

Water Resources Data for Maryland and Delaware Water Year 1976



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT MD-DE-76-1

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

CALENDAR FOR WATER YEAR 1976

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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT MD-DE-76-1

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

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

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PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the States of Maryland and Delaware and the District of Columbia and with other agencies by personnel of the Maryland, Delaware, District of Columbia district of the Water Resources Division under the supervision of W. F. White, District Chief, and J. T. Callahan, Regional Hydrologist, Northeastern Region.

This report is one of a series issued by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

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WATER RESOURCES DATA FOR MARYLAND AND DELAWARE, 1976

INTRODUCTION

Water resources data for the 1976 water year for Maryland and Delaware consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This report contains discharge records for 107 gaging stations; stage and contents for 1 reservoir; water quality for 54 gaging stations and 91 wells; and water levels for 29 observation wells. Also included are data for 54 low-flow partial-record stations, 45 crest-stage partial-record stations, and 4 tidal crest-stage partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Maryland and Delaware.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report MD-DE-76-1." Water-data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

COOPERATION

The U.S. Geological Survey and organizations of the State of Maryland have had cooperative agreements for the systematic collection of streamflow records from 1896 to 1909 and since 1924, for ground-water levels since 1943, and for water-quality records since 1958. Similar agreements between the Survey and organizations of the State of Delaware began in 1943 for streamflow records and 1949 for water-quality records. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

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

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

Maryland State Highway Administration, B. M. Evans, administrator.

Delaware Department of Highways and Transportation, R. A. Haber, director of highways.

Maryland Department of Health and Mental Hygiene, Environmental Health Administration, D. H. Noren, director.

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

City of Baltimore, Department of Public Works, R. J. Kretzschmar, chief of water supply division, bureau of engineering.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, for 25 gaging stations; by the Water Quality Office, Environmental Protection Agency for 3 gaging stations; and by the National Park Service, U.S. Department of the Interior for 1 station.

The following organizations aided in collecting records:

Delaware: State Department of Natural Resources and Environmental Control; and New Castle County.

Maryland: Maryland Water Resources Administration; Washington Suburban Sanitary Commission; Upper Potomac River Commission; Anne Arundel, Baltimore, Harford, and Howard Counties; Potomac Electric Power Co.; and Virginia Electric Power Co.

Organizations that supplied data are acknowledged in station descriptions.

ACKNOWLEDGMENT

Maryland and Delaware district personnel who contributed significantly to the collection and preparation of the data in this report were: W. B. Solley, Chief, Network Operations Section, assisted by Philip Pfannebecker, R. W. James, Jr., W. E. Webb, and M. E. Walters.

HYDROLOGIC CONDITIONS

As the 1976 water year began, streamflow continued to be excessive throughout the bi-State area. However, streamflow at three index stations was near normal for the year. No significant floods or droughts occurred, but a record high flow for January of $335 \text{ ft}^3/\text{s}$ ($9.49 \text{ m}^3/\text{s}$) was recorded at the index station Seneca Creek at Dawsonville, which averaged $132 \text{ ft}^3/\text{s}$ ($3.74 \text{ m}^3/\text{s}$) during the year, 162 percent of normal. Monthly flows at the index station Potomac River near Washington, D.C., adjusted for diversions, ranged from a high of 655 percent of median in October to 40 percent of median in May and were in the normal range from June to September. The yearly streamflow averaged $10,500 \text{ ft}^3/\text{s}$ ($297 \text{ m}^3/\text{s}$), which is normal for the reference period 1941-70.

Annual mean discharge is compared with the long-term average discharge for two representative gaging stations in figure 1. Data for the station, Potomac River at Point of Rocks, Md., reflects runoff conditions in the Potomac River basin excluding the Coastal Plain. Data for the station, Choptank River at Greensboro, Md. reflects runoff from a 113 mi^2 (293 km^2) area, of which 21.6 mi^2 (34.8 km^2) is in Delaware in the central part of the Delmarva peninsula.

The combined storage in the three major water-supply reservoirs in the Baltimore City Municipal System was 108 percent of average on September 30, 1976, or about 79,500,000,000 gal (301 hm^3), a decrease of 8 percent from the end of last year and 93 percent of the usable capacity of 85,340,000,000 gal (323 hm^3).

Ground-water levels were generally above average throughout the year, but below the levels of last year. Slightly lower-than-average levels were noted in the Hancock and Elkton areas and in a belt across central Maryland.

Average fresh-water inflow to the Chesapeake Bay was estimated at $80,800 \text{ ft}^3/\text{s}$ ($2,290 \text{ m}^3/\text{s}$), 108 percent of the long-term average, reference period 1952-76. A record high inflow for October of $118,000 \text{ ft}^3/\text{s}$ ($3,340 \text{ m}^3/\text{s}$) occurred as the water year began, and above average inflows occurred in November, January, February, and June to August.

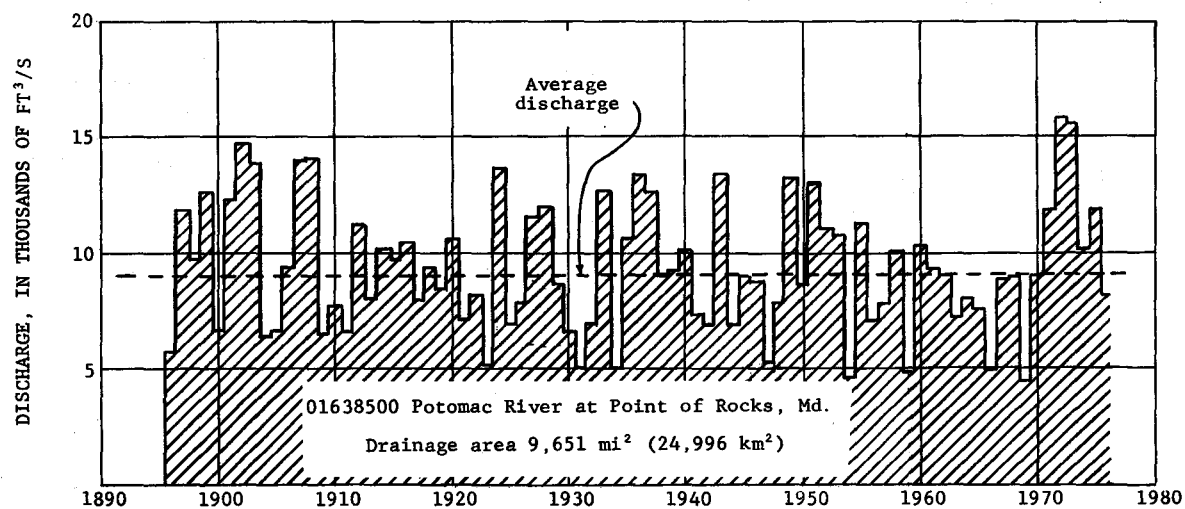
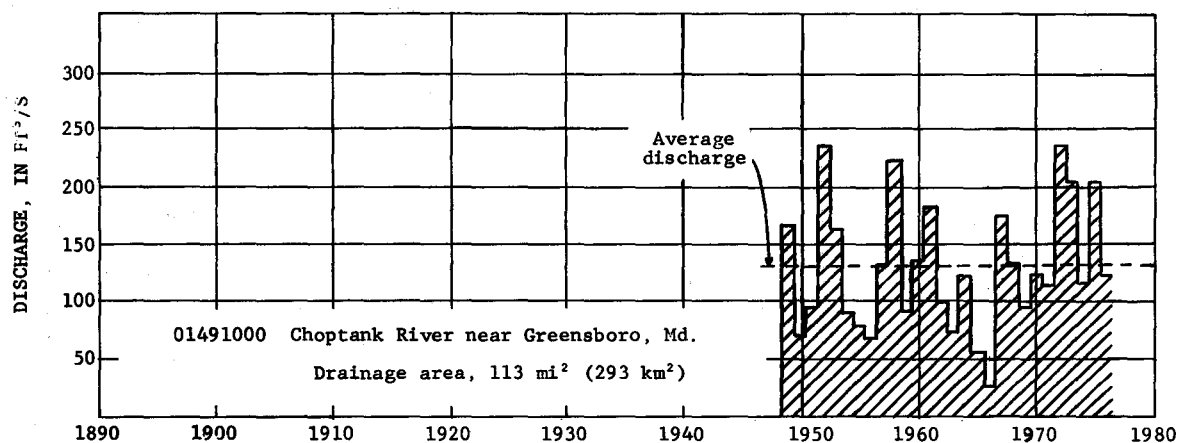


Figure 1.--Annual mean discharge at two gaging stations in Maryland.

DEFINITION OF TERMS

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

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

Adenosine triphosphate (ATP) is the primary energy donor in cellular life process. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, 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.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded 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 intestines of warm-blooded 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-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²).

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

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

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

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 multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by 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 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

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

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT³/S, ft³/s) 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 or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

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

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

Dissolved refers to the amount of substance present in true chemical solution. In practice, however, the term includes all forms of substance that will pass through a 0.45-micrometer membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = - \sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

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 river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution 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 a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

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 gram (ug/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

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

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

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

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 meters (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 milliliters (mL) or liters (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 and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

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

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

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

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

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

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

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/mL of sample.

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/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [$\text{mg C}/(\text{m}^2 \cdot \text{time})$ for periphyton and macrophytes and $\text{mg C}/(\text{m}^3 \cdot \text{time})$ for phytoplankton] are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon-14 method is of greater sensitivity than the oxygen light-and-dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [$\text{mg O}_2/(\text{m}^2 \cdot \text{time})$ for periphyton and macrophytes and $\text{mg O}_2/(\text{m}^3 \cdot \text{time})$ for phytoplankton] are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light-and-dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported 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 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 liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) 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 volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

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

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. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time flowing in a channel.

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" as 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 lived.

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

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate 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.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45 micrometer filter.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical 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

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

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

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

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WDR is used as an abbreviation for "Water Data Report" in the REVISED RECORDS paragraph to refer to State annual basic-data reports.

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

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in SURVEY reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in a list of stations in the front of the report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic 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 stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of 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 01477800, which appears just to the left of the station name, includes the 2-digit part number "01" plus the 6-digit downstream order number "477800."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 2 below.

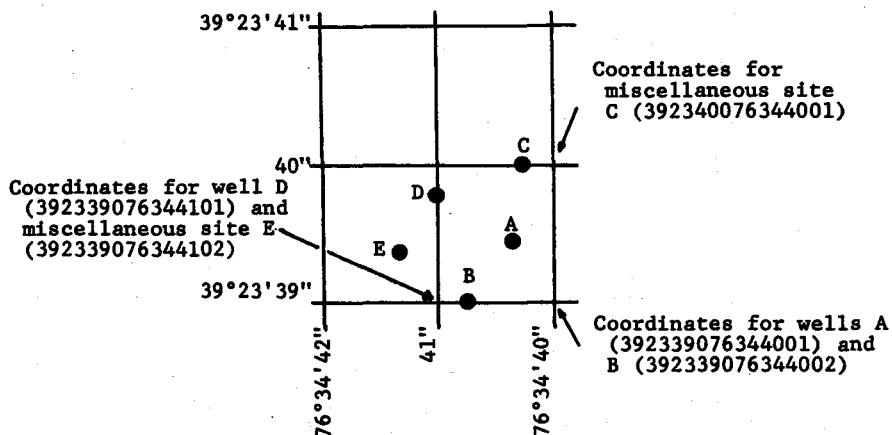


Figure 2. System for numbering wells and miscellaneous sites (latitude and longitude)

A second well-numbering system used in Maryland utilizes the county prefix and a 5-minute grid. The first 2 to 4 letters of the identification number are the county prefix; for example, for Charles County the prefix is Ch and for Dorchester County the prefix is Dor. Each county is divided by 5-minute quadrangles of latitude and longitude. Each quadrangle, from north to south, is designated by an uppercase letter, and west to east by a lowercase letter. The wells are numbered serially within each quadrangle. A similar system used in Delaware divides the state, rather than the counties, by 5-minute quadrangles of latitude and longitude which are designated as explained above. Each 5-minute quadrangle is further subdivided by 1-minute quadrangles. Each of the 1-minute quadrangles from north to south is designated by a number from 1 to 5, and west to east by a number from 1 to 5. Thus ID 55-1 is the first well inventoried in the southeast 1-minute quad of the ID 5-minute quadrangle of Delaware.

SPECIAL NETWORKS AND PROGRAMS

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

National stream-quality accounting network (NASQAN) is a data-collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables; then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations, there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals, a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs, a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations, information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital),

a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations, peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs, the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs, a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of discharge collected by agencies other than the Geological Survey

The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22902, maintains an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface-water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

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

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diel 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 recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published.

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 subdivided 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 subdivided 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 and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 2.

Measurements are made in many types of wells under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will insure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and at the end of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Thirty-two manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

- 1-D1. *Water temperature-influential factors, field measurement, and data presentation*, by H. H. Stevens Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 p. \$1.60.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. \$1.90.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. \$1.75.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages. \$0.25.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages. \$0.20.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. \$0.40.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages. \$1.00.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages. \$0.30.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages. \$0.20.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages. \$0.45.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages. \$1.25.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. \$0.40.
- 3-A12. *Fluorometric procedures for dye tracing*, by J. F. Wilson Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. \$0.35. Not currently available.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages. \$0.70.
- 3-B2. *Introduction to ground-water hydraulics-a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages. \$2.50.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. \$0.65.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages. \$0.70.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages. \$1.15.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4 Chapter A1. 1968. 39 pages. \$0.30.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages. \$0.20.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages. \$0.65.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages. \$0.75.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages. \$0.75.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages. \$0.65.
- 5-A1. *Methods for collection and analysis of water samples for dissolved minerals and gases*, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 pages. \$2.40.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. \$0.80.
- 5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. \$0.90.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by K. V. Slack, R. C. Averett, P. E. Greeson, and R. G. Lipscomb: USGS--TWRI Book 5, Chapter A4. 1973. 165 pages. \$1.95.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages. \$0.65.
- 7-C1. *Finite-difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages. \$2.30.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages. \$0.70.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages. \$0.40.

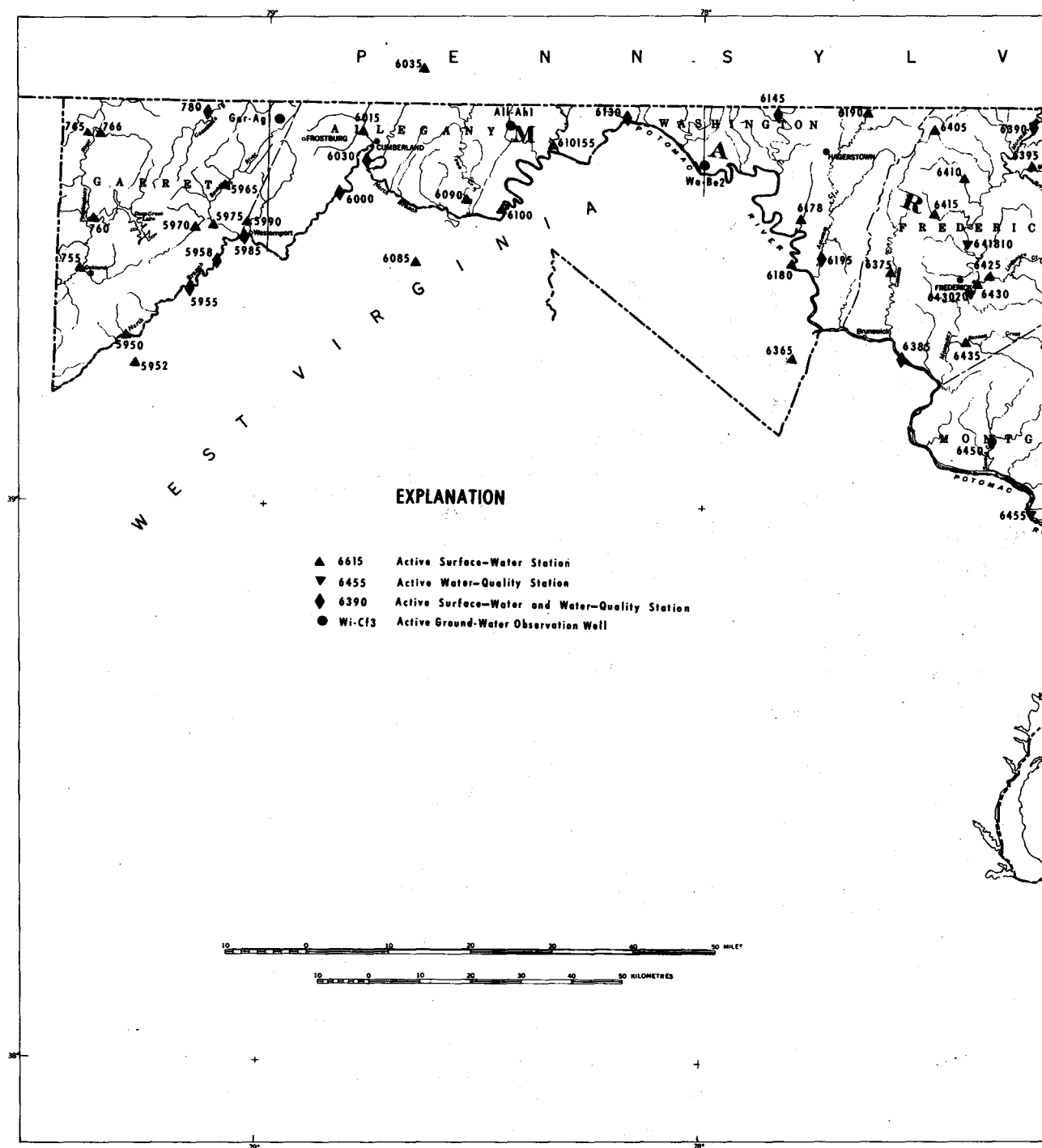
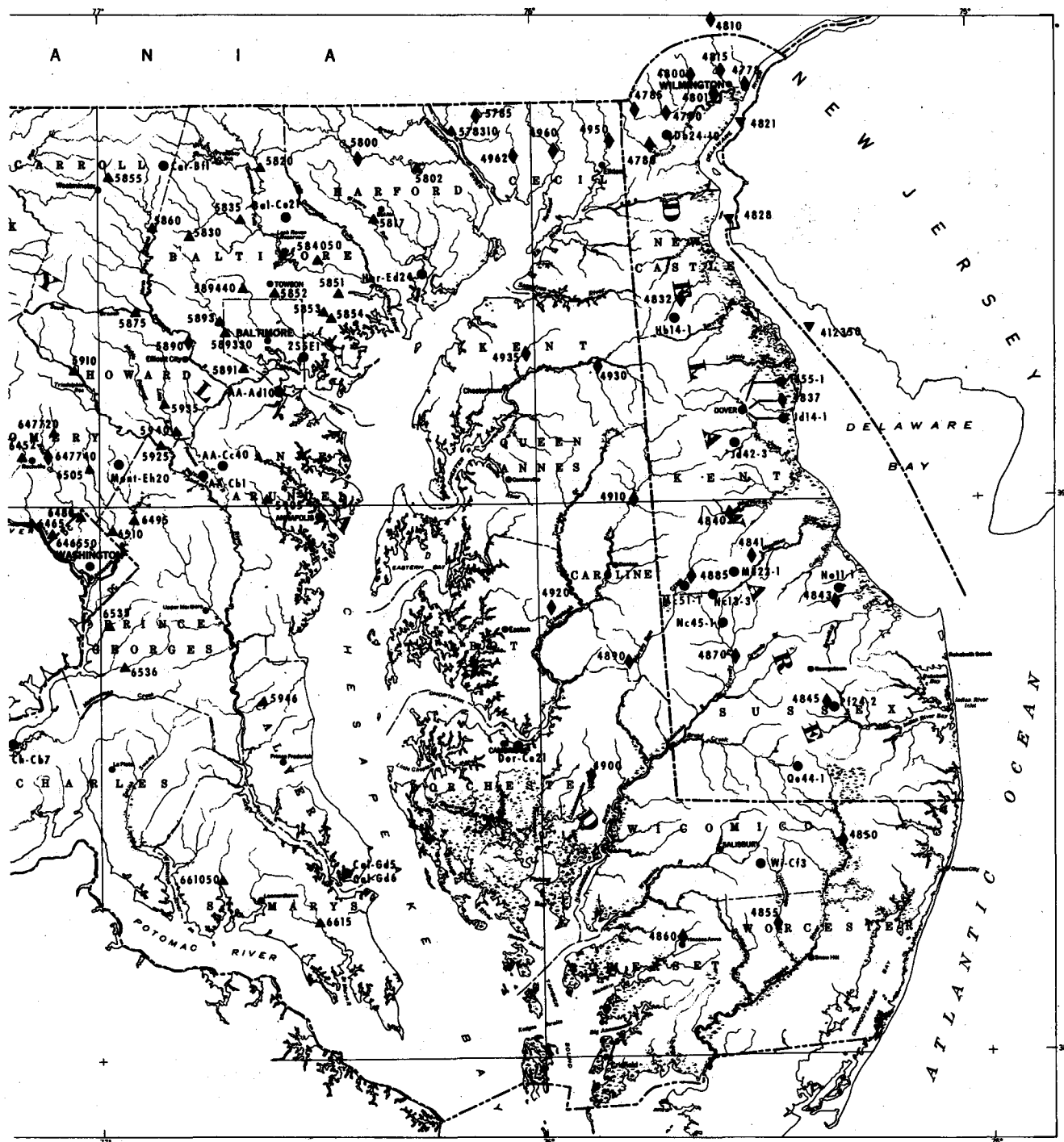


Figure3.--Map of Maryland and Delaware showing location of surface-water and water-quality stations and ground-water observation wells.



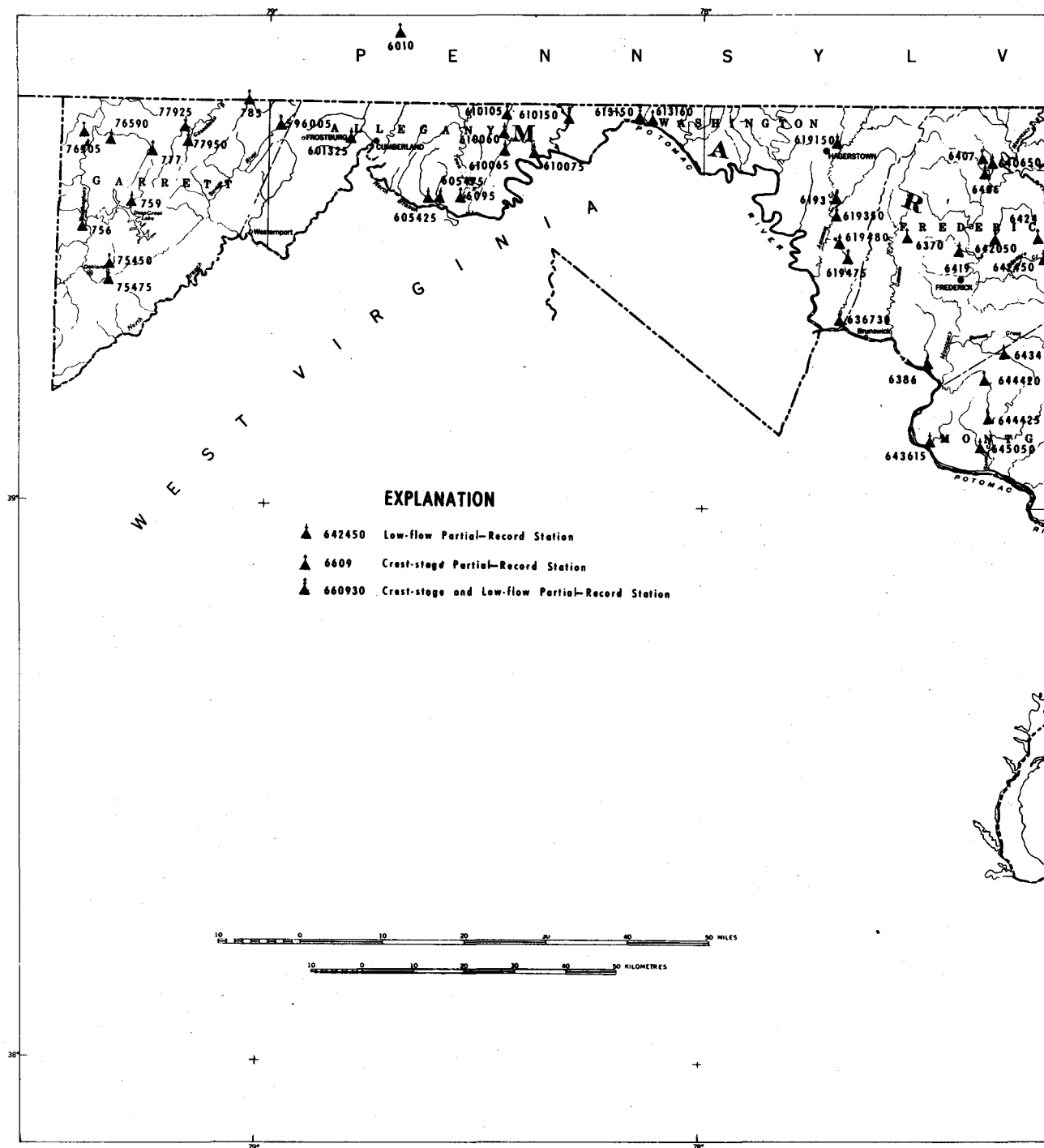
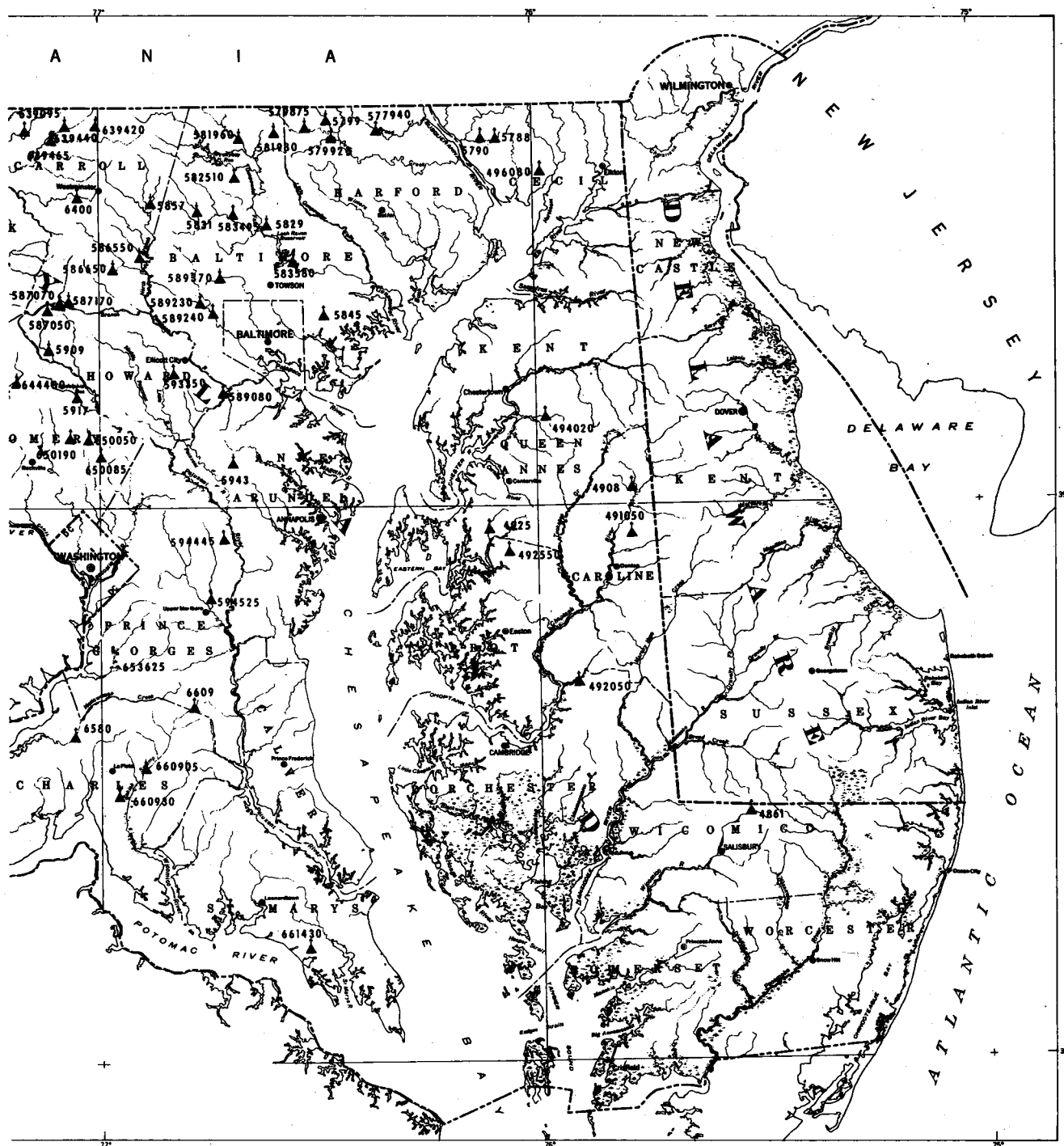


Figure 4.--Map of Maryland and Delaware showing location of low-flow and crest-stage partial-record stations.



NORTH ATLANTIC SLOPE BASINS

DELAWARE BAY

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ

LOCATION.--Lat 39°18'19", long 75°22'37", Cumberland County, Hydrologic Unit 02040204, water-quality recorder on lightship in bay opposite Bombay Hook Island, Del., and 3 mi (4.8 km) south-southwest of mouth of Cohansey River, N. J.

PERIOD OF RECORD.--April 1969 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1969 to current year.

WATER TEMPERATURES: February 1970 to current year.

REMARKS.--Water-quality monitor records less than 80 percent complete for most parameters. Extremes for period of record are those recorded when monitor was in operation.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 52,800 micromhos Feb. 10, 1970; minimum, 1,500 micromhos Mar. 4, 1971.

WATER TEMPERATURES: Maximum, 30.0°C Aug. 1, 1970; minimum, 0.0°C on many days during January and February 1976.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 30,200 micromhos July 26, Sept. 26; minimum, 3,260 micromhos Feb. 2.

WATER TEMPERATURES: Maximum, 26.5°C on many days during June to August; minimum, 0.0°C on many days during January and February.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19300	12000	16200	21500	14900	18500	17200	10300	13600	22800	13900	19300
2	19400	13700	17000	21000	14400	17600	17700	10500	14500	23100	15200	18600
3	20600	12500	17100	21200	14500	17400	17400	10100	13400	20700	14100	17400
4	20300	13700	17000	20300	14300	16900	18400	10700	14200	18100	10300	13900
5	20100	13700	16900	19300	13500	16600	18800	10900	14600	16500	9190	12500
6	22500	14200	17500	21900	14100	17400	17200	10700	14000	18400	11800	15000
7	20500	13400	16700	20300	14700	17000	18800	10500	14100	19200	12400	15600
8	20900	13800	17000	18500	12000	15800	19300	12200	15400	18900	12100	15400
9	21500	14100	17500	17400	12400	15300	22100	11800	17800	19100	11500	15100
10	20000	14600	17500	18600	12500	15600	20900	11800	16000	19100	11600	15100
11	19500	12100	16700	18000	10800	14500	18900	10500	15000	20700	13200	16200
12	18600	12200	15900	19300	12300	15600	21300	12000	15600	21900	11900	17800
13	21300	11400	16300	17300	10800	15100	21600	12100	16800	22600	15500	19600
14	22200	12300	17300	18400	11300	14500	21900	13600	17800	21200	14300	18100
15	22400	14400	18000	17400	9670	14000	21300	14500	18300	19900	13700	16800
16	22000	16200	19400	17400	10900	14600	20500	15900	18800	21000	15300	18200
17	24600	19200	21400	19000	11400	15800	23200	16400	20000	21800	15900	18600
18	22700	18400	20500	18100	12000	15600	21300	16100	18400	21800	15200	18800
19	22700	17200	20200	19300	12500	15800	21200	13400	17200	23200	15600	19700
20	22000	14000	17800	19500	11000	15200	21600	13800	17700	21500	15400	18400
21	18100	10500	---	19400	12700	15200	22800	16000	19100	22200	11000	18300
22	15700	8670	13000	17200	8920	12400	23800	15900	20000	19400	12200	16600
23	15800	8130	13100	16700	10000	13500	22600	15100	19200	17700	10900	14000
24	15400	8700	12400	18800	12100	15600	22200	16900	19500	18100	12100	15400
25	14800	7910	12000	20600	11600	16900	24500	17000	20800	23000	14500	19600
26	15200	8020	12300	18600	12400	15700	25400	18400	21800	22800	16400	19800
27	16400	10300	12900	19400	12000	16100	22400	16800	19800	21200	14200	18000
28	17600	8490	13600	16800	11800	14900	21600	14000	18300	16400	9120	13200
29	18300	10900	14900	18400	11200	15200	22000	14200	19100	13200	6720	9900
30	19200	12900	16100	20500	10800	15500	22700	14800	19400	12000	6120	9340
31	22200	11800	18200	---	---	---	22500	16100	19200	12700	5420	9060
MONTH	24600	7910	16400	21900	8920	15700	25400	10100	17400	23200	5420	16200

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12800	6120	9390	12300	6840	9620	15000	6680	11700	25200	19000	22600
2	10500	3260	6250	12600	8330	10400	13200	8190	10600	24300	18700	21100
3	7940	3700	5870	13600	8580	11100	12800	6820	9770	22400	15200	18800
4	9220	4760	6680	11900	7910	10200	14300	7990	10900	21800	14100	17800
5	11600	4910	7460	11000	6040	9110	14300	6720	10400	19300	14600	---
6	11200	6300	8550	10700	5070	8260	14800	7560	10900	---	---	---
7	12900	6610	9410	11300	5760	8470	15700	9960	12100	---	---	---
8	14500	6180	10700	12700	5140	9010	16900	11700	13700	---	---	---
9	16800	9880	12300	15100	8860	11600	18400	11700	15600	---	---	---
10	15400	9880	---	18000	8860	13600	21200	14400	17400	---	---	---
11	---	---	---	17600	8960	13800	21800	15800	18900	---	---	---
12	---	---	---	18400	12100	15200	21800	14900	18000	---	---	---
13	---	---	---	17300	11800	14500	20900	15200	17900	---	---	---
14	---	---	---	16600	9150	12900	22400	14600	18000	---	---	---
15	---	---	---	17900	10800	14200	20500	15200	17800	---	---	---
16	---	---	---	18200	11900	14600	21000	14600	17300	---	---	---
17	---	---	---	15600	7450	11700	20800	14600	17700	---	---	---
18	18700	12900	---	15600	6480	11400	19600	13700	16600	---	---	---
19	18000	9700	13500	16400	9060	12500	20600	13900	17300	---	---	---
20	14400	8190	11000	15400	9630	12800	21300	14300	18100	---	---	---
21	14700	8100	11400	16800	7880	12100	21200	14600	17700	---	---	---
22	13700	4550	9730	13400	8610	11300	20700	13800	17600	---	---	---
23	10300	4100	6920	14500	7830	11700	20300	15400	17800	---	---	---
24	11800	3940	8380	14300	7990	11700	21500	14800	18400	---	---	---
25	11700	4990	8600	13400	8270	11100	21600	16000	18900	---	---	---
26	12400	6320	9450	14000	8460	11700	21000	14900	18400	23500	15400	---
27	13000	7480	10100	14000	8390	11900	21900	14300	17900	22400	14500	19700
28	12300	6720	9560	13300	8390	11000	22400	14100	18500	23300	15400	19200
29	13200	6770	10100	13800	8670	11500	24800	17100	21000	22800	15200	19800
30	---	---	---	16600	9290	12700	25200	18000	22100	22700	17100	19700
31	---	---	---	16200	10400	13300	---	---	---	23100	15700	19400
MONTH	---	---	---	18400	5070	11800	25200	6680	16300	---	---	---
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22400	16500	---	23500	17500	20700	28700	23100	26100	28100	22000	25100
2	---	---	---	23300	16500	20100	29400	23200	26300	26700	20700	24100
3	---	---	---	23100	15600	19700	29200	21300	26100	28700	22000	25100
4	---	---	---	24200	16400	20300	29200	21900	25700	28300	20900	24900
5	---	---	---	24200	16000	20800	28300	21900	25200	26000	22500	24200
6	---	---	---	25900	15400	20200	29600	23100	25700	27600	22500	24600
7	21900	15900	---	24200	15700	19600	28900	22400	25200	27700	22400	25200
8	23200	15300	19200	23900	14900	19200	27700	22500	25100	28100	22200	24800
9	24300	15800	20300	25700	15700	19900	27600	19500	23200	28300	22400	25600
10	23600	16100	20400	26000	16400	20700	27100	20700	24500	29200	23600	25900
11	24500	16400	19700	24300	16100	20200	27700	19400	23900	27600	23000	25000
12	25100	16500	20000	23200	15600	19800	26200	19200	---	26700	22200	24800
13	25200	17500	21300	24800	13900	19400	25400	18200	---	26900	20000	24800
14	24000	16100	19600	26000	16100	21500	25200	16400	22500	27100	21300	24500
15	22700	14700	18700	26400	17400	22800	24600	16000	21500	27200	22500	24900
16	22000	14800	18000	26400	16900	22800	24800	15800	21100	27900	23300	25300
17	19700	13800	17300	26000	19100	22900	24900	16100	21200	27600	21000	24700
18	20800	14000	18000	26000	18200	22900	25700	15600	22400	26400	17900	23400
19	20500	15000	18400	26500	17800	22100	27200	20000	24100	26700	19300	23700
20	21200	14900	18100	26000	16500	22100	28900	16800	23200	27200	20400	24400
21	20300	14900	17800	25600	16800	21600	27200	18700	23700	29600	22100	26000
22	21400	13200	17000	26500	18300	22800	28300	22500	25100	29400	24500	26900
23	21200	12900	17000	25700	21400	---	29000	22800	26000	29200	23000	26000
24	19500	12400	16500	26500	19600	23700	29800	23800	26600	29000	21800	25700
25	20100	12900	15800	26700	21500	24300	28500	23900	26300	30200	23500	26800
26	23500	13700	16900	30200	22600	25500	28100	23000	25500	30200	23600	26900
27	22700	13500	18300	29400	22800	25800	27900	21900	25200	28700	22700	26000
28	24200	14700	19300	29000	23600	26200	28300	22400	25200	29400	22600	25900
29	23800	15300	20300	29800	23500	26500	27400	22400	25000	29800	23500	26500
30	25600	15800	21000	29400	23000	26300	29400	22400	25200	29400	23500	26300
31	---	---	---	29600	22400	26300	28300	22400	26000	---	---	---
MONTH	25600	12400	---	30200	13900	22200	29800	15600	24600	30200	17900	25300

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.0	20.0	20.5	15.5	14.5	15.0	10.0	9.5	10.0	3.0	3.0	3.0
2	21.0	19.5	20.5	15.0	14.5	15.0	9.5	8.5	9.0	3.0	3.0	3.0
3	20.0	18.5	19.0	15.0	14.0	14.5	8.5	8.0	8.5	3.0	3.0	3.0
4	18.5	18.5	18.5	15.0	14.5	15.0	8.0	8.0	8.0	3.0	2.0	3.0
5	18.5	18.0	18.5	15.5	14.5	15.0	8.0	8.0	8.0	2.0	1.5	2.0
6	19.5	18.5	18.5	15.5	14.5	15.0	8.0	8.0	8.0	2.0	1.0	1.5
7	19.0	18.5	18.5	15.5	14.5	15.0	8.0	8.0	8.0	2.0	1.0	1.5
8	18.5	18.0	18.5	15.5	15.0	15.0	8.0	7.0	7.0	2.0	1.0	1.5
9	18.5	18.0	18.5	16.0	15.0	15.0	8.0	7.0	7.5	1.5	0.5	1.0
10	18.0	18.0	18.0	16.0	15.0	15.5	8.0	6.5	7.0	1.0	0.0	0.5
11	18.0	18.0	18.0	16.0	15.0	15.5	7.0	6.5	6.5	1.0	0.0	0.5
12	18.0	17.0	18.0	15.5	15.0	15.0	7.0	6.0	6.5	1.0	0.5	0.5
13	18.0	17.0	17.5	15.5	14.5	15.0	7.0	6.5	7.0	1.5	0.5	1.0
14	18.0	17.0	17.5	15.0	13.5	14.0	8.0	6.5	7.5	1.5	1.0	1.5
15	18.5	18.0	---	14.0	13.0	13.0	8.0	6.5	7.5	1.5	1.0	1.0
16	18.0	18.0	18.0	13.5	12.0	13.0	8.0	8.0	8.0	1.5	1.0	1.5
17	18.0	18.0	18.0	13.5	12.0	12.5	8.0	7.0	8.0	1.5	0.5	1.0
18	18.0	18.0	18.0	13.0	12.0	13.0	8.0	6.0	7.0	0.5	0.0	0.0
19	18.0	17.0	18.0	13.5	12.0	13.0	6.0	5.0	5.5	0.0	0.0	0.0
20	18.0	16.5	17.5	13.0	12.0	13.0	5.0	4.5	5.0	0.0	0.0	0.0
21	18.0	16.5	---	13.0	12.0	13.0	5.0	4.5	4.5	0.0	0.0	0.0
22	18.0	16.5	17.0	13.0	11.5	12.5	4.5	3.5	4.0	0.0	0.0	0.0
23	18.0	16.5	17.0	12.0	11.0	11.5	4.0	3.0	3.5	0.0	0.0	0.0
24	18.0	17.0	17.5	12.0	11.0	11.5	3.0	3.0	3.0	0.0	0.0	0.0
25	18.0	17.0	18.0	11.5	10.5	11.0	3.0	3.0	3.0	0.0	0.0	0.0
26	18.0	18.0	18.0	11.0	10.5	11.0	3.0	3.0	3.0	0.0	0.0	0.0
27	18.0	17.0	17.5	11.0	10.5	11.0	3.0	3.0	3.0	0.0	0.0	0.0
28	18.0	17.0	17.5	10.5	10.0	10.0	3.0	3.0	3.0	0.5	0.0	0.0
29	18.0	17.0	18.0	10.0	9.5	10.0	3.0	3.0	3.0	0.5	0.0	0.5
30	18.0	15.5	17.0	10.0	9.5	10.0	3.0	3.0	3.0	0.5	0.5	0.5
31	16.5	14.5	15.5	---	---	---	3.0	3.0	3.0	1.0	0.5	0.5
MONTH	21.0	14.5	18.0	16.0	9.5	13.5	10.0	3.0	6.0	3.0	0.0	1.0
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.0	0.5	1.0	8.0	6.0	6.5	10.0	9.5	9.5	13.5	13.0	13.0
2	1.0	0.5	1.0	6.5	6.5	6.5	10.0	9.0	9.5	14.5	13.0	13.5
3	3.0	0.0	0.5	6.5	6.5	6.5	10.5	9.0	9.5	14.5	13.5	14.0
4	0.5	0.0	0.5	8.0	6.5	7.0	10.0	9.0	9.5	14.0	13.5	14.0
5	0.5	0.0	0.5	8.0	6.5	7.5	10.0	9.0	9.5	14.5	13.5	14.0
6	0.5	0.0	0.0	8.0	7.0	8.0	11.0	9.0	10.0	---	---	---
7	0.0	0.0	0.0	8.0	6.5	8.0	11.5	9.5	10.5	---	---	---
8	0.0	0.0	0.0	8.0	6.5	8.0	10.5	10.0	10.0	---	---	---
9	0.5	0.0	0.0	8.0	6.5	7.0	10.0	9.0	9.5	---	---	---
10	1.0	0.0	0.5	6.5	6.0	6.5	10.0	8.5	9.5	---	---	---
11	1.0	1.0	---	7.0	6.0	6.5	10.0	9.0	9.5	---	---	---
12	---	---	---	6.5	6.0	6.0	9.5	8.0	9.0	---	---	---
13	---	---	---	7.0	6.0	6.5	9.0	8.5	8.5	---	---	---
14	---	---	---	7.0	6.0	6.5	10.0	8.5	9.0	---	---	---
15	---	---	---	8.0	6.5	6.5	10.0	9.0	9.5	---	---	---
16	---	---	---	6.5	6.5	6.5	11.0	9.5	10.0	---	---	---
17	---	---	---	6.5	5.5	6.0	11.5	10.0	10.5	---	---	---
18	4.0	3.0	---	6.0	5.0	5.5	12.0	11.0	11.5	---	---	---
19	4.5	3.0	4.0	6.0	5.0	5.5	13.0	11.5	12.0	---	---	---
20	5.0	3.0	4.0	6.5	6.0	6.0	13.0	12.0	13.0	---	---	---
21	5.0	3.5	4.5	7.0	6.0	6.5	15.0	13.0	13.5	---	---	---
22	5.5	4.5	5.0	8.0	6.5	7.5	15.0	13.5	14.0	---	---	---
23	5.5	4.0	4.5	8.0	6.5	7.5	15.0	14.0	14.5	---	---	---
24	5.5	4.0	4.5	8.0	7.0	8.0	15.0	14.5	15.0	---	---	---
25	5.5	4.5	5.0	8.5	8.0	8.0	15.0	15.0	15.0	---	---	---
26	6.0	4.5	5.0	10.0	8.0	8.5	15.0	14.0	14.5	18.5	18.0	---
27	6.0	5.0	5.5	9.0	8.0	8.5	14.0	13.0	13.5	19.5	18.0	18.0
28	6.0	5.5	6.0	10.0	8.5	9.0	13.5	13.0	13.0	18.5	18.0	18.0
29	7.0	5.5	6.0	9.5	8.5	9.5	13.0	13.0	13.0	18.5	18.0	18.5
30	---	---	---	10.0	9.0	9.5	14.0	13.0	13.0	19.0	18.0	18.5
31	---	---	---	9.5	9.5	9.5	---	---	---	19.5	18.5	18.5
MONTH	7.0	0.0	---	10.0	5.0	7.5	15.0	8.0	11.5	---	---	---

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

01477800 SHELLPOT CREEK AT WILMINGTON, DE

LOCATION.--Lat 39°45'39", long 75°31'10", New Castle County, Hydrologic Unit 02040205, on right bank 100 ft (30 m) east of intersection of 44th and Pine Streets in Clifton Park, 700 ft (213 m) downstream from bridge on North Market Street in Wilmington, 0.2 mi (0.3 km) downstream from Matson Run, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--7.46 mi² (19.32 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1945 to current year.

REVISED RECORDS.--WSP 1382: 1948(m).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 15.16 ft (4.621 m) above mean sea level.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--30 years (water years 1947-76), 9.62 ft³/s (0.272 m³/s), 17.51 in/yr (445 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,850 ft³/s (194 m³/s) Sept. 13, 1971, gage height, 11.91 ft (3.630 m), from rating curve extended above 620 ft³/s (17.6 m³/s) on basis of computation of flow over dam at gage height 6.52 ft (1.987 m); contracted-opening measurements at gage heights 6.52 ft (1.987 m), 7.87 ft (2.429 m), and 8.6 ft (2.62 m), from floodmarks; type V culvert measurement at 9.10 ft (2.774 m); and contracted opening measurement of peak flow; minimum daily, 0.09 ft³/s (0.003 m³/s) Oct. 2, 4, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1940, that of Sept. 13, 1971. Flood of Aug. 1, 1945, reached a stage of about 8.5 ft (2.59 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft³/s (15 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	0630	926 26.2	4.25 1.295	May 1	1940	800 22.7	4.00 1.219
Nov. 12	1910	591 16.7	3.67 1.119	July 11	0920	*1050 29.7	4.48 1.366
Mar. 13	1250	668 18.9	3.80 1.158	July 29	2140	995 28.2	4.38 1.335

Minimum daily discharge, 0.30 ft³/s (0.008 m³/s) Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.3	3.3	103	10	2.0	45	95	48	2.9	1.5	.51
2	1.4	1.3	2.0	9.4	44	2.0	7.2	13	38	.88	1.1	1.3
3	1.2	1.3	1.7	39	5.7	2.0	4.3	3.5	4.3	14	1.0	1.0
4	1.2	1.4	1.6	10	5.6	2.5	9.9	2.4	2.5	6.7	.95	.68
5	1.2	1.4	1.6	4.1	4.0	2.5	4.8	2.1	2.0	1.3	.85	.59
6	1.2	1.1	1.6	3.1	3.2	2.5	3.4	1.8	1.6	.95	.87	.52
7	1.1	1.1	1.6	11	3.1	2.1	3.1	6.9	1.6	3.4	.96	.55
8	1.0	6.7	1.5	27	4.2	2.1	4.4	2.7	1.5	1.6	13	.47
9	2.9	1.4	1.9	3.9	3.4	3.1	3.0	1.6	1.6	1.6	34	.51
10	1.9	5.5	2.9	2.7	4.2	8.7	2.5	1.5	1.3	1.1	16	2.3
11	7.0	3.6	1.6	2.5	6.2	13	2.4	1.6	1.3	128	2.3	1.1
12	3.4	99	1.5	2.8	4.1	6.1	2.2	10	1.1	8.8	1.6	.64
13	1.3	58	1.4	6.5	3.8	62	2.1	1.6	.88	2.4	1.3	.55
14	1.2	7.7	1.4	13	5.0	8.3	2.1	1.6	.88	1.7	13	.43
15	.97	3.9	1.8	3.0	3.6	4.7	2.0	1.7	.95	2.8	7.4	.43
16	.93	2.9	2.5	2.4	3.9	13	2.0	3.0	.99	2.9	2.9	17
17	7.8	2.5	1.7	2.0	4.8	7.9	1.9	2.9	5.6	3.9	1.2	3.5
18	18	2.2	1.5	1.7	13	3.8	1.9	48	1.3	2.2	1.0	1.3
19	123	2.2	1.3	1.5	9.1	3.6	1.8	8.7	.97	1.1	.91	.67
20	10	2.1	1.4	1.7	2.9	3.2	2.1	2.7	1.2	.84	.84	.54
21	3.3	25	1.5	1.8	2.4	4.0	3.6	3.1	6.3	.88	.84	.48
22	2.1	7.2	1.5	2.0	20	3.2	2.8	2.7	3.1	1.3	.79	.41
23	1.7	3.2	1.6	2.0	5.1	2.7	1.8	1.9	1.1	.99	.84	.42
24	1.6	2.6	1.3	2.0	2.9	2.5	1.5	1.7	.91	7.0	.80	.35
25	5.2	2.4	1.6	1.6	2.6	2.5	2.6	1.7	.85	1.2	.74	.30
26	2.0	2.2	79	20	2.5	2.4	4.7	1.6	.71	.81	.76	.58
27	1.6	3.3	7.8	138	2.3	3.4	1.7	1.5	13	.69	2.3	.67
28	1.5	2.3	3.5	29	2.1	5.1	1.6	1.5	4.3	1.0	1.4	1.3
29	1.5	1.9	2.5	6.8	2.0	2.4	1.5	1.7	1.1	66	.86	.49
30	1.3	1.9	13	4.6	---	2.3	1.5	8.1	4.6	9.2	.65	18
31	1.3	---	39	3.3	---	3.8	---	2.0	---	2.1	.59	---
TOTAL	211.30	258.6	188.1	461.4	185.7	189.4	131.4	239.8	153.54	280.24	113.25	57.59
MEAN	6.82	8.62	6.07	14.9	6.40	6.11	4.38	7.74	5.12	9.04	3.65	1.92
MAX	123	99	79	138	44	62	45	95	48	128	34	18
MIN	.93	1.1	1.3	1.5	2.0	2.0	1.5	1.5	.71	.69	.59	.30
CFSM	.91	1.16	.81	2.00	.86	.82	.59	1.04	.69	1.21	.49	.26
IN.	1.05	1.29	.94	2.30	.93	.94	.66	1.20	.77	1.40	.56	.29
CAL YR 1975 TOTAL	4656.95			MEAN 12.8	MAX 330	MIN .53	CFSM 1.72	IN 23.22				
WTR YR 1976 TOTAL	2470.32			MEAN 6.75	MAX 138	MIN .30	CFSM .90	IN 12.32				

DELAWARE RIVER BASIN

01477800 SHELLPOT CREEK AT WILMINGTON, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
14...	1325	1.2	290	14.0	26.0	--	7.7
NOV							
04...	1205	1.4	306	14.5	25.5	--	7.4
25...	1320	2.4	270	8.5	8.0	12.2	7.1
DEC							
15...	1115	1.5	273	7.5	17.5	--	8.0
JAN							
02...	1100	7.8	224	1.0	1.0	--	7.6
23...	1230	2.0	473	.5	-6.0	--	6.9
FEB							
17...	1220	4.8	202	10.5	21.5	--	7.2
MAR							
08...	1210	2.0	153	7.5	10.0	--	8.6
29...	1240	2.4	189	12.0	18.0	--	8.4
APR							
19...	1200	1.7	245	22.0	34.0	--	9.2
MAY							
10...	1150	1.5	245	14.5	23.5	--	7.4
JUN							
02...	1135	34	139	17.0	14.0	--	7.6
21...	1215	1.2	264	24.0	27.0	--	7.5
JUL							
12...	1400	17	194	23.5	27.0	8.2	7.4
AUG							
03...	1420	1.0	--	22.0	23.5	--	7.7
23...	1610	.86	345	26.0	30.5	8.2	11.9

01478000 CHRISTINA RIVER AT COOCHS BRIDGE. DE

LOCATION.--Lat 39°38'14", long 75°43'43", New Castle County, Hydrologic Unit 02040205, on right bank 60 ft (18 m) downstream from highway bridge, 0.5 mi (0.8 km) southeast of Coochs Bridge, 3.6 mi (5.8 km) upstream from Muddy Run, 3.3 mi (5.3 km) south of Newark, and 22.6 mi (36.4 km) upstream from mouth.

DRAINAGE AREA. - - 20.5 mi² (53.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 25.54 ft (7.78 m) above mean sea level. Prior to Sept. 14, 1944, nonrecording gage on upstream side of bridge at same datum. Sept. 14, 1944, to May 13, 1969, recording gage at site on left bank at downstream side of highway bridge at same datum. May 26, 1969, to Dec. 5, 1973, recording gage on left bank 82 ft (25 m) downstream from highway bridge at same datum.

REMARKS.--Water-discharge records good. Low and medium flow regulated by mill above station.

AVERAGE DISCHARGE.--33 years, 27.2 ft³/s (0.770 m³/s), 18.02 in/yr (458 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,320 ft³/s (94.0 m³/s) June 22, 1972, gage height, 11.35 ft (3.459 m); maximum gage height, 12.41 ft (3.783 m) May 2, 1947; minimum daily discharge, 0.2 ft³/s (0.006 m³/s) Aug. 7, 14, 18, 21, 27, 28, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 19	0845	*1260	35.7	9.96	3.036	Jan. 27	2145	1230	34.8	9.92	3.024
Nov. 13	0030	1070	30.3	9.74	2.969	May 1	2130	1160	32.9	9.85	3.002
Jan. 1	0430	1230	34.8	9.93	3.027	July 11	1245	1250	35.4	9.95	3.033

Minimum daily discharge, 3.3 ft³/s (0.093 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	17	522	47	18	162	248	13	4.2	8.0	5.4
2	10	11	16	62	147	18	34	141	193	5.3	8.1	4.5
3	14	14	15	117	32	18	22	22	21	5.1	7.7	7.3
4	10	11	15	66	24	19	53	15	13	10	7.5	5.5
5	10	13	14	23	25	18	33	14	11	4.9	6.1	3.8
6	13	12	15	21	22	18	21	13	10	5.9	8.8	3.7
7	9.7	12	14	59	20	17	18	19	10	5.9	6.8	5.5
8	13	30	15	148	20	16	17	14	9.6	7.4	11	5.1
9	10	14	15	29	19	20	16	11	8.4	5.0	24	4.3
10	12	25	17	20	23	28	16	11	8.5	4.5	45	4.5
11	14	28	15	20	36	51	15	11	8.3	398	7.1	5.6
12	19	135	14	21	23	33	14	20	8.1	58	6.9	3.8
13	13	328	13	26	22	123	14	11	7.6	13	5.8	5.0
14	11	44	13	94	27	40	14	11	7.9	11	62	3.7
15	12	23	15	25	21	26	14	10	8.0	9.6	9.1	4.6
16	11	20	15	22	23	35	14	11	8.5	11	9.1	10
17	20	18	13	22	25	35	13	11	9.2	9.3	5.4	6.8
18	63	17	13	17	33	23	13	32	27	7.9	6.8	6.5
19	461	17	13	14	46	22	13	21	10	8.1	6.8	3.8
20	39	17	13	15	22	20	13	12	8.3	8.3	5.3	6.2
21	20	77	13	18	20	20	14	10	12	7.5	4.7	4.5
22	16	38	14	17	103	18	13	10	9.9	9.6	4.0	5.0
23	15	19	12	15	42	17	12	9.3	10	8.7	6.3	3.7
24	13	18	16	14	23	17	12	11	8.2	13	4.0	4.2
25	16	17	12	15	22	17	12	7.7	6.7	8.6	5.0	4.7
26	14	16	179	74	21	16	21	10	6.5	9.1	5.1	3.6
27	15	16	46	507	19	16	13	8.5	5.1	6.3	5.1	5.1
28	13	17	20	204	19	17	11	9.0	6.5	9.5	5.8	6.3
29	14	15	17	46	18	15	12	9.2	3.6	17	5.1	3.3
30	13	14	26	33	---	15	11	38	5.2	51	6.8	39
31	13	---	112	27	---	18	---	11	---	9.0	4.4	---
TOTAL	940.7	1048	757	2313	944	784	660	791.7	474.1	741.7	313.6	185.0
MEAN	30.3	34.9	24.4	74.6	32.6	25.3	22.0	25.5	15.8	23.9	10.1	6.17
MAX	461	328	179	522	147	123	162	248	193	398	62	39
MIN	9.7	11	12	14	18	15	11	7.7	3.6	4.2	4.0	3.3
CFSM	1.48	1.70	1.19	3.64	1.59	1.23	1.07	1.24	.77	1.17	.49	.30
IN.	1.71	1.90	1.37	4.20	1.71	1.42	1.20	1.44	.86	1.35	.57	.34
CAL YR 1975	TOTAL	16270.7	MEAN 44.6	MAX 929	MIN 8.4	CFSM 2.18	IN 29.52					
WTR YR 1976	TOTAL	9952.8	MEAN 27.2	MAX 522	MIN 3.3	CFSM 1.33	IN 18.06					

DELAWARE RIVER BASIN

01478000 CHRISTINA RIVER AT COOCHS BRIDGE, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA. WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
21...	1345	19	222	14.0	19.5	--	7.2
NOV							
13...	1340	218	112	11.5	7.5	--	7.0
DEC							
08...	1220	25	183	4.5	3.5	--	7.6
JAN							
22...	1130	17	350	.5	1.0	--	7.0
FEB							
26...	1320	21	79	8.0	16.5	--	7.3
APR							
12...	1130	12	141	8.0	9.0	--	7.9
MAY							
17...	1200	8.6	178	19.5	21.5	--	7.7
JUN							
11...	1115	8.1	164	22.5	24.0	--	7.4
29...	1500	3.2	--	28.0	32.0	--	7.5
JUL							
19...	1330	11	123	24.5	30.0	--	6.2
20...	1200	12	143	24.0	28.0	--	6.2
AUG							
12...	1130	6.2	--	--	--	6.5	--
SEP							
15...	1040	22	142	14.0	15.0	9.7	6.8

01478500 WHITE CLAY CREEK ABOVE NEWARK, DE

LOCATION.--Lat 39°42'52", long 75°45'34", New Castle County, Hydrologic Unit 02040205, on right bank at downstream wingwall of abandoned bridge, 0.9 mi (1.4 km) downstream from small tributary, 1.7 mi (2.7 km) southeast of Delaware-Maryland-Pennsylvania State corner, 2.1 mi (3.4 km) downstream from Pennsylvania-Delaware State line, 2.2 mi (3.5 km) north of Newark, and 12.8 mi (20.6 km) upstream from mouth.

DRAINAGE AREA.--66.7 mi² (172.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1952 to September 1959, July 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 78.6 ft (24.0 m) above mean sea level.

REMARKS.--Water-discharge records fair. Records do not include a negligible diversion above station by plant of E. I. du Pont de Nemours & Co.

AVERAGE DISCHARGE.--21 years (water years 1953-59, 1963-76), 84.8 ft³/s (2.402 m³/s), 17.27 in/yr (439 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,200 ft³/s (289 m³/s) June 22, 1972, gage height, 13.77 ft (4.197 m), from rating curve extended above 1,800 ft³/s (51.0 m³/s) on basis of contracted-opening measurements at gage heights 9.97 ft (3.039 m) and 13.77 ft (4.197 m); minimum, 4.6 ft³/s (0.13 m³/s) Dec. 7, 1954, gage height, 0.55 ft (0.168 m), result of freezeup; minimum daily, 5.6 ft³/s (0.16 m³/s) Sept. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	0730	2010 56.9	6.22 1.896	July 11	---	Unknown	---
Nov. 12	2230	1560 44.2	5.39 1.643	July 30	0200	*3190 90.3	8.09 2.466
Jan. 27	2100	2070 58.6	6.32 1.926				

Minimum daily discharge, 25 ft³/s (0.71 m³/s) Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	78	92	541	147	106	287	186	78	44	51	29
2	72	78	86	153	349	105	123	190	200	41	44	33
3	67	78	83	207	156	105	104	101	82	45	41	34
4	68	77	80	164	133	108	118	90	67	60	39	32
5	66	76	80	99	120	108	107	86	61	48	37	30
6	66	75	81	97	117	108	94	83	58	48	37	28
7	63	75	81	109	113	100	90	84	57	54	67	27
8	61	111	78	228	112	98	88	82	56	56	52	27
9	63	82	81	107	104	104	86	78	53	52	57	26
10	67	95	87	118	114	111	83	76	51	48	121	29
11	89	130	79	97	186	133	82	76	50	800	54	31
12	83	277	78	90	127	133	79	95	48	120	45	27
13	66	496	78	86	116	206	78	77	47	62	44	26
14	63	165	78	363	119	135	78	76	49	59	89	25
15	61	120	78	109	109	117	76	74	50	55	48	25
16	60	105	81	95	117	123	76	74	48	55	49	41
17	64	99	76	88	131	128	80	84	89	51	40	52
18	135	96	75	85	128	109	91	121	59	47	37	40
19	724	92	67	80	177	109	83	99	59	44	35	32
20	172	90	68	85	121	105	68	79	56	44	34	29
21	122	138	73	95	112	105	68	76	80	44	34	29
22	103	116	72	92	205	105	68	72	97	50	33	30
23	93	96	70	85	147	99	67	70	89	48	33	28
24	89	92	67	80	122	98	64	68	57	64	32	28
25	94	88	76	85	119	97	66	68	53	48	31	28
26	90	86	357	440	116	96	84	69	49	43	32	29
27	86	88	137	956	112	95	68	69	45	42	38	34
28	83	86	93	419	109	99	65	66	44	42	40	34
29	83	83	82	167	105	84	63	67	42	86	35	33
30	82	83	84	144	---	83	62	99	40	620	31	50
31	78	---	144	128	---	85	---	77	---	65	29	---
TOTAL	3186	3451	2842	5692	3943	3397	2646	2712	1914	2985	1389	946
MEAN	103	115	91.7	184	136	110	88.2	87.5	63.8	96.3	44.8	31.5
MAX	724	496	357	956	349	206	287	190	200	800	121	52
MIN	60	75	67	80	104	83	62	66	40	41	29	25
CFSM	1.54	1.72	1.37	2.76	2.04	1.65	1.32	1.31	.96	1.44	.67	.47
IN.	1.78	1.92	1.59	3.17	2.20	1.89	1.48	1.51	1.07	1.66	.77	.53

CAL YR 1975 TOTAL 55090 MEAN 151 MAX 3060 MIN 52 CFSM 2.26 IN 30.72
WTR YR 1976 TOTAL 35103 MEAN 95.9 MAX 956 MIN 25 CFSM 1.44 IN 19.58

DELAWARE RIVER BASIN

01478500 WHITE CLAY CREEK ABOVE NEWARK, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
OCT 28...	1410	83	234	8.0	23.0	14.5	--	--	--	--	--
NOV 18...	1100	108	250	7.0	--	7.5	12.5	88	35	22	8.0
DEC 02...	1115	84	244	8.0	6.0	5.0	--	--	--	--	--
16...	1240	80	234	8.4	10.5	9.0	--	--	--	--	--
JAN 20...	1330	84	238	7.6	-2.5	.5	--	--	--	--	--
MAR 04...	1120	105	204	7.7	10.0	6.5	--	--	--	--	--
APR 12...	1525	78	201	9.0	9.0	8.5	13.1	--	--	--	--
MAY 18...	1350	126	206	7.4	23.0	18.5	--	--	--	--	--
JUN 29...	1200	42	--	8.1	29.0	24.0	--	--	--	--	--
AUG 13...	1605	41	230	7.2	28.0	23.5	9.2	--	--	--	--

[illegible]

01478500 WHITE CLAY CREEK ABOVE NEWARK, DE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT											
28...	--	--	--	--	--	--	--	--	--	--	--
NOV											
18...	.69	.06	.05	1	0	0	40	4	40	2	10
DEC											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
JAN											
20...	--	--	--	--	--	--	--	--	--	--	--
MAR											
04...	--	--	--	--	--	--	--	--	--	--	--
APR											
12...	--	--	--	--	--	--	--	--	--	--	--
MAY											
18...	--	--	--	--	--	--	--	--	--	--	--
JUN											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
13...	--	--	--	--	--	--	--	--	--	--	--

NOV. 18, 1975
1100 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

403 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ANNELIDA		
..OLIGOCHAETA	AQUATIC EARTHWORMS	
...UNKNOWN ORDER		
...UNKNOWN FAMILY		
...UNKNOWN GENUS		1
ARTHROPODA		
..INSECTA		
..COLEOPTERA	BEETLES	
...ELMIDAE	RIFFLE BEETLES	
...DUBIRAPHIA		1
..DIPTERA		
...CHIRONOMIDAE	MIDGES	
...CRICOTOPUS		30
...METEROTRISOCLADIUS		13
...ORTHOCLADIUS		76
...RHEOTANYTARSUS		90
...THIENEMANNIELLA		43
...SIMULIIDAE	BLACK FLIES	
...SIMULIUM		8
...TIPULIDAE	CRANE FLIES	
...ANTOCHA		28
..EPHEMEROPTERA	MAY FLIES	
...BAETIDAE		
...PSEUDOCLOEON		3
...EPHEMERELLIDAE		
...EPHEMERELLA		7
...HEPTAGENIIDAE		
...STENONEMA		3
...SIPHONURIDAE		
...ISONYCHIA		1
..TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
...CHEUMATOPSYCHE		29
...HYDROPSYCHE		68
...HYDROPTILIDAE		
...LEUCOTRICHIA		2

NOTE: ANALYSIS METHOD: STAIN & SCREEN, DISSECTING MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.025
 CLASS 0.025
 ORDER 1.055
 FAMILY 1.607
 GENERA 3.115
 INSECTA 1.033

DELAWARE RIVER BASIN

01479000 WHITE CLAY CREEK NEAR NEWARK, DE

LOCATION.--Lat 39°41'57", long 75°40'33", New Castle County, Hydrologic Unit 02040205, on left bank 35 ft (11 m) downstream from bridge on private road owned by Delaware Racing Association, 0.4 mi (0.6 km) downstream from the Baltimore and Ohio Railroad bridge, 1.1 mi (1.8 km) downstream from Pike Creek, 3.8 mi (6.1 km) east of Newark, and 5.0 mi (8.0 km) upstream from mouth. Prior to April 8, 1976, at site 0.5 mi (0.8 km) upstream.

DRAINAGE AREA.--89.1 mi² (230.8 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1931 to September 1936, June 1943 to September 1957, October 1959 to current year.

Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1051: 1933(M). WSP 1382: 1932, 1934.

GAGE.--Water-stage recorder. Datum of gage is 9.00 ft (2.74 m) above mean sea level. Nov. 17, 1931, to Sept. 30, 1936, June 4, 1943, to Sept. 30, 1957, and Oct. 1, 1959, to Apr. 7, 1976, at site 0.5 mi (0.8 km) upstream at datum 2.6 ft (0.792 m) higher.

REMARKS.--Water-discharge records good. Slight diurnal fluctuation by low flow caused by mills above station.

Records do not include a negligible diversion above station by plant of E. I. du Pont de Nemours & Co.

AVERAGE DISCHARGE.--36 years (water years 1932-36, 1944-57, 1960-76), 111 ft³/s (3.144 m³/s), 16.92 in/yr (430 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,080 ft³/s (257 m³/s) June 22, 1972, gage height, 15.91 ft (4.849 m), present datum, from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 4.7 ft³/s (0.13 m³/s) Sept. 11, 1966; minimum daily, 5.0 ft³/s (0.14 m³/s) Sept. 10, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 23 ft (7 m), previous site and datum, in July 1937 (probably affected by backwater from railroad bridge which has since been raised and widened), from information by Baltimore & Ohio Railroad.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	0815	2240 63.4	10.99 3.350	July 11	1400	*4090 116	12.51 3.813
Jan. 27	2300	2640 74.8	11.62 3.542				

Minimum daily discharge, 32 ft³/s (0.91 m³/s) Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	86	117	703	178	124	431	364	102	55	66	39
2	101	85	110	236	468	121	169	352	440	52	59	43
3	94	85	102	279	191	120	139	126	112	58	56	43
4	100	85	97	238	180	123	166	105	82	74	55	40
5	102	83	96	130	160	120	145	99	73	61	56	38
6	100	81	97	125	159	119	130	94	68	59	56	36
7	95	83	96	140	150	108	122	95	69	66	69	35
8	93	127	94	301	148	105	115	96	68	70	66	34
9	98	93	96	150	138	114	109	91	66	63	84	34
10	101	106	104	160	135	132	105	87	63	61	150	40
11	138	146	93	150	208	150	105	84	63	1250	61	39
12	128	272	90	142	162	158	100	112	61	144	52	37
13	99	688	90	160	135	249	99	88	60	81	50	34
14	93	195	90	425	144	160	98	84	59	74	126	32
15	89	149	91	167	128	129	96	82	59	69	56	32
16	87	134	95	142	135	141	96	83	58	72	52	56
17	123	126	89	132	152	152	95	92	99	67	47	85
18	187	121	87	130	154	120	92	138	80	60	45	65
19	950	117	87	125	200	121	91	125	80	58	44	46
20	196	116	91	120	141	118	88	97	74	56	43	39
21	145	176	87	130	125	135	91	91	110	56	42	36
22	119	156	86	150	238	165	88	88	130	61	41	36
23	107	119	83	140	186	152	88	85	110	59	41	35
24	103	112	84	130	139	150	84	82	74	78	40	34
25	112	106	96	140	139	151	87	80	70	62	39	33
26	105	104	384	454	137	149	112	78	66	54	41	33
27	99	108	169	1250	135	148	91	77	62	51	48	37
28	95	106	122	826	132	159	85	75	58	51	50	37
29	94	101	109	227	126	146	84	75	56	87	42	37
30	91	100	130	183	---	144	82	130	52	999	39	47
31	86	---	231	164	---	150	---	105	---	84	37	---
TOTAL	4233	4166	3493	7949	4823	4333	3483	3460	2624	4192	1753	1212
MEAN	137	139	113	256	166	140	116	112	87.5	135	56.5	40.4
MAX	950	688	384	1250	468	249	431	364	440	1250	150	85
MIN	86	81	83	120	125	105	82	75	52	51	37	32
CFSM	1.54	1.56	1.27	2.87	1.86	1.57	1.30	1.26	.98	1.52	.63	.45
IN.	1.77	1.74	1.46	3.32	2.01	1.81	1.45	1.44	1.10	1.75	.73	.51

CAL YR 1975 TOTAL 73184 MEAN 201 MAX 3870 MIN 69 CFSM 2.26 IN 30.55
WTR YR 1976 TOTAL 45721 MEAN 125 MAX 1250 MIN 32 CFSM 1.40 IN 19.09

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

[illegible]

DELAWARE RIVER BASIN

01479000 WHITE CLAY CREEK NEAR NEWARK, DE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT 28...	--	--	--	--	--	--	--	--	--	--	--
NOV 18...	.79	.05	.03	1	0	0	60	4	40	3	160
NOV 28...	--	--	--	--	--	--	--	--	--	--	--
DEC 15...	--	--	--	--	--	--	--	--	--	--	--
JAN 21...	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	--	--	--	--	--	--	--	--	--	--	--
APR 12...	--	--	--	--	--	--	--	--	--	--	--
MAY 13...	--	--	--	--	--	--	--	--	--	--	--
JUN 09...	--	--	--	--	--	--	--	--	--	--	--
JUN 15...	--	--	--	--	--	--	--	--	--	--	--
JUN 29...	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	--	--	--	--	--	--	--	--	--	--	--

NOV. 1, 1974

IDENTIFICATION OF BENTHIC INVERTEBRATES

NO ORGANISMS FOUND

NOV. 18, 1975
1315 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

40 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..INSECTA		
...DIPTERA		
....CHIRONOMIDAE	MIDGES	9
....CRICOTOPUS		15
....ORTHOCLADIUS		5
....TANYTARSUS		
....EMPIDIDAE	DANCE FLIES	1
....HEMERODROMIA		
....TIPULIDAE	CRANE FLIES	7
....ANTOCHA		
...TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
...HYDROPSYCHE		2
...HYDROPTILIDAE		
...LEUCOTRICHIA		1

NOTE: ANALYSIS METHOD: STAIN & SCREEN, DISSECTING MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:ORDER 0.384
FAMILY 1.259
GENERA 2.312
INSECTA 0.384

01480000 RED CLAY CREEK AT WOODDALE, DE

LOCATION.--Lat 39°45'52", long 75°38'08", New Castle County, Hydrologic Unit 02040205, on right bank 12 ft (4 m) upstream from bridge on State Highway 48, 0.3 mi (0.5 km) south of Wooddale, 2.3 mi (3.7 km) north of Marshallton, and 4.9 mi (7.9 km) upstream from mouth.

DRAINAGE AREA.--47.0 mi² (121.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1943 to current year.

REVISED RECORDS.--WSP 1141: 1948. WSP 1272: 1951(M). WSP 1432: 1944(M), 1945, 1946(M), 1948, 1949(M). WSP 2102: 1960(M), 1964(M), 1966-67(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 81.46 ft (24.829 m) above mean sea level. Prior to Sept. 21, 1950, nonrecording gage at site 10 ft (3 m) downstream at same datum.

REMARKS.--Water-discharge records good. Some diurnal fluctuation at low flow caused by mills above station.

AVERAGE DISCHARGE.--33 years, 64.3 ft³/s (1.821 m³/s), 18.58 in/yr (472 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,010 ft³/s (142 m³/s) July 21, 1975, gage height, 10.32 ft (3.146 m); minimum, 2.9 ft³/s (0.082 m³/s) Sept. 4, 1966; minimum daily, 4.5 ft³/s (0.13 m³/s) Sept. 4, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	0800	*1540 43.6	5.36 1.634	Jan. 27	2115	1390 39.4	5.14 1.567

Minimum discharge, 4.5 ft³/s (0.13 m³/s) June 11, Aug. 23, 24, 25, result of regulation; minimum daily, 16 ft³/s (0.45 m³/s) Sept. 9, 13, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	50	65	371	106	69	205	180	42	29	35	19
2	54	51	60	119	233	67	93	126	120	25	25	22
3	49	50	58	161	101	68	76	55	46	27	27	22
4	49	49	56	125	93	69	86	47	36	37	26	20
5	48	48	56	80	90	71	77	44	33	28	25	20
6	47	47	56	73	85	74	70	43	31	24	25	18
7	45	48	55	91	76	66	66	48	31	25	26	17
8	45	78	53	190	75	64	66	40	30	25	43	18
9	47	54	56	85	74	70	64	38	29	26	46	16
10	50	66	61	73	80	79	61	39	28	23	109	21
11	66	90	54	62	120	99	60	34	28	161	38	21
12	68	176	53	73	89	93	57	54	26	48	32	17
13	50	347	53	88	83	163	58	38	24	32	29	16
14	48	109	53	225	85	101	57	37	26	30	83	16
15	45	81	53	78	76	81	57	37	28	28	39	16
16	44	72	55	68	83	91	57	38	28	28	33	39
17	48	68	51	60	95	92	55	44	53	26	28	38
18	123	66	51	55	90	73	55	83	34	22	26	24
19	498	64	45	49	126	73	53	60	34	21	24	20
20	117	63	47	60	84	70	53	41	30	21	24	19
21	80	127	49	64	77	70	53	40	54	21	23	20
22	67	93	48	60	165	70	54	35	54	25	22	20
23	63	71	47	56	110	64	53	34	43	23	22	18
24	60	67	45	60	87	64	48	32	34	33	23	18
25	64	64	44	64	84	63	51	32	32	22	19	18
26	60	62	256	200	79	62	75	32	30	20	21	24
27	58	65	103	591	76	61	52	32	27	20	27	25
28	57	61	71	293	73	65	49	30	28	19	27	23
29	55	59	62	121	70	60	48	31	26	47	22	19
30	54	59	66	100	---	60	47	47	26	195	19	29
31	50	---	122	88	---	60	---	38	---	40	20	---
TOTAL	2264	2405	2004	3883	2765	2332	1956	1509	1091	1151	988	633
MEAN	73.0	80.2	64.6	125	95.3	75.2	65.2	48.7	36.4	37.1	31.9	21.1
MAX	498	347	256	591	233	163	205	180	120	195	104	39
MIN	44	47	44	49	70	60	47	30	24	19	19	16
CFSM	1.55	1.71	1.37	2.66	2.03	1.60	1.39	1.04	.77	.79	.68	.45
IN.	1.79	1.90	1.59	3.07	2.19	1.85	1.55	1.19	.86	.91	.78	.50

CAL YR 1975	TOTAL	39537	MEAN 108	MAX 1630	MIN 44	CFSM 2.30	IN 31.29
WTR YR 1976	TOTAL	22981	MEAN 62.8	MAX 591	MIN 16	CFSM 1.34	IN 18.19

DELAWARE RIVER BASIN

01480000 RED CLAY CREEK AT WOODDALE, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: April 1953 to current year.

INSTRUMENTATION.--Temperature recorder since April 1953.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 30.5°C July 17, Aug. 2, 6, 1955, July 19, 1963; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.5°C June 26; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
28...	1145	58	306	15.5	16.5	--	7.3
NOV							
28...	1120	62	256	7.0	5.5	--	7.8
DEC							
29...	1335	61	281	2.4	5.0	--	7.9
JAN							
21...	0925	64	310	.0	-1.5	--	7.3
FEB							
27...	1140	78	165	8.6	16.0	--	7.5
APR							
12...	1215	54	223	7.5	4.5	14.0	7.8
MAY							
18...	1430	88	244	18.6	21.0	--	7.7
JUN							
02...	1340	137	242	17.5	14.0	--	7.4
28...	1010	30	254	24.0	28.5	--	7.6
AUG							
13...	1235	29	370	24.0	29.0	7.7	7.1

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

01480000 RED CLAY CREEK AT WOODDALE, DE--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

DELAWARE RIVER BASIN

01480100 LITTLE MILL CREEK AT ELSMERE, DE

LOCATION.--Lat 39°44'05", long 75°35'14", New Castle County, Hydrologic Unit 02040205, on left bank at downstream side of bridge on North Du Pont Road at Elsmere, 0.5 mi (0.8 km) downstream from unnamed tributary, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--6.70 mi² (17.35 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1968. Prior to Mar. 19, 1964, nonrecording gage at same site and datum. Datum of gage is 48.62 ft (14.819 m) above mean sea level.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--13 years, 10.1 ft³/s (0.286 m³/s), 20.47 in/yr (520 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,960 ft³/s (112 m³/s) Aug. 10, 1967, gage height, 8.58 ft (2.615 m), from rating curve extended above 380 ft³/s (10.8 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 0.10 ft³/s (0.003 m³/s) July 17, 18, Sept. 18, 19, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft³/s (9.9 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. '19	0515	534 15.1	4.36 1.329	May 1	2015	471 13.3	4.19 1.277
Nov. 12	1815	374 10.6	3.90 1.189	July 29	2230	*1040 29.5	5.63 1.716

Minimum discharge, 1.2 ft³/s (0.042 m³/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	3.4	4.9	102	12	5.2	45	74	23	2.1	2.0	1.6
2	4.3	3.5	3.6	12	45	5.3	8.7	16	52	1.7	1.9	2.7
3	4.0	3.4	3.5	37	8.5	5.4	6.1	5.6	5.1	12	1.8	1.8
4	4.2	3.6	3.4	13	8.3	5.5	13	4.1	3.4	9.7	1.8	1.5
5	3.8	3.6	3.3	6.9	6.5	5.7	7.7	3.7	2.9	3.1	1.8	1.5
6	4.0	3.6	3.4	5.9	6.3	5.2	5.9	3.5	2.7	2.0	1.7	1.3
7	3.8	3.6	3.3	25	5.7	4.2	5.4	4.0	2.8	8.2	5.2	1.4
8	3.8	10	3.4	34	6.0	4.3	6.5	3.5	2.7	2.6	9.8	1.4
9	4.6	4.1	4.3	8.5	5.5	6.4	5.4	3.1	2.5	2.2	33	1.4
10	4.4	9.6	4.4	6.0	5.9	11	4.8	3.4	2.3	1.7	15	5.3
11	11	5.8	3.4	5.4	7.3	11	4.6	3.3	2.4	73	3.1	1.7
12	6.5	77	3.3	6.5	5.7	7.3	4.4	8.6	2.2	5.3	2.7	1.4
13	4.0	49	3.3	9.6	5.5	33	4.3	3.1	2.0	2.7	2.4	1.4
14	3.9	8.5	3.6	17	6.3	9.3	4.3	3.2	2.2	2.4	9.6	1.3
15	4.7	5.4	3.7	6.3	5.0	6.5	4.3	3.0	2.2	2.5	3.9	1.4
16	4.5	4.7	4.3	5.6	5.5	13	4.2	5.1	2.2	5.3	2.9	14
17	13	4.2	3.3	4.7	6.1	9.0	4.1	4.3	6.1	3.1	2.4	7.9
18	18	3.9	3.3	4.3	11	5.9	3.9	15	3.8	1.9	2.0	2.4
19	97	3.8	3.1	4.2	12	6.1	4.1	6.9	2.7	4.7	1.8	1.7
20	9.8	3.7	3.0	5.2	6.0	5.9	4.1	3.5	3.0	1.7	1.9	1.6
21	5.5	21	3.0	5.8	5.3	5.4	5.1	3.2	9.5	2.1	1.8	1.7
22	4.6	7.5	3.3	4.9	26	4.8	6.3	2.7	3.9	2.1	1.7	1.7
23	3.8	4.7	2.9	4.8	9.2	4.6	4.1	2.5	2.4	1.9	1.8	1.4
24	3.8	4.3	2.6	4.3	6.3	4.8	3.5	2.5	2.2	7.3	1.8	1.4
25	5.5	4.0	2.6	4.2	6.0	7.0	4.2	2.5	2.1	2.4	1.8	1.5
26	4.3	3.8	62	21	5.6	11	7.0	2.7	1.9	1.8	1.8	1.8
27	3.8	4.7	7.8	122	5.9	10	3.7	2.6	3.3	1.6	3.1	2.2
28	3.8	3.8	4.5	37	6.2	9.6	3.6	2.4	3.1	1.5	2.1	2.2
29	3.6	3.6	3.8	10	5.2	4.2	3.4	3.2	2.1	62	1.9	1.6
30	3.6	3.5	13	7.4	---	4.2	3.2	8.2	2.1	27	1.7	24
31	3.4	---	39	5.9	---	6.1	---	3.0	---	2.8	1.6	---
TOTAL	259.5	275.3	216.3	546.4	255.8	236.9	194.9	212.4	160.8	260.4	127.8	94.2
MEAN	8.37	9.18	6.98	17.6	8.82	7.64	6.50	6.85	5.36	8.40	4.12	3.14
MAX	97	77	62	122	45	33	45	74	52	73	33	24
MIN	3.4	3.4	2.6	4.2	5.0	4.2	3.2	2.4	1.9	1.5	1.6	1.3
CFSM	1.25	1.37	1.04	2.63	1.32	1.14	.97	1.02	.80	1.25	.61	.47
IN.	1.44	1.53	1.20	3.03	1.42	1.32	1.08	1.18	.89	1.45	.71	.52

CAL YR 1975 TOTAL 4850.9 MEAN 13.3 MAX 262 MIN 2.6 CFSM 1.99 IN 26.93
WTR YR 1976 TOTAL 2840.7 MEAN 7.76 MAX 122 MIN 1.3 CFSM 1.16 IN 15.77

01480100 LITTLE MILL CREEK AT ELSMERE, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT 29...	1330	3.9	248	19.0	24.5	--	8.2
NOV 13...	1130	50	155	12.5	14.5	--	7.0
DEC 16...	1055	4.5	193	9.5	11.0	--	7.9
JAN 21...	1100	5.1	228	.0	.0	--	7.4
FEB 27...	1250	5.8	103	13.0	17.0	--	7.0
APR 12...	1045	4.3	215	8.0	4.5	13.0	7.1
MAY 18...	1600	6.5	198	21.0	16.0	--	7.6
JUN 28...	1220	2.6	223	29.5	30.5	--	8.8
AUG 13...	1025	2.2	245	24.0	27.5	13.5	7.7

DELAWARE RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA

LOCATION.--Lat 39°52'11", long 75°35'37", Delaware County, Hydrologic Unit 02040205, on left bank 27 ft (8 m) upstream from Penn Central Railroad bridge at Chadds Ford, 150 ft (46 m) upstream from Harvey Run and 1,200 ft (370 m) downstream from highway bridge on U.S. Highway 1.

DRAINAGE AREA.--287 mi² (743 km²), including that of Harvey Run.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1911 to December 1953, October 1962 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1202: 1919-20, 1932-33, 1936, 1938(P), 1942, (maximum only, 1917-18, 1922-31, 1934, 1939, 1944-46). WDR PA-72: 1971.

GAGE.--Water-stage recorder. Datum of gage is 150.45 ft (45.857 m) above mean sea level. Prior to May 21, 1927, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Marsh Creek Reservoir about 17 mi (27 km) upstream.

AVERAGE DISCHARGE.--56 years (water years 1912-53, 1963-76), 390 ft³/s (11.0 m³/s), 18.44 in/yr (468 mm/yr), adjusted for storage since November 1973.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,800 ft³/s (674 m³/s) June 22, 1972, gage height, 16.56 ft (5.047 m), from rating curve extended above 9,000 ft³/s (255 m³/s) on basis of area-velocity study; minimum, 4.9 ft³/s (0.14 m³/s) Oct. 2, 1941, gage height, 0.28 ft (0.085 m); minimum daily, 42 ft³/s (1.19 m³/s) Sept. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,200 ft³/s (147 m³/s) Jan. 28, gage height, 8.78 ft (2.676 m); minimum, 104 ft³/s (2.95 m³/s) Sept. 7, gage height, 1.45 ft (0.442 m); minimum daily, 114 ft³/s (3.23 m³/s) Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	422	377	390	2230	703	479	1580	480	241	327	232	147
2	406	375	390	999	1420	436	676	641	1460	214	201	160
3	382	371	370	943	713	437	510	361	467	193	184	156
4	372	369	361	1010	645	451	480	313	318	219	168	151
5	364	362	355	689	622	456	463	295	276	241	160	144
6	358	356	358	646	595	460	430	286	254	210	180	147
7	345	352	355	611	554	428	410	281	250	193	267	121
8	335	412	346	725	547	413	398	276	241	267	232	121
9	336	390	349	469	516	423	398	267	227	259	528	121
10	350	406	374	419	482	451	375	263	223	193	666	132
11	410	500	353	422	714	473	366	254	214	1670	327	151
12	593	601	339	429	681	516	361	366	214	765	250	129
13	395	1520	339	435	520	799	356	286	206	342	219	121
14	359	700	340	1370	529	629	351	267	206	286	422	114
15	343	513	337	570	486	474	337	267	206	259	259	114
16	333	467	352	466	494	459	347	267	201	250	263	241
17	332	443	343	445	580	480	337	332	380	259	214	463
18	737	428	333	356	592	421	332	370	267	219	180	286
19	2410	417	309	350	799	421	323	366	241	197	164	214
20	978	410	306	346	558	413	323	281	236	188	160	176
21	651	478	303	342	504	427	318	295	402	184	164	164
22	524	467	301	340	709	446	323	281	418	241	156	164
23	479	418	300	339	661	424	318	254	394	193	147	151
24	452	405	298	338	512	421	295	241	267	272	144	136
25	462	396	298	337	500	419	309	236	232	201	132	136
26	447	388	1090	1200	494	414	366	236	214	176	136	156
27	428	397	741	3360	517	411	313	241	201	164	593	180
28	414	399	474	3080	508	473	290	227	206	164	475	164
29	405	379	446	954	496	426	290	227	201	201	232	147
30	401	375	530	760	---	412	286	286	267	1260	188	176
31	383	---	765	665	---	408	---	272	---	309	160	---
TOTAL	15606	13871	12545	25645	17651	14200	12253	9315	9130	10116	7803	4983
MEAN	503	462	405	827	609	458	408	300	304	326	252	166
MAX	2410	1520	1090	3360	1420	799	1580	641	1460	1670	666	463
MIN	332	352	298	337	482	408	286	227	201	164	132	114
MEAN#	500	461	386	794	594	471	431	308	316	336	252	166
CFSM#	1.74	1.61	1.34	2.77	2.07	1.64	1.50	1.07	1.10	1.17	0.88	0.58
IN.#	2.01	1.80	1.54	3.19	2.23	1.89	1.67	1.23	1.23	1.35	1.02	0.65

CAL YR 1975 TOTAL 230286 MEAN 631 MAX 7640 MIN 227 MEAN# 629 CFSM# 2.19 IN.# 29.77
WTR YR 1976 TOTAL 153118 MEAN 418 MAX 3360 MIN 114 MEAN# 418 CFSM# 1.46 IN.# 19.82

Adjusted for change in contents in Marsh Creek Reservoir.

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1963 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1965 to current year.

pH: October 1965 to September 1966, December 1971 to current year.

WATER TEMPERATURES: October 1964 to current year.

DISSOLVED OXYGEN: October 1971 to current year.

SUSPENDED SEDIMENT DISCHARGE: July 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 445 micromhos Oct. 25, 1971; minimum, 71 micromhos June 23, 1972.

pH: Maximum, 9.8 Apr. 9, 1975; minimum, 6.1 Feb. 22, 1976.

WATER TEMPERATURES: Maximum, 29.0°C Aug. 9, 17, 1965; minimum daily, 0.0°C on many days during winter months.

DISSOLVED OXYGEN: Maximum, 16.5 mg/L Jan. 13, 1973; minimum, 4.7 mg/L July 10, 1975.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,000 mg/L (estimated) Feb. 8, 1965; minimum daily mean, 1 mg/L on many days.

SEDIMENT DISCHARGES: Maximum daily, 20,000 tons (18,100 tonnes) (estimated) Feb. 8, 1965; minimum daily, 0 tons (0 tonnes) on Oct. 7, 8, 1967.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 397 micromhos Jan. 26; minimum, 139 micromhos June 2.

pH: Maximum, 9.2 Mar. 26; minimum, 6.1 Feb. 22.

WATER TEMPERATURES: Maximum, 26.5°C June 26-29; minimum, 0.0°C on many days during winter months.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 726 mg/L July 11; minimum daily mean, 1 mg/L on several days during October through December.

SEDIMENT DISCHARGES: Maximum daily, 5,410 tons (4,910 tonnes) July 11; minimum daily, 0.83 tons (0.75 tonnes) Dec. 19, 20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT										
06...	1440	366	260	8.1	15.0	10.8	880	--	--	--
16...	1230	337	240	7.9	17.0	9.2	81500	--	--	--
22...	0850	555	245	7.2	13.0	9.2	--	--	--	--
30...	1130	425	210	7.4	13.5	10.0	--	81	32	20
31...	1030	390	250	7.2	9.0	10.8	390	--	--	--
NOV										
10...	1345	390	255	7.0	15.0	9.6	--	--	--	--
17...	1115	460	280	7.1	7.5	12.2	--	--	--	--
DEC										
05...	1330	356	240	7.4	4.5	13.5	--	--	--	--
12...	0900	342	280	6.3	4.5	9.8	320	--	--	--
17...	0900	347	260	7.2	6.0	10.8	8230	--	--	--
30...	1500	530	225	7.6	4.0	14.3	390	--	--	--
JAN										
07...	1155	645	235	6.8	.5	13.5	230	--	--	--
14...	0900	2240	300	6.7	4.0	12.6	440	--	--	--
21...	1430	415	280	7.0	.5	14.0	--	--	--	--
29...	0930	980	250	6.9	3.5	13.0	--	--	--	--
FEB										
05...	1200	660	330	6.8	3.0	13.6	--	--	--	--
11...	1500	685	280	7.1	5.0	12.0	--	--	--	--
19...	1200	875	260	6.6	8.0	10.1	--	--	--	--
27...	0915	560	230	6.8	7.0	11.2	--	--	--	--
MAR										
03...	1030	455	240	6.7	6.5	10.8	--	--	--	--
16...	1230	445	260	6.4	6.5	11.0	570	--	--	--
26...	0830	420	250	7.3	12.0	6.6	370	--	--	--
APR										
02...	0945	690	200	6.5	9.5	10.4	650	--	--	--
07...	0900	425	210	6.8	9.5	9.4	870	--	--	--
13...	1345	361	210	8.0	9.0	14.0	8420	--	--	--
22...	1300	347	226	7.1	20.0	8.6	240	--	--	--
28...	0830	318	250	7.2	9.5	11.2	1200	--	--	--
MAY										
06...	1400	290	230	7.8	16.0	10.8	--	--	--	--
12...	0930	475	230	6.8	15.5	8.6	--	--	--	--
18...	1230	385	220	6.8	19.0	7.6	2600	--	--	--
27...	0930	268	220	7.0	14.0	8.2	360	--	--	--
JUN										
03...	1100	470	180	6.9	15.5	8.8	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

[illegible]

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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)
JUN								
08...	0900	273	220	6.9	19.0	8.2	700	1.9
16...	1100	237	240	7.1	23.0	8.0	360	2.1
22...	1300	405	200	7.1	23.0	6.8	E6000	6.7
29...	1015	228	230	7.1	25.0	7.2	380	3.5
JUL								
07...	1330	240	225	7.4	24.0	8.4	420	4.4
16...	0830	246	220	7.2	21.5	8.4	410	--
23...	0830	224	225	7.5	21.5	8.0	320	--
28...	1330	206	250	8.2	23.0	11.6	230	4.0
AUG								
04...	0900	206	300	7.1	20.0	10.0	400	--
13...	1230	232	320	7.2	23.5	9.2	510	--
27...	1000	152	260	7.4	24.0	8.0	360	3.0
SEP								
02...	1230	168	240	7.5	20.0	10.0	240	3.2
15...	0930	156	207	7.4	19.0	8.6	200	4.8
22...	1230	215	190	7.6	17.0	10.0	220	--

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
JAN											
14...	1030	1940	4.0	479	2510	37	56	77	91	99	100

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	273	266	270	272	266	268	256	247	252	245	169	194
2	276	265	270	270	260	266	255	248	253	249	213	223
3	277	267	272	264	258	262	259	254	256	245	225	232
4	277	270	275	267	258	263	262	257	259	250	214	224
5	281	272	277	270	264	267	267	262	---	226	219	223
6	276	271	273	268	264	266	---	---	---	232	225	228
7	277	272	275	269	264	268	---	---	---	246	227	230
8	281	275	278	270	261	265	---	---	---	364	251	312
9	282	275	279	270	255	259	---	---	---	305	270	290
10	280	271	277	260	246	254	233	232	---	272	265	269
11	276	270	273	253	238	246	236	231	233	266	256	259
12	271	236	249	248	202	236	243	235	239	283	258	263
13	251	242	248	215	202	210	243	235	239	334	280	302
14	255	250	253	234	214	225	245	239	242	299	210	244
15	252	242	247	244	234	239	253	239	246	246	217	236
16	243	237	240	248	244	246	255	238	248	253	246	251
17	246	235	242	247	244	245	259	254	257	259	253	256
18	235	214	222	253	248	252	261	254	258	275	256	265
19	218	151	181	257	251	254	264	258	260	278	267	272
20	221	178	202	259	255	257	280	265	271	272	263	269
21	241	223	234	261	243	252	277	269	274	330	262	281
22	251	240	246	250	243	246	274	263	268	350	302	317
23	260	250	254	256	245	251	269	264	266	366	322	338
24	259	252	256	255	253	254	275	260	267	366	294	317
25	262	255	259	255	251	253	274	263	268	306	295	301
26	261	253	257	257	252	255	308	239	266	397	283	313
27	258	254	256	257	251	254	244	226	234	271	228	242
28	263	255	259	263	253	259	275	240	258	248	226	236
29	269	260	264	255	249	252	264	257	261	259	249	255
30	264	260	262	253	250	252	259	227	240	263	257	260
31	272	263	267	---	---	---	231	221	226	267	257	263
MONTH	282	151	255	272	202	253	308	221	254	397	169	263

DELAWARE RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	266	259	262	232	226	230	242	167	200	266	231	255
2	265	223	240	237	230	235	222	183	206	233	216	222
3	259	238	253	244	236	241	231	223	227	244	222	233
4	286	260	272	249	244	246	240	231	235	271	246	257
5	335	260	300	250	240	245	240	228	233	262	237	246
6	262	250	254	248	242	245	237	231	235	240	227	234
7	266	248	257	243	236	240	239	207	219	234	230	232
8	294	248	260	244	237	240	216	210	212	235	230	233
9	292	252	273	246	238	241	217	209	213	234	225	231
10	257	238	251	296	241	260	214	208	211	234	225	230
11	274	251	260	386	313	342	218	211	214	234	224	230
12	250	228	237	310	259	281	221	206	212	235	223	228
13	250	242	246	268	237	256	212	206	209	229	221	226
14	255	247	250	237	222	227	217	209	213	237	229	234
15	253	244	249	244	237	240	216	206	211	242	233	238
16	251	248	249	266	243	254	217	212	214	248	239	244
17	257	251	253	268	261	264	220	211	215	248	218	234
18	264	243	250	266	261	264	219	213	216	228	219	223
19	270	246	256	272	266	269	225	212	219	233	217	223
20	261	248	255	275	264	270	224	213	220	232	222	226
21	259	252	255	272	266	269	226	222	223	236	231	233
22	256	245	250	274	260	266	227	218	223	243	231	236
23	252	241	246	267	261	264	225	220	222	244	237	241
24	260	251	255	267	261	264	227	221	224	244	233	240
25	258	254	256	269	261	266	229	221	226	243	233	238
26	264	255	257	272	246	256	230	216	222	244	235	241
27	263	233	241	255	244	249	242	219	231	235	220	227
28	234	228	231	249	243	247	252	243	249	235	221	228
29	233	229	232	246	233	238	255	249	254	236	230	234
30	---	---	---	246	236	241	265	255	260	235	215	226
31	---	---	---	248	241	244	---	---	---	220	209	215
MONTH	335	223	253	386	222	255	265	167	222	271	209	233
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	216	211	214	248	209	222	357	321	332	236	225	229
2	185	139	154	253	215	233	339	332	336	246	231	238
3	216	159	181	269	253	261	334	307	323	255	243	248
4	266	206	230	282	269	276	310	299	305	254	243	248
5	273	225	243	280	263	269	322	301	309	251	243	247
6	232	225	229	262	245	253	322	310	316	249	238	245
7	279	226	240	261	225	252	318	280	304	250	246	---
8	279	227	239	235	219	227	307	295	301	---	---	---
9	233	229	231	246	207	235	301	203	264	237	227	---
10	237	231	234	251	199	219	244	202	230	243	233	239
11	245	233	238	263	233	255	274	240	254	248	230	241
12	241	234	238	262	143	208	297	276	288	246	227	237
13	246	237	241	314	169	238	325	299	311	237	228	232
14	244	239	242	360	295	325	315	232	283	240	230	233
15	241	235	238	317	295	307	291	256	274	245	202	218
16	242	235	238	293	221	258	274	255	265	207	190	201
17	237	204	220	279	223	239	268	244	253	192	144	158
18	225	213	219	277	263	270	248	242	245	166	149	158
19	234	221	227	277	257	269	249	245	247	169	162	167
20	239	234	237	280	277	279	259	244	249	179	170	177
21	237	188	225	280	275	278	258	248	253	188	174	179
22	209	184	197	287	246	281	261	252	257	198	184	189
23	226	206	215	282	219	240	264	254	257	196	187	191
24	229	212	218	233	220	225	266	249	258	198	191	194
25	255	231	247	222	213	219	258	254	255	204	197	200
26	304	252	265	229	214	223	262	253	257	202	198	199
27	310	287	303	230	218	223	264	149	237	200	189	196
28	316	268	292	242	230	235	171	145	159	196	184	190
29	267	226	243	241	206	229	201	173	189	199	191	195
30	242	229	238	303	226	261	230	203	218	198	191	194
31	---	---	---	325	303	318	234	222	228	---	---	---
MONTH	316	139	233	360	143	252	357	145	266	255	144	209

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

OCTOBER				NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.3	7.2	7.2	7.8	7.4	7.6	7.5	6.5	7.1	7.0	6.9	6.9
2	7.4	7.2	7.3	7.9	7.5	7.6	7.7	7.1	7.3	7.0	6.9	7.0
3	7.4	7.2	7.3	7.7	7.3	7.5	7.6	7.1	7.4	7.0	7.0	7.0
4	7.4	7.2	7.3	7.8	7.1	7.5	7.7	7.3	7.5	7.1	6.9	7.0
5	7.5	7.2	7.3	7.8	7.2	7.5	7.4	7.2	---	7.1	7.0	7.1
6	8.5	7.2	7.8	7.8	7.1	7.5	---	---	---	7.5	7.1	7.2
7	8.4	7.5	7.9	8.0	7.1	7.6	---	---	---	7.3	7.1	7.2
8	8.6	7.6	8.0	7.7	7.3	7.5	---	---	---	7.3	7.2	7.2
9	8.0	7.6	7.7	7.7	7.2	7.4	---	---	---	7.4	7.3	7.3
10	7.7	7.5	7.6	7.3	7.1	7.2	7.9	7.7	---	7.4	7.3	7.4
11	7.8	7.6	7.7	7.3	7.1	7.2	8.1	7.5	7.7	7.4	7.3	7.3
12	7.7	7.5	7.6	7.1	6.7	7.0	7.7	7.5	---	7.5	7.3	7.4
13	7.7	7.4	7.6	6.9	6.7	6.8	---	---	---	7.4	7.3	7.4
14	7.9	7.5	7.7	7.0	6.9	7.0	---	---	---	7.2	6.7	7.0
15	8.0	7.5	7.7	7.1	6.9	7.0	7.8	7.5	---	7.1	7.0	7.0
16	8.0	7.6	7.7	7.1	6.9	7.0	8.0	7.3	7.6	7.1	7.0	7.1
17	7.6	7.2	7.3	7.3	6.9	7.1	7.9	7.3	7.6	7.2	7.1	7.1
18	8.0	6.9	7.6	7.3	7.1	7.2	8.0	7.4	7.7	7.2	7.1	7.1
19	8.2	6.9	7.2	7.4	7.1	7.2	8.0	7.6	7.8	7.1	6.6	7.0
20	7.2	7.1	7.1	7.4	7.1	7.3	7.9	7.6	7.8	7.1	7.0	7.1
21	7.2	7.1	7.1	7.3	6.6	7.0	7.9	7.6	7.7	7.2	7.0	7.1
22	7.2	7.0	7.2	7.3	7.1	7.2	7.8	7.5	7.7	7.2	7.2	7.2
23	7.2	7.1	7.1	7.3	7.0	7.2	7.9	7.6	7.7	7.2	7.1	7.1
24	7.1	7.0	7.1	7.3	7.0	7.1	7.8	7.6	7.7	7.1	7.0	7.1
25	7.1	7.0	7.0	7.3	7.0	7.2	7.8	7.6	7.7	7.1	7.1	7.1
26	7.2	7.0	7.1	7.5	7.1	7.3	7.7	7.3	7.4	7.1	6.8	7.0
27	7.3	7.1	7.2	7.2	6.3	7.0	7.5	7.4	7.5	6.9	6.8	6.9
28	7.4	7.1	7.2	7.6	7.0	7.3	7.7	7.5	7.6	7.4	6.8	7.0
29	7.4	7.2	7.3	7.6	7.1	7.3	7.7	7.6	7.7	7.1	6.9	7.0
30	7.5	7.2	7.3	7.5	7.0	7.2	7.7	7.2	7.4	7.1	7.1	7.1
31	7.6	7.2	7.4	---	---	---	7.2	7.0	7.1	7.1	7.0	7.1
MONTH	8.6	6.9	7.4	8.0	6.3	7.3	8.1	6.5	---	7.5	6.6	7.1
FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.1	7.0	7.0	8.0	6.9	7.4	8.1	7.1	7.3	8.0	7.0	7.3
2	7.0	6.9	7.0	7.4	6.9	7.1	7.3	6.7	7.0	7.2	6.9	7.0
3	7.1	7.0	7.0	7.4	6.7	7.1	7.3	6.9	7.1	7.1	7.0	---
4	7.1	7.0	7.0	7.5	7.0	7.3	7.1	6.9	7.0	---	---	---
5	7.0	6.8	6.9	7.7	7.0	7.3	7.7	6.9	7.2	---	---	---
6	6.9	6.9	6.9	7.7	6.9	7.3	7.9	6.9	7.4	8.3	7.8	---
7	7.0	6.8	6.9	7.7	7.0	7.4	8.2	7.0	7.6	8.3	7.4	7.8
8	7.0	6.9	7.0	7.8	7.0	7.4	8.2	7.0	7.6	8.6	7.5	8.0
9	7.1	7.0	7.0	7.6	7.0	7.2	8.4	7.1	7.8	8.7	7.8	8.3
10	7.1	7.0	7.1	7.9	6.9	7.4	8.4	7.2	7.9	8.8	7.8	8.4
11	7.1	7.0	7.0	8.1	7.1	7.6	8.4	7.2	7.0	8.5	7.8	8.2
12	6.9	6.9	6.9	7.8	7.1	7.4	8.6	7.3	8.0	7.8	6.9	7.4
13	6.9	6.8	6.9	7.3	7.0	7.1	8.6	7.5	8.1	7.8	6.9	7.3
14	7.0	6.8	6.9	7.5	7.1	7.3	8.6	7.4	7.9	7.6	7.0	7.2
15	7.0	6.8	6.9	7.7	7.1	7.4	8.2	7.2	7.5	7.7	7.0	7.3
16	7.0	6.8	6.9	7.5	7.0	7.2	8.0	7.1	7.4	7.3	7.0	7.1
17	7.0	6.8	6.9	7.9	7.2	7.5	7.8	7.0	7.3	7.2	7.0	7.1
18	7.0	6.8	6.9	7.9	7.3	7.6	7.5	6.9	7.1	7.3	6.9	7.1
19	6.9	6.6	6.8	8.2	7.3	7.8	7.6	7.0	7.2	7.4	7.2	7.3
20	7.2	6.9	7.0	8.5	7.3	7.9	7.3	6.8	7.0	7.5	7.2	7.4
21	7.2	6.6	7.0	8.2	7.3	7.8	7.5	6.9	7.1	7.4	7.2	7.3
22	7.5	6.1	6.8	8.5	7.3	7.9	7.7	6.8	7.2	7.5	7.2	7.3
23	7.1	6.8	7.0	8.4	7.4	8.0	8.0	7.0	7.5	7.6	7.2	7.4
24	7.1	6.8	7.0	8.6	7.4	8.0	8.0	7.1	7.5	7.6	7.2	7.4
25	7.2	6.8	7.0	8.8	7.4	8.2	7.5	7.0	7.2	7.4	7.2	7.3
26	7.3	6.9	7.1	9.2	7.4	8.5	7.3	6.9	7.1	7.5	7.2	7.3
27	7.7	6.8	7.2	8.9	7.8	8.4	7.9	7.1	7.5	7.9	7.2	7.5
28	7.7	6.9	7.3	9.0	7.5	8.3	8.1	7.2	7.7	8.0	7.3	7.6
29	7.8	7.0	7.4	9.1	7.6	8.4	8.2	7.3	7.8	7.6	7.2	7.4
30	---	---	---	9.1	7.7	8.5	8.3	7.3	7.8	7.3	7.2	7.2
31	---	---	---	8.8	7.7	8.3	---	---	---	7.6	7.1	7.3
MONTH	7.8	6.1	7.0	9.2	6.7	7.7	8.6	6.7	7.4	8.8	6.9	7.5

DELAWARE RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.7	7.1	7.4	7.3	7.0	7.1	7.6	7.1	7.3	7.9	7.2	7.5
2	7.1	6.9	7.0	7.4	6.9	7.1	7.6	7.4	7.5	7.6	7.2	7.4
3	7.1	6.9	---	7.6	7.1	7.3	7.8	7.2	7.4	8.1	7.3	7.7
4	---	---	---	7.6	7.1	7.3	8.4	7.2	7.9	8.4	7.4	7.9
5	---	---	---	8.1	7.2	7.5	8.7	7.5	8.2	8.4	7.4	7.9
6	---	---	---	8.2	7.8	8.0	8.8	7.8	8.4	8.3	7.4	7.9
7	---	---	---	8.0	7.7	7.8	8.1	7.1	7.4	8.0	7.4	---
8	7.5	7.3	---	7.9	7.6	7.7	7.3	7.0	7.1	---	---	---
9	7.7	7.2	7.4	7.7	7.2	7.5	7.2	7.0	7.1	8.2	7.5	---
10	7.9	7.1	7.4	7.5	7.1	7.3	7.1	7.0	7.1	7.9	7.4	7.6
11	7.9	7.0	7.4	7.8	7.3	7.5	7.2	7.0	7.1	7.9	7.4	7.6
12	7.9	6.9	7.3	7.6	6.8	7.1	7.3	7.0	7.2	8.1	7.4	7.7
13	7.5	6.9	7.2	7.3	6.8	7.1	7.5	7.1	7.3	8.1	7.4	7.7
14	7.2	6.9	7.0	7.3	7.2	7.3	7.3	6.8	7.1	8.2	7.4	7.8
15	7.3	6.9	7.1	7.4	7.2	7.3	7.1	6.9	7.0	8.2	7.4	7.7
16	7.7	6.9	7.3	7.5	7.2	7.3	7.4	6.9	7.0	7.7	7.5	7.6
17	7.4	6.9	7.1	7.9	7.4	7.5	7.5	7.1	7.3	7.5	7.3	7.4
18	7.2	6.9	7.0	7.8	7.4	7.6	8.0	7.3	7.7	7.6	7.3	7.4
19	7.7	7.1	7.3	8.1	7.4	7.7	8.2	7.2	7.7	7.5	7.3	7.4
20	7.8	7.4	7.6	8.5	7.5	7.9	8.2	7.3	7.8	7.8	7.2	7.5
21	7.5	7.1	7.3	8.6	7.7	8.2	8.3	7.3	7.8	7.6	7.4	7.5
22	7.2	7.0	7.1	8.6	7.5	7.9	8.4	7.2	7.9	7.8	7.5	7.6
23	7.5	7.1	7.2	7.9	7.3	7.5	8.5	7.2	7.9	7.8	7.5	7.6
24	7.7	7.3	7.5	7.8	7.2	7.5	8.4	7.3	7.9	7.9	7.4	7.7
25	8.1	7.4	7.7	8.0	7.4	7.7	8.3	7.2	7.9	7.9	7.4	7.7
26	7.7	7.3	7.5	8.2	7.4	7.8	8.4	7.3	7.9	7.7	7.5	7.6
27	7.7	7.3	7.5	8.5	7.4	8.0	8.2	6.9	7.4	7.7	7.4	7.5
28	7.8	7.3	7.6	8.7	7.5	8.2	6.9	6.8	6.9	7.9	7.4	7.6
29	7.7	7.2	7.5	8.6	6.9	7.6	7.2	6.8	7.0	7.9	7.4	7.7
30	7.5	7.2	7.4	7.2	6.9	7.0	7.5	7.1	7.3	7.7	7.4	7.5
31	---	---	---	7.5	7.1	7.2	7.6	7.2	7.4	---	---	---
MONTH	8.1	6.9	7.3	8.7	6.8	7.5	8.8	6.8	7.5	8.4	7.2	7.6

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.0	3.5	4.0	10.0	8.5	9.0	13.0	11.5	12.0	15.5	13.5	14.0
2	5.0	0.0	2.0	9.5	8.0	8.5	13.0	8.5	10.0	16.0	13.5	14.5
3	1.0	0.0	0.5	8.0	6.5	7.0	10.0	7.0	9.0	15.5	14.5	15.0
4	3.0	0.5	1.5	8.5	6.5	7.5	9.5	8.5	9.0	14.5	12.0	13.0
5	3.0	1.5	2.5	11.5	8.5	10.0	9.5	6.5	8.0	15.0	10.5	12.5
6	1.5	0.5	1.0	11.5	8.0	10.0	11.0	8.0	9.5	18.0	14.5	16.0
7	1.0	0.0	0.5	8.0	6.0	7.0	13.0	9.5	11.0	19.0	17.0	18.0
8	3.5	1.0	2.0	8.0	6.0	7.0	11.5	9.5	10.5	18.0	15.0	16.0
9	3.5	2.0	3.0	6.5	2.0	4.5	10.0	8.5	9.0	15.5	13.5	14.5
10	4.5	1.5	3.0	5.0	1.5	3.0	10.5	7.0	9.0	16.5	14.0	15.0
11	5.0	4.0	4.5	8.0	5.0	6.5	10.5	9.0	10.0	17.0	15.5	16.5
12	4.0	3.0	3.5	7.0	5.0	6.0	8.5	6.0	7.5	16.5	15.0	16.0
13	5.5	3.5	4.5	8.5	5.0	7.0	10.5	6.5	8.5	16.0	14.0	15.0
14	6.0	5.0	5.5	8.0	6.0	7.0	14.0	9.5	11.5	18.0	15.0	16.5
15	5.0	3.5	4.0	8.0	6.0	7.0	14.0	11.0	12.5	20.5	17.0	19.0
16	8.5	5.0	6.5	8.0	6.0	6.5	16.5	12.0	14.5	20.5	20.0	20.0
17	9.5	8.0	9.0	6.0	4.0	5.0	19.5	15.5	17.5	20.0	18.5	19.5
18	8.5	8.0	8.5	5.5	2.0	4.0	21.0	18.0	19.5	19.5	17.0	18.5
19	8.5	7.0	8.0	9.5	5.0	7.0	22.0	19.0	20.5	16.5	13.0	14.0
20	8.0	6.0	7.0	13.0	9.0	11.0	23.0	20.0	21.5	15.5	11.5	13.5
21	8.0	5.0	6.0	14.0	12.0	13.0	23.5	20.5	22.0	18.0	15.0	16.5
22	9.5	8.0	9.0	13.0	10.0	11.0	22.0	19.5	20.5	18.5	16.0	17.5
23	7.0	4.0	5.5	9.5	7.0	9.0	19.0	16.5	18.0	18.0	16.0	17.0
24	5.0	3.0	4.0	11.0	8.0	9.5	18.0	15.5	16.5	18.0	16.0	17.0
25	7.0	4.5	6.0	12.0	10.0	11.0	16.5	14.0	15.0	17.0	15.5	16.5
26	8.5	7.0	8.0	14.5	10.5	13.0	14.0	10.5	12.5	15.0	14.5	15.0
27	9.5	7.0	8.5	15.0	13.5	14.5	10.0	9.0	9.5	16.5	13.5	15.0
28	9.0	7.0	8.0	15.0	13.5	14.5	13.0	9.0	11.0	18.5	15.5	17.0
29	9.0	6.0	7.5	14.5	11.5	13.0	14.5	11.5	13.0	18.0	16.5	17.0
30	---	---	---	13.5	11.5	12.5	15.5	12.0	14.0	17.0	16.5	16.5
31	---	---	---	13.0	11.5	12.0	---	---	---	19.0	16.0	17.5
MONTH	9.5	0.0	5.0	15.0	1.5	9.0	23.5	6.0	13.0	20.5	10.5	16.0
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.0	18.5	20.0	24.5	23.5	24.0	24.5	20.5	22.5	19.5	17.0	18.5
2	19.5	15.5	17.0	24.5	22.0	23.5	22.0	21.5	22.0	19.5	18.5	19.0
3	18.0	14.5	16.5	24.5	22.0	23.5	22.0	19.5	21.0	20.0	18.0	19.0
4	19.0	16.0	17.5	24.0	21.5	22.5	22.0	19.5	21.5	20.0	18.0	19.0
5	19.0	16.0	18.0	24.0	21.0	22.5	23.0	20.0	21.5	21.0	18.5	19.5
6	18.5	16.5	17.0	24.5	21.5	23.5	24.0	21.0	22.5	20.0	18.0	19.0
7	20.0	15.5	17.5	23.5	23.0	23.5	23.0	21.5	22.0	18.5	16.5	---
8	21.0	19.0	20.0	24.0	23.5	23.5	22.0	21.5	21.5	---	---	---
9	23.5	19.5	21.5	23.5	22.0	23.0	21.5	20.0	20.5	21.0	19.5	---
10	24.5	21.0	23.0	24.5	21.0	23.0	21.0	19.5	20.0	21.0	19.0	20.0
11	25.0	22.0	23.5	25.0	22.0	23.5	23.0	19.5	21.0	19.5	17.0	18.5
12	25.0	22.0	23.5	24.0	20.5	21.5	23.5	21.0	22.0	20.0	16.5	18.5
13	23.5	20.5	22.0	23.0	21.0	21.5	24.5	21.5	23.5	20.5	17.0	19.5
14	20.5	20.0	20.5	21.5	19.5	20.5	24.5	21.5	23.0	21.0	18.0	20.0
15	23.0	19.5	21.0	21.5	19.0	20.0	24.0	23.0	23.5	20.5	19.0	19.5
16	24.5	22.0	23.0	23.5	20.5	21.5	23.5	21.5	22.5	19.5	19.0	19.5
17	23.5	22.0	23.0	24.0	22.0	23.0	23.0	20.0	21.5	20.5	19.0	20.0
18	24.5	23.0	23.5	24.0	20.5	22.0	22.0	20.5	21.5	20.0	19.5	20.0
19	25.5	23.0	24.0	23.5	20.0	22.0	22.0	19.5	21.0	20.5	19.0	20.0
20	26.0	24.5	25.0	24.5	21.0	22.5	21.5	19.0	20.5	20.5	19.0	19.5
21	25.0	24.0	24.5	24.0	22.0	23.5	23.0	19.5	21.5	19.5	18.0	19.0
22	24.0	23.0	23.5	24.0	22.0	22.5	24.0	21.0	22.5	18.0	16.0	16.5
23	24.0	21.5	23.0	22.0	21.0	21.5	25.0	22.0	24.0	16.5	14.0	15.5
24	25.5	23.0	24.0	23.5	20.5	22.0	25.0	23.0	24.0	16.5	15.0	16.0
25	26.0	24.5	25.0	24.0	21.5	23.0	24.5	22.0	23.5	16.5	15.5	16.0
26	26.5	24.5	25.5	23.0	20.0	21.5	25.0	23.0	24.0	16.0	15.0	15.5
27	26.5	24.0	25.5	22.0	20.0	21.5	25.0	21.5	23.5	18.0	16.0	17.0
28	26.5	24.0	25.5	24.0	20.5	22.5	23.0	21.5	22.0	19.0	17.0	18.0
29	26.5	24.5	25.5	24.0	20.5	22.5	24.0	22.0	23.0	17.0	15.5	16.5
30	25.5	24.0	24.5	24.0	21.5	22.5	23.0	20.0	21.0	16.0	14.0	14.5
31	---	---	---	24.5	23.0	23.5	20.0	18.0	19.0	---	---	---
MONTH	26.5	14.5	22.0	25.0	19.0	22.5	25.0	18.0	22.0	21.0	14.0	18.5

DELAWARE RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.1	8.5	8.8	11.7	10.3	10.9	11.3	10.0	10.8	---	---	---
2	9.5	8.6	8.9	11.0	9.4	10.3	13.2	11.1	12.1	---	---	---
3	10.9	9.7	10.4	10.5	8.8	9.7	14.1	12.1	13.1	12.0	11.2	---
4	12.0	11.1	11.4	10.3	8.4	9.3	14.5	12.9	13.6	12.9	11.1	12.1
5	12.0	11.1	11.5	9.8	8.1	8.9	13.8	12.8	---	13.8	12.8	13.3
6	12.0	11.0	11.3	10.0	7.8	8.8	---	---	---	13.7	12.4	13.0
7	12.7	10.6	11.6	12.2	8.8	10.7	---	---	---	13.2	11.8	12.5
8	13.3	10.4	11.7	10.7	9.1	9.8	---	---	---	12.7	11.6	11.9
9	11.5	10.2	---	10.5	8.2	9.2	---	---	---	14.7	12.6	13.9
10	---	---	---	10.3	8.4	9.3	12.2	11.2	---	14.6	14.0	14.4
11	---	---	---	11.8	9.9	11.0	12.7	10.6	11.6	14.4	13.5	13.9
12	---	---	---	12.4	11.1	11.7	11.6	9.9	10.9	13.2	12.2	12.8
13	---	---	---	11.8	10.7	11.2	10.4	9.4	9.8	14.0	12.5	13.4
14	---	---	---	12.4	11.4	---	10.3	8.7	9.3	13.1	12.5	12.8
15	---	---	---	---	---	---	9.3	8.0	---	13.4	13.0	13.2
16	10.0	8.6	---	---	---	---	---	---	---	13.3	12.2	12.8
17	9.9	8.1	9.0	12.7	11.8	---	12.7	11.0	---	13.7	12.0	12.7
18	9.3	8.2	8.8	12.5	11.1	11.9	14.0	10.9	12.7	14.6	14.0	---
19	9.9	8.3	8.9	11.7	10.4	11.2	14.2	13.5	---	---	---	---
20	10.4	10.0	10.3	11.5	9.9	10.5	---	---	---	---	---	---
21	10.9	10.4	10.7	9.9	8.5	9.1	---	---	---	15.1	14.5	---
22	10.4	9.0	9.7	10.1	8.5	9.3	---	---	---	15.0	14.3	14.7
23	9.4	8.7	9.1	11.7	9.7	10.5	---	---	---	15.4	14.5	14.9
24	9.5	8.1	8.7	11.1	10.1	10.6	---	---	---	15.2	14.5	14.8
25	9.0	8.5	8.8	11.9	10.1	10.7	---	---	---	14.9	14.1	14.6
26	9.1	8.3	8.7	13.2	10.1	11.9	---	---	---	14.3	12.7	13.4
27	9.8	8.8	9.2	12.2	11.2	11.7	13.0	12.3	---	14.1	13.0	13.5
28	9.9	8.6	9.3	12.9	10.9	11.9	13.4	12.4	13.1	15.0	13.3	14.0
29	9.3	7.9	8.7	13.7	11.9	12.7	13.9	13.3	13.7	13.5	12.2	12.8
30	9.4	7.9	8.6	12.9	11.3	12.1	14.1	13.1	13.5	12.7	12.2	12.5
31	11.4	8.8	10.2	---	---	---	13.1	12.3	12.8	13.1	12.6	12.8
MONTH	13.3	7.9	---	13.7	7.8	10.6	---	---	---	15.4	11.1	---
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.6	10.8	11.9	12.0	10.0	11.0	---	---	---	11.0	8.6	9.5
2	13.2	10.1	---	10.3	9.0	9.8	12.5	10.5	---	8.5	7.0	7.7
3	---	---	---	12.5	9.8	11.3	13.2	11.5	12.6	9.9	8.0	8.9
4	---	---	---	12.0	10.5	11.3	11.8	10.8	11.3	11.8	9.0	10.2
5	14.1	13.5	---	10.4	9.7	---	13.7	11.1	12.8	11.3	9.3	10.3
6	15.0	14.0	14.5	---	---	---	13.4	11.5	12.3	11.7	8.4	10.0
7	15.5	14.6	15.1	---	---	---	12.1	9.7	10.9	11.3	8.2	9.7
8	15.0	13.0	14.1	---	---	---	11.8	9.2	10.5	12.2	8.1	10.1
9	13.7	13.0	13.3	---	---	---	13.0	10.1	11.6	12.9	8.9	10.9
10	13.9	11.8	13.2	14.2	12.6	---	13.3	10.1	11.8	13.2	9.6	11.2
11	12.3	11.1	11.7	13.2	11.6	12.4	12.1	9.0	10.4	11.4	8.7	10.0
12	13.3	12.4	12.8	13.1	11.2	12.1	13.8	10.4	12.2	11.5	7.8	9.5
13	12.6	11.1	12.1	12.2	10.5	11.0	14.4	10.4	12.5	12.3	8.3	10.2
14	11.7	10.9	11.3	12.2	10.6	11.4	14.2	10.0	12.1	9.9	8.0	9.0
15	12.3	10.9	11.8	12.4	11.0	11.6	14.3	9.3	11.6	9.2	7.0	7.9
16	10.9	10.2	---	11.1	10.7	10.9	12.1	9.2	10.8	---	---	---
17	---	---	---	13.4	10.9	12.4	12.6	7.9	9.9	8.4	7.7	---
18	---	---	---	14.3	12.7	13.7	11.2	6.8	8.8	8.0	6.9	7.5
19	10.0	9.5	---	12.7	10.5	12.0	10.9	5.9	8.4	9.0	7.7	8.4
20	11.4	9.6	10.4	11.4	9.3	10.3	10.0	7.0	8.4	9.7	8.1	8.9
21	11.8	10.4	11.2	10.2	8.2	9.0	9.2	6.4	7.7	7.9	7.0	---
22	10.2	8.7	9.1	11.7	8.4	10.0	9.2	6.2	7.6	---	---	---
23	10.9	9.0	10.1	12.4	9.9	11.1	10.1	6.7	8.4	---	---	---
24	11.3	10.5	---	12.0	9.4	10.7	10.7	7.4	8.9	9.9	8.7	---
25	---	---	---	11.0	8.2	9.4	8.5	7.4	7.7	9.3	7.4	8.5
26	---	---	---	8.5	7.8	---	8.9	7.0	8.1	9.5	8.1	8.8
27	12.5	11.1	---	---	---	---	11.2	8.8	9.9	9.5	8.3	8.8
28	12.7	10.5	11.6	---	---	---	13.3	9.1	11.6	8.9	7.1	8.0
29	12.6	10.8	11.7	---	---	---	13.5	10.5	12.0	---	---	---
30	---	---	---	---	---	---	13.5	10.3	11.7	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	15.5	8.7	---	---	---	---	14.4	5.9	10.4	13.2	6.9	---

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)		MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)		MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)		MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)		MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH									
1	13	15	1	1.0	3	3.2	225	1350	25	47	5	6.5								
2	9	9.9	1	1.0	3	3.2	52	140	200	767	5	5.9								
3	8	8.3	2	2.0	8	8.0	40	102	15	29	5	5.9								
4	5	5.0	1	1.0	15	15	45	123	12	21	4	4.9								
5	5	4.9	2	2.0	20	19	10	19	7	12	6	7.4								
6	5	4.8	2	1.9	8	7.7	9	16	6	9.6	8	9.9								
7	6	5.6	1	.95	5	4.8	12	20	10	15	13	15								
8	5	4.5	3	3.3	4	3.7	27	53	6	8.9	11	12								
9	5	4.5	2	2.1	4	3.8	10	13	3	4.2	12	14								
10	8	7.6	7	7.7	3	3.0	5	5.7	4	5.2	11	13								
11	10	11	14	19	3	2.9	7	8.0	15	29	11	14								
12	34	54	60	97	5	4.6	9	10	40	74	12	17								
13	17	18	145	595	5	4.6	6	7.0	14	20	24	52								
14	16	16	22	42	4	3.7	280	1040	10	14	20	34								
15	11	10	11	15	3	2.7	65	100	7	9.2	14	18								
16	8	7.2	7	8.8	4	3.8	12	15	5	6.7	11	14								
17	6	5.4	3	3.6	3	2.8	5	6.0	20	31	10	13								
18	60	119	3	3.5	1	.90	7	6.7	17	27	8	9.1								
19	235	1530	5	5.6	1	.83	8	7.6	54	116	9	10								
20	46	121	5	5.5	1	.83	10	9.3	19	29	8	8.9								
21	14	25	9	12	2	1.6	12	11	14	19	10	12								
22	8	11	8	10	3	2.4	9	8.3	29	56	10	12								
23	8	10	4	4.5	3	2.4	8	7.3	22	39	11	13								
24	10	12	4	4.4	2	1.6	8	7.3	5	6.9	10	11								
25	9	11	5	5.3	3	2.4	7	6.4	3	4.1	10	11								
26	8	9.7	3	3.1	95	280	140	454	6	8.0	9	10								
27	8	9.2	5	5.4	53	106	550	4990	6	8.4	7	7.8								
28	6	6.7	3	3.2	14	18	400	3330	4	5.5	25	32								
29	4	4.4	2	2.0	6	7.2	56	144	4	5.4	12	14								
30	2	2.2	2	2.0	9	13	28	57	---	---	10	11								
31	1	1.0	---	---	20	41	18	32	---	---	11	12								
TOTAL	---	2063.90	---	869.85	---	574.66	---	12098.60	---	1427.10	---	430.33								

DELAWARE RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	405	2620	39	51	16	10	30	26	22	14	8	3.2
2	67	122	55	95	700	2760	23	13	14	7.6	9	3.9
3	17	23	14	14	160	202	21	11	11	5.5	9	3.8
4	10	13	6	5.1	44	38	16	9.5	10	4.5	7	2.9
5	10	13	3	2.4	24	18	14	9.1	9	3.9	7	2.7
6	12	14	3	2.3	21	14	12	6.8	8	3.9	8	3.2
7	13	14	2	1.5	15	10	11	5.7	12	8.7	10	3.3
8	18	19	2	1.5	20	13	16	12	10	6.3	9	2.9
9	16	17	3	2.2	18	11	40	28	48	68	12	3.9
10	15	15	2	1.4	15	9.0	25	13	65	117	15	5.3
11	13	13	2	1.4	12	6.9	726	5410	20	18	16	6.5
12	12	12	13	13	10	5.8	200	413	15	10	15	5.2
13	11	11	4	3.1	10	5.6	58	54	14	8.3	11	3.6
14	12	11	3	2.2	11	6.1	37	29	65	74	8	2.5
15	12	11	3	2.2	11	6.1	30	21	20	14	11	3.4
16	13	12	5	3.6	12	6.5	27	18	16	11	32	21
17	12	11	12	11	70	72	22	15	11	6.4	42	53
18	15	13	18	18	26	19	13	7.7	7	3.4	14	11
19	16	14	22	22	18	12	9	4.8	7	3.1	12	6.9
20	15	13	7	5.3	18	11	6	3.0	6	2.6	13	6.2
21	14	12	8	6.4	44	48	7	3.5	8	3.5	13	5.8
22	15	13	7	5.3	115	130	9	5.9	10	4.2	11	4.9
23	15	13	6	4.1	75	80	6	3.1	8	3.2	10	4.1
24	14	11	6	3.9	47	34	16	12	5	1.9	9	3.3
25	14	12	7	4.5	39	24	9	4.9	7	2.5	8	2.9
26	14	14	7	4.5	22	13	8	3.8	11	4.0	10	4.2
27	10	8.5	7	4.6	20	11	7	3.1	105	168	13	6.3
28	11	8.6	5	3.1	26	14	6	2.7	58	74	9	4.0
29	13	10	6	3.7	12	6.5	12	6.5	17	11	10	4.0
30	11	8.5	18	14	18	13	350	1190	12	6.1	16	7.6
31	---	---	15	11	---	---	39	33	11	4.8	---	---
TOTAL	---	3101.60	---	323.30	---	3609.50	---	7378.10	---	673.40	---	201.50

TOTAL LOAD FOR YEAR: 32751.81 TONS.

01481500 BRANDYWINE CREEK AT WILMINGTON, DE

LOCATION.--Lat 39°46'09", long 75°34'25", New Castle County, Hydrologic Unit 02040205, on right bank in Rockford Park, 0.2 mi (0.3 km) downstream from Henry Clay Bridge, in Wilmington, and 4.2 mi (6.8 km) upstream from mouth.

DRAINAGE AREA.--314 mi² (813 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to current year. Prior to December 1946 monthly discharge only, published in WSP 1302.

REVISED RECORDS.--WSP 1432: 1948, 1950.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 68.23 ft (20.797 m) above mean sea level.

REMARKS.--Water-discharge records good. Some diurnal fluctuation at low flow caused by mills above station. Flow regulated since November 1973 by Marsh Creek Reservoir about 27 mi (43 km) upstream. No diversion just above station by plant of E. I. du Pont de Nemours & Co. since June 13, 1960.

AVERAGE DISCHARGE.--30 years, 469 ft³/s (13.28 m³/s), 20.28 in/yr (515 mm/yr), adjusted for storage since November 1973.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,000 ft³/s (821 m³/s) June 23, 1972, gage height, 15.49 ft (4.721 m), from rating curve extended above 18,000 ft³/s (510 m³/s); minimum, about 30 ft³/s (0.85 m³/s) Dec. 26, 1948, during period of ice effect; minimum daily, 56 ft³/s (1.59 m³/s) Aug. 23, 24, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (110 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	1700	4700 133	7.33 2.234	Jan. 28	0815	*5240 148	7.96 2.426

Minimum discharge, 120 ft³/s (3.40 m³/s) Sept. 7, 8, 10, 14, 15; minimum daily, 122 ft³/s (3.46 m³/s) Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466	364	426	2830	902	597	1780	669	276	286	272	144
2	443	365	431	1340	1750	519	987	962	1440	209	233	153
3	412	361	407	1210	975	517	670	463	609	186	213	153
4	397	355	392	1340	867	538	621	358	326	205	197	147
5	392	345	384	938	833	553	597	336	276	217	186	144
6	386	338	388	844	779	563	542	320	254	197	183	141
7	373	328	385	855	708	502	511	320	250	179	286	136
8	358	408	373	1080	698	471	491	310	237	201	286	125
9	360	386	374	679	645	484	482	295	217	267	621	128
10	379	382	405	445	597	548	454	290	209	183	844	133
11	432	548	385	500	800	588	445	290	197	1790	358	153
12	655	858	364	564	950	662	436	418	197	1280	254	136
13	441	2020	361	532	657	987	427	331	186	378	225	128
14	392	778	362	1720	679	869	418	300	186	300	445	122
15	363	615	359	811	597	580	405	300	190	276	290	122
16	340	548	375	633	597	549	410	290	186	267	263	179
17	338	513	366	575	718	601	402	364	347	267	221	501
18	742	489	354	370	779	481	402	445	263	237	186	267
19	2970	473	323	370	1040	482	386	482	221	209	166	217
20	1070	462	322	472	728	461	378	320	205	194	166	172
21	674	565	330	491	633	458	370	320	326	190	163	159
22	557	561	332	460	890	465	370	315	402	250	159	159
23	506	483	318	370	925	417	370	281	364	201	159	153
24	474	460	304	430	657	407	342	267	245	276	153	144
25	485	443	304	450	621	404	347	263	217	229	147	141
26	473	431	1290	1250	609	395	454	263	194	183	150	144
27	444	439	908	3540	657	387	364	267	186	176	445	166
28	426	447	555	3330	633	475	336	250	194	176	633	163
29	406	420	495	1250	621	411	326	245	172	281	254	150
30	398	410	584	1040	---	382	320	300	225	1560	190	166
31	376	---	838	902	---	375	---	295	---	394	156	---
TOTAL	16928	15595	13794	31621	22545	16128	14843	10929	8797	11244	8504	4946
MEAN	546	520	445	1020	777	520	495	353	293	363	274	165
MAX	2970	2020	1290	3540	1750	987	1780	962	1440	1790	844	501
MIN	338	328	304	370	597	375	320	245	172	176	147	122
(*)	-3.1	- .7	-19.2	-32.8	-14.8	+13.2	+22.9	+7.8	+12.3	+9.8	- .2	- .5
MEAN*	543	519	426	987	762	533	518	361	305	373	274	165
CFSM*	1.73	1.65	1.36	3.14	2.43	1.70	1.65	1.15	.97	1.19	.87	.53
IN*	1.99	1.84	1.56	3.62	2.62	1.96	1.84	1.33	1.08	1.37	1.01	.59

CAL YR 1975 TOTAL 261548 MEAN 717 MAX 6570 MIN 245 MEAN* 715 CFSM* 2.28 IN* 30.92
WTR YR 1976 TOTAL 175874 MEAN 481 MAX 3540 MIN 122 MEAN* 481 CFSM* 1.53 IN* 20.86

* Change in contents in Marsh Creek Reservoir, equivalent in cubic feet per second, furnished by Pennsylvania Department of Environmental Resources.

* Adjusted for change in reservoir contents.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1956 to September 1961, February 1971 to September 1973, October 1974 to current year.

SUSPENDED-SEDIMENT DISCHARGE: December 1946 to September 1961, July 1962 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 30.0°C June 17, 1957; minimum, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,700 mg/L Feb. 14, 1966; minimum daily mean, 1 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 35,700 tons (32,400 tonnes), Feb. 14, 1971; minimum daily, less than 0.50 ton (0.45 tonnes) on many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 27.5°C on June 26, 27; minimum, 0.0°C on many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 650 mg/L June 2, July 11; minimum daily mean, 1 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 5,540 tons (5,020 tonnes) Jan. 27; minimum daily, 0.98 tons (0.89 tonnes) on Dec. 12.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	HARDNESS (CA, MG/L)
OCT 01...	1230	436	210	7.8	20.5	15.5	1	12.8	76
NOV 03...	1230	351	224	7.8	24.0	12.5	--	--	--
DEC 01...	1310	434	214	7.9	9.0	9.0	--	--	--
JAN 02...	1240	1280	199	6.8	-5	1.5	18	14.1	51
FEB 04...	1315	822	195	7.7	6.0	2.5	--	--	--
MAR 01...	1230	614	141	7.7	19.0	10.0	--	--	--
APR 01...	1245	2970	150	7.5	13.5	10.5	10	--	63
MAY 03...	1130	464	190	7.7	15.5	15.0	--	--	--
JUN 01...	1235	260	203	8.0	28.5	20.5	--	--	--
JUL 01...	1150	306	--	7.9	28.0	26.0	--	--	--
14...	1435	299	196	7.3	25.5	21.0	4	8.4	65
AUG 02...	1135	232	210	7.5	24.0	23.0	--	12.5	--
SEP 01...	1130	145	219	7.6	24.0	21.0	6	9.3	81

DATE	NON-CARBONATE HARDNESS (MG/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)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
OCT 01...	29	18	7.6	8.0	2.9	58	22	12	.2
NOV 03...	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--
JAN 02...	21	12	5.0	12	3.3	36	16	21	.1
FEB 04...	--	--	--	--	--	--	--	--	--
MAR 01...	--	--	--	--	--	--	--	--	--
APR 01...	23	14	6.7	8.1	.5	48	20	14	.1
MAY 03...	--	--	--	--	--	--	--	--	--
JUN 01...	--	--	--	--	--	--	--	--	--
JUL 01...	--	--	--	--	--	--	--	--	--
14...	26	16	6.0	8.5	3.2	47	21	12	.1
AUG 02...	--	--	--	--	--	--	--	--	--
SEP 01...	29	20	7.5	9.9	3.1	63	22	14	.2

01481500 BRANDYWINE CREEK AT WILMINGTON, DE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
OCT 01...	12	--	111	2.3	.19	540	--	70	--
NOV 03...	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--
JAN 02...	8.6	--	96	1.9	.23	2400	--	150	--
FEB 04...	--	--	--	--	--	--	--	--	--
MAR 01...	--	--	--	--	--	--	--	--	--
APR 01...	7.3	--	94	2.8	.74	9200	--	770	--
MAY 03...	--	--	--	--	--	--	--	--	--
JUN 01...	--	--	--	--	--	--	--	--	--
JUL 01...	--	--	--	--	--	--	--	--	--
JUL 14...	11	118	101	1.8	.21	1200	50	80	50
AUG 02...	--	--	--	--	--	--	--	--	--
SEP 01...	9.1	134	117	1.8	.23	480	70	80	50

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.5	9.0	9.0	4.0	0.0	10.0	11.0	14.5	21.5	25.5	24.5	22.0
2	---	9.5	7.0	3.0	0.5	9.5	10.5	16.0	18.5	24.5	24.0	21.5
3	---	10.5	5.5	3.5	0.0	8.0	10.5	15.5	18.5	25.0	23.0	20.5
4	---	12.5	4.0	3.5	2.0	7.5	10.0	14.0	19.0	24.0	24.5	21.0
5	---	13.5	5.5	0.5	2.0	10.0	10.0	15.5	19.0	23.5	25.0	22.5
6	---	13.0	---	0.5	1.0	10.5	10.5	16.5	19.0	---	26.0	21.0
7	---	13.0	5.5	1.0	0.5	8.5	12.5	19.5	20.0	25.0	25.0	21.0
8	---	15.0	4.5	3.0	0.0	8.0	11.5	---	21.0	24.5	23.5	21.0
9	---	16.5	5.5	0.0	2.5	5.0	10.5	17.0	23.0	25.0	22.5	22.0
10	---	17.0	6.0	0.0	3.0	4.5	10.0	18.0	25.0	25.5	22.5	22.0
11	---	14.5	6.0	0.5	5.0	6.0	11.0	18.0	25.5	23.0	23.5	20.0
12	---	12.0	6.0	1.0	4.5	6.0	9.0	17.5	25.5	23.0	25.0	21.5
13	---	12.0	6.5	2.0	5.5	7.5	10.0	17.5	22.5	21.5	26.0	22.5
14	---	10.0	7.5	4.5	---	8.0	11.5	18.5	22.0	22.0	26.0	23.0
15	---	9.5	10.0	4.5	6.0	8.0	14.0	20.0	24.0	23.0	25.0	21.5
16	---	8.5	9.0	3.0	8.0	7.5	14.0	---	24.0	24.5	24.5	21.0
17	---	8.5	7.0	2.5	9.0	5.5	19.0	21.0	24.0	25.5	23.5	21.5
18	---	9.5	4.5	2.0	9.5	4.5	21.0	21.0	24.5	24.0	23.5	21.0
19	---	10.5	0.5	0.5	9.5	7.0	21.5	16.0	25.0	24.5	23.5	---
20	---	10.0	1.0	0.5	8.0	12.0	22.5	16.5	25.5	26.0	24.0	21.5
21	---	11.0	1.5	0.0	7.0	13.5	23.0	18.5	25.0	26.0	23.5	20.5
22	---	10.0	1.0	1.5	9.5	11.5	22.0	19.0	24.5	24.0	25.5	18.5
23	---	8.0	2.0	0.0	7.0	10.5	20.0	19.5	24.0	23.5	26.0	18.5
24	---	8.0	0.5	0.0	5.0	11.0	19.0	19.0	25.0	25.0	26.5	18.5
25	---	7.5	0.0	0.0	6.5	11.0	16.5	18.0	26.5	25.0	26.0	17.5
26	---	7.5	4.0	1.5	7.0	12.0	15.0	16.0	27.5	24.0	26.5	17.5
27	---	8.0	4.0	4.0	10.0	12.0	11.5	17.0	27.5	24.5	25.5	18.5
28	---	7.5	3.0	2.0	9.5	13.5	12.5	19.0	---	25.0	24.0	18.5
29	15.5	6.5	3.0	3.5	9.5	12.5	---	19.0	27.0	26.0	---	18.0
30	14.0	7.0	3.5	4.0	---	11.5	16.0	18.5	27.0	23.5	24.0	---
31	10.0	---	5.0	3.5	---	11.0	---	---	---	23.0	21.5	---

01481500 BRANDYWINE CREEK AT WILMINGTON, DE--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)		MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)		MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)		MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)		MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)		MEAN CONCEN- TRATION (MG/L)		LOADS (T/DAY)		
OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH					
1	12	15	1	.98	3	3.5	250	1910	23	56	8	13													
2	9	11	1	.99	2	2.3	65	235	190	898	9	13													
3	7	7.8	3	2.9	3	3.3	35	114	20	53	5	7.0													
4	5	5.4	5	4.8	2	2.1	40	145	15	35	4	5.8													
5	6	6.4	4	3.7	2	2.1	9	23	16	36	6	9.0													
6	6	6.3	3	2.7	2	2.1	5	11	12	25	7	11													
7	6	6.0	5	4.4	3	3.1	9	21	10	19	6	8.1													
8	7	6.8	4	4.4	3	3.0	24	70	10	19	5	6.4													
9	7	6.8	4	4.2	3	3.0	9	16	11	19	8	10													
10	8	8.2	6	6.2	2	2.2	4	4.8	18	29	6	8.9													
11	9	10	10	15	1	1.0	6	8.1	22	48	6	9.5													
12	30	53	55	127	1	.98	7	11	60	154	10	18													
13	18	21	135	736	3	2.9	5	7.2	18	32	30	80													
14	16	17	25	53	4	3.9	250	1160	12	22	20	47													
15	10	9.8	5	8.3	3	2.9	58	127	10	16	7	11													
16	7	6.4	2	3.0	3	3.0	15	26	12	19	9	13													
17	6	5.5	2	2.8	2	2.0	5	7.8	15	29	7	11													
18	65	130	3	4.0	4	3.8	7	7.0	13	27	5	6.5													
19	250	2000	3	3.8	3	2.6	8	8.0	45	126	5	6.5													
20	40	116	5	6.2	2	1.7	9	11	23	45	5	6.2													
21	15	27	8	12	3	2.7	11	15	15	26	7	8.7													
22	8	12	8	12	3	2.7	9	11	25	60	7	8.8													
23	7	9.6	4	5.2	4	3.4	8	8.0	22	55	6	6.8													
24	8	10	3	3.7	3	2.5	7	8.1	10	18	5	5.5													
25	7	9.2	1	1.2	4	3.3	6	7.3	8	13	6	6.5													
26	7	8.9	1	1.2	105	366	130	439	6	9.9	8	8.5													
27	8	9.6	1	1.2	70	172	580	5540	8	14	7	7.3													
28	6	6.9	3	3.6	20	30	440	3960	7	12	27	35													
29	4	4.4	1	1.1	6	8.0	55	186	6	10	12	13													
30	3	3.2	1	1.1	7	11	20	56	---	---	12	12													
31	2	2.0	---	---	19	43	13	32	---	---	11	11													
TOTAL	---	2551.20	---	1036.67	---	696.08	---	14185.30	---	1924.90	---	424.00													
APRIL				MAY				JUNE				JULY				AUGUST				SEPTEMBER					
1	195	1340	40	72	22	16	22	17	19	14	8	3.1													
2	87	232	46	119	650	2530	18	10	15	9.4	8	3.3													
3	19	34	20	25	235	386	30	15	14	8.1	11	4.5													
4	18	30	33	32	85	75	28	15	12	6.4	12	4.8													
5	13	21	58	53	38	28	21	12	9	4.5	10	3.9													
6	13	19	55	48	25	17	15	8.0	7	3.5	9	3.4													
7	11	15	15	13	17	11	11	5.3	9	6.9	9	3.3													
8	13	17	13	11	18	12	15	8.1	14	11	10	3.4													
9	15	20	13	10	17	10	31	22	42	70	11	3.8													
10	17	21	11	8.6	14	7.9	19	9.4	55	125	11	4.0													
11	12	14	12	9.4	12	6.4	650	4990	19	18	9	3.7													
12	13	15	19	21	14	7.4	350	1210	14	9.6	8	2.9													
13	12	14	15	13	16	8.0	65	66	11	6.7	6	2.1													
14	13	15	10	8.1	16	8.0	30	24	70	84	6	2.0													
15	12	13	9	7.3	12	6.2	24	18	20	16	7	2.3													
16	14	15	10	7.8	13	6.5	15	11	16	11	30	14													
17	15	16	11	11	65	61	16	12	13	7.8	40	54													
18	14	15	17	20	22	16	9	5.8	8	4.0	15	11													
19	13	14	25	33	15	9.0	7	4.0	7	3.1	12	7.0													
20	13	13	18	16	16	8.9	5	2.6	8	3.6	13	6.0													
21	13	13	16	14	37	33	5	2.6	8	3.5	12	5.2													
22	13	13	12	10	95	103	8	5.4	6	2.6	11	4.7													
23	12	12	12	9.1	65	64	6	3.3	5	2.1	12	5.0													
24	13	12	18	13	31	21	10	7.5	5	2.1	9	3.5													
25	13	12	17	12	24	14	7	4.3	5	2.0	8	3.0													
26	15	18	15	11	22	12	6	3.0	8	3.2	6	2.3													
27	12	12	16	12	19	9.5	5	2.4	90	108	10	4.5													
28	8	7.3	12	8.1	33	17	6	2.9	70	120	12	5.3													
29	8	7.0	13	8.6	23	11	20	15	20	14	10	4.1													
30	9	7.8	17	14	22	13	280	1180	13	6.7	20	9.0													
31	---	---	15	12	---	---	42	45	12	5.1	---	---													
TOTAL	---	2007.10	---	662.00	---	3527.80	---	7736.60	---	691.90	---	189.10													
TOTAL LOAD FOR YEAR: 35632.65 TONS.																									

TOTAL LOAD FOR YEAR: 35632.65 TONS.

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE

LOCATION.--Lat 39°41'21", long 75°31'19", New Castle County, Hydrologic Unit 02040205, at tidal-gaging station located on channel side of west tower of south bridge between Pigeon Point, Del., and Deepwater Point, N. J.

DRAINAGE AREA.--11,030 mi² (28,600 km²).

PERIOD OF RECORD.--July 1955 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1963 to current year.

pH: January 1968 to current year.

WATER TEMPERATURES: October 1956 to current year.

DISSOLVED OXYGEN: November 1962 to current year.

REMARKS.--Water-quality monitor records less than 80 percent complete for most parameters. Extremes for period of record are those recorded when monitor was in operation.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 12,700 micromhos Nov. 13, 1966; minimum, 100 micromhos on many days.

pH: Maximum, 9.3 Nov. 10-11, 13, 1970; minimum, 4.2 Nov. 6, 1969.

WATER TEMPERATURES: Maximum, 31.0°C Aug. 9, 1968; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 13.5 mg/L Dec. 29, 1969; minimum, 0.0 mg/L on many days during summer periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 27.0°C on several days during June and July; minimum, 0.0°C Jan. 23-25.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	270	250	256	290	270	282	910	280	521
2	---	---	---	260	250	259	290	270	280	700	260	352
3	---	---	---	260	250	252	290	270	284	1110	270	364
4	---	---	---	260	250	255	290	270	285	380	260	289
5	---	---	---	260	250	254	290	270	280	440	260	275
6	---	---	---	260	250	253	290	270	280	750	260	381
7	---	---	---	260	250	255	290	270	281	660	260	427
8	1610	490	---	260	250	254	290	270	280	570	250	328
9	1510	450	811	260	250	253	290	270	281	300	230	264
10	1210	460	803	260	250	253	460	270	319	330	230	266
11	1410	470	839	260	250	256	430	260	324	530	240	320
12	1460	460	946	260	250	256	660	260	384	1090	250	475
13	930	500	685	260	250	259	1710	270	473	1600	280	670
14	1230	310	643	260	250	255	1060	230	499	1550	260	616
15	490	310	365	260	250	254	1290	260	571	790	260	384
16	540	310	392	270	250	258	1140	270	568	840	270	409
17	550	310	408	260	250	258	1210	270	565	750	280	435
18	610	320	460	260	250	255	1210	250	581	710	270	353
19	500	310	385	260	250	257	910	250	437	1240	260	553
20	510	300	340	260	250	253	1560	250	588	1350	290	731
21	330	310	316	260	250	252	1590	270	691	1480	290	727
22	320	300	315	260	250	253	1620	300	782	810	290	445
23	320	240	297	260	250	255	1260	280	714	620	290	360
24	270	240	253	290	250	268	1600	270	828	1220	300	675
25	260	240	250	290	270	280	1820	330	981	1210	390	768
26	260	250	256	290	270	280	2650	310	1290	1280	510	847
27	260	250	253	290	270	280	2160	280	1090	960	390	533
28	260	240	250	290	270	277	1210	270	619	390	310	353
29	260	240	249	290	270	279	1090	270	563	320	250	278
30	260	250	257	290	270	280	1250	280	708	260	230	---
31	260	250	254	---	---	---	1230	280	576	---	---	---
MONTH	---	---	---	290	250	260	2650	230	538	1600	230	462

DELAWARE RIVER BASIN

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued
 SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	280	240	263	340	320	---	2610	280	1120
2	---	---	---	280	250	263	350	320	328	2480	230	1400
3	---	---	---	300	230	---	320	320	320	1770	220	1000
4	---	---	---	300	260	283	330	320	323	1040	330	650
5	180	160	---	320	270	297	330	310	325	1360	340	578
6	190	150	171	320	290	304	340	290	322	850	340	475
7	200	170	183	310	290	302	340	280	315	650	350	441
8	220	160	188	310	300	303	350	270	307	550	350	385
9	210	180	198	320	300	309	380	270	309	560	340	420
10	220	190	205	350	310	324	370	260	308	1200	340	544
11	230	200	213	410	320	346	850	260	359	1590	350	660
12	250	170	209	430	330	348	720	250	315	1330	340	646
13	520	180	251	1060	340	491	1540	250	570	1670	360	707
14	380	180	224	390	340	364	1690	260	688	1740	360	823
15	800	190	287	590	360	403	2230	270	910	1370	330	767
16	640	210	319	720	370	462	2510	270	1050	1330	730	1050
17	520	210	---	840	200	474	4310	280	1460	1750	350	957
18	---	---	---	440	340	358	3700	1490	2300	2150	350	1030
19	---	---	---	510	350	395	3380	1110	2140	940	320	551
20	---	---	---	490	350	389	3130	1170	2050	970	310	570
21	---	---	---	480	340	393	3140	1210	1940	930	360	608
22	---	---	---	440	340	378	3500	1220	2130	780	340	545
23	---	---	---	440	340	376	3240	1210	2070	740	340	492
24	---	---	---	430	250	365	3350	1280	2040	1210	320	573
25	---	---	---	390	340	---	3140	1310	2110	950	320	569
26	330	270	---	---	---	---	3220	230	1480	1600	320	733
27	310	250	284	---	---	---	1180	210	667	1380	320	651
28	310	240	273	---	---	---	1350	240	729	1410	320	677
29	290	250	268	---	---	---	2800	290	1150	2270	330	829
30	---	---	---	---	---	---	2480	280	1090	1530	350	770
31	---	---	---	---	---	---	---	---	---	1830	360	973
MONTH	---	---	---	1060	200	---	4310	210	1040	2610	220	716
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1610	360	902	2130	430	1120	3270	1540	2390	---	---	---
2	2170	360	1060	1540	380	958	3120	1530	2340	---	---	---
3	2100	340	1080	1370	340	840	3840	1390	2670	---	---	---
4	1640	320	966	1520	350	758	4200	1140	3040	---	---	---
5	1840	320	1010	2010	340	747	3120	1170	---	---	---	---
6	2260	330	1100	1430	340	723	---	---	---	---	---	---
7	2010	290	1120	1860	360	852	---	---	---	---	---	---
8	2120	320	1030	1590	360	783	---	---	---	3120	1590	---
9	2420	360	1200	1370	360	759	---	---	---	3920	1640	2840
10	2580	380	1280	1590	370	810	---	---	---	3990	1750	3040
11	2960	380	1400	1730	370	911	2480	650	---	4170	1760	2940
12	2990	460	1420	1910	330	855	2970	500	1660	4090	1610	2910
13	3280	1740	2500	1690	350	990	2420	530	---	4110	1650	2900
14	3180	650	2370	2160	1030	1730	---	---	---	4010	1720	2850
15	3190	600	1800	2340	1390	1860	---	---	---	3620	1920	---
16	2970	790	2460	2200	620	1330	1580	540	---	---	---	---
17	2810	1970	2360	2490	540	1270	1360	360	888	---	---	---
18	2460	1760	2120	2110	690	1370	1500	380	883	---	---	---
19	2480	1790	2110	1980	920	1390	1830	470	1020	---	---	---
20	2420	1910	2160	1730	340	1270	1750	360	1020	---	---	---
21	2470	1870	2120	1740	360	970	2500	370	1000	---	---	---
22	2370	590	1780	1710	410	964	2130	410	---	---	---	---
23	1870	560	1320	1760	490	1060	---	---	---	---	---	---
24	1810	500	1160	2130	420	1070	2260	690	---	---	---	---
25	1590	480	1030	2040	460	1090	3310	690	---	---	---	---
26	1510	450	930	2360	630	1380	---	---	---	---	---	---
27	1400	460	938	2600	570	1500	---	---	---	---	---	---
28	1660	450	933	3120	620	1780	---	---	---	---	---	---
29	1930	480	1030	3530	790	2050	---	---	---	---	---	---
30	1860	520	1140	3400	790	2190	---	---	---	---	---	---
31	---	---	---	3150	920	2400	---	---	---	---	---	---
MONTH	3280	290	1460	3530	330	1220	---	---	---	---	---	---

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PH (UNITS), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

[illegible]

DELAWARE RIVER BASIN

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

PH (UNITS), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.1	6.6	6.9	7.1	6.7	6.9	---	---	---
2	---	---	---	7.1	6.9	7.0	7.1	6.9	7.0	---	---	---
3	---	---	---	7.1	6.9	7.0	7.0	6.9	6.9	---	---	---
4	---	---	---	7.1	6.9	7.0	7.5	6.9	7.1	---	---	---
5	---	---	---	7.1	6.9	6.9	7.8	6.9	---	---	---	---
6	---	---	---	7.1	6.8	6.9	---	---	---	---	---	---
7	---	---	---	7.0	6.7	6.9	---	---	---	---	---	---
8	---	---	---	7.0	6.6	6.8	---	---	---	6.8	6.6	---
9	7.2	6.4	6.8	7.1	6.7	6.9	---	---	---	6.9	6.5	6.7
10	7.4	6.8	7.1	7.1	6.9	7.0	---	---	---	6.9	6.3	6.6
11	7.5	5.8	6.8	7.1	6.5	6.8	7.4	6.9	---	6.6	6.3	6.5
12	6.7	5.5	6.2	7.1	6.6	6.9	7.5	6.9	7.2	6.6	6.3	6.5
13	6.0	5.5	5.7	7.2	6.9	7.1	7.6	7.0	---	6.5	6.0	6.4
14	7.4	6.1	6.7	7.3	6.9	7.1	---	---	---	6.6	6.1	6.4
15	7.7	6.7	7.3	7.3	6.7	7.0	---	---	---	6.4	6.2	---
16	7.7	7.2	7.5	7.2	6.6	6.9	7.3	6.8	---	---	---	---
17	7.7	7.2	7.6	7.3	6.4	7.0	7.5	7.2	7.4	7.0	6.7	---
18	7.7	7.1	7.5	7.3	7.0	7.2	7.5	6.8	7.2	7.2	6.9	7.1
19	7.5	7.2	7.4	7.2	6.9	7.1	7.4	6.9	7.2	7.2	7.0	7.1
20	7.6	6.8	7.2	7.3	6.8	7.1	7.5	7.0	7.3	7.2	7.0	7.1
21	7.2	6.7	7.0	7.4	6.7	7.1	7.6	7.2	7.4	7.2	7.0	7.1
22	7.1	6.7	---	7.2	6.7	7.0	7.8	7.2	---	7.2	6.7	7.0
23	---	---	---	7.4	6.8	7.1	---	---	---	6.9	6.7	6.8
24	---	---	---	7.3	6.7	7.1	---	---	---	6.9	6.7	6.8
25	---	---	---	7.0	6.4	6.5	---	---	---	7.0	6.7	6.8
26	---	---	---	6.7	6.4	6.5	---	---	---	7.0	6.7	6.8
27	---	---	---	7.3	6.1	6.7	---	---	---	6.9	6.7	6.8
28	---	---	---	6.8	6.3	6.6	---	---	---	6.9	6.6	6.8
29	6.8	6.1	---	6.9	6.4	6.7	---	---	---	6.9	6.7	6.8
30	6.8	6.2	6.6	7.0	6.5	6.8	---	---	---	6.9	6.6	6.8
31	---	---	---	7.0	6.6	6.8	---	---	---	---	---	---
MONTH	---	---	---	7.4	6.1	6.9	---	---	---	---	---	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.0	6.5	6.5	11.0	10.5	---	15.0	14.5	15.0
2	---	---	---	7.0	6.5	6.5	11.0	10.5	10.5	15.0	14.5	14.5
3	---	---	---	7.0	6.5	---	11.0	10.5	11.0	15.5	15.0	15.5
4	---	---	---	8.0	7.0	7.0	11.5	10.5	11.0	15.5	15.0	15.5
5	1.5	1.5	---	10.5	7.0	8.5	11.5	10.5	11.0	16.0	14.5	15.0
6	1.5	1.0	1.5	10.0	10.0	10.0	11.5	11.0	11.0	16.5	15.0	16.0
7	1.5	1.0	1.5	10.0	9.5	10.0	11.5	11.0	11.5	17.0	16.0	16.5
8	1.5	1.0	1.5	10.5	10.0	10.0	12.0	11.5	12.0	17.0	16.0	16.5
9	1.5	1.5	1.5	10.0	9.0	9.5	12.0	11.5	11.5	17.0	16.0	16.5
10	1.5	1.5	1.5	9.0	6.0	7.0	11.5	11.0	11.0	18.0	16.5	17.0
11	1.5	1.0	1.5	8.0	6.0	7.0	11.5	11.0	11.5	17.0	16.5	16.5
12	2.0	1.0	1.5	7.0	6.5	7.0	11.5	10.5	11.0	17.0	16.5	17.0
13	3.5	1.5	2.0	7.0	6.5	7.0	11.0	10.0	10.5	18.0	16.5	17.0
14	3.5	2.0	2.5	8.0	6.5	7.0	11.5	10.5	11.0	18.0	17.0	17.5
15	3.5	1.5	2.5	7.0	6.5	7.0	11.5	11.0	11.0	18.5	18.0	18.0
16	4.0	2.0	3.5	8.0	7.0	7.5	13.0	11.0	11.5	19.0	18.5	18.5
17	4.5	3.5	---	7.0	6.0	7.0	14.5	12.0	12.5	19.5	19.0	19.0
18	---	---	---	7.0	6.0	6.0	15.5	14.0	14.5	19.5	19.0	19.0
19	---	---	---	7.0	5.5	6.5	15.0	13.5	14.5	19.0	18.0	18.5
20	---	---	---	8.0	6.5	7.0	14.5	13.5	14.0	18.5	17.0	18.0
21	---	---	---	8.0	6.5	7.5	15.5	14.0	14.5	19.0	18.0	18.5
22	---	---	---	8.5	7.0	8.0	15.5	15.0	15.0	19.0	18.0	18.5
23	---	---	---	8.5	8.0	8.5	16.0	15.0	15.5	19.0	18.0	18.5
24	---	---	---	9.0	8.5	8.5	16.0	15.0	15.5	19.0	18.5	18.5
25	---	---	---	9.5	9.0	---	16.0	15.5	15.5	18.5	18.5	18.5
26	6.5	6.5	---	---	---	---	15.5	15.0	15.5	18.5	18.0	18.5
27	6.5	6.0	6.5	---	---	---	15.0	14.5	15.0	19.0	18.0	18.5
28	7.0	6.0	6.5	---	---	---	15.0	14.0	14.5	19.0	18.5	19.0
29	7.0	6.0	6.5	---	---	---	14.5	14.0	14.5	19.0	19.0	19.0
30	---	---	---	---	---	---	15.0	14.0	14.5	19.0	19.0	19.0
31	---	---	---	---	---	---	---	---	---	19.5	19.0	19.0
MONTH	---	---	---	10.5	5.5	---	16.0	10.0	13.0	19.5	14.5	17.5
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	19.5	19.5	27.0	26.5	27.0	26.5	26.0	26.0	---	---	---
2	20.0	19.5	19.5	27.0	26.0	26.5	26.0	25.5	26.0	---	---	---
3	20.0	19.0	19.5	27.0	26.0	26.5	26.0	25.0	25.5	---	---	---
4	20.0	19.5	20.0	26.5	26.0	26.0	26.0	25.0	25.5	---	---	---
5	20.5	19.5	20.0	27.0	25.5	26.5	26.0	25.5	---	---	---	---
6	20.5	19.5	20.0	27.0	26.0	26.5	---	---	---	---	---	---
7	20.5	20.0	20.0	26.5	26.0	26.5	---	---	---	---	---	---
8	21.0	20.5	21.0	26.5	26.0	26.0	---	---	---	24.0	23.5	---
9	21.5	20.5	21.0	26.5	26.0	26.0	---	---	---	24.0	23.5	23.5
10	23.0	21.5	22.0	27.0	26.0	26.5	---	---	---	24.0	23.0	23.5
11	23.0	22.0	22.5	26.5	25.5	26.0	26.0	25.5	---	23.0	22.0	22.5
12	23.5	22.0	23.0	26.0	25.5	26.0	26.0	25.5	26.0	23.0	22.0	22.5
13	23.0	22.0	22.5	25.5	25.0	25.0	26.5	25.5	---	23.5	22.0	23.0
14	23.0	22.0	22.5	25.0	24.5	25.0	---	---	---	23.5	23.0	23.5
15	23.5	22.0	22.5	25.5	24.5	25.0	---	---	---	23.5	23.0	---
16	23.5	23.0	23.5	25.5	24.5	25.0	26.0	26.0	---	---	---	---
17	24.0	23.5	23.5	25.5	25.0	25.0	26.0	25.5	25.5	23.5	23.0	---
18	24.5	23.5	24.0	25.5	24.5	25.0	26.0	25.0	25.5	23.0	23.0	23.0
19	25.0	24.0	24.5	26.0	24.5	25.0	25.5	24.5	25.0	23.0	22.0	23.0
20	25.0	24.5	24.5	26.0	25.0	25.5	25.5	24.5	25.0	23.0	22.0	23.0
21	25.0	24.5	25.0	26.0	25.5	25.5	25.5	25.0	25.0	23.0	22.0	22.5
22	25.0	25.0	25.0	26.0	25.0	25.5	25.5	25.0	---	22.0	21.0	22.0
23	25.5	25.0	25.0	25.5	25.0	25.5	---	---	---	21.5	21.0	21.5
24	26.0	25.0	25.5	26.0	25.5	25.5	26.5	25.5	---	21.0	20.5	21.0
25	26.0	25.5	25.5	25.5	25.5	25.5	26.5	25.5	---	21.0	20.5	20.5
26	26.5	25.5	25.5	26.0	25.0	25.0	---	---	---	20.5	20.0	20.5
27	26.5	25.5	26.0	25.5	25.0	25.5	---	---	---	21.0	20.0	20.5
28	27.0	26.0	26.5	26.0	25.0	25.5	---	---	---	21.0	20.0	20.5
29	27.0	26.0	26.5	26.0	25.5	26.0	---	---	---	20.5	20.0	20.0
30	27.0	26.5	27.0	26.5	25.5	26.0	---	---	---	20.0	19.5	20.0
31	---	---	---	26.5	26.0	26.5	---	---	---	---	---	---
MONTH	27.0	19.0	23.0	27.0	24.5	26.0	---	---	---	---	---	---

DELAWARE RIVER BASIN

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.6	6.7	7.0	6.6	6.1	6.4	11.2	9.4	10.3
2	---	---	---	7.1	6.6	7.0	6.9	6.5	6.7	10.8	8.8	9.8
3	---	---	---	6.9	6.3	6.7	8.0	6.3	7.3	9.9	8.6	9.4
4	---	---	---	6.7	6.0	6.4	8.5	8.0	8.3	10.5	8.9	9.7
5	---	---	---	6.6	5.8	6.2	8.4	8.0	8.2	10.8	7.7	9.5
6	---	---	---	6.4	5.7	6.0	8.2	7.4	7.8	10.1	8.2	9.0
7	---	---	---	6.4	5.3	5.8	8.3	7.2	7.7	10.8	9.8	10.2
8	4.8	4.0	---	6.0	5.2	5.6	8.4	7.9	8.1	11.4	10.4	11.0
9	4.8	3.9	4.3	5.7	4.6	5.3	8.7	8.1	8.5	11.5	11.1	11.3
10	5.0	4.2	4.5	4.6	3.7	4.0	9.0	8.1	8.6	11.5	11.2	11.3
11	4.9	4.2	4.6	5.9	4.0	4.9	9.1	8.4	8.8	11.7	11.1	11.4
12	4.9	4.0	4.5	6.2	5.2	5.7	9.1	8.4	8.7	11.6	9.8	10.9
13	5.3	4.1	4.7	6.7	4.7	5.7	8.8	8.3	8.5	11.6	9.7	10.7
14	5.8	4.1	4.9	5.9	4.6	5.5	8.5	7.9	8.2	12.3	10.1	11.3
15	5.1	4.2	4.6	5.7	4.7	5.2	8.3	7.2	7.8	12.4	11.3	11.9
16	5.3	4.0	4.6	5.5	4.7	5.1	8.0	5.4	7.2	12.4	11.5	12.0
17	5.1	4.0	4.7	5.3	4.7	4.9	9.0	7.2	7.8	12.2	11.4	11.9
18	5.7	4.5	5.2	5.1	4.7	4.8	7.8	6.8	7.4	12.5	11.9	12.3
19	5.4	4.3	4.9	5.1	4.5	4.8	8.0	7.4	7.7	12.1	10.0	11.1
20	5.4	4.0	5.0	5.1	4.5	4.7	8.7	7.7	8.1	11.3	9.5	10.3
21	5.2	4.1	4.6	5.0	4.3	4.6	9.1	8.7	8.9	11.3	10.1	10.7
22	5.6	4.7	5.0	4.9	3.9	4.4	9.9	9.1	9.4	11.3	10.5	11.0
23	5.6	4.8	5.2	5.7	4.6	5.0	10.2	9.9	10.1	11.5	9.9	10.6
24	---	---	---	6.8	5.8	6.4	10.1	9.3	9.6	10.5	9.8	10.1
25	---	---	---	7.0	6.6	6.8	9.7	9.2	9.4	10.2	9.6	9.9
26	---	---	---	6.6	6.2	6.4	10.7	8.9	9.7	9.7	9.4	9.5
27	---	---	---	6.6	6.2	6.4	11.1	10.1	10.5	10.6	9.5	10.0
28	---	---	---	6.5	6.1	6.3	11.7	10.7	11.2	10.9	9.3	10.1
29	---	---	---	6.4	6.1	6.3	11.7	10.6	---	12.8	10.3	11.7
30	7.4	6.4	---	6.4	6.0	6.2	10.1	8.7	---	13.3	12.4	---
31	7.7	6.7	7.1	---	---	---	10.2	8.5	9.2	---	---	---
MONTH	---	---	---	7.6	3.7	5.7	11.7	5.4	8.5	13.3	7.7	10.7
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	9.9	9.6	9.8	8.0	6.8	---	8.2	7.4	7.8
2	---	---	---	9.9	9.6	9.8	7.8	6.3	7.1	7.8	7.1	7.5
3	---	---	---	10.1	9.9	---	7.6	6.1	6.9	7.3	6.6	7.0
4	---	---	---	10.1	9.5	9.8	7.5	6.1	6.8	7.0	6.0	---
5	---	---	---	10.4	9.6	10.2	7.4	6.2	6.7	---	---	---
6	---	---	---	10.5	10.1	10.3	7.2	6.4	6.8	---	---	---
7	---	---	---	10.6	10.0	10.4	7.4	6.4	6.8	---	---	---
8	---	---	---	10.5	9.7	10.1	7.3	6.5	6.8	---	---	---
9	---	---	---	10.9	9.8	10.4	7.2	6.7	7.0	---	---	---
10	---	---	---	11.3	9.6	10.6	7.8	6.9	7.4	6.4	5.7	---
11	12.0	11.5	---	10.9	9.3	10.3	8.0	7.3	7.6	6.4	5.6	5.9
12	12.4	11.7	12.1	10.2	9.0	9.6	9.0	7.4	8.1	6.4	5.6	5.9
13	12.3	12.0	12.2	9.7	8.9	9.3	9.2	7.7	8.4	6.2	5.0	5.5
14	12.2	12.0	12.1	9.3	8.4	8.8	8.9	7.5	8.2	6.2	4.8	5.2
15	12.2	12.0	---	9.4	7.6	8.6	8.5	7.2	7.9	5.4	4.3	4.7
16	12.2	11.9	12.0	8.9	7.4	8.2	8.1	7.1	7.5	5.1	3.9	4.2
17	12.1	11.9	---	9.5	7.5	8.8	7.7	6.8	7.3	5.4	3.7	4.4
18	---	---	---	10.2	9.1	9.5	7.7	7.0	7.3	6.0	4.8	---
19	---	---	---	10.5	9.0	9.6	7.6	6.9	7.3	---	---	---
20	---	---	---	10.1	8.8	9.3	7.4	6.0	7.0	---	---	---
21	---	---	---	9.9	9.0	9.3	6.7	6.0	6.3	---	---	---
22	---	---	---	9.7	9.0	9.3	7.0	6.0	6.4	---	---	---
23	---	---	---	9.3	8.6	9.0	7.1	6.0	6.4	---	---	---
24	---	---	---	9.3	8.3	8.8	7.3	6.6	7.0	---	---	---
25	---	---	---	8.5	7.7	---	8.0	6.8	7.3	---	---	---
26	10.3	9.9	---	---	---	---	7.9	6.7	7.3	---	---	---
27	10.5	9.8	10.1	---	---	---	8.2	7.3	7.8	---	---	---
28	10.3	9.9	10.0	---	---	---	8.2	7.7	8.1	---	---	---
29	10.1	9.7	9.9	---	---	---	8.4	7.7	8.1	---	---	---
30	---	---	---	---	---	---	8.1	7.7	7.9	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	11.3	7.4	---	9.2	6.0	7.3	---	---	---

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DE--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.2	2.4	---	3.6	1.2	2.6	---	---	---	---	---	---
2	3.5	2.5	2.9	3.3	1.0	2.4	---	---	---	---	---	---
3	3.5	2.6	3.0	3.3	1.2	2.3	---	---	---	---	---	---
4	3.4	2.7	3.0	3.2	1.2	2.2	4.4	2.7	---	---	---	---
5	3.6	2.7	3.0	3.2	1.1	2.0	4.1	3.0	---	---	---	---
6	3.6	2.7	3.0	3.1	.9	1.8	---	---	---	---	---	---
7	4.2	2.6	3.1	3.7	1.1	2.2	---	---	---	---	---	---
8	4.0	2.5	3.0	3.5	1.0	2.1	---	---	---	---	---	---
9	3.9	2.1	2.8	3.4	.5	1.8	---	---	---	---	---	---
10	3.6	1.8	2.4	3.3	.3	1.7	---	---	---	2.8	1.9	---
11	3.7	1.6	2.4	3.4	.8	2.3	---	---	---	2.5	1.9	2.3
12	3.5	1.6	2.6	3.7	1.2	2.6	---	---	---	2.4	1.7	2.1
13	4.4	2.5	3.4	4.3	1.8	3.3	---	---	---	2.5	1.7	2.2
14	4.7	2.8	3.7	4.8	2.2	3.6	---	---	---	3.8	1.8	2.2
15	4.3	2.7	3.6	4.6	2.3	3.6	---	---	---	---	---	---
16	4.7	3.0	3.9	4.3	2.1	3.4	---	---	---	---	---	---
17	5.0	3.1	4.2	4.1	2.1	3.3	---	---	---	4.6	3.4	---
18	4.8	2.7	4.0	4.2	2.6	3.5	---	---	---	4.3	3.2	3.8
19	4.6	2.8	3.9	4.0	2.7	3.4	---	---	---	4.5	3.0	3.6
20	4.7	2.9	3.9	4.7	3.0	3.7	---	---	---	4.3	3.0	3.5
21	5.0	3.1	4.1	4.6	3.2	3.9	---	---	---	---	---	---
22	5.1	3.1	4.2	4.7	3.1	3.8	---	---	---	5.5	3.7	---
23	4.7	2.6	3.9	4.4	3.3	3.9	---	---	---	6.0	3.5	5.0
24	4.5	1.9	3.3	4.1	3.0	3.6	---	---	---	6.2	4.2	5.4
25	4.2	2.0	3.2	4.3	2.9	3.5	---	---	---	6.5	4.4	5.4
26	4.4	1.5	2.8	4.5	3.0	3.8	---	---	---	6.7	4.1	5.5
27	4.2	1.2	2.7	4.7	3.0	3.8	---	---	---	6.6	4.3	5.6
28	4.0	.8	2.5	4.4	2.7	3.6	---	---	---	6.6	3.9	5.4
29	3.8	1.2	2.4	4.3	2.6	3.4	---	---	---	5.9	3.9	4.9
30	3.5	1.0	2.5	4.0	2.2	3.2	---	---	---	4.8	3.0	4.1
31	---	---	---	3.5	2.4	---	---	---	---	---	---	---
MONTH	5.1	.8	3.2	4.8	.3	3.0	---	---	---	---	---	---

DELAWARE RIVER BASIN

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE

LOCATION.--Lat 39°30'03", long 75°34'07", New Castle County, Hydrologic Unit 02040205, water-quality recorder located on platform about 0.4 mi (0.6 km) downstream from Reedy Island near Port Penn.

DRAINAGE AREA.--11,200 mi² (29,100 km²), approximately.

PERIOD OF RECORD.--October 1963 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1963 to current year.

pH: February 1970 to current year.

WATER TEMPERATURES: February 1970 to current year.

DISSOLVED OXYGEN: February 1970 to current year.

REMARKS.--Water-quality monitor records less than 80 percent complete for most parameters. Extremes for period of record are those recorded when monitor was in operation.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 35,400 micromhos Nov. 7, 1963; minimum, 100 micromhos on several days during August 1969, April 1970, and February 1974.

pH: Maximum, 8.8 Aug. 29, Sept. 2, 1973; minimum, 5.4 Dec. 31, 1972.

WATER TEMPERATURES: Maximum, 29.5°C Aug. 5, 1975; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 13.7 mg/L Feb. 18, 19, 1973; minimum, 0.3 mg/L Sept. 16, 17, 1971.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.5°C June 28, 29, July 6, 10; minimum, 0.0°C on several days during January.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7000	1280	3150	8360	5200	6590	1720	1080	1320	10800	3080	5430
2	5440	1400	2620	6360	5000	5680	2960	760	1330	9960	2520	6730
3	4960	1320	2310	6120	5000	5580	3040	680	1320	7760	6160	6910
4	4160	1600	2450	6240	5480	5860	2960	720	1190	6080	2480	4700
5	5520	1640	2680	8000	2160	4460	3160	720	1330	3440	1600	2350
6	4320	1800	---	9280	2240	4190	2440	720	1260	7680	2240	5610
7	---	---	---	8080	2480	4600	3160	760	1410	7040	5280	6160
8	8040	2320	---	6120	2200	3850	5200	1200	2480	5760	4080	5140
9	7320	2280	4060	5640	2080	3230	7160	2320	4850	7600	3800	5910
10	7200	2800	4560	6560	2000	3690	8640	2840	4840	11000	6320	9120
11	6640	560	4280	6120	1800	2880	5920	2080	3540	12000	8760	10000
12	6000	3040	4360	6360	1720	3410	6720	2240	4780	12300	10500	11300
13	7760	3360	5210	4360	1520	2480	8680	3240	5990	13400	10500	12200
14	9880	4600	7370	4840	920	2180	8680	3800	6190	12400	9560	11200
15	9240	2680	6730	3760	640	1710	9320	4200	6000	9440	6480	7790
16	8160	2440	4810	4360	1160	2440	7320	3680	5120	9560	5200	---
17	7880	2360	5110	4640	1600	2780	8640	4320	5920	---	---	---
18	9960	3160	6280	3680	2080	2820	7480	4360	5720	---	---	---
19	7160	2920	4960	3680	2240	2830	6600	3200	4510	---	---	---
20	7000	1200	4180	3840	480	2090	8080	3160	4650	---	---	---
21	3960	1080	1890	4240	400	1430	7360	3280	4690	---	---	---
22	1440	640	988	2600	200	742	8760	4640	6130	---	---	---
23	1840	600	897	1480	160	507	8720	5080	6400	---	---	---
24	2000	360	755	3400	200	1320	7400	4960	---	---	---	---
25	2120	320	722	4200	1160	2650	---	---	---	---	---	---
26	1520	200	468	2440	960	1560	---	---	---	---	---	---
27	3760	280	1080	2880	920	1670	---	---	---	---	---	---
28	4760	400	1650	2600	840	1460	---	---	---	---	---	---
29	4760	480	1710	2440	1080	1590	6920	3640	---	---	---	---
30	4680	480	1410	2400	1080	1700	11200	3440	5710	560	360	---
31	6640	560	3200	---	---	---	10400	3360	5140	600	360	450
MONTH	9960	200	3210	9280	160	2930	11200	680	4070	---	---	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	440	320	388	560	280	363	3680	600	1490	12800	5200	8610
2	1200	280	472	760	320	448	2200	360	778	12900	4120	6960
3	840	440	675	1240	360	688	600	320	438	11200	3440	6020
4	640	400	515	1200	240	535	1760	360	562	8640	2840	4660
5	520	360	422	680	240	402	1400	320	547	10800	2440	5230
6	480	320	387	480	240	302	4440	360	1480	7960	1880	3500
7	1880	200	587	760	240	288	5560	560	2660	7520	1560	3560
8	4600	320	2900	1320	160	318	5840	720	2680	7640	1760	3150
9	8920	1400	4140	4000	200	2100	7280	1560	3420	9320	1560	4410
10	9880	2280	6400	6160	2600	4460	9440	3280	5610	10200	2320	4950
11	9600	3000	5220	8320	1920	4220	10500	4360	7650	9080	2680	5090
12	9640	1960	4690	5600	1680	3040	7400	3360	4810	7960	3480	5160
13	10600	2200	4880	6720	1840	3510	7320	3280	4970	8160	4200	5540
14	5480	1960	3400	3840	880	1730	7920	3160	4990	7520	4920	5810
15	6200	1920	3610	3720	880	1810	11400	3400	5860	7280	4960	5910
16	4560	2120	3090	4960	800	2020	10500	3680	5830	6440	5040	5550
17	3920	2040	2740	1960	560	1190	9920	3640	5700	6840	4920	5890
18	4760	2240	3150	1160	520	795	10100	3760	5720	6920	5360	6080
19	4080	2200	2750	2760	520	1080	9000	3920	5560	5680	2400	3900
20	2160	1960	---	2680	560	1050	7920	3800	5220	6600	1600	3540
21	---	---	---	3640	680	1300	7720	3720	5110	9840	1840	4910
22	---	---	---	920	440	583	9000	3840	5740	9040	2120	5530
23	---	---	---	1600	400	730	8320	3920	5560	9920	4640	6630
24	---	---	---	1240	560	743	8840	3680	5610	10200	2760	5660
25	---	---	---	840	480	602	9520	3920	6090	12600	3360	6890
26	---	---	---	1040	480	643	8680	4200	5690	10700	4080	7080
27	400	320	---	1440	560	930	9920	3560	5310	9480	3520	5690
28	680	320	385	1280	920	1030	9320	3160	4950	9960	2800	5030
29	600	320	377	1120	920	995	12900	4280	7550	10200	3240	5600
30	---	---	---	3480	600	1310	15400	4520	8350	9400	3400	5410
31	---	---	---	2640	560	1370	---	---	---	9440	3440	5600
MONTH	10600	200	---	8320	160	1310	15400	320	4530	12900	1560	5400
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9600	3800	5870	9120	2880	5260	14200	7400	10300	---	---	---
2	9600	6600	8020	8520	2960	5770	14200	4440	9960	---	---	---
3	11400	7760	9490	8160	5320	6780	14800	7000	9780	---	---	---
4	8800	6320	7650	8440	4480	6040	15600	7480	10300	---	---	---
5	9080	6480	7850	10200	4800	6990	15900	7760	10300	---	---	---
6	10100	6800	8420	9680	2880	6640	15000	6800	9400	---	---	---
7	9240	4040	6460	8720	2920	4940	15600	6640	9360	12800	7360	---
8	11100	3880	6010	8720	2360	4310	14600	6960	9480	14100	7360	9460
9	9520	4160	---	9120	2320	4170	15200	6800	9100	15100	7520	10300
10	---	---	---	8240	2560	4340	12000	6040	8310	15300	8520	11400
11	---	---	---	9320	2920	4950	12400	5600	7700	15100	8000	11000
12	---	---	---	8600	2800	4610	13400	5720	7940	13200	8200	10200
13	---	---	---	7160	2640	4300	10200	5680	7030	13600	7760	10200
14	9240	5600	---	11000	2600	5530	9400	5360	6670	14100	7840	10500
15	10400	4600	6850	11900	3320	---	10800	5240	---	14200	8120	10600
16	9960	4640	6840	---	---	---	---	---	---	13900	8280	10600
17	8960	3640	5750	---	---	---	---	---	---	14200	7600	10200
18	8240	3520	5410	---	---	---	---	---	---	14500	7120	9950
19	7440	3880	5430	---	---	---	---	---	---	15200	6920	9770
20	7480	4480	5710	---	---	---	---	---	---	16800	6880	10600
21	6480	4560	5550	---	---	---	---	---	---	16800	7480	10600
22	6040	4680	---	---	---	---	---	---	---	16000	7800	11200
23	6080	4640	5300	---	---	---	---	---	---	16400	8000	11000
24	6120	4440	5190	---	---	---	---	---	---	13900	7360	9960
25	10900	4280	5300	---	---	---	---	---	---	17100	7640	11400
26	5720	4240	4970	15600	6560	---	---	---	---	16800	8600	11900
27	6600	4400	5830	16000	6720	9550	---	---	---	15100	8600	11600
28	7120	5440	6380	14400	4440	8530	---	---	---	15700	8360	10900
29	7600	3080	5750	15200	6920	9960	---	---	---	15800	8440	11500
30	9600	3120	5590	15200	7160	10200	---	---	---	13200	8800	10600
31	---	---	---	15300	7160	10100	---	---	---	---	---	---
MONTH	11400	3080	---	---	---	---	---	---	---	17100	6880	---

DELAWARE RIVER BASIN

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

PH (UNITS), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.6	7.3	7.4	7.6	6.2	7.0	---	---	---	---	---	---
2	7.5	6.8	7.1	8.1	6.4	7.2	7.0	6.8	---	7.2	6.8	---
3	7.2	6.7	6.9	8.3	7.2	7.8	7.2	6.7	6.9	7.6	7.2	7.4
4	7.3	6.7	7.0	8.6	7.9	8.2	7.2	6.8	6.9	7.3	6.7	6.9
5	7.7	7.2	7.4	7.9	7.2	---	7.1	6.4	6.8	7.4	6.7	6.9
6	7.7	7.5	---	---	---	---	6.9	6.5	6.6	7.1	6.8	6.9
7	---	---	---	---	---	---	7.2	6.6	6.9	7.4	6.9	7.1
8	7.6	7.3	---	---	---	---	7.2	6.9	7.0	7.2	6.8	7.0
9	7.8	7.5	7.6	---	---	---	7.3	7.0	7.2	7.1	6.8	7.0
10	7.9	7.5	7.7	---	---	---	7.4	7.1	7.2	7.2	6.9	7.0
11	7.8	7.4	7.7	---	---	---	7.2	7.0	7.1	7.2	6.9	7.1
12	7.5	6.8	7.1	---	---	---	7.3	7.0	7.1	7.2	7.0	7.1
13	7.4	6.8	7.1	---	---	---	7.3	7.0	7.2	7.5	7.0	7.2
14	8.1	7.1	7.6	---	---	---	7.3	6.8	7.1	7.6	7.0	7.3
15	7.9	7.7	---	---	---	---	7.2	6.7	6.9	7.9	7.1	7.4
16	7.7	6.8	7.1	---	---	---	7.2	6.7	7.0	7.8	7.5	7.6
17	8.0	6.6	7.4	---	---	---	7.4	6.9	7.1	7.5	7.0	7.1
18	---	---	---	---	---	---	7.2	6.9	7.1	7.6	7.1	7.2
19	---	---	---	---	---	---	7.6	7.0	7.2	7.4	7.0	7.2
20	---	---	---	---	---	---	7.6	7.1	7.2	---	---	---
21	---	---	---	---	---	---	7.6	7.2	7.3	---	---	---
22	---	---	---	---	---	---	7.8	7.4	7.6	---	---	---
23	---	---	---	---	---	---	7.9	7.5	7.7	---	---	---
24	---	---	---	---	---	---	7.8	7.4	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	8.1	7.3	---	---	---	---	---	---	---	---	---	---
29	8.5	7.9	8.2	---	---	---	7.2	6.9	---	---	---	---
30	7.7	6.5	7.0	---	---	---	7.2	6.9	7.0	7.1	6.9	---
31	7.5	6.6	7.0	---	---	---	7.2	6.9	7.0	7.5	7.0	7.2
MONTH	---	---	---	---	---	---	7.9	6.4	---	---	---	---

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

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

PM (UNITS), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.0	2.0	3.0	8.5	7.0	8.0	10.5	9.5	10.0	14.5	14.0	14.0
2	3.0	1.0	2.0	8.0	7.0	7.0	10.0	9.5	10.0	15.0	14.0	14.5
3	2.0	1.0	1.0	8.0	7.0	7.0	10.5	9.5	10.0	15.0	14.0	15.0
4	1.5	1.0	1.0	8.0	7.0	7.5	10.0	9.5	10.0	15.0	14.5	14.5
5	1.5	1.0	1.0	9.0	7.0	8.0	10.0	9.5	10.0	15.0	14.0	14.5
6	1.0	0.5	1.0	8.5	8.0	8.5	10.5	9.5	10.0	16.0	14.5	15.5
7	1.0	0.5	1.0	8.0	7.0	8.0	11.0	10.0	10.5	16.5	15.0	15.5
8	1.5	0.5	1.0	8.5	7.0	8.0	11.0	10.0	10.5	16.0	15.0	15.5
9	1.0	0.5	0.5	7.0	6.0	6.5	10.5	9.5	10.0	16.5	15.0	15.5
10	1.0	0.5	0.5	7.0	6.0	6.5	10.5	9.5	10.0	17.0	15.5	16.0
11	1.5	1.0	1.0	7.0	6.0	6.5	10.5	10.0	10.0	16.5	15.5	16.0
12	2.0	1.0	1.0	6.5	6.0	6.0	10.5	9.0	9.5	17.0	16.0	16.5
13	2.0	1.0	1.5	7.0	6.5	6.5	10.5	9.5	10.0	16.5	15.5	16.5
14	3.0	1.5	2.0	8.5	6.0	6.5	11.0	9.5	10.0	17.0	16.0	16.5
15	3.0	1.5	2.0	7.0	6.5	6.5	11.0	9.5	10.5	18.5	16.5	17.0
16	3.5	2.0	3.0	7.0	6.5	6.5	11.5	10.0	10.5	18.5	17.0	18.0
17	4.0	3.0	3.5	8.0	5.5	6.0	13.0	10.5	11.5	18.5	17.0	18.0
18	4.5	3.5	4.0	6.0	5.5	5.5	13.0	11.0	12.0	19.0	17.0	18.0
19	4.5	4.0	4.5	7.0	5.5	6.5	13.5	11.5	13.0	18.0	16.5	17.5
20	4.5	4.5	---	7.0	6.0	6.5	14.5	13.0	13.5	18.5	17.0	17.5
21	---	---	---	8.0	6.5	7.5	15.5	13.5	14.5	18.5	17.0	18.0
22	---	---	---	8.0	7.0	7.5	16.0	14.5	15.0	19.0	17.0	18.0
23	---	---	---	8.5	7.0	8.0	16.5	15.0	15.5	19.5	18.0	18.5
24	---	---	---	9.0	8.0	8.0	16.0	15.0	15.5	19.5	18.0	18.5
25	---	---	---	9.5	8.0	8.5	15.5	15.0	15.5	18.5	17.0	18.0
26	---	---	---	10.0	8.5	9.0	15.5	14.5	15.0	18.5	17.0	18.0
27	8.0	6.5	---	9.5	9.0	9.5	14.5	13.5	14.0	19.5	18.0	18.5
28	8.0	6.5	7.0	10.5	9.0	9.5	14.5	13.0	14.0	19.5	18.5	19.0
29	8.5	6.5	7.5	10.5	9.5	10.0	14.5	13.0	13.5	19.0	18.5	19.0
30	---	---	---	10.0	9.5	10.0	15.0	13.5	14.0	19.0	18.5	19.0
31	---	---	---	10.0	9.5	9.5	---	---	---	20.0	18.5	19.5
MONTH	8.5	0.5	---	10.5	5.5	7.5	16.5	9.0	12.0	20.0	14.0	17.0
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.5	19.0	20.0	26.0	25.0	25.5	26.0	25.0	25.5	---	---	---
2	19.5	19.0	19.5	26.0	25.0	25.5	25.5	25.0	25.0	---	---	---
3	20.0	19.0	19.5	26.0	25.0	25.5	25.5	24.5	25.0	---	---	---
4	20.0	19.0	19.5	25.5	25.0	25.0	25.5	24.5	25.0	---	---	---
5	20.5	19.0	19.5	26.0	24.5	25.5	25.5	24.5	25.0	---	---	---
6	20.5	19.5	20.0	26.5	25.0	25.5	26.0	24.5	25.0	---	---	---
7	21.0	19.5	20.0	26.0	25.0	25.5	25.5	25.0	25.0	23.5	22.0	---
8	21.0	20.0	20.5	26.0	25.0	25.5	25.0	25.0	25.0	23.5	22.0	22.5
9	22.0	20.0	---	26.0	25.0	25.5	25.0	24.5	25.0	23.5	22.0	23.0
10	---	---	---	26.5	25.0	25.5	25.0	24.0	24.5	23.0	22.0	22.5
11	---	---	---	25.5	25.0	25.5	25.5	24.5	25.0	22.0	21.0	21.5
12	---	---	---	25.5	25.0	25.0	26.0	24.5	25.0	22.0	21.0	21.5
13	---	---	---	25.0	24.0	24.5	26.0	25.0	25.5	23.0	21.5	22.0
14	22.0	21.5	---	24.5	23.5	24.0	26.0	25.5	26.0	23.0	21.5	22.0
15	23.0	21.5	22.0	24.5	24.0	---	26.0	25.5	---	23.0	22.0	22.0
16	23.5	22.0	23.0	---	---	---	---	---	---	22.0	21.5	22.0
17	23.5	23.0	23.5	---	---	---	---	---	---	22.0	22.0	22.0
18	24.0	23.0	23.5	---	---	---	---	---	---	23.0	21.5	22.0
19	24.5	23.0	23.5	---	---	---	---	---	---	23.0	21.5	22.0
20	24.5	23.5	24.0	---	---	---	---	---	---	23.0	21.5	22.0
21	24.5	24.0	24.0	---	---	---	---	---	---	22.0	21.5	21.5
22	24.5	24.0	---	---	---	---	---	---	---	21.5	21.0	21.0
23	25.5	24.0	24.5	---	---	---	---	---	---	21.0	20.5	20.5
24	25.5	24.0	25.0	---	---	---	---	---	---	21.0	20.0	20.5
25	26.0	24.5	25.0	---	---	---	---	---	---	20.5	20.0	20.0
26	26.0	25.0	25.5	25.5	24.5	---	---	---	---	20.0	19.5	20.0
27	26.0	24.5	25.5	25.0	24.5	25.0	---	---	---	20.5	20.0	20.0
28	26.5	25.0	25.5	25.5	24.5	25.0	---	---	---	20.0	19.5	20.0
29	26.5	25.0	26.0	25.5	25.0	25.0	---	---	---	20.0	19.5	19.5
30	26.0	25.5	25.5	26.0	25.0	25.5	---	---	---	19.5	18.5	19.0
31	---	---	---	26.0	25.0	25.5	---	---	---	---	---	---
MONTH	26.5	19.0	---	---	---	---	---	---	---	23.5	18.5	---

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.7	5.0	5.4	8.1	7.3	7.6	8.9	8.1	8.6	11.7	11.2	11.4
2	5.7	4.8	5.3	7.6	7.1	7.4	9.2	8.7	8.9	11.6	10.8	11.2
3	6.5	5.3	5.9	7.4	6.7	7.0	9.6	8.8	9.2	11.6	10.6	11.1
4	6.1	5.3	5.8	7.2	6.5	6.8	9.6	9.1	9.3	11.7	10.7	11.1
5	6.2	5.2	5.7	7.5	7.0	7.2	9.7	9.0	9.3	12.3	11.2	11.7
6	6.2	5.3	---	7.7	6.9	7.2	9.4	8.8	9.1	12.0	11.6	11.8
7	---	---	---	7.4	6.7	7.1	9.9	8.7	9.5	11.8	11.4	11.6
8	5.5	4.5	---	7.2	6.7	7.0	10.1	9.5	9.9	12.1	11.5	11.7
9	5.1	4.4	4.7	6.9	6.5	6.8	10.4	9.8	10.2	12.3	11.7	12.0
10	5.2	4.7	5.0	7.3	6.6	6.9	10.3	9.9	10.1	12.2	11.8	12.0
11	5.0	4.2	4.9	7.3	6.6	7.0	10.1	9.9	10.0	12.3	11.9	12.0
12	5.2	4.7	5.0	7.6	6.7	7.2	10.1	9.7	9.8	12.0	11.8	11.9
13	5.5	5.1	5.3	7.6	7.0	7.3	9.9	9.5	9.7	11.9	11.6	11.8
14	5.6	5.2	5.4	7.8	7.1	7.5	9.7	9.1	9.4	11.9	11.7	11.8
15	7.0	5.2	6.3	7.9	6.9	7.5	9.5	9.0	9.2	11.9	11.8	---
16	6.8	6.3	6.6	7.8	7.0	7.4	9.4	9.0	9.2	---	---	---
17	7.1	6.4	6.7	8.2	7.0	7.4	9.5	9.0	9.2	---	---	---
18	7.2	6.7	7.0	7.8	6.6	7.2	9.6	9.0	9.3	---	---	---
19	6.8	6.4	6.7	7.4	6.4	6.8	10.0	9.4	9.7	---	---	---
20	6.6	6.0	6.4	7.5	6.2	6.8	10.3	9.8	10.1	---	---	---
21	6.3	5.8	6.1	7.9	6.6	7.3	10.5	10.1	10.3	---	---	---
22	6.2	5.6	5.9	8.4	7.1	7.8	10.8	10.4	10.6	---	---	---
23	6.1	5.5	5.8	8.1	7.4	7.8	10.8	10.6	10.7	---	---	---
24	5.8	5.1	5.5	8.7	7.7	8.3	10.9	10.6	---	---	---	---
25	5.6	4.8	5.3	8.8	7.9	8.3	---	---	---	---	---	---
26	5.2	4.2	4.8	8.2	7.6	8.0	---	---	---	---	---	---
27	6.1	4.8	5.4	8.4	7.7	8.2	---	---	---	---	---	---
28	6.1	5.1	5.4	8.4	7.7	8.1	---	---	---	---	---	---
29	5.8	5.0	5.4	8.6	7.7	8.2	11.8	11.1	---	---	---	---
30	7.1	5.4	6.3	8.8	8.0	8.4	11.7	11.1	11.3	---	---	---
31	7.9	6.8	7.3	---	---	---	11.5	10.9	11.2	---	---	---
MONTH	7.9	4.2	5.8	8.8	6.2	7.5	11.8	8.1	9.8	---	---	---
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	10.0	9.7	9.9	9.6	8.4	8.9	8.4	7.7	8.1
2	---	---	---	10.2	10.0	10.1	8.8	7.8	8.4	8.3	7.4	7.8
3	---	---	---	10.3	10.0	10.2	8.8	7.9	8.4	7.9	7.2	7.5
4	---	---	---	10.2	9.3	9.8	8.6	8.0	8.3	7.6	7.1	7.4
5	---	---	---	9.6	9.2	9.4	8.5	7.9	8.1	7.8	7.1	7.4
6	---	---	---	9.9	9.2	9.5	9.0	7.8	8.5	7.7	7.1	7.4
7	---	---	---	9.9	9.5	9.7	9.3	8.3	8.8	8.4	7.2	7.7
8	---	---	---	9.9	9.3	9.6	9.2	8.4	8.8	8.7	7.9	8.3
9	8.8	8.7	---	10.4	9.5	10.0	10.0	8.7	9.2	8.5	7.8	8.1
10	9.0	8.7	8.8	10.6	10.1	10.3	10.3	9.3	9.8	8.4	7.4	7.9
11	8.8	8.6	8.7	10.5	9.9	10.2	10.6	9.2	10.0	8.4	7.5	7.9
12	8.9	8.6	8.7	10.3	9.9	10.1	10.3	9.4	10.0	8.2	7.2	7.8
13	8.9	8.4	8.6	10.3	9.9	10.1	10.8	9.7	10.1	8.2	7.1	7.6
14	8.6	8.3	8.5	10.4	9.4	9.8	10.8	9.4	9.9	8.1	6.8	7.5
15	8.7	8.3	8.5	10.9	9.1	10.1	10.9	9.3	9.9	7.7	6.4	7.0
16	8.6	8.2	8.4	10.8	10.3	10.6	10.7	9.0	9.7	7.3	6.1	6.8
17	8.4	8.0	8.2	11.3	10.5	10.9	10.3	8.6	9.2	7.3	6.1	6.8
18	8.3	7.8	8.1	11.4	10.7	11.1	10.1	8.4	9.0	7.2	5.8	6.6
19	8.1	7.7	7.8	11.2	10.7	11.0	9.7	8.2	8.8	8.3	6.1	7.3
20	7.7	7.5	---	10.9	10.5	10.7	9.2	8.0	8.4	8.5	7.6	8.1
21	---	---	---	10.9	10.6	10.7	9.2	7.8	8.5	8.3	7.8	8.1
22	---	---	---	11.0	10.4	10.7	9.4	8.2	8.6	8.4	7.7	8.1
23	---	---	---	10.7	10.3	10.5	8.9	7.9	8.4	8.4	7.7	8.1
24	---	---	---	10.5	10.3	10.4	9.1	8.1	8.5	8.7	7.4	8.0
25	---	---	---	10.4	9.8	10.1	9.0	8.2	8.5	8.7	7.3	8.1
26	---	---	---	10.2	9.7	9.9	8.8	8.0	8.4	8.6	7.5	8.0
27	10.4	9.9	---	10.0	9.8	9.9	9.8	8.5	9.1	8.3	7.0	7.7
28	10.3	9.8	10.1	9.9	9.4	9.7	9.8	9.2	9.5	8.1	6.7	7.5
29	10.2	9.9	10.0	9.7	9.2	9.4	10.0	9.2	9.7	8.0	7.1	7.6
30	---	---	---	9.3	8.7	9.0	10.2	7.7	9.0	8.0	6.8	7.4
31	---	---	---	9.2	8.4	8.8	---	---	---	7.6	6.6	7.1
MONTH	---	---	---	11.4	8.4	10.1	10.9	7.7	9.0	8.7	5.8	7.6

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DE--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

[illegible]

DELAWARE RIVER BASIN

69

01483200 BLACKBIRD CREEK AT BLACKBIRD, DE

LOCATION.--Lat 39°21'58", long 75°40'10", New Castle County, Hydrologic Unit 02040205, on right bank 15 ft (5 m) downstream from highway bridge, 0.5 mi (0.8 km) upstream from Barlow Branch, 0.6 mi (1.0 km) southwest of Blackbird, 5.6 mi (9.0 km) northwest of Smyrna, and 13.8 mi (22.2 km) upstream from mouth.

DRAINAGE AREA.--3.85 mi² (9.97 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximum, water years 1952-56, and occasional low-flow measurements, water years 1952-53, 1955-56. October 1956 to current year.

GAGE.--Water-stage recorder. Concrete control since May 23, 1968. Datum of gage is 18.89 ft (5.758 m) above mean sea level. Mar. 5, 1951, to Oct. 16, 1956, nonrecording gage and crest-stage gage at site 15 ft (5 m) upstream at same datum.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--20 years, 4.73 ft³/s (0.134 m³/s), 16.68 in/yr (424 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 712 ft³/s (20.2 m³/s) June 22, 1972, gage height, 5.04 ft (1.536 m), from rating curve extended above 200 ft³/s (5.66 m³/s) on basis of Type III culvert measurement of peak flow; no flow at times during 1964, 1965, 1966, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.4 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	1230	112 3.17	2.70 0.823	Jan. 28	0115	96 2.72	2.58 0.786
Nov. 13	0545	81 2.29	2.47 0.753	July 11	1700	108 3.06	2.67 0.814
Jan. 1	0815	*144 4.08	2.87 0.875				

Minimum discharge, 0.15 ft³/s (0.004 m³/s) Sept. 14, 15; minimum daily, 0.16 ft³/s (0.005 m³/s) Sept. 13, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.8	4.5	73	9.3	4.7	14	5.9	3.2	1.4	.66	.31
2	2.3	2.8	4.0	19	21	4.7	8.5	8.6	7.4	.68	.66	.28
3	2.1	2.7	3.7	14	12	4.7	5.7	3.2	2.3	.51	.63	.28
4	2.0	2.8	3.5	14	9.1	4.7	6.1	2.5	1.5	1.2	.63	.25
5	2.1	2.7	3.5	7.6	9.0	4.7	6.4	2.4	1.3	2.1	.56	.24
6	2.2	2.7	3.5	6.1	8.1	4.6	4.9	2.2	1.2	.86	.50	.27
7	2.0	2.7	3.6	9.6	6.8	4.2	4.5	2.3	1.2	1.8	.43	.26
8	2.0	3.9	3.4	18	6.7	4.0	4.2	2.5	1.0	1.2	.32	.24
9	2.2	3.3	3.6	12	6.8	5.2	4.1	1.9	1.0	1.4	2.4	.25
10	2.4	3.4	3.8	8.2	6.5	6.4	3.9	1.9	.94	.88	8.5	.22
11	3.0	3.1	3.3	7.8	7.6	9.3	3.9	1.8	.75	40	1.5	.21
12	2.8	8.5	3.1	7.2	6.7	9.4	3.5	2.0	.72	12	.99	.17
13	2.2	46	3.1	6.6	6.5	9.6	3.5	1.7	.67	1.9	.80	.16
14	2.2	13	3.2	7.0	7.1	8.4	3.5	1.8	.63	1.6	.93	.16
15	2.0	6.8	3.3	6.6	6.0	5.9	3.4	1.7	.80	1.3	2.5	.16
16	1.9	5.3	3.6	6.2	6.0	8.2	3.3	1.7	.82	1.7	3.8	.40
17	3.1	4.7	3.2	6.2	6.1	10	3.2	1.7	1.5	1.3	1.1	.77
18	9.4	4.5	3.1	4.0	6.0	6.1	3.0	2.1	1.2	.98	.77	.43
19	57	4.3	2.6	3.3	6.9	5.6	3.9	2.9	1.3	.84	.60	.29
20	15	4.2	2.7	4.0	5.4	5.1	3.0	1.7	.95	.76	.51	.28
21	5.3	6.2	3.2	4.9	5.2	5.1	2.8	1.6	1.2	.66	.50	.21
22	4.0	6.8	3.1	5.2	7.9	4.5	2.7	1.4	1.4	.78	.50	.22
23	3.4	4.5	2.8	4.1	7.6	4.3	2.6	1.3	1.6	1.5	.49	.26
24	3.3	4.1	2.6	4.3	5.5	4.3	2.3	1.3	1.4	1.7	.47	.17
25	4.3	4.0	2.5	4.8	5.3	4.2	2.8	1.2	1.0	1.1	.43	.17
26	3.8	3.7	11	7.8	5.2	4.2	3.2	1.4	.88	.75	.41	.23
27	3.2	4.3	9.3	46	5.0	4.3	2.5	1.5	.69	.69	.40	.31
28	3.1	4.1	4.4	49	4.7	4.8	2.4	1.3	.54	.65	.40	.43
29	3.0	3.6	3.7	16	4.5	4.0	2.2	1.5	.49	.64	.39	.27
30	3.5	3.7	4.1	11	---	4.2	2.2	3.5	.78	.78	.40	.99
31	3.0	---	10	9.2	---	4.5	---	2.0	---	.72	.38	---
TOTAL	160.1	175.2	125.0	402.7	210.5	173.9	122.2	70.5	40.36	84.38	33.56	8.89
MEAN	5.16	5.84	4.03	13.0	7.26	5.61	4.07	2.27	1.35	2.72	1.08	.30
MAX	57	46	11	73	21	10	14	8.6	7.4	40	8.5	.99
MIN	1.9	2.7	2.5	3.3	4.5	4.0	2.2	1.2	.49	.51	.32	.16
CFSM	1.34	1.52	1.05	3.38	1.89	1.46	1.06	.59	.35	.71	.28	.08
IN.	1.55	1.69	1.21	3.89	2.03	1.68	1.18	.68	.39	.82	.32	.09

CAL YR 1975 TOTAL 2414.38 MEAN 6.61 MAX 96 MIN .88 CFSM 1.72 IN 23.32
WTR YR 1976 TOTAL 1607.29 MEAN 4.39 MAX 73 MIN .16 CFSM 1.14 IN 15.53

DELAWARE RIVER BASIN

01483200 BLACKBIRD CREEK AT BLACKBIRD, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT 21...	1555	4.8	81	16.5	23.5	--	7.1
NOV 26...	1135	3.8	102	8.0	9.5	--	7.4
DEC 12...	1500	3.2	102	5.5	9.5	--	7.6
JAN 16...	1350	6.2	85	3.0	7.0	10.0	6.8
FEB 24...	1410	5.6	450	7.0	13.0	--	7.4
APR 12...	1320	3.4	80	10.0	11.0	--	7.7
MAY 19...	1500	2.7	87	17.5	14.5	--	7.6
JUN 21...	1435	1.0	119	26.5	22.5	--	7.6
AUG 11...	1615	1.4	85	26.0	27.0	7.0	8.3
SEP 30...	1130	.31	87	18.5	14.0	--	6.2

01483700 ST. JONES RIVER AT DOVER, DE

LOCATION.--Lat 39°09'49", long 75°31'10", Kent County, Hydrologic Unit 02040207, on left bank 150 ft (46 m) upstream from Division Street Bridge in Dover, 1,950 ft (594 m) downstream from Silver Lake, and 12.5 mi (20.1 km) upstream from mouth.

DRAINAGE AREA.--31.9 mi² (82.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 0.50 ft (0.152 m) above mean sea level.

REMARKS.--Water-discharge records good. Flow affected by Silver Lake.

AVERAGE DISCHARGE.--18 years, 36.4 ft³/s (1.031 m³/s), 15.50 in/yr (394 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s (53.8 m³/s) Sept. 13, 1960, gage height, 9.45 ft (2.880 m), from floodmark; no flow at times in 1959, 1961, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 500 ft³/s (14.2 m³/s) Jan. 28, gage height, 5.35 ft (1.631 m); minimum, 0.26 ft³/s (0.007 m³/s) Dec. 6, gage height, 2.35 ft (0.716 m), result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	36	32	360	90	33	51	21	12	5.5	11	.90
2	22	36	46	376	118	32	49	36	10	3.4	5.5	1.2
3	18	27	51	206	128	31	51	25	9.0	2.5	3.9	2.4
4	17	20	51	160	108	32	49	16	8.2	4.9	3.9	2.6
5	16	20	23	122	88	33	48	12	7.6	12	2.9	2.4
6	16	19	.26	87	85	32	48	12	7.2	12	2.1	2.1
7	16	19	4.5	75	66	29	48	12	7.0	14	2.4	1.9
8	14	20	24	140	60	27	37	12	6.8	11	7.1	2.4
9	16	20	27	156	57	37	15	11	6.6	33	28	2.9
10	17	20	30	118	54	54	2.4	10	6.4	30	53	5.0
11	22	20	27	76	54	63	3.2	10	6.2	149	28	5.5
12	26	21	26	63	56	79	7.6	12	6.2	245	11	4.6
13	22	23	25	63	53	77	28	10	6.0	80	7.6	3.2
14	17	88	25	72	62	56	22	11	6.0	23	8.9	1.3
15	15	85	26	76	69	47	5.9	12	6.0	13	21	1.6
16	13	59	27	63	59	48	12	11	6.8	11	31	3.9
17	20	44	26	59	53	59	9.5	12	7.6	11	19	5.0
18	53	34	26	42	48	52	7.1	15	11	8.0	9.2	4.2
19	103	31	20	36	48	42	7.1	18	8.0	6.7	6.3	3.9
20	150	30	18	30	47	37	7.1	12	5.9	5.9	4.6	3.7
21	120	49	22	32	45	36	7.1	11	5.0	5.5	4.6	5.5
22	72	65	22	37	47	31	11	9.0	8.0	5.5	4.6	5.9
23	48	68	20	34	59	27	24	7.1	23	11	3.9	3.7
24	50	49	18	33	60	25	21	6.7	78	12	3.7	4.2
25	52	40	17	36	48	25	18	6.3	30	8.4	3.7	3.9
26	51	34	42	47	40	39	20	6.3	12	5.5	3.4	9.0
27	51	36	68	151	36	52	16	7.6	8.0	5.0	5.5	15
28	51	37	61	435	34	52	13	6.7	5.0	4.6	5.9	24
29	49	34	39	288	34	51	13	7.6	4.2	5.9	5.9	13
30	49	31	32	158	---	49	13	20	3.7	10	2.6	29
31	42	---	57	114	---	49	---	16	---	15	1.3	---
TOTAL	1251	1115	932.76	3745	1806	1336	664.0	394.3	327.4	769.3	311.5	173.80
MEAN	40.4	37.2	30.1	121	62.3	43.1	22.1	12.7	10.9	24.8	10.0	5.79
MAX	150	88	68	435	128	79	51	36	78	245	53	29
MIN	13	19	.26	30	34	25	2.4	6.3	3.7	2.5	1.3	.80
CFSM	1.27	1.17	.94	3.79	1.95	1.35	.69	.40	.34	.78	.31	.18
IN.	1.46	1.30	1.09	4.37	2.11	1.56	.77	.46	.38	.90	.36	.20
CAL YR 1975 TOTAL	20355.26			MEAN 55.8	MAX 500	MIN .26	CFSM 1.75	IN 23.74				
WTR YR 1976 TOTAL	12826.06			MEAN 35.0	MAX 435	MIN .26	CFSM 1.10	IN 14.96				

ST. JONES RIVER BASIN

01483700 ST. JONES RIVER AT DOVER, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965-72, 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	HARD- NESS (CA+MG) (MG/L)
OCT									
01...	1540	22	95	7.1	23.0	20.5	50	9.7	26
NOV									
03...	1540	20	157	7.0	17.5	13.0	--	7.5	--
DEC									
02...	1420	56	163	7.4	9.0	8.0	--	--	--
JAN									
02...	1500	343	85	6.1	3.0	2.5	50	12.7	20
FEB									
03...	0950	123	104	6.8	-4.0	2.0	--	13.5	--
MAR									
02...	1430	33	205	6.7	10.0	11.0	--	--	--
APR									
01...	1530	49	134	7.2	14.5	13.0	37	10.0	33
MAY									
03...	1445	26	162	8.0	17.5	18.5	--	12.0	--
JUN									
01...	1440	12	204	7.1	34.0	25.0	--	8.6	--
JUL									
02...	1340	4.7	--	7.0	27.0	24.0	--	--	--
15...	1500	12	134	6.5	26.5	25.0	23	7.0	34
AUG									
03...	1005	3.9	138	5.8	23.0	24.5	--	5.8	--
SEP									
01...	1630	1.1	157	8.3	26.0	23.0	15	13.0	53

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT									
01...	13	7.5	1.8	4.8	2.9	16	17	6.7	.1
NOV									
03...	--	--	--	--	--	--	--	--	--
DEC									
02...	--	--	--	--	--	--	--	--	--
JAN									
02...	7	4.9	2.0	4.6	2.6	16	11	7.7	.3
FEB									
03...	--	--	--	--	--	--	--	--	--
MAR									
02...	--	--	--	--	--	--	--	--	--
APR									
01...	14	8.2	3.1	10	2.3	23	22	11	.1
MAY									
03...	--	--	--	--	--	--	--	--	--
JUN									
01...	--	--	--	--	--	--	--	--	--
JUL									
02...	--	--	--	--	--	--	--	--	--
15...	19	9.4	2.6	8.4	2.4	19	32	6.2	.1
AUG									
03...	--	--	--	--	--	--	--	--	--
SEP									
01...	20	14	4.4	14	2.9	40	37	8.7	.1

ST. JONES RIVER BASIN

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01483700 ST. JONES RIVER AT DOVER, DE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT									
01...	9.4	--	58	.29	.13	850	--	110	--
NOV									
03...	--	--	--	--	--	--	--	--	--
DEC									
02...	--	--	--	--	--	--	--	--	--
JAN									
02...	9.2	--	50	.63	.17	1200	--	60	--
FEB									
03...	--	--	--	--	--	--	--	--	--
MAR									
02...	--	--	--	--	--	--	--	--	--
APR									
01...	9.9	--	78	.73	.11	1200	--	60	--
MAY									
03...	--	--	--	--	--	--	--	--	--
JUN									
01...	--	--	--	--	--	--	--	--	--
JUL									
02...	--	--	--	--	--	--	--	--	--
15...	9.0	90	80	.39	.11	1100	130	120	110
AUG									
03...	--	--	--	--	--	--	--	--	--
SEP									
01...	8.2	113	109	.20	.17	1700	120	150	110

MURDERKILL RIVER BASIN

01484000 MURDERKILL RIVER NEAR FELTON, DE

LOCATION.--Lat 38°58'33", long 75°34'03", Kent County, Hydrologic Unit 02040207, on left bank 30 ft (9 m) downstream from northbound lane of bridge on U.S. Highway 13, 400 ft (122 m) downstream from Black Swamp Creek, 1.3 mi (2.1 km) upstream from Killen Pond, 2.2 mi (3.5 km) south of Felton, and 17.6 mi (28.3 km) upstream from mouth.

DRAINAGE AREA.--13.6 mi² (35.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1931 to October 1933. Monthly discharge only for July to September 1931, published in WSP 1302. Annual maximum, water years 1952-60, and occasional low-flow measurements, water years 1952-53, 1955-57, 1959-60. June 1960 to current year.

REVISED RECORDS.--WSP 1432: 1932.

GAGE.--Water-stage recorder. Datum of gage is 21.87 ft (6.666 m) above mean sea level. July 1931 to October 1933, nonrecording gage at bridge 200 ft (61 m) upstream at datum 2.00 ft (0.610 m) higher. March 1951 to May 1960, nonrecording gage and crest-stage gage at bridge 200 ft (61 m) upstream at datum 2.00 ft (0.610 m) higher.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--18 years (water years 1932-33, 1961-76), 18.9 ft³/s (0.535 m³/s), 18.87 in/yr (479 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,090 ft³/s (59.2 m³/s) Aug. 4, 1967, gage height, 8.83 ft (2.691 m); minimum, 0.80 ft³/s (0.023 m³/s) Aug. 28, Sept. 11, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 4, 1967, is believed to have been the highest since that of 1935, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 130 ft³/s (3.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0800	*318 9.01	5.72 1.743	Jan. 28	0200	258 7.31	5.50 1.676
Jan. 8	1200	135 3.82	4.88 1.487				

Minimum discharge, 1.9 ft³/s (0.054 m³/s) Sept. 7, gage height, 2.23 ft (0.680 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	10	24	250	32	17	28	13	6.5	4.7	3.2	2.8
2	9.9	9.9	22	121	74	17	24	16	6.7	3.7	3.0	3.2
3	8.4	9.9	24	68	43	17	20	11	6.1	3.3	2.5	3.3
4	7.5	9.6	23	72	36	16	23	9.1	5.5	2.9	3.0	3.0
5	7.2	9.3	21	40	40	16	28	8.5	5.1	3.3	3.1	2.6
6	7.6	9.1	20	32	35	17	21	7.8	4.7	3.3	3.0	2.2
7	7.1	9.1	19	36	30	15	19	7.8	3.6	6.4	2.6	2.2
8	6.9	13	19	110	27	15	17	7.8	4.0	9.6	2.7	2.3
9	11	13	21	61	26	25	16	7.0	4.5	5.8	8.4	2.4
10	10	12	20	33	25	36	15	6.2	4.0	4.6	19	3.4
11	9.7	13	18	30	26	35	14	6.5	4.0	23	3.9	3.4
12	8.8	13	17	31	24	29	13	7.0	3.4	11	2.6	2.6
13	7.5	59	16	30	24	28	12	4.6	3.3	5.5	5.0	2.3
14	6.8	42	15	34	30	28	12	6.0	3.7	5.1	3.3	2.5
15	6.3	28	17	31	26	24	12	5.7	3.5	4.5	9.9	2.5
16	5.9	23	16	29	25	27	11	5.7	2.6	4.3	15	3.5
17	10	21	15	28	24	32	11	5.5	4.2	6.2	5.4	3.3
18	30	20	14	22	22	24	9.3	6.5	3.6	3.9	4.4	2.8
19	38	18	13	20	22	23	8.8	12	3.6	3.7	3.7	2.5
20	27	18	12	20	21	21	8.2	7.5	3.5	3.7	3.6	2.2
21	19	26	11	22	20	20	7.4	6.5	5.0	3.4	3.1	2.5
22	15	51	11	22	25	18	6.9	5.5	8.2	3.7	2.7	2.6
23	13	30	10	19	24	17	6.6	5.0	6.4	4.7	3.0	2.4
24	12	26	10	19	21	17	6.0	5.0	4.3	5.5	3.0	2.3
25	15	24	9.5	19	20	17	4.6	5.0	3.9	5.2	3.2	2.2
26	14	22	30	24	19	16	6.4	3.9	3.7	3.8	3.1	6.8
27	15	25	33	97	18	15	5.8	5.0	3.2	3.7	4.1	3.8
28	14	27	22	195	18	18	5.6	5.0	3.2	3.7	4.7	6.6
29	13	22	19	77	18	15	5.1	5.7	3.3	3.7	3.3	3.6
30	13	21	19	45	---	16	4.2	11	3.6	4.2	2.9	4.8
31	11	---	34	36	---	15	---	7.3	---	3.5	2.8	---
TOTAL	389.6	633.9	578.5	1673	795	646	380.9	226.1	130.9	163.6	143.2	92.6
MEAN	12.6	21.1	18.7	54.0	27.4	20.8	12.7	7.29	4.36	5.28	4.62	3.09
MAX	38	59	38	250	74	36	28	16	8.2	23	19	6.8
MIN	5.9	9.1	9.5	19	18	15	4.2	3.9	2.6	2.9	2.5	2.2
CFSM	.93	1.55	1.38	3.97	2.01	1.53	.93	.54	.32	.39	.34	.23
IN.	1.07	1.73	1.58	4.58	2.17	1.77	1.04	.62	.36	.45	.39	.25

CAL YR 1975 TOTAL 10775.7 MEAN 29.5 MAX 557 MIN 3.6 CFSM 2.17 IN 29.47
WTR YR 1976 TOTAL 5853.3 MEAN 16.0 MAX 250 MIN 2.2 CFSM 1.18 IN 16.01

MURDERKILL RIVER BASIN

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01484000 MURDERKILL RIVER NEAR FELTON, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
31...	1500	12	150	9.0	12.0	7.8	7.0
NOV							
10...	1445	12	163	18.0	22.0	--	6.9
13...	1025	60	120	14.0	13.5	--	6.6
DEC							
23...	1500	10	143	4.0	5.5	--	7.6
JAN							
14...	1510	37	81	6.0	8.0	--	7.5
MAR							
04...	1635	16	142	9.5	11.5	8.0	6.7
APR							
14...	1400	13	124	15.5	26.0	--	7.2
MAY							
21...	1635	6.1	225	16.5	26.0	6.2	7.1
JUN							
08...	1130	4.2	175	16.0	22.5	7.0	6.9
22...	1230	4.3	265	20.0	24.5	6.0	7.1
AUG							
13...	1455	6.8	203	22.0	32.5	--	6.1
SEP							
24...	1230	2.4	265	16.5	21.0	--	6.5

MISPILLION RIVER BASIN

01484100 BEAVERDAM BRANCH AT HOUSTON, DE

LOCATION.--Lat 38°54'20", long 75°30'49", Kent County, Hydrologic Unit 02040207, on left bank 15 ft (5 m) upstream from bridge on State Highway 384, 0.8 mi (1.3 km) south of Houston, and 1.2 mi (1.9 km) upstream from Blairs Pond and mouth.

DRAINAGE AREA.--2.83 mi² (7.33 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1958 to current year.

GAGE.--Water-stage recorder and timber control. Datum of gage is 35.67 ft (10.872 m) above mean sea level.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--18 years, 3.73 ft³/s (0.106 m³/s), 17.90 in/yr (455 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 176 ft³/s (4.98 m³/s) Sept. 12, 1960, gage height, 5.55 ft (1.692 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Sept. 18, 19, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30 ft³/s (0.84 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0600	*45 1.27	3.45 1.052	Jan. 28	0045	42 1.19	3.37 1.027
Jan. 8	0645	39 1.10	3.28 1.000				

Minimum daily discharge, 0.35 ft³/s (0.010 m³/s) Sept. 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.3	4.3	34	7.4	4.0	5.8	3.8	2.0	.75	.75	.40
2	2.9	3.3	4.0	10	19	4.0	4.7	3.5	1.9	.75	.68	.50
3	2.6	3.2	4.1	10	9.6	4.0	4.1	2.9	1.9	.50	.68	.62
4	2.6	3.1	3.8	9.9	9.4	4.0	4.9	2.8	1.7	.91	.62	.62
5	2.5	2.9	3.7	7.2	11	3.9	5.0	2.8	1.7	.83	.68	.62
6	2.5	2.9	3.7	6.5	9.6	3.9	4.2	2.8	1.7	.62	.56	.56
7	2.3	2.9	3.6	7.9	8.2	3.7	3.8	2.8	1.7	.62	.56	.50
8	2.3	3.0	3.7	27	7.4	3.6	3.7	2.8	1.6	.83	.62	.40
9	2.8	3.0	3.9	11	7.0	6.4	3.6	2.6	1.5	.83	.91	.45
10	2.6	2.9	3.7	8.0	6.8	7.9	3.5	2.6	1.6	.91	1.9	.56
11	2.5	3.0	3.5	7.4	7.0	6.4	3.4	2.5	1.5	1.7	1.1	.56
12	2.4	3.3	3.4	7.2	6.6	5.5	3.3	2.4	1.5	1.5	.91	.56
13	2.2	13	3.3	6.8	6.4	5.5	3.5	2.3	1.5	1.4	.83	.45
14	2.2	7.3	3.3	7.3	8.0	5.0	3.4	2.4	1.3	1.4	.75	.45
15	2.2	4.9	3.5	6.6	7.0	4.9	3.4	2.3	1.2	1.2	1.0	.50
16	2.2	4.4	3.4	6.5	6.6	5.9	3.3	2.3	.75	1.1	1.5	.62
17	3.0	4.1	3.3	6.2	6.4	5.7	3.2	2.2	1.4	1.2	1.0	.56
18	7.3	4.0	3.2	5.3	6.2	4.9	3.1	2.5	1.6	1.1	.83	.47
19	11	3.8	3.1	5.0	5.8	4.8	3.0	3.0	1.6	1.0	.83	.42
20	6.0	3.7	3.1	5.2	5.6	4.4	3.0	2.6	1.5	.91	.75	.39
21	4.5	5.0	3.1	5.4	5.4	4.5	3.1	2.4	1.7	.91	.75	.39
22	4.1	5.2	3.1	5.1	5.4	4.1	3.1	2.3	1.6	.91	.68	.39
23	3.8	4.0	2.9	4.8	5.2	4.0	3.0	2.2	1.6	1.1	.68	.36
24	3.7	4.0	2.9	4.9	4.8	4.0	2.9	2.1	1.5	1.1	.68	.35
25	4.1	3.7	2.9	4.6	4.6	4.0	3.0	2.1	1.5	1.0	.68	.35
26	3.8	3.5	5.9	5.0	4.5	3.8	2.9	2.0	1.5	.91	.56	7.7
27	3.7	4.5	4.5	14	4.4	3.8	2.8	2.0	1.4	.83	.62	1.9
28	3.5	4.3	3.4	25	4.2	3.9	2.9	2.0	1.4	.83	.68	1.4
29	3.4	3.7	3.3	10	4.1	3.8	2.8	2.0	1.3	.83	.68	1.1
30	3.4	3.7	3.5	8.3	---	3.8	2.8	3.0	.91	.83	.56	1.2
31	3.3	---	7.5	7.3	---	3.8	---	3.1	---	.83	.40	---
TOTAL	108.3	123.6	114.6	289.4	203.6	141.9	105.2	79.1	45.56	30.14	24.43	25.35
MEAN	3.49	4.12	3.70	9.34	7.02	4.58	3.51	2.55	1.52	.97	.79	.85
MAX	11	13	7.5	34	19	7.9	5.8	3.8	2.0	1.7	1.9	7.7
MIN	2.2	2.9	2.9	4.6	4.1	3.6	2.8	2.0	.75	.50	.40	.35
CFSM	1.23	1.46	1.31	3.30	2.48	1.62	1.24	.90	.54	.34	.28	.30
IN.	1.42	1.62	1.51	3.80	2.68	1.86	1.38	1.04	.60	.40	.32	.33

CAL YR 1975	TOTAL	2157.40	MEAN 5.91	MAX 74	MIN 1.6	CFSM 2.09	IN 28.35
WTR YR 1976	TOTAL	1291.18	MEAN 3.53	MAX 34	MIN .35	CFSM 1.25	IN 16.97

MISPILLION RIVER BASIN

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01484100 BEAVERDAM BRANCH AT HOUSTON, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT 31...	1350	3.2	76	10.5	8.0	9.3	6.7
NOV 10...	1315	2.9	91	16.0	24.0	--	7.3
DEC 24...	1445	2.9	79	6.0	.5	--	--
JAN 16...	1215	6.3	71	7.0	5.0	--	7.4
FEB 23...	1415	5.2	79	10.0	2.0	10.5	6.8
APR 09...	1545	3.7	84	12.0	9.5	--	7.1
MAY 28...	1145	2.0	70	14.5	25.5	8.9	6.7
JUN 22...	1110	1.6	68	16.5	24.0	7.0	--
SEP 07...	1230	.50	58	15.5	29.0	--	5.5
17...	1340	.60	66	19.5	27.0	--	6.6

BROADKILL RIVER BASIN

01484300 SOWBRIDGE BRANCH NEAR MILTON, DE

LOCATION.--Lat 38°48'51", long 75°19'39", Sussex County, Hydrologic Unit 02040207, on left bank at downstream side of highway bridge, 0.7 mi (1.1 km) upstream from mouth, 1 mi (1.6 km) downstream from Reynolds Pond, and 2.5 mi (4.0 km) north of Milton.

DRAINAGE AREA.--7.08 mi² (18.34 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 28, 1968. Datum of gage is 3.43 ft (1.045 m) above mean sea level.

REMARKS.--Water-discharge records good. Flow regulated by Reynolds Pond.

AVERAGE DISCHARGE.--20 years, 10.1 ft³/s (0.286 m³/s), 19.37 in/yr (492 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 134 ft³/s (3.79 m³/s) Aug. 5, 1967, gage height, 6.33 ft (1.929 m); minimum, 0.47 ft³/s (0.013 m³/s) Feb. 10, 1969, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30 ft³/s (0.85 m³/s) Sept. 27, gage height, 5.17 ft (1.576 m); maximum gage height, 5.19 ft (1.582 m) Jan. 10; minimum discharge, 1.7 ft³/s (0.048 m³/s) Sept. 23, 24, 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	9.3	12	22	20	13	12	7.6	4.4	4.1	2.4	2.9
2	13	8.6	12	27	22	13	12	10	13	3.9	2.2	2.9
3	11	8.6	12	26	22	13	12	10	14	3.6	2.2	3.1
4	10	8.6	12	24	23	13	12	9.5	4.0	3.5	2.2	3.1
5	10	8.2	12	21	23	13	12	8.5	3.1	3.6	2.2	3.1
6	9.6	8.1	11	20	23	13	12	7.7	2.9	3.6	2.0	3.1
7	9.2	7.6	11	18	22	13	11	7.7	3.1	3.6	2.0	2.9
8	9.0	7.3	11	24	21	12	11	7.6	3.1	3.8	2.2	2.9
9	9.1	7.3	11	24	20	14	11	7.3	3.3	3.9	3.5	2.9
10	9.6	7.3	11	24	19	17	10	7.1	3.5	4.1	15	3.0
11	9.6	7.3	11	21	19	17	10	6.9	3.6	5.4	14	3.0
12	9.4	7.4	11	20	18	17	9.6	7.1	3.6	4.8	10	2.5
13	8.7	18	11	19	17	16	9.6	6.9	3.7	3.8	7.7	2.4
14	8.6	19	11	18	17	15	9.6	6.9	3.9	3.8	6.2	2.2
15	8.1	18	11	17	17	14	9.6	7.3	3.9	3.6	5.4	2.2
16	7.7	15	11	17	17	14	9.4	7.3	3.9	3.9	4.9	2.4
17	7.7	13	11	16	16	15	9.1	7.3	4.0	3.8	2.7	2.5
18	9.7	13	10	15	16	14	9.1	7.5	4.4	3.5	2.5	2.5
19	15	13	9.8	15	15	14	8.6	9.3	4.7	3.6	2.5	2.4
20	18	12	9.6	14	15	14	8.6	8.3	5.2	3.6	2.5	2.2
21	17	13	9.6	14	14	13	8.1	7.6	5.7	3.4	2.6	2.2
22	15	14	10	14	15	13	8.1	7.2	6.2	3.6	2.7	2.0
23	13	14	9.6	14	17	12	8.0	6.9	6.2	3.8	2.7	1.8
24	12	14	9.6	14	17	12	7.7	6.8	6.2	4.1	2.7	1.7
25	12	14	9.6	13	16	12	7.7	6.5	6.2	4.1	2.9	1.7
26	12	13	10	12	16	12	7.7	3.0	5.8	3.7	2.9	13
27	11	13	12	7.2	15	11	7.6	2.5	5.4	6.6	2.9	28
28	11	13	12	21	14	11	7.3	2.6	5.1	6.4	3.1	24
29	10	13	12	25	14	11	7.3	2.9	4.6	3.3	3.1	16
30	10	13	11	23	---	11	7.3	3.6	3.9	2.8	3.0	12
31	9.6	---	11	21	---	11	---	3.9	---	2.5	2.9	---
TOTAL	339.6	350.6	337.8	580.2	520	413	285.0	211.3	150.6	121.8	125.8	156.6
MEAN	11.0	11.7	10.9	18.7	17.9	13.3	9.50	6.82	5.02	3.93	4.06	5.22
MAX	18	19	12	27	23	17	12	10	14	6.6	15	28
MIN	7.7	7.3	9.6	7.2	14	11	7.3	2.5	2.9	2.5	2.0	1.7
CFSM	1.55	1.65	1.54	2.64	2.53	1.88	1.34	.96	.71	.56	.57	.74
IN.	1.78	1.84	1.77	3.05	2.73	2.17	1.50	1.11	.79	.64	.66	.82
CAL YR 1975	TOTAL	4629.2	MEAN	12.7	MAX	38	MIN	2.7	CFSM	1.79	IN	24.32
WTR YR 1976	TOTAL	3592.3	MEAN	9.82	MAX	28	MIN	1.7	CFSM	1.39	IN	18.87

01484300 SOWBRIDGE BRANCH NEAR MILTON, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT 20...	1130	18	79	16.0	14.5	7.6	6.8
NOV 14...	1100	20	92	11.0	7.0	--	7.2
DEC 30...	1525	11	107	4.5	6.5	--	7.7
JAN 14...	1020	18	74	4.5	4.5	--	7.6
MAR 01...	1105	14	84	19.0	20.0	9.3	6.8
APR 09...	1310	11	99	13.0	10.0	--	7.5
MAY 18...	1330	7.2	92	23.0	25.0	9.1	7.0
JUN 29...	1430	5.2	88	27.0	30.0	7.7	6.9
SEP 10...	1115	3.0	83	21.0	22.0	--	6.1

INDIAN RIVER BASIN

01484500 STOCKLEY BRANCH AT STOCKLEY, DE

LOCATION.--Lat 38°38'19", long 75°20'31", Sussex County, Hydrologic Unit 02060010, on left bank at highway bridge in Stockley, 1.6 mi (2.6 km) upstream from mouth, and 4.4 mi (7.1 km) southeast of Georgetown.

DRAINAGE AREA.--5.24 mi² (13.57 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.54 ft (7.480 m) above mean sea level. Prior to Aug. 16, 1950, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--33 years, 7.00 ft³/s (0.198 m³/s), 18.13 in/yr (461 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 132 ft³/s (3.74 m³/s) June 4, 1948, gage height, 5.0 ft (1.52 m), from graph based on gage readings, from rating curve extended above 50 ft³/s (1.42 m³/s); minimum observed, 0.13 ft³/s (0.004 m³/s) Sept. 1-11, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 45 ft³/s (1.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Nov. 13	0830	56	1.59	Jan. 28	0645	50	1.42
Jan. 1	0930	*67	1.90	Feb. 2	0900	59	1.67
			3.06 0.933				2.97 0.905
			3.21 0.978				3.10 0.945

Minimum discharge, 0.87 ft³/s (0.025 m³/s) July 27, Aug. 5, 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	5.7	11	56	15	7.0	6.7	4.1	2.5	1.6	1.6	1.5
2	6.7	5.8	11	27	44	6.6	6.1	5.4	2.4	1.4	1.1	1.5
3	6.1	5.7	9.9	24	26	6.6	5.7	3.9	2.3	1.4	1.0	1.4
4	5.9	5.6	8.8	26	22	6.6	6.4	3.2	2.3	1.4	1.0	1.4
5	5.7	5.3	8.6	18	21	7.0	6.8	3.2	2.2	1.4	.97	1.2
6	5.6	5.2	8.2	15	19	7.0	5.9	3.0	2.2	1.4	.96	1.2
7	5.3	5.0	7.8	15	16	6.5	5.6	3.0	2.2	1.3	.92	1.2
8	5.2	5.1	7.8	36	15	6.2	5.4	3.0	2.2	1.3	1.0	1.2
9	6.2	5.1	8.2	23	13	11	5.2	3.0	2.1	1.3	8.0	1.1
10	5.8	5.1	8.3	16	12	15	4.8	2.9	2.1	1.3	13	1.6
11	5.6	5.1	7.7	15	12	11	4.8	3.1	2.0	2.3	2.4	1.4
12	5.3	5.3	7.3	14	11	9.3	4.6	3.2	2.0	1.7	1.9	1.2
13	5.0	4.7	7.0	13	11	9.4	4.5	2.9	1.9	1.4	1.6	1.2
14	4.9	28	7.0	14	10	8.4	4.4	2.9	1.9	1.4	1.6	1.1
15	4.7	18	7.0	13	9.5	7.8	4.2	2.9	1.8	1.3	1.8	1.1
16	4.6	14	7.1	12	9.6	8.6	4.0	3.0	1.8	1.3	5.6	1.2
17	5.2	12	6.6	12	9.2	8.9	3.9	3.0	2.9	1.3	2.1	1.2
18	9.8	11	6.6	9.8	8.5	7.6	3.7	4.2	2.2	1.2	1.8	1.1
19	14	9.9	6.1	8.8	8.5	7.5	3.8	5.8	2.0	1.2	1.7	1.1
20	11	9.4	6.0	8.8	7.9	7.2	3.8	3.2	2.0	1.2	1.6	1.1
21	8.9	11	6.0	9.1	7.6	7.2	3.6	2.9	2.3	1.1	1.6	1.1
22	8.0	15	6.0	8.9	9.5	6.8	3.5	2.7	2.0	1.1	1.5	1.1
23	7.4	11	5.7	8.1	9.2	6.4	3.4	2.5	2.0	1.1	1.5	1.0
24	7.1	11	5.5	7.9	8.2	6.3	3.3	2.5	1.9	1.3	1.5	1.0
25	7.6	11	5.5	7.6	7.9	6.3	3.5	2.4	1.8	1.1	1.5	1.0
26	7.5	9.5	9.3	7.9	7.6	6.2	3.5	2.4	1.7	1.1	1.5	1.1
27	7.2	11	8.8	15	7.6	6.0	3.3	2.4	1.6	1.1	1.5	1.0
28	7.0	12	7.2	40	7.6	5.8	3.3	2.3	1.5	1.1	2.0	1.2
29	6.7	10	6.7	23	7.0	5.5	2.9	2.6	1.5	1.0	1.6	1.2
30	6.6	9.3	7.0	18	---	5.7	2.8	2.9	1.5	1.0	1.4	1.8
31	6.3	---	13	15	---	5.7	---	2.6	---	1.0	1.5	---
TOTAL	209.8	324.1	238.7	536.9	372.4	233.1	133.4	97.1	60.8	40.1	68.75	36.5
MEAN	6.77	10.8	7.70	17.3	12.8	7.52	4.45	3.13	2.03	1.29	2.22	1.22
MAX	14	47	13	56	44	15	6.8	5.8	2.9	2.3	13	1.8
MIN	4.6	5.0	5.5	7.6	7.0	5.5	2.8	2.3	1.5	1.0	.92	1.0
CFSM	1.29	2.06	1.47	3.30	2.44	1.44	.85	.60	.39	.25	.42	.23
IN.	1.49	2.30	1.69	3.81	2.64	1.65	.95	.69	.43	.28	.49	.26

CAL YR 1975 TOTAL 3478.90 MEAN 9.53 MAX 63 MIN 1.7 CFSM 1.82 IN 24.69
WTR YR 1976 TOTAL 2351.65 MEAN 6.43 MAX 56 MIN .92 CFSM 1.23 IN 16.69

INDIAN RIVER BASIN

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01484500 STOCKLEY BRANCH AT STOCKLEY, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
20...	1450	10	96	15.0	15.0	8.2	6.6
NOV							
12...	1100	5.0	140	13.0	18.5	--	6.9
DEC							
24...	1215	5.3	114	5.5	-1.0	--	--
JAN							
15...	1340	12	77	6.0	6.5	--	7.4
MAR							
01...	1445	6.8	89	15.0	17.0	10.0	6.6
APR							
09...	1125	5.2	119	10.0	10.0	--	7.1
MAY							
18...	1715	2.9	104	17.0	20.5	--	6.6
AUG							
13...	1255	1.7	118	22.0	33.0	--	5.6
SEP							
27...	1445	1.0	109	19.0	22.5	--	6.2

POCOMOKE RIVER BASIN

01485000 POCOMOKE RIVER NEAR WILLARDS, MD

LOCATION.--Lat 38°23'20", long 75°19'30", Worcester County, Hydrologic Unit 02060009, on left bank 30 ft (9 m) downstream from bridge on State Highway 346, 0.6 mi (1.0 km) upstream from Burnt Mill Branch, 1.3 mi (2.1 km) east of Willards, 1.3 mi (2.1 km) west of Whaleysville, and 50.3 mi (80.9 km) upstream from mouth.

DRAINAGE AREA.--60.5 mi² (156.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 13.95 ft (4.252 m) above mean sea level.

REMARKS.--Water-discharge records fair.

AVERAGE DISCHARGE.--26 years (water years 1951-76), 59.2 ft³/s (1.677 m³/s), 13.29 in/yr (338 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,000 ft³/s (28.3 m³/s) July 26, 1975, gage height, 12.00 ft (3.658 m); maximum gage height, 13.67 ft (4.167 m) June 30, 1972; minimum, 2.2 ft³/s (0.062 m³/s) Aug. 18, 19, 1957, gage height, 1.91 ft (0.582 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 567 ft³/s (16.1 m³/s) Jan. 1, gage height, 9.98 ft (3.042 m), no other peak above base of 500 ft³/s (14 m³/s); minimum, 8.8 ft³/s (0.25 m³/s) July 9, 27, Aug. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	51	67	519	128	41	46	27	20	12	24	12
2	58	50	81	413	373	39	47	84	20	11	15	12
3	52	47	70	276	331	39	44	58	19	10	11	12
4	48	45	64	241	231	38	45	48	19	10	10	12
5	44	43	60	163	191	38	50	41	18	10	9.8	12
6	42	41	58	129	157	38	48	36	18	9.5	9.5	11
7	39	40	56	117	129	36	45	32	18	9.0	9.0	11
8	37	44	55	252	110	34	42	34	18	9.3	10	10
9	40	46	58	194	96	48	40	29	17	20	36	10
10	42	45	61	134	84	107	38	28	17	53	262	15
11	43	46	58	114	82	94	37	26	17	22	116	19
12	44	44	54	108	75	78	35	29	16	22	62	14
13	41	127	50	99	71	75	34	25	16	17	47	13
14	38	156	48	105	68	69	33	25	16	15	36	12
15	36	114	48	98	64	64	33	24	16	14	31	11
16	34	92	47	96	63	64	32	23	15	13	57	12
17	33	77	44	106	61	73	31	23	17	13	42	12
18	43	69	44	87	58	66	30	23	17	12	28	11
19	74	64	41	72	56	62	29	30	16	12	24	11
20	88	61	39	69	52	58	29	26	15	11	21	10
21	74	58	39	68	50	56	28	24	27	11	20	10
22	65	76	38	66	52	54	28	23	20	11	19	10
23	59	72	36	61	54	51	27	22	17	11	17	9.3
24	54	67	34	61	51	49	27	22	15	11	17	9.3
25	57	66	33	59	49	48	27	21	14	10	16	9.0
26	58	62	48	60	48	47	27	21	13	9.5	15	9.0
27	60	60	78	103	47	45	25	20	12	9.3	14	10
28	62	65	69	448	45	44	25	20	11	9.5	17	27
29	59	62	62	319	42	42	25	20	11	9.5	15	19
30	57	59	60	202	---	41	25	23	11	9.5	13	22
31	54	---	106	152	---	40	---	21	---	11	13	---
TOTAL	1598	1949	1706	4991	2918	1678	1032	908	496	417.1	1036.3	376.6
MEAN	51.5	65.0	55.0	161	101	54.1	34.4	29.3	16.5	13.5	33.4	12.6
MAX	88	156	106	519	373	107	50	84	27	53	262	27
MIN	33	40	33	59	42	34	25	20	11	9.0	9.0	9.0
CFSM	.85	1.07	.91	2.66	1.67	.89	.57	.48	.27	.22	.55	.21
IN.	.98	1.20	1.05	3.07	1.79	1.03	.63	.56	.30	.26	.64	.23
CAL YR 1975	TOTAL	36606.0	MEAN	100	MAX	899	MIN	19	CFSM	1.65	IN	22.51
WTR YR 1976	TOTAL	19106.0	MEAN	52.2	MAX	519	MIN	9.0	CFSM	.86	IN	11.75

01485000 POCOMOKE RIVER NEAR WILLARDS, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
02...	1530	57	114	17.0	16.5	10.3	6.4
22...	0945	66	134	13.5	19.5	9.3	6.4
NOV							
24...	1300	68	183	10.0	11.5	--	6.9
DEC							
30...	1225	58	121	5.5	6.5	--	7.2
JAN							
21...	1350	67	83	1.0	1.0	--	6.7
MAR							
02...	1610	40	100	11.0	12.5	9.6	6.8
APR							
08...	1245	41	112	11.0	14.5	--	6.7
MAY							
19...	1600	30	109	13.0	12.5	9.1	6.8
JUN							
30...	1600	11	89	24.0	27.0	6.6	6.6
JUL							
13...	1150	17	100	20.0	21.0	--	6.3
14...	1125	14	77	20.0	21.0	--	5.7
AUG							
13...	1045	47	121	21.0	25.0	--	5.1
SEP							
27...	1300	9.0	100	19.5	21.0	--	6.1

POCOMOKE RIVER BASIN

01485500 NASSAWANGO CREEK NEAR SNOW HILL, MD

LOCATION.--Lat 38°13'44", long 75°28'19", Worcester County, Hydrologic Unit 02060009, on right bank 15 ft (5 m) downstream from bridge on State Highway 12, 0.5 mi (0.8 km) upstream from Furnace Branch, 0.6 mi (1.0 km) downstream from Millville Creek, 5.5 mi (8.8 km) northwest of Snow Hill, and 7.3 mi (11.7 km) upstream from mouth.

DRAINAGE AREA.--44.9 mi² (116.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1949 to current year.

REVISED RECORDS.--WSP 1332: 1953.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 12.29 ft (3.746 m) above mean sea level.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--26 years (water years 1951-76), 51.6 ft³/s (1.461 m³/s), 15.61 in/yr (396 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,320 ft³/s (37.4 m³/s) June 30, 1972, gage height, 7.63 ft (2.326 m); maximum gage height, 7.82 ft (2.384 m) Aug. 16, 1953; minimum discharge, 0.80 ft³/s (0.023 m³/s) Sept. 8, 9, 10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 280 ft³/s (7.9 m³/s) and maximum(*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1000	*416 11.8	6.14 1.871	Feb. 3	1800	314 8.89	5.64 1.719
Jan. 29	1300	369 10.5	5.92 1.804				

Minimum discharge, 1.7 ft³/s (0.048 m³/s) July 28, 29, gage height, 1.45 ft (0.442 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	31	44	271	127	28	31	14	7.2	2.2	5.5	4.7
2	26	30	53	407	195	26	35	30	6.8	2.0	4.9	4.6
3	21	28	57	324	302	25	34	36	5.9	1.9	3.3	5.6
4	18	26	58	220	270	24	34	57	4.9	2.0	3.0	5.2
5	15	24	50	159	190	25	37	50	4.1	2.3	2.5	4.6
6	14	22	43	115	145	26	36	33	3.5	2.2	2.2	4.0
7	13	21	39	95	117	25	35	23	3.2	2.0	2.0	3.5
8	11	23	37	119	94	23	32	30	3.0	2.1	3.5	3.2
9	24	26	37	145	83	36	30	25	2.9	2.9	27	3.0
10	30	29	39	141	69	68	26	23	2.8	3.3	94	9.3
11	26	30	38	110	63	86	24	19	2.6	7.6	73	25
12	37	28	37	90	57	89	21	19	2.5	10	58	18
13	39	56	36	79	51	74	19	17	2.3	6.8	40	10
14	33	91	34	81	49	58	18	15	2.2	4.7	21	6.2
15	27	107	33	73	44	47	17	13	2.2	3.9	12	5.0
16	22	103	32	70	42	44	16	11	2.1	3.0	35	5.6
17	19	80	31	79	40	53	16	10	3.6	4.9	54	7.8
18	27	58	32	63	38	55	15	9.8	4.4	3.6	46	6.6
19	39	45	30	55	36	52	15	17	3.3	2.7	31	5.3
20	45	39	27	42	34	45	14	22	2.9	2.3	18	4.7
21	42	38	27	39	33	39	13	20	4.9	2.1	11	4.2
22	39	46	26	40	35	38	12	14	4.2	2.1	8.4	4.0
23	35	47	25	38	46	35	11	9.6	3.2	2.2	8.5	3.7
24	31	49	23	38	43	34	10	7.5	2.7	2.2	16	3.4
25	30	49	21	39	40	33	9.8	6.4	2.4	2.0	8.6	3.2
26	29	44	35	44	37	31	10	5.9	2.2	1.9	6.8	3.3
27	35	41	55	68	35	30	9.4	5.5	2.0	1.8	6.0	4.7
28	37	41	66	212	33	29	8.7	5.2	1.9	1.8	7.6	32
29	37	40	67	354	30	26	8.5	5.4	1.8	1.8	12	33
30	35	39	57	286	---	25	8.0	10	1.8	1.9	7.6	48
31	33	---	80	181	---	24	---	9.6	---	2.5	5.6	---
TOTAL	901	1331	1269	4077	2378	1253	605.4	572.9	99.5	94.7	634.0	281.4
MEAN	29.1	44.4	40.9	132	82.0	40.4	20.2	18.5	3.32	3.05	20.5	9.38
MAX	45	107	80	407	302	89	37	57	7.2	10	94	48
MIN	11	21	21	38	30	23	8.0	5.2	1.8	1.8	2.0	3.0
CFSM	.65	.99	.91	2.94	1.83	.90	.45	.41	.07	.07	.46	.21
IN.	.75	1.10	1.05	3.38	1.97	1.04	.50	.47	.08	.08	.53	.23
CAL YR 1975	TOTAL	24269.3	MEAN 66.5	MAX 545	MIN 2.9	CFSM 1.48	IN 20.11					
WTR YR 1976	TOTAL	13496.9	MEAN 36.9	MAX 407	MIN 1.8	CFSM .82	IN 11.18					

01485500 NASSAWANGO CREEK NEAR SNOW HILL, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT 21...	1430	43	71	12.5	19.0	8.1	6.1
NOV 19...	1315	47	79	9.0	21.5	--	6.5
DEC 30...	1550	56	74	2.0	6.5	10.7	5.6
JAN 21...	1200	40	55	.5	3.0	--	6.6
MAR 02...	1315	26	61	11.5	15.0	8.3	6.2
APR 05...	1510	37	79	11.5	12.0	--	6.5
MAY 19...	1310	18	66	14.0	15.5	8.1	6.5
JUL 02...	1530	1.9	62	20.0	28.5	5.4	6.5
AUG 11...	1355	76	125	21.0	24.5	--	4.3
SEP 21...	1410	4.3	82	18.5	24.0	--	6.5

MANOKIN RIVER BASIN

01486000 MANOKIN BRANCH NEAR PRINCESS ANNE, MD

LOCATION.--Lat 38°12'50", long 75°40'18", Somerset County, Hydrologic Unit 02060009, on right bank 45 ft (14 m) downstream from farm bridge, 1.4 mi (2.3 km) northeast of Princess Anne, and 1.6 mi (2.6 km) upstream from confluence with Loretto Branch.

DRAINAGE AREA.--4.80 mi² (12.43 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1951 to September 1971, October 1974 to current year.

REVISED RECORDS.--WDR MD-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7.03 ft (2.143 m) above mean sea level. Artificial control since April 30, 1975. Nov. 26, 1968, to Sept. 30, 1971, water-stage recorder above and nonrecording gage below gage height 1.4 ft (0.43 m). Prior to Nov. 26, 1968, recording gage at datum 1.0 ft (0.30 m) higher.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--22 years (water years 1952-71, 1975-76), 4.19 ft³/s (0.119 m³/s), 11.85 in/yr (301 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 547 ft³/s (15.5 m³/s) Aug. 20, 1969, gage height, 5.44 ft (1.658 m), from rating curve extended above 27 ft³/s (0.76 m³/s) on basis of channel-conveyance study; no flow at times in 1954, 1963, 1964, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.4 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0200	*97 2.75	3.49 1.064	Feb. 2	0445	82 2.32	3.37 1.027
Jan. 28	0230	78 2.21	3.34 1.018	May 18	1845	56 1.59	3.15 0.960

Minimum daily discharge, 0.36 ft³/s (0.010 m³/s) July 3, 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.5	5.7	59	10	3.4	3.5	1.4	1.1	.44	.83	.77
2	1.3	2.4	6.2	25	49	3.5	3.6	1.6	1.1	.37	.60	.78
3	1.2	2.3	4.9	19	22	3.0	3.1	1.3	1.0	.36	.53	.77
4	1.2	2.2	4.2	16	18	3.0	3.1	1.2	.98	.40	.51	.75
5	1.1	2.0	3.8	11	14	3.0	3.2	1.1	.89	.38	.49	.74
6	1.1	2.0	3.6	8.2	12	3.1	2.9	1.1	.89	.38	.49	.70
7	1.0	2.0	3.4	8.1	8.9	2.9	2.6	1.1	.89	.39	.47	.66
8	1.0	2.2	3.3	21	7.5	2.7	2.5	1.2	.85	.39	.58	.65
9	1.3	2.3	3.8	13	6.4	6.1	2.3	1.1	.76	.36	1.6	.64
10	1.4	2.4	4.2	9.0	5.6	10	2.2	1.1	.74	.36	4.5	.81
11	1.4	2.3	3.6	7.7	5.5	7.4	2.2	1.1	.72	.86	2.8	.81
12	4.2	2.2	3.2	8.1	4.8	5.7	1.9	1.1	.70	.83	1.3	.72
13	3.2	17	3.0	7.3	4.7	5.3	1.9	1.0	.62	.59	1.0	.66
14	2.4	11	2.9	7.7	4.6	4.4	1.9	1.0	.64	.47	.88	.62
15	2.0	7.1	2.9	6.5	4.4	4.1	1.8	.99	.64	.46	.91	.60
16	1.8	5.6	2.9	6.9	4.3	4.7	1.8	.99	.61	.43	16	.69
17	1.9	4.7	2.7	7.7	4.1	6.0	1.7	.98	.73	.42	5.7	.70
18	3.7	4.2	2.9	5.6	3.9	4.6	1.6	6.8	.72	.40	3.2	.64
19	6.3	3.9	2.6	4.2	3.8	4.1	1.6	3.3	.66	.38	2.1	.61
20	4.4	3.7	2.5	4.2	3.4	3.7	1.5	1.8	.79	.57	1.5	.60
21	3.3	3.7	2.5	4.2	3.3	3.7	1.4	1.5	.69	.38	1.3	.61
22	2.9	4.2	2.5	4.2	4.5	3.4	1.4	1.3	.62	.41	1.2	.60
23	2.6	3.7	2.4	3.7	5.5	3.1	1.3	1.2	.58	.42	1.2	.56
24	2.3	3.7	2.2	3.7	4.5	2.9	1.2	1.2	.56	.42	1.1	.55
25	2.5	3.6	2.2	3.7	4.1	2.9	1.3	1.2	.51	.38	1.0	.58
26	2.6	3.2	6.1	3.9	3.9	2.8	1.2	1.1	.49	.38	.97	.58
27	3.1	3.4	8.2	23	3.8	2.7	1.1	1.1	.46	.40	.95	.64
28	3.5	4.0	5.6	52	3.6	2.7	1.1	1.1	.45	.40	1.1	1.1
29	3.1	3.4	4.7	24	3.4	2.5	1.1	1.2	.41	.58	1.0	.86
30	2.9	3.3	4.7	16	---	2.6	1.1	1.3	.40	.48	.89	.87
31	2.7	---	22	12	---	2.6	---	1.2	---	.92	.80	---
TOTAL	74.8	120.2	135.4	405.6	233.5	122.6	59.1	44.66	21.20	14.41	57.50	20.87
MEAN	2.41	4.01	4.37	13.1	8.05	3.95	1.97	1.44	.71	.46	1.85	.70
MAX	6.3	17	22	59	49	10	3.6	6.8	1.1	.92	16	1.1
MIN	1.0	2.0	2.2	3.7	3.3	2.5	1.1	.98	.40	.36	.47	.55
CFSM	.50	.84	.91	2.73	1.68	.82	.41	.30	.15	.10	.39	.15
IN.	.58	.93	1.05	3.14	1.81	.95	.46	.35	.16	.11	.45	.16

CAL YR 1975 TOTAL 2284.33 MEAN 6.26 MAX 94 MIN .66 CFSM 1.30 IN 17.70
WTR YR 1976 TOTAL 1309.84 MEAN 3.58 MAX 59 MIN .36 CFSM .75 IN 10.15

MANOKIN RIVER BASIN

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01486000 MANOKIN BRANCH NEAR PRINCESS ANNE, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
21...	1110	3.5	155	12.5	18.0	9.7	6.5
NOV							
17...	1325	4.9	148	11.0	10.5	--	6.7
DEC							
31...	1125	9.6	133	8.5	10.0	--	6.8
JAN							
08...	1235	22	102	5.5	4.0	--	7.7
19...	1205	4.2	80	2.5	-1.0	--	7.2
28...	1145	51	50	6.5	2.5	--	5.5
MAR							
02...	1000	3.2	136	10.5	14.0	9.5	6.1
APR							
05...	1230	3.2	126	13.5	18.5	--	6.3
MAY							
19...	1035	3.1	142	12.5	15.0	9.3	6.5
JUL							
01...	1620	.40	150	27.5	31.5	10.8	6.6
AUG							
11...	1120	2.8	112	23.0	29.5	--	5.2
SEP							
21...	1100	.60	158	20.0	23.5	--	6.4

NANTICOKE RIVER BASIN

01487000 NANTICOKE RIVER NEAR BRIDGEVILLE, DE

LOCATION.--Lat 38°43'42", long 75°33'44", Sussex County, Hydrologic Unit 02060008, on left bank at downstream side of highway bridge, 800 ft (244 m) downstream from Gum Branch, 2.5 mi (4.0 km) southeast of Bridgeville, and 50.5 mi (81.3 km) upstream from mouth.

DRAINAGE AREA.--75.4 mi² (195.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1943 to current year. Prior to October 1955, published as Gravelly Fork near Bridgeville.

REVISED RECORDS.--WSP 1111: 1947. WSP 1232: 1945-49.

GAGE.--Water-stage recorder. Datum of gage is 13.64 ft (4.157 m) above mean sea level (levels by Soil Conservation Service). Prior to Apr. 19, 1947, nonrecording gage, and Apr. 19, 1947, to Dec. 18, 1969, recording gage at present site and datum. Timber control Sept. 3, 1947, to Dec. 18, 1969. Feb. 18, 1970, to Oct. 1, 1973, recording gage at site 300 ft (91 m) downstream at same datum.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--33 years, 92.2 ft³/s (2.611 m³/s), 16.61 in/yr (422 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,360 ft³/s (66.8 m³/s) Aug. 5, 1967, gage height, 8.86 ft (2.701 m); minimum observed, 6.3 ft³/s (0.18 m³/s) Sept. 29, 1943.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 11.0 ft (3.35 m) in September 1935, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 360 ft³/s (10 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	1000	*724 20.5	6.96 2.121	Jan. 28	0500	662 18.7	6.83 2.082
Jan. 8	1000	687 19.5	6.93 2.112				

Minimum daily discharge, 16 ft³/s (0.45 m³/s) Sept. 23, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	69	91	549	181	108	102	68	49	31	22	19
2	54	68	94	274	381	106	102	80	46	28	22	19
3	52	67	91	207	280	105	95	70	45	28	23	19
4	50	66	88	231	228	104	96	65	44	28	22	19
5	49	64	85	170	238	104	100	63	43	30	22	18
6	49	63	84	146	221	104	95	62	42	29	21	18
7	48	63	84	141	199	100	92	61	41	29	20	18
8	46	65	82	526	184	98	89	60	40	55	19	17
9	51	64	84	277	171	109	87	58	40	40	26	17
10	49	64	84	191	159	138	86	58	40	33	50	18
11	48	63	81	177	158	132	84	56	40	41	34	19
12	47	64	78	178	149	124	83	57	38	48	28	18
13	45	149	77	174	144	122	81	54	36	37	26	17
14	45	147	77	176	142	117	81	53	36	33	25	17
15	44	113	77	167	136	112	79	52	34	31	24	17
16	44	100	79	159	137	115	80	51	33	31	27	18
17	46	94	76	155	135	124	79	50	35	31	25	19
18	78	89	75	142	132	114	78	50	37	29	23	18
19	122	86	72	132	129	110	77	54	35	27	23	17
20	113	85	71	130	123	108	76	49	33	27	22	17
21	92	90	71	131	119	108	75	47	35	27	22	17
22	84	110	71	128	127	104	74	46	37	26	20	17
23	79	98	69	121	128	100	74	45	40	25	20	16
24	76	93	67	119	120	97	72	44	33	27	20	16
25	77	92	66	115	118	98	71	44	32	26	20	16
26	77	88	82	114	116	96	71	45	31	25	20	19
27	76	89	99	181	115	95	66	45	29	24	20	35
28	74	96	87	516	112	95	66	44	28	23	23	27
29	72	90	81	274	109	91	64	44	27	23	21	22
30	73	87	81	220	---	90	63	50	27	24	19	22
31	70	---	98	193	---	89	---	52	---	21	19	---
TOTAL	1985	2576	2502	6414	4691	3317	2438	1677	1106	937	728	566
MEAN	64.0	85.9	80.7	207	162	107	81.3	54.1	36.9	30.2	23.5	18.9
MAX	122	149	99	549	381	138	102	80	49	55	50	35
MIN	44	63	66	114	109	89	63	44	27	21	19	16
CFSM	.85	1.14	1.07	2.75	2.15	1.42	1.08	.72	.49	.40	.31	.25
IN.	.98	1.27	1.23	3.16	2.31	1.64	1.20	.83	.55	.46	.36	.28

CAL YR 1975 TOTAL 43132 MEAN 118 MAX 1230 MIN 37 CFSM 1.56 IN 21.28
WTR YR 1976 TOTAL 28937 MEAN 79.1 MAX 549 MIN 16 CFSM 1.05 IN 14.28

NANTICOKE RIVER BASIN

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01487000 NANTICOKE RIVER NEAR BRIDGEVILLE, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961-72, 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	HARD- NESS (CA,MG)
OCT									
06...	1435	50	112	6.7	24.0	17.0	1	10.5	20
31...	1125	70	168	6.5	6.0	8.5	--	9.2	--
NOV									
14...	1430	144	130	7.0	7.0	10.5	--	--	--
DEC									
30...	1230	79	95	6.4	5.0	5.5	1	12.2	18
JAN									
09...	1320	259	102	7.1	-2.0	2.5	--	--	--
20...	1405	131	74	7.3	2.0	3.5	--	--	--
MAR									
05...	1530	103	92	7.1	26.5	17.0	--	11.2	--
APR									
02...	1330	101	94	6.9	11.5	11.0	7	12.0	19
MAY									
20...	1450	49	99	6.8	25.0	16.5	--	9.7	--
JUN									
03...	1110	45	106	6.5	18.0	16.5	--	--	--
JUL									
08...	1100	65	155	7.1	25.5	20.5	38	5.1	15
SEP									
14...	1145	16	163	5.8	27.0	20.0	3	--	22

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT									
06...	7	5.4	1.5	10	2.7	16	5.2	14	.0
31...	--	--	--	--	--	--	--	--	--
NOV									
14...	--	--	--	--	--	--	--	--	--
DEC									
30...	6	4.0	2.0	6.8	1.9	15	5.1	9.7	.0
JAN									
09...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
MAR									
05...	--	--	--	--	--	--	--	--	--
APR									
02...	2	4.5	1.8	7.7	1.8	20	6.0	10	.0
MAY									
20...	--	--	--	--	--	--	--	--	--
JUN									
03...	--	--	--	--	--	--	--	--	--
JUL									
08...	0	3.1	1.7	22	4.0	36	12	11	.1
SEP									
14...	7	5.1	2.3	13	3.6	18	3.1	17	.1

NANTICOKE RIVER BASIN

01487000 NANTICOKE RIVER NEAR BRIDGEVILLE, DE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT									
06...	18	--	65	2.5	.14	560	--	50	--
31...	--	--	--	--	--	--	--	--	--
NOV									
14...	--	--	--	--	--	--	--	--	--
DEC									
30...	19	--	56	3.1	.04	380	--	20	--
JAN									
09...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
MAR									
05...	--	--	--	--	--	--	--	--	--
APR									
02...	16	--	58	2.6	.04	530	--	20	--
MAY									
20...	--	--	--	--	--	--	--	--	--
JUN									
03...	--	--	--	--	--	--	--	--	--
JUL									
08...	8.7	102	80	3.1	.69	2400	110	80	30
SEP									
14...	16	85	69	2.6	.33	1200	30	50	10

01488500 MARSHYHOPE CREEK NEAR ADAMSVILLE, DE

LOCATION.--Lat 38°50'59", long 75°40'24", Kent County, Hydrologic Unit 02060008, on left bank 45 ft (14 m) upstream from highway bridge, 1.4 mi (2.3 km) upstream from Cattail Branch, 1.6 mi (2.6 km) northeast of Adamsville, 4.9 mi (7.9 km) northwest of Greenwood, and 33 mi (53 km) upstream from mouth.

DRAINAGE AREA.--43.9 mi² (113.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1943 to March 1969, October 1971 to current year.

REVISED RECORDS.--WSP 1141: 1948(P). WSP 1432: 1946(M), 1948, 1952.

GAGE.--Water-stage recorder. Datum of gage is 26.21 ft (7.989 m) above mean sea level. Prior to Nov. 24, 1953, nonrecording gage and crest-stage gage, and Nov. 24, 1953, to March 1969, recording gage at site on old channel about 240 ft (73 m) southeast of present site at datum 2.00 ft (0.610 m) higher.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--30 years (water years 1944-68, 1972-76), 54.3 ft³/s (1.538 m³/s), 16.80 in/yr (427 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft³/s (105 m³/s) July 13, 1975, gage height, 13.19 ft (4.020 m); maximum gage height, 13.98 ft (4.261 m) Aug. 5, 1967, present datum; minimum discharge, 1.0 ft³/s (0.028 m³/s) Sept. 9, 10, 1964, Aug. 20, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 16.5 ft (5.03 m), present datum, in September 1935, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0600	*1050 29.7	7.97 2.429	Jan. 27	0300	885 25.1	7.25 2.210
Jan. 8	0500	627 17.8	5.88 1.792	Feb. 2	0800	477 13.5	5.09 1.551

Minimum discharge, 7.5 ft³/s (0.21 m³/s) Aug. 5, 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	32	51	767	106	49	58	31	18	13	9.4	9.9
2	33	32	52	259	291	49	56	32	17	12	8.7	11
3	31	32	49	242	140	48	50	29	17	11	8.7	9.9
4	30	31	46	223	130	48	51	27	17	12	8.7	9.9
5	29	30	45	137	143	47	59	26	16	13	8.1	9.9
6	29	30	44	111	120	47	53	26	16	12	8.1	9.4
7	27	29	43	127	97	45	50	26	16	13	8.1	9.4
8	27	31	42	457	88	44	48	26	16	14	8.7	8.7
9	29	30	43	191	81	52	46	25	16	13	12	8.7
10	27	30	44	125	76	74	44	24	15	12	21	9.4
11	27	29	42	108	77	86	43	24	15	34	16	9.4
12	26	30	40	103	71	74	41	24	14	33	13	8.7
13	25	137	39	95	70	71	40	23	14	21	11	8.7
14	25	92	39	106	71	65	40	23	14	15	9.9	11
15	24	71	39	96	68	61	39	23	15	13	13	11
16	24	64	39	91	68	66	38	22	14	13	20	12
17	25	60	37	86	65	76	38	22	16	14	18	12
18	44	57	37	75	62	64	36	22	15	13	14	11
19	65	55	35	69	61	60	36	22	14	12	11	11
20	53	54	35	68	57	57	35	21	14	11	9.9	10
21	45	67	35	68	54	57	35	20	15	11	9.9	11
22	42	81	34	65	61	54	34	20	15	11	9.4	10
23	39	57	34	61	67	49	34	19	14	11	9.4	9.9
24	37	53	32	60	59	49	32	19	13	11	8.7	9.8
25	38	51	32	58	57	49	32	19	13	11	8.7	9.9
26	37	47	57	60	55	48	32	19	13	11	8.7	29
27	36	50	64	335	54	47	30	18	12	9.9	20	25
28	35	55	50	492	52	47	29	18	12	9.9	35	16
29	35	49	46	201	50	45	29	19	12	9.9	14	13
30	35	47	46	143	---	46	28	21	12	9.9	11	14
31	32	---	128	114	---	45	---	20	---	9.9	11	---
TOTAL	1045	1513	1399	5193	2451	1719	1216	710	440	419.5	383.1	348.6
MEAN	33.7	50.4	45.1	168	84.5	55.5	40.5	22.9	14.7	13.5	12.4	11.6
MAX	65	137	128	767	291	86	59	32	18	34	35	29
MIN	24	29	32	58	50	44	28	18	12	9.9	8.1	8.7
CFSM	.77	1.15	1.03	3.83	1.92	1.26	.92	.52	.33	.31	.28	.26
IN.	.89	1.28	1.19	4.40	2.08	1.46	1.03	.60	.37	.36	.32	.30

CAL YR 1975	TOTAL	34657.0	MEAN 95.0	MAX 2480	MIN 21	CFSM 2.16	IN 29.37
WTR YR 1976	TOTAL	16837.2	MEAN 46.0	MAX 767	MIN 8.1	CFSM 1.05	IN 14.27

NANTICOKE RIVER BASIN

01488500 MARSHYHOPE CREEK NEAR ADAMSVILLE, DE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	HARD- NESS (CA+MG) (MG/L)	
OCT										
06...	1140	30	97	6.9	21.5	17.5	2	10.6	28	
31...	1500	33	116	7.1	14.5	12.5	--	--	--	
NOV										
13...	1200	169	85	--	10.5	14.0	--	--	--	
DEC										
23...	1300	35	121	7.4	6.0	4.0	--	--	--	
JAN										
07...	0950	99	93	6.7	3.5	4.5	35	7.8	18	
09...	1115	187	94	7.2	-5.5	1.5	--	--	--	
16...	1400	90	68	7.2	7.0	7.0	--	--	--	
MAR										
04...	1210	48	92	6.5	10.5	10.0	--	11.0	--	
30...	1545	46	88	6.6	18.5	15.5	4	11.7	19	
MAY										
21...	1440	21	96	7.0	24.0	20.5	--	10.2	--	
JUL										
08...	1445	13	94	7.3	27.5	28.5	2	11.1	24	
SEP										
14...	1355	8.3	104	6.6	27.5	20.0	3	--	24	
DATE		NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT										
06...	14	8.9	1.3	7.0	1.6	17	11	8.8	.0	
31...	--	--	--	--	--	--	--	--	--	--
NOV										
13...	--	--	--	--	--	--	--	--	--	--
DEC										
23...	--	--	--	--	--	--	--	--	--	--
JAN										
07...	7	4.2	1.8	6.3	1.6	13	11	9.3	.1	
09...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
MAR										
04...	--	--	--	--	--	--	--	--	--	--
30...	3	5.0	1.6	7.2	1.3	19	8.6	8.8	.1	
MAY										
21...	--	--	--	--	--	--	--	--	--	--
JUL										
08...	7	6.5	1.8	6.7	1.2	20	11	7.6	.1	
SFP										
14...	8	6.4	1.9	6.4	1.5	19	7.7	9.9	.1	
DATE		DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT										
06...	24	--	--	71	1.1	.05	1900	--	120	--
31...	--	--	--	--	--	--	--	--	--	--
NOV										
13...	--	--	--	--	--	--	--	--	--	--
DEC										
23...	--	--	--	--	--	--	--	--	--	--
JAN										
07...	23	--	--	64	1.4	.07	2500	--	110	--
09...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
MAR										
04...	--	--	--	--	--	--	--	--	--	--
30...	24	--	--	66	.96	.02	1100	--	90	--
MAY										
21...	--	--	--	--	--	--	--	--	--	--
JUL										
08...	20	--	73	65	.57	.02	1300	70	60	60
SEP										
14...	21	--	66	64	.70	.02	1000	60	50	20

01489000 FAULKNER BRANCH AT FEDERALSBURG, MD

LOCATION.--Lat 38°42'44", long 75°47'34", Caroline County, Hydrologic Unit 02060008, on right bank 25 ft (8 m) downstream from bridge on Nichols Road, 0.9 mi (1.4 km) upstream from mouth, and 1.6 mi (2.6 km) northwest of Federalburg.

DRAINAGE AREA.--7.10 mi² (18.39 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1950 to current year.

REVISED RECORDS.--WSP 1552: 1952. WSP 2103: 1960(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 16.70 ft (5.090 m) above mean sea level.

REMARKS.--Water-discharge records good. Diversion for irrigation of about 100 acres (40.5 ha) above station during some years.

AVERAGE DISCHARGE.--26 years, 8.79 ft³/s (0.249 m³/s), 16.81 in/yr (427 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft³/s (47.6 m³/s) July 13, 1975, gage height, 5.98 ft (1.823 m), from rating curve extended above 210 ft³/s (5.95 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times during many years (result of pumpage for irrigation).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1935 is believed to have been higher than that of July 13, 1975, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 60 ft³/s (1.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)				
Jan. 1	0530	188	5.32	3.23	0.985	Feb. 2	0830	82	2.32	2.39	0.728
Jan. 8	0500	142	4.02	2.98	0.908	July 8	0115	66	1.87	2.23	0.680
Jan. 27	2330	*189	5.35	3.24	0.988						

Minimum discharge, 0.58 ft³/s (0.016 m³/s) July 1, 2, 3, 6, Aug. 5, 6, 7, 22, 23, 24, 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	3.8	7.7	121	21	7.9	10	5.2	2.1	.77	1.1	1.1
2	4.8	3.9	7.3	33	56	7.5	8.5	5.4	1.9	.71	.83	1.2
3	4.3	3.7	7.0	35	27	7.5	7.2	4.2	1.8	.71	.84	1.2
4	4.1	3.6	6.3	34	26	7.2	7.6	3.6	1.7	.76	.89	1.1
5	4.1	3.5	6.1	21	29	7.3	7.9	3.4	1.6	.83	.85	.98
6	4.0	3.4	6.1	17	24	7.2	7.0	3.3	1.6	.79	.79	.88
7	3.7	3.3	6.1	21	19	6.7	6.4	3.4	1.6	3.1	.78	.86
8	3.4	3.7	5.9	90	18	6.4	6.0	3.2	1.6	14	1.1	.82
9	5.4	3.6	6.3	35	16	11	5.7	3.0	1.5	2.2	2.2	.80
10	4.5	3.5	6.3	23	15	16	5.4	2.9	1.3	1.7	2.7	1.3
11	4.1	3.3	5.7	21	15	14	5.3	3.1	1.3	3.8	1.3	1.2
12	4.2	4.0	5.4	20	13	12	5.0	2.9	1.2	2.6	1.1	.93
13	3.8	24	5.2	16	13	11	4.9	2.6	1.2	1.9	.97	.85
14	3.2	15	5.2	19	13	9.5	4.9	2.6	1.2	1.7	.90	.81
15	3.0	10	5.5	16	12	8.6	4.7	2.7	1.1	1.6	1.0	.89
16	3.0	8.9	5.6	15	12	11	4.7	2.6	1.1	1.5	1.1	1.7
17	3.3	8.0	5.2	15	12	13	4.6	2.6	1.5	1.6	.91	1.5
18	6.3	7.3	5.1	12	11	9.7	4.5	2.7	1.5	1.3	.84	1.1
19	8.1	6.9	4.7	10	10	8.9	4.3	2.6	1.3	1.2	.82	.99
20	6.7	6.7	4.7	10	9.4	8.3	4.2	2.3	1.2	1.2	.81	1.7
21	5.8	7.7	4.7	11	8.9	8.2	4.1	2.1	1.5	1.1	.80	1.4
22	5.4	8.0	4.7	10	13	7.4	5.3	2.0	1.4	.95	.76	1.2
23	4.9	6.8	4.5	8.9	14	6.9	5.4	2.0	1.2	.95	.74	.95
24	4.7	6.4	4.3	9.2	11	6.6	4.3	2.0	1.1	1.2	.74	.97
25	4.9	6.2	4.3	8.6	10	6.6	4.2	1.9	.98	1.1	.78	1.0
26	4.8	6.0	11	10	9.6	6.3	4.0	1.9	.92	1.0	.73	1.7
27	4.7	7.8	12	65	9.2	6.3	3.6	1.8	.88	1.0	5.7	1.4
28	4.4	8.2	8.4	104	8.8	6.3	3.5	1.7	.82	1.1	7.4	1.3
29	4.2	7.1	7.4	35	8.2	5.8	3.4	2.2	.81	1.0	1.8	1.1
30	4.2	6.9	7.9	26	---	5.9	3.4	3.4	.81	.96	1.3	1.7
31	3.9	---	21	21	---	5.9	---	2.4	---	.94	1.2	---
TOTAL	140.9	201.2	207.6	892.7	464.1	262.9	160.0	87.7	39.72	55.27	43.78	34.63
MEAN	4.55	6.71	6.70	28.8	16.0	8.48	5.33	2.83	1.32	1.78	1.41	1.15
MAX	8.1	24	21	121	56	16	10	5.4	2.1	14	7.4	1.7
MIN	3.0	3.3	4.3	8.6	8.2	5.8	3.4	1.7	.81	.71	.73	.80
CFSM	.64	.95	.94	4.06	2.25	1.19	.75	.40	.19	.25	.20	.16
IN.	.74	1.05	1.09	4.68	2.43	1.38	.84	.46	.21	.29	.23	.18

CAL YR 1975 TOTAL 5155.60 MEAN 14.1 MAX 699 MIN 1.9 CFSM 1.99 IN 27.01
WTR YR 1976 TOTAL 2590.50 MEAN 7.08 MAX 121 MIN .71 CFSM 1.00 IN 13.57

NANTICOKE RIVER BASIN

01489000 FAULKNER BRANCH AT FEDERALSBURG, MD--Continued

WATER-QUALITY DATA

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPECIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
31...	1125	3.8	135	9.5	10.5	--	7.0
NOV							
25...	1040	6.6	162	9.5	9.5	--	7.0
DEC							
23...	1100	4.3	194	4.0	3.0	--	7.6
JAN							
08...	1345	78	83	2.5	.5	11.8	6.0
09...	1015	33	117	1.0	-6.0	9.8	6.1
12...	1235	17	130	4.0	4.0	--	7.5
MAR							
04...	1415	7.1	140	9.5	12.5	11.5	6.6
APR							
14...	1200	4.8	99	12.0	20.5	--	7.3
MAY							
20...	1715	2.3	161	15.5	24.0	8.4	6.8
JUL							
08...	1135	5.5	--	20.0	23.5	--	--
AUG							
12...	1440	1.1	170	20.5	28.0	--	--
SEP							
22...	1530	.91	171	16.0	24.0	--	6.8

01490000 CHICAMACOMICO RIVER NEAR SALEM, MD

LOCATION.--Lat 38°30'43", long 75°52'51", Dorchester County, Hydrologic Unit 02060007, on left bank 30 ft (9 m) downstream from Big Mill Pond dam, 1.6 mi (2.6 km) east of Salem, 3.5 mi (5.6 km) northwest of Vienna, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--15.0 mi² (38.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1951 to current year.

REVISED RECORDS.--WSP 1332: 1952.

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (3.05 m), from topographic map.

REMARKS.--Water-discharge records fair. Occasional regulation by Big Mill Pond.

AVERAGE DISCHARGE.--25 years, 18.2 ft³/s (0.515 m³/s), 16.48 in/yr (419 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 542 ft³/s (15.3 m³/s) Aug. 3, 1973, gage height, 4.48 ft (1.366 m); minimum daily, 0.5 ft³/s (0.014 m³/s) June 11, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 166 ft³/s (4.70 m³/s) Jan. 1, gage height, 3.24 ft (0.988 m); minimum, 0.19 ft³/s (0.005 m³/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	27	132	34	19	27	15	8.3	4.6	6.4	4.0
2	16	15	28	71	76	18	26	26	7.2	2.5	4.5	5.2
3	13	14	25	51	58	18	20	16	7.0	1.7	3.4	3.7
4	13	14	23	57	44	18	19	12	6.7	2.0	3.3	4.2
5	12	13	22	42	45	19	21	11	5.7	2.4	3.4	5.6
6	12	13	21	33	40	21	19	11	5.4	2.4	3.9	4.2
7	12	13	21	33	34	18	16	10	5.6	3.3	3.6	2.7
8	12	14	21	120	31	17	15	9.8	5.4	2.5	2.7	2.4
9	21	15	22	72	29	24	14	9.0	5.2	2.3	3.1	1.9
10	19	14	24	44	27	38	14	8.7	5.4	2.0	8.1	3.3
11	18	14	22	36	28	33	14	9.5	5.1	3.1	6.2	4.0
12	17	15	20	34	25	27	13	10	4.6	5.4	4.8	3.3
13	14	78	19	31	25	26	13	8.7	4.5	4.9	4.3	2.5
14	13	72	19	34	24	23	13	8.7	5.2	4.3	4.3	2.3
15	13	45	19	31	23	20	12	8.7	5.9	3.7	4.8	2.3
16	12	36	19	29	23	23	12	8.3	5.4	3.9	5.6	4.9
17	13	31	18	28	23	30	12	8.3	6.8	3.4	4.2	7.3
18	26	28	18	24	22	24	12	9.6	5.9	2.0	3.6	6.2
19	35	26	16	21	22	21	12	13	5.1	1.4	3.3	4.3
20	28	25	16	20	20	20	12	9.2	5.4	.92	4.0	3.4
21	22	28	17	22	19	19	12	8.1	7.8	.50	4.3	3.7
22	19	33	16	22	27	18	12	7.2	9.2	.26	3.1	3.3
23	16	28	16	19	35	17	12	6.7	7.2	.22	2.5	3.3
24	14	25	15	19	26	16	11	6.5	5.2	.44	2.0	3.6
25	15	25	15	20	24	17	11	6.7	4.8	.56	2.0	2.8
26	16	25	26	22	23	16	12	7.0	4.0	.44	3.4	4.3
27	15	26	34	39	22	14	11	7.6	3.4	1.7	4.9	7.3
28	15	28	24	102	20	17	10	5.7	2.7	2.2	9.7	7.8
29	15	25	21	57	19	15	10	7.8	3.4	2.5	7.3	5.2
30	16	23	21	43	---	15	10	15	4.8	4.6	4.8	5.7
31	14	---	40	36	---	15	---	11	---	4.8	3.4	---
TOTAL	511	775	665	1344	868	638	426	312.8	168.3	76.94	134.9	124.7
MEAN	16.5	25.8	21.5	43.4	29.9	20.6	14.2	10.1	5.61	2.48	4.35	4.16
MAX	35	78	40	132	76	38	27	26	9.2	5.4	9.7	7.8
MIN	12	13	15	19	19	15	10	6.5	2.7	.22	2.0	1.9
CFSM	1.10	1.72	1.43	2.89	1.99	1.37	.95	.67	.37	.17	.29	.28
IN.	1.27	1.92	1.65	3.33	2.15	1.58	1.06	.78	.42	.19	.33	.31
CAL YR 1975	TOTAL	9265.90	MEAN 25.4	MAX 337	MIN 8.0	CFSM 1.69	IN 22.98					
WTR YR 1976	TOTAL	6044.64	MEAN 16.5	MAX 132	MIN .22	CFSM 1.10	IN 14.99					

TRANSQUAKING RIVER BASIN

01490000 CHICAMACOMICO RIVER NEAR SALEM, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
22...	1200	20	81	14.5	22.5	7.7	6.6
NOV							
11...	1340	14	90	17.0	24.0	--	6.9
DEC							
31...	1330	39	86	7.5	9.0	--	7.4
JAN							
20...	1145	19	69	2.5	2.0	--	7.3
MAR							
03...	1225	17	72	8.0	11.5	9.8	6.4
APR							
13...	1335	13	72	--	17.5	--	7.4
MAY							
21...	1130	7.9	64	18.5	25.0	8.8	6.7
JUL							
02...	1150	2.7	58	26.5	26.0	7.0	6.8
AUG							
12...	1130	4.7	80	25.5	29.0	--	5.5
SEP							
22...	1155	3.2	66	21.0	22.0	--	6.9

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD

LOCATION.--Lat 38°59'50", long 75°47'09", Caroline County, Hydrologic Unit 02060005, on left bank at highway bridge, 0.1 mi (0.2 km) upstream from Gravelly Branch, 2 mi (3 km) northeast of Greensboro, and 60 mi (97 km) upstream from mouth.

DRAINAGE AREA.--113 mi² (293 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1948 to current year.

REVISED RECORDS.--WSP 1622: 1948.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3.51 ft (1.070 m) above mean sea level.

REMARKS.--Water-discharge records good. Slight diurnal fluctuation at low flow caused by mill above station.

AVERAGE DISCHARGE.--28 years, 130 ft³/s (3.682 m³/s), 15.62 in/yr (397 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,970 ft³/s (197 m³/s) Aug. 4, 1967, gage height, 14.47 ft (4.410 m), from rating curve extended above 3,600 ft³/s (102 m³/s); minimum, 1.2 ft³/s (0.034 m³/s) Aug. 29, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1935 is believed to have been higher than that of Aug. 4, 1967, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0045	*2080 58.9	8.73 2.661	Jan. 28	1530	1990 56.4	8.60 2.621

Minimum discharge, 4.5 ft³/s (0.13 m³/s) Sept. 1, 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	92	143	1170	347	128	131	55	38	13	16	5.0
2	141	87	157	1640	458	121	200	77	50	10	14	9.2
3	106	85	163	916	562	117	191	70	52	7.9	12	11
4	77	82	143	792	369	113	163	56	37	12	10	12
5	73	79	128	568	333	112	170	50	33	13	9.4	9.4
6	75	76	118	361	329	115	181	47	29	9.8	9.0	7.7
7	70	73	112	283	275	110	157	45	28	15	8.9	6.4
8	66	72	109	552	227	103	133	45	25	21	13	7.5
9	70	79	106	760	204	112	115	39	25	24	39	5.8
10	72	82	109	381	188	157	103	38	25	21	41	9.0
11	69	81	109	241	183	206	97	37	23	76	34	14
12	69	91	100	202	188	273	89	40	22	100	22	13
13	70	196	92	212	179	271	84	38	21	57	17	12
14	65	430	89	220	198	241	80	38	19	29	15	9.5
15	60	361	89	257	264	212	77	38	20	24	19	9.2
16	56	252	89	231	227	186	73	36	20	21	34	14
17	57	193	89	204	204	216	73	36	22	22	33	19
18	81	170	84	165	188	234	71	35	27	19	23	15
19	196	152	77	154	176	186	67	39	22	17	19	13
20	381	138	73	136	167	167	61	37	20	14	17	12
21	333	143	73	112	149	152	57	34	21	15	15	11
22	223	276	73	115	154	138	55	28	23	15	15	12
23	165	350	71	105	212	125	53	29	21	15	14	11
24	143	237	67	112	223	112	54	30	19	15	12	11
25	128	202	63	108	183	106	54	27	17	32	9.1	11
26	121	174	92	118	167	103	56	24	13	32	10	19
27	121	157	196	415	154	100	51	27	13	20	8.6	21
28	113	160	231	1700	143	103	48	28	13	17	9.5	42
29	106	167	174	1220	136	103	43	28	11	15	12	30
30	101	149	146	699	---	97	44	46	9.0	15	9.2	25
31	97	---	191	467	---	95	---	43	---	15	6.5	---
TOTAL	3646	4886	3556	14616	6787	4614	2831	1240	718.0	731.7	526.6	406.7
MEAN	118	163	115	471	234	149	94.4	40.0	23.9	23.6	17.0	13.6
MAX	381	430	231	1700	562	273	200	77	52	100	41	42
MIN	56	72	63	105	136	95	43	24	9.0	7.9	6.5	5.0
CFSM	1.04	1.44	1.02	4.17	2.07	1.32	.84	.35	.21	.21	.15	.12
IN.	1.20	1.61	1.17	4.81	2.23	1.52	.93	.41	.24	.24	.17	.13

CAL YR 1975	TOTAL	79324.0	MEAN 217	MAX 2510	MIN 33	CFSM 1.92	IN 26.11
WTR YR 1976	TOTAL	44559.0	MEAN 122	MAX 1700	MIN 5.0	CFSM 1.08	IN 14.67

CHOPTANK RIVER BASIN

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to current year.

WATER TEMPERATURES: October 1974 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 184 micromhos Sept. 23, 1976; minimum daily, 45 micromhos July 15, 1975.

WATER TEMPERATURE: Maximum daily, 27.5°C Aug. 3, 1975; minimum daily, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 184 micromhos Sept. 23; minimum daily, 53 micromhos Jan. 2.

WATER TEMPERATURE: Maximum daily, 26.0°C June 20, 24, 25, 30; minimum daily, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	WEATHER	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG)	
OCT													
15...	1100	65	139	7.3	24.0	16.0	0	5	8.9	20	120	41	
23...	1000	171	112	6.8	24.5	14.0	--	--	9.1	--	--	--	
30...	1400	93	124	7.2	10.5	12.0	1	5	10.5	64	100	41	
NOV													
24...	1500	241	93	6.2	7.5	6.5	3	6	10.8	160	510	26	
DEC													
23...	1230	70	132	6.6	4.5	1.0	1	5	11.3	52	390	34	
JAN													
23...	1235	102	123	7.7	-3.0	.0	--	--	--	--	--	--	
26...	1415	111	123	6.9	19.5	4.0	--	4	8.6	25	33	32	
FEB													
24...	1400	219	99	7.0	14.5	5.5	1	10	10.7	80	120	29	
MAR													
24...	1445	103	106	7.0	18.0	10.5	0	3	10.0	8	7	31	
APR													
23...	1315	54	122	7.1	26.5	20.5	1	5	7.0	21	27	37	
MAY													
24...	1545	29	144	7.2	21.5	17.0	1	10	8.0	51	64	41	
JUN													
24...	1330	20	159	6.9	29.5	24.5	2	4	6.3	44	170	46	
JUL													
23...	1000	14	155	6.8	25.0	23.0	3	5	6.6	70	80	48	
AUG													
25...	1355	12	152	6.9	27.5	23.0	2	3	7.2	60	90	48	
SEP													
23...	1530	9.2	184	7.0	24.5	15.0	0	1	--	120	800	54	
DATE		NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT													
15...	20	11	3.4	6.5	2.5	26	21	19	15	.1	19	91	
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	22	11	3.3	6.3	2.3	23	19	17	11	.1	21	115	
NOV													
24...	20	7.5	1.7	4.5	2.5	7	6	14	9.2	.2	17	85	
DEC													
23...	18	9.0	2.8	6.4	1.6	20	16	13	11	.2	20	91	
JAN													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	18	9.0	2.2	5.4	1.7	16	13	15	10	.0	19	90	
FEB													
24...	17	7.5	2.5	4.9	1.8	15	12	16	9.1	.2	14	83	
MAR													
24...	18	8.0	2.6	5.7	1.6	16	13	15	9.6	.1	15	86	
APR													
23...	18	9.8	3.1	6.5	2.1	23	19	14	10	.1	17	92	
MAY													
24...	19	11	3.2	6.4	1.9	26	21	18	12	.1	18	99	
JUN													
24...	15	13	3.4	8.4	2.2	38	31	17	13	.1	18	101	
JUL													
23...	18	14	3.2	7.4	2.2	37	30	18	13	.1	15	102	
AUG													
25...	17	13	3.8	8.7	2.0	38	31	15	15	.1	14	106	
SEP													
23...	19	15	3.9	9.3	2.4	42	34	16	17	.1	15	100	

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)
OCT												
15...	90	1.2	.27	.06	0	1	0	0	0	0	1	1
23...	--	--	--	--	--	--	--	--	--	--	--	--
30...	83	.86	1.5	.08	--	--	--	--	--	--	--	--
NOV												
24...	60	.54	.68	.07	--	--	--	--	--	--	--	--
DEC												
23...	74	1.5	.27	.06	0	0	0	0	0	0	3	2
JAN												
23...	--	--	--	--	--	--	--	--	--	--	--	--
26...	70	1.6	.29	.05	--	--	--	--	--	--	--	--
FEB												
24...	63	.86	.64	.08	--	--	--	--	--	--	--	--
MAR												
24...	66	1.0	.34	.05	0	0	0	0	0	0	0	1
APR												
23...	74	1.1	.63	.09	--	--	--	--	--	--	--	--
MAY												
24...	83	1.4	.40	.08	--	--	--	--	--	--	--	--
JUN												
24...	94	1.2	.38	.07	0	0	1	0	<10	<10	1	1
JUL												
23...	92	1.1	.28	.07	1	1	0	1	<10	<10	1	1
AUG												
25...	90	1.0	.20	.06	--	--	--	--	--	--	--	--
SEP												
23...	100	1.1	.28	.05	0	1	1	0	10	<10	3	3

DATE	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)
OCT												
15...	10	10	910	260	2	1	20	20	<.5	<.5	0	0
23...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
24...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
23...	0	0	970	410	3	1	60	60	<5.0	<5.0	1	0
JAN												
23...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
24...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
24...	0	0	1100	100	3	1	40	30	<.5	<.5	0	0
APR												
23...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
24...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
24...	0	0	1000	240	4	2	60	50	<.5	<.5	0	0
JUL												
23...	10	0	1000	520	3	4	90	80	<.5	<.5	2	1
AUG												
25...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
23...	0	0	760	150	4	4	40	30	<.5	<.5	0	0

CHOPTANK RIVER BASIN

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ATRA-ZINE (UG/L)	ATRA-ZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)
OCT 15...	10	10	5.6	ND	ND	--	--	ND	ND	ND	ND	ND
23...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 24...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 23...	0	10	3.1	ND	ND	ND	--	ND	ND	ND	ND	ND
JAN 23...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	--	--	--	ND	--	ND	--	ND	--	--	ND	--
MAR 24...	10	10	6.1	--	--	--	--	--	--	--	--	--
APR 23...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 24...	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
JUN 24...	7	0	4.3	--	--	--	--	--	--	--	--	--
JUL 23...	10	0	5.0	--	--	--	--	--	--	--	--	--
AUG 25...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	10	0	3.9	ND	--	ND	--	ND	--	--	ND	--

DATE	TOTAL DDT (UG/L)	DDT IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	DI-AZINON IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)
OCT 15...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
30...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 24...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 23...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JAN 26...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAR 24...	--	--	--	--	--	--	--	--	--	--	--	--
APR 23...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 24...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JUN 24...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 25...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 23...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--

ND MEANS NOT DETECTED

CHOPTANK RIVER BASIN

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01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	METHOX- YCHLOR IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)
OCT												
15...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
30...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
24...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
23...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JAN												
26...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
24...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAR												
24...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
23...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
24...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JUN												
24...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
25...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
23...	ND	--	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	SIMA- ZINE TOTAL (UG/L)	SIMA- ZINE IN BOTTOM MATERI- AL (UG/ KG DRY SOLIDS)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)
OCT											
15...	ND	ND	--	--	ND	ND	ND	ND	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
NOV											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
23...	ND	ND	--	--	ND	ND	ND	ND	ND	--	ND
JAN											
26...	--	--	--	--	--	--	--	--	--	--	--
FEB											
24...	ND	--	--	--	ND	--	ND	--	ND	--	ND
MAR											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
23...	--	--	--	--	--	--	--	--	--	--	--
MAY											
24...	ND	ND	--	ND	ND	ND	ND	ND	ND	ND	ND
JUN											
24...	--	--	--	--	--	--	--	--	--	--	--
JUL											
23...	--	--	--	--	--	--	--	--	--	--	--
AUG											
25...	--	--	--	--	--	--	--	--	--	--	--
SEP											
23...	ND	--	ND	--	ND	--	ND	--	ND	--	ND

ND MEANS NOT DETECTED

CHOPTANK RIVER BASIN

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	2.4.5-T IN BOTTOM MA- TERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MA- TERIAL (UG/KG)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT											
15...	--	--	--	680	--	--	--	--	8	1.4	100
30...	--	--	--	77	--	--	--	--	6	1.5	100
NOV											
24...	--	--	--	360	--	--	--	--	8	5.2	100
DEC											
23...	--	ND	--	150	--	--	2.40	1.40	1	.19	100
JAN											
26...	--	--	--	38	--	--	--	--	8	2.4	100
FEB											
24...	--	ND	--	150	--	--	--	--	6	3.5	100
MAR											
24...	--	--	--	250	47.0	.300	20.0	15.0	7	1.9	100
APR											
23...	--	--	--	280	--	--	--	--	10	1.5	100
MAY											
24...	ND	ND	ND	150	--	--	--	--	4	.31	100
JUN											
24...	--	--	--	7800	1.67	.082	3.77	1.38	4	.22	100
JUL											
23...	--	--	--	420	--	--	--	--	--	--	--
AUG											
25...	--	--	--	95	--	--	--	--	4	.13	100
SEP											
23...	--	ND	--	86	--	--	--	--	4	.10	100

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	130	108	74	76	108	---	136	140	147	145	152
2	122	130	108	53	---	110	106	133	130	140	139	152
3	124	130	108	61	77	112	97	138	142	150	142	152
4	128	128	107	66	77	113	98	134	137	147	143	153
5	130	128	109	68	86	---	103	132	132	151	142	153
6	134	128	112	76	---	113	98	133	139	152	136	152
7	132	136	114	82	---	113	98	134	140	150	138	152
8	135	134	115	---	---	114	100	133	141	152	137	152
9	132	130	118	---	105	---	104	135	140	152	137	153
10	134	130	117	---	99	---	109	135	140	152	137	153
11	136	130	116	86	100	---	111	138	142	142	132	153
12	135	130	119	90	99	99	115	138	146	140	136	153
13	138	120	---	93	100	---	118	138	148	137	133	153
14	135	106	122	94	103	---	124	140	146	132	133	153
15	139	98	120	93	---	91	123	140	146	132	138	---
16	134	102	120	92	97	95	124	139	146	136	140	151
17	136	102	121	95	97	97	124	140	145	140	141	154
18	142	108	121	---	98	92	126	141	---	147	140	153
19	127	108	122	---	101	104	128	141	---	148	145	153
20	108	111	126	---	106	97	129	142	159	150	142	---
21	96	116	128	---	105	99	130	138	152	150	147	154
22	102	112	---	---	---	101	132	146	147	151	138	154
23	108	93	132	123	104	104	122	143	147	151	140	153
24	112	93	---	---	99	106	132	144	145	150	140	---
25	116	99	---	---	96	116	137	134	146	151	140	151
26	119	104	124	123	101	119	---	135	---	150	139	151
27	120	106	---	102	101	116	---	137	---	150	138	150
28	119	107	107	---	---	116	137	---	148	148	138	152
29	119	106	108	57	---	118	135	140	148	146	136	152
30	124	107	104	63	---	120	136	134	147	150	141	152
31	128	---	103	72	---	122	---	134	---	147	140	---
MONTH	125	115	116	---	---	108	118	138	144	146	139	152

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.5	9.5	0.5	5.0	4.5	14.5	---	16.0	20.0	25.0	24.5	18.5
2	17.5	11.0	6.5	3.0	---	12.0	12.0	16.0	21.0	23.0	22.0	20.0
3	14.5	11.0	5.0	4.0	0.0	9.5	12.5	19.5	19.0	23.0	21.0	19.5
4	14.0	13.0	4.0	3.0	0.0	9.5	12.0	15.0	19.0	23.0	21.0	20.0
5	13.0	14.5	3.0	0.0	2.5	---	12.0	13.5	17.0	21.0	22.0	21.5
6	15.0	15.0	7.0	0.0	---	13.5	10.0	18.0	16.5	22.0	24.5	19.5
7	16.0	16.0	7.0	0.0	---	9.5	14.0	17.5	20.5	23.0	---	17.0
8	14.0	18.0	5.0	---	---	9.5	13.0	17.0	19.0	24.5	24.0	17.5
9	16.0	18.0	7.0	---	3.0	---	10.5	17.0	22.5	23.0	25.0	19.0
10	16.0	18.5	7.0	---	4.0	---	11.0	15.0	23.5	22.5	21.0	18.0
11	16.0	15.5	6.0	0.0	5.5	---	12.0	17.0	24.5	23.0	20.5	19.0
12	16.0	13.0	4.5	0.0	4.5	6.0	11.0	19.0	23.5	22.5	23.0	18.0
13	15.5	13.0	---	3.0	5.0	---	12.0	15.0	20.0	22.0	24.0	20.0
14	15.0	11.0	8.0	4.5	8.0	---	14.5	19.0	23.0	21.5	25.0	20.5
15	16.0	8.0	10.5	3.0	---	9.0	13.0	20.5	24.0	22.0	24.0	---
16	18.0	9.0	11.0	3.0	10.0	9.0	15.0	21.0	25.0	23.0	23.0	21.0
17	17.0	8.0	7.0	2.5	11.0	5.5	22.0	21.5	24.0	23.5	22.0	22.0
18	17.0	10.0	7.0	0.0	13.5	3.0	24.0	20.0	---	23.0	21.5	22.0
19	18.0	11.0	0.5	0.0	13.0	10.0	24.5	15.5	---	22.0	21.0	21.5
20	17.0	10.5	1.0	0.0	11.0	12.5	22.0	17.5	26.0	24.0	20.5	---
21	15.0	12.0	0.5	0.0	10.5	14.5	24.5	17.5	25.0	25.0	19.0	20.5
22	16.0	10.5	---	0.0	---	12.5	24.0	17.0	25.0	24.0	21.0	17.5
23	17.5	10.0	1.0	0.0	7.5	8.5	20.5	18.0	24.0	25.0	24.0	17.0
24	17.0	6.5	---	0.0	5.5	10.5	18.0	17.0	26.0	25.5	22.5	17.5
25	19.0	7.5	---	---	7.0	12.0	18.0	16.0	26.0	24.0	22.0	16.5
26	18.5	7.5	4.0	4.0	11.0	11.5	---	16.0	---	23.0	24.5	18.5
27	17.0	10.0	---	9.5	9.5	17.0	---	17.0	---	23.0	24.0	19.5
28	15.5	8.0	4.0	---	---	16.0	14.0	---	24.0	24.0	24.0	19.5
29	16.0	6.0	3.0	4.5	---	13.5	12.0	18.0	25.0	25.0	25.5	18.0
30	12.0	9.0	3.0	4.0	---	13.5	16.0	18.0	26.0	25.0	21.5	16.5
31	10.5	---	5.5	3.5	---	12.0	---	19.0	---	24.5	18.5	---

CHOPTANK RIVER BASIN

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

OCT. 15, 1975
1100 HOURS

IDENTIFICATION OF PHYTOPLANKTON

690 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
...OOCYSTACEAE				
....ANKISTRODESMUS		20	3	
...SCENEDESMACEAE				
....SCENEDESMUS				
	TOTALS	<u>13</u> 33	<u>2</u> 5	0.971=DIVERSITY
CHRYSOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
...CENTRALES	CENTRIC			
...COSCINODISCACEAE				
....CYCLOTELLA		7	1	
...PENNALES	PENNATE			
....ACHNANTHACEAE				
....COCCONEIS		7	1	
...CYMBELLACEAE				
....EPITHEMIA		7	1	
...NAVICULACEAE	NAVICULOID			
....GYROSIGMA		7	1	
....NAVICULA		13	2	
...PINNULARIA		7	1	
...NITZSCHACEAE				
....NITZSCHIA		<u>13</u> 59	<u>2</u> 9	2.725=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
...OSCILLATORIALES	FILAMENTOUS			
...OSCILLATORIA				
D ....OSCILLATORIA		<u>590</u> 590	<u>86</u> 86	0.000=DIVERSITY
EUGLENOPHYTA	EUGLENOIDS			
..EUGLENOPHYCEAE				
...EUGLENALES				
...EUGLENACEAE				
....TRACHELOMONAS		<u>7</u> 7	<u>1</u> 1	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 0.768
CLASS 0.768
ORDER 0.811
FAMILY 0.990
GENERA 1.047

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

OCT. 30, 1975
0000 HOURS

IDENTIFICATION OF PHYTOPLANKTON

78 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
...MICRACTINIACEAE				
....GOLENKINIA				
	TOTALS	6	8	0.000=DIVERSITY
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCACEAE				
D ....CYCLOTELLA		12	15	
D ....HELOSIRA		18	23	
..PENNALES	PENNATE			
...ACHNANTHACEAE				
...ACHNANTHES		6	8	
...GOMPHONEMATACEAE				
D ....GOMPHONEMA		18	23	
...NAVICULACEAE	NAVICULOID			
...NAVICULA		6	8	
...NITZSCHIA				
D ....NITZSCHIA		12	15	
	TOTALS	72	92	2.459=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER ; 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 0.391
 CLASS 0.391
 ORDER 1.296
 FAMILY 2.288
 GENERA 2.661

CHOPTANK RIVER BASIN

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

NOV. 24, 1975
1500 HOURS

IDENTIFICATION OF PHYTOPLANKTON

370 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
...OOCYSTACEAE				
....ANKISTRODESMUS		47	13	
...SCENEDESMACEAE				
....CRUCIGENIA		16	4	
....SCENEDESMUS		31	9	
	TOTALS	93	26	1.459=DIVERSITY
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCEACEAE				
D ....MELOSIRA		62	17	
..PENNIALES	PENNATE			
...ACHNANTHACEAE				
....ACHNANTHES		8	2	
...NAVICULACEAE	NAVICULOID			
L ....GYROSIGMA			0	
...NITZSCHIA		16	4	
	TOTALS	85	23	1.096=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
..CHROOCOCCALES	COCCOID			
...CHROOCOCCACEAE				
D ....ANACYSTIS		160	43	
...OSCILLATORIALES	FILAMENTOUS			
...NOSTOCACEAE				
....ANABAENA		31	9	
	TOTALS	190	52	0.650=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THAN 15% MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 1.488
 CLASS 1.488
 ORDER 2.018
 FAMILY 2.332
 GENERA 2.449

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DEC. 23, 1975
1230 HOURS

IDENTIFICATION OF PHYTOPLANKTON

150 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
CHRYSTOPHYTA			
.BACILLARIOPHYCEAE	DIATOMS		
...CENTRALES	CENTRIC		
...COSCINODISCACEAE			
L ....MELOSIRA			0
...PENNALES	PENNATE		
...ACHNANTHACEAE			
...ACHNANTHES		19	12
...EUNOTIACEAE			
...EUNOTIA		19	12
...FRAGILARIACEAE			
...SYNEDRA		19	12
...GOMPHONEMACEAE			
L ....GOMPHONEMA			0
...NAVICULACEAE	NAVICULOID		
...NAVICULA		19	12
...NITZSCHACEAE			
D ....NITZSCHIA			
	TOTALS	74 150	50 98

2.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 FAMILY 2.000
 GENERA 2.000

JAN. 26, 1976
1415 HOURS

IDENTIFICATION OF PHYTOPLANKTON

38 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
CHRYSTOPHYTA			
.BACILLARIOPHYCEAE	DIATOMS		
...PENNALES	PENNATE		
...ACHNANTHACEAE			
...ACHNANTHES		3	8
...EUNOTIACEAE			
L ....EUNOTIA			0
...FRAGILARIACEAE			
D ....SYNEDRA		12	31
...GOMPHONEMACEAE			
D ....GOMPHONEMA		6	15
...NAVICULACEAE	NAVICULOID		
D ....NAVICULA		12	31
...NITZSCHACEAE			
D ....NITZSCHIA			
	TOTALS	6 38	15 100

2.162=DIVERSITY

CYANOPHYTA
 .MYXOPHYCEAE
 ...OSCILLATORIALES
 ...OSCILLATORIA
 LOSCILLATORIA

BLUE-GREEN ALGAE
 FILAMENTOUS

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 FAMILY 2.162
 GENERA 2.162

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

FEB. 24, 1976
1400 HOURS

IDENTIFICATION OF PHYTOPLANKTON

150 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
...CENTRALES	CENTRIC			
...COSCINODISCACEAE				
L ...MELOSIRA			0	
...PENNALES	PENNATE			
...ACHNANTHACEAE				
...ACHNANTHES		11	7	
...EUNOTIACEAE				
...EUNOTIA		6	4	
...FRAGILARIACEAE				
...ASTERIONELLA		6	4	
D ...SYNEDRA		22	15	
...GOMPHONEMATACEAE				
...GOMPHONEMA		6	4	
...MERIDIONACEAE				
...MERIDION		6	4	
...NAVICULACEAE	NAVICULOID			
...CALONEIS		6	4	
...NAVICULA		11	7	
...PINNULARIA		6	4	
...NITZSCHACEAE				
D ...NITZSCHIA				
	TOTALS	55	37	
		130	90	2.701=DIVERSITY
..CHRYSTOPHYCEAE	YELLOW-BROWN ALGAE			
..CHRYSOMONADALES				
...MALLOMONADACEAE				
...MALLOMONAS		6	4	
...OCHROMONADACEAE				
...DINOBRYON		6	4	
	TOTALS	6	4	
		11	8	1.000=DIVERSITY
EUGLENOPHYTA	EUGLENOIDS			
..EUGLENOPHYCEAE				
...EUGLENALES				
...EUGLENACEAE				
L ...EUGLENA			0	
...TRACHELOMONAS				
	TOTALS	6	4	
		6	4	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THAN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER • 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 0.229
 CLASS 0.605
 ORDER 0.605
 FAMILY 2.724
 GENERA 3.080

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MAR. 24, 1976
1445 HOURS

IDENTIFICATION OF PHYTOPLANKTON

250 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
...SCENEDESMACEAE				
....SCENEDESMUS		13	5	
...VOLVOCALES				
...CHLAMYDOMONADACEAE				
....CHLAMYDOMONAS		13	5	
...ZYGEMATALES				
...DESMIDIACEAE	PLACODERM DESMIDS			
....STAUSTRUM		27	11	
	TOTALS	53	21	1.500=DIVERSITY
CHRYSOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
...CENTRALES	CENTRIC			
...COSCINODISCAEAE				
....MELOSIRA		27	11	
...PENNALES	PENNATE			
...GOMPHONEMACEAE				
D ...GOMPHONEMA		53	21	
...NAVICULACEAE	NAVICULOID			
...FRUSTULIA		13	5	
...NAVICULA		13	5	
L ...STAURONEIS			0	
...NITZSCHIAEAE				
D ...NITZSCHIA		66	26	
	TOTALS	170	68	2.038=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
...OSCILLATORIALES	FILAMENTOUS			
...OSCILLATORIAEAE				
....SPIRULINA		13	5	
	TOTALS	13	5	0.000=DIVERSITY
EUGLENOPHYTA	EUGLENOIDS			
..EUGLENOPHYCEAE				
...EUGLENALES				
...EUGLENACEAE				
....EUGLENA		13	5	
	TOTALS	13	5	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THEN 1% MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 1.295
 CLASS 1.295
 ORDER 2.035
 FAMILY 2.900
 GENERA 3.005

CHOPTANK RIVER BASIN

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

APR. 23, 1976
1315 HOURS

IDENTIFICATION OF PHYTOPLANKTON

280 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
.CHLOROPHYCEAE				
..CHLOROCOCCALES				
...OOCYSTACEAE				
....ANKISTRODESMUS		10	4	
...SCENEDESMACEAE				
L ....CRUCIGENIA			0	
D ....SCENEDESMUS			48	
	TOTALS	120 130	48	0.391=DIVERSITY
CHRYSOPHYTA				
.BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCACEAE				
D ....MELOSIRA		41	15	
..PENNALES	PENNATE			
...CYMBELLACEAE				
....CYMBELLA		10	4	
...FRAGILARIACEAE				
....SYNEDRA		10	4	
...GOMPHONEMACEAE				
D ....GOMPHONEMA		41	15	
...NAVICULACEAE	NAVICULOID			
L ....GYROSIGMA			0	
....NAVICULA		10	4	
...NITZSCHACEAE				
....NITZSCHIA		31 140	11 53	2.325=DIVERSITY
	TOTALS			

NOTE: D - DOMINANT ORGANISM: GREATER OR EQUAL TO 15%
 L - LESS THEN 1%: MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 0.999
 CLASS 0.999
 ORDER 1.447
 FAMILY 2.393
 GENERA 2.393

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MAY 24, 1976

1545 HOURS

IDENTIFICATION OF PHYTOPLANKTON

150 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
...OOCYSTACEAE				
D ....ANKISTRODESMUS		32	21	
...SCENEDESMACEAE				
D ....SCENEDESMUS		29	19	
...VOLVOCALES				
...CHLAMYDOMONADACEAE				
....CHLAMYDOMONAS				
	TOTALS	<u>7</u> 68	<u>5</u> 45	1.378=DIVERSITY
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..PENNALES	PENNATE			
...FRAGILARIACEAE				
L ....ASTERIONELLA			0	
...GOMPHONEMACEAE				
...GOMPHONEMA		21	14	
...NAVICULACEAE	NAVICULOID			
...FRUSTULIA		4	2	
...NAVICULA		14	9	
...NITZSCHIA				
....NITZSCHIA				
	TOTALS	<u>11</u> 50	<u>7</u> 32	1.788=DIVERSITY
..CHRYSTOPHYCEAE	YELLOW-BROWN ALGAE			
..CHRYSOMONADALES				
...OCHROMONADACEAE				
....DINOBRYON				
	TOTALS	<u>11</u> 11	<u>7</u> 7	0.000=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
..CHROOCOCCALES	COCCOID			
...CHROOCOCCACEAE				
D ....ANACYSTIS				
	TOTALS	<u>25</u> 25	<u>16</u> 16	0.000=DIVERSITY
EUGLENOPHYTA	EUGLENIDS			
..EUGLENOPHYCEAE				
..EUGLENALES				
...EUGLENACEAE				
L ....TRACHELOMONAS			0	

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%

L - LESS THAN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED

ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER • 200-X MICROSCOPE

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 1.476

CLASS 1.742

ORDER 1.957

FAMILY 2.849

GENERA 2.933

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

JUNE 24, 1976
1330 HOURS

IDENTIFICATION OF PHYTOPLANKTON

7,800 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
...OOCYSTACEAE				
....DICTYOSPHAERIUM		320	4	
....SCENEDESMACEAE				
D ....SCENEDESMUS		5,400	69	
....TETRASTRUM		320	4	
..VOLVOCEALES				
...VOLVOCEAEAE				
D ....PANDORINA				
	TOTALS	<u>1,300</u> 7,300	<u>16</u> 93	1.155=DIVERSITY
CHRYSOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCACEAE				
....CYCLOTELLA		79	1	
..PENNALES	PENNATE			
...NITZSCHIAEAE				
L ....NITZSCHIA				
	TOTALS	<u>79</u>	<u>0</u> 1	0.000=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
..CHROOCOCCALES	COCCOID			
...CHROOCOCCACEAE				
....ANACYSTIS		320	4	
...OSCILLATORIALES	FILAMENTOUS			
...OSCILLATORIAEAE				
....OSCILLATORIA		<u>160</u> 480	<u>2</u> 6	0.918=DIVERSITY
	TOTALS			
EUGLENOPHYTA	EUGLENOIDS			
..EUGLENOPHYCEAE				
...EUGLENALES				
...EUGLENACEAE				
L ....TRACHELOMONAS			0	

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THEN 1% MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 0.410
 CLASS 0.410
 ORDER 1.085
 FAMILY 1.314
 GENERA 1.539

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

JULY 23, 1976
1000 HOURS

IDENTIFICATION OF PHYTOPLANKTON

420 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
...MICRACTINIACEAE				
....MICRACTINIUM		24	6	
...OOCYSTACEAE				
....DICTYOSPHAERIUM		24	6	
....OOCYSTIS		24	6	
...SCENEDESMACEAE				
D ....SCENEDESMUS		<u>84</u>	<u>20</u>	
	TOTALS	160	38	1.727=DIVERSITY
CHRYSOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCAEAE				
...MELOSIIRA		24	6	
..PENNALES	PENNATE			
...CYMBELLACEAE				
....AMPHORA		6	1	
...GOMPHONEMACEAE				
....GOMPHONEMA		6	1	
...NAVICULACEAE	NAVICULOID			
....NAVICULA		12	3	
....NEIDIUM		6	1	
...NITZSCHIAEAE				
....NITZSCHIA		6	1	
...TABELLARIAEAE				
....TABELLARIA		<u>6</u>	<u>1</u>	
	TOTALS	66	14	2.550=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
...CHROOCOCCALES	COCCOID			
...CHROOCOCCACEAE				
....AGMENELLUM		48	11	
D ....ANACYSTIS		120	29	
...OSCILLATORIALES	FILAMENTOUS			
...OSCILLATORIAEAE				
....OSCILLATORIA		<u>24</u>	<u>6</u>	
	TOTALS	190	46	1.299=DIVERSITY
EUGLENOPHYTA	EUGLENOIDS			
..EUGLENOPHYCEAE				
...EUGLENALES				
...EUGLENACEAE				
....TRACHELOMONAS		<u>6</u>	<u>1</u>	
	TOTALS	6	1	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 1.554
CLASS 1.554
ORDER 1.951
FAMILY 2.691
GENERA 3.190

CHOPTANK RIVER BASIN

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

AUG. 25, 1976
1355 HOURS

IDENTIFICATION OF PHYTOPLANKTON

95 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
..SCENEDESMACEAE				
D ....SCENEDESMUS				
	TOTALS	<u>16</u> 16	<u>17</u> 17	0.000=DIVERSITY
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
..COSCINODISCACEAE				
..CYCLOTELLA		8	8	
..PENNALES	PENNATE			
..ACHNANTHACEAE				
..COCCONEIS		8	8	
..FRAGILARIACEAE				
..ASTERIONELLA		8	8	
..MERIDIONACEAE				
..MERIDION		8	8	
..NAVICULACEAE	NAVICULOID			
..NAVICULA		8	8	
..NITZSCHACEAE				
D ....NITZSCHIA				
	TOTALS	<u>24</u> 64	<u>25</u> 65	2.406=DIVERSITY
EUGLENOPHYTA	EUGLENIDS			
..EUGLENOPHYCEAE				
..EUGLENALES				
..EUGLENACEAE				
D ....TRACHELOMONAS				
	TOTALS	<u>16</u> 16	<u>17</u> 17	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 1.252
 CLASS 1.252
 ORDER 1.614
 FAMILY 2.855
 GENERA 2.855

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

SEP. 23, 1976
1530 HOURS

IDENTIFICATION OF PHYTOPLANKTON

86 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
...CENTRALES	CENTRIC			
...COSCINODISCACEAE				
....CYCLOTELLA		10	11	
..PENNALES	PENNATE			
...ACHNANTHACEAE				
....COCCONEIS		5	6	
...GOMPHONEMATACEAE				
....GOMPHONEMA		5	6	
...NAVICULACEAE	NAVICULOID			
....NAVICULA		5	6	
...NITZSCHACEAE				
....NITZSCHIA		5	6	
	TOTALS	29	35	2.252=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
...CHROOCOCCALES	COCCOID			
...CHROOCOCCACEAE				
D ....ANACYSTIS		48	56	
	TOTALS	48	56	0.000=DIVERSITY
EUGLENOPHYTA	EUGLENOIDS			
..EUGLENOPHYCEAE				
...EUGLENALES				
...EUGLENACEAE				
....TRACHELOMONAS		10	11	
	TOTALS	10	11	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 1.352
 CLASS 1.352
 ORDER 1.658
 FAMILY 2.102
 GENERA 2.102

CHOPTANK RIVER BASIN

01492000 BEAVERDAM BRANCH AT MATTHEWS, MD

LOCATION.--Lat 38°48'41", long 75°58'15", Talbot County, Hydrologic Unit 01060005, on left bank 50 ft (15 m) upstream from bridge on State Highway 328, 1 mi (2 km) west of Matthews, 1.2 mi (1.9 km) upstream from mouth, and 6 mi (10 km) northeast of Easton.

DRAINAGE AREA.--5.85 mi² (15.15 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1950 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2.33 ft (0.710 m) above mean sea level.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--26 years, 6.73 ft³/s (0.191 m³/s), 15.62 in/yr (397 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,200 ft³/s (62.3 m³/s) Sept. 12, 1960, gage height, 10.24 ft (3.121 m), from high-water mark in gage shelter, from rating curve extended above 440 ft³/s (12.5 m³/s) on basis of contracted-opening measurement at gage height 7.15 ft (2.179 m); no flow at times during many years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 120 ft³/s (3.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0130	*201 5.69	3.50 1.067	Jan. 27	2230	185 5.24	3.37 1.027

No flow part of Aug. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.3	8.4	125	13	4.7	26	4.8	1.0	.11	.03	.05
2	2.3	2.3	6.5	22	49	4.5	8.1	5.8	.91	.11	.03	.08
3	1.8	2.3	5.1	40	13	4.5	5.7	2.4	.89	.14	.02	.08
4	1.7	2.3	4.3	25	17	4.5	8.3	1.7	.65	.64	.03	.06
5	1.7	2.2	4.0	8.7	17	4.6	8.4	1.5	.52	.51	.02	.05
6	1.6	2.1	4.0	7.3	13	5.0	5.6	1.4	.44	.14	.03	.03
7	1.5	2.1	4.4	19	8.7	4.2	4.7	1.3	.44	1.1	.03	.03
8	1.4	4.7	4.1	65	8.1	4.0	4.2	1.2	.43	.38	.04	.03
9	7.2	3.9	4.9	15	7.9	15	3.9	1.1	.36	.18	.13	.03
10	3.9	3.8	5.7	8.2	7.5	20	3.6	1.1	.31	.14	.30	.20
11	3.2	4.7	4.3	8.7	8.4	16	3.5	1.0	.30	2.0	.09	.10
12	3.0	8.6	3.8	9.2	7.5	9.4	3.1	1.3	.25	.60	.06	.06
13	2.1	70	3.9	9.2	7.3	8.3	3.0	.96	.22	.18	.05	.05
14	1.9	17	4.0	13	7.1	6.3	3.0	.98	.25	.11	.05	.06
15	1.6	7.1	4.0	8.7	6.5	5.6	2.8	.95	.25	.11	2.0	.07
16	1.5	5.4	3.9	8.2	6.5	11	2.8	.85	.21	.99	1.7	1.6
17	3.5	4.6	3.5	7.7	6.5	9.5	2.7	.91	.56	3.7	.21	.91
18	15	4.2	3.4	4.6	6.5	5.9	2.5	1.3	.52	.26	.10	.16
19	21	4.0	2.7	3.8	5.9	5.7	2.2	2.0	.34	.11	.08	.09
20	7.4	3.8	2.7	4.5	5.1	5.3	2.1	1.1	.24	.06	.08	.07
21	4.5	25	3.0	5.4	4.8	5.1	1.9	.85	.34	.04	.07	.08
22	3.6	17	3.0	5.5	12	4.5	1.8	.75	.52	.04	.08	.11
23	3.0	6.6	2.8	4.5	9.5	4.2	1.8	.68	.32	.05	.08	.11
24	2.8	5.6	2.4	4.8	6.5	4.0	1.5	.68	.18	.05	.07	.11
25	3.1	5.0	2.4	5.4	6.0	4.0	1.6	.68	.14	.03	.09	.11
26	3.2	4.6	31	21	5.8	3.9	1.6	.62	.14	.03	.07	.80
27	3.0	7.8	13	119	5.5	3.8	1.4	.70	.11	.03	.06	.28
28	3.0	7.0	5.4	81	5.0	5.9	1.4	.66	.08	.03	.07	.19
29	2.8	5.0	4.5	22	4.8	4.1	1.3	1.7	.08	.03	.12	.14
30	2.9	4.8	6.7	14	---	4.3	1.3	5.2	.11	.05	.05	1.5
31	2.6	---	46	11	---	4.4	---	1.5	---	.03	.04	---
TOTAL	120.1	245.8	207.8	706.4	281.4	202.2	121.8	47.67	11.11	11.98	5.88	7.24
MEAN	3.87	8.19	6.70	22.8	9.70	6.52	4.06	1.54	.37	.39	.19	.24
MAX	21	70	46	125	49	20	26	5.8	1.0	3.7	2.0	1.6
MIN	1.4	2.1	2.4	3.8	4.8	3.8	1.3	.62	.08	.03	.02	.03
CFSM	.66	1.40	1.15	3.90	1.66	1.11	.69	.26	.06	.07	.03	.04
IN.	.76	1.56	1.32	4.49	1.79	1.29	.77	.30	.07	.08	.04	.05

CAL YR 1975 TOTAL 3657.79 MEAN 10.0 MAX 131 MIN .38 CFSM 1.71 IN 23.26
WTR YR 1976 TOTAL 1969.38 MEAN 5.38 MAX 125 MIN .02 CFSM .92 IN 12.52

01492000 BEAVERDAM BRANCH AT MATTHEWS, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT 20...	1140	7.5	163	15.5	14.0	--	7.0
NOV 21...	1040	4.4	132	12.5	14.5	8.7	6.7
DEC 09...	1115	4.6	182	7.5	10.0	--	7.6
JAN 15...	1025	8.4	133	1.5	2.0	12.3	7.1
FEB 23...	1130	9.0	115	4.5	3.0	--	7.0
APR 14...	1025	3.0	121	8.5	18.5	9.2	7.3
MAY 19...	0955	1.9	168	13.0	10.0	--	7.1
JUN 22...	0925	.51	223	21.5	25.0	--	7.0
AUG 05...	1025	.05	193	19.5	26.0	--	6.3

CHESTER RIVER BASIN

01493000 UNICORN BRANCH NEAR MILLINGTON, MD

LOCATION.--Lat 39°14'59", long 75°51'40", Kent County, Hydrologic Unit 02060002, on right bank 20 ft (6 m) upstream from bridge on State Highway 313, 0.9 mi (1.4 km) upstream from mouth, and 1.4 mi (2.3 km) southwest of Millington.

DRAINAGE AREA.--22.3 mi² (57.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1948 to current year.

REVISED RECORDS.--WSP 1382: 1952(P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3.57 ft (1.088 m) above mean sea level.

REMARKS.--Water-discharge records good except those for period of doubtful gage-height record, Aug. 2 to Sept. 9, which are fair. Occasional regulation at low flow by fish hatchery above station.

AVERAGE DISCHARGE.--28 years, 24.8 ft³/s (0.702 m³/s), 15.10 in/yr (384 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,060 ft³/s (30.0 m³/s) Sept. 12, 1960, gage height, 7.17 ft (2.185 m); no flow for part of each day June 13, 14, 1965, caused by regulation at Unicorn Lake Dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft³/s (4.1 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	1400	*332 9.40	4.48 1.366	Jan. 28	0700	329 9.32	4.47 1.362

Minimum discharge, 5.0 ft³/s (0.14 m³/s) Sept. 14, gage height, 1.83 ft (0.558 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	34	240	50	20	35	19	13	7.8	11	6.0
2	20	19	39	179	90	26	38	21	13	6.9	9.0	6.4
3	19	19	30	88	75	26	30	16	13	6.2	8.0	8.0
4	18	19	21	97	51	25	28	14	12	6.4	7.6	7.6
5	18	19	25	60	50	26	28	14	11	6.8	6.7	7.1
6	18	18	24	42	48	25	25	13	11	6.6	6.7	6.7
7	17	18	24	42	44	24	23	13	11	7.9	6.4	6.4
8	17	18	24	113	42	23	22	12	11	8.8	10	6.4
9	19	19	20	90	41	27	20	12	11	14	13	6.4
10	18	20	16	47	41	29	20	12	10	15	25	7.2
11	19	21	20	37	40	34	20	12	10	49	12	7.4
12	20	30	22	39	40	45	19	13	10	53	10	6.6
13	18	90	22	36	39	40	19	12	9.6	14	8.0	6.4
14	17	79	21	43	39	36	18	12	9.7	11	8.0	6.1
15	16	51	21	44	40	31	18	12	9.5	11	17	6.5
16	16	39	18	40	39	33	17	12	9.6	11	27	12
17	19	33	17	38	39	45	17	12	15	9.5	14	14
18	35	29	17	37	38	34	17	12	14	9.0	11	8.2
19	66	28	16	36	38	30	16	13	11	9.0	9.0	7.7
20	66	27	16	36	37	28	16	12	10	8.5	8.5	7.3
21	42	29	16	36	36	27	16	11	11	8.5	8.0	7.9
22	32	35	16	36	35	25	15	11	11	8.5	7.6	7.3
23	27	30	16	36	38	23	15	11	10	9.0	7.1	6.6
24	24	27	16	36	40	23	14	11	18	14	7.1	6.4
25	23	26	16	35	37	22	15	11	12	23	7.1	6.7
26	23	24	19	25	29	22	15	11	10	11	7.6	7.2
27	22	24	43	93	19	22	14	11	8.4	8.5	7.1	6.7
28	21	25	32	288	14	23	14	11	6.9	9.0	8.5	7.2
29	21	23	26	135	15	22	13	12	6.4	11	7.6	6.4
30	21	23	25	79	---	21	14	21	7.0	12	6.7	11
31	20	---	42	58	---	21	---	15	---	13	6.0	---
TOTAL	753	882	714	2241	1184	858	591	404	325.1	398.9	308.3	223.8
MEAN	24.3	29.4	23.0	72.3	40.8	27.7	19.7	13.0	10.8	12.9	9.95	7.46
MAX	66	90	43	288	90	45	38	21	18	53	27	14
MIN	16	18	16	25	14	20	13	11	6.4	6.2	6.0	6.0
CFSM	1.09	1.32	1.03	3.24	1.83	1.24	.88	.58	.48	.58	.45	.33
IN.	1.26	1.47	1.19	3.74	1.98	1.43	.99	.67	.54	.67	.51	.37

CAL YR 1975	TOTAL	12616.0	MEAN	34.6	MAX	281	MIN	11	CFSM	1.55	IN	21.04
WTR YR 1976	TOTAL	8883.1	MEAN	24.3	MAX	288	MIN	6.0	CFSM	1.09	IN	14.82

01493000 UNICORN BRANCH NEAR MILLINGTON, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
20...	1635	56	121	18.5	17.0	--	7.0
NOV							
14...	1525	71	95	9.5	5.5	--	6.9
DEC							
12...	1050	23	216	5.5	6.5	--	7.8
JAN							
09...	1320	94	72	1.0	-6.0	12.9	6.7
15...	1305	42	102	4.0	2.0	12.2	6.8
FEB							
24...	1040	39	109	4.5	7.0	--	7.2
APR							
14...	1220	17	107	12.0	18.5	8.0	7.4
MAY							
19...	1250	13	126	17.0	11.0	--	7.6
JUN							
22...	1325	12	144	26.5	30.0	--	7.9
JUL							
02...	1150	7.2	--	26.5	26.0	--	--
AUG							
05...	1405	6.7	102	26.5	29.0	--	6.6
11...	1010	12	102	23.5	21.0	6.7	8.0
SEP							
09...	1225	6.4	107	23.5	27.5	--	--
30...	1335	7.6	123	18.5	13.5	--	8.1

CHESTER RIVER BASIN

01493500 MORGAN CREEK NEAR KENNEDYVILLE, MD

LOCATION.--Lat 39°16'48", long 76°00'54", Kent County, Hydrologic Unit 02060002, on right bank 200 ft (61 m) upstream from highway bridge, 2 mi (3 km) southwest of Kennedyville, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--12.7 mi² (32.9 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WSP 1552: 1952, 1953(P), 1954(M), 1955, 1956-57(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 15 ft (4.6 m), from topographic map.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--25 years, 10.6 ft³/s (0.300 m³/s), 11.33 in/yr (288 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,500 ft³/s (212 m³/s) June 22, 1972, gage height, 13.07 ft (3.984 m), from rating curve extended above 590 ft³/s (16.7 m³/s) on basis of Type IV culvert and flow-over-road measurement of peak flow; minimum, 0.60 ft³/s (0.017 m³/s) Aug. 28, 29, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1972 highest since at least 1924.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0530	*713 20.2	6.45 1.966	July 11	2100	251 7.11	4.45 1.356
Jan. 27	2315	222 6.29	4.24 1.292				

Minimum discharge, 3.2 ft³/s (0.091 m³/s) Aug. 30, 31, Sept. 8, 9, 12, 13, 14, 15, 23, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	6.0	13	387	12	8.5	20	13	8.0	19	4.8	3.5
2	6.7	6.4	10	68	39	8.5	11	15	37	7.2	4.5	4.3
3	5.9	6.4	7.4	34	17	8.5	9.1	6.8	14	5.5	4.4	4.4
4	6.0	6.9	8.2	27	11	8.8	9.7	5.7	6.9	5.2	4.4	4.0
5	6.0	6.4	8.2	11	11	9.2	10	5.7	6.1	5.1	4.4	3.7
6	6.3	6.0	8.5	9.5	11	8.9	8.5	5.6	6.0	4.8	4.2	3.5
7	6.0	6.4	8.7	13	8.7	8.1	8.2	8.3	5.9	6.2	4.1	3.5
8	6.0	57	7.9	49	9.2	7.9	7.9	13	5.6	7.2	6.3	3.4
9	8.0	32	9.8	20	9.4	9.9	7.8	6.3	5.5	6.8	6.8	3.4
10	7.3	6.4	13	8.9	9.3	13	7.4	5.5	5.3	5.5	12	4.1
11	7.7	6.4	8.1	9.0	11	16	7.7	5.4	5.1	94	5.9	3.9
12	7.5	20	7.9	11	9.9	13	7.4	9.3	5.0	79	5.1	3.4
13	6.1	100	8.0	11	9.9	13	7.4	5.8	4.8	13	5.4	3.3
14	5.9	53	8.5	15	11	10	7.4	5.6	5.1	6.9	25	3.3
15	5.6	14	8.5	11	9.4	9.1	7.4	5.5	5.1	6.1	12	3.4
16	5.6	7.9	9.4	9.9	9.7	12	7.4	6.4	4.8	5.8	16	8.7
17	9.3	7.4	8.2	9.2	9.7	13	7.3	6.6	5.3	5.4	6.0	8.6
18	48	9.1	8.3	6.7	9.9	9.0	6.8	6.7	5.3	4.8	5.1	4.3
19	42	8.5	6.1	5.9	12	9.0	6.6	6.5	5.2	4.8	4.6	3.7
20	28	8.5	7.2	6.8	9.1	8.5	6.6	5.0	4.8	4.6	4.5	3.5
21	9.5	15	8.5	8.3	8.6	8.5	6.6	4.8	5.0	4.6	4.4	3.6
22	7.4	11	8.2	8.6	13	7.9	6.3	4.4	5.3	5.3	4.4	3.7
23	6.9	8.5	7.8	6.6	11	7.9	6.1	4.3	5.1	5.4	4.1	3.3
24	6.9	8.5	7.0	7.6	8.9	8.0	5.9	4.4	4.8	7.7	3.8	3.2
25	14	8.5	7.2	8.6	9.1	8.5	6.8	4.3	4.6	10	4.0	3.4
26	12	7.9	33	15	9.1	8.3	8.1	4.7	4.4	5.5	3.8	4.5
27	9.1	9.1	25	97	9.0	8.3	6.5	5.4	4.2	5.0	4.0	4.7
28	8.5	8.5	10	118	8.5	9.6	6.4	4.8	4.1	4.9	4.8	5.2
29	7.9	6.9	8.6	25	8.5	8.0	6.4	6.3	4.1	5.7	4.0	3.8
30	9.1	7.9	9.9	13	---	8.5	6.4	26	6.8	5.5	3.4	7.7
31	6.9	---	24	11	---	9.3	---	8.4	---	5.1	3.4	---
TOTAL	328.7	466.5	324.1	1041.6	324.9	296.7	237.1	225.5	199.2	361.6	189.6	127.0
MEAN	10.6	15.6	10.5	33.6	11.2	9.57	7.90	7.27	6.64	11.7	6.12	4.23
MAX	48	100	33	387	39	16	20	26	37	94	25	8.7
MIN	5.6	6.0	6.1	5.9	8.5	7.9	5.9	4.3	4.1	4.6	3.4	3.2
CFSM	.83	1.23	.83	2.65	.88	.75	.62	.57	.52	.92	.48	.33
IN.	.96	1.37	.95	3.05	.95	.87	.69	.66	.58	1.06	.56	.37

CAL YR 1975	TOTAL	5195.8	MEAN 14.2	MAX 118	MIN 5.4	CFSM 1.12	IN 15.22
WTR YR 1976	TOTAL	4122.5	MEAN 11.3	MAX 387	MIN 3.2	CFSM .89	IN 12.07

01493500 MORGAN CREEK NEAR KENNEDYVILLE, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	WEATHER	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT 09...	1555	9.0	131	7.1	16.0	14.0	--	1	10.9	--	--
30...	1200	8.8	138	6.9	10.5	10.5	--	3	10.5	490	990
NOV 24...	1220	8.7	138	6.7	7.5	6.5	--	1	12.3	240	540
DEC 24...	1315	8.5	134	6.6	-3.5	1.0	1	4	8.5	340	390
JAN 26...	1250	12	120	6.7	13.0	2.5	--	9	10.8	320	160
FEB 25...	1445	9.0	117	7.0	20.0	8.0	1	27	11.3	68	80
MAR 24...	1105	8.0	120	7.1	11.5	7.0	--	7	12.1	97	93
APR 23...	1100	6.5	125	7.4	24.0	16.5	--	27	8.0	400	170
MAY 25...	1100	4.5	97	7.4	19.0	15.0	--	2	8.1	225	300
JUN 25...	1235	4.4	126	7.0	31.5	23.0	--	6	7.0	400	950
JUL 21...	1330	4.6	117	6.8	33.0	21.5	--	28	7.2	220	1940
AUG 26...	1445	3.8	119	6.8	39.0	23.0	--	12	7.5	385	1300
SEP 23...	1200	3.6	128	6.9	22.0	13.0	--	5	--	400	230

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 09...	43	6	--	12	3.2	4.0	4.7	45	4.8	10
30...	54	16	--	15	4.1	4.3	4.1	47	3.8	9.8
NOV 24...	42	10	--	12	3.0	4.5	4.0	40	5.0	10
DEC 24...	42	12	--	11	3.5	4.7	2.5	36	5.6	9.7
JAN 26...	36	5	--	10	2.6	3.7	2.6	38	5.0	9.2
FEB 25...	36	8	--	9.0	3.2	4.3	2.7	34	6.6	10
MAR 24...	38	10	--	10	3.1	4.3	2.5	34	4.7	8.8
APR 23...	45	10	--	12	3.6	4.7	2.7	42	3.9	7.6
MAY 25...	37	13	--	10	3.0	4.0	2.7	30	4.7	8.7
JUN 25...	40	5	--	11	3.0	4.8	2.7	42	7.0	8.6
JUL 21...	39	5	--	11	2.7	4.0	2.7	41	4.3	7.9
AUG 26...	38	2	--	10	3.1	4.2	2.9	43	2.9	7.9
SEP 23...	43	7	--	12	3.1	4.4	3.0	43	3.3	8.6

CHESTER RIVER BASIN

01493500 MORGAN CREEK NEAR KENNEDYVILLE, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT										
09...	.1	11	--	72	1.3	.08	1600	--	230	--
30...	.1	12	--	76	1.1	.09	2500	--	430	--
NOV										
24...	.1	12	--	70	1.8	.07	2300	--	330	--
DEC										
24...	.2	13	--	68	2.2	.10	1800	--	430	--
JAN										
26...	.1	10	--	62	2.1	.08	2200	--	480	--
FEB										
25...	.2	9.0	--	62	2.0	.08	1400	--	230	--
MAR										
24...	.1	6.9	--	57	1.8	.07	1400	--	320	--
APR										
23...	.1	10	--	65	1.7	.12	2400	--	390	--
MAY										
25...	.1	12	--	60	2.4	.08	1500	--	200	--
JUN										
25...	.2	13	80	71	1.5	.08	1600	280	190	160
JUL										
21...	.1	12	72	65	1.4	.08	1500	270	140	120
AUG										
26...	.1	11	73	63	1.2	.06	1200	30	120	0
SEP										
23...	.1	12	72	68	1.3	.05	1000	240	150	150

01495000 BIG ELK CREEK AT ELK MILLS, MD

LOCATION.--Lat 39°39'26", long 75°49'20", Cecil County, Hydrologic Unit 02060002, on right bank 100 ft (30 m) downstream from highway bridge at Elk Mills, 3.5 mi (5.6 km) north of Elkton, and 7 mi (11 km) upstream from confluence with Little Elk Creek.

DRAINAGE AREA.--52.6 mi² (136.2 km²).

WATER-DISCHARGE RECORD

PERIOD OF RECORD.--April 1932 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1432: 1932-33, 1934(M), 1935, 1936(M), 1938, 1939-40(M), 1942(M), 1943-51, 1952-53(P).

GAGE.--Water-stage recorder. Datum of gage is 68.5 ft (20.88 m) above mean sea level. Apr. 10, 1932, to May 16, 1946, nonrecording gage at bridge 100 ft (30 m) upstream at same datum.

REMARKS.--Water-discharge records good. Slight diurnal fluctuation caused by mills above station.

AVERAGE DISCHARGE.--44 years, 69.3 ft³/s (1.963 m³/s), 17.89 in/yr (454 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s (300 m³/s) July 5, 1937, gage height, 14.5 ft (4.42 m), from floodmarks, from rating curve extended above 1,700 ft³/s (48.1 m³/s) on basis of velocity-area and conveyance studies; minimum, 4.5 ft³/s (0.13 m³/s) Jan. 21, 1955, (result of freezeup); minimum daily, 4.8 ft³/s (0.14 m³/s) Sept. 8-10, 1966; minimum gage height observed, 2.09 ft (0.637 m) Sept. 19, 22-24, 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 19 ft (5.8 m) in June 1884, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,530 ft³/s (43.3 m³/s) Jan. 27, gage height, 6.07 ft (1.850 m), from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of slope-area measurement at gage height 13.46 ft (4.103 m), no peak above base of 1,700 ft³/s (48.1 m³/s); minimum, 17 ft³/s (0.48 m³/s) Sept. 14, 15; minimum daily, 18 ft³/s (0.51 m³/s) Sept. 13, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	57	66	490	115	72	322	167	56	39	34	22
2	57	57	65	137	327	71	115	194	240	33	28	25
3	52	56	58	173	109	72	90	82	77	45	26	27
4	51	56	56	150	107	75	107	69	57	57	24	24
5	51	55	56	84	93	74	97	64	48	34	23	23
6	51	53	57	84	87	75	80	60	45	32	53	21
7	49	53	57	117	82	68	76	60	44	34	213	20
8	48	86	54	200	78	66	74	57	41	39	59	19
9	50	63	57	90	76	71	71	53	39	35	85	19
10	53	66	63	66	85	77	68	51	37	32	129	21
11	68	110	56	67	151	96	67	50	35	454	50	24
12	71	171	53	66	98	106	65	69	34	94	37	19
13	53	399	53	75	82	181	64	53	32	48	34	18
14	50	124	53	308	86	98	64	51	34	43	119	18
15	46	85	54	92	76	79	62	51	35	37	42	18
16	47	74	57	76	82	83	62	53	34	39	65	28
17	48	68	52	70	96	90	61	75	73	35	34	112
18	115	66	52	68	93	74	60	113	47	30	30	37
19	398	64	46	64	140	74	58	79	41	29	27	28
20	140	63	53	62	85	70	58	59	40	28	26	25
21	91	94	50	68	77	70	60	54	84	29	26	25
22	75	80	50	66	166	69	59	49	80	33	25	24
23	67	65	46	62	121	64	57	46	52	31	24	22
24	64	63	59	52	87	64	53	46	46	50	23	21
25	69	62	60	66	85	64	55	44	38	32	23	21
26	67	63	284	409	81	63	74	44	35	27	24	26
27	63	65	118	846	78	63	58	46	32	26	37	28
28	61	64	73	407	75	66	54	42	32	27	37	29
29	59	60	63	143	73	61	52	43	31	29	28	23
30	58	60	65	111	---	60	51	108	32	345	24	33
31	56	---	137	94	---	63	---	61	---	47	22	---
TOTAL	2288	2502	2123	4863	2991	2379	2294	2093	1551	1893	1431	800
MEAN	73.8	83.4	68.5	157	103	76.7	76.5	67.5	51.7	61.1	46.2	26.7
MAX	398	399	284	846	327	181	322	194	240	454	213	112
MIN	47	53	46	52	73	60	51	42	31	26	22	18
CFSM	1.40	1.59	1.30	2.98	1.96	1.46	1.45	1.28	.98	1.16	.88	.51
IN.	1.62	1.77	1.50	3.44	2.12	1.68	1.62	1.48	1.10	1.34	1.01	.57
CAL YR 1975	TOTAL	40210	MEAN	110	MAX	1890	MIN	40	CFSM	2.09	IN	28.44
WTR YR 1976	TOTAL	27208	MEAN	74.3	MAX	846	MIN	18	CFSM	1.41	IN	19.24

ELK RIVER BASIN

01495000 BIG ELK CREEK AT ELK MILLS, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT 24...	1300	62	148	16.5	26.5	--	7.6
NOV 25...	1615	63	126	6.0	7.0	12.9	6.9
DEC 11...	1345	54	146	5.5	7.0	--	8.9
JAN 20...	1120	61	138	.5	-2.0	--	7.4
MAR 03...	1320	72	154	6.5	8.5	--	7.6
APR 13...	1455	65	112	12.0	17.5	11.2	8.2
MAY 18...	1250	85	112	18.0	20.0	--	7.2
JUN 29...	1040	31	--	24.0	25.0	--	8.0
AUG 16...	1500	51	138	23.5	26.0	9.0	7.0

01496000 NORTHEAST CREEK AT LESLIE, MD

LOCATION.--Lat 39°37'38", long 75°56'40", Cecil County, Hydrologic Unit 02060002, on left bank at downstream side of highway bridge, 0.7 mi (1.1 km) northeast of Leslie, 1.5 mi (2.4 km) southeast of Bay View, and 1.7 mi (2.7 km) upstream from confluence with Little Northeast Creek.

DRAINAGE AREA.--24.3 mi² (62.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1948 to current year.

REVISED RECORDS.--WSP 1232: 1949-51.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 115.0 ft (35.05 m) above mean sea level.

REMARKS.--Water-discharge records good. Slight diurnal fluctuation at low flow caused by powerplant above station.

AVERAGE DISCHARGE.--28 years, 35.3 ft³/s (1.000 m³/s), 19.73 in/yr (501 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s (136 m³/s) June 22, 1972, gage height, 8.41 ft (2.563 m), from rating curve extended above 2,300 ft³/s (65.1 m³/s) on basis of contracted-opening measurement at gage height 7.74 ft (2.359 m); minimum, 1.2 ft³/s (0.034 m³/s) Sept. 8, 9, 10, 11, 12, 13, 14, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 893 ft³/s (25.3 m³/s) Jan. 27, gage height, 4.05 ft (1.234 m), no other peak above base of 800 ft³/s (22 m³/s); minimum, 6.0 ft³/s (0.170 m³/s) Sept. 9, 10, 13, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	19	24	526	69	27	434	103	24	11	11	7.3
2	21	18	22	77	289	27	63	120	326	9.2	8.8	8.3
3	19	19	20	147	63	27	40	28	42	8.9	9.7	9.4
4	19	19	18	100	47	29	71	20	23	9.5	8.2	8.1
5	19	19	18	39	41	28	56	19	19	9.4	7.9	7.9
6	19	18	18	39	36	28	34	18	17	7.7	7.6	7.4
7	18	19	19	42	33	26	30	17	16	7.7	44	6.8
8	18	39	17	142	31	24	27	16	15	10	30	7.3
9	18	25	18	46	30	26	26	15	15	10	86	6.1
10	19	31	21	50	33	31	24	15	13	7.9	51	7.7
11	32	39	16	40	62	51	23	14	12	217	19	9.5
12	29	106	16	31	40	53	22	24	12	37	13	6.8
13	20	356	16	32	36	158	21	16	11	21	12	6.5
14	19	54	16	166	40	58	22	15	12	14	21	6.3
15	18	33	17	42	33	36	20	15	12	12	14	6.3
16	18	26	18	33	37	39	20	16	12	13	17	16
17	19	25	16	31	45	44	20	20	22	13	11	21
18	71	24	16	29	42	30	20	55	16	11	9.7	13
19	365	24	14	26	85	30	19	31	13	10	8.8	11
20	64	22	13	22	38	28	19	18	13	9.3	7.6	9.6
21	36	35	15	25	32	28	19	16	14	10	8.4	8.4
22	27	33	15	24	94	27	20	14	15	11	7.8	7.9
23	24	23	14	21	55	25	18	13	13	11	7.7	7.2
24	23	22	15	18	35	25	16	13	12	18	7.3	6.8
25	26	21	15	20	34	25	17	13	12	12	6.9	6.7
26	25	20	241	235	32	24	25	13	10	9.0	7.3	7.5
27	23	21	69	656	31	24	18	14	9.5	9.7	12	11
28	22	21	31	401	29	26	17	12	11	9.0	13	9.9
29	22	19	23	65	28	23	16	13	8.9	10	9.7	9.0
30	21	19	25	49	---	23	16	62	8.9	22	8.1	13
31	19	---	93	40	---	24	---	21	---	12	7.3	---
TOTAL	1115	1169	909	3214	1500	1074	1193	799	759.3	582.3	492.8	269.7
MEAN	36.0	39.0	29.3	104	51.7	34.6	39.8	25.8	25.3	18.8	15.9	8.99
MAX	365	356	241	656	289	158	434	120	326	217	86	21
MIN	18	18	13	18	28	23	16	12	8.9	7.7	6.9	6.1
CFSM	1.48	1.60	1.21	4.28	2.13	1.42	1.64	1.06	1.04	.77	.65	.37
IN.	1.71	1.79	1.39	4.92	2.30	1.64	1.83	1.22	1.16	.89	.75	.41

CAL YR 1975 TOTAL 21237.0 MEAN 58.2 MAX 1690 MIN 11 CFSM 2.40 IN 32.51
WTR YR 1976 TOTAL 13077.1 MEAN 35.7 MAX 656 MIN 6.1 CFSM 1.47 IN 20.02

NORTHEAST RIVER BASIN

01496000 NORTHEAST CREEK AT LESLIE, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT 22...	1340	27	163	16.0	27.0	--	8.0
NOV 19...	1445	23	140	10.5	18.0	11.6	7.5
DEC 11...	1125	16	142	4.5	5.5	--	8.3
JAN 20...	0940	21	150	.5	-2.5	--	7.6
22...	1445	25	149	.5	-1.0	--	7.2
FEB 26...	1125	32	65	7.5	13.0	--	7.8
APR 13...	0910	21	126	6.0	9.0	12.9	8.3
MAY 17...	1325	20	142	19.5	19.5	--	7.8
JUN 30...	1405	8.7	--	25.5	28.5	--	7.9
AUG 16...	1645	16	144	22.5	24.5	8.2	7.3

01496200 PRINCIPIO CREEK NEAR PRINCIPIO FURNACE, MD

LOCATION.--Lat 39°37'34", long 76°02'27", Cecil County, Hydrologic Unit 02060002, on left bank, 55 ft (17 m) downstream from bridge on Belvedere Road, 3.5 mi (5.6 km) north of Principio Furnace, and 4.9 mi (7.9 km) upstream from mouth.

DRAINAGE AREA.--9.03 mi² (23.39 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 215 ft (65.5 m), from topographic map.

REMARKS.--Water-stage records good.

AVERAGE DISCHARGE.--9 years, 12.8 ft³/s (0.362 m³/s), 20.90 in/yr (531 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,060 ft³/s (200 m³/s) Aug. 4, 1969, gage height, 9.26 ft (2.822 m), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurements at gage heights 8.89 ft (2.710 m) and 9.26 ft (2.822 m); minimum, 1.6 ft³/s (0.045 m³/s) Oct. 4, 5, 1968, July 17, 18, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.4 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	0530	434 12.3	4.60 1.402	Mar. 13	1245	423 12.0	4.56 1.390
Nov. 12	2015	520 14.7	4.90 1.494	Apr. 1	0500	730 20.7	5.53 1.686
Jan. 1	0215	583 16.5	5.10 1.554	June 2	0100	529 15.0	4.93 1.503
Jan. 26	2145	*741 21.0	5.56 1.695	July 11	0900	467 13.2	4.72 1.439

Minimum discharge, 3.2 ft³/s (0.091 m³/s) Aug. 26, Sept. 6, 7, 8, 9, 10, 12, 13, 14, gage height, 1.74 ft (0.530 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	7.7	9.6	15.4	4.4	11	160	56	28	4.1	4.2	3.5
2	8.9	7.7	8.6	14	6.4	10	17	21	103	3.7	4.0	4.0
3	8.2	7.7	8.4	55	17	11	13	11	9.8	4.5	3.9	3.8
4	8.2	7.6	8.1	17	14	11	26	9.8	7.5	5.6	3.9	3.7
5	8.0	7.4	8.0	9.2	14	11	15	9.5	6.6	5.1	3.9	3.6
6	8.1	7.4	8.0	8.9	13	10	12	9.1	6.4	3.9	3.9	3.4
7	7.6	7.4	8.0	17	11	9.6	11	9.0	6.1	4.3	4.8	3.3
8	7.6	17	8.0	49	12	9.4	11	8.3	5.9	4.8	9.8	3.3
9	8.0	8.9	8.1	10	12	11	11	8.1	5.7	4.7	25	3.3
10	8.0	19	8.3	8.0	13	11	10	8.0	5.3	3.9	11	4.2
11	15	15	7.7	8.8	20	19	10	7.9	5.1	80	5.4	3.7
12	9.8	97	7.5	8.9	13	13	9.6	12	4.9	8.5	4.6	3.4
13	8.2	70	7.4	24	13	63	9.6	8.3	4.7	6.4	4.4	3.4
14	7.8	14	7.6	46	13	15	9.4	8.1	5.1	6.0	8.2	3.4
15	7.6	11	7.7	9.9	12	12	9.3	7.9	5.0	5.7	5.0	3.5
16	7.4	11	7.8	9.3	13	14	9.2	9.1	4.7	6.2	4.9	10
17	12	10	7.4	8.4	14	13	9.1	9.3	6.7	5.4	4.1	9.0
18	26	10	7.4	8.2	18	11	8.9	18	5.1	4.9	3.9	4.4
19	96	9.7	6.5	8.2	21	11	8.8	11	4.7	4.9	3.7	3.8
20	16	9.7	6.8	8.3	13	11	8.8	8.8	4.6	4.7	3.7	3.7
21	11	11	7.4	8.4	12	11	8.7	8.2	5.3	4.8	3.7	3.8
22	10	10	7.1	7.6	31	10	8.5	7.5	5.6	5.3	3.6	3.7
23	9.3	9.5	6.5	7.4	15	10	8.0	7.3	4.8	5.3	3.5	3.6
24	9.2	9.5	6.0	7.2	13	9.9	7.9	7.0	4.3	7.8	3.5	3.7
25	9.9	9.0	6.3	7.0	13	10	8.3	6.9	4.7	4.8	3.5	3.7
26	9.2	8.9	7.8	160	12	9.7	9.7	7.1	4.1	4.4	3.5	4.5
27	8.7	9.2	12	181	12	9.8	8.1	7.2	3.9	4.4	7.0	4.6
28	8.3	8.7	8.9	59	11	10	7.9	6.8	3.8	4.3	4.5	4.5
29	8.2	8.6	8.4	19	11	9.5	7.6	7.5	3.9	4.9	3.9	4.0
30	7.8	8.6	11	15	---	9.7	7.5	36	3.9	5.4	3.6	6.8
31	7.5	---	42	14	---	11	---	9.4	---	4.6	3.5	---
TOTAL	386.8	448.2	350.5	967.7	494	397.6	460.9	361.1	279.2	233.3	166.1	127.3
MEAN	12.5	14.9	11.3	31.2	17.0	12.8	15.4	11.6	9.31	7.53	5.36	4.24
MAX	96	97	78	181	64	63	160	56	103	80	25	10
MIN	7.4	7.4	6.0	7.0	11	9.4	7.5	6.8	3.8	3.7	3.5	3.3
CFSM	1.38	1.65	1.25	3.46	1.88	1.42	1.71	1.28	1.03	.83	.59	.47
IN.	1.59	1.85	1.44	3.99	2.03	1.64	1.90	1.49	1.15	.96	.68	.52

CAL YR 1975	TOTAL	7486.3	MEAN 20.5	MAX 388	MIN 5.0	CFSM 2.27	IN 30.84
WTR YR 1976	TOTAL	4672.7	MEAN 12.8	MAX 181	MIN 3.3	CFSM 1.42	IN 19.25

PRINCIPIO CREEK BASIN

01496200 PRINCIPIO CREEK NEAR PRINCIPIO FURNACE, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT 24...	1100	9.3	147	16.0	21.0	--	7.6
NOV 19...	0920	9.7	144	8.5	11.0	10.7	7.0
DEC 10...	1325	8.2	184	6.5	7.5	--	8.6
JAN 19...	1515	8.7	150	.0	-5.0	12.3	6.7
FEB 25...	1325	12	--	8.0	17.5	--	7.4
APR 13...	1045	9.9	130	8.0	12.5	13.0	7.7
MAY 18...	1035	17	142	18.0	20.0	--	7.3
JUN 30...	1255	4.1	--	26.0	29.5	--	7.9
AUG 17...	1050	4.0	150	20.0	18.0	9.0	6.9

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD

LOCATION.--Lat 39°39'31", long 76°10'28", Harford County, Hydrologic Unit 02050306, at downstream side of Conowingo Dam, 1 mi (1.6 km) southwest of Conowingo, and 9.9 mi (15.9 km) upstream from mouth.

DRAINAGE AREA.--27,100 mi² (70,190 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.00 ft (1.524 m) above mean sea level.

REMARKS.--Records good. Flow regulated by Conowingo Reservoir beginning October 1928, usable capacity, 55,070,000,000 gal (208.4 hm³); dead storage, 45,290,000,000 gal (171.4 hm³). Records do not include a small infrequent diversion above station to augment municipal supply of city of Baltimore. Records of diversion available from Baltimore Department of Public Works.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,130,000 ft³/s (32,000 m³/s) June 24, 1972, gage height, 36.83 ft (11.226 m); minimum, 144 ft³/s (4.08 m³/s) Mar. 2, 1969, gage height, 6.28 ft (1.914 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 338,000 ft³/s (9,570 m³/s) Jan. 28, gage height, 24.65 ft (7.513 m); minimum, 762 ft³/s (21.6 m³/s) Aug. 22, Sept. 11, gage height, 7.25 ft (2.210 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146000	31500	38300	60500	87100	81700	61000	37900	44600	33900	8570	17900
2	118000	14000	39100	70300	96900	82600	81100	28900	49200	36400	18800	14800
3	90100	32700	37300	67200	81400	75800	83700	42500	43100	32500	18300	17300
4	74400	31500	37700	54100	62400	74300	84700	40700	46700	25900	19300	5280
5	61100	26400	46900	53800	57800	92600	82000	41000	36000	27400	20700	4270
6	55700	27400	24300	48000	44700	115000	77400	36900	23900	30700	23500	16700
7	51400	32100	21200	38900	38300	108000	72000	34600	32700	31700	11200	4110
8	42200	21100	31200	33100	33200	105000	66100	30300	29900	30700	8520	18400
9	37500	8500	31500	35300	43600	94200	61200	13800	30500	27800	26100	7750
10	43400	31000	35300	20900	42100	81600	52900	29100	33000	16900	28300	17100
11	31000	28700	39700	4630	41700	70600	23900	30500	38900	21100	41300	7240
12	20800	36200	50000	26900	45100	68400	47200	27700	17500	29800	37700	1010
13	36400	60900	39900	25900	52300	64400	36500	27200	17800	25000	39300	17500
14	37600	81200	31900	31000	57000	52700	31600	27300	21200	21100	23600	4970
15	31500	79800	42500	38800	56900	56800	36700	19300	20200	34300	14700	18000
16	29200	74700	38200	46400	54700	63500	25900	14300	19900	33900	27800	13600
17	38300	60300	40000	28700	70700	56900	27600	29100	21700	26900	28900	28300
18	45100	69600	46900	18900	121000	54600	14100	32500	30400	19800	29800	13800
19	83000	59900	58400	30200	239000	46000	30600	42800	20000	26100	24800	7470
20	140000	51300	43900	22200	251000	49300	42800	44300	17100	28500	26700	23600
21	142000	44800	30600	17900	226000	20500	30000	44500	43000	24800	20100	15800
22	129000	41300	41800	25500	194000	46300	29800	40400	55600	19900	6730	16300
23	115000	38100	28100	30300	177000	51800	30300	38000	99800	24100	22500	17500
24	97500	50000	30100	8000	156000	52900	22700	58300	100000	17700	18500	21400
25	81600	48200	13100	9590	143000	56600	12700	51000	77900	10300	15300	9780
26	60100	48300	43900	45800	130000	56100	30100	49400	57100	19500	16300	2650
27	65700	29000	39000	82400	108000	51100	30800	41800	38500	19500	18100	17700
28	57800	40900	30400	168000	85600	32900	31600	37200	43400	19500	6150	10500
29	51100	32500	52100	170000	81300	55700	36400	37200	33500	15300	4570	19100
30	41800	26200	53700	142000	---	53300	44700	22800	31900	26800	12200	19100
31	42300	---	55100	110000	---	54600	---	35100	---	15200	13200	---
TOTAL	2096600	1262100	1192100	1565220	2877800	2025800	1338100	1086400	1175000	773000	631540	408930
MEAN	67630	42070	38450	50490	99230	65350	44600	35050	39170	24940	20370	13630
MAX	146000	81200	58400	170000	251000	115000	84700	58300	100000	36400	41300	28300
MIN	20800	8500	13100	4630	33200	20500	12700	13800	17100	10300	4570	1010
CAL YR 1975 TOTAL	19494149			MEAN 53410	MAX 662000	MIN 883						
WTR YR 1976 TOTAL	16432590			MEAN 44900	MAX 251000	MIN 1010						

SUSQUEHANNA RIVER BASIN

01578500 OCTORARO CREEK NEAR RISING SUN, MD

LOCATION.--Lat 39°41'24", long 76°07'43", Cecil County, Hydrologic Unit 02050306, on right bank at downstream side of Porter Bridge, 300 ft (91 m) downstream from Love Run, 3.5 mi (5.6 km) west of Rising Sun, and 3.5 mi (5.6 km) upstream from mouth.

DRAINAGE AREA.--193 mi² (500 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1932 to September 1958. Annual maximum, water years 1963-68. December 1968 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1051: Drainage area. WSP 1432: 1933, 1935, 1936(M), 1937-38, 1939(M), 1944-45, 1947(M), 1949.

GAGE.--Water-stage recorder. Datum of gage is 73.77 ft (22.485 m) above mean sea level.

REMARKS.--Water-discharge records good. Slight diurnal fluctuation caused by mills above station. Flow regulated by Chester-Octoraro Reservoir (formerly Pine Grove Reservoir), beginning Feb. 22, 1951, capacity, 2,800,000,000 gal (10.60 hm³). Diversion above station by Octoraro Water Co., and from Chester-Octoraro Reservoir beginning November 1951 by Chester Municipal Authority for municipal supply of Chester and surrounding boroughs.

AVERAGE DISCHARGE.--33 years (water years 1933-58, 1970-76), 271 ft³/s (7.675 m³/s), 19.07 in/yr (484 mm/yr), adjusted for storage and diversion since October 1951.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,000 ft³/s (991 m³/s) Aug. 9, 1942, gage height, 17.57 ft (5.355 m), from rating curve extended above 5,000 ft³/s (142 m³/s) on basis of velocity-area studies; maximum gage height, 18.92 ft (5.767 m) June 22, 1972; minimum discharge, 18 ft³/s (0.51 m³/s) July 30, 31, Aug. 2, 1954; minimum daily, 22 ft³/s (0.62 m³/s) Aug. 2, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of 1884 and 1918 reached stages of 24.3 ft (7.41 m) and 16.5 ft (5.03 m), respectively, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,250 ft³/s (177 m³/s) Jan. 27, gage height, 9.23 ft (2.813 m); minimum, 35 ft³/s (0.99 m³/s) Sept. 15, gage height, 3.72 ft (1.134 m); minimum daily, 40 ft³/s (1.13 m³/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	181	206	1400	416	249	873	225	155	102	171	69
2	243	183	208	655	907	242	510	436	453	88	108	68
3	221	185	196	494	489	238	325	236	258	77	84	74
4	210	184	184	528	396	245	317	183	169	70	72	68
5	207	182	181	335	362	255	299	173	135	74	60	61
6	204	178	181	270	340	259	253	174	122	65	63	59
7	194	175	186	270	312	232	234	176	116	65	334	55
8	185	200	181	453	295	222	221	176	108	83	217	49
9	185	215	181	320	288	229	213	170	103	90	982	45
10	191	210	189	290	278	254	198	168	96	88	454	51
11	224	314	179	260	378	272	191	166	90	846	274	59
12	271	308	168	245	464	300	192	186	85	859	168	53
13	235	798	165	242	329	388	180	158	81	224	130	45
14	197	462	167	1210	316	363	178	130	77	132	196	42
15	182	299	169	535	288	282	175	128	77	104	168	40
16	173	248	178	307	286	266	172	137	78	94	188	111
17	176	228	172	259	320	276	174	164	118	81	116	300
18	328	216	168	215	345	244	171	264	118	72	95	90
19	1090	209	151	200	426	235	167	208	97	62	83	74
20	785	205	140	230	346	231	165	156	91	59	77	67
21	400	213	151	265	286	227	173	136	100	52	73	62
22	291	239	149	240	353	232	167	128	157	66	70	58
23	254	220	143	200	414	215	158	116	178	75	66	56
24	232	207	137	170	311	207	153	139	125	136	65	52
25	233	197	160	190	290	204	153	144	99	147	61	52
26	231	193	608	1770	277	203	173	142	88	95	57	66
27	218	196	581	3480	269	199	164	133	78	70	259	70
28	211	205	297	2160	259	225	148	114	69	60	342	74
29	206	192	218	741	252	216	141	103	63	70	155	58
30	204	187	202	511	---	202	152	200	72	1320	104	80
31	188	---	290	420	---	198	---	177	---	412	81	---
TOTAL	8424	7229	6486	18865	10292	7610	6790	5346	3656	5838	5373	2108
MEAN	272	241	209	609	355	245	226	172	122	188	173	70.3
MAX	1090	798	608	3480	907	388	873	436	453	1320	982	300
MIN	173	175	137	170	252	198	141	103	63	52	57	40
(#)	+44.7	+43.6	+47.8	+50.6	+46.1	+45.7	+44.5	+46.7	+46.4	+52.9	+41.9	+49.7
MEAN*	317	285	257	660	401	291	271	219	168	241	215	120
CFSM*	1.64	1.48	1.33	3.42	2.08	1.51	1.40	1.13	.87	1.25	1.11	.62
IN*	1.89	1.65	1.54	3.94	2.24	1.74	1.57	1.31	.97	1.44	1.28	.69
CAL YR 1975	TOTAL	144914	MEAN 397	MAX 10700	MIN 111	MEAN* 443	CFSM* 2.30	IN* 31.17				
WTR YR 1976	TOTAL	88017	MEAN 240	MAX 3480	MIN 40	MEAN* 287	CFSM* 1.49	IN* 20.25				

* Diversion above station and diversion from and change in contents in Chester-Octoraro Reservoir, equivalent in cubic feet per second; furnished by Octoraro Water Co. and Chester Municipal Authority, respectively.

* Adjusted for diversion and change in reservoir contents.

01578500 OCTORARO CREEK NEAR RISING SUN, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PH (UNITS)
OCT							
23...	1210	261	242	14.5	18.0	--	7.0
NOV							
19...	1135	217	183	9.5	18.5	12.2	7.0
DEC							
10...	1145	191	204	6.0	8.0	--	8.5
JAN							
19...	1315	193	172	.0	-4.0	14.3	7.3
FEB							
25...	1125	291	165	4.5	16.5	--	7.5
APR							
13...	1245	187	164	10.0	13.5	12.0	7.5
MAY							
18...	0910	305	147	18.0	21.0	--	7.6
JUN							
30...	1105	61	--	--	26.0	--	8.0
AUG							
17...	1520	114	160	22.5	29.0	9.0	7.7

SUSQUEHANNA RIVER BASIN

01580000 DEER CREEK AT ROCKS, MD

LOCATION.--Lat 39°37'49", long 76°24'13", Harford County, Hydrologic Unit 02050306, on right bank 0.3 mi (0.5 km) upstream from bridge on Cherry Hill Road, 0.8 mi (1.3 km) southeast of Rocks, 1.2 mi (1.9 km) upstream from Stirrup Run, and 23.5 mi (37.8 km) upstream from mouth.

DRAINAGE AREA.--94.4 mi² (244.5 km²).

PERIOD OF RECORD.--October 1926 to current year. Monthly discharge only for November and December 1926, published in WSP 1302.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1502: 1927-36 (maximum and minimum only 1927-29, maximum only 1930-32, 1936).

GAGE.--Water-stage recorder. Concrete control since Sept. 7, 1938. Datum of gage is 250.40 ft (76.322 m) above mean sea level (city of Baltimore bench mark).

REMARKS.--Records excellent. Some regulation at low flow by mills above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--50 years, 123 ft³/s (3.483 m³/s), 17.69 in/yr (449 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s (385 m³/s) Aug. 23, 1933, gage height, 17.7 ft (5.39 m), from floodmarks, from rating curve extended above 3,000 ft³/s (85.0 m³/s) on basis of slope-area measurements at gage heights 13.3 ft (4.05 m) and 17.7 ft (5.39 m); minimum, 8 ft³/s (0.23 m³/s) Dec. 16, 1930, Jan. 26, 1939, result of regulation; minimum daily, 8.6 ft³/s (0.24 m³/s) Sept. 11, 12, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1888, that of Aug. 23, 1933.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s (53 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 26	1330	3410 96.6	8.45 2.576	Sept. 16	1600	*3850 109	9.09 2.771
Jan. 26	2300	2640 74.8	7.17 2.185				

Minimum discharge, 27 ft³/s (0.76 m³/s) Sept. 8, gage height, 1.89 ft (0.576 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	156	152	733	263	147	536	170	111	83	65	47
2	243	156	143	263	470	145	240	224	204	78	61	52
3	223	153	139	278	256	146	198	139	125	75	57	49
4	213	150	136	254	251	148	225	120	107	74	55	51
5	204	149	135	207	225	148	200	116	97	70	52	51
6	199	145	136	200	204	147	179	116	96	68	51	48
7	190	145	137	210	191	138	172	114	99	77	64	45
8	185	168	133	229	185	135	162	108	91	74	107	40
9	200	151	146	198	179	147	156	108	88	72	109	43
10	200	191	160	180	175	153	150	110	85	69	139	58
11	235	204	139	170	199	168	148	110	82	84	84	59
12	198	224	134	158	183	177	139	122	79	83	69	48
13	180	371	131	175	173	258	135	105	75	72	67	45
14	175	224	131	662	176	198	133	102	75	69	63	45
15	170	193	131	207	167	172	131	102	77	69	88	44
16	173	180	134	177	172	171	132	102	79	93	79	961
17	184	172	127	168	189	172	133	122	193	71	69	246
18	536	166	125	150	188	154	129	207	95	66	63	120
19	286	162	118	140	205	154	126	131	85	65	59	87
20	248	159	125	160	176	149	124	111	87	61	56	74
21	213	173	120	150	165	147	127	104	259	60	54	69
22	199	172	118	150	202	144	123	98	252	61	52	65
23	185	157	116	150	178	137	120	94	116	65	49	59
24	176	153	115	150	164	136	116	92	98	70	48	58
25	182	150	120	140	162	136	119	91	92	64	48	57
26	176	148	523	1540	159	135	143	93	89	60	49	57
27	170	149	218	1160	156	133	122	97	82	57	131	62
28	164	146	164	565	152	169	118	91	78	56	79	63
29	162	142	148	300	149	138	114	92	78	70	61	57
30	162	142	150	255	---	136	112	230	79	128	54	68
31	153	---	208	229	---	138	---	124	---	71	51	---
TOTAL	6445	5151	4712	9708	5714	4776	4762	3745	3253	2235	2133	2828
MEAN	208	172	152	313	197	154	159	121	108	72.1	68.8	94.3
MAX	536	371	523	1540	470	258	536	230	259	128	139	961
MIN	153	142	115	140	149	133	112	91	75	56	48	40
CFSM	2.20	1.82	1.61	3.32	2.09	1.63	1.68	1.28	1.14	.76	.73	1.00
IN.	2.54	2.03	1.86	3.83	2.25	1.88	1.88	1.48	1.28	.88	.84	1.11

CAL YR 1975 TOTAL 71938 MEAN 197 MAX 2390 MIN 81 CFSM 2.09 IN 28.35
WTR YR 1976 TOTAL 55462 MEAN 152 MAX 1540 MIN 40 CFSM 1.61 IN 21.86

01580000 DEER CREEK AT ROCKS, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972-73, 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	AIR TEMPER- ATURE (DEG C)	TEMPER- ATURE (DEG C)	WEATHER	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (CA, MG)
OCT 29...	1025	148	--	--	3.5	7.0	--	--	--
DEC 11...	1445	136	105	7.7	4.5	5.0	3	0	29
JAN 21...	0930	150	105	6.9	-1.0	.5	3	--	--
FEB 27...	1345	156	95	7.1	18.0	10.0	1	--	--
MAY 14...	1400	104	--	--	22.0	16.5	--	--	--
JUN 28...	1100	77	--	--	27.5	22.0	--	--	--
AUG 19...	1050	59	--	--	19.5	18.0	--	--	--
23...	0945	51	100	7.3	25.0	21.5	0	3	25

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	RICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT 29...	--	--	--	--	--	--	--	--	--
DEC 11...	13	8.5	2.0	4.7	1.4	20	5.5	9.2	.0
JAN 21...	--	--	--	--	--	--	--	--	--
FEB 27...	--	--	--	--	--	--	--	--	--
MAY 14...	--	--	--	--	--	--	--	--	--
JUN 28...	--	--	--	--	--	--	--	--	--
AUG 19...	--	--	--	--	--	--	--	--	--
23...	9	6.8	2.0	4.8	1.4	20	2.4	7.6	.1

DATE	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT 29...	--	--	--	--	--	--	--	--	--
DEC 11...	7.5	--	49	2.7	.02	30	--	10	--
JAN 21...	--	--	--	--	--	--	--	--	--
FEB 27...	--	--	--	--	--	--	--	--	--
MAY 14...	--	--	--	--	--	--	--	--	--
JUN 28...	--	--	--	--	--	--	--	--	--
AUG 19...	--	--	--	--	--	--	--	--	--
23...	6.4	60	42	2.1	.04	580	120	70	50

SUSQUEHANNA RIVER BASIN

01580200 DEER CREEK NEAR KALMIA, MD

LOCATION.--Lat 39°37'16", long 76°17'57", Harford County, Hydrologic Unit 02050306, on left bank 50 ft (15 m) upstream from bridge on U.S. Highway 1, 1 mi (1.6 km) north of Kalmia, 6.5 mi (10.5 km) northeast of Bel Air, and 12.5 mi (20.1 km) upstream from mouth.

DRAINAGE AREA.--125 mi² (324 km²).

PERIOD OF RECORD.--July 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 145 ft (44 m), from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--9 years, 198 ft³/s (5.607 m³/s), 21.51 in/yr (546 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s (476 m³/s) June 22, 1972, gage height, 16.08 ft (4.901 m); minimum, 29 ft³/s (0.82 m³/s) Dec. 7, 1969, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (70 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 26	1630	4380 124	8.86 2.701	Sept. 16	1900	*5770 163	10.02 3.054

Minimum discharge, 41 ft³/s (1.16 m³/s) Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 to SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	323	194	188	1010	337	199	688	239	162	114	92	68
2	301	194	180	360	652	196	320	331	320	101	85	72
3	276	191	172	361	347	198	262	202	186	98	79	73
4	265	190	167	356	330	199	288	173	151	98	77	66
5	253	186	166	260	310	198	275	159	133	93	73	70
6	245	181	170	250	280	198	238	159	126	89	93	66
7	233	180	172	284	261	184	224	154	132	187	103	66
8	225	208	165	318	252	179	211	144	121	108	190	58
9	242	189	177	238	248	193	202	139	115	103	174	53
10	249	229	203	222	238	210	197	137	109	93	215	69
11	299	275	176	236	258	229	194	137	107	105	131	81
12	259	263	166	204	258	251	185	167	101	112	102	66
13	224	499	165	217	237	328	180	143	97	96	94	62
14	214	290	162	795	245	279	178	137	98	90	90	62
15	206	249	162	279	228	236	173	136	100	90	141	63
16	208	228	166	229	233	232	171	136	100	141	139	1620
17	223	215	157	213	254	238	174	154	235	98	96	446
18	596	207	155	190	258	209	170	274	132	88	87	219
19	459	201	140	190	284	208	169	186	110	84	81	141
20	359	198	150	215	244	200	166	152	119	80	77	117
21	282	209	147	200	225	197	170	140	351	80	74	108
22	257	220	144	200	276	195	163	129	325	85	71	101
23	240	193	140	200	258	184	158	124	162	85	68	93
24	226	188	140	200	228	181	154	120	132	100	64	89
25	234	187	150	190	224	181	157	118	120	87	64	87
26	226	184	664	1770	217	180	195	122	119	82	64	86
27	221	186	318	1630	213	176	165	129	108	77	168	95
28	212	184	220	829	206	217	157	119	102	77	130	94
29	208	175	193	407	201	183	156	120	101	118	85	84
30	205	175	187	345	---	179	150	337	106	252	73	97
31	196	---	258	307	---	182	---	182	---	106	68	---
TOTAL	8166	6468	5920	12705	7802	6419	6290	5099	4380	3217	3148	4472
MEAN	263	216	191	410	269	207	210	164	146	104	102	149
MAX	596	499	664	1770	652	328	688	337	351	252	215	1620
MIN	196	175	140	190	201	176	150	118	97	77	64	53
CFSM	2.10	1.73	1.53	3.28	2.15	1.66	1.68	1.31	1.17	.83	.82	1.19
IN.	2.43	1.92	1.76	3.78	2.32	1.91	1.87	1.52	1.30	.96	.94	1.33

CAL YR 1975 TOTAL 96081 MEAN 263 MAX 3030 MIN 99 CFSM 2.10 IN 28.59
WTR YR 1976 TOTAL 74086 MEAN 202 MAX 1770 MIN 53 CFSM 1.62 IN 22.05

01581700 WINTERS RUN NEAR BENSON, MD

LOCATION.--Lat 39°31'12", long 76°22'24", Harford County, Hydrologic Unit 02060003, on left bank 30 ft (9 m) downstream from bridge on U.S. Highway 1, 0.1 mi (0.2 km) upstream from Heavenly Waters, 1.2 mi (1.9 km) northeast of Benson, 1.8 mi (2.9 km) southwest of Bel Air, and 10.5 mi (16.9 km) upstream from mouth.

DRAINAGE AREA.--34.8 mi² (90.1 km²).

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 195 ft (59 m), from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--9 years, 55.7 ft³/s (1.577 m³/s), 21.74 in/yr (552 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,600 ft³/s (215 m³/s) June 22, 1972, gage height, 11.60 ft (3.536 m); minimum, 7.2 ft³/s (0.20 m³/s) July 5, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0215	1590 45.0	5.08 1.548	July 29	2145	1960 55.5	5.62 1.713
Jan. 26	1145	1790 50.7	5.38 1.640	Sept. 16	1545	*5190 147	9.67 2.947

Minimum discharge, 15 ft³/s (0.42 m³/s) Sept. 13, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	57	57	458	116	50	264	138	36	31	26	18
2	78	57	51	90	218	49	77	81	69	24	23	22
3	74	56	49	133	84	51	64	50	40	22	22	21
4	71	56	48	89	75	51	75	43	35	23	21	19
5	70	55	48	63	75	51	67	41	31	22	21	19
6	70	51	49	55	70	48	59	40	31	21	25	18
7	67	51	48	76	66	44	56	39	31	91	33	18
8	65	62	46	104	64	43	54	36	29	33	96	18
9	77	53	54	54	60	50	51	36	28	29	54	18
10	72	114	57	50	59	56	50	36	29	25	69	28
11	95	84	48	50	63	74	52	36	27	46	35	20
12	74	144	44	50	59	67	49	50	26	37	30	18
13	66	162	45	86	60	99	49	36	25	26	27	17
14	63	84	43	201	61	66	48	36	26	24	34	15
15	60	70	42	61	57	57	48	36	26	25	72	16
16	59	65	43	53	61	60	48	37	26	29	41	1170
17	84	60	40	46	71	63	48	40	54	24	27	192
18	154	59	39	44	77	55	47	51	30	22	23	77
19	138	59	35	44	86	55	46	41	27	21	22	47
20	88	58	36	48	65	50	44	36	32	21	21	37
21	74	65	39	46	60	50	49	34	117	22	21	34
22	67	63	38	46	91	45	44	32	68	27	20	30
23	64	57	36	46	70	43	42	31	39	27	19	27
24	63	55	34	46	62	42	41	31	32	45	19	26
25	68	53	40	46	61	42	42	30	32	24	19	25
26	64	51	301	610	58	42	54	32	32	21	18	26
27	63	54	80	445	54	43	44	32	27	21	59	29
28	60	51	56	183	51	47	42	30	26	21	27	28
29	58	49	47	95	51	41	41	38	25	190	23	24
30	58	49	56	81	---	42	40	114	24	89	20	42
31	56	---	118	72	---	47	---	42	---	31	19	---
TOTAL	2304	2004	1767	3571	2105	1623	1739	1385	1080	1114	986	2099
MEAN	74.3	66.8	57.0	115	72.6	52.4	58.0	44.7	36.0	35.9	31.8	70.0
MAX	154	162	301	610	218	99	268	138	117	190	96	1170
MIN	56	49	34	44	51	41	40	30	24	21	18	15
CFSM	2.14	1.92	1.64	3.30	2.09	1.51	1.67	1.28	1.03	1.03	.91	2.01
IN.	2.46	2.14	1.89	3.82	2.25	1.73	1.86	1.48	1.15	1.19	1.05	2.24
CAL YR 1975	TOTAL	27030	MEAN 74.1	MAX 1050	MIN 26	CFSM 2.13	IN 28.89					
WTR YR 1976	TOTAL	21777	MEAN 59.5	MAX 1170	MIN 15	CFSM 1.71	IN 23.28					

GUNPOWDER RIVER BASIN

01582000 LITTLE FALLS AT BLUE MOUNT, MD

LOCATION.--Lat 39°36'16", long 76°37'16", Baltimore County, Hydrologic Unit 02060003, on left bank at downstream side of Pennsylvania Railroad bridge, 0.2 mi (0.3 km) north of Blue Mount, 0.6 mi (1.0 km) upstream from mouth, 0.9 mi (1.4 km) downstream from First Mine Branch, and 1.2 mi (1.9 km) south of White Hall.

DRAINAGE AREA.--52.9 mi² (137.0 km²).

PERIOD OF RECORD.--June 1944 to current year.

REVISED RECORDS.--WSP 111: 1944(M), 1945-47(P).

GAGE.--Water-stage recorder. Altitude of gage is 305 ft (93 m), from topographic map.

REMARKS.--Records good. Slight diurnal fluctuation at low flow caused by mill above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--32 years, 68.3 ft³/s (1.934 m³/s), 17.53 in/yr (445 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,280 ft³/s (234 m³/s) June 22, 1972, gage height, 18.54 ft (5.651 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 1.9 ft³/s (0.054 m³/s) Aug. 29, 1966; minimum daily, 4.5 ft³/s (0.13 m³/s) Sept. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum(*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	0930	1600 45.3	5.29 1.612	Jan. 26	2130	1380 39.1	4.83 1.472
Jan. 26	1130	*2060 58.3	6.22 1.896				

Minimum discharge, 22 ft³/s (0.62 m³/s) Sept. 8, 9, 10, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	94	88	353	164	91	307	130	73	54	34	27
2	156	94	83	138	246	91	139	115	125	46	32	34
3	140	93	81	154	135	91	118	85	78	45	31	30
4	132	91	79	127	140	93	141	78	69	46	31	29
5	126	90	79	105	128	94	116	76	63	44	30	28
6	121	89	80	100	120	90	107	73	66	42	41	26
7	116	89	80	100	113	87	101	72	63	49	64	25
8	112	102	78	120	111	85	97	68	59	50	62	24
9	146	90	87	90	108	94	93	68	56	46	56	23
10	125	132	89	85	107	97	91	67	55	42	68	40
11	156	110	80	85	119	111	90	68	53	70	45	29
12	122	161	77	85	107	106	87	77	52	50	39	25
13	111	202	77	109	107	152	86	67	50	43	37	24
14	107	128	77	308	108	112	85	67	50	41	36	24
15	104	111	77	104	103	102	84	65	50	52	52	24
16	102	104	78	94	107	104	83	74	49	46	44	182
17	116	100	74	88	118	104	82	95	104	41	35	77
18	438	96	74	80	117	97	80	135	56	39	33	47
19	155	94	71	75	122	97	80	82	53	37	31	40
20	132	93	70	75	108	92	79	72	66	36	30	36
21	119	102	71	85	104	93	83	69	94	38	30	35
22	113	95	70	75	124	89	78	64	140	42	29	33
23	108	89	70	75	105	86	75	61	64	43	27	31
24	107	88	69	75	101	85	74	60	57	45	27	31
25	110	87	70	76	100	85	77	59	56	38	27	30
26	106	86	302	888	98	83	93	66	53	35	27	31
27	105	88	107	468	97	89	77	63	48	35	54	36
28	101	85	88	250	94	100	75	59	46	35	35	36
29	99	83	81	170	92	85	73	67	59	38	32	31
30	98	82	90	147	---	85	71	148	50	52	28	48
31	95	---	136	132	---	92	---	78	---	37	27	---
TOTAL	4048	3048	2733	4916	3403	2962	2922	2428	1957	1357	1174	1136
MEAN	131	102	88.2	159	117	95.5	97.4	78.3	65.2	43.8	37.9	37.9
MAX	438	202	302	888	246	152	307	148	140	70	68	182
MIN	95	82	69	75	92	83	71	59	46	35	27	23
CFSM	2.48	1.93	1.67	3.01	2.21	1.81	1.84	1.48	1.23	.83	.72	.72
IN.	2.85	2.14	1.92	3.46	2.39	2.08	2.05	1.71	1.38	.95	.83	.80

CAL YR 1975	TOTAL	40157	MEAN 110	MAX 2520	MIN 45	CFSM 2.08	IN 28.24
WTR YR 1976	TOTAL	32084	MEAN 87.7	MAX 888	MIN 23	CFSM 1.66	IN 22.56

01583000 SLADE RUN NEAR GLYNDON, MD

LOCATION---Lat 39°29'40", long 76°47'45", Baltimore County, Hydrologic Unit 02060003, on left bank at downstream side of bridge on Longnecker Road, 1.1 mi (1.8 km) upstream from mouth, 1.6 mi (2.6 km) northeast of Glyndon, and 2.6 mi (4.2 km) northeast of Reisterstown.

DRAINAGE AREA--2.09 mi² (5.41 km²).

PERIOD OF RECORD--September 1947 to current year.

REVISED RECORD--WSP 1502: Drainage area.

GAGE--Water-stage recorder and concrete control. Datum of gage is 425.25 ft (129.616 m) above mean sea level.

REMARKS--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE--29 years, 2.35 ft³/s (0.067 m³/s), 15.27 in/yr (388 mm/yr).

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 515 ft³/s (14.6 m³/s) June 22, 1972, gage height, 4.80 ft (1.463 m), from rating curve extended above 80 ft³/s (2.27 m³/s) on basis of slope-area measurement at gage height 3.96 ft (1.207 m); no flow many days in August and September 1966.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 115 ft³/s (3.26 m³/s) Jan. 1, gage height, 3.45 ft (1.052 m), no other peak above base of 90 ft³/s (2.5 m³/s); minimum, 0.56 ft³/s (0.016 m³/s) Sept. 8, 9, gage height, 2.06 ft (0.628 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	3.5	3.3	22	6.2	3.8	12	5.0	3.8	2.2	1.1	.76
2	8.9	3.5	3.2	5.7	10	3.7	4.5	3.5	7.9	1.5	1.0	1.1
3	7.5	3.4	3.0	7.3	4.6	3.6	3.4	2.6	3.2	1.4	1.0	.92
4	6.8	3.4	3.0	5.3	4.3	3.6	3.9	2.4	2.6	1.4	1.0	.87
5	6.2	3.4	3.0	4.1	4.1	3.5	3.6	2.4	2.3	1.4	.97	.81
6	6.0	3.4	3.0	4.0	3.9	3.3	3.1	2.3	2.2	1.3	.96	.72
7	5.2	3.4	2.9	4.0	3.5	3.2	2.9	2.3	2.1	2.2	1.1	.70
8	4.8	3.9	3.0	4.7	3.3	3.2	2.8	2.2	1.9	1.9	1.9	.67
9	8.6	3.4	3.8	3.6	3.2	3.6	2.7	2.2	1.7	1.7	1.6	.65
10	9.1	4.8	3.5	3.2	3.1	3.6	2.6	2.1	1.7	1.5	1.9	1.3
11	9.2	4.1	3.1	3.2	3.5	4.3	2.6	2.1	1.7	4.3	1.3	.81
12	7.8	5.8	3.0	3.2	3.3	3.9	2.5	2.8	1.6	2.2	1.1	.70
13	5.7	6.7	3.0	5.1	3.4	5.3	2.4	2.3	1.5	1.6	1.1	.69
14	4.9	4.5	3.0	7.8	3.7	4.1	2.4	2.2	1.5	1.4	1.3	.67
15	4.1	4.0	3.0	4.1	3.4	3.8	2.3	2.2	1.5	1.9	2.9	.78
16	3.4	3.9	3.0	4.0	3.7	4.0	2.1	2.8	1.6	1.5	1.6	6.2
17	3.4	3.8	2.8	3.8	3.9	5.2	2.4	2.5	3.0	1.4	1.2	1.9
18	7.3	3.6	2.8	3.3	3.9	3.4	2.3	3.7	1.6	1.3	1.0	1.3
19	4.7	3.6	2.6	3.0	4.2	3.4	2.3	2.5	1.6	1.2	.97	1.1
20	4.3	3.6	2.7	3.0	3.8	3.2	2.2	2.2	5.5	1.2	.95	1.0
21	4.1	3.9	2.8	3.1	3.7	3.4	2.2	2.0	4.0	1.8	.91	1.0
22	4.1	3.9	2.7	2.9	4.3	3.2	2.1	1.9	3.0	1.7	.87	.93
23	4.0	3.4	2.7	2.9	3.7	3.0	2.0	1.9	2.0	2.0	.83	.89
24	4.0	3.4	2.7	2.7	3.6	3.0	2.0	1.8	1.8	1.7	.83	.87
25	4.1	3.4	2.6	2.6	3.6	3.2	2.1	1.8	1.7	1.4	.86	.88
26	4.1	3.2	8.7	19	3.6	3.0	2.3	2.0	1.6	1.2	.83	.92
27	4.1	3.3	4.1	18	3.5	3.2	1.9	2.0	1.4	1.2	1.3	1.0
28	3.8	3.2	3.4	8.9	3.4	3.8	1.9	1.8	1.4	1.2	1.1	.99
29	3.8	3.2	3.2	5.2	3.4	3.2	1.9	3.5	1.4	1.8	.94	.90
30	3.7	3.2	3.8	4.6	---	3.2	1.9	11	1.5	1.3	.78	2.1
31	3.5	---	7.1	4.2	---	3.7	---	4.7	---	1.2	.77	---
TOTAL	170.3	113.8	104.3	178.5	115.8	111.6	85.3	86.7	70.3	51.0	35.97	34.13
MEAN	5.49	3.79	3.36	5.76	3.99	3.60	2.84	2.80	2.34	1.65	1.16	1.14
MAX	9.2	6.7	8.7	22	10	5.3	12	11	7.9	4.3	2.9	6.2
MIN	3.4	3.2	2.5	2.6	3.1	3.0	1.9	1.8	1.4	1.2	.77	.65
CFSM	2.63	1.81	1.61	2.76	1.91	1.72	1.36	1.34	1.12	.79	.56	.55
IN.	3.03	2.02	1.86	3.18	2.06	1.99	1.52	1.54	1.25	.91	.64	.61

CAL YR 1975 TOTAL 1461.10 MEAN 4.00 MAX 85 MIN 1.6 CFSM 1.91 IN 25.99
WTR YR 1976 TOTAL 1157.70 MEAN 3.16 MAX 22 MIN .65 CFSM 1.51 IN 20.60

GUNPOWDER RIVER BASIN

01583500 WESTERN RUN AT WESTERN RUN, MD

LOCATION.--Lat 39°30'38", long 76°40'37", Baltimore County, Hydrologic Unit 02060003, on right bank 100 ft (30 m) downstream from bridge on Western Run Road, 0.3 mi (0.5 km) southeast of Western Run, 2.5 mi (4.0 km) northwest of Cockeysville, 3.2 mi (5.1 km) upstream from Beaverdam Run, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--59.8 mi² (154.9 km²).

PERIOD OF RECORD.--September 1944 to current year.

REVISED RECORDS.--WSP 1502: 1945-46, 1948(M).

GAGE.--Water-stage recorder. Datum of gage is 262.78 ft (80.095 m) above mean sea level (Baltimore County bench mark).

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--32 years, 68.1 ft³/s (1.929 m³/s), 15.46 in/yr (393 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,000 ft³/s (1,080 m³/s) June 22, 1972, gage height, 26.0 ft (7.92 m), from floodmarks, from rating curve extended above 3,200 ft³/s (90.6 m³/s) on basis of slope-area measurement and contracted-opening measurement at gage height 26.0 ft (7.92 m); minimum, 2.4 ft³/s (0.068 m³/s) Sept. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	1015	1110 31.4	4.14 1.262	Jan. 14	0345	1110 31.4	4.14 1.262
Jan. 1	0530	1740 49.3	5.26 1.603	Jan. 26	1100	*2000 56.6	5.74 1.750

Minimum discharge, 24 ft³/s (0.68 m³/s) Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	95	96	616	154	89	299	99	80	58	35	27
2	147	95	95	164	279	88	131	99	192	45	34	35
3	135	95	92	186	135	89	111	76	91	43	33	32
4	129	93	89	151	129	93	121	72	78	45	33	29
5	125	93	89	118	124	91	112	70	70	42	32	28
6	122	92	88	111	117	88	101	69	69	41	32	27
7	118	90	88	113	111	84	96	68	66	50	52	26
8	118	101	86	141	109	83	93	65	63	59	50	25
9	210	92	101	110	107	91	89	64	59	56	45	24
10	144	122	102	105	105	93	88	63	56	44	55	40
11	162	110	88	103	109	107	87	64	55	67	40	30
12	136	140	84	103	102	106	83	73	53	58	37	28
13	126	200	84	126	102	133	82	64	51	44	35	26
14	123	137	83	348	105	106	81	63	52	42	36	25
15	117	121	83	120	100	97	80	62	53	59	77	27
16	114	115	88	109	104	99	79	74	51	46	57	207
17	123	110	83	106	114	97	78	79	92	42	38	71
18	326	107	81	100	112	88	76	139	57	39	34	45
19	132	104	77	95	120	88	76	79	55	38	32	39
20	120	103	78	95	103	86	75	68	59	37	32	36
21	113	108	79	100	99	86	77	64	85	38	31	35
22	109	102	77	95	120	83	74	59	74	47	30	33
23	106	98	77	95	106	80	71	58	58	49	29	32
24	104	95	75	95	98	79	71	57	54	48	28	31
25	106	94	74	94	97	80	73	56	50	41	29	31
26	105	91	256	804	95	79	83	64	47	38	29	32
27	106	92	100	541	93	78	72	62	45	38	41	34
28	102	88	82	267	91	95	71	56	44	38	36	35
29	100	86	76	157	89	80	69	66	57	44	32	31
30	100	86	81	139	---	79	68	284	48	38	28	42
31	96	---	118	127	---	86	---	97	---	38	28	---
TOTAL	4033	3155	2850	5634	3329	2801	2767	2433	1964	1412	1160	1163
MEAN	130	105	91.9	182	115	90.4	92.2	78.5	65.5	45.5	37.4	38.8
MAX	326	200	256	804	279	133	299	284	192	67	77	207
MIN	96	86	74	94	89	78	68	56	44	37	28	24
CFSM	2.17	1.76	1.54	3.04	1.92	1.51	1.54	1.31	1.10	.76	.63	.65
IN.	2.51	1.96	1.77	3.50	2.07	1.74	1.72	1.51	1.22	.88	.72	.72

CAL YR 1975	TOTAL	41916	MEAN	115	MAX	3170	MIN	50	CFSM	1.92	IN	26.07
WTR YR 1976	TOTAL	32701	MEAN	89.3	MAX	804	MIN	24	CFSM	1.49	IN	20.34

01584050 LONG GREEN CREEK AT GLEN ARM, MD

LOCATION.--Lat 39°27'17", long 76°28'45", Baltimore County, Hydrologic Unit 02060003, on right bank 0.5 mi (0.8 km) downstream from bridge on Glen Arm Road, 0.6 mi (1.0 km) upstream from State Highway 147 (Harford Road), 0.8 mi (1.3 km) east of Glen Arm, and 1.6 mi (2.6 km) upstream from mouth.

DRAINAGE AREA.--9.40 mi² (24.3 km²).

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 230 ft (70 m), from topographic map.

REMARKS.--Records good except for period of no gage-height record, May 15 to July 1, which are fair. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,690 ft³/s (47.9 m³/s) Sept. 16, 1976, gage height, 5.59 ft (1.704 m); minimum, 3.2 ft³/s (0.091 m³/s) Sept. 13, 14, 15, 1976, gage height, 0.99 ft (0.302 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0245	514 14.6	4.06 1.237	Jan. 26	2000	390 11.0	3.77 1.149
Jan. 26	1115	383 10.8	3.75 1.143	Sept. 16	1415	*1690 47.9	5.59 1.704

Minimum discharge, 3.2 ft³/s (0.091 m³/s) Sept. 13, 14, 15, gage height, 0.99 ft (0.302 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	10	11	120	29	12	48	30	8.5	7.0	4.9	3.8
2	14	10	10	19	46	11	15	13	14	5.5	4.5	4.4
3	13	10	10	37	17	11	14	10	9.0	5.0	4.5	4.7
4	13	10	9.9	18	16	12	17	9.6	8.0	5.0	4.5	4.3
5	13	9.9	9.7	15	16	11	14	9.3	7.5	5.0	4.5	4.2
6	13	9.9	10	13	15	11	13	9.0	7.5	5.0	4.3	3.8
7	12	9.9	10	19	14	11	12	8.8	7.5	22	4.8	3.6
8	12	11	9.9	24	14	11	12	8.6	7.0	8.0	10	3.6
9	20	10	11	13	13	11	11	8.2	7.0	7.2	7.4	3.6
10	14	16	11	12	13	12	11	8.2	7.0	6.1	9.0	5.7
11	15	12	10	12	14	15	11	8.2	6.5	20	6.2	4.0
12	13	29	9.7	12	13	13	11	10	6.0	8.0	5.3	3.6
13	12	26	9.6	23	13	19	10	8.3	6.0	6.5	5.0	3.5
14	12	14	9.6	26	14	13	10	8.2	6.0	5.9	5.2	3.2
15	11	13	9.6	13	13	13	10	8.2	6.0	6.7	8.5	3.3
16	11	12	9.5	12	14	13	9.9	8.5	6.0	6.4	5.9	244
17	17	12	9.4	11	15	12	9.9	9.0	13	6.0	4.3	38
18	25	11	9.2	10	18	11	9.5	11	7.0	5.3	4.2	6.2
19	15	11	8.4	10	20	11	9.5	9.5	6.5	5.3	4.3	6.0
20	14	11	8.6	11	15	11	9.6	8.5	7.5	5.0	4.3	5.5
21	12	11	8.8	11	14	11	9.9	7.5	18	5.0	4.3	5.0
22	12	11	8.8	11	22	11	9.3	7.0	8.2	5.0	4.2	5.0
23	12	11	8.5	11	17	11	9.0	7.0	8.0	5.7	4.0	5.0
24	11	10	8.2	11	15	11	8.8	7.0	7.0	6.4	3.8	5.0
25	11	10	8.2	11	14	11	8.9	7.0	7.0	5.6	3.8	5.0
26	11	10	47	126	13	10	9.8	7.5	7.0	4.8	3.8	5.5
27	11	11	14	89	12	10	9.0	7.5	6.5	4.8	7.8	6.0
28	11	10	12	37	12	11	8.8	7.0	6.0	4.7	5.3	5.5
29	11	10	11	20	12	10	8.8	12	6.0	9.4	4.7	5.0
30	11	10	12	17	---	10	8.5	24	6.0	6.0	4.2	9.0
31	10	---	31	16	---	11	---	10	---	5.5	3.8	---
TOTAL	407	361.7	365.6	790	473	361	358.2	307.6	233.2	213.8	161.3	415.0
MEAN	13.1	12.1	11.8	25.5	16.3	11.6	11.9	9.92	7.77	6.90	5.20	13.8
MAX	25	29	47	126	46	19	48	30	18	22	10	244
MIN	10	9.9	8.2	10	12	10	8.5	7.0	6.0	4.7	3.8	3.2
CFSM	1.39	1.29	1.26	2.71	1.73	1.23	1.27	1.06	.83	.73	.55	1.47
IN.	1.61	1.43	1.45	3.13	1.87	1.43	1.42	1.22	.92	.85	.64	1.64

WTR YR 1976 TOTAL 4447.4 MEAN 12.2 MAX 244 MIN 3.2 CFSM 1.30 IN 17.60

GUNPOWDER RIVER BASIN

01585100 WHITEMARSH RUN AT WHITE MARSH, MD

LOCATION.--Lat 39°22'15", long 76°26'46", Baltimore County, Hydrologic Unit 02060003, on left bank at upstream side of bridge on State Highway 7, 1 mi (1.6 km) southwest of White Marsh, and 3 mi (4.8 km) upstream from mouth.

DRAINAGE AREA.--7.61 mi² (19.71 km²).

PERIOD OF RECORD.--February 1959 to current year.

REVISED RECORDS.--WDR-MD-73-1: 1960(M), 1967-68, 1969(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 38.96 ft (11.875 m) above mean sea level.

REMARKS.--Records good. Low flow affected by operations of sand and gravel plant in vicinity of gage. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--17 years, 10.8 ft³/s (0.306 m³/s), 19.27 in/yr (489 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s (227 m³/s) Aug. 1, 1971, gage height, 14.05 ft (4.282 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of computation of flow-through-culvert at gage height 10.04 ft (3.060 m) and computation of flow-through-culvert and over road at gage height 14.05 ft (4.282 m); no flow for part of Mar. 20, 1965, caused by construction work above station; minimum daily, 0.10 ft³/s (0.003 m³/s) Sept. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0145	1350 38.2	7.06 2.152	Aug. 8	1445	508 14.4	3.60 1.097
Apr. 1	0400	646 18.3	3.99 1.216	Sept. 16	1400	*3460 98.0	11.40 3.475
Aug. 6	2045	857 24.3	4.73 1.442				

Minimum discharge, 0.33 ft³/s (0.009 m³/s) Dec. 18, gage height, 1.21 ft (0.369 m); minimum daily, 0.64 ft³/s (0.018 m³/s) Aug. 3, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	3.5	5.9	296	32	5.1	121	64	14	1.5	.83	.94
2	4.9	3.7	4.0	22	70	4.9	14	18	9.8	.81	.66	7.2
3	4.2	3.7	3.8	53	17	5.0	8.8	6.4	4.3	.76	.64	1.8
4	4.1	3.6	3.6	17	11	5.9	21	4.7	3.1	.97	.65	1.2
5	4.1	3.7	3.7	9.1	8.0	5.1	10	4.2	2.6	.77	.64	1.1
6	4.1	3.6	3.9	7.6	8.0	4.6	7.5	3.8	2.6	.80	.61	.79
7	3.5	3.7	3.9	19	7.5	4.3	6.5	3.7	2.4	14	10	.72
8	3.5	21	3.8	40	7.0	4.1	5.8	3.2	2.3	4.8	59	.72
9	22	5.0	8.1	7.5	6.5	7.5	5.3	3.2	2.0	3.2	19	.70
10	6.9	28	6.4	7.0	6.5	15	5.1	3.1	2.0	1.3	21	9.6
11	19	11	4.2	6.5	6.4	18	5.0	3.4	1.9	19	3.7	1.4
12	6.0	73	3.9	6.5	5.8	9.0	4.6	12	1.5	3.2	2.4	.76
13	4.5	63	4.1	11	5.8	20	4.6	3.5	1.4	1.2	2.1	.75
14	4.1	12	3.9	12	8.0	8.8	4.6	3.4	1.7	1.1	12	.71
15	3.9	8.0	4.1	7.5	5.6	6.8	4.3	3.2	1.9	5.0	28	1.1
16	3.5	6.7	3.9	6.6	6.0	11	4.3	4.8	1.9	2.0	7.1	685
17	33	5.8	3.7	6.0	7.2	7.2	4.4	4.1	9.2	2.0	2.5	63
18	37	5.4	3.4	5.0	15	5.5	4.2	4.4	2.2	.83	1.6	22
19	12	5.1	3.7	5.0	13	5.6	4.1	3.6	1.9	.78	1.3	9.5
20	7.9	5.1	3.9	4.4	6.2	5.4	4.1	2.6	4.1	.74	1.2	5.7
21	5.8	8.6	3.6	4.6	5.5	5.3	7.6	2.4	6.7	1.6	1.2	4.0
22	5.0	5.8	3.4	4.4	30	4.7	4.3	2.2	5.0	2.7	1.1	3.0
23	4.6	4.7	3.4	4.4	11	4.5	4.0	2.7	6.5	3.2	.96	2.2
24	4.5	4.5	3.2	4.4	8.2	4.7	3.5	2.2	1.9	2.0	1.1	2.1
25	5.3	4.3	3.2	4.3	6.5	5.5	4.0	2.1	1.5	1.0	1.0	2.2
26	4.4	4.0	83	84	5.7	5.3	9.0	5.5	1.2	.74	1.0	2.5
27	4.1	4.9	13	129	5.4	6.2	3.6	3.5	1.1	.78	14	2.7
28	4.1	4.2	7.1	46	5.1	8.0	3.5	2.4	.97	.74	2.8	2.3
29	4.1	4.1	5.8	15	4.9	4.7	3.2	29	.98	6.5	1.6	1.8
30	4.3	4.2	16	11	---	4.7	3.2	31	1.0	1.9	.90	24
31	3.7	---	78	8.8	---	14	---	5.2	---	1.0	.88	---
TOTAL	243.6	323.9	305.6	864.6	334.8	226.4	295.1	247.5	99.65	86.92	261.86	861.49
MEAN	7.86	10.8	9.86	27.9	11.5	7.30	9.84	7.98	3.32	2.80	8.45	28.7
MAX	37	73	83	296	70	20	121	64	14	19	61	685
MIN	3.5	3.5	3.2	4.3	4.9	4.1	3.2	2.1	.97	.74	.64	.70
CFSM	1.03	1.42	1.30	3.67	1.51	.96	1.29	1.05	.44	.37	1.11	3.77
IN.	1.19	1.58	1.49	4.23	1.64	1.11	1.44	1.21	.49	.42	1.28	4.21

CAL YR 1975 TOTAL 6012.70 MEAN 16.5 MAX 438 MIN 1.6 CFSM 2.17 IN 29.39
WTR YR 1976 TOTAL 4151.42 MEAN 11.3 MAX 685 MIN .64 CFSM 1.48 IN 20.29

01585200 WEST BRANCH HERRING RUN AT IDLEWYLDE, MD

LOCATION.--Lat 39°22'25", long 76°35'05", Baltimore County, Hydrologic Unit 02060003, on left bank 40 ft (12 m) downstream from bridge on Regester Avenue, at Idlewylde, 0.1 mi (0.2 km) north of Baltimore city limits, 1 mi (1.6 km) upstream from mouth, and 1.3 mi (2.1 km) east of State Highway 45.

DRAINAGE AREA.--2.13 mi² (5.52 km²).

PERIOD OF RECORD.--July 1957 to May 1965, January 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 285 ft (87 m), from topographic map. Prior to May 31, 1965, at site 40 ft (12 m) upstream at datum 3.24 ft (0.988 m) higher.

REMARKS.--Records good. Diurnal fluctuation (occasionally extensive) caused by ready-mixed concrete plant above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--17 years (water years 1958-64, 1967-76), 2.58 ft³/s (0.073 m³/s), 16.45 in/yr (418 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft³/s (49.3 m³/s) Sept. 11, 1971, gage height, 6.80 ft (2.073 m); from rating curve extended above 90 ft³/s (2.55 m³/s) on basis of slope-area measurement at gage height 6.37 ft (1.942 m); no flow Aug. 14-24, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 290 ft³/s (8.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
July 7	0400	313 8.86	3.54 1.079	Sept. 16	1100	354 10.0	3.70 1.128
Aug. 6	1930	*491 13.9	4.17 1.271	Sept. 16	1200	387 11.0	3.82 1.164
Sept. 16	0900	328 9.29	3.60 1.097				

Minimum discharge, 0.06 ft³/s (0.002 m³/s) Sept. 14, gage height, 0.77 ft (0.235 m); minimum daily, 0.22 ft³/s (0.006 m³/s) Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.0	2.8	30	10	1.8	20	23	5.4	.64	.77	.36
2	1.4	1.0	.97	2.7	7.9	1.6	2.2	1.7	2.1	.51	.45	4.3
3	1.2	.97	.93	11	2.3	2.5	1.8	1.1	.93	.55	.35	.50
4	1.2	.97	.93	2.4	2.3	3.6	7.1	.99	.87	.89	.38	.52
5	1.2	.93	.97	1.9	1.9	1.7	1.9	1.0	.82	.50	.33	.40
6	1.1	1.0	1.1	1.7	2.0	1.8	1.6	1.1	.87	.46	13	.44
7	1.1	.92	.97	5.7	1.8	1.2	1.5	1.2	.72	11	2.3	.61
8	1.1	11	1.0	4.8	1.7	1.2	1.4	1.1	.69	2.7	16	.25
9	10	.98	4.0	1.6	1.6	3.0	1.4	1.0	.81	.70	6.0	.29
10	2.1	11	1.2	1.5	1.6	5.3	1.4	.84	1.1	1.3	4.1	6.1
11	4.7	1.3	.93	1.7	1.6	3.2	1.3	3.3	.91	10	.69	.31
12	1.2	15	.97	1.9	1.5	1.7	1.5	4.1	.98	.85	.61	.34
13	1.3	6.4	1.3	3.7	2.0	5.2	1.2	.92	1.1	.54	.57	.22
14	1.1	1.7	1.0	2.9	3.6	1.8	1.2	.89	.63	.49	3.1	.22
15	1.0	1.4	.98	1.4	2.9	1.4	1.1	.85	.64	5.9	5.5	2.2
16	1.0	1.3	.97	1.4	1.5	3.2	1.2	3.1	5.5	1.3	.66	76
17	13	1.2	.97	1.3	2.6	1.5	1.2	1.2	4.3	.61	.51	4.9
18	3.2	1.2	.97	1.1	5.8	1.4	1.1	1.9	1.1	.47	.46	1.3
19	1.8	1.2	.90	1.1	1.9	1.3	1.4	.96	.80	.42	.44	.85
20	1.4	1.1	.90	1.4	1.5	1.5	2.6	.88	3.6	.52	.42	.70
21	1.2	2.3	.90	1.6	1.5	1.7	2.2	.74	6.5	2.2	.46	.69
22	1.1	1.1	.90	1.2	6.2	1.2	1.1	.74	1.1	.65	.41	.62
23	1.1	1.1	.80	1.2	1.6	1.2	.97	.74	.70	1.6	.33	.59
24	1.1	1.1	.80	1.3	1.5	1.2	1.0	.74	.65	.54	.39	.58
25	1.9	1.0	1.1	1.1	1.4	1.2	1.8	.77	.62	.43	.40	.59
26	1.2	1.0	22	35	1.4	1.2	1.8	4.2	.56	.38	.43	.62
27	1.1	1.4	1.8	28	2.0	4.5	.96	.88	.55	.36	4.9	.72
28	1.1	.97	1.3	6.7	2.9	1.3	.93	.75	.49	.47	.57	.57
29	1.1	.97	1.2	2.6	2.3	1.3	.90	19	.57	4.0	.45	.51
30	1.0	1.1	6.8	2.2	---	1.3	.81	5.0	1.1	.57	.33	13
31	1.0	---	24	1.9	---	11	---	1.2	---	.60	.35	---
TOTAL	64.5	73.61	86.36	164.0	78.8	73.0	66.57	85.89	46.71	52.15	65.66	119.30
MEAN	2.08	2.45	2.79	5.29	2.72	2.35	2.22	2.77	1.56	1.68	2.12	3.98
MAX	13	15	24	35	10	11	20	23	6.5	11	16	76
MIN	1.0	.92	.80	1.1	1.4	1.2	.81	.74	.49	.36	.33	.22
CFSM	.98	1.15	1.31	2.48	1.28	1.10	1.04	1.30	.73	.79	1.00	1.87
IN.	1.13	1.28	1.51	2.86	1.38	1.27	1.16	1.50	.82	.91	1.15	2.08

CAL YR 1975 TOTAL 1221.44 MEAN 3.35 MAX 59 MIN .59 CFSM 1.57 IN 21.32
WTR YR 1976 TOTAL 976.55 MEAN 2.67 MAX 76 MIN .22 CFSM 1.25 IN 17.05

BACK RIVER BASIN

01585300 STEMMERS RUN AT ROSSVILLE, MD

LOCATION.--Lat 39°20'28", long 76°29'17", Baltimore County, Hydrologic Unit 02060003, on left bank 500 ft (152 m) upstream from bridge on State Highway 7, at Rossville, 0.9 mi (1.4 km) upstream from Brien Run, and 2.1 mi (3.4 km) upstream from mouth.

DRAINAGE AREA.--4.46 mi² (11.55 km²).

PERIOD OF RECORD.--December 1958 to September 1972, October 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 21.64 ft (6.596 m) above mean sea level (Baltimore County bench mark). Prior to Sept. 30, 1972, at site on old channel about 550 ft (168 m) southeast of present site at datum 2.40 ft (0.732 m) lower.

REMARKS.--Records good. Slight diurnal fluctuation at times from unknown source. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years (water years 1960-72, 1974-76), 6.40 ft³/s (0.181 m³/s), 19.49 in/yr (495 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,950 ft³/s (169 m³/s) Aug. 1, 1971, gage height, 11.34 ft (3.456 m), from high-water mark in well, site and datum then in use, from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum daily, 0.10 ft³/s (0.003 m³/s) many days in 1962, 1964, and 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0115	1150 32.6	4.07 1.241	Sept. 16	1230	*2310 65.4	*a6.67 2.033
Apr. 1	0330	550 15.6	3.20 0.975				

a Affected by backwater.

Minimum discharge, 0.15 ft³/s (0.004 m³/s) Aug. 30, gage height, 1.25 ft (0.381 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	1.3	2.8	176	23	2.2	75	37	12	.83	.39	.31
2	2.0	1.4	1.5	8.4	37	2.2	5.6	5.8	3.4	.39	.27	3.8
3	1.7	1.4	1.4	31	9.8	2.3	3.6	2.6	1.5	.37	.24	.96
4	1.7	1.4	1.4	7.0	4.1	2.5	9.2	2.0	1.1	.36	.22	.48
5	1.6	1.3	1.4	4.0	3.8	2.2	4.0	1.9	.97	.37	.20	.46
6	1.5	1.3	1.4	3.0	3.7	2.0	3.0	1.8	.97	.47	15	.38
7	1.4	1.3	1.6	10	3.0	1.8	2.6	1.7	.93	7.6	2.6	.27
8	1.4	11	1.4	17	2.8	1.8	2.4	1.3	.87	4.5	24	.22
9	14	1.7	4.7	3.7	2.6	4.8	2.3	1.6	.82	1.6	7.5	.20
10	3.4	12	2.8	2.6	2.6	8.8	2.1	1.1	.78	.58	8.3	6.1
11	8.2	3.4	1.6	2.8	3.1	9.9	2.1	1.3	.76	8.3	.90	.56
12	2.5	50	1.4	3.3	2.6	4.4	1.9	7.2	.73	1.2	.72	.28
13	1.8	27	1.7	5.5	2.8	11	2.0	1.2	.67	.53	.63	.26
14	1.6	4.8	1.5	7.8	4.2	3.7	1.9	1.3	.75	.46	4.7	.23
15	1.5	3.0	1.5	3.1	2.6	2.8	1.8	1.1	.77	5.1	17	.44
16	1.4	2.5	1.5	2.9	2.7	5.7	1.9	2.3	.84	.80	1.9	420
17	23	2.3	1.4	2.6	3.8	3.1	2.0	1.7	4.9	1.1	.71	7.6
18	15	2.1	1.3	1.6	9.1	2.3	1.6	1.8	.81	.42	.55	2.4
19	4.9	2.0	1.1	1.6	5.5	2.3	1.6	1.5	.75	.38	.45	1.6
20	3.2	1.9	1.3	1.8	3.0	2.3	1.7	.92	2.5	.42	.42	1.2
21	2.1	4.1	1.2	2.3	2.5	2.2	3.5	.86	4.5	1.2	.41	1.1
22	1.9	2.3	1.1	1.9	16	1.9	1.6	.90	2.8	1.5	.38	.88
23	1.7	1.8	1.0	1.6	4.1	1.8	1.4	.82	.78	1.6	.30	.76
24	1.6	1.7	1.0	1.6	3.0	2.0	1.3	.81	.97	.73	.33	.77
25	2.2	1.9	1.2	1.6	2.7	1.9	1.7	.81	.82	.41	.34	.74
26	1.7	1.6	53	61	2.6	1.9	4.9	3.7	.68	.31	.35	1.1
27	1.6	2.0	5.2	86	2.5	3.3	1.4	1.3	.52	.29	7.1	.92
28	1.5	1.6	2.9	20	2.3	3.7	1.3	.84	.52	1.5	1.2	.78
29	1.5	1.5	2.3	6.7	2.2	1.9	1.2	25	.51	4.4	.66	.70
30	1.6	1.5	9.8	5.0	---	1.9	1.2	12	.57	.85	.32	18
31	1.3	---	87	4.1	---	9.9	---	1.9	---	.46	.30	---
TOTAL	112.8	153.1	199.4	487.5	169.7	110.5	147.8	126.06	49.49	49.03	98.39	473.50
MEAN	3.64	5.10	6.43	15.7	5.85	3.56	4.93	4.07	1.65	1.58	3.17	15.8
MAX	23	50	87	176	37	11	75	37	12	8.3	24	420
MIN	1.3	1.3	1.0	1.6	2.2	1.8	1.2	.81	.51	.29	.20	.20
CFSM	.82	1.14	1.44	3.52	1.31	.80	1.11	.91	.37	.35	.71	3.54
IN.	.94	1.28	1.66	4.07	1.42	.92	1.23	1.05	.41	.41	.82	3.95

CAL YR 1975 TOTAL 3216.20 MEAN 8.81 MAX 312 MIN .55 CFSM 1.98 IN 26.82
WTR YR 1976 TOTAL 2177.27 MEAN 5.95 MAX 420 MIN .20 CFSM 1.33 IN 18.16

01585400 BRIEN RUN AT STEMMERS RUN, MD

LOCATION.--Lat 39°20'01", long 76°28'23", Baltimore County, Hydrologic Unit 02060003, on right bank 0.2 mi (0.3 km) upstream from mouth and 0.3 mi (0.5 km) north of Stemmers Run.

DRAINAGE AREA.--1.97 mi² (5.10 km²).

PERIOD OF RECORD.--May 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8.80 ft (2.681 m) above mean sea level (Baltimore County bench mark).

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--18 years, 2.49 ft³/s (0.071 m³/s), 17.16 in/yr (436 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft³/s (99.1 m³/s) Aug. 1, 1971, gage height, 10.75 ft (3.277 m), from high-water mark in well, from rating curve extended above 180 ft³/s (5.10 m³/s) on basis of computation of peak flow through culvert and over road at site 0.8 mile (1.3 km) upstream, adjusted for flow from intervening area; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0130	313 8.86	3.88 1.183	Sept. 16	1345	*990 28.0	6.74 2.054
Apr. 1	0330	156 4.42	2.72 0.829				

Minimum discharge, 0.44 ft³/s (0.012 m³/s) many days in June, July, August, and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	.76	1.1	74	10	.88	38	17	3.9	.64	.48	.48
2	.68	.85	.78	3.6	21	.75	2.1	2.9	1.4	.44	.44	.88
3	.66	.76	.75	15	6.0	.75	1.2	1.0	.79	.44	.44	.49
4	.66	.76	.75	3.2	1.6	.75	3.0	.79	.62	.44	.44	.48
5	.66	.76	.75	1.6	1.9	.75	1.5	.76	.58	.46	.44	.48
6	.66	.85	.77	1.2	1.3	.74	1.0	.79	.58	.46	.47	.50
7	.66	.85	.76	5.5	1.1	.71	.89	.72	.58	1.2	.50	.47
8	.66	2.9	.75	11	1.0	.75	1.3	.66	.58	.58	6.8	.44
9	4.7	1.0	1.4	2.2	.99	1.3	.91	.66	.58	.56	1.8	.44
10	1.2	4.0	.95	1.9	.99	3.5	.80	.66	.58	.49	1.9	2.0
11	1.8	1.4	.75	1.2	1.2	4.6	.75	.83	.56	2.5	.52	.48
12	.92	19	.75	1.2	1.3	1.9	.75	2.8	.55	.55	.65	.44
13	.88	16	.77	1.7	1.1	5.0	.84	.79	.54	.48	.50	.48
14	.86	2.0	.75	3.0	1.6	1.5	.75	.71	.59	.47	1.3	.49
15	.83	1.3	.75	1.4	1.1	1.0	.75	.67	.60	.97	5.6	.64
16	.85	1.0	.73	1.3	1.3	2.1	.75	.75	.65	.52	.78	164
17	13	.96	.73	1.1	1.4	1.2	.72	.72	1.1	.52	.57	2.6
18	4.9	.87	.75	.97	3.4	.85	.66	1.8	.57	.48	.47	.79
19	2.1	1.0	.65	.97	2.0	.85	.66	.78	.56	.45	.44	.62
20	1.4	1.1	.71	.85	1.1	.81	.84	.66	.57	.47	.44	.81
21	1.1	1.4	.75	.88	.86	.79	2.0	.66	1.4	.58	.45	.79
22	1.1	.90	.75	.85	6.1	.75	.75	.64	.55	.54	.44	.76
23	1.0	.85	.75	.85	1.6	.81	.74	.62	1.4	.57	.48	.82
24	.97	.88	.73	.85	1.1	.75	.75	.55	.55	.51	.44	.82
25	.97	.85	.74	.85	.95	.75	.93	.51	.51	.47	.44	.58
26	.97	.81	23	22	.86	.75	1.3	1.1	.51	.44	.44	.88
27	.85	.86	2.6	38	.94	1.5	.75	.58	.51	.44	2.7	.86
28	.85	.80	1.4	10	.85	1.1	.75	.56	.48	.44	.55	.61
29	.97	.75	1.1	3.0	.85	.75	.73	8.6	.48	.71	.50	.58
30	.97	.76	4.2	2.7	---	.75	.71	4.0	.52	.53	.47	7.6
31	.76	---	33	2.0	---	4.4	---	.77	---	.48	.53	---
TOTAL	49.34	66.98	85.12	214.87	75.49	43.79	67.58	55.04	23.39	18.83	32.42	192.31
MEAN	1.59	2.23	2.75	6.93	2.60	1.41	2.25	1.78	.78	.61	1.05	6.41
MAX	13	19	33	74	21	5.0	38	17	3.9	2.5	6.8	164
MIN	.66	.75	.65	.85	.85	.71	.66	.51	.48	.44	.44	.44
CFSM	.81	1.13	1.40	3.52	1.32	.72	1.14	.90	.40	.31	.53	3.25
IN.	.93	1.26	1.61	4.06	1.42	.83	1.28	1.04	.44	.36	.61	3.63

CAL YR 1975	TOTAL	1278.32	MEAN	3.50	MAX	94	MIN	.56	CFSM	1.78	IN	24.13
WTR YR 1976	TOTAL	925.16	MEAN	2.53	MAX	164	MIN	.44	CFSM	1.28	IN	17.46

PATAPSCO RIVER BASIN

01585500 CRANBERRY BRANCH NEAR WESTMINSTER, MD

LOCATION.--Lat 39°35'35", long 76°58'05", Carroll County, Hydrologic Unit 02060003, on left bank 80 ft (24 m) upstream from culvert, 0.7 mi (1.1 km) upstream from mouth, and 1.8 mi (2.9 km) northeast of Westminster.

DRAINAGE AREA.--3.29 mi² (8.52 km²).

PERIOD OF RECORD.--September 1949 to current year.

REVISED RECORDS.--WSP 1432: Drainage area, 1954-55. WDR MD-75-1: 1972(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 670 ft (204 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Oct. 1 to Jan. 26, which are fair. Occasional small diversions to and releases from Cranberry Reservoir located offstream 1 mi (1.6 km) above station since August 1957, capacity, 113,700,000 gal (430,400 m³). Beginning October 1972 occasional large diversions past the gaging station from the reservoir through a 30 in (0.76 m) pipe. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--27 years, 3.61 ft³/s (0.102 m³/s), 14.90 in/yr (378 mm/yr), unadjusted for storage and diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,220 ft³/s (62.9 m³/s) Sept. 26, 1975, gage height, 7.47 ft (2.277 m), from rating curve extended above 200 ft³/s (5.66 m³/s) on the basis of computations of flows through culvert at gage heights 5.54 ft (1.689 m) and 7.47 ft (2.277 m); minimum daily, 0.27 ft³/s (0.008 m³/s) Dec. 3, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 74 ft³/s (2.10 m³/s) Jan. 27, gage height, 2.75 ft (0.838 m), but may have been greater during period of no gage-height record, Oct. 1 to Jan. 26, no recorded peak above base of 80 ft³/s (2.2 m³/s); minimum daily, 0.34 ft³/s (0.010 m³/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	4.4	4.2	50	13	4.3	23	5.5	9.4	3.0	.47	1.8
2	9.5	4.4	4.2	7.0	9.5	4.3	7.5	2.7	12	2.6	.45	1.8
3	9.0	4.4	3.8	9.5	3.4	4.3	5.8	1.9	4.8	2.6	.43	1.8
4	8.5	4.4	3.8	6.5	5.3	4.8	8.1	1.7	3.8	2.6	1.0	1.8
5	8.0	4.4	3.8	5.0	3.5	5.1	5.1	1.5	3.3	2.4	1.7	1.7
6	7.5	4.4	3.8	5.0	3.0	4.4	3.2	1.4	3.3	2.3	1.7	1.6
7	6.5	4.4	3.6	5.0	2.4	4.0	2.9	1.3	3.1	2.6	1.8	.55
8	6.0	5.0	3.8	6.0	2.3	4.0	2.7	1.2	2.9	2.6	2.5	.38
9	11	4.4	4.8	4.6	2.2	4.5	2.8	1.2	2.7	2.4	2.1	.48
10	12	6.0	4.4	4.0	2.4	5.1	2.7	1.9	2.6	2.5	2.8	.42
11	12	5.0	4.0	4.0	3.1	6.6	2.7	2.7	2.6	6.4	2.1	.39
12	10	7.5	3.8	4.0	2.6	3.6	2.6	3.1	2.4	3.4	2.0	.38
13	7.5	8.5	3.8	6.5	4.5	7.9	2.6	2.5	2.4	2.5	2.0	.34
14	6.5	5.5	3.8	10	6.0	3.5	2.5	2.5	2.5	2.3	1.9	.42
15	5.0	5.0	3.8	5.5	5.5	3.0	2.4	2.5	2.4	3.9	2.4	3.2
16	4.4	5.0	3.8	5.0	4.2	3.7	2.4	5.5	3.1	2.6	2.1	.84
17	4.4	4.8	3.6	4.8	4.2	3.0	2.4	3.7	4.9	2.3	1.9	.58
18	10	4.6	3.6	4.2	3.7	2.0	2.4	4.5	2.8	2.2	2.0	.48
19	6.0	4.6	3.4	3.8	3.3	1.4	1.9	3.2	2.7	2.1	1.9	1.2
20	5.5	4.6	3.4	3.8	2.3	1.3	1.8	2.8	15	2.0	1.8	1.8
21	5.0	5.0	3.6	4.0	2.2	1.4	1.8	2.5	11	2.2	1.8	1.0
22	5.0	5.0	3.4	3.6	4.2	1.3	1.8	2.4	5.7	2.4	1.7	1.0
23	5.0	4.4	3.4	3.6	4.3	1.3	1.6	2.3	3.9	2.9	1.7	1.6
24	5.0	4.4	3.2	3.4	5.2	1.2	1.6	2.3	3.3	2.6	1.5	1.6
25	5.0	4.4	3.2	3.2	5.1	1.4	1.8	2.5	3.1	2.2	1.7	1.7
26	5.0	4.2	11	40	5.0	1.2	2.0	3.8	2.8	2.0	1.7	1.9
27	5.0	4.2	5.0	33	4.9	1.7	1.7	2.8	2.6	2.0	1.8	1.5
28	4.8	4.2	4.2	11	4.6	1.3	1.6	2.5	2.6	1.9	1.9	.43
29	4.8	4.2	4.0	5.1	4.4	2.3	1.5	4.4	2.8	1.5	1.8	1.4
30	4.6	4.2	5.0	4.0	---	3.5	1.4	24	4.2	.54	1.7	.88
31	4.4	---	9.0	3.4	---	5.7	---	5.2	---	.48	1.6	---
TOTAL	212.4	145.5	132.2	268.5	126.3	103.1	104.3	108.0	130.7	76.02	53.95	34.97
MEAN	6.85	4.85	4.26	8.66	4.36	3.33	3.48	3.48	4.36	2.45	1.74	1.17
MAX	12	8.5	11	50	13	7.9	23	24	15	6.4	2.8	3.2
MIN	4.4	4.2	3.2	3.2	2.2	1.2	1.4	1.2	2.4	.48	.43	.34

CAL YR 1975 TOTAL 2372.08 MEAN 6.50 MAX 364 MIN .49

WTR YR 1976 TOTAL 1495.94 MEAN 4.09 MAX 50 MIN .34

01586000 NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD

LOCATION.--Lat 39°30'00", long 76°53'00", Carroll County, Hydrologic Unit 02060003, on left bank at downstream side of private footbridge at Cedarhurst, 0.8 mi (1.3 km) downstream from Roaring Run, 8 mi (12.9 km) southeast of Westminster, and 16.5 mi (26.5 km) upstream from confluence with South Branch.

DRAINAGE AREA.--56.6 mi² (146.6 km²).

PERIOD OF RECORD.--September 1945 to current year.

REVISED RECORDS.--WSP 1903: 1959-60.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 425 ft (130 m), from topographic map.

REMARKS.--Records good. Slight diurnal fluctuation at low and medium flow caused by mill above station. Low flow affected slightly by Cranberry Reservoir since August 1957, capacity, 113,700,000 gal (430,400 m³). Records do not include a mean discharge of 1.92 ft³/s (0.054 m³/s) diverted above station for municipal supply of Westminster; sewage effluent discharged into Little Pipe Creek in Monocacy River basin. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--31 years, 64.1 ft³/s (1.815 m³/s), 15.38 in/yr (391 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,800 ft³/s (787 m³/s) June 22, 1972, gage height, 20.75 ft (6.325 m), from high-water mark in well, from rating curve extended above 4,100 ft³/s (116 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 1.9 ft³/s (0.054 m³/s) Sept. 10, 1966, result of filling pond above station; minimum daily, 3.1 ft³/s (0.088 m³/s) Sept. 10, 12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	0745	*2230 63.2	7.00 2.134	Jan. 26	2130	1140 32.3	4.86 1.481
Jan. 1	0330	1380 39.1	5.41 1.649	Jan. 27	1915	1060 30.0	4.68 1.426
Jan. 26	0830	1080 30.6	4.73 1.442	May 30	0745	1230 34.8	5.06 1.542

Minimum discharge, 17 ft³/s (0.48 m³/s) Sept. 10, gage height, 1.40 ft (0.427 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	92	85	528	157	71	355	115	93	64	32	21
2	178	92	79	155	256	71	128	91	234	46	30	30
3	164	90	77	187	117	71	107	64	98	43	28	26
4	157	88	75	143	120	75	124	57	81	47	28	23
5	152	87	75	112	110	75	105	55	73	43	32	24
6	148	86	76	102	100	73	93	53	71	40	30	23
7	142	86	79	107	91	66	87	52	66	62	38	20
8	139	96	75	134	87	64	83	49	62	71	60	20
9	338	87	102	93	85	73	79	49	57	59	47	20
10	159	138	101	89	85	79	77	47	60	44	60	37
11	208	105	81	91	93	98	75	49	53	102	35	25
12	154	202	77	89	85	93	73	59	50	77	31	24
13	143	222	77	112	85	134	71	49	47	49	31	21
14	137	125	75	325	91	93	71	47	47	43	28	20
15	130	109	75	107	85	85	68	46	49	83	60	21
16	129	103	77	98	89	89	66	73	50	49	43	159
17	179	96	72	91	107	85	64	93	95	43	30	53
18	680	93	70	65	100	75	64	143	52	40	27	38
19	200	90	61	71	107	75	60	71	53	38	26	30
20	160	89	66	75	87	71	60	57	167	37	26	27
21	140	107	68	81	81	77	62	50	128	38	24	28
22	120	95	66	77	105	71	59	46	95	46	24	26
23	110	87	63	65	85	64	57	44	66	53	23	24
24	110	85	60	77	81	64	53	43	57	49	23	24
25	110	84	63	75	81	68	60	47	53	40	23	24
26	110	82	332	633	79	66	73	79	49	35	23	25
27	110	86	114	569	77	71	59	55	47	34	41	28
28	105	82	90	225	75	91	57	47	46	34	27	32
29	102	79	83	141	73	66	55	59	53	37	26	25
30	100	79	97	124	---	66	53	486	59	34	23	53
31	93	---	183	112	---	79	---	117	---	34	21	---
TOTAL	5101	3042	2774	4953	2874	2399	2498	2392	2211	1514	1000	951
MEAN	165	101	89.5	160	99.1	77.4	83.3	77.2	73.7	48.8	32.3	31.7
MAX	680	222	332	633	256	134	355	486	234	102	60	159
MIN	93	79	60	65	73	64	53	43	46	34	21	20
CFSM	2.92	1.78	1.58	2.83	1.75	1.37	1.47	1.36	1.30	.86	.57	.56
IN.	3.35	2.00	1.82	3.26	1.89	1.58	1.64	1.57	1.45	1.00	.66	.63

CAL YR 1975 TOTAL 44146 MEAN 121 MAX 5240 MIN 34 CFSM 2.14 IN 29.01
WTR YR 1976 TOTAL 31709 MEAN 86.6 MAX 680 MIN 20 CFSM 1.53 IN 20.84

PATAPSCO RIVER BASIN

01587500 SOUTH BRANCH PATAPSCO RIVER AT HENRYTON, MD

LOCATION.--Lat 39°21'05", long 76°54'50", Howard County, Hydrologic Unit 02060003, on right bank at downstream side of bridge on Henryton Road at Henryton, 1.3 mi (2.1 km) upstream from Piney Run, 2.5 mi (4.0 km) upstream from confluence with North Branch, and 3.2 mi (5.1 km) southeast of Sykesville.

DRAINAGE AREA.--64.4 mi² (166.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1948 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 289.15 ft (88.133 m) above mean sea level.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--28 years, 92.0 ft³/s (2.605 m³/s), 15.27 in/yr (388 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,900 ft³/s (762 m³/s) June 22, 1972, gage height, 28.14 ft (8.577 m), from floodmarks, from rating curve extended above 1,900 ft³/s (53.8 m³/s) on basis of slope-area measurements at gage height 7.88 ft (2.402 m) and 28.14 ft (8.577 m), and contracted-opening measurements at gage heights 10.12 ft (3.085 m) and 19.40 ft (5.913 m); minimum, 0.40 ft³/s (0.011 m³/s) Sept. 9-12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 950 ft³/s (26 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	0830	1440 40.8	5.25 1.600	Jan. 1	0500	*2870 81.3	8.23 2.509

Minimum discharge, 17 ft³/s (0.48 m³/s) Sept. 10, gage height, 1.81 ft (0.552 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	101	86	1160	162	82	407	96	86	64	38	21
2	167	101	82	250	308	80	165	109	143	41	34	28
3	149	99	80	293	200	81	127	69	79	38	33	27
4	141	96	77	222	136	81	136	62	65	38	32	24
5	132	95	77	156	134	82	120	60	58	36	30	23
6	130	94	78	145	120	80	104	58	56	35	30	21
7	123	92	80	129	107	75	96	57	54	44	37	19
8	120	115	77	192	102	73	90	54	52	45	48	19
9	370	97	117	131	99	83	86	53	49	41	43	18
10	186	143	112	115	96	90	83	53	47	36	39	32
11	175	124	87	115	103	109	82	53	45	85	34	26
12	147	207	81	114	98	112	78	71	45	70	31	20
13	134	319	82	113	97	140	77	55	42	42	30	19
14	127	151	80	303	113	107	76	54	44	37	33	19
15	120	124	79	128	98	93	74	53	44	67	49	20
16	116	114	78	117	102	98	73	101	43	43	46	168
17	149	106	75	109	116	94	72	111	92	38	32	94
18	506	102	73	75	111	82	70	176	51	34	28	44
19	214	98	69	80	124	83	68	98	50	33	27	35
20	171	97	69	84	100	79	67	70	55	32	26	31
21	148	111	70	90	95	79	74	61	99	34	25	31
22	131	105	69	86	117	77	67	55	74	86	25	29
23	120	93	67	78	97	73	64	53	51	82	25	27
24	113	91	68	93	91	72	61	52	46	95	24	27
25	112	90	74	88	91	74	63	51	44	47	23	26
26	112	88	354	398	88	73	71	63	42	40	24	27
27	112	89	144	525	87	72	63	60	39	38	28	29
28	108	86	103	294	84	87	62	53	38	36	30	29
29	106	83	91	171	82	72	60	61	39	73	26	26
30	106	82	98	149	---	78	59	239	42	45	22	34
31	101	---	187	132	---	90	---	87	---	40	22	---
TOTAL	4823	3393	2964	6135	3358	2651	2795	2348	1714	1515	974	993
MEAN	156	113	95.6	198	116	85.5	93.2	75.7	57.1	48.9	31.4	33.1
MAX	506	319	354	1160	308	140	407	239	143	95	49	168
MIN	101	82	67	75	82	72	59	51	38	32	22	18
CFSM	2.42	1.75	1.48	3.07	1.80	1.33	1.45	1.18	.89	.76	.49	.51
IN.	2.79	1.96	1.71	3.54	1.94	1.53	1.61	1.36	.99	.88	.56	.57

CAL YR 1975	TOTAL	45934	MEAN 126	MAX 4910	MIN 39	CFSM 1.96	IN 26.53
WTR YR 1976	TOTAL	33663	MEAN 92.0	MAX 1160	MIN 18	CFSM 1.43	IN 19.44

01587500 SOUTH BRANCH PATAPSCO RIVER AT HENRYTON, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965-74, 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	WEATHER	COLOR (PLATINUM-CORAL UNITS)	HARDNESS (CA, MG)
NOV 04...	1410	97	--	--	22.0	13.0	--	--	--
DEC 03...	1500	79	130	7.5	3.5	4.5	0	1	40
JAN 14...	1330	199	140	7.5	5.0	3.0	0	--	--
FEB 20...	1030	100	140	7.5	8.0	7.0	1	--	--
MAR 30...	1215	82	132	7.4	12.0	11.0	3	--	--
MAY 11...	1430	55	--	--	18.0	15.5	--	--	--
AUG 23...	1300	26	150	7.8	27.0	23.5	0	2	48

DATE	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)
NOV 04...	--	--	--	--	--	--	--	--	--
DEC 03...	15	11	3.0	4.7	1.5	30	6.0	8.6	.2
JAN 14...	--	--	--	--	--	--	--	--	--
FEB 20...	--	--	--	--	--	--	--	--	--
MAR 30...	--	--	--	--	--	--	--	--	--
MAY 11...	--	--	--	--	--	--	--	--	--
AUG 23...	11	15	2.5	6.7	2.3	45	3.7	9.3	.1

DATE	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
NOV 04...	--	--	--	--	--	--	--	--	--
DEC 03...	7.6	--	57	2.4	.05	190	--	50	--
JAN 14...	--	--	--	--	--	--	--	--	--
FEB 20...	--	--	--	--	--	--	--	--	--
MAR 30...	--	--	--	--	--	--	--	--	--
MAY 11...	--	--	--	--	--	--	--	--	--
AUG 23...	7.5	92	69	1.7	.16	410	70	70	50

PATAPSCO RIVER BASIN

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD

LOCATION.--Lat 39°18'36", long 76°47'34", Baltimore County, Hydrologic Unit 0206003, on left bank at downstream side of highway bridge at Hollofield, 0.3 mi (0.5 km) downstream from Dogwood Run, 3.0 mi (4.8 km) north of Ellicott City, and 28 mi (45 km) upstream from mouth.

DRAINAGE AREA.--285 mi² (738 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1944 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 190 ft (58 m), from topographic map. June 26 to Dec. 8, 1972, nonrecording gage at same site and datum. Prior to June 22, 1972, water-stage recorder at site on opposite bank at same datum.

REMARKS.--Water-discharge records good. Flow regulated by Liberty Reservoir 11 mi (18 km) upstream beginning July 22, 1954, usable capacity, 42,070,000,000 gal (159.2 hm³); dead storage, 1,260,000,000 gal (4.769 hm³). Diversions above station for municipal supply of Westminster (sewage effluent discharged into Little Pipe Creek), and from Liberty Reservoir beginning Feb. 26, 1953, for municipal supply of Baltimore, and beginning February 1970 for a small municipal supply for part of Carroll County.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 80,600 ft³/s (2,280 m³/s) June 22, 1972, gage height, 31.3 ft (9.54 m), from floodmarks, from rating curve extended above 27,000 ft³/s (765 m³/s) on basis of slope-area measurement of peak flow; minimum, 6 ft³/s (0.17 m³/s) Sept. 6, 1944; minimum daily, 9.6 ft³/s (0.27 m³/s) Aug. 12, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,330 ft³/s (179 m³/s) Jan. 1, gage height, 7.14 ft (2.18 m); minimum, 33 ft³/s (0.93 m³/s) Sept. 7-10, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	208	201	4050	500	186	1190	227	310	120	75	35
2	680	207	174	1500	900	177	714	277	476	84	67	55
3	480	212	172	1200	600	174	494	189	359	76	61	58
4	430	206	158	999	440	176	429	125	259	74	58	46
5	390	202	151	615	447	180	403	119	192	71	53	45
6	360	191	151	466	376	199	313	112	140	66	52	39
7	350	186	176	424	325	164	275	110	120	89	61	34
8	330	228	152	553	291	158	241	100	110	112	123	33
9	1150	217	193	406	273	170	236	100	100	94	110	33
10	780	281	259	313	246	229	192	100	90	75	102	53
11	660	366	205	304	254	246	181	100	85	192	74	64
12	560	422	182	306	250	274	184	132	80	163	65	39
13	450	1110	177	288	245	344	152	104	80	95	61	37
14	390	617	172	918	279	315	146	102	80	79	59	33
15	350	424	171	563	248	258	143	101	80	142	99	35
16	310	345	179	414	252	254	142	125	85	100	106	485
17	330	302	154	369	279	279	142	202	245	84	67	188
18	2200	272	171	160	293	205	139	264	120	72	58	102
19	1120	251	143	200	336	193	138	166	111	67	51	73
20	690	236	138	220	290	184	136	129	123	63	47	62
21	490	253	137	230	256	181	146	115	229	65	41	60
22	410	270	154	210	314	186	134	105	213	104	41	53
23	350	232	141	180	299	154	129	99	135	163	39	46
24	320	223	133	250	239	149	124	97	105	151	39	44
25	330	199	130	230	230	148	125	96	90	101	39	41
26	320	187	722	1200	215	150	138	118	75	79	39	41
27	330	185	513	1600	213	149	128	123	70	72	48	43
28	300	188	364	900	201	200	124	106	70	69	62	46
29	280	176	292	600	193	155	122	129	70	128	53	43
30	280	174	262	500	---	153	178	569	73	92	41	62
31	229	---	486	450	---	169	---	321	---	79	35	---
TOTAL	16649	8570	6813	20618	9284	6159	7338	4762	4375	3021	1926	2028
MEAN	537	286	220	665	320	199	245	154	146	97.5	62.1	67.6
MAX	2200	1110	722	4050	900	344	1190	569	476	192	123	485
MIN	229	174	130	160	193	148	122	96	70	63	35	33
(*)	43340	43290	43640	43480	43310	43300	42950	43390	42900	42280	40480	39180
(#)	219	228	222	225	223	226	222	218	220	201	204	188
CAL YR 1975	TOTAL	140973	MEAN 386	MAX 24000	MIN 71	+ 203						
WTR YR 1976	TOTAL	91543	MEAN 250	MAX 4050	MIN 33	+ 216						

* Month-end contents, in millions of gallons in Liberty Reservoir (contents on Sept. 30, 1975, 43,620,000,000 gal); records furnished by Baltimore Department of Public Works.

* Diversions, in cubic feet per second, above station for municipal supply of city of Westminster; and from Liberty Reservoir for municipal supply of city of Baltimore, and for part of Carroll County. Records furnished by cities of Westminster and Baltimore, respectively.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-74, 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	WEATHER	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (CA, MG) (MG/L)
OCT 28...	1445	290	--	--	20.0	15.5	--	--	--
DEC 03...	1145	164	150	7.4	5.0	5.5	1	1	52
JAN 21...	1445	232	--	--	.5	.5	--	--	--
FEB 11...	1205	250	--	--	9.0	3.5	--	--	--
20...	1400	275	150	7.4	8.0	8.0	1	--	--
MAR 30...	0945	150	145	7.8	13.0	11.5	3	--	--
MAY 11...	1100	98	--	--	19.0	16.5	--	--	--
AUG 20...	1320	47	--	--	22.5	26.0	--	--	--
23...	1200	39	170	8.3	26.0	26.0	0	5	56
SEP 13...	1130	37	--	--	21.5	18.5	--	--	--

[illegible][illegible]

PATAPSCO RIVER BASIN

01589100 EAST BRANCH HERBERT RUN AT ARBUTUS, MD

LOCATION.--Lat 39°14'24", long 76°41'33", Baltimore County, Hydrologic Unit 02060003, on right bank at downstream side of bridge on Tom Day Boulevard at U.S. Route 1 in Arbutus, 0.5 mi (0.8 km) upstream from mouth, and 2 mi (3 km) south of Baltimore city limits.

DRAINAGE AREA.--2.47 mi² (6.40 km²).

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 45 ft (14 m), from topographic map.

REMARKS.--Records good. Slight regulation at low flow from unknown source above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--19 years, 3.28 ft³/s (0.093 m³/s), 18.03 in/yr (458 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,340 ft³/s (37.9 m³/s) June 22, 1972, gage height, 6.35 ft (1.935 m), from rating curve extended above 280 ft³/s (7.93 m³/s) on basis of slope-area measurement of flood of July 20, 1956, (prior to establishment of station) at gage height 5.7 ft (1.74 m), from floodmarks, discharge, 1,090 ft³/s (30.9 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) July 24, Sept. 4, 11, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 622 ft³/s (17.6 m³/s) Sept. 16, gage height, 3.79 ft (1.155 m), no other peak above base of 400 ft³/s (11 m³/s); minimum daily, 0.51 ft³/s (0.014 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.2	2.2	47	6.3	1.8	16	15	5.8	1.1	.92	.70
2	1.5	1.2	1.3	3.8	6.6	1.7	2.3	2.1	1.9	.90	.72	2.2
3	1.3	1.4	1.2	11	2.6	1.8	1.9	1.4	1.3	.80	.76	.73
4	1.1	1.4	1.2	3.3	2.5	2.0	3.3	1.3	1.1	.72	.77	.62
5	1.1	1.4	1.3	2.7	2.4	1.8	1.9	1.3	1.0	.70	.79	.58
6	.99	1.3	1.4	2.6	2.4	1.7	1.8	1.3	.96	.82	1.0	.56
7	.90	1.2	1.2	5.0	2.1	1.6	1.8	1.3	1.0	8.2	1.0	.66
8	1.3	5.9	1.2	5.8	2.1	1.7	1.7	1.1	1.1	2.1	4.9	.62
9	17	1.2	4.0	2.1	2.0	4.1	1.7	1.1	1.0	1.5	4.3	.65
10	3.4	4.4	1.5	1.9	2.1	4.3	1.6	1.1	1.0	2.1	2.8	3.7
11	3.6	1.7	1.2	2.2	2.1	3.3	1.6	2.2	1.0	16	.94	.58
12	1.6	16	1.2	2.3	2.0	2.0	1.5	2.7	.92	1.5	.92	.51
13	1.5	7.7	1.3	2.9	2.2	3.2	1.4	1.0	.85	.98	.91	.60
14	1.4	2.2	1.0	3.1	2.4	1.8	1.3	1.0	1.1	.96	3.7	.66
15	1.4	1.7	1.2	2.1	1.8	1.7	1.3	.94	.99	2.7	12	2.6
16	1.2	1.5	1.2	2.1	1.9	3.0	1.2	2.4	5.5	1.4	1.3	94
17	14	1.4	1.2	1.8	2.5	1.8	1.2	1.5	3.2	.92	.89	2.0
18	5.2	1.4	1.1	1.5	4.0	1.6	1.2	2.2	1.1	.86	.86	1.5
19	2.1	1.5	1.1	1.4	2.6	1.6	1.2	1.1	.95	.98	.86	1.0
20	1.9	1.4	1.0	1.7	2.1	1.4	4.2	.99	2.4	.99	.90	.90
21	1.7	2.2	1.1	1.9	2.0	1.3	3.0	.97	2.5	1.5	.76	.80
22	1.7	1.3	1.1	1.5	6.0	1.4	1.3	.94	1.4	1.1	.69	.80
23	1.6	1.1	1.1	1.4	2.1	1.4	1.2	.92	1.0	1.2	.71	.80
24	1.6	1.3	1.0	1.5	1.9	1.5	1.1	.97	1.0	1.8	.81	.80
25	2.9	1.3	1.4	1.4	1.9	1.4	2.3	1.0	1.2	.92	.82	.80
26	1.5	1.2	17	14	1.9	1.4	1.8	2.4	.90	.90	.80	2.2
27	1.6	1.4	2.0	14	1.9	2.5	1.2	1.1	.80	.91	2.6	.90
28	1.6	1.1	1.5	4.8	1.8	1.7	1.2	.98	.91	.89	.80	.80
29	1.5	1.1	1.7	2.7	1.8	1.4	1.2	17	.94	6.0	.66	.80
30	1.6	1.1	4.3	2.4	---	1.5	1.1	8.3	2.2	.82	.67	9.0
31	1.3	---	40	2.2	---	9.3	---	1.3	---	.72	.70	---
TOTAL	82.79	70.2	100.2	154.1	76.0	68.7	65.5	78.91	47.02	62.99	51.26	133.07
MEAN	2.67	2.34	3.23	4.97	2.62	2.22	2.18	2.55	1.57	2.03	1.65	4.44
MAX	17	16	40	47	6.6	9.3	16	17	5.8	16	12	94
MIN	.90	1.1	1.0	1.4	1.8	1.3	1.1	.92	.80	.70	.66	.51
CFSM	1.08	.95	1.31	2.01	1.06	.90	.88	1.03	.64	.82	.67	1.80
IN.	1.25	1.06	1.51	2.32	1.14	1.03	.99	1.19	.71	.95	.77	2.00

CAL YR 1975 TOTAL 1636.53 MEAN 4.48 MAX 133 MIN .90 CFSM 1.81 IN 24.64
WTR YR 1976 TOTAL 990.74 MEAN 2.71 MAX 94 MIN .51 CFSM 1.10 IN 14.92

PATAPSCO RIVER BASIN

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01589300 GWYNNS FALLS AT VILLA NOVA, MD

LOCATION.--Lat 39°20'45", long 76°44'01", Baltimore County, Hydrologic Unit 02060003, on right bank 300 ft (91 m) downstream from bridge on Essex Road, 300 ft (91 m) north of State Highway 26 (Liberty Road), in Villa Nova, 1.1 mi (1.8 km) west of Baltimore city limits, and 11.5 mi (18.5 km) upstream from mouth.

DRAINAGE AREA.--32.5 mi² (84.2 km²).

PERIOD OF RECORD.--February 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 361.32 ft (110.130 m) above mean sea level (Baltimore County bench mark). Prior to Aug. 27, 1963, and Oct. 25, 1972, to Sept. 20, 1973, water-stage recorder, and June 26, 1972, to Oct. 24, 1972, nonrecording gage at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good. Slight diurnal fluctuation at times from unknown source above station. Small diversion for irrigation above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--19 years, 36.6 ft³/s (1.037 m³/s), 15.29 in/yr (388 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,200 ft³/s (459 m³/s) June 22, 1972, gage height, 21.5 ft (6.55 m), from floodmarks, from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 1.7 ft³/s (0.048 m³/s) Sept. 7, 8, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 21, 1956, reached a stage of 12.6 ft (3.84 m), discharge, 5,270 ft³/s (149 m³/s) on basis of contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 750 ft³/s (21 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0215	*2070 58.6	7.26 2.213	Sept. 16	1015	1770 50.1	6.66 2.030

Minimum discharge, 8.7 ft³/s (0.25 m³/s) Sept. 8, 9, 12, 13, 14, gage height, 0.49 ft (0.149 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	31	36	852	83	34	278	86	73	40	16	9.8
2	38	31	30	85	157	33	54	48	89	17	14	23
3	33	31	29	181	50	34	41	29	37	16	13	13
4	33	31	28	79	46	37	75	24	30	16	13	11
5	32	31	28	48	43	37	49	23	26	16	13	10
6	32	30	31	42	41	35	38	22	26	15	13	9.4
7	31	30	30	55	36	32	35	23	25	51	14	9.0
8	31	43	29	75	34	32	33	21	23	43	85	8.7
9	214	32	54	42	34	39	31	21	22	34	36	8.7
10	59	89	45	36	33	60	31	21	21	21	55	28
11	67	57	33	36	37	75	31	22	20	117	18	11
12	43	118	30	35	35	53	29	44	20	36	15	8.7
13	36	176	31	44	36	105	29	22	19	20	14	8.7
14	34	56	30	110	43	47	29	22	19	17	14	8.8
15	32	42	30	42	36	38	29	21	19	47	38	12
16	31	36	30	38	39	47	29	54	26	21	24	456
17	69	34	28	36	48	39	30	39	80	18	14	46
18	117	33	27	36	54	33	29	79	23	16	13	22
19	47	32	26	36	59	33	28	39	20	15	12	16
20	40	32	26	38	39	32	30	27	29	15	12	14
21	36	49	27	40	37	33	32	24	60	20	12	13
22	34	37	26	40	77	31	27	22	52	36	11	13
23	33	32	25	44	45	30	26	21	24	25	11	12
24	33	32	24	42	37	30	26	21	20	25	11	12
25	42	31	24	42	37	31	27	20	19	20	13	12
26	36	30	241	312	35	30	35	33	18	15	11	12
27	38	31	58	335	35	36	26	25	16	14	19	13
28	34	30	38	160	34	43	25	21	16	14	13	13
29	33	29	34	63	33	29	25	78	17	45	11	12
30	32	29	49	52	---	29	25	311	25	18	9.9	52
31	31	---	178	46	---	55	---	49	---	16	9.6	---
TOTAL	1441	1325	1355	3122	1353	1252	1232	1312	914	839	577.5	897.8
MEAN	46.5	44.2	43.7	101	46.7	40.4	41.1	42.3	30.5	27.1	18.6	29.9
MAX	214	176	241	852	157	105	278	311	89	117	85	456
MIN	31	29	24	35	33	29	25	20	16	14	9.6	8.7
CFSM	1.43	1.36	1.34	3.11	1.44	1.24	1.26	1.30	.94	.83	.57	.92
IN.	1.65	1.52	1.55	3.57	1.55	1.43	1.41	1.50	1.05	.96	.66	1.03

CAL YR 1975	TOTAL	21915.0	MEAN 60.0	MAX 2140	MIN	16	CFSM 1.85	IN 25.08
WTR YR 1976	TOTAL	15620.3	MEAN 42.7	MAX 852	MIN	8.7	CFSM 1.31	IN 17.88

PATAPSCO RIVER BASIN

01589330 DEAD RUN AT FRANKLINTOWN, MD

LOCATION.--Lat 39°18'40", long 76°43'02", Baltimore County, Hydrologic Unit 02060003, on right bank at downstream side of bridge on Colonial Road at Security Boulevard at Franklinton, 0.3 mi (0.5 km) west of Baltimore city limits, 1.2 mi (1.9 km) southwest of Woodlawn, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--5.52 mi² (14.30 km²).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 310 ft (94 m), from topographic map.

REMARKS.--Records good. Occasional regulation at low flow from unknown source above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--17 years, 7.30 ft³/s (0.207 m³/s), 17.96 in/yr (456 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,400 ft³/s (210 m³/s) June 22, 1972, gage height, 12.5 ft (3.81 m), from floodmarks, from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of contracted-opening measurement of peak flow at bridge 0.6 mi (1.0 km) downstream, adjusted for flow from intervening area; minimum, 0.10 ft³/s (0.003 m³/s) Sept. 11-12, 1966, gage height, 0.57 ft (0.174 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft³/s (18 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0100	1220 34.6	5.75 1.753	Aug. 6	1945	730 20.7	4.23 1.289
June 1	1945	1460 41.3	6.40 1.951	Sept. 16	1030	*2320 65.7	8.19 2.496

Minimum discharge, 0.65 ft³/s (0.018 m³/s) Jan. 17, 18, result of freezeup, Sept. 12, 13, gage height, 0.70 ft (0.213 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.1	6.0	203	35	2.5	83	54	99	2.6	1.7	.96
2	2.6	2.3	2.2	11	38	2.6	5.3	4.1	12	1.2	.89	9.2
3	2.2	2.3	2.1	60	5.7	2.7	3.4	2.2	3.4	1.0	.88	1.0
4	2.0	2.3	2.0	9.7	4.9	3.1	13	1.8	2.4	.97	.90	.93
5	1.9	2.3	1.9	6.5	4.4	2.8	3.5	1.8	2.1	.88	1.1	.87
6	1.9	2.3	1.9	6.5	4.3	2.5	2.8	1.9	1.9	.97	33	.76
7	1.8	2.4	2.2	18	3.4	2.4	2.6	1.9	1.9	12	3.5	.89
8	2.0	7.6	2.3	20	3.3	2.5	2.5	1.5	1.7	5.7	70	.88
9	73	2.0	15	4.4	3.2	8.5	2.3	1.5	1.7	4.0	16	.97
10	7.4	16	3.3	4.0	3.2	18	2.2	1.5	1.8	6.2	16	14
11	16	2.9	2.2	3.6	3.6	12	2.2	3.6	1.8	50	1.9	.84
12	3.7	49	1.9	3.2	3.3	4.5	1.9	11	1.6	3.2	1.5	.72
13	3.1	29	2.6	8.0	4.4	19	2.0	1.4	1.4	1.5	1.5	.81
14	2.6	4.3	1.9	12	7.9	3.7	2.0	1.4	1.5	1.3	13	.87
15	2.1	3.0	1.9	3.6	3.4	3.1	2.0	1.4	1.7	9.7	24	7.0
16	1.9	2.7	1.9	3.3	3.7	8.4	1.9	19	15	2.1	2.4	310
17	56	2.5	1.9	2.9	7.8	3.1	1.9	2.7	12	1.7	1.5	19
18	19	2.4	1.9	2.0	22	2.7	1.9	5.6	2.1	1.1	1.4	2.9
19	3.6	2.3	1.9	2.0	7.9	2.9	2.0	2.0	1.4	1.0	1.3	1.6
20	3.6	2.3	1.9	2.2	3.7	2.3	8.4	1.4	4.1	1.0	1.2	1.4
21	2.9	8.7	1.9	2.6	3.4	2.3	6.6	1.4	28	5.8	1.2	1.2
22	2.9	2.7	1.9	2.8	23	2.3	2.1	1.2	4.8	2.2	1.1	1.1
23	2.5	2.3	1.8	2.8	4.1	2.1	2.0	1.2	1.6	2.5	1.2	1.1
24	2.9	2.3	1.9	2.7	3.5	2.2	1.9	1.2	1.5	5.7	1.2	1.1
25	12	2.3	2.2	2.3	3.3	2.3	6.0	1.2	1.3	1.3	1.2	1.1
26	2.9	2.2	86	83	3.2	2.0	4.9	8.6	1.2	.99	1.4	1.1
27	2.5	2.6	5.5	96	3.2	11	1.6	1.7	1.1	1.0	4.5	1.4
28	2.5	2.1	3.2	28	3.1	4.1	1.6	1.3	1.1	1.2	1.3	1.1
29	2.3	2.0	2.9	7.6	2.6	2.2	1.5	76	1.1	10	1.1	1.1
30	2.4	1.9	14	5.5	---	2.2	1.6	74	6.3	1.5	.90	28
31	3.7	---	113	4.6	---	33	---	3.7	---	1.1	.97	---
TOTAL	248.7	171.1	293.2	623.8	222.5	175.0	176.6	293.2	218.5	141.41	209.74	413.90
MEAN	8.02	5.70	9.46	20.1	7.67	5.65	5.89	9.46	7.28	4.56	6.77	13.8
MAX	73	49	113	203	38	33	83	76	99	50	70	310
MIN	1.8	1.9	1.8	2.0	2.6	2.0	1.5	1.2	1.1	.88	.88	.72
CFSM	1.45	1.03	1.71	3.64	1.39	1.02	1.07	1.71	1.32	.83	1.23	2.50
IN.	1.68	1.15	1.98	4.20	1.50	1.18	1.19	1.98	1.47	.95	1.41	2.79
CAL YR 1975	TOTAL	4671.50	MEAN	12.8	MAX	402	MIN	1.2	CFSM	2.32	IN	31.48
WTR YR 1976	TOTAL	3187.65	MEAN	8.71	MAX	310	MIN	.72	CFSM	1.58	IN	21.48

01589440 JONES FALLS AT SORRENTO, MD

LOCATION---Lat 39°23'30", long 76°39'42", Baltimore County, Hydrologic Unit 02060003, on right bank 0.3 mi (0.5 km) downstream from bridge on State Highway 25 (Falls Road), 0.4 mi (0.6 km) downstream from Slaughterhouse Branch and Sorrento, and 18 mi (29 km) upstream from mouth.

DRAINAGE AREA--25.2 mi² (65.3 km²).

PERIOD OF RECORD--Annual maximum, water years 1958-66. April 1966 to current year.

GAGE--Water-stage recorder. Altitude of gage is 240 ft (73 m), from topographic map. January 1958 to April 1966, nonrecording gage at site 450 ft (140 m) upstream at same datum.

REMARKS--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE--10 years, 34.0 ft³/s (0.963 m³/s), 18.32 in/yr (465 mm/yr).

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 13,800 ft³/s (391 m³/s) June 22, 1972, gage height, 18.11 ft (5.520 m), from floodmarks, from rating curve extended above 1,400 ft³/s (39.6 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.8 ft³/s (0.051 m³/s) Sept. 7, 8, 1966, gage height, 1.16 ft (0.354 m).

EXTREMES FOR CURRENT YEAR--Peak discharges above base of 600 ft³/s (17 m³/s) and maximum (*):

Date	Time	Discharges (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0200	*997 28.2	7.72 2.353	Sept. 16	1130	923 26.1	7.46 2.274

Minimum discharge, 8.3 ft³/s (0.24 m³/s) Sept. 8, gage height, 1.85 ft (0.564 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	32	32	425	66	36	140	60	35	28	15	11
2	46	32	29	73	103	36	49	41	44	18	14	15
3	41	32	29	107	54	36	42	31	30	17	14	12
4	40	32	29	65	51	38	56	29	26	18	13	12
5	39	31	29	48	47	37	44	29	25	17	13	11
6	38	31	30	44	45	36	39	28	25	16	13	10
7	36	31	29	51	42	35	37	28	24	28	14	10
8	36	36	29	60	41	34	35	27	22	28	36	9.3
9	97	32	38	40	40	38	34	27	21	23	27	9.3
10	47	63	35	40	39	43	34	26	20	19	32	15
11	49	49	33	39	41	52	34	26	20	45	18	11
12	40	70	29	39	40	46	32	34	19	25	16	11
13	37	92	29	45	40	69	32	27	19	19	15	10
14	35	48	29	73	42	44	32	26	20	18	15	9.4
15	34	41	29	42	39	39	31	26	20	28	20	10
16	33	38	28	40	41	42	31	33	20	20	18	269
17	55	36	27	39	44	38	31	30	49	18	14	34
18	76	35	26	38	48	35	30	39	23	17	13	26
19	43	34	25	36	50	35	30	29	21	16	12	20
20	39	34	26	36	40	34	29	26	22	15	12	17
21	37	40	27	36	39	35	30	24	35	16	12	17
22	35	35	26	36	57	33	29	23	40	20	12	15
23	34	33	25	40	44	33	28	23	23	20	11	14
24	34	33	24	36	40	32	28	22	21	18	11	14
25	37	31	25	34	39	33	28	22	20	16	11	14
26	35	31	127	202	38	32	32	24	19	15	11	14
27	35	32	46	191	37	34	29	24	18	15	14	15
28	33	30	35	108	37	36	28	22	17	15	14	14
29	33	30	32	60	37	32	28	49	16	21	13	13
30	32	31	37	53	---	32	28	120	18	17	11	31
31	32	---	83	49	---	42	---	35	---	16	11	---
TOTAL	1287	1155	1077	2225	1321	1177	1110	1010	732	622	475	693.0
MEAN	41.5	38.5	34.7	71.8	45.6	38.0	37.0	32.6	24.4	20.1	15.3	23.1
MAX	97	92	127	425	103	69	140	120	49	45	36	269
MIN	32	30	24	34	37	32	28	22	16	15	11	9.3
CFSM	1.65	1.53	1.38	2.85	1.81	1.51	1.47	1.29	.97	.80	.61	.92
IN.	1.90	1.70	1.59	3.28	1.95	1.74	1.64	1.49	1.08	.92	.70	1.02

CAL YR 1975	TOTAL	17281.0	MEAN 47.3	MAX 1160	MIN 18	CFSM 1.88	IN 25.51
WTR YR 1976	TOTAL	12884.0	MEAN 35.2	MAX 425	MIN 9.3	CFSM 1.40	IN 19.02

01590500 BACON RIDGE BRANCH AT CHESTERFIELD, MD

LOCATION.--Lat 39°00'07", long 76°36'53", Anne Arundel County, Hydrologic Unit 02060004, on left bank 50 ft (15 m) downstream from highway bridge, 0.5 mi (0.8 km) east of Chesterfield, 1.4 mi (2.3 km) upstream from confluence with North River, and 6.8 mi (10.9 km) northwest of Annapolis.

DRAINAGE AREA.--6.92 mi² (17.92 km²).

PERIOD OF RECORD.--October 1942 to September 1952. Annual maximum, water years 1965-74. October 1974 to current year. Monthly discharge only October and November 1942, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 15 ft (4.6 m), from topographic map.

REMARKS.--Records good. Records include sewage from Crownsville State Hospital, which obtains its water supply from wells. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years (water years 1943-52, 1975-76), 10.0 ft³/s (0.283 m³/s), 19.62 in/yr (498 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s (59.5 m³/s) Aug. 2, 1944, gage height, 5.49 ft (1.673 m), from rating curve extended above 140 ft³/s (3.96 m³/s) on basis of velocity-area studies; minimum, 2.3 ft³/s (0.065 m³/s) Aug. 30, 1975, gage height, 1.72 ft (0.524 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 185 ft³/s (5.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0500	*256 7.25	3.86 1.177	Sept. 16	1700	229 6.49	3.74 1.140

Minimum discharge, 2.6 ft³/s (0.074 m³/s) June 28, 29, gage height, 1.73 ft (0.527 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	8.2	9.3	134	14	8.4	34	16	7.1	3.9	4.3	3.3
2	8.2	7.9	8.6	40	24	8.4	15	25	6.3	3.3	3.6	4.0
3	7.1	7.7	7.7	27	13	8.8	11	9.2	6.0	4.0	3.6	4.2
4	7.1	7.6	7.5	23	13	8.8	11	7.9	5.0	4.7	3.3	3.6
5	7.1	7.5	7.5	14	13	8.8	11	7.1	4.7	3.6	3.3	3.6
6	7.1	7.5	7.6	11	12	7.9	8.8	7.1	4.3	3.3	3.3	3.3
7	7.1	7.5	9.0	13	9.8	7.9	8.4	7.1	4.3	4.0	3.3	3.0
8	6.7	12	8.4	26	9.8	7.5	7.9	7.9	4.3	5.6	9.2	3.0
9	25	9.0	10	12	9.8	12	8.4	6.7	4.3	4.9	14	3.0
10	14	8.8	9.8	8.8	9.9	14	8.4	6.3	4.3	3.6	10	4.3
11	11	8.9	8.4	11	11	15	8.4	6.1	4.0	13	5.0	4.0
12	9.2	12	7.5	12	9.8	14	7.9	9.4	3.6	6.3	4.3	3.3
13	8.0	34	8.2	11	9.8	12	7.9	6.7	3.3	4.0	4.0	3.0
14	7.4	14	7.9	13	14	9.2	7.9	6.3	3.6	3.6	3.6	3.0
15	7.1	9.9	7.9	10	9.8	8.8	7.9	6.3	4.0	5.8	8.4	3.6
16	7.1	9.0	7.9	10	9.8	12	7.9	6.7	3.6	5.0	16	90
17	9.3	8.8	7.5	9.8	9.2	11	7.9	7.1	5.7	6.3	5.4	33
18	17	8.4	7.5	7.5	9.8	9.1	7.5	7.1	5.0	4.0	4.3	7.1
19	9.5	8.2	6.3	7.5	14	9.2	7.5	7.1	4.3	3.8	3.8	4.8
20	8.5	8.2	6.4	8.8	8.8	8.8	7.5	6.3	4.0	3.6	3.6	4.1
21	8.4	8.5	7.1	9.2	8.8	8.8	7.5	5.8	4.6	3.6	3.4	4.1
22	8.4	8.2	7.1	9.8	15	8.4	7.1	5.0	5.3	3.6	3.4	4.1
23	8.2	7.5	6.7	10	12	8.8	7.1	4.7	4.3	4.0	3.4	3.4
24	7.9	7.5	6.3	10	9.2	8.8	6.7	4.7	4.0	4.3	3.4	3.4
25	9.3	7.9	6.3	10	9.2	8.8	7.1	4.3	3.3	4.0	3.4	3.4
26	8.8	7.9	21	17	8.8	8.8	7.9	5.1	3.3	3.3	3.4	5.6
27	8.4	7.9	14	39	8.8	9.8	7.1	6.3	3.3	3.3	3.4	5.2
28	8.4	7.9	8.2	37	8.8	11	7.1	5.0	3.3	3.3	4.0	10
29	7.9	7.5	7.9	19	8.4	9.2	7.1	8.2	3.0	4.3	3.8	4.8
30	11	7.7	9.4	15	---	9.8	6.7	26	3.3	7.5	3.3	9.8
31	8.7	---	19	13	---	12	---	8.4	---	4.3	3.3	---
TOTAL	287.7	283.6	273.9	598.4	323.3	305.8	273.6	252.9	129.4	141.8	154.5	245.0
MEAN	9.28	9.45	8.84	19.3	11.1	9.86	9.12	8.16	4.31	4.57	4.98	8.17
MAX	25	34	21	134	24	15	34	26	7.1	13	16	90
MIN	6.7	7.5	6.3	7.5	8.4	7.5	6.7	4.3	3.0	3.3	3.3	3.0
CFSM	1.34	1.37	1.28	2.79	1.60	1.42	1.32	1.18	.62	.66	.72	1.18
IN.	1.55	1.52	1.47	3.22	1.74	1.64	1.47	1.36	.70	.76	.83	1.32

CAL YR 1975	TOTAL	3545.0	MEAN	9.71	MAX	148	MIN	2.6	CFSM	1.40	IN	19.05
WTR YR 1976	TOTAL	3269.9	MEAN	8.93	MAX	134	MIN	3.0	CFSM	1.29	IN	17.58

01591000 PATUXENT RIVER NEAR UNITY, MD

LOCATION.--Lat 39°14'18", long 77°03'23", Montgomery County, Hydrologic Unit 02060006, on right bank at downstream side of bridge on State Highway 97, 0.6 mi (1 km) upstream from Cattail Creek, 0.8 mi (1.3 km) upstream from Triadelphia Reservoir, 1.1 mi (1.8 km) northeast of Unity, and 97 mi (155 km) upstream from mouth.

DRAINAGE AREA.--34.8 mi² (90.1 km²).

PERIOD OF RECORD.--July 1944 to current year.

REVISED RECORDS.--WSP 1111: 1947. WSP 1432: 1948.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 364.76 ft (111.179 m) above mean sea level (Washington Suburban Sanitary Commission bench mark). Prior to Aug. 14, 1946, non-recording gage at same site and datum.

REMARKS.--Records good except those for periods of doubtful or no gage-height record, Jan. 27 to June 4, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--32 years, 38.7 ft³/s (1.096 m³/s), 15.10 in/yr (384 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,800 ft³/s (595 m³/s) Sept. 11, 1971, gage height, 18.60 ft (5.669 m), from rating curve extended above 870 ft³/s (24.6 m³/s) on basis of slope-area measurement at gage height 13.58 ft (4.139 m); minimum, 0.20 ft³/s (0.006 m³/s) Sept. 10, 11, 12, 1966, gage height, 1.66 ft (0.506 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,040 ft³/s (57.8 m³/s) Jan. 1, gage height, 7.82 ft (2.384 m), no other peak above base of 770 ft³/s (21 m³/s); minimum, 7.0 ft³/s (0.20 m³/s) Aug. 26, 27, gage height, 2.18 ft (0.664 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	44	41	770	80	40	300	81	105	44	20	8.9
2	71	44	39	138	140	40	100	47	110	22	17	14
3	63	43	38	179	75	40	80	40	55	19	16	15
4	59	43	38	117	67	40	75	37	40	18	15	13
5	57	42	36	84	66	38	70	36	32	18	14	14
6	53	40	38	74	57	38	65	34	29	16	14	10
7	49	40	38	76	54	36	65	34	27	22	21	8.9
8	48	52	35	101	53	36	60	32	25	23	27	8.2
9	169	43	60	66	50	40	50	32	23	37	22	7.6
10	83	61	65	74	53	50	48	30	22	22	19	15
11	77	55	46	58	52	55	48	32	20	43	16	12
12	63	101	40	58	50	60	46	50	19	38	15	10
13	57	164	44	62	53	80	46	34	18	23	13	8.9
14	53	77	40	121	57	55	46	32	19	20	14	8.9
15	49	62	38	62	48	50	46	30	19	33	32	9.6
16	48	57	36	58	46	55	44	85	18	28	23	7.4
17	66	53	34	54	55	48	44	90	46	22	16	33
18	230	49	33	49	55	45	44	85	23	19	13	18
19	89	48	29	54	58	45	42	70	21	17	10	13
20	80	48	31	46	50	43	41	46	27	17	9.6	11
21	67	55	32	47	55	42	63	40	46	17	8.9	11
22	62	52	31	46	44	41	45	36	35	27	8.6	9.6
23	58	46	30	48	42	38	42	32	25	30	8.2	8.2
24	55	44	28	43	46	38	39	30	23	47	7.6	8.2
25	59	43	28	42	55	38	40	30	23	34	7.7	7.6
26	55	42	169	158	44	38	41	40	22	22	7.6	7.6
27	54	42	70	280	42	37	38	34	19	21	8.3	8.9
28	52	41	52	140	40	46	37	30	18	20	10	8.2
29	49	39	47	90	40	38	36	42	20	57	12	7.6
30	48	40	50	80	---	44	38	150	24	25	9.6	19
31	46	---	128	72	---	60	---	65	---	21	9.0	---
TOTAL	2147	1610	1464	3347	1627	1394	1779	1486	953	822	444.1	408.9
MEAN	69.3	53.7	47.2	108	56.1	45.0	59.3	47.9	31.8	26.5	14.3	13.6
MAX	230	164	169	770	140	80	300	150	110	57	32	74
MIN	46	39	28	42	40	36	36	30	18	16	7.6	7.6
CFSM	1.99	1.54	1.36	3.10	1.61	1.29	1.70	1.38	.91	.76	.41	.39
IN.	2.30	1.72	1.56	3.58	1.74	1.49	1.90	1.59	1.02	.88	.47	.44

CAL YR 1975 TOTAL 21620.0 MEAN 59.2 MAX 2590 MIN 10 CFSM 1.70 IN 23.11
WTR YR 1976 TOTAL 17482.0 MEAN 47.8 MAX 770 MIN 7.6 CFSM 1.37 IN 18.69

PATUXENT RIVER BASIN

01592500 PATUXENT RIVER NEAR LAUREL, MD

LOCATION.--Lat 39°06'56", long 76°52'27", Prince Georges County, Hydrologic Unit 02060006, on right bank at Rocky Gorge pumping station, 600 ft (180 m) downstream from T. Howard Duckett Reservoir, 0.7 mi (1.1 km) upstream from Walker Branch, 1.3 mi (2.1 km) northwest of Laurel, and 81 mi (130 km) upstream from mouth.

DRAINAGE AREA.--132 mi² (342 km²).

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 153.5 ft (46.79 m) above mean sea level (levels by Washington Suburban Sanitary Commission). Prior to Oct. 1, 1955, water-stage recorder and concrete control at site 0.3 mi (0.5 km) downstream at different datum. Oct. 1, 1955, to Sept. 30, 1956, nonrecording gage at present site at datum 1.2 ft (0.37 m) lower. Oct. 1, 1956, to Jan. 27, 1957, nonrecording gage at present site and datum. Jan. 28, 1957, to May 3, 1972, water-stage recorder and concrete control at present site and datum. May 4, 1972, to Sept. 4, 1973, nonrecording gage at present site and datum.

REMARKS.--Records good. Records do not include diversion at Patuxent (formerly Willis School) filtration plant for supply of Washington Suburban Sanitary District. Flow regulated by Triadelphia Reservoir, and since March 1954 by T. Howard Duckett Reservoir, combined usable capacity, 12,500,000 gal (47.31 hm³); dead storage, 80,000,000 gal (302,800 m³). Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 26,000 ft³/s (736 m³/s) June 22, 1972, gage height, about 25 ft (7.6 m), from floodmarks, from rating curve extended above 6,600 ft³/s (187 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 0.10 ft³/s (0.003 m³/s) Sept. 25, 1964, (valve closed for repair); minimum daily, 1.1 ft³/s (0.031 m³/s) June 26, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,710 ft³/s (76.7 m³/s) Jan. 1, gage height, 10.43 ft (3.179 m); minimum daily, 12 ft³/s (0.34 m³/s) Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	111	61	1370	46	100	629	20	209	24	27	24
2	215	111	61	2110	557	98	900	34	163	24	27	24
3	211	109	62	1630	765	97	276	59	171	24	27	24
4	127	109	61	347	759	107	118	59	173	24	27	24
5	125	109	61	53	295	98	63	59	173	24	27	24
6	59	111	60	19	68	98	18	137	159	24	27	24
7	20	113	60	245	98	68	46	195	29	24	27	23
8	33	113	72	443	98	19	65	198	29	24	28	22
9	152	113	103	443	97	19	59	125	28	25	30	19
10	198	71	105	248	97	18	59	71	28	26	28	20
11	201	21	105	101	97	82	59	41	25	26	28	20
12	198	36	105	46	97	142	78	22	24	27	289	21
13	558	128	105	18	97	200	90	22	23	27	25	21
14	338	212	63	57	97	203	110	23	23	27	25	20
15	32	209	18	109	97	190	84	23	23	27	26	20
16	58	209	18	137	97	157	95	23	24	26	26	20
17	336	201	18	259	97	175	95	27	24	26	25	20
18	571	203	18	259	97	113	103	58	24	26	25	19
19	352	206	18	197	97	20	105	76	24	26	26	18
20	295	203	18	59	98	20	77	78	24	26	25	18
21	104	206	17	59	98	20	59	84	24	26	24	17
22	25	209	80	74	97	20	57	49	24	27	24	17
23	25	209	172	92	95	41	58	75	25	27	23	17
24	25	88	212	92	95	74	58	75	24	26	23	17
25	25	24	209	94	95	74	58	75	24	26	23	17
26	25	24	190	94	97	72	58	41	24	27	23	17
27	24	23	173	245	97	71	58	28	24	26	23	16
28	24	23	173	765	97	71	58	30	24	27	23	12
29	24	31	171	681	98	125	33	43	24	27	23	12
30	36	62	194	252	---	200	20	176	24	27	24	13
31	76	---	227	18	---	200	---	209	---	27	24	---
TOTAL	4707	3597	3010	10616	4720	2992	3646	2235	1641	800	1052	580
MEAN	152	120	97.1	342	163	96.5	122	72.1	54.7	25.8	33.9	19.3
MAX	571	212	227	2110	765	203	900	209	209	27	289	24
MIN	20	21	17	18	46	18	18	20	23	24	23	12
(#)	12090	11960	11900	12080	11890	11880	11990	12040	11630	11270	10350	9930
(#)	74.6	77.0	80.9	64.8	71.7	80.7	80.3	76.1	78.4	79.0	77.3	78.4

CAL YR 1975 TOTAL 53232 MEAN 146 MAX 10000 MIN 15 (#) 77.2
WTR YR 1976 TOTAL 39596 MEAN 108 MAX 2110 MIN 12 (#) 76.6

* Combined month-end total contents, in million of gallons, in Triadelphia and T. Howard Duckett Reservoirs (contents on Sept. 30, 1975: 12,060,000,000 gal); furnished by Washington Suburban Sanitary Commission.

* Diversion, in cubic feet per second, above station at Patuxent (formerly Willis School) filtration plant for supply of Washington Suburban Sanitary District. Records furnished by Washington Suburban Sanitary Commission.

01593500 LITTLE PATUXENT RIVER AT GUILFORD, MD

LOCATION.--Lat 39°10'04", long 76°51'07", Howard County, Hydrologic Unit 02060006, on left bank 75 ft (23 m) upstream from bridge on State Highway 32, 1 mi (1.6 km) west of Guilford, 3 mi (4.8 km) upstream from Middle Patuxent River, 4 mi (6.4 km) north of Laurel, and 20.1 mi (32.3 km) upstream from mouth.

DRAINAGE AREA.--38.0 mi² (98.4 km²).

PERIOD OF RECORD.--April 1932 to current year. Monthly discharge only for April 1932, published in WSP 1302.

REVISED RECORDS.--WSP 1502: 1933, 1934(M), 1939(M), 1945(M), 1948(P).

GAGE.--Water-stage recorder. Concrete control since June 20, 1946. Altitude of gage is 260 ft (79.2 m), from topographic map. Prior to June 25, 1946, nonrecording gage at same site and datum.

REMARKS.--Records good. Low flow affected by regulation from unknown source. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--44 years, 42.1 ft³/s (1.192 m³/s), 15.05 in/yr (382 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s (351 m³/s) June 22, 1972, gage height, 18.38 ft (5.602 m), from high-water mark in well, from rating curve extended above 1,800 ft³/s (51.0 m³/s) on basis of contracted-opening measurement at gage height 13.26 ft (4.042 m) and contracted-opening and flow-over-embankment measurement at gage height 18.38 ft (5.602 m); no flow Sept. 8, and parts of Sept. 6, 7, 9-12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (22 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0400	*1910 54.1	10.12 3.085	Sept. 16	1330	1410 39.9	9.30 2.835

Minimum discharge, 7.5 ft³/s (0.21 m³/s) Sept. 8-10, gage height, 2.57 ft (0.783 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	35	44	1120	81	37	346	84	51	29	13	8.5
2	58	36	38	111	175	36	78	76	86	17	11	15
3	49	36	36	166	60	37	54	35	39	14	10	14
4	48	36	34	101	52	37	57	29	30	14	9.9	11
5	47	35	34	60	52	37	58	27	26	13	9.2	10
6	46	33	35	58	50	36	44	27	24	13	9.0	8.8
7	42	34	37	56	43	33	41	26	23	22	16	8.1
8	41	51	36	107	41	32	38	24	22	35	176	7.9
9	245	39	57	63	40	43	36	23	21	45	65	7.5
10	95	72	57	55	39	60	35	23	20	19	40	16
11	79	71	40	44	44	67	35	23	19	74	20	14
12	62	121	36	45	41	60	33	46	18	44	16	9.2
13	51	213	38	45	41	68	33	26	16	20	15	8.2
14	46	75	36	81	60	52	32	24	17	16	20	8.0
15	43	54	36	51	44	39	32	23	18	76	60	8.7
16	41	48	36	46	45	46	32	53	19	25	53	532
17	85	44	33	44	52	46	33	56	51	21	18	112
18	139	43	33	40	54	34	31	39	24	16	14	61
19	69	41	30	38	85	35	30	38	20	15	13	25
20	56	41	28	34	50	33	32	26	32	14	12	19
21	49	52	29	36	44	34	90	23	51	13	11	18
22	46	50	29	36	79	30	34	21	55	19	11	16
23	43	41	28	36	59	29	30	20	24	18	11	14
24	42	39	28	36	44	30	27	20	21	20	10	14
25	53	39	27	35	43	31	28	19	19	19	9.8	13
26	48	37	209	234	41	31	46	24	18	14	10	16
27	43	39	86	323	40	32	29	29	15	13	11	16
28	42	37	51	203	38	49	27	22	15	12	13	15
29	40	35	43	80	37	33	26	52	15	17	12	14
30	38	36	52	67	---	34	26	326	19	17	9.7	34
31	35	---	183	59	---	47	---	54	---	14	8.5	---
TOTAL	1885	1563	1519	3510	1574	1248	1473	1338	828	718	717.1	1073.9
MEAN	60.8	52.1	49.0	113	54.3	40.3	49.1	43.2	27.6	23.2	23.1	35.8
MAX	245	213	209	1120	175	68	346	326	86	76	176	532
MIN	35	33	27	34	37	29	26	19	15	12	8.5	7.5
CFSM	1.60	1.37	1.29	2.97	1.43	1.06	1.29	1.14	.73	.61	.61	.94
IN.	1.85	1.53	1.49	3.44	1.54	1.22	1.44	1.31	.81	.70	.70	1.05

CAL YR 1975	TOTAL	25416.0	MEAN	69.6	MAX	3370	MIN	16	CFSM	1.83	IN	24.88
WTR YR 1976	TOTAL	17447.0	MEAN	47.7	MAX	1120	MIN	7.5	CFSM	1.26	IN	17.08

PATUXENT RIVER BASIN

01594000 LITTLE PATUXENT RIVER AT SAVAGE, MD

LOCATION.--Lat 39°08'00", long 76°48'58", Howard County, Hydrologic Unit 02060006, on left bank 500 ft (150 m) downstream from bridge on U.S. Highway 1, 0.5 mi (0.8 km) southeast of Savage, 1.0 mi (1.6 km) downstream from Middle Patuxent River, and 16.1 mi (25.9 km) upstream from mouth.

DRAINAGE AREA.--98.4 mi² (254.9 km²).

PERIOD OF RECORD.--October 1939 to September 1958. Annual maximum, water years 1959-66, 68, 72. October 1975 to current year. Prior to December 1939 monthly discharge only, published in WSP 1302.

GAGE.--Water-stage recorder. Altitude of gage is 125 ft (38.1 m), from topographic map. Prior to 1958, water-stage recorder at site 100 ft (30 m) upstream at same datum. October 1958 to September 1972, crest-stage gage 100 ft (30 m) upstream on right bank at same datum.

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by plant 0.5 mi (0.8 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--20 years (water years 1940-58, 1976), 103 ft³/s (2.917 m³/s), 14.21 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,400 ft³/s (1,000 m³/s) June 22, 1972; gage height, 25.4 ft (7.74 m), from floodmarks, from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 7.0 ft³/s (0.20 m³/s) Sept. 19, 1943.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0900	*4700 133	10.85 3.307	Apr. 1	0845	1930 54.7	7.52 2.292
Jan. 27	2130	1520 43.0	6.86 2.091	Sept. 16	1430	1930 54.7	7.53 2.295

Minimum discharge, 22 ft³/s (0.62 m³/s) Sept. 14, 15, gage height, 2.63 ft (0.802 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	103	104	2880	201	114	921	181	139	84	42	26
2	160	105	96	349	516	113	227	220	243	55	38	33
3	130	105	91	480	160	112	159	107	118	47	35	41
4	130	103	88	312	155	112	149	90	92	46	35	33
5	120	103	87	170	150	115	162	84	80	46	33	31
6	120	99	87	160	151	117	134	83	75	43	31	27
7	110	99	93	160	139	106	124	80	73	59	44	25
8	110	132	89	290	133	105	117	77	71	94	293	24
9	700	111	124	150	131	130	111	72	65	113	136	23
10	300	164	152	140	125	160	107	72	64	60	79	34
11	220	195	105	135	137	210	107	73	60	150	54	38
12	180	261	95	133	131	180	104	117	58	110	45	26
13	160	642	96	131	130	220	101	80	53	61	42	24
14	140	207	96	228	170	170	100	75	53	50	45	22
15	120	143	95	146	139	130	99	75	56	162	114	23
16	110	126	93	133	140	150	98	114	56	73	122	867
17	220	118	86	129	153	150	96	156	108	61	48	219
18	400	113	86	100	154	125	95	103	71	50	40	120
19	200	109	80	110	228	119	91	114	68	45	36	61
20	170	107	80	110	146	116	93	88	70	44	35	49
21	140	122	82	100	133	114	198	73	203	41	34	45
22	123	133	81	100	195	112	100	69	159	52	32	43
23	114	105	79	100	180	107	89	65	76	53	30	39
24	109	103	80	100	135	101	83	64	66	56	30	37
25	126	101	80	100	133	103	83	63	59	58	29	37
26	134	97	600	800	127	107	121	73	57	44	29	39
27	120	99	233	1000	125	105	91	93	51	40	29	41
28	117	98	128	607	118	142	86	73	49	40	38	41
29	113	93	109	220	116	110	83	105	48	61	37	40
30	111	94	114	184	---	110	80	696	64	53	30	60
31	103	---	392	162	---	129	---	153	---	44	26	---
TOTAL	5280	4190	3901	9919	4651	3994	4209	3588	2505	1995	1691	2168
MEAN	170	140	126	320	160	129	140	116	83.5	64.4	54.5	72.3
MAX	700	642	600	2880	516	220	921	696	243	162	293	867
MIN	103	93	79	100	116	101	80	63	48	40	26	22
CFSM	1.73	1.42	1.28	3.25	1.63	1.31	1.42	1.18	.85	.65	.55	.73
IN.	2.00	1.58	1.47	3.75	1.76	1.51	1.59	1.36	.95	.75	.64	.82

WTR YR 1976 TOTAL 48091 MEAN 131 MAX 2880 MIN 22 CFSM 1.33 IN 18.18

01594600 COCKTOWN CREEK NEAR HUNTINGTOWN, MD

LOCATION.--Lat 38°38'27", long 76°38'07", Calvert County, Hydrologic Unit 02060006, on right bank at downstream side of highway bridge, 2 mi (3.2 km) northwest of Huntingtown, 2.8 mi (4.5 km) southeast of Lower Marlboro, and 3.5 mi (5.6 km) upstream from mouth.

DRAINAGE AREA.--3.85 mi² (9.97 km²).

PERIOD OF RECORD.--December 1956 to September 1976 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Records fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--19 years (water years 1958-76), 4.14 ft³/s (0.117 m³/s), 14.60 in/yr (371 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft³/s (31.7 m³/s) June 14, 1960, gage height, 7.96 ft (2.426 m), from rating curve extended above 150 ft³/s (1.42 m³/s) on basis of contracted-opening measurement of peak flow; no flow many days in July and August 1957, September 1963, July, August, and September 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 60 ft³/s (1.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 9	0530	105	2.97	Aug. 14	2215	*217	6.15
Dec. 31	2345	136	3.85				5.71
			4.05				1.234
			4.65				1.417

Minimum daily discharge, 0.06 ft³/s (0.002 m³/s) Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	4.2	5.3	27	9.6	5.2	11	8.0	3.4	.44	.77	.19
2	5.9	4.0	3.9	9.6	14	5.2	5.9	5.3	2.6	.37	.25	.32
3	5.2	4.0	3.5	11	9.2	5.2	5.3	3.6	2.2	.36	.20	.32
4	5.2	3.8	3.3	8.4	8.9	5.2	5.8	3.2	2.0	.43	.16	.28
5	5.0	3.8	3.4	7.1	8.5	5.9	5.2	3.1	1.8	.40	.12	.25
6	4.8	3.8	3.4	6.7	8.4	5.4	5.0	2.9	1.6	.34	.09	.16
7	4.5	3.6	3.6	8.9	7.9	5.0	4.8	3.3	1.5	.50	.11	.14
8	4.6	3.6	3.7	12	7.9	4.8	4.7	3.0	1.4	.46	.34	.12
9	24	3.6	5.0	7.1	7.4	12	4.6	2.7	1.3	.35	5.9	.10
10	7.6	3.4	4.2	6.4	7.4	9.7	4.5	2.6	1.2	.30	1.3	.25
11	6.7	3.4	3.6	6.9	7.3	8.9	4.6	2.7	1.1	2.3	.63	.16
12	5.8	7.0	3.4	6.7	6.9	7.3	4.4	3.5	1.0	.90	.50	.08
13	5.4	13	3.3	6.5	7.0	6.8	4.4	2.6	.96	.53	.42	.06
14	5.1	5.6	3.4	6.8	6.8	5.9	4.4	2.6	1.0	.38	26	.06
15	4.8	4.6	3.5	5.9	6.7	5.8	4.3	2.4	.98	.70	10	.36
16	4.7	4.4	3.4	5.9	6.6	8.3	4.3	2.9	1.0	.55	4.0	8.3
17	9.2	4.1	3.2	5.5	6.5	6.4	4.2	2.8	2.4	.58	2.0	1.3
18	8.1	4.1	3.0	4.8	6.5	5.7	4.0	3.1	1.4	.32	1.0	.69
19	6.0	4.1	2.7	5.3	6.4	5.7	4.0	2.8	1.2	.26	.75	.51
20	5.4	4.1	2.9	5.5	5.9	5.6	4.0	2.2	1.1	.23	.60	.45
21	5.2	5.3	2.8	5.4	5.9	5.5	3.7	1.9	1.1	.21	.50	.45
22	5.1	4.3	2.8	5.0	8.2	5.2	3.7	1.8	.99	.27	.44	.41
23	4.9	3.8	2.6	4.7	6.3	5.2	3.5	1.7	.94	.35	.42	.32
24	4.9	3.8	2.5	4.8	5.9	5.2	3.4	1.7	.85	.30	.40	.32
25	5.3	3.8	2.7	4.8	5.8	5.3	3.6	1.6	.75	.21	.32	.32
26	4.6	3.5	9.6	10	5.6	5.2	3.4	1.8	.69	.14	.32	2.7
27	4.6	4.3	4.4	25	5.6	5.4	3.2	1.7	.63	.12	.28	.84
28	4.4	3.7	3.5	14	5.5	6.4	3.2	1.6	.55	.11	.32	.69
29	4.4	3.5	3.3	11	5.3	5.2	3.2	9.3	.52	.88	.32	.51
30	4.8	3.6	4.6	9.8	---	5.4	3.1	10	.52	.76	.19	2.7
31	4.2	---	19	9.2	---	6.4	---	6.6	---	.31	.19	---
TOTAL	186.8	131.8	129.5	267.7	209.9	190.4	133.4	105.0	38.68	14.36	58.84	23.36
MEAN	6.03	4.39	4.18	8.64	7.24	6.14	4.45	3.39	1.29	.46	1.90	.78
MAX	24	13	19	27	14	12	11	10	3.4	2.3	26	8.3
MIN	4.2	3.4	2.5	4.7	5.3	4.8	3.1	1.6	.52	.11	.09	.06
CFSM	1.57	1.14	1.09	2.24	1.88	1.59	1.16	.88	.34	.12	.49	.20
IN.	1.80	1.27	1.25	2.59	2.03	1.84	1.29	1.01	.37	.14	.57	.23

CAL YR 1975 TOTAL 2571.70 MEAN 7.05 MAX 56 MIN 1.1 CFSM 1.83 IN 24.84
WTR YR 1976 TOTAL 1489.74 MEAN 4.07 MAX 27 MIN .06 CFSM 1.06 IN 14.39

POTOMAC RIVER BASIN
01595000 NORTH BRANCH POTOMAC RIVER AT STEYER, MD

LOCATION.--Lat 39°18'07", long 79°18'26", Garrett County, Hydrologic Unit 02070002, on left bank 0.3 mi (0.5 km) southeast of Steyer, 0.4 mi (0.6 km) downstream from Steyer Run, 2.0 mi (3.2 km) northeast of Gorman, and at mile 81.8 (131.6 km).

DRAINAGE AREA.--73.0 mi² (189.1 km²).

PERIOD OF RECORD.--July 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,276.01 ft (693.728 m) above mean sea level.

REMARKS.--Records fair except those for winter periods, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--20 years, 170 ft³/s (4.814 m³/s), 31.62 in/yr (803 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,240 ft³/s (177 m³/s) Mar. 5, 1963, gage height, 9.13 ft (2.783 m), from rating curve extended above 3,000 ft³/s (85.0 m³/s); minimum, 2.9 ft³/s (0.082 m³/s) Sept. 10, 1965, gage height, 2.03 ft (0.619 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 15, 1954, reached a stage of 13.0 ft (3.96 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,200 ft³/s (62.3 m³/s) Jan. 1, gage height, 6.03 ft (1.838 m), no other peak above base of 2,200 ft³/s (62 m³/s); minimum, 9.4 ft³/s (0.27 m³/s) Sept. 7, 8, 14, 15, gage height, 2.15 ft (0.655 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	60	47	1290	166	132	252	72	137	79	32	18
2	62	54	46	529	125	119	223	110	121	68	29	19
3	58	52	42	560	135	104	254	89	104	62	25	19
4	49	52	41	457	125	99	415	80	84	76	24	18
5	46	49	42	315	124	92	352	74	72	58	22	15
6	43	51	46	261	205	87	270	72	70	49	22	12
7	39	47	95	226	120	78	227	72	76	45	51	10
8	39	51	70	204	115	74	192	74	60	41	50	12
9	58	47	66	125	110	89	162	66	57	45	30	12
10	77	47	77	190	157	117	142	62	49	36	23	46
11	124	51	66	255	1040	139	130	60	41	42	22	33
12	75	94	63	210	469	145	117	66	36	142	19	18
13	60	169	215	220	671	373	106	52	66	65	17	12
14	56	109	173	527	1010	257	99	51	60	45	18	9.4
15	48	92	149	265	534	212	89	49	37	39	20	10
16	45	89	371	213	518	208	84	89	38	96	28	26
17	145	96	253	155	539	222	76	76	50	88	19	22
18	503	85	197	125	581	195	74	133	297	58	20	19
19	226	80	140	145	417	243	68	149	355	45	20	16
20	175	74	165	178	311	250	62	107	369	37	19	13
21	148	74	140	155	250	534	58	87	295	35	14	24
22	127	68	120	145	324	394	60	80	191	38	14	26
23	115	62	115	150	281	282	60	74	219	67	14	18
24	100	58	115	185	242	230	51	68	244	123	14	16
25	92	56	120	212	239	204	49	80	227	65	13	16
26	86	52	237	498	205	176	125	82	321	47	15	15
27	82	54	226	545	182	178	92	64	167	42	174	33
28	78	56	154	341	160	212	78	56	127	36	48	87
29	68	47	127	260	145	159	70	56	105	35	30	36
30	70	47	174	215	---	155	66	118	92	35	21	42
31	62	---	829	182	---	147	---	101	---	33	19	---
TOTAL	3021	2023	4721	9338	9500	5906	4103	2469	4167	1772	886	672.4
MEAN	97.5	67.4	152	301	328	191	137	79.6	139	57.2	28.6	22.4
MAX	503	169	829	1290	1040	534	415	149	369	142	174	87
MIN	39	47	41	125	110	74	49	49	36	33	13	9.4
CFSM	1.34	.92	2.08	4.12	4.49	2.62	1.88	1.09	1.90	.78	.39	.31
IN.	1.54	1.03	2.41	4.76	4.84	3.01	2.09	1.26	2.12	.90	.45	.34
CAL YR 1975	TOTAL	68213.0	MEAN 187	MAX 2000	MIN 10	CFSM 2.56	IN 34.76					
WTR YR 1976	TOTAL	48578.4	MEAN 133	MAX 1290	MIN 9.4	CFSM 1.82	IN 24.75					

01595200 STONY RIVER NEAR MT. STORM, WV

LOCATION.--Lat 39°16'10", long 79°15'45", Grant County, Hydrologic Unit 02070002, on left bank 100 ft (30 m) downstream from bridge on U.S. Highway 50, 1.0 mi (1.6 km) west of Mt. Storm, and at mile 6.4 (10.3 km).

DRAINAGE AREA.--48.8 mi² (126.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,554.54 ft (778.624 m) above mean sea level.

REMARKS.--Water-discharge records good. Flow regulated by Stony River Reservoir, 14.0 mi (22.5 km) upstream from station, capacity, 1,948,000,000 gal (7.373 hm³), of which 1,681,000,000 gal (6.363 hm³) is controlled above minimum pool. Since 1963, minor regulation by Virginia Electric and Power Company dam 4.0 mi (6.4 km) upstream from station.

AVERAGE DISCHARGE.--15 years, 95.5 ft³/s (2.705 m³/s), 26.58 in/yr (675 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,120 ft³/s (88.4 m³/s) Mar. 19, 1963, gage height, 8.37 ft (2.551 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s); maximum gage height, 8.41 ft (2.563 m) Mar. 5, 1963, ice jam; minimum discharge, 1.8 ft³/s (0.051 m³/s) July 13, 1968, gage height, 1.98 ft (0.604 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 584 ft³/s (16.5 m³/s) Feb. 11, gage height, 4.87 ft (1.484 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s); minimum, 7.8 ft³/s (0.22 m³/s) Sept. 8, 9, gage height, 1.87 ft (0.570 m); minimum daily discharge, 8.0 ft³/s (0.23 m³/s) Sept. 6-9, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	79	21	292	116	104	118	32	116	31	13	8.9
2	96	66	19	186	98	88	111	42	102	27	12	9.2
3	84	58	19	236	66	58	118	31	100	23	12	8.9
4	72	51	19	225	43	53	142	27	86	23	11	8.6
5	64	45	19	192	45	50	128	24	76	21	11	8.3
6	45	41	19	162	72	48	116	22	69	20	11	8.0
7	24	38	24	142	62	44	106	23	61	19	17	8.0
8	27	36	21	129	56	43	100	22	54	17	14	8.0
9	29	32	21	112	60	45	90	20	48	16	12	8.0
10	40	32	24	99	66	52	82	19	44	15	11	17
11	46	30	22	94	337	65	77	19	40	19	10	9.8
12	31	57	21	88	226	70	70	20	36	75	10	8.6
13	28	65	58	92	286	167	65	18	46	31	9.6	15
14	27	49	49	146	355	111	59	17	38	24	9.5	8.0
15	27	42	46	102	282	100	56	19	31	22	11	8.6
16	27	37	75	94	302	106	52	71	34	34	11	14
17	111	35	64	88	337	111	50	63	34	31	9.8	12
18	307	32	58	81	314	108	46	104	30	24	8.9	10
19	167	30	56	72	290	118	48	101	45	21	8.6	9.5
20	156	30	53	73	254	118	53	87	97	20	8.6	9.2
21	159	30	50	72	226	188	52	80	109	20	8.6	12
22	146	28	48	72	238	157	53	74	109	20	8.3	10
23	145	26	48	68	220	136	46	71	76	32	8.3	9.2
24	145	25	46	72	195	128	44	67	64	44	8.3	8.6
25	144	24	45	77	178	123	44	73	68	28	8.3	8.6
26	142	22	64	139	157	116	45	73	70	20	10	8.6
27	138	24	73	195	139	120	38	64	53	15	26	12
28	126	21	64	195	125	118	33	59	46	14	12	15
29	115	20	59	160	113	104	29	59	43	15	9.8	10
30	108	20	77	139	---	100	25	98	38	14	14	37
31	93	---	258	125	---	96	---	97	---	13	9.8	---
TOTAL	2977	1125	1540	4019	5258	3045	2096	1596	1863	748	344.4	328.6
MEAN	96.0	37.5	49.7	130	181	98.2	69.9	51.5	62.1	24.1	11.1	11.0
MAX	307	79	258	292	355	188	142	104	116	75	26	37
MIN	24	20	19	68	43	43	25	17	30	13	8.3	8.0
(†)	975	1202	1230	1224	1202	1224	1214	1297	1379	1405	1388	1431

CAL YR 1975 TOTAL 43809.0 MEAN 120 MAX 779 MIN 14 CFSM 2.46 IN 33.89
WTR YR 1976 TOTAL 24940.0 MEAN 68.1 MAX 355 MIN 8.0 CFSM 1.40 IN 19.01

† Month-end contents, in millions of gallons, in Stony River Reservoir, furnished by West Virginia Pulp and Paper Co.

POTOMAC RIVER BASIN

01595200 STONY RIVER NEAR MOUNT STORM, WV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1961 to March 1974, September 1974 to current year.

INSTRUMENTATION.--Temperature recorder since December 1961.

REMARKS.--Temperature recorder clock stopped Oct. 1-15 (range in temperature 12.5 to 16.5°C), Dec. 28-30 (range in temperature 4.0 to 5.0°C), Feb. 2-9 (range in temperature 2.5 to 5.5°C), May 26-27 (range in temperature 14.0 to 18.0°C), July 17-27 (range in temperature 18.0 to 20.5°C); no record Aug. 17 to Sept. 8.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 27°C July 1, Aug. 22, 23, 1968; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 23.0°C June 12; minimum, 2.5°C Dec. 20, Jan. 18, 19, 23, Feb. 9, 10.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	14.5	14.5	6.5	4.5	5.5	5.0	5.5	5.0	10.0	9.0
2	---	---	15.0	14.5	4.5	3.5	5.0	5.0	---	---	10.5	9.5
3	---	---	14.5	14.5	3.5	3.0	5.5	5.0	---	---	10.5	10.0
4	---	---	14.5	14.5	3.5	3.0	5.5	5.5	---	---	11.0	10.5
5	---	---	14.5	14.5	4.0	3.0	5.0	5.0	---	---	12.0	11.0
6	---	---	14.5	14.5	5.5	4.0	5.0	5.0	---	---	11.0	9.0
7	---	---	14.5	14.5	5.5	5.0	5.5	5.0	---	---	9.0	7.0
8	---	---	14.5	14.5	5.0	4.0	5.5	5.0	---	---	8.0	7.5
9	---	---	14.5	14.5	4.5	4.0	5.0	4.0	---	---	8.0	6.5
10	---	---	14.5	14.5	4.0	3.5	4.0	3.5	3.5	2.5	7.0	5.5
11	---	---	14.5	13.0	3.5	3.0	4.5	4.0	3.5	3.0	8.0	7.0
12	---	---	13.0	13.0	3.0	3.0	4.5	4.5	3.5	3.0	8.0	7.0
13	---	---	13.0	13.0	4.0	3.0	5.0	4.5	4.0	3.5	7.5	7.5
14	---	---	12.0	10.5	5.0	4.0	4.5	4.0	4.0	4.0	7.5	7.0
15	14.0	13.5	10.0	9.0	6.5	5.0	4.0	4.0	4.5	4.0	8.0	7.0
16	14.0	14.0	9.0	8.5	6.5	6.0	4.0	4.0	5.5	4.5	8.5	8.0
17	15.0	14.5	8.5	8.5	6.0	5.0	4.0	4.0	6.0	5.5	8.0	7.0
18	14.5	14.5	8.5	8.5	5.0	3.5	4.0	2.5	7.0	6.0	7.5	7.0
19	16.0	15.5	8.5	8.5	3.5	3.0	3.0	2.5	7.0	7.0	8.5	7.5
20	16.0	16.0	8.5	8.0	3.0	2.5	4.0	3.0	7.0	7.0	10.5	8.5
21	16.0	16.0	8.5	7.5	3.5	3.0	4.0	4.0	8.0	8.0	10.5	10.0
22	17.0	16.0	7.5	5.5	3.5	3.0	3.5	3.0	8.0	8.0	10.0	9.5
23	17.0	17.0	5.5	5.0	3.0	3.0	3.0	2.5	8.0	8.0	9.5	9.0
24	17.0	16.5	5.0	4.0	3.0	3.0	4.0	3.0	8.0	7.5	12.0	9.5
25	17.5	17.0	5.0	4.5	3.0	3.0	4.0	4.0	8.0	7.5	12.0	11.5
26	17.5	17.5	5.0	4.5	4.0	3.0	4.0	4.0	8.5	8.0	13.0	11.5
27	17.5	17.5	5.5	4.5	4.0	4.0	4.0	4.0	9.0	8.5	13.0	13.0
28	17.5	17.0	5.0	4.0	---	---	4.0	4.0	9.0	8.5	13.0	12.0
29	17.5	17.5	4.0	3.0	---	---	4.0	4.0	9.5	9.0	12.5	11.5
30	17.5	16.5	6.0	3.5	5.5	5.5	4.0	4.0	---	---	13.5	12.0
31	16.0	15.0	---	---	5.5	5.5	5.0	4.0	---	---	13.5	13.5
MONTH	---	---	15.0	3.0	6.5	2.5	5.5	2.5	---	---	13.5	5.5

01595200 STONY RIVER NEAR MOUNT STORM, WV--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

POTOMAC RIVER BASIN

01595500 NORTH BRANCH POTOMAC RIVER AT KITZMILLER, MD

LOCATION.--Lat 39°23'38", long 79°10'55", Garrett County, Hydrologic Unit 02070002, on left bank 0.6 mi (1.0 km) downstream from bridge on State Highway 38 in Kitzmiller, 1.5 mi (2.4 km) downstream from Wolfden Run, and at mile 68.9 (110.9 km).

DRAINAGE AREA.--225 mi² (583 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,572.26 ft (479.225 m) above mean sea level. Prior to Oct. 15, 1954, at site 0.5 mi (0.5 km) upstream at datum 7.58 ft (2.310 m) higher. Oct. 15, 1954, to Nov. 20, 1955, nonrecording gage at bridge 0.5 mi (0.8 km) upstream at datum 21.51 ft (6.556 m) higher.

REMARKS.--Water-discharge records good except those for winter periods, which are fair. Regulation at low flow by Stony River Reservoir, 30 mi (48 km) above station (see station 01595200).

AVERAGE DISCHARGE.--27 years, 443 ft³/s (12.55 m³/s), 26.74 in/yr (679 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,400 ft³/s (946 m³/s) Oct. 15, 1954, gage height, 13.73 ft (4.185 m), from floodmarks, present site and datum; minimum, 4.6 ft³/s (0.13 m³/s) Oct. 3-7, 1953, gage height, 1.45 ft (0.442 m), site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,400 ft³/s (96 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0330	*4510 128	7.16 2.182	Feb. 11	1000	3870 110	6.92 2.109

Minimum discharge, 24 ft³/s (0.68 m³/s) Sept. 15, gage height, 2.34 ft (0.713 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	309	230	119	2960	552	383	641	154	372	178	64	40
2	276	206	114	1510	465	352	595	251	347	152	59	41
3	243	188	107	1450	390	291	610	198	314	135	51	45
4	212	178	99	1370	365	270	908	175	264	149	48	39
5	189	164	101	1040	359	251	809	157	222	128	44	35
6	174	157	100	820	476	239	655	149	208	113	42	31
7	136	150	164	740	365	215	568	147	209	107	123	27
8	128	149	142	726	335	201	495	155	178	102	131	26
9	165	138	131	520	335	209	432	135	161	98	70	28
10	275	135	153	470	350	232	383	130	144	89	55	53
11	408	136	136	502	2350	341	353	125	130	100	47	81
12	250	222	127	496	1340	401	319	140	118	307	43	43
13	199	456	391	425	1580	1000	289	119	120	149	39	32
14	176	289	380	1110	2020	737	264	113	180	99	39	31
15	162	236	303	605	1340	592	244	107	115	83	42	27
16	149	222	578	545	1370	567	227	227	113	143	58	64
17	405	222	470	472	1550	598	210	251	129	164	46	83
18	1950	203	382	335	1610	515	199	344	151	111	38	69
19	933	190	278	320	1260	605	188	430	589	85	39	49
20	712	178	312	386	993	608	174	311	626	72	36	40
21	607	176	287	350	843	1050	169	256	568	65	33	49
22	521	172	235	312	920	938	176	227	482	69	29	68
23	466	154	200	301	820	705	170	208	308	101	29	46
24	424	144	190	354	701	605	151	197	487	236	29	40
25	396	141	195	457	665	549	149	202	340	137	29	36
26	375	136	265	777	589	495	255	238	637	93	31	35
27	359	135	431	1270	532	470	218	193	333	78	347	41
28	329	138	303	964	463	578	182	171	251	73	139	151
29	301	120	258	774	421	440	163	169	214	71	76	88
30	289	119	273	664	---	423	148	368	188	70	53	108
31	255	---	1500	591	---	399	---	352	---	63	49	---
TOTAL	11773	5484	8724	23616	25359	15259	10344	6399	8498	3620	1958	1546
MEAN	380	183	281	762	874	492	345	206	283	117	63.2	51.5
MAX	1950	456	1500	2960	2350	1050	908	430	637	307	347	151
MIN	128	119	99	301	335	201	148	107	113	63	29	26

CAL YR 1975 TOTAL 194046 MEAN 532 MAX 4410 MIN 43 CFSM 2.36 IN. 32.07
WTR YR 1976 TOTAL 122580 MEAN 335 MAX 2960 MIN 26 CFSM 1.49 IN. 20.26

01595500 NORTH BRANCH POTOMAC RIVER AT KITZMILLER, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: August 1961 to current year.

INSTRUMENTATION.--Temperature recorder since August 1961.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 32.0°C Aug. 15, 16, 18, 1965; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 26.5°C July 15; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITROGEN (N) (MG/L)	
SEP 01...	1030	40	750	4.5	23.0	17.0	11.8	0	20	.37	.0	.15	
DATE	TIME	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM (CD) (UG/L)
SEP 01...	39		.00	.15	3500	.52	.02	.01	230	1800	0	19	0
DATE	TIME	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
SEP 01...		0	10	10	0	20	220	27000	2	20	1400	240	240
DATE	TIME	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	IN-ORGANIC CARBON IN BOTTOM MATERIAL (G/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	PCB IN BOTTOM MATERIAL (UG/KG)
SEP 01...		<.5	.1	20	0	0	120	30	120	.2	.0	0	0
DATE	TIME	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIAZINON (UG/L)
SEP 01...		.00	.0	.0	0	.00	.0	.00	.0	.00	.0	.00	.00

POTOMAC RIVER BASIN

01595500 NORTH BRANCH POTOMAC RIVER AT KITZMILLER, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)
SEP 01...	.0	.00	.7	.00	.0	.00	.0	.00	.0	.00	.0
DATE	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)
SEP 01...	.00	.0	.00	.0	.00	.00	.0	.00	.0	.00	.0
DATE	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MA- TERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MA- TERIAL (UG/KG)
SEP 01...	.00	0	0	.00	.0	.00	0	.00	0	.00	0

01595500 NORTH BRANCH POTOMAC RIVER AT KITZMILLER, MD--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	7.5	12.5	10.5	18.5	16.0	19.5	17.0	24.0	19.5	21.5	15.0
2	7.5	5.0	14.0	10.0	17.0	14.5	21.0	15.0	23.0	17.5	22.0	17.5
3	9.0	4.5	13.5	10.0	18.0	13.5	20.5	17.0	24.0	16.0	19.5	17.5
4	8.5	6.5	13.0	8.0	18.5	13.5	21.5	17.5	24.0	16.5	22.0	16.0
5	8.0	5.0	15.5	7.5	18.5	13.5	23.5	17.0	22.5	17.5	22.5	18.0
6	9.0	5.5	14.5	12.0	16.5	13.5	23.5	17.5	22.0	19.0	22.0	14.5
7	10.5	7.0	13.5	11.0	19.5	13.5	21.0	19.0	23.5	20.0	22.0	13.5
8	9.5	7.0	14.5	9.0	20.5	15.0	21.0	18.0	20.5	19.0	23.5	14.5
9	8.5	5.5	16.0	8.5	21.5	15.5	25.0	18.0	21.0	18.0	24.5	16.0
10	9.5	5.0	16.5	10.0	22.5	16.0	20.5	17.5	22.0	16.5	21.5	15.5
11	8.5	5.0	15.0	12.5	22.0	17.0	24.5	18.5	25.0	16.5	18.0	13.0
12	7.5	3.0	16.5	11.0	24.0	18.0	22.5	19.0	26.0	18.0	21.0	13.5
13	10.0	4.0	17.5	10.0	21.0	18.5	22.0	16.5	25.0	19.5	22.5	14.5
14	11.5	5.5	17.5	13.0	23.5	18.5	23.0	16.5	25.5	19.0	22.5	15.0
15	14.0	7.5	18.5	14.5	24.5	19.0	26.5	19.5	23.0	20.0	19.0	17.0
16	16.0	10.5	19.0	16.5	22.5	19.5	22.5	20.0	23.5	18.5	17.0	16.5
17	18.0	12.0	19.5	15.5	24.5	19.0	23.0	19.0	24.0	16.0	20.0	16.5
18	19.5	13.0	17.5	11.0	24.5	18.5	23.5	17.0	25.0	17.0	19.0	16.5
19	20.0	14.0	11.0	9.5	22.0	17.5	25.0	17.0	24.0	17.0	19.5	15.0
20	19.0	14.5	16.0	9.0	19.0	17.0	26.0	19.0	24.0	16.5	17.5	14.5
21	20.0	15.0	18.5	13.5	18.0	16.0	24.5	20.5	25.0	16.0	18.5	15.5
22	18.5	15.0	18.5	12.5	21.0	17.0	22.5	21.5	26.0	16.0	16.5	13.5
23	18.0	13.5	19.0	13.0	21.5	18.0	25.5	21.0	26.0	17.5	17.0	11.0
24	18.0	12.5	17.0	13.5	19.0	16.5	24.0	21.5	25.5	19.0	17.0	13.5
25	17.0	14.5	15.0	13.0	21.0	18.0	25.0	19.5	26.0	20.0	19.0	14.0
26	14.5	8.0	13.5	11.5	20.5	17.0	25.0	18.0	25.0	20.0	15.5	14.0
27	8.0	6.0	17.5	10.5	22.0	17.0	23.5	19.5	22.0	19.0	16.0	15.0
28	9.0	5.5	17.0	12.5	23.0	18.0	25.5	19.5	22.0	18.5	15.5	13.5
29	13.0	6.0	15.0	14.5	23.0	19.5	26.0	21.5	24.0	19.5	16.5	12.0
30	15.5	7.5	16.0	14.0	22.0	19.0	24.5	21.5	21.5	15.5	14.0	12.5
31	---	---	18.5	14.5	---	---	26.0	21.0	22.0	14.0	---	---
MONTH	20.0	3.0	19.5	7.5	24.5	13.5	26.5	15.0	26.0	14.0	24.5	11.0

POTOMAC RIVER BASIN

01595800 NORTH BRANCH POTOMAC RIVER AT BARNUM, WV

LOCATION.--Lat 39°26'44", long 79°06'39", Garrett County, Md., Hydrologic Unit 02070002, on left bank at highway bridge at Barnum, W. Va., 0.4 mi (0.6 km) upstream from Folly Run, and 4.0 mi (6.4 km) southwest of Piedmont, W. Va.

DRAINAGE AREA.--266 mi² (689 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,151.82 ft (351.075 m) above mean sea level.

REMARKS.--Water-discharge records good. Regulation at low flow by Stony River Reservoir, 39 mi (63 km) above station (see station 01595200).

AVERAGE DISCHARGE.--10 years, 522 ft³/s (14.78 m³/s), 26.65 in/yr (677 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,800 ft³/s (362 m³/s) Dec. 8, 1972, gage height, 9.86 ft (3.005 m); minimum, 10 ft³/s (0.28 m³/s) Oct. 2, 3, 1968, gage height, 1.69 ft (0.515 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (110 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0430	*5330 151	7.42 2.262	Feb. 11	1215	4820 137	7.16 2.182

Minimum discharge, 29 ft³/s (0.82 m³/s) Aug. 26, Sept. 8, 9, gage height, 2.14 ft (0.652 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	357	268	142	3610	599	446	693	169	384	185	65	47
2	318	245	139	1570	496	410	664	265	373	160	62	43
3	286	224	129	1460	430	351	647	233	336	135	56	46
4	253	213	121	1400	400	320	960	199	288	140	51	45
5	227	198	120	980	389	295	903	181	243	135	48	40
6	212	189	121	770	491	279	734	172	223	120	45	37
7	178	186	169	705	430	259	642	166	222	110	135	33
8	156	181	182	711	374	243	576	174	198	105	168	30
9	182	173	161	506	370	245	508	156	178	95	85	30
10	331	163	176	435	384	271	446	147	159	95	65	35
11	496	164	166	484	2600	369	410	139	143	105	54	92
12	325	209	155	507	1560	488	374	154	130	300	48	54
13	255	549	374	420	1670	1050	342	139	119	190	43	39
14	224	351	462	1160	2600	877	312	127	195	110	41	36
15	205	294	347	655	1580	692	287	123	131	90	42	31
16	191	265	563	580	1660	640	265	215	116	124	51	62
17	418	261	542	502	1970	640	247	281	126	175	55	108
18	2610	243	436	365	2040	584	233	332	127	125	42	86
19	1150	225	318	324	1560	657	218	480	560	94	40	61
20	851	215	349	384	1190	687	202	347	650	79	39	50
21	707	206	334	370	967	1080	193	285	700	71	37	47
22	611	206	285	333	1010	1060	193	253	550	74	33	68
23	543	186	248	316	943	790	196	226	350	92	31	57
24	493	178	230	360	777	688	175	214	530	216	31	44
25	462	170	230	520	756	623	172	207	360	155	31	41
26	424	166	280	738	661	565	233	260	700	102	31	39
27	408	158	484	1440	593	522	254	212	400	84	317	42
28	374	164	353	1040	542	654	205	187	290	78	175	133
29	346	147	305	835	491	510	184	180	240	73	88	109
30	327	142	294	714	---	478	175	355	210	72	63	100
31	298	---	1550	636	---	462	---	411	---	67	51	---
TOTAL	14218	6539	9765	24830	29533	17235	11643	6989	9231	3756	2123	1685
MEAN	459	218	315	801	1018	556	388	225	308	121	68.5	56.2
MAX	2610	549	1550	3610	2600	1080	960	480	700	300	317	133
MIN	156	142	120	316	370	243	172	123	116	67	31	30

CAL YR 1975 TOTAL 215239 MEAN 590 MAX 4600 MIN 49 CFSM 2.22 IN. 30.09
WTR YR 1976 TOTAL 137547 MEAN 376 MAX 3610 MIN 30 CFSM 1.41 IN. 19.23

01595800 NORTH BRANCH POTOMAC RIVER AT BARNUM, WV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARDNESS (CA, MG)	NON-CARBONATE HARDNESS (MG/L)
OCT 20...	1235	851	--	--	9.5	11.0	--	--	--
DEC 05...	1005	123	360	4.6	--	1.0	1	140	140
FEB 26...	0900	667	230	4.2	--	6.0	1	74	74
MAR 22...	1000	1060	160	5.0	5.5	6.0	--	--	--
APR 30...	1055	171	350	4.3	16.5	10.5	1	140	140
JUL 13...	0920	182	400	3.9	16.5	18.0	--	--	--
29...	1235	76	--	--	33.0	25.0	--	--	--
AUG 19...	1455	43	740	4.0	--	23.0	2	340	340

DATE	TOTAL ACIDITY AS H+ (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)
OCT 20...	--	--	--	--	--	--	--	--	--
DEC 05...	.5	42	9.5	3.2	1.2	0	170	4.1	.1
FEB 26...	.4	22	4.7	1.9	1.0	0	82	3.8	.1
MAR 22...	--	--	--	--	--	--	--	--	--
APR 30...	.3	43	7.6	2.3	1.1	2	140	3.1	.1
JUL 13...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
AUG 19...	.3	110	17	4.5	1.9	0	340	5.4	.2

DATE	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
OCT 20...	--	--	--	--	--	--	--	--	--
DEC 05...	6.5	--	237	.38	.02	830	--	950	--
FEB 26...	5.0	--	121	.69	.02	1400	--	480	--
MAR 22...	--	--	--	--	--	--	--	--	--
APR 30...	4.6	--	203	.03	.02	780	--	730	--
JUL 13...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
AUG 19...	8.7	560	490	.42	.01	320	100	1800	1800

01596500 SAVAGE RIVER NEAR BARTON, MD

LOCATION.--Lat 39°34'05", long 79°06'10", Garrett County, Hydrologic Unit 02070002, on right bank 0.9 mi (1.4 km) upstream from Bear Pen Run, 1.5 mi (2.4 km) downstream from Popular Lick Run, 5.4 mi (8.7 km) northwest of Barton, and 10 mi (16 km) upstream from mouth.

DRAINAGE AREA.--49.1 mi² (127.2 km²).

PERIOD OF RECORD.--September 1948 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1603.88 ft (488.863 m) above mean sea level.

REMARKS.--Records good except those for January, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years, 73.7 ft³/s (2.087 m³/s), 20.38 in/yr (518 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,510 ft³/s (213 m³/s) Oct. 15, 1954, gage height, 8.45 ft (2.576 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.40 ft³/s (0.011 m³/s) Sept. 3, 4, 1966, gage height, 0.96 ft (0.293 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 937 ft³/s (26.5 m³/s) Jan. 1, gage height, 3.51 ft (1.070 m), no other peak above base of 800 ft³/s (22 m³/s); minimum, 1.7 ft³/s (0.048 m³/s) Sept. 9, 10, gage height, 1.09 ft (0.332 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	28	20	717	71	47	76	19	48	13	14	2.8
2	42	27	19	329	50	43	86	21	106	12	6.7	3.8
3	33	24	18	215	64	40	95	20	97	11	5.5	3.9
4	28	23	13	170	62	37	189	17	75	10	4.7	3.3
5	24	22	14	135	52	35	230	15	59	9.9	4.1	2.9
6	21	20	15	130	48	33	173	15	48	9.1	4.1	2.5
7	19	19	18	110	41	30	129	16	41	9.4	29	2.3
8	17	19	15	90	53	29	98	16	33	9.5	28	2.0
9	22	18	16	52	47	27	79	14	28	12	15	1.9
10	32	18	23	48	44	29	66	14	23	9.0	11	3.2
11	65	18	20	48	388	37	58	13	20	12	8.4	3.9
12	64	48	17	46	276	44	50	14	18	26	7.0	3.1
13	54	92	36	50	334	111	46	13	15	13	6.0	2.5
14	46	78	60	92	457	143	41	12	14	9.3	5.5	2.1
15	40	66	66	102	286	120	36	12	12	9.3	6.0	2.0
16	35	58	71	98	476	104	33	27	12	24	6.5	15
17	60	50	64	88	568	90	30	39	11	14	5.0	15
18	465	45	57	82	422	78	27	52	10	10	4.1	14
19	277	43	46	78	296	78	25	71	16	8.4	3.6	9.0
20	230	41	54	72	205	84	24	65	67	7.1	3.2	6.6
21	164	40	47	65	149	110	22	55	60	10	3.2	5.8
22	123	36	37	60	131	131	22	45	57	19	3.0	4.9
23	92	32	37	56	104	121	21	37	39	12	2.8	4.2
24	72	28	35	52	86	101	19	34	30	12	2.6	3.5
25	62	28	41	62	74	87	19	30	29	11	2.6	3.3
26	55	26	54	94	68	73	25	29	27	8.6	2.4	3.1
27	49	25	75	275	63	65	21	24	21	7.1	8.8	4.4
28	42	24	59	184	56	62	19	21	17	6.5	7.0	12
29	38	20	52	135	51	53	18	23	16	6.5	5.0	7.8
30	35	20	51	101	---	52	18	47	14	6.0	3.2	9.0
31	31	---	185	82	---	52	---	48	---	7.1	2.9	---
TOTAL	2383	1036	1335	3918	5022	2146	1795	878	1063	343.8	220.9	159.8
MEAN	76.9	34.5	43.1	126	173	69.2	59.8	28.3	35.4	11.1	7.13	5.33
MAX	465	92	185	717	568	143	230	71	106	26	29	15
MIN	17	18	13	46	41	27	18	12	10	6.0	2.4	1.9
CFSM	1.57	.70	.88	2.57	3.52	1.41	1.22	.58	.72	.23	.15	.11
IN.	1.81	.78	1.01	2.97	3.80	1.63	1.36	.67	.81	.26	.17	.12

CAL YR 1975 TOTAL 34666.3 MEAN 95.0 MAX 1200 MIN 2.6 CFSM 1.93 IN 26.26
WTR YR 1976 TOTAL 20300.5 MEAN 55.5 MAX 717 MIN 1.9 CFSM 1.13 IN 15.38

01597000 CRABTREE CREEK NEAR SWANTON, MD

LOCATION.--Lat 39°30'00", long 79°09'35", Garrett County, Hydrologic Unit 02070002, on left bank 0.5 mi (0.8 km) upstream from mouth, 1.0 mi (1.6 km) downstream from Springlick Run, and 5.0 mi (8.0 km) northeast of Swanton.

DRAINAGE AREA.--16.7 mi² (43.3 km²).

PERIOD OF RECORD.--September 1948 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,529.06 ft (466.058 m) above mean sea level (Corps of Engineers bench mark).

REMARKS.--Records good except those for winter periods, which are fair. Small diversion above station by Baltimore and Ohio Railroad. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years, 28.5 ft³/s (0.807 m³/s), 23.18 in/yr (589 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,260 ft³/s (92.3 m³/s) July 12, 1949, gage height, 5.01 ft (1.527 m), from rating curve extended above 210 ft³/s (5.95 m³/s) on basis of slope-area and contracted-opening measurements of peak flow; minimum, 0.1 ft³/s (0.003 m³/s) Dec. 3, 1953, gage height, 0.56 ft (0.171 m); minimum daily, 0.8 ft³/s (0.023 m³/s) Nov. 6, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 302 ft³/s (8.55 m³/s) Jan. 1, gage height, 2.35 ft (0.716 m); no peak above base of 330 ft³/s (9.3 m³/s); minimum, 1.7 ft³/s (0.048 m³/s) Sept. 15, gage height, 0.71 ft (0.216 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	12	8.3	244	31	21	28	8.8	21	11	4.0	2.1
2	19	11	7.8	130	27	19	31	9.5	28	10	3.0	3.2
3	15	11	7.5	96	25	17	34	8.8	32	8.8	2.8	2.5
4	13	10	7.1	81	23	16	52	8.0	29	8.7	2.6	2.2
5	12	10	6.9	65	19	15	64	7.9	24	7.4	2.5	2.2
6	11	9.6	7.2	49	21	14	59	7.9	20	6.8	2.6	2.0
7	10	9.4	7.6	42	19	13	46	8.3	17	6.5	2.7	1.9
8	9.8	9.3	6.7	37	18	13	36	8.0	14	6.1	1.8	1.9
9	13	8.8	7.4	32	16	13	31	7.6	13	5.2	1.2	1.9
10	17	8.8	8.1	30	18	14	27	7.4	11	5.5	8.9	2.8
11	35	8.2	7.2	29	111	17	23	7.6	10	9.6	7.1	2.2
12	38	11	7.0	22	111	20	19	7.9	9.0	15	5.8	1.9
13	33	13	14	20	120	64	17	7.1	8.1	6.7	5.1	1.8
14	28	12	19	32	157	73	15	6.9	7.7	5.4	5.0	1.8
15	24	12	23	27	121	58	14	6.8	6.8	5.4	4.9	2.0
16	20	12	26	26	143	50	13	9.8	6.3	7.7	4.6	6.4
17	28	12	26	26	158	43	12	8.1	6.4	6.4	3.6	6.2
18	162	12	26	24	142	38	11	14	5.9	4.8	3.3	3.6
19	115	12	24	24	113	37	11	16	12	4.3	3.0	2.6
20	78	12	23	22	85	38	11	18	21	4.0	2.8	2.4
21	54	12	19	16	65	69	10	17	16	4.9	2.7	3.0
22	42	12	16	14	59	88	11	15	14	5.7	2.5	2.5
23	34	11	15	14	46	73	9.6	14	13	5.8	2.5	2.2
24	28	10	14	14	38	55	9.1	12	21	5.4	2.4	2.1
25	24	10	13	15	35	43	9.6	12	25	4.3	2.4	2.1
26	22	9.7	15	29	32	34	11	11	34	3.6	2.3	2.1
27	18	9.9	15	71	29	32	9.0	9.8	26	3.5	4.6	3.0
28	16	9.1	13	72	26	28	8.4	8.8	19	3.4	2.9	4.1
29	15	8.4	13	56	24	24	8.0	10	15	3.4	2.6	2.6
30	14	8.3	15	43	---	24	7.8	17	13	3.2	2.2	5.9
31	13	---	8.8	34	---	23	---	17	---	3.3	2.1	---
TOTAL	984.8	316.5	505.8	1436	1832	1086	647.5	328.0	498.2	191.8	157.8	83.2
MEAN	31.8	10.6	16.3	46.3	63.2	35.0	21.6	10.6	16.6	6.19	5.09	2.77
MAX	162	13	88	244	158	88	64	18	34	15	27	6.4
MIN	9.8	8.2	6.7	14	16	13	7.8	6.8	5.9	3.2	2.1	1.8
CFSM	1.90	.63	.98	2.77	3.78	2.10	1.29	.63	.99	.37	.30	.17
IN.	2.19	.70	1.13	3.20	4.08	2.42	1.44	.73	1.11	.43	.35	.19

CAL YR 1975 TOTAL 13652.0 MEAN 37.4 MAX 393 MIN 3.2 CFSM 2.24 IN 30.41
WTR YR 1976 TOTAL 8067.6 MEAN 22.0 MAX 244 MIN 1.8 CFSM 1.32 IN 17.97

POTOMAC RIVER BASIN

01597500 SAVAGE RIVER, BELOW SAVAGE RIVER DAM, NEAR BLOOMINGTON, MD

LOCATION.--Lat 39°30'05", long 79°07'25", Garrett County, Hydrologic Unit 02070002, on left bank 0.7 mi (1.1 km) downstream from Savage River Dam, 1.1 mi (1.8 km) downstream from Crabtree Creek, 3.2 mi (5.1 km) northwest of Bloomington, and 3.7 mi (6.0 km) upstream from mouth.

DRAINAGE AREA.--106 mi² (275 km²).

PERIOD OF RECORD.--October 1948 to current year.

REVISED RECORDS.--WSP 1432: 1955.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,276.40 ft (389.047 m) above mean sea level (Corps of Engineers bench mark).

REMARKS.--Records good. Diversions above station by Baltimore and Ohio Railroad and by cities of Frostburg and Westernport for municipal supply. Flow regulated by Savage River Reservoir beginning December 1950, capacity 20,000 acre-ft (24.7 hm³). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years, 165 ft³/s (4.673 m³/s), 21.14 in/yr (537 mm/yr), adjusted for storage since December 1950.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,530 ft³/s (185 m³/s) Oct. 16, 1954, gage height, 7.70 ft (2.347 m); minimum, 0.35 ft³/s (0.010 m³/s) Oct. 27, 1966, gage height, 0.57 ft (0.174 m); minimum daily, 0.6 ft³/s (0.017 m³/s) July 27-31, Aug. 5, 6, 9, 10, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,360 ft³/s (38.5 m³/s) Oct. 20, gage height, 4.42 ft (1.347 m); minimum, 6.4 ft³/s (0.18 m³/s) Oct. 2, gage height, 0.88 ft (0.268 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	107	98	112	94	92	22	18	18	31	42	50
2	102	107	98	809	94	92	17	18	18	29	45	50
3	107	107	98	1150	94	92	17	18	18	24	47	85
4	107	107	97	1110	366	92	18	18	18	23	53	331
5	107	107	97	864	242	92	18	18	18	21	56	480
6	107	106	97	585	92	92	18	18	18	20	64	65
7	107	105	97	348	92	92	18	18	44	21	59	71
8	107	105	81	95	92	92	18	18	81	20	31	78
9	107	105	72	94	92	92	17	18	71	21	31	87
10	107	105	71	191	92	91	17	18	60	21	41	87
11	108	104	70	94	97	91	17	18	52	30	67	87
12	108	104	70	94	715	92	17	18	45	72	80	86
13	433	105	70	94	1020	95	17	18	37	36	80	86
14	612	105	71	94	1030	97	22	18	36	24	80	86
15	289	105	87	344	1020	526	18	18	32	21	80	86
16	101	105	354	284	1010	329	18	18	31	31	80	86
17	103	105	245	91	1030	97	18	18	30	33	80	47
18	113	105	95	90	1040	60	18	18	30	22	79	26
19	110	102	95	56	1020	38	18	18	42	18	79	56
20	729	105	95	37	724	39	18	18	132	27	78	72
21	1300	105	96	38	507	40	18	18	122	39	78	72
22	1000	105	352	38	331	79	18	18	103	42	78	71
23	571	105	336	73	95	104	18	18	73	42	78	71
24	563	380	91	92	95	105	18	18	68	30	78	71
25	390	270	91	92	365	105	18	18	67	15	77	71
26	108	100	92	93	344	105	18	18	78	16	75	71
27	108	100	92	351	94	107	18	18	62	32	76	71
28	108	100	92	489	94	106	18	18	49	36	201	71
29	108	99	92	484	94	57	18	18	42	40	189	71
30	107	99	93	338	---	27	18	18	37	42	57	71
31	107	---	205	93	---	27	---	18	---	42	50	---
TOTAL	8242	3569	3790	8817	12075	3245	541	558	1532	921	2289	2813
MEAN	266	119	122	284	416	105	18.0	18.0	51.1	29.7	73.8	93.8
MAX	1300	380	354	1150	1040	526	22	18	132	72	201	480
MIN	101	99	70	37	92	27	17	18	18	15	31	26
(f)	8530	6160	4660	4330	4170	8870	15460	18250	20050	19670	16450	11640

CAL YR 1975 TOTAL 77935 MEAN 214 MAX 1750 MIN 17 CFSM 2.01 IN. 27.34
WTR YR 1976 TOTAL 48392 MEAN 132 MAX 1300 MIN 15 CFSM 1.25 IN. 16.98

/ Monthend contents, in acre-feet, in Savage River Reservoir (contents on Sept. 30, 1975, 13,410 acre-feet).
Records furnished by Corps of Engineers.

01598500 NORTH BRANCH POTOMAC RIVER AT LUKE, MD

LOCATION.--Lat 39°28'45", long 79°03'55", Mineral County, WV, Hydrologic Unit 02070002, on right bank 0.2 mi (0.3 km) downstream from Savage River, 0.5 mi (0.8 km) northwest of Luke, and at mile 53.3 (85.8 km).

DRAINAGE AREA.--404 mi² (1,046 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1899 to July 1906 (published as "at Piedmont, W. Va."), October 1949 to current year.

REVISED RECORDS.--WSP 192: 1899-1904. WSP 1432: 1905-6, drainage area at former site.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 944.22 ft (287.798 m) above mean sea level. June 27, 1899, to July 15, 1906, nonrecording gage at bridge 1.1 mi (1.8 km) downstream at datum about 35 ft (11 m) lower.

REMARKS.--Water-discharge records good except those for winter periods, which are fair. Flow regulated since 1913 by Stony River Reservoir, 45 mi (72 km) above station (see station 01595200), and since December 1950, by Savage River Reservoir, 5 mi (8 km) above station (see station 01597500). Some regulation at low flow by West Virginia Pulp and Paper Company at site used 1899-1906.

AVERAGE DISCHARGE.--33 years (water years 1900-05, 1950-76), 699 ft³/s (19.80 m³/s), 23.50 in/yr (597 mm/yr), adjusted for storage since October 1949.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,400 ft³/s (1,120 m³/s) Oct. 15, 1954, gage height, 17.15 ft (5.227 m); minimum daily, 6 ft³/s (0.17 m³/s) Sept. 4, 1904.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,760 ft³/s (163 m³/s) Jan. 1, gage height, 7.57 ft (2.307 m); maximum gage height, 8.56 ft (2.609 m) Jan. 19, backwater from ice jam; minimum, 88 ft³/s (2.49 m³/s) Sept. 19, gage height, 1.18 ft (0.360 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	522	400	241	4170	709	565	769	191	427	221	108	97
2	466	372	240	2540	630	524	742	290	434	149	106	96
3	429	345	230	2700	550	466	727	253	387	163	101	121
4	387	331	221	2670	761	429	1060	225	335	161	101	350
5	355	317	217	1970	691	405	1010	197	281	157	102	457
6	334	303	219	1460	591	388	821	188	254	140	106	99
7	299	296	256	1170	544	357	714	181	280	131	204	106
8	275	291	265	890	475	339	629	190	285	124	229	104
9	313	282	231	660	470	347	555	173	252	118	122	116
10	492	271	246	675	479	372	495	163	224	117	104	122
11	679	271	240	608	2670	489	455	158	197	129	115	169
12	493	301	224	624	2370	614	416	169	177	370	125	143
13	694	675	440	540	2760	1200	375	157	156	230	120	126
14	861	498	578	1280	3810	1080	350	144	222	136	118	121
15	549	422	464	1050	2760	1240	320	140	167	110	120	119
16	317	387	924	940	2800	1050	300	222	143	140	126	155
17	538	376	860	620	3120	844	278	310	154	210	133	181
18	3050	363	561	475	3250	690	260	360	154	150	118	116
19	1510	337	440	400	2720	742	247	521	616	112	115	111
20	1610	328	460	425	2070	770	230	387	811	102	114	122
21	1990	323	450	450	1600	1140	222	316	849	107	111	119
22	1660	324	710	420	1450	1230	223	277	683	116	108	135
23	1200	301	716	420	1150	962	225	251	447	130	105	130
24	1110	494	335	500	960	840	200	237	622	241	105	116
25	894	517	325	700	1150	763	198	235	436	180	106	112
26	578	272	345	900	1100	710	269	288	801	118	107	110
27	556	261	638	1870	735	662	294	239	469	108	367	115
28	525	267	484	1670	667	792	233	211	345	113	374	188
29	490	251	410	1400	611	607	209	208	286	110	259	187
30	468	241	395	1140	---	541	192	395	249	111	124	173
31	434	---	1710	765	---	518	---	487	---	107	100	---
TOTAL	24078	10417	14075	36102	43653	21676	13018	7763	11143	4651	4353	4416
MEAN	777	347	454	1165	1505	699	434	250	371	150	140	147
MAX	3050	675	1710	4170	3810	1240	1060	521	849	370	374	457
MIN	275	241	217	400	470	339	192	140	143	102	100	96

CAL YR 1975 TOTAL 317883 MEAN 871 MAX 6170 MIN 107 CFSM 2.16 IN. 29.26
WTR YR 1976 TOTAL 195345 MEAN 534 MAX 4170 MIN 96 CFSM 1.32 IN. 17.98

POTOMAC RIVER BASIN

01598500 NORTH BRANCH POTOMAC RIVER AT LUKE, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1961 to December 1962, July to September 1963, December 1963 to September 1973, October 1974 to current year.

INSTRUMENTATION.--Temperature recorder during all periods.

REMARKS.--Interruptions in the record for the current year were due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 33.0°C July 3, 1966; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum 28.5°C July 15; minimum, 0.0°C on Feb. 2, 10.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

01598500 NORTH BRANCH POTOMAC RIVER AT LUKE, MD--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				---	---	---	12.0	9.0	10.5	13.5	12.0	12.5
2				10.0	8.5	9.5	8.5	6.0	7.5	15.0	11.0	13.0
3				10.5	9.0	9.5	10.0	5.0	7.5	13.5	11.5	12.5
4				13.0	6.0	11.0	10.5	8.5	10.0	14.0	10.0	11.5
5				12.5	11.0	12.0	9.5	7.0	8.0	17.0	9.0	13.0
6				11.0	7.0	9.0	10.0	6.0	8.5	17.0	13.5	15.0
7				7.5	4.5	6.0	12.0	7.5	10.0	16.0	13.0	15.0
8				7.5	4.5	6.0	11.5	8.0	9.5	16.0	11.0	13.5
9				6.0	0.5	3.0	10.0	6.0	8.0	18.0	10.0	14.0
10				7.0	0.5	4.0	10.5	5.5	8.5	19.0	12.0	15.5
11				8.5	5.5	7.0	10.0	6.0	8.5	18.0	14.0	15.5
12				7.0	6.0	6.0	9.0	4.5	6.5	19.0	12.5	15.5
13				8.5	6.0	7.0	10.5	5.0	8.0	20.0	12.0	16.0
14				7.5	4.5	6.0	13.0	7.0	10.0	20.5	15.0	17.5
15				9.5	5.0	7.0	15.0	9.0	12.5	21.0	16.5	19.0
16				8.0	5.5	6.5	17.0	12.0	15.0	22.0	19.0	20.0
17				5.0	3.0	4.0	19.5	14.0	17.0	21.5	17.5	19.5
18				5.5	1.5	3.5	21.0	15.0	18.0	19.5	13.0	16.5
19				9.0	4.5	6.5	22.0	16.0	19.0	12.5	10.5	11.5
20				12.0	7.5	10.0	21.0	16.5	19.0	16.0	10.0	13.0
21				12.5	10.5	12.0	22.0	16.5	19.0	20.0	15.0	17.0
22				10.0	8.0	9.0	20.5	16.5	18.0	20.5	14.5	17.5
23				10.0	6.0	8.0	19.5	15.0	17.0	20.5	14.5	17.5
24				11.5	7.0	9.5	20.0	13.5	17.0	20.0	15.0	17.0
25				10.5	9.5	10.0	18.5	13.0	17.0	17.0	13.5	15.0
26				13.5	8.5	11.0	15.0	9.5	12.0	14.5	12.5	13.5
27				13.5	11.5	12.5	9.0	7.5	8.5	19.0	12.0	15.0
28				13.5	9.0	11.5	11.0	6.5	9.0	20.0	14.0	17.0
29				11.5	9.0	10.0	14.5	8.5	11.5	17.5	15.0	16.0
30				11.5	9.0	10.5	16.5	10.0	13.0	17.5	14.5	16.0
31				12.0	9.5	11.0	---	---	---	20.0	15.5	17.5
MONTH				13.5	0.5	8.5	22.0	4.5	12.0	22.0	9.0	15.5
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.0	17.5	18.0	22.0	18.5	20.5	25.0	20.5	22.5	23.0	15.5	17.5
2	19.5	16.0	17.5	23.5	16.5	20.0	24.5	17.5	19.0	24.0	18.5	21.0
3	20.0	15.0	17.5	22.5	18.5	20.5	26.5	16.5	21.5	21.5	16.5	19.5
4	21.0	15.5	18.0	24.5	18.0	21.0	26.5	17.5	22.0	22.0	13.0	17.5
5	21.0	15.5	18.5	26.0	18.5	22.0	23.5	18.0	21.5	20.0	13.0	16.5
6	18.0	15.5	16.5	26.0	19.0	22.0	23.5	20.0	22.0	23.5	15.0	19.0
7	22.5	15.0	19.0	22.5	21.0	22.0	24.0	21.0	22.0	23.5	14.0	18.5
8	23.0	17.5	20.5	21.5	19.0	20.5	22.5	20.0	21.5	23.5	15.5	19.5
9	24.5	18.0	21.5	28.0	19.5	22.5	22.5	18.5	20.5	24.5	16.0	21.0
10	25.0	19.0	22.0	24.0	19.5	21.0	24.5	18.0	21.0	21.5	16.0	19.5
11	25.0	19.5	22.5	27.5	19.5	22.0	27.0	17.5	22.0	20.0	14.0	16.5
12	27.5	20.5	24.0	24.0	21.0	23.0	27.5	19.0	23.5	23.5	14.5	18.5
13	23.5	21.0	22.0	24.0	18.5	21.0	27.0	20.5	23.5	24.5	15.0	19.5
14	25.5	20.0	23.0	25.5	18.0	22.0	26.0	20.5	23.0	23.0	16.0	19.5
15	27.5	21.5	24.5	28.5	21.0	24.5	23.5	20.5	22.0	19.5	17.5	18.5
16	24.5	22.0	23.5	24.5	22.5	23.5	26.0	18.5	22.0	18.5	17.0	18.0
17	27.0	21.0	23.5	24.5	20.0	22.5	26.0	17.0	21.5	20.5	17.5	18.5
18	28.0	21.0	24.0	25.0	18.5	22.0	26.5	18.0	22.0	20.0	17.0	18.0
19	24.0	20.5	22.0	27.5	18.0	22.5	26.0	18.0	22.0	21.0	15.5	18.0
20	21.5	19.0	20.0	28.0	21.0	24.0	25.5	17.5	21.0	18.5	15.0	17.0
21	20.5	18.0	19.0	25.5	21.0	23.5	26.0	16.5	21.0	20.5	16.0	17.5
22	23.5	18.5	21.0	24.0	22.0	22.5	26.5	16.0	21.5	18.0	13.5	15.5
23	24.5	20.0	22.5	26.5	21.0	23.0	26.5	18.0	22.5	19.0	11.5	15.0
24	22.5	19.5	21.0	26.0	22.5	24.0	26.0	19.5	22.5	17.0	14.0	15.5
25	23.5	19.5	21.5	26.5	21.0	23.0	27.0	20.5	23.5	20.0	14.0	16.5
26	23.5	19.0	21.0	27.5	19.0	23.0	25.0	20.5	23.0	17.0	14.5	15.5
27	25.0	19.0	22.0	25.0	20.5	23.0	22.5	21.0	22.0	17.0	15.5	16.0
28	25.5	20.5	23.0	27.0	20.5	24.0	23.5	17.5	21.0	16.0	14.5	15.5
29	26.0	22.5	24.0	27.5	22.5	25.0	24.5	16.0	21.5	17.5	13.0	15.0
30	24.5	21.5	23.0	26.0	22.5	24.5	23.5	17.0	20.0	14.5	13.5	14.0
31	---	---	---	27.0	22.0	24.5	24.0	15.0	19.0	---	---	---
MONTH	28.0	15.0	21.0	28.5	16.5	22.5	27.5	15.0	21.5	24.5	11.5	17.5

POTOMAC RIVER BASIN

01599000 GEORGES CREEK AT FRANKLIN, MD

LOCATION.--Lat 39°29'38", long 79°02'42", Allegany County, Hydrologic Unit 02070002, on right bank at Franklin, and 1.2 mi (1.9 km) upstream from Westernport and mouth.

DRAINAGE AREA.--72.4 mi² (187.5 km²).

PERIOD OF RECORD.--May 1905 to July 1906 (published as "at Westernport"), October 1929 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1502: 1940.

GAGE.--Water-stage recorder. Datum of gage is 958.96 ft (292.291 m) above mean sea level (Westvaco Corporation bench mark). May 4, 1905, to July 15, 1906, nonrecording gage at bridge 0.8 mi (1.3 km) downstream at different datum. Oct. 16, 1929, to Oct. 1, 1937, water-stage recorder at site 95 ft (29 m) downstream at present datum.

REMARKS.--Records good. Records include about 0.5 ft³/s (0.014 m³/s) of sewage from city of Frostburg, which obtains its water supply from Big Piney Run (Monongahela River basin) and Savage River. A negligible discharge is diverted above station by Frostburg Water Co. for municipal supplies of Eckhart and Welch Hill. An undetermined amount of water is diverted from the upper third of basin into the Wills Creek basin by the Hoffman drainage tunnel (see station 01601500). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--47 years (water years 1930-76), 79.7 ft³/s (2.257 m³/s), 14.95 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,500 ft³/s (241 m³/s) Mar. 17, 1936, gage height, 9.6 ft (2.93 m), site then in use, from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.6 ft³/s (0.045 m³/s) Sept. 29 to Oct. 13, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1924, reached a stage of about 10 ft (3.0 m), from flood-marks, at site 95 ft (29 m) downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,200 ft³/s (34.0 m³/s) Oct. 18, gage height, 6.35 ft (1.935 m), no other peak above base of 1,200 ft³/s (34 m³/s); minimum, 6.0 ft³/s (0.17 m³/s) Sept. 8, 9, 14, 15, gage height, 3.05 ft (0.930 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	52	27	582	90	77	149	35	60	19	23	7.4
2	70	50	26	340	70	70	134	38	72	17	12	11
3	56	46	24	269	60	65	127	32	60	14	10	8.8
4	49	42	23	207	74	61	162	28	52	14	9.5	8.3
5	42	39	22	140	68	57	146	27	44	16	9.2	7.7
6	38	36	23	127	68	54	134	25	40	15	9.5	7.1
7	34	36	23	125	58	51	125	26	37	19	65	6.9
8	32	36	21	128	56	48	113	25	32	14	39	6.5
9	67	33	25	76	52	51	101	23	29	15	17	6.3
10	101	35	31	68	60	59	91	22	25	13	13	11
11	147	33	25	83	379	77	84	22	23	17	12	8.1
12	101	69	22	78	226	76	73	23	21	28	11	6.9
13	78	94	49	70	317	133	66	20	20	14	9.7	7.0
14	66	66	50	104	366	121	60	20	20	12	9.5	6.4
15	58	56	42	70	292	106	58	19	17	12	12	7.5
16	53	52	42	67	383	108	56	48	16	18	12	39
17	191	49	38	56	430	104	52	55	17	14	9.5	36
18	707	46	36	36	431	90	48	68	14	12	8.8	20
19	376	44	26	46	346	93	45	66	81	11	8.4	12
20	365	43	38	56	259	88	44	52	148	10	8.2	10
21	235	42	36	51	207	124	41	45	119	13	8.1	10
22	182	39	31	45	187	118	44	38	91	26	7.9	8.9
23	146	36	31	42	151	102	39	36	54	14	7.8	8.4
24	125	35	28	53	133	96	35	33	43	15	8.3	8.0
25	112	34	28	62	123	93	43	39	39	13	11	8.0
26	101	32	38	69	113	85	47	40	34	11	11	8.2
27	88	32	48	182	102	91	37	31	26	11	22	11
28	77	30	37	136	92	87	33	27	22	14	11	13
29	69	28	33	117	84	73	31	39	21	13	9.7	10
30	62	28	39	105	---	85	29	90	20	11	8.0	25
31	55	---	238	95	---	86	---	69	---	11	7.5	---
TOTAL	3965	1293	1200	3685	5277	2629	2247	1161	1297	456	420.6	344.4
MEAN	128	43.1	38.7	119	182	84.8	74.9	37.5	43.2	14.7	13.6	11.5
MAX	707	94	238	582	431	133	162	90	148	28	65	39
MIN	32	28	21	36	52	48	29	19	14	10	7.5	6.3
CFSM	1.77	.60	.53	1.64	2.51	1.17	1.03	.52	.60	.20	.19	.16
IN.	2.04	.66	.62	1.89	2.71	1.35	1.15	.60	.67	.23	.22	.18
CAL YR 1975	TOTAL	44848.6	MEAN 123	MAX 1060	MIN 9.6	CFSM 1.70	IN 23.04					
WTR YR 1976	TOTAL	23975.0	MEAN 65.5	MAX 707	MIN 6.3	CFSM .90	IN 12.32					

01600000 NORTH BRANCH POTOMAC RIVER AT PINTO, MD

LOCATION.--Lat 39°33'59", long 78°50'25", Mineral County, W. Va., Hydrologic Unit 02070002, on right bank at downstream side of Western Maryland Railway bridge at Pinto, 2.8 mi (4.5 km) downstream from Mill Run, and at mile 32.6 (52.5 km).

DRAINAGE AREA.--596 mi² (1,544 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1332: 1943.

GAGE.--Water-stage recorder. Datum of gage is 648.23 ft (197.581 m) above mean sea level (Corps of Engineers bench mark). Prior to Dec. 10, 1938, nonrecording gage at highway bridge 250 ft (76 m) downstream at same datum.

REMARKS.--Water-discharge records good except those for winter periods, which are fair. Some regulation at low flow by Stony River Reservoir, 66 mi (106 km) above station (see station 01595200), and since December 1950, by Savage River Reservoir (see station 01597500).

AVERAGE DISCHARGE.--38 years, 876 ft³/s (24.81 m³/s), 19.96 in/yr (507 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,000 ft³/s (1,050 m³/s) Oct. 16, 1954, gage height, 23.23 ft (7.081 m); minimum, 31 ft³/s (0.88 m³/s) Dec. 18, 19, 1943, gage height, 1.37 ft (0.418 m), result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1924, reached a stage of about 24 ft (7.3 m), discharge, about 55,000 ft³/s (1,560 m³/s). Flood of Mar. 17, 1936, reached a stage of about 23.5 ft (7.16 m), from floodmarks, discharge, about 50,000 ft³/s (1,420 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,610 ft³/s (244 m³/s) Jan. 1, gage height, 10.61 ft (3.234 m); minimum, 101 ft³/s (2.86 m³/s) Sept. 9, gage height, 1.75 ft (0.533 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	779	530	311	6650	1010	788	1080	270	538	292	150	116
2	690	495	305	3480	947	724	1140	341	599	268	139	124
3	612	471	293	3190	746	661	1100	374	528	228	131	119
4	547	435	281	3230	871	597	1330	314	462	205	120	279
5	492	416	272	2410	1040	563	1470	277	407	218	123	430
6	459	393	273	1880	745	536	1200	257	356	192	123	368
7	422	385	278	1640	790	497	1060	246	352	195	235	128
8	377	379	342	1260	655	464	940	245	381	176	466	119
9	425	366	297	915	650	471	831	240	343	164	225	123
10	707	356	314	845	626	508	742	218	303	147	150	153
11	989	349	316	854	2720	659	678	211	268	155	136	166
12	819	416	284	854	2860	919	623	217	239	319	150	196
13	766	949	365	755	2910	1270	559	218	211	407	150	159
14	1060	760	811	1380	4350	1610	519	193	232	218	147	147
15	889	617	600	1270	3190	1440	479	190	246	161	150	148
16	464	544	784	1270	3180	1530	448	236	198	147	161	235
17	695	515	1200	855	3550	1180	416	475	195	235	167	290
18	5740	497	716	595	3850	989	390	427	198	228	158	241
19	2690	460	545	485	3290	990	370	693	561	161	139	154
20	2220	440	533	565	2620	1020	349	548	933	131	136	145
21	2490	436	580	598	2050	1160	337	437	1120	131	131	159
22	2160	430	602	520	1850	1660	339	375	916	158	128	154
23	1560	401	881	455	1570	1260	340	336	660	161	126	175
24	1430	462	448	520	1300	1110	310	312	694	215	123	151
25	1320	739	408	764	1340	1020	300	302	572	303	123	136
26	838	356	461	771	1480	960	333	359	821	179	123	134
27	780	343	711	2130	1010	896	432	333	654	139	225	143
28	723	343	651	2160	916	1040	347	279	471	141	587	175
29	665	326	541	1780	838	880	307	266	385	155	288	271
30	620	310	526	1590	---	769	282	450	339	144	276	234
31	577	---	1470	1110	---	753	---	715	---	141	136	---
TOTAL	35005	13919	16399	46781	52954	28924	19051	10354	14182	6114	5622	5572
MEAN	1129	464	529	1509	1826	933	635	334	473	197	181	186
MAX	5740	949	1470	6650	4350	1660	1470	715	1120	407	587	430
MIN	377	310	272	455	626	464	282	190	195	131	120	116
CAL YR 1975	TOTAL	420240	MEAN	1151	MAX	6980	MIN	141	CFSM	1.93	IN.	26.22
WTR YR 1976	TOTAL	254877	MEAN	696	MAX	6650	MIN	116	CFSM	1.17	IN.	15.90

POTOMAC RIVER BASIN

01600000 NORTH BRANCH POTOMAC RIVER AT PINTO, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-74, 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
NOV									
03...	1230	437	--	--	15.0	13.0	--	--	--
04...	1330	432	--	--	24.0	14.0	--	--	--
DEC									
01...	1145	309	--	--	.0	8.5	--	--	--
JAN									
05...	1040	2480	200	6.8	--	1.0	1	68	54
FEB									
02...	1030	980	450	7.4	--	2.0	--	--	--
04...	1445	690	--	--	10.0	1.5	--	--	--
APR									
01...	1030	1040	520	7.4	10.0	10.5	--	--	--
MAY									
03...	1030	381	750	6.3	--	15.5	37	230	210
06...	1250	246	--	--	26.0	17.5	--	--	--
JUN									
01...	1110	508	440	7.2	23.5	20.5	--	--	--
14...	1005	225	--	--	21.0	23.0	--	--	--
14...	1310	190	--	--	29.0	24.5	--	--	--
JUL									
01...	1150	304	600	6.9	20.0	23.0	--	--	--
06...	1250	185	--	--	25.0	24.0	--	--	--
AUG									
02...	1155	143	1150	7.3	--	23.5	55	360	320
03...	1440	130	--	--	24.0	24.0	--	--	--
SEP									
01...	1135	118	--	--	--	19.5	--	--	--

[illegible]

01601500 WILLS CREEK NEAR CUMBERLAND, MD

LOCATION.--Lat 39°40'07", long 78°47'18", Allegany County, Hydrologic Unit 02070002, on right bank at downstream side of Western Maryland Railway bridge, 2.0 mi (3.2 km) upstream from Cumberland, and mouth.

DRAINAGE AREA.--247 mi² (640 km²).

PERIOD OF RECORD.--May 1905 to July 1906 (published as "at Cumberland"), October 1929 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1432: 1906, 1930(M), 1933-34(M), 1936-37, 1945(M).

GAGE.--Water-stage recorder. Datum of gage is 640.89 ft (195.343 m) above mean sea level (Corps of Engineers bench mark). May 6, 1905, to July 14, 1906, nonrecording gage at highway bridge 700 ft (213 m) upstream at different datum. Oct. 18, 1929, to Mar. 17, 1936, water-stage recorder, and Apr. 1, 1936, to Mar. 19, 1937, nonrecording gage at site 200 ft (61 m) upstream at present datum.

REMARKS.--Records good except those for winter periods, which are fair. Records include drainage from numerous active and abandoned coal mines. An undetermined amount of water is diverted into the basin from Georges Creek basin by Hoffman drainage tunnel. Miscellaneous measurements of discharge from the Hoffman drainage tunnel have been made in the water years 1944, 1964-65, and 1967-76 by the U.S. Geological Survey, and in the water years 1958 and 1959 by the Maryland Geological Survey. See page 294. Slight diurnal fluctuation at low flow caused by quarry upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--47 years (water years 1930-76), 319 ft³/s (9.034 m³/s), 17.54 in/yr (446 mm/yr).

EXTREMES FROM PERIOD OF RECORD.--Maximum discharge, 38,100 ft³/s (1,080 m³/s) Mar. 17, 1936, gage height, 20.2 ft (6.16 m), from floodmarks at present site, from rating curve extended above 6,500 ft³/s (184 m³/s) on basis of slope-area measurements at gage heights 13.45 ft (4.100 m) and 20.2 ft (6.16 m); minimum, 9 ft³/s (0.25 m³/s) Oct. 14, 1930.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,190 ft³/s (90.3 m³/s) Feb. 16, gage height, 6.12 ft (1.865 m); no peak above base of 3,500 ft³/s (99 m³/s); minimum, 21 ft³/s (0.59 m³/s) Sept. 14, gage height, 1.48 ft (0.451 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	298	182	125	2280	370	254	505	114	139	86	78	29
2	253	171	119	1490	296	235	565	123	149	80	66	32
3	205	161	113	1060	236	225	596	112	136	75	57	33
4	174	152	105	809	265	233	869	104	121	75	52	33
5	153	144	101	585	255	217	968	97	109	69	50	31
6	137	135	104	469	249	200	870	93	100	64	48	28
7	124	132	103	395	207	186	703	93	93	62	157	26
8	117	130	98	310	190	177	572	92	86	64	292	25
9	187	124	110	240	190	186	474	87	82	89	141	24
10	263	129	156	205	195	200	408	83	76	75	106	35
11	296	136	136	190	1020	261	361	83	72	76	86	31
12	243	310	121	185	1100	302	309	85	75	136	74	27
13	216	763	152	220	1330	554	275	82	70	87	66	25
14	197	655	196	304	1980	727	251	78	65	68	67	23
15	183	526	232	235	1410	676	230	80	64	66	80	25
16	171	428	281	234	2150	598	212	132	60	75	64	95
17	404	352	268	195	2910	537	197	150	61	68	56	163
18	2180	294	258	120	2110	430	182	128	68	59	50	126
19	1400	255	180	105	1460	402	170	140	85	51	45	70
20	1440	235	225	175	1020	368	163	123	204	47	42	55
21	1090	229	225	195	791	405	158	117	415	46	39	48
22	798	210	170	169	696	417	160	111	533	97	38	42
23	600	187	145	148	572	382	151	104	510	108	35	38
24	500	170	130	163	473	383	138	99	304	84	34	35
25	416	163	135	195	420	373	141	100	232	73	33	34
26	367	154	230	231	373	343	152	102	191	62	33	34
27	316	151	418	536	340	330	134	92	143	55	65	46
28	273	144	366	568	303	346	122	85	115	57	60	123
29	244	132	329	524	275	281	116	93	101	220	46	79
30	221	126	329	463	---	318	111	131	92	113	36	81
31	196	---	680	406	---	324	---	175	---	89	32	---
TOTAL	13662	7080	6340	13404	23186	10870	10263	3288	4551	2476	2128	1496
MEAN	441	236	205	432	800	351	342	106	152	79.9	68.6	49.9
MAX	2180	763	680	2280	2910	727	968	175	533	220	292	163
MIN	117	124	98	105	190	177	111	78	60	46	32	23
CFSM	1.79	.96	.83	1.75	3.24	1.42	1.38	.43	.62	.32	.28	.20
IN.	2.06	1.07	.95	2.02	3.49	1.64	1.55	.50	.69	.37	.32	.23

CAL YR 1975 TOTAL 173520 MEAN 475 MAX 5180 MIN 34 CFSM 1.92 IN 26.13
WTR YR 1976 TOTAL 98744 MEAN 270 MAX 2910 MIN 23 CFSM 1.09 IN 14.87

01603000 NORTH BRANCH POTOMAC RIVER NEAR CUMBERLAND, MD

LOCATION.--Lat 39°37'16", long 78°46'24", Allegany County, Hydrologic Unit 02070002, on left bank at downstream side of Wiley Ford Bridge, 2.0 mi (3.2 km) south of Cumberland, 2.1 mi (3.4 km) downstream from Wills Creek, and at mile 19.6 (31.5 km).
DRAINAGE AREA.--875 mi² (2,266 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1929 to current year. Gage-height records collected at various sites about 2.0 mi (3.2 km) upstream from September 1901 to December 1932 and thereafter at present site, are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 726: Drainage area. WSP 781: 1932(M).

GAGE.--Water-stage recorder. Datum of gage is 585.22 ft (178.375 m) above mean sea level (Corps of Engineers bench mark). Prior to June 18, 1929, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good. Regulation by Stony River Reservoir, about 79 mi (127 km) above station (see station 01595200), and since December 1950, by Savage River Reservoir (see station 01597500). Prior to July 1957, small amount of inflow from industrial wastes and sewage from city of Cumberland from water diverted from Evitts Creek, mouth of which is below station. Diversion to Chesapeake and Ohio Canal prior to 1935.

AVERAGE DISCHARGE.--47 years, 1,237 ft³/s (35.03 m³/s), 19.20 in/yr (488 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88,200 ft³/s (2,500 m³/s) Mar. 17, 1936, gage height, 29.1 ft (8.87 m), from rating curve extended above 33,000 ft³/s (935 m³/s) on basis of slope-area measurement of peak flow; minimum (river only), 12 ft³/s (0.34 m³/s) Sept. 22, 1932, gage height, 2.38 ft (0.725 m); minimum daily (including flow in canal), 38 ft³/s (1.08 m³/s) Sept. 24, 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 29.2 ft (8.90 m) June 1, 1889, discharge, about 89,000 ft³/s (2,520 m³/s). Flood of Mar. 29, 1924, reached a stage of 28.4 ft (8.66 m), discharge, about 82,000 ft³/s (2,320 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,000 ft³/s (280 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	1130	10400 295	10.28 3.133	Jan. 1	1230	*11300 320	10.87 3.313

Minimum discharge, 120 ft³/s (3.40 m³/s) Sept. 9, gage height, 2.13 ft (0.649 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	769	463	9300	1420	1070	1560	408	716	396	222	152
2	1000	719	450	5490	1290	998	1800	447	775	360	214	161
3	867	670	435	4410	989	936	1780	516	703	314	191	156
4	772	627	416	4190	1120	873	2280	441	620	283	175	170
5	690	598	402	3310	1410	828	2680	404	533	278	170	408
6	631	565	404	2610	989	778	2260	377	468	259	175	518
7	582	548	405	2280	980	722	1880	368	443	248	454	152
8	527	539	448	1870	879	671	1570	356	464	247	811	152
9	618	522	444	1250	928	686	1340	356	436	259	432	134
10	965	522	491	1000	849	747	1180	327	396	226	290	186
11	1270	516	479	1240	3020	912	1070	315	358	237	230	175
12	1180	709	435	1160	4250	1200	975	316	328	367	224	208
13	979	1730	502	1020	4330	1670	880	320	297	533	219	186
14	1310	1510	966	1580	6710	2630	812	295	272	316	214	166
15	1180	1190	870	1580	5150	2160	750	282	343	241	236	166
16	699	1010	945	1590	5580	2380	696	372	269	220	225	340
17	973	912	1570	1050	6860	1770	647	625	258	262	214	486
18	8100	843	1000	730	6560	1480	599	573	266	298	214	434
19	4870	771	799	680	5340	1390	565	813	483	223	186	243
20	3960	722	763	777	4140	1400	537	729	1140	186	180	191
21	3950	711	828	836	3180	1440	513	596	1870	166	175	202
22	3360	683	734	733	2810	2260	517	516	1600	234	170	180
23	2410	630	1030	640	2370	1720	506	468	1270	294	166	197
24	2030	587	695	717	1890	1540	472	436	990	272	161	186
25	1840	981	568	921	1770	1420	462	426	862	377	162	166
26	1310	569	726	1010	1970	1330	492	462	963	265	161	161
27	1150	526	1070	2560	1460	1240	557	465	879	202	234	191
28	1050	518	1070	3120	1250	1370	498	397	607	202	568	296
29	969	496	909	2530	1150	1210	446	392	499	387	427	323
30	898	466	879	2230	---	1110	415	537	439	276	327	333
31	830	---	1790	1650	---	1100	---	901	---	235	180	---
TOTAL	52110	22159	22986	64064	80644	41041	30739	14236	19547	8663	8008	7019
MEAN	1681	739	741	2067	2781	1324	1025	459	652	279	258	234
MAX	8100	1730	1790	9300	6860	2630	2680	901	1870	533	811	518
MIN	527	466	402	640	849	671	415	282	258	166	161	134
CAL YR 1975 TOTAL	636407			1744		13100	186	CFSM 1.99	IN. 27.05			
WTR YR 1976 TOTAL	371216			1014		9300	134	CFSM 1.16	IN. 15.78			

POTOMAC RIVER BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1964 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1964 to current year.

REMARKS.--Water temperatures are measured in field at time of sample.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum daily, 33.0°C July 13, 14, 1966, July 16, 18, Aug. 19, 23, 1968; minimum daily, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,600 mg/L Feb. 13, 1966; minimum daily mean, 1 mg/L Jan. 17, 1975.

SEDIMENT LOADS: Maximum daily, 61,000 tons (55,300 tonnes) Mar. 6, 1967; minimum daily, 2.1 tons (1.9 tonnes) Aug. 27, 1971.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum daily, 27.5°C Aug. 25, 26; minimum daily, 1.0°C Jan. 5, 9, Feb. 2.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 287 mg/L Jan. 1; minimum daily mean, 3 mg/L Nov. 20, 29.

SEDIMENT LOADS: Maximum daily, 7,140 tons (6,480 tonnes) Jan. 1; minimum daily, 4.0 tons (3.6 tonnes) Nov. 29.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)
NOV 03...	1410	655	--	7.7	16.0	12.0	1	130	94
DEC 01...	1350	458	--	7.6	1.0	7.0	5	160	130
JAN 05...	1000	3450	180	7.3	--	1.0	1	65	50
FEB 02...	1130	1310	330	7.6	--	1.0	7	81	62
MAR 01...	1140	1070	300	6.6	--	8.5	2	120	94
APR 01...	1115	1530	280	7.6	8.0	9.0	9	88	61
MAY 03...	1115	530	650	6.6	--	13.5	21	190	150
06...	1425	372	--	--	24.5	16.5	--	--	--
JUN 01...	1230	690	380	7.4	--	20.0	2	150	120
JUL 01...	1340	410	450	7.0	--	22.5	7	160	130
AUG 02...	1350	206	850	7.5	24.0	23.0	32	260	220
SEP 01...	1250	152	720	7.6	--	21.0	20	260	220

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)
NOV 03...	37	9.0	12	1.9	43	97	21	.2	5.2
DEC 01...	46	12	17	2.0	46	120	36	.3	4.8
JAN 05...	17	5.5	4.6	1.3	18	45	9.6	.1	5.7
FEB 02...	24	5.2	9.1	1.4	24	63	18	.1	6.0
MAR 01...	32	8.5	7.8	1.6	25	84	15	.0	5.8
APR 01...	24	6.7	8.8	1.6	32	60	15	.1	5.9
MAY 03...	55	13	21	2.6	48	120	41	.1	4.9
06...	--	--	--	--	--	--	--	--	--
JUN 01...	44	9.0	10	1.6	35	100	19	.1	6.0
JUL 01...	48	9.8	20	2.3	40	120	39	.2	5.8
AUG 02...	84	13	51	3.4	57	220	93	.2	5.2
SEP 01...	84	13	36	3.5	59	190	75	.2	5.4

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
NOV 03...	--	205	.33	.13	660	--	410	--
DEC 01...	--	261	.36	.06	730	--	440	--
JAN 05...	--	98	1.1	.05	1300	--	230	--
FEB 02...	--	139	.93	.06	1100	--	330	--
MAR 01...	--	167	.73	.03	690	--	360	--
APR 01...	--	138	.73	.06	810	--	240	--
MAY 03...	--	281	.34	.10	910	--	520	--
JUN 06...	--	--	--	--	--	--	--	--
JUL 01...	--	207	.47	.09	1100	--	430	--
AUG 01...	298	265	.60	.09	1500	30	410	0
SEP 02...	552	499	.44	.09	1200	280	610	500
SEP 01...	468	438	.38	.09	910	850	700	590

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	---	7.0	4.5	4.5	10.0	11.0	15.0	20.5	23.0	24.0	22.0
2	19.0	---	---	4.5	1.0	11.0	10.0	15.0	18.0	24.0	23.0	22.0
3	18.5	12.0	---	4.5	2.0	12.0	11.0	14.5	---	23.0	23.0	23.0
4	18.5	---	---	2.0	2.0	14.0	9.5	16.0	20.0	22.5	23.0	24.0
5	18.5	---	---	1.0	2.0	13.0	10.0	17.5	20.0	23.0	23.0	24.0
6	20.0	---	9.0	2.0	3.0	10.0	9.0	18.0	21.0	25.0	24.0	22.0
7	20.0	---	9.0	3.5	3.5	10.0	9.0	15.0	22.0	24.0	22.5	21.0
8	20.0	---	8.5	3.5	4.5	9.0	9.0	15.0	23.0	24.0	22.5	22.0
9	---	---	8.0	1.0	4.5	9.0	9.0	15.0	25.0	25.0	22.0	22.0
10	---	---	8.0	2.0	4.5	8.0	9.5	18.0	25.0	25.0	22.0	22.0
11	---	---	8.0	3.5	4.5	8.0	8.0	18.0	25.0	24.0	23.0	20.0
12	---	---	7.0	3.5	4.5	7.5	8.0	17.0	25.0	22.0	24.0	23.0
13	---	---	9.0	---	4.5	7.0	12.0	18.0	24.0	22.0	25.5	22.5
14	---	---	9.5	2.0	4.5	7.0	12.0	20.0	25.0	24.0	23.0	22.0
15	---	---	10.0	2.0	8.0	8.0	16.0	21.0	26.0	26.0	23.0	22.0
16	---	---	9.0	3.5	---	7.0	17.0	21.0	---	25.0	23.0	21.0
17	---	---	7.0	2.0	4.5	6.5	20.0	21.5	26.0	23.0	23.0	20.0
18	15.5	---	3.5	2.0	4.5	6.5	20.5	16.0	26.0	23.0	23.0	19.0
19	---	---	3.5	2.0	4.5	8.5	20.5	16.5	25.0	25.0	23.0	19.0
20	---	---	1.0	3.5	4.5	12.0	21.0	18.5	24.0	25.0	23.0	18.0
21	---	---	4.5	3.5	5.5	11.0	21.0	18.5	24.0	25.0	23.0	18.0
22	---	---	4.5	2.0	5.5	11.0	19.0	18.5	24.0	22.0	25.0	18.0
23	---	---	4.5	2.0	5.5	11.0	19.5	18.5	25.0	22.0	25.0	18.0
24	---	---	4.5	2.0	5.5	13.5	17.5	19.5	26.0	23.0	25.0	18.0
25	---	---	4.5	3.5	6.5	13.5	18.0	19.5	25.0	22.5	27.5	18.0
26	---	---	4.5	6.5	6.5	12.5	15.0	16.5	26.0	25.0	27.5	19.0
27	---	---	4.5	6.5	10.0	11.0	10.0	19.0	25.0	25.0	25.0	19.0
28	---	---	4.5	4.5	10.0	12.0	12.5	19.0	---	25.0	---	16.0
29	14.5	---	4.5	---	10.0	11.0	13.0	---	25.0	25.0	22.5	16.0
30	---	---	4.5	4.5	---	10.0	13.0	20.5	---	25.0	21.0	16.0
31	---	---	7.0	4.5	---	11.0	---	21.0	---	25.0	20.0	---

POTOMAC RIVER BASIN

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

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)	
OCTOBER																								
1	21	65	9	19	8	10	287	7140	18	69	18	52												
2	21	57	12	23	9	11	184	2800	18	63	19	51												
3	21	49	19	34	10	12	100	1190	20	53	25	63												
4	20	42	19	32	9	10	103	1170	21	64	26	61												
5	15	28	13	21	8	8.7	60	536	25	95	25	56												
NOVEMBER																								
6	30	51	15	23	11	12	33	233	18	48	27	57												
7	34	53	8	12	12	13	30	185	15	40	28	55												
8	23	33	5	7.3	8	9.7	23	116	20	47	26	47												
9	19	32	4	5.6	16	19	21	71	25	63	22	41												
10	27	70	6	8.5	11	15	17	46	22	50	22	44												
DECEMBER																								
11	39	134	8	11	8	10	12	40	68	781	25	62												
12	26	83	7	14	13	15	13	41	75	859	29	94												
13	22	58	8	37	13	18	13	36	52	604	34	158												
14	25	88	13	53	26	68	14	60	71	1290	41	291												
15	26	83	9	29	22	52	21	90	87	1190	36	210												
JANUARY																								
16	24	45	6	16	20	52	23	99	112	1700	30	193												
17	24	68	7	17	17	72	25	71	116	2150	29	139												
18	218	5210	5	11	12	32	19	37	106	1880	32	128												
19	100	1450	4	8.3	12	26	9	17	103	1490	40	150												
20	19	203	3	5.8	12	25	14	29	66	738	35	132												
FEBRUARY																								
21	10	107	4	7.7	23	51	11	25	45	386	29	113												
22	10	91	5	9.2	31	61	7	14	39	296	37	231												
23	17	111	9	15	27	75	21	36	27	173	30	139												
24	26	143	8	13	19	36	35	68	23	117	25	104												
25	23	114	11	29	23	35	23	57	21	100	25	96												
MARCH																								
26	14	50	13	20	26	51	15	41	24	128	19	68												
27	9	28	11	16	19	55	47	353	30	118	23	77												
28	9	26	7	9.8	16	46	42	354	30	101	29	107												
29	13	34	3	4.0	21	52	39	266	25	78	27	88												
30	8	19	6	7.5	66	163	36	217	---	---	27	81												
31	4	9.0	---	---	160	871	24	107	---	---	34	101												
TOTAL	---	8634.0	---	518.7	---	1986.4	---	15545.0	---	14771.0	---	3289.0												
APRIL																								
1	36	152	26	29	20	39	27	29	35	21	30	12												
2	52	253	23	28	35	73	29	28	26	15	27	12												
3	65	312	27	38	27	51	28	24	20	10	27	11												
4	46	266	32	38	23	39	30	23	20	9.5	21	9.6												
5	31	224	33	36	19	27	26	20	22	10	36	40												
MAY																								
6	26	159	30	31	24	30	28	20	21	9.9	45	63												
7	16	81	33	33	25	30	25	17	41	78	34	14												
8	22	93	26	25	23	29	19	13	79	176	41	17												
9	27	98	17	16	24	28	20	14	58	68	33	12												
10	21	67	14	12	23	25	21	13	42	33	39	20												
JUNE																								
11	15	43	14	12	31	30	21	13	28	17	46	22												
12	19	50	19	16	32	28	22	22	27	16	30	17												
13	21	50	29	25	24	19	29	42	32	19	38	19												
14	20	44	26	21	25	18	20	17	34	20	52	23												
15	17	34	19	14	27	25	14	9.1	30	19	167	75												
JULY																								
16	14	26	28	28	26	19	22	13	39	24	285	262												
17	17	30	35	59	26	18	34	24	44	25	130	171												
18	18	29	36	56	27	19	33	27	35	20	63	74												
19	18	27	33	72	32	51	25	15	25	13	31	20												
20	17	25	23	45	102	337	19	9.5	23	11	29	15												
AUGUST																								
21	33	46	18	29	120	757	19	8.5	39	18	32	17												
22	42	59	18	25	141	624	21	13	42	19	32	16												
23	25	34	17	21	34	117	23	18	48	22	52	28												
24	18	23	18	21	46	123	23	17	53	23	59	30												
25	19	24	22	25	37	86	26	26	33	14	36	16												
SEPTEMBER																								
26	20	27	24	30	37	96	29	21	22	9.6	22	9.6												
27	25	38	23	29	33	78	39	21	39	25	22	11												
28	20	27	22	24	29	48	33	18	41	63	24	19												
29	22	26	25	26	36	49	22	23	46	53	28	24												
30	28	31	29	42	32	38	33	25	43	38	30	27												
31	---	---	39	95	---	---	40	25	47	23	---	---												
TOTAL	---	2398.0	---	1001.0	---	2951.0	---	608.1	---	922.0	---	1106.2												
TOTAL LOAD FOR YEAR: 53730.4 TONS.																								

01603500 EVITT'S CREEK NEAR CENTERVILLE, PA

LOCATION.--Lat 39°47'23", long 78°38'48", Bedford County, Hydrologic Unit 02070002, on left bank 2.0 mi (3.2 km) upstream from Thomas W. Koon Dam, 3.0 mi (4.8 km) south of Centerville, 7.0 mi (11.3 km) upstream from Rock Gully Creek, and at mile 16.3 (26.2 km).

DRAINAGE AREA.--30.2 mi² (78.2 km²).

PERIOD OF RECORD.--September 1932 to current year. Prior to October 1952, published as "near Bedford Valley."

REVISED RECORDS.--WSP 781: 1933(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,027.59 ft (313.209 m) above mean sea level (city of Cumberland bench mark).

REMARKS.--Records good except those for January, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--44 years, 31.5 ft³/s (0.892 m³/s), 14.16 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,240 ft³/s (148 m³/s) Mar. 17, 1936, gage height, 7.13 ft (2.173 m), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of slope-area measurements at gage heights 4.64 ft (1.414 m) and 7.13 ft (2.173 m); minimum, 0.70 ft³/s (0.020 m³/s) Dec. 17, 1958, gage height, 0.79 ft (0.241 m), result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 8 ft (2.4 m), from floodmark, date unknown.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	0100	*1410 39.9	3.93 1.198	July 29	0400	490 13.9	2.93 0.893

Minimum discharge, 4.8 ft³/s (0.14 m³/s) Sept. 9, 10, 13-15, gage height, 1.20 ft (0.366 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	29	19	179	37	32	49	15	15	13	25	6.8
2	46	28	18	81	36	30	42	16	17	12	21	7.8
3	38	27	17	73	34	29	40	15	15	11	18	7.6
4	34	25	17	60	38	31	78	14	14	10	16	7.0
5	30	24	17	50	36	28	62	13	13	9.4	15	6.4
6	28	23	17	46	34	26	55	13	13	8.7	14	6.0
7	25	22	16	44	28	24	51	13	13	8.5	35	5.5
8	24	22	16	42	24	24	47	13	12	8.9	50	5.2
9	44	21	19	38	24	24	44	12	11	9.1	30	5.0
10	37	25	27	34	26	26	41	12	10	8.0	23	13
11	36	24	19	32	165	38	38	12	10	53	20	7.4
12	28	86	17	28	73	37	36	12	10	43	18	5.7
13	25	98	19	28	84	63	34	11	9.1	14	18	5.2
14	24	54	19	32	92	44	31	11	9.0	11	19	4.9
15	24	47	18	28	72	39	29	13	8.3	11	22	5.2
16	24	42	19	26	110	38	27	33	8.6	11	18	20
17	55	38	17	22	129	36	28	37	9.4	9.4	15	33
18	332	35	16	20	116	34	25	23	7.9	7.8	14	16
19	121	33	16	18	97	35	22	23	8.7	7.2	13	9.7
20	147	31	16	34	76	32	21	18	54	6.6	12	8.0
21	96	32	16	30	65	40	20	17	89	7.6	11	7.5
22	78	29	15	26	62	36	21	15	54	107	10	6.5
23	67	26	14	22	52	30	20	14	36	31	9.8	5.9
24	57	25	14	24	47	29	18	14	28	21	9.1	5.5
25	52	24	14	26	44	30	19	14	25	16	8.7	5.5
26	49	23	29	28	41	29	20	15	21	13	8.9	5.7
27	44	24	37	120	39	31	18	13	18	12	13	14
28	40	22	27	60	36	34	16	12	16	38	10	20
29	37	21	24	50	33	28	15	13	15	190	8.9	9.5
30	34	20	28	43	---	32	14	23	14	37	7.4	13
31	31	---	82	39	---	32	---	18	---	29	6.9	---
TOTAL	1760	980	659	1383	1750	1021	981	497	584.0	774.2	519.7	278.5
MEAN	56.8	32.7	21.3	44.6	60.3	32.9	32.7	16.0	19.5	25.0	16.8	9.28
MAX	332	98	82	179	165	63	78	37	89	190	50	33
MIN	24	20	14	18	24	24	14	11	7.9	6.6	6.9	4.9
CFSM	1.88	1.08	.71	1.48	2.00	1.09	1.08	.53	.65	.83	.56	.31
IN.	2.17	1.21	.81	1.70	2.16	1.26	1.21	.61	.72	.95	.64	.34

CAL YR 1975	TOTAL	18634.2	MEAN	51.1	MAX	766	MIN	4.6	CFSM	1.69	IN	22.95
WTR YR 1976	TOTAL	11187.4	MEAN	30.6	MAX	332	MIN	4.9	CFSM	1.01	IN	13.78

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV

LOCATION.--Lat 39°26'49", long 78°39'16", Hampshire County, Hydrologic Unit 02070001, on left bank at highway bridge, 2.0 mi (3.2 km) east of Springfield, and at mile 13.4 (21.6 km).

DRAINAGE AREA.--1,471 mi² (3,810 km²).

PERIOD OF RECORD.--June 1894 to February 1896 (fragmentary), June 1899 to February 1902, August 1903 to July 1906, August 1928 to current year.

REVISED RECORDS.--WSP 1552: 1903-06, 1929-30(M), 1932-33(M), 1935(M), 1937-40(M), 1942-43(M), 1945(M).

GAGE.--Water-stage recorder. Datum of gage is 562.02 ft (171.304 m) above mean sea level. June 1894 to February 1896, nonrecording gage at Baltimore & Ohio Railroad bridge 11.2 mi (18.0 km) upstream at different datum. June 26, 1899, to Feb. 2, 1902, nonrecording gage at bridge 10.0 mi (16.1 km) upstream at different datum. Aug. 28, 1903, to July 14, 1906, nonrecording gage at present site at different datum. Aug. 8 to Sept. 24, 1928, nonrecording gage at present site and datum.

REMARKS.--Records good. Several observations of water temperature were made during the year. Gage-height tele-meter at station.

AVERAGE DISCHARGE.--52 years (water years 1900-01, 1904-05, 1929-76), 1,274 ft³/s (36.08 m³/s), 11.76 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft³/s (4,050 m³/s) Mar. 18, 1936, gage height, 34.2 ft (10.42 m), from rating curve extended above 28,000 ft³/s (793 m³/s) on basis of measurement made about 10 mi (16 km) upstream from station, adjusted for storage and inflow and slope-area measurement at gage height 29.84 ft (9.095 m); minimum, 29 ft³/s (0.82 m³/s) Jan. 28, 1956, result of freezeup, July 30, 1966, result of temporary dam; minimum gage height, 0.39 ft (0.119 m) July 30, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in November 1877 reached a stage of about 34 ft (10.4 m), from flood-marks, discharge, 140,000 ft³/s (3,960 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,000 ft³/s (280 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	0200	*27900 790	17.32 5.279	Jan. 1	2015	26000 736	16.75 5.105

Minimum discharge, 109 ft³/s (3.08 m³/s) Sept. 9, 10, gage height, 1.39 ft (0.424 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260	678	515	18500	2030	1030	1130	397	905	366	277	117
2	1050	632	493	14800	1990	962	1510	407	919	332	262	115
3	885	596	487	7550	1740	900	1720	428	798	311	237	115
4	755	566	472	5640	1500	847	1630	429	749	289	213	120
5	668	538	454	4390	1440	803	1610	390	716	278	196	128
6	600	515	438	3310	1340	753	1460	364	636	265	185	122
7	551	495	433	2680	1720	713	1310	346	572	251	235	117
8	517	483	421	2370	1630	672	1180	333	524	255	816	113
9	511	471	427	1990	1490	668	1060	324	478	249	600	109
10	565	507	435	1380	1330	735	960	317	433	247	396	120
11	558	541	433	1290	1260	862	880	309	393	238	287	128
12	551	742	431	1300	1950	1510	816	305	358	249	238	120
13	524	2120	447	1210	1760	2060	762	297	336	244	206	117
14	465	2280	502	1180	1760	3090	698	292	313	308	186	126
15	430	1910	491	1530	2030	2970	656	287	305	286	178	122
16	401	1520	475	1230	1800	2400	621	296	352	251	186	156
17	441	1290	467	1140	1790	2190	589	366	480	227	171	231
18	14400	1160	503	978	2040	1950	558	684	391	265	161	308
19	15200	1070	483	620	2120	1670	528	679	369	367	154	245
20	5750	988	450	640	2260	1590	502	673	381	293	145	195
21	3650	931	424	880	2040	1570	490	621	412	253	138	173
22	2600	906	473	690	1800	1640	512	553	1730	232	130	156
23	2000	877	453	560	1760	1590	495	505	1390	216	128	145
24	1630	782	396	620	1670	1430	479	462	1020	252	122	138
25	1370	716	370	780	1510	1310	460	434	803	511	118	130
26	1180	683	455	734	1410	1200	474	437	681	477	117	128
27	1070	649	1620	897	1310	1120	470	457	602	376	138	134
28	993	607	2910	3760	1210	1060	455	439	535	323	122	147
29	903	581	2110	3990	1110	1000	433	393	466	302	118	151
30	801	548	1700	3000	---	924	409	384	412	284	118	203
31	730	---	2040	2400	---	941	---	441	---	265	118	---
TOTAL	63009	26382	22208	92039	48800	42160	24857	13049	18459	9062	6696	4429
MEAN	2033	879	716	2969	1683	1360	829	421	615	292	216	148
MAX	15200	2280	2910	18500	2260	3090	1720	684	1730	511	816	308
MIN	401	471	370	560	1110	668	409	287	305	216	117	109
CFSM	1.38	.60	.49	2.02	1.14	.92	.56	.29	.42	.20	.15	.10
IN.	1.59	.67	.56	2.33	1.23	1.07	.63	.33	.47	.23	.17	.11

CAL YR 1975 TOTAL 637988 MEAN 1748 MAX 31500 MIN 215 CFSM 1.19 IN 16.13
WTR YR 1976 TOTAL 371150 MEAN 1014 MAX 18500 MIN 109 CFSM .69 IN 9.39

01609000 TOWN CREEK NEAR OLDTOWN, MD

LOCATION.--Lat 39°33'12", long 78°33'19", Allegany County, Hydrologic Unit 02070003, on left bank at downstream side of bridge on Oldtown Road 2.0 mi (3.2 km) upstream from Sawpit Run, 3.0 mi (4.8 km) northeast of Oldtown, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--148 mi² (383 km²).

PERIOD OF RECORD.--July 1928 to September 1935, June 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 547.97 ft (167.021 m) above mean sea level. July 1928 to September 1935, nonrecording gage on upstream side of highway bridge at datum 0.08 ft (0.024 m) lower.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years (water years 1929-35, 1968-76), 154 ft³/s (4.361 m³/s), 14.13 in/yr (359 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft³/s (331 m³/s) June 22, 1972, gage height, 14.13 ft (4.307 m); minimum, 0.9 ft³/s (0.025 m³/s) Aug. 2, 3, 7-14, 1930, gage height, 1.49 ft (0.454 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 17 or 18, 1936, reached a stage of 19.08 ft (5.816 m), from floodmarks, discharge, 27,000 ft³/s (765 m³/s), from rating curve extended above 9,500 ft³/s (269 m³/s) on basis of contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	1630	*4130 117	10.95 3.338	July 22	2200	1860 52.7	7.94 2.420
Jan. 1	0415	2410 68.3	9.02 2.749	Aug. 8	1000	1820 51.5	7.85 2.393
June 21	0830	3310 93.7	10.36 3.158				

Minimum discharge, 13 ft³/s (0.37 m³/s) Sept. 15, gage height, 2.02 ft (0.616 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	88	54	1810	200	118	447	49	85	67	79	23
2	130	84	53	812	185	110	443	52	75	60	65	23
3	109	77	51	515	170	104	333	52	71	50	52	23
4	92	73	48	406	160	104	365	47	59	45	44	22
5	81	67	46	265	145	107	493	44	50	42	40	21
6	73	64	45	220	132	98	399	41	44	38	37	18
7	66	63	44	210	105	86	317	40	42	35	49	18
8	61	62	43	200	94	80	251	38	41	33	1090	17
9	72	60	45	185	92	83	207	35	37	39	413	16
10	131	62	68	175	90	89	176	34	33	35	223	18
11	125	88	79	160	240	117	158	34	30	91	159	23
12	138	197	61	145	315	192	140	34	28	235	121	22
13	113	682	56	135	230	251	125	33	27	98	99	18
14	99	366	63	130	326	321	117	31	25	60	86	15
15	88	245	65	120	264	269	109	31	24	48	137	14
16	80	190	69	115	267	228	100	37	25	47	126	21
17	84	155	68	96	374	208	95	264	25	41	90	64
18	2830	133	62	54	479	162	89	166	25	35	68	173
19	1080	118	42	38	457	149	82	141	27	30	60	70
20	802	109	38	74	350	139	76	107	700	27	52	46
21	581	107	38	105	271	146	74	86	2310	24	46	36
22	404	103	36	93	255	170	72	71	1030	545	42	31
23	295	88	36	81	217	136	76	60	469	563	39	26
24	231	78	34	84	180	126	66	54	269	226	36	23
25	192	75	36	91	172	122	63	48	194	145	33	22
26	168	72	73	105	156	126	70	52	161	100	31	20
27	147	67	178	385	147	131	69	52	120	79	48	22
28	132	65	166	510	135	263	59	44	98	72	52	56
29	120	60	139	335	126	179	55	42	82	171	39	60
30	108	56	145	270	---	169	52	50	71	110	32	47
31	96	---	397	220	---	184	---	120	---	99	25	---
TOTAL	8886	3754	2378	8144	6334	4767	5178	1989	6277	3290	3513	1008
MEAN	287	125	76.7	263	218	154	173	64.2	209	106	113	33.6
MAX	2830	682	397	1810	479	321	493	264	2310	563	1090	173
MIN	61	56	34	38	90	80	52	31	24	24	25	14
CFSM	1.94	.84	.52	1.78	1.47	1.04	1.17	.43	1.41	.72	.76	.23
IN.	2.23	.94	.60	2.05	1.59	1.20	1.30	.50	1.58	.93	.88	.25
CAL YR 1975 TOTAL	77472.6			MEAN 212	MAX 3190	MIN 7.0	CFSM 1.43	IN 19.47				
WTR YR 1976 TOTAL	55518.0			MEAN 152	MAX 2830	MIN 14	CFSM 1.03	IN 13.95				

POTOMAC RIVER BASIN

01610000 POTOMAC RIVER AT PAW PAW, WV

LOCATION.--Lat 39°32'13", long 78°27'28", Allegany County, Md., Hydrologic Unit 02070003, on left bank 250 ft (76 m) upstream from bridge on Maryland State Highway 51 at Paw Paw, 3.3 mi (5.3 km) downstream from Little Cacapon River, and at mile 277 (446 km).

DRAINAGE AREA.--3,109 mi² (8,052 km²).

PERIOD OF RECORD.--October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 487.88 ft (148.706 m) above mean sea level (Corps of Engineers bench mark). Prior to Mar. 25, 1939, nonrecording gage at bridge 250 ft (76 m) downstream at same datum.

REMARKS.--Records good. Low flow affected by Stony River Reservoir (see station 01595200), and since December 1950, by Savage River Reservoir (see station 01597500). Several observations of water temperature were made during the year. Gage-height telemeter at station.

AVERAGE DISCHARGE.--38 years, 3,184 ft³/s (90.17 m³/s), 13.91 in/yr (353 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 111,000 ft³/s (3,140 m³/s) Oct. 16, 1942, gage height, 38.36 ft (11.692 m); minimum, 164 ft³/s (4.64 m³/s) Sept. 10, 11, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 54.0 ft (16.46 m) Mar. 18, 1936, discharge, 240,000 ft³/s (6,800 m³/s), from rating curve extended above 85,000 ft³/s (2,410 m³/s) on basis of slope-area measurement of peak flow at site 5.0 mi (8.0 km) upstream at Okonoko, W. Va.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20,000 ft³/s (560 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	0015	42500 1200	22.87 6.971	Jan. 1	2215	*43300 1230	23.09 7.038

Minimum discharge, 310 ft³/s (8.78 m³/s) Sept. 9, 10, gage height, 3.23 ft (0.985 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 to SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3800	2080	1390	30400	4820	2890	3690	1150	1940	1050	772	383
2	3070	1930	1340	30400	4730	2700	4690	1190	2100	950	701	362
3	2610	1830	1300	16000	4060	2530	4770	1270	1970	853	624	363
4	2260	1720	1260	12400	3650	2390	4820	1250	1750	779	549	349
5	2000	1630	1210	9780	3940	2300	5670	1140	1630	715	491	473
6	1790	1560	1170	7540	3480	2150	5140	1050	1450	701	461	673
7	1630	1490	1170	6370	3400	2020	4510	998	1320	656	512	560
8	1490	1460	1170	5750	3390	1890	3960	952	1250	642	3620	337
9	1500	1420	1240	4730	3290	1860	3490	920	1200	658	2700	324
10	1860	1430	1300	3660	3000	2010	3110	891	1090	648	1480	361
11	2310	1520	1360	3540	3490	2310	2840	864	984	647	1060	417
12	2590	1820	1280	3430	7750	3490	2600	852	893	907	825	394
13	2120	6100	1270	3200	6680	4550	2390	831	826	1040	710	411
14	2130	5830	1750	3140	8530	6510	2210	815	761	905	637	373
15	2150	4670	2000	4160	8410	6310	2060	785	750	804	681	369
16	1770	3850	1910	3690	7690	5850	1940	839	819	689	726	525
17	1490	3290	2360	3230	9280	5180	1820	1340	898	613	625	875
18	24300	2930	2240	2450	10000	4590	1710	1740	873	624	562	1280
19	31300	2660	1840	1870	9220	4030	1610	1890	841	747	520	956
20	13800	2460	1650	2010	7900	3880	1520	1950	2010	689	465	651
21	10000	2350	1700	2360	6560	3880	1460	1720	4930	571	434	541
22	7940	2260	1660	2130	5770	4540	1470	1500	5000	694	416	504
23	6240	2140	1740	1810	5310	4300	1470	1340	4030	1730	396	457
24	5130	1960	1770	1770	4690	3880	1380	1230	2850	1020	382	449
25	4490	2030	1340	2160	4230	3620	1330	1160	2460	1010	368	420
26	3870	2000	1550	2360	4230	3410	1410	1170	1990	1190	361	395
27	3290	1670	2670	3560	3880	3210	1420	1230	2110	928	433	418
28	2990	1600	5080	8110	3390	3610	1420	1160	1650	757	634	540
29	2720	1530	4270	8210	3120	3340	1290	1050	1360	884	842	650
30	2490	1450	3730	6690	---	3010	1200	1110	1210	1080	558	752
31	2260	---	4480	5600	---	2950	---	1550	---	808	510	---
TOTAL	157390	70670	60200	202510	157890	109190	78400	36937	52945	25989	24055	15562
MEAN	5077	2356	1942	6533	5444	3522	2613	1192	1765	838	776	519
MAX	31300	6100	5080	30400	10000	6510	5670	1950	5000	1730	3620	1280
MIN	1490	1420	1170	1770	3000	1860	1200	785	750	571	361	324

CAL YR 1975 TOTAL 1652375 MEAN 4527 MAX 54600 MIN 579 CFSM 1.46 IN. 19.77
WTR YR 1976 TOTAL 991738 MEAN 2710 MAX 31300 MIN 324 CFSM 0.87 IN. 11.86

01610155 SIDELING HILL CREEK NEAR BELLEGROVE, MD

LOCATION.--Lat 39°38'58", long 78°20'40", Washington County, Hydrologic Unit 02070003, on left bank at bridge on Pearre Road, 1.2 mi (1.9 km) upstream from mouth, and 4.0 mi (6.4 km) south of Bellegrove.

DRAINAGE AREA.--102 mi² (264 km²).

PERIOD OF RECORD.--July 1967 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 440.41 ft (134.237 m) above mean sea level.

REMARKS.--Records good except those for winter periods, which are fair to poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--9 years, 121 ft³/s (3.427 m³/s), 16.11 in/yr (409 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft³/s (402 m³/s) June 22, 1972, gage height, 12.44 ft (3.792 m); minimum, no flow for many days in August and September 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	0945	*4290 121	7.06 2.152	June 21	0445	2590 73.3	5.50 1.676
Oct. 20	0630	1350 38.2	3.98 1.213	Aug. 7	2230	1320 37.4	3.94 1.201
Jan. 1	0930	2570 72.8	5.48 1.670	Aug. 8	0800	1380 39.1	4.02 1.225
June 20	0230	1960 55.5	4.79 1.460	Sept. 17	1645	1180 33.4	3.73 1.137

Minimum discharge, 3.1 ft³/s (0.088 m³/s) June 16, gage height, 1.08 ft (0.329 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	36	28	1810	136	63	464	18	33	22	27	13
2	59	34	27	749	125	55	509	19	28	22	19	12
3	46	32	25	326	120	51	311	19	27	17	14	12
4	35	29	24	243	115	49	304	18	23	14	11	11
5	29	27	22	170	105	49	430	16	17	12	8.3	10
6	25	25	21	140	99	48	343	15	13	11	6.9	8.7
7	23	24	20	140	88	41	244	14	11	10	179	7.8
8	20	23	20	135	86	40	180	13	9.6	9.3	917	6.8
9	26	23	20	125	82	38	139	12	8.6	9.2	224	5.7
10	61	25	37	120	68	41	113	11	8.2	9.0	115	7.1
11	64	57	47	110	105	55	96	11	6.4	49	70	8.6
12	79	95	36	100	189	105	81	11	5.4	114	51	9.7
13	70	706	33	88	120	165	67	12	4.2	56	38	9.5
14	59	374	33	78	139	261	58	12	3.7	35	32	7.6
15	49	220	33	70	115	235	52	11	3.4	25	119	6.5
16	42	151	34	63	116	193	46	15	3.4	21	98	12
17	47	115	35	46	211	169	42	39	3.2	17	60	346
18	2310	90	35	25	335	121	37	92	6.2	13	43	217
19	746	77	32	35	344	105	33	87	8.7	10	34	104
20	1020	71	26	46	265	97	31	64	1010	7.9	28	61
21	517	68	24	46	201	97	30	47	1440	5.4	22	47
22	289	66	24	43	181	118	29	38	294	62	18	38
23	188	53	20	39	161	94	29	30	150	112	16	31
24	137	45	20	40	125	91	25	26	94	61	14	24
25	109	42	25	40	110	91	23	22	68	41	12	21
26	91	40	38	41	97	89	26	21	58	30	10	19
27	75	36	132	220	87	84	30	21	43	22	50	21
28	63	35	134	735	79	176	24	18	33	17	45	80
29	54	32	120	225	70	165	20	15	27	16	30	61
30	47	28	115	180	---	161	20	21	23	27	22	53
31	41	---	183	155	---	173	---	44	---	30	17	---
TOTAL	6497	2679	1423	6383	4074	3320	3836	812	3463.0	906.8	2350.2	1271.0
MEAN	210	89.3	45.9	206	140	107	128	26.2	115	29.3	75.8	42.4
MAX	2310	706	183	1810	344	261	509	92	1440	114	917	346
MIN	20	23	20	25	68	38	20	11	3.2	5.4	6.9	5.7
CFSM	2.06	.88	.45	2.02	1.37	1.05	1.25	.26	1.13	.29	.74	.42
IN.	2.37	.98	.52	2.33	1.49	1.21	1.40	.30	1.26	.33	.86	.46
CAL YR 1975	TOTAL	55124.72	MEAN	151	MAX	3110	MIN	.40	CFSM	1.48	IN	20.10
WTR YR 1976	TOTAL	37015.00	MEAN	101	MAX	2310	MIN	3.2	CFSM	.99	IN	13.50

POTOMAC RIVER BASIN

01613000 POTOMAC RIVER AT HANCOCK, MD

LOCATION.--Lat 39°41'49", long 78°10'39", Washington County, Hydrologic Unit 02070004, on left bank 0.2 mi (0.3 km) downstream from Little Tonoloway Creek, 0.5 mi (0.8 km) downstream from bridge on U.S. Highway 522 at Hancock, 1.1 mi (1.8 km) upstream from Tonoloway Creek (formerly called Great or Big Tonoloway Creek), and at mile 239 (385 km).

DRAINAGE AREA.--4,073 mi² (10,549 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1932 to current year. Gage-height records collected at same site since June 1925 are contained in reports of U.S. Weather Service.

REVISED RECORDS.--WSP 781: 1933(M). WSP 801: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 383.68 ft (116.946 m) above mean sea level. Oct. 1, 1932, to Jan. 5, 1935, Mar. 18, 1936, to Jan. 20, 1937, nonrecording gage, on former highway bridge just upstream at same datum.

REMARKS.--Water-discharge records good. Slight regulation at low flow from power plants upstream. Low flow affected slightly by Stony River Reservoir (see station 01595200) and since December 1950, by Savage River Reservoir (see station 01597500). Gage-height telemeter at station.

AVERAGE DISCHARGE.--44 years, 4,054 ft³/s (114.8 m³/s), 13.52 in/yr (343 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340,000 ft³/s (9,630 m³/s) Mar. 18, 1936, gage height, 47.6 ft (14.508 m), from rating curve extended above 120,000 ft³/s (3,400 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 180 ft³/s (5.10 m³/s) Oct. 4, 1932, gage height, 2.01 ft (0.613 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1932, about 40 ft (12.2 m) in May 1889, discharge, about 220,000 ft³/s (6,230 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 23,000 ft³/s (650 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	0715	49100 1390	19.85 6.050	Jan. 2	0245	*57700 1630	21.71 6.617

Minimum discharge, 402 ft³/s (11.4 m³/s) Sept. 9, 10, gage height, 2.51 ft (0.765 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6070	2670	1830	25300	6630	3570	4570	1540	1830	1360	960	618
2	4750	2480	1760	47500	6090	3340	6220	1500	2250	1220	880	492
3	3900	2340	1680	23500	5850	3130	6470	1530	2370	1110	817	453
4	3300	2220	1640	16600	5020	2960	6250	1610	2190	1010	723	442
5	2860	2110	1590	13600	4800	2810	6990	1550	1980	904	626	430
6	2530	2010	1520	10300	4860	2670	7060	1410	1830	819	572	471
7	2270	1930	1490	8530	4200	2500	6100	1310	1630	800	713	723
8	2070	1880	1460	7750	4070	2360	5270	1230	1480	761	3940	662
9	1980	1830	1510	6710	4020	2270	4590	1170	1390	758	5130	434
10	2050	1820	1630	5460	3850	2320	4050	1130	1320	745	2860	436
11	2390	1920	1740	4490	3620	2530	3640	1100	1210	826	1830	425
12	2860	2120	1750	4530	5510	3230	3340	1070	1100	1130	1330	492
13	3020	5720	1660	4250	7930	5060	3060	1040	999	1130	1040	473
14	2580	9100	1690	3950	7720	6950	2830	1020	931	1180	900	478
15	2530	7180	2290	4270	9600	8570	2640	1000	873	1070	922	460
16	2490	5650	2390	4760	8620	7530	2480	1030	839	939	1050	553
17	2130	4670	2340	4260	9210	6940	2350	1120	938	821	1000	984
18	13900	4020	2880	3560	10900	6040	2220	1860	972	724	862	1930
19	44000	3610	2420	2950	11200	5230	2100	2160	1060	682	740	1800
20	21400	3280	2130	2430	9930	4760	1990	2250	2390	774	659	1310
21	14000	3060	2000	2670	8610	4620	1910	2210	5340	789	583	952
22	10800	2930	2030	2890	7310	4760	1820	1940	6140	1050	536	756
23	8660	2830	1980	2540	6620	5310	1840	1690	5330	1980	508	666
24	6820	2640	2090	2260	5990	4720	1800	1530	4040	1880	485	594
25	5810	2430	2140	2540	5280	4350	1720	1400	2990	1250	467	566
26	5140	2550	1820	2740	4870	4100	1700	1340	2580	1170	451	536
27	4310	2340	2330	3010	4850	3880	1850	1340	2200	1290	489	545
28	3840	2100	4980	6410	4270	4190	1840	1390	2200	1050	584	667
29	3530	2010	6230	10600	3860	4350	1790	1330	1820	956	743	764
30	3210	1920	5200	9450	---	3980	1630	1280	1530	985	940	915
31	2910	---	5300	7940	---	3780	---	1380	---	1180	669	---
TOTAL	198110	93370	73500	257750	185290	132810	102120	44460	63752	32343	34009	21027
MEAN	6391	3112	2371	8315	6389	4284	3404	1434	2125	1043	1097	701
MAX	44000	9100	6230	47500	11200	8570	7060	2250	6140	1980	5130	1930
MIN	1980	1820	1460	2260	3620	2270	1630	1000	839	682	451	425
CFSM	1.57	.76	.58	2.04	1.57	1.05	.84	.35	.52	.26	.27	.17
IN.	1.81	.85	.67	2.35	1.69	1.21	.93	.41	.58	.30	.31	.19

CAL YR 1975	TOTAL	2081306	MEAN	5702	MAX	64700	MIN	663	CFSM	1.40	IN	19.01
WTR YR 1976	TOTAL	1238541	MEAN	3384	MAX	47500	MIN	425	CFSM	.83	IN	11.31

POTOMAC RIVER BASIN

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01613000 POTOMAC RIVER AT HANCOCK, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-72, 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (SEVERITY)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG)
DEC 09...	1415	1490	270	7.8	--	3.5	3	--	--	--	--	130
FEB 23...	1730	6400	180	8.1	--	7.0	1	--	--	--	--	68
JUN 16...	1120	784	330	7.7	28.0	26.5	1	--	--	--	--	130
JUL 22...	1115	752	360	7.3	--	23.5	--	--	--	--	--	--
AUG 27...	1350	464	430	8.0	--	26.0	4	--	--	--	--	160
31...	1630	616	535	8.7	25.0	24.5	--	1	12.0	160	23	--
DATE	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SI02) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
DEC 09...	55	38	7.5	11	1.7	86	71	62	21	.1	2.0	--
FEB 23...	37	20	4.5	4.6	1.6	38	31	37	8.1	.1	5.2	--
JUN 16...	69	41	6.7	9.0	1.8	74	61	65	17	.1	2.6	220
JUL 22...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	83	50	7.8	18	2.4	90	74	84	33	.1	2.3	280
31...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE PLUS NITRITE (N) (MG/L)	TOTAL NITRATE PLUS NITRITE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)
DEC 09...	186	.35	--	--	--	--	--	--	--	.04	--	--
FEB 23...	100	.70	--	--	--	--	--	--	--	.04	--	--
JUN 16...	180	--	--	--	--	--	--	--	--	.03	--	--
JUL 22...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	242	.02	--	--	--	--	--	--	--	.04	--	--
31...	--	.41	.0	.06	19	.47	.53	390	.94	.07	.04	170
DATE	TOTAL ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)
DEC 09...	--	--	--	--	--	--	--	--	--	--	--	310
FEB 23...	--	--	--	--	--	--	--	--	--	--	--	640
JUN 16...	--	--	--	--	--	--	--	--	--	--	--	120
JUL 22...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	--	--	--	--	--	--	--	--	--	--	--	220
31...	110	0	1	0	0	<10	10	3	10	0	10	200

POTOMAC RIVER BASIN

01613000 POTOMAC RIVER AT HANCOCK, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/L)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)
DEC 09...	--	--	--	--	70	--	--	--	--	--	--	--
FEB 23...	--	--	--	--	110	--	--	--	--	--	--	--
JUN 16...	10	--	--	--	50	6	--	--	--	--	--	--
JUL 22...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	0	--	--	--	90	0	--	--	--	--	--	--
31...	--	6100	1	20	60	--	370	<.5	.2	20	0	0

DATE	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	ORGANIC CARBON IN BOT- TOM MA- TERIAL (C) (G/KG)	IN- ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)
AUG 31...	10	60	35	.4	.0	88	.00	.0	.0	20

DATE	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)
AUG 31...	.00	95	.00	29	.00	27	.00	.0	.00	.4

DATE	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)
AUG 31...	.00	.4	.00	.0	.00	.0	.00	.0	.00	.0

DATE	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)
AUG 31...	.00	.0	.00	.00	.0	.00	.0	.00	.0	.00

DATE	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MA- TERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MA- TERIAL (UG/KG)
AUG 31...	0	0	.00	.0	.10	0	.00	0	.00	0

01614500 CONOCOCHEAGUE CREEK AT FAIRVIEW, MD

LOCATION.--Lat 39°42'57", long 77°49'28", Washington County, Hydrologic Unit 02070004, on right bank 0.7 mi (1.1 km) upstream from highway bridge in Fairview, 2.0 mi (3.2 km) upstream from Rockdale Run, 6.5 mi (10.5 km) northwest of Hagerstown, and 19.1 mi (30.7 km) upstream from mouth.
DRAINAGE AREA.--494 mi² (1,279 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1928 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1432: 1929(M), 1930, 1931-32(M), 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 391.85 ft (119.436 m) above mean sea level. Prior to Dec. 6, 1932, nonrecording gage at highway bridge 0.7 mi (1.1 km) downstream at datum 2.93 ft (0.893 m) lower. Dec. 6, 1932, to Oct. 7, 1933, nonrecording gage 150 ft (46 m) downstream from former site at datum 4.92 ft (1.500 m) lower than present datum.

REMARKS.--Water-discharge records good except those for winter periods, which are fair. Low flow partly regulated by small powerplants near Mercersburg, PA.

AVERAGE DISCHARGE.--48 years, 584 ft³/s (16.54 m³/s), 16.05 in/yr (408 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,400 ft³/s (918 m³/s) June 23, 1972, gage height, 24.5 ft (7.47 m), from floodmark, from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 21 ft³/s (0.59 m³/s) Aug. 8, Sept. 12, 1966; minimum daily, 25 ft³/s (0.71 m³/s) Nov. 28, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1928, about 16.5 ft (5.03 m), present datum, sometime in 1889, from information by local residents; discharge, about 22,000 ft³/s (620 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,300 ft³/s (120 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	1630	*6850 194	9.53 2.905	Jan. 28	0030	4690 133	7.85 2.393
Jan. 1	1115	4780 135	7.93 2.417				

Minimum discharge, 97 ft³/s (2.75 m³/s) Sept. 9, gage height, 1.44 ft (0.439 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1420	672	480	4160	884	558	3240	337	547	369	162	114
2	1210	644	471	2790	1480	533	2560	399	501	300	152	117
3	1050	617	448	1920	865	513	1740	375	542	270	147	116
4	928	585	425	1640	715	515	1630	333	433	253	141	113
5	835	559	410	1250	930	523	1610	308	377	242	138	112
6	776	529	399	1020	689	485	1310	300	348	229	136	108
7	706	509	402	940	580	452	1160	290	339	225	143	104
8	649	529	386	954	505	430	1030	275	323	218	761	105
9	1370	509	410	795	495	438	923	264	295	243	547	100
10	1720	569	774	675	505	460	835	263	274	215	317	123
11	1390	961	712	709	736	496	776	259	256	225	238	157
12	1240	980	589	679	954	640	713	299	243	378	197	131
13	1040	2700	539	628	650	922	656	282	228	343	179	112
14	909	1820	506	740	689	1130	619	255	222	241	166	109
15	805	1360	491	775	617	928	582	245	221	219	233	106
16	734	1150	489	643	583	837	550	257	222	438	237	244
17	717	1000	461	597	916	920	524	449	226	380	207	343
18	5250	897	434	460	1240	774	495	805	242	279	178	473
19	5150	817	370	460	1280	726	470	566	220	239	157	280
20	2920	758	360	485	1140	696	450	418	778	218	149	197
21	2210	781	390	486	993	674	432	342	780	215	143	176
22	1710	853	360	445	954	724	411	303	1010	253	135	156
23	1440	700	305	384	918	625	392	282	659	272	132	138
24	1260	638	280	405	789	585	373	269	485	378	131	128
25	1170	606	290	419	742	570	378	259	416	282	127	121
26	1110	580	611	475	700	560	487	315	382	223	129	119
27	987	554	1160	2390	665	532	459	466	336	197	140	134
28	909	539	963	3040	629	844	380	355	303	186	150	178
29	835	504	807	1260	589	781	356	296	353	178	138	159
30	776	485	791	1100	---	861	341	468	559	172	124	162
31	717	---	1470	920	---	980	---	701	---	168	117	---
TOTAL	43943	24405	16983	33644	23332	20712	25882	11035	12120	8048	6051	4735
MEAN	1418	814	548	1085	805	668	863	356	404	260	195	158
MAX	5250	2700	1470	4160	1480	1130	3240	805	1010	438	761	473
MIN	649	485	280	384	495	430	341	245	220	168	117	100
CFSM	2.87	1.65	1.11	2.20	1.63	1.35	1.75	.72	.82	.53	.39	.32
IN.	3.31	1.84	1.28	2.53	1.76	1.56	1.95	.83	.91	.61	.46	.36

CAL YR 1975 TOTAL 368714 MEAN 1010 MAX 14400 MIN 154 CFSM 2.04 IN 27.77
WTR YR 1976 TOTAL 230890 MEAN 631 MAX 5250 MIN 100 CFSM 1.28 IN 17.39

01614500 CONOCOCHEAGUE CREEK AT FAIRVIEW, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1966 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,050 mg/L Oct. 25, 1971; minimum daily mean, 1 mg/L on many days during 1967, 1970-76.

SEDIMENT LOADS: Maximum daily, 73,000 tons (66,200 tonnes) June 23, 1972; minimum daily, 0.17 ton (0.15 tonne) Nov. 24, 26, 27, 1966.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 525 mg/L May 18; minimum daily mean, 1 mg/L on many days during winter periods.

SEDIMENT LOADS: Maximum daily, 3,190 tons (2,890 tonnes) Apr. 1; minimum daily, 1.0 ton (0.91 tonne) Dec. 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (CA, MG)	NON-CARBONATE HARDNESS (MG/L)
OCT 28...	1255	895	360	--	20.0	13.5	--	--	--
DEC 09...	1310	395	420	8.3	--	4.0	2	170	23
JAN 13...	1225	628	350	8.2	--	2.0	1	150	17
FEB 23...	1350	921	260	8.3	2.5	6.5	1	110	19
MAR 29...	1330	761	250	8.2	12.0	10.0	8	110	22
MAY 11...	1100	255	--	--	16.0	15.5	--	--	--
JUN 16...	0930	230	360	8.1	--	22.5	1	170	13
JUL 21...	1250	201	380	8.4	25.0	23.5	--	--	--
AUG 26...	1625	132	400	8.6	--	26.0	6	190	37

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)
OCT 28...	--	--	--	--	--	--	--	--	--
DEC 09...	51	11	4.6	2.0	182	19	8.4	.1	3.8
JAN 13...	45	10	4.4	1.8	166	20	7.7	.2	6.8
FEB 23...	33	6.8	4.8	1.8	112	18	8.8	.0	6.2
MAR 29...	32	7.3	5.3	3.4	107	18	11	.1	5.5
MAY 11...	--	--	--	--	--	--	--	--	--
JUN 16...	48	11	6.8	2.4	185	17	10	.1	3.4
JUL 21...	--	--	--	--	--	--	--	--	--
AUG 26...	54	14	9.1	2.7	189	25	16	.1	1.7

01614500 GONOCOCHAEAGUE CREEK AT FAIRVIEW, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT 28...	--	--	--	--	--	--	--	--
DEC 09...	--	190	3.0	.13	160	--	10	--
JAN 13...	--	178	3.6	.08	160	--	20	--
FEB 23...	--	135	2.1	.08	300	--	20	--
MAR 29...	--	135	1.6	.11	600	--	40	--
MAY 11...	--	--	--	--	--	--	--	--
JUN 16...	201	190	2.4	.17	250	0	30	0
JUL 21...	--	--	--	--	--	--	--	--
AUG 26...	220	216	2.2	.25	240	10	30	0

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	32	123	4	7.3	1	1.3	131	1560	7	17	8	12
2	15	49	5	8.7	2	2.5	17	153	23	94	8	12
3	60	170	18	30	4	4.8	6	31	15	35	8	11
4	245	614	6	9.5	3	3.4	5	22	24	46	5	7.0
5	220	496	8	12	4	4.4	8	27	14	31	13	18
6	65	136	16	23	2	2.2	22	61	7	13	10	13
7	12	23	18	25	2	2.2	16	41	4	6.3	10	12
8	5	8.8	14	20	4	4.2	16	41	3	4.1	4	4.6
9	43	202	12	16	5	5.5	34	73	2	2.7	5	5.9
10	52	251	8	12	3	6.3	26	47	3	4.1	5	6.2
11	11	41	6	14	2	3.8	13	25	13	27	5	6.7
12	11	37	11	29	2	3.2	5	9.2	33	86	7	12
13	14	39	5	39	1	1.5	10	17	13	23	13	32
14	16	39	2	9.8	2	2.7	9	18	9	17	24	73
15	7	15	3	11	3	4.0	9	19	4	6.7	12	30
16	25	50	7	22	2	2.6	7	12	3	4.7	4	9.0
17	75	145	7	19	2	2.5	8	13	10	27	2	5.0
18	205	2300	5	12	1	1.2	9	11	27	90	3	6.3
19	78	1100	3	6.6	1	1.0	3	3.7	38	131	4	7.8
20	41	325	5	10	8	7.8	2	2.6	48	148	2	3.8
21	27	161	2	4.2	26	27	2	2.6	15	40	2	3.6
22	19	88	1	2.3	10	9.7	2	2.4	5	13	1	2.0
23	34	132	2	3.8	15	12	3	3.1	7	17	1	1.7
24	14	48	4	6.9	31	23	4	4.4	4	8.5	3	4.7
25	12	38	2	3.3	18	14	4	4.5	4	8.0	6	9.2
26	24	72	1	1.6	35	65	7	9.8	4	7.6	4	6.0
27	17	45	1	1.5	38	119	114	1010	3	5.4	3	4.3
28	10	25	2	2.9	17	44	128	1220	8	14	4	9.1
29	12	27	1	1.4	10	22	33	112	6	9.5	4	8.4
30	22	46	1	1.3	10	21	13	39	---	---	12	28
31	18	35	---	---	9	34	7	17	---	---	15	39
TOTAL	---	6880.8	---	365.1	---	457.8	---	4611.3	---	936.6	---	403.3
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	337	3190	18	16	42	62	160	159	31	14	4	1.2
2	89	670	8	8.6	39	53	70	57	30	12	10	3.2
3	61	287	8	8.1	54	79	80	58	35	14	15	4.7
4	58	255	8	7.2	29	34	56	38	30	11	33	10
5	45	196	7	5.8	19	19	14	9.1	31	12	30	9.1
6	36	127	7	5.7	31	29	7	4.3	40	15	26	7.6
7	26	81	7	5.5	27	25	7	4.3	49	19	25	7.0
8	40	111	6	4.5	10	8.7	5	2.9	64	140	38	11
9	44	110	6	4.3	18	14	6	3.9	44	68	31	8.4
10	25	56	6	4.3	14	10	8	4.6	19	16	15	5.0
11	14	29	7	4.9	12	8.3	18	11	8	5.1	16	6.8
12	13	25	13	10	16	10	14	14	5	2.7	27	9.5
13	18	32	28	21	25	15	14	13	7	3.4	23	7.0
14	14	23	14	9.6	31	19	16	10	5	2.2	14	4.1
15	18	28	7	4.6	26	16	44	26	3	1.9	6	1.7
16	22	33	7	4.9	26	16	51	62	4	2.6	38	31
17	22	31	32	41	19	12	21	22	2	1.1	34	38
18	19	25	525	1430	25	16	17	13	3	1.4	58	90
19	11	14	170	260	30	18	18	12	4	1.7	69	52
20	12	15	68	77	380	983	13	7.7	4	1.6	57	30
21	21	24	83	77	220	463	16	9.3	6	2.3	20	9.5
22	21	23	51	42	280	764	28	19	9	3.3	16	6.7
23	13	14	63	48	110	196	27	20	12	4.3	21	7.8
24	10	10	63	46	50	65	24	24	10	3.5	15	5.2
25	7	7.1	54	38	80	90	23	18	8	2.7	12	3.9
26	21	28	57	48	70	72	12	7.2	8	2.8	20	6.4
27	13	16	126	158	82	74	9	4.8	5	1.9	19	6.9
28	12	12	22	21	68	56	21	11	9	3.6	23	11
29	12	12	17	57	55	52	20	9.6	13	4.8	24	10
30	12	11	40	51	162	274	35	16	10	3.3	26	11
31	---	---	64	121	---	---	31	14	7	2.2	---	---
TOTAL	---	5495.1	---	2640.0	---	3553.0	---	684.7	---	379.4	---	415.7

TOTAL LOAD FOR YEAR: 26822.8 TONS.

POTOMAC RIVER BASIN

197

01617800 MARSH RUN AT GRIMES, MD

LOCATION.--Lat 39°30'53", long 77°46'38", Washington County, Hydrologic Unit 02070004, on right bank 220 ft (67 m) upstream from bridge on Sprecher Road, 0.1 mi (0.2 km) downstream from unnamed tributary, 0.5 mi (0.8 km) southwest of Grimes, 1.5 mi (2.4 km) upstream from mouth, and 2.2 mi (3.5 km) southwest of Fairplay.

DRAINAGE AREA.--18.9 mi² (49.0 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 354.72 ft (108.119 m) above mean sea level.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years, 12.9 ft³/s (0.365 m³/s), 9.27 in/yr (235 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 345 ft³/s (9.77 m³/s) June 1, 1975, gage height, 3.78 ft (1.152 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Jan. 31, 1966, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 60 ft³/s (1.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	0515	*126 3.57	2.51 0.765	Jan. 1	0400	77 2.18	2.04 0.622
Nov. 12	1945	89 2.52	2.16 0.658	Jan. 27	2015	72 2.04	1.99 0.607

Minimum discharge, 3.8 ft³/s (0.11 m³/s) Sept. 15, gage height, 0.95 ft (0.290 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	26	19	67	26	15	40	14	9.6	8.9	7.6	4.7
2	41	26	18	43	32	14	35	15	13	7.5	7.2	4.8
3	37	26	18	41	24	14	29	13	10	7.2	7.2	4.5
4	36	25	18	34	21	14	28	13	9.3	8.5	7.0	4.5
5	34	24	17	27	19	14	28	12	8.8	7.2	6.8	4.4
6	32	24	17	26	19	13	24	12	9.0	6.7	7.3	4.1
7	31	23	16	26	18	13	22	12	9.2	6.8	7.8	4.0
8	30	24	16	26	17	12	21	11	8.5	7.9	8.1	4.0
9	46	22	20	23	16	13	20	11	8.0	8.6	7.9	4.0
10	39	27	21	21	15	13	19	11	7.6	6.9	7.2	5.0
11	35	26	18	21	17	14	18	12	7.4	16	6.9	4.8
12	31	47	16	22	16	16	17	13	7.2	14	6.7	4.2
13	30	64	17	21	15	20	16	11	7.1	9.7	6.4	4.1
14	28	38	16	29	15	16	15	11	7.2	9.1	6.4	4.0
15	27	31	16	24	14	16	15	11	7.1	9.8	7.9	4.0
16	26	30	16	22	18	16	15	12	8.1	9.3	7.6	15
17	31	27	16	21	19	16	15	12	10	8.7	6.1	9.1
18	113	27	15	18	20	15	15	15	7.8	8.3	5.7	6.6
19	70	26	14	18	20	15	14	13	7.2	8.1	5.4	5.9
20	64	26	15	18	16	15	14	12	8.7	7.7	5.4	5.4
21	52	26	15	18	16	14	14	11	13	8.4	5.2	5.5
22	46	25	15	17	18	14	14	10	11	11	5.1	5.1
23	40	23	14	16	16	14	13	9.7	8.4	10	4.9	4.9
24	35	23	13	16	16	13	13	9.7	7.7	10	4.8	4.8
25	35	22	13	16	16	13	15	10	7.4	8.7	4.8	4.7
26	33	22	23	18	15	13	17	11	7.0	8.6	4.8	4.5
27	32	21	21	41	15	14	14	11	6.6	8.3	7.6	5.3
28	31	20	18	40	15	17	14	9.7	7.1	8.2	6.0	6.2
29	30	19	17	30	15	14	13	9.8	14	8.2	5.3	5.2
30	28	19	18	27	---	16	13	12	9.6	8.3	4.7	8.7
31	27	---	23	25	---	17	---	10	---	7.7	4.8	---
TOTAL	1214	809	529	812	519	453	560	359.9	262.6	274.3	196.6	162.0
MEAN	39.2	27.0	17.1	26.2	17.9	14.6	18.7	11.6	8.75	8.85	6.34	5.40
MAX	113	64	23	67	32	20	40	15	14	16	8.1	15
MIN	26	19	13	16	14	12	13	9.7	6.6	6.7	4.7	4.0
CFSM	2.07	1.43	.90	1.39	.95	.77	.99	.61	.46	.47	.34	.29
IN.	2.39	1.59	1.04	1.60	1.02	.89	1.10	.71	.52	.54	.39	.32

CAL YR 1975	TOTAL	9114.7	MEAN 25.0	MAX 187	MIN 8.0	CFSM 1.32	IN 17.94
WTR YR 1976	TOTAL	6151.4	MEAN 16.8	MAX 113	MIN 4.0	CFSM .89	IN 12.11

POTOMAC RIVER BASIN

01618000 POTOMAC RIVER AT SHEPHERDSTOWN, WV

LOCATION.--Lat 39°26'04", long 77°48'07", Jefferson County, Hydrologic Unit 02070004, on right bank 0.1 mi (0.2 km) downstream from Rumsey Bridge at Shepherdstown, 3.3 mi (5.3 km) upstream from Antietam Creek, and at mile 184 (296 km).

DRAINAGE AREA.--5,936 mi² (15,374 km²).

PERIOD OF RECORD.--August 1928 to September 1953. Annual maximums, water years 1954-64. July 1964 to current year. Gage-height record and estimated discharges October 1953 to June 1964 available in files of Maryland district office.

REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1929(M).

GAGE.--Water-stage recorder. Datum of gage is 281.00 ft (85.649 m) above mean sea level.

REMARKS.--Records good. Some regulation at low flow by power plants above station, Stony River Reservoir (see station 01595200), and since December 1950 by Savage River Reservoir (see station 01597500). Several observations of water temperature were made during the year. Gage-height telemeter at station.

AVERAGE DISCHARGE.--37 years (water years 1929-53, 1965-76), 5,984 ft³/s (169.5 m³/s), 13.69 in/yr. (348 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 335,000 ft³/s (9,490 m³/s) Mar. 19, 1936, gage height, 42.1 ft (12.83 m), from floodmarks, from rating curve extended above 200,000 ft³/s (5,660 m³/s) on basis of slope-area measurement of peak flow; minimum, 170 ft³/s (4.81 m³/s) Aug. 1, 1966; minimum daily, 185 ft³/s (5.24 m³/s) July 31, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods in June 1889 and May 1924 reached stages of 39.2 ft (11.95 m) and 29.8 ft (9.08 m) respectively, from floodmarks, discharges, about 290,000 ft³/s (8,210 m³/s) and 168,000 ft³/s (4,760 m³/s) respectively, from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 23,000 ft³/s (650 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	1530	61000 1730	16.37 4.990	Jan. 2	1200	*72700 2060	18.33 5.587

Minimum discharge, 678 ft³/s (19.2 m³/s) Aug. 24, 25, gage height, 1.63 ft (0.497 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10600	4570	3220	21400	10100	5350	8930	2680	2760	3160	1700	1120
2	8540	4270	3060	65200	10000	4950	14000	2690	3450	2760	1460	984
3	6990	4030	2970	42200	9780	4700	12700	2680	4040	2480	1320	919
4	6010	3870	2850	27300	8010	4460	11000	2620	3830	2000	1200	821
5	5280	3680	2770	21300	7460	4290	11500	2560	3500	1800	1160	798
6	4730	3500	2700	16500	7400	4120	11600	2500	3200	1500	1100	777
7	4330	3360	2630	13200	6700	3990	10300	2320	2900	1400	1060	764
8	3990	3260	2540	11800	5860	3780	8870	2180	2650	1500	2940	894
9	4070	3220	2580	10400	5980	3680	7710	2100	2400	1550	7710	1120
10	5410	3210	2860	8350	5710	3710	6780	2010	2250	1300	5860	940
11	5390	3490	3420	7100	5450	3800	6120	1960	2100	1500	3630	806
12	5500	3950	3360	6680	6080	4290	5550	1990	1950	2700	2560	804
13	5540	8410	3200	6550	10200	6370	5120	2010	1800	2800	2000	833
14	4990	15800	3050	6360	9530	9680	4750	1880	1700	2100	1690	818
15	4430	12900	3090	6400	11000	11800	4450	1820	1600	1800	1700	833
16	4370	10100	3680	6930	11300	11100	4200	1860	1500	1700	1980	1090
17	4170	8240	3680	6530	10600	10100	3980	1980	1600	1800	1920	1550
18	11500	7010	3660	5470	13600	9200	3770	2360	1650	1600	1760	2390
19	54100	6170	3940	4560	15200	8050	3580	3480	1700	1450	1510	3010
20	40600	5580	3380	3900	14100	7190	3410	3370	2940	1350	1250	2510
21	23900	5210	3260	3890	12400	6770	3270	3500	5810	1300	1160	2030
22	17600	5070	3100	4140	10800	6650	3120	3180	10600	1600	1100	1560
23	14000	4850	3040	3780	9660	6900	2970	3130	8730	2260	1070	1200
24	11300	4500	2830	3340	8830	6800	2900	2830	6610	3000	883	1140
25	9380	4210	2940	3500	7920	6220	2850	2510	4950	2850	753	1070
26	8330	3940	3300	3830	7140	5980	2980	2210	3880	2240	834	943
27	7430	4060	4560	4820	6810	5610	3220	2170	3360	1710	902	974
28	6430	3680	6380	11900	6550	5630	3150	2440	2940	1840	925	1050
29	5860	3460	8980	16200	5690	6900	2970	2590	3150	1620	1020	1280
30	5380	3310	8230	15000	---	6530	2820	2810	3040	1690	1070	1420
31	4930	---	8140	12000	---	6570	---	2590	---	1600	1250	---
TOTAL	315080	160910	117400	380530	259860	195170	178570	77010	102590	59960	56477	36448
MEAN	10160	5364	3787	12280	8961	6296	5952	2484	3420	1934	1822	1215
MAX	54100	15800	8980	65200	15200	11800	14000	3500	10600	3160	7710	3010
MIN	3990	3210	2540	3340	5450	3680	2820	1820	1500	1300	753	764
CFSM	1.71	.90	.64	2.07	1.51	1.06	1.00	.42	.58	.33	.31	.20
IN.	1.97	1.01	.74	2.38	1.63	1.22	1.12	.48	.64	.38	.35	.23

CAL YR 1975 TOTAL 3224560 MEAN 8834 MAX 85100 MIN 1510 CFSM 1.49 IN 20.21
WTR YR 1976 TOTAL 1940005 MEAN 5301 MAX 65200 MIN 753 CFSM .89 IN 12.16

01619000 ANTIETAM CREEK NEAR WAYNESBORO, PA

LOCATION.--Lat 39°42'59", long 77°36'28", Washington County, Md., Hydrologic Unit 02070004, on right bank 100 ft (30 m) upstream from highway bridge at Rocky Forge, 0.4 mi (0.6 km) downstream from Pennsylvania-Maryland State line, 0.7 mi (1.1 km) downstream from confluence of west and east branches, 1.9 mi (3.1 km) northeast of Leitersburg, Md., 2.5 mi (4.0 km) southwest of Waynesboro, Pa., and 36.6 mi (58.9 km) upstream from mouth.

DRAINAGE AREA.--93.5 mi² (242.2 km²).

PERIOD OF RECORD.--May 1948 to September 1951, October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 536.59 ft (163.553 m) above mean sea level (Corps of Engineers bench mark). May 1948 to September 1951, nonrecording gage and crest-stage gage 100 ft (30 m) downstream at present datum.

REMARKS.--Records good. Occasional regulation from mills above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years (water years 1949-51, 1966-76), 119 ft³/s (3.370 m³/s), 17.28 in/yr (439 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,430 ft³/s (154 m³/s) June 22, 1972, gage height, 12.33 ft (3.758 m), from rating curve extended above 2,700 ft³/s (76.5 m³/s); minimum daily, 11 ft³/s (0.31 m³/s) Jan. 30, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 850 ft³/s (24 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	1030	*1200 34.0	6.16 1.878	Nov. 12	1930	871 24.7	5.44 1.658

Minimum discharge, 33 ft³/s (0.93 m³/s) Sept. 7, gage height, 3.14 ft (0.957 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	419	165	133	476	243	119	447	106	87	63	50	37
2	360	160	125	291	320	116	296	108	101	60	48	41
3	305	155	122	288	240	114	245	94	84	57	46	39
4	274	150	119	248	217	112	272	89	76	57	46	38
5	250	148	116	203	175	111	222	87	72	56	49	36
6	231	145	116	188	169	108	194	87	74	55	51	35
7	212	142	116	183	156	106	181	83	74	54	54	35
8	200	148	116	190	151	103	168	82	68	56	186	36
9	559	139	139	164	144	108	156	80	64	55	71	35
10	310	196	156	150	142	111	147	79	63	53	56	66
11	285	179	125	149	152	114	148	84	61	86	52	44
12	244	390	116	147	145	116	142	89	61	94	50	39
13	223	476	114	145	139	149	132	78	58	59	48	36
14	209	312	112	198	139	136	130	77	59	55	46	35
15	199	256	113	152	130	125	127	76	57	96	51	36
16	190	224	116	145	136	139	125	96	61	105	52	116
17	218	202	108	142	149	142	122	83	72	68	47	286
18	761	188	106	122	155	125	116	90	59	63	46	96
19	387	177	103	130	166	124	114	86	64	61	44	59
20	355	170	103	125	144	122	111	76	145	59	42	54
21	309	184	103	125	139	125	106	72	165	64	40	53
22	281	164	101	122	156	119	103	70	125	68	39	47
23	255	148	98	116	145	111	102	68	87	66	39	44
24	237	148	91	115	136	108	101	66	76	74	38	42
25	235	142	94	114	133	111	108	68	73	55	37	41
26	219	136	184	190	130	116	126	86	69	52	37	42
27	205	136	147	468	127	125	103	82	63	50	48	56
28	195	130	125	373	125	136	101	70	63	50	44	68
29	187	125	119	271	122	114	96	70	85	57	40	47
30	182	125	142	235	---	127	94	122	67	55	39	64
31	170	---	206	205	---	142	---	88	---	55	37	---
TOTAL	8666	5560	3784	6170	4625	3734	4635	2592	2333	1958	1573	1703
MEAN	280	185	122	199	159	120	155	83.6	77.8	63.2	50.7	56.8
MAX	761	476	206	476	320	149	447	122	165	105	186	286
MIN	170	125	91	114	122	103	94	66	57	50	37	35
CFSM	2.99	1.98	1.30	2.13	1.70	1.28	1.66	.89	.83	.68	.54	.61
IN.	3.45	2.21	1.51	2.45	1.84	1.49	1.84	1.03	.93	.78	.63	.68

CAL YR 1975	TOTAL	75388	MEAN 207	MAX 4090	MIN 59	CFSM 2.21	IN 29.99
WTR YR 1976	TOTAL	47333	MEAN 129	MAX 761	MIN 35	CFSM 1.38	IN 18.83

01619500 ANTIETAM CREEK NEAR SHARPSBURG, MD

LOCATION.--Lat 39°27'01", long 77°43'52", Washington County, Hydrologic Unit 02070004, on left bank 400 ft (120 m) downstream from Burnside Bridge, 1.0 mi (1.6 km) southeast of Sharpsburg, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--281 mi² (728 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1897 to September 1905, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 192: 1897-1905. WSP 726: Drainage area. WSP 1432: 1929-31(M), 1933, 1935(M), 1937(M), 1949(M), 1952(M).

GAGE.--Water-stage recorder. Concrete control since Mar. 29, 1934. Datum of gage is 311.00 ft (94.793 m) above mean sea level, adjustment of 1912. June 24, 1897, to Aug. 25, 1905, nonrecording gage a few hundred feet downstream from Middle Bridge, 1.2 mi (1.9 km) upstream at datum 12 ft (3.7 m) higher. Aug. 21, 1928, to July 13, 1933, nonrecording gage at Burnside Bridge, 0.1 mi (0.2 km) upstream at present datum.

REMARKS.--Water-discharge records good. Some diurnal fluctuation caused by powerplant above station. Since 1928 records include pumpage from the Potomac River for municipal supply of Hagerstown. This water later enters Antietam Creek above station as sewage.

AVERAGE DISCHARGE.--53 years (water years 1898-1903, 1905, 1931-76), 271 ft³/s (7.675 m³/s), 13.10 in/yr (333 mm/yr), adjusted for inflow since January 1930.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s (357 m³/s) July 20, 1956, gage height, 16.73 ft (5.099 m); minimum, 9.4 ft³/s (0.266 m³/s) Nov. 22, 1957, result of regulation caused by construction work above station; minimum daily, 37 ft³/s (1.05 m³/s) Jan. 30, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	2245	*2080 58.9	6.31 1.923	Jan. 1	0330	1780 50.4	5.81 1.771
Nov. 13	0400	1530 43.3	5.41 1.649				

Minimum discharge, 106 ft³/s (3.00 m³/s) Sept. 6, 7, 8, 9, gage height, 2.38 ft (0.725 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	549	456	1420	610	376	858	295	233	215	151	115
2	1000	540	451	999	798	367	774	334	314	177	142	121
3	899	526	428	884	624	358	657	295	255	168	139	123
4	823	522	415	858	586	350	633	277	217	180	135	117
5	774	509	406	725	563	346	638	269	203	167	132	114
6	735	495	402	671	549	342	558	262	200	164	148	109
7	696	482	397	647	526	330	531	259	215	169	150	109
8	662	486	388	657	509	330	509	248	201	188	338	109
9	994	473	424	610	491	338	482	238	191	210	259	108
10	959	513	509	563	473	350	460	231	185	163	177	147
11	774	582	442	549	473	358	447	232	181	277	157	153
12	730	681	402	540	473	358	428	280	176	299	149	119
13	671	1210	393	526	451	388	420	238	171	213	143	111
14	642	949	384	610	451	406	402	228	172	178	139	111
15	619	794	384	568	428	371	393	222	173	173	153	109
16	600	720	384	526	428	376	384	247	185	233	173	307
17	610	671	367	513	456	420	371	288	223	202	146	258
18	1490	638	354	465	465	376	358	280	190	181	136	402
19	1320	610	338	447	495	363	346	269	173	178	132	177
20	1010	591	338	447	460	358	342	231	314	175	129	147
21	899	586	338	451	433	358	338	219	397	175	126	143
22	818	586	334	442	447	358	322	210	424	219	122	135
23	764	540	330	410	460	338	314	204	273	186	120	126
24	715	526	318	410	424	330	307	201	224	183	120	121
25	705	518	311	406	415	322	299	204	208	173	119	118
26	691	504	504	424	406	330	393	226	198	156	116	117
27	657	495	554	828	397	330	326	237	186	150	160	126
28	628	478	451	1120	388	393	307	212	182	148	168	170
29	605	460	420	754	380	346	295	200	234	157	131	147
30	591	447	420	686	---	384	288	266	234	173	120	171
31	568	---	558	628	---	393	---	277	---	156	117	---
TOTAL	24789	17681	12600	19784	14059	11143	13180	7679	6732	5786	4647	4440
MEAN	800	589	406	638	485	359	439	248	224	187	150	148
MAX	1490	1210	558	1420	798	420	858	334	424	299	338	402
MIN	568	447	311	406	380	322	288	200	171	148	116	108
(%)	-5.8	-5.4	-6.3	-6.6	-6.4	-5.9	-6.4	-9.4	-11.6	-8.7	-10.9	-12.0
MEAN#	794	584	400	631	479	353	433	239	212	178	139	136
CFSM#	2.83	2.08	1.42	2.25	1.70	1.26	1.54	.85	.75	.63	.49	.48
IN.#	3.26	2.32	1.64	2.59	1.83	1.45	1.72	.98	.84	.73	.56	.54

CAL YR 1975 TOTAL 205421 MEAN 563 MAX 8970 MIN 192 MEAN# 556 CFSM# 1.98 IN.# 26.86
WTR YR 1976 TOTAL 142520 MEAN 389 MAX 1490 MIN 108 MEAN# 381 CFSM# 1.36 IN.# 18.46

/ Pumpage, in cubic feet per second, from Potomac River for municipal supply of Hagerstown.

Adjusted for pumpage.

POTOMAC RIVER BASIN

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01619500 ANTIETAM CREEK NEAR SHARPSBURG, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (SEVERITY)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG)
OCT 08...	1425	650	500	7.3	--	14.0	1	--	--	--	--	250
NOV 17...	1230	666	380	7.6	21.0	8.5	--	--	--	--	--	--
DEC 19...	1020	338	490	--	-4.0	2.0	--	--	--	--	--	--
MAR 11...	1120	350	480	--	--	7.0	--	--	--	--	--	--
MAY 11...	1710	223	470	8.1	--	15.5	1	--	--	--	--	230
JUN 15...	1225	166	480	8.3	--	21.5	1	--	--	--	--	220
JUL 20...	1240	174	500	8.2	30.0	21.5	--	--	--	--	--	--
AUG 26...	1305	122	500	8.0	--	22.5	2	--	--	--	--	240
31...	1005	118	480	8.0	18.0	16.5	--	2	9.0	530	1100	--
DATE	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT 08...	52	72	17	5.7	3.2	241	198	31	12	.4	8.9	--
NOV 17...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 11...	45	68	14	6.3	2.9	222	182	26	12	.2	5.8	--
JUN 15...	28	63	14	7.7	3.2	228	187	27	14	.2	7.0	307
JUL 20...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 26...	51	72	15	9.9	3.4	232	190	29	15	.3	6.3	295
31...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)
OCT 08...	269	4.6	--	--	--	--	--	--	--	.17	--	--
NOV 17...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 11...	245	3.6	--	--	--	--	--	--	--	.23	--	--
JUN 15...	249	2.9	--	--	--	--	--	--	--	.25	--	--
JUL 20...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 26...	265	3.2	--	--	--	--	--	--	--	.38	--	--
31...	--	2.9	1.0	.05	37	.45	.50	910	3.4	.34	.27	360

POTOMAC RIVER BASIN

01619500 ANTIETAM CREEK NEAR SHARPSBURG, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)
OCT 08...	--	--	--	--	--	--	--	--	--	--	--	290
NOV 17...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 11...	--	--	--	--	--	--	--	--	--	--	--	320
JUN 15...	--	--	--	--	--	--	--	--	--	--	--	350
JUL 20...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 26...	--	--	--	--	--	--	--	--	--	--	--	310
31...	210	0	8	0	0	<10	20	3	10	0	10	560

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)
OCT 08...	--	--	--	--	20	--	--	--	--	--	--	--
NOV 17...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 11...	--	--	--	--	30	--	--	--	--	--	--	--
JUN 15...	10	--	--	--	30	2	--	--	--	--	--	--
JUL 20...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 26...	10	--	--	--	40	0	--	--	--	--	--	--
31...	--	11000	11	30	30	--	630	<.5	.0	10	0	0

DATE	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	IN-ORGANIC CARBON IN BOTTOM MATERIAL (G/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
AUG 31...	100	60	24	.1	.0	0	.00	.0	.0	4

DATE	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	DIAZINON IN BOTTOM MATERIAL (UG/KG)	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)
AUG 31...	.00	3.9	.00	.8	.00	2.2	.01	.0	.01	.0

01619500 ANTIETAM CREEK NEAR SHARPSBURG, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)
AUG 31...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0
DATE	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)
AUG 31...	.00	.0	.00	.00	.0	.00	.0	.00	.0	.00
DATE	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MA- TERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MA- TERIAL (UG/KG)
AUG 31...	0	0	.00	.0	.07	0	.07	0	.00	0

POTOMAC RIVER BASIN

01636500 SHENANDOAH RIVER AT MILLVILLE, WV

LOCATION.--Lat 39°16'55", long 77°47'22", Jefferson County, Hydrologic Unit 02070007, on left bank 0.4 mi (0.6 km) downstream from Cattail Run, 1.0 mi (1.6 km) upstream from Millville, 5.0 mi (8.0 km) upstream from Harpers Ferry, and at mile 5.0 (8.0 km).

DRAINAGE AREA.--3,040 mi² (7,874 km²).

PERIOD OF RECORD.--April 1895 to March 1909, August 1928 to current year.

REVISED RECORDS.--WSP 951: 1936(M). WSP 1432: Drainage area at former site, 1895-99, 1901-02, 1905, 1907-08, 1932(M), 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 293.00 ft (89.306 m) above mean sea level, adjustment of 1912. Apr. 15, 1895, to Mar. 31, 1909, nonrecording gage at site 0.8 mi (1.3 km) downstream at datum 0.32 ft (0.098 m) higher.

REMARKS.--Records good. Regulation by hydroelectric plants, particularly that of Potomac Light and Power Co., 0.5 mi (0.8 km) upstream from station. Several observations of water temperature were made during the year. Gage-height telemeter at station.

AVERAGE DISCHARGE.--61 years (water years 1896-1908, 1929-76), 2,658 ft³/s (75.27 m³/s), 11.87 in/yr (301 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 230,000 ft³/s (6,510 m³/s) Oct. 16, 1942, gage height, 32.4 ft (9.88 m), from floodmarks; minimum, about 59 ft³/s (1.67 m³/s) Oct. 4, 1930, gage height, 0.39 ft (0.119 m); minimum daily, 194 ft³/s (5.49 m³/s) July 24, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1870 reached practically same stage as flood of Mar. 18, 1936, 26.36 ft (8.035 m), discharge, 151,000 ft³/s (4,280 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft³/s (420 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 19	2045	16200 459	8.74 2.664	Jan. 2	1130	*33400 946	12.53 3.819

Minimum discharge, 305 ft³/s (8.64 m³/s) Sept. 5, gage height, 1.01 ft (0.308 m); minimum daily discharge, 435 ft³/s (12.3 m³/s) Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5160	2240	1640	14200	5430	2260	2530	1380	1520	1410	840	435
2	4250	2200	1590	29700	5170	2210	3530	1390	2610	1400	886	503
3	3620	2070	1540	17700	5100	2160	5400	1420	3220	1330	747	530
4	3190	1980	1530	12200	4810	2070	4900	1440	2900	1180	693	532
5	2880	1940	1480	9330	4200	2000	4260	1440	2480	1120	644	469
6	2640	1910	1440	7410	3890	1950	3740	1300	2230	1050	632	471
7	2460	1830	1450	6270	3660	1860	3330	1290	1990	1030	623	490
8	2300	1850	1440	5650	3430	1830	3030	1230	1750	970	778	526
9	2290	1790	1480	5180	3250	1860	2780	1160	1590	987	818	506
10	2220	1800	1600	4630	3090	1970	2560	1170	1410	963	755	506
11	2230	1830	1590	4080	2930	1940	2330	1150	1320	972	725	498
12	2120	1850	1580	3710	2830	2330	2300	1170	1210	1050	700	440
13	2000	2330	1580	3520	2710	2810	2170	1160	1170	1090	682	494
14	2150	3310	1540	3400	2660	3740	2060	1130	1040	861	661	479
15	1950	3750	1510	3350	2520	3860	1980	1110	958	854	673	489
16	1810	3660	1510	3190	2440	3820	1920	1170	1030	894	788	844
17	1810	3240	1500	3050	2410	3590	1850	1270	1060	846	798	1160
18	3680	2910	1470	2800	2400	3310	1780	1500	1090	818	709	977
19	10800	2640	1410	2560	2420	3220	1730	1760	1300	790	653	762
20	12500	2410	1330	2550	2480	2890	1680	1600	1800	849	644	821
21	7790	2260	1380	2370	2500	2690	1710	1670	1680	754	610	693
22	5930	2220	1330	2290	2470	2590	1720	1620	1790	763	603	649
23	4860	2140	1290	2500	2480	2450	1600	1480	2880	747	555	611
24	4090	2060	1310	2510	2470	2340	1520	1370	3180	769	448	589
25	3570	1950	1320	2400	2510	2210	1470	1240	2780	774	451	550
26	3220	1860	1370	2160	2470	2150	1540	1250	2350	774	480	564
27	2990	1810	2080	2380	2440	2070	1560	1220	2030	759	494	534
28	2820	1770	3380	4770	2400	2030	1470	1210	1750	723	523	539
29	2690	1720	4460	9330	2330	1990	1470	1220	1610	706	526	559
30	2500	1680	3930	8120	---	2010	1460	1290	1510	878	536	673
31	2340	---	3620	6400	---	1990	---	1470	---	763	574	---
TOTAL	114860	67010	55680	189710	89900	76200	71380	41280	55238	28874	20249	17893
MEAN	3705	2234	1796	6120	3100	2458	2379	1332	1841	931	653	596
MAX	12500	3750	4460	29700	5430	3860	5400	1760	3220	1410	886	1160
MIN	1810	1680	1290	2160	2330	1830	1460	1110	958	706	448	435
CFSM	1.22	.73	.59	2.01	1.02	.81	.78	.44	.61	.31	.21	.20
IN.	1.41	.82	.68	2.32	1.10	.93	.87	.51	.68	.35	.25	.22

CAL YR 1975	TOTAL	1234850	MEAN	3383	MAX	57400	MIN	918	CFSM	1.11	IN	15.11
WTR YR 1976	TOTAL	828274	MEAN	2263	MAX	29700	MIN	435	CFSM	.74	IN	10.14

01637500 CATOCTIN CREEK NEAR MIDDLETOWN, MD

LOCATION.--Lat 39°25'35", long 77°33'25", Frederick County, Hydrologic Unit 02070008, on right bank 300 ft (91 m) downstream from bridge on State Highway 17, 1.3 mi (2.1 km) south of Middletown, 2.2 mi (3.5 km) downstream from Little Catoclin Creek, and 14.8 mi (23.8 km) upstream from mouth.

DRAINAGE AREA.--66.9 mi² (173.3 km²).

PERIOD OF RECORD.--August 1947 to current year.

REVISED RECORDS.--WSP 1432: 1947-48.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 385 ft (117.3 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, June 9 to July 23, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--29 years, 74.0 ft³/s (2.096 m³/s), 15.02 in/yr (382 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,200 ft³/s (317 m³/s) June 22, 1972, gage height, 12.28 ft (3.743 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement at gage height 11.18 ft (3.408 m); no flow Aug. 27 to Sept. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0200	*1940 54.9	5.04 1.536	Jan. 27	1730	1700 48.1	4.69 1.430

Minimum discharge, 4.3 ft³/s (0.12 m³/s) Sept. 10, gage height, 0.91 ft (0.277 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	64	71	954	165	71	675	47	37	26	20	6.8
2	167	62	65	395	240	67	335	64	68	19	17	8.0
3	141	59	59	375	267	65	259	42	40	17	15	9.1
4	124	57	54	300	150	63	253	35	28	15	14	8.3
5	110	53	52	220	150	61	212	33	23	14	13	7.4
6	100	51	51	200	124	56	178	31	22	14	14	6.9
7	88	50	52	187	111	52	170	30	33	14	19	6.5
8	82	68	48	196	110	49	150	27	23	36	58	6.1
9	275	54	73	150	96	53	130	26	19	20	33	5.6
10	171	115	108	139	87	60	118	26	17	17	22	8.3*
11	173	125	70	124	91	66	109	26	16	60	18	10
12	139	459	62	116	85	78	96	39	16	36	15	7.5
13	124	504	61	115	79	103	88	29	16	17	13	6.5
14	111	283	58	216	84	99	81	26	16	17	13	5.9
15	101	224	58	129	74	82	77	25	16	30	22	6.1
16	92	189	60	111	75	86	72	28	16	24	35	7.9
17	112	162	55	101	95	103	67	34	24	20	17	7.0
18	417	143	51	70	103	78	63	38	19	17	13	3.8
19	224	129	41	95	123	78	59	42	17	14	12	1.8
20	188	119	53	87	101	75	55	27	30	14	11	1.4
21	161	115	48	83	93	75	54	23	70	16	10	1.3
22	141	104	48	75	125	76	50	20	34	20	9.5	1.2
23	124	91	45	75	114	65	46	18	19	40	9.1	1.0
24	112	85	45	70	97	61	42	18	17	87	8.0	9.5
25	108	80	50	70	93	62	43	19	16	36	7.4	9.0
26	101	75	240	158	89	61	67	26	15	26	7.4	9.2
27	94	76	157	854	84	61	48	27	15	23	9.6	1.2
28	85	70	118	361	78	86	42	20	15	22	18	2.2
29	79	64	104	353	73	62	39	21	20	32	11	1.6
30	74	63	115	213	---	112	36	62	46	28	7.9	4.1
31	68	---	291	179	---	120	---	53	---	22	7.0	---
TOTAL	4286	3793	2463	6771	3256	2286	3714	982	763	793	498.9	481.7
MEAN	138	126	79.5	218	112	73.7	124	31.7	25.4	25.6	16.1	16.1
MAX	417	504	291	954	267	120	675	64	70	87	58	7.9
MIN	68	50	41	70	73	49	36	18	15	14	7.0	5.6
CFSM	2.06	1.88	1.19	3.26	1.67	1.10	1.85	.47	.38	.38	.24	.24
IN.	2.38	2.11	1.37	3.76	1.81	1.27	2.07	.55	.42	.44	.28	.27

CAL YR 1975	TOTAL	47924.0	MEAN	131	MAX	2710	MIN	11	CFSM	1.96	IN	26.65
WTR YR 1976	TOTAL	30087.6	MEAN	82.2	MAX	954	MIN	5.6	CFSM	1.23	IN	16.73

POTOMAC RIVER BASIN

01638500 POTOMAC RIVER AT POINT OF ROCKS, MD

LOCATION.--Lat 39°16'25", long 77°32'35", Frederick County, Hydrologic Unit 02070008, on left bank at downstream side of bridge on U.S. Highway 15 at Point of Rocks, 0.3 mi (0.5 km) downstream from Catoctin Creek (Virginia), 6 mi (9.7 km) upstream from Monocacy River, and at mile 159.5 (256.6 km).

DRAINAGE AREA.--9,651 mi² (24,996 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1895 to current year.

REVISED RECORDS.--WSP 192: 1895-1905. WSP 1432: 1899, 1901-2, 1904-5, 1912, 1914(M), 1915, 1917(M), 1918, 1919(M), 1920, 1921-23(M), 1924, 1925-28(M), 1930(M).

GAGE.--Water-stage recorder. Datum of gage is 200.54 ft (61.125 m) above mean sea level, adjustment of 1912. Prior to October 28, 1929, nonrecording gage at same site. Prior to Sept. 2, 1902, at datum about 0.45 ft (0.317 m) higher.

REMARKS.--Water-discharge records good. Low flow affected slightly since 1913 by Stony River Reservoir (see station 01595200) and since December 1950 by Savage River Reservoir (see station 01597500). Low flow affected extensively at times by run-of-the-river hydroelectric plants. Gage-height telemeter at station.

AVERAGE DISCHARGE.--81 years, 9,282 ft³/s (262.9 m³/s), 13.06 in/yr (332 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 480,000 ft³/s (13,600 m³/s) Mar. 19, 1936, gage height, 41.03 ft (12.506 m) from rating curve extended above 300,000 ft³/s (8,500 m³/s) on the basis of adjustment of figure of peak flow at station near Washington for inflow and storage, and slope-area measurement of peak flow; minimum, 530 ft³/s (15.0 m³/s) Sept. 11, 12, 1966, gage height, 0.27 ft (0.082 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 2, 1889, reached a stage of 40.2 ft (12.25 m), from floodmarks, discharge, about 460,000 ft³/s (13,000 m³/s) from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 35,000 ft³/s (990 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 20	0030	77700 2200	14.94 4.554	Jan. 2	1630	*109000 3090	18.71 5.703

Minimum discharge, 1,190 ft³/s (33.7 m³/s) Sept. 7, gage height, 0.75 ft (0.229 m)..

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20600	7600	5480	33000	17200	8220	14300	4590	4760	4690	2570	1800
2	15500	7230	5310	93300	16700	7800	18700	4620	6050	4200	2620	1540
3	12500	6850	5100	72500	16400	7450	19200	4550	7090	3730	2330	1580
4	10800	6570	4920	44000	14400	7100	17500	4440	6780	3350	2100	1480
5	9610	6300	4780	34400	12600	6870	16600	4410	5970	3160	1960	1400
6	8850	6060	4660	27400	12100	6620	16400	4270	5330	2890	1870	1310
7	7990	5820	4600	21800	11400	6290	15000	4050	4930	2800	1860	1260
8	7420	5770	4440	18700	10100	5990	13100	3780	4550	2670	1970	1270
9	8070	5640	4620	16800	9790	5920	11600	3590	4100	2890	7090	1420
10	8770	5620	5180	14600	9490	6080	10300	3480	3760	2720	7900	1610
11	9190	5960	5460	12100	9070	6090	9370	3400	3500	2980	5280	1510
12	8920	6790	5550	11200	9030	6800	8660	3480	3280	3290	3840	1400
13	8590	10400	5380	11000	12300	8940	8070	3460	3060	3870	3110	1310
14	8210	19400	5170	10800	12900	12800	7580	3350	2870	3440	2690	1350
15	7560	18900	5020	10600	13300	15700	7170	3250	2680	3150	2540	1330
16	7100	15600	5470	10600	14600	16000	6840	3280	2600	2980	2650	2590
17	7010	13000	5680	10500	13500	14600	6530	3510	2830	2910	2890	2560
18	11300	11200	5520	9440	15800	13500	6270	3910	2810	2770	2730	3210
19	54500	9910	5670	7900	18000	12100	5960	5040	2840	2410	2410	3830
20	62700	9010	5330	7210	17700	10900	5740	5370	3930	2310	2190	3770
21	37400	8400	5060	6760	15800	10100	5640	5180	6430	2240	1930	3160
22	27500	8080	4850	7180	14100	9770	5410	5030	12700	2220	1800	2580
23	21600	7850	4690	7040	12800	9740	5160	4570	12100	2520	1720	2170
24	17300	7380	4620	6650	11900	9860	4920	4150	10500	3400	1620	1850
25	14400	6950	4540	6320	11000	9140	4830	3800	8430	3860	1340	1740
26	12800	6560	5790	6850	10200	8650	4980	3640	6860	3240	1280	1630
27	11600	6430	6710	10600	9710	8320	5120	3610	5890	2780	1410	1600
28	10400	6250	9520	16200	9510	8170	5170	3610	5030	2610	1480	1560
29	9560	5790	13400	25200	8780	9110	4880	3630	5030	2660	1520	1680
30	8810	5580	13300	25200	---	9500	4800	3890	4800	2640	1600	2020
31	8120	---	13000	20400	---	9380	---	3990	---	2760	1670	---
TOTAL	474680	252900	188820	616250	370180	287510	275800	124930	161490	94140	79970	57520
MEAN	15310	8430	6091	19880	12760	9275	9193	4030	5383	3037	2580	1917
MAX	62700	19400	13400	93300	18000	16000	19200	5370	12700	4690	7900	3830
MIN	7010	5580	4440	6320	8780	5920	4800	3250	2600	2220	1280	1260
CFSM	1.59	.87	.63	2.06	1.32	.96	.95	.42	.56	.31	.27	.20
IN.	1.83	.97	.73	2.38	1.43	1.11	1.06	.48	.62	.36	.31	.22
CAL YR 1975	TOTAL	4743150	MEAN	12990	MAX	165000	MIN	2780	CFSM	1.35	IN	18.28
WTR YR 1976	TOTAL	2984190	MEAN	8154	MAX	93300	MIN	1260	CFSM	.84	IN	11.50

WATER-QUALITY RECORDS

[illegible]

POTOMAC RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL AMMONIA NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL KJEL- NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS IN BOT- TOM MA- TERIAL (MG/KG)	TOTAL ALUM- INUM (AL) (UG/L)
OCT												
17...	1.5	--	--	--	--	--	--	--	.17	--	--	--
NOV												
19...	1.3	--	--	--	--	--	--	--	.05	--	--	--
DEC												
22...	1.4	--	--	--	--	--	--	--	.06	--	--	--
FEB												
05...	1.6	--	--	--	--	--	--	--	.10	--	--	--
MAR												
12...	.94	--	--	--	--	--	--	--	.05	--	--	--
APR												
21...	.73	--	--	--	--	--	--	--	.07	--	--	--
MAY												
20...	.77	--	--	--	--	--	--	--	.08	--	--	--
JUL												
23...	.66	--	--	--	--	--	--	--	.10	--	--	--
AUG												
23...	.14	--	--	--	--	--	--	--	.07	--	--	--
31...	.10	1.4	.24	160	.39	.63	1900	.73	.11	.03	320	130

DATE	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)
OCT												
17...	--	--	--	--	--	--	--	--	--	--	220	--
NOV												
19...	--	--	--	--	--	--	--	--	--	--	970	--
DEC												
22...	--	--	--	--	--	--	--	--	--	--	340	--
FEB												
05...	--	--	--	--	--	--	--	--	--	--	430	--
MAR												
12...	--	--	--	--	--	--	--	--	--	--	250	--
APR												
21...	--	--	--	--	--	--	--	--	--	--	200	--
MAY												
20...	--	--	--	--	--	--	--	--	--	--	240	--
JUL												
23...	--	--	--	--	--	--	--	--	--	--	270	0
AUG												
23...	--	--	--	--	--	--	--	--	--	--	190	10
31...	1	4	0	0	<10	10	0	20	0	20	220	--

DATE	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)
OCT											
17...	--	--	--	60	--	--	--	--	--	--	--
NOV											
19...	--	--	--	30	--	--	--	--	--	--	--
DEC											
22...	--	--	--	30	--	--	--	--	--	--	--
FEB											
05...	--	--	--	40	--	--	--	--	--	--	--
MAR											
12...	--	--	--	30	--	--	--	--	--	--	--
APR											
21...	--	--	--	40	--	--	--	--	--	--	--
MAY											
20...	--	--	--	70	--	--	--	--	--	--	--
JUL											
23...	--	--	--	70	30	--	--	--	--	--	--
AUG											
23...	--	--	--	70	0	--	--	--	--	--	--
31...	17000	24	30	70	--	840	<.5	.1	20	0	0

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL ZINC (Zn) (UG/L)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)	IN-ORGANIC CARBON IN BOT-TOM MA-TERIAL (G/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)
AUG 31...	10	140	10	11	6.6	.0	0	.00	.0	.0	0

DATE	TOTAL DDD (UG/L)	DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	DI-AZINON IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)
AUG 31...	.00	1.0	.00	.6	.00	.0	.00	.0	.00	.0

DATE	TOTAL ENDRIIN (UG/L)	ENDRIIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)
AUG 31...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	TOTAL MALA-THION (UG/L)	MALA-THION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL METH-OXY-CHLOR (UG/L)	TOTAL METHYL PARA-THION (UG/L)	METHYL PARA-THION IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL METHYL TRI-THION (UG/L)	METHYL TRI-THION IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL PARA-THION (UG/L)	PARA-THION IN BOTTOM MA-TERIAL (UG/KG)	POLY-CHLORINATED NAPHTHA-LENES (UG/L)
AUG 31...	.00	.0	.00	.00	.0	.00	.0	.00	.0	.00

DATE	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA-TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MA-TERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MA-TERIAL (UG/KG)
AUG 31...	0	0	.00	.0	.00	0	.00	0	.00	0

POTOMAC RIVER BASIN

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

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.0	7.0	3.0	3.0	12.0	13.0	17.0	23.0	27.0	26.0	24.0
2	17.0	14.0	7.0	---	---	---	---	19.0	21.0	---	26.0	24.0
3	---	15.0	---	5.0	1.0	10.0	---	17.0	22.0	27.0	26.0	24.0
4	---	15.0	6.0	4.0	4.0	11.0	---	16.0	22.0	26.0	26.0	24.0
5	17.0	---	---	3.0	3.0	11.0	11.0	18.0	23.0	26.0	---	---
6	18.0	15.0	8.0	3.0	1.0	11.0	12.0	19.0	23.0	28.0	26.0	22.0
7	17.0	15.0	7.0	3.0	2.0	11.0	12.0	---	24.0	---	26.0	23.0
8	---	16.0	5.0	---	2.0	11.0	12.0	---	24.0	---	25.0	---
9	16.0	---	5.0	2.0	3.0	---	13.0	19.0	27.0	27.0	---	25.0
10	16.0	17.0	5.0	2.0	5.0	9.0	14.0	21.0	27.0	27.0	---	22.0
11	18.0	15.0	---	3.0	---	---	12.0	18.0	27.0	27.0	---	21.0
12	17.0	14.0	5.0	---	4.0	6.5	12.0	---	28.0	---	26.0	---
13	18.0	12.0	---	3.0	6.0	10.0	14.0	19.0	23.0	25.0	---	---
14	---	---	5.0	4.0	---	9.0	15.0	21.0	25.0	25.0	---	24.0
15	---	10.0	---	4.0	6.0	8.0	16.0	22.0	27.0	---	25.0	21.0
16	---	11.0	---	---	---	8.0	18.0	23.0	---	27.0	25.0	---
17	15.5	---	---	---	9.0	6.0	19.0	---	27.0	26.0	26.0	---
18	16.0	10.0	---	---	9.0	---	21.0	18.0	---	27.0	24.0	24.0
19	15.0	10.0	3.0	---	10.0	9.0	22.0	---	27.0	28.0	23.0	---
20	14.5	11.0	3.0	1.0	9.0	---	---	21.0	26.0	29.0	23.0	---
21	16.0	---	3.0	1.0	---	9.0	23.0	21.0	---	29.0	25.0	21.0
22	15.0	---	2.0	---	8.0	10.0	23.0	22.0	27.0	26.0	27.0	---
23	15.0	9.0	2.0	---	7.0	---	---	---	26.0	24.0	27.0	---
24	16.0	9.0	1.0	---	8.0	---	22.0	22.0	27.0	27.5	---	20.0
25	17.0	---	2.0	2.0	---	---	---	19.0	27.0	26.5	27.0	20.0
26	15.0	8.0	3.0	3.0	10.0	14.0	15.0	18.0	29.0	27.5	---	20.0
27	15.0	---	3.0	3.0	10.0	---	15.0	---	29.0	27.5	---	20.0
28	16.0	8.0	3.0	3.0	10.0	14.0	---	---	29.0	29.0	---	20.0
29	---	7.0	3.0	3.0	12.0	---	16.0	22.0	---	28.5	---	---
30	13.0	9.0	---	3.0	---	13.0	18.0	---	---	28.0	26.0	17.0
31	13.0	---	---	3.0	---	12.0	---	23.0	---	26.0	25.0	---

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

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	44	2450	10	205	4	59	192	16700	29	1350	9	200
2	33	1380	6	117	8	115	602	155000	28	1260	7	147
3	23	776	6	111	8	110	265	54000	31	1370	7	141
4	19	554	7	124	6	80	110	13100	19	739	9	173
5	15	389	7	119	5	65	25	2320	14	476	11	204
6	18	430	8	131	4	50	21	1550	12	392	9	161
7	15	324	6	94	8	99	18	1060	19	585	8	136
8	12	240	11	171	6	72	20	1010	11	300	8	129
9	20	436	14	213	5	62	22	998	8	211	8	128
10	17	403	14	212	5	70	20	788	8	205	12	197
11	13	323	14	225	5	74	8	261	7	171	18	296
12	13	313	15	275	5	75	7	212	8	195	19	349
13	11	255	31	844	5	73	8	238	12	399	19	459
14	10	222	61	3200	6	84	6	175	16	557	19	657
15	9	184	34	1740	6	81	4	114	18	646	19	805
16	8	153	19	800	6	89	4	114	22	867	19	821
17	9	170	14	491	7	107	4	113	25	911	14	552
18	94	2900	10	302	8	119	8	204	21	896	12	437
19	249	42700	8	214	8	122	7	149	27	1310	13	425
20	436	76600	6	146	8	115	6	117	30	1430	12	353
21	123	12400	3	68	5	68	12	219	27	1150	12	327
22	68	5070	4	87	5	65	10	194	25	952	21	554
23	40	2330	5	106	4	51	10	190	20	691	25	657
24	40	1870	3	60	4	50	6	108	13	418	26	692
25	42	1630	3	56	3	37	3	51	10	297	26	642
26	30	1040	3	53	3	47	5	92	9	248	27	631
27	29	908	3	52	6	109	28	965	9	236	23	517
28	18	505	3	51	10	257	36	1620	9	231	17	375
29	16	413	4	63	16	579	70	4760	10	237	16	394
30	20	476	4	60	20	718	58	3950	---	---	16	410
31	19	417	---	---	29	1070	41	2260	---	---	18	456
TOTAL	---	158261.0	---	10390.0	---	4772.0	---	262632.0	---	18730.0	---	12425.0
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	38	1470	15	186	30	386	28	355	26	180	37	180
2	50	2520	20	249	55	898	25	283	30	212	32	133
3	27	1400	14	172	65	1240	21	211	35	220	36	154
4	23	1090	14	168	39	714	18	163	28	159	37	148
5	22	986	12	143	36	580	17	145	28	148	41	155
6	22	974	9	104	37	532	19	148	34	172	52	184
7	18	729	9	98	31	413	19	144	52	261	39	133
8	16	566	9	92	27	332	19	137	57	303	37	127
9	17	532	10	97	23	255	18	140	70	1300	47	180
10	22	612	9	85	18	183	16	118	70	1450	40	174
11	16	405	9	83	18	170	115	925	60	855	43	175
12	11	257	10	94	17	151	118	1050	50	518	46	174
13	10	218	10	93	24	198	80	836	41	344	44	156
14	10	205	8	72	21	163	20	186	37	269	41	149
15	8	155	7	61	21	152	18	153	32	219	45	162
16	8	148	8	71	25	175	17	137	34	243	53	371
17	9	159	9	85	28	214	16	126	35	273	43	297
18	8	135	10	106	29	220	14	105	33	243	71	615
19	9	145	11	150	28	215	12	78	33	215	64	662
20	11	170	13	188	38	403	12	75	33	195	56	570
21	12	183	14	196	76	1330	16	97	21	109	48	410
22	15	219	16	217	93	3120	17	102	15	73	42	293
23	16	223	16	197	75	2450	18	122	18	84	38	223
24	16	213	14	157	61	1730	33	303	18	79	44	220
25	16	209	13	133	46	1050	45	469	16	58	32	150
26	16	215	12	118	39	722	25	219	17	59	16	70
27	13	180	12	117	32	509	19	143	20	76	15	65
28	12	168	13	127	29	394	16	113	22	88	18	76
29	12	158	14	137	29	394	25	180	24	98	22	100
30	13	168	18	189	29	376	20	143	27	117	19	104
31	---	---	24	259	---	---	24	179	35	158	---	---
TOTAL	---	14812.0	---	4244.0	---	19669.0	---	7585.0	---	8778.0	---	6610.0

TOTAL LOAD FOR YEAR: 528908.0 TONS.

POTOMAC RIVER BASIN

01639000 MONOCACY RIVER AT BRIDGEPORT, MD

LOCATION.--Lat 39°40'43", long 77°14'06", Frederick County, Hydrologic Unit 02070009, on right bank 60 ft (18 m) downstream from bridge on State Highway 97 at Bridgeport, 0.9 mi (1.4 km) upstream from Cattail Branch, 3.4 mi (5.5 km) northwest of Taneytown, 4.8 mi (7.7 km) downstream from confluence of Rock and Marsh Creeks at Pennsylvania-Maryland State line, and 52 mi (83.7 km) upstream from mouth.

DRAINAGE AREA.--173 mi² (448 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1942 to current year.

REVISED RECORDS.--WSP 1382: 1944(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 15, 1947. Datum of gage is 340.83 ft (103.885 m) above mean sea level (Corps of Engineers bench mark). Prior to May 3, 1946, nonrecording gage and crest-stage gages at site 0.3 mi (0.5 km) downstream at datum 0.98 ft (0.299 m) lower.

REMARKS.--Water-discharge records good. Occasional regulation at low flow from unknown source above station.

AVERAGE DISCHARGE.--34 years, 200 ft³/s (5.664 m³/s), 15.70 in/yr (399 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,300 ft³/s (603 m³/s) June 22, 1972, gage height, 24.05 ft (7.330 m), from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of slope-conveyance study; no flow July 24-29, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 24, 1933, reached a stage of about 25 ft (7.6 m), present site and datum, from floodmarks; stage exceeded that of June 1889, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,800 ft³/s (130 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	1000	4950 140	12.07 3.679	Jan. 26	2200	5040 143	12.20 3.719
Nov. 12	2400	*6440 182	14.05 4.282	Apr. 1	0900	5410 153	12.70 3.871
Jan. 1	0630	5240 148	12.48 3.804				

Minimum discharge, 4.5 ft³/s (0.13 m³/s) Sept. 9, 10, gage height, 1.88 ft (0.573 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	102	103	3270	632	115	3150	47	264	46	21	6.9
2	196	95	107	885	1300	109	658	111	359	37	17	6.7
3	160	90	97	612	240	107	361	69	204	29	14	7.0
4	137	85	89	620	220	107	574	51	127	26	12	7.1
5	123	80	86	260	200	105	445	44	92	25	11	8.3
6	113	73	96	200	160	96	259	41	73	23	12	7.1
7	97	69	101	160	130	82	213	38	83	22	19	6.3
8	89	115	94	180	120	74	176	35	65	42	261	5.9
9	1360	117	119	120	100	79	149	31	53	32	141	5.1
10	725	379	474	110	90	96	132	30	45	25	58	5.7
11	565	722	202	110	122	135	122	29	40	32	40	25
12	384	1910	155	110	164	302	110	47	35	100	29	18
13	227	3190	139	100	120	982	99	43	31	53	23	9.8
14	181	742	131	506	154	577	92	32	29	30	19	7.0
15	149	372	116	276	130	264	85	30	29	85	19	5.9
16	130	274	121	165	137	229	79	31	29	111	28	101
17	151	223	107	130	287	387	75	72	43	63	21	193
18	3160	191	92	65	381	223	69	56	45	36	17	122
19	749	168	55	65	604	220	64	66	31	25	13	46
20	933	153	65	68	331	186	61	47	44	21	12	29
21	432	186	65	73	240	164	57	35	127	20	11	22
22	284	266	60	69	522	182	53	28	459	21	9.6	20
23	226	158	55	55	351	133	50	25	119	37	8.6	17
24	190	136	53	54	200	120	46	23	72	64	7.8	15
25	186	125	55	58	186	114	46	21	57	39	7.4	13
26	207	115	1270	1500	171	111	93	31	53	25	7.6	13
27	171	113	925	3750	159	104	71	107	43	20	12	15
28	149	120	347	1540	141	201	54	50	36	17	20	26
29	134	99	250	394	124	134	48	36	36	17	14	32
30	130	101	267	324	---	139	45	589	53	22	11	24
31	118	---	1090	234	---	212	---	442	---	29	8.0	---
TOTAL	12086	10569	6986	16063	7716	6089	7536	2337	2776	1174	904.0	819.8
MEAN	390	352	225	518	266	196	251	75.4	92.5	37.9	29.2	27.3
MAX	3160	3190	1270	3750	1300	982	3150	589	459	111	261	193
MIN	89	69	53	54	90	74	45	21	29	17	7.4	5.1
CFSM	2.25	2.03	1.30	2.99	1.54	1.13	1.45	.44	.53	.22	.17	.16
IN.	2.60	2.27	1.50	3.45	1.66	1.31	1.62	.50	.60	.25	.19	.18

CAL YR 1975	TOTAL	131649.0	MEAN 361	MAX 10300	MIN 11	CFSM 2.09	IN 28.31
WTR YR 1976	TOTAL	75055.8	MEAN 205	MAX 3750	MIN 5.1	CFSM 1.18	IN 16.14

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-51, 1969-72, 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	WEATHER	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT											
07...	1000	99	195	7.5	12.0	12.5	0	2	9.9	7	.8
21...	1015	430	185	7.6	16.5	11.5	1	10	10.2	19	2.0
NOV											
03...	1000	90	230	8.0	20.0	8.5	1	1	11.6	7	1.0
17...	0950	226	195	7.5	8.5	6.0	0	4	11.8	9	.4
DEC											
01...	0945	103	230	7.9	3.0	6.0	1	1	12.3	6	.7
15...	1000	116	230	7.9	12.0	4.5	3	2	13.0	9	1.0
JAN											
05...	1015	210	190	7.5	-5.5	.0	0	7	14.2	11	1.0
20...	0945	69	235	7.2	-2.0	.0	3	2	14.1	7	.9
FEB											
03...	1000	205	143	7.6	-4.0	.0	0	15	14.0	20	4.4
18...	0945	373	220	7.5	7.0	6.0	3	10	11.9	13	1.8
MAR											
10...	0945	90	220	8.2	4.0	2.0	3	2	14.0	10	1.8
22...	1000	194	196	7.9	3.5	9.0	1	2	11.6	9	.9
APR											
06...	1015	262	185	7.5	15.0	8.0	0	5	11.6	11	1.1
19...	1000	64	197	8.0	31.0	19.0	0	2	8.9	8	.8
MAY											
04...	0940	52	255	7.7	9.5	12.0	2	2	9.2	11	1.6
19...	0930	63	275	7.6	10.5	14.5	2	2	8.2	13	2.2
JUN											
02...	0945	590	205	7.5	15.5	18.5	3	20	8.0	16	1.4
23...	0945	118	180	7.2	25.5	23.5	1	20	--	25	1.6
JUL											
14...	0950	30	270	7.6	22.0	21.0	1	25	6.1	19	1.8
28...	0945	17	270	8.9	25.0	23.0	0	15	7.9	34	5.4
AUG											
11...	0940	42	205	7.4	22.0	20.0	0	26	6.4	25	3.1
25...	0945	7.0	290	7.8	22.5	24.0	1	90	5.2	15	2.4
SEP											
08...	0940	6.0	320	8.0	22.0	17.5	0	2	7.4	15	3.6
22...	0945	20	235	7.5	14.0	16.0	1	10	7.5	19	2.2

[illegible]

POTOMAC RIVER BASIN

01639000 MONOCACY RIVER AT BRIDGEPORT, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER, 1975 TO SEPTEMBER 1976

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)
OCT										
07...	1	1.3	.01	.00	.25	.08	--	2.6	.000	.000
21...	16	.97	.02	.02	.05	.12	.09	5.6	.000	.000
NOV										
03...	1	.80	.01	.00	.26	.11	--	2.6	.000	.000
17...	2	1.5	.01	.04	.30	.11	--	2.8	.000	.000
DEC										
01...	1	1.1	.01	.01	.18	.11	--	--	.000	.000
15...	2	1.1	.02	.04	.26	.12	--	3.6	2.90	.000
JAN										
05...	13	1.6	.01	.07	.35	.10	--	--	.900	.000
20...	8	2.0	.01	.22	.23	.15	--	--	.000	.000
FEB										
03...	23	1.4	.02	.16	.65	.18	--	6.4	.800	.000
18...	36	1.4	.03	.09	.73	.22	--	4.8	4.00	.000
MAR										
10...	0	.69	.02	.01	.28	.15	--	3.2	2.80	.000
22...	18	.79	.03	.04	.40	.09	--	2.9	8.00	.100
APR										
06...	13	1.8	.02	.04	.44	.09	--	4.4	.000	.000
19...	3	.42	.04	.03	.40	.11	--	3.4	4.10	.000
MAY										
04...	7	.85	.07	.13	.42	.26	--	1.7	3.19	.000
19...	6	.80	.11	.28	.92	.44	--	4.1	17.8	.000
JUN										
02...	47	2.2	.08	.09	.64	.19	--	7.8	8.35	.000
23...	27	1.5	.04	.05	.88	.18	--	8.8	.000	.000
JUL										
14...	51	1.3	.05	.26	.42	.44	--	5.5	3.11	.000
28...	36	.32	.03	.12	.98	.35	--	8.2	68.0	.000
AUG										
11...	--	.85	.04	.08	.80	.27	--	9.2	8.69	.491
25...	18	.09	.01	.05	.60	.24	--	5.4	16.6	.082
SEP										
08...	21	.00	.01	.02	.71	.23	--	--	19.4	2.13
22...	8	.76	.01	.04	.51	.26	--	--	--	--

01639500 BIG PIPE CREEK AT BRUCEVILLE, MD

LOCATION.--Lat 39°36'45", long 77°14'10", Carroll County, Hydrologic Unit 02070009, on left bank 300 ft (91 m) downstream from bridge on State Highway 194, 800 ft (240 m) downstream from Bruceville, 3.5 mi (5.6 km) upstream from Detour, and confluence with Little Pipe Creek.

DRAINAGE AREA.--102 mi² (264 km²).

PERIOD OF RECORD.--October 1947 to current year. Prior to December 1947, monthly discharge only, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 340 ft (104 m), from topographic map.

REMARKS.--Records good. Occasional diversion for irrigation above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--29 years, 110 ft³/s (3.115 m³/s), 14.65 in/yr (372 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft³/s (793 m³/s) Sept. 26, 1975, gage height, 18.98 ft (5.785 m), from rating curve extended above 3,900 ft³/s (110 m³/s) on the basis of contracted-opening measurement at gage height 17.86 ft (5.444 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0230	2480 70.2	7.35 2.240	Jan. 27	1900	2370 67.1	7.17 2.185
Jan. 26	2030	*2950 83.5	8.08 2.463	Apr. 1	0400	2240 63.4	6.95 2.118

Minimum discharge, 16 ft³/s (0.45 m³/s) Sept. 10, 14, gage height, 0.86 ft (0.262 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	314	126	117	1200	436	102	1030	98	94	92	40	23
2	283	125	110	376	643	99	310	143	350	52	35	24
3	246	120	104	390	235	99	230	87	118	51	32	31
4	225	118	100	322	227	108	280	78	90	73	31	28
5	210	114	100	224	217	104	220	75	77	60	30	25
6	202	111	100	207	182	106	177	71	71	47	41	24
7	184	110	104	199	159	94	159	70	72	45	133	22
8	174	123	97	215	162	91	143	66	65	62	79	23
9	604	111	143	162	135	97	129	64	61	63	67	21
10	287	164	179	143	130	110	120	63	57	48	58	28
11	306	193	117	151	149	158	116	61	56	127	49	37
12	231	489	107	146	140	187	109	87	54	146	42	25
13	197	598	106	170	135	340	106	67	50	61	39	23
14	182	274	104	517	152	210	103	64	50	51	36	22
15	168	211	104	205	130	164	101	64	52	186	38	22
16	159	185	109	164	147	164	98	106	50	78	60	74
17	219	166	100	158	202	163	96	132	99	59	38	83
18	1010	154	98	140	197	123	92	107	59	50	34	45
19	321	145	80	138	219	124	89	92	56	46	30	35
20	282	139	93	139	157	113	87	74	199	43	29	33
21	223	173	91	127	137	113	88	66	100	42	29	31
22	201	173	95	125	187	111	83	60	122	55	28	30
23	183	133	90	110	142	101	79	56	69	70	28	27
24	172	126	90	138	120	99	84	55	60	75	26	26
25	174	120	88	115	122	98	97	53	55	52	25	26
26	168	115	662	1100	114	99	116	71	52	44	25	26
27	171	119	275	1720	112	96	87	79	49	41	29	29
28	153	114	182	699	106	138	82	60	46	41	33	39
29	145	107	156	325	103	99	80	57	47	39	28	34
30	148	107	194	267	---	102	77	278	135	66	25	51
31	130	---	422	222	---	137	---	126	---	47	25	---
TOTAL	7672	5063	4517	10314	5297	3949	4668	2630	2515	2012	1242	967
MEAN	247	169	146	333	183	127	156	84.8	83.8	64.9	40.1	32.2
MAX	1010	598	662	1720	643	340	1030	278	350	186	133	83
MIN	130	107	80	110	103	91	77	53	46	39	25	21
CFSM	2.42	1.66	1.43	3.26	1.79	1.25	1.53	.83	.82	.64	.39	.32
IN.	2.80	1.85	1.65	3.76	1.93	1.44	1.70	.96	.92	.73	.45	.35

CAL YR 1975 TOTAL 77942 MEAN 214 MAX 11200 MIN 40 CFSM 2.10 IN 28.43
WTR YR 1976 TOTAL 50846 MEAN 139 MAX 1720 MIN 21 CFSM 1.36 IN 18.54

01640500 OWENS CREEK AT LANTZ, MD

LOCATION.--Lat 39°40'36", long 77°27'50", Frederick County, Hydrologic Unit 02070009, on right bank 0.5 mi (0.8 km) west of Lantz Post Office (Deerfield station on Western Maryland Railway), 1.5 mi (2.4 km) south of Sabillasville, 4.5 mi (7.2 km) northwest of Thurmont, and 14.2 mi (22.8 km) upstream from mouth.

DRAINAGE AREA.--5.93 mi² (15.36 km²).

PERIOD OF RECORD.--October 1931 to current year.

REVISED RECORDS.--WSP 921: 1932(M). WSP 1202: 1935(M). WSP 1382: Drainage area. WSP 1432: 1937(M), 1943(M), 1949(P).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 965 ft (294 m), from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--45 years, 9.09 ft³/s (0.257 m³/s), 20.82 in/yr (529 mm/yr), adjusted for diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,270 ft³/s (92.6 m³/s) Dec. 1, 1934, gage height, 8.4 ft (2.56 m), from rating curve extended above 750 ft³/s (21.2 m³/s) on basis of slope-area measurements at gage heights 5.11 ft (1.558 m) and 6.30 ft (1.920 m); no flow Sept. 2-11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 120 ft³/s (3.4 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Nov. 12	1630	250 7.08	3.43 1.045	June 21	1600	134 3.79	3.07 0.936
Jan. 1	0130	122 3.46	2.91 0.887	Sept. 17	0715	*310 8.78	3.63 1.106
Apr. 1	0230	176 4.98	3.15 0.960				

Minimum discharge, 0.77 ft³/s (0.022 m³/s) Sept. 8, 9, 10, 14, 15, gage height, 1.21 ft (0.369 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	10	10	55	26	9.9	74	11	11	5.2	2.1	1.1
2	22	9.6	8.9	30	26	9.8	35	9.4	18	3.8	1.8	1.6
3	18	9.2	8.2	32	18	9.8	28	7.2	11	4.7	1.8	1.3
4	17	8.9	7.6	25	17	9.3	32	6.5	9.0	5.6	1.7	1.2
5	17	8.4	7.4	19	15	8.9	25	6.3	7.5	3.8	1.8	1.1
6	16	8.1	7.3	18	13	8.3	22	5.8	7.7	3.2	2.2	.96
7	15	8.1	7.2	17	12	7.9	19	5.8	6.8	5.3	2.5	.92
8	15	9.3	6.7	18	12	7.6	17	5.4	5.7	4.5	8.9	.84
9	54	7.9	15	16	11	8.0	16	5.4	5.0	3.9	2.9	.82
10	27	22	15	14	11	8.7	15	5.0	4.4	3.0	2.3	2.5
11	23	15	10	13	13	9.6	14	5.8	3.9	12	1.9	1.1
12	21	69	9.2	12	11	9.3	13	7.7	3.6	9.6	1.7	.90
13	16	58	9.0	12	11	21	12	5.2	3.6	4.4	1.6	.87
14	12	35	8.7	18	10	16	11	4.8	3.4	3.6	1.6	.84
15	11	28	8.5	12	9.4	14	11	4.4	2.7	7.9	2.3	.93
16	10	24	8.8	12	10	16	10	6.5	2.9	6.2	2.2	27
17	18	21	8.0	10	13	15	10	5.5	4.6	3.9	1.5	58
18	47	18	7.2	9.0	13	13	9.4	9.6	2.8	3.1	1.3	13
19	23	17	6.7	9.0	14	13	8.9	6.6	3.9	2.9	1.2	5.9
20	23	16	7.2	9.0	12	12	8.6	4.8	15	2.6	1.2	4.1
21	18	16	6.8	9.1	11	14	8.2	4.1	38	3.4	1.1	3.9
22	16	14	6.3	8.5	19	12	7.7	3.7	19	3.9	1.0	3.1
23	15	13	6.0	8.5	14	11	7.1	3.6	11	6.0	1.0	2.7
24	14	12	5.6	7.7	13	10	6.9	3.5	9.0	3.9	.97	2.5
25	16	12	5.6	7.2	13	10	9.6	3.8	7.7	2.8	1.0	2.5
26	14	11	27	24	12	10	13	5.3	6.3	2.4	1.0	2.7
27	13	11	15	66	12	12	8.0	4.3	5.0	2.3	11	4.5
28	13	10	12	35	11	13	7.5	3.5	4.4	2.3	2.2	4.5
29	12	9.4	11	25	11	10	7.0	6.5	6.8	2.3	1.6	2.8
30	12	9.1	15	21	---	17	6.5	25	5.9	2.5	1.2	15
31	11	---	30	18	---	22	---	11	---	2.4	1.1	---
TOTAL	583	520.0	316.9	590.0	393.4	368.1	472.4	203.0	245.6	133.4	67.67	169.18
MEAN	18.8	17.3	10.2	19.0	13.6	11.9	15.7	6.55	8.19	4.30	2.18	5.64
MAX	54	69	30	66	26	22	74	25	38	12	11	58
MIN	10	7.9	5.6	7.2	9.4	7.6	6.5	3.5	2.7	2.3	.97	.82
CFSM	3.17	2.92	1.72	3.20	2.29	2.01	2.65	1.10	1.38	.73	.37	.95
IN.	3.66	3.26	1.99	3.70	2.47	2.31	2.96	1.27	1.54	.84	.42	1.06

CAL YR 1975 TOTAL 6506.00 MEAN 17.8 MAX 441 MIN 1.3 CFSM 3.00 IN 40.81
WTR YR 1976 TOTAL 4062.65 MEAN 11.1 MAX 74 MIN .82 CFSM 1.87 IN 25.48

POTOMAC RIVER BASIN

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01641000 HUNTING CREEK AT JIMTOWN, MD

LOCATION.--Lat 39°35'40", long 77°23'50", Frederick County, Hydrologic Unit 02070009, on right bank just downstream from highway bridge, 0.4 mi (0.6 km) southwest of Jimtown, about 2.2 mi (3.5 km) southeast of Thurmont, 2.2 mi (3.5 km) upstream from Little Hunting Creek, and 5.2 mi (8.4 km) upstream from mouth.

DRAINAGE AREA.--18.4 mi² (47.7 km²).

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WSP 1332: 1952.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 355 ft (108 m), from topographic map.

REMARKS.--Records good. Slight regulation at irregular intervals caused by pumpage at recreation camp near Foxville, and from occasional draining and refilling of pond near Thurmont by Maryland Game and Inland Fish Commission. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--27 years, 25.5 ft³/s (0.722 m³/s), 18.82 in/yr (478 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft³/s (54.7 m³/s) Sept. 26, 1975, gage height, 5.48 ft (1.670 m); minimum, 0.4 ft³/s (0.011 m³/s) Sept. 9, 1966, gage height, 1.48 ft (0.451 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft³/s (9.9 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Nov. 12	1600	413 11.7	3.25 0.991	Apr. 1	0300	*456 12.9	3.36 1.024
Jan. 1	0200	398 11.3	3.21 0.978	June 21	1530	402 11.4	3.22 0.981

Minimum discharge, 3.9 ft³/s (0.11 m³/s) many days in August and September, gage height, 1.60 ft (0.488 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	31	23	189	79	35	205	27	45	12	8.2	4.1
2	55	30	23	85	81	35	112	26	43	10	7.1	5.3
3	50	29	23	95	55	34	83	20	29	10	6.5	4.5
4	46	29	24	85	53	34	86	19	24	14	6.2	4.4
5	41	28	24	68	49	34	71	18	20	12	5.8	4.4
6	38	27	24	61	47	33	59	15	18	10	6.4	5.7
7	34	26	24	59	41	32	53	15	17	10	7.2	5.8
8	32	35	24	61	38	31	47	14	15	24	16	4.2
9	151	29	37	55	36	32	44	14	13	17	12	4.3
10	86	84	32	50	34	30	41	13	12	12	8.9	6.8
11	62	68	26	50	37	37	38	14	11	36	7.1	4.8
12	51	203	25	49	34	34	34	18	11	33	6.2	4.3
13	44	240	25	49	33	49	32	15	9.9	19	5.6	5.8
14	38	120	24	61	33	36	28	14	10	13	5.2	6.0
15	34	84	24	49	31	33	25	13	7.5	19	12	6.3
16	32	68	24	45	32	42	25	16	8.4	23	8.1	4.0
17	63	58	23	36	39	39	25	18	16	16	5.9	5.9
18	200	51	23	34	46	34	24	19	12	12	4.7	3.2
19	100	47	22	32	48	34	23	18	10	10	4.5	1.9
20	84	43	22	32	39	33	22	14	29	9.0	5.9	1.3
21	68	43	22	28	36	35	21	13	90	9.9	5.6	1.0
22	60	40	22	26	50	32	20	11	53	14	5.5	8.5
23	51	34	21	26	43	30	19	10	29	24	5.3	7.5
24	48	33	21	24	40	30	19	10	21	20	5.2	7.2
25	50	42	21	25	40	29	20	10	17	14	4.1	7.1
26	48	47	79	72	39	29	25	18	14	11	4.0	7.6
27	43	43	40	161	38	33	22	14	12	8.9	8.3	9.2
28	40	38	32	86	37	34	20	12	11	7.9	5.2	9.0
29	38	23	30	74	36	29	18	16	13	13	4.8	7.7
30	35	23	39	67	---	44	17	109	12	9.6	4.1	2.0
31	33	---	80	59	---	60	---	56	---	9.5	4.0	---
TOTAL	1818	1696	903	1893	1244	1086	1278	619	632.8	462.8	205.6	333.5
MEAN	58.6	54.5	29.1	61.1	42.9	35.0	42.6	20.0	21.1	14.9	6.63	11.1
MAX	200	240	80	189	81	60	205	109	90	36	16	5.9
MIN	32	23	21	24	31	29	17	10	7.5	7.9	4.0	4.1
CFSM	3.18	3.07	1.58	3.32	2.33	1.90	2.32	1.09	1.15	.81	.36	.60
IN.	3.68	3.43	1.83	3.83	2.51	2.20	2.58	1.25	1.28	.94	.42	.67

CAL YR 1975	TOTAL	18169.2	MEAN	49.8	MAX	1260	MIN	4.5	CFSM	2.71	IN	36.73
WTR YR 1976	TOTAL	12171.7	MEAN	33.3	MAX	240	MIN	4.0	CFSM	1.81	IN	24.61

POTOMAC RIVER BASIN

01641500 FISHING CREEK NEAR LEWISTOWN, MD

LOCATION.--Lat 39°31'35", long 77°28'00". Frederick County, Hydrologic Unit 02070009, on left bank immediately upstream from Fishing Creek Reservoir, 50 ft (15 m) downstream from Little Fishing Creek, 2.8 mi (4.5 km) west of Lewistown, and 9.9 mi (15.9 km) upstream from mouth.

DRAINAGE AREA.--7.29 mi² (18.88 km²).

PERIOD OF RECORD.--October 1947 to current year.

REVISED RECORDS.--WSP 1432: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 735 ft (224 m), from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--29 years, 11.2 ft³/s (0.317 m³/s), 20.86 in/yr (530 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 610 ft³/s (17.3 m³/s) June 21, 1972, gage height, 4.01 ft (1.222 m), from rating curve extended above 100 ft³/s (2.83 m³/s) on basis of slope-area measurement at gage height 3.73 ft (1.137 m); minimum, 0.6 ft³/s (0.017 m³/s) Sept. 10, 11, 12, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 82 ft³/s (2.32 m³/s) Apr. 1, gage height, 2.18 ft (0.664 m), no peak above base of 100 ft³/s (2.8 m³/s); minimum, 2.0 ft³/s (0.057 m³/s) Sept. 9, 13, 14, 15, gage height, 1.20 ft (0.366 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	15	16	46	30	12	61	11	13	6.1	4.3	2.3
2	31	15	14	35	30	12	48	10	17	5.1	4.0	2.6
3	26	14	13	37	25	11	41	9.3	15	5.1	4.0	2.5
4	23	14	13	32	24	11	40	8.4	13	6.1	3.8	2.5
5	22	13	12	29	23	11	34	8.4	12	4.9	3.8	2.5
6	20	12	12	27	22	11	30	8.0	12	4.6	3.8	2.3
7	18	12	12	26	21	10	28	7.6	12	5.1	4.0	2.3
8	17	15	12	26	21	10	26	7.2	11	7.2	6.8	2.3
9	33	12	15	22	20	11	24	6.8	9.7	6.1	4.6	2.2
10	25	18	15	21	19	11	23	6.8	9.3	4.9	4.0	3.3
11	25	15	12	20	19	11	21	7.2	8.8	8.4	4.0	2.5
12	24	29	12	20	18	11	20	8.0	8.4	8.0	3.8	2.3
13	23	45	12	18	17	16	18	6.8	8.4	5.8	3.8	2.2
14	22	43	11	20	16	13	18	6.5	8.0	4.9	3.8	2.3
15	21	38	11	18	15	13	16	6.5	7.6	6.8	5.4	2.3
16	20	33	12	17	15	15	16	7.6	7.6	6.1	4.3	1.7
17	24	30	11	16	16	15	15	6.8	9.3	5.1	3.5	9.7
18	40	27	11	15	15	14	14	8.0	7.6	4.9	3.3	4.6
19	34	26	11	18	15	15	14	6.8	7.2	4.6	3.1	3.5
20	32	25	10	13	14	15	13	6.1	10	4.3	3.1	3.1
21	30	24	10	14	13	15	13	5.8	13	5.1	3.1	3.1
22	28	22	10	13	15	14	12	5.4	9.7	5.8	3.1	2.9
23	25	21	10	16	13	14	11	5.1	7.2	8.0	3.1	2.7
24	23	20	9.7	12	13	13	11	5.1	5.8	6.1	2.9	2.5
25	23	19	9.3	12	13	14	11	5.1	5.4	5.1	2.9	2.5
26	21	18	20	16	13	13	11	6.8	5.1	4.6	2.9	2.7
27	20	17	15	33	13	14	10	5.8	4.9	4.6	3.5	2.9
28	19	17	13	37	12	15	9.7	5.1	4.6	4.6	2.9	3.1
29	18	15	12	34	12	13	9.3	8.4	5.4	5.4	2.7	2.7
30	17	15	14	32	---	17	9.3	23	6.8	4.9	2.4	7.2
31	16	---	20	29	---	20	---	14	---	4.3	2.4	---
TOTAL	756	639	390.0	724	512	410	627.3	243.4	274.8	172.6	113.1	106.6
MEAN	24.4	21.3	12.6	23.4	17.7	13.2	20.9	7.85	9.16	5.57	3.65	3.55
MAX	40	45	20	46	30	20	61	23	17	8.4	6.8	17
MIN	16	12	9.3	12	12	10	9.3	5.1	4.6	4.3	2.4	2.2
CFSM	3.35	2.92	1.73	3.21	2.43	1.81	2.87	1.08	1.26	.76	.50	.49
IN.	3.86	3.26	1.99	3.69	2.61	2.09	3.20	1.24	1.40	.88	.58	.54

CAL YR 1975 TOTAL 7065.3 MEAN 19.4 MAX 250 MIN 2.5 CFSM 2.66 IN 36.05
WTR YR 1976 TOTAL 4968.8 MEAN 13.6 MAX 61 MIN 2.2 CFSM 1.87 IN 25.35

01641810 MONOCACY RIVER NEAR WALKERSVILLE, MD

LOCATION.--Lat 39°28'47", long 77°23'18", Frederick County, Hydrologic Unit 02070009, at Biggs Ford Bridge on Biggs Ford Road, 2.0 mi (3.2 km) west of Walkersville, 4.7 mi (7.6 km) north of Frederick, 9.3 mi (15.0 km) upstream from Linganore Creek, and 26.5 mi (42.6 km) upstream from mouth.

DRAINAGE AREA.--637 mi² (1,650 km²), approximately.

PERIOD OF RECORD.--Water years 1974 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	AIR TEMPER- ATURE (DEG C)	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)
OCT											
07...	1115	872	215	7.7	17.5	13.5	0	4	9.8	5	.6
21...	1230	1970	195	7.2	22.5	12.5	1	15	9.6	12	1.6
NOV											
03...	1145	668	225	8.0	22.5	10.0	1	1	11.5	2	.8
17...	1130	1240	185	7.5	15.0	7.0	0	3	12.0	3	.4
DEC											
01...	1115	599	210	7.8	6.0	7.0	0	1	12.1	4	.6
15...	1115	574	225	7.9	15.0	5.0	2	6	12.8	5	.8
JAN											
05...	1230	1380	185	7.4	-3.0	.0	1	6	13.8	6	.8
20...	1130	566	215	7.2	-2.0	.0	3	3	15.0	3	.7
FEB											
03...	1130	1390	155	7.1	-1.0	.0	2	25	14.0	19	2.7
18...	1130	1250	210	7.4	12.5	7.5	2	10	11.7	9	1.4
MAR											
10...	1115	553	205	8.4	6.0	2.0	1	1	14.6	4	1.2
22...	1115	744	193	8.1	6.0	9.0	1	2	12.0	8	1.0
APR											
06...	1130	1350	180	7.4	16.5	8.0	1	10	11.6	8	1.5
19...	1130	486	185	7.9	31.5	20.5	0	2	9.1	7	.6
MAY											
04...	1100	390	213	7.8	11.0	13.0	2	4	9.8	11	1.4
19...	1115	486	225	7.6	10.5	14.5	2	5	8.8	12	1.9
JUN											
02...	1120	1160	195	7.5	17.0	18.5	3	70	7.5	22	2.4
23...	1130	677	165	7.4	29.5	24.0	1	40	--	25	2.0
JUL											
14...	1115	310	235	7.7	24.5	21.0	1	4	7.5	14	1.9
28...	1130	207	245	9.0	31.0	23.0	0	20	10.9	25	4.0
AUG											
11...	1115	236	220	7.6	26.5	21.0	0	43	7.1	17	2.3
25...	1110	112	275	7.9	25.5	24.0	1	15	6.4	13	2.0
SEP											
08...	1110	99	275	8.0	26.5	19.0	0	18	7.6	<10	1.9
22...	1120	172	250	7.8	15.5	16.0	1	13	8.2	12	1.0

POTOMAC RIVER BASIN

01641810 MONOCACY RIVER NEAR WALKERSVILLE, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL CALCIUM (CA) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	TOTAL SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT										
07...	530	310	--	--	28	--	5.9	--	4.3	--
21...	1800	81800	--	--	23	--	5.0	--	3.9	--
NOV										
03...	120	150	--	--	25	--	6.3	--	4.6	--
17...	8500	380	--	--	19	--	4.6	--	3.9	--
DEC										
01...	110	120	--	--	22	--	6.4	--	4.4	--
15...	300	630	--	--	31	--	6.4	--	4.9	--
JAN										
05...	380	1100	--	--	24	--	8.5	--	4.4	--
20...	27	76	--	--	22	--	4.4	--	4.6	--
FEB										
03...	82600	814000	--	--	24	--	4.0	--	3.8	--
18...	8620	240	--	--	19	--	5.7	--	5.2	--
MAR										
10...	27	120	--	--	22	--	4.8	--	4.6	--
22...	59	240	--	--	22	--	5.9	--	6.2	--
APR										
06...	230	200	--	--	20	--	5.2	--	4.4	--
19...	71	815	--	--	21	--	5.5	--	4.6	--
MAY										
04...	400	770	--	--	31	--	5.8	--	5.6	--
19...	4500	970	--	--	26	--	5.8	--	5.1	--
JUN										
02...	813000	812000	--	--	21	--	5.7	--	4.7	--
23...	2600	2200	--	--	26	--	4.9	--	4.1	--
JUL										
14...	1700	500	--	--	--	--	--	--	--	--
28...	300	330	100	20	31	31	6.2	6.0	5.9	6.2
AUG										
11...	1000	800	85	24	29	26	4.7	4.9	7.9	6.1
25...	170	240	100	21	35	33	4.7	4.7	7.2	7.6
SEP										
08...	140	240	110	16	33	33	6.9	5.6	7.2	7.5
22...	1400	470	90	23	26	26	6.0	6.1	6.3	6.6
DATE	TOTAL POTASSIUM (K) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT										
07...	2.0	--	73	60	15	9.6	137	4	2.4	.01
21...	2.1	--	63	52	19	7.4	119	19	1.5	.01
NOV										
03...	1.6	--	76	62	16	7.9	128	1	2.1	.01
17...	1.9	--	53	43	17	6.9	104	4	2.0	.01
DEC										
01...	1.5	--	70	57	17	7.8	119	0	2.1	.01
15...	1.6	--	68	56	18	7.8	118	5	1.5	.01
JAN										
05...	1.8	--	51	42	16	8.0	206	11	2.2	.01
20...	1.6	--	68	56	19	8.7	124	5	2.8	.01
FEB										
03...	2.5	--	38	31	13	7.6	102	36	1.8	.02
18...	1.8	--	57	47	22	10	113	27	2.0	.02
MAR										
10...	1.1	--	64	53	17	8.8	105	0	1.8	.02
22...	1.7	--	56	46	19	8.5	117	13	1.4	.03
APR										
06...	1.4	--	51	42	20	7.8	99	19	2.7	.02
19...	1.5	--	69	57	16	8.2	116	5	1.6	.03
MAY										
04...	1.9	--	70	57	15	7.7	130	8	1.6	.04
19...	2.8	--	84	69	14	8.7	135	19	2.0	.10
JUN										
02...	2.5	--	56	46	17	8.8	127	78	2.4	.07
23...	2.5	--	52	43	13	6.5	107	4	1.7	.05
JUL										
14...	--	--	80	66	28	14	163	5	1.6	.02
28...	2.7	2.7	100	82	16	11	158	43	1.1	.02
AUG										
11...	3.3	3.4	75	62	17	11	137	49	1.5	.03
25...	2.7	2.8	99	81	14	11	160	46	1.5	.02
SEP										
08...	2.6	2.5	109	89	15	13	157	57	1.6	.01
22...	3.1	3.3	82	67	19	13	132	29	1.6	.01

01641810 MONOCACY RIVER NEAR WALKERSVILLE, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
OCT										
07...	.00	.21	.06	--	180	0	0	0	10	250
21...	.01	.19	.11	.07	240	1	0	10	10	450
NOV										
03...	.00	.18	.06	--	10	0	1	0	10	120
17...	.01	.22	.07	--	110	0	0	0	0	180
DEC										
01...	.00	.18	.06	--	50	0	1	10	0	180
15...	.01	.26	.08	--	240	0	1	0	0	390
JAN										
05...	.06	.28	.09	--	150	1	1	<10	0	280
20...	.08	.21	.09	--	180	0	0	10	0	190
FEB										
03...	.16	.54	.18	--	520	1	1	<10	10	810
18...	.01	.43	.13	--	310	1	1	<10	0	550
MAR										
10...	.01	.18	.09	--	50	0	2	<10	0	130
22...	.01	.00	.06	--	100	0	0	<10	0	230
APR										
06...	.04	.36	.08	--	200	0	1	10	10	330
19...	.03	.35	.08	--	90	0	0	10	10	250
MAY										
04...	.03	.37	.10	--	110	0	1	10	0	330
19...	.16	.69	.19	--	260	0	0	<10	0	480
JUN										
02...	.12	1.1	.28	--	2000	0	1	10	10	2500
23...	.03	.90	.14	--	1400	2	1	<10	0	1900
JUL										
14...	.05	.48	.22	--	--	--	--	--	--	--
28...	.06	1.2	.14	--	540	0	0	<10	30	840
AUG										
11...	.05	.70	.24	--	690	1	1	<10	0	960
25...	.03	.52	.16	--	590	1	1	<10	0	1000
SEP										
08...	.04	.44	.16	--	550	1	0	<10	0	850
22...	.05	.48	.18	--	270	1	1	<10	0	590

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	CHLORO-PHYLL A (UG/L)	CHLORO-PHYLL B (UG/L)
OCT										
07...	--	16	30	--	1	10	2.0	0	.000	.000
21...	--	2	40	--	2	10	3.6	1	.000	.000
NOV										
03...	--	3	20	--	0	0	2.7	--	.000	.000
17...	--	4	20	--	1	10	2.1	0	.000	.000
DEC										
01...	--	5	10	--	0	10	--	0	.000	.000
15...	--	4	10	--	0	10	2.3	--	7.50	3.20
JAN										
05...	--	4	20	--	1	10	--	1	1.30	.400
20...	--	3	20	--	0	10	1.8	0	.200	.000
FEB										
03...	--	16	50	--	1	10	4.7	0	--	--
18...	--	8	40	--	1	10	5.2	1	4.40	.000
MAR										
10...	--	5	10	--	0	0	4.4	0	2.90	.000
22...	--	6	30	--	0	10	2.0	0	25.0	.000
APR										
06...	--	8	30	--	1	10	3.1	0	.000	.000
19...	--	4	30	--	0	10	3.5	0	4.20	.000
MAY										
04...	--	5	30	--	0	10	3.0	--	4.84	.000
19...	--	4	50	--	0	10	5.5	1	13.8	.000
JUN										
02...	--	11	180	--	0	20	9.3	1	14.4	.000
23...	--	10	120	--	0	20	6.6	0	.000	.000
JUL										
14...	--	--	--	--	--	--	5.9	0	.000	.000
28...	20	5	120	10	0	0	6.0	6	90.2	1.78
AUG										
11...	40	8	100	30	0	20	5.2	0	9.00	1.52
25...	10	10	120	40	0	30	3.8	0	13.9	.000
SEP										
08...	10	22	90	20	0	10	3.8	--	15.3	.000
22...	60	8	80	30	0	10	3.6	0	--	--

POTOMAC RIVER BASIN

01642500 LINGANORE CREEK NEAR FREDERICK, MD

LOCATION.--Lat 39°24'55", long 77°20'00", Frederick County, Hydrologic Unit 02070009, on left bank 2.4 mi (3.9 km) upstream from mouth and 4 mi (6.4 km) east of Frederick.

DRAINAGE AREA.--82.3 mi² (213.2 km²).

PERIOD OF RECORD.--November 1931 to March 1932, September 1934 to current year.

REVISED RECORDS.--WSP 891: 1938-39. WSP 1432: 1934, 1936, 1937(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 23, 1946. Altitude of gage is 270 ft (82 m), from topographic map. Prior to Mar. 27, 1932, nonrecording gage at Frederick pumping station, 1.5 mi (2.4 km) downstream at datum about 20 ft (6.1 m) lower. Sept. 12, 1934, to Sept. 25, 1946, nonrecording gage at present site and datum.

REMARKS.--Records good. Occasional regulation by Linganore Reservoir 0.5 mi (0.8 km) upstream beginning September 1972, total capacity, 883,200,000 gal (3.343 hm³). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--42 years, 84.9 ft³/s (2.404 m³/s), 14.01 in/yr (356 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,100 ft³/s (569 m³/s) June 22, 1972, gage height, 19.46 ft (5.931 m), from high-water mark in well, from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement at gage height 10.01 ft (3.051 m) and contracted-opening measurement at gage height 19.46 ft (5.931 m) at site 2.6 mi (4.2 km) upstream, adjusted for flow from intervening area; minimum discharge, 1.4 ft³/s (0.040 m³/s) Nov. 24, 1972, gage height, 1.10 ft (0.335 m), result of regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0430	*3000 85.0	9.11 2.777	Jan. 27	2130	2240 63.4	7.82 2.384
Jan. 26	2300	2000 56.6	7.38 2.249	Apr. 1	0700	1800 51.0	7.01 2.137

Minimum discharge, 3.2 ft³/s (0.091 m³/s) Oct. 17, gage height, 1.21 ft (0.369 m); minimum daily, 9.5 ft³/s (0.27 m³/s) Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	100	86	1720	213	87	916	93	74	96	47	19
2	183	99	82	393	502	115	273	124	159	57	42	27
3	159	98	78	414	189	132	197	76	89	48	39	30
4	146	94	76	326	170	89	187	66	68	47	37	26
5	137	93	76	213	162	20	168	63	58	45	36	25
6	131	90	76	187	150	72	141	61	55	41	37	23
7	121	88	78	178	136	75	129	59	62	58	41	21
8	116	94	75	213	127	74	118	55	82	94	49	20
9	529	86	105	156	122	85	110	54	92	103	153	19
10	253	115	129	132	119	93	104	53	43	56	15	32
11	152	146	91	138	124	107	101	54	21	109	16	33
12	275	206	81	134	117	132	95	70	14	147	16	25
13	354	423	81	145	115	167	93	58	17	67	16	22
14	342	196	79	426	126	142	90	54	33	52	24	21
15	329	151	79	168	115	119	87	54	41	68	48	21
16	294	135	80	143	119	118	84	70	43	63	55	211
17	9.5	122	75	132	136	117	81	129	187	50	37	108
18	16	288	72	103	134	96	78	238	67	44	35	58
19	120	146	62	98	145	95	76	123	51	41	30	40
20	275	10	68	109	119	90	75	81	291	41	26	35
21	181	22	68	112	111	91	80	69	207	42	24	33
22	159	101	67	108	122	87	73	61	155	112	26	30
23	145	97	65	89	112	79	69	58	79	183	26	27
24	135	93	62	98	100	77	67	55	64	226	26	26
25	138	91	61	95	100	78	71	54	58	84	27	26
26	134	88	410	567	95	78	90	64	54	62	26	27
27	145	90	210	1350	94	78	70	62	49	54	28	30
28	125	87	131	634	91	98	66	55	45	50	33	31
29	116	82	112	262	87	79	65	54	49	53	31	28
30	112	82	119	217	---	98	63	120	71	57	24	46
31	104	---	280	184	---	116	---	83	---	50	18	---
TOTAL	5639.5	3613	3214	9244	4052	2984	3917	2370	2378	2300	1088	1120
MEAN	182	120	104	298	140	96.3	131	76.5	79.3	74.2	35.1	37.3
MAX	529	423	410	1720	502	167	916	238	291	226	153	211
MIN	9.5	10	61	89	87	20	63	53	14	41	15	19
CFSM	2.21	1.46	1.26	3.62	1.70	1.17	1.59	.93	.96	.90	.43	.45
IN.	2.55	1.63	1.45	4.18	1.83	1.35	1.77	1.07	1.07	1.04	.49	.51

CAL YR 1975 TOTAL 53887.5 MEAN 148 MAX 4660 MIN 9.5 CFSM 1.80 IN 24.36
WTR YR 1976 TOTAL 41919.5 MEAN 115 MAX 1720 MIN 9.5 CFSM 1.40 IN 18.95

01643000 MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD

LOCATION.--Lat 39°24'13", long 77°21'58", Frederick County, Hydrologic Unit 02070009, on right bank 0.2 mi (0.3 km) upstream from Jug Bridge on U.S. Highway 40, 0.4 mi (0.6 km) downstream from Linganore Creek, 2 mi (3.2 km) east of Frederick, and 16.9 mi (27.2 km) upstream from mouth.

DRAINAGE AREA.--817 mi² (2,116 km²).

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for October, November 1929, published in WSP 1302.

REVISED RECORDS.--WSP 711: 1930.

GAGE.--Water-stage recorder. Nonrecording gage at site 0.2 mile (0.3 km) downstream. Datum of gage is 231.92 ft (70.689 m) above mean sea level (Corps of Engineers bench mark).

REMARKS.--Records good. Several observations of water temperature were made during the year. Gage-height tele-meter at station.

AVERAGE DISCHARGE.--47 years, 910 ft³/s (25.77 m³/s), 15.13 in/yr (384 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,600 ft³/s (2,310 m³/s) June 23, 1972, gage height, 35.9 ft (10.94 m), from floodmark; minimum daily, 19 ft³/s (0.54 m³/s) Sept. 7-13, 1966

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1889 reached a stage of 30 ft (9.1 m), from floodmarks, discharge, 56,000 ft³/s (1,590 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,800 ft³/s (250 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 18	Unknown	13000 368	Unknown	Jan. 27	1430	14000 396	14.28 4.353
Nov. 13	1500	13200 374	13.81 4.209	Apr. 1	2100	13100 371	13.76 4.194
Jan. 1	1930	*14400 408	14.52 4.426				

Minimum discharge, 123 ft³/s (3.48 m³/s) Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2180	917	767	11700	1730	768	9130	492	1080	699	307	137
2	1880	885	772	6090	5690	763	5350	763	1580	405	247	145
3	1610	857	731	3170	1950	768	2520	658	1220	321	220	151
4	1420	827	694	3560	1550	736	2190	505	790	328	202	155
5	1300	795	668	1980	1520	658	2650	454	613	328	190	148
6	1210	763	658	1650	1290	689	1740	426	522	286	187	142
7	1110	736	673	1500	1100	653	1460	413	501	268	237	136
8	1040	799	673	1570	970	608	1270	390	518	331	462	130
9	4150	857	705	1320	950	623	1130	366	475	564	854	126
10	4000	952	1400	1020	890	710	1030	352	394	370	422	156
11	3000	2470	1170	1050	919	790	961	352	338	475	307	159
12	2800	2360	868	1040	1010	1330	902	434	314	1020	250	160
13	2400	11100	801	967	925	1860	834	446	286	633	217	160
14	2000	4020	768	2590	961	2700	801	386	289	401	205	142
15	1700	2310	747	1950	954	1450	752	359	297	409	240	136
16	1500	1820	736	1260	919	1210	715	363	292	684	300	617
17	1700	1580	720	1100	1180	1520	684	613	492	492	289	1250
18	11000	1520	668	779	1570	1210	658	752	475	363	220	866
19	3000	1330	573	650	1890	1030	623	633	352	293	187	463
20	4000	1070	554	768	1560	999	598	488	772	262	170	305
21	2400	1050	588	806	1200	925	603	401	1000	263	161	251
22	1800	1400	569	731	1280	942	564	359	2080	349	159	222
23	1600	1140	522	578	1770	845	526	331	918	545	154	198
24	1450	992	501	684	1120	763	496	310	578	884	149	178
25	1380	943	505	715	1010	736	488	297	467	509	147	172
26	1400	909	2290	2310	961	731	598	342	409	359	145	170
27	1330	877	4640	12900	913	699	638	430	363	297	152	177
28	1200	880	1840	10100	868	873	526	462	324	269	178	198
29	1100	817	1340	2810	806	890	484	366	345	294	189	222
30	1040	766	1220	2220	---	862	462	1120	513	300	168	299
31	985	---	2630	1770	---	1020	---	2160	---	332	149	---
TOTAL	68685	47742	31991	81338	39456	30361	41383	16223	18597	13333	7464	7771
MEAN	2216	1591	1032	2624	1361	979	1379	523	620	430	241	259
MAX	11000	11100	4640	12900	5690	2700	9130	2160	2080	1020	854	1250
MIN	985	736	501	578	806	608	462	297	286	262	145	126
CFSM	2.71	1.95	1.26	3.21	1.67	1.20	1.69	.64	.76	.53	.29	.32
IN.	3.13	2.17	1.46	3.70	1.80	1.38	1.88	.74	.85	.61	.34	.35
CAL YR 1975	TOTAL	656593	MEAN	1799	MAX	49000	MIN	203	CFSM	2.20	IN	29.90
WTR YR 1976	TOTAL	404344	MEAN	1105	MAX	12900	MIN	126	CFSM	1.35	IN	18.41

POTOMAC RIVER BASIN

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

LOCATION.--Lat 39°23'16", long 77°22'40", Frederick County, Hydrologic Unit 02070009, at Reich's Ford Bridge, 1.1 mi (1.8 km) downstream from U.S. Highway 40, 1.2 mi (1.9 km) downstream from gaging station, 2 mi (3.2 km) southeast of Frederick, and 15.0 m (25.1 km), revised, upstream from mouth.

PERIOD OF RECORD.--Water years 1961 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1960 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1960 to current year.

REMARKS.--Water temperatures are measured daily in field at time of sample. Water-discharge records for Monocacy River at Jug Bridge near Frederick (station 01643000) are used for computation of sediment loads. Prior to 1970, published as Monocacy River at Jug Bridge near Frederick (station 01643000).

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES (water years 1961-72, 1975): Maximum, 31.0°C Aug. 1, 4, 1975; minimum, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,000 mg/L July 10, 1970; minimum daily mean, 1 mg/L on many days in 1961-67, 1970, and 1972.

SEDIMENT LOADS: Maximum daily, 134,000 tons (122,000 tonnes) June 22, 1972; minimum daily, less than 0.50 ton (0.45 tonne) on many days in 1961-67.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 836 mg/L Apr. 1; minimum daily mean, 4 mg/L Feb. 26.

SEDIMENT LOADS: Maximum daily, 22,900 tons (20,800 tonnes) Jan. 27; minimum daily, 7.0 tons (6.4 tonnes) Dec. 23.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	WEATHER	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOLOGICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT											
07...	1230	1110	250	7.6	21.0	14.0	1	6	9.3	5	1.6
21...	1400	2450	210	7.6	23.5	13.0	1	15	9.2	14	2.6
NOV											
03...	1330	856	255	8.0	23.5	11.0	1	2	11.0	4	1.4
17...	1300	1580	215	7.6	17.5	8.0	0	4	12.0	4	.8
DEC											
01...	1245	768	240	7.7	6.0	7.0	0	2	12.2	4	1.3
15...	1245	741	250	7.8	18.0	5.5	2	3	13.0	7	1.2
JAN											
05...	1330	1770	200	7.4	-2.5	.0	1	15	13.4	9	1.0
20...	1250	747	245	7.3	-1.0	.0	3	4	14.6	5	1.4
FEB											
03...	1330	1720	175	7.2	.0	.0	2	40	14.0	17	3.3
18...	1300	1620	225	7.4	14.5	8.0	3	10	12.0	8	1.6
MAR											
10...	1240	715	245	8.1	3.5	4.0	0	1	13.8	6	1.8
22...	1245	961	215	8.2	7.5	10.0	0	2	12.0	9	1.2
APR											
06...	1300	1700	200	7.5	19.0	9.0	1	10	11.2	10	1.9
19...	1300	623	215	7.8	29.5	21.0	0	4	9.0	7	.8
MAY											
04...	1230	496	235	7.7	13.5	13.5	1	4	9.9	11	1.2
19...	1245	608	225	7.7	11.5	15.0	2	6	9.1	12	2.0
JUN											
02...	1240	1600	200	7.4	17.5	18.5	3	70	7.8	21	3.0
23...	1245	817	180	7.3	29.5	25.0	1	35	--	25	3.1
JUL											
14...	1240	394	250	7.6	25.0	21.0	1	30	7.1	23	2.6
28...	1330	262	260	9.1	33.0	25.0	1	20	11.6	29	7.6
AUG											
11...	1300	303	270	7.6	30.0	22.0	1	36	6.6	22	4.0
25...	1245	143	335	7.6	28.0	25.0	1	20	4.8	13	4.2
SEP											
08...	1230	127	345	7.8	26.0	20.5	0	6	5.9	13	6.1
22...	1300	220	290	7.6	17.0	17.0	1	18	7.3	14	2.8

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL CALCIUM (CA) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG)	DIS-SOLVED MAGNESIUM (MG/L)	TOTAL SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT										
07...	270	38	--	--	32	--	6.0	--	5.0	--
21...	5600	1500	--	--	24	--	5.1	--	4.3	--
NOV										
03...	47	3200	--	--	34	--	6.0	--	5.1	--
17...	330	600	--	--	23	--	4.8	--	4.2	--
DEC										
01...	32	150	--	--	27	--	6.8	--	4.9	--
15...	140	270	--	--	29	--	6.2	--	5.2	--
JAN										
05...	530	1500	--	--	63	--	25	--	4.7	--
20...	89	130	--	--	26	--	4.4	--	5.1	--
FEB										
03...	1300	4900	--	--	32	--	5.4	--	4.2	--
18...	5600	180	--	--	29	--	6.2	--	5.4	--
MAR										
10...	87	8300	--	--	24	--	5.1	--	8.4	--
22...	84	1100	--	--	22	--	5.3	--	5.7	--
APR										
06...	8280	260	--	--	28	--	4.9	--	4.5	--
19...	28	<1	--	--	31	--	4.6	--	5.0	--
MAY										
04...	41	8300	--	--	25	--	6.0	--	5.9	--
19...	1700	380	--	--	25	--	5.8	--	5.4	--
JUN										
02...	814000	7600	--	--	24	--	5.5	--	4.9	--
23...	4400	490	--	--	21	--	4.8	--	4.7	--
JUL										
14...	930	210	--	--	28	--	6.4	--	6.6	--
28...	600	290	110	25	35	35	6.3	6.1	7.0	7.3
AUG										
11...	1300	260	97	23	29	30	6.2	5.4	8.0	8.1
25...	220	170	110	22	39	38	5.5	4.8	11	12
SEP										
08...	1200	180	130	25	41	42	7.8	6.4	1.1	12
22...	823000	1200	110	26	33	33	6.6	5.8	7.7	7.9
DATE	TOTAL PHOSPHATE (K) (MG/L)	DIS-SOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT										
07...	2.2	--	89	73	16	12	144	9	2.7	.02
21...	2.4	--	71	58	19	8.7	139	27	1.7	.01
NOV										
03...	1.8	--	92	75	16	9.9	203	2	2.4	.01
17...	2.2	--	65	53	18	8.1	117	6	2.2	.01
DEC										
01...	1.7	--	84	69	17	9.4	130	1	2.4	.01
15...	1.8	--	82	67	17	8.0	142	4	2.0	.02
JAN										
05...	2.1	--	55	45	16	8.9	111	22	2.3	.01
20...	2.0	--	81	66	17	10	139	7	1.9	.01
FEB										
03...	2.7	--	47	39	14	9.1	110	47	1.9	.02
18...	1.9	--	64	53	21	11	116	30	2.3	.03
MAR										
10...	1.4	--	77	63	17	16	124	2	2.0	.00
22...	1.6	--	68	56	18	10	124	14	1.7	.03
APR										
06...	1.5	--	58	48	18	8.7	114	4	2.4	.02
19...	1.7	--	79	65	17	9.8	133	16	1.9	.04
MAY										
04...	2.1	--	80	66	15	8.7	142	9	1.9	.04
19...	3.0	--	84	69	14	9.3	132	21	1.8	.09
JUN										
02...	3.0	--	62	51	16	9.2	148	123	2.1	.07
23...	2.8	--	60	49	15	7.8	119	108	1.7	.09
JUL										
14...	3.6	--	85	70	17	9.6	150	61	1.8	.09
28...	3.2	3.4	107	88	18	14	160	33	1.1	.06
AUG										
11...	3.5	3.6	90	74	20	14	154	50	1.7	.09
25...	3.5	3.6	113	93	18	16	190	38	1.7	.11
SEP										
08...	3.3	3.3	130	107	20	19	190	28	1.7	.10
22...	3.6	3.9	98	88	21	15	165	40	1.6	.07

POTOMAC RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
OCT										
07...	.00	.10	.10	--	200	0	0	<10	0	310
21...	.04	.29	.14	.08	260	1	0	0	20	470
NOV										
03...	.07	.36	.10	--	70	0	0	0	10	170
17...	.08	.35	.11	--	80	0	0	0	10	210
DEC										
01...	.09	.27	.08	--	80	0	1	10	10	190
15...	.08	.29	.11	--	110	0	1	<10	0	210
JAN										
05...	.11	.34	.13	--	240	1	1	<10	0	420
20...	.28	.51	.13	--	100	0	0	10	0	230
FEB										
03...	.17	.41	.25	--	560	2	1	<10	0	850
18...	.01	.50	.16	--	330	1	0	<10	0	550
MAR										
10...	.06	.23	.12	--	70	0	0	<10	0	160
22...	.11	.29	.11	--	110	0	0	<10	0	240
APR										
06...	.12	.43	.11	--	220	0	0	20	0	400
19...	.12	.43	.13	--	170	0	1	10	0	370
MAY										
04...	.12	.46	.16	--	130	0	1	10	0	280
19...	.20	1.0	.23	--	300	0	1	<10	0	530
JUN										
02...	.19	1.0	.28	--	1600	0	1	10	10	2500
23...	.04	.94	.26	--	1400	3	1	<10	10	2000
JUL										
14...	.11	.82	.28	--	700	2	0	<10	0	1000
28...	.05	.85	.20	--	430	1	1	<10	30	710
AUG										
11...	.18	1.0	.35	--	630	0	2	<10	0	1700
25...	.36	.74	.34	--	460	0	1	<10	10	710
SEP										
08...	.45	.75	.44	--	340	1	1	<10	10	460
22...	.28	.55	.35	--	400	2	1	<10	10	790

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)
OCT										
07...	--	13	40	--	0	20	2.2	1	.000	.000
21...	--	3	50	--	2	10	3.0	0	.000	.000
NOV										
03...	--	1	20	--	1	10	2.9	--	.000	.000
17...	--	2	30	--	1	10	2.8	0	.000	.000
DEC										
01...	--	4	10	--	1	10	--	0	.000	.000
15...	--	7	10	--	0	10	--	--	3.50	.000
JAN										
05...	--	3	40	--	0	10	--	1	.400	.000
20...	--	2	20	--	0	10	--	1	.500	.000
FEB										
03...	--	8	60	--	0	10	5.4	0	--	--
18...	--	8	50	--	1	10	3.4	0	4.50	.200
MAR										
10...	--	3	30	--	0	0	2.7	1	3.40	.100
22...	--	4	40	--	1	10	2.4	0	14.0	.000
APR										
06...	--	5	40	--	1	10	3.2	0	.000	.000
19...	--	3	50	--	0	10	3.5	0	3.90	.000
MAY										
04...	--	10	50	--	0	10	5.6	0	3.91	.000
19...	--	8	80	--	0	10	5.3	0	13.1	1.03
JUN										
02...	--	13	170	--	0	20	9.7	0	8.64	.000
23...	--	14	170	--	0	20	9.4	2	--	--
JUL										
14...	--	10	140	--	0	20	7.3	0	.000	.000
28...	30	11	150	20	1	10	6.7	0	103	3.43
AUG										
11...	20	11	160	80	0	20	7.4	0	15.3	5.29
25...	10	14	160	100	1	30	6.1	0	11.2	.399
SEP										
08...	10	26	140	80	0	20	4.0	--	11.3	1.07
22...	50	18	150	90	0	20	3.4	0	--	--

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE DI- MENT (MG/L)	SUS- PENDE DI- MENT (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
APR 01...	1250	396	11.0	1140	1220	--	39	54
JUN 02...	0640	725	18.5	141	276	29	48	67

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
APR 01...	69	78	88	90	92	95	99	100
JUN 02...	83	91	98	99	99	100	--	--

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	7.0	3.0	---	12.0	11.0	16.0	---	---	27.0	23.0
2	---	---	---	2.5	0.0	---	11.0	18.0	18.5	---	23.0	22.0
3	---	11.0	---	4.0	1.0	9.0	11.0	16.0	18.5	---	24.0	23.0
4	---	---	---	1.5	4.0	10.0	10.0	15.0	---	---	25.0	22.5
5	---	---	---	0.5	3.0	12.5	11.0	18.5	21.0	---	24.0	22.0
6	---	---	---	2.0	2.0	12.0	11.5	19.5	20.5	---	25.0	21.5
7	14.0	---	---	2.0	2.0	11.0	13.5	18.0	21.5	---	24.0	---
8	---	---	---	3.0	2.0	10.0	12.0	17.5	23.0	---	---	25.0
9	---	---	---	1.0	2.0	---	12.5	18.0	24.0	24.5	---	26.0
10	---	---	---	0.0	---	4.0	11.0	18.0	24.0	24.5	23.0	21.0
11	---	---	---	1.0	---	7.5	10.0	18.0	25.5	---	26.0	21.0
12	---	---	---	1.5	---	7.0	11.0	17.0	25.5	22.0	26.0	23.0
13	---	---	---	4.0	---	7.0	12.5	18.0	23.0	24.0	26.0	---
14	---	---	---	4.0	---	7.0	14.0	---	23.0	24.0	25.0	22.0
15	---	---	---	2.0	---	8.5	15.0	---	24.0	25.0	---	21.5
16	---	---	---	1.5	---	7.0	18.0	---	---	24.0	24.0	20.0
17	---	8.0	---	1.0	---	5.0	22.0	---	26.0	25.5	25.0	21.0
18	---	---	---	0.5	8.0	5.5	24.0	17.0	26.5	24.5	24.0	21.0
19	---	---	---	1.0	---	---	24.0	15.0	---	25.0	24.0	21.0
20	---	---	---	1.0	---	11.5	24.0	---	24.5	25.0	---	20.5
21	13.0	---	---	1.0	8.0	12.0	24.0	20.5	24.0	---	26.0	---
22	---	---	---	1.0	8.0	11.0	22.0	21.0	23.5	23.0	26.5	19.0
23	---	---	5.5	0.5	7.0	11.5	22.5	22.0	25.0	23.0	26.0	19.0
24	---	---	---	3.0	7.0	12.5	21.0	20.5	26.0	24.0	25.5	---
25	---	---	---	2.5	7.5	12.0	18.0	21.0	26.0	25.0	28.0	19.0
26	---	---	---	3.0	9.0	14.0	---	---	28.0	24.0	29.0	20.0
27	---	---	---	1.5	12.0	14.0	12.0	19.0	25.0	24.0	---	19.0
28	---	---	1.5	2.0	13.5	13.0	13.5	19.5	---	27.0	27.0	---
29	---	---	---	4.0	11.5	13.0	16.0	19.0	27.0	---	27.0	16.0
30	---	---	4.0	---	---	12.0	18.0	19.0	---	25.0	22.0	15.0
31	---	---	---	3.0	---	11.0	---	19.0	---	27.0	22.0	---

POTOMAC RIVER BASIN

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

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L) LOADS (T/DAY)		MEAN CONCENTRATION (MG/L) LOADS (T/DAY)		MEAN CONCENTRATION (MG/L) LOADS (T/DAY)		MEAN CONCENTRATION (MG/L) LOADS (T/DAY)		MEAN CONCENTRATION (MG/L) LOADS (T/DAY)		MEAN CONCENTRATION (MG/L) LOADS (T/DAY)	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	25	147	11	27	17	35	545	15900	36	173	10	21
2	19	96	9	22	13	27	112	1950	302	4910	10	21
3	15	65	9	21	13	26	65	556	95	553	10	21
4	12	46	13	29	11	21	70	658	33	138	7	14
5	11	39	13	28	9	16	35	187	20	82	14	25
6	10	33	12	25	9	16	20	89	18	63	16	30
7	10	30	7	14	10	18	21	85	18	53	8	14
8	10	28	8	17	14	25	25	106	13	34	6	9.8
9	295	3560	7	16	15	29	32	114	14	36	9	15
10	91	1170	14	36	30	113	33	91	14	34	12	23
11	26	211	110	770	20	63	39	111	16	40	16	34
12	18	136	49	452	21	49	25	70	20	55	38	138
13	14	91	146	4380	21	45	25	65	16	40	44	241
14	15	81	41	465	17	35	231	1690	18	47	47	352
15	13	60	16	100	16	32	100	567	16	41	40	157
16	8	32	7	34	12	24	36	122	18	45	30	98
17	50	229	8	34	13	25	17	50	30	96	24	98
18	126	10000	10	41	11	20	10	21	40	170	14	46
19	80	648	9	32	13	20	11	19	60	306	7	19
20	70	756	6	17	10	15	12	25	35	147	9	24
21	21	136	10	28	11	17	32	70	10	32	11	27
22	19	92	19	72	11	17	28	55	14	50	10	25
23	11	48	10	31	5	7.0	15	23	32	158	9	21
24	17	67	8	21	8	11	45	83	12	36	6	12
25	20	75	9	23	10	14	23	44	7	19	8	16
26	19	72	12	29	131	1430	315	4630	4	10	16	32
27	16	57	12	28	224	3130	674	22900	11	27	13	25
28	16	52	16	38	55	273	308	8580	13	30	18	42
29	17	50	22	49	18	65	115	873	10	22	18	43
30	18	51	22	46	20	66	36	216	---	---	18	42
31	15	40	---	---	341	2800	33	158	---	---	85	285
TOTAL	---	18198.0	---	6925.0	---	8484.0	---	60108.0	---	7447.0	---	1970.8
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	836	19600	20	27	80	233	70	132	77	64	33	12
2	218	3610	40	82	143	621	40	44	76	51	37	14
3	45	306	17	30	134	441	35	30	58	34	29	12
4	35	207	14	19	84	179	30	27	44	24	25	10
5	51	365	12	15	43	71	30	27	48	25	25	10
6	29	136	16	18	35	49	30	23	53	27	23	8.8
7	24	95	21	23	30	41	25	18	65	42	22	8.1
8	24	82	22	23	25	35	40	36	150	187	23	8.1
9	22	67	16	16	22	28	160	244	238	612	25	8.5
10	19	53	13	12	17	18	75	75	80	91	30	13
11	19	49	13	12	12	11	180	231	88	73	34	15
12	16	39	20	23	10	8.5	549	1530	43	29	36	16
13	13	29	19	23	10	7.7	210	359	29	17	35	15
14	15	32	16	17	14	11	70	76	31	17	33	13
15	16	32	16	16	13	10	113	160	36	23	33	12
16	15	29	15	15	12	9.5	253	495	47	38	128	266
17	20	37	129	228	27	36	95	126	58	45	277	986
18	32	57	137	283	27	35	55	54	44	26	249	589
19	24	40	32	55	24	23	40	32	43	22	105	131
20	18	29	21	28	287	597	37	26	39	18	55	45
21	14	23	18	19	455	1230	57	40	31	13	50	34
22	10	15	14	14	478	2740	57	54	28	12	48	29
23	11	16	16	14	125	330	85	125	27	11	29	16
24	11	15	16	13	75	117	181	460	28	11	27	13
25	12	16	14	11	44	55	80	110	32	13	30	14
26	12	19	14	13	25	28	57	55	31	12	29	13
27	11	19	16	19	27	26	42	34	31	13	37	18
28	10	14	16	20	28	24	45	33	33	16	43	23
29	10	13	18	18	28	26	75	60	39	20	48	29
30	9	11	84	347	70	97	80	65	41	19	48	39
31	---	---	144	882	---	---	60	54	28	11	---	---
TOTAL	---	25055.0	---	2335.0	---	7137.7	---	4835.0	---	1616.0	---	2420.5

TOTAL LOAD FOR YEAR: 146532.0 TONS.

01643500 BENNETT CREEK AT PARK MILLS, MD

LOCATION.--Lat 39°17'40", long 77°24'30", Frederick County, Hydrologic Unit 02070009, on left bank 75 ft (23 m) downstream from highway bridge, 0.2 mi (0.3 km) south of Park Mills, 1.8 mi (2.9 km) upstream from mouth, and 3.7 mi (6.0 km) southwest of Urbana.

DRAINAGE AREA.--62.8 mi² (162.7 km²).

PERIOD OF RECORD.--July 1948 to September 1958. Annual maximum, water years 1960-66. August 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 240 ft (73.2 m), from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--20 years (water years 1949-58, 1967-76), 69.9 ft³/s (1.980 m³/s), 15.11 in/yr (384 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,200 ft³/s (912 m³/s) June 21, 1972, gage height, 22.1 ft (6.74 m), from floodmark, from rating curve extended above 2,700 ft³/s (76.5 m³/s) on basis of contracted-opening measurements at gage heights 11.15 ft (3.399 m), 14.33 ft (4.368 m), and 22.1 ft (6.74 m); minimum, 0.30 ft³/s (0.008 m³/s) Sept. 8, 1966, gage height, 0.80 ft (0.244 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (33 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0515	*2830 80.1	7.74 2.359	Jan. 27	1915	1470 41.6	5.30 1.615
Jan. 26	2030	1280 36.2	4.85 1.478	Apr. 1	0600	1500 42.5	5.37 1.637

Minimum discharge, 12 ft³/s (0.34 m³/s) Sept. 8, 9, 10, 14, 15, gage height, 1.50 ft (0.457 in).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	63	57	1270	120	64	702	99	120	76	33	14
2	95	63	54	293	300	63	199	86	206	38	29	21
3	85	61	54	412	150	63	141	61	86	35	28	20
4	80	61	51	235	115	63	135	54	66	34	25	18
5	75	57	51	160	110	63	117	51	57	32	24	16
6	70	56	51	138	103	61	101	49	54	30	25	13
7	65	56	54	133	94	59	92	47	51	54	40	13
8	65	61	51	160	90	57	86	46	47	44	45	12
9	260	56	84	112	86	66	80	44	44	64	38	12
10	120	68	88	115	82	70	78	43	41	35	33	27
11	95	66	66	105	88	86	76	46	40	112	28	19
12	85	157	59	99	80	90	72	72	38	63	26	14
13	75	293	61	110	82	130	70	47	35	41	24	13
14	70	117	59	169	92	97	68	44	37	35	24	12
15	65	90	59	101	82	84	66	43	37	80	60	13
16	65	82	57	94	84	86	64	74	40	61	40	173
17	100	76	54	88	92	82	63	120	135	41	30	103
18	360	72	52	72	88	72	61	247	46	34	26	43
19	120	70	46	74	92	72	59	99	40	31	24	31
20	150	68	49	74	80	68	57	68	149	30	22	27
21	100	82	51	72	76	68	78	57	78	31	20	27
22	90	74	49	72	86	64	61	51	70	46	20	23
23	80	64	49	66	76	61	57	47	51	50	19	21
24	70	63	47	66	72	61	54	46	44	52	18	20
25	75	61	46	63	72	61	56	46	41	41	18	20
26	70	59	313	435	72	61	61	57	40	33	18	21
27	70	61	122	791	70	59	52	52	34	30	22	23
28	65	57	84	220	68	64	51	44	32	29	23	23
29	65	56	76	140	64	57	51	46	38	54	20	20
30	65	56	80	120	---	88	49	84	51	42	15	38
31	61	---	301	110	---	103	---	59	---	35	14	---
TOTAL	3011	2326	2375	6169	2766	2243	2957	2029	1848	1413	831	850
MEAN	97.1	77.5	76.6	199	95.4	72.4	98.6	65.5	61.6	45.6	26.8	28.3
MAX	360	293	313	1270	300	130	702	247	206	112	60	173
MIN	61	56	46	63	64	57	49	43	32	29	14	12
CFSM	1.55	1.23	1.22	3.17	1.52	1.15	1.57	1.04	.98	.73	.43	.45
IN.	1.78	1.38	1.41	3.65	1.64	1.33	1.75	1.20	1.09	.84	.49	.50

CAL YR 1975 TOTAL 30963 MEAN 84.8 MAX 2170 MIN 18 CFSM 1.35 IN 18.34
WTR YR 1976 TOTAL 28818 MEAN 78.7 MAX 1270 MIN 12 CFSM 1.25 IN 17.07

01645000 SENECA CREEK AT DAWSONVILLE, MD

LOCATION---Lat 39°07'41", long 77°20'13", Montgomery County, Hydrologic Unit 02070008, on right bank 60 ft (18 m) downstream from bridge on State Highway 28, 150 ft (46 m) downstream from mouth of Great Seneca Creek, 0.5 mi (0.8 km) east of Dawsonville, and 5.8 mi (9.3 km) upstream from mouth.
DRAINAGE AREA---101 mi² (262 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD---September 1930 to current year.

REVISED RECORDS---WSP 726: Drainage area. WSP 1232: 1930. WSP 1272: 1933. WSP 1432: 1934-35(M), 1941(M).
WDR-MD-74-1: 1970(M).

GAGE---Water-stage recorder. Concrete control since Mar. 3, 1934. Datum of gage is 214.15 ft (65.273 m) above mean sea level, adjustment of 1912. Sept. 26 to Nov. 9, 1930, chain gage and Nov. 10, 1930, to Apr. 6, 1934, water-stage recorder, at highway bridge 60 ft (18 m) upstream at same datum.

REMARKS---Water-discharge records good. Small diversion at times for irrigation above station.

AVERAGE DISCHARGE---46 years, 98.7 ft³/s (2.795 m³/s), 13.27 in/yr (337 mm/yr).

EXTREMES FOR PERIOD OF RECORD---Maximum discharge, 26,100 ft³/s (739 m³/s) June 22, 1972, gage height, 16.4 ft (5.00 m), from high-water mark in gage house, from rating curve extended above 3,000 ft³/s (850 m³/s) on basis of contracted-opening and flow-over-road measurement at gage height 12.17 ft (3.709 m) at gage; and contracted-opening and flow-over-road measurement at gage height 16.32 ft (4.974 m) at site 5.0 mi (8.0 km) downstream, adjusted for flow from intervening area; minimum observed, 1.7 ft³/s (0.048 m³/s) Sept. 28, 29, 1930, gage height, 0.56 ft (0.171 m).

EXTREMES FOR CURRENT YEAR---Peak discharges above base of 1,300 ft³/s (36 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0630	*4900 139	8.94 2.725	Apr. 1	0845	2690 76.2	7.65 2.332
Jan. 27	2100	1860 52.7	6.71 2.045				

Minimum discharge, 25 ft³/s (0.71 m³/s) Sept. 14, 15, gage height, 1.88 ft (0.573 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	106	101	2980	208	104	1370	166	141	153	52	29
2	142	103	96	441	440	102	306	183	293	57	45	42
3	122	103	93	592	183	103	212	111	119	50	43	37
4	116	101	91	373	163	101	199	98	97	50	40	33
5	112	101	89	252	159	101	178	94	87	48	39	32
6	109	98	89	208	152	98	154	90	80	45	71	28
7	102	96	93	205	137	92	141	87	79	46	61	27
8	101	140	91	312	131	98	132	82	75	77	122	27
9	390	106	156	169	127	106	124	83	71	122	71	26
10	173	140	163	170	122	122	119	81	76	57	55	42
11	150	166	111	159	130	142	118	84	65	201	48	36
12	128	341	103	159	122	150	112	167	62	120	43	27
13	114	547	106	156	125	175	111	88	57	63	40	26
14	106	201	101	236	155	141	108	84	57	55	50	26
15	101	156	101	163	128	123	105	81	58	103	270	25
16	98	140	98	153	132	138	103	231	57	117	120	342
17	134	125	91	143	143	135	100	260	178	82	53	136
18	696	122	91	120	134	112	97	197	71	55	46	58
19	216	117	79	125	156	112	94	167	63	50	42	45
20	208	114	84	125	125	107	96	109	62	48	39	40
21	153	140	86	120	120	109	400	95	84	46	37	39
22	137	125	86	110	150	105	124	86	88	57	36	36
23	125	111	82	110	131	98	104	82	64	63	34	33
24	120	106	79	109	117	96	96	79	58	63	34	33
25	128	103	77	105	116	100	97	78	54	50	33	33
26	125	101	532	358	114	98	110	108	53	45	33	33
27	125	103	201	1030	111	100	92	102	48	42	37	34
28	120	101	143	532	109	143	89	82	45	42	45	36
29	117	96	128	255	105	102	87	85	46	163	39	32
30	111	96	131	213	---	183	86	216	50	131	33	44
31	106	---	452	188	---	189	---	112	---	57	29	---
TOTAL	4846	4205	4024	10371	4245	3685	5264	3668	2438	2358	1740	1437
MEAN	156	140	130	335	146	119	175	118	81.3	76.1	56.1	47.9
MAX	696	547	532	2980	440	189	1370	260	293	201	270	342
MIN	98	96	77	105	105	92	86	78	45	42	29	25
CFSM	1.54	1.39	1.29	3.32	1.45	1.18	1.73	1.17	.80	.75	.56	.47
IN.	1.78	1.55	1.48	3.82	1.56	1.36	1.94	1.35	.90	.87	.64	.53

CAL YR 1975 TOTAL 56038 MEAN 154 MAX 7720 MIN 30 CFSM 1.52 IN 20.64
WTR YR 1976 TOTAL 48281 MEAN 132 MAX 2980 MIN 25 CFSM 1.31 IN 17.78

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

[illegible]

POTOMAC RIVER BASIN

01645200 WATTS BRANCH AT ROCKVILLE, MD

LOCATION.--Lat 39°05'03", long 77°10'38", Montgomery County, Hydrologic Unit 02070008, on left bank 0.2 mi (0.3 km) south of State Highway 28, 1.3 mi (2.1 km) west of post office in Rockville, and 9.4 mi (15.0 km) upstream from mouth.

DRAINAGE AREA.--3.70 mi² (9.58 km²).

PERIOD OF RECORD.--June 1957 to current year.

REVISED RECORDS.--WSP 2103: 1965. WDR MD-75-1: 1967-70.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 330 ft (100 m), from topographic map.

REMARKS.--Records good except those for period of indefinite stage-discharge relationship, Apr. 15 to July 19, which are fair. Some regulation of low flow from unknown source above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--19 years, 3.98 ft³/s (0.113 m³/s), 14.61 in/yr (371 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft³/s (96.3 m³/s) Sept. 26, 1975, gage height, 7.32 ft (2.231 m), from rating curve extended above 280 ft³/s (7.93 m³/s) on basis of combined computation of peak flow through culvert and slope-area measurement of tributary inflow at gage height 7.22 ft (2.201 m) in gage well, 7.83 ft (2.387 m), from floodmarks; minimum, 0.10 ft³/s (0.003 m³/s) Sept. 2, 1966, gage height, 1.10 ft (0.335 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 220 ft³/s (6.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 31	2300	*283 8.01	5.91 1.801	July 29	1815	221 6.26	5.41 1.649
Apr. 1	0200	230 6.51	5.51 1.679				

Minimum discharge, 0.35 ft³/s (0.010 m³/s) Sept. 12, 13, gage height, 1.16 ft (0.354 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.0	2.9	54	11	2.3	39	16	5.0	2.0	4.3	.54
2	2.3	1.9	1.9	5.6	11	2.2	4.6	3.0	3.0	1.5	1.1	3.2
3	2.2	1.9	1.9	23	3.4	2.2	3.6	2.2	2.0	1.2	1.1	.72
4	2.1	1.9	1.8	5.7	3.4	2.2	4.5	1.8	1.8	1.1	1.1	.65
5	2.0	1.9	1.8	3.5	3.2	2.2	3.3	1.8	1.7	1.0	.98	.65
6	1.8	1.9	2.0	3.2	3.3	2.1	3.0	1.7	1.7	1.0	.91	.69
7	1.9	1.9	2.1	5.8	2.7	2.1	2.6	1.6	1.6	1.5	1.2	.65
8	2.7	2.9	2.1	10	2.7	2.0	2.6	1.5	1.5	1.8	3.2	.44
9	25	1.7	1.1	3.0	2.6	5.9	2.4	1.5	1.4	1.2	1.4	.40
10	3.4	1.1	2.9	2.8	2.6	5.5	2.3	1.5	1.3	1.6	1.2	3.1
11	9.8	2.5	2.1	2.8	3.1	4.3	2.3	3.0	1.3	1.7	.51	.49
12	2.9	2.1	2.0	2.9	2.6	3.0	2.2	4.0	1.3	2.2	.85	.40
13	2.4	1.1	2.4	3.0	4.1	3.0	2.4	1.5	1.2	1.3	.79	.40
14	2.4	2.9	2.0	3.7	7.0	2.4	2.4	1.5	1.2	1.0	1.9	.44
15	2.4	2.5	2.0	2.7	3.1	2.4	2.4	1.5	1.1	1.5	1.9	4.4
16	2.3	2.3	2.0	2.7	3.0	5.2	2.4	1.5	1.0	1.0	1.9	2.9
17	18	2.2	1.9	2.5	3.7	2.6	2.5	4.2	6.0	2.4	1.1	1.3
18	6.5	2.2	1.8	2.2	5.9	2.4	2.5	1.0	2.0	1.2	.91	1.5
19	3.4	2.0	1.6	2.2	3.5	2.3	2.4	2.8	1.3	1.0	.85	.98
20	2.8	2.0	1.7	2.2	2.7	2.2	2.4	2.1	5.0	1.0	.79	.91
21	2.4	6.5	1.7	2.3	2.6	2.6	4.6	1.7	7.0	1.2	.79	.91
22	2.2	2.2	1.7	2.2	6.0	2.0	2.2	1.4	2.0	1.2	.79	.79
23	2.1	2.0	1.7	2.0	2.7	2.0	2.0	1.4	1.5	1.7	.72	.79
24	2.0	2.0	1.6	2.1	2.6	2.0	1.9	1.4	1.3	1.1	.65	.79
25	3.3	2.0	2.0	2.0	2.5	2.6	5.0	2.2	2.0	.87	.72	.72
26	2.2	1.9	3.6	19	2.5	2.0	2.6	3.0	1.3	.79	.91	.85
27	2.2	2.0	3.4	37	2.4	4.6	2.0	1.7	1.2	.79	1.9	1.2
28	2.0	1.9	2.5	9.0	2.4	2.8	1.9	1.4	1.2	.79	.91	1.1
29	2.0	1.9	2.4	4.4	2.4	2.0	1.8	1.2	1.1	2.1	.79	.79
30	2.0	1.9	5.2	3.7	---	8.1	1.8	1.0	1.5	2.3	.54	5.1
31	1.9	---	5.7	3.4	---	14	---	2.0	---	1.5	.54	---
TOTAL	122.9	103.9	165.1	230.6	110.7	103.2	117.6	116.4	85.0	99.24	54.75	75.60
MEAN	3.96	3.46	5.33	7.44	3.82	3.33	3.92	3.75	2.83	3.20	1.77	2.52
MAX	25	21	57	54	11	14	39	16	15	21	19	29
MIN	1.8	1.7	1.6	2.0	2.4	2.0	1.8	1.4	1.1	.79	.54	.40
CFSM	1.07	.94	1.44	2.01	1.03	.90	1.06	1.01	.76	.86	.48	.68
IN.	1.24	1.04	1.66	2.32	1.11	1.04	1.18	1.17	.85	1.00	.55	.76

CAL YR 1975	TOTAL	2167.31	MEAN	5.94	MAX	279	MIN	.80	CFSM	1.61	IN	21.78
WTR YR 1976	TOTAL	1384.99	MEAN	3.78	MAX	57	MIN	.40	CFSM	1.02	IN	13.92

POTOMAC RIVER BASIN

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01645500 POTOMAC RIVER AT GREAT FALLS, MD
(National stream-quality accounting network station)

LOCATION.--Lat 39°00'03", long 77°14'56", Montgomery County, Hydrologic Unit 02070008, 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 mi² (29,600 km²).

PERIOD OF RECORD.--Water years 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1973 to current year.

WATER TEMPERATURES: March 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since March 1973

REMARKS.--Records of discharge are given for station 01646500 Potomac River near Washington, D. C. (unadjusted for diversions). Interruptions in record were due to malfunctions of the instruments. Some periods of missing temperature records were supplied by the Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (March 1974 to current year): Maximum, 470 micromhos Oct. 25, 1974; minimum, 75 micromhos Jan. 1, 1976.

WATER TEMPERATURE: Maximum, 32.0°C on many days during 1973; minimum, 0.0°C Jan. 22, 1975, Jan. 10, 21, 1976.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 412 micromhos Sept. 25; minimum, 75 micromhos Jan. 1.

WATER TEMPERATURES: Maximum, 29.5°C June 26-30; minimum, 0.0°C Jan. 10, 21.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	WEATHER	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA, MG/L)
OCT 20...	1100	73800	195	7.7	16.0	15.0	0	80	--	4300	10000	78
NOV 18...	1045	15100	265	7.9	18.0	10.0	0	4	--	200	110	100
DEC 16...	1030	6870	345	8.5	7.0	7.0	2	1	--	88	84	150
JAN 19...	1030	9890	285	8.1	-3.5	.5	0	3	--	84	80	93
FEB 17...	1015	16400	250	8.0	22.0	8.5	1	10	--	825	76	92
MAR 08...	1045	7900	255	9.0	11.0	10.5	2	4	--	81	84	100
APR 20...	1300	7970	255	8.9	34.5	23.0	0	3	--	84	81	110
MAY 18...	1000	5320	300	8.0	20.0	22.5	3	10	--	360	110	130
JUN 22...	1030	9740	285	8.0	27.5	26.0	2	20	--	400	3100	120
JUL 27...	1140	3950	295	8.9	30.5	27.5	1	10	--	89	970	110
AUG 24...	1220	2090	290	8.0	29.5	27.5	1	3	--	85	300	95
SEP 01...	1430	2000	350	8.9	--	23.0	--	--	10.3	820	1000	--
07...	1030	1730	380	8.3	23.8	22.3	0	3	--	88	280	130

POTOMAC RIVER BASIN

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT 20...	21	23	5.0	4.6	2.8	70	57	25	6.3	.2	6.4	126
NOV 18...	27	30	7.0	6.0	2.1	93	76	25	6.7	.1	6.7	148
DEC 16...	39	43	9.3	11	2.0	130	107	41	12	.1	1.4	185
JAN 19...	11	32	3.1	11	3.8	100	82	28	9.0	.2	7.1	161
FEB 17...	30	27	6.0	6.2	1.8	76	62	34	8.9	.0	5.2	154
MAR 08...	26	29	7.0	8.0	1.6	92	75	35	9.0	.1	.5	148
APR 20...	26	30	7.3	8.1	1.7	96	79	33	8.5	.1	.8	133
MAY 18...	34	37	8.1	11	2.5	112	92	36	13	.1	1.3	177
JUN 22...	32	35	7.1	11	2.7	103	84	34	10	.2	5.8	169
JUL 27...	36	31	8.5	13	2.6	93	76	44	15	.1	2.3	165
AUG 24...	27	26	7.4	15	2.6	84	69	46	14	.2	2.9	163
SEP 01...	--	--	--	--	--	--	--	--	--	--	--	--
07...	38	36	9.5	21	2.6	111	91	65	17	.2	3.3	220
DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	TOTAL ALUMINUM (AL) (UG/L)
OCT 20...	108	190	.66	--	--	--	.37	--	.29	--	--	--
NOV 18...	129	--	1.1	--	--	--	.27	--	.07	--	--	--
DEC 16...	184	--	1.1	--	--	--	.20	--	.04	--	--	--
JAN 19...	144	--	1.7	--	--	--	.20	--	.06	--	--	--
FEB 17...	127	--	1.4	--	--	--	.29	--	.07	--	--	--
MAR 08...	136	--	.59	--	--	--	.72	--	.07	--	--	--
APR 20...	137	8	.50	--	--	--	.58	--	.05	--	--	--
MAY 18...	164	--	.64	--	--	--	.70	--	.07	--	--	--
JUN 22...	157	--	.91	--	--	--	.53	--	.15	--	--	--
JUL 27...	162	--	.12	--	--	--	1.2	--	.10	--	--	--
AUG 24...	156	--	.07	--	--	--	.70	--	.09	--	--	--
SEP 01...	--	--	.01	9.1	.05	200	1.1	2300	.14	.01	600	460
07...	209	--	.07	--	--	--	.80	--	.09	--	--	--

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)
OCT												
20...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
18...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	0	0	--	1	1	--	<10	0	--	1	1	--
JAN												
19...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
08...	0	0	--	0	0	--	0	0	--	0	0	--
APR												
20...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
18...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
22...	0	0	--	0	0	--	10	10	--	2	0	--
JUL												
27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
24...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
01...	2	--	6	1	--	0	<10	--	10	1	--	10
07...	2	0	--	0	1	--	<10	<10	--	0	1	--

DATE	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)
OCT												
20...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
18...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
16...	0	0	--	150	40	--	3	2	--	10	10	--
JAN												
19...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
08...	0	0	--	270	50	--	8	3	--	30	10	--
APR												
20...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
18...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
22...	0	0	--	980	10	--	8	6	--	120	0	--
JUL												
27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
24...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
01...	0	--	20	830	--	14000	11	--	20	180	--	870
07...	0	0	--	400	0	--	7	4	--	100	0	--

POTOMAC RIVER BASIN

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)
OCT 20...	--	--	--	--	--	--	--	--	--	<1.7
NOV 18...	--	--	--	--	--	--	--	--	--	--
DEC 16...	<.5	<.5	--	0	0	--	10	0	--	--
JAN 19...	--	--	--	--	--	--	--	--	--	--
FEB 17...	--	--	--	--	--	--	--	--	--	--
MAR 08...	<.5	<.5	--	0	0	--	0	0	--	--
APR 20...	--	--	--	--	--	--	--	--	--	<1.9
MAY 18...	--	--	--	--	--	--	--	--	--	--
JUN 22...	<.5	<.5	--	0	0	--	20	0	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--
AUG 24...	--	--	--	--	--	--	--	--	--	--
SEP 01...	<.5	--	30	0	--	0	10	--	160	--
07...	<.5	<.5	--	0	0	--	10	10	--	--
DATE	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	SUS- PENDED GROSS BETA AS CS-137 (PC/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT- TOM MA- TERIAL (C) (G/KG)	IN- ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)	PCB IN BOTTOM MA- TERIAL (UG/KG)
OCT 20...	20	4.0	10	3.2	7.3	.05	--	--	--	--
NOV 18...	--	--	--	--	--	--	--	--	--	--
DEC 16...	--	--	--	--	--	--	--	--	--	--
JAN 19...	--	--	--	--	--	--	--	--	--	--
FEB 17...	--	--	--	--	--	--	--	--	--	--
MAR 08...	--	--	--	--	--	--	19	--	--	--
APR 20...	<.4	2.5	<.4	2.1	<.4	.04	--	--	--	--
MAY 18...	--	--	--	--	--	--	--	--	--	--
JUN 22...	--	--	--	--	--	--	4.0	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--
AUG 24...	--	--	--	--	--	--	--	--	--	--
SEP 01...	--	--	--	--	--	--	11	16	4.1	0
07...	--	--	--	--	--	--	8.7	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

[illegible]

POTOMAC RIVER BASIN

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	SILVEX IN BOTTOM MA- TERIAL (UG/KG)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI- PHYTON BIOMASS DRY WEIGHT G/SQ M	SUS- PENDED SEDIMENT MENT (MG/L)	SUS- PENDED SEDIMENT CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT 20...	--	4600	--	--	--	--	216	43000	93
NOV 18...	--	1100	--	--	--	--	--	--	--
DEC 16...	--	1000	110	.000	54.0	62.0	--	--	--
JAN 19...	--	250	--	--	--	--	33	881	95
FEB 17...	--	3000	--	--	--	--	--	--	--
MAR 08...	--	32000	10.0	.300	11.0	13.0	48	1020	87
APR 20...	--	59000	--	--	--	--	17	366	88
MAY 18...	--	64000	--	--	--	--	--	--	--
JUN 22...	--	34000	52.0	6.25	11.6	15.2	--	--	--
JUL 27...	--	120000	--	--	--	--	--	--	--
AUG 24...	--	39000	--	--	--	--	--	--	--
SEP 01...	0	--	--	--	--	--	--	--	--
07...	--	15000	--	--	--	--	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	216	201	209	259	252	257	256	246	253	143	75	99
2	226	216	220	261	247	258	259	247	254	165	111	144
3	233	223	228	263	250	258	255	248	252	145	137	140
4	240	232	237	266	247	260	257	251	254	152	138	145
5	249	237	245	272	252	263	262	254	259	165	151	159
6	254	245	251	272	253	263	266	254	260	172	163	168
7	260	246	256	277	254	263	260	243	252	183	170	175
8	262	257	260	272	247	261	253	246	250	188	176	183
9	264	210	237	271	253	264	252	240	247	204	185	195
10	246	173	216	270	253	260	246	224	236	203	197	201
11	198	172	181	262	223	243	249	228	241	210	200	207
12	219	195	211	261	193	237	240	217	228	213	207	210
13	241	217	228	189	141	162	254	235	245	222	212	216
14	248	237	242	154	109	125	261	252	257	224	216	221
15	256	245	251	205	164	190	261	257	260	225	198	214
16	259	251	255	188	171	179	260	253	258	210	197	202
17	261	255	258	190	169	182	259	251	256	227	212	219
18	256	175	214	193	177	183	265	256	261	232	226	229
19	249	155	192	202	161	189	261	256	259	237	213	228
20	231	160	179	208	199	205	268	259	263	244	218	231
21	183	164	174	215	194	209	271	260	266	246	224	234
22	194	182	188	217	201	211	268	261	264	259	231	245
23	205	193	199	222	215	218	267	259	264	249	205	237
24	215	205	210	228	215	221	272	260	268	272	234	253
25	221	215	218	234	223	229	271	260	266	270	239	250
26	224	218	221	240	226	236	259	152	215	256	226	239
27	231	221	226	241	235	239	219	162	203	234	135	184
28	235	226	232	243	235	240	201	157	167	130	111	117
29	245	230	239	247	240	245	215	162	189	208	117	151
30	253	242	247	253	239	247	252	217	242	211	199	205
31	257	244	253	---	---	---	241	159	213	205	194	200
MONTH	264	155	225	277	109	227	272	152	245	272	75	197

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	193	186	189	197	184	191	189	100	129	258	235	250
2	---	---	---	195	186	191	128	106	116	247	219	234
3	---	---	---	203	186	196	153	120	142	266	232	245
4	---	---	---	206	193	200	160	146	152	252	232	245
5	---	---	---	199	187	194	161	145	149	257	240	251
6	---	---	---	204	192	197	175	153	163	261	254	257
7	---	---	---	206	196	202	183	167	176	268	251	261
8	---	---	---	210	199	204	176	155	166	268	254	261
9	---	---	---	209	199	204	172	155	164	271	255	264
10	---	---	---	213	200	206	178	159	166	274	263	268
11	---	---	---	239	215	228	173	158	164	277	257	269
12	---	---	---	248	202	221	172	154	164	274	252	265
13	212	192	203	222	199	208	177	162	169	271	254	263
14	224	203	215	214	192	202	187	169	176	284	263	273
15	222	201	212	214	195	204	193	167	180	291	267	281
16	242	210	227	217	204	213	199	176	185	301	273	286
17	211	179	201	201	178	188	199	180	190	290	254	273
18	190	182	187	180	170	175	201	184	192	308	267	273
19	190	178	184	172	170	171	211	191	203	268	214	247
20	187	179	184	178	172	176	230	198	209	251	211	232
21	180	169	175	183	170	179	233	192	218	264	249	257
22	177	165	174	183	175	179	230	216	224	278	256	268
23	181	169	175	185	176	181	232	214	224	281	256	267
24	181	172	177	194	182	188	233	208	221	266	247	258
25	185	174	181	196	184	192	233	213	224	275	249	264
26	185	173	181	199	189	195	238	211	226	278	257	267
27	186	176	181	204	192	200	242	222	234	279	258	269
28	191	178	186	207	197	203	244	228	236	278	259	267
29	194	183	187	209	196	204	252	229	240	278	257	266
30	---	---	---	202	188	196	255	231	246	264	250	258
31	---	---	---	199	188	195	---	---	---	266	250	258
MONTH	---	---	---	248	170	196	255	100	188	308	211	261
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	266	209	237	231	197	218	283	257	271	295	268	282
2	227	204	211	237	210	221	276	236	260	307	277	286
3	230	198	210	223	193	209	252	238	245	312	285	296
4	250	211	228	226	199	213	266	242	257	333	294	308
5	270	248	257	236	217	228	267	251	259	364	309	336
6	275	263	268	252	228	239	285	257	271	364	329	344
7	280	273	276	264	242	254	297	271	283	372	318	344
8	274	267	270	270	243	257	279	265	271	369	334	345
9	277	268	274	276	241	257	283	260	273	370	338	353
10	291	274	286	266	229	246	314	284	293	371	344	357
11	302	287	295	247	203	226	322	278	298	365	333	349
12	297	283	289	244	202	230	304	266	284	377	327	349
13	283	256	269	250	203	230	279	212	236	379	348	364
14	277	263	272	246	220	232	233	214	222	380	348	362
15	281	272	276	269	243	251	228	205	213	371	346	361
16	286	270	278	281	239	259	235	178	211	358	239	315
17	274	258	268	285	255	270	256	232	245	345	262	293
18	281	272	276	273	245	258	259	233	246	374	260	319
19	282	261	272	271	230	253	260	221	236	277	237	255
20	285	267	276	271	224	246	235	219	226	351	246	295
21	285	226	268	261	221	246	235	221	229	395	332	358
22	253	205	226	261	239	248	237	220	227	395	355	373
23	250	233	240	260	226	246	243	222	232	402	350	375
24	244	198	218	272	236	255	275	227	248	391	346	370
25	213	186	194	264	231	250	282	250	269	412	350	381
26	235	206	219	249	230	240	298	265	280	396	352	378
27	228	203	214	266	233	246	309	274	287	393	343	372
28	231	203	217	273	241	255	306	267	288	370	325	343
29	239	222	231	292	250	272	301	276	288	355	313	332
30	238	219	228	297	224	267	314	290	300	349	308	326
31	---	---	---	286	243	272	314	281	294	---	---	---
MONTH	302	186	251	297	193	245	322	178	259	412	237	337

POTOMAC RIVER BASIN

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.0	2.0	---	12.0	10.5	11.0	12.5	10.5	11.5	18.0	17.0	17.0
2	2.5	1.5	---	11.5	11.0	11.0	11.0	9.5	10.5	18.5	16.0	17.0
3	2.0	2.0	---	11.0	10.5	11.0	11.5	9.5	10.5	18.0	17.0	17.5
4	2.0	2.0	---	11.0	10.5	10.5	11.0	10.5	11.0	17.0	15.0	16.5
5	3.0	2.0	---	13.0	11.0	12.0	11.5	9.5	10.0	18.0	15.0	16.5
6	3.5	3.0	---	13.0	11.5	12.0	12.0	10.0	11.0	19.5	16.5	18.0
7	3.0	2.0	---	11.5	10.5	11.0	13.0	11.0	12.0	20.0	18.0	19.0
8	2.5	2.0	---	10.5	10.0	10.5	13.5	12.0	12.5	19.0	17.0	18.0
9	2.5	2.0	---	10.5	7.5	9.0	13.0	11.5	12.5	19.5	16.5	18.0
10	3.5	2.5	---	8.5	7.0	7.5	13.0	11.0	12.0	20.0	17.0	18.5
11	4.5	3.5	---	9.0	7.0	8.0	13.0	11.5	12.0	20.0	18.0	19.0
12	5.5	3.5	---	8.5	7.5	8.0	11.5	10.0	11.0	19.5	17.5	18.5
13	7.0	5.5	6.0	10.0	7.5	8.5	13.0	10.5	11.5	19.0	17.5	18.5
14	7.5	6.0	7.0	9.5	7.5	8.5	14.0	11.5	12.5	21.0	18.0	19.5
15	7.0	6.0	6.5	9.0	7.5	8.5	15.5	13.0	14.0	22.5	20.0	21.0
16	8.0	6.5	7.0	8.5	7.5	8.0	17.5	14.5	16.0	22.5	22.0	22.0
17	9.5	7.5	7.5	7.5	6.0	6.5	19.5	17.0	18.0	23.5	21.5	22.0
18	10.0	8.5	9.0	6.5	5.0	6.0	21.5	18.5	20.0	23.5	20.0	22.5
19	10.0	9.0	9.5	8.5	6.0	7.5	23.0	20.5	21.5	19.5	16.5	18.0
20	10.0	8.5	9.5	11.0	8.0	9.5	23.5	21.5	22.0	19.0	15.5	17.0
21	9.5	8.5	9.0	12.5	10.5	11.5	23.5	21.5	22.5	21.0	18.0	19.0
22	10.0	9.0	9.5	12.0	10.0	11.0	23.5	22.0	22.5	22.5	19.0	20.5
23	9.0	8.0	8.5	12.0	10.0	10.5	23.0	21.0	22.0	23.0	20.5	21.5
24	8.0	7.0	7.5	13.0	10.5	12.0	22.5	20.5	21.5	22.5	20.5	22.0
25	9.0	7.0	8.0	13.0	12.0	12.5	22.0	20.5	21.0	22.5	20.5	21.0
26	9.5	8.0	8.5	14.0	12.0	13.0	20.5	16.5	19.0	21.0	18.5	19.5
27	10.5	8.5	9.5	14.0	13.5	14.0	16.5	14.5	15.0	21.5	18.0	19.5
28	10.0	9.0	9.5	14.5	12.5	13.5	15.0	13.0	14.0	22.5	20.0	21.0
29	11.0	9.0	10.0	14.0	13.0	13.5	16.5	13.5	15.0	22.5	20.5	21.5
30	---	---	---	14.0	13.0	13.5	18.5	14.5	16.5	21.0	20.0	20.5
31	---	---	---	13.0	12.5	13.0	---	---	---	22.5	20.5	21.5
MONTH	11.0	1.5	---	14.5	5.0	10.5	23.5	9.5	15.5	23.5	15.0	19.5

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.5	21.5	22.0	28.0	26.5	27.5	29.0	27.0	28.0	24.0	23.5	24.0
2	23.0	21.0	22.0	27.5	25.5	26.5	28.0	25.5	26.5	24.0	23.5	24.0
3	21.5	20.0	20.5	27.5	26.0	26.5	27.0	24.5	26.0	23.5	23.0	23.5
4	22.5	19.5	21.0	27.0	25.5	26.0	27.5	25.0	26.5	24.0	23.0	23.5
5	22.5	20.0	21.5	28.0	25.0	26.5	27.5	26.5	27.0	24.5	24.0	24.0
6	23.0	21.0	22.0	28.0	26.0	27.0	28.0	27.0	27.5	24.0	23.0	23.5
7	24.5	21.5	22.5	28.0	26.5	27.5	28.0	26.0	27.0	23.5	22.5	22.5
8	25.5	23.0	24.0	27.5	26.0	27.0	26.5	25.5	26.0	24.0	22.5	23.5
9	27.5	24.0	25.5	28.5	26.0	27.5	25.5	24.0	25.0	25.5	24.0	24.5
10	28.0	25.5	27.0	28.0	26.0	27.0	25.5	23.5	24.5	25.0	23.5	24.5
11	28.0	26.5	27.5	28.0	25.5	26.0	27.0	24.0	25.0	23.0	21.5	22.0
12	28.5	26.5	27.5	26.5	25.0	25.5	28.0	25.5	26.5	22.0	22.0	22.0
13	28.5	25.0	26.0	26.0	24.0	24.5	28.5	26.0	27.0	23.5	22.5	23.0
14	25.0	23.5	24.5	25.0	23.5	24.5	28.5	26.5	27.5	24.5	23.5	24.0
15	27.0	24.0	25.0	27.0	24.5	25.5	28.5	26.5	27.0	24.5	23.0	24.0
16	27.0	25.0	26.0	28.0	25.5	27.0	26.5	24.0	25.5	23.0	22.0	22.5
17	27.0	24.5	25.5	28.5	26.0	27.0	26.5	24.5	25.5	23.5	21.5	22.5
18	28.5	26.0	27.0	28.5	26.0	27.0	27.0	24.5	25.5	23.5	22.5	22.5
19	28.5	26.5	27.5	29.0	26.5	27.5	27.0	24.0	25.5	23.0	21.0	22.0
20	28.5	27.0	27.5	29.5	27.0	28.0	26.5	23.5	25.0	23.0	21.5	22.5
21	27.5	26.0	26.5	29.5	28.0	29.0	26.5	25.0	26.0	23.0	22.0	22.5
22	27.0	25.5	25.5	29.5	28.0	28.5	27.0	26.0	26.5	22.0	20.0	21.0
23	27.5	25.5	26.5	28.0	26.5	27.0	28.0	27.5	27.5	20.5	19.0	19.5
24	28.0	26.0	27.0	29.0	26.5	27.5	28.0	27.5	28.0	21.0	19.5	20.5
25	28.0	26.0	27.0	29.0	26.0	27.5	28.0	28.0	28.0	21.0	20.0	20.5
26	28.5	26.5	27.5	28.5	26.0	27.5	28.5	28.0	28.5	21.0	20.0	20.5
27	29.5	27.0	28.0	28.0	26.5	27.0	28.5	27.0	28.0	21.5	20.5	21.0
28	29.5	27.5	28.5	29.5	26.5	28.0	27.0	26.5	27.0	21.5	21.0	21.0
29	29.5	28.0	29.0	29.5	28.0	29.0	27.5	27.0	27.0	21.0	19.5	20.0
30	29.5	28.0	28.5	29.5	27.0	28.5	27.0	24.0	25.5	19.5	18.0	19.0
31	---	---	---	29.5	27.0	28.0	24.5	23.5	24.0	---	---	---
MONTH	29.5	19.5	25.5	29.5	23.5	27.0	29.0	23.5	26.5	25.5	18.0	22.5

POTOMAC RIVER BASIN

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

OCT. 20, 1975
1100 HOURS

IDENTIFICATION OF PHYTOPLANKTON

4,700 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
...OOCYSTACEAE				
....ANKISTRODESMUS		72	2	
...SCENEDESMACEAE				
....SCENEDESMUS		430	9	
..ZYGNEMATALES				
...DESMIDIACEAE	PLACODERM DESMIDS			
....COSMARTUM		36	1	
	TOTALS	540	12	0.906=DIVERSITY
CHRYSOPHYTA				
..BACILLARIOPHYCEAE	Diatoms			
...CENTRALES	CENTRIC			
...COSCINODISCACEAE				
....CYCLOTELLA		110	2	
....MELOSIRA		540	12	
..PENNALES	PENNATE			
...ACHNANTHACEAE				
....ACHNANTHES		430	9	
...COCCONEIS		330	7	
...RHOICOSPHENIA		36	1	
...CYMBELLACEAE				
....CYMBELLA		290	6	
...DIATOMACEAE				
L ...DIATOMA			0	
...GOMPHONEMACEAE				
....GOMPHONEMA		140	3	
...MERIDIOMACEAE				
L ...MERIDION			0	
...NAVICULACEAE	NAVICULOID			
....GYROSIGMA		110	2	
D ...NAVICULA		1,200	26	
...NITZSCHACEAE				
D ...NITZSCHIA		910	19	
	TOTALS	4,100	87	2.791=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 0.519
 CLASS 0.519
 ORDER 1.116
 FAMILY 2.678
 GENERA 3.091

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

NOV. 18, 1975

1045 HOURS

IDENTIFICATION OF PHYTOPLANKTON

1,200 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
...MICRACTINIACEAE				
....GOLENKINIA		18	2	
...OOCYSTACEAE				
....ANKISTRODESMUS		18	2	
....TETRAEDRON		18	2	
...SCENEDESMACEAE				
...SCENEDESMUS		89	8	
...VOLVOCALES				
...CHLAMYDOMONADACEAE				
...CHLAMYDOMONAS				
	TOTALS	18	2	
		160	16	1.880=DIVERSITY
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
...CENTRALES	CENTRIC			
...COSCINODISCACEAE				
D ...CYCLOTELLA		190	17	
...MELOSIRA		110	9	
...PENNALES	PENNATE			
...ACHNANTHACEAE				
...ACHNANTHES		35	3	
...COCONEIS		18	2	
...DIATOMACEAE				
...DIATOMA		35	3	
...GOMPHONEMATACEAE				
...GOMPHONEMA		35	3	
...NAVICULACEAE	NAVICULOID			
D ...NAVICULA		210	18	
...NITZSCHACEAE				
D ...NITZSCHIA		350	30	
...SURIRELLACEAE				
...SURIRELLA				
	TOTALS	18	2	
		1,000	87	2.517=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
...OSCILLATORIALES	FILAMENTOUS			
...OSCILLATORIACEAE				
L ....OSCILLATORIA			0	

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%

L - LESS THEN 1% MAY NOT HAVE BEEN ACTUALLY COUNTED

ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.575

CLASS 0.575

ORDER 1.403

FAMILY 2.691

GENERA 3.005

POTOMAC RIVER BASIN

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DEC. 16, 1975

1030 HOURS

IDENTIFICATION OF PHYTOPLANKTON

1,000 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
CHLOROPHYTA	GREEN ALGAE		
..CHLOROPHYCEAE			
...CHLOROCOCCALES			
...SCENEDESMACEAE			
L ....SCENEDESMUS			0
CHRYSOPHYTA			
..BACILLARIOPHYCEAE	DIATOMS		
..CENTRALES	CENTRIC		
...COSCINODISCACEAE			
...CYCLOTELLA		32	3
L ....MELOSIRA			0
..PENNALES	PENNATE		
...DIATOMACEAE			
D ....DIATOMA		380	37
...FRAGILARIACEAE			
L ....ASTERIONELLA			0
...SYNEDRA		32	3
...GOMPHONEMACEAE			
...GOMPHONEMA		32	3
...NAVICULACEAE	NAVICULOID		
D ....NAVICULA		320	31
...NITZSCHIACEAE			
D ....NITZSCHIA			
TOTALS		220 1,000	22 99

2.003=DIVERSITY

NOTE: D - DOMINANT ORGANISM: GREATER OR EQUAL TO 15%

L - LESS THEN 1%: MAY NOT HAVE BEEN ACTUALLY COUNTED.

ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

ORDER 0.201

FAMILY 2.003

GENERA 2.003

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

JAN. 19, 1976
1030 HOURS

IDENTIFICATION OF PHYTOPLANKTON

250 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
CHLOROPHYTA	GREEN ALGAE		
..CHLOROPHYCEAE			
..CHLOROCOCCALES			
...SCENEDESMACEAE			
L ....SCENEDESMUS			0
..VOLVOCALES			
...CHLAMYDOMONADACEAE			
L ....CHLAMYDOMONAS			0
CHRYSTOPHYTA			
..BACILLARIOPHYCEAE	DIATOMS		
..CENTRALES	CENTRIC		
...COSCINODISCAEAE			
....CYCLOTELLA		16	6
L ....MELOSIRA			0
..PENNALES	PENNATE		
...ACHNANTHACEAE			
L ....COCONEIS			0
...DIATOMACEAE			
L ....DIATOMA			0
...FRAGILARIACEAE			
L ....ASTERIONELLA			0
D ....SYNEDRA		47	19
...MERIDIONACEAE			
L ....MERIDION			0
...NAVICULACEAE	NAVICULOID		
D ....NAVICULA		160	62
...NITZSCHIACEAE			
....NITZSCHIA			
	TOTALS	250	99
			1.502=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE		
..MYXOPHYCEAE			
...OSCILLATORIALES	FILAMENTOUS		
...OSCILLATORIACEAE			
L ....OSCILLATORIA			0

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THAN 15% MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

ORDER 0.337

FAMILY 1.502

GENERA 1.502

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

FEB. 17. 1976
1015 HOURS

IDENTIFICATION OF PHYTOPLANKTON

3,000 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..ZYGNEATALES				
...DESMIDIACEAE	PLACODERM DESMIDS			
....COSMARIUM		21	1	
	TOTALS	21	1	0.000=DIVERSITY
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCACEAE				
....CYCLOTELLA		63	2	
L ....MELOSIRA			0	
..PENNALES	PENNATE			
...ACHNANTHACEAE				
....ACHNANTHES		21	1	
...CYMBELLACEAE				
....CYMBELLA		63	2	
...DIATOMACEAE				
L ....DIATOMA			0	
...EUNOTIACEAE				
....EUNOTIA		21	1	
...FRAGILARIACEAE				
....SYNEDRA		42	1	
...GOMPHONEMACEAE				
L ....GOMPHONEMA			0	
...NAVICULACEAE	NAVICULOID			
D ....NAVICULA		550	18	
...PINNULARIA		21	1	
...NITZSCHIACEAE				
....NITZSCHIA		400	13	
	TOTALS	1,200	39	1.978=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
...OSCILLATORIALES	FILAMENTOUS			
....OSCILLATORIA		1,800	60	
D ....OSCILLATORIA		1,800	60	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 1.023
 CLASS 1.023
 ORDER 1.142
 FAMILY 1.760
 GENERA 1.803

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MAR. 8, 1976
1045 HOURS

IDENTIFICATION OF PHYTOPLANKTON

32,000 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
...MICRACTINIACEAE				
L ...MICRACTINIUM			0	
...SCENEDESMACEAE				
L ...SCENEDESMUS			0	
...VOLVOCALES				
...CHLAMYDOMONADACEAE				
...CHLAMYDOMONAS				
	TOTALS	<u>200</u> 340	<u>1</u> 1	0.971=DIVERSITY
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCACEAE				
D ...CYCLOTELLA		30,000.	93	
...PENNALES	PENNALE			
...ACHNANTHACEAE				
L ...COCCONEIS			0	
L ...RHOICOSPHEA			0	
...CYMBELLACEAE				
L ...CYMBELLA			0	
...DIATOMACEAE				
L ...DIATOMA			0	
...FRAGILARIACEAE				
L ...SYNEDRA			0	
...NAVICULACEAE	NAVICULOID			
...NAVICULA		1,100	4	
...NITZSCHACEAE				
...NITZSCHIA				
	TOTALS	<u>610</u> 32,000	<u>2</u> 99	0.402=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%

L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED

ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.084

CLASS 0.084

ORDER 0.415

FAMILY 0.492

GENERA 0.492

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

APR. 20, 1976
1300 HOURS

IDENTIFICATION OF PHYTOPLANKTON

59,000 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
...MICRACTINIACEAE				
L ...MICRACTINIUM			0	
...OOCYSTACEAE				
...ANKISTRODESMUS		1,300	2	
...SCENEDESMACEAE				
L ...ACTINASTRUM			0	
...SCENEDESMUS		370	1	
..VOLVOCALES				
...CHLAMYDOMONADACEAE				
...CHLAMYDOMONAS				
	TOTALS	<u>300</u> 2,200	<u>1</u> 4	1.685=DIVERSITY
CHRYSOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCACEAE				
D ...CYCLOTELLA		53,000	90	
...MELOSIRA		1,700	3	
..PENNALES	PENNATE			
...ACHNANTHACEAE				
L ...RHOICOSPHEA			0	
...CYMBELLACEAE				
L ...CYMBELLA			0	
...DIATOMACEAE				
L ...DIATOMA			0	
...GOMPHONEMATACEAE				
L ...GOMPHONEMA			0	
...NAVICULACEAE	NAVICULOID			
...NAVICULA		890	2	
...NITZSCHIACEAE				
...NITZSCHIA				
	TOTALS	<u>740</u> 57,000	<u>1</u> 96	0.468=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THAN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 0.232
 CLASS 0.232
 ORDER 0.460
 FAMILY 0.555
 GENERA 0.747

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MAY 18, 1976
1000 HOURS

IDENTIFICATION OF PHYTOPLANKTON

64,000 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
...MICRACTINIACEAE				
L ....BOLENKINIA			0	
...OOCYSTACEAE				
...ANKISTRODESMUS		3,700	6	
...DICTYOSPHAERIUM		2,600	4	
L ....KIRCHNERIELLA			0	
L ....TREUBARIA			0	
...SCENEDESMACEAE				
...ACTINASTRUM		870	1	
...SCENEDESMUS		6,300	10	
...ZYGEMATALES				
...DESMIDIACEAE	PLACODERM DESMIDS			
L ....COSMARUM			0	
	TOTALS	14,000	21	2.001=DIVERSITY
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCACEAE				
D ....CYCLOTELLA		44,000	68	
L ....MELOSIRA			0	
...PENNALES	PENNATE			
...ACHNANTHACEAE				
...ACHNANTHES		1,100	2	
...CYMBELLACEAE				
L ....CYMBELLA			0	
...NITZSCHIA				
...NITZSCHIA				
	TOTALS	650 46,000	1 71	0.355=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
..CHROOCOCCALES	COCCOID			
...CHROOCOCCACEAE				
....ANACYSTIS				
	TOTALS	4,300 4,300	7 7	0.000=DIVERSITY
EUGLENOPHYTA	EUGLENOIDS			
..CRYPTOPHYCEAE	CRYPTOMONADS			
..CRYPTOMONIDALES				
...CRYPTOMONODACEAE				
L ....CRYPTOMONAS			0	
	TOTALS	220	0	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THEN 1% MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 1.120
 CLASS 1.120
 ORDER 1.326
 FAMILY 1.582
 GENERA 1.810

POTOMAC RIVER BASIN

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

JUNE 22, 1976
1030 HOURS

IDENTIFICATION OF PHYTOPLANKTON

34,000 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
.CHLOROPHYCEAE				
..CHLOROCOCCALES				
...COELASTRACEAE				
....COELASTRUM		3,900	11	
...HYDRODICTYACEAE				
....PEDIASTRUM		1,400	4	
...OOCYSTACEAE				
....ANKISTRODESMUS		1,200	3	
....KIRCHNERIELLA		1,600	5	
...SCENEDESMACEAE				
D ....ACTINASTRUM		5,700	17	
D ....SCENEDESMUS		12,000	34	
....TETRASTRUM		<u>3,100</u>	<u>9</u>	
	TOTALS	29,000	83	2.364=DIVERSITY
CHRYSTOPHYTA				
.BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCACEAE				
....CYCLOTELLA		2,100	6	
....MELOSIRA		1,300	4	
..PENNALES	PENNATE			
...NAVICULACEAE	NAVICULOID			
....NAVICULA		680	2	
...NITZSCHIA				
....NITZSCHIA		<u>580</u>	<u>2</u>	
	TOTALS	4,600	14	1.806=DIVERSITY
EUGLENOPHYTA	EUGLENIDS			
.CRYPTOPHYCEAE	CRYPTOMONADS			
..CRYPTOMONIDALES				
...CRYPTOMONODACEAE				
L ....CRYPTOMONAS				
	TOTALS	<u>97</u>	<u>0</u>	0.000=DIVERSITY
.EUGLENOPHYCEAE				
..EUGLENALES				
...EUGLENACEAE				
....TRACHELOMONAS		<u>1,200</u>	<u>3</u>	
	TOTALS	1,200	3	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%

L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED

ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.789

CLASS 0.803

ORDER 0.917

FAMILY 2.006

GENERA 3.006

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

JULY 27, 1976
1140 HOURS

IDENTIFICATION OF PHYTOPLANKTON

120,000 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
..MICRACTINIACEAE				
..GOLLENKINIA		690	1	
..OOCYSTACEAE				
..ANKISTRODESMUS		6,900	6	
D ..DICTYOSPHAERIUM		19,000	16	
..KIRCHNERIELLA		2,800	2	
..TETRAEDRON		690	1	
..TREUBARIA		690	1	
..SCENEDESMACEAE				
D ..ACTINASTRUM		44,000	37	
..SCENEDESMUS		9,000	8	
..TETRASTRUM		2,800	2	
..TETRASPORALES				
..COCCOMYXACEAE				
..ELAKATOTHRIX		1,400	1	
..VOLVOCALES				
..CHLAMYDOMONADACEAE				
..CHLAMYDOMONAS		1,400	1	
..VOLVOCAEAE				
..GONIUM				
	TOTALS	5,500	5	
		96,000	81	2.442=DIVERSITY
CHRYSTOPHYTA	DIATOMS			
..BACILLARIOPHYCEAE	CENTRIC			
..CENTRALES				
..COSCINODISCACEAE				
..CYCLOTELLA		11,000	9	
..MELOSIRA		4,800	4	
..PENNALES	PENNATE			
..GOMPHONEMACEAE				
..GOMPHONEMA		690	1	
..NAVICULACEAE	NAVICULOID			
..NAVICULA		690	1	
..NITZSCHACEAE				
..NITZSCHIA				
	TOTALS	2,800	2	
		20,000	17	1.698=DIVERSITY
..CHRYSTOPHYCEAE	YELLOW-BROWN ALGAE			
..CHRYSONOMADALES				
..OCHROMONADACEAE				
..OCHROMONAS				
	TOTALS	690	1	
		690	1	0.000=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
..CHROOCOCCALES	COCCOID			
..CHROOCOCCACEAE				
..ANACYSTIS				
	TOTALS	2,800	2	
		2,800	2	0.000=DIVERSITY
EUGLENOPHYTA	EUGLENOIDS			
..CRYPTOPHYCEAE	CRYPTOMONADS			
..CRYPTOMONIDALES				
..CRYPTOCHRYSIDACEAE				
..CHROOMONAS				
	TOTALS	690	1	
		690	1	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 0.867
 CLASS 0.904
 ORDER 1.412
 FAMILY 2.222
 GENERA 3.136

POTOMAC RIVER BASIN

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

AUG. 24, 1976

1220 HOURS

IDENTIFICATION OF PHYTOPLANKTON

39,000 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
...MICRACTINIACEAE				
...ACANTHOSPHAERA		260	1	
...OOCYSTACEAE				
...ANKISTRODESMUS		1,600	4	
L ...DICTYOSPHAERIUM			0	
...KIRCHNERIELLA		790	2	
...SCENEDESMACEAE				
...ACTINASTRUM		4,200	11	
D ...SCENEDESMUS		16,000	42	
...TETRASTRUM		1,100	3	
...OOCYSTACEAE				
...GLOEOACTINIUM				
	TOTALS	<u>1,600</u> 26,000	<u>4</u> 67	1.748=DIVERSITY
CHRYSOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCAEAE				
...CYCLOTELLA		4,000	10	
...MELOSIRA		2,900	7	
..PENNALES	PENNATE			
...NAVICULACEAE	NAVICULOID			
L ...GYROSIGMA			0	
...NAVICULA		260	1	
...NITZSCHIAEAE				
...NITZSCHIA				
	TOTALS	<u>260</u> 7,400	<u>1</u> 19	1.355=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
..CHROOCOCCALES	COCCOID			
...CHROOCOCCACEAE				
...AGMENELLUM				
	TOTALS	<u>5,300</u> 5,300	<u>14</u> 14	0.000=DIVERSITY
EUGLENOPHYTA	EUGLENOIDS			
..CRYPTOPHYCEAE	CRYPTOMONADS			
...CRYPTOMONIDALES				
...CRYPTOMONODACEAE				
...CRYPTOMONAS				
	TOTALS	<u>530</u> 530	<u>1</u> 1	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THAN 1%: MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER, 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 1.322
 CLASS 1.322
 ORDER 1.393
 FAMILY 1.966
 GENERA 2.736

01645500 POTOMAC RIVER AT GREAT FALLS, MD--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

SEP. 7, 1976
1030 HOURS

IDENTIFICATION OF PHYTOPLANKTON

15.000 CELLS/ML

ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT	
CHLOROPHYTA	GREEN ALGAE			
..CHLOROPHYCEAE				
..CHLOROCOCCALES				
...HYDRODICTYACEAE				
D ....PEDIASTRUM		12,000	81	
...OOCYSTACEAE				
L ....CHODATELLA			0	
...SCENEDESMACEAE				
...ACTINASTRUM		400	3	
...SCENEDESMUS		600	4	
..TETRASPORALES				
...PALMELLACEAE				
...GLOEOCYSTIS		150	1	
..VOLVOCALES				
...CHLAMYDOMONADACEAE				
...CHLAMYDOMONAS		99	1	
TOTALS		13,000	90	0.637=DIVERSITY
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE	DIATOMS			
..CENTRALES	CENTRIC			
...COSCINODISCACEAE				
...CYCLOTELLA		99	1	
..PENNALES	PENNATE			
...ACHNANTHACEAE				
...ACHNANTHES		200	1	
L ....COCCONEIS			0	
...CYMBELLACEAE				
...CYMBELLA		200	1	
...FRAGILARIACEAE				
...ASTERIONELLA		350	2	
L ....SYNEDRA			0	
...NAVICULACEAE	NAVICULOID			
...NAVICULA		99	1	
...NITZSCHACEAE				
L ....NITZSCHIA			0	
TOTALS		1,100	6	2.657=DIVERSITY
CYANOPHYTA	BLUE-GREEN ALGAE			
..MYXOPHYCEAE				
..CHROOCOCCALES	COCCOID			
...CHROOCOCCACEAE				
....ANACYSTIS		400	3	
TOTALS		400	3	0.000=DIVERSITY

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
 L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
 ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER • 200-X MICROSCOPE
 DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 0.553
 CLASS 0.553
 ORDER 0.721
 FAMILY 1.229
 GENERA 1.320

01646500 POTOMAC RIVER NEAR WASHINGTON, DC

LOCATION.--Lat 38°56'58", long 77°07'40", Montgomery County, Md., Hydrologic Unit 02070008, on left bank just above Little Falls Dam, 1 mi (1.6 km) upstream from District of Columbia boundary line, 1.2 mi (1.9 km) upstream from Chain Bridge, 1.8 mi (2.9 km) east of Langley, Fairfax County, Va., and at mile 117.4 (188.9 km).

DRAINAGE AREA.--11,560 mi² (29,940 km²).

PERIOD OF RECORD.--March 1930 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WDR-MD-75-1: 1973-74(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 37.95 ft (11.567 m) above mean sea level.

Prior to June 7, 1930, nonrecording gage, and June 7, 1930, to Jan. 22, 1965, water-stage recorder at site 1 mi (1.6 km) upstream on right bank at same datum.

REMARKS.--Records good. Diversions at Great Falls through aqueducts, and since June 1959, from gage pool at Little Falls Dam, for municipal supply of Washington, D. C.; since October 1958, at Rockville Filtration Plant, for municipal supply of city of Rockville; since April 1961, at Potomac Filtration Plant for water supply of Washington Suburban Sanitary District; since October 1961, at Fairfax Water Treatment Plant for water supply of city of Fairfax (from Goose Creek); and since April 1964, at Violets Lock to Chesapeake and Ohio Canal. Low flow affected slightly by Stony River Reservoir (see station 01595200) and since December 1950, by Savage River Reservoir (see station 01597500). Low flow affected extensively at times by run-of-the-river hydroelectric plants. Gage-height telemeter at station.

AVERAGE DISCHARGE.--46 years, 11,170 ft³/s (316.3 m³/s), 13.12 in/yr (333 mm/yr), adjusted for diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 484,000 ft³/s (13,700 m³/s), Mar. 19, 1936, gage height, 28.1 ft (8.56 m) site then in use; minimum daily observed at gaging station, 121 ft³/s (3.43 m³/s) Sept. 9, 1966, does not include diversion of 489 ft³/s (13.8 m³/s) for municipal use; minimum daily (adjusted), 601 ft³/s (17.0 m³/s) Sept. 10, 1966, includes diversion of 449 ft³/s (12.7 m³/s) for municipal use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 2, 1889, was of approximately the same magnitude as that of March 19, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 45,000 ft³/s (1,270 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 20	0730	73700 2090	8.24 2.512	Jan. 3	0030	*103000 2920	9.59 2.923

Minimum daily discharge, 1,120 ft³/s (31.7 m³/s) Sept. 9, does not include diversion for municipal use; minimum daily (adjusted), 1,660 ft³/s (47.0 m³/s) Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24400	9530	6970	51100	21500	10100	27400	6110	6580	6080	3050	1420
2	19800	9030	6490	82100	23200	9590	31400	6450	7360	5710	2740	1670
3	16300	8680	6690	87600	22900	9220	25000	6060	8420	4560	2650	1560
4	14000	8260	6430	55400	18700	8790	22700	5620	8590	4030	2420	1430
5	12400	7950	6240	40500	16400	8410	21000	5330	7600	3570	1980	1410
6	11200	7700	6020	32300	15200	8060	20300	5130	6650	3350	1800	1340
7	10200	7400	5960	26300	14300	7740	18900	4910	5920	3010	1810	1200
8	9460	7250	5880	23300	13100	7390	16800	4600	5480	3150	2160	1130
9	10200	7260	6000	20900	12000	7220	14900	4310	5090	3460	2400	1120
10	14600	7260	7190	17600	11600	7330	13500	4070	4550	3640	8490	1200
11	13700	7810	7840	15400	11000	7630	12000	3950	4270	3820	7450	1480
12	12500	9720	7740	14100	10700	8480	11000	4210	3740	4090	5110	1470
13	11700	17000	7360	13200	11300	10100	10300	4130	3380	4410	3780	1330
14	11000	26700	7120	13300	15300	13800	9700	4050	3220	4500	3080	1210
15	10300	24100	6720	14700	14600	17300	9150	3900	3020	4180	3270	1230
16	9340	20300	6530	13300	15800	18300	8730	3920	2780	3850	3710	3000
17	9110	17000	6970	12900	15900	17600	8410	4440	3500	3950	3070	4000
18	15500	14500	6970	11700	16200	16500	8080	5030	3590	3640	2980	4400
19	41700	13200	6780	10000	19500	14800	7760	5540	3290	3130	2720	4380
20	68900	11700	6800	9130	20700	13500	7390	6140	3510	2630	2360	4250
21	45100	10800	6490	9280	19300	12200	7660	6040	5900	2350	2060	4040
22	32100	10500	6160	9190	17400	11600	7300	5620	10400	2300	1820	3330
23	25500	10300	5920	8050	16100	11400	6810	5410	15400	2260	1630	2760
24	21100	9700	5720	7370	14900	11200	6460	4890	12600	2810	1560	2390
25	17900	9120	5570	8440	13700	11000	6180	4480	10300	4020	1460	2030
26	15800	8610	8150	8730	12700	10400	6170	4320	8490	4140	1250	1790
27	14500	8140	13600	22700	11800	9950	6310	4240	6960	3290	1130	1740
28	13200	8060	13200	36400	11300	10000	6510	4170	5980	2750	1220	1650
29	11900	7750	13800	30600	10900	9950	6390	4230	5110	2730	1290	1620
30	10900	7230	16300	30700	---	11700	6070	4710	5200	4080	1360	1860
31	10200	---	16600	25900	---	12000	---	5490	---	3130	1370	---
TOTAL	564510	332560	246610	762190	448000	343260	370280	151500	186880	112620	83180	63440
MEAN	18210	11090	7955	24590	15450	11070	12340	4887	6229	3633	2683	2115
MAX	68900	26700	16600	87600	23200	18300	31400	6450	15400	6080	8490	4400
MIN	9110	7230	5570	7370	10700	7220	6070	3900	2780	2260	1130	1120
(*)	434	428	433	464	411	459	481	471	543	524	520	496
MEAN*	18640	11520	8388	25050	15890	11530	12820	5358	6772	4157	3203	2611
CFSM*	1.61	1.00	.73	2.17	1.37	1.00	1.11	.46	.59	.36	.28	.23
IN*	1.86	1.11	.84	2.50	1.48	1.15	1.24	.53	.66	.42	.32	.26

CAL YR 1975 TOTAL 5670100 MEAN 15530 MAX 186000 MIN 3040 MEAN* 15990 CFSM* 1.38 IN* 18.73
WTR YR 1976 TOTAL 3665030 MEAN 10010 MAX 87600 MIN 1120 MEAN* 10480 CFSM* .91 IN* 12.39

* Diversion in cfs, for municipal supply of Washington, D. C., Washington Suburban Sanitary District, city of Rockville, city of Fairfax (from Goose Creek), and the Chesapeake and Ohio Canal (insignificant diversion to canal during current water year); records furnished by Corps of Engineers, Washington Suburban Sanitary Commission, city of Rockville, and city of Fairfax.

* Adjusted for diversion.

01646550 LITTLE FALLS BRANCH NEAR BETHESDA, MD

LOCATION.--Lat 38°57'27", long 77°06'31", Montgomery County, Hydrologic Unit 02070008, on left bank at downstream side of bridge on Massachusetts Avenue, 0.3 mi (0.5 km) downstream from Willett Branch, 1.7 mi (2.7 km) upstream from mouth, and 2.0 mi (3.2 km) southwest of Bethesda.

DRAINAGE AREA.--4.1 mi² (10.6 km²), approximately.

PERIOD OF RECORD.--June 1944 to September 1959. Annual maximum, water years 1960-61. December 1961 to current year.

REVISED RECORDS.--WSP 1171: 1945.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 169.32 ft (51.609 m) above mean sea level (Maryland State Highway Administration bench mark). Prior to Oct. 1959, water-stage recorder and concrete control at site 50 ft (15 m) upstream at same datum. Oct. 1, 1959, to Nov. 30, 1961, crest-stage gage at present site and datum.

REMARKS.--Records good except those for period of no gage-height record, Nov. 14 to Dec. 17, which are fair. Occasional slight regulation at low flow from unknown source above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--29 years (water years 1945-59, 1963-76), 3.33 ft³/s (0.094 m³/s), 11.03 in/yr (280 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,680 ft³/s (75.9 m³/s) Sept. 14, 1966, gage height, 6.82 ft (2.079 m), from rating curve extended above 630 ft³/s (17.8 m³/s) on basis of slope-area measurement at gage height 5.92 ft (1.804 m); no flow at times in 1944, 1954, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 335 ft³/s (9.49 m³/s) Apr. 1, gage height, 2.79 ft (0.850 m), no peak above base of 450 ft³/s (12 m³/s); minimum daily, 0.87 ft³/s (0.025 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	1.5	2.4	60	12	2.1	23	32	1.6	2.2	3.6	.95
2	2.1	1.4	1.6	3.6	9.4	2.0	3.3	2.5	1.6	1.1	1.1	5.7
3	1.9	1.4	1.5	20	3.0	2.1	2.8	2.1	1.5	5.8	1.1	1.2
4	1.8	1.4	1.5	3.1	3.0	2.0	4.4	2.0	1.3	1.1	1.1	1.1
5	1.7	1.4	1.4	2.5	2.8	2.4	2.6	1.9	1.3	.92	.97	.99
6	1.8	1.4	1.4	2.3	2.6	2.0	2.5	1.9	1.8	1.1	.97	1.0
7	1.7	1.4	1.6	7.0	2.4	1.9	2.5	5.8	1.3	5.8	1.2	.95
8	4.0	3.0	1.7	8.9	2.4	1.9	2.3	2.1	1.3	1.3	4.5	1.1
9	26	1.3	12	1.9	2.2	11	2.3	2.0	1.5	1.1	1.4	1.1
10	3.0	23	2.2	1.7	2.2	7.8	2.2	2.0	1.4	2.7	1.1	4.6
11	1.9	1.9	1.7	1.9	2.4	4.4	2.2	3.6	1.4	15	1.0	.90
12	1.6	40	1.5	2.0	2.2	2.7	2.1	4.1	1.3	1.8	.95	.87
13	1.7	14	2.2	2.2	4.4	4.0	2.1	1.9	1.4	1.1	.95	.92
14	1.6	1.7	1.7	3.8	3.5	2.3	2.1	2.0	1.4	1.2	2.7	.95
15	1.5	1.6	1.6	1.9	2.2	2.3	2.1	1.9	1.6	14	5.7	9.9
16	1.5	1.5	1.5	1.9	2.2	4.0	2.1	4.1	11	4.4	1.7	41
17	20	1.5	1.5	1.7	2.4	2.4	2.1	3.0	25	1.7	1.1	11
18	3.0	1.4	1.4	1.6	7.6	2.3	2.1	8.2	1.3	1.3	.99	1.0
19	1.8	1.4	1.3	1.6	2.6	2.2	2.1	2.0	.95	1.1	1.1	.90
20	1.6	1.4	1.4	1.6	2.1	2.2	7.7	1.8	6.6	1.1	1.1	.97
21	1.5	5.0	1.5	1.7	2.1	2.2	2.5	1.8	9.4	1.2	1.0	1.4
22	1.5	1.8	1.4	1.6	16	2.1	2.0	1.8	1.4	1.1	.95	.96
23	1.5	1.5	1.4	1.5	2.6	2.1	2.0	1.7	1.2	1.5	.95	1.0
24	1.5	1.5	1.4	1.5	2.4	2.1	2.2	1.7	1.2	1.2	1.2	1.1
25	3.5	1.5	3.4	1.5	2.2	3.2	5.6	4.4	1.7	1.0	1.2	1.3
26	1.7	1.5	38	31	2.2	2.1	2.6	6.7	1.2	1.0	1.1	3.0
27	1.6	1.4	2.4	35	2.2	4.2	2.0	1.8	1.0	1.0	14	5.0
28	1.5	1.4	2.3	10	2.2	2.4	2.3	1.6	1.0	.91	1.3	1.5
29	1.5	1.4	1.8	3.0	2.1	2.1	2.0	27	1.0	8.6	1.1	1.2
30	1.5	1.4	6.4	2.8	---	10	2.0	9.5	8.4	1.6	1.2	17
31	1.5	---	55	2.6	---	20	---	1.7	---	1.2	.95	---
TOTAL	101.3	122.0	158.1	223.4	107.6	116.5	99.8	146.6	94.05	86.13	59.28	120.56
MEAN	3.27	4.07	5.10	7.21	3.71	3.76	3.33	4.73	3.14	2.78	1.91	4.02
MAX	26	40	55	60	16	20	23	32	25	15	14	41
MIN	1.5	1.3	1.3	1.5	2.1	1.9	2.0	1.6	.95	.91	.95	.87
CFSM	.80	.99	1.24	1.76	.90	.92	.81	1.15	.77	.68	.47	.98
IN.	.92	1.11	1.43	2.03	.98	1.06	.91	1.33	.85	.78	.54	1.09

CAL YR 1975 TOTAL 1684.16 MEAN 4.61 MAX 200 MIN .65 CFSM 1.12 IN 15.28
WTR YR 1976 TOTAL 1435.32 MEAN 3.92 MAX 60 MIN .87 CFSM .96 IN 13.02

01647720 NORTH BRANCH ROCK CREEK NEAR NORBECK, MD

LOCATION.--Lat 39°06'59", long 77°06'09", Montgomery County, Hydrologic Unit 02070010, on left bank 550 ft (168 m) downstream from bridge on Muncaster Mill Road (State Highway 115), 0.7 mi (1.1 km) upstream from Manor Run, 1.5 mi (2.4 km) northwest of Norbeck, and 2 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--9.73 mi² (25.20 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 320 ft (98 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Dec. 16 to Jan. 26, which are fair. Diversion at low flow for irrigation of golf courses above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--10 years, 12.4 ft³/s (0.351 m³/s), 17.31 in/yr (440 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft³/s (286 m³/s) June 22, 1972, gage height, 14.1 ft (4.30 m), from floodmarks, from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of computation of peak flow through culvert and flow over road; minimum daily, 0.40 ft³/s (0.011 m³/s) July 17-18, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	Unknown	*1200 34.0	6.0 1.83	Apr. 1	0345	443 12.5	4.00 1.219

Minimum daily discharge, 1.5 ft³/s (0.042 m³/s) Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	8.0	8.9	260	19	9.3	188	22	25	6.2	4.2	1.9
2	10	8.1	7.8	20	53	9.1	27	15	17	3.9	4.0	3.0
3	9.0	8.0	7.5	80	15	9.1	15	8.6	8.2	3.9	3.9	2.4
4	8.5	8.0	7.3	20	13	9.1	14	7.4	6.5	3.9	3.7	2.0
5	8.0	7.9	7.3	15	14	9.1	14	7.0	5.8	3.9	3.7	1.8
6	8.0	7.7	7.4	12	13	8.8	12	6.7	5.4	3.7	3.5	1.8
7	8.0	7.7	7.7	26	12	8.5	11	6.5	5.4	4.0	3.5	1.7
8	8.3	10	7.5	46	11	8.2	10	6.1	5.2	4.3	4.3	1.6
9	64	8.2	18	12	11	9.2	10	6.0	5.0	3.9	4.6	1.5
10	15	15	13	11	11	11	9.8	6.0	4.8	3.7	3.9	2.6
11	20	12	8.7	10	12	16	9.7	5.9	4.7	4.7	3.6	2.0
12	12	40	7.8	11	11	16	9.2	11	4.7	5.1	3.2	1.9
13	10	43	8.8	12	12	13	9.1	6.0	4.6	4.1	3.0	1.8
14	9.2	14	8.3	16	17	11	9.0	6.0	4.6	3.9	3.0	1.7
15	8.7	11	8.0	10	12	9.7	8.8	6.0	4.7	4.9	18	1.6
16	8.4	9.7	8.0	10	12	11	8.8	8.2	4.3	5.5	5.5	28
17	35	9.1	7.0	9.0	13	12	8.5	8.6	6.0	4.8	3.9	6.5
18	36	8.8	6.5	8.5	13	9.4	8.2	9.4	4.7	3.5	3.4	3.9
19	13	8.7	6.0	8.5	18	9.3	8.0	9.8	4.6	3.2	3.0	2.9
20	12	8.3	6.5	8.5	12	8.8	7.9	6.5	4.9	3.1	2.8	2.4
21	10	16	6.5	9.0	11	8.7	31	5.9	8.0	2.9	2.6	2.1
22	9.7	11	6.5	8.5	14	8.6	9.4	5.5	6.1	3.2	2.4	2.1
23	9.2	8.9	6.5	8.0	14	8.0	8.1	5.4	4.9	3.5	2.4	2.0
24	9.2	8.6	6.0	8.0	11	8.0	7.5	5.2	4.5	3.5	2.3	2.0
25	12	8.2	8.0	8.0	11	8.2	7.7	5.2	4.3	3.0	2.2	2.1
26	11	7.9	7.0	50	10	8.2	11	7.1	4.3	2.7	2.2	2.1
27	9.8	8.0	13	142	10	7.9	7.5	6.7	4.1	2.6	3.0	2.2
28	9.2	7.7	9.5	68	9.7	13	7.3	5.4	4.1	2.4	2.4	2.2
29	9.1	7.5	9.0	19	9.4	8.6	7.0	7.1	4.0	14	2.2	5.3
30	8.5	7.6	4.0	16	---	11	6.8	42	5.6	6.3	2.0	4.6
31	8.0	---	200	14	---	20	---	9.3	---	4.5	1.9	---
TOTAL	420.8	344.6	543.0	956.0	404.1	317.8	501.3	273.5	186.0	132.8	114.3	99.7
MEAN	13.6	11.5	17.5	30.8	13.9	10.3	16.7	8.82	6.20	4.28	3.69	3.32
MAX	64	43	200	260	53	20	188	42	25	14	18	28
MIN	8.0	7.5	6.0	8.0	9.4	7.9	6.8	5.2	4.0	2.4	1.9	1.5
CFSM	1.40	1.18	1.80	3.17	1.43	1.06	1.72	.91	.64	.44	.38	.34
IN.	1.61	1.32	2.08	3.65	1.54	1.21	1.92	1.05	.71	.51	.44	.38

CAL YR 1975	TOTAL	6223.0	MEAN 17.0	MAX 840	MIN 2.8	CFSM 1.75	IN 23.79
WTR YR 1976	TOTAL	4293.9	MEAN 11.7	MAX 260	MIN 1.5	CFSM 1.20	IN 16.41

01647740 NORTH BRANCH ROCK CREEK NEAR ROCKVILLE, MD

LOCATION.--Lat 39°06'09", long 77°07'12", Montgomery County, Hydrologic Unit 02070010, on left bank 170 ft (52 m) downstream from outlet of Bernard Frank Lake, 370 ft (113 m) upstream from mouth, and 2.4 mi (3.9 km) northeast of Rockville.

DRAINAGE AREA.--12.5 mi² (32.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 270 ft (82 m), from topographic map.

REMARKS.--Water-discharge records good. Flow regulated by dam above station.

AVERAGE DISCHARGE.--9 years, 17.0 ft³/s (0.481 m³/s), 18.47 in/yr (469 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 420 ft³/s (11.9 m³/s) June 22, 1972, gage height, 6.10 ft (1.859 m); maximum gage height, 9.62 ft (2.932 m) June 22, 1972, (backwater from Rock Creek); minimum discharge, 0.01 ft³/s (<0.001 m³/s) July 28-29, 1971, gage height, 0.64 ft (0.195 m), when drain valve at Bernard Frank Lake was closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 123 ft³/s (3.48 m³/s) Jan. 1, gage height, 3.71 ft (1.131 m); minimum, 1.7 ft³/s (0.048 m³/s) Sept. 15, 16, gage height, 1.04 ft (0.317 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	9.9	9.4	91	32	11	43	11	16	7.1	7.5	2.4
2	88	9.9	10	81	37	11	41	16	20	6.8	7.1	2.4
3	75	9.9	9.8	77	34	11	39	15	19	6.4	6.1	2.4
4	57	9.9	9.4	72	30	11	37	15	15	6.4	5.8	2.6
5	40	9.4	9.4	66	26	11	34	13	14	6.4	5.2	2.4
6	24	9.0	9.4	59	22	11	32	13	12	6.1	4.9	2.0
7	15	8.9	8.5	51	20	11	29	11	11	6.1	5.2	2.0
8	12	9.4	8.5	48	18	9.8	27	11	11	6.1	5.2	2.0
9	40	9.4	11	41	15	10	23	9.8	10	6.4	5.5	2.0
10	37	10	16	35	14	13	21	9.8	9.0	6.1	5.5	2.0
11	30	15	14	29	14	14	18	9.8	8.6	5.8	5.2	2.4
12	25	17	12	22	14	17	16	10	7.8	6.8	4.9	1.9
13	18	41	12	21	14	17	15	10	6.4	6.4	5.2	1.9
14	14	37	11	21	16	15	15	9.4	6.4	6.1	5.2	1.9
15	12	26	11	19	16	14	14	9.8	6.4	6.1	6.1	1.7
16	11	19	10	17	15	14	13	9.8	6.4	6.1	11	7.5
17	15	14	10	15	15	14	12	9.4	6.8	6.4	8.6	12
18	44	13	8.9	14	16	14	12	10	6.8	6.4	6.1	11
19	32	12	9.4	13	17	14	11	11	6.8	6.1	4.3	9.4
20	23	10	9.4	13	17	13	9.8	11	6.8	6.1	4.3	8.6
21	17	12	9.4	12	15	12	14	10	7.1	5.2	4.3	8.6
22	14	15	9.4	12	15	11	15	9.8	8.6	5.2	3.7	8.6
23	12	13	9.0	11	16	11	13	9.8	8.6	5.5	3.7	8.6
24	12	11	8.5	11	15	9.8	12	9.0	7.1	5.5	3.3	7.5
25	12	10	8.5	11	14	9.4	12	9.0	6.4	4.9	2.8	5.2
26	12	9.8	29	20	14	9.4	12	9.0	6.8	4.6	3.0	4.6
27	12	10	39	48	13	9.4	12	8.6	6.8	4.9	3.0	4.6
28	11	10	31	60	12	10	12	8.6	6.1	4.6	3.0	4.6
29	11	8.9	24	52	11	10	11	9.0	6.1	4.9	2.8	4.6
30	10	8.9	18	43	---	11	11	17	5.8	10	2.8	4.6
31	9.9	---	28	37	---	13	---	16	---	9.0	2.6	---
TOTAL	841.9	408.3	422.9	1122	527	371.8	585.8	340.6	275.6	190.5	153.9	142.0
MEAN	27.2	13.6	13.6	36.2	18.2	12.0	19.5	11.0	9.19	6.15	4.96	4.73
MAX	97	41	39	91	37	17	43	17	20	10	11	12
MIN	9.9	8.9	8.5	11	11	9.4	9.8	8.6	5.8	4.6	2.6	1.7
CFSM	2.18	1.09	1.09	2.90	1.46	.96	1.56	.88	.74	.49	.40	.38
IN.	2.51	1.22	1.26	3.34	1.57	1.11	1.74	1.01	.82	.57	.46	.42

CAL YR 1975 TOTAL 8187.6 MEAN 22.4 MAX 292 MIN 4.6 CFSM 1.79 IN 24.36
WTR YR 1976 TOTAL 5382.3 MEAN 14.7 MAX 97 MIN 1.7 CFSM 1.18 IN 16.02

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

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: September 1967 to current year.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 450 mg/L Nov. 2, 1967; minimum daily mean, 3 mg/L Jan. 24, 1972, Aug. 15, Sept. 10, 1976.

SEDIMENT LOADS: Maximum daily, 358 tons (325 tonnes) June 22, 1972; minimum daily, 0 ton (0 tonnes) July 29, 1971.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 88 mg/L Jan. 1; minimum daily mean, 3 mg/L Aug. 15, Sept. 10.

SEDIMENT LOADS: Maximum daily, 22 tons (20 tonnes) Jan. 1; minimum daily, 0.02 tons (0.018 tonnes) Sept. 10, 12-15.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (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
DATE	TIME							
JAN 28...	0945	28	46	3.5	61	80	89	95
AUG 26...	1130	--	--	--	--	--	--	--
		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	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM
DATE								
JAN 28...	97	98	99	100	--	--	--	--
AUG 26...	--	--	--	--	65	69	83	100

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

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	26	6.8	10	.27	11	.28	88	22	24	2.1	22	.65
2	19	4.5	9	.24	13	.35	77	17	30	3.0	22	.65
3	13	2.6	9	.24	23	.61	75	16	23	2.1	21	.62
4	10	1.5	9	.24	20	.51	69	13	17	1.4	21	.62
5	10	1.1	9	.23	13	.33	53	9.4	14	.98	20	.59
6	10	.65	9	.22	17	.43	46	7.3	12	.71	19	.56
7	9	.36	9	.22	12	.28	46	6.3	14	.76	18	.53
8	10	.32	9	.23	13	.30	32	4.1	15	.73	20	.53
9	9	.97	9	.23	14	.42	28	3.1	15	.61	19	.51
10	8	.80	9	.24	18	.78	29	2.7	11	.42	25	.88
11	7	.57	9	.36	15	.57	27	2.1	11	.42	24	.91
12	7	.47	10	.46	11	.36	24	1.4	9	.34	20	.92
13	9	.44	6	.66	12	.39	19	1.1	8	.30	20	.92
14	9	.34	7	.70	12	.36	22	1.2	7	.30	20	.81
15	8	.26	9	.63	12	.36	22	1.1	8	.35	19	.72
16	8	.24	10	.51	12	.32	22	1.0	9	.36	19	.72
17	7	.28	11	.42	10	.27	19	.77	9	.36	20	.76
18	8	.95	11	.39	10	.24	18	.68	9	.39	20	.76
19	8	.69	10	.32	12	.30	13	.46	11	.50	21	.79
20	4	.25	8	.22	12	.30	9	.32	20	.92	20	.70
21	5	.23	9	.29	11	.28	9	.29	23	.93	17	.55
22	4	.15	9	.36	11	.28	10	.32	23	.93	19	.56
23	4	.13	10	.35	11	.27	8	.24	25	1.1	19	.56
24	13	.42	9	.27	10	.23	10	.30	25	1.0	21	.56
25	12	.39	8	.22	10	.23	15	.45	24	.91	22	.56
26	10	.32	10	.26	35	2.7	10	.54	24	.91	18	.46
27	10	.32	9	.24	30	3.2	15	1.9	23	.81	20	.51
28	10	.30	9	.24	27	2.3	26	4.2	23	.75	20	.54
29	10	.30	14	.34	24	1.6	23	3.2	22	.65	15	.41
30	10	.27	13	.31	40	1.9	24	2.8	---	---	14	.42
31	11	.29	---	---	30	2.3	24	2.4	---	---	13	.46
TOTAL	---	27.21	---	9.91	---	23.05	---	127.67	---	25.04	---	19.74
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	67	7.8	22	.65	18	.78	9	.17	5	.10	8	.05
2	54	6.0	17	.73	20	1.1	10	.18	8	.15	9	.06
3	39	4.1	16	.65	21	1.1	11	.19	8	.13	7	.05
4	42	4.2	20	.81	26	1.1	12	.21	12	.19	6	.04
5	34	3.1	21	.74	21	.79	12	.21	16	.22	7	.05
6	30	2.6	29	1.0	18	.58	13	.21	13	.17	7	.04
7	26	2.0	20	.59	17	.50	23	.38	14	.20	5	.03
8	23	1.7	16	.48	15	.45	17	.28	10	.14	5	.03
9	24	1.5	20	.53	14	.38	15	.26	12	.18	6	.03
10	23	1.3	15	.40	15	.36	13	.21	8	.12	3	.02
11	19	.92	15	.40	15	.35	12	.19	6	.08	4	.03
12	19	.82	13	.35	16	.34	13	.24	15	.20	4	.02
13	20	.81	12	.32	16	.28	11	.19	9	.13	4	.02
14	19	.77	12	.30	25	.43	10	.16	4	.06	4	.02
15	17	.64	12	.32	30	.52	8	.13	3	.05	4	.02
16	15	.53	11	.29	26	.45	9	.15	4	.12	20	.41
17	14	.45	15	.38	22	.40	15	.26	5	.12	11	.36
18	14	.45	12	.32	19	.35	15	.26	6	.10	6	.18
19	15	.45	11	.33	16	.29	9	.15	12	.14	6	.15
20	16	.42	16	.48	19	.35	7	.12	9	.10	5	.12
21	26	.98	16	.43	17	.33	15	.21	8	.09	6	.14
22	24	.97	15	.40	13	.30	15	.21	7	.07	8	.19
23	18	.63	14	.37	12	.28	16	.24	6	.06	9	.21
24	13	.42	14	.34	17	.33	16	.24	6	.05	11	.22
25	12	.39	14	.34	15	.26	16	.21	8	.06	8	.11
26	13	.42	13	.32	13	.24	17	.21	9	.07	10	.12
27	14	.45	13	.30	14	.26	17	.22	13	.11	8	.10
28	15	.49	14	.33	13	.21	14	.17	14	.11	5	.06
29	16	.48	14	.34	8	.13	18	.24	8	.06	5	.06
30	17	.50	12	.55	8	.13	10	.27	6	.05	7	.09
31	---	---	18	.78	---	---	8	.19	6	.04	---	---
TOTAL	---	46.29	---	14.57	---	13.37	---	6.56	---	3.47	---	3.03

TOTAL LOAD FOR YEAR: 319.91 TONS.

POTOMAC RIVER BASIN

01648000 ROCK CREEK AT SHERRILL DRIVE, WASHINGTON, DC

LOCATION.--Lat 38°58'21", long 77°02'25", District of Columbia, Hydrologic Unit 02070010, on left bank 125 ft (38 m) downstream from Sherrill Drive Bridge in Rock Creek Park in Washington, and 7.5 mi (12 km) upstream from mouth.

DRAINAGE AREA.--62.2 mi² (161.1 km²).

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 1432: 1933(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 148.87 ft (45.376 m) above mean sea level.

REMARKS.--Records good. Flow affected by two upstream reservoirs which control flow from about 25 mi² (65 km²), Needwood Lake on Rock Creek since Sept. 1966 and Bernard Frank Lake on North Branch Rock Creek since February 1968. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--47 years, 60.7 ft³/s (1.719 m³/s), 13.25 in/yr (337 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s (354 m³/s) June 22, 1972, gage height, 16.2 ft (4.94 m), from floodmark, from rating curve extended above 5,640 ft³/s (160 m³/s) on basis of contracted-opening measurements at gage heights 13.19 ft (4.020 m) and 16.2 ft (4.94 m); minimum, 0.5 ft³/s (0.014 m³/s) Oct. 1-7, 1930, gage height, 1.04 ft (0.317 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (33 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0745	*2100 59.5	8.06 2.457	July 30	0015	1200 34.0	5.67 1.728
Apr. 1	0945	1340 37.9	6.11 1.862	Sept. 16	0845	1460 41.3	6.45 1.966

Minimum discharge, 9.9 ft³/s (0.28 m³/s) Sept. 12, 13, 14, 15, gage height, 1.23 ft (0.375 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	219	42	59	1170	111	48	640	197	49	111	72	11
2	189	42	44	230	220	48	133	78	58	27	26	37
3	161	42	42	350	100	48	115	52	55	46	22	16
4	138	42	40	202	88	48	104	46	49	31	21	12
5	117	42	39	163	78	49	90	45	43	22	21	12
6	92	42	40	148	71	49	76	42	42	22	19	11
7	67	41	49	145	66	46	69	58	38	51	19	11
8	55	74	42	199	59	45	64	42	37	49	215	11
9	368	42	111	110	56	96	59	38	35	41	34	11
10	115	72	78	90	54	93	55	38	34	23	28	39
11	126	86	52	75	54	75	54	38	32	157	21	16
12	82	255	47	70	54	67	51	88	31	69	18	9.9
13	67	276	54	63	55	109	49	37	29	23	17	9.9
14	58	108	45	75	94	60	59	37	29	18	26	9.9
15	54	82	43	63	59	56	60	37	29	152	211	15
16	51	65	43	58	58	98	45	60	34	69	75	639
17	174	57	41	56	63	64	43	54	152	90	27	184
18	211	52	40	55	79	53	42	69	31	23	23	48
19	94	49	37	50	99	52	42	60	28	21	21	26
20	74	48	37	48	60	50	46	41	46	21	19	23
21	62	68	37	48	56	49	62	38	94	21	24	24
22	55	58	37	47	139	47	55	37	43	26	24	21
23	51	50	37	43	65	45	51	35	29	29	22	19
24	49	49	35	42	57	45	48	34	28	27	21	19
25	64	47	35	44	55	51	49	46	27	23	18	18
26	49	45	385	219	54	46	64	84	29	21	32	21
27	46	45	116	422	51	49	43	42	26	17	55	24
28	46	44	85	259	50	91	42	34	24	16	22	31
29	46	42	68	143	49	47	49	117	23	208	16	17
30	49	42	73	126	---	97	39	248	108	185	13	76
31	43	---	329	106	---	106	---	57	---	30	11	---
TOTAL	3072	2049	2220	4919	2154	1927	2398	1929	1312	1669	1193	1421.7
MEAN	99.1	68.3	71.6	159	74.3	62.2	79.9	62.2	43.7	53.8	38.5	47.4
MAX	368	276	385	1170	220	109	640	248	152	208	215	639
MIN	43	41	35	42	49	45	39	34	23	16	11	9.9
CFSM	1.59	1.10	1.15	2.56	1.19	1.00	1.28	1.00	.70	.86	.62	.76
IN.	1.84	1.23	1.33	2.94	1.29	1.15	1.43	1.15	.78	1.00	.71	.85
CAL YR 1975	TOTAL	37785.0	MEAN	104	MAX	3700	MIN	19	CFSM	1.67	IN	22.60
WTR YR 1976	TOTAL	26263.7	MEAN	71.8	MAX	1170	MIN	9.9	CFSM	1.15	IN	15.71

01649500 NORTHEAST BRANCH ANACOSTIA RIVER AT RIVERDALE, MD

LOCATION.--Lat 38°57'37", long 76°55'34", Prince Georges County, Hydrologic Unit 02070010, on right bank 200 ft (61 m) downstream from bridge on Riverdale Road, 1.8 mi (2.9 km) downstream from Indian Creek, and 1.8 mi (2.9 km) upstream from confluence with Northwest Branch.

DRAINAGE AREA.--72.8 mi² (188.6 km²).

PERIOD OF RECORD.--August 1938 to current year.

REVISED RECORDS.--WDR MD-75-1: 1972(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 12.68 ft (3.865 m) above mean sea level (Washington Suburban Sanitary Commission bench mark). Prior to June 12, 1942, nonrecording gage; June 12, 1942, to Mar. 22, 1966, and Apr. 12, 1967, to Sept. 3, 1969, water-stage recorder, all at bridge at datum 14.00 ft (4.267 m) above mean sea level. Mar. 23, 1966, to Apr. 11, 1967, nonrecording gage 600 ft (183 m) downstream from bridge at datum 9.25 ft (2.819 m) above mean sea level.

REMARKS.--Records good. Some regulation at low flow by sand and gravel plants above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--38 years, 83.2 ft³/s (2.356 m³/s), 15.52 in/yr (394 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s (340 m³/s) June 22, 1972, gage height, 9.52 ft (2.902 m), from rating curve extended above 3,800 ft³/s (108 m³/s) on basis of the average of contracted-opening and slope-area measurements at gage height 9.52 ft (2.902 m); maximum gage height, 12.93 ft (3.941 m) Oct. 16, 1942; minimum daily discharge, 1.4 ft³/s (0.040 m³/s) Sept. 12, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 23 or 24, 1933, reached a stage of about 15.5 ft (4.72 m), at datum 14.00 ft (4.267 m) above mean sea level, from floodmarks, discharge, 10,500 ft³/s (297 m³/s), from rating curve extended above 3,000 ft³/s (85.0 m³/s) on basis of velocity-area study.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0230	*5490 155	8.14 2.481	Sept. 16	0930	3630 103	6.63 2.021
Apr. 1	0400	3060 86.7	6.11 1.862	Sept. 17	0030	3860 109	6.83 2.082

Minimum daily discharge, 14 ft³/s (0.40 m³/s) Sept. 7, 9, 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	45	75	2320	160	49	1170	469	67	87	89	17
2	71	45	54	300	440	47	239	271	53	34	29	42
3	59	44	49	399	150	49	127	84	45	71	25	26
4	56	43	48	199	95	50	122	53	40	41	23	22
5	52	43	47	95	90	50	96	47	36	29	22	20
6	50	44	50	70	80	47	79	42	35	25	22	16
7	46	42	68	102	70	42	73	84	31	94	22	14
8	51	97	54	265	65	41	68	66	29	62	526	15
9	527	54	130	120	61	135	64	42	29	81	131	14
10	175	65	90	75	57	112	62	37	27	42	58	73
11	160	75	57	70	65	140	61	44	27	189	33	26
12	104	391	49	65	54	119	54	96	26	87	26	18
13	72	537	62	65	65	131	50	44	25	32	23	14
14	65	167	54	93	122	89	52	37	25	24	34	14
15	58	92	50	60	68	64	51	36	25	70	200	36
16	53	74	47	55	63	140	50	246	51	47	109	1380
17	245	65	42	55	66	86	50	135	195	50	37	940
18	255	60	39	50	100	60	49	98	53	26	27	93
19	106	58	40	50	119	56	46	78	48	21	24	46
20	73	57	36	55	69	53	44	53	80	20	21	35
21	63	67	39	48	58	51	97	45	117	20	21	34
22	58	63	40	48	263	45	47	40	65	21	21	31
23	53	53	37	46	143	42	44	37	40	27	19	26
24	50	50	36	46	79	42	44	35	35	25	19	24
25	73	48	39	44	69	48	49	34	33	21	18	38
26	59	49	494	381	61	45	70	68	37	18	18	68
27	50	50	181	802	54	55	44	50	31	15	67	72
28	49	49	85	393	54	85	42	38	29	17	37	69
29	46	47	66	169	51	47	40	229	27	161	24	30
30	60	47	106	113	---	69	40	539	58	114	17	166
31	45	---	805	89	---	152	---	127	---	38	16	---
TOTAL	2961	2621	3069	6742	2895	2241	3128	3312	1419	1609	1758	3419
MEAN	95.5	87.4	99.0	217	99.8	72.3	104	107	47.3	51.9	56.7	114
MAX	527	537	805	2320	440	152	1170	539	195	189	526	1380
MIN	45	42	36	44	51	41	40	34	25	15	16	14
CFSM	1.31	1.20	1.36	2.98	1.37	.99	1.43	1.47	.65	.71	.78	1.57
IN.	1.51	1.34	1.57	3.45	1.48	1.15	1.60	1.69	.73	.82	.90	1.75

CAL YR 1975 TOTAL 52716 MEAN 144 MAX 6830 MIN 20 CFSM 1.98 IN 26.94
WTR YR 1976 TOTAL 35174 MEAN 96.1 MAX 2320 MIN 14 CFSM 1.32 IN 17.97

01650500 NORTHWEST BRANCH ANACOSTIA RIVER NEAR COLESVILLE, MD

LOCATION.--Lat 39°03'55", long 77°01'48", Montgomery County, Hydrologic Unit 02070010, on right bank 400 ft (120 m) upstream from bridge on State Highway 183, 1.5 mi (2.4 km) southwest of Colesville, 3 mi (4.8 km) upstream from Burnt Mills, 10 mi (16.1 km) upstream from Sligo Creek, and 12.5 mi (20.1 km) upstream from confluence with Northeast Branch.

DRAINAGE AREA.--21.1 mi² (54.6 km²).

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1432: 1924(M), 1925-26, 1929-30(M), 1933(M), 1939(P), 1940(M), 1943-46, 1948-49(P).

WSP 1903: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 264.85 ft (80.726 m) above mean sea level, adjustment of 1912. Prior to Apr. 22, 1932, nonrecording gages in same general vicinity at different datums. Apr. 22, 1932, to Apr. 11, 1934, nonrecording gages at present site and datum.

REMARKS.--Records good. Diversions at low flow since 1962 for irrigation of golf courses above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--53 years, 22.4 ft³/s (0.634 m³/s), 14.42 in/yr (366 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft³/s (312 m³/s) June 22, 1972, gage height, 15.89 ft (4.843 m), from high-water mark in well, from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of contracted-opening and flow-over-road measurement at gage height 10.99 ft (3.350 m) and computation of flow over Burnt Mills Dam, 3 miles (4.8 km) downstream, adjusted for flow from intervening area, at gage height 15.89 ft (4.843 m); no flow several days during August and September 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0400	*1480 41.9	8.75 2.667	Sept. 16	1000	653 18.5	5.95 1.814
Apr. 1	0700	810 22.9	6.75 2.057	Sept. 16	2330	655 18.5	5.96 1.817
July 29	1930	606 17.2	5.69 1.734				

Minimum discharge, 1.8 ft³/s (0.051 m³/s) Sept. 9, 10, 13, 14, 15, gage height, 1.52 ft (0.463 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	16	20	538	39	20	278	57	44	21	8.8	2.6
2	18	16	17	52	90	19	38	32	40	8.7	6.3	5.7
3	16	16	16	122	32	20	27	18	17	7.6	5.8	4.5
4	16	16	15	47	26	20	26	15	14	7.4	5.5	3.8
5	15	16	15	28	27	20	24	15	12	6.9	4.8	3.6
6	15	15	16	26	26	20	22	14	11	6.5	4.5	3.2
7	14	15	17	29	23	19	21	14	11	12	5.1	2.8
8	15	22	16	63	22	18	20	13	10	15	54	2.5
9	128	16	37	26	21	25	19	12	9.8	12	13	2.3
10	30	40	28	24	21	31	19	12	9.0	7.3	9.0	5.7
11	56	30	19	22	23	45	19	13	8.7	29	7.0	3.9
12	27	116	17	22	21	32	18	24	7.9	16	6.2	2.8
13	21	107	19	23	22	30	18	13	7.7	7.5	5.9	2.1
14	19	31	18	30	43	24	17	13	8.8	6.5	6.5	2.2
15	18	23	18	23	25	21	17	13	8.3	15	16	3.2
16	17	21	17	22	24	30	17	20	8.8	26	15	304
17	66	20	16	22	26	25	17	17	21	16	6.9	106
18	77	19	16	22	31	20	16	21	9.4	7.6	5.8	22
19	27	18	14	20	48	21	16	18	8.5	6.7	5.2	11
20	23	18	15	18	25	19	16	13	17	6.2	4.7	8.6
21	20	23	16	19	23	19	63	12	17	6.2	4.3	8.0
22	19	21	16	18	45	18	19	11	12	7.2	4.1	7.0
23	18	18	16	18	32	17	16	10	9.1	8.1	3.9	6.4
24	18	18	14	17	24	17	15	10	8.2	7.1	3.5	6.2
25	21	17	14	17	23	18	16	13	7.8	5.6	3.3	6.5
26	19	17	159	128	22	18	19	20	7.9	4.9	3.3	6.6
27	18	17	37	200	21	20	15	14	6.9	5.1	3.6	7.2
28	17	16	24	99	21	29	15	11	6.5	4.8	5.1	7.5
29	17	16	21	37	20	19	14	31	6.1	77	4.7	6.2
30	17	16	28	30	---	25	14	87	44	19	3.5	17
31	16	---	204	27	---	35	---	21	---	8.0	3.0	---
TOTAL	836	770	915	1789	846	714	871	607	409.4	393.9	238.3	581.1
MEAN	27.0	25.7	29.5	57.7	29.2	23.0	29.0	19.6	13.6	12.7	7.69	19.4
MAX	128	116	204	538	90	45	278	87	44	77	54	304
MIN	14	15	14	17	20	17	14	10	6.1	4.8	3.0	2.1
CFSM	1.28	1.22	1.40	2.73	1.38	1.09	1.37	.93	.64	.60	.36	.92
IN.	1.47	1.36	1.61	3.15	1.49	1.26	1.54	1.07	.72	.69	.42	1.02
CAL YR 1975	TOTAL	13573.3	MEAN	37.2	MAX	2060	MIN	6.1	CFSM	1.76	IN	23.93
WTR YR 1976	TOTAL	8970.7	MEAN	24.5	MAX	538	MIN	2.1	CFSM	1.16	IN	15.81

01651000 NORTHWEST BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD

LOCATION.--Lat 38°57'09", long 76°58'00", Prince Georges County, Hydrologic Unit 02070010, on right bank at downstream side of bridge on Queens Chapel Road (State Highway 500), 0.8 mi (1.3 km) downstream from Sligo Branch, 1 mi (1.6 km) west of Hyattsville, and 1.6 mi (2.6 km) upstream from confluence with Northeast Branch.

DRAINAGE AREA.--49.4 mi² (127.9 km²).

PERIOD OF RECORD.--July 1938 to current year. Monthly discharge only for July 1938 published in WSP 1302.

REVISED RECORDS.--WSP 971: 1942(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 17.30 ft (5.273 m) above mean sea level, adjustment of 1912. Prior to Oct. 22, 1938, nonrecording gage; Oct. 22, 1938, to Sept. 17, 1951, water-stage recorder; Sept. 17, 1951, to Aug. 29, 1952, nonrecording gage and crest-stage gage.

REMARKS.--Records good except those for period of no gage-height record, Feb. 3 to Mar. 11, which are fair. Small diversion since 1962 for irrigation of golf courses above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--38 years, 44.7 ft³/s (1.266 m³/s), 12.29 in/yr (312 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s (510 m³/s) June 22, 1972, gage height, 14.47 ft (4.410 m), from rating curve extended above 4,000 ft³/s (113 m³/s) on the basis of the average of slope-area and step-back-water measurements at gage height 14.47 ft (4.410 m); minimum, 0.2 ft³/s (0.006 m³/s) Sept. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft³/s (48 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0115	2480 70.2	6.05 1.844	July 29	2015	1990 56.4	4.06 1.237
Apr. 1	0315	1870 53.0	5.48 1.670	Sept. 16	2315	*5540 157	6.59 2.009

Minimum daily discharge, 5.0 ft³/s (0.14 m³/s) Sept. 7, 8, 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	29	50	1040	103	42	572	110	33	40	58	11
2	32	33	31	137	214	40	92	60	84	20	14	10
3	30	31	28	282	130	42	65	36	34	30	13	8.0
4	28	31	27	125	60	44	70	30	28	18	9.9	7.5
5	28	31	26	77	65	44	57	26	25	14	9.8	7.0
6	26	30	28	65	55	42	49	26	23	13	11	6.0
7	26	30	40	78	50	40	45	24	23	36	11	5.0
8	50	78	29	179	46	40	43	24	23	24	180	5.0
9	220	34	85	70	46	60	40	24	23	28	30	12
10	60	51	66	72	46	70	40	25	20	16	18	9.0
11	100	70	37	58	50	85	39	26	21	80	16	7.0
12	50	277	32	58	46	68	39	73	18	30	14	6.0
13	40	263	40	56	50	84	37	27	16	18	12	5.0
14	34	59	35	79	90	47	36	26	17	13	30	5.0
15	32	41	32	57	55	41	35	24	17	82	31	16
16	32	38	30	53	50	96	35	90	40	38	17	1200
17	120	37	31	51	60	54	35	51	200	48	15	417
18	140	36	31	48	70	41	34	64	21	17	15	66
19	46	34	28	46	100	39	34	48	17	13	11	29
20	40	32	26	44	55	37	36	27	34	12	8.8	21
21	36	45	26	40	50	36	102	24	52	13	8.0	22
22	34	41	26	40	95	35	40	23	25	14	7.5	17
23	33	32	26	38	70	34	33	22	18	16	7.5	15
24	33	30	26	38	50	34	30	22	16	14	7.0	14
25	49	29	28	38	48	37	34	27	16	12	7.0	14
26	40	28	359	299	46	34	63	83	15	10	7.0	37
27	34	28	85	415	46	47	29	38	14	11	10	32
28	32	28	51	210	44	64	26	23	14	9.5	9.5	29
29	32	28	43	86	44	37	28	141	13	253	8.0	14
30	41	28	69	69	---	65	28	227	70	90	7.0	99
31	30	---	415	60	---	126	---	44	---	19	6.0	---
TOTAL	1568	1582	1886	4008	1934	1605	1846	1515	970	1051.5	609.0	2145.5
MEAN	50.6	52.7	60.8	129	66.7	51.8	61.5	48.9	32.3	33.9	19.6	71.5
MAX	220	277	415	1040	214	126	572	227	200	253	180	1200
MIN	26	28	26	38	44	34	26	22	13	9.5	6.0	5.0
CFSM	1.02	1.07	1.23	2.61	1.35	1.05	1.24	.99	.65	.69	.40	1.45
IN.	1.18	1.19	1.42	3.02	1.46	1.21	1.39	1.14	.73	.79	.46	1.62

CAL YR 1975	TOTAL	32183.0	MEAN 88.2	MAX 5050	MIN 11	CFSM 1.79	IN 24.23
WTR YR 1976	TOTAL	20720.0	MEAN 56.6	MAX 1200	MIN 5.0	CFSM 1.15	IN 15.60

POTOMAC RIVER BASIN

01653500 HENSON CREEK AT OXON HILL, MD

LOCATION.--Lat 38°47'16", long 76°58'42", Prince Georges County, Hydrologic Unit 02070010, on left bank 100 ft (30 m) downstream from bridge on Tucker Road, 1.0 mi (1.6 km) south of Oxon Hill, and 1.4 mi (2.3 km) upstream from Carey Branch and mouth.

DRAINAGE AREA.--16.7 mi² (43.3 km²).

PERIOD OF RECORD.--June 1948 to current year.

REVISED RECORDS.--WSP 1232: 1949(M), 1950.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 62 ft (18.9 m), from topographic map.

REMARKS.--Records good. Some diversion above station for irrigation of truck farm. Some regulation at low flow by sand and gravel plant above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--28 years, 19.6 ft³/s (0.555 m³/s), 15.94 in/yr (405 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,440 ft³/s (97.4 m³/s) Aug. 4, 1971, gage height, 7.63 ft (2.326 m), from rating curve extended above 520 ft³/s (14.7 m³/s) on basis of slope-area measurement at gage heights 6.63 ft (2.021 m) and 7.27 ft (2.216 m); no flow at times during some summer months in 1954, 1955, 1957, 1962-64, and 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0030	*1070 30.3	4.87 1.484	Sept. 16	0845	789 22.3	4.22 1.286
Jan. 26	1945	495 14.0	3.30 1.006	Sept. 16	1830	853 24.2	4.38 1.335
Apr. 1	0445	661 18.7	3.86 1.177				

Minimum discharge, 0.16 ft³/s (0.005 m³/s) Sept. 9, gage height, 0.32 ft (0.098 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	19	19	346	30	9.9	229	83	8.0	1.1	5.7	.54
2	19	15	10	41	110	9.9	25	21	7.5	1.0	2.0	.91
3	17	14	10	83	26	10	19	9.3	7.3	1.1	1.9	1.2
4	17	14	8.8	29	24	10	20	7.7	6.4	1.7	1.4	.89
5	16	14	8.4	18	22	10	16	7.2	5.5	1.5	1.2	1.0
6	14	12	9.9	16	20	10	15	6.7	5.2	1.2	1.0	.81
7	14	9.1	14	31	18	9.5	15	6.7	5.5	8.6	1.0	.71
8	15	12	12	85	17	8.4	14	6.2	3.8	3.4	30	.43
9	135	9.8	35	17	16	48	13	6.2	3.0	1.6	16	.20
10	23	13	18	16	16	36	14	5.7	2.5	1.7	8.3	8.0
11	20	9.2	12	15	17	31	13	4.8	2.5	75	2.7	1.4
12	16	74	10	15	15	19	11	11	2.5	15	2.0	.63
13	14	87	12	14	15	17	11	6.2	2.4	3.3	1.6	.47
14	14	19	10	19	16	13	11	6.2	2.5	2.1	3.3	.25
15	13	15	9.6	13	14	11	10	6.2	2.4	65	26	9.5
16	14	13	11	13	14	48	10	47	2.4	69	9.5	415
17	72	12	9.1	12	13	20	11	13	11	27	2.6	26
18	47	11	8.8	12	26	13	10	18	3.5	5.7	1.5	8.8
19	20	11	8.1	11	21	12	8.8	11	3.8	3.6	1.5	6.2
20	16	11	8.4	10	13	12	8.3	6.7	19	2.6	1.8	4.9
21	15	14	8.7	10	13	12	13	5.2	14	2.6	1.3	4.3
22	15	12	7.7	9.8	54	9.8	8.8	5.2	5.9	2.9	1.3	4.0
23	14	10	7.3	10	17	9.7	7.7	4.8	3.0	4.4	.91	3.1
24	14	9.5	7.4	10	13	9.6	8.8	4.0	2.3	4.6	.48	3.0
25	19	9.5	8.4	9.5	13	11	8.8	3.7	2.1	2.4	.59	3.4
26	16	9.2	122	126	12	9.7	11	7.7	2.0	1.9	.51	12
27	15	10	21	236	11	18	6.7	6.7	2.0	1.6	9.3	8.4
28	15	8.9	14	88	12	26	6.7	4.4	1.6	1.7	5.6	9.2
29	15	9.4	12	27	11	9.8	6.7	44	.96	18	2.1	3.7
30	32	9.8	28	20	---	20	6.2	60	1.2	12	.79	32
31	16	---	226	18	---	39	---	11	---	3.6	.44	---
TOTAL	723	492.4	706.6	1380.3	619	532.3	568.5	446.5	141.76	346.9	144.32	570.74
MEAN	23.3	16.4	22.8	44.5	21.3	17.2	19.0	14.4	4.73	11.2	4.66	19.0
MAX	135	87	226	346	110	48	229	83	19	75	30	415
MIN	13	8.9	7.3	9.5	11	8.4	6.2	3.7	.96	1.0	.44	.20
CFSM	1.40	.98	1.37	2.66	1.28	1.03	1.14	.86	.28	.67	.28	1.14
IN.	1.61	1.10	1.57	3.07	1.38	1.19	1.27	.99	.32	.77	.32	1.27

CAL YR 1975	TOTAL	10536.70	MEAN	28.9	MAX	1120	MIN	2.3	CFSM	1.73	IN	23.47
WTR YR 1976	TOTAL	6672.32	MEAN	18.2	MAX	415	MIN	.20	CFSM	1.09	IN	14.86

POTOMAC RIVER BASIN

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01653600 PISCATAWAY CREEK AT PISCATAWAY, MD

LOCATION.--Lat 38°42'20", long 76°58'00", Prince Georges County, Hydrologic Unit 02070010, on left bank 75 ft (23 m) downstream from bridge on State Highway 223, at Piscataway, 0.4 mi (0.6 km) upstream from Tinker Creek, and 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--39.5 mi² (102.3 km²).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 10 ft (3 m), from topographic map.

REMARKS.--Records good below 100 ft³/s and fair above. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years, 48.4 ft³/s (1.371 m³/s), 16.64 in/yr (423 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s (142 m³/s) Sept. 26, 1975, gage height, 10.48 ft (3.194 m), from rating curve extended above 1,700 ft³/s (48.1 m³/s) on basis of contracted-opening measurement of peak flow at bridge 100 ft (30 m) upstream; no flow at times in 1966 and 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	2100	*937 26.5	7.19 2.192	Apr. 1	1400	532 15.1	6.14 1.871
Jan. 27	2200	677 19.2	6.64 2.024	Sept. 16	2130	620 17.6	6.50 1.981

No flow Sept. 1-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	38	44	440	88	43	431	68	21	1.5	20	0
2	106	37	36	329	297	42	137	96	16	1.7	4.6	0
3	90	36	30	189	112	42	75	34	15	.87	2.0	0
4	83	36	27	157	93	42	69	24	12	.71	1.4	0
5	77	35	26	82	86	40	64	22	10	.77	.92	0
6	74	34	26	71	78	40	56	19	9.4	.77	.72	0
7	64	34	31	84	67	38	52	19	8.8	1.2	.55	0
8	59	36	29	259	65	38	50	19	7.4	7.4	30	0
9	264	36	60	95	63	180	47	17	6.5	2.8	24	0
10	123	36	63	72	61	100	45	16	5.8	1.6	24	0
11	85	36	36	68	62	70	44	15	5.0	52	6.4	0
12	71	54	31	67	56	50	42	30	4.1	36	3.7	0
13	58	265	30	62	55	60	40	17	3.4	8.3	3.0	0
14	53	81	28	78	56	48	39	16	4.2	4.1	5.8	0
15	49	50	28	58	52	48	38	15	3.8	60	28	0
16	46	44	28	56	52	72	37	29	3.0	43	38	322
17	82	41	25	52	51	89	37	35	55	54	7.5	262
18	205	38	24	43	53	56	34	31	14	12	3.8	28
19	80	36	21	43	73	53	31	41	8.3	7.1	2.4	14
20	64	35	21	44	49	50	29	19	11	5.0	1.8	10
21	53	37	23	46	46	49	27	15	16	3.8	1.7	7.7
22	49	35	23	44	119	46	25	13	13	3.3	1.5	6.6
23	45	31	21	40	80	43	24	12	7.4	4.1	1.1	4.8
24	44	30	20	40	55	43	23	11	5.4	4.6	.65	3.9
25	61	30	20	40	51	44	23	11	4.2	3.2	.38	4.0
26	50	28	173	117	49	43	27	13	3.4	1.8	.35	7.9
27	43	30	87	560	47	43	21	13	2.9	1.4	.24	11
28	42	28	45	488	45	60	20	11	2.4	1.2	.44	19
29	40	26	38	155	43	43	20	23	1.9	1.2	1.2	8.1
30	65	27	42	103	---	53	19	126	1.6	16	.40	23
31	43	---	151	86	---	53	---	37	---	4.1	.08	---
TOTAL	2387	1340	1287	4468	2104	1721	1626	867	281.9	345.52	216.63	732.0
MEAN	77.0	44.7	41.5	144	72.6	55.5	54.2	28.0	9.40	11.1	6.99	24.4
MAX	264	265	173	840	297	180	431	126	55	60	38	322
MIN	40	26	20	40	43	38	19	11	1.6	.71	.08	0
CFSM	1.95	1.13	1.05	3.65	1.84	1.41	1.37	.71	.24	.28	.18	.62
IN.	2.25	1.26	1.21	4.21	1.98	1.62	1.53	.82	.27	.33	.20	.69

CAL YR 1975	TOTAL	26249.30	MEAN 71.9	MAX 2980	MIN 6.5	CFSM 1.82	IN 24.72
WTR YR 1976	TOTAL	17376.05	MEAN 47.5	MAX 840	MIN 0	CFSM 1.20	IN 16.36

POTOMAC RIVER BASIN

01661050 ST. CLEMENT CREEK NEAR CLEMENTS, MD

LOCATION.--Lat 38°28'00", long 76°43'31", St. Marys County, Hydrologic Unit 02070011, on left bank 60 ft (18 m) downstream from bridge on State Highway 242, 0.5 mi (0.8 km) north of Clements, 2.3 mi (3.7 km) upstream from mouth, and 5.7 mi (9.2 km) northwest of Leonardtown.

DRAINAGE AREA.--18.5 mi² (47.9 km²).

PERIOD OF RECORD.--October 1968 to current year.

REVISED RECORDS.--WDR-MD-71-1: 1969(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8 ft (2.4 m), from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--8 years, 21.1 ft³/s (0.598 m³/s), 15.49 in/yr (393 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,350 ft³/s (123 m³/s) June 22, 1972, gage height, 6.55 ft (1.996 m), from rating curve extended above 420 ft³/s (11.9 m³/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 0.07 ft³/s (0.002 m³/s) Sept. 7, 8, 1970, gage height, 0.69 ft (0.210 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 220 ft³/s (6.2 m³/s) revised, and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0500	393 11.1	4.52 1.378	Sept. 17	0330	*508 14.4	4.88 1.487
Jan. 27	2400	363 10.3	4.40 1.341				

Minimum discharge, 0.12 ft³/s (0.003 m³/s) July 28, gage height, 0.72 ft (0.219 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	16	22	308	35	19	76	40	8.2	1.0	1.6	.60
2	20	18	20	70	135	21	34	45	6.8	.86	1.2	.70
3	14	23	17	75	46	17	25	15	6.9	.62	.73	.80
4	13	15	16	59	38	18	25	11	5.5	.72	.55	1.5
5	13	17	15	30	36	23	25	4.5	4.5	.82	.37	1.0
6	13	16	15	26	32	33	22	8.9	4.1	.94	.21	.70
7	15	16	16	36	28	21	19	9.5	4.1	1.8	.26	.60
8	13	18	17	104	27	19	20	6.9	3.8	4.2	.39	.55
9	125	17	23	35	26	76	20	6.9	3.7	2.2	4.2	.55
10	54	22	24	24	25	81	15	10	3.5	1.6	5.9	1.2
11	26	15	17	28	26	34	17	7.0	3.1	7.5	2.3	1.7
12	120	21	15	30	23	27	16	13	2.9	8.1	1.5	1.0
13	27	171	14	27	24	28	15	7.6	2.5	3.9	1.2	.80
14	19	80	14	31	24	24	15	7.5	2.6	1.8	1.3	.65
15	21	24	14	23	22	22	14	7.2	2.9	9.8	15	1.8
16	16	21	16	23	23	38	14	8.8	2.6	5.5	4.7	169
17	44	19	13	23	23	41	14	12	6.1	4.3	2.1	300
18	118	18	12	16	22	24	13	9.9	5.6	2.6	1.3	50
19	41	17	10	15	22	22	13	16	3.5	1.7	1.1	10
20	25	17	11	19	19	22	12	8.3	4.6	1.3	.87	3.0
21	21	20	12	22	19	22	11	6.9	7.4	1.0	.80	1.2
22	20	19	12	21	33	20	11	6.0	4.8	.86	.73	1.1
23	18	15	12	18	33	19	10	5.1	3.6	2.1	.59	1.0
24	18	16	11	21	23	19	9.5	5.1	3.0	2.0	.59	.90
25	79	16	11	21	22	19	10	5.0	2.5	1.3	.48	.90
26	44	15	75	45	22	20	11	5.5	2.3	2.2	.35	1.2
27	28	21	42	216	21	19	9.5	6.0	2.2	.66	.45	5.0
28	23	22	20	240	19	27	9.3	5.2	1.7	.13	1.2	15
29	21	17	17	61	19	19	8.9	17	1.4	.19	1.0	4.0
30	38	16	33	41	---	27	9.1	40	1.1	1.1	.80	30
31	26	---	124	36	---	25	---	12	---	1.5	.70	---
TOTAL	1091	758	690	1744	867	846	523.3	373.8	117.5	74.30	54.47	606.45
MEAN	35.2	25.3	22.3	56.3	29.9	27.3	17.4	12.1	3.92	2.40	1.76	20.2
MAX	125	171	124	308	135	81	76	45	8.2	9.8	15	300
MIN	13	15	10	15	19	17	8.9	5.0	1.1	.13	.21	.55
CFSM	1.90	1.37	1.21	3.04	1.62	1.48	.94	.65	.21	.13	.10	1.09
IN.	2.19	1.52	1.39	3.51	1.74	1.70	1.05	.75	.24	.15	.11	1.22
CAL YR 1975	TOTAL	11508.50	MEAN	31.5	MAX	661	MIN	2.2	CFSM	1.70	IN	23.14
WTR YR 1976	TOTAL	7745.82	MEAN	21.2	MAX	308	MIN	.13	CFSM	1.15	IN	15.57

01661500 ST. MARYS RIVER AT GREAT MILLS, MD

LOCATION.--Lat 38°14'36", long 76°30'13", St. Marys County, Hydrologic Unit 02070011, on left bank at downstream side of bridge on State Highway 471 in Great Mills, 0.3 mi (0.5 km) downstream from Western Branch, and 12.0 mi (19.3 km) upstream from mouth.

DRAINAGE AREA.--24.0 mi² (62.2 km²).

PERIOD OF RECORD.--June 1946 to current year.

REVISED RECORDS.--WSP 1702: 1946, 1948-49, 1955, 1957-58.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 10 ft (3 m), from topographic map.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--30 years, 23.0 ft³/s (0.651 m³/s), 13.01 in/yr (330 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,950 ft³/s (225 m³/s) Aug. 20, 1969, gage height, 13.34 ft (4.066 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of contracted-opening measurement at gage height 12.08 ft (3.682 m); minimum, 0.2 ft³/s (0.006 m³/s) Sept. 7, 1966, gage height, 1.13 ft (0.344 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0630	504 14.3	5.24 1.597	Jan. 28	0100	*676 19.1	6.32 1.926

Minimum discharge, 1.9 ft³/s (0.054 m³/s) Aug. 25, 26, 27, gage height, 1.25 ft (0.381 m)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	18	330	94	16	78	19	11	2.5	5.6	2.8
2	12	13	18	148	169	15	41	49	8.5	2.2	4.3	3.2
3	9.9	13	15	126	107	16	25	20	7.7	2.2	3.1	4.0
4	9.1	13	14	112	77	16	22	15	6.6	2.2	2.5	7.5
5	8.6	12	13	74	52	16	22	16	5.5	2.2	2.3	4.4
6	8.6	12	13	41	38	16	18	9.3	4.9	2.2	2.3	3.1
7	8.2	12	14	41	30	15	16	8.3	5.0	2.8	2.0	2.5
8	7.7	15	16	149	28	14	15	8.0	4.4	4.1	2.0	2.1
9	48	15	22	92	25	49	14	7.4	4.2	3.7	3.2	2.3
10	29	13	25	55	23	68	13	7.2	3.9	3.0	6.1	5.6
11	47	12	19	38	23	39	13	8.1	3.6	13	4.6	8.0
12	224	13	16	32	21	26	12	11	3.5	18	3.3	5.2
13	80	152	14	27	22	23	12	8.8	3.1	10	2.6	3.8
14	33	101	14	28	22	20	12	7.9	3.2	4.8	2.5	3.1
15	19	52	14	23	20	18	12	7.4	3.3	4.6	4.4	5.7
16	15	29	14	21	20	26	12	8.6	3.1	8.6	9.3	147
17	26	21	13	20	20	30	12	13	8.1	11	6.2	75
18	71	18	12	16	19	22	11	15	8.8	6.2	4.1	24
19	48	16	11	14	18	20	11	24	6.0	3.8	3.0	11
20	30	15	11	15	17	18	11	13	5.1	2.8	2.6	6.5
21	21	17	12	17	16	18	10	9.0	6.8	2.7	2.4	4.9
22	17	18	12	17	35	17	9.7	7.1	8.7	2.5	2.3	4.5
23	15	15	11	15	36	15	9.1	6.1	5.9	2.6	2.1	4.0
24	14	15	11	16	23	15	8.9	5.9	4.9	2.9	2.0	3.9
25	22	16	11	16	20	15	9.2	5.5	4.4	2.5	1.9	3.9
26	21	14	51	29	18	15	9.5	5.5	4.1	2.2	1.9	4.0
27	19	15	48	317	17	15	8.3	5.7	3.7	2.0	1.9	16
28	17	17	28	341	17	17	8.1	5.6	3.2	1.9	6.2	43
29	15	14	20	161	16	15	8.4	21	2.8	1.9	5.1	12
30	17	14	19	129	---	17	8.2	52	2.6	2.6	3.7	119
31	16	---	110	109	---	17	---	18	---	3.1	3.6	---
TOTAL	941.1	716	639	2569	1043	659	471.4	417.4	156.6	136.8	109.1	542.0
MEAN	30.4	23.9	20.6	82.9	36.0	21.3	15.7	13.5	5.22	4.41	3.52	18.1
MAX	224	152	110	341	169	68	78	52	11	18	9.3	147
MIN	7.7	12	11	14	16	14	8.1	5.5	2.6	1.9	1.9	2.1
CFSM	1.27	1.00	.86	3.45	1.50	.89	.65	.56	.22	.18	.15	.75
IN.	1.46	1.11	.99	3.98	1.62	1.02	.73	.65	.24	.21	.17	.84

CAL YR 1975	TOTAL	11474.1	MEAN 31.4	MAX 350	MIN 2.8	CFSM 1.31	IN 17.78
WTR YR 1976	TOTAL	8400.4	MEAN 23.0	MAX 341	MIN 1.9	CFSM .96	IN 13.02

OHIO RIVER BASIN

MONONGAHELA RIVER BASIN

03075500 YOUGHIOGHENY RIVER NEAR OAKLAND, MD

LOCATION.--Lat 39°25'19", long 79°25'32", Garrett County, Hydrologic Unit 05020006, on left bank 200 ft (61 m) downstream from Baltimore and Ohio Railroad bridge, 250 ft (76 m) downstream from Little Youghiogheny River, 1.2 mi (1.9 km) northwest of Oakland, and 1.5 mi (2.4 km) upstream from Dunkard Lick Run.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--August 1941 to current year.

REVISED RECORDS.--WSP 1113: 1947(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,353.61 ft (717.380 m) above mean sea level. Prior to Aug. 1, 1946, nonrecording gage at bridge 200 ft (61 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Town of Oakland diverted an average of 0.4 ft³/s (0.011 m³/s) for water supply. The diversion is returned above station as sewage. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--35 years, 291 ft³/s (8.241 m³/s), 29.49 in/yr (749 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft³/s (334 m³/s) Oct. 16, 1954, gage height, 12.16 ft (3.706 m); minimum daily, 2.5 ft³/s (0.071 m³/s) Oct. 4, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of 15.3 ft (4.66 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0815	*3530 100	6.89 2.100	Feb. 11	1530	2310 65.4	5.78 1.762

Minimum discharge, 12 ft³/s (0.34 m³/s) Sept. 9, 10, 15, gage height, 1.89 ft (0.576 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	83	87	3110	287	201	415	95	124	144	45	19
2	136	78	83	1510	242	178	401	153	170	114	38	22
3	120	75	76	1110	235	162	454	127	126	94	29	29
4	100	71	70	1050	210	148	798	114	97	101	26	23
5	89	68	70	708	185	136	759	97	81	81	24	19
6	82	65	73	510	347	128	575	91	74	68	23	17
7	72	63	153	420	260	109	444	94	88	64	86	16
8	68	63	123	360	250	100	350	95	70	69	113	15
9	79	60	115	255	235	102	282	80	59	64	54	13
10	127	61	139	255	235	119	235	74	52	56	39	17
11	276	64	117	238	1640	204	208	71	46	62	33	37
12	197	83	109	232	1210	272	187	90	42	195	28	19
13	149	241	321	232	1020	578	157	70	74	108	25	15
14	127	164	317	896	1290	507	139	62	106	71	26	13
15	111	138	276	490	878	411	123	60	54	57	29	13
16	100	134	682	355	918	392	112	105	44	95	63	19
17	153	137	549	291	1160	433	101	118	59	111	41	28
18	623	126	410	212	1130	357	92	165	57	70	28	26
19	405	117	294	195	892	424	85	249	107	54	25	24
20	331	111	254	190	650	434	78	185	200	46	22	21
21	263	117	216	167	497	884	74	151	282	41	20	24
22	221	119	181	138	565	942	98	127	255	43	19	32
23	186	98	150	146	527	632	91	108	254	51	17	23
24	162	91	130	200	435	466	73	95	480	144	16	17
25	143	89	120	361	413	387	71	89	487	86	16	15
26	133	86	263	732	357	324	172	90	970	55	15	14
27	127	89	491	1030	311	278	147	77	471	44	115	20
28	113	94	317	690	265	284	114	67	299	40	64	105
29	103	79	254	507	228	219	101	65	214	37	37	56
30	102	77	307	398	---	213	92	110	174	40	27	41
31	89	---	1330	325	---	198	---	114	---	37	21	---
TOTAL	5130	2941	8077	17313	16872	10222	7028	3288	5616	2342	1164	752
MEAN	165	98.0	261	558	582	330	234	106	187	75.5	37.5	25.1
MAX	623	241	1330	3110	1640	942	798	249	970	195	115	105
MIN	68	60	70	138	185	100	71	60	42	37	15	13
CFSM	1.23	.73	1.95	4.16	4.34	2.46	1.75	.79	1.40	.56	.28	.19
IN.	1.42	.82	2.24	4.81	4.68	2.84	1.95	.91	1.56	.65	.32	.21

CAL YR 1975 TOTAL 126801 MEAN 347 MAX 2760 MIN 25 CFSM 2.59 IN 35.20
WTR YR 1976 TOTAL 80745 MEAN 221 MAX 3110 MIN 13 CFSM 1.65 IN 22.42

03076000 DEEP CREEK RESERVOIR NEAR OAKLAND, MD

LOCATION.--Lat 39°30'34", long 79°23'28", Garrett County, Hydrologic Unit 05020006, on Deep Creek at dam, 1.8 mi (2.9 km) upstream from mouth and 7.0 mi (11.3 km) north of Oakland.

DRAINAGE AREA.--64.7 mi² (167.6 km²).

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1950, monthend contents published in WSP 1305, and October 1950 to September 1955, monthend contents published in WSP 1385.

GAGE.--Water-stage recorder at right end of spillway. Datum of gage is at mean sea level, unadjusted.

REMARKS.--Reservoir is formed by an earthfill dam completed January 1925, with storage beginning at that time. Usable capacity, 92,975 acre-ft (115 hm³) between elevations 2,425 ft (739.1 m), top of intake to outlet tunnel, and 2,462 ft (750.4 m), crest of spillway. Dead storage, 13,085 acre-ft (16.1 hm³). Figures given herein represent usable contents. Reservoir is used for hydroelectric power.

COOPERATION.--Elevations and capacity table furnished by Pennsylvania Electric Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 93,258 acre-ft (115 hm³) July 24, 25, 1949, elevation, 2,462.075 ft (750.440 m); minimum observed, 11,763 acre-ft (14.5 hm³) Sept. 30, 1925, elevation, 2,433.45 ft (741.716 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 81,100 acre-ft (100 hm³) Apr. 8, elevation, 2,458.80 ft (749.442 m); minimum, 68,700 acre-ft (84.7 hm³) Sept. 28-30, elevation, 2,455.30 ft (748.375 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2458.2	78900	
Oct. 31	2458.2	78900	0
Nov. 30	2456.4	72500	-6400
Dec. 31	2455.4	69100	-3400
CAL YR 1975			+2100
Jan. 31	2456.4	72500	+3400
Feb. 29	2458.2	78900	+6400
Mar. 31	2458.4	79700	+800
Apr. 30	2458.4	79700	0
May 31	2457.8	77500	-2200
June 30	2457.8	77500	0
July 31	2456.8	73900	-3600
Aug. 31	2456.0	71100	-2800
Sept. 30	2455.3	68700	-2400
WTR YR 1976			-10200

03076500 YOUGHIOGHENY RIVER AT FRIENDSVILLE, MD

LOCATION.--Lat 39°39'13", long 79°24'31", Garrett County, Hydrologic Unit 05020006, on left bank 0.7 mi (1.1 km) upstream from bridge on State Highway 42 at Friendsville, and 1.5 mi (2.4 km) upstream from Bear Creek.

DRAINAGE AREA.--295 mi² (764 km²).

PERIOD OF RECORD.--August 1898 to December 1904 and October 1940 to current year. October, November 1940 monthly discharge only, published in WSP 1305. September 1922 to September 1926 (gage heights only) in reports of Pennsylvania Department of Forests and Waters.

REVISED RECORDS.--WSP 1385: Drainage area at former site, 1898-1905, 1941(M), 1942, 1944-45, 1948-49, 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 1,487.33 ft (453.338 m) above mean sea level. Aug. 17, 1898, to Dec. 31, 1904, and Sept. 1, 1922, to Sept. 30, 1926, nonrecording gages at bridge 0.7 mi (1.1 km) downstream at datum 16.24 ft (4.950 m) and 16.29 ft (4.965 m) lower, respectively.

REMARKS.--Records good. Low and medium flow regulated since July 1925 by Deep Creek Reservoir (see station 03076000). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--42 years (water years 1899-1904, 1941-76), 637 ft³/s (18.04 m³/s), 29.32 in/yr (745 mm/yr), adjusted for storage since October 1940.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Oct. 16, 1954, gage height, 8.99 ft (2.740 m), from rating curve extended above 5,800 ft³/s (164 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 8.2 ft³/s (0.23 m³/s) Sept. 11, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1898, 14.2 ft (4.33 m) Mar. 29, 1924, from floodmarks, site and datum then in use or 10.2 ft (3.11 m), present site and datum; discharge, about 15,600 ft³/s (440 m³/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,980 ft³/s (141 m³/s) Jan. 1, gage height, 5.69 ft (1.734 m); minimum, 25 ft³/s (0.71 m³/s) Sept. 15, gage height, 1.83 ft (0.558 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	407	238	391	4570	521	511	785	197	318	328	103	77
2	405	183	406	3040	600	504	873	257	580	282	140	70
3	437	336	384	1990	553	480	752	356	432	182	129	68
4	272	362	353	2020	526	460	1440	350	347	177	119	47
5	199	360	389	1520	497	414	1560	299	215	166	119	35
6	279	347	197	1140	687	316	1160	286	197	239	109	64
7	254	339	293	978	470	289	933	292	275	224	133	75
8	279	194	430	890	345	320	754	210	275	265	252	73
9	294	143	406	827	435	353	636	193	244	229	204	71
10	375	301	451	452	492	379	498	264	159	124	152	70
11	632	347	418	405	2180	451	404	252	215	137	137	48
12	524	500	406	534	2480	607	426	268	121	458	119	45
13	486	752	474	695	1810	969	423	263	114	309	126	49
14	448	617	629	1420	2240	979	383	235	271	210	77	57
15	411	350	694	1030	1610	903	356	164	215	229	82	56
16	386	311	1290	753	1900	840	291	193	206	249	169	85
17	473	515	1220	560	2350	992	234	327	144	209	177	93
18	960	468	959	385	2310	770	210	365	215	177	156	52
19	773	464	734	448	1950	865	249	501	156	224	112	41
20	734	467	535	465	1460	759	312	422	206	194	106	77
21	654	466	455	417	954	1260	276	373	456	210	64	142
22	573	288	530	371	997	2010	306	246	536	224	57	89
23	511	249	474	381	1220	1320	301	224	344	209	97	88
24	523	403	470	249	978	993	185	291	637	185	95	79
25	338	413	295	445	919	874	173	281	575	219	87	41
26	287	398	643	983	810	816	337	278	1320	229	92	26
27	462	229	924	2070	740	533	392	261	683	173	95	50
28	454	413	648	1440	539	525	324	247	527	144	137	135
29	413	215	679	1090	446	550	299	156	421	133	79	195
30	425	185	747	893	---	548	292	177	357	126	90	145
31	415	---	2230	596	---	508	---	210	---	88	76	---
TOTAL	14083	10853	19154	33057	33019	22098	15564	8438	10761	6552	3690	2243
MEAN	454	362	618	1066	1139	713	519	272	359	211	119	74.8
MAX	960	752	2230	4570	2480	2010	1560	501	1320	458	252	195
MIN	199	143	197	249	345	289	173	156	114	88	57	26
(f)	0	-107	-55.5	+55.5	+111	+13.0	0	-35.8	0	-58.5	-45.5	-40.3
MEAN#	454	255	562	1122	1250	726	519	236	359	152	73.5	34.5
CFSM#	1.54	.86	1.91	3.80	4.24	2.46	1.76	.80	1.22	.52	.25	.12
IN.#	1.78	.96	2.20	4.38	4.57	2.84	1.96	.92	1.36	.60	.29	.13

CAL YR 1975 TOTAL 282741 MEAN 775 MAX 5180 MIN 60 MEAN# 778 CFSM# 2.64 IN.# 35.80
WTR YR 1976 TOTAL 179512 MEAN 490 MAX 4570 MIN 26 MEAN# 476 CFSM# 1.61 IN.# 21.96

/ Change in contents, equivalent in cubic feet per second, in Deep Creek Reservoir, furnished by Pennsylvania Electric Co.

Adjusted for change in contents.

MONONGAHELA RIVER BASIN

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03076600 BEAR CREEK AT FRIENDSVILLE, MD

LOCATION.--Lat 39°39'22", long 79°23'41", Garrett County, Hydrologic Unit 05020006, on right bank 0.2 mi (0.3 km) downstream from bridge on Accident-Friendsville Road, 0.6 mi (1.0 km) downstream from South Branch Bear Creek, 0.8 mi (1.3 km) southeast of Friendsville, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--48.9 mi² (126.7 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,551.34 ft (472.848 m) above mean sea level.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years, 82.7 ft³/s (2.342 m³/s), 22.97 in/yr (583 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,650 ft³/s (132 m³/s) Sept. 14, 1971, gage height, 9.6 ft (2.93 m), from floodmarks, from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s (0.042 m³/s) Sept. 12, 1966, gage height, 0.42 ft (0.128 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0145	*1440 40.8	4.68 1.426	Feb. 11	0715	1230 34.8	4.34 1.323

Minimum discharge, 5.9 ft³/s (0.17 m³/s) Sept. 15, gage height, 0.70 ft (0.213 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	34	31	883	88	66	81	28	32	20	43	7.8
2	49	33	28	459	72	60	90	34	81	17	20	11
3	41	31	27	382	70	55	132	32	55	15	15	10
4	37	30	26	330	66	56	385	28	47	16	13	8.5
5	34	29	25	251	62	50	349	26	41	14	11	8.0
6	32	28	28	165	102	46	253	26	37	13	13	7.6
7	30	27	43	133	78	43	165	29	35	13	193	6.9
8	29	28	37	115	72	40	120	28	31	21	94	6.7
9	33	26	39	74	68	40	94	25	28	18	59	6.3
10	45	27	49	72	79	43	79	24	25	13	44	12
11	78	26	45	86	639	51	72	24	22	55	35	9.2
12	72	100	44	70	401	51	62	27	21	86	30	7.3
13	60	138	81	76	347	174	56	23	38	40	25	6.6
14	53	100	98	206	357	151	52	22	31	30	23	6.2
15	49	79	106	122	287	128	48	21	23	28	24	6.0
16	46	72	219	104	391	120	45	27	20	37	25	15
17	75	67	182	84	435	106	42	26	25	29	18	17
18	151	60	135	68	382	94	40	37	17	23	16	14
19	121	55	94	64	326	105	39	42	20	19	15	11
20	106	52	84	62	257	107	37	36	42	16	14	8.3
21	87	52	77	58	183	198	34	34	45	21	12	8.5
22	75	48	65	51	187	236	37	31	38	31	12	8.1
23	66	42	58	56	144	167	33	29	30	22	11	7.7
24	58	39	52	72	126	133	31	28	26	23	11	7.0
25	53	38	50	88	113	112	31	27	38	20	10	6.7
26	51	35	115	204	100	92	39	29	40	15	9.8	6.5
27	47	36	131	305	90	86	32	24	29	13	13	11
28	43	33	109	224	81	79	29	22	24	13	11	21
29	41	30	94	154	73	66	28	21	22	13	10	12
30	39	31	132	119	---	64	26	29	23	12	8.9	16
31	35	---	474	97	---	61	---	29	---	17	8.1	---
TOTAL	1785	1426	2778	5234	5676	2880	2561	868	986	723	846.8	289.9
MEAN	57.6	47.5	89.6	169	196	92.9	85.4	28.0	32.9	23.3	27.3	9.66
MAX	151	138	474	883	639	236	385	42	81	86	193	21
MIN	29	26	25	51	62	40	26	21	17	12	8.1	6.0
CFSM	1.18	.97	1.83	3.46	4.01	1.90	1.75	.57	.67	.48	.56	.20
IN.	1.36	1.08	2.11	3.98	4.32	2.19	1.95	.66	.75	.55	.64	.22

CAL YR 1975 TOTAL 41380.8 MEAN 113 MAX 1370 MIN 8.0 CFSM 2.31 IN 31.48
WTR YR 1976 TOTAL 26053.7 MEAN 71.2 MAX 883 MIN 6.0 CFSM 1.46 IN 19.82

MONONGAHELA RIVER BASIN

03078000 CASSELMAN RIVER AT GRANTSVILLE, MD

LOCATION.--Lat 39°42'08", long 79°08'12", Garrett County, Hydrologic Unit 05020006, on left bank at downstream side of highway bridge, 0.3 mi (0.5 km) upstream from Slaubaugh Run, 0.7 mi (1.1 km) downstream from U.S. Highway 40, and 1.0 mi (1.6 km) northeast of Grantsville.

DRAINAGE AREA.--62.5 mi² (161.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1947 to current year.

REVISED RECORDS.--WSP 1143: 1948.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,089.03 ft (636.736 m) above mean sea level (levels by Corps of Engineers).

REMARKS.--Water-discharge records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--29 years, 117 ft³/s (3.313 m³/s), 25.42 in/yr (646 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft³/s (238 m³/s) Oct. 15, 1954, gage height, 10.70 ft (3.261 m), from rating curve extended above 1,600 ft³/s (73.6 m³/s) on basis of contracted-opening measurement at gage height 8.13 ft (2.478 m); no flow Aug. 31, 1962, result of regulation from unknown source.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	0430	*1230 34.8	3.98 1.213	Feb. 11	1000	1150 32.6	3.87 1.180

Minimum discharge, 3.4 ft³/s (0.096 m³/s) Sept. 9, gage height, 1.01 ft (0.308 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	47	43	864	98	85	171	36	57	21	39	6.6
2	76	46	39	362	79	79	181	53	176	19	19	9.5
3	63	43	37	316	80	74	191	47	93	16	13	10
4	54	40	40	280	82	81	460	41	65	16	12	8.2
5	49	38	35	200	80	72	318	36	52	14	10	7.1
6	45	37	35	140	125	66	212	33	47	13	11	6.2
7	41	35	58	120	80	58	169	35	47	14	136	5.3
8	40	37	49	105	72	54	141	37	40	23	109	4.3
9	54	34	47	90	68	55	120	32	35	27	49	3.7
10	102	34	89	84	66	62	105	29	32	16	34	8.7
11	236	38	64	100	740	95	95	29	28	28	26	8.9
12	126	104	56	94	408	97	85	32	25	152	22	6.3
13	88	189	147	84	496	326	77	28	25	45	19	5.1
14	73	106	162	150	469	208	70	26	29	26	17	4.4
15	65	85	123	120	383	148	64	26	23	35	17	5.0
16	60	79	195	90	715	141	59	51	20	78	23	22
17	134	85	140	72	728	136	54	44	23	42	19	51
18	462	72	112	60	535	121	50	70	19	28	15	38
19	213	65	78	74	403	147	46	76	31	22	12	25
20	165	60	80	70	275	149	44	52	123	18	11	16
21	138	60	78	64	211	255	43	44	85	21	9.6	15
22	115	55	72	70	239	240	46	39	50	46	8.5	13
23	98	50	76	78	204	160	45	36	33	31	7.4	11
24	86	47	72	100	163	136	39	34	25	30	6.7	9.4
25	80	47	78	150	147	124	38	35	56	27	6.4	9.3
26	74	44	140	346	129	113	66	41	60	20	23	8.2
27	71	47	190	347	116	114	56	35	34	15	37	16
28	63	47	117	185	103	134	45	30	24	15	16	45
29	58	40	94	146	92	101	40	30	21	15	12	23
30	56	40	111	120	---	101	36	48	21	14	8.9	23
31	50	---	400	105	---	96	---	59	---	13	7.4	---
TOTAL	3109	1751	3057	5186	7386	3828	3166	1244	1399	900	755.9	424.2
MEAN	100	58.4	98.6	167	255	123	106	40.1	46.6	29.0	24.4	14.1
MAX	462	189	400	864	740	326	460	76	176	152	136	51
MIN	40	34	35	60	66	54	36	26	19	13	6.4	3.7
CFSM	1.60	.93	1.58	2.67	4.08	1.97	1.70	.64	.75	.46	.39	.23
IN.	1.85	1.04	1.82	3.09	4.40	2.28	1.88	.74	.83	.54	.45	.25

CAL YR 1975 TOTAL 50518.0 MEAN 138 MAX 1790 MIN 5.4 CFSM 2.21 IN 30.07
WTR YR 1976 TOTAL 32206.1 MEAN 88.0 MAX 864 MIN 3.7 CFSM 1.41 IN 19.17

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
OCT 20...	0955	178	--	7.0	--	10.0	1	37	24
DEC 04...	1410	36	120	6.7	--	1.5	1	34	17
JAN 15...	1150	100	--	--	-2.0	.0	--	--	--
FEB 19...	1440	410	80	6.8	--	6.0	1	30	23
MAR 19...	0930	136	100	6.4	--	3.0	--	--	--
MAY 05...	1015	37	120	6.1	--	8.5	--	--	--
JUN 09...	1320	36	110	7.6	--	20.0	--	--	--
JUN 11...	1410	28	--	--	25.5	21.5	--	--	--
JUL 13...	1145	45	140	6.4	--	17.0	--	--	--
AUG 19...	1115	12	150	9.2	--	17.0	10	53	36
SEP 08...	1115	4.6	--	--	22.0	16.0	--	--	--

[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)
SUSQUEHANNA RIVER BASIN									
01580200 DEER CREEK NEAR KALMIA, MD (LAT 39 37 16 LONG 076 17 57)									
OCT , 1975					MAY , 1976				
29... 1500	207	14.0	16.5		14... 1020	140	15.0	19.0	
DEC					JUN				
11... 1025	177	4.0	4.0		28... 1520	106	26.0	28.0	
JAN , 1976					AUG				
16... 1325	221	2.0	3.0		19... 1525	82	21.5	20.5	
22... 1435	207	.0	-3.0		SEP				
FEB					13... 1005	64	17.0	19.0	
27... 1015	212	8.0	13.0						
APR									
02... 1215	313	8.0	8.5						
BUSH RIVER BASIN									
01581700 WINTERS RUN NEAR BENSON, MD (LAT 39 31 12 LONG 076 22 24)									
OCT , 1975					JUN , 1976				
29... 1125	56	14.0	20.0		29... 1030	25	22.5	28.0	
DEC					JUL				
09... 1350	54	5.5	8.0		07... 1055	93	20.0	21.5	
JAN , 1976					AUG				
13... 1420	48	1.0	3.0		17... 1342	28	22.0	23.5	
FEB					SEP				
26... 1425	59	9.0	15.0		13... 1130	17	19.0	24.0	
APR					17... 1115	105	20.0	23.0	
01... 1300	188	17.0	12.0						
MAY									
13... 1250	37	14.5	19.5						
GUNPOWDER RIVER BASIN									
01582000 LITTLE FALLS AT BLUE MOUNT, MD (LAT 39 36 16 LONG 076 37 16)									
OCT , 1975					APR , 1976				
30... 1035	98	11.5	7.0		08... 1045	100	9.5	10.0	
DEC					MAY				
10... 1500	89	6.0	5.0		11... 1110	68	14.5	18.0	
JAN , 1976					JUN				
15... 1055	102	1.0	-.5		25... 1100	54	20.5	23.5	
FEB					AUG				
24... 1020	97	2.0	4.0		09... 1310	48	18.0	20.5	
MAR					18... 1045	34	17.5	19.0	
24... 1520	85	10.5	19.5						
01583000 SLADE RUN NEAR GLYNDON, MD (LAT 39 29 40 LONG 076 47 45)									
OCT , 1975					FEB , 1976				
29... 1010	3.7	14.0	19.0		19... 1520	3.8	11.0	15.5	
DEC					MAR				
04... 1015	3.0	4.0	-2.0		31... 1025	2.9	9.5	8.0	
JAN , 1976					AUG				
14... 1005	5.2	3.5	4.5		18... 1555	.96	24.5	25.0	
01583500 WESTERN RUN AT WESTERN RUN, MD (LAT 39 30 38 LONG 076 40 37)									
OCT , 1975					APR , 1976				
28... 1055	103	13.0	16.0		08... 1230	96	11.5	11.5	
NOV					MAY				
13... 1440	198	11.0	5.5		11... 1315	63	16.0	19.0	
DEC					JUN				
10... 1120	97	6.5	5.0		25... 1400	54	24.0	27.0	
JAN , 1976					AUG				
15... 1420	115	2.0	-1.0		09... 1444	44	19.0	20.0	
28... 1110	221	2.0	-2.0		18... 1325	36	21.0	23.0	
FEB					SEP				
11... 1410	107	5.0	5.0		13... 1445	27	21.0	23.0	
23... 1335	104	5.0	3.0						
MAR									
30... 1525	81	11.0	13.0						

TEMPERATURE MEASUREMENTS AT GAGING STATIONS
WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)
GUNPOWDER RIVER BASIN--CONTINUED									
01584050 LONG GREEN CREEK AT GLEN ARM, MD (LAT 39 27 17 LONG 076 28 45.01)									
OCT , 1975					APR , 1976				
24....	1250	11	14.5	18.5	01...	0940	40	8.0	13.0
DEC					MAY				
09....	1025	10	6.0	5.0	13...	1010	8.3	11.5	16.5
JAN , 1976					AUG				
16....	1010	12	3.0	2.0	17...	1544	4.2	20.0	22.5
28....	1425	26	4.0	-5	SEP				
FEB					13...	1245	3.5	18.5	25.0
26....	1020	14	7.5	12.5					
01585100 WHITEMARSH RUN AT WHITE MARSH, MD (LAT 39 22 15 LONG 076 26 46)									
OCT , 1975					MAR , 1976				
24....	1040	4.1	16.0	17.0	29...	1520	4.3	17.0	14.5
DEC					JUL				
08....	1045	3.8	3.5	1.0	01...	1330	1.7	30.0	27.0
JAN , 1976					AUG				
13....	1020	7.7	.0	3.0	16...	1430	5.1	27.5	22.0
FEB									
25....	0950	6.4	5.5	12.5					
BACK RIVER BASIN									
01585200 WEST BRANCH HERRING RUN AT IDLEWYLOE, MD (LAT 39 22 25 LONG 076 35 35)									
NOV , 1975					MAR , 1976				
05....	0950	.80	14.5	21.0	31...	1010	1.1	10.0	9.0
DEC					MAY				
03....	0955	.83	4.5	5.0	10...	0950	.83	13.5	21.0
JAN , 1976					JUN				
14....	0950	1.8	3.0	4.0	24...	1412	.60	26.5	32.0
FEB					SEP				
23....	0925	1.5	3.0	-1.0	15...	0855	.13	20.0	20.0
01585300 STEMMERS RUN AT ROSSVILLE, MD (LAT 39 20 28 LONG 076 29 17)									
OCT , 1975					MAY , 1976				
23....	1040	1.7	15.0	19.0	12...	1440	1.9	21.5	18.5
JAN , 1976					JUL				
12....	1440	3.7	.5	3.0	01...	1115	.83	28.0	27.0
FEB					AUG				
25....	1435	2.5	10.0	18.5	16...	1025	1.8	21.5	22.5
MAR									
29....	1025	1.8	10.0	11.5					
01585400 BRIEN RUN AT STEMMERS RUN, MD (LAT 39 20 01 LONG 076 28 23)									
OCT , 1975					MAR , 1976				
23....	1350	1.0	16.5	23.0	29...	1315	.74	11.5	15.0
DEC					MAY				
08....	1310	.78	6.0	2.5	28...	1340	.53	18.0	23.0
JAN , 1976					JUL				
12....	1155	.96	3.0	1.0	01...	0930	.60	19.5	21.0
FEB					AUG				
25....	1155	1.0	7.5	14.0	16...	1220	.70	20.0	20.5
PATAPSCO RIVER BASIN									
01585500 CRANBERRY BRANCH NEAR WESTMINSTER, MD (LAT 39 35 35 LONG 076 58 05)									
MAR , 1976					AUG , 1976				
01....	1140	4.3	9.5	18.0	18...	1150	1.8	17.0	19.0
31....	1500	4.1	9.0	7.0					
MAY									
13....	1210	2.7	11.5	17.0					
01586000 NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD (LAT 39 30 00 LONG 076 53 00)									
OCT , 1975					MAR , 1976				
29....	1250	101	14.0	19.5	31...	1240	67	9.5	8.0
DEC					MAY				
04....	1340	71	3.0	3.0	13...	1435	50	14.0	19.0
JAN , 1976					AUG				
21....	1040	85	1.0	1.0	18...	1415	30	22.0	27.0
MAR									
01....	1505	74	10.5	16.0					

TEMPERATURE MEASUREMENTS AT GAGING STATIONS
WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)
PATAPSCO RIVER BASIN--CONTINUED									
01589100 E. BR. HERBERT RUN AT ARBUTUS, MD (LAT 39 14 24 LONG 076 41 33)									
OCT , 1975					MAR , 1976				
28... 1050	1.5	15.5	16.5	29... 1055	1.3	10.5	14.5		
DEC 02... 1430	1.4	8.0	7.0	30... 1430	1.4	13.0	13.0		
JAN , 1976				MAY 10... 1110	1.2	14.0	22.0		
13... 1045	1.9	3.0	6.5						
FEB 19... 1025	2.5	9.0	13.5						
01589300 GWYNNS FALLS AT VILLA NOVA, MD (LAT 39 20 45 LONG 076 44 01)									
NOV , 1975				MAY , 1976					
05... 1135	31	13.5	22.5	10... 1440	23	17.5	24.0		
13... 1232	140	12.0	7.0	11... 0910	21	15.5	24.0		
DEC 12... 1130	30	4.0	4.0	JUL 01... 1405	26	24.0	26.5		
FEB , 1976				AUG 20... 1335	12	21.0	26.0		
24... 1505	37	5.5	12.0						
MAR 31... 1535	37	9.5	8.0						
01589330 DEAD RUN AT FRANKLINTOWN, MD (LAT 39 18 40 LONG 076 43 02)									
OCT , 1975				MAR , 1976					
28... 1310	2.4	16.0	19.5	29... 1325	2.3	12.5	17.5		
DEC 05... 1040	1.8	3.0	6.0	MAY 10... 1330	1.6	17.0	24.0		
JAN , 1976				AUG 10... 1100	5.2	20.0	21.5		
13... 1335	3.0	3.0	7.0						
FEB 19... 1240	5.8	11.0	15.0						
01589440 JONES FALLS AT SORRENTO, MD (LAT 39 23 30 LONG 076 39 42)									
OCT , 1975				MAY , 1976					
28... 1520	34	15.0	18.5	10... 1205	25	14.0	23.0		
NOV 13... 1330	78	11.0	5.5	JUN 24... 1150	22	20.5	27.5		
DEC 03... 1320	30	5.0	5.0	JUL 12... 1045	27	19.0	25.0		
JAN , 1976				AUG 20... 1000	12	16.0	18.0		
14... 1230	56	4.0	5.5	SEP 15... 1010	9.2	18.0	19.0		
FEB 23... 1140	43	5.0	1.0						
MAR 30... 1030	32	10.0	11.5						
PATUXENT RIVER BASIN									
01590500 BACON RIDGE BRANCH AT CHESTERFIELD, MD (LAT 39 00 07 LONG 076 36 53)									
APR , 1976				JUL , 1976					
13... 1115	8.1	10.0	14.5	14... 1120	3.8	18.0	22.0		
01591000 - PATUXENT RIVER NEAR UNITY, MD. (LAT 39 14 18 LONG 077 03 23)									
OCT , 1975				JUL , 1976					
06... 0938	52	12.5	15.0	23... 1055	26	19.5	21.5		
JAN , 1976				AUG 31... 1050	9.6	15.0	15.5		
21... 1015	46	.5	1.0						
APR 15... 1050	46	11.0	22.0						
01592500 PATUXENT RIVER NEAR LAUREL, MD (LAT 39 06 56 LONG 076 52 27)									
OCT , 1975				APR , 1976					
06... 1340	21	18.0	24.0	22... 1230	57	13.5	24.5		
JAN , 1976				JUL 21... 1005	26	19.0	32.0		
06... 1110	18	3.5	2.0						

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)
PATUXENT RIVER BASIN--CONTINUED									
01593500 LITTLE PATUXENT RIVER AT GUILFORD, MD (LAT 39 10 04 LONG 076 51 07)									
OCT , 1975					JUL , 1976				
06... 1130	43	15.0	18.5		13... 1150	20	22.0	26.5	
JAN , 1976					AUG				
21... 1250	37	1.5	.5		17... 1250	18	22.5	25.5	
APR									
12... 1445	33	11.5	9.5						
01594000 LITTLE PATUXENT RIVER AT SAVAGE, MD (LAT 39 08 00 LONG 076 48 58)									
DEC , 1975					JUL , 1976				
31... 1025	177	4.5	4.5		13... 1410	62	24.0	24.5	
MAR , 1976					AUG				
08... 1533	103	9.0	11.5		17... 1450	48	24.0	25.0	
APR					SEP				
12... 1225	101	10.0	10.0		13... 1430	24	22.0	26.0	
MAY									
20... 0955	85	12.5	17.5						
01594600 COCKTOWN CREEK NEAR HUNTINGTOWN, MD (LAT 38 38 27 LONG 076 38 07)									
APR , 1976					AUG , 1976				
13... 1345	4.4	13.0	14.0		24... 1430	.39	21.0	26.0	
JUN					SEP				
10... 1425	1.2	18.5	--		16... 1240	17	20.0	22.0	
JUL									
14... 1410	.40	20.0	--						
POTOMAC RIVER BASIN									
01595000 NORTH BRANCH POTOMAC RIVER AT STEYER, MD (LAT 39 18 07 LONG 079 18 26)									
OCT , 1975					APR , 1976				
21... 1500	142	10.0	15.5		30... 1340	65	12.0	17.0	
DEC					JUN				
05... 1345	46	2.0	12.0		08... 0940	59	15.0	16.0	
JAN , 1976					JUL				
14... 0945	472	.0	-1.0		12... 1535	129	20.0	20.5	
FEB					AUG				
19... 1155	410	5.0	7.0		13... 1355	18	25.5	28.0	
MAR									
22... 1150	386	5.5	4.0						
26... 1110	180	7.0	16.0						
01595500 N B POTOMAC R AT KITZMILLER, MD (LAT 39 23 38 LONG 079 10 55)									
OCT , 1975					APR , 1976				
01... 0810	315	13.5	--		01... 0855	756	8.0	8.0	
15... 1000	158	13.5	18.0		MAY				
NOV					03... 0900	197	10.0	7.0	
03... 0830	190	10.0	--		JUN				
DEC					01... 0930	417	16.0	--	
01... 0810	125	4.5	.5		JUL				
JAN , 1976					01... 0915	172	18.0	17.0	
21... 1235	344	.0	--		AUG				
FEB					02... 1245	59	21.0	23.0	
02... 0950	472	.0	--		SEP				
MAR					01... 0930	40	14.5	13.0	
01... 1000	407	6.5	7.0						
26... 1315	502	10.0	21.0						
01596500 SAVAGE RIVER NEAR BARTON, MD (LAT 39 34 05 LONG 079 06 10)									
OCT , 1975					JUN , 1976				
24... 1030	75	9.0	10.0		04... 1105	82	11.0	12.0	
DEC					10... 1305	22	17.5	27.0	
08... 1135	15	1.0	-3.0		JUL				
FEB , 1976					14... 1100	9.7	15.0	19.0	
26... 0955	73	4.5	6.0		AUG				
MAR					26... 1040	2.4	19.0	21.0	
19... 1110	76	3.0	9.0						
MAY									
06... 1025	15	11.0	19.0						

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

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WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)
POTOMAC RIVER BASIN--CONTINUED									
01597000 CRABTREE CREEK NEAR SWANTON, MD (LAT 39 30 00 LONG 079 09 35)									
OCT , 1975					MAY , 1976				
24... 1145	29	9.5	11.5		06... 0850	7.8	10.5	14.5	
DEC 08... 1250	6.3	2.0	-2.0		JUN 04... 0950	29	10.0	9.0	
FEB , 1976					JUL 14... 1200	5.5	15.0	20.0	
26... 1100	31	6.0	8.5		AUG 26... 1155	2.3	17.0	24.0	
MAR 19... 1300	34	6.5	18.0						
01597500 SAVAGE R, BELOW SAVAGE R DAM, NR BLOOMINGTON (LAT 39 30 05 LONG 079 07 25)									
OCT , 1975					JUN , 1976				
15... 1110	101	15.0	24.0		01... 1110	17	9.5	18.0	
24... 1305	589	10.0	17.0		07... 1245	59	15.0	21.5	
DEC 01... 1045	98	7.5	1.0		10... 1105	57	17.0	23.0	
FEB , 1976					21... 1045	117	20.5	24.0	
10... 1030	86	1.0	2.0		JUL 01... 1255	30	15.5	19.5	
MAR 16... 1120	98	5.0	3.0		AUG 02... 1150	46	9.0	21.5	
APR 01... 1215	17	7.5	10.0		SEP 14... 1350	90	13.0	27.0	
01598500 NORTH BRANCH POTOMAC RIVER AT LUKE MD (LAT 39 28 45 LONG 079 03 55)									
OCT , 1975					APR , 1976				
01... 0930	527	14.1	--		01... 1240	913	9.3	--	
15... 1210	353	15.7	29.0		MAY 03... 1155	255	13.0	13.0	
NOV 03... 1000	348	10.6	--		JUL 01... 1335	220	19.7	18.0	
DEC 01... 1125	238	4.8	3.0		AUG 02... 0855	111	18.1	17.0	
FEB , 1976					SEP 01... 1350	92	21.0	20.0	
02... 1120	661	.0	--						
10... 1205	437	.0	6.0						
11... 1420	4790	--	7.0						
01599000 GEORGES CREEK AT FRANKLIN, MD (LAT 39 29 38 LONG 079 02 42)									
OCT , 1975					MAY , 1976				
14... 1345	65	15.5	20.0		03... 0935	33	10.0	7.0	
NOV 03... 1005	47	9.0	11.0		JUL 01... 0950	19	17.0	16.0	
DEC 01... 1000	28	5.5	-1.0		AUG 02... 0950	13	16.0	16.0	
FEB , 1976					SEP 01... 1020	7.0	15.0	17.5	
10... 1305	48	2.0	6.0						
01601500 WILLS CREEK NEAR CUMBERLAND, MD (LAT 39 40 07 LONG 078 47 18)									
OCT , 1975					MAY , 1976				
24... 1125	474	12.5	15.0		06... 1155	91	15.0	19.0	
DEC 04... 1030	108	3.0	3.0		JUN 16... 1205	57	20.0	24.0	
JAN , 1976					JUL 19... 1015	53	18.0	20.0	
16... 1120	219	1.0	.0		AUG 18... 0935	51	18.0	20.5	
FEB 17... 1130	3050	7.5	21.0		SEP 08... 1505	24	20.0	28.0	
MAR 19... 1220	376	3.5	7.0						
APR 09... 1050	463	7.0	6.5						

TEMPERATURE MEASUREMENTS AT GAGING STATIONS
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DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)
POTOMAC RIVER BASIN--CONTINUED									
01603500 EVITTS CR NR CENTERVILLE, PA (LAT 39 47 23 LONG 078 38 48)									
OCT , 1975					MAY , 1976				
24... 0945	58	12.0	12.0		06... 0915	13	11.5	9.0	
DEC					JUN				
04... 1230	16	4.0	6.0		02... 0950	18	15.0	14.0	
JAN , 1976					16... 1045	8.4	18.0	21.0	
16... 0950	26	1.0	-2.0		JUL				
FEB					13... 0950	16	15.0	17.0	
17... 1340	126	7.5	16.5		AUG				
18... 0930	121	6.0	17.0		18... 1135	14	15.5	20.0	
MAR					SEP				
19... 1425	33	5.5	11.0		08... 1610	5.5	17.0	21.0	
01609000 TOWN CREEK NEAR OLDTOWN, MD (LAT 39 33 12 LONG 078 33 19)									
OCT , 1975					MAR , 1976				
27... 1405	151	14.0	18.0		19... 0940	152	3.0	.0	
DEC					MAY				
08... 1320	41	2.5	-5.0		10... 1455	34	19.0	22.0	
JAN , 1976					JUL				
16... 1350	112	.5	4.5		13... 1340	94	21.0	23.0	
FEB					SEP				
18... 1210	503	7.0	13.0		07... 1100	17	16.0	18.0	
01610000 POTOMAC RIVER AT PAW PAW, W. VA. (LAT 39 32 13 LONG 078 27 28.01)									
OCT , 1975					MAY , 1976				
22... 1140	7870	13.5	24.0		21... 1115	1700	18.0	23.0	
FEB , 1976					AUG				
24... 1015	4620	4.5	6.0		25... 0930	353	24.5	23.0	
APR									
22... 1115	1370	20.5	20.0						
01610155 SIDELING HILL CREEK NEAR BELLEGROVE, MD (LAT 39 38 58 LONG 078 20 40)									
OCT , 1975					MAY , 1976				
29... 1030	54	13.0	19.0		10... 1215	11	16.0	20.0	
DEC					JUN				
10... 1020	37	2.5	3.5		03... 1040	27	18.0	16.0	
JAN , 1976					09... 1050	8.9	21.0	30.0	
15... 1035	66	.0	-3.0		16... 1425	3.1	24.0	28.0	
FEB					JUL				
24... 0950	127	2.0	3.0		21... 1440	5.3	23.0	25.0	
MAR					AUG				
30... 1150	178	9.0	12.0		10... 1315	115	18.5	22.0	
31... 1030	168	9.5	11.0		27... 1420	84	23.0	--	
01617800 MARSH RUN AT GRIMES, MD (LAT 39 30 53 LONG 077 46 38)									
OCT , 1975					JUN , 1976				
08... 0840	30	11.0	14.0		15... 1000	7.6	18.0	23.5	
NOV					JUL				
17... 1045	28	8.5	11.0		20... 1435	8.1	20.5	30.0	
FEB , 1976					AUG				
04... 1020	21	4.0	2.5		26... 0940	4.8	19.0	23.5	
MAY									
11... 1530	11	14.0	17.0						
01618000 POTOMAC RIVER AT SHEPHERDSTOWN, W. VA. (LAT 39 26 04 LONG 077 48 07)									
MAY , 1976					JUL , 1976				
12... 1040	2070	18.0	10.0		20... 1120	1380	27.0	26.0	

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

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WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)
POTOMAC RIVER BASIN--CONTINUED									
01619000 ANTIETAM CREEK NEAR WAYNESBORO, PA (LAT 39 42 59 LONG 077 36 28)									
OCT , 1975					MAY , 1976				
28...	1015	204	12.0	15.5	12...	1225	88	13.0	14.0
DEC					JUN				
09...	1100	124	6.5	2.0	15...	1450	58	21.0	30.5
FEB , 1976					JUL				
23...	1100	143	4.0	-1.0	21...	1020	58	18.5	23.0
MAR					AUG				
29...	1045	116	8.5	6.0	26...	1545	39	22.0	29.5
MAY									
11...	1300	80	13.5	16.0					
01637500 CATOCTIN CREEK NEAR MIDDLETOWN, MD (LAT 39 25 35 LONG 077 33 25)									
OCT , 1975					JUN , 1976				
10...	0955	176	13.0	15.0	03...	1415	39	20.5	18.5
DEC					AUG				
17...	1334	55	4.5	8.0	24...	1125	8.2	22.0	24.0
MAR , 1976									
11...	1354	62	8.0	6.0					
01639500 BIG PIPE CREEK AT BRUCEVILLE, MD (LAT 39 36 45 LONG 077 14 10)									
NOV , 1975					APR , 1976				
03...	1345	117	12.0	21.0	02...	1325	303	9.0	9.0
JAN , 1976					MAY				
16...	1250	161	2.0	3.5	14...	1125	61	16.0	21.5
MAR					AUG				
02...	1125	100	9.0	6.5	17...	1225	38	21.0	--
01640500 OWENS CREEK AT LANTZ, MD (LAT 39 40 36 LONG 077 27 50)									
OCT , 1975					MAR , 1976				
31...	1405	11	9.5	9.0	02...	1225	9.7	7.0	7.0
DEC					APR				
08...	1540	6.7	3.0	-2.5	01...	1240	53	9.5	11.5
JAN , 1976					MAY				
15...	1310	12	2.0	-5.0	17...	1350	5.2	16.5	25.0
01641000 HUNTING CREEK AT JINTOWN, MD (LAT 39 35 40 LONG 077 23 50)									
NOV , 1975					APR , 1976				
04...	1200	29	14.0	25.0	01...	1425	159	11.0	13.0
DEC					MAY				
09...	1010	30	4.0	2.0	17...	1616	15	17.5	22.0
10...	1220	31	5.0	4.5	AUG				
JAN , 1976					17...	0950	5.9	17.0	--
16...	1410	47	4.0	5.0					
MAR									
02...	1400	35	7.5	8.0					
01641500 FISHING CREEK NEAR LEWISTOWN, MD (LAT 39 31 35 LONG 077 28 00)									
OCT , 1975					APR , 1976				
31...	1105	16	8.5	6.5	01...	1040	61	9.0	9.5
DEC					MAY				
09...	1220	13	5.0	2.5	17...	1100	6.9	13.5	19.0
10...	1035	14	5.0	2.5	SEP				
JAN , 1976					14...	1025	2.2	15.0	18.0
15...	1045	18	3.0	-5					
MAR									
02...	1025	12	8.0	7.0					
01642500 LINGANORE CREEK NEAR FREDERICK, MD (LAT 39 24 55 LONG 077 20 00)									
OCT , 1975					APR , 1976				
30...	1215	108	14.0	10.0	05...	1130	168	10.0	12.0
DEC					MAY				
09...	1515	102	5.0	3.0	12...	1225	72	15.0	13.0
MAR , 1976					SEP				
01...	1150	82	9.0	16.0	14...	1215	20	22.5	21.5

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DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)
POTOMAC RIVER BASIN--CONTINUED									
01643000 MONOCACY R AT JUG BRIDGE NR FREDERICK, MD (LAT 39 23 16 LONG 077 22 48)									
NOV , 1975					AUG , 1976				
05...	1350	744	14.5	24.0	19...	1300	183	21.0	20.5
MAR , 1976					30...	1110	165	21.5	19.0
01...	1425	746	10.5	16.5	SEP				
MAY					14...	1410	138	22.0	26.0
12...	1615	440	17.0	14.5					
01643500 BENNETT CREEK AT PARK MILLS, MD (LAT 39 17 40 LONG 077 24 30)									
OCT , 1975					APR , 1976				
10...	1255	99	14.5	16.0	13...	1540	65	11.5	17.0
NOV					JUN				
14...	1020	125	8.5	6.5	02...	1145	158	15.0	17.0
DEC					AUG				
17...	1120	54	4.0	3.5	24...	1540	18	24.0	28.0
01645200 WATTS BRANCH AT ROCKVILLE, MD (LAT 39 05 03 LONG 077 10 38)									
OCT , 1975					MAR , 1976				
07...	1225	1.8	15.0	21.0	09...	1115	6.8	3.0	1.0
NOV					APR				
13...	0915	8.9	11.0	8.0	15...	1350	2.5	13.0	27.0
DEC					JUN				
16...	1410	1.9	9.0	11.0	07...	1015	1.7	16.0	23.5
JAN , 1976					JUL				
23...	1420	2.2	.0	-3.0	21...	1245	.96	24.0	26.5
01646550 LITTLE FALLS BRANCH NEAR BETHESDA, MD (LAT 38 57 27 LONG 077 06 31)									
OCT , 1975					JUL , 1976				
06...	1200	2.1	18.5	--	21...	1415	1.0	24.5	--
APR , 1976									
14...	1120	2.3	11.5	18.5					
01647720 N BR ROCK CREEK NEAR NORBECK, MD (LAT 39 06 59 LONG 077 06 09)									
OCT , 1975					APR , 1976				
07...	0950	7.8	12.0	15.0	15...	1305	8.8	13.0	23.5
NOV					JUN				
12...	0955	8.5	11.0	12.5	07...	1215	5.6	15.5	24.0
DEC					JUL				
16...	1010	8.2	9.0	7.5	16...	1120	4.4	21.0	26.0
JAN , 1976					SEP				
26...	1100	50	3.0	5.0	23...	1500	2.0	15.0	22.0
MAR									
24...	1148	7.8	9.0	16.0					
01647740 N BR ROCK CREEK NR ROCKVILLE, MD (LAT 39 06 09 LONG 077 07 12)									
OCT , 1975					APR , 1976				
15...	1025	12	16.5	21.0	20...	1155	10	22.0	31.0
JAN , 1976					JUL				
26...	1025	16	3.5	5.5	16...	1320	6.0	24.5	30.0
28...	1000	60	3.0	.0					

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

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WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)
POTOMAC RIVER BASIN--CONTINUED									
01648000 ROCK CREEK AT SHERRILL DRIVE, WASHINGTON, D C (LAT 38 58 21 LONG 077 02 25)									
APR , 1976					AUG , 1976				
15...	1140	64	13.5	23.0	18...	1425	24	22.5	27.5
MAY									
26...	1230	44	14.5	15.0					
01649500 N E BR ANACOSTIA RIVER AT RIVERDALE, MD (LAT 38 57 37 LONG 076 55 34)									
DEC , 1975					JUL , 1976				
22...	1455	38	2.0	2.0	16...	1100	35	25.0	36.0
MAR , 1976					AUG				
11...	1105	111	7.0	12.0	18...	1100	27	22.0	26.0
APR					SEP				
12...	1330	53	13.0	8.5	23...	1240	26	18.0	22.0
JUN									
14...	1330	24	22.0	25.5					
01650500 N W BR ANACOSTIA R NR COLESVILLE, MD (LAT 39 03 55 LONG 077 01 48)									
DEC , 1975					APR , 1976				
16...	0910	16	8.0	9.5	20...	1320	17	22.0	30.5
JAN , 1976					MAY				
22...	1040	18	.5	-1.0	24...	1120	9.8	14.5	22.5
MAR					AUG				
24...	1100	18	9.5	17.0	19...	1350	5.5	20.0	24.0
01651000 NORTHWEST BRANCH ANACOSTIA RIVER NEAR HYATTSVILL (LAT 38 57 09 LONG 076 58 00)									
DEC , 1975					JUL , 1976				
22...	1345	25	2.0	2.0	13...	1145	15	23.5	24.0
MAR , 1976					AUG				
11...	1300	62	7.0	11.5	09...	1015	30	22.0	24.5
APR					19...	1105	11	23.5	24.5
01...	1430	307	12.0	14.5	SEP				
20...	1510	32	25.5	31.0	16...	1612	480	20.5	25.0
JUN									
14...	1245	15	21.5	26.5					
01653500 HENSON CREEK AT OXON HILL, MD (LAT 38 47 16 LONG 076 58 42)									
FEB , 1976					JUN , 1976				
02...	1205	59	.5	-13.0	08...	1055	4.9	18.5	26.5
APR					SEP				
15...	1410	10	15.0	22.0	23...	1050	4.1	15.0	18.0
01653600 PISCATAWAY CREEK AT PISCATAWAY, MD (LAT 38 42 20 LONG 076 58 00)									
APR , 1976					AUG , 1976				
15...	1137	34	11.0	20.0	26...	1230	.28	23.0	27.5
JUN					SEP				
08...	1350	7.5	18.0	28.0	27...	1325	8.3	19.0	23.0
01661050 ST. CLEMENT CREEK NEAR CLEMENTS, MARYLAND (LAT 38 20 00 LONG 076 43 31)									
APR , 1976					JUL , 1976				
14...	1228	16	11.0	17.0	15...	1045	10	21.0	25.0
JUN					AUG				
09...	1725	3.5	19.5	30.5	25...	1315	.52	21.0	28.0

TEMPERATURE MEASUREMENTS AT GAGING STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)
POTOMAC RIVER BASIN--CONTINUED									
01661500 ST. MARYS RIVER AT GREAT MILLS, MD (LAT 38 14 36 LONG 076 30 13)									
APR , 1976					JUL , 1976				
14...	0930	12	9.0	14.0	15...	0905	4.6	21.0	22.0
JUN									
09...	1455	4.3	18.0	27.5					
MONONGAHELA RIVER BASIN									
03075500 YOUGHIOGHENY RIVER NEAR OAKLAND, MD (LAT 39 25 19 LONG 079 25 32)									
OCT , 1975					JUN , 1976				
21...	1315	264	9.0	14.0	08...	1300	69	18.5	23.0
DEC					JUL				
05...	1040	70	1.0	2.0	12...	1325	260	19.5	20.5
JAN , 1976					AUG				
13...	1415	209	1.0	8.5	18...	1430	30	21.0	26.0
FEB					SEP				
19...	0955	958	6.0	5.0	09...	1310	15	22.0	27.0
MAY									
04...	1410	112	10.5	11.0					
03076500 YOUGHIOGHENY RIVER AT FRIENDSVILLE, MD (LAT 39 39 13 LONG 079 24 31)									
MAR , 1976					JUL , 1976				
15...	1210	792	4.5	14.0	12...	0755	366	19.5	21.5
23...	0850	1180	5.0	--	AUG				
MAY					18...	1005	77	18.0	16.0
04...	0940	248	9.0	4.5	19...	0810	72	18.0	10.0
JUN					SEP				
09...	0855	161	16.0	14.0	22...	1035	53	14.0	12.0
11...	0955	125	20.5	27.0	24...	1230	42	14.0	16.0
03076600 BEAR CREEK AT FRIENDSVILLE, MD (LAT 39 39 22 LONG 079 23 41)									
OCT , 1975					JUN , 1976				
20...	1025	107	9.0	8.0	09...	1045	30	14.5	19.5
DEC					11...	1225	23	17.0	25.5
04...	1150	25	1.0	.0	JUL				
JAN , 1976					12...	1045	77	16.5	20.5
13...	1120	63	.5	.0	AUG				
FEB					18...	1130	16	17.0	20.0
18...	1010	374	7.5	10.0	SEP				
MAR					09...	1130	6.3	15.0	19.0
23...	1055	165	4.5	8.0					
MAY									
04...	1135	26	8.0	7.0					

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1976

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
Susquehanna River basin						
01579875	Deer Creek at Gorsuch Mills, MD	Lat 39°42'21", long 76°35'15", Baltimore County, at bridge on West Liberty Road at Gorsuch Mills, and 0.8 mi downstream from Harris Mill Creek.	a25	1975-76	11-17-75	47
					3- 8-76	32
					7-27-76	15
					8-24-76	14
01579900	Big Branch at Harkins, MD	Lat 39°41'53", long 76°27'59", Harford County, at bridge on State Highway 517, 0.8 mi west of Harkins, and 1.8 mi upstream from mouth.	6.39	1975-76	11-17-75	9.4
					3- 8-76	8.0
					7-27-76	4.1
					8-25-76	3.4
01579925	Little Deer Creek near Federal Hill, MD	Lat 39°39'42", long 76°26'55", Harford County, at bridge on State Highway 165, 0.5 mi upstream from mouth, and 1.9 mi northeast of Federal Hill.	14.0	1975-76	11-17-75	21
					3- 8-76	17
					6- 8-76	14
					7-27-76	8.3
					8-25-76	6.7
Gunpowder River basin						
01581960	Beetree Run at Bentley Springs, MD	Lat 39°40'23", long 76°40'31", Baltimore County, at bridge on Bentley Road in Bentley Springs, and 200 feet upstream from mouth.	9.72	1975-76	11-17-75	19
					3- 8-76	14
					7-27-76	7.6
					8-24-76	5.9
01581980	Third Mine Branch near Stablersville, MD	Lat 39°39'27", long 76°37'24", Baltimore County, at bridge on Ensor Road, 0.6 mi northwest of Stablersville, and 2.6 mi upstream from mouth.	5.27	1975-76	11-17-75	8.1
					3- 8-76	7.3
					7-27-76	3.4
					8-24-76	2.6
01582900	Greene Branch at Phoenix, MD	Lat 39°30'22", long 76°36'50", Baltimore County, at bridge on Phoenix Road, 0.4 mi upstream from mouth, and 0.6 mi northwest of Phoenix.	4.45	1973, 1975-76	11-17-75	7.1
					3- 8-76	6.5
				7-28-76	2.4	
				8-24-76	2.4	
01583100	Piney Run at Dover, MD	Lat 39°31'17", long 76°46'00", Baltimore County, at bridge on State Highway 128, 0.7 mi north of Dover, and 0.8 mi upstream from mouth.	12.3	1975-76	11-17-75	24
					3- 8-76	17
					7-27-76	9.1
					8-24-76	6.5
Patapsco River basin						
01585700	Deep Run at Lawndale, MD	Lat 39°32'06", long 76°52'33", Carroll County, at bridge on county highway, 0.9 mi upstream from mouth, and 1.0 mi north of Lawndale.	6.70	1975-76	11-18-75	8.5
					4-19-76	6.8
					7-28-76	4.0
					8-25-76	3.8
01586550	Middle Run near Finksburg, MD	Lat 39°27'44", long 76°54'30", Carroll County, at bridge on Louisville Road, 1.0 mi upstream from Prugh Branch, and 1.5 mi east of Gamber.	6.18	1973, 1975-76	11-18-75	10
					3-25-76	8.0
				4-19-76	6.4	
				7-28-76	4.8	
				8-25-76	3.9	
01586650	Little Morgan Run near Eldersburg, MD	Lat 39°25'35", long 76°57'40", Carroll County, at bridge on Bartholow Road, 0.7 mi north of Johnsville, and 0.9 mi upstream from mouth.	7.13	1973, 1976	6-15-73	9.5
					8-13-73	6.6
				9- 7-73	4.6	
				11-19-75	11	
				4-19-76	8.9	
				7-28-76	4.6	
				8-24-76	3.3	
a. Approximately.						

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1976

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
Patapsco River basin--Continued						
01587070	South Branch Patapsco River at Woodbine, MD	Lat 39°21'44", long 77°04'00", Carroll County, at bridge on county highway, 0.1 mi upstream from Gillis Falls, and 0.3 mi west of Woodbine.	11.4	1975-76	11-19-75	16
					4-20-76	12
					7-28-76	6.4
					8-24-76	4.2
01587170	Gillis Falls at Woodbine, MD	Lat 39°21'48", long 77°03'59", Carroll County, at bridge on dirt road, 0.2 mi upstream from mouth, and 0.3 mi northwest of Woodbine.	19.4	1975-76	11-19-75	27
					4-20-76	20
					7-28-76	11
					8-24-76	7.6
01589080	Deep Run at Hanover, MD	Lat 39°11'24", long 76°43'12", Howard County, at bridge on county highway, 0.3 mi southeast of Hanover, and 2.4 mi upstream from mouth.	18.0	1975-76	11- 3-75	11
					3- 8-76	13
					7-28-76	4.3
					8-23-76	3.4
01589230	Red Run near Owings Mills, MD	Lat 39°24'17", long 76°46'45", Baltimore County, at bridge on Painters Mill Road, 0.2 mi upstream from mouth, and 1.1 mi south of Owings Mills.	7.39	1975-76	11-18-75	9.6
					4-19-76	7.5
					7-27-76	3.8
					8-24-76	2.6
01589370	Jones Falls at Eccleston, MD	Lat 39°24'35", long 76°43'37", Baltimore County, at bridge on State Highway 129 at Eccleston, and 1.1 mi up- stream from North Branch.	2.86	1976	11-18-75	5.4
					4-19-76	4.7
					7-27-76	2.9
					8-24-76	2.4
Patuxent River basin						
01590900	Cabin Branch near Florence, MD	Lat 39°16'36", long 77°06'20", Howard County, at bridge on light-duty road, 0.9 mi upstream from mouth, and 2.3 mi south of Florence.	8.36	1975-76	11-17-75	13
					3- 8-76	13
					8- 5-76	4.1
					8-24-76	2.8
01591700	Hawlings River near Sandy Spring, MD	Lat 39°10'29", long 77°01'22", Mont- gomery County, 100 ft downstream from bridge on State Highway 650, 1.0 mi upstream from mouth, and 1.7 mi north of Sandy Spring.	27.0	1975-76	11-17-75	32
					8- 3-76	8.3
					8-24-76	4.7
01594300	Towers Branch at Conaways, MD	Lat 39°02'00", long 76°41'38", Anne Arundel County, at bridge on Evergreen Road, 0.7 mi north of Conaways, and 0.8 mi upstream from mouth.	5.69	1975-76	11- 3-75	2.3
					3- 8-76	2.0
					7-27-76	1.9
					8-23-76	1.4
01594525	Collington Branch at Upper Marl- boro, MD	Lat 38°49'16", long 76°44'40", Prince Georges County, at railroad bridge at Upper Marlboro, and 0.1 mi up- stream from mouth.	22.9	1964-66, 1975-76	11- 3-75	18
					3- 8-76	18
					7-27-76	3.9
					8-23-76	3.5
Potomac River basin						
01601325	Jennings Run at Corriganville, MD	Lat 39°41'36", long 78°47'17", Alle- gany County, at bridge on State Highway 36 at Corriganville, and 0.1 mi upstream from mouth.	37.7	1975-76	11- 5-75	22
					3- 8-76	28
					4-21-76	25
					7- 6-76	7.0
01605425	Mill Run at Oldtown, MD	Lat 39°32'26", long 78°36'43", Alle- gany County, at bridge on county highway, 0.1 mi south of Oldtown, and 0.3 mi upstream from mouth.	10.6	1975-76	11- 5-75	2.6
					3- 8-76	3.2
					4-20-76	1.8
					7- 6-76	.83
01605475	Seven Springs Run at Old- town, MD	Lat 39°32'29", long 78°36'28", Alle- gany County, at bridge on county highway at Oldtown, and 1.4 mi downstream from mouth of Trading Run.	9.16	1975-76	11- 5-75	1.6
					3- 8-76	2.4
					4-20-76	2.9
					8-24-76	.70
01610060	Fifteen Mile Creek near Piney Grove, MD	Lat 39°41'13", long 78°27'17", Alle- gany County, at bridge on light- duty road, 1.1 mi upstream from Piclic Run, and 4.3 mi southwest of Piney Grove.	20.2	1975-76	11- 5-75	3.1
					3- 8-76	6.1
					4-20-76	6.3
					7- 7-76	1.4
01610065	Deep Run near Little Orleans, MD	Lat 39°39'12", long 78°27'09", Alle- gany County, at bridge on light- duty road, 0.5 mi upstream from mouth, and 3.9 mi northwest of Little Orleans.	6.26	1975-76	11- 5-75	.56
					3- 8-76	2.3
					4-20-76	2.3
					7- 7-76	.04
					8-24-76	.05

Discharge measurements made at low-flow partial-record stations during water year 1976

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
Potomac River basin--Continued						
01610075	Fifteen Mile Creek at Little Orleans, MD	Lat 39°37'41", long 78°23'22", Alle- gany County, at bridge on light- duty road at Little Orleans, and 1.5 mi downstream from Flat Run.	61.6	1975-76	11- 5-75 3- 8-76 4-20-76 7- 7-76 8-24-76	8.0 20 19 3.0 3.1
*01610150	Bear Creek at Forest Park, MD	Lat 39°42'07", long 78°19'02", Wash- ington County, at upstream side of culvert on U.S. Highway 40, 0.2 mi upstream from mouth, and 0.9 mi west of Forest Park.	10.4	1975-76	11- 5-75 3- 8-76 4-20-76 7- 7-76 8-24-76	3.1 4.2 4.2 3.7 86
*01613150	Ditch Run near Hancock, MD	Lat 39°41'30", long 78°07'57", Wash- ington County, at upstream side of culvert on U.S. Highway 40, 0.3 mi upstream from mouth, and 2.7 mi east of Hancock.	4.80	1975-76	11- 5-75 3- 8-76 4-20-76 7- 7-76 8-24-76	1.4 1.3 1.5 20 46
01619150	Marsh Run at Fiddlesburg, MD	Lat 39°39'29", long 77°41'16", Wash- ington County, at bridge on Old Forge Road at Fiddlesburg, 0.5 mi east of Hagerstown city limits, and 0.6 mi above mouth.	a31	1965-74, 1976	9- 2-76	3.6
01619300	Beaver Creek at Benevola, MD	Lat 39°33'04", long 77°40'55", Wash- ington County, at bridge on light- duty road at Benevola, and 0.4 mi upstream from Little Beaver Creek.	22.9	1975-76	11-18-75 3- 8-76 7-27-76 8-26-76 9- 2-76	53 32 19 16 16
01619350	Little Beaver Creek at Bene- vola, MD	Lat 39°32'48", long 77°40'39", Wash- ington County, at bridge on U.S. Highway 40 (Alternate) at Benevola, and 0.2 mi upstream from Beaver Creek.	8.70	1975-76	11-18-75 3- 8-76 7-27-76 8-26-76 9- 2-76	17 10 6.1 5.1 5.3
01619480	Little Antietam Creek at Keedys- ville, MD	Lat 39°29'10", long 77°42'05", Wash- ington County, at bridge on Koffman Lane at Keddysville, and 1.2 mi upstream from mouth.	a24	1964-67, 1976	9- 2-76	11
01636730	Israel Creek at Weverton, MD	Lat 39°19'45", long 77°41'03", Wash- ington County, at bridge on light- duty road at Weverton, and 0.1 mi upstream from mouth.	13.2	1975-76	11-18-75 3- 8-76 7-27-76 8-26-76	18 10 4.8 2.2
01638600	Tuscarora Creek at Tuscarora, MD	Lat 39°15'06", long 77°28'49", Freder- ick County, at bridge on light-duty road, 0.7 mi southwest of Tuscarora, and 0.8 mi upstream from mouth.	20.3	1975-76	11-18-75 8- 4-76 8-23-76	18 10 7.2
01639420	Deep Run at Union Mills, MD	Lat 39°40'08", long 77°00'41", Carroll County, at bridge on light-duty road, 0.1 mi upstream from mouth, and 0.7 mi east of Union Mills.	5.46	1975-76	11-18-75 4-20-76 8- 5-76 8-25-76	8.2 6.0 1.5 1.3
01639440	Silver Run near Silver Run, MD	Lat 39°40'38", long 77°05'37", Carroll County, at bridge on light- duty road, 1.0 mi upstream from mouth, and 2.6 mi west of Silver Run.	8.77	1975-76	11-18-75 4-20-76 8- 5-76 8-25-76	14 7.9 1.9 1.4
01639465	Bear Branch near Mayberry, MD	Lat 39°38'07", long 77°07'41", Carroll County, at bridge on State Highway 32, 0.8 mi upstream from mouth, and 1.6 mi west of Mayberry.	13.9	1975-76	11-18-75 4-20-76 8- 5-76 8-25-76	18 12 4.9 5.0
01640600	Owens Creek near Thurmont, MD	Lat 39°38'26", long 77°23'40", Freder- ick County, at bridge on county highway, 0.8 mi upstream from Little Owens Creek, and 1.2 mi northwest of Thurmont.	14.4	1975-76	11-17-75 3- 8-76 7-27-76 8-26-76	50 20 6.4 2.5
01640650	Little Owens Creek near Thurmont, MD	Lat 39°38'58", long 77°23'41", Freder- ick County, at bridge on light-duty road, 1.0 mi upstream from mouth, and 2.0 mi northeast of Thurmont.	6.16	1975-76	11-17-75 3- 8-76 7-27-76 8-26-76	21 6.7 3.1 1.1
01641900	Tuscarora Creek near Frederick, MD	Lat 39°27'52", long 77°24'11", Freder- ick County, 0.1 mi upstream from U.S. Highway 15 bridge, 1.8 mi up- stream from mouth, and 2.0 mi north of Frederick.	16.5	1975-76	11-17-75 3- 8-76 7-28-76 8-26-76	34 13 5.8 3.3

* Also a crest-stage partial-record station.

a Approximately.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1976

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
Potomac River basin--Continued						
01642050	Israel Creek near Walkersville, MD	Lat 39°28'27", long 77°20'26", Frederick County, at bridge on Crum Road, 1.1 mi southeast of Walkersville, and 2.8 mi upstream from mouth.	a29	1964-66, 1975-76	11-17-75 3- 8-76 7-28-76 8-26-76	42 17 9.0 2.8
01642450	Bens Branch near New Market, MD	Lat 39°24'58", long 77°16'45", Frederick County, at bridge on light-duty road, 1.1 mi upstream from mouth, and 2.3 mi north of New Market.	11.8	1975-76	11-17-75 3- 8-76 7-28-76 8-26-76	14 11 7.3 3.6
01643400	Little Bennett Creek at Hyattstown, MD	Lat 39°16'46", long 77°18'54", Montgomery County, at bridge on State Highway 355 at Hyattstown, and 0.7 mi downstream from Soper Branch.	12.8	1968-69, 1975-76	11-17-75 3-25-76 8- 3-76 8-24-76	18 12 5.6 4.0
01643615	Broad Run near Elmer, MD	Lat 39°07'06", long 77°28'52", Montgomery County, at bridge on River Road, 0.5 mi upstream from mouth, and 1.2 mi south of Elmer.	14.2	1975-76	11-18-75 8- 4-76 8-23-76	14 .98 .70
01644425	Bucklodge Branch near Dawsonville, MD	Lat 39°09'11", long 77°20'30", Montgomery County, at bridge on light-duty road, 0.7 mi upstream from mouth, and 1.7 mi north of Dawsonville.	8.47	1975-76	11-18-75 8- 4-76 8-23-76	12 2.7 2.2
01644480	Goshen Branch at Goshen, MD	Lat 39°12'10", long 77°12'06", Montgomery County, 0.1 mi upstream from mouth, and 0.7 mi west of Goshen.	7.63	1975-76	11-17-75 8- 3-76 8-24-76	11 6.3 3.2
01645050	Dry Seneca Creek near Seneca, MD	Lat 39°05'38", long 77°20'15", Montgomery County, at bridge on Montevideo Road, 0.4 mi upstream from mouth, and 1.1 mi northwest of Seneca.	19.2	1975-76	11-18-75 8- 4-76 8-23-76	19 1.9 1.7
01653625	Tinkers Creek at Piscataway, MD	Lat 38°42'50", long 76°58'16", Prince Georges County, at bridge on Gallahan Road, 0.5 mi upstream from mouth, and 0.8 mi north of Piscataway.	15.9	1975-76	11- 3-75 7-27-76 8-23-76	5.6 4.6 2.4
01660905	Zekiah Swamp Run near Malcom, MD	Lat 38°36'52", long 76°49'59", Charles County, at bridge on State Highway 382, 0.4 mi downstream from Wolf Den Branch, and 2.4 mi west of Malcom.	12.1	1975-76	11- 3-75 7-27-76 8-23-76	9.7 .57 .37
*01660930	Clark Run near Bel Alton, MD	Lat 38°28'21", long 76°57'22", Charles County, at bridge on Newtown Road, 1.5 mi northeast of Bel Alton, and 1.8 mi upstream from mouth.	10.4	1975-76	11- 3-75 7-27-76 8-23-76	6.5 0 0
Monongahela River basin						
03075475	Little Youghio-gheny River at Loch Lynn Heights, MD	Lat 39°23'54", long 79°22'11", Garrett County, at bridge on State Highway 41, 0.4 mi northeast of Loch Lynn Heights, and 3.2 mi downstream from Block Run.	13.2	1975-76	11- 5-75 3- 8-76 4-21-76 7- 7-76 8-23-76	7.5 9.8 7.4 5.7 1.5
03075900	Cherry Creek near McHenry, MD	Lat 39°32'20", long 79°18'55", Garrett County, 200 ft east of Rock Lodge Road, 200 ft upstream from mouth, and 2.4 mi southeast of McHenry.	12.3	1973, 1975-76	11- 5-75 3- 8-76 4-21-76 7- 7-76 8-23-76	9.8 12 7.8 3.7 .86
03076590	South Branch Bear Creek near Friendsville, MD	Lat 39°39'11", long 79°23'06", Garrett County, at bridge on light-duty road, 100 ft upstream from mouth, and 1.2 mi southeast of Friendsville.	16.8	1975-76	11- 5-75 3- 8-76 4-21-76 7- 7-76 8-23-76	5.9 12 9.3 3.6 2.2
03077925	North Branch Casselman River near Grantsville, MD	Lat 39°40'08", long 79°10'43", Garrett County, at bridge on State Highway 495, 250 ft upstream from confluence with South Branch Casselman River, and 2.3 mi southwest of Grantsville.	24.4	1975-76	11- 5-75 3- 8-76 4-21-76 7- 7-76 8-23-76	18 24 18 7.0 3.8
03077950	South Branch Casselman River near Grantsville, MD	Lat 39°40'05", long 79°10'42", Garrett County, 250 ft upstream from confluence with North Branch Casselman River, 2.2 mi southwest of Grantsville.	20.8	1975-76	11- 5-75 3- 8-76 4-21-76 7- 7-76 8-23-76	13 18 14 3.2 1.6

a Approximately.

* Also a crest-stage partial-record station.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1976

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
Wicomico River basin							
01486100	Andrews Branch near Delmar, MD	Lat 38°26'15", long 75°31'46", Wicomico County, at culvert on Rum Ridge Road, 1.2 mi above Williams Pond, and 2.8 mi south-east of Delmar.	a4.1	1967-76	1- 1-76	5.6	42
Choptank River basin							
01490800	Oldtown Branch at Goldsboro, MD	Lat 39°01'23", long 75°47'16", Caroline County, at upstream side of culvert on State Highway 313, 0.7 mi upstream from mouth, and 0.7 mi south of Goldsboro.	3.9	1967-76	1- 1-76	5.3	170
01491050	Spring Branch near Greensboro, MD	Lat 38°56'34", long 75°47'25", Caroline County, at culvert on Knife Box Road, 2.0 mi above mouth, and 2.2 mi southeast of Greensboro.	a3.8	1967-76	1- 1-76	b5.5	60
01492050	Gravel Run at Beulah, MD	Lat 38°40'54", long 75°53'53", Dorchester County, at upstream side of culvert on State Highway 16, 0.3 mi north of Beulah, and 0.6 mi upstream from mouth.	8.4	1966-76	11-13-75	4.1	36
Wye River basin							
01492500	Sallie Harris Creek near Carmichael, MD	Lat 38°57'55", long 76°06'30", Queen Annes County, at upstream side of bridge on U.S. Highway 50, 2.0 mi northeast of Carmichael, and 2.4 mi upstream from mouth.	8.09	1952-56† 1957-76	1- 1-76	4.82	304
01492550	Mill Creek near Skipton, MD	Lat 38°55'00", long 76°03'42", Talbot County, at upstream side of culvert on U.S. Highway 50, 1.5 mi north of Skipton, and 2.7 mi upstream from mouth.	a4.6	1966-76	1- 1-76	4.7	72
Chester River basin							
01494020	Browns Branch tributary near Church Hill, MD	Lat 39°10'05", long 75°58'41", Queen Annes County, at upstream side of culvert on John Powell Road, 0.6 mi upstream from mouth, and 1.8 mi north of Church Hill.	a1.7	1971-76	11-13-75	6.3	70
Northeast River basin							
01496080	Northeast River tributary near Charlestown, MD	Lat 39°35'53", long 75°58'37", Cecil County, at upstream side of culvert on U.S. Highway 40, 1.3 mi above mouth, 1.6 mi north of Charlestown, and 1.8 mi west of North East.	a1.7	1967-76	3- 7-67 1968 1969 4- 2-70 8-28-71 6-22-72 6-29-73 12-21-73 7-20-75 11-13-75	4.0 <3.45 <3.45 5.1 4.7 5.8 3.8 3.8 7.7 4.3	c260 c<125 c<125 c480 c395 615 c150 215 700 320
Susquehanna River basin							
01577940	Broad Creek tributary at Whiteford, MD	Lat 39°42'14", long 76°21'49", Harford County, at upstream side of culvert on State Highway 165, 0.8 mi upstream from mouth, and 1.0 mi southwest of Whiteford.	.77	1971-76	9-16-76	5.7	110

See footnotes at end of table, p. 293.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1976

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (ft)	Dis- charge (ft ³ /s)
Susquehanna River basin--Continued							
01578800	Basin Run at West Notting- ham, MD	Lat 39°39'23", long 76°04'30", Cecil County, at upstream side of culvert on State Highway 276, 0.9 mi south of West Nottingham, and 5.2 mi upstream from mouth.	a1.3	1967-76	8- 9-67	13.6	820
					5-30-68	8.4	310
					8- 4-69	12.2	700
					4- 2-70	8.6	335
					8-28-71	9.6	420
					6-22-72	11.8	660
					6-29-73	11.7	640
					12-21-73	7.3	220
					7-20-75	12.4	710
					6- 1-76	6.5	160
01579000	Basin Run at Liberty Grove, MD	Lat 39°39'30", long 76°06'10", Cecil County, on left bank 100 ft upstream from highway bridge, 0.9 mi east of Liberty Grove, and 3.0 mi upstream from mouth.	5.31	1948-58† 1965-76	6- 1-76	3.1	435
Gunpowder River basin							
01582510	Piney Creek near Hereford, MD	Lat 39°34'38", long 76°40'39", Baltimore County, at upstream side of culvert on Highway I-83, 1.1 mi southwest of Hereford, and 5.3 mi upstream from mouth.	a1.5	1962-76	5-29-76	7.6	120
01583495	Western Run tributary at Western Run, MD	Lat 39°31'01", long 76°41'04", Baltimore County, at upstream side of culvert on Western Run Road, 0.05 mi above mouth, and 0.3 mi northwest of Western Run.	.26	1966-76	1- 1-76	3.7	34
01583580	Baisman Run at Broadmoor, MD	Lat 39°28'45", long 76°40'42", Baltimore County, at upstream side of bridge on Ivy Hill Road, 0.3 mi upstream from mouth, and 1.8 mi west of Cockeysville.	1.47	1965-69† 1970-76	1- 1-76	2.5	68
01584500	Little Gunpowder Falls at Laurel Brook, MD	Lat 39°30'18", long 76°25'56", Baltimore County, 750 ft upstream from bridge on Bottom Road, 5 mi southwest of Bel Air, and 10.5 mi upstream from mouth.	36.1	1927-70† 1971-76	9-16-76	8.4	6,210
Patapsco River basin							
01587050	Hay Meadow Branch trib- utary at Poplar Springs, MD	Lat 39°20'55", long 77°06'02", Howard County, at upstream side of culvert on U.S. Highway 40, 0.4 mi northwest of Poplar Springs, and 0.5 mi above mouth.	.54	1966-76	1- 1-76	4.8	84
01589240	Gwynns Falls at McDonogh, MD	Lat 39°23'28", long 76°45'56", Baltimore County, at bridge on McDonogh Road at McDonogh, and 0.3 mi upstream from Horsehead Branch.	19.3	1958-76	1- 1-76	7.81	1,160
Patuxent River basin							
01593350	Little Patuxent River trib- utary at Guilford Downs, MD	Lat 39°13'39", long 76°50'41", Howard County, at upstream side of culvert on U.S. Highway 29 at Guilford Downs, 0.3 mi above mouth, and 4.1 mi north of Guilford.	.95	1966-76	9-16-76	12.2	270
01594445	Mill Branch near Mitchellville, MD	Lat 38°55'44", long 76°43'03", Prince Georges County, at up- stream side of culvert on U.S. Highway 301, 1.4 mi east of Mitchellville, and 2.2 mi up- stream from mouth.	a1.1	1967-76	8-25-67	4.8	60
					9-10-68	5.9	110
					8- 2-69	11.4	540
					4- 2-70	6.1	135
					8-27-71	8.5	305
					6-22-72	6.6	165
					7- 4-73	5.9	120
					10- 2-73	6.1	135
					9-26-75	8.9	340
					1- 1-76	5.6	105

See footnotes at end of table, p. 293.

Annual maximum discharge at crest-stage partial-record stations during water year 1976

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (ft)	Dis-charge (ft ³ /s)
Potomac River basin							
01596005	Savage River near Frostburg, MD	Lat 39°40'56", long 78°57'54", Garrett County, at upstream side of culvert on U.S. Highway 40, 1.9 mi northwest of Frostburg city limits, and about 26 mi upstream from mouth.	a1.5	1971-76	1971 6-23-72 8- 1-73 10-29-73 4-25-75 10-18-75	<19.4 19.7 19.9 19.6 19.6 19.2	<38 70 80 61 59 31
01601000	Wills Creek below Hyndman, PA	Lat 39°48'43", long 78°43'00", Bedford County, 150 ft above county highway bridge, 150 ft downstream from Pennsylvania Railroad bridge, 0.35 mi downstream from Little Wills Creek and 0.5 mi south of Hyndman.	146	1951-67; 1968-76	2-16-76	5.71	2,710
01609500	Sawpit Run near Oldtown, MD	Lat 39°32'48", long 78°33'20", Allegany County, 900 ft above bridge on State Highway 51, 1.0 mi above mouth, 3.0 mi east of Oldtown, and 12 mi southeast of Cumberland.	5.08	1948-58; 1963-76	3- 4-63 4-29-64 3- 5-65 2-13-66 3- 7-67 12-11-67 3-25-69 4- 2-70 5-20-71 6-22-72 4- 4-73 12-26-73 9-26-75 10-18-75	3.15 2.67 3.02 2.79 3.69 2.76 2.05 2.68 3.03 4.33 2.83 2.93 3.16 3.51	c275 c170 c245 c195 c425 c187 c46 c235 c350 c680 207 230 280 370
01610105	Pratt Hollow tributary at Pratt, MD	Lat 39°41'35", long 78°30'18", Allegany County, at upstream side of culvert on U.S. Highway 40, 0.2 mi northeast of Pratt, and 1.0 mi upstream from Kifer Hollow.	.70	1971-76	7-22-76	12.2	75
*01610150	Bear Creek at Forest Park, MD	Lat 39°42'07", long 78°19'02", Washington County, at upstream side of culvert on U.S. Highway 40, 0.2 mi upstream from mouth, and 0.9 mi west of Forest Park.	10.4	1965-69 1971-76	6-20-76	6.2	520
*01613150	Ditch Run near Hancock, MD	Lat 39°41'30", long 78°07'57", Washington County, at upstream side of culvert on U.S. Highway 40, 0.3 mi above mouth, and 2.7 mi east of Hancock.	a4.8	1965-76	9-17-76	5.8	220
01613160	Potomac River tributary near Hancock, MD	Lat 39°41'27", long 78°07'38", Washington County, at upstream side of culvert on State Highway 615, 0.3 mi upstream from mouth, and 3.0 mi east of Hancock.	a1.2	1965-76	Unknown	<3.6	<44
01619475	Dog Creek tributary near Locust Grove, MD	Lat 39°27'57", long 77°39'31", Washington County, at upstream side of culvert on State Highway 67, 0.4 mi upstream from mouth, and 1.3 mi north of Locust Grove.	.10	1966-76	7-11-76	4.8	19
01637000	Little Catoctin Creek at Harmony, MD	Lat 39°28'54", long 77°32'17", Frederick County, at upstream side of bridge on county road, 0.9 mi southwest of Harmony, and 2.8 mi upstream from mouth.	8.83	1948-58; 1959-76	1- 1-76	3.39	400
01639095	Piney Creek tributary at Taneytown, MD	Lat 39°39'53", long 77°09'59", Carroll County, at upstream side of culvert under Pennsylvania Railroad, 0.1 mi upstream from mouth, and 0.6 mi northeast of Taneytown.	.62	1967-76	1-27-76	6.4	89

See footnotes at end of table, p. 293.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1976

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Dis- charge (ft ³ /s)
Potomac River Basin--Continued							
01640000	Little Pipe Creek at Avondale, MD	Lat 39°33'40", long 77°02'38", Carroll County, at private bridge 0.1 mi below Copps Branch, and 0.5 mi northwest of Avondale.	8.10	1948-56† 1959-64 1967-76	10-18-75	4.65	445
01640700	Owens Creek tributary near Rocky Ridge, MD	Lat 39°37'16", long 77°20'26", Frederick County, at upstream side of culvert on Appolds Crossing Road, 0.8 mi upstream from mouth, and 1.6 mi north- west of Rocky Ridge.	a1.2	1967-76	4- 1-76	5.8	135
01642400	Dollyhyde Creek at Liberty- town, MD	Lat 39°28'55", long 77°13'38", Frederick County, at upstream side of culvert on State High- way 26, 0.9 mi east of Libertytown, and 2.7 mi up- stream from mouth.	a2.7	1967-76	1- 1-76	5.6	255
01644420	Bucklodge Branch tributary near Barnesville, MD	Lat 39°12'42", long 77°21'02", Montgomery County, at upstream side of culvert on Barnesville Road, 0.6 mi upstream from mouth, and 1.6 mi southeast of Barnesville.	.27	1967-76	1- 1-76	6.1	75
01650050	Northwest Branch Anacostia River at Norwood, MD	Lat 39°07'36", long 77°01'15", Montgomery County, 20 ft down- stream from bridge on Ednor Road, 0.2 mi downstream from tributary, and 0.4 mi east of Norwood.	2.45	1967-74† 1975-76	9-16-76	3.97	440
01650085	Nursery Run at Cloverly, MD	Lat 39°07'05", long 77°00'24", Montgomery County, 300 ft up- stream from culvert on Bryants Nursery Road, 350 ft upstream from mouth, and 0.8 mi north- west of Cloverly.	.35	1967-74† 1975-76	9-16-76	2.63	53
01650190	Batchellors Run at Oakdale, MD	Lat 39°07'21", long 77°03'37", Montgomery County, 70 ft down- stream from culvert at Batchellors Forest Road, 0.2 mi upstream from small tributary, and 0.8 mi south- east of Oakdale.	.47	1967-76	1- 1-76	1.68	71
01658000	Mattawoman Creek near Pomonkey, MD	Lat 38°35'45", long 77°03'25", Charles County, at downstream side of bridge on State High- way 227, 1.2 mi southeast of Pomonkey, and 12.6 mi upstream from mouth.	57.7	1949-72† 1973-76	1- 1-76	5.21	1,510
01660900	Wolf Den Branch near Cedar- ville, MD	Lat 38°38'29", long 76°49'02", Charles County, at upstream side of culvert on Forest Road, 1.5 mi upstream from mouth, and 1.6 mi southwest of Cedarville.	a2.3	1966-76	1- 1-76	5.1	115
*01660930	Clark Run near Bel Alton, MD	Lat 38°28'21", long 76°57'22", Charles County, at downstream side of bridge on Newtown Road, 1.5 mi northeast of Bel Alton, and 1.8 mi upstream from mouth.	10.4	1966-76	1-27-76	6.25	280
01661430	Glebe Branch at Valley Lee, MD	Lat 38°11'40", long 76°31'13", St. Marys County, at upstream side of culvert on private road, 200 ft downstream from culvert on State Highway 244, 0.2 mi upstream from mouth, and 0.3 mi west of Valley Lee.	a.3	1968-76	9-30-76	4.7	29

See footnotes at end of table, p. 293.

Annual maximum discharge at crest-stage partial-record stations during water year 1976

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
Monongahela River basin							
03075450	Little Youghiogheny River tributary near Deer Park, MD	Lat 39°24'37", long 79°21'00", Garrett County, at upstream side of culvert on State Highway 135, 0.7 mi upstream from mouth, and 1.6 mi southwest of Deer Park.	.57	1965-76	12-31-75	4.7	23
03075600	Toliver Run tributary near Hoyes Run, MD	Lat 39°29'39", long 79°25'14", Garrett County, at upstream side of culvert on Swallow Falls Road, 100 ft upstream from mouth, and 2.4 mi south of Hoyes Run.	.53	1965-76	12-31-75	4.4	19
03076505	Youghiogheny River tributary near Friendsville, MD	Lat 39°39'48", long 79°25'42", Garrett County, at culvert on State Highway 42, 0.1 mi upstream from mouth, and 1.3 mi west of Friendsville.	.22	1965-76	12-31-75	3.3	10
03077700	North Branch Casselman River tributary at Foxtown, MD	Lat 39°37'58", long 79°14'36", Garrett County, at upstream side of culvert on Dunghill Road, at Foxtown, and 2.0 mi upstream from mouth.	al.0	1965-76	12-31-75	4.5	34
03078500	Big Piney Run near Salisbury, PA	Lat 39°43'34", long 79°02'55", Somerset County, 660 ft upstream from Little Piney Run, and 2.5 mi southeast of Salisbury.	24.5	1932-70† 1974-76	2-11-76	3.55	495

* Also a low-flow partial-record station.
† Operated as a continuous-record station.
a Approximately.
b Affected by backwater from debris.
c Revised.

TIDAL CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum stages for tidal crest-stage stations. The information is obtained from a crest-stage gage or a water-stage recorder located at each site. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. All stages are elevations above mean sea level, datum of 1929. Only the maximum stage is given. Information on some other high stages may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum stage at tidal crest-stage partial-record stations during water year 1976

Station No.	Station name	Location	Period of Record	Annual maximum	
				Date	Elevation above mean sea level (ft)
		Smyrna River basin			
01483335	Duck Creek at Smyrna, DE	Lat 39°18'31", long 75°36'34", Kent County, at bridge on U.S. Highway 13, at north edge of Smyrna, 2 mi north of intersection of State Highway 300 and U.S. Highway 13 on downstream right wingwall of bridge.	1966-76	6-14-76	3.75
		Murderkill River basin			
01484085	Murderkill River at Bowers, DE	Lat 39°03'30", long 75°23'51", Kent County, at Faulkner's Landing in Bowers, on left bank 10 ft southeast of southeast corner of restaurant on Faulkner's Pier.	1966-76	6-14-76	5.59
		Cedar Creek basin			
01484235	Cedar Creek near Slaughter Beach, DE	Lat 38°56'06", long 75°19'26", Sussex County, at bridge No. S-164 on State Highway 36, 1.8 mi northwest of Slaughter Beach.	1966-76	8-7-76	4.31
		Indian River basin			
01484595	Indian River at Oak Orchard, DE	Lat 38°35'45", long 75°10'24", Sussex County, at Hanes Landing 2.0 mi southeast of intersection of State Highways 24 and 5, at Oak Orchard.	1966-76	1-1-76	3.66

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table. All measurements in this table were made during periods of base flow, except as otherwise noted.

Discharge measurements made at miscellaneous sites during water year 1976

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
Gunpowder River basin						
01581955 Gunpowder Falls	Gunpowder River	Lat 39°36'32", long 76°38'08", Baltimore County, at bridge on Big Falls Road, 2.0 mi northeast of Hereford, Md.	91.6	1975	10- 1-74 11- 4-74 11-14-74 12- 9-74 12-16-74 1-27-75 4-23-75 5-14-75 6-26-75 8-13-75 9-10-75 10-30-75 3- 3-76 4- 8-76 5-17-76 7- 9-76	63 45 62 257 451 189 103 187 154 70 68 182 138 158 130 83
01583985 Gunpowder Falls	Gunpowder River	Lat 39°25'31", long 76°31'47", Baltimore County, at bridge on Cromwell Bridge Road, 0.5 mi northeast of Loch Raven, Md.	308	1975	10- 1-74 10-16-74 11- 5-74 11-14-74 12- 2-74 12-20-74 12-23-74 12-30-74 3-21-75 4-23-75 8-13-75 11- 5-75 3- 3-76 4- 8-76 5-17-76 7- 9-76 8- 9-76	3.0 12 2.7 2.6 12 326 158 78 1,120 196 39 283 267 351 192 2.7 3.3
Potomac River basin						
01598000 Savage River	North Branch Potomac River	Lat 39°29'00", long 79°04'24", Garrett County, 0.4 mi upstream from mouth, and 0.5 mi north of Bloomington, Md.	115	1905-6† 1924-27† 1929-50† 1975	10-15-74 11- 4-74 12-12-74 1-29-75 4-16-75 5- 2-75 6-16-75 7-29-75 8-26-75 10-24-75 12- 8-75 3-16-76 4- 5-76 5- 7-76 6-24-76 8-30-76	77 55 258 933 28 740 71 43 30 584 67 115 33 18 79 69
Potomac Blue Spring	North Branch Potomac	Lat 39°34'26", long 78°43'50", Allegany County, 200 ft below abandoned C&O Canal lock, 1.1 mi northwest of Spring Gap, Md.	--	1958-75	10-31-75 3- 8-76 4-20-76 7- 6-76 8-24-76	16 15 18 13 11
Murley Branch	Murley Branch	Lat 39°39'38", long 78°37'08", Allegany County, below dam at spring house of farm on Williams Road, 4.0 mi southwest of Flintstone, Md.	--	1958-75	10-31-75 3- 8-76 4-20-76 7- 6-76 8-24-76	2.1 2.0 2.3 1.2 0.9
Hoffman Drainage Tunnel	Braddock Run	Lat 39°38'18", long 78°53'38", Allegany County, upstream from State Highway 55, 0.5 mi southwest of Clarysville, and 2.1 mi southeast of Frostburg, Md.	--	1944 1958-59 1964 1965 1967-75	10-31-75 3- 8-76 4-21-76 7- 6-76 8-24-76	22 26 25 16 11

† Operated as a continuous-record station.

Discharge measurements made at miscellaneous sites during water year 1976

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Potomac River basin--Continued						
01601490 Braddock Run	Wills Creek	Lat 39°40'12", long 78°47'37", Alle- gany County, 0.2 mi upstream from mouth, and 2.0 mi northwest of Cumberland, Md.	17.5	1975	10-15-74	15
					11-12-74	25
					12- 2-74	43
					2-18-75	86
					3-19-75	855
					4- 8-75	60
					4-16-75	55
					4-29-75	129
					6- 9-75	49
					7-28-75	25
					8-26-75	19
					9-29-75	36
					10-23-75	54
					12-10-75	25
					1-26-76	32
Downey Branch	Potomac River	Lat 39°31'19", long 77°49'11", Wash- ington County, 0.6 mi upstream from mouth, and 1.2 mi southeast of Downsview, Md.	--	--	9- 2-76	1.2
					Landis Spring Branch	Antietam Creek
Little Antietam Creek	Antietam Creek	Lat 39°40'56", long 77°37'45", Wash- ington County, 0.4 mi southwest of Leitersburg, Md., and 0.6 mi upstream from mouth.	--	--		
					Little Conoco- cheague Creek	Potomac River
Little Conoco- cheague Creek	Potomac River	Lat 39°40'56", long 77°55'50", Wash- ington County, 0.2 mi downstream from unnamed tributary, and 1.8 mi north of Clear Spring, Md.	--	--		
					Meadow Brook	Conococheague Creek
Rockdale Run	Conococheague Creek	Lat 39°42'07", long 77°50'46", Wash- ington County, 0.7 mi southwest of Fairview, Md., and 2.3 mi upstream from mouth.	--	--		
					Rush Run	Conococheague Creek
Unnamed tributary	Conococheague Creek	Lat 39°40'39", long 77°50'37", Wash- ington County, 1.2 mi upstream from mouth, and 1.4 mi north of Conococheague, Md..	--	--		
					01643580 Monocacy River	Potomac River
5-29-75	856					
6- 6-75	8,060					
8-30-75	236					
01645080 Seneca Creek	Potomac River	Lat 39°05'28", long 77°19'47", Mont- gomery County, 50 ft upstream from Hooker Branch, 1.0 mi northeast of Seneca, Md., and 1.9 mi upstream from mouth.	128	1975		
					11-13-74	78
					12-16-74	1,200
					12-26-74	75
					1-30-75	125
					3- 6-75	94
					4- 9-75	110
					5-14-75	169
					6-24-75	50
					11-13-75	815
					4-14-76	127
					7-22-76	60

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

Water-quality partial-record stations are particular sites where chemical-quality, biological, and/or sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly.

WATER QUALITY DATA
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN

01477875 CHRISTINA RIVER AT HUNTING HILLS, NEWARK, DE (LAT 39 41 24 LONG 075 46 41)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
NOV 18...	1000	140	6.8	8.0	12.1	39	17	10	3.3	6.3	2.5

DATE	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
NOV 18...	26	13	.1	17	71	74	2.2	.00	.56	.56

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHOPHOSPHORUS (P) (MG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV 18...	.02	.01	1	0	0	60	5	50	2	20

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

OCT. 31, 1974
0400 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

118 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ANNELIDA		
..OLIGOCHAETA	AQUATIC EARTHWORMS	4
ARTHROPODA		
..INSECTA		
...DIPTERA		
...CHIRONOMIDAE	MIDGES	20
...TIPULIDAE	CRANE FLIES	
...ANTOCHA		1
...PLECOPTERA	STONEFLIES	
...CAPNIIDAE		
...ALLOCAPNIA		3
...TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
...CHEUMATOPSYCHE		16
...HYDROPSYCHE		64
...PHILOPOTAMIDAE		
...CHIMARRA		1
...RHYACOPHILIDAE		
...GLOSSOSOMA		6
MOLLUSCA		
..GASTROPODA	SNAILS	
..BASOMMATOPHORA		
...ANCYLIDAE	FRESHWATER LIMPETS	
...FERRISSIA		3
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:		
PHYL/DIV 0.383		
CLASS 0.383		
INSECTA 0.671		

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01477875 CHRISTINA RIVER AT HUNTING HILLS, NEWARK, DE (LAT 39 41 24 LONG 075 46 41)

NOV. 18, 1975
1000 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

298 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..ARACHNOIDEA		
...HYDRACARINA	WATER MITES	
...UNKNOWN FAMILY		
...UNKNOWN GENUS		4
..INSECTA		
...COLEOPTERA	BEETLES	
...ELMIDAE	RIFFLE BEETLES	
...OPTIOSERVUS		6
...DIPTERA		
...CHIRONOMIDAE	MIDGES	
...ABLABESMYIA		9
...HETEROTRISOCLADIUS		3
...MICROTENDIPES		4
...ORTHOCCLADIUS		19
...RHEOTANYTARSUS		21
...TIPULIDAE	CRANE FLIES	
...ANTOCHA		9
...EPHEMEROPTERA	MAY FLIES	
...BAETIDAE		
...PSEUDOCLOEON		3
...EPHEMERELLIDAE		
...EPHEMERELLA		72
...HEPTAGENIIDAE		
...STENONEMA		6
...PLECOPTERA	STONEFLIES	
...CAPNIIDAE		
...ALLOCAPNIA		1
...TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
...CHEUMATOPSYCHE		40
...HYDROPSYCHE		78
...HYDROPTILIDAE		
...LEUCOTRICHIA		1
...PHILOPOTAMIDAE		
...CHIMARRA		10
...SORTOSA		1
...RHYACOPHILIDAE		
...GLOSSOSOMA		11

NOTE: ANALYSIS METHOD: STAIN & SCREEN, DISSECTING MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

CLASS 0.103
ORDER 1.725
FAMILY 2.414
GENERA 3.168
INSECTA 1.645

WATER QUALITY DATA
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
DELAWARE RIVER BASIN--CONTINUED

01477960 CHRISTINA RIVER AT ROLLING GREEN, NEWARK, DE (LAT 39 39 13 LONG 075 45 18)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
NOV 18...	0830	150	6.9	7.5	12.2	45	20	12	3.7	7.8	2.6

DATE	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)
NOV 18...	31	16	.2	18	83	86	1.9	.00	.60	.60

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV 18...	.11	.08	1	10	0	120	7	100	2	20

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

OCT. 31, 1974
0440 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

161 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..CRUSTACEA		
...DECAPODA		
...ASTACIDAE	CRAYFISH	1
..INSECTA		
...DIPTERA		
...CHIRONOMIDAE	MIDGES	7
...TIPULIDAE	CRANE FLIES	4
...ANTOCHA		
..EPHEMEROPTERA	MAY FLIES	
...HEPTAGENIIDAE		
...STENONEMA		7
...SIPHONURIDAE		
...ISONYCHIA		1
..TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
...CHEUMATOPSYCHE		37
...HYDROPSYCHE		102
...HYDROPTILIDAE		
...LEUCOTRICHIA		2

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

CLASS 0.054
ORDER 0.693
FAMILY 0.879
INSECTA 0.642

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01477960 CHRISTINA RIVER AT ROLLING GREEN, NEWARK, DE (LAT 39 39 13 LONG 075 45 18)

NOV. 18, 1975
0830 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

932 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..ARACHNOIDEA		
...HYDRACARINA	WATER MITES	
...UNKNOWN FAMILY		
...UNKNOWN GENUS		480
INSECTA		
..COLEOPTERA	BEETLES	
...ELMIDAE	RIFFLE BEETLES	
...DUBIRAPHIA		1
..DIPTERA		
...CHIRONOMIDAE	MIDGES	
....ABLABESMYIA		10
....CARDIOCLADIUS		5
....HETEROTRISOCCLADIUS		18
....ORTHOCCLADIUS		31
....RHEOTANYTARSUS		22
...EMPIDIDAE	DANCE FLIES	
...HEMERODROMIA		2
...TIPULIDAE	CRANE FLIES	
...ANTOCHA		85
..EPHEMEROPTERA	MAY FLIES	
...EPHEMERELLIDAE		
....EPHEMERELLA		3
...HEPTAGENIIDAE		
....STENONEMA		57
...SIPHONURIDAE		
....ISONYCHIA		5
..TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
....CHEUMATOPSYCHE		97
....HYDROPSYCHE		103
...HYDROPTILIDAE		
....LEUCOTRICHIA		8
....STACTOBIELLA		3
...RHYACOPHILIDAE		
....GLOSSOSOMA		2

NOTE: ANALYSIS METHOD: STAIN & SCREEN, DISSECTING MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

CLASS 0.999
ORDER 1.709
FAMILY 2.040
GENERA 2.458
INSECTA 1.464

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PH (UNITS)
------	------	-------------------------------	-----------------------------------	---------------------	-------------------------	-------------------------	------------

01478050 - CHRISTINA RIVER AT CHRISTIANA, DE (LAT 39 39 13 LONG 075 40 17.01)

JUN , 1976							
11...	1225	5.0	161	24.0	25.5	--	7.4
JUL							
01...	1315	5.9	--	27.0	31.5	--	7.9
19...	1420	8.4	88	26.0	27.5	--	6.4
20...	1330	5.7	122	25.5	26.5	--	6.5
AUG							
12...	1345	7.4	118	25.0	28.5	7.5	6.7

WATER QUALITY DATA
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01478700 WHITE CLAY CREEK BELOW NEWARK, DE (LAT 39 41 33 LONG 075 43 23)

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
NOV 18...	1230	117	250	7.3	9.5	12.2	85	35	21	8.0	6.9

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)
NOV 18...	3.6	62	23	.1	15	131	121	3.3	.01	.74	.75

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV 18...	.06	.04	2	<10	0	20	8	40	4	190

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

OCT. 28, 1974
1205 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

5 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..INSECTA		
...DIPTERA		
...CHIRONOMIDAE	MIDGES	1
...TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
...HYDROPSYCHE		4

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

ORDER 0.722
FAMILY 0.722
INSECTA 0.722

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01478700 WHITE CLAY CREEK BELOW NEWARK, DE (LAT 39 41 33 LONG 075 43 23)

NOV. 18, 1975
1230 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

172 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..INSECTA		
...COLEOPTERA	BETTERLES	
...ELMIDAE	RIFFLE BETTERLES	
...OPTIOSERVUS		2
...DIPTERA		
...CHIRONOMIDAE	MIDGES	
...ABLABESMYIA		10
...CARDIOCLADIUS		16
...HETEROTRISSECLADIUS		9
...ORTHOCLADIUS		71
...RHEOTANYTARSUS		21
...EMPIDIDAE	DANCE FLIES	
...HEMERODROMIA		1
...SIMULIIDAE	BLACK FLIES	
...SIMULIUM		7
...TIPULIDAE	CRANE FLIES	
...ANTOCHA		12
...EPHEMEROPTERA	MAY FLIES	
...BAETIDAE		
...BAETIS		3
...TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
...CHEUMATOPSYCHE		3
...HYDROPSYCHE		15
...HYDROPTILIDAE		
...LEUCOTRICHIA		2

NOTE: ANALYSIS METHOD: STAIN & SCREEN, DISSECTING MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

ORDER 0.731
FAMILY 1.414
GENERA 2.837
INSECTA 0.731

WATER QUALITY DATA
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01478880 TRIB. TO WHITE CLAY CR. NR. NEWARK, DE (LAT 39 41 01 LONG 075 42 37.01)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)
APR 15...	1045	1.3	223	7.8	17.0	11.5	4	10.7	64	30
SEP 07...	1210	.24	235	6.6	29.5	21.0	7	10.0	59	24

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
APR 15...	14	7.1	15	2.7	42	34	23	25	.1
SEP 07...	13	6.5	17	3.2	43	35	25	28	.2

DATE	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)
APR 15...	6.2	--	114	2.2	.06	750	--	200	--
SEP 07...	6.7	132	121	1.1	.07	400	130	50	50

WATER QUALITY DATA
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01479955 RED CLAY CREEK AT ASHLAND, DE (LAT 39 47 55 LONG 075 39 30)

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
NOV 17...	1430	46	330	7.6	9.5	11.4	98	38	24	9.3	19

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)
NOV 17...	4.2	73	33	.2	17	182	170	3.6	.02	.99	1.0

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV 17...	.23	.10	1	<10	0	60	4	70	3	570

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

OCT. 31, 1974
0945 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

9 COUNT

_ORGANISM_NAME	_COMMON_NAME	COUNT
ARTHROPODA		
..INSECTA		
...DIPTERA		
...CHIRONOMIDAE	MIDGES	9

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01479955 RED CLAY CREEK AT ASHLAND, DE (LAT 39 47 55 LONG 075 39 30)

NOV. 17, 1975

1430 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

123 COUNT

__ORGANISM__NAME__	__COMMON__NAME__	COUNT
ANNELIDA		
..OLIGOCHAETA	AQUATIC EARTHWORMS	
...UNKNOWN ORDER		
...UNKNOWN FAMILY		
....UNKNOWN GENUS		3
ARTHROPODA		
..CRUSTACEA		
...CALANOIDA	COPEPODS	
....DIAPYOMIDAE		
....DIAPYOMUS		3
..INSECTA		
...DIPTERA		
....CHIRONOMIDAE	MIDGES	
....ABLABESMYIA		9
....CARDIOCLADUS		23
....CRICOTOPUS		17
....ORTHOCLADUS		35
....POLYPEDILUM		12
....TANYTARSUS		1
...SIMULIIDAE	BLACK FLIES	
....SIMULIUM		15
...TRICHOPTERA	CADDIS FLIES	
....HYDROPSYCHIDAE		
....CNEUMATOPSYCHE		5

NOTE: ANALYSIS METHOD: STAIN & SCREEN, DISSECTING MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.165
CLASS 0.330
ORDER 0.572
FAMILY 1.090
GENERA 2.842
INSECTA 0.255

WATER QUALITY DATA
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01480019 RED CLAY CREEK AT STANTON, DE (LAT 39 42 34 LONG 075 38 38)

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	HARDNESS (CA.MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
NOV 17...	1600	76	250	7.3	9.0	11.7	85	35	21	8.0	10

DATE	DIS-SOLVED PO-TAS- SIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
NOV 17...	3.8	62	27	.1	17	161	134	3.2	.01	.77	.78

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV 17...	.10	.07	1	10	0	70	2	50	2	230

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

OCT. 28, 1974
1030 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

21 \ COUNT

ORGANISM NAME	COMMON NAME	COUNT
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ARTHROPODA

.INSECTA

..DIPTERA

...CHIRONOMIDAE

MIDGES

19

...SIMULIIDAE

BLACK FLIES

2

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

FAMILY 0.454

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01480019 RED CLAY CREEK AT STANTON, DE (LAT 39 42 34 LONG 075 38 38)

NOV. 17, 1975
1600 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

97 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ANNELIDA		
..OLIGOCHAETA	AQUATIC EARTHWORMS	
...PLESIOPORA		
...TUBIFICIDAE		
....UNKNOWN GENUS		2
ARTHROPODA		
..INSECTA		
...DIPTERA		
....CHIRONOMIDAE	MIDGES	
....CARDIOCLADIUS		12
....CRICOTOPUS		50
....RHEOTANYTARSUS		2
...EMPIIDAE	DANCE FLIES	
....HEMERODROMIA		1
...SIMULIIDAE	BLACK FLIES	
....SIMULIUM		24
...TRICHOPTERA	CAODIS FLIES	
....HYDROPSYCHIDAE		3
....CHEUMATOPSYCHE		2
....HYDROPSYCHE		
NEMATODA	NEMATODES	
..UNKNOWN CLASS		
...UNKNOWN ORDER		
....UNKNOWN FAMILY		
.....UNKNOWN GENUS		1

NOTE: ANALYSIS METHOD: STAIN & SCREEN, DISSECTING MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.227
CLASS 0.227
ORDER 0.518
FAMILY 1.366
GENERA 2.002
INSECTA 0.300

WATER QUALITY DATA
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01481280 BRANDYWINE CREEK AT SMITH BRIDGE, DE (LAT 39 50 12 LONG 075 34 46)

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
NOV 17...	1045	215	7.2	8.0	11.7	77	31	19	7.1	8.0	2.6

DATE	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
NOV 17...	56	21	.2	12	129	112	2.3	.07	.54	.61

DATE	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV 17...	.14	.12	1	0	0	90	6	30	7	10

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01481280 BRANDYWINE CREEK AT SMITH BRIDGE, DE (LAT 39 50 12 LONG 075 34 46)

OCT. 31, 1974
1030 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

676 \ COUNT

ORGANISM NAME	COMMON NAME	COUNT
ANNELIDA		
.OLIGOCHAETA	AQUATIC EARTHWORMS	2
ARTHROPODA		
.INSECTA		
..DIPTERA		
...CHIRONOMIDAE	MIDGES	26
...SIMULIIDAE	BLACK FLIES	1
...EPHEMEROPTERA	MAY FLIES	
...BAETIDAE		
....BAETIS		3
...HEPTAGENIIDAE		
....STENONEMA		2
...LEPIDOPTERA		
...PYRALIIDAE		
....CATACLYSTA		3
...ODONATA	DRAGONFLIES	
...AGRIONIDAE		
....ARGIA		1
...TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
....CHEUMATOPSYCHE		292
....HYDROPSYCHE		294
...HYDROPTILIDAE		
....LEUCOTRICHIA		4
...PSYCHOMYIIDAE		
....POLYCENTROPUS		3
MOLLUSCA		
.BIVALVIA	BIVALVES	
..NUCULOIDEA		
...SPHAERIIDAE	FINGERNAIL CLAMS	
....SPHAERIUM		1
.GASTROPODA	SNAILS	
..BASOMMATOPHORA		
...ANCYLIDAE	FRESHWATER LIMPETS	
....FERRISSIA		5
PLATYHELMINTHES	FLATWORMS	
.TURBELLARIA		
..TRICLADIDA		39

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.420

CLASS 0.425

INSECTA 0.382

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01481280 BRANDYWINE CREEK AT SMITH BRIDGE, DE (LAT 39 50 12 LONG 075 34 46)

NOV. 17, 1975

1045 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

400 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..INSECTA		
...DIPTERA		
...CHIRONOMIDAE	MIDGES	10
....CARDIOCLADIUS		7
....CRICOTOPUS		5
....ORTHOCLADIUS		
...EMPIDIDAE	DANCE FLIES	2
....HEMERODROMIA		
...SIMULIIDAE	BLACK FLIES	3
....SIMULIUM		
...TIPULIDAE	CRANE FLIES	47
....ANTOCHA		
..EPHEMEROPTERA	MAY FLIES	
...BAETIDAE		2
....PSEUDOCLOEON		
...HEPTAGENIIDAE		12
....STENONEMA		
...LEPIDOPTERA		
...PYRALIIDAE		20
....PARARGYRACTIS		
..TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		64
....CHEUMATOPSYCHE		215
....HYDROPSYCHE		
...HYDROPTILIDAE		1
....LEUCOTRICHIA		
...PSYCHOMYIIDAE		3
....POLYCENTROPUS		
...RHYACOPHILIDAE		2
....GLOSSOSOMA		
MOLLUSCA		
..GASTROPODA	SNAILS	
...BASOMMATOPHORA		
...ANCYLIDAE	FRESHWATER LIMPETS	7
....FERRISSIA		

NOTE: ANALYSIS METHOD: STAIN & SCREEN, DISSECTING MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.127
CLASS 0.127
ORDER 1.286
FAMILY 1.668
GENERA 2.294
INSECTA 1.180

WATER QUALITY DATA
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01481490 BRANDY#INE CR. AT HAGLEY MUSEUM, WILMINGTON, DE (LAT 39 46 23 LONG 075 34 39)

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPECIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA.MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
NOV 17...	0900	521	220	7.1	7.0	12.2	79	34	20	<7.0	7.9

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)
NOV 17...	2.7	54	20	.2	12	124	111	2.4	.06	.65	.71

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV 17...	.16	.07	1	0	0	20	4	40	9	10

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01481490 BRANDY#INE CR. AT HAGLEY MUSEUM, WILMINGTON, DE (LAT 39 46 23 LONG 075 34 39)

OCT. 31, 1974
1230 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

550 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..INSECTA		
...DIPTERA		
...CHIRONOMIDAE	MIDGES	63
...EMPIDIDAE	DANCE FLIES	1
...HEMEROPTERIDAE	CRANE FLIES	2
...TIPULIDAE		
...ANTOCHA		
...LEPIDOPTERA		
...PYRALIDIDAE		
...CATACTYSTA		
...TRICHOPTERA	CADDIS FLIES	3
...HYDROPSYCHIDAE		
...CHEUMATOPSYCHE		75
...HYDROPSYCHE		353
...HYDROPTILIDAE		
...LEUCOTRICHIA		18
...PSYCHOMYIIDAE		
...POLYCENTROPUS		2
MOLLUSCA		
..BIVALVIA	BIVALVES	
...NUCULOIDEA		
...SPHAERIIDAE	FINGERNAIL CLAMS	3
...SPHAERIUM		
..GASTROPODA	SNAILS	
...BASOMMATOPHORA		
...ANCYLIDAE	FRESHWATER LIMPETS	3
...FERRISSIA		
...PLANORBIDAE	ORB SNAILS	1
...HELISOMA		
PLATYHELMINTHES	FLATWORMS	
..TURBELLARIA		
..TRICLADIDA		26

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.372
CLASS 0.385
ORDER 0.950
INSECTA 0.601

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01481490 BRANDYWINE CR. AT HAGLEY MUSEUM, WILMINGTON, DE (LAT 39 46 23 LONG 075 34 39)

NOV. 17, 1975
0900 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

909 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..INSECTA		
...DIPTERA		
....CHIRONOMIDAE	MIDGES	
....ABLABESMYIA		3
....CARDIOCLADIUS		15
....CRICOTOPUS		9
....ORTHOCLADIUS		10
....PSECTROCLADIUS		6
....EMPIDIDAE	DANCE FLIES	
....HEMERODROMIA		3
....SIMULIIDAE	BLACK FLIES	
....SIMULIUM		6
....TIPULIDAE	CRANE FLIES	
....ANTOCHA		57
..EPHEMEROPTERA	MAY FLIES	
...HEPTAGENIIDAE		
....STENONEMA		35
..LEPIDOPTERA		
...PYRALIDIDAE		
....PARARGYRACTIS		10
..TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
....CHEUMATOPSYCHE		228
....HYDROPSYCHE		501
...HYDROPTILIDAE		
....LEUCOTRICHIA		5
...PSYCHOMYIIDAE		
....POLYCENTROPUS		14
MOLLUSCA		
..GASTROPODA	SNAILS	
...BASOMMATOPHORA		
....ANCYLIDAE	FRESHWATER LIMPETS	
....FERRISSIA		5

NOTE: ANALYSIS METHOD: STAIN & SCREEN, DISSECTING MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.049
CLASS 0.049
ORDER 0.926
FAMILY 1.254
GENERA 2.048
INSECTA 0.882

WATER QUALITY DATA
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01481550 BRANDYWINE CR. BELOW ALAPOCAS RUN AT WILMINGTON (LAT 39 45 10 LONG 075 32 58)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
NOV 17...	1230	250	7.3	8.0	12.3	79	34	20	7.0	8.0	2.6

DATE	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)
NOV 17...	84	21	.3	12	117	112	2.3	.04	.59	.63

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV 17...	.14	.06	1	0	0	40	4	30	8	10

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01481550 BRANDYWINE CR. BELOW ALAPOCAS RUN AT WILMINGTON (LAT 39 45 10 LONG 075 32 58)

OCT. 31, 1974
0230 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

225 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..CRUSTACEA		
...AMPHIPODA	SCUDS	
...GAMMARIDAE		13
....GAMMARUS		
..INSECTA		
...DIPTERA		
...CHIRONOMIDAE	MIDGES	18
...EPHEMEROPTERA	MAY FLIES	
...BAETIDAE		
....BAETIS		2
...HEPTAGENIIDAE		
...STENONEMA		2
...TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		38
...CHEUMATOPSYCHE		145
...HYDROPSYCHE		
...HYDROPTILIDAE		
...LEUCOTRICHIA		2
...PSYCHOMYIIDAE		
....POLYCENTROPUS		6
MOLLUSCA		
..GASTROPODA	SNAILS	
...BASOMMATOPHORA		
...ANCYLIDAE	FRESHWATER LIMPETS	
...FERRISSIA		10
...PHYSIDAE	POND SNAILS	
....PHYSA		1
..MESOGASTROPODA		
...PLEUROCERIDAE		2
...PLEUROCERA		
...VIVIPARIDAE		9
...VIVIPARUS		
PLATYHELMINTHES	FLATWORMS	
..TURBELLARIA		
..TRICLADIDA		7

DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
 PHYL/DIV 0.602
 CLASS 0.883
 ORDER 1.429
 INSECTA 0.550

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01481550 BRANDYWINE CR. BELOW ALAPOCAS RUN AT WILMINGTON (LAT 39 45 10 LONG 075 32 58)

NOV. 17, 1975
1230 HOURS

IDENTIFICATION OF BENTHIC INVERTEBRATES

899 COUNT

ORGANISM NAME	COMMON NAME	COUNT
ARTHROPODA		
..INSECTA		
...COLEOPTERA	BEETLES	
...ELMIDAE	RIFFLE BEETLES	
....ANCYRONYX		1
....OPTIOSERVUS		2
..DIPTERA		
...CHIRONOMIDAE	MIDGES	
....ABLABESMYIA		3
....CARDIOCLADIUS		37
....CRICOTOPUS		10
...EMPIDIDAE	DANCE FLIES	
....HEMERODROMIA		9
...SIMULIIDAE	BLACK FLIES	
....SIMULIUM		5
...TIPULIDAE	CRANE FLIES	
....ANTOCHA		46
..EPHEMEROPTERA	MAY FLIES	
...BAETIDAE		
....BAETIS		1
....PSEUDOCLOEON		2
...EPHEMERELLIDAE		
....EPHEMERELLA		2
...HEPTAGENIIDAE		
....STENONEMA		11
...SIPHONURIDAE		
....ISONYCHIA		1
..LEPIDOPTERA		
...PYRALIDIDAE		
....PARARGYRACTIS		24
..MEGALOPTERA		
...CORYDALIDAE		
....CORYDALUS	DOBSON FLIES	1
..TRICHOPTERA	CADDIS FLIES	
...HYDROPSYCHIDAE		
....CHEUMATOPSYCHE		442
....HYDROPSYCHE		289
...HYDROPTILIDAE		
....LEUCOTRICHIA		7
...PSYCHOMYIIDAE		
....POLYCENTROPUS		3
...RHYACOPHILIDAE		
....GLOSSOSOMA		1
MOLLUSCA		
..GASTROPODA	SNAILS	
...BASOMMATOPHORA		
....ANCYLIDAE	FRESHWATER LIMPETS	
....FERRISSIA		2

NOTE: ANALYSIS METHOD: STAIN & SCREEN, DISSECTING MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV 0.023
CLASS 0.023
ORDER 0.905
FAMILY 1.228
GENERA 2.079
INSECTA 0.884

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01482310 DOLL RUN AT RED LION, DE (LAT 39 35 53 LONG 075 39 43)

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
APR 15...	1225	.84	175	6.6	22.5	14.0	2	8.0	53	41
SEP 07...	1545	.38	185	6.5	30.0	16.0	6	8.5	58	42

DATE	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)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
APR 15...	10	6.8	6.5	2.2	14	11	26	17	.1
SEP 07...	11	7.3	7.5	2.0	19	16	16	18	.1

DATE	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
APR 15...	10	--	86	3.5	.02	270	--	220	--
SEP 07...	4.8	113	76	4.4	.03	120	40	30	30

01483170 - TRIB. TO DRAWYER CR. NR. ODESSA, DE (LAT 39 27 45 LONG 075 41 17.01)

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
APR 15...	1345	3.8	130	7.3	22.5	16.0	5	10.0	43	28
SEP 09...	1125	2.1	119	6.9	26.5	18.0	1	9.7	47	21

DATE	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)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
APR 15...	9.6	4.5	4.6	2.4	18	15	9.6	12	.1
SEP 09...	11	4.7	4.8	2.5	32	26	5.6	13	.1

DATE	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
APR 15...	11	--	63	4.0	.05	980	--	90	--
SEP 09...	16	100	74	4.5	.03	950	280	100	110

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01483348 MILL CREEK NEAR SMYRNA, DE (LAT 39 16 35 LONG 075 37 29 01)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	HARDNESS (CA, MG)	NON-CARBONATE HARDNESS (MG/L)
MAR 29...	1630	2.3	147	7.0	16.0	12.0	8	11.9	47	34
SEP 15...	1130	.30	164	6.6	--	--	5	--	55	23

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)
MAR 29...	11	4.7	5.7	1.9	16	13	18	13	.1
SEP 15...	15	4.3	4.9	2.2	39	32	17	13	.2

DATE	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
MAR 29...	14	--	76	3.1	.09	840	--	60	--
SEP 15...	18	105	94	1.7	.16	1100	100	120	110

01483500 - LEIPSIC RIVER NEAR CHESWOLD, DE (LAT 39 13 58 LONG 075 37 57)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)
MAR 29...	1500	10	224	7.2	16.5	12.0	13	10.5

DATE	HARDNESS (CA, MG)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
MAR 29...	63	33	16	5.6	11	2.2	36	30	23

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
MAR 29...	19	.1	18	113	3.1	.14	970	100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01483675 CAHOON BRANCH AT DOVER, DE (LAT 39 10 05 LONG 075 34 38.01)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)
MAR 31...	1000	4.7	100	6.6	12.5	9.5	25	10.7

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
MAR 31...	21	4	4.4	2.4	8.8	1.8	20	16	5.4

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
MAR 31...	11	.1	16	60	2.2	.13	670	50

01484050 - PRATT BRANCH NEAR FELTON, DE (LAT 39 00 37 LONG 075 31 46)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
MAR 31...	1315	3.6	137	6.9	11.5	9.5	2	10.5	39	27
SEP 13...	1320	1.1	159	6.4	26.5	18.0	1	--	36	20

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)
MAR 31...	7.5	4.8	7.0	1.9	14	11	17	12	.0
SEP 13...	8.2	3.8	7.3	1.9	20	16	13	11	.1

DATE	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
MAR 31...	16	--	73	3.9	.03	380	--	40	--
SEP 13...	22	90	77	3.6	.04	480	40	30	10

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DELAWARE RIVER BASIN--CONTINUED

01490600 MEREDITH BRANCH NEAR SANDTOWN, DE (LAT 39 02 23 LONG 075 41 52)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
MAR 31...	1115	4.9	90	6.5	9.5	9.5	45	11.2	21	10
SEP 13...	1450	4.1	119	6.0	26.0	18.0	5	--	27	12

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)
MAR 31...	4.9	2.2	6.4	1.6	14	11	12	8.9	.1
SEP 13...	6.3	2.7	6.0	2.3	18	15	8.7	10	.1

DATE	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
MAR 31...	18	--	61	1.3	.04	1100	--	50	--
SEP 13...	20	71	65	2.1	.06	1000	190	40	30

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CROSS SECTION LOCATION FROM RIGHT EDGE OF BRIDGE (FT)	STREAM STAGE (FT)	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	SPE- CIFIC CON- DUCT- ANCE (MICRO MHOS)	TEMPER- ATURE (DEG C)	SEDI- MENT CONCEN- TRATION (MG/L)
PATUXENT RIVER BASIN							
01592000 PATUXENT RIVER NEAR LAUREL (LAT 39 06 56 LONG 76 52 27)							
8-12-76	1225	-	-	-	88	-	8
PATUXENT RIVER AT RTE. 216 (LAT 39 06 40 LONG 76 51 13)							
8-12-76	0935	-	0.3	-	107	21.1	28
8-12-76	1120	165	2.2	-	87	-	344
8-12-76	1125	130	2.4	-	87	-	1012
8-12-76	1125	150	2.4	-	85	-	420
8-12-76	1240	165	3.5	-	87	27.5	705
8-12-76	1245	155	3.5	-	84	-	477
8-12-76	1255	145	3.6	-	86	-	398
8-12-76	1305	125	3.6	-	83	-	1356
8-12-76	1305	125	3.6	-	87	-	3334
8-12-76	1410	155	3.7	-	86	-	206
8-12-76	1410	165	3.7	-	85	-	149
8-12-76	1415	140	3.7	-	86	27.0	343
8-12-76	1420	125	3.7	-	85	-	2035
8-12-76	1450	165	4.5	-	100	-	575
8-12-76	1455	155	4.7	-	86	-	459
8-12-76	1500	145	4.8	-	85	-	557
8-12-76	1620	123	5.1	-	89	-	209
8-12-76	1630	140	5.1	-	87	-	176
8-12-76	1640	150	5.0	-	88	-	141
8-12-76	1645	167	5.0	-	89	-	133
8-12-76	1710	165	4.2	-	88	-	111
8-12-76	1715	155	3.7	-	88	-	67
8-12-76	1720	145	3.4	-	89	-	55
8-12-76	1730	125	2.7	-	90	-	36
8-12-76	1750	125	1.5	-	87	-	36
8-12-76	1750	145	1.5	-	86	-	56
8-12-76	1750	155	1.5	-	88	-	202
8-12-76	1750	165	1.5	-	87	-	52

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CROSS SECTION LOCATION FROM RIGHT EDGE OF BRIDGE (FT)	STREAM STAGE (FT)	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	SPE- CIFIC CON- DUCT- ANCE (MICRO MHOS)	TEMPER- ATURE (DEG C)	SEDI- MENT CONCEN- TRATION (MG/L)
PATUXENT RIVER BASIN--CONTINUED							
PATUXENT RIVER AT RTE. 1 (LAT 39 06 21 LONG 76 50 30)							
8-12-76	0825	-	-	-	113	-	119
8-12-76	0900	-	-	27	-	-	-
8-12-76	1120	140	2.2	-	90	-	150
8-12-76	1130	45	2.8	-	111	-	380
8-12-76	1132	80	2.9	-	99	-	712
8-12-76	1135	110	3.1	-	97	-	644
8-12-76	1137	140	3.1	-	98	-	373
8-12-76	1225	-	-	376	-	-	-
8-12-76	1235	140	3.8	-	92	-	77
8-12-76	1240	110	4.0	-	88	-	629
8-12-76	1243	80	4.3	-	88	-	865
8-12-76	1315	80	5.0	-	88	-	481
8-12-76	1315	110	5.0	-	89	-	413
8-12-76	1355	140	5.3	-	86	-	183
8-12-76	1357	110	5.3	-	87	-	255
8-12-76	1400	80	5.3	-	102	-	316
8-12-76	1430	-	-	926	-	-	-
8-12-76	1504	45	5.7	-	104	-	1158
8-12-76	1506	80	5.8	-	105	-	796
8-12-76	1508	110	5.9	-	97	-	289
8-12-76	1510	140	6.0	-	92	-	85
8-12-76	1547	140	6.5	-	86	-	129
8-12-76	1552	110	6.6	-	85	-	350
8-12-76	1555	80	6.6	-	87	-	359
8-12-76	1556	45	6.6	-	88	-	445
8-12-76	1630	45	6.7	-	87	-	182
8-12-76	1632	80	6.7	-	88	-	258
8-12-76	1635	110	6.7	-	87	-	232
8-12-76	1637	140	6.8	-	103	-	85
8-12-76	1645	-	-	1370	-	-	-

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CROSS SECTION LOCATION FROM RIGHT EDGE OF BRIDGE (FT)	STREAM STAGE (FT)	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	SPE- CIFIC CON- DUCT- ANCE (MICRO MHOS)	TEMPER- ATURE (DEG C)	SEDI- MENT CONCEN- TRATION (MG/L)
PATUXENT RIVER BASIN--CONTINUED							
PATUXENT RIVER AT RTE. 198 (LAT 39 05 48 LONG 76 50 09)							
8-12-76	0955	-	0.8	-	117	23.0	3
8-12-76	1145	137	2.8	-	102	-	291
8-12-76	1145	126	2.8	-	112	-	347
8-12-76	1145	113	2.8	-	112	-	391
8-12-76	1150	96	3.0	-	104	22.0	227
8-12-76	1300	93	5.8	-	105	-	346
8-12-76	1300	115	5.8	-	98	-	346
8-12-76	1300	130	5.8	-	93	-	301
8-12-76	1300	140	5.8	-	101	26.0	269
8-12-76	1450	140	6.4	-	103	26.0	198
8-12-76	1450	125	6.4	-	102	-	251
8-12-76	1450	110	6.4	-	96	-	225
8-12-76	1450	93	6.4	-	101	-	179
8-12-76	1600	140	6.5	-	108	26.0	463
8-12-76	1603	125	6.5	-	97	-	633
8-12-76	1605	95	6.5	-	96	-	480
8-12-76	1605	110	6.5	-	91	-	516
8-12-76	1740	95	6.7	-	89	-	156
8-12-76	1740	125	6.7	-	88	-	166
8-12-76	1745	110	6.7	-	88	-	251
8-12-76	1745	155	6.7	-	88	25.5	132
PATUXENT RIVER AT THE BALTIMORE-WASHINGTON EXPRESSWAY (LAT 39 04 07 LONG 76 49 53)							
8-12-76	0940	-	-	33	-	-	-
8-12-76	1030	-	1.68	-	131	26.5	25
8-12-76	1200	-	1.6	-	130	23.5	37
8-12-76	1325	188	1.71	-	141	-	25
8-12-76	1515	148	2.87	-	114	-	277
8-12-76	1515	162	2.87	-	115	-	278
8-12-76	1515	175	2.87	-	112	-	269
8-12-76	1515	188	2.87	-	135	-	296
8-12-76	1620	188	3.03	-	97	25.5	260
8-12-76	1620	175	3.03	-	93	-	256
8-12-76	1620	160	3.03	-	92	-	252
8-12-76	1620	141	3.03	-	97	-	1186
8-12-76	1805	177	3.47	-	92	-	180
8-12-76	1808	175	-	-	92	-	182
8-12-76	1810	160	-	-	91	-	125
8-12-76	1813	140	-	-	91	25.0	180

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PATUXENT RIVER BASIN--CONTINUED

PATUXENT RIVER AT RTE. 216 (LAT 39 06 40 LONG 76 51 13)

DATE	TIME	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	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. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
AUG 12...	1610	26.0	133	8	10	12	18	29	47	91	98	100

PATUXENT RIVER AT RTE. 1 (LAT 39 06 21 LONG 76 50 30)

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
AUG 12...	0820	--	1	3	17	39	61	78	96	100
26...	0945	4	6	11	34	66	86	93	99	100

PATUXENT RIVER AT RTE. 198 (LAT 39 05 48 LONG 76 50 09)

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
AUG 12...	1005	2	4	10	32	47	76	89	97	100
26...	1000	--	--	1	11	48	79	92	98	100

PATUXENT RIVER AT THE BALTIMORE-WASHINGTON EXPRESSWAY (LAT 39 04 07 LONG 76 49 53)

DATE	TIME	SUS- PENDE SEDIM- ENT (MG/L)	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. FALL DIAM. % FINER THAN .052 MM
AUG 12...	1055	--	--	--	--	--	--
12...	1650	171	9	33	72	89	97
26...	1015	--	--	--	--	--	--

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM
AUG 12...	--	--	100	--	--	--
12...	99	100	--	--	--	--
26...	--	--	--	79	88	100

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

POTOMAC RIVER BASIN

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL AMMONIA NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL ORGANIC NITROGEN (N) (MG/L)
SEP 01...	1330	265	8.5	20.5	10.7	33	130	.02	.0	.05	95	.00
DATE	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	
SEP 01...	.03	1800	.05	.05	.05	190	80	1	8	0	0	
DATE	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	
SEP 01...	10	10	0	10	160	11000	0	20	20	290	<.5	
DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	ORGANIC CARBON IN BOTTOM MATERIAL (G/KG)	IN-ORGANIC CARBON IN BOTTOM MATERIAL (G/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	
SEP 01...	.0	20	0	1	0	50	26	.6	.0	0	.00	
DATE	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	DIAZINON IN BOTTOM MATERIAL (UG/KG)	
SEP 01...	.0	.0	0	.00	.8	.00	.8	.00	1.0	.00	.0	
DATE	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	
SEP 01...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00	

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

POTOMAC RIVER BASIN--CONTINUED

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV--CONTINUED

DATE	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)
SEP 01...	.0	.00	.0	.00	.00	.0	.00	.0	.00	.0	.00

DATE	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MA- TERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MA- TERIAL (UG/KG)
SEP 01...	0	0	.00	.0	.00	0	.00	0	.00	0

01619250 ANTIETAM CR AT HAGERSTOWN MD (LAT 39 37 52 LONG 077 41 58)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL AMMONIA NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)
AUG 31...	1330	500	7.6	18.5	7.9	1	26	3.2	4.0	.12	170	.33

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL KJEL. NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS IN BOT- TOM MA- TERIAL (MG/KG)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)
AUG 31...	.45	3600	3.7	.53	.47	640	130	0	8	0	0

DATE	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
AUG 31...	50	10	0	60	280	11000	4	200	40	310	<.5

DATE	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	ORGANIC CARBON IN BOT- TOM MA- TERIAL (C) (G/KG)	IN- ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ALDRIN (UG/L)
AUG 31...	.4	20	0	1	30	220	51	12	.0	420	.00

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

POTOMAC RIVER BASIN--CONTINUED

01619250 ANTIETAM CREEK AT HAGERSTOWN, MD--CONTINUED

DATE	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)
AUG 31...	.0	.0	230	.01	640	.01	84	.00	2700	.00	.0
DATE	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)
AUG 31...	.00	150	.00	.0	.00	.0	.00	.0	.00	.0	.00
DATE	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)
AUG 31...	.0	.00	.0	.00	.00	.0	.00	.0	.00	.0	.00

DATE	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MA- TERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MA- TERIAL (UG/KG)
AUG 31...	0	0	.00	.0	.00	0	.00	0	.00	0

01643580 MONOCACY RIVER NEAR DICKERSON, MD (LAT 39 14 11 LONG 077 26 25)

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL AMMONIA NITRO- GEN IN BOTTOM MAT. (MG/KG)
SEP 01...	0930	170	320	7.9	19.5	7.5	120	140	2.2	.6	.15	14
DATE	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL KJEL. NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS IN BOT- TOM MA- TERIAL (MG/KG)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)
SEP 01...	.30	.45	260	2.7	.26	.14	170	590	2	2	1	0

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

POTOMAC RIVER BASIN--CONTINUED

01643580 MONOCACY RIVER NEAR DICKERSON, MD--CONTINUED

DATE	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)
SEP 01...	10	10	0	10	1100	7000	12	10	160	440	<.5	.0

DATE	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)	IN-ORGANIC CARBON IN BOTTOM MATERIAL (G/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL ALDRIN (UG/L)
SEP 01...	10	0	0	10	30	10	6.5	.0	.0	0	.00

DATE	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	DIAZINON IN BOTTOM MATERIAL (UG/KG)
SEP 01...	.0	.0	0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)
SEP 01...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	MALATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL METHOXYCHLOR (UG/L)	TOTAL METHYL PARATHION (UG/L)	METHYL PARATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL METHYL TRITHION (UG/L)	METHYL TRITHION IN BOTTOM MATERIAL (UG/KG)	TOTAL PARATHION (UG/L)	PARATHION IN BOTTOM MATERIAL (UG/KG)	POLYCHLORINATED NAPHTHALENES (UG/L)
SEP 01...	.0	.00	.0	.00	.00	.0	.00	.0	.00	.0	.00

DATE	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MATERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MATERIAL (UG/KG)
SEP 01...	0	0	.00	.0	.04	0	.02	0	.00	0

01647720 NORTH BRANCH ROCK CREEK NEAR NORBECK, MD (LAT 39 06 59 LONG 077 06 09)

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG 26...	1115	1	2	4	7	13	20	31	57	84

GROUND-WATER RECORDS

329

GROUND-WATER LEVELS

DELAWARE

KENT COUNTY

391026075304901. Local number, Id 55-1.

LOCATION.--Lat 39°10'26", long 75°30'49", Hydrologic Unit 02040207, White Oak Road at Dover.

Owner: City of Dover.

AQUIFER.--Piney Point.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 2.5 in (0.06 m), depth 349 ft (106 m), cased to 329 ft (100 m), screened 329 to 349 ft (100 to 106 m).

DATUM.--Altitude of land-surface datum is 20 ft (6.1 m). Measuring point: Top of casing at land-surface datum.

REMARKS.--Water level affected by pumping in the Dover area.

PERIOD OF RECORD.--August 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 67.40 ft (20.54 m) below land-surface datum, May 5, 1970; lowest, 127.0 ft (38.71 m) below land-surface datum, Aug. 30, 31, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

NOON VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	111.6	110.5	109.1	106.9	110.5	111.8	111.2	112.4	114.9	122.0	121.2	e126.9
10	111.6	111.3	108.1	108.1	110.6	111.7	111.1	112.7	115.1	121.8	122.5	e126.8
15	111.0	111.2	108.7	108.5	112.0	111.7	110.5	113.5	117.5	e121.0	123.1	e126.5
20	109.9	111.0	109.2	109.6	110.9	111.0	110.4	114.4	119.5	120.2	123.4	e126.6
25	109.9	111.0	109.8	110.8	111.8	111.7	112.0	114.5	120.9	121.5	124.6	125.7
EOM	110.8	109.5	107.9	111.2	112.0	111.0	112.6	114.9	120.9	120.0	127.0	.....

WTR YEAR 1976 MAX 106.7 JAN 7, 1976 MIN 127.0 AUG 30,31, 1976

e Estimated.

390935075320001. Local number, Jd 14-1.

LOCATION.--Lat 39°09'35", long 75°32'00", Hydrologic Unit 02040207, Division Street at Dover.

Owner: City of Dover.

AQUIFER.--Cheswold.

WELL CHARACTERISTICS.--Drilled former public supply well, diameter 12 in (0.30 m), depth 227 ft (69.2 m) cased to 195 ft (59.4 m), screened 195 to 227 ft (59.4 to 69.2 m).

DATUM.--Altitude of land-surface datum is 35 ft (10.7 m). Measuring point: Top of casing at land-surface datum.

REMARKS.--Water level affected by pumping in the Dover area.

PERIOD OF RECORD.--August 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 99.4 ft (30.30 m) below land-surface datum, Mar. 20, 1976; lowest, 131.4 ft (40.05 m) below land-surface datum, Sept. 2, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

NOON VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	111.7	109.9	111.5	103.8	.....	102.8	105.5	109.7	111.2	115.6	111.9	110.6
10	111.7	109.8	109.7	106.8	.....	103.5	108.6	110.0	112.9	118.2	109.8	112.1
15	111.2	111.6	107.9	107.9	.....	104.5	108.7	116.6	114.2	117.7	111.6	111.7
20	110.7	112.0	106.1	.....	100.8	107.7	109.3	113.0	112.9	115.8	111.6	107.8
25	110.8	111.8	105.6	.....	101.5	107.3	107.7	112.4	112.4	112.8	111.7	110.4
EOM	110.6	110.1	104.8	.....	100.9	107.4	110.1	107.8	115.3	114.4	111.9	109.6

WTR YEAR 1976 MAX 99.4 MAR 20, 1976 MIN 118.4 JUL 11, 1976

390607075331501. Local number, Jd 42-3.

LOCATION.--Lat 39°06'07", long 75°33'15", Hydrologic Unit 02040207, 1 mi (1.6 km) south of Camden.

Owner: Delaware Department of Highways and Transportation.

AQUIFER.--Columbia Deposits.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 1.25 in (0.03 m), depth 11 ft (3.4 m), well point 8.5 to 11 ft (2.6 to 3.4 m).

DATUM.--Altitude of land-surface datum is about 44 ft (13.4 m). Measuring point: Top of casing at land-surface datum.

REMARKS.--This is a replacement well and is located 2 ft (0.6 m) north of the original well. The measurements published in WSP 1782, for the years 1958-61 for the original well, are doubtful.

PERIOD OF RECORD.--October 1950 to December 1961, August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.69 ft (0.82 m) below land-surface datum, July 18, 1975; lowest measured, 9.16 ft (2.79 m) below land-surface datum, Oct. 30, 1951.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	5.23	DEC 23	5.26	FEB 24	4.45	APR 23	5.26	JUN 24	6.27	AUG 25	7.00
NOV 24	4.80	JAN 23	4.61	MAR 25	4.81	MAY 24	5.74	JUL 23	6.58	SEP 23	7.64

GROUND-WATER LEVELS

DELAWARE--Continued

KENT COUNTY--Continued

385041075395601. Local number, Mc 51-1.

LOCATION.--Lat 38°50'41", long 75°39'56", Hydrologic Unit 02060008, 1.3 mi (2.1 km) northeast of Adamsville.

Owner: Delaware Department of Highways and Transportation.

AQUIFER.--Columbia Deposits.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 2 in (0.05 m), depth 19 ft (5.8 m), well point 15 to 19 ft (4.6 to 5.8 m).

DATUM.--Altitude of land-surface datum is about 55 ft (16.8 m). Measuring point: Top of casing at land-surface datum.

REMARKS.--This is a replacement well and is located about 60 ft (18.3 m) north of original well.

PERIOD OF RECORD.--September 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.52 ft (1.38 m) below land-surface datum, July 16, 1975; lowest measured, 15.24 ft (4.65 m) below land-surface datum, Jan. 24, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 7	12.07	DEC 23	12.90	MAR 4	10.74	MAY 21	12.98	AUG 11	14.65		
31	12.38	JAN 13	10.62	APR 14	12.06	JUL 8	14.05	SEP 24	15.18		

385310075331301. Local number, Md 22-1.

LOCATION.--Lat 38°53'10", long 75°33'13", Hydrologic Unit 02040207, 2.4 mi (3.9 km) west of Williamsville.

Owner: Delaware Department of Highways and Transportation.

AQUIFER.--Columbia Deposits.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 1 in (0.03 m), depth 17 ft (5.2 m), well point 14 to 17 ft (4.3 to 5.2 m).

DATUM.--Altitude of land-surface datum is about 58 ft (17.7 m). Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--September 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.07 ft (0.33 m) below land-surface datum, July 14, 1975; lowest measured, 11.14 ft (3.40 m) below land-surface datum, Jan. 6, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	4.52	DEC 23	4.56	MAR 4	3.65	MAY 28	6.62	AUG 10	8.95		
NOV 10	5.02	JAN 16	2.21	APR 9	3.82	JUN 22	7.39	SEP 24	10.04		

NEW CASTLE COUNTY

393854075415401. Local number, Db 24-10.

LOCATION.--Lat 39°38'54", long 75°41'54", Hydrologic Unit 02040205, 2 mi (3.2 km) south of Ogletown.

Owner: Delaware Department of Highways and Transportation.

AQUIFER.--Columbia Deposits.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 1 in (0.03 m), depth 24 ft (7.3 m), well point 21 to 24 ft (6.4 to 7.3 m).

DATUM.--Altitude of land-surface datum is about 77 ft (23.5 m). Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--August 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.88 ft (1.49 m) below land-surface datum, May 12, 1958; lowest measured, 17.43 ft (5.31 m) below land-surface datum, Feb. 10, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	9.77	DEC 8	10.30	FEB 26	8.40	MAY 17	9.73	AUG 12	12.01		
NOV 13	10.21	JAN 22	9.35	APR 12	9.06	JUN 29	11.00				

GROUND-WATER LEVELS

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DELAWARE--Continued

NEW CASTLE COUNTY--Continued

393755075364802. Local number, Dc 34-6.

LOCATION.--Lat 39°37'55", long 75°36'48", Hydrologic Unit 02040205, at Delaware National Guard Rifle Range, New Castle.

Owner: Delaware Geological Survey.

AQUIFER.--Upper Potomac.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (0.15 m) to 43 ft (13.1 m), 2 in (0.05 m) to 190 ft (57.9 m), depth 190 ft (57.9 m), screened 183 to 188 ft (55.8 to 57.3 m).

DATUM.--Altitude of land-surface datum is 28 ft (8.5 m). Measuring point: Top of casing, 2.0 ft (0.61 m) above land-surface datum.

PERIOD OF RECORD.--November 1975 to September 1976.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.30 ft (11.98 m) below land-surface datum, Feb. 2, 1976; lowest, 47.04 ft (14.34 m) below land-surface datum, Sept. 29, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

NOON VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.65	41.10	40.47	40.52	40.85	45.15	44.69	45.72	46.52	46.05
10	42.59	40.88	41.15	40.20	40.37	42.66	44.77	45.21	45.61	46.07	45.93
15	42.12	40.75	40.71	39.94	40.10	42.86	44.45	45.90	45.75	46.00	45.82
20	41.85	40.64	40.48	40.50	40.05	43.80	44.78	45.58	46.25	46.75	46.64
25	41.60	40.83	40.35	40.22	42.10	43.67	44.93	45.45	46.50	46.18	46.15
EOM	41.26	40.42	40.05	40.04	40.49	44.08	44.64	45.05	46.27	46.98	46.20

WTR YEAR 1976 MAX 39.30 FEB 2, 1976 MIN 47.04 SEP 29, 1976

391949075410701. Local number, Hb 14-1.

LOCATION.--Lat 39°19'49", long 75°41'07", Hydrologic Unit 02040205, at Prices Corners.

Owner: Delaware Department of Highways and Transportation.

AQUIFER.--Columbia Deposits.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 1 in (0.03 m), depth 19 ft (5.8 m), well point 16 to 19 ft (4.9 to 5.8 m).

DATUM.--Altitude of land-surface datum is about 72 ft (21.9 m). Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--October 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.49 ft (0.45 m) below land-surface datum, Apr. 7, 1958; lowest measured, 11.95 ft (3.64 m) below land-surface datum, Aug. 31, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	5.69	DEC 8	6.08	FEB 24	4.19	MAY 17	6.51	AUG 11	8.15		
NOV 21	5.54	JAN 15	4.75	APR 12	5.63	JUN 21	7.36	SEP 30	9.03		

SUSSEX COUNTY

384930075370201. Local number, Nc 13-3.

LOCATION.--Lat 38°49'30", long 75°37'02", Hydrologic Unit 02060008, 2.0 mi (3.2 km) northwest of Greenwood.

Owner: University of Delaware.

AQUIFER.--Piney Point.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 630 ft (192 m), cased to 620 ft (189 m), screened 620 to 630 ft (189 to 192 m).

DATUM.--Land surface datum is 62.5 ft (19.1 m) above mean sea level. Measuring point: Top of casing, 3.0 ft (0.9 m) above land-surface datum.

PERIOD OF RECORD.--December 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.70 ft (21.24 m) below land-surface datum, Jan. 1, 1971; lowest, 76.28 ft (23.25 m) below land-surface datum, Sept. 23, 24, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

NOON VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	74.56	74.53	74.65	74.73	74.80	74.80	74.92	75.20	75.53	75.59	75.91	75.99
10	74.49	74.50	74.39	74.74	74.73	74.80	75.03	75.20	75.44	75.66	75.86	75.99
15	74.42	74.48	74.47	74.67	74.90	74.87	75.08	75.20	75.48	75.54	75.85	76.19
20	74.32	74.48	74.61	74.70	74.82	74.85	74.99	75.46	75.46	75.77	76.04	76.07
25	74.39	74.47	74.78	74.78	74.86	74.90	74.88	75.28	75.47	75.78	76.07	76.24
EOM	74.65	74.60	74.52	74.63	74.81	74.97	75.15	74.27	75.49	75.70	76.09	76.03

WTR YEAR 1976 MAX 74.27 OCT 18, 1976 MIN 76.28 SEP 23, 24, 1976

GROUND-WATER LEVELS

DELAWARE--Continued

SUSSEX COUNTY--Continued

384639075353101. Local number, Nc 45-1.

LOCATION.--Lat 38°46'39", long 75°35'31", Hydrologic Unit 02060008, 2.0 mi (3.2 km) south of Greenwood.

Owner: P. H. Cannon.

AQUIFER.--Columbia Deposits.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1 in (0.03 m), depth 15 ft (4.6 m), screened 14 to 15 ft (4.3 to 4.6 m).

DATUM.--Altitude of land-surface datum is about 43 ft (13.1 m). Measuring point: Top of casing, 1.00 ft (0.30 m) above land-surface datum.

PERIOD OF RECORD.--October 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.67 ft (2.03 m) below land-surface datum, Jan. 30, 1952; lowest measured, 14.48 ft (4.41 m) below land-surface datum, Nov. 18, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	13.58	DEC 22	13.28	MAR 4	12.44	MAY 20	13.54	JUL 8	13.97		
NOV 11	13.64	JAN 13	10.79	APR 2	12.94	JUN 3	13.70	AUG 10	13.78		

384955075192801. Local number, Ng 11-1.

LOCATION.--Lat 38°49'55", long 75°19'28", Hydrologic Unit 02040207, 1.2 mi (1.9 km) east of Jefferson Crossroads.

Owner: Delaware Department of Highways and Transportation.

AQUIFER.--Columbia Deposits.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 1 in (0.03 m), depth 19 ft (5.8 m), well point 16 to 19 ft (4.9 to 5.8 m).

DATUM.--Altitude of land-surface datum is 24 ft (7.3 m). Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--September 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.43 ft (2.75 m) below land-surface datum, July 17, 1975; lowest measured, 14.64 ft (4.46 m) below land-surface datum, Jan. 7, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	10.96	DEC 22	11.01	MAR 1	9.96	MAY 18	11.56	AUG 10	12.66		
NOV 14	10.81	JAN 13	9.75	APR 9	10.72	JUN 29	12.41	SEP 28	12.89		

383730075213501. Local number, Pf 24-2.

LOCATION.--Lat 38°37'30", long 75°21'35", Hydrologic Unit 02060010, 1.5 mi (2.4 km) southwest of Stockley.

Owner: Delaware Department of Highways and Transportation.

AQUIFER.--Columbia Deposits.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in (0.10 m), depth 49 ft (14.9 m), cased to 46 ft (14.0 m), screened 46 to 49 ft (14.0 to 14.9 m).

DATUM.--Altitude of land-surface datum is about 50 ft (15.2 m). Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.

PERIOD OF RECORD.--January 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.15 ft (2.18 m) below land-surface datum, Dec. 25, 1972; lowest, 11.70 ft (3.57 m) below land-surface datum, Aug. 7, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

NOON VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.09	9.13	8.58	7.97	7.56	8.66	9.00	9.51	10.10	10.98	11.65	11.23
10	9.22	9.22	8.64	7.80	7.73	8.65	9.10	9.61	10.24	11.14	11.15	11.31
15	9.34	8.52	8.72	7.95	7.95	8.70	9.20	9.71	10.43	11.15	11.00	11.37
20	9.09	8.36	8.90	8.16	8.23	8.76	9.28	9.76	10.46	11.33	10.96	11.45
25	9.00	8.41	9.04	8.41	8.40	8.84	9.33	9.88	10.50	11.43	11.04	11.53
EOM	9.06	8.51	8.97	7.95	8.51	8.96	9.46	9.97	10.80	11.55	11.15	11.56
WTR YEAR 1976	MAX	7.50	FEB 6, 1976	MIN	11.70	AUG 7, 1976						

383138075260201. Local number, Qe 44-1.

LOCATION.--Lat 38°31'38", long 75°26'02", Hydrologic Unit 02060008, 1.0 mi (1.6 km) east of Whaleys Crossroads.

Owner: Delaware Department of Highways and Transportation.

AQUIFER.--Columbia Deposits.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 1 in (0.03 m), depth 25 ft (7.6 m), well point 22 to 25 ft (6.7 to 7.6 m).

DATUM.--Altitude of land-surface datum is about 50 ft (15.2 m). Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--September 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.99 ft (1.52 m) below land-surface datum, Mar. 20, 1963; lowest measured, 12.18 ft (3.71 m) below land-surface datum, Oct. 16, 1962, Sept. 8, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	7.07	NOV 21	6.34	JAN 13	5.87	APR 9	7.25	JUL 2	10.03	SEP 27	11.22
21	6.72	DEC 22	7.01	MAR 1	6.90	MAY 20	8.40	AUG 10	10.47		

GROUND-WATER LEVELS

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MARYLAND

ALLEGANY COUNTY

394024078273401. Local number, A11-Ah 1.

LOCATION.--Lat 39°40'24", long 78°27'34", Hydrologic Unit 02070003, on Fifteen Mile Creek, 2.8 mi (4.5 km) southeast of Pratt.

Owner: Green Ridge State Forest.

AQUIFER.--Jennings Formation.

WELL CHARACTERISTICS.--Drilled unused artesian (?) well, diameter 8 in (0.20 m), reported depth 300 ft (91.4 m), measured depth 113 ft (34.4 m), cased to unknown depth, open hole.

DATUM.--Altitude of land-surface datum is 720 ft (219 m). Measuring point: Top of sanitary seal in casing, 0.3 ft (0.09 m) above land-surface datum.

REMARKS.--Water level was deeper than 40 ft (12 m) below land-surface datum on Nov. 19, 1969, and Feb. 12, 1970, when well was being pumped.

PERIOD OF RECORD.--December 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.88 ft (0.57 m) below land-surface datum, Jan. 2, 1976; lowest measured, 22.80 ft (6.95 m) below land-surface datum, July 16, 1968.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR October 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	2.93	JAN 2	1.88	MAR 29	2.68	JUN 9	4.46	AUG 24	5.37		
DEC 9	4.37	FEB 23	3.13	MAY 11	4.47	JUL 1	4.48				

ANNE ARUNDEL COUNTY

391208076353501. Local number, AA-Ad 10.

LOCATION.--Lat 39°12'08", long 76°35'35", Hydrologic Unit 02060003, at Curtis Bay.

Owner: U.S. Army Reserve Center.

AQUIFER.--Patapsco Formation.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 to 6 in (0.20 to 0.15 m), depth 109 ft (33.2 m), length of casing and position of screen unknown.

DATUM.--Altitude of land-surface datum is 45 ft (14 m). Measuring point: Top of casing, 1.0 ft (0.30 m) above land-surface datum.

PERIOD OF RECORD.--August 1944, January 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.96 ft (9.13 m) below land-surface datum, June 18, 1953; lowest measured, 36.56 ft (11.14 m) below land-surface datum, Apr. 21, 1944.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	32.19	NOV 19	32.16	FEB 10	32.22	MAY 6	32.12	SEP 27	32.59		
NOV 13	32.78	DEC 29	32.50	MAR 18	32.44	JUL 2	32.53				

390303076463201. Local number, AA-Cb 1.

LOCATION.--Lat 39°03'03", long 76°46'32", Hydrologic Unit 02060006, on Duvall Bridge Rd., Fort George G. Meade.

Owner: U.S. Army.

AQUIFER.--Patuxent Formation.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 505 ft (153.9 m), cased to 485 ft (147.8 m), screened 485 to 505 ft (147.8 to 153.9 m).

DATUM.--Altitude of land-surface datum is 126 ft (38 m). Measuring point: Top lip of 3 in (0.08 m) extension pipe, 3.35 ft (1.02 m) above land-surface datum.

REMARKS.--Equipped with water-stage recorder during many periods.

PERIOD OF RECORD.--March 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.60 ft (12.37 m) below land-surface datum, May 1, 1962; lowest measured, 67.98 ft (20.72 m) below land-surface datum, Aug. 7, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 6	64.43	DEC 16	64.98	JAN 22	65.37	APR 13	63.30	JUL 12	67.03		
NOV 17	64.56	31	65.59	MAR 10	65.47	MAY 20	64.58	AUG 20	66.07		

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

390423076432001. Local number, AA-Cc 40.

LOCATION.--Lat 39°04'23" long 76°43'20", Hydrologic Unit 02060006, on Rifle Range Rd., Fort George G. Meade.

Owner: U.S. Army.

AQUIFER.--Patapsco Formation.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 238 ft (72.5 m), cased to 208 ft (63.4 m), screened 208 to 238 ft (63.4 to 72.5 m).

DATUM.--Altitude of land-surface datum is 138 ft (42 m). Measuring point: Top of 1.5 in (0.04 m) coupling, 1.7 ft (0.52 m) above land-surface datum.

REMARKS.--Equipped with water-stage recorder Dec. 4, 1959, to July 21, 1960.

PERIOD OF RECORD.--December 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.58 ft (12.98 m) below land-surface datum, Mar. 25, 1961; lowest measured, 49.22 ft (15.00 m), June 2, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 6	45.23	DEC 16	46.18	JAN 22	44.79	APR 13	45.07	JUL 12	46.08		
NOV 17	45.38	31	44.91	MAR 10	46.31	MAY 20	45.45	AUG 20	46.87		

BALTIMORE CITY

391617076322001. Local number, 2SSE-1.

LOCATION.--Lat 39°16'17", long 76°32'20", Hydrologic Unit 02060003, near Holabird Avenue and Pumphrey Street, at Fort Holabird, Baltimore.

Owner: U.S. Army.

AQUIFER.--Patuxent Formation.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.30 m), depth 290 ft (88.4 m), length of casing and position of screen unknown.

DATUM.--Altitude of land-surface datum is 30 ft (9.1 m). Measuring point: Top of casing, 1.8 ft (0.55 m) above land-surface datum.

PERIOD OF RECORD.--1934, April 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.70 ft (17.59 m) below land-surface datum, Jan. 31, 1967; lowest measured, 103.70 ft (31.61 m), Oct. 15, 1948.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	61.54	DEC 29	58.07	MAR 18	59.56	JUL 2	73.48	SEP 27	43.15		
NOV 19	59.33	FEB 10	58.48	MAY 6	64.14	AUG 6	72.24				

BALTIMORE COUNTY

393102076341801. Local number, Bal-Ce 21.

LOCATION.--Lat 39°31'02", long 76°34'18", Hydrologic Unit 02060003, on Paper Mill Rd, about 0.2 mi (0.3 km) west of Jacksonville.

Owner: Maryland National Guard.

AQUIFER.--Loch Raven Schist (Wissahickon Group), revised.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 10 to 6 in (0.25 to 0.15 m), depth 350 ft (106.7 m), cased to 33 ft (10.1 m), open hole.

DATUM.--Altitude of land-surface datum is 536 ft (163 m). Measuring point: Top of casing, 2 ft (0.61 m) above land-surface datum.

PERIOD OF RECORD.--November and December 1955, November 1956 through September 1975, discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.60 ft (3.84 m) below land-surface datum, June 23, 1972; lowest measured, 21.54 ft (6.57 m) below land-surface datum, Feb. 10, 1966.

CALVERT COUNTY

381954076272101. Local number, Cal-Gd 5.

LOCATION.--Lat 38°19'54", long 76°27'21", Hydrologic Unit 02060006, at the Lord Calvert Yacht Club, about 0.5 mi (0.8 km) northeast of Solomons.

Owner: Calvert Marina.

AQUIFER.--Piney Point Formation.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.20 m), depth 248 ft (75.6 m), cased to 233 ft (71.0 m), screened 233 to 248 ft (71.0 to 75.6 m).

DATUM.--Altitude of land-surface datum is 10 ft (3.0 m). Measuring point: Top of hole in domed cap, 3.7 ft (1.13 m) below land-surface datum.

REMARKS.--Equipped with water-stage recorder Oct. 14, 1949, to Dec. 3, 1957.

PERIOD OF RECORD.--1942, January 1944, October 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level reported, 15 ft (4.6 m) below land-surface datum, 1942; lowest measured, 56.5 ft (17.2 m) below land-surface datum, Jan. 15, 1944.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 25	27.43	DEC 30	27.57	MAR 10	30.92	JUN 10	29.51	AUG 24	35.74		
DEC 18	27.54	FEB 3	28.22	APR 13	29.15	JUL 14	31.51				

MARYLAND--Continued

CALVERT COUNTY--Continued

381952076270901. Local number, Cal-Gd 6.

LOCATION.--Lat 38°19'52", long 76°27'09", Hydrologic Unit 02060006, at the Lord Calvert Yacht Club, about 0.5 mi (0.8 km) northeast of Solomons.

Owner: Calvert Marina.

AQUIFER.--Aquia Formation.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 to 6 in (0.20 to 0.15 m), depth 493 ft (150.3 m), cased to 472 ft (143.9 m), screened 469 to 493 ft (143.0 to 150.3 m).

DATUM.--Altitude of land-surface datum is 10 ft (3.0 m). Measuring point: Top of pump base, 10 ft (3.0 m) above land-surface datum.

REMARKS.--Equipped with water-stage recorder Oct. 19, 1949, to Feb. 25, 1960.

PERIOD OF RECORD.--1942, January 1944, October 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level reported, at land-surface datum, 1942; lowest measured, 58.9 ft (17.95 m) below land-surface datum, Jan. 13, 1944.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	44.35	DEC 18	44.09	FEB 3	44.78	APR 13	44.19	JUL 14	47.73		
NOV 14	44.09	30	44.18	MAR 10	43.70	JUN 10	45.93	AUG 24	48.99		

CARROLL COUNTY

393638076510001. Local number, Car-Bf 1.

LOCATION.--Lat 39°36'38", long 76°51'00", Hydrologic Unit 02060003, on Hillcrest Street, Hampstead.

Owner: Town of Hampstead.

AQUIFER.--Prettyboy Schist (Wissahickon Group), revised.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.20 m), depth 407 ft (124.1 m), cased to about 65 ft (19.8 m), open hole.

DATUM.--Altitude of land-surface datum is 933 ft (284 m). Measuring point: Floor of well house at land-surface datum.

REMARKS.--Equipped with water-stage recorder Apr. 15, 1952, to Nov. 7, 1962.

PERIOD OF RECORD.--September and December 1946, April and September 1947, February 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 52.30 ft (15.94 m) below land-surface datum, May 13, 1952; lowest measured, 76.26 ft (23.24 m) below land-surface datum, Feb. 10, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 4	60.59	MAR 1	61.78	MAY 13	64.74	AUG 18	68.30				
29	63.20	31	63.88	JUL 1	65.94						

CHARLES COUNTY

383422077114601. Local number, Ch-Cb 7.

LOCATION.--Lat 38°34'22", long 77°11'46", Hydrologic Unit 02070011, at Caffee and Greenslade Roads, about 2.5 mi (4.0 km) southwest of Indian Head.

Owner: U.S. Navy: Naval Ordnance Station.

AQUIFER.--Patapsco Formation.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 to 6 in (0.20 to 0.15 m), depth 400 ft (121.9 m), cased to 400 ft (121.9 m), screened 154 to 167 ft (46.9 to 50.9 m).

DATUM.--Altitude of land-surface datum is 36 ft (11 m). Measuring point: Top of casing at land-surface datum.

REMARKS.--Equipped with water-stage recorder Sept. 21, 1953, to July 8, 1965.

PERIOD OF RECORD.--March and April 1952, August 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.35 ft (17.48 m) below land-surface datum, Apr. 18, 1952; lowest measured, 88.58 ft (27.00 m) below land-surface datum, Oct. 22, 1968.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	78.03	DEC 16	77.86	FEB 4	79.42	APR 15	80.54	JUL 15	74.58		
NOV 20	77.91	31	77.62	MAR 15	80.62	JUN 8	75.78	AUG 26	73.23		

GROUND-WATER LEVELS

MARYLAND--Continued

DORCHESTER COUNTY

383346076030301. Local number, Dor-Ce 21.

LOCATION.--Lat 38°33'46", long 76°03'03", Hydrologic Unit 02060005, on Shoal Creek about 1.5 mi (2.4 km) southeast of Cambridge.

Owner: Eastern Shore State Hospital.

AQUIFER.--Piney Point Formation.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 to 4.5 in (0.20 to 0.11 m), depth 368 ft (112.2 m), cased to 368 ft (112.2 m).

DATUM.--Altitude of land-surface datum is 12 ft (3.7 m). Measuring point: Top casing at land-surface datum.

REMARKS.--Equipped with water-stage recorder Aug. 23, 1956, to Nov. 6, 1958, and Sept. 11, 1965, to Oct. 13, 1966.

PERIOD OF RECORD.--August 1914, February 1952, August 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level reported, 14 ft (4.3 m) below land-surface datum, August 1914; lowest measured, 137.49 ft (41.91 m) below land-surface datum, Feb. 8, 1962, affected by pumpage of nearby well.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	93.46	JAN 5	92.20	APR 13	89.89	JUL 2	88.88	SEP 22	88.78		
NOV 11	95.12	MAR 3	90.64	MAY 21	88.84	AUG 12	89.43				

GARRETT COUNTY

394016078581601. Local number, Gar-Ag 1.

LOCATION.--Lat 39°40'16", long 78°58'16", Hydrologic Unit 02070002, in the Savage River valley, 2.5 mi (4.0 km) northwest of Frostburg.

Owner: Town of Frostburg.

AQUIFER.--Pocono Sandstone or Greenbrier Limestone.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.20 m), depth 30 ft (9.1 m), cased to unknown depth, open hole.

DATUM.--Altitude of land-surface datum is 2,530 ft (771 m). Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--October 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.71 ft (1.74 m) below land-surface datum, Jan. 14, 1950; lowest measured, 9.37 ft (2.86 m) below land-surface datum, Nov. 24, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	6.52	JAN 2	6.83	FEB 24	6.71	APR 22	6.71	JUN 23	6.77	AUG 25	7.12
NOV 24	6.64	23	6.98	MAR 24	6.60	MAY 21	6.73	JUL 26	6.85	SEP 22	7.33
DEC 23	6.71										

HARFORD COUNTY

392343076161901. Local number, Har-Ed 24.

LOCATION.--Lat 39°23'43", long 76°16'19", Hydrologic Unit 02060003, at Bush River Road and 29th Street, about 2 mi (3.2 km) southeast of Edgewood.

Owner: U.S. Army: Edgewood Arsenal.

AQUIFER.--Patapsco Formation.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 18 to 10 in (0.46 to 0.25 m), depth 149 ft (45.4 m), cased to 120 ft (36.6 m), screened 120 to 135 ft (36.6 to 41.1 m).

DATUM.--Altitude of land-surface datum is 13 ft (4.0 m). Measuring point: Top of casing, 1.15 ft (0.35 m) above land-surface datum.

REMARKS.--Equipped with water-stage recorder Jan. 24, 1950, to June 6, 1961.

PERIOD OF RECORD.--April 1944, September 1949, January 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.24 ft (2.51 m) below land-surface datum, Apr. 13, 1944; lowest measured, 38.40 ft (11.70 m) below land-surface datum, Apr. 23, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 30	9.85	FEB 26	10.20	APR 5	9.83	JUN 29	9.52	AUG 17	9.58		

GROUND-WATER LEVELS

337

MARYLAND--Continued

MONTGOMERY COUNTY

390434076573002. Local number, Mont-Eh 20.

LOCATION.--Lat 39°04'34", long 76°57'30", Hydrologic Unit 02070010, at Sate Highway 196 and Fairland Road, Fairland.

Owner: Cities Service Oil Co.

AQUIFER.--Wissahickon Group, revised.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5.6 in (0.14 m), depth 103 ft (31.4 m), cased to 50 ft (15.2 m), open hole.

DATUM.--Altitude of land-surface datum is 410 ft (125 m). Measuring point: West side of bell housing at inside of lip at land-surface datum.

PERIOD OF RECORD.--March 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.39 ft (1.34 m) below land-surface datum, June 25, 1972; lowest measured, 13.86 ft (4.22 m) below land-surface datum, Nov. 25, 1974.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	10.23	DEC 30	11.02	MAR 24	10.78	MAY 25	12.02	JUL 23	12.68	AUG 25	12.91
NOV 25	10.84	JAN 23	10.86	APR 21	11.37	JUN 25	12.37	AUG 18	12.62	SEP 23	12.30
DEC 24	11.84	FEB 25	10.26								

WASHINGTON COUNTY

393638078001301. Local number, Wa-Be 2.

LOCATION.--Lat 39°36'38", long 78°00'13", Hydrologic Unit 02070004, about 1.2 mi (1.9 km) southeast of Big Pool.

Owner: Fort Frederick State Park.

AQUIFER.--Romney Shale.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 42 in (1.07 m), depth 43 ft (13.1 m), cribbed with stone.

DATUM.--Altitude of land-surface datum is 470 ft (143 m). Measuring point: Top of stone sill, 0.8 ft (0.24 m) above land-surface datum.

PERIOD OF RECORD.--December 1949, June 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.90 ft (5.46 m) below land-surface datum, May 15, 1972; lowest measured, 36.92 ft (11.25 m) below land-surface datum, Jan. 11, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	25.19	JAN 2	31.05	MAR 29	32.40	JUN 16	33.90	AUG 27	34.22		
DEC 9	30.45	FEB 23	30.94	MAY 11	32.05	JUL 20	34.25				

WICOMICO COUNTY

382037075310801. Local number, Wi-Cf 3.

LOCATION.--Lat 38°20'37", long 75°31'08", Hydrologic Unit 02060007, on Airport Road, about 5 mi (8.0 km) southeast of Salisbury.

Owner: Salisbury Wicomico Airport.

AQUIFER.--Columbia Deposits.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 16 in (0.41 m), depth 109 ft (33.2 m), cased to 90 ft (27.4 m), screened 90 to 108 ft (27.4 to 32.9 m).

DATUM.--Altitude of land-surface datum is 45 ft (14 m). Measuring point: Top of casing, 2.0 ft (0.61 m) above land-surface datum.

REMARKS.--Equipped with water-stage recorder Aug. 2, 1949, to Apr. 11, 1960, and Aug. 29, 1963, to Aug. 20, 1968.

PERIOD OF RECORD.--October 1942, September 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.90 ft (0.58 m) below land-surface datum, May 7, 1958; lowest measured, 13.44 ft (4.10 m) below land-surface datum, Sept. 18, 1947.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	7.21	JAN 5	5.55	APR 5	7.20	JUN 30	8.54	SEP 21	9.19		
NOV 19	6.86	MAR 3	6.87	MAY 19	7.16	AUG 11	8.31				

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

LOCAL IDENT- I- FIER	STATION	NUMBER	GEO- LOGIC UNIT	DATE OF SAMPLE	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)
KENT COUNTY, DELAWARE										
JD45 6	390619075302301	124PNPN	76-02-09	452	35	506	8.0	--	0	
JE31 1	390741075290201	122CSLD	76-02-09	232	20	288	7.9	--	0	
JE31 2	390734075291501	122CSLD	76-02-09	230	25	279	7.9	--	0	
JE32 3	390738075285801	122CSLD	76-02-09	252	20	285	7.8	--	0	
JE32 5	390740075285902	124PNPN	76-02-09	580	25	587	8.2	--	0	
SUSSEX COUNTY										
QJ32 16	383250075034701	122PCMK	76-02-12	210	5.0	255	6.6	16.0	85	
ANNE ARUNDEL COUNTY, MARYLAND										
CF 118 735564	390207076292502	217PPSC	76-05-25	540	130	--	5.0	15.0	1	
CF 119 235562	390203076292801	217PPSC	76-08-19	554	130	--	5.4	15.0	10	
DE 125 734914	385526076334801	211MGTY	76-02-28	488	31	--	6.6	16.0	1	
EE 64 735693	385304076301701	211MGTY	76-06-14	538	20	--	--	17.0	1	
BALTIMORE COUNTY										
DG 116	392630076234701	300PRDP	75-10-03	100	225	--	7.4	--	--	
CAROLINE COUNTY										
BD 54 720085	390421075473001	122CSLD	76-02-26	168	65	--	--	--	1	
BD 55 730076	390359075461001	124PNPN	76-02-26	335	65	--	--	--	1	
CARROLL COUNTY										
AE 56 700209	394121076575301	300MRBG	75-10-03	185	930	--	7.0	--	--	
AE 59 731715	394023076580801	300MRBG	75-10-02	135	740	--	7.2	--	--	
AE 64 731729	394224076591101	300MRBG	75-10-01	90	850	--	6.5	--	--	
AE 66 732032	394223076593801	300MRBG	75-10-01	100	870	--	7.3	--	--	
AF 87 732467	394126076523301	300PRTB	75-10-02	128	850	--	6.8	--	--	
BF 95 731030	393831076501401	300PRTB	75-10-29	248	830	--	6.4	--	--	
BF 172 732531	393746076521301	300PRTB	75-10-29	85	800	--	7.4	--	--	
BF 177 732623	393902076500401	300PRTB	75-10-29	355	850	--	5.9	--	--	
BG 17 732145	393828076495801	300PRTB	75-10-29	75	830	--	5.6	--	--	
BG 31 732404	393950076484301	300PRTB	75-10-29	110	825	--	6.6	--	--	
CD 42 733098	393231077020901	300MRBG	75-10-22	94	820	--	6.1	--	--	
CE 204 680303	393414076571001	300PRTB	75-10-29	455	710	--	6.8	--	--	
DC 74 720048	392836077061401	300PRTB	75-10-15	100	790	--	6.8	--	--	
DC 82 730048	392832077061501	300PRTB	75-10-14	105	815	--	5.4	--	--	
DC 102	392753077054501	300PRTB	75-10-14	54	740	--	6.2	--	--	
DC 103	392752077054501	300PRTB	75-10-14	--	735	--	6.6	--	--	
DC 135 732029	392924077060801	300PRTB	75-10-14	220	630	--	7.8	--	--	
DC 153 700392	392544077061601	300PRTB	75-10-15	60	795	--	5.5	--	--	
DC 157 732289	392541077050201	300PRTB	75-10-17	65	730	--	6.4	--	--	
DC 162 731709	392508077071601	300PRTB	75-10-16	265	760	--	6.8	--	--	
DC 163 710236	392850077053501	300PRTB	75-10-20	60	640	--	7.8	--	--	
DC 164 710262	392857077052901	300PRTB	75-10-22	100	660	--	7.5	--	--	
DD 21 690397	392533077031101	300PRTB	75-10-16	141	820	--	6.4	--	--	
DD 22 720076	392520077012801	300PRTB	75-10-16	56	640	--	7.2	--	--	
DD 23 710301	392551077020601	300PRTB	75-10-16	306	760	--	6.3	--	--	
DD 25 720067	392501077004401	300PRTB	75-10-16	100	600	--	6.8	--	--	
DD 26 70244	392557077005401	300PRTB	75-10-16	100	785	--	6.5	--	--	
DD 27 660548	392632077012501	300PRTB	75-10-16	172	760	--	6.7	--	--	
DD 35 680491	392839077040601	300PRTB	75-10-16	98	825	--	5.6	--	--	
DD 49 731064	392921077000101	300PRTB	75-10-01	130	750	--	7.1	--	--	
DD 78 731801	392759077011201	300PRTB	75-10-01	85	680	--	6.9	--	--	
DD 79 731874	392922077010901	300PRTB	75-10-01	200	680	--	6.7	--	--	
DD 84 731327	392713077042001	300PRTB	75-10-27	85	825	--	6.2	--	--	
DD 93 730803	392501077025401	300PRTB	75-10-22	85	795	--	5.7	--	--	
DD 94 732820	392930077044601	300PRTB	75-10-20	120	690	--	7.6	--	--	

Geologic unit (aquifer):

122CSLD - Cheswold Aquifer
 122PCMK - Pocomoke Aquifer
 124PNPN - Piney Point Formation
 211MGTY - Magothy Formation

217PPSC - Patapsco Formation
 300MRBG - Marburg Formation
 300PRDP - Port Deposit Gneiss
 300PRTB - Prettyboy Schist

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

LOCAL IDENT- IFIER	DATE OF SAMPLE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	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)
KENT COUNTY, DELAWARE										
JD45 6	76-02-09	85	0	18	9.8	82	9.2	322	264	3.3
JE31 1	76-02-09	120	0	39	6.0	12	3.0	172	141	2.4
JE31 2	76-02-09	100	0	32	5.3	20	3.0	168	138	3.0
JE32 3	76-02-09	120	0	40	6.0	12	3.0	173	142	2.5
JE32 5	76-02-09	58	0	11	7.5	120	10	370	303	6.7
SUSSEX COUNTY										
QJ32 16	76-02-12	89	0	23	7.6	10	3.3	121	99	3.8
ANNE ARUNDEL COUNTY, MARYLAND										
CF 118 735564	76-05-25	23	19	4.1	3.1	1.0	1.5	5	4	33
CF 119 235562	76-08-19	18	9	4.1	2.0	.8	1.4	12	10	35
QE 125 734914	76-02-28	54	18	16	3.5	1.4	2.4	44	36	21
EE 64 735693	76-06-14	110	52	34	5.2	2.2	2.8	66	54	50
BALTIMORE COUNTY										
DG 116	75-10-03	51	0	11	5.6	--	--	63	52	--
CAROLINE COUNTY										
BD 54 720085	76-02-26	93	0	33	2.6	6.0	2.0	120	98	2.9
BD 55 730076	76-02-26	66	0	18	5.2	130	6.9	423	347	4.8
CARROLL COUNTY										
AE 56 700209	75-10-03	20	0	6.1	1.2	--	--	30	25	--
AE 59 731715	75-10-02	99	20	35	2.9	--	--	97	80	--
AE 64 731729	75-10-01	38	31	6.8	5.2	--	--	9	7	--
AE 66 732032	75-10-01	6	0	2.0	.3	--	--	17	14	--
AF 87 732467	75-10-02	40	29	6.2	5.9	--	--	13	11	--
BF 95 731030	75-10-29	21	13	5.0	2.0	--	--	9	7	--
BF 172 732531	75-10-29	110	51	27	9.8	--	--	69	57	--
BF 177 732623	75-10-29	25	20	3.3	4.0	--	--	6	5	--
BG 17 732145	75-10-29	18	11	3.1	2.5	--	--	8	7	--
BG 31 732404	75-10-29	22	8	7.0	1.1	--	--	17	14	--
CD 42 733098	75-10-22	24	0	5.3	2.6	--	--	30	25	--
CE 204 680303	75-10-29	38	20	4.9	6.2	--	--	22	18	--
DC 74 720048	75-10-15	47	0	18	.5	--	--	134	110	--
DC 82 730048	75-10-14	17	10	3.8	1.8	--	--	9	7	--
DC 102	75-10-14	7	0	2.5	.3	--	--	10	8	--
DC 103	75-10-14	11	4	3.7	.5	--	--	9	7	--
DC 135 732029	75-10-14	48	0	17	1.3	--	--	60	49	--
DC 153 700392	75-10-15	18	12	4.0	2.0	--	--	7	6	--
DC 157 732289	75-10-17	30	22	7.0	3.0	--	--	9	7	--
DC 162 731709	75-10-16	37	7	11	2.3	--	--	37	30	--
DC 163 710236	75-10-20	45	5	13	3.0	--	--	48	39	--
DC 164 710262	75-10-22	--	--	--	2.9	--	--	47	39	--
DD 21 690397	75-10-16	17	6	3.5	1.9	--	--	13	11	--
DD 22 720076	75-10-16	26	3	7.1	2.1	--	--	28	23	--
DD 23 710301	75-10-16	61	27	12	7.5	--	--	41	34	--
DD 25 720067	75-10-16	30	6	8.9	1.8	--	--	29	24	--
DD 26 70244	75-10-16	15	10	3.2	1.8	--	--	7	6	--
DD 27 660548	75-10-16	16	6	3.4	1.9	--	--	13	11	--
DD 35 680491	75-10-16	73	27	11	11	--	--	56	46	--
DD 49 731064	75-10-01	48	35	7.5	7.0	--	--	15	12	--
DD 78 731801	75-10-01	17	3	4.0	1.8	--	--	17	14	--
DD 79 731874	75-10-01	25	10	6.2	2.2	--	--	18	15	--
DD 84 731327	75-10-27	36	25	8.0	3.9	--	--	14	11	--
DD 93 730803	75-10-22	--	--	--	2.8	--	--	3	2	--
DD 94 732820	75-10-20	89	5	22	8.2	--	--	102	84	--

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
KENT COUNTY, DELAWARE									
JD45 6	76-02-09	4.6	.8	22	304	308	.10	--	--
JE31 1	76-02-09	3.7	.1	57	212	208	.08	--	--
JE31 2	76-02-09	2.5	.1	50	202	199	.09	--	--
JE32 3	76-02-09	3.6	.1	57	204	210	.07	--	--
JE32 5	76-02-09	5.8	.8	17	366	362	.26	--	--
SUSSEX COUNTY									
QJ32 16	76-02-12	13	.1	38	--	158	.05	.27	11000
ANNE ARUNDEL COUNTY, MARYLAND									
CF 118 735564	76-05-25	.7	.2	8.0	59	64	.01	.01	9900
CF 119 235562	76-08-19	.7	.2	8.1	67	70	.02	.08	12000
DE 125 734914	76-02-28	3.4	2.0	8.8	--	80	.04	.75	24000
EE 64 735693	76-06-14	2.0	.3	9.5	169	161	.23	.20	22000
BALTIMORE COUNTY									
D6 116	75-10-03	--	--	--	--	--	--	--	--
CAROLINE COUNTY									
BD 54 720085	76-02-26	2.0	.2	59	--	167	.01	.01	170
BD 55 730076	76-02-26	3.1	1.5	33	--	411	.04	.10	130
CARROLL COUNTY									
AE 56 700209	75-10-03	1.9	--	--	--	--	.02	--	--
AE 59 731715	75-10-02	7.4	--	--	--	--	3.9	--	--
AE 64 731729	75-10-01	8.4	--	--	--	--	4.7	--	--
AE 66 732032	75-10-01	1.2	--	--	--	--	.01	--	--
AF 87 732467	75-10-02	7.0	--	--	--	--	6.8	--	--
BF 95 731030	75-10-29	3.4	--	--	--	--	4.4	--	--
BF 172 732531	75-10-29	13	--	--	--	--	9.3	--	--
BF 177 732623	75-10-29	3.8	--	--	--	--	6.0	--	--
BG 17 732145	75-10-29	7.7	--	--	--	--	4.8	--	--
BG 31 732404	75-10-29	3.2	--	--	--	--	2.9	--	--
CO 42 733098	75-10-22	4.7	--	--	--	--	.63	--	--
CE 204 680303	75-10-29	4.6	--	--	--	--	8.1	--	--
DC 74 720048	75-10-15	7.0	--	--	--	--	4.7	--	--
DC 82 730048	75-10-14	3.7	--	--	--	--	2.4	--	--
DC 102	75-10-14	1.5	--	--	--	--	.25	--	--
DC 103	75-10-14	3.1	--	--	--	--	1.1	--	--
DC 135 732029	75-10-14	1.9	--	--	--	--	1.5	--	--
DC 153 700392	75-10-15	8.4	--	--	--	--	3.0	--	--
DC 157 732289	75-10-17	5.5	--	--	--	--	7.9	--	--
DC 162 731709	75-10-16	3.1	--	--	--	--	1.4	--	--
DC 163 710236	75-10-20	3.9	--	--	--	--	3.0	--	--
DC 164 710262	75-10-22	2.7	--	--	--	--	3.6	--	--
DD 21 690397	75-10-16	4.6	--	--	--	--	3.0	--	--
DD 22 720076	75-10-16	3.8	--	--	--	--	2.1	--	--
DD 23 710301	75-10-16	11	--	--	--	--	5.6	--	--
DD 25 720067	75-10-16	7.0	--	--	--	--	2.2	--	--
DD 26 70244	75-10-16	7.5	--	--	--	--	2.9	--	--
DD 27 660548	75-10-16	3.6	--	--	--	--	2.1	--	--
DD 35 680491	75-10-16	5.1	--	--	--	--	3.7	--	--
DD 49 731064	75-10-01	7.4	--	--	--	--	6.3	--	--
DD 78 731801	75-10-01	3.2	--	--	--	--	.96	--	--
DD 79 731874	75-10-01	5.6	--	--	--	--	2.0	--	--
DD 84 731327	75-10-27	7.1	--	--	--	--	6.3	--	--
DD 93 730803	75-10-22	3.8	--	--	--	--	4.8	--	--
DD 94 732820	75-10-20	2.2	--	--	--	--	.01	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDE MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
KENT COUNTY, DELAWARE					
JD45 6	76-02-09	0	--	--	0
JE31 1	76-02-09	0	--	--	0
JE31 2	76-02-09	0	--	--	0
JE32 3	76-02-09	0	--	--	0
JE32 5	76-02-09	0	--	--	0
SUSSEX COUNTY					
QJ32 16	76-02-12	--	160	--	--
ANNE ARUNDEL COUNTY, MARYLAND					
CF 118 735564	76-05-25	10000	170	0	180
CF 119 235562	76-08-19	12000	210	0	210
DE 125 734914	76-02-28	--	290	--	--
EE 64 735693	76-06-14	22000	270	0	280
BALTIMORE COUNTY					
D6 116	75-10-03	2300	--	--	20
CAROLINE COUNTY					
BD 54 720085	76-02-26	--	60	--	--
BD 55 730076	76-02-26	--	10	--	--
CARROLL COUNTY					
AE 56 700209	75-10-03	--	--	--	--
AE 59 731715	75-10-02	--	--	--	--
AE 64 731729	75-10-01	--	--	--	--
AE 66 732032	75-10-01	--	--	--	--
AF 87 732467	75-10-02	--	--	--	--
BF 95 731030	75-10-29	--	--	--	--
BF 172 732531	75-10-29	--	--	--	--
BF 177 732623	75-10-29	--	--	--	--
BG 17 732145	75-10-29	--	--	--	--
BG 31 732404	75-10-29	--	--	--	--
CD 42 733098	75-10-22	--	--	--	--
CE 204 680303	75-10-29	--	--	--	--
DC 74 720048	75-10-15	--	--	--	--
DC 82 730048	75-10-14	--	--	--	--
DC 102	75-10-14	--	--	--	--
DC 103	75-10-14	--	--	--	--
DC 135 732029	75-10-14	--	--	--	--
DC 153 700392	75-10-15	--	--	--	--
DC 157 732289	75-10-17	--	--	--	--
DC 162 731709	75-10-16	--	--	--	--
DC 163 710236	75-10-20	--	--	--	--
DC 164 710262	75-10-22	--	--	--	--
DD 21 690397	75-10-16	--	--	--	--
DD 22 720076	75-10-16	--	--	--	--
DD 23 710301	75-10-16	--	--	--	--
DD 25 720067	75-10-16	--	--	--	--
DD 26 70244	75-10-16	--	--	--	--
DD 27 660548	75-10-16	--	--	--	--
DD 35 680491	75-10-16	--	--	--	--
DD 49 731064	75-10-01	--	--	--	--
DD 78 731801	75-10-01	--	--	--	--
DD 79 731874	75-10-01	--	--	--	--
DD 84 731327	75-10-27	--	--	--	--
DD 93 730803	75-10-22	--	--	--	--
DD 94 732820	75-10-20	--	--	--	--

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

LOCAL IDENT- IFIER	STATION	NUMBER	GEO- LOGIC UNIT	DATE OF SAMPLE	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)
CARROLL COUNTY, MARYLAND										
DD 100	732945	392834077021601	300PRTB	75-10-01	100	800	--	6.3	--	--
DD 101	731014	392502077025901	300PRTB	75-10-22	125	800	--	6.3	--	--
DD 102	73 889	392811077042901	300PRTB	75-10-20	120	800	--	5.3	--	--
DD 108	731374	392824077042201	300PRTB	75-10-20	160	810	--	9.9	--	--
DD 109	731811	392736077023701	300PRTB	75-10-20	205	840	--	6.6	--	--
DD 110	730305	392608077011201	300PRTB	75-10-22	105	800	--	6.7	--	--
DD 116	72 863	392748077004501	300PRTB	75-10-20	265	760	--	7.5	--	--
DD 133	731199	392729077025501	300PRTB	75-10-20	120	830	--	6.0	--	--
DD 137	700342	392701077040401	300PRTB	75-10-28	306	760	--	5.8	--	--
DD 146	690502	392949077003901	300PRTB	75-10-01	212	750	--	6.6	--	--
DD 159	68 197	392717077001501	300PRTB	75-10-01	180	800	--	5.2	--	--
DD 162	67 121	392855077001201	300PRTB	75-10-01	245	550	--	6.7	--	--
DD 164	720745	392844077040401	300PRTB	75-10-17	95	830	--	6.4	--	--
DD 166	731596	392516077012501	300PRTB	75-10-17	203	640	--	6.8	--	--
DD 185	3772	392736077034001	300PRTB	75-10-01	107	860	--	4.2	--	--
DD 186	69009	392804077032701	300PRTB	75-10-01	66	730	--	6.0	--	--
EC 21	710465	392316077072201	300PRTB	75-10-14	95	740	--	6.3	--	--
EC 31	731068	392240077061501	300PRTB	75-10-14	105	670	--	6.8	--	--
EC 37	710228	392443077051001	300PRTB	75-10-17	122	720	--	6.2	--	--
EC 69	720752	392415077055601	300PRTB	75-10-14	158	745	--	6.6	--	--
EC 77	720849	392346077054701	300PRTB	75-10-16	96	680	--	6.1	--	--
ED 27	700315	392231077020301	300PRTB	75-10-28	100	620	--	6.5	--	--
ED 32	731696	392415077010501	300PRTB	75-10-17	100	645	--	7.5	--	--
ED 54	731047	392402077010101	300PRTB	75-10-27	100	600	--	6.9	--	--
ED 80	710152	392450077020101	300PRTB	75-10-28	150	795	--	7.3	--	--
ED 82	670447	392331077042101	300PRTB	75-10-28	80	700	--	6.8	--	--
ED 85	720293	392420077030001	300PRTB	75-10-28	200	760	--	6.3	--	--
ED 99	690060	392235077043001	300PRTB	75-10-28	110	630	--	5.7	--	--
ED 100	732061	392305077002301	300PRTB	75-10-28	145	595	--	7.1	--	--
CHARLES COUNTY										
BF 141	730190	383819076501302	211MGTY	76-01-07	630	202	--	7.4	17.0	1
DORCHESTER COUNTY										
BG 59	730612	383708075503801	124PNPN	76-09-23	536	25	870	8.5	18.0	15
HARFORD COUNTY										
DE 128		392726076120401	112TLBT	76-02-18	65	30	--	--	--	1
DE 129	732535	392726076120402	217PTMC	76-02-18	166	30	--	--	--	2
ST. MARYS COUNTY										
FF 36	731478	380719076251801	125AQUI	75-10-29	618	7.0	--	8.7	21.0	1
WORCESTER COUNTY										
AH 33	72 62	382630075032201	122MNKN	76-03-08	450	5.0	550	7.1	15.0	360
			122MNKN	76-08-03	450	5.0	--	6.7	19.0	100
			122MNKN	76-09-02	450	5.0	--	--	--	--
AH 34	72 59	382632075031901	122MNKN	76-05-17	450	5.0	--	--	--	--
AH 34	72 59	382632075031901	122MNKN	76-09-02	450	5.0	--	--	--	--
			122MNKN	76-09-22	450	5.0	--	--	--	--
AH 36	730517	382635075030602	122MNKN	75-10-03	431	10	--	--	15.4	140
AH 37	730518	382635075030603	122MNKN	75-10-30	478	10	--	--	15.5	41
AH 38	730689	382638075033001	122MNKN	76-08-03	435	4.0	400	6.7	19.0	120
			122MNKN	76-08-26	435	4.0	--	--	--	--
			122MNKN	76-08-26	435	4.0	--	--	--	--
AH 39	730690	382649075033701	122MNKN	76-08-03	420	7.0	450	--	19.0	45
BG 49	730520	382038075065901	122MNKN	75-10-16	244	15	--	--	14.7	6
DG 21	730519	381427075081102	122MNKN	75-10-09	370	6.0	365	--	16.0	2

Geologic unit (aquifer):

112TLBT - Talbot Formation
 122MNKN - Manokin Aquifer
 124PNPN - Piney Point Formation
 125AQUI - Aquia Formation

211MGTY - Magothy Formation
 217PTMC - Potomac Group
 300PRTB - Prettyboy Schist

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

LOCAL IDENT- IFIER	DATE OF SAMPLE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
CARROLL COUNTY, MARYLAND										
DD 100 732945	75-10-01	8	0	2.9	.3	--	--	11	9	--
DD 101 731014	75-10-22	55	22	11	6.8	--	--	41	34	--
DD 102 73 889	75-10-20	77	70	11	12	--	--	9	7	--
DD 108 731374	75-10-20	110	45	12	19	--	--	77	63	--
DD 109 731811	75-10-20	18	0	4.0	1.9	--	--	22	18	--
DD 110 730305	75-10-22	82	58	13	12	--	--	29	24	--
DD 116 72 863	75-10-20	110	31	21	13	--	--	91	75	--
DD 133 731199	75-10-20	12	1	2.9	1.2	--	--	14	11	--
DD 137 700342	75-10-28	38	29	8.2	4.3	--	--	11	9	--
DD 146 690502	75-10-01	7	0	1.6	.8	--	--	10	8	--
DD 159 68 197	75-10-01	38	33	7.2	4.8	--	--	6	5	--
DD 162 67 121	75-10-01	27	6	6.2	2.9	--	--	26	21	--
DD 164 720745	75-10-17	56	33	17	3.2	--	--	27	22	--
DD 166 731596	75-10-17	6	0	2.0	.2	--	--	8	7	--
DD 185 3772	75-10-01	220	220	31	35	--	--	0	0	--
DD 186 69009	75-10-01	13	9	2.9	1.5	--	--	6	5	--
EC 21 710465	75-10-14	4	0	1.0	.3	--	--	10	8	--
EC 31 731068	75-10-14	20	2	6.0	1.3	--	--	22	18	--
EC 37 710228	75-10-17	15	7	3.6	1.5	--	--	10	8	--
EC 69 720752	75-10-14	22	0	6.5	1.5	--	--	30	25	--
EC 77 720849	75-10-16	30	12	3.9	5.0	--	--	22	18	--
ED 27 700315	75-10-28	21	10	3.9	2.7	--	--	13	11	--
ED 32 731696	75-10-17	33	3	10	2.0	--	--	37	30	--
ED 54 731047	75-10-27	27	6	6.8	2.5	--	--	26	21	--
ED 80 710152	75-10-28	37	3	9.0	3.6	--	--	42	34	--
ED 82 670447	75-10-28	21	13	4.0	2.6	--	--	10	8	--
ED 85 720293	75-10-28	27	10	5.0	3.5	--	--	21	17	--
ED 99 690060	75-10-28	24	20	2.9	4.0	--	--	5	4	--
ED 100 732061	75-10-28	15	0	3.0	1.9	--	--	19	16	--
CHARLES COUNTY										
BF 141 730190	76-01-07	120	0	29	12	11	10	185	152	8.2
DORCHESTER COUNTY										
BG 59 730612	76-09-23	59	0	20	2.2	220	7.9	534	438	24
HARFORD COUNTY										
DE 128	76-02-18	12	5	1.5	1.9	1.8	8.0	8	7	9.0
DE 129 732535	76-02-18	21	13	4.0	2.7	3.3	1.2	10	8	2.5
ST. MARYS COUNTY										
FF 36 731478	75-10-29	11	0	3.9	.2	120	4.3	305	250	14
WORCESTER COUNTY										
AH 33 72 62	76-03-08	84	0	22	7.0	60	4.7	122	100	5.9
	76-08-03	82	0	23	6.0	65	4.9	116	95	.1
	76-09-02	--	--	--	--	--	--	--	--	--
AH 34 72 59	76-05-17	--	--	--	--	--	--	--	--	.5
AH 34 72 59	76-09-02	--	--	--	--	--	--	--	--	--
	76-09-22	--	--	--	--	--	--	--	--	--
AH 36 730517	75-10-03	110	6	34	6.8	110	6.1	130	107	2.3
AH 37 730518	75-10-30	110	0	21	15	220	11	210	172	6.5
AH 38 730689	76-08-03	77	0	24	4.1	39	4.0	107	88	.2
	76-08-26	--	--	--	--	--	--	--	--	--
	76-08-26	--	--	--	--	--	--	--	--	--
AH 39 730690	76-08-03	88	3	27	5.0	39	4.0	104	85	.1
BG 49 730520	75-10-16	120	0	33	10	37	10	245	201	2.9
DG 21 730519	75-10-09	150	0	39	13	44	8.9	272	223	2.0

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
CARROLL COUNTY, MARYLAND									
DD 100 732945	75-10-01	3.8	--	--	--	--	.53	--	--
DD 101 731014	75-10-22	11	--	--	--	--	5.6	--	--
DD 102 73 889	75-10-20	70	--	--	--	--	7.7	--	--
DD 108 731374	75-10-20	21	--	--	--	--	5.5	--	--
DD 109 731811	75-10-20	2.5	--	--	--	--	1.6	--	--
DD 110 730305	75-10-22	56	--	--	--	--	6.6	--	--
DD 116 72 863	75-10-20	6.4	--	--	--	--	3.9	--	--
DD 133 731199	75-10-20	6.2	--	--	--	--	1.1	--	--
DD 137 700342	75-10-28	13	--	--	--	--	8.6	--	--
DD 146 690502	75-10-01	1.7	--	--	--	--	.77	--	--
DD 159 68 197	75-10-01	16	--	--	--	--	11	--	--
DD 162 67 121	75-10-01	1.7	--	--	--	--	.13	--	--
DD 164 720745	75-10-17	65	--	--	--	--	3.4	--	--
DD 166 731596	75-10-17	1.9	--	--	--	--	.31	--	--
DD 185 3772	75-10-01	130	--	--	--	--	110	--	--
DD 186 69009	75-10-01	5.1	--	--	--	--	2.9	--	--
EC 21 710465	75-10-14	1.4	--	--	--	--	.13	--	--
EC 31 731068	75-10-14	2.9	--	--	--	--	2.2	--	--
EC 37 710228	75-10-17	4.3	--	--	--	--	1.0	--	--
EC 69 720752	75-10-14	3.9	--	--	--	--	.27	--	--
EC 77 720849	75-10-16	6.6	--	--	--	--	1.8	--	--
ED 27 700315	75-10-28	3.9	--	--	--	--	3.7	--	--
ED 32 731696	75-10-17	4.2	--	--	--	--	3.3	--	--
ED 54 731047	75-10-27	2.4	--	--	--	--	2.6	--	--
ED 80 710152	75-10-28	4.5	--	--	--	--	3.8	--	--
ED 82 670447	75-10-28	3.8	--	--	--	--	2.9	--	--
ED 85 720293	75-10-28	7.3	--	--	--	--	6.2	--	--
ED 99 690060	75-10-28	3.5	--	--	--	--	5.1	--	--
ED 100 732061	75-10-28	1.7	--	--	--	--	7.8	--	--
CHARLES COUNTY									
BF 141 730190	76-01-07	2.2	.3	8.8	--	173	.02	.06	530
DORCHESTER COUNTY									
BG 59 730612	76-09-23	25	1.3	21	600	585	.13	.09	120
HARFORD COUNTY									
DE 128	76-02-18	3.0	.1	6.5	--	36	2.2	.01	150
DE 129 732535	76-02-18	7.0	.1	9.0	--	35	5.2	.01	110
ST. MARYS COUNTY									
FF 36 731478	75-10-29	2.5	.8	12	--	308	.01	.31	180
WORCESTER COUNTY									
AM 33 72 62	76-03-08	91	.0	32	--	283	.04	.20	14000
	76-08-03	99	.1	33	327	302	.13	.25	13000
	76-09-02	94	--	--	--	--	--	--	--
	76-05-17	56	--	--	--	--	--	--	--
AM 34 72 59	76-09-02	97	--	--	--	--	--	--	--
	76-09-22	83	--	--	--	--	--	--	14000
AM 36 730517	75-10-03	170	.2	31	--	424	.96	.28	13000
AM 37 730518	75-10-30	320	.2	29	--	726	.78	.31	4900
AM 38 730689	76-08-03	54	.1	33	268	228	.07	.22	17000
	76-08-26	61	--	--	--	--	--	--	--
	76-08-26	61	--	--	--	--	--	--	--
AM 39 730690	76-08-03	63	.1	34	273	239	.01	.23	15000
BG 49 730520	75-10-16	17	.2	23	--	254	.28	.13	2200
DG 21 730519	75-10-09	26	.1	21	--	288	.27	.21	1000

QUALITY OF GROUND WATER

345

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

LOCAL IDENT- I- FIER	DATE OF SAMPLE	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
CARROLL COUNTY, MARYLAND					
DD 100 732945	75-10-01	--	--	--	--
DD 101 731014	75-10-22	--	--	--	--
DD 102 73 889	75-10-20	--	--	--	--
DD 108 731374	75-10-20	--	--	--	--
DD 109 731811	75-10-20	--	--	--	--
DD 110 730305	75-10-22	--	--	--	--
DD 116 72 863	75-10-20	--	--	--	--
DD 133 731199	75-10-20	--	--	--	--
DD 137 700342	75-10-20	--	--	--	--
DD 146 690502	75-10-01	--	--	--	--
DD 159 68 197	75-10-01	--	--	--	--
DD 162 67 121	75-10-01	--	--	--	--
DD 164 720745	75-10-17	--	--	--	--
DD 166 731596	75-10-17	--	--	--	--
DD 185 3772	75-10-01	--	--	--	--
DD 186 69009	75-10-01	--	--	--	--
EC 21 710465	75-10-14	--	--	--	--
EC 31 731068	75-10-14	--	--	--	--
EC 37 710228	75-10-17	--	--	--	--
EC 69 720752	75-10-14	--	--	--	--
EC 77 720849	75-10-16	--	--	--	--
ED 27 700315	75-10-28	--	--	--	--
ED 32 731696	75-10-17	--	--	--	--
ED 54 731047	75-10-27	--	--	--	--
ED 80 710152	75-10-28	--	--	--	--
ED 82 670447	75-10-28	--	--	--	--
ED 85 720293	75-10-28	--	--	--	--
ED 99 690060	75-10-28	--	--	--	--
ED 100 732061	75-10-28	--	--	--	--
CHARLES COUNTY					
BF 141 730190	76-01-07	--	20	--	--
DORCHESTER COUNTY					
BG 59 730612	76-09-23	140	0	0	0
HARFORD COUNTY					
DE 128	76-02-18	--	10	--	--
DE 129 732535	76-02-18	--	10	--	--
ST. MARYS COUNTY					
FF 36 731478	75-10-29	--	0	--	--
WORCESTER COUNTY					
AM 33 72 62	76-03-08	--	170	--	--
	76-08-03	14000	150	0	160
	76-09-02	--	--	--	--
AM 34 72 59	76-05-17	--	--	--	--
AM 34 72 59	76-09-02	--	--	--	--
	76-09-22	--	--	--	--
AM 36 730517	75-10-03	--	150	--	--
AM 37 730518	75-10-30	--	80	--	--
AM 38 730689	76-08-03	17000	170	0	180
	76-08-26	--	--	--	--
	76-08-26	--	--	--	--
AM 39 730690	76-08-03	15000	180	--	190
BG 49 730520	75-10-16	--	50	--	--
DB 21 730519	75-10-09	--	50	--	--

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

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

Multiply English units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	*hectares (ha)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	**liters (l)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons (10 ⁶ gal)	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days [(ft ³ /s) · d]	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (l/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (l/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day (mgal/d)	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	tonnes (t)

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

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

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