	--
JULY								
27...	26	263	7.2	27.5	20.0	27	7.8	68
ST. JONES RIVER BASIN								
01483675 - CAHOON BRANCH AT DOVER, DEL. (LAT 39 10 05 LONG 075 34 38.01)								
APR., 1974								
18...	9	97	6.5	--	13.0	50	--	--
JULY								
27...	0	107	6.5	26.0	20.5	26	7.7	380
MURDERKILL RIVER BASIN								
01484050 - PRATT BRANCH NEAR FELTON, DEL. (LAT 39 00 37 LONG 075 31 46)								
APR., 1974								
18...	30	134	6.4	--	16.5	2	--	--
JULY								
27...	22	138	6.6	26.5	17.5	26	7.2	133
MISPILLION RIVER BASIN								
01484125 - TANTROUGH BRANCH AT MILFORD, DEL. (LAT 38 54 34 LONG 075 27 35.01)								
MAY , 1974								
17...	5	99	6.7	--	25.5	20	6.5	125
JULY								
31...	0	94	6.4	28.0	26.0	3	5.2	47
01484143 - HAVEN LAKE OUTLET AT MILFORD, DEL. (LAT 38 54 46 LONG 075 26 41.01)								
MAR., 1974								
26...	--	92	7.2	5.0	8.5	--	--	--
APR.								
19...	--	96	7.2	16.0	17.5	--	--	--
MAY								
17...	8	94	8.0	31.5	26.5	10	8.5	6
JUNE								
04...	--	89	6.8	19.5	20.0	--	8.2	--
JULY								
17...	--	95	8.4	26.5	27.5	--	8.7	--
31...	0	98	8.5	28.0	29.0	4	8.1	19
AUG.								
20...	--	93	7.6	25.5	26.0	--	8.8	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
MISPILLION RIVER BASIN--Continued									
01484146 - SILVER LAKE AT MILFORD, DEL. (LAT 38 54 42 LONG 075 26 13.01)									
MAY , 1974									
17...	1135	--	12	670	100	5.8	2.1	8.0	1.8
JULY									
31...	0930	--	1.4	460	160	4.9	2.4	9.0	2.0
BROADKILL RIVER BASIN									
01484270 - BEAVERDAM CREEK NEAR MILTON, DEL. (LAT 38 45 41 LONG 075 16 03)									
APR., 1974									
19...	1135	12	14	310	40	5.2	2.4	11	3.2
JULY									
27...	1050	8.6	18	340	70	4.6	2.0	12	3.6
CHOPTANK RIVER BASIN									
01490600 - MEREDITH BRANCH NEAR SANDTOWN, DEL. (LAT 39 02 23 LONG 075 41 52)									
APR., 1974									
18...	1330	6.2	16	1600	80	5.0	2.2	5.8	1.7
JULY									
27...	1745	1.0	20	1000	80	6.5	3.2	6.8	2.4

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)
				MISPILLION RIVER BASIN--Continued					
				01484146 - SILVER LAKE AT MILFORD, DEL. (LAT 38 54 42 LONG 075 26 13.01)					
MAY , 1974									
17...	23	19	5.2	9.3	.1	1.1	.04	56	23
JULY									
31...	28	23	5.7	12	.0	.08	.07	51	22
				BROADKILL RIVER BASIN					
				01484270 - BEAVERDAM CREEK NEAR MILTON, DEL. (LAT 38 45 41 LONG 075 16 03)					
APR., 1974									
19...	11	9	5.2	14	.1	2.7	.91	61	23
JULY									
27...	2	19	7.8	15	.0	3.4	1.0	74	20
				CHOPTANK RIVER BASIN					
				01490600 - MEREDITH BRANCH NEAR SANDTOWN, DEL. (LAT 39 02 23 LONG 075 41 52)					
APR., 1974									
18...	7	6	15	8.6	.1	1.2	.03	58	22
JULY									
27...	33	27	14	9.6	.1	1.9	.05	79	29

CHESTER RIVER BASIN

01493100 - CHESTER RIVER AT CRUMPTON, MD. (LAT 39 14 41 LONG 075 55 30.01)

DATE	TIME	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
DEC.										
07...	1110	11	500	1700	240	14	7.1	36	4.5	36

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
DEC.									
07...	30	17	64	.4	2.2	.43	.06	234	172

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	NON-CARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
MISPILLION RIVER BASIN--Continued								
01484146 - SILVER LAKE AT MILFORD, DEL. (LAT 38 54 42 LONG 075 26 13.01)								
MAY , 1974								
17...	4	98	7.4	--	24.5	6	9.2	21
JULY								
31...	0	101	7.1	28.0	27.5	4	8.2	37
BROADKILL RIVER BASIN								
01484270 - BEAVERDAM CREEK NEAR MILTON, DEL. (LAT 38 45 41 LONG 075 16 03)								
APR., 1974								
19...	14	130	5.9	--	13.5	10	--	--
JULY								
27...	1	136	5.8	22.5	17.5	23	5.8	480
CHOPTANK RIVER BASIN								
01490600 - MEREDITH BRANCH NEAR SANDTOWN, DEL. (LAT 39 02 23 LONG 075 41 52)								
APR., 1974								
18...	16	88	5.6	--	14.0	40	--	--
JULY								
27...	2	112	6.4	--	19.0	29	7.0	84

CHESTER RIVER BASIN

01493100 - CHESTER RIVER AT CRUMPTON, MD. (LAT 39 14 41 LONG 075 55 30.01)

DATE	SUSPENDED SOLIDS (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
DEC.									
07...	13	64	35	4.2	307	6.9	7.5	15	10.2

DATE	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	CYANIDE (CN) (MG/L)	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC.									
07...	2.9	150	.00	1	0	0	0	2	30

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
DELAWARE RIVER BASIN							
01478000 - CHRISTINA RIVER AT COOCHS BRIDGE, DEL. (LAT 39 38 16 LONG 075 43 46)							
FEB., 1974							
11...	1335	25	275	--	.0	1.0	--
APR.							
15...	1545	28	137	--	19.0	15.0	--
MAY							
27...	1335	15	147	--	17.0	15.0	--
AUG.							
01...	1255	2.9	161	6.8	27.0	23.0	2.7
19...	0935	6.7	120	--	24.5	22.5	--
01478500 - WHITE CLAY CREEK ABOVE NEWARK, DEL. (LAT 39 42 50 LONG 075 45 35.01)							
FEB., 1974							
12...	1340	91	234	--	8.0	.5	--
MAR.							
12...	1410	72	234	--	7.5	7.0	--
APR.							
16...	1555	119	204	--	15.0	14.0	--
MAY							
28...	1435	79	214	--	19.0	16.0	--
AUG.							
20...	1410	40	234	--	27.0	22.0	--
01479000 - WHITE CLAY CREEK NEAR NEWARK, DEL. (LAT 39 42 00 LONG 075 41 10)							
FEB., 1974							
12...	0955	90	173	--	-.5	.0	--
MAR.							
12...	1000	89	224	--	6.5	6.5	--
APR.							
16...	1010	146	204	--	11.0	11.0	--
MAY							
28...	1020	94	214	--	15.5	15.0	--
AUG.							
19...	1050	61	202	--	26.5	23.0	--
01480100 - LITTLE MILL CREEK AT ELSMERE, DEL. (LAT 39 44 05 LONG 075 35 14)							
FEB., 1974							
12...	1055	4.0	316	--	2.0	1.0	--
MAR.							
12...	1100	3.7	244	--	11.0	9.0	--
APR.							
16...	1130	6.3	211	--	12.0	13.5	--
MAY							
28...	1125	4.0	209	--	16.5	19.0	--
AUG.							
19...	1200	1.8	226	--	25.0	24.5	--
01484134 - LEDNUM BRANCH AT MILFORD, DEL. (LAT 38 54 48 LONG 075 27 41.01)							
MAY , 1974							
17...	1715	--	104	6.8	--	25.5	9.1
JULY							
31...	1415	--	99	6.1	28.0	23.0	4.9
01484137 - COPPER BRANCH AT MILFORD, DEL. (LAT 38 54 59 LONG 075 27 08.01)							
MAY , 1974							
17...	1705	--	152	6.6	--	23.5	5.6
JULY							
31...	1425	--	187	6.6	28.0	22.0	4.4
01484142 - BOWMAN BRANCH AT MILFORD, DEL. (LAT 38 54 30 LONG 075 26 59.01)							
MAY , 1974							
17...	1740	--	125	6.3	--	22.5	5.1
JULY							
31...	1445	--	142	6.0	28.0	20.0	4.8

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

FIELD DETERMINATIONS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
MISPILLION RIVER BASIN							
01484145 - PRESBYTERIAN BRANCH AT MILFORD, DEL. (LAT 38 54 37 LONG 075 26 20.01)							
APR., 1974							
19...	1430	.63	145	6.3	12.0	14.5	--
MAY							
17...	1225	.43	146	6.5	30.5	18.0	8.0
JUNE							
04...	1155	.53	149	6.2	22.0	15.5	7.2
JULY							
17...	1255	.18	140	6.4	26.5	18.0	6.0
31...	1700	.10	140	6.6	28.0	22.0	5.9
AUG.							
20...	1000	.12	143	6.1	25.5	19.0	5.0
01484147 - NORTH SILVER LAKE OUTLET AT MILFORD, DEL. (LAT 38 54 45 LONG 075 26 04.01)							
MAY , 1974							
17...	1220	--	96	7.4	--	25.5	8.5
JULY							
31...	1455	--	100	8.0	28.0	28.5	8.9
01484149 - SOUTH SILVER LAKE OUTLET AT MILFORD, DEL. (LAT 38 54 40 LONG 075 26 01.01)							
MAY , 1974							
17...	1200	--	99	7.9	--	26.0	9.1
JULY							
31...	1507	--	109	7.6	28.0	28.0	8.5
ELK RIVER BASIN							
01495000 - BIG ELK CREEK AT ELK MILLS, MD. (LAT 39 39 26 LONG 075 49 20)							
FEB., 1974							
12...	1450	81	117	--	7.5	1.0	--
MAR.							
12...	1515	58	122	--	9.0	8.0	--
APR.							
17...	1340	82	120	--	19.0	13.5	--
MAY							
28...	1605	62	120	--	18.0	18.0	--
AUG.							
20...	1300	37	122	--	26.5	23.0	--
NORTHEAST RIVER BASIN							
01496000 - NORTHEAST CREEK AT LESLIE, MD. (LAT 39 37 40 LONG 075 56 40)							
FEB., 1974							
13...	1025	28	158	--	-1.5	.5	--
MAR.							
13...	0905	20	142	--	-3.5	3.5	--
APR.							
17...	0805	30	142	--	2.5	9.5	--
MAY							
29...	0835	31	153	--	15.5	15.0	--
AUG.							
20...	0800	15	140	--	18.5	20.0	--
PRINCIPIO CREEK BASIN							
01496200 - PRINCIPIO CREEK NEAR PRINCIPIO FURNACE, MD. (LAT 39 37 34 LONG 076 02 27)							
FEB., 1974							
13...	1210	9.9	142	--	9.5	3.0	--
MAR.							
13...	1055	7.4	137	--	2.0	3.0	--
APR.							
17...	0950	11	129	--	17.0	9.5	--
MAY							
29...	1025	8.0	142	--	16.5	15.0	--
AUG.							
20...	0955	3.8	153	--	23.0	19.5	--
SUSQUEHANNA RIVER BASIN							
01578500 - OCTORARO CREEK NEAR RISING SUN, MD. (LAT 39 41 24 LONG 076 07 43)							
FEB., 1974							
13...	1325	191	183	--	13.0	3.0	--
MAR.							
13...	1205	154	178	--	2.5	5.0	--
APR.							
17...	1110	334	163	--	16.5	10.5	--
MAY							
29...	1155	192	176	--	17.0	17.5	--
AUG.							
20...	1115	103	168	--	25.5	22.5	--

MONONGAHELA RIVER BASIN

03076500 YOUGHIOGHENY RIVER AT FRIENDSVILLE, MD.

LOCATION.--Lat 39°39'13", long 79°24'31", Garrett County, temperature recorder at gaging station on left bank 0.7 mile (1.1 km) upstream from bridge on State Highway 42 at Friendsville, and 1.5 miles (2.4 km) upstream from Bear Creek.
DRAINAGE AREA.--295 sq mi (764 sq km).
PERIOD OF RECORD.--Water temperatures: October 1962 to September 1974.
EXTREMES.--1973-74:
Water temperatures: Maximum, 24.5°C July 28, 29; minimum, freezing point on several days during December and February.
Period of record:
Water temperatures: Maximum, 29.5°C June 27, 28, 1969; minimum, freezing point on many days during winter periods.

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

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	3.5	16.0	14.0	13.5	13.5	18.5	16.0	21.5	18.0	21.0	20.0
2	8.5	5.5	15.5	12.0	13.5	13.0	19.0	16.0	22.0	18.5	22.0	20.0
3	9.5	7.0	12.0	10.5	13.5	12.0	21.0	16.5	22.0	19.5	21.0	18.5
4	10.5	9.5	12.5	10.0	15.0	13.0	21.0	17.0	22.0	20.0	18.5	17.5
5	10.5	8.0	12.5	10.0	16.0	14.0	21.0	18.5	21.0	19.0	18.0	15.5
6	8.0	6.0	11.0	10.0	17.0	14.5	21.0	18.0	21.0	17.5	18.0	16.0
7	7.0	4.5	10.5	8.5	18.0	15.5	23.0	20.0	23.0	18.5	17.5	16.5
8	7.0	6.0	12.0	8.5	19.0	16.5	23.0	19.0	22.0	20.0	17.5	16.0
9	6.0	4.5	12.5	11.0	20.5	17.0	22.0	18.0	20.5	19.0	18.5	17.5
10	5.5	3.5	13.5	11.5	21.5	18.0	21.5	17.5	21.5	18.5	19.5	18.5
11	6.5	4.5	14.5	11.0	19.0	16.5	22.0	17.5	22.0	18.5	19.5	18.5
12	9.0	6.0	15.0	13.0	17.0	15.5	20.5	16.5	21.5	19.5	20.0	18.0
13	11.0	8.5	13.0	11.0	17.0	13.5	21.5	16.5	22.0	19.0	20.5	18.0
14	12.0	10.0	15.0	10.5	18.0	14.5	24.0	18.5	22.5	19.5	19.5	17.5
15	11.5	9.5	16.0	13.5	17.5	16.5	22.5	18.5	22.5	18.5	17.5	16.0
16	9.5	8.5	18.0	14.5	17.0	16.5	21.5	18.0	22.5	18.5	16.5	16.0
17	10.0	7.0	19.0	16.0	17.0	15.5	21.5	17.0	22.0	19.5	18.0	16.0
18	10.5	8.0	17.0	15.5	16.5	14.5	22.0	18.5	21.5	19.5	17.5	16.0
19	10.0	9.0	15.5	15.0	17.5	15.0	20.5	19.0	22.5	19.0	17.0	15.0
20	11.5	7.0	16.0	13.5	18.0	17.0	22.5	18.0	21.5	18.5	17.5	16.5
21	12.5	9.5	16.5	14.5	18.5	17.0	23.0	18.0	21.0	19.0	17.5	15.0
22	12.5	11.5	17.5	15.5	17.0	17.0	22.0	18.0	22.5	19.0	15.0	13.5
23	11.5	10.0	17.0	16.0	17.0	14.5	20.0	18.0	22.5	19.0	13.5	11.5
24	10.0	8.0	17.5	15.5	14.5	14.0	19.5	18.0	22.5	19.0	13.0	11.0
25	10.0	6.5	15.5	13.5	14.0	13.0	20.0	17.5	23.0	19.5	13.0	11.5
26	12.0	8.5	14.0	12.5	14.5	13.0	20.5	18.5	23.5	20.5	14.5	13.0
27	12.5	9.5	14.0	12.5	15.5	14.0	23.5	18.5	23.0	19.5	15.5	13.0
28	15.0	12.0	14.5	11.5	15.5	15.0	24.5	19.5	21.5	20.0	17.0	15.5
29	17.0	15.0	14.5	13.5	16.0	14.5	24.5	20.0	21.5	19.5	16.5	15.0
30	17.0	14.0	13.5	13.5	18.0	14.5	21.5	18.5	21.0	20.0	15.0	13.0
31	---	---	13.5	13.0	---	---	21.0	18.0	21.0	19.0	---	---
MONTH	17.0	3.5	19.0	8.5	21.5	12.0	24.5	16.0	23.5	17.5	22.0	11.0

03078000 CASSELMAN RIVER AT GRANTSVILLE, MD.

LOCATION.--Lat 39°42'08", long 79°08'12", Garrett County, at gaging station on left bank at downstream side of highway bridge, 0.3 mile (0.5 km) upstream from Slaubough Run, 0.7 mile (1.1 km) downstream from U. S. Highway 40, and 1.0 mile (1.6 km) northeast of Grantsville.

DRAINAGE AREA.--62.5 sq mi (161.9 sq km).

PERIOD OF RECORD.--Chemical analyses: August 1965 to September 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.												
16...	1430	41	3.2	480	100	13	3.8	6.7	2.2	18	15	28
NOV.												
05...	1435	97	3.7	290	180	8.8	2.5	4.0	1.0	8	7	20
DEC.												
13...	1345	99	3.6	550	220	9.0	2.5	17	1.0	9	7	18
JAN.												
11...	1250	2330	2.4	7000	470	6.0	1.5	2.4	1.3	2	2	15
25...	--	175	3.5	1600	50	7.0	2.1	2.2	.7	7	6	19
MAR.												
14...	1220	110	3.8	260	190	8.1	2.4	3.1	1.0	9	7	18
JUNE												
05...	1500	139	4.2	520	100	8.4	2.0	2.6	.9	8	7	17
JULY												
23...	1310	14	2.9	280	100	13	4.2	4.8	1.3	23	19	30
AUG.												
27...	1405	5.2	1.7	330	70	17	3.8	9.4	2.4	13	11	41

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)
OCT.												
16...	13	.3	.33	--	79	48	33	148	6.2	--	14.0	--
NOV.												
05...	9.9	.3	.41	--	54	32	26	108	6.4	--	12.0	--
DEC.												
13...	32	.3	.74	--	88	33	25	181	6.6	2.0	5.0	--
JAN.												
11...	5.2	.2	.74	--	35	21	20	68	5.8	5.5	3.5	--
25...	5.5	.1	.68	--	44	26	20	86	6.4	2.0	4.0	--
MAR.												
14...	6.8	.2	.64	--	48	30	23	88	6.6	-2.0	1.0	--
JUNE												
05...	5.3	.1	.47	.02	44	29	23	100	--	18.0	17.0	3
JULY												
23...	9.1	.1	.92	.16	77	50	31	--	--	16.0	17.5	1
AUG.												
27...	9.0	.2	8.6	.28	91	58	47	190	--	--	23.5	2

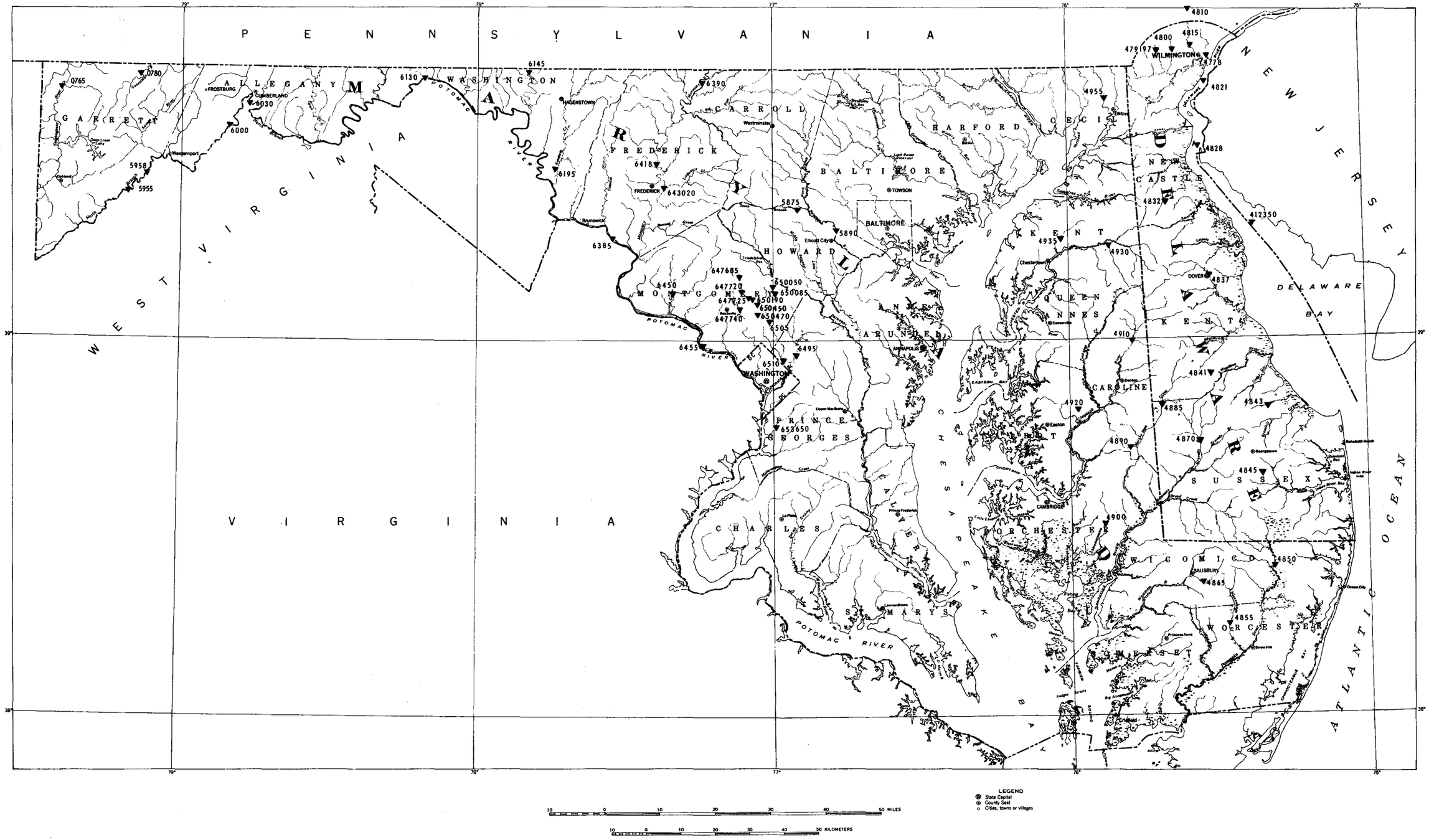

Figure 1.——Map of Maryland and Delaware showing locations of water-quality stations

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