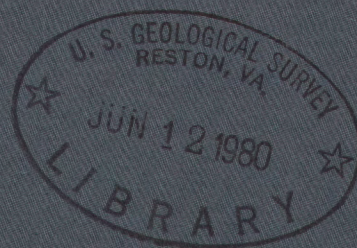


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Water Resources Data for Pennsylvania

Volume 2. Susquehanna and Potomac
River Basins

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT PA-79-2

WATER YEAR 1979

Prepared in cooperation with the Pennsylvania
Department of Environmental Resources and with
other State, municipal, and Federal agencies

CALENDAR FOR WATER YEAR 1979

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Volume 2. Susquehanna and Potomac
River Basins

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT PA-79-2

WATER YEAR 1979

Prepared in cooperation with the Pennsylvania
Department of Environmental Resources and with
other State, municipal, and Federal agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. W. Menard, Director

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
P. O. Box 1107
Harrisburg, Pennsylvania 17108

PREFACE

This report was prepared by personnel of the Pennsylvania District of the Water Resources Division of the U.S. Geological Survey under the supervision of David E. Click, District Chief, and J.E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of Pennsylvania and with other agencies.

This report is one of a series issued State by State. General direction for the series is by Philip Cohen, Chief Hydrologist, U.S. Geological Survey, and Robert J. Dingman, Acting Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for Pennsylvania are in three volumes as follows:

- Volume 1. Delaware River Basin
- Volume 2. Susquehanna and Potomac River Basins
- Volume 3. Ohio River and St. Lawrence River Basins

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WATER RESOURCES DATA FOR PENNSYLVANIA, 1979

INTRODUCTION

Water resources data for the 1979 water year for Pennsylvania consist of records of discharge and water quality of streams; contents of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 105 gaging stations; contents at 10 lakes and reservoirs; water quality at 27 gaging stations; and water levels at 40 observation wells. Also included are data for 20 crest-stage, 45 low-flow, and 130 water-quality partial-record stations. Locations of these sites are shown on figures 4, 5, and 6. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 1 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Pennsylvania.

Records of discharge and 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 the 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 in official Survey reports 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 volume is identified as "U.S. Geological Survey Water-Data Report PA-79-2". For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (717) 782-3420.

COOPERATION

The U.S. Geological Survey and organizations of the Commonwealth of Pennsylvania have had cooperative agreements for the systematic collection of surface-water records during the periods 1919-21 and 1931 to date, water-quality records from 1944 to date, and ground-water records from 1925 to date. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

State Department of Environmental Resources, Clifford L. Jones, secretary, through the following: Office of Resources Management, C. H. McConnell, deputy secretary; Bureau of Soil and Water Conservation, W.N. Peechatka, director; Office of Environmental Protection and Regulation, W.B. Middendorf, deputy secretary; Bureau of Topographic and Geologic Survey, A. A. Socolow, director.

Susquehanna River Basin Commission, R. J. Bielo, executive director.

City of Harrisburg, Paul E. Doutrich, mayor.

Letort Regional Authority, executive secretary.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 45 gaging stations. Assistance was also furnished by the National Weather Service, NOAA, U.S. Department of Commerce, Soil Conservation Service, U.S. Department of Agriculture.

The following organizations aided in collecting records:

Municipality of Lancaster; P.H. Glatfelter Co.; Pennsylvania Power and Light Co.; Safe Harbor Water Power Corp.; and York Water Co.

WATER RESOURCES DATA FOR PENNSYLVANIA, 1979

HYDROLOGIC CONDITIONS

Runoff for the 1979 water year was above average. At the index station used for the Susquehanna River Basin, Susquehanna River at Harrisburg, Pa. (01570500) streamflow was 120 percent of the 1941-70 median. Yearly mean streamflow has been above average since 1970.

Excessive runoff occurred January, March and September. It was otherwise normal in the basin during the year.

Records for Susquehanna River at Harrisburg show a comparison of the monthly and yearly mean discharge for the 1979 water year with the median discharge for the standard reference period 1941-70 (fig. 1).

Ground water levels of the 1979 water year were mostly above their monthly means in January, March and April. A general decline in the water levels in May and June and a recovery during the last quarter was noted.

Ground water levels were below average the first 10 months compared to corresponding months in 1978. Recovery seemed to occur in the last two months.

Comparison of 1979 water levels in network observation wells with a) 1978 water levels and b) monthly mean water levels for period of record is shown in figure 2.

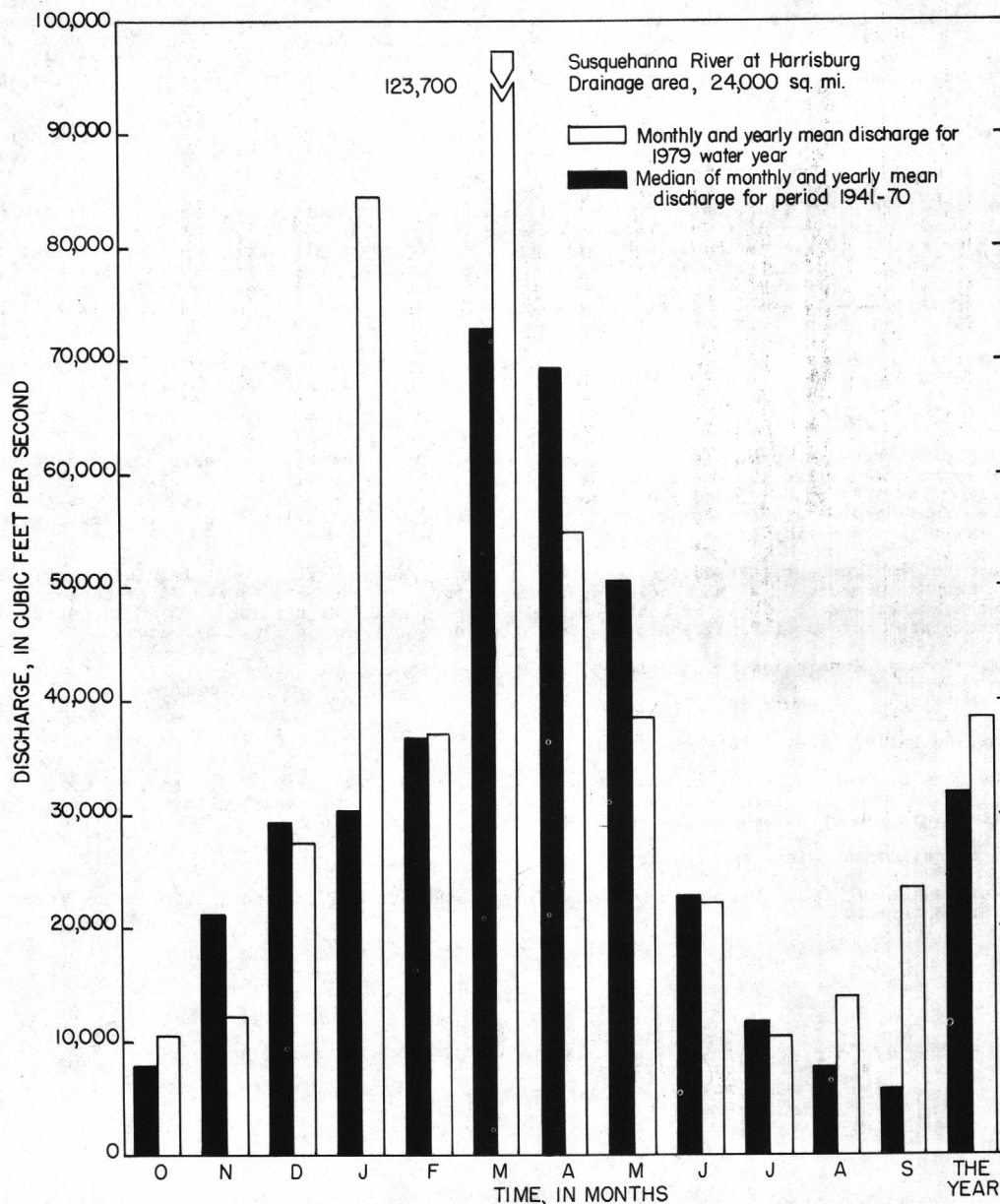


Figure 1.--Comparison of discharge at Susquehanna River at Harrisburg during the 1979 water year with median discharge for period 1941-70.

WATER RESOURCES DATA FOR PENNSYLVANIA, 1979

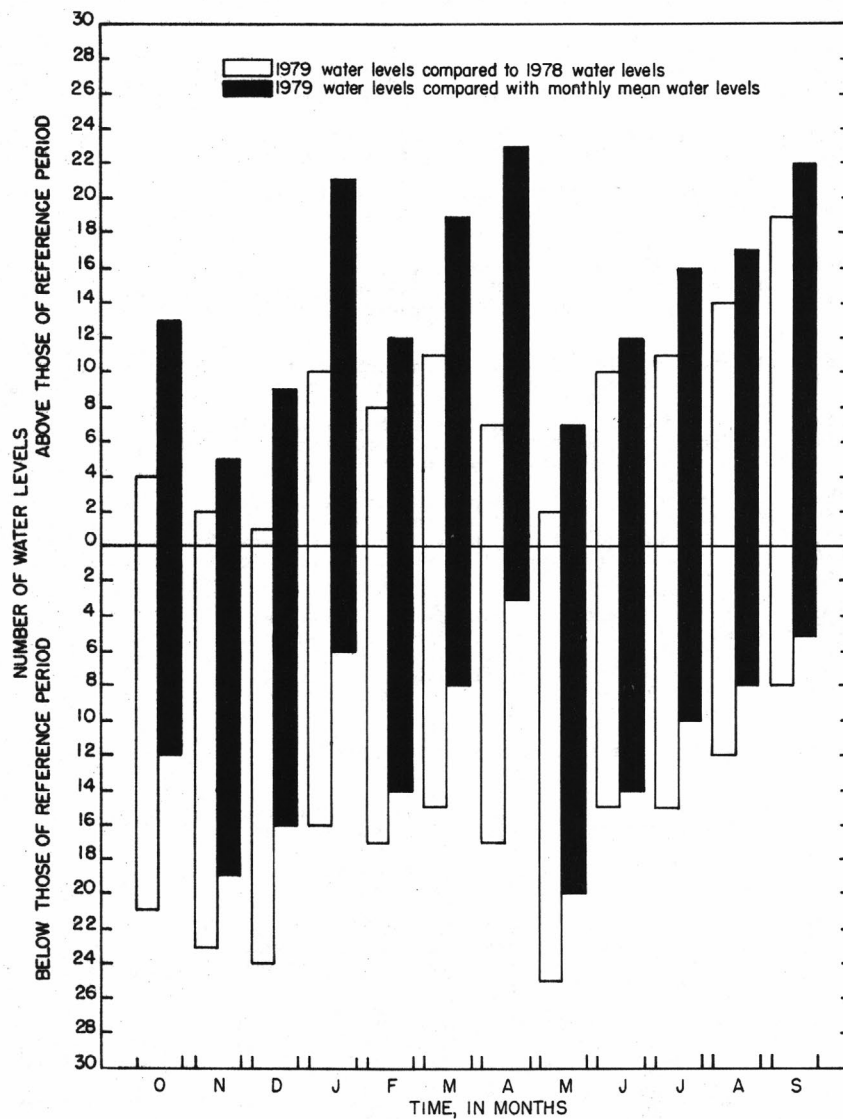


Figure 2.--Comparison of 1979 water levels in network observation wells with
a) 1978 water levels and
b) monthly mean water levels for period of record.

WATER RESOURCES DATA FOR PENNSYLVANIA, 1979

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 Inch-pound 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.

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 microorganisms, 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.

WATER RESOURCES DATA FOR PENNSYLVANIA, 1979

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 that material in a representative water sample which passes through a 0.45 μ m membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

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

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

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 specific 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 (CaCO₃).

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.

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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.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

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 (m²), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organisms 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	0.004 - 0.062	Sedimentation.
Sand	0.062 - 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.

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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.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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 the 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 planimeted. All areas shown are those for the stage when the planimeted 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, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 μ m membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 μ m membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

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 is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

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.

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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.

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

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 03041000, which appears just to the left of the station name, includes the 2-digit part number "03" plus the 6-digit downstream order number "041000".

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and some 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 the degrees, minutes, and seconds of longitude, and the last 2-digits (assigned sequentially identify the wells or other sites with a 1-second grid. See figure 3 below.

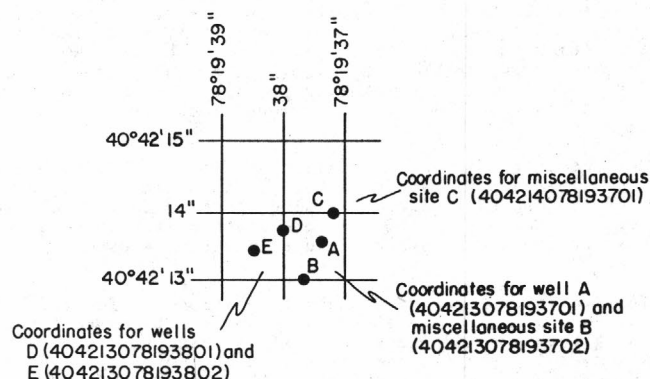


Figure 3.--System for numbering wells and miscellaneous sites (latitude and longitude).

A local well number is also assigned to the wells and consists of a 2-letter abbreviation of the county in which the well is located and a sequential number assigned at the time the well was scheduled.

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.

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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 to tritium in the Nation's surface waters. In addition to the surface-water station 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 measurement 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.

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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 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 referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE". National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page

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.

Skeleton rating tables are published, immediately following "EXTREMES", for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

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 discharge 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 for computing discharge for various unusual conditions have been explained in preceding paragraphs.

WATER RESOURCES DATA FOR PENNSYLVANIA, 1979

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 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. 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 observations of water temperatures, 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.

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.

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.

WATER RESOURCES DATA FOR PENNSYLVANIA, 1979

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 section.

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 3.

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 ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface datum above mean sea level is given in the well description. Mean sea level is the datum plane on which the national network of precise levels is based. 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 the end of each month (eom).

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four 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 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 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.
- 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.
- 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.
- 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.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 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.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 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.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 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.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 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.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 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.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
- 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.
- 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.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlike, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 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.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 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.
- 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.

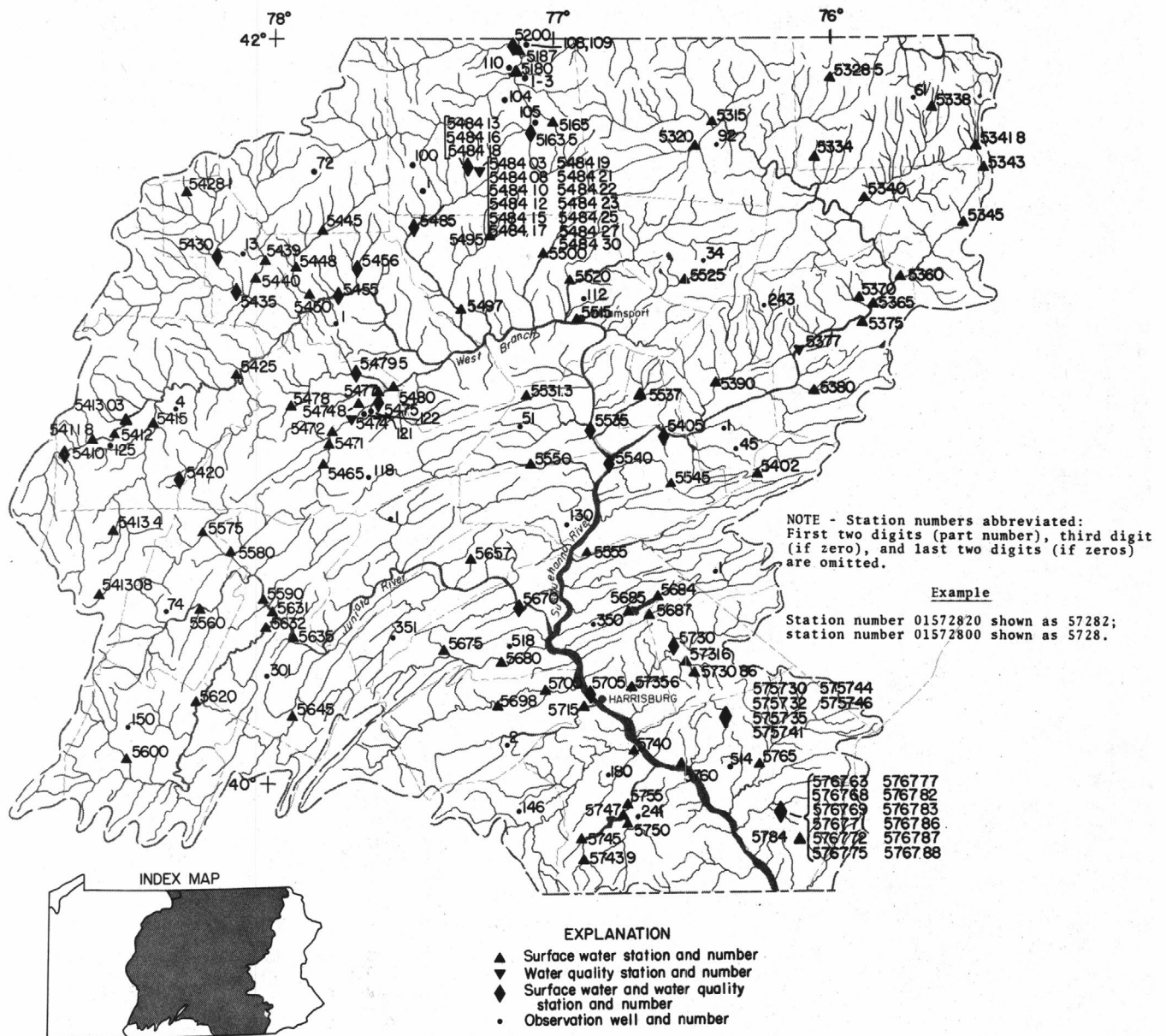


FIGURE 4 —Location of data collection stations and observation wells

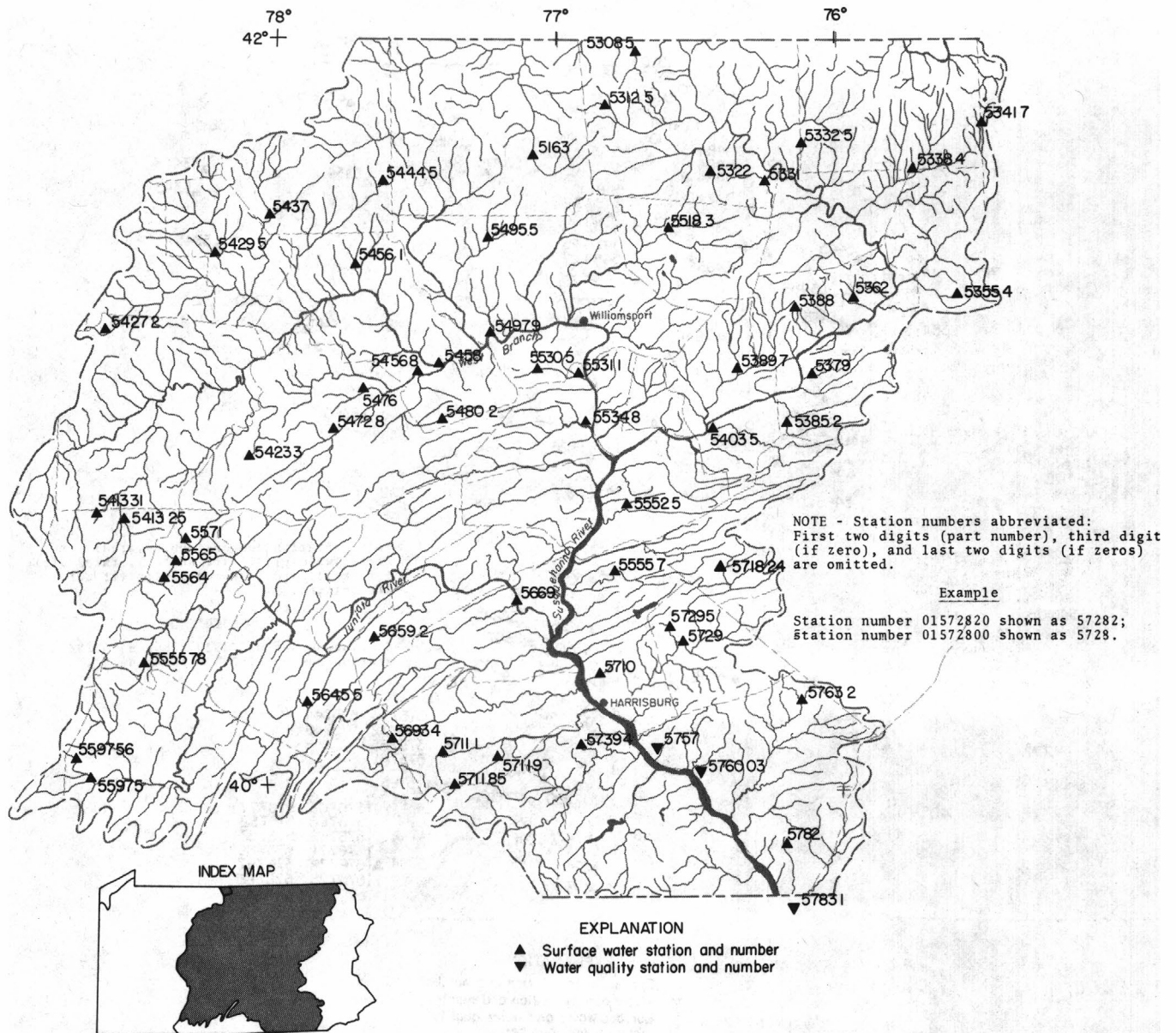
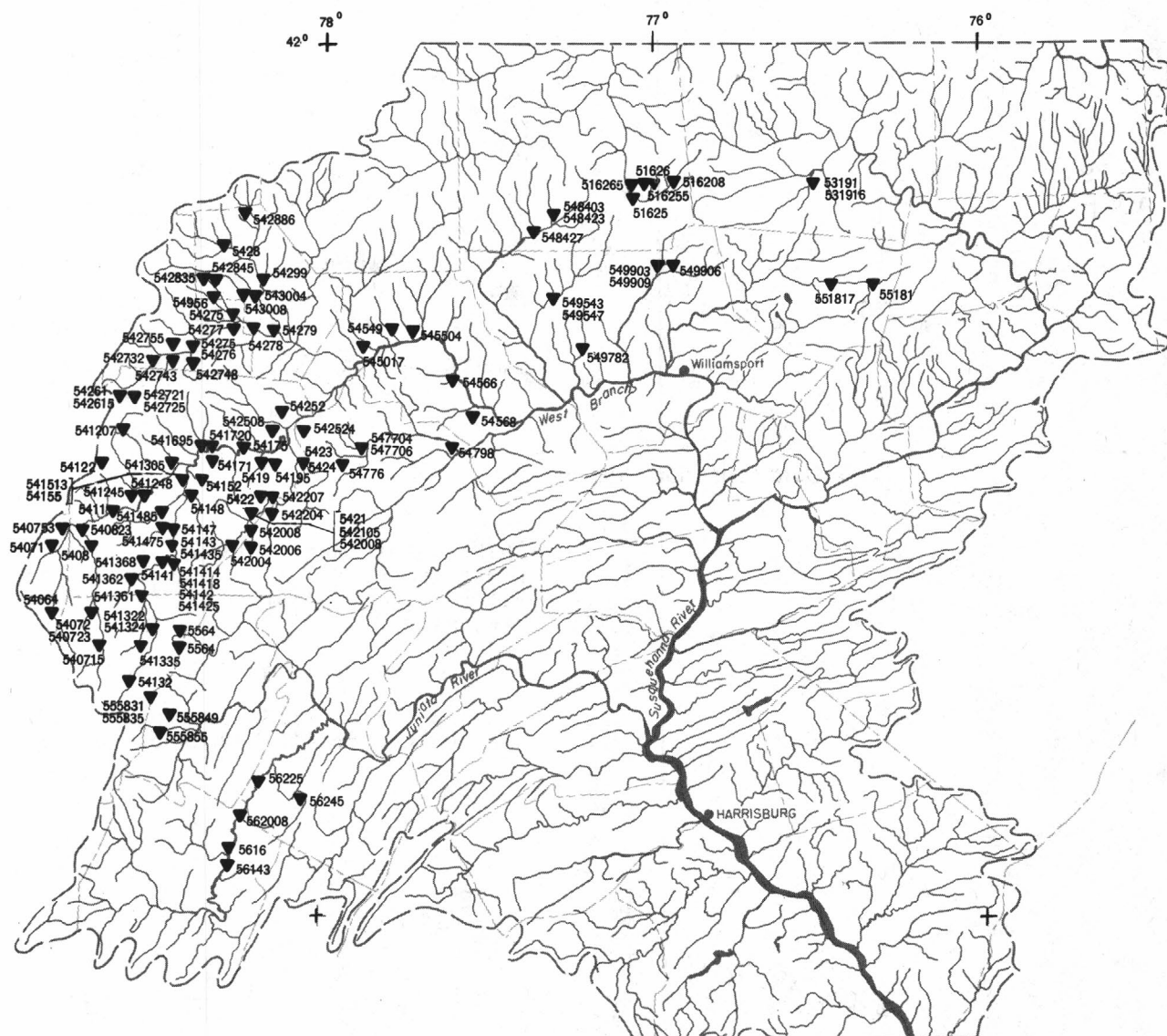


FIGURE 5 - Locations of partial-record data collection stations



EXPLANATION

▼ Water quality station and number

NOTE - Station numbers abbreviated:
First two digits (part number), third digit
(if zero), and last two digits (if zeros)
are omitted.

Example

Station number 01572820 shown as 57282;
station number 01572800 shown as 5723.

INDEX MAP

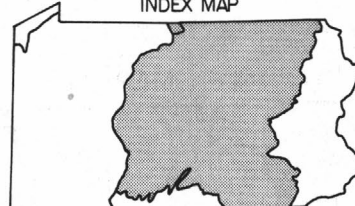
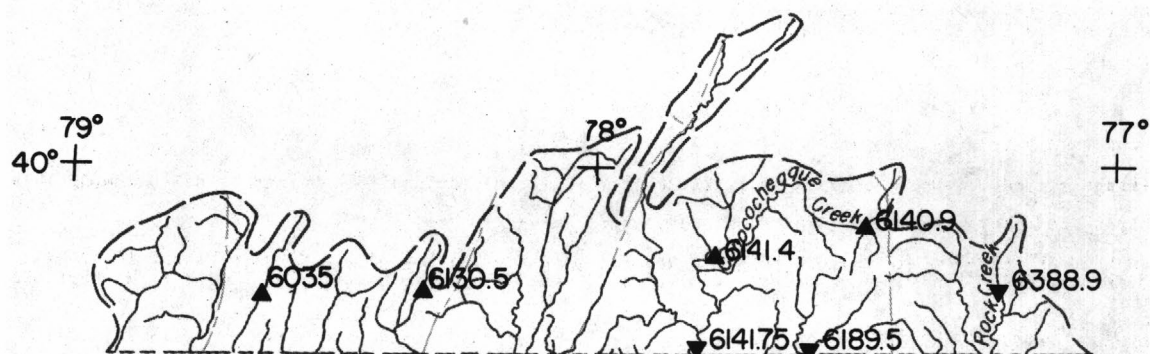


FIGURE 6 - Locations of water-quality partial-record stations of the coal-hydrology network

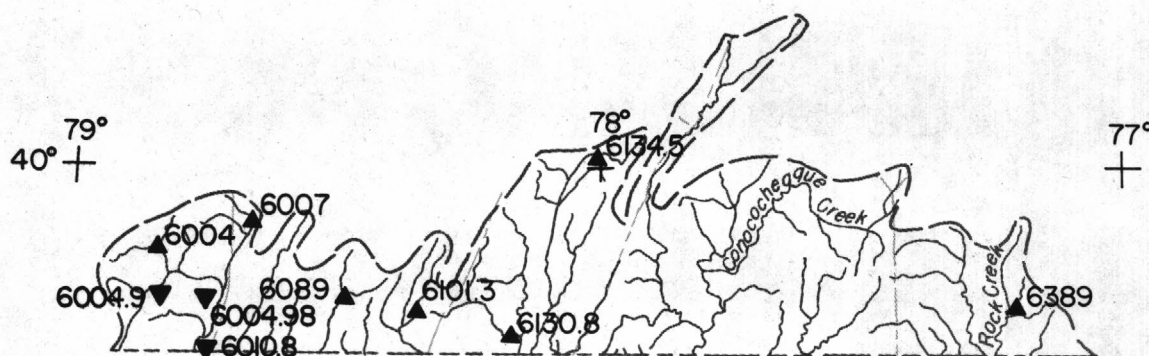


A-Data collection stations

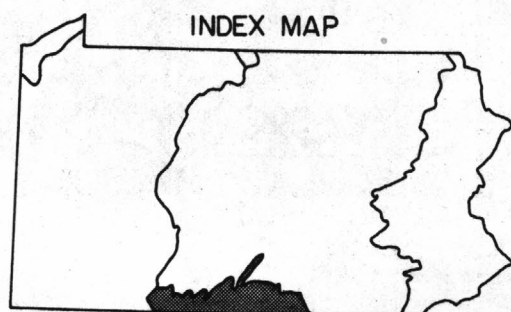
NOTE - Station numbers abbreviated:
First two digits (part number), third digit
(if zero), and last two digits (if zeros)
are omitted.

Example

Station number 01572820 shown as 57282;
station number 01572800 shown as 5728.



B-Partial record stations



EXPLANATION

- ▲ Surface water station and number
- ▼ Water quality station and number for the coal-hydrology network

FIGURE 7 - Location of data collection and partial record stations.

CHEMUNG RIVER BASIN

01516350 TIOGA RIVER NEAR MANSFIELD, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to current year.

pH: October 1976 to current year.

WATER TEMPERATURES: October 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1976.

REMARKS.--Interruptions in the record were due to malfunctions of the equipment. Unpublished records of specific conductance for the period June 1 to Aug. 1, 1979 are available for inspection in the district office.

SPECIFIC CONDUCTANCE (MICROMHOS/CM 25° C), WATER YEAR OCTOBER 1978 SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	492	484	487	---	---	---	---	---	---	262	177	208
2	501	489	493	---	---	---	254	234	251	195	143	171
3	518	498	504	304	291	295	264	251	256	169	123	142
4	525	362	461	310	294	301	---	---	---	---	---	---
5	407	357	375	319	300	312	---	---	---	305	234	261
6	446	409	422	---	---	---	---	---	---	249	227	238
7	461	434	444	---	---	---	---	---	---	239	183	228
8	486	461	473	---	---	---	---	---	---	201	176	183
9	516	485	495	---	---	---	247	183	223	231	199	218
10	526	505	512	---	---	---	192	166	174	272	218	251
11	---	---	---	348	334	339	191	160	176	306	249	285
12	---	---	---	353	345	349	199	172	186	317	262	301
13	---	---	---	364	353	357	204	189	198	291	249	270
14	---	---	---	367	358	361	218	201	208	254	211	231
15	---	---	---	366	353	358	236	208	219	253	213	230
16	---	---	---	363	353	358	232	192	218	---	---	---
17	---	---	---	365	330	354	224	185	218	---	---	---
18	---	---	---	328	184	236	237	217	227	---	---	---
19	---	---	---	---	---	---	278	233	257	---	---	---
20	341	316	325	---	---	---	260	234	252	---	---	---
21	320	298	306	---	---	---	247	201	221	---	---	---
22	333	301	322	---	---	---	243	202	210	---	---	---
23	347	332	338	---	---	---	249	221	235	---	---	---
24	349	338	343	---	---	---	266	245	258	---	---	---
25	359	332	344	---	---	---	253	234	241	---	---	---
26	361	322	352	---	---	---	258	239	248	129	76	98
27	---	---	---	---	---	---	266	245	255	173	129	156
28	---	---	---	---	---	---	289	252	272	182	173	178
29	---	---	---	240	223	232	300	263	288	187	170	183
30	---	---	---	250	236	241	301	273	283	230	175	188
31	---	---	---	---	---	---	276	261	268	---	---	---
MONTH	526	298	412	367	184	315	301	160	234	317	76	212

CHEMUNG RIVER BASIN

01516350 TIOGA RIVER NEAR MANSFIELD, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM 25° C), WATER YEAR OCTOBER 1978 SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	206	159	188	182	173	177	---	---	---
2	---	---	---	161	149	154	182	178	180	---	---	---
3	---	---	---	166	146	157	179	173	176	---	---	---
4	---	---	---	152	101	136	183	177	180	---	---	---
5	---	---	---	107	82	91	184	157	172	207	195	201
6	---	---	---	137	88	122	194	159	174	225	188	205
7	---	---	---	182	137	162	177	168	172	235	195	213
8	---	---	---	205	182	195	175	170	173	250	206	226
9	284	272	277	215	206	211	176	133	160	---	---	---
10	306	276	294	209	181	197	137	128	133	269	232	248
11	312	292	308	181	170	173	133	121	127	---	---	---
12	322	310	319	199	175	187	130	124	126	---	---	---
13	325	318	322	211	191	203	134	127	129	---	---	---
14	326	317	323	200	154	182	138	132	135	---	---	---
15	326	320	324	170	151	164	137	129	132	---	---	---
16	323	315	318	194	170	182	166	132	141	---	---	---
17	324	315	317	186	172	182	138	130	134	331	278	306
18	338	323	331	182	169	173	160	136	145	348	295	321
19	350	336	344	178	168	171	176	145	152	363	322	341
20	349	336	341	182	169	174	162	151	156	347	325	333
21	347	336	342	179	165	171	170	156	164	342	317	327
22	339	286	322	172	153	161	178	168	174	350	314	334
23	288	274	284	163	144	150	194	177	183	340	313	322
24	273	204	232	152	124	140	203	187	195	328	123	237
25	213	202	206	131	119	123	221	195	209	149	105	127
26	213	183	193	133	122	127	214	198	208	131	107	116
27	202	183	189	149	132	141	210	165	193	127	111	118
28	229	202	216	163	148	155	170	139	154	144	121	129
29	---	---	---	166	156	161	---	---	---	159	134	146
30	---	---	---	169	163	165	---	---	---	178	152	165
31	---	---	---	175	167	172	---	---	---	218	171	189
MONTH	350	183	290	215	82	164	221	121	163	363	105	230
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1							579	557	558	626	579	603
2							571	543	559	659	626	640
3							527	321	362	629	534	576
4							447	371	407	618	585	602
5							500	420	457	646	618	632
6							552	501	525	646	173	367
7							580	554	569	279	175	225
8							631	579	608	353	277	313
9							665	631	646	432	354	390
10							707	650	679	508	433	466
11							702	647	664	554	509	526
12							647	577	608	609	538	568
13							592	512	558	616	587	597
14							589	557	571	623	444	573
15							624	590	608	428	261	291
16							---	---	---	384	301	342
17							---	---	---	446	385	411
18							---	---	---	495	446	471
19							---	---	---	538	496	514
20							---	---	---	573	538	551
21							---	---	---	584	558	574
22							742	726	735	562	469	510
23							754	742	749	493	464	473
24							753	735	745	539	493	511
25							744	493	620	570	540	549
26							531	496	514	594	569	578
27							523	330	421	608	586	595
28							412	340	365	615	524	586
29							478	412	441	524	309	387
30							530	478	502	359	307	328
31							579	531	553	---	---	---
MONTH							754	321	561	659	173	492

CHEMUNG RIVER BASIN

01516350 TIOGA RIVER NEAR MANSFIELD, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	3.8	3.7	3.8	---	---	---	---	---	---	6.8	4.9	6.0
2	3.8	3.7	3.8	---	---	---	5.5	5.2	5.3	6.9	6.7	6.8
3	3.8	3.7	3.8	5.0	4.7	4.8	5.3	5.2	5.2	---	---	---
4	4.8	3.7	4.0	4.8	4.5	4.7	5.5	5.3	5.4	---	---	---
5	4.8	4.4	4.7	4.7	4.5	4.6	5.5	5.3	5.4	4.8	4.2	4.3
6	4.5	4.2	4.3	---	---	---	5.4	5.1	5.2	4.4	4.1	4.2
7	4.2	4.1	4.2	---	---	---	5.4	5.0	5.1	5.2	4.1	4.3
8	4.1	4.0	4.0	---	---	---	5.7	4.9	5.2	5.1	4.7	4.9
9	4.0	3.9	4.0	---	---	---	6.9	5.8	6.7	---	---	---
10	3.9	3.9	3.9	---	---	---	6.8	6.2	6.5	---	---	---
11	---	---	---	4.6	4.4	4.5	6.2	5.4	5.8	4.4	4.0	4.2
12	---	---	---	4.4	4.3	4.4	5.8	5.3	5.6	4.3	4.0	4.2
13	---	---	---	4.4	4.3	4.3	5.6	5.4	5.4	4.4	4.0	4.2
14	---	---	---	4.4	4.3	4.3	5.5	5.3	5.4	5.4	4.4	5.0
15	---	---	---	4.4	4.3	4.4	---	---	---	5.3	4.8	5.1
16	---	---	---	4.4	4.3	4.3	5.4	5.0	5.2	---	---	---
17	---	---	---	4.9	4.3	4.4	5.4	5.1	5.2	---	---	---
18	---	---	---	5.9	4.9	5.4	5.4	4.8	5.1	---	---	---
19	---	---	---	5.5	4.7	5.1	5.4	4.4	4.9	---	---	---
20	5.0	4.8	4.9	5.2	5.0	5.1	5.2	4.7	4.9	---	---	---
21	5.1	4.9	5.0	5.3	4.9	5.1	5.5	5.1	5.3	---	---	---
22	5.0	4.6	4.9	5.3	5.0	5.1	5.3	4.9	5.2	---	---	---
23	5.0	4.9	4.9	5.3	5.0	5.1	5.2	4.7	5.0	---	---	---
24	5.0	4.9	5.0	5.5	5.1	5.3	5.1	4.6	4.8	---	---	---
25	4.9	4.7	4.8	5.3	5.2	5.2	5.3	4.6	5.0	---	---	---
26	4.7	4.6	4.6	5.3	5.1	5.2	5.3	5.2	5.3	5.9	5.0	5.3
27	---	---	---	5.2	4.7	5.0	5.3	5.1	5.3	5.0	4.6	4.7
28	---	---	---	5.3	5.0	5.2	5.3	5.0	5.2	4.6	4.5	4.5
29	---	---	---	5.3	5.1	5.2	5.1	4.9	5.1	4.5	4.0	4.4
30	---	---	---	5.4	5.2	5.2	5.2	4.8	5.0	---	---	---
31	---	---	---	---	---	---	5.0	4.8	4.9	---	---	---
MONTH	5.1	3.7	4.4	5.9	4.3	4.9	6.9	4.4	5.3	6.9	4.0	4.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	6.0	5.0	5.7	5.4	5.3	5.4	---	---	---
2	---	---	---	6.2	6.0	6.1	5.5	5.3	5.4	---	---	---
3	---	---	---	6.3	5.9	6.1	5.5	5.5	5.5	---	---	---
4	---	---	---	6.3	6.2	6.3	5.6	5.5	5.5	5.1	4.3	4.9
5	---	---	---	6.3	6.1	6.2	5.9	5.6	5.7	5.2	4.8	5.0
6	---	---	---	6.7	6.1	6.4	---	---	---	4.9	4.6	4.8
7	---	---	---	6.1	5.0	5.4	5.8	5.3	5.6	4.8	4.6	4.7
8	---	---	---	5.0	4.6	4.8	5.6	5.4	5.4	4.7	4.5	4.6
9	---	---	---	4.6	4.5	4.6	5.8	5.4	5.6	4.6	4.4	4.6
10	5.0	4.2	4.4	5.0	4.6	4.8	5.7	5.6	5.6	4.5	4.5	4.5
11	4.3	4.2	4.2	5.1	5.0	5.1	5.7	5.7	5.7	---	---	---
12	4.2	4.1	4.2	5.1	4.6	4.9	5.7	5.7	5.7	---	---	---
13	4.2	4.2	4.2	4.7	4.4	4.6	5.7	5.6	5.6	---	---	---
14	4.2	4.1	4.2	5.4	4.6	5.0	5.6	5.5	5.5	---	---	---
15	4.2	4.1	4.2	5.3	5.2	5.3	5.6	5.5	5.6	---	---	---
16	4.2	4.2	4.2	5.3	5.2	5.2	5.7	5.2	5.5	---	---	---
17	4.3	4.2	4.3	5.2	5.2	5.2	5.3	5.2	5.3	3.5	3.4	3.5
18	4.2	4.2	4.2	5.3	5.2	5.2	5.4	5.0	5.2	3.5	3.4	3.4
19	4.2	4.1	4.1	5.3	5.2	5.2	5.1	4.9	5.0	3.4	3.4	3.4
20	4.2	4.1	4.2	5.3	5.2	5.2	5.3	5.0	5.1	3.4	3.4	3.4
21	4.2	4.1	4.2	5.4	5.2	5.3	5.2	5.0	5.1	3.5	3.4	3.4
22	5.2	4.2	4.5	5.3	4.7	5.2	5.0	4.8	4.9	3.5	3.4	3.4
23	5.4	5.2	5.3	5.2	5.1	5.2	4.9	4.8	4.8	3.5	3.4	3.4
24	6.1	5.4	5.8	5.4	5.2	5.3	4.9	4.7	4.8	4.8	3.5	4.2
25	6.1	5.8	6.0	5.7	5.4	5.5	4.8	4.4	4.7	---	---	---
26	6.2	5.8	6.1	5.7	5.7	5.7	4.9	4.7	4.8	5.1	4.9	5.0
27	6.2	5.6	6.0	5.7	5.4	5.5	5.6	4.9	5.1	4.9	4.8	4.8
28	5.7	5.2	5.4	5.5	5.3	5.4	5.6	5.2	5.5	4.8	4.8	4.8
29	---	---	---	5.4	5.3	5.3	---	---	---	4.9	4.6	4.7
30	---	---	---	5.4	5.3	5.4	---	---	---	4.6	4.5	4.6
31	---	---	---	5.4	5.3	5.4	---	---	---	4.5	4.0	4.3
MONTH	6.2	4.1	4.7	6.7	4.4	5.4	5.9	4.4	5.3	5.2	3.4	4.3

01516350 TIOGA RIVER NEAR MANSFIELD, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	4.2	4.0	4.1	6.3	3.6	4.8	3.7	3.5	3.6	3.5	3.5	3.5
2	4.0	3.8	3.9	4.6	4.4	4.5	4.0	3.6	3.6	3.5	3.4	3.5
3	3.8	3.7	3.8	4.4	3.9	4.2	4.1	3.7	3.9	3.9	3.5	3.7
4	3.7	3.6	3.7	3.9	3.8	3.9	3.9	3.7	3.8	3.6	3.5	3.6
5	3.6	3.5	3.5	3.8	3.7	3.8	3.8	3.6	3.7	3.5	3.5	3.5
6	3.5	3.5	3.5	3.7	3.6	3.7	3.6	3.5	3.6	4.8	3.5	4.2
7	3.9	3.4	3.6	3.6	3.5	3.6	3.6	3.5	3.5	4.6	4.2	4.4
8	4.0	3.8	3.9	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.0	4.1
9	---	---	---	3.5	3.4	3.5	3.5	3.4	3.5	4.0	3.8	3.9
10	4.8	4.5	4.6	3.6	3.4	3.5	3.6	3.4	3.4	3.8	3.7	3.7
11	---	---	---	3.6	3.4	3.5	3.5	3.4	3.5	3.7	3.6	3.6
12	5.0	4.7	4.9	3.7	3.4	3.5	3.6	3.5	3.5	3.6	3.5	3.6
13	4.7	4.4	4.6	3.6	3.5	3.5	3.8	3.5	3.6	3.6	3.4	3.5
14	4.4	4.1	4.3	3.5	3.5	3.5	3.6	3.5	3.6	4.0	3.4	3.5
15	4.0	3.8	4.0	3.5	3.5	3.5	3.6	3.5	3.6	4.2	3.9	4.1
16	3.9	3.8	3.8	3.5	3.4	3.5	---	---	---	4.0	3.7	3.9
17	3.8	3.7	3.7	3.5	3.5	3.5	---	---	---	3.8	3.6	3.7
18	3.7	3.7	3.7	3.5	3.5	3.5	---	---	---	3.7	3.6	3.6
19	3.7	3.6	3.7	3.5	3.5	3.5	---	---	---	3.6	3.5	3.5
20	3.6	3.6	3.6	3.5	3.5	3.5	---	---	---	3.5	3.5	3.5
21	3.6	3.6	3.6	3.5	3.5	3.5	---	---	---	3.5	3.5	3.5
22	4.3	3.6	3.6	3.5	3.4	3.5	3.4	3.4	3.4	3.7	3.5	3.6
23	5.6	4.5	4.7	3.5	3.4	3.4	3.4	3.4	3.4	3.7	3.6	3.6
24	4.5	4.1	4.3	3.5	3.4	3.4	3.4	3.4	3.4	3.6	3.5	3.5
25	4.0	3.8	3.9	4.7	3.4	3.7	3.6	3.4	3.5	3.6	3.5	3.5
26	3.8	3.6	3.7	4.6	3.9	4.3	3.6	3.6	3.6	3.5	3.5	3.5
27	3.6	3.5	3.6	3.9	3.7	3.8	4.4	3.6	4.0	3.5	3.4	3.5
28	3.5	3.5	3.5	3.8	3.7	3.7	4.0	3.8	3.9	3.7	3.5	3.5
29	3.6	3.5	3.5	3.7	3.6	3.7	3.8	3.6	3.7	4.3	3.7	4.1
30	3.7	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	4.2	3.9	4.1
31	---	---	---	3.6	3.5	3.6	3.6	3.5	3.6	---	---	---
MONTH	5.6	3.4	3.9	6.3	3.4	3.7	4.4	3.4	3.6	4.8	3.4	3.7

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.5	12.5	14.0	---	---	---	2.5	.5	1.5	1.5	.0	1.0
2	13.5	11.0	12.5	---	---	---	2.5	.5	1.5	2.5	1.5	2.0
3	16.0	9.0	12.0	10.0	5.5	8.0	2.0	1.0	1.0	1.5	.0	.5
4	15.5	12.0	13.5	10.5	6.5	8.5	5.0	2.0	4.0	1.0	.0	.5
5	16.5	10.5	13.5	10.0	6.5	8.0	5.0	2.5	3.5	.5	.0	.5
6	15.0	12.5	14.0	11.0	6.5	8.5	3.5	1.5	3.0	1.0	.0	.5
7	14.0	10.5	12.5	10.0	7.0	8.5	4.5	2.0	3.0	1.0	.0	.5
8	11.0	8.0	9.5	9.5	6.0	7.5	6.5	2.0	5.5	1.0	.5	.5
9	13.0	6.0	9.5	8.0	4.5	6.5	6.5	3.0	5.0	1.0	.5	.5
10	15.0	7.5	11.0	8.5	4.5	6.5	3.0	1.0	2.0	.5	.0	.5
11	---	---	---	8.5	5.0	7.0	---	---	---	.5	.0	.5
12	---	---	---	7.5	6.0	6.5	2.5	.0	1.5	1.0	.0	.5
13	---	---	---	6.0	5.5	6.0	3.0	1.5	2.0	1.0	.0	.5
14	---	---	---	9.5	6.0	8.0	2.5	1.0	1.5	.5	.0	.5
15	---	---	---	8.5	7.0	7.5	2.0	.0	1.0	.5	.0	.5
16	---	---	---	7.5	5.5	6.5	3.0	.5	1.5	---	---	---
17	---	---	---	8.0	4.5	5.5	2.5	1.0	2.0	---	---	---
18	---	---	---	8.5	7.5	8.0	1.5	.5	1.0	---	---	---
19	---	---	---	7.0	6.0	6.5	1.0	.0	.5	---	---	---
20	11.5	8.0	9.5	6.0	4.0	4.5	1.0	.0	.5	---	---	---
21	12.5	5.5	9.0	4.5	2.0	3.0	.5	.5	.5	---	---	---
22	13.5	7.0	10.5	3.5	2.0	2.5	---	---	---	---	---	---
23	11.5	8.5	10.5	3.5	3.0	3.0	1.5	.0	1.0	---	---	---
24	10.5	5.5	8.0	---	---	---	1.0	.0	.5	---	---	---
25	10.5	4.5	7.5	4.5	3.5	4.0	1.0	.5	.5	---	---	---
26	12.5	9.0	10.5	3.0	1.0	1.5	1.0	.5	.5	2.5	1.5	2.0
27	---	---	---	1.0	.0	.5	.5	.0	.5	2.5	2.0	2.5
28	---	---	---	2.0	.5	1.5	.5	.5	.5	2.5	2.0	2.5
29	---	---	---	1.5	.0	1.0	1.0	.0	.5	2.5	1.5	2.0
30	---	---	---	4.0	1.5	2.5	.5	.0	.5	2.0	1.5	2.0
31	---	---	---	---	---	---	.5	.0	.5	---	---	---
MONTH	16.5	4.5	11.0	11.0	.0	5.5	6.5	.0	1.5	2.5	.0	1.0

CHEMUNG RIVER BASIN

01516350 TIOGA RIVER NEAR MANSFIELD, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	.5	.0	.5	9.5	7.5	8.5	---	---	---
2	---	---	---	.5	.5	.5	8.0	7.0	7.5	---	---	---
3	---	---	---	1.0	.5	.5	8.0	6.5	7.0	---	---	---
4	---	---	---	1.5	1.0	1.5	6.5	4.0	5.0	17.0	12.0	15.0
5	---	---	---	2.0	1.0	1.5	6.0	4.5	5.0	18.0	14.0	16.0
6	---	---	---	2.0	1.5	2.0	5.5	3.0	4.5	19.5	15.0	17.0
7	---	---	---	3.5	2.0	2.5	6.5	2.0	4.0	21.0	16.0	18.0
8	---	---	---	3.5	2.5	3.0	4.5	2.0	3.5	22.5	18.0	20.5
9	---	---	---	4.5	2.5	3.0	3.5	3.0	3.0	24.5	19.5	22.0
10	---	---	---	4.0	3.5	4.0	7.5	2.5	4.5	23.0	20.5	22.0
11	.5	.0	.5	4.0	2.0	3.0	8.5	3.5	6.0	---	---	---
12	.5	.5	.5	2.5	1.5	2.0	7.0	5.0	6.0	---	---	---
13	.5	.5	.5	3.5	1.0	2.0	8.0	6.5	7.0	---	---	---
14	.5	.0	.5	5.5	3.5	4.5	9.0	5.5	7.0	---	---	---
15	.5	.5	.5	4.0	2.0	2.5	8.0	6.5	7.0	---	---	---
16	.5	.5	.5	5.0	2.5	3.5	7.0	6.0	6.0	---	---	---
17	.5	.5	.5	7.5	3.0	5.0	7.5	5.0	6.5	20.5	10.0	15.0
18	.5	.0	.5	7.5	4.0	6.0	11.0	5.0	7.5	20.5	11.5	16.0
19	.5	.5	.5	8.0	4.0	6.0	12.0	4.5	8.0	20.5	15.5	17.5
20	.5	.5	.5	8.5	4.5	6.5	11.0	5.0	8.5	22.0	15.0	18.0
21	.5	.5	.5	9.5	5.0	7.0	12.0	6.5	9.0	18.5	15.5	16.5
22	.5	.5	.5	10.0	6.0	7.5	13.0	10.0	11.5	20.5	12.5	16.0
23	.5	.5	.5	10.0	4.5	7.5	15.0	10.5	12.5	16.5	13.0	14.5
24	.5	.5	.5	8.5	8.0	8.0	16.0	10.0	13.0	15.5	12.5	14.0
25	.5	.5	.5	8.0	5.5	6.5	19.0	12.5	15.5	13.5	12.0	12.5
26	.5	.5	.5	5.5	3.5	4.5	18.5	16.5	17.5	13.5	11.0	12.0
27	.5	.5	.5	6.0	2.0	3.5	17.5	16.0	17.0	12.0	10.0	11.0
28	.5	.5	.5	7.0	1.5	4.0	19.0	13.0	16.0	12.0	10.0	11.0
29	---	---	---	9.0	4.0	6.0	---	---	---	14.0	10.0	11.5
30	---	---	---	10.0	7.0	8.0	---	---	---	18.0	10.5	14.0
31	---	---	---	10.5	7.5	9.0	---	---	---	21.5	10.5	15.5
MONTH	.5	.0	.5	10.5	.0	4.0	19.0	2.0	8.5	24.5	10.0	15.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.0	14.5	17.5	23.5	18.0	20.5	30.5	23.0	26.0	27.5	18.5	22.5
2	23.5	15.5	19.0	20.5	18.0	19.0	28.5	23.5	25.5	26.5	20.5	23.0
3	21.0	16.0	18.0	25.5	17.0	20.5	29.0	21.0	24.5	28.0	21.0	24.0
4	24.0	14.0	19.0	21.5	15.5	18.5	29.5	21.5	25.5	27.5	19.5	23.0
5	22.0	16.0	19.0	18.0	14.0	15.5	29.5	22.0	25.5	24.5	21.0	23.0
6	19.0	15.0	17.0	21.0	11.5	16.0	26.5	21.5	24.0	22.5	20.0	21.0
7	24.5	15.0	19.5	25.0	13.5	19.0	25.5	17.5	21.5	22.5	17.5	20.0
8	21.5	15.0	20.0	26.5	16.0	21.0	27.0	20.5	24.0	20.0	15.0	17.5
9	27.0	18.5	22.5	26.5	17.5	22.0	28.5	19.5	24.0	20.5	12.5	16.0
10	24.5	20.0	21.5	23.0	19.5	21.0	26.0	21.0	23.5	22.0	13.5	17.5
11	21.5	15.0	18.5	27.5	18.0	22.0	23.0	19.0	21.0	23.0	16.5	19.5
12	18.5	11.0	15.0	28.0	20.5	24.5	19.5	17.0	18.0	23.5	14.5	18.5
13	19.0	11.5	15.5	30.0	21.5	25.5	24.5	15.0	19.5	22.0	16.0	19.0
14	23.0	12.0	17.0	28.5	22.5	25.5	23.0	18.5	20.0	22.0	18.0	19.5
15	25.5	15.5	20.5	29.5	22.0	25.5	18.5	15.0	16.5	19.0	14.5	16.5
16	27.0	18.0	22.0	29.0	22.5	25.5	---	---	---	19.5	12.0	16.0
17	25.5	19.0	22.0	28.5	21.5	24.5	---	---	---	21.0	13.5	17.0
18	22.0	17.0	19.5	28.0	21.0	24.5	---	---	---	21.5	14.0	18.0
19	24.0	14.5	19.0	28.0	19.5	24.0	---	---	---	19.0	14.0	16.5
20	25.5	15.5	20.0	28.0	20.5	24.0	---	---	---	18.0	10.0	14.0
21	20.5	16.5	18.5	29.5	21.5	25.0	---	---	---	15.0	13.0	14.0
22	22.5	15.5	18.5	29.5	22.0	25.5	28.0	17.5	22.5	17.0	13.5	15.0
23	21.0	15.0	17.5	31.0	22.0	26.0	21.5	18.0	20.0	17.5	11.0	14.0
24	17.5	13.5	15.5	30.5	21.5	26.0	24.5	20.0	22.0	18.0	10.5	13.5
25	22.0	12.0	16.5	29.5	23.0	25.0	26.0	21.0	23.0	18.0	10.5	14.0
26	24.0	13.0	18.0	27.5	23.0	24.5	26.5	18.5	22.0	20.0	12.0	16.0
27	25.0	15.5	20.0	24.5	21.5	23.0	22.5	20.5	21.5	19.5	12.5	16.0
28	21.0	17.0	19.0	24.5	20.0	22.5	25.5	19.0	22.0	16.0	14.5	15.0
29	24.5	16.5	20.0	25.0	20.5	22.5	25.5	21.0	23.0	16.0	14.5	15.0
30	24.5	19.0	21.0	30.0	20.5	24.5	28.5	21.0	24.0	18.0	14.5	16.5
31	---	---	---	30.5	21.0	25.5	27.5	19.5	23.0	---	---	---
MONTH	27.0	11.0	19.0	31.0	11.5	23.0	30.5	15.0	22.5	28.0	10.0	17.5

CHEMUNG RIVER BASIN

01516500 COREY CREEK NEAR MAINESBURG, PA

LOCATION.--Lat 41°47'27", long 77°00'54", Tioga County, Hydrologic Unit 02050104, on right bank 30 ft (9 m) upstream from township bridge, 500 ft (152 m) upstream from small tributary, 1.1 mi (1.8 km) west of Mainesburg, 3.5 mi (5.6 km) east of Mansfield, and 4.2 mi (6.8 km) upstream from mouth.

DRAINAGE AREA.--12.2 mi² (31.6 km²).

PERIOD OF RECORD.--May 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,337.50 ft (407.670 m) National Geodetic Vertical Datum of 1929. Prior to June 28, 1954, nonrecording gage at site 30 ft (9 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--25 years, 12.7 ft³/s (0.360 m³/s), 14.12 in/yr (359 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,580 ft³/s (158 m³/s) June 23, 1972, gage height, 10.44 ft (3.182 m), from floodmark, from rating curve extended above 490 ft³/s (13.9 m³/s) on basis of slope-area measurements at gage height, 7.88 ft (2.402 m) and at peak flow; no flow for many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 280 ft³/s (7.93 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	0630	448 12.7	4.67 1.423	Mar. 5	2315	618 17.5	5.28 1.609
Jan. 24	1915	*1,070 30.3	*6.29 1.917				

Minimum daily discharge, 0.14 ft³/s (0.004 m³/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	5.6	4.1	199	12	30	16	13	8.8	1.2	.98	.43
2	1.7	5.0	3.9	249	10	45	16	13	7.9	1.7	5.2	.43
3	1.7	4.1	3.4	80	8.5	75	15	13	6.5	1.5	3.3	3.1
4	2.6	3.9	5.6	47	7.7	173	15	14	5.3	1.1	1.4	1.2
5	2.5	3.4	5.0	32	6.8	334	19	13	4.9	1.0	.94	1.0
6	2.0	3.2	3.9	25	6.2	214	14	12	4.6	.96	.73	16
7	1.9	3.2	3.4	24	5.7	82	12	11	4.0	.88	.56	4.4
8	1.7	3.9	8.0	31	5.4	51	12	9.1	3.5	.78	.44	3.0
9	1.7	3.2	59	24	5.1	39	45	6.9	4.5	.66	.36	2.3
10	1.7	2.6	25	19	4.8	39	44	14	3.3	.59	.68	1.8
11	1.6	2.5	19	16	4.6	33	30	14	6.7	.52	1.2	1.4
12	1.6	2.5	15	15	4.4	29	28	9.8	4.0	.48	2.0	1.2
13	1.9	2.3	13	14	4.2	25	25	9.1	3.0	.44	1.5	1.1
14	21	2.3	11	20	4.0	32	24	7.8	2.5	.42	1.0	5.7
15	8.8	2.3	9.2	14	3.9	23	33	6.5	2.1	.42	.70	5.4
16	5.6	2.0	8.3	11	3.7	21	26	5.8	1.9	.53	.52	3.0
17	4.4	2.6	7.8	9.8	3.6	19	24	4.8	1.7	.41	.34	2.3
18	3.9	12	7.2	9.0	3.5	18	20	4.2	1.6	.54	.36	2.0
19	3.7	5.6	6.8	8.2	3.5	16	17	4.7	1.5	.43	.50	1.7
20	5.0	4.4	6.6	7.8	3.4	15	15	4.8	1.2	.27	.39	1.4
21	4.6	4.1	9.0	9.4	3.5	16	13	3.9	1.2	.24	.31	1.6
22	3.9	4.1	6.4	12	3.6	16	12	3.6	2.0	.19	.19	2.6
23	3.9	5.3	5.3	8.9	4.5	19	12	4.1	2.8	.14	.19	1.8
24	4.1	7.2	5.6	270	8.4	31	11	18	1.7	1.3	.68	1.5
25	3.6	6.2	11	183	18	61	9.8	23	1.4	3.9	.93	1.3
26	7.6	4.4	9.5	57	36	37	9.8	23	1.1	2.2	.68	1.1
27	36	4.1	8.2	35	23	26	16	21	.93	1.4	3.6	1.0
28	12	5.3	7.4	25	19	21	16	19	.99	.99	1.3	1.9
29	9.2	5.0	6.8	20	---	21	14	16	1.2	.85	.91	5.1
30	7.2	5.0	6.4	16	---	20	13	13	1.4	.79	.72	3.0
31	6.5	---	6.2	14	---	18	---	10	---	.55	.48	---
TOTAL	175.3	127.3	307.0	1505.1	227.0	1599	576.6	345.1	94.22	27.38	33.09	79.76
MEAN	5.65	4.24	9.90	48.6	8.11	51.6	19.2	11.1	3.14	.88	1.07	2.66
MAX	36	12	59	270	36	334	45	23	8.8	3.9	5.2	16
MIN	1.6	2.0	3.4	7.8	3.4	15	9.8	3.6	.93	.14	.19	.43
CFSM	.46	.35	.81	3.98	.67	4.23	1.57	.91	.26	.07	.09	.22
IN.	.53	.39	.94	4.59	.69	4.88	1.76	1.05	.29	.08	.10	.24
CAL YR 1978	TOTAL	6505.54	MEAN	17.8	MAX	252	MIN	.62	CFSM	1.46	IN	19.83
WTR YR 1979	TOTAL	5096.85	MEAN	14.0	MAX	334	MIN	.14	CFSM	1.15	IN	15.54

CHEMUNG RIVER BASIN

01518000 TIOGA RIVER AT TIOGA, PA

LOCATION.--Lat 41°54'30", long 77°07'47", Tioga County, Hydrologic Unit 02050104, on left bank 130 ft (40 m) upstream from highway bridge at Tioga, 0.8 mi (1.3 km) upstream from Crooked Creek and 0.9 mi downstream from Tioga Lake.

DRAINAGE AREA.--282 mi² (730 km²).

PERIOD OF RECORD.--June 1938 to current year.

REVISIONS.--WSP 871: 1938.

GAGE.--Water-stage recorder. Datum of gage is 1,021.0 ft (311.20 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1953, at site 20 ft (6 m) upstream at datum 2.11 ft (0.643 m) higher. Sept. 9, 1953 to Aug. 10, 1954, at site 130 ft (40 m) downstream at present datum.

REMARKS.--Records good except those for winter periods, which are fair. Discharges include flow diverted from Crooked Creek into Tioga River since Oct. 1, 1977. Peak flows were regulated at Tioga Lake.

AVERAGE DISCHARGE.--39 years (water years 1939-77), 331 ft³/s (9.374 m³/s), 15.89 in/yr (404 mm/yr), prior to inflow diverted from Crooked Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,000 ft³/s (1,670 m³/s) June 22, 1972, gage height, 19.70 ft (6.005 m), from floodmark, from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of slope-area measurement and contracted-opening measurement at gage height, 15.47 ft (4.715 m) and slope-area measurement of peak flow; no flow Mar. 6, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,430 ft³/s (239 m³/s) Mar. 5, gage height, 7.09 ft (2.161 m); minimum daily discharge, 29 ft³/s (0.82 m³/s) Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	187	190	1140	490	814	573	285	300	227	74	41
2	78	171	182	5430	440	1470	551	264	267	160	66	38
3	76	160	171	4650	390	1450	573	250	233	125	145	43
4	80	152	195	1480	340	2610	500	280	204	100	86	47
5	125	145	281	1510	300	4800	812	257	182	85	65	42
6	102	135	230	774	260	353	645	233	171	74	51	364
7	92	128	204	700	245	2870	515	215	158	66	46	491
8	86	139	204	740	230	4840	472	201	142	58	43	204
9	83	138	1120	580	220	1920	912	187	224	52	39	128
10	79	125	931	450	210	4090	1610	184	179	47	37	97
11	74	117	520	400	200	4590	1550	410	218	49	40	79
12	69	112	460	370	190	4960	1240	352	230	46	45	67
13	75	132	420	350	180	4830	1120	260	158	43	55	60
14	410	153	380	340	175	4490	997	230	123	40	51	63
15	454	136	330	470	170	4180	1120	201	109	52	43	224
16	243	107	322	380	160	3910	997	190	97	70	39	150
17	182	105	307	300	155	1970	899	171	86	56	36	100
18	150	300	260	270	150	842	742	150	83	45	34	81
19	137	278	230	250	145	787	606	140	79	42	35	70
20	147	207	215	240	142	736	525	155	73	40	35	64
21	158	190	240	280	145	742	472	145	67	36	33	65
22	137	179	220	330	150	780	431	135	78	34	30	79
23	125	171	200	280	180	842	393	128	289	33	29	92
24	123	195	190	1270	240	997	352	271	160	40	30	71
25	119	227	215	6830	400	1610	326	628	107	48	49	64
26	119	224	195	4800	1080	1520	307	705	86	107	63	59
27	611	182	175	2180	874	1090	364	583	73	92	135	56
28	376	179	160	1230	594	818	481	525	67	70	123	58
29	267	195	150	944	---	730	360	491	69	54	70	145
30	221	193	145	767	---	705	311	418	83	44	58	177
31	198	---	140	657	---	640	---	356	---	45	48	---
TOTAL	5274	5062	9182	40392	8455	66986	20756	9000	4395	2080	1733	3319
MEAN	170	169	296	1303	302	2161	692	290	147	67.1	55.9	111
MAX	611	300	1120	6830	1080	4960	1610	705	300	227	145	491
MIN	69	105	140	240	142	353	307	128	67	33	29	38
CFSM	.60	.60	1.05	4.62	1.07	7.66	2.45	1.03	.52	.24	.20	.39
IN.	.70	.67	1.21	5.33	1.12	8.84	2.74	1.19	.58	.27	.23	.44

CAL YR 1978 TOTAL 226720 MEAN 621 MAX 8360 MIN 60 CFSM 2.20 IN 29.91
WTR YR 1979 TOTAL 176634 MEAN 484 MAX 6830 MIN 29 CFSM 1.72 IN 23.30

CHEMUNG RIVER BASIN

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA

LOCATION.--Lat 41°57'27", long 77°06'58", Tioga County, Hydrologic Unit 02050104, on left bank, 3.3 mi (5.3 km) downstream from Crooked Creek and 5.0 mi (8.0 km) downstream from Tioga Lake.

DRAINAGE AREA.--446 mi² (1,160 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 990.43 ft (301.883 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,900 ft³/s (507 m³/s) Feb. 25, 1977, gage height, 16.70 ft (5.090 m), from rating curve extended above 4,000 ft³/s (113 m³/s); minimum, 26 ft³/s (0.74 m³/s), Sept. 12, 13, 1977 and Feb. 3, 1979.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 1975 reached an approximate stage of 22.12 ft (6.742 m) present datum, from floodmarks, approximate discharge 48,000 ft³/s (1,360 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,500 ft³/s (297 m³/s) Mar. 5, gage height, 14.47 ft (4.410 m); minimum, 26 ft³/s (0.74 m³/s) Feb. 3, gage height, 6.36 ft (1.939 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	208	192	600	562	900	636	307	316	224	103	49
2	83	188	182	6380	500	1700	617	282	277	177	89	45
3	77	178	172	4990	414	1860	636	272	242	141	149	51
4	85	171	197	1490	360	3300	558	301	211	113	106	56
5	139	164	299	1730	302	6820	938	272	186	96	75	50
6	110	153	239	1060	267	1350	740	243	173	87	60	448
7	99	143	207	1060	250	3220	580	225	165	77	55	579
8	92	149	204	1350	235	4630	520	211	155	70	51	216
9	85	147	1700	884	225	2190	1100	194	223	65	45	142
10	81	132	1290	640	215	3990	1990	202	191	61	43	109
11	77	122	689	551	205	4320	1910	442	232	62	48	90
12	71	114	602	500	200	4560	1520	375	251	60	57	77
13	81	124	528	470	190	4480	1380	280	171	57	66	69
14	480	157	475	460	185	4310	1210	243	139	53	60	71
15	584	146	362	580	178	4080	1340	209	121	64	50	207
16	281	111	330	390	172	3860	1210	194	109	78	45	158
17	205	109	290	310	168	2360	1060	173	99	69	42	110
18	168	325	250	280	162	1000	854	156	94	58	39	89
19	153	308	196	260	159	914	680	148	90	55	40	80
20	165	219	316	250	155	854	589	160	83	53	40	70
21	176	193	320	285	155	866	523	154	76	47	37	71
22	156	182	260	340	170	908	470	142	102	44	34	90
23	142	175	220	290	400	999	423	135	297	43	32	101
24	139	233	190	1690	800	1190	380	248	180	46	34	81
25	134	273	210	7390	1150	1890	348	668	121	52	58	70
26	148	232	200	4880	1200	1820	329	806	98	112	73	64
27	800	183	190	2560	1000	1290	399	654	86	104	137	60
28	466	203	180	1520	700	992	539	581	79	81	141	63
29	311	201	170	1150	---	836	391	543	80	64	87	134
30	256	192	160	908	---	800	335	456	92	56	68	177
31	225	---	155	752	---	709	---	379	---	57	57	---
TOTAL	6152	5435	10975	46000	10679	72998	24205	9655	4739	2426	2021	3677
MEAN	198	181	354	1484	381	2355	807	311	158	78.3	65.2	123
MAX	800	325	1700	7390	1200	6820	1990	806	316	224	149	579
MIN	71	109	155	250	155	709	329	135	76	43	32	45
CFSM	.44	.41	.79	3.33	.85	5.28	1.81	.70	.35	.18	.15	.28
IN.	.51	.45	.92	3.84	.89	6.09	2.02	.81	.40	.20	.17	.31

CAL YR 1978 TOTAL 251115 MEAN 688 MAX 8510 MIN 54 CFSM 1.54 IN 20.94
WTR YR 1979 TOTAL 198962 MEAN 545 MAX 7390 MIN 32 CFSM 1.22 IN 16.59

CHEMUNG RIVER BASIN

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1969 to September 1972, September 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to current year.

pH: October 1976 to current year.

WATER TEMPERATURES: October 1976 to current year.

DISSOLVED OXYGEN: October 1976 to September 1977.

INSTRUMENTATION.--Water-quality monitor since October 1976.

REMARKS.--Interruptions in the record were due to malfunctions of the equipment.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE (Water years 1977, 1979): Maximum, 460 micromhos Aug. 26, 1979; minimum, 67 micromhos Mar. 8, 1979.

pH: Maximum, 8.0 units May 23-25, 1978; minimum, 5.1 units Sept. 8, 1977; Aug. 26, Sept. 15, 23, 1979.

WATER TEMPERATURES: Maximum, 29.0°C on several days in 1977 and 1979; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 460 micromhos Aug. 26, minimum, 67 micromhos March 8.

pH: Maximum, 7.6 units Nov. 15; minimum, 5.1 units Aug. 26, Sept. 15, 23.

WATER TEMPERATURES: Maximum, 29.0°C July 13, 14; minimum, 0.0°C Feb. 6.

SPECIFIC CONDUCTANCE (MICROMHOS/CM at 25° C), WATER YEAR OCTOBER 1978 to SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	321	315	318	223	214	218	205	202	203	215	141	193
2	321	316	318	226	218	221	205	201	203	161	108	124
3	326	318	322	233	223	227	204	201	202	136	108	118
4	---	---	---	235	229	231	207	202	204	148	109	126
5	---	---	---	237	231	233	210	188	203	147	124	132
6	311	302	305	238	233	235	187	181	183	161	146	156
7	314	304	310	244	236	239	191	183	187	162	159	160
8	319	310	315	245	241	242	193	189	191	160	148	152
9	322	311	316	245	235	240	192	158	176	155	147	149
10	330	320	325	239	234	235	160	144	152	168	152	161
11	339	328	334	244	237	240	150	144	147	177	167	172
12	347	336	340	248	242	245	154	150	152	191	177	184
13	343	330	336	249	245	247	160	153	156	191	186	189
14	330	214	286	255	240	247	164	158	162	187	178	182
15	215	192	202	258	248	252	175	163	169	187	174	179
16	218	196	208	259	255	257	177	173	175	178	174	176
17	236	218	227	258	252	255	181	175	178	186	178	182
18	246	234	239	255	226	247	185	179	181	195	183	189
19	256	246	251	226	178	191	208	183	194	195	193	194
20	260	254	256	191	179	184	207	202	205	201	193	198
21	260	249	255	199	189	194	206	198	201	201	197	198
22	250	241	244	205	197	200	199	183	191	214	190	204
23	255	247	251	206	202	203	191	182	186	190	179	184
24	266	254	259	206	202	204	199	190	195	185	119	174
25	267	260	263	204	186	195	208	197	202	145	76	93
26	266	214	258	187	183	185	205	197	200	90	72	78
27	244	175	205	197	185	190	200	197	198	125	90	109
28	187	170	177	200	196	197	206	197	201	138	125	132
29	199	185	193	203	197	200	216	205	212	145	137	141
30	207	198	202	204	200	201	225	216	221	150	144	147
31	216	206	211	---	---	---	226	214	222	156	150	152
MONTH	347	170	266	259	178	222	226	144	189	215	72	159

CHEMUNG RIVER BASIN

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM at 25° C), WATER YEAR OCTOBER 1978 to SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MTN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	168	155	160	181	168	174	148	143	145	181	175	178
2	179	166	172	168	134	144	150	146	148	186	180	183
3	181	176	178	136	123	130	150	146	148	188	181	185
4	182	177	179	123	95	111	151	147	149	187	180	183
5	185	178	182	95	73	80	150	137	144	184	168	181
6	194	184	190	84	70	75	143	138	140	189	182	186
7	201	193	198	74	68	70	148	142	145	194	189	191
8	199	195	196	76	67	71	150	147	148	202	193	197
9	196	192	194	101	74	87	147	120	137	208	200	204
10	201	194	198	90	85	87	124	119	121	212	192	206
11	207	199	204	88	83	85	122	116	118	203	148	179
12	212	206	209	95	87	90	122	117	119	165	149	157
13	215	210	213	106	94	100	122	119	120	181	160	172
14	220	214	218	107	95	103	126	121	124	189	179	185
15	220	217	218	131	96	110	126	123	124	195	186	189
16	221	218	219	134	105	119	130	122	126	205	193	198
17	221	216	219	144	133	138	132	129	131	208	200	204
18	224	217	221	140	132	135	141	131	135	216	206	210
19	224	221	222	135	131	133	145	139	142	222	214	219
20	230	223	227	136	132	134	152	145	148	223	219	220
21	234	227	231	135	128	131	157	150	153	225	216	221
22	238	234	236	131	122	127	162	157	159	224	215	219
23	250	233	241	125	116	120	166	160	163	230	224	226
24	233	202	220	118	111	115	172	165	169	227	219	223
25	203	170	184	117	107	111	178	172	175	222	154	178
26	192	170	177	116	109	112	182	176	179	156	138	144
27	173	161	164	124	111	117	181	173	176	139	132	136
28	177	163	170	137	123	128	179	157	165	138	132	135
29	---	---	---	137	133	135	169	157	163	141	134	137
30	---	---	---	140	136	138	176	167	171	149	139	144
31	---	---	---	144	138	141	---	---	---	158	148	152
MONTH	250	155	201	181	67	115	182	116	146	230	132	185

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	165	156	160	301	213	262	303	243	283	339	323	333
2	173	165	169	247	208	226	302	269	291	347	334	341
3	182	173	178	255	245	251	372	281	323	365	336	350
4	192	182	186	264	254	259	316	261	278	382	364	374
5	202	192	197	267	257	261	283	263	273	377	357	366
6	211	201	207	280	265	274	301	284	295	358	198	287
7	219	208	213	289	277	284	315	297	305	208	182	189
8	223	217	220	296	289	293	333	313	326	230	194	213
9	243	196	221	305	296	301	346	332	340	255	228	241
10	219	195	209	314	298	306	360	342	350	280	254	267
11	221	196	209	320	308	316	365	359	361	307	280	292
12	220	190	203	327	315	320	397	364	382	326	306	316
13	213	192	203	327	314	322	405	395	401	342	326	332
14	227	212	220	332	322	327	402	376	392	350	337	343
15	239	226	234	365	327	347	376	358	365	381	249	325
16	249	238	244	337	303	314	363	355	359	248	228	235
17	261	247	253	318	286	302	376	358	367	272	242	257
18	269	257	261	332	317	326	395	373	382	295	271	282
19	275	266	270	339	329	334	400	381	389	317	294	305
20	281	273	277	350	338	343	398	390	393	336	314	324
21	287	280	283	348	339	343	397	390	393	341	330	334
22	290	234	278	355	341	349	406	392	400	356	341	347
23	298	208	249	358	349	354	409	397	401	376	331	358
24	214	195	203	364	349	355	415	403	406	333	318	322
25	242	214	229	369	330	352	434	406	420	334	318	324
26	261	243	252	395	288	341	460	424	440	357	331	339
27	282	260	271	291	268	277	424	281	320	364	349	354
28	287	277	283	318	290	307	323	275	299	365	349	356
29	299	286	292	317	310	313	287	270	275	356	336	345
30	313	296	304	320	311	315	303	285	292	336	253	277
31	---	---	---	333	299	323	324	302	312	---	---	---
MONTH	313	156	233	395	208	310	460	243	349	382	182	311

CHEMUNG RIVER BASIN

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

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

CHEMUNG RIVER BASIN

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.3	7.0	7.2	7.3	6.8	7.0	7.3	7.2	7.3	7.3	7.0	7.1
2	7.3	7.0	7.1	7.3	7.2	7.2	7.5	7.2	7.3	7.2	7.0	7.1
3	7.3	7.0	7.1	7.3	7.2	7.2	7.3	6.6	7.0	7.1	6.8	7.0
4	7.3	7.0	7.1	7.2	7.1	7.2	7.1	6.8	7.0	6.8	6.6	6.7
5	7.2	7.0	7.1	7.3	7.1	7.2	7.2	7.0	7.1	7.0	6.6	6.9
6	7.2	6.9	7.0	7.2	7.1	7.2	7.2	7.0	7.1	7.3	6.9	7.0
7	7.1	6.9	7.0	7.1	7.1	7.1	7.3	7.1	7.2	7.2	7.0	7.1
8	7.1	6.9	7.0	7.1	7.0	7.1	7.3	7.1	7.2	7.3	7.1	7.2
9	7.1	6.9	7.0	7.1	6.9	7.0	7.2	7.0	7.1	7.2	7.2	7.2
10	7.2	7.0	7.1	7.1	6.9	7.0	7.2	7.0	7.1	7.2	7.1	7.2
11	7.3	7.0	7.1	7.0	6.8	6.9	7.2	7.0	7.1	7.1	7.0	7.1
12	7.3	7.3	7.3	7.1	6.8	6.9	7.1	6.8	7.0	7.0	6.9	6.9
13	7.3	7.2	7.3	7.1	6.9	7.0	6.8	6.0	6.4	6.9	6.8	6.9
14	7.3	7.2	7.2	7.1	6.9	7.0	6.1	5.5	5.7	6.8	6.7	6.7
15	7.3	7.1	7.2	7.0	6.7	6.9	6.5	5.9	6.4	6.8	5.1	6.1
16	7.2	7.0	7.1	7.2	6.7	7.0	6.7	6.5	6.6	6.8	6.2	6.6
17	7.2	7.0	7.1	7.2	7.0	7.1	6.8	6.7	6.7	6.8	6.6	6.7
18	7.2	7.0	7.1	7.1	7.0	7.1	7.0	6.7	6.8	6.7	6.7	6.7
19	7.1	7.0	7.1	7.1	6.9	7.0	7.0	6.9	6.9	6.7	6.5	6.7
20	7.1	7.0	7.0	7.0	6.9	6.9	6.9	6.8	6.8	6.6	6.3	6.5
21	7.1	7.0	7.1	7.1	6.8	6.9	6.8	6.7	6.8	6.5	6.2	6.3
22	7.1	7.0	7.0	7.1	6.9	7.0	6.9	6.7	6.8	6.4	5.9	6.2
23	7.1	6.8	7.0	7.0	6.9	6.9	6.9	6.8	6.8	6.0	5.1	5.2
24	7.1	7.0	7.1	7.0	6.8	6.9	6.9	6.8	6.8	5.6	5.2	5.4
25	7.1	7.1	7.1	7.2	6.8	7.0	7.1	6.7	6.9	6.4	5.7	6.0
26	7.1	7.0	7.1	7.2	6.5	7.0	6.8	5.1	5.7	6.6	6.1	6.3
27	7.1	7.0	7.1	7.5	7.2	7.4	7.2	5.5	6.6	6.6	6.1	6.4
28	7.1	7.0	7.0	7.4	7.2	7.3	7.1	6.8	6.9	6.5	5.9	6.2
29	7.0	6.9	7.0	7.3	7.1	7.2	7.2	6.9	7.0	6.6	6.0	6.3
30	6.9	6.8	6.9	7.3	7.1	7.2	7.2	7.0	7.1	6.9	6.3	6.7
31	---	---	---	7.3	7.1	7.2	7.1	7.0	7.1	---	---	---
MONTH	7.3	6.8	7.1	7.5	6.5	7.1	7.5	5.1	6.9	7.3	5.1	6.6

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

CHEMUNG RIVER BASIN

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	1.0	1.0	1.0	.5	1.0	11.0	8.5	9.5	15.0	12.0	13.5
2	1.0	1.0	1.0	1.0	.5	1.0	9.0	8.0	8.0	15.5	10.0	13.0
3	1.5	1.0	1.0	1.5	1.0	1.0	8.0	7.0	7.5	14.5	12.0	12.5
4	1.5	1.0	1.0	1.5	1.0	1.0	7.0	5.0	6.0	14.0	11.5	12.5
5	1.0	1.0	1.0	2.0	1.0	1.0	5.5	5.0	5.0	14.5	10.0	12.5
6	1.0	.0	1.0	3.0	1.5	2.0	5.5	3.5	4.5	17.0	11.5	14.0
7	1.5	1.0	1.0	2.5	2.0	2.0	4.5	2.0	3.5	19.5	13.0	16.0
8	1.0	.5	1.0	2.0	2.0	2.0	4.5	3.0	3.5	22.0	16.5	19.5
9	1.0	.5	1.0	3.5	2.0	2.5	3.5	2.5	3.0	24.0	19.0	21.5
10	1.0	1.0	1.0	2.5	2.5	2.5	6.5	2.0	4.0	23.0	20.5	22.0
11	1.5	1.0	1.0	2.5	2.5	2.5	7.5	5.0	6.0	21.5	19.5	20.5
12	1.0	1.0	1.0	2.5	2.0	2.5	7.5	6.5	7.0	22.0	19.0	20.5
13	1.0	1.0	1.0	2.5	2.0	2.5	7.5	7.0	7.5	21.0	18.0	19.5
14	1.5	1.0	1.0	2.5	2.0	2.5	8.0	6.0	7.0	20.0	16.0	18.0
15	1.5	1.0	1.5	2.5	2.0	2.0	8.0	7.0	7.5	18.5	16.0	17.0
16	1.5	1.0	1.5	2.0	1.5	1.5	7.0	6.0	6.5	17.0	15.5	16.5
17	1.5	1.0	1.0	5.0	1.5	3.0	7.0	5.5	6.5	17.0	14.0	15.5
18	1.0	1.0	1.0	5.5	4.0	4.5	9.0	6.0	7.5	18.0	15.5	16.5
19	1.0	1.0	1.0	5.5	3.5	4.5	10.0	7.5	9.0	19.0	17.5	18.0
20	1.5	1.0	1.0	6.0	4.0	5.5	11.5	7.5	9.5	20.0	17.5	18.5
21	1.0	1.0	1.0	7.5	5.0	6.0	13.0	9.0	11.0	20.0	17.5	18.5
22	1.0	.5	1.0	8.5	6.0	7.5	14.0	12.0	13.0	18.0	15.5	16.5
23	1.0	.5	.5	9.5	7.0	8.5	16.0	12.5	14.0	18.0	16.0	16.5
24	1.0	.5	.5	9.5	9.0	9.5	17.0	13.0	15.0	16.0	15.0	15.5
25	1.0	.5	1.0	9.5	6.5	7.5	18.0	15.0	16.0	15.0	13.5	14.0
26	1.0	.5	.5	6.5	4.0	5.0	17.0	15.5	16.0	13.5	13.0	13.5
27	1.0	.5	.5	5.0	3.0	4.0	15.5	13.0	14.5	13.0	12.5	12.5
28	1.0	.5	.5	6.0	3.0	4.5	15.0	11.5	13.5	12.5	12.0	12.0
29	---	---	---	8.5	5.5	6.5	14.5	12.5	13.5	13.0	12.0	12.5
30	---	---	---	10.5	8.5	9.5	16.0	11.5	13.5	16.5	13.0	14.5
31	---	---	---	11.0	10.0	10.5	---	---	---	19.5	14.0	16.5
MONTH	1.5	.0	1.0	11.0	.5	4.0	18.0	2.0	9.0	24.0	10.0	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	22.0	17.5	19.5	22.5	20.5	21.5	28.5	23.5	25.5	25.5	22.0	23.5
2	23.5	19.0	21.0	21.0	19.5	20.5	27.5	24.5	26.0	24.5	22.5	23.5
3	22.0	19.0	20.5	23.5	18.5	21.0	28.0	23.5	25.5	25.5	22.5	23.5
4	23.5	18.0	20.5	22.0	18.0	20.0	27.5	24.0	26.0	25.0	21.5	23.5
5	22.5	19.5	21.0	20.0	16.0	17.5	28.0	24.0	26.0	24.0	22.5	23.5
6	21.5	18.5	20.0	20.0	14.5	17.0	27.0	24.0	25.5	23.5	21.5	22.5
7	23.0	18.0	20.5	22.5	16.5	19.5	24.0	20.5	22.5	21.5	20.0	21.0
8	22.0	20.5	21.5	24.5	18.5	21.5	25.0	22.0	23.5	21.0	17.5	19.5
9	26.0	20.5	23.0	25.5	20.5	23.0	26.0	21.5	24.0	20.0	15.5	17.5
10	25.0	22.5	23.5	24.0	21.5	22.0	25.0	23.0	24.0	20.0	16.0	18.0
11	23.5	17.5	20.5	25.0	20.0	22.0	24.0	20.5	22.0	21.0	18.0	19.5
12	18.0	14.5	16.0	26.5	22.0	24.0	20.5	18.5	19.5	21.5	17.0	19.5
13	19.0	14.0	16.5	29.0	23.5	26.0	22.5	17.0	19.5	21.5	18.0	20.0
14	21.0	15.0	18.0	29.0	25.0	27.0	22.5	19.5	21.0	21.5	19.5	20.5
15	24.0	18.0	21.0	28.5	25.0	26.5	20.5	17.0	18.0	20.0	17.0	18.0
16	25.5	20.5	23.0	26.5	24.5	26.0	20.0	15.5	17.5	19.5	15.0	17.0
17	25.0	21.5	23.5	26.5	23.0	24.5	20.0	16.0	18.0	20.0	16.0	18.0
18	23.5	18.5	21.0	27.0	22.5	24.5	19.5	17.5	18.5	20.5	17.0	19.0
19	22.5	16.5	19.5	27.5	22.0	24.5	21.5	17.5	19.0	19.5	16.5	18.0
20	24.0	18.0	21.0	27.0	23.0	25.0	23.0	19.0	21.0	16.5	13.0	15.0
21	22.5	18.5	20.0	27.0	24.0	25.5	24.5	20.5	22.5	16.0	14.5	15.0
22	21.0	17.0	18.5	27.5	24.0	26.0	24.5	20.5	22.5	16.5	15.0	15.5
23	20.0	18.0	19.0	27.0	24.0	25.5	23.0	20.5	21.0	16.5	13.0	15.0
24	18.5	16.0	17.0	28.0	23.5	25.5	23.5	20.0	21.5	16.5	13.0	14.5
25	20.5	15.0	17.5	27.5	24.5	26.0	24.5	22.0	23.0	17.0	13.0	15.0
26	22.0	16.0	19.0	26.0	24.0	25.0	23.5	20.5	22.5	18.5	14.5	16.5
27	23.0	18.0	20.5	25.0	23.0	24.0	23.0	21.5	22.0	18.0	15.0	16.5
28	22.0	19.5	20.0	24.0	22.0	23.0	24.5	21.0	22.5	17.0	15.5	16.0
29	23.5	18.0	21.0	25.5	22.0	23.5	24.5	22.5	23.5	16.5	15.5	16.0
30	24.0	20.5	22.0	27.0	22.0	24.5	26.5	22.5	24.5	18.5	16.0	17.0
31	---	---	---	28.5	23.5	26.0	26.0	22.0	24.0	---	---	---
MONTH	26.0	14.0	20.0	29.0	14.5	23.5	28.5	15.5	22.5	25.5	13.0	18.5

CHEMUNG RIVER BASIN

01520000 COWANESQUE RIVER NEAR LAWRENCEVILLE, PA

LOCATION.--Lat 41°59'48", long 77°08'25", Tioga County, Hydrologic Unit 02050104, on left bank 1.4 mi (2.3 km) upstream from mouth, and 0.8 mi (1.3 km) upstream from steel-truss highway bridge on U.S. Route 15 in Lawrenceville, Pa.

DRAINAGE AREA.--298 mi² (777 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1951 to current year. Prior to July 1976 at site 1.1 mi (1.8 km) upstream, datum 998.03 ft (304.200 m) above mean sea level.

REVISED RECORDS.--WDR PA-72-1: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 983.96 ft (299.911 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Discharges affected by construction of Cowanesque Reservoir 1/2 mile upstream of gage.

AVERAGE DISCHARGE.--28 years, 294 ft³/s (8.326 m³/s), 13.44 in/yr (341 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,700 ft³/s (1,240 m³/s) Sept. 26, 1975, gage height, 18.13 ft (5.526 m) site and datum then in use, from floodmark, from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of slope-area measurement of peak flow; minimum discharge before construction of Cowanesque Dam, 0.8 ft³/s (0.023 m³/s), Aug. 31, Sept. 1, 27, 1964; no flow Aug. 22, 1978, during dam construction.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,850 ft³/s (166 m³/s) Mar. 6, gage height, 11.78 ft (3.591 m); minimum daily, 13 ft³/s (0.368 m³/s) Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	67	80	670	357	210	501	137	130	128	61	21
2	14	62	84	4040	268	580	456	120	111	99	72	20
3	13	56	81	2780	220	998	474	111	94	69	42	21
4	13	52	88	1240	190	1910	418	123	80	51	34	21
5	16	48	183	660	170	4880	504	121	68	39	28	21
6	21	46	136	460	155	5780	509	105	64	35	25	273
7	18	44	109	340	145	5310	428	94	58	31	24	506
8	17	46	103	450	135	4180	370	88	55	29	25	159
9	16	51	482	330	128	2190	653	81	82	27	23	83
10	16	47	552	280	120	1550	1440	76	81	25	23	56
11	15	42	307	260	112	1490	1570	173	115	26	23	42
12	14	40	261	240	105	857	1060	219	163	28	23	35
13	18	38	220	220	100	684	907	172	82	26	23	31
14	169	37	190	190	96	1060	750	130	58	24	22	31
15	406	37	165	300	92	1100	709	108	47	23	21	40
16	212	36	150	220	88	715	642	121	40	24	21	47
17	131	38	140	180	84	640	588	104	35	29	20	35
18	98	64	130	150	81	715	531	83	33	27	19	30
19	77	116	84	130	79	677	433	73	29	25	19	27
20	67	79	90	120	77	677	348	69	30	23	19	26
21	63	65	110	140	78	679	290	63	29	22	19	25
22	56	59	140	210	83	709	254	57	31	21	18	26
23	48	55	113	180	110	691	226	54	65	21	18	27
24	44	71	100	250	150	998	199	62	50	36	18	26
25	45	117	92	4420	350	1550	179	173	36	44	18	25
26	43	112	110	2820	250	1250	166	276	30	39	23	24
27	147	68	96	1230	200	791	168	244	27	67	33	23
28	193	77	88	895	180	640	204	205	29	42	49	25
29	120	88	82	702	---	576	185	216	31	32	31	37
30	92	84	76	574	---	576	178	208	39	28	25	89
31	71	---	80	496	---	554	---	165	---	26	23	---
TOTAL	2287	1842	4722	25177	4203	45217	15340	4031	1822	1166	842	1852
MEAN	73.8	61.4	152	812	150	1459	511	130	60.7	37.6	27.2	61.7
MAX	406	117	552	4420	357	5780	1570	276	163	128	72	506
MIN	13	36	76	120	77	210	166	54	27	21	18	20
CFSM	.25	.21	.51	2.73	.50	4.90	1.72	.44	.20	.13	.09	.21
IN.	.29	.23	.59	3.14	.52	5.64	1.91	.50	.23	.15	.11	.23
CAL YR 1978 TOTAL	129572.70			MEAN 355	MAX 5320	MIN .00	CFSM 1.19	IN 16.17				
WTR YR 1979 TOTAL	108501.00			MEAN 297	MAX 5780	MIN 13	CFSM 1.00	IN 13.54				

CHEMUNG RIVER BASIN

01520000 COWANESQUE RIVER NEAR LAWRENCEVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1968 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: May 1972 to September 1975, November 1976 to current year.

INSTRUMENTATION.--Temperature recorder since May 1972.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 31.0°C July 9, 1975, July 14, 15, 1979; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum, 31.0°C July 14, 15; minimum 0.0°C on many days during winter period.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.0	14.0	15.0	9.5	7.5	8.5	2.5	1.0	1.5	.5	.0	.0
2	15.0	13.0	14.0	9.5	7.0	8.0	1.5	1.0	1.5	1.0	.0	.5
3	17.5	12.5	14.5	9.5	6.5	7.5	1.5	1.0	1.0	.5	.0	.5
4	16.5	13.5	14.5	10.0	7.5	8.0	3.5	1.0	2.0	.0	.0	.0
5	17.0	13.0	15.0	10.0	7.5	8.5	3.5	2.5	3.0	.0	.0	.0
6	15.5	13.5	14.5	10.5	8.0	9.0	3.0	2.0	2.5	.5	.0	.0
7	14.5	12.0	13.5	9.0	9.0	9.0	2.5	2.0	2.5	.0	.0	.0
8	12.5	10.5	11.5	10.0	7.5	9.0	4.5	2.5	3.5	.0	.0	.0
9	14.0	9.5	11.0	9.5	6.5	7.5	5.0	2.5	4.0	.0	.0	.0
10	14.5	9.5	11.5	9.0	6.0	7.0	2.5	.0	1.0	.0	.0	.0
11	16.0	11.0	13.0	9.0	6.0	7.0	.5	.0	.5	.0	.0	.0
12	17.0	12.5	14.0	7.0	6.5	6.5	1.0	.0	.5	.0	.0	.0
13	14.5	13.0	14.0	6.5	6.0	6.5	1.0	.0	.5	.0	.0	.0
14	13.0	9.5	11.5	7.5	6.0	7.0	.5	.0	.0	.0	.0	.0
15	9.5	9.0	9.0	8.0	6.5	7.0	1.5	.0	.5	.0	.0	.0
16	9.5	8.5	9.0	8.5	6.5	7.0	1.0	.0	.5	.0	.0	.0
17	10.0	8.0	9.0	7.0	6.0	6.5	1.0	.0	.5	.0	.0	.0
18	8.5	7.0	8.0	7.0	6.5	6.5	.5	.0	.0	.0	.0	.0
19	8.5	7.0	8.0	7.0	6.0	6.5	.5	.0	.0	.5	.0	.0
20	10.0	8.0	9.0	6.0	4.0	5.5	.0	.0	.0	.0	.0	.0
21	12.0	9.0	10.0	4.0	2.5	3.5	.5	.0	.0	.0	.0	.0
22	12.5	9.5	11.0	2.5	2.0	2.0	.5	.0	.0	.0	.0	.0
23	12.0	10.0	11.0	2.5	2.0	2.5	.5	.0	.0	.0	.0	.0
24	11.5	9.0	10.0	4.0	2.5	3.5	.5	.0	.0	.0	.0	.0
25	10.5	8.5	9.5	4.0	3.0	3.5	.0	.0	.0	.0	.0	.0
26	10.5	9.0	10.0	3.0	1.0	2.0	.5	.0	.0	.0	.0	.0
27	11.0	10.5	10.5	1.0	.0	.5	.0	.0	.0	.0	.0	.0
28	10.0	9.0	9.5	1.0	.0	.5	.5	.0	.0	.0	.0	.0
29	9.5	8.0	9.0	1.5	.0	.5	.5	.0	.0	.0	.0	.0
30	8.5	6.5	7.5	2.0	.5	1.0	.5	.0	.0	.0	.0	.0
31	9.5	7.0	8.0	---	---	---	.5	.0	.0	.0	.0	.0
MONTH	17.5	6.5	11.0	10.5	.0	5.5	5.0	.0	1.0	1.0	.0	.0

CHEMUNG RIVER BASIN

01520000 COWANESQUE RIVER NEAR LAWRENCEVILLE, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	.0	.0	.0	.0	.0	.0	10.5	8.5	9.5	13.5	12.0	12.5
2	.5	.0	.0	.0	.0	.0	8.5	7.0	7.5	14.0	12.0	13.5
3	.5	.0	.0	.5	.0	.0	7.0	7.0	7.0	13.5	12.0	12.5
4	.5	.0	.0	.5	.0	.0	7.0	5.0	5.5	13.0	11.5	12.5
5	.0	.0	.0	.5	.0	.5	5.0	4.0	4.5	13.5	11.0	13.0
6	.0	.0	.0	.5	.5	.5	4.0	2.5	3.5	15.5	13.0	15.0
7	.0	.0	.0	1.5	.5	1.0	4.0	2.0	2.5	19.5	15.5	17.5
8	.0	.0	.0	2.0	1.0	1.5	3.5	2.5	3.0	23.0	20.0	21.0
9	.0	.0	.0	2.0	1.5	1.5	2.5	2.0	2.0	24.0	22.5	23.5
10	.0	.0	.0	2.5	2.0	2.5	6.0	1.5	3.0	24.5	21.0	22.5
11	.0	.0	.0	2.5	.5	1.5	6.0	5.0	5.5	22.0	20.0	21.0
12	.0	.0	.0	1.0	.0	.5	6.5	6.0	6.0	22.0	20.0	21.0
13	.0	.0	.0	3.0	.5	1.5	6.5	6.0	6.5	20.5	17.5	18.5
14	.0	.0	.0	3.5	2.5	3.0	6.5	6.0	6.5	19.0	17.5	18.0
15	.0	.0	.0	2.5	.0	1.0	7.0	6.5	7.0	17.5	16.0	17.0
16	.0	.0	.0	1.5	.0	.5	6.5	6.0	6.5	17.0	14.5	16.0
17	.0	.0	.0	4.0	1.0	2.5	6.5	5.5	6.0	18.5	16.5	17.5
18	.0	.0	.0	4.5	3.5	4.0	8.5	6.0	7.0	20.5	17.5	19.0
19	.0	.0	.0	5.0	4.0	4.5	9.5	8.0	9.0	22.5	19.5	20.5
20	.0	.0	.0	5.5	4.0	5.0	11.0	9.0	9.5	21.0	19.5	20.5
21	.0	.0	.0	6.5	5.0	5.5	13.0	9.5	11.0	20.5	17.0	18.0
22	.0	.0	.0	7.5	5.5	6.5	14.5	12.5	13.5	17.5	16.5	17.5
23	.0	.0	.0	8.5	7.0	7.5	---	---	---	16.5	16.0	16.0
24	.0	.0	.0	9.0	8.5	9.0	---	---	---	15.5	14.0	15.0
25	.0	.0	.0	9.0	6.5	7.5	17.0	---	---	14.0	13.0	13.5
26	.0	.0	.0	6.0	3.5	5.0	17.0	16.0	16.5	13.5	12.5	13.0
27	.0	.0	.0	3.5	2.5	3.0	16.0	13.5	15.0	13.0	12.0	12.5
28	.0	.0	.0	5.0	2.5	3.5	14.0	12.5	13.5	13.0	12.0	12.5
29	---	---	---	7.0	5.0	6.0	14.0	12.5	13.5	16.0	13.5	14.5
30	---	---	---	9.5	7.0	8.5	14.0	13.0	13.5	18.5	15.5	16.5
31	---	---	---	10.5	9.5	10.0	---	---	---	21.5	18.5	19.5
MONTH	.5	.0	.0	10.5	.0	3.5	17.0	1.5	8.0	24.5	11.0	17.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.0	21.0	22.0	24.0	21.5	22.5	27.5	25.0	26.5	28.0	22.5	25.0
2	23.5	21.5	22.5	23.0	21.0	22.0	28.0	26.5	27.0	26.0	23.0	24.5
3	24.0	21.0	22.5	23.0	20.0	21.0	28.0	25.0	26.5	27.5	23.5	25.0
4	24.0	21.5	23.0	23.0	20.5	21.5	28.0	25.5	26.5	27.0	22.0	24.5
5	21.5	20.0	21.0	21.5	18.0	19.5	30.0	25.5	27.0	26.0	23.5	24.5
6	21.0	20.0	20.5	20.5	15.5	17.5	27.5	23.5	25.5	24.0	21.5	22.5
7	23.0	21.0	22.0	23.0	17.0	19.0	27.0	22.0	24.0	21.5	21.0	21.0
8	22.5	22.0	22.5	25.0	20.0	22.0	25.5	22.5	24.0	21.0	18.0	19.5
9	26.5	22.0	24.0	25.5	21.5	23.5	27.5	21.5	24.5	19.0	16.5	18.0
10	26.0	24.0	25.0	25.0	23.0	23.5	26.5	23.5	24.5	21.0	17.0	18.5
11	25.0	19.0	22.5	25.5	21.0	23.0	23.5	21.0	22.0	22.0	18.5	20.0
12	18.5	16.5	17.0	27.0	23.0	24.5	21.5	18.5	20.5	22.5	19.0	20.5
13	18.5	16.0	17.0	30.0	24.5	26.5	25.0	17.5	21.0	22.5	19.5	20.5
14	21.0	17.0	19.0	31.0	26.0	28.0	24.0	19.5	21.5	22.5	19.5	20.5
15	24.5	20.0	22.0	31.0	26.5	28.0	19.0	17.0	18.0	21.0	17.0	19.0
16	26.5	22.0	24.0	28.5	26.0	27.0	23.5	16.0	19.0	19.0	17.0	17.5
17	26.0	23.5	24.5	27.0	24.5	25.5	23.5	15.5	19.5	21.0	17.0	18.5
18	24.5	20.5	22.5	27.5	24.0	25.5	19.0	18.0	18.5	22.0	17.5	19.5
19	23.0	18.5	20.5	28.0	23.5	25.5	24.0	18.0	20.5	21.0	16.0	18.5
20	25.0	19.0	21.5	28.0	24.0	25.5	25.0	18.5	21.5	19.5	15.0	16.5
21	22.5	21.0	21.5	28.5	24.0	25.5	27.0	20.5	23.0	16.0	15.0	15.5
22	23.0	19.5	20.5	30.0	24.0	26.5	27.0	20.0	23.0	17.5	15.0	16.0
23	21.5	19.0	20.0	29.5	24.0	26.0	22.0	20.5	21.0	18.5	14.0	15.5
24	20.0	17.5	18.5	27.5	23.5	26.0	25.5	21.0	22.5	18.5	14.0	15.5
25	21.0	16.0	18.0	27.5	26.0	26.5	27.0	22.0	23.5	18.5	13.0	16.0
26	23.5	16.5	19.0	27.0	25.0	26.0	25.5	21.0	23.0	21.0	15.0	17.0
27	24.0	18.5	21.0	25.0	24.0	24.5	24.0	22.0	23.0	19.0	15.0	16.5
28	22.5	20.5	21.0	24.5	23.5	24.0	24.5	22.5	23.5	16.5	15.5	16.0
29	24.0	19.5	21.0	26.0	23.0	24.5	25.0	23.5	24.0	16.0	15.5	15.5
30	24.5	21.0	22.0	28.0	23.5	25.5	27.5	23.0	25.0	17.5	16.0	17.0
31	---	---	---	29.5	24.5	26.5	27.5	23.0	25.0	---	---	---
MONTH	26.5	16.0	21.5	31.0	15.5	24.5	30.0	15.5	23.0	28.0	13.0	19.0

SUSQUEHANNA RIVER BASIN

01531500 SUSQUEHANNA RIVER AT TOWANDA, PA

LOCATION.--Lat 41°45'55", long 76°26'28", Bradford County, Hydrologic Unit 02050106, on right bank under Bridge Street Bridge at Towanda, 1.8 mi (2.9 km) upstream from Towanda Creek.

DRAINAGE AREA.--7,797 mi² (20,194 km²).

PERIOD OF RECORD.--October 1913 to current year. Monthly discharge only for some periods, published in WSP 1302. Gage-height records collected at same site since October 1892 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1922, 1929.

GAGE.--Water-stage recorder. Datum of gage is 694.38 ft (211.647 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 18, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Peaks may be affected by upstream regulation.

AVERAGE DISCHARGE.--66 years, 10,680 ft³/s (302.5 m³/s), 18.60 in/yr (472 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 320,000 ft³/s (9,060 m³/s) June 24, 1972, gage height, 35.42 ft (10.189 m) from floodmarks, from rating curve extended above 180,000 ft³/s (5,100 m³/s); minimum, 334 ft³/s (9.46 m³/s) Sept. 23, 24, 1964; minimum gage height, -0.56 ft (-0.171 m) Aug. 17, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 68,000 ft³/s (1,930 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. 3	0300	97,100 2,750	16.22 4.944	Mar. 6	1000	*179,000 5,070	*24.04 7.327
Jan. 26	0430	87,200 2,470	15.12 4.609				

Minimum discharge, 948 ft³/s (26.8 m³/s), Aug. 23, 24, Sept. 2, gage height, 0.17 ft (0.052 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1660	5240	3870	7880	14000	17700	22600	12900	12500	1950	2160	1030
2	1560	4760	3910	62000	10500	22200	20600	10800	10000	2170	3010	976
3	1540	4430	3920	89000	8400	25500	19800	9600	8640	2270	2530	1010
4	1570	4110	3780	59000	7600	36000	19100	9400	8640	2040	2100	1330
5	1560	3820	4200	35000	6800	93400	18600	10500	7620	1890	1760	1560
6	1580	3620	6680	25000	6300	168000	19000	10000	6440	1770	1480	1970
7	2080	3450	7820	19000	5900	137000	17500	8620	5810	1660	1320	8270
8	2310	3340	7600	20000	5500	107000	15200	7590	5410	1540	1220	7320
9	2280	3240	9750	21000	5100	77900	17300	6930	4930	1430	1180	6190
10	2280	3180	17600	17000	4900	53600	34600	6540	4890	1360	1150	4300
11	2080	3110	15400	13000	4700	50200	37900	7830	4690	1310	1130	3170
12	1880	2970	11100	9000	4500	46700	32900	7280	5120	1280	1110	2520
13	1740	2810	9330	8000	4300	40500	29100	6730	5100	1250	1100	2140
14	1850	2690	8670	9000	4200	35600	26200	5880	4400	1220	1110	1940
15	3330	2600	8210	11000	4100	38300	25500	5430	3810	1180	1090	1920
16	6470	2500	7390	12000	3900	33900	26000	5020	3390	1210	1070	3160
17	6310	2440	6730	10000	3900	28700	24800	4780	3070	1840	1040	2880
18	4950	2500	6560	8000	3800	24200	22700	4430	2840	2070	1060	2480
19	3980	2850	5600	6600	3700	21800	19300	4030	2670	2880	1060	2270
20	3600	3810	4590	6000	3700	19900	16400	3770	2590	2520	1060	1960
21	3410	3910	5060	6200	3800	18700	14100	3590	2490	2630	1030	1780
22	3530	3610	7830	8000	4300	19200	12400	3450	2400	2110	990	1700
23	3710	3210	9410	13000	4900	21000	11200	3330	2470	1700	962	1690
24	3380	3080	7200	17000	6200	24200	10300	3790	2610	1720	1010	1800
25	3130	3170	5800	51400	7800	30000	9300	9160	2670	1660	1020	1780
26	3010	3960	4800	75100	18000	37800	8450	23500	2400	1770	990	1650
27	3960	4530	5700	45900	20000	35900	8290	30400	2160	1780	1030	1510
28	7370	4500	5400	32000	16000	28200	14000	27900	2000	1730	1150	1450
29	9620	3900	5100	25600	---	21700	19200	21700	1940	1550	1190	1560
30	7600	3850	4900	21500	---	22200	16700	18100	1930	1450	1220	1770
31	5960	---	5540	17900	---	24200	---	15200	---	1450	1140	---
TOTAL	109290	105190	219450	761080	196800	1361200	589040	308180	135630	54390	40472	75086
MEAN	3525	3506	7079	24550	7029	43910	19630	9941	4521	1755	1306	2503
MAX	9620	5240	17600	89000	20000	168000	37900	30400	12500	2880	3010	8270
MIN	1540	2440	3780	6000	3700	17700	8290	3330	1930	1180	962	976
CFSM	.45	.45	.91	3.15	.90	5.63	2.52	1.28	.58	.23	.17	.32
IN.	.52	.50	1.05	3.63	.94	6.49	2.81	1.47	.65	.26	.19	.36
CAL YR 1978	TOTAL	4007070	MEAN	10980	MAX	88500	MIN	1110	CFSM	1.41	IN	19.12
WTR YR 1979	TOTAL	3955808	MEAN	10840	MAX	168000	MIN	962	CFSM	1.39	IN	18.87

TOWANDA CREEK BASIN

01532000 TOWANDA CREEK NEAR MONROETON, PA

LOCATION.--Lat 41°42'25", long 76°29'06", Bradford County, Hydrologic Unit 02050106, 1.0 mi (1.6 km) upstream from South Branch Towanda Creek, and 0.75 mi (1.21 km) southwest of Monroeton.

DRAINAGE AREA.--214 mi² (554 km²).

PERIOD OF RECORD.--February 1914 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1051: 1943-44(M). WSP 1302: 1922(M), 1924, 1925-26(M), 1928, 1929(M), 1930-31. WSP 1432: 1921(M), 1932(M), 1933, 1934-35(M), 1936, 1938(M), 1940. WDR PA-78-2: 1972(M).

GAGE.--Water-stage recorder. Datum of gage is 765.527 ft (233.333 m) National Geodetic Vertical Datum of 1929. Non-recording gage Aug. 27, 1976, to Oct. 20, 1977, at present site and datum. Non-recording gage Sept. 26, 1975, to Aug. 26, 1976, at bridge 0.6 mi (1.0 km) downstream at datum 11.82 ft (3.603 m) lower. Water-stage recorder Oct. 1, 1942, to Sept. 25, 1975, 0.6 mi (1.0 km) downstream at datum 11.82 ft (3.603 m) lower. Prior to Oct. 1, 1942, non-recording gage at present site at datum 8.62 ft (2.627 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--65 years, 291 ft³/s (8.241 m³/s), 18.33 in/yr (466 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,000 ft³/s (2,100 m³/s), revised, June 22, 1972, gage height, 15.3 ft (4.66 m) in gage well, 16.9 ft (5.15 m) outside, from floodmark, site and datum then in use minimum observed, 0.7 ft³/s (0.020 m³/s) Sept. 15, 17, 21, 22, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,300 ft³/s (122 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	0915	14,200 402	11.55 3.520	Mar. 6	0200	*16,900 479	*14.54 4.432
Jan. 25	0215	16,700 473	11.92 3.633				

Minimum discharge, 18 ft³/s (0.510 m³/s), Aug. 10, 23, 24, gage height, 6.17 ft (1.881 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	149	180	2170	307	800	255	167	255	47	25	24
2	33	134	162	8100	240	1100	250	152	219	41	26	22
3	33	122	149	2350	190	1480	269	145	186	41	35	24
4	39	117	188	964	155	3600	245	174	152	38	32	22
5	67	104	256	589	130	8800	407	156	128	37	26	21
6	109	97	200	500	120	8240	329	138	118	35	24	174
7	80	95	176	493	112	2100	269	128	109	31	21	203
8	58	114	188	530	107	1300	245	115	94	29	20	83
9	52	104	1530	400	102	956	582	106	86	28	19	50
10	47	95	836	310	98	901	823	97	75	26	18	42
11	45	84	548	250	95	928	693	109	142	26	21	37
12	42	88	451	230	92	655	554	94	142	25	32	32
13	47	82	405	265	90	533	500	86	94	25	41	29
14	266	80	362	330	87	589	480	83	70	24	32	42
15	302	80	292	310	85	540	506	78	60	24	28	207
16	184	78	256	205	83	419	443	81	50	34	25	91
17	142	78	252	185	81	389	419	64	45	47	23	56
18	117	486	225	175	79	367	350	60	43	37	21	43
19	104	362	176	165	77	329	303	56	41	31	24	40
20	117	261	190	160	76	303	259	66	40	26	21	37
21	109	225	215	230	100	288	228	62	38	26	20	38
22	97	196	180	290	130	278	206	75	40	24	19	106
23	88	196	150	250	200	269	190	75	115	23	18	94
24	84	297	140	3750	300	323	170	965	70	24	19	58
25	80	292	150	8270	450	500	159	1810	48	22	45	45
26	82	230	135	1890	900	449	149	1510	41	24	38	42
27	451	196	115	1100	780	345	194	919	38	29	37	38
28	302	208	105	814	700	283	303	685	37	28	41	38
29	225	204	100	616	---	288	215	513	37	25	34	81
30	184	184	96	479	---	303	182	437	47	24	29	91
31	162	---	140	393	---	283	---	329	---	24	26	---
TOTAL	3781	5038	8548	36763	5966	37938	10177	9535	2660	925	840	1910
MEAN	122	168	276	1186	213	1224	339	308	88.7	29.8	27.1	63.7
MAX	451	486	1530	8270	900	8800	823	1810	255	47	45	207
MIN	33	78	96	160	76	269	149	56	37	22	18	21
CFSM	.57	.78	1.28	5.52	.99	5.69	1.58	1.43	.41	.14	.13	.30
IN.	.65	.87	1.48	6.36	1.03	6.56	1.76	1.65	.46	.16	.15	.33

CAL YR 1978	TOTAL	155604	MEAN 426	MAX 15600	MIN 22	CFSM 1.98	IN 26.92
WTR YR 1979	TOTAL	124081	MEAN 340	MAX 8800	MIN 18	CFSM 1.58	IN 21.47

WYALUSING CREEK BASIN

01532850 MIDDLE BRANCH WYALUSING CREEK TRIBUTARY NEAR BIRCHARDVILLE, PA

LOCATION.--Lat 41°51'45", long 76°00'26", Susquehanna County, Hydrologic Unit 02050106, on left bank 60 ft (18 m) upstream from bridge on State Highway 267, 1,000 ft (305 m) upstream from mouth, and 1.2 mi (1.9 km) north of Birchardville.

DRAINAGE AREA.--5.67 mi² (14.69 km²).

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum, water years 1960-65. August 1965 to September 1979 (discontinued).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 1,077.51 ft (328.425 m) National Geodetic Vertical Datum of 1929. Oct. 7, 1959 to Aug. 12, 1965, crest-stage gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--14 years, 10.3 ft³/s (0.292 m³/s), 24.67 in/yr (627 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft³/s (31.7 m³/s) June 22, 1972, gage height, 6.85 ft (2.088 m), from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of contracted-opening measurement; minimum daily, 0.10 ft³/s (0.003 m³/s) on many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 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	0900	550 15.6	6.10 1.859	Feb. 24	0830	550 15.6	6.10 1.859
Jan. 5	1300	372 10.5	5.76 1.756	Feb. 26	0730	892 25.3	*7.44 2.268
Jan. 9	--	--	ice jam	Feb. 28	1030	185 5.24	5.80 1.768
Jan. 21	2100	400 11.3	5.82 1.774	Mar. 5	1045	308 8.72	6.21 1.893
Jan. 25	0500	*1,070 30.3	6.79 2.070	May 25	2045	152 4.30	5.69 1.734

Minimum recorded discharge, 0.10 ft³/s (0.003 m³/s) Aug. 9, 10, gage height, 3.83 ft (1.167 m), but may have been less during periods of no gage height record Oct. 1 to Nov. 2 and Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.3	3.1	155	20	15	7.4	8.5	7.1	.78	.14	.36
2	1.8	3.2	2.9	354	16	18	7.7	7.4	6.9	.72	.78	.26
3	2.0	3.1	2.7	126	13	21	7.4	11	6.3	.61	.78	.41
4	2.3	3.1	8.7	126	11	48	7.9	12	4.8	.52	.36	.36
5	2.5	2.9	6.7	313	9.2	221	10	9.2	5.6	.48	.26	.26
6	2.6	2.9	4.9	294	8.0	133	7.7	9.2	5.9	.41	.19	6.6
7	2.3	2.9	3.5	175	6.8	45	6.9	7.4	4.4	.36	.16	3.9
8	2.5	2.9	7.9	141	6.0	28	6.6	6.6	3.3	.31	.14	2.2
9	2.4	2.9	67	110	5.3	21	30	5.6	2.2	.26	.12	1.7
10	2.3	2.7	21	64	4.7	22	26	7.4	2.3	.22	.57	1.3
11	2.2	2.5	15	51	4.4	23	21	8.5	3.1	.22	.78	1.2
12	2.1	2.5	13	36	4.1	17	17	6.1	2.7	.26	1.9	.97
13	2.5	2.3	12	22	3.9	15	15	5.6	2.0	.26	1.1	.90
14	8.0	2.3	10	16	3.8	15	14	5.0	1.6	.22	.57	1.3
15	6.0	2.1	7.9	10	3.6	12	15	4.4	1.6	.22	.48	1.8
16	4.5	2.1	6.3	6.6	3.5	15	14	4.6	1.4	.57	.36	1.3
17	3.8	2.1	6.0	6.0	3.4	9.2	13	3.6	1.7	.84	.31	.97
18	3.2	6.3	4.3	5.6	3.3	8.5	11	3.3	1.3	.52	.36	.90
19	2.9	3.1	16	5.4	3.3	7.7	9.5	3.2	1.2	.41	.48	.90
20	2.5	2.9	4.9	5.2	3.2	7.1	8.2	3.2	1.1	.31	.31	.90
21	2.1	2.7	29	238	3.2	12	7.4	3.2	.90	.26	.26	2.7
22	1.8	2.5	8.7	212	3.2	6.6	6.6	2.8	1.6	.26	.19	7.4
23	1.6	2.5	6.3	124	8.0	6.6	5.9	3.2	1.6	.22	.19	3.9
24	1.4	4.0	6.0	218	376	7.9	5.2	19	.97	.22	.36	2.5
25	1.3	3.5	8.7	662	367	11	5.2	32	.84	.19	1.3	1.8
26	2.8	3.1	9.1	95	373	8.9	6.1	34	.72	.16	.57	1.6
27	6.0	2.9	6.0	62	113	7.1	17	23	.57	.26	2.5	1.4
28	5.0	3.1	5.3	47	70	6.9	14	18	.57	.22	1.2	1.7
29	4.5	3.1	14	39	---	9.5	12	14	.84	.19	.72	4.0
30	3.9	3.1	5.3	32	---	9.5	9.5	12	.90	.19	.52	2.5
31	3.5	---	5.3	24	---	7.9	---	9.2	---	.14	4.1	---
TOTAL	94.0	88.6	327.5	3774.8	1449.9	795.4	344.2	302.2	76.01	10.81	22.06	57.99
MEAN	3.03	2.95	10.6	122	51.8	25.7	11.5	9.75	2.53	.35	.71	1.93
MAX	8.0	6.3	67	662	376	221	30	34	7.1	.84	4.1	7.4
MIN	1.3	2.1	2.7	5.2	3.2	6.6	5.2	2.8	.57	.14	.12	.26
CFSM	.53	.52	1.87	21.5	9.14	4.53	2.03	1.72	.45	.06	.13	.34
IN.	.62	.58	2.15	24.76	9.51	5.22	2.26	1.98	.50	.07	.14	.38

CAL YR 1978 TOTAL 5636.00 MEAN 15.4 MAX 306 MIN 1.3 CFSM 2.72 IN 36.97
WTR YR 1979 TOTAL 7343.47 MEAN 20.1 MAX 662 MIN .12 CFSM 3.55 IN 48.17

SUSQUEHANNA RIVER BASIN

01533400 SUSQUEHANNA RIVER AT MESHOPPEN, PA.

LOCATION.--Lat 41°36'26", long 76°03'02", Wyoming County, Hydrologic Unit 02050106, on right bank 2.3 mi (3.7 km), upstream from bridge on Route 87, 0.7 mi (1.1 km) downstream from Meshoppen Creek, 2.4 mi (3.9 km) upstream from Mehoopany Creek, and 0.7 mi (1.1 km) south of Meshoppen.

DRAINAGE AREA.--8,720 mi² (22,580 km²).

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 640 ft (195 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation by flood-control reservoirs upstream. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 207,000 ft³/s (5,860 m³/s) Mar. 6, 1979, gage height, 35.06 ft (10.686 m); minimum, 1,030 ft³/s (29.2 m³/s) Aug. 23, 24, 1979, gage height, 7.39 ft (2.253 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1972 reached a stage of 43.51 ft (13.262 m), from floodmark information by local resident, discharge about 331,000 ft³/s (9,370 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 70,000 ft³/s (1,980 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. 3	0800	103,000 2,920	25.96 7.913	Mar. 6	1700	*207,000 5,860	*35.06 10.686
Jan. 26	1200	80,000 2,270	23.37 7.123				

Minimum discharge, 1,030 ft³/s (29.2 m³/s) Aug. 23, 24, gage height, 7.39 ft (2.252 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1920	6200	4280	8760	18800	22900	25300	15800	15200	2030	1460	1190
2	1840	5500	4300	49100	15300	27000	23100	13000	12600	2060	2040	1100
3	1730	5020	4300	99500	12000	29600	21800	11500	11200	2310	3160	1100
4	1780	4650	4300	88000	11000	38000	21400	11100	10400	2250	2920	1090
5	1860	4300	4440	50000	9210	87900	20900	11800	9330	2040	2290	1450
6	2290	4050	5910	33000	8700	185000	21400	11900	8150	1900	1920	2630
7	2410	3860	8340	25000	8100	169000	19900	10500	6970	1790	1610	5510
8	2640	3750	8540	28000	7500	123000	17600	9120	6350	1680	1410	9250
9	2670	3690	11400	26800	6900	92300	18100	8200	5800	1560	1300	7440
10	2580	3560	18100	23700	6400	62200	35300	7510	5370	1460	1230	5710
11	2490	3510	18900	18700	6000	54400	41500	8880	5490	1390	1240	4060
12	2260	3400	14500	14300	5600	51500	37500	8470	5470	1350	1300	3180
13	2120	3260	11500	12200	5400	45200	32900	8150	5850	1320	1290	2550
14	2550	3120	10500	12100	5200	39200	29600	7050	5190	1280	1250	2230
15	3690	2980	9860	15500	4900	40200	28500	6340	4460	1240	1210	2300
16	5710	2890	8960	15900	4800	37700	28900	5860	3920	1260	1170	2570
17	7460	2780	8150	15400	4700	32200	27900	5410	3550	1460	1140	3570
18	6220	3060	7670	12200	4700	27500	26100	5100	3270	2130	1130	2990
19	4900	3440	6950	10300	4700	24400	22800	4640	2960	2360	1160	2620
20	4200	3820	6120	9330	4900	22500	19300	4310	2790	2940	1150	2300
21	3930	4320	5890	10300	5200	20500	16800	4070	2670	2660	1140	2070
22	3820	4180	7830	13000	5600	20600	14800	3930	2570	2570	1100	2350
23	3990	4100	10700	20000	6300	21800	13400	3840	2600	2020	1050	2290
24	3920	4000	10900	25000	7500	24500	12200	5260	2740	1780	1030	2120
25	3620	3900	9450	50000	13000	29900	11200	11500	2840	1800	1170	2070
26	3440	4200	6780	74800	42200	38300	10000	25700	2670	1730	1210	1920
27	3970	4500	7130	53900	34200	39300	9820	33700	2390	1890	1360	1780
28	6530	5000	7440	36800	25400	32400	13200	32700	2150	1800	1430	1660
29	10300	4600	7800	29600	---	25500	20600	26100	2050	1710	1370	1810
30	9710	4300	6950	24800	---	23500	19700	21800	2030	1590	1340	2070
31	7380	---	6830	21600	---	25800	---	18200	---	1490	1310	---
TOTAL	123930	119940	264720	927590	294210	1513800	661520	361440	159030	56850	44890	84980
MEAN	3998	3998	8539	29920	10510	48830	22050	11660	5301	1834	1448	2833
MAX	10300	6200	18900	99500	42200	185000	41500	33700	15200	2940	3160	9250
MIN	1730	2780	4280	8760	4700	20500	9820	3840	2030	1240	1030	1090
CFSM	.46	.46	.98	3.43	1.21	5.60	2.53	1.34	.61	.21	.17	.33
IN.	.53	.51	1.13	3.96	1.26	6.46	2.82	1.54	.68	.24	.19	.36

CAL YR 1978 TOTAL 4665740 MEAN 12780 MAX 97900 MIN 1300 CFSM 1.47 IN 19.90
WTR YR 1979 TOTAL 4612900 MEAN 12640 MAX 185000 MIN 1030 CFSM 1.45 IN 19.68

TUNKHANNOCK CREEK BASIN

01533800 BUTLER CREEK AT GIBSON, PA

LOCATION.--Lat 41°48'10", long 75°38'45", Susquehanna County, Hydrologic Unit 02050106, on right bank 35 ft (11 m) upstream from bridge on State Highway 547 at Gibson, and 6.0 mi (9.7 km) upstream from Leslie Creek.

DRAINAGE AREA.--7.38 mi² (19.11 km²).

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum, water years 1963-73. October 1973 to Sept. 1979 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1196.29 ft (364.629 m) National Geodetic Vertical Datum of 1929. Sept. 11, 1962 to Mar. 12, 1973, crest-stage gage at site 300 ft (91 m) downstream at datum 7.0 ft (2.13 m) lower. Mar. 13 to Sept. 30, 1973, crest-stage gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--6 years, 14.4 ft³/s (0.408 m³/s), 26.50 in/yr (673 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,460 ft³/s (69.7 m³/s) Aug. 27, 1967, gage height, 12.66 ft (3.859 m), at present site and datum, from highwater mark, from contracted-opening measurement of peak flow; minimum, 0.01 ft³/s (0.001 m³/s) Aug. 6, 1976, gage height, 1.73 ft (0.527 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft³/s (5.10 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. 2	1000	296 8.38	4.37 1.332	Feb. 14	--	---	ice jam
Jan. 12	--	---	ice jam	Feb. 26	0500	*364 10.31	*4.58 1.396
Jan. 21	2030	275 7.79	4.30 1.311	Mar. 5	0700	296 8.38	4.37 1.332
Jan. 25	0030	253 7.16	4.22 1.286				

Minimum discharge, 0.40 ft³/s (0.011 m³/s) Sept. 2, gage height, 2.13 ft (0.649 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	4.3	5.1	50	20	50	24	14	15	1.2	.61	.49
2	2.5	4.0	4.5	182	18	64	33	11	14	1.1	.61	.44
3	2.9	3.8	4.5	71	16	92	30	14	17	1.1	.68	1.0
4	3.3	3.5	11	67	14	132	24	19	12	1.0	.61	.68
5	4.8	3.3	8.7	95	12	248	30	16	12	.91	.61	.61
6	5.8	3.1	6.4	102	12	147	27	13	10	.83	.61	8.7
7	5.4	3.1	5.4	44	11	65	22	10	7.9	.83	.61	3.1
8	5.8	3.1	8.3	69	10	46	17	9.1	6.4	.75	.61	1.7
9	5.4	3.1	40	49	9.8	38	39	7.9	5.4	.75	.61	1.2
10	5.1	3.1	20	40	9.5	44	56	6.8	5.1	.68	.61	1.1
11	5.1	2.9	13	30	9.0	50	36	6.1	5.1	.75	.83	1.0
12	4.8	3.3	11	22	8.5	42	28	5.1	4.0	.61	2.1	.83
13	5.8	7.2	9.5	18	8.2	39	24	5.1	3.3	.68	1.2	.75
14	19	3.8	8.7	15	7.9	36	27	4.8	2.7	.61	1.1	1.7
15	17	2.9	7.2	14	7.5	31	28	4.0	2.3	.61	.91	1.7
16	13	2.7	6.4	13	7.3	35	31	4.0	2.1	4.0	.83	1.0
17	10	2.7	6.1	12	7.0	20	33	3.3	4.0	1.7	.75	.83
18	8.3	11	7.2	12	6.9	20	26	3.3	5.4	1.1	1.0	.68
19	7.2	6.4	27	11	6.8	17	20	5.4	3.3	.83	1.2	.75
20	7.2	5.1	32	11	6.7	15	15	3.5	2.0	.68	.91	.68
21	5.4	4.5	24	128	6.6	13	11	3.5	1.2	.61	1.0	3.8
22	4.5	4.3	10	128	6.6	12	10	3.5	1.6	.61	.75	8.3
23	4.0	4.3	8.7	57	20	11	10	6.1	2.5	1.1	.55	3.8
24	3.5	5.4	11	51	163	14	10	47	1.4	1.2	.55	2.7
25	4.1	6.1	11	157	232	26	8.3	55	1.2	.68	.91	2.0
26	4.9	5.4	11	76	273	21	7.6	44	1.1	.75	.61	1.4
27	15	5.1	7.2	70	98	15	34	30	1.0	.83	1.3	1.1
28	7.9	5.1	19	54	33	12	36	29	1.1	.75	.83	1.3
29	6.4	4.8	35	40	---	16	24	26	1.2	.68	.61	4.8
30	5.1	5.1	25	31	---	20	17	27	1.7	.68	.61	2.9
31	4.8	---	6.4	23	---	20	---	19	---	.61	.61	---
TOTAL	206.3	132.5	410.3	1742	1040.3	1411	737.9	455.5	153.0	29.22	25.33	61.04
MEAN	6.65	4.42	13.2	56.2	37.2	45.5	24.6	14.7	5.10	.94	.82	2.03
MAX	19	11	40	182	273	248	56	55	17	4.0	2.1	8.7
MIN	2.3	2.7	4.5	11	6.6	11	7.6	3.3	1.0	.61	.55	.44
CFSM	.90	.60	1.79	7.62	5.04	6.17	3.33	1.99	.69	.13	.11	.28
IN.	1.04	.67	2.07	8.78	5.24	7.11	3.72	2.30	.77	.15	.13	.31

CAL YR 1978 TOTAL 4310.22 MEAN 11.8 MAX 169 MIN .26 CFSM 1.60 IN 21.72
WTR YR 1979 TOTAL 6404.39 MEAN 17.5 MAX 273 MIN .44 CFSM 2.37 IN 32.28

TUNKHANNOCK CREEK BASIN

01534000 TUNKHANNOCK CREEK NEAR TUNKHANNOCK, PA

LOCATION.--Lat 41°33'29", long 75°53'42", Wyoming County, Hydrologic Unit 02050106, on left bank 300 ft (91 m) upstream from bridge on U.S. Highway 6 at Dixon, 3 mi (4.8 km) northeast of Tunkhannock, and 4 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--383 mi² (992 km²).

PERIOD OF RECORD.--February 1914 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1965, published as "at Dixon".

REVISED RECORDS.--WSP 756: Drainage area. WSP 1051: 1921(M), 1932, 1934-35(M), 1936, 1938(M), 1939-40, 1942-44, 1945(M), WSP 1302: 1922, 1923(M), 1924-25, 1927-28. WSP 1432: 1919(M), 1920, 1933, 1934(P).

GAGE.--Water-stage recorder. Datum of gage is 610.50 ft (186.080 m) National Geodetic Vertical Datum of 1929, Pennsylvania Department of Transportation benchmark. Prior to Aug. 10, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--65 years, 548 ft³/s (15.5 m³/s), 19.43 in/yr (494 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,600 ft³/s (952 m³/s) Mar. 10, 1964, gage height, 14.26 ft (4.346 m), from rating curve extended above 14,000 ft³/s (395 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 6.2 ft³/s (0.18 m³/s) Sept. 24, 1964; minimum gage height, 0.73 ft (0.223 m) Aug. 12, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,700 ft³/s (161 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	1730	13,000 368	10.07 3.069	Feb. 26	0630	8,020 227	8.03 2.448
Jan. 8	0830	6,500 184	7.29 2.222	Mar. 5	1630	12,800 362	10.01 3.051
Jan. 25	0630	*14,100 399	*10.48 3.194	May 24	1730	7,380 209	7.73 2.356

Minimum discharge, 28 ft³/s (0.79 m³/s) Sept. 2, 3, gage height, 1.02 ft (0.311 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	215	205	1270	687	1570	653	882	951	126	45	30
2	61	197	187	9430	570	1870	653	735	764	110	43	28
3	59	178	175	4410	500	1570	714	660	701	99	45	34
4	76	165	223	1820	440	1980	627	1050	588	93	45	35
5	146	156	330	1630	400	9190	844	778	497	90	39	35
6	168	151	260	1630	350	9540	701	647	515	81	36	185
7	181	143	226	1630	340	4010	582	576	418	72	33	292
8	138	143	243	3130	320	2350	533	521	360	67	32	146
9	128	140	1250	1640	310	1640	1190	462	320	64	30	95
10	114	128	1080	1110	300	1410	1860	451	350	64	29	70
11	114	121	680	1040	290	1940	1310	634	310	64	32	55
12	104	117	563	1040	280	1380	1010	468	292	66	43	45
13	91	117	515	1040	270	1070	897	423	243	63	76	40
14	515	117	479	999	260	1040	951	423	209	61	61	44
15	595	112	407	714	260	928	1310	375	185	57	47	72
16	355	108	365	539	250	728	1220	365	172	55	43	74
17	260	108	355	451	250	714	1170	315	156	63	36	56
18	212	230	320	451	250	660	951	278	146	72	36	46
19	191	256	256	370	240	601	800	269	140	72	46	45
20	197	197	292	468	240	570	694	273	126	66	51	45
21	194	175	771	1630	240	540	608	247	114	60	51	46
22	171	162	687	2880	240	515	551	256	114	56	38	292
23	156	159	503	1320	250	509	509	350	162	53	34	260
24	146	219	428	1540	700	545	456	3190	146	56	32	159
25	135	238	440	9680	2590	844	401	3890	119	59	33	112
26	128	212	503	3230	5570	792	396	3120	104	55	34	90
27	627	168	412	1880	2210	647	1550	1930	93	60	48	76
28	521	181	385	1450	1440	551	2780	1850	95	59	56	69
29	350	187	301	1170	---	634	1440	2170	121	53	46	79
30	278	184	340	912	---	764	1080	1780	123	53	38	116
31	234	---	340	829	---	721	---	1260	---	51	33	---
TOTAL	6711	4984	13521	61333	20047	51823	28441	30628	8634	2120	1291	2771
MEAN	216	166	436	1978	716	1672	948	988	288	68.4	41.6	92.4
MAX	627	256	1250	9680	5570	9540	2780	3890	951	126	76	292
MIN	59	108	175	370	240	509	396	247	93	51	29	28
CFSM	.56	.43	1.14	5.16	1.87	4.37	2.48	2.58	.75	.18	.11	.24
IN.	.65	.48	1.31	5.96	1.95	5.03	2.76	2.97	.84	.21	.13	.27
CAL YR 1978 TOTAL	214352	MEAN 587	MAX 11600	MIN 45	CFSM 1.53	IN 20.82						
WTR YR 1979 TOTAL	232304	MEAN 636	MAX 9680	MIN 28	CFSM 1.66	IN 22.56						

LACKAWANNA RIVER BASIN

01534300 LACKAWANNA RIVER NEAR FOREST CITY, PA

LOCATION.--Lat 41°40'47", long 75°28'20", Susquehanna County, Hydrologic Unit 02050107, on left bank 1,600 ft (488 m) upstream from bridge on State Highway 171, 1.3 mi (2.1 km) downstream from new Stillwater Dam, 1.7 mi (2.7 km) below confluence of East and West Branches, and 2.2 mi (3.5 km) north of Forest City.

DRAINAGE AREA.--38.8 mi² (100 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,551.28 ft (472.830 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 11, 1958, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated since December 1959 by Stillwater Lake (Station 01534180) 1.3 mi (2.1 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--21 years, 74.7 ft³/s (2.116 m³/s), 26.14 in/yr (664 mm/yr), adjusted for storage since December 1959.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) Jan. 22, 1959, gage height, 6.41 ft (1.954 m), from rating curve extended above 930 ft³/s (26.3 m³/s); no flow part of each day July 21, 22, 1978, when gates in dam at Stillwater Lake were closed; minimum gage height, 1.30 ft (0.396 m) July 21, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, 2,530 ft³/s (71.6 m³/s) May 22, 1942, from computation of flow over dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 976 ft³/s (27.6 m³/s) Mar. 8, gage height, 4.91 ft (1.497 m); minimum, 2.1 ft³/s (0.060 m³/s) Aug. 8, 9, gage height, 1.26 ft (0.384 m); minimum daily discharge, 2.1 ft³/s (0.060 m³/s) Aug. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	45	27	58	79	138	105	126	234	12	3.9	4.5
2	9.7	40	28	134	66	124	91	93	158	12	3.8	4.3
3	8.2	40	25	172	62	120	94	81	120	13	3.7	4.5
4	9.2	36	29	716	58	126	87	111	109	12	3.4	4.1
5	15	31	53	725	53	120	89	107	82	10	3.1	3.7
6	27	28	54	725	48	44	87	84	72	8.4	2.9	29
7	32	26	48	472	46	386	77	69	65	7.3	2.6	71
8	28	26	45	193	44	960	65	59	55	6.6	2.4	46
9	23	25	92	221	43	884	74	52	49	6.3	2.1	26
10	19	23	144	203	41	776	115	48	45	5.9	2.3	16
11	18	23	111	156	38	685	145	48	42	5.5	2.4	11
12	16	22	82	113	36	541	132	44	40	5.5	3.7	8.0
13	16	19	72	103	35	379	111	41	36	5.3	5.9	6.3
14	51	21	64	84	34	247	102	41	31	5.1	6.6	6.6
15	119	19	54	86	33	203	115	39	27	4.9	5.9	8.4
16	92	18	50	74	32	190	124	36	25	5.3	5.1	9.0
17	61	18	48	62	31	143	132	32	22	5.9	4.3	8.4
18	45	26	40	55	30	115	120	29	20	5.9	4.1	7.3
19	38	32	39	50	29	102	94	28	18	5.5	5.1	7.3
20	35	34	36	48	28	98	77	31	16	5.1	5.1	5.5
21	34	30	54	63	28	100	66	30	15	4.9	4.7	6.6
22	31	27	72	118	27	105	60	30	14	4.9	4.1	21
23	29	27	63	138	27	109	57	35	18	6.3	3.5	35
24	26	31	51	128	38	120	52	71	18	11	3.3	29
25	25	36	50	45	74	203	47	48	16	10	3.3	20
26	28	39	50	343	149	237	45	169	13	8.4	3.2	15
27	82	31	50	449	193	226	74	725	12	7.7	4.5	12
28	110	28	45	302	171	193	200	748	11	5.9	4.5	11
29	82	29	40	183	---	153	208	641	11	5.1	4.1	12
30	63	28	40	126	---	138	171	525	11	4.5	4.1	14
31	51	---	39	96	---	126	---	386	---	4.3	4.3	---
TOTAL	1232.8	858	1695	6441	1573	8091	3016	4607	1405	220.5	122.0	462.5
MEAN	39.8	28.6	54.7	208	56.2	261	101	149	46.8	7.11	3.94	15.4
MAX	119	45	144	725	193	960	208	748	234	13	6.6	71
MIN	8.2	18	25	45	27	44	45	28	11	4.3	4.01	3.7
MEAN#	41.1	28.4	54.9	209	58.2	260	102	152	39.5	6.61	4.01	15.9
CFSM#	1.06	0.73	1.41	5.39	1.50	6.70	2.63	3.92	1.02	0.17	0.10	0.41
IN.#	1.22	0.81	1.63	6.21	1.56	7.72	2.93	4.52	1.14	0.20	0.12	0.46

CAL YR 1978 TOTAL 28621.30 MEAN 78.4 MAX 503 MIN .00 MEAN# 78.3 CFSM# 2.02 IN.# 27.41
WTR YR 1979 TOTAL 29723.80 MEAN 81.4 MAX 960 MIN 2.1 MEAN# 81.3 CFSM# 2.10 IN.# 28.45

Adjusted for change in contents in Stillwater Lake.

LACKAWANNA RIVER BASIN

01534500 LACKAWANNA RIVER AT ARCHBALD, PA

LOCATION.--Lat 41°30'16", long 75°32'33", Lackawanna County, Hydrologic Unit 02050107, on right bank in Archbald, 0.5 mi (0.8 km) upstream from White Oak Run and Gilmartin Street Bridge.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 889.33 ft (271.068 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Regulation at low flow by mine pumps above station. Flow regulated since December 1959 by Stillwater Lake (Station 01534180) about 17 mi (27 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--40 years, 206 ft³/s (5.834 m³/s), 25.90 in/yr (658 mm/yr), adjusted for storage since December 1959.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,510 ft³/s (269 m³/s) May 22, 1942, gage height, 10.58 ft (3.225 m), from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.0 ft³/s (0.085 m³/s) Oct. 9, 11, 1943; minimum daily, 13 ft³/s (0.368 m³/s) Nov. , 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,250 ft³/s (63.7 m³/s) Jan. 25, gage height, 5.49 ft (1.673 m); minimum, 19 ft³/s (0.54 m³/s) Aug. 28, minimum gage height, 1.63 ft (0.497 m) Aug. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	124	91	339	279	402	290	357	591	58	35	27
2	43	115	91	1420	239	430	272	287	454	55	30	27
3	41	109	89	826	219	420	268	257	331	52	33	29
4	63	105	105	1090	199	529	253	314	294	55	24	25
5	53	98	135	863	172	1650	272	287	253	50	23	24
6	98	89	133	612	158	1570	246	243	222	46	22	126
7	62	89	124	493	153	1110	225	209	203	46	21	107
8	55	83	143	797	153	1510	206	187	178	45	21	85
9	52	78	388	601	138	1330	283	170	161	40	21	63
10	51	78	374	499	133	1250	370	161	145	39	24	48
11	50	76	287	392	122	1300	411	170	135	37	32	41
12	46	73	229	294	119	1000	383	158	126	36	39	36
13	45	67	206	260	117	779	343	153	115	35	34	34
14	300	66	184	257	111	617	379	145	107	37	32	39
15	200	66	161	229	111	524	493	140	96	37	30	45
16	150	63	150	199	107	444	459	133	92	40	29	40
17	110	64	145	172	100	388	449	122	87	40	27	35
18	93	94	126	158	94	331	388	115	80	46	33	34
19	80	89	113	138	98	290	326	122	76	37	34	35
20	84	83	111	138	94	272	279	126	71	35	27	32
21	82	81	212	283	92	260	253	111	67	37	26	44
22	77	78	187	397	96	260	229	109	69	36	25	107
23	74	81	167	331	94	264	209	145	74	33	25	87
24	71	96	150	509	184	302	184	688	71	36	26	73
25	67	105	153	1430	318	540	172	1060	64	41	28	61
26	91	96	140	926	545	514	167	1020	59	36	25	55
27	335	91	135	958	468	449	352	1290	56	34	30	50
28	236	91	122	733	416	392	639	1320	55	42	27	48
29	193	89	113	514	---	374	540	1220	55	37	33	56
30	153	92	115	397	---	361	444	1020	59	39	27	53
31	135	---	119	331	---	326	---	797	---	37	25	---
TOTAL	3234	2609	4998	16586	5129	20188	9784	12636	4446	1274	868	1566
MEAN	104	87.0	161	535	183	651	326	408	148	41.1	28.0	52.2
MAX	335	124	388	1430	545	1650	639	1320	591	58	39	126
MIN	41	63	89	138	92	260	167	109	55	33	21	24
MEAN [#]	105	86.8	161	536	185	650	327	412	141	40.9	28.1	52.7
CFSM [#]	0.97	0.80	1.49	4.96	1.71	6.02	3.03	3.81	1.31	0.38	0.26	0.49
IN. [#]	1.12	0.89	1.72	5.72	1.78	6.94	3.38	4.39	1.46	0.44	0.30	0.55
CAL YR 1978 TOTAL	80844											
WTR YR 1979 TOTAL	83318											
MEAN 221												
MAX 1270												
MIN 33												
MEAN [#] 221												
MEAN [#] 228												
CFSM [#]												
CFSM [#]												
2.05												
IN. [#] 27.84												
IN. [#] 28.68												

[#] Adjusted for change in contents in Stillwater Lake.

LACKAWANNA RIVER BASIN

01536000 LACKAWANNA RIVER AT OLD FORGE, PA

LOCATION.--Lat 41°21'33", long 75°44'41", Lackawanna County, Hydrologic Unit 02050107, on right bank 150 ft (46 m) upstream from Delaware, Lackawanna and Western Railroad Bridge in Old Forge, and 0.5 mi (0.8 km) upstream from St. Johns Creek.

DRAINAGE AREA.--332 mi² (860 km²).

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1432: 1939(M), 1940, 1945.

GAGE.--Water-stage recorder. Datum of gage is 595.26 ft (181.435 m) National Geodetic Vertical Datum of 1929. Prior to Oct 1, 1974, water-stage recorder at same site and datum. Oct 1, 1974 to Aug. 17, 1975, non-recording gage at site 150 ft (46 m) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated since December 1959 by Stillwater Lake (Station 01534180), about 33 mi (53 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years, 507 ft³/s (14.36 m³/s), 20.74 in/yr (527 mm/yr), adjusted for storage since December 1959.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,000 ft³/s (878 m³/s) Aug. 19, 1955, gage height, 20.05 ft (6.111 m), from floodmark, from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of slope-area measurements at gage height 20.05 ft (6.111 m) and 15.30 ft (4.663 m); minimum, 20 ft³/s (0.57 m³/s) Sept. 21, 1964, gage height, 1.28 ft (0.390 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,710 ft³/s (190 m³/s) Jan. 25, gage height, 8.32 ft (2.536 m); minimum, 42 ft³/s (1.19 m³/s) Sept. 1, gage height, 2.08 ft (0.634 m), minimum daily, 48 ft³/s (1.36 m³/s) Sept. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	192	140	694	659	1100	666	732	1090	98	60	48
2	73	179	131	2910	548	1210	623	588	871	100	57	48
3	69	167	134	2190	482	1170	595	528	847	90	55	126
4	107	161	155	1730	444	1240	673	602	739	94	52	54
5	83	149	215	1390	378	3390	588	534	808	88	51	55
6	170	143	221	1040	315	4320	514	444	839	80	52	383
7	104	153	210	1070	300	2790	482	378	644	76	52	174
8	90	145	267	2330	270	2570	785	332	501	72	52	128
9	87	130	807	1490	250	2220	1090	288	401	72	54	98
10	87	128	748	1150	230	1970	1110	252	343	66	57	88
11	80	124	580	863	220	2250	993	272	310	66	96	76
12	76	120	481	644	210	1850	968	238	272	70	131	84
13	75	116	421	595	200	1520	903	262	229	64	88	72
14	457	110	377	609	200	1300	1070	378	196	59	66	98
15	342	109	325	495	190	1200	1260	221	170	59	62	88
16	241	107	288	407	190	943	1150	204	154	332	60	74
17	179	114	281	332	180	871	1090	177	142	157	58	70
18	148	165	238	310	170	754	935	160	131	92	70	66
19	135	140	203	234	170	673	792	163	126	88	76	80
20	142	131	197	247	160	616	688	177	115	74	62	62
21	138	124	459	1130	170	575	609	160	105	68	57	157
22	132	122	381	1480	170	548	554	154	126	84	54	395
23	122	131	319	951	180	541	501	267	167	118	54	185
24	117	156	284	1660	871	541	444	1880	115	98	62	140
25	109	158	312	4910	1420	1050	401	2870	108	78	84	118
26	120	146	267	2370	2230	1230	389	2430	98	78	72	105
27	527	141	248	1970	1540	1020	800	2160	92	76	52	98
28	356	145	215	1570	1160	871	1500	2160	110	74	57	92
29	290	139	196	1220	---	808	1100	2050	118	80	78	148
30	238	144	198	960	---	823	895	1740	118	78	70	100
31	208	---	207	785	---	754	---	1390	---	70	52	---
TOTAL	5176	4189	9505	39736	13507	42718	24168	24191	10085	2799	2003	3510
MEAN	167	140	307	1282	482	1378	806	780	336	90.3	64.6	117
MAX	527	192	807	4910	2230	4320	1500	2870	1090	332	131	395
MIN	69	107	131	234	160	541	389	154	92	59	51	48
MEAN#	168	140	307	1283	484	1377	807	784	329	89.8	64.7	118
CFSM#	0.51	0.42	0.92	3.86	1.46	4.15	2.43	2.36	0.99	0.27	0.19	0.36
IN.#	0.59	0.47	1.06	4.45	1.52	4.78	2.71	2.72	1.10	0.31	0.22	0.40
CAL YR 1978 TOTAL	158484		MEAN 434	MAX 3200	MIN 69	MEAN# 434	CFSM# 1.31	IN.# 17.75				
WTR YR 1979 TOTAL	181587		MEAN 497	MAX 4910	MIN 48	MEAN# 497	CFSM# 1.50	IN.# 20.34				

Adjusted for change in contents in Stillwater Lake.

LACKAWANNA RIVER BASIN

RESERVOIR IN LACKAWANNA RIVER BASIN

01534180 STILLWATER LAKE.--Lat 41°41'46", long 75°29'10", Susquehanna County, Hydrologic Unit 02050107, at Stillwater Dam on Lackawanna River, 0.3 mi (0.5 km) downstream from confluence of East and West Branches, 1.4 mi (2.3 km) south of Uniondale and 3.5 mi (5.6 km) north of Forest City. DRAINAGE AREA, 37.1 mi² (96.1 km²). PERIOD OF RECORD, December 1959 to current year. GAGE water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earthfill dam, rock faced, with ungated concrete spillway at elevation 1,621.00 ft (494.081 m). Storage began in December 1959. Capacity at elevation 1,621.00 ft (494.081 m) is 12,000 acre-ft (14.8 hm³). Reservoir is used for flood control and municipal water supply. Figures given herein represent total contents. Flood storage is regulated by power-operated slide gate; water supply storage is regulated by a weir formed by stop logs. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 6,000 acre-ft (7.40 hm³) March 7, 1979 (elevation, 1,604.01 ft or 488.902 m); minimum, 242 acre-ft (0.298 hm³) Sept. 10, 1960 (elevation, 1,568.85 ft or 478.185 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 6,000 acre-ft (7.40 hm³) March 7 (elevation, 1,604.01 ft or 488.902 m); minimum, 370 acre-ft (0.456 hm³) Aug. 9 (elevation, 1,572.30 ft or 479.237 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01534180 Stillwater Lake			
Sept. 30	1,572.50	450	--
Oct. 31	1,573.33	533	+ 1.3
Nov. 30	1,573.19	519	- 0.2
Dec. 31	1,573.30	530	+ 0.2
CAL YR 1978	--	--	- .08
Jan. 31	1,574.00	600	+ 1.1
Feb. 28	1,575.10	710	+ 2.0
Mar. 31	1,574.40	640	- 1.1
Apr. 30	1,574.92	692	+ 0.9
May 31	1,577.05	905	+ 3.5
June 30	1,572.69	469	- 7.3
July 31	1,572.41	441	- 0.5
Aug. 31	1,572.47	447	+ 0.1
Sept. 30	1,572.79	479	+ 0.5
WTR YR 1979	--	--	- 0.1

SUSQUEHANNA RIVER BASIN

01536500 SUSQUEHANNA RIVER AT WILKES-BARRE, PA

LOCATION.--Lat 41°15'03", long 75°52'52", Luzerne County, Hydrologic Unit 02050107, on left bank at foot of West Union Street, 800 ft (244 m) downstream from North Street Bridge, and 1.6 mi (2.6 km) upstream from Toby Creek.

DRAINAGE AREA.--9,960 mi² (25,800 km²), approximately.

PERIOD OF RECORD.--April 1899 to current year. Monthly discharge only for some periods, published in WSP 1302. Gage-height records collected at same site since November 1890 contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 109: 1900-1905. WSP 351: Drainage area. WSP 781: 1902(M). WSP 1302: 1916. WSP 1432: 1901-5, 1907, 1909, 1913, 1937(M).

GAGE.--Water-stage recorder. Datum of gage is 512.07 ft (156.079 m) National Geodetic Vertical Datum of 1929. See WSP 1722 for history of changes prior to Mar. 23, 1949.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation by flood-control reservoirs upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--80 years, 13,440 ft³/s (381 m³/s), 18.32 in/yr (465 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 345,000 ft³/s (9,770 m³/s) June 24, 1972, gage height, 40.91 ft (12.469 m), from floodmark, from rating curve extended above 230,000 ft³/s (6,514 m³/s) on basis of slope-area measurement of peak flow; minimum, 528 ft³/s (15.0 m³/s) Sept. 27, 1964, gage height, -1.78 ft (-0.543 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1899, 33.1 ft (10.1 m) Mar. 18, 1865, from floodmarks, discharge, about 232,000 ft³/s (6,570 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 82,000 ft³/s (2,320 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. 3	1300	118,000 3,340	21.29 6.489	Mar. 7	0600	*210,000 5,950	*31.02 9.455
Jan. 26	1815	96,100 2,720	18.57 5.660				

Minimum discharge, 1,450 ft³/s (41.1 m³/s) Aug. 24, gage height, -0.26 ft (-0.079 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2380	7360	5230	10000	22500	28100	27900	20500	20200	2770	1970	1750
2	2220	6520	5180	17000	19500	30100	26200	16700	16900	2800	1910	1630
3	2080	5940	5140	103000	15000	34000	24400	14400	15400	2780	2810	1850
4	2090	5540	5170	90900	13000	39100	23500	13700	13300	3020	3740	1630
5	2170	5180	5370	58400	12000	84300	23200	13700	12300	2910	3270	1600
6	2560	4850	5650	41200	10000	164000	23500	13900	11300	2660	2750	2970
7	3050	4610	7700	31100	9300	202000	22800	13000	9500	2490	2380	6170
8	3000	4570	9060	33900	8400	150000	20900	11300	8300	2360	2060	9120
9	3080	4480	10600	31900	7800	114000	19300	9970	7580	2230	1840	8560
10	3050	4360	17700	28400	7400	80100	29400	9000	6940	2090	1750	7310
11	2960	4240	21300	22600	6900	63100	44100	8920	6670	1990	1810	5560
12	2860	4150	17900	17800	6500	59000	43700	10300	6630	1940	1920	4340
13	2650	4010	14300	15300	6200	52400	37800	9360	6620	1860	2040	3590
14	3210	3850	12400	15000	5900	45300	34100	8840	6250	1860	1980	3180
15	4440	3690	11400	16500	5600	42200	32200	7760	5790	1780	1820	3100
16	5000	3560	10400	17000	5500	39100	32500	7210	5140	2060	1700	3120
17	7430	3470	9620	15000	5500	28900	32000	6650	4640	2250	1620	3440
18	7570	3640	8810	14000	5400	25900	30200	6220	4250	2070	1620	3970
19	5830	4470	8090	12000	5500	27600	26900	5880	3900	2700	1670	3500
20	5300	4460	6600	15000	5400	25200	22900	5520	3650	3000	1640	3150
21	4780	4790	7010	17000	5900	22900	19900	5210	3490	3270	1610	3030
22	4480	5050	8120	30000	6300	22000	17600	4950	3390	3160	1580	3620
23	4420	4960	10000	23200	7000	22500	15800	5000	3510	3050	1520	4010
24	4540	4830	11400	30400	8000	24500	14800	8620	3440	2640	1470	3470
25	4300	4800	11700	62500	15000	29100	13000	20500	3470	2310	1500	3100
26	4040	4750	9540	86800	35000	35800	11900	29100	3500	2330	1580	2930
27	4480	4980	8430	72300	45600	42200	12200	38600	3280	2280	1680	2700
28	6170	5580	8000	46800	32500	39000	17800	40200	3040	2390	2090	2510
29	9000	5870	7700	35900	---	31600	21700	35900	2920	2360	2170	2540
30	11200	5410	8000	28700	---	24900	23900	29300	2840	2260	2000	2570
31	9030	---	9000	25600	---	26500	---	24200	---	2080	1840	---
TOTAL	139370	143970	296520	1065200	338600	1655400	746100	454410	208140	75750	61340	110020
MEAN	4496	4799	9565	34360	12090	53400	24870	14660	6938	2444	1979	3667
MAX	11200	7360	21300	103000	45600	202000	44100	40200	20200	3270	3740	9120
MIN	2080	3470	5140	10000	5400	22000	11900	4950	2840	1780	1470	1600
CFSM	.45	.48	.96	3.45	1.21	5.36	2.50	1.47	.70	.25	.20	.37
IN.	.52	.54	1.11	3.98	1.26	6.18	2.79	1.70	.78	.28	.23	.41

CAL YR 1978 TOTAL 5490310 MEAN 15040 MAX 111000 MIN 1520 CFSM 1.51 IN 20.51
WTR YR 1979 TOTAL 5294820 MEAN 14510 MAX 202000 MIN 1470 CFSM 1.46 IN 19.78

TOBY CREEK BASIN

01537000 TOBY CREEK AT LUZERNE, PA

LOCATION.--Lat 41°16'57", long 75°53'46", Luzerne County, Hydrologic Unit 02050107, on right bank at Luzerne, 150 ft (46 m) upstream from bridge on U.S. Highway 309, 0.5 mi (0.8 km) upstream from inlet works of flood basin, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--32.4 mi² (83.9 km²).

PERIOD OF RECORD.--August 1941 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 574.60 ft (175.138 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation by Huntsville Reservoir 5.9 mi (9.5 km) upstream, usable capacity, 256,900,000 ft³ (7.28 hm³). Diversion from reservoir for municipal supply. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--38 years, 46.1 ft³/s (1.306 m³/s), 19.32 in/yr (491 mm/yr), adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,390 ft³/s (96.0 m³/s) June 22, 1972, gage height, 6.07 ft (1.850 m) in gage well, 7.59 ft (2.313 m) outside, from floodmarks, from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.1 ft³/s (0.003 m³/s) Sept. 12, 1944; minimum daily, 0.5 ft³/s (0.014 m³/s) Sept. 20, Oct. 8, 1946.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 630 ft³/s (17.8 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. 25	0245	1,010 28.6	2.98 0.908	Mar. 5	1100	1,030 29.2	3.00 0.914
Feb. 26	0445	934 26.4	2.88 0.878	May 24	1300	*1,160 32.8	*3.15 0.960

Minimum discharge, 3.8 ft³/s (0.11 m³/s) Aug. 28, Sept. 2, gage height, 0.26 ft (0.079 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.8	12	70	56	149	34	51	91	12	7.8	7.8
2	15	9.0	11	257	48	158	83	42	72	11	8.6	8.2
3	18	8.6	12	126	42	147	40	50	70	9.4	8.6	40
4	22	9.4	23	59	36	170	39	81	55	12	7.4	10
5	14	9.0	20	42	33	650	62	55	45	11	7.8	9.4
6	19	8.6	16	39	28	572	47	45	42	9.0	8.2	61
7	15	8.6	14	78	25	301	40	38	36	8.2	7.8	22
8	14	9.0	16	242	24	199	35	34	29	7.8	7.1	14
9	14	7.8	48	104	23	144	78	29	24	7.8	6.8	13
10	13	7.4	29	69	22	141	121	28	22	7.8	9.8	11
11	12	9.0	20	47	21	176	91	25	21	7.8	18	136
12	13	9.4	19	44	21	118	78	23	202	8.2	25	9.4
13	12	9.4	18	38	20	93	69	24	16	12	14	9.4
14	35	7.4	18	33	19	93	89	22	15	10	8.6	16
15	21	7.4	15	29	19	83	81	20	14	11	11	13
16	17	7.8	15	26	18	64	69	19	12	11	9.4	11
17	16	9.0	14	24	18	58	61	17	12	19	8.6	9.4
18	15	18	14	23	18	55	52	16	13	20	11	8.2
19	14	13	14	23	17	48	43	18	11	14	11	12
20	15	10	15	22	17	45	38	18	9.8	12	9.4	9.0
21	14	9.8	27	285	17	41	34	16	10	10	9.0	29
22	13	9.4	18	213	17	39	32	15	13	7.8	7.8	67
23	11	11	16	102	20	38	29	27	18	11	8.2	25
24	11	17	15	220	167	42	27	328	14	13	8.2	15
25	11	13	19	493	189	51	25	355	11	13	8.6	13
26	11	11	16	179	487	46	27	346	9.4	14	8.2	13
27	20	10	14	123	192	39	100	220	8.6	11	9.4	12
28	13	11	12	102	144	34	116	238	8.6	10	8.6	12
29	11	10	13	87	---	37	74	220	9.0	13	12	16
30	11	11	13	70	---	37	56	170	15	10	7.8	13
31	9.8	---	14	67	---	35	---	123	---	9.0	7.1	---
TOTAL	461.8	300.8	540	3336	1758	3903	1770	2713	928.4	342.8	300.8	644.8
MEAN	14.9	10.0	17.4	108	62.8	126	59.0	87.5	30.9	11.1	9.70	21.5
MAX	35	18	48	493	487	650	121	355	202	20	25	136
MIN	9.8	7.4	11	22	17	34	25	15	8.6	7.8	6.8	7.8
(%)	5.2	5.0	5.5	4.9	4.9	5.3	5.1	5.4	5.3	6.1	5.9	5.6
MEAN#	20.1	15.0	22.9	113	67.7	131	64.1	92.9	36.2	17.2	15.6	27.1
CFSM#	0.62	0.46	0.71	3.49	2.09	4.04	1.98	2.87	1.12	0.53	0.48	0.84
IN.#	0.72	0.51	0.82	4.02	2.18	4.66	2.21	3.31	1.25	0.61	0.55	0.94

CAL YR 1978 TOTAL 17745.4 MEAN 48.6 MAX 815 MIN 7.4 MEAN# 53.6 CFSM# 1.65 IN.# 22.48
WTR YR 1979 TOTAL 16999.4 MEAN 46.6 MAX 650 MIN 6.8 MEAN# 51.9 CFSM# 1.60 IN.# 21.76

/ Diversion, equivalent in cubic feet per second, for municipal supply, furnished by Pennsylvania Gas and Water Company.

Adjusted for diversion.

SOLOMON CREEK BASIN

01537500 SOLOMON CREEK AT WILKES-BARRE, PA

LOCATION.--Lat 41°13'39", long 75°54'17", Luzerne County, Hydrologic Unit 02050107, on right bank at southwest city limits of Wilkes-Barre, 20 ft (6 m) downstream from bridge on Central Railroad of Pennsylvania, 0.4 mi (0.6 km) downstream from Spring Run and 3.4 mi (5.5 km) upstream from mouth.

DRAINAGE AREA.--15.7 mi² (40.7 km²).

PERIOD OF RECORD.--March 1940 to current year. Monthly discharge only for March 1940, published in WSP 1302.

REVISED RECORDS.--WSP 1272: Drainage area. WSP 1382: 1940, 1942, 1944(P), 1945-47, 1949(M), 1951-52, 1954-54(M).

GAGE.--Water-stage recorder and broad-crested weir. Altitude of gage is 545 ft (166 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Regulation by mine pumps above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--39 years, 19.8 ft³/s (0.561 m³/s), 17.13 in/yr (435 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,450 ft³/s (69.4 m³/s) Aug. 18, 1955, gage height, 9.83 ft (2.996 m), from rating curve extended above 380 ft³/s (10.8 m³/s) on basis of computation of peak flow through culvert; minimum, 0.13 ft³/s (0.004 m³/s) Sept. 16, Oct. 20, 1969; minimum daily, 0.30 ft³/s (0.008 m³/s) Sept. 10, 1975; minimum gage height, 0.14 ft (0.043 m) Aug. 16, 25, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 16, 1933 reached a stage of 11.4 ft (3.47 m) from floodmark.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 320 ft³/s (9.06 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. 21	0930	340 9.63	3.94 1.201	Feb. 24	0430	ice jam	*4.49 1.368
Jan. 25	0145	*419 11.9	4.28 1.304	May 24	1330	322 9.12	3.86 1.176

Minimum discharge, 0.19 ft³/s (0.005 m³/s) Aug. 30; minimum gage height, 0.84 ft (0.256 m) June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	5.8	5.2	56	19	47	11	29	32	2.2	.94	1.4
2	6.3	5.4	4.9	152	19	46	12	23	24	1.9	1.0	1.1
3	6.5	5.0	6.9	119	20	42	11	25	24	1.8	1.2	5.4
4	7.4	4.9	12	82	16	43	12	26	17	3.2	.94	1.1
5	4.5	4.5	11	52	18	81	15	21	14	3.2	.82	1.6
6	8.5	4.1	11	41	19	89	12	19	12	2.4	1.9	45
7	1.7	3.8	10	80	16	69	12	17	10	2.2	1.4	6.7
8	1.5	3.6	14	137	14	54	12	15	8.2	2.0	1.1	4.7
9	1.4	3.5	37	75	12	44	28	13	6.7	1.2	.94	4.7
10	1.3	3.2	25	56	10	40	29	11	6.0	.80	2.2	4.3
11	1.2	3.0	20	46	9.0	44	31	9.4	5.8	.80	11	4.0
12	1.1	3.2	19	35	8.0	35	32	8.2	4.9	.80	11	4.0
13	1.4	3.0	16	29	7.3	31	30	8.5	4.1	1.3	3.8	3.6
14	30	3.0	14	23	6.6	29	39	7.2	5.4	1.1	2.4	7.7
15	7.2	3.0	11	20	6.5	24	32	6.3	2.9	1.2	2.1	4.5
16	5.4	3.2	10	18	6.4	25	29	6.3	2.6	2.8	1.5	4.0
17	5.0	3.3	9.1	17	6.3	18	26	5.0	2.3	3.2	1.4	3.3
18	5.0	6.3	7.7	14	6.2	16	22	4.9	2.2	3.4	2.2	3.0
19	5.0	3.6	7.4	13	6.0	14	19	4.9	2.0	1.7	1.9	3.6
20	4.9	3.2	6.7	12	5.9	13	17	4.7	1.7	1.1	1.2	3.5
21	3.6	3.3	14	171	5.8	12	14	4.3	1.8	1.0	2.0	5.6
22	3.3	3.3	8.0	64	5.8	11	13	3.8	2.2	.90	1.5	11
23	3.0	5.0	7.4	46	5.8	10	12	14	3.2	1.1	1.3	11
24	3.0	6.0	13	152	101	13	11	140	2.4	1.5	1.0	13
25	2.8	5.0	22	231	56	16	10	113	1.8	.52	2.1	14
26	5.0	4.9	12	104	109	14	11	81	1.4	1.4	1.6	12
27	16	5.0	11	71	66	13	41	62	1.1	1.3	1.1	9.4
28	6.5	5.4	14	55	51	12	41	58	.88	1.1	1.1	9.1
29	6.3	5.2	16	43	---	14	36	49	1.1	2.2	1.1	12
30	6.3	5.4	7.7	33	---	13	33	42	2.8	1.5	.58	8.8
31	6.3	---	10	25	---	12	---	38	---	1.2	.70	---
TOTAL	173.0	127.1	393.0	2072	631.6	944	653	869.5	206.48	52.02	65.02	223.1
MEAN	5.58	4.24	12.7	66.8	22.6	30.5	21.8	28.0	6.88	1.68	2.10	7.44
MAX	30	6.3	37	231	109	89	41	140	32	3.4	11	45
MIN	1.1	3.0	4.9	12	5.8	10	10	3.8	.88	.52	.58	1.1
CFSM	.36	.27	.81	4.26	1.44	1.94	1.39	1.78	.44	.11	.13	.47
IN.	.41	.30	.93	4.91	1.50	2.24	1.55	2.06	.49	.12	.15	.53
CAL YR 1978 TOTAL	5646.45			MEAN 15.5	MAX 240	MIN .29	CFSM .99	IN 13.38				
WTR YR 1979 TOTAL	6409.82			MEAN 17.6	MAX 231	MIN .52	CFSM 1.12	IN 15.19				

SUSQUEHANNA RIVER BASIN

01537700 SUSQUEHANNA RIVER NEAR HUNLOCK CREEK, PA

LOCATION.--Lat 41°11'19", long 76°05'13", Luzerne County, Hydrologic Unit 02050107, at bridge to State Hospital Retreat, 1.6 mi (2.6 km) southwest of Hunlock Creek.

DRAINAGE AREA.--10,140 mi² (26,300 km²).

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

REMARKS.--Composite samples taken as part of the USGS-EPA surveillance network. Records of discharge are given for 01536500 Susquehanna River at Wilkes-Barre.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	BICAR- BONATE (MG/L AS HCO3)
OCT											
05...	1000	2120	400	7.2	15.0	7	10.2	14	3.9	2700	--
17...	1530	8020	300	7.5	12.0	15	11.0	19	4.6	450	--
31...	1100	9260	295	7.5	10.0	5	11.4	17	2.4	100	--
NOV											
14...	1430	3890	320	7.4	9.0	5	11.2	--	1.8	200	--
29...	1000	6010	270	6.7	2.0	3	12.6	--	3.0	340	--
DEC											
12...	1400	18000	250	7.1	1.5	20	13.8	--	--	420	47
27...	1100	7960	240	7.1	.5	4	14.0	--	--	120	--

DATE	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT										
05...	--	--	--	--	--	247	--	.66	.29	.51
17...	--	--	--	--	--	169	--	.65	.07	.72
31...	--	--	--	--	--	139	--	.54	.07	.25
NOV										
14...	--	--	--	--	--	188	--	.82	.20	.35
29...	--	--	--	--	--	172	--	.68	.12	.23
DEC										
12...	0	39	6.0	30	12	111	--	.73	.04	.36
27...	--	--	--	--	--	136	10	.73	.14	.22

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)
OCT										
05...	.80	1.5	.13	110	1	1	<10	6	2900	2
17...	.79	1.4	.21	410	1	1	20	14	3800	25
31...	.32	.86	.09	300	1	0	<10	7	1900	4
NOV										
14...	.55	1.4	.07	60	--	0	10	8	2200	2
29...	.35	1.0	.07	110	1	0	10	5	1400	15
DEC										
12...	.40	1.1	.09	550	1	1	10	8	2000	13
27...	.36	1.1	.04	80	1	1	10	4	1400	7

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	OIL AND GREASE (MG/L)	OIL AND GREASE, TOTAL RECOV- ERABLE METRIC (MG/L)	CHLORO- PHYLL A PHYTO- PLANK- TON, UNCORR. (UG/L)	CHLORO- PHYLL B PHYTO- PLANK- TON, UNCORR. (UG/L)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT										
05...	610	1	40	1.9	0	--	25.1	3.23	17	97
17...	390	0	20	4.4	0	--	36.1	.536	46	996
31...	180	0	10	4.1	1	--	11.4	.000	12	300
NOV										
14...	370	0	30	3.4	0	--	6.11	1.11	12	126
29...	10	1	10	3.9	--	1	1.71	.462	5	81
DEC										
12...	200	0	30	4.0	--	0	.000	.000	--	--
27...	270	0	30	2.8	--	1	.000	.000	--	--

WAPWALLOPEN CREEK BASIN

01538000 WAPWALLOPEN CREEK NEAR WAPWALLOPEN, PA

LOCATION.--Lat 41°03'33", long 76°05'38", Luzerne County, Hydrologic Unit 02050107, on left bank 100 ft (30 m) upstream from Harts Bridge, 2.2 mi (3.5 km) southeast of Wapwallopen and 3.7 mi (6.0 km) upstream from mouth.

DRAINAGE AREA.--43.8 mi² (113.4 km²).

PERIOD OF RECORD.--October 1919 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1302: 1926(M), 1929(M), 1938(M). WSP 1432: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 752.41 ft (229.33 m) Penn Central Railroad datum. Prior to Mar. 15, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good, except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--60 years, 64.9 ft³/s (1.838 m³/s), 20.12 in/yr (511 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,410 ft³/s (153 m³/s) June 22, 1972, gage height, 11.04 ft (3.365 m), from rating curve extended above 1,400 ft³/s (39.6 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 1.1 ft³/s (0.031 m³/s) Aug. 4, 1955, gage height, 0.44 ft (0.314 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Aug. 31, 1953, Aug. 5, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 580 ft³/s (16.4 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. 2	1730	916 25.9	5.14 1.567	Jan. 25	0630	*1,560 44.2	*6.65 2.027
Jan. 8	0700	879 24.9	5.04 1.536	Feb. 25	1630	1,360 38.5	6.25 1.905
Jan. 21	2130	1,040 29.5	5.46 1.664	May 24	1500	876 24.8	5.03 1.533

Minimum discharge, 7.9 ft³/s (0.22 m³/s) Aug. 5, 6, 9, 10, minimum gage height, 1.27 ft (0.387 m) Aug. 5, 6, 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	26	30	203	100	154	60	78	109	21	15	11
2	12	25	27	622	97	160	60	70	96	18	12	10
3	12	24	27	456	91	141	64	72	87	18	12	12
4	15	23	62	311	86	139	59	103	80	19	11	11
5	19	23	61	260	84	298	86	74	69	25	9.6	12
6	50	21	44	220	82	364	67	64	65	18	9.2	160
7	28	21	39	180	80	248	59	59	60	16	14	64
8	20	22	47	628	78	189	56	55	50	15	11	33
9	18	21	152	298	76	152	99	51	46	14	8.7	27
10	17	21	117	250	74	148	134	50	41	13	8.7	23
11	16	20	90	200	72	210	114	50	41	14	49	22
12	15	19	76	170	70	139	99	43	38	13	78	16
13	15	18	64	150	69	123	93	42	34	15	51	18
14	101	19	60	140	68	126	126	41	32	16	27	27
15	64	19	58	130	67	107	111	37	29	28	23	49
16	37	20	56	120	66	96	96	38	27	35	19	25
17	32	21	57	120	65	86	90	33	26	71	16	20
18	29	46	48	115	64	82	82	32	25	27	16	19
19	28	33	44	110	64	75	74	33	23	22	21	23
20	27	26	53	150	63	71	67	35	22	17	17	20
21	25	23	78	613	63	66	64	31	21	16	15	47
22	23	23	61	411	62	62	59	31	23	15	13	233
23	22	23	49	168	80	59	56	54	29	15	13	94
24	22	31	56	459	813	70	53	465	23	17	15	62
25	21	27	99	1050	1130	94	49	394	21	13	26	48
26	23	23	74	391	693	78	50	280	19	15	21	41
27	66	23	62	258	248	66	143	189	18	23	15	35
28	40	26	60	201	170	61	164	189	17	17	15	31
29	31	28	56	162	---	70	97	181	18	17	13	44
30	27	28	54	134	---	66	84	152	26	26	13	35
31	27	---	120	120	---	62	---	132	---	19	12	---
TOTAL	894	723	1981	8800	4775	3862	2515	3158	1215	628	599.2	1272
MEAN	28.8	24.1	63.9	284	171	125	83.8	102	40.5	20.3	19.3	42.4
MAX	101	46	152	1050	1130	364	164	465	109	71	78	233
MIN	12	18	27	110	62	59	49	31	17	13	8.7	10
CFSM	.66	.55	1.46	6.48	3.90	2.85	1.91	2.33	.93	.46	.44	.97
IN.	.76	.61	1.68	7.47	4.06	3.28	2.14	2.68	1.03	.53	.51	1.08

CAL YR 1978 TOTAL 29345.0 MEAN 80.4 MAX 1140 MIN 8.3 CFSM 1.84 IN 24.92
WTR YR 1979 TOTAL 30422.2 MEAN 83.3 MAX 1130 MIN 8.7 CFSM 1.90 IN 25.84

FISHING CREEK BASIN

01539000 FISHING CREEK NEAR BLOOMSBURG, PA

LOCATION.--Lat 41°04'41", long 76°25'53", Columbia County, Hydrologic Unit 02050107, on left bank 25 ft (8 m) downstream from highway bridge, 0.8 mi (1.3 km) downstream from Green Creek, 0.9 mi (1.4 km) west of Orangeville, and 5.5 mi (8.8 km) north of Bloomsburg.

DRAINAGE AREA.--274 mi² (710 km²).

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 1202: 1939-42, 1948(P), 1950.

GAGE.--Water-stage recorder. Datum of gage is 543.84 ft (165.762 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years, 485 ft³/s (13.74 m³/s), 24.04 in/yr (611 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,900 ft³/s (875 m³/s) June 22, 1972, gage height, 15.18 ft (4.627 m), from floodmark in gage shelter, from rating curve extended above 9,500 ft³/s (269 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 7.6 ft³/s (0.22 m³/s) July 19, 1939; minimum gage height, 1.54 ft (0.469 m) Aug. 11, 1966; minimum daily discharge, 8.4 ft³/s (0.24 m³/s) Sept. 12, 13, 18, 19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (113 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	1700	7,440 211	8.11 2.472	Feb. 26	0700	6,210 176	7.49 2.283
Jan. 25	0400	7,510 213	8.15 2.484	Mar. 5	1630	*12,300 348	*10.15 3.094

Minimum discharge, 51 ft³/s (1.44 m³/s) July 16, gage height, 1.68 ft (0.512 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	306	363	810	584	1200	441	357	644	86	64	130
2	143	282	326	5430	441	1160	447	326	551	83	178	114
3	130	259	316	4150	380	1070	513	326	610	81	277	282
4	146	241	597	2000	350	1110	483	803	526	79	164	237
5	190	228	810	1370	300	7570	856	644	435	90	114	171
6	459	211	686	1090	280	9050	765	538	424	74	97	1830
7	395	198	590	1050	260	3800	658	476	368	65	102	1600
8	316	194	604	2690	240	2270	597	429	368	63	85	927
9	277	178	1450	1790	230	1610	795	379	282	59	72	665
10	241	167	1430	1270	220	1370	1130	347	254	57	67	459
11	215	156	1080	927	210	1780	1020	395	250	57	117	352
12	194	146	848	743	200	1340	943	326	241	55	316	282
13	178	139	729	700	190	1100	856	306	203	56	390	241
14	424	139	630	887	180	984	880	296	175	55	241	237
15	435	136	507	714	180	864	864	259	153	55	190	352
16	352	139	447	551	170	686	751	250	139	53	153	246
17	311	146	412	459	170	624	679	220	126	178	130	190
18	273	545	368	380	165	571	604	194	114	99	117	178
19	259	532	311	320	165	513	532	186	112	79	139	186
20	246	412	292	340	160	476	483	194	102	66	126	182
21	224	363	465	1400	160	441	441	182	95	60	104	190
22	207	331	412	1980	150	407	395	175	90	57	88	1080
23	190	316	326	1150	200	395	368	198	102	65	86	758
24	178	513	296	1860	500	407	336	1050	107	160	83	532
25	164	483	597	5160	1640	538	316	1960	92	85	86	418
26	178	418	495	2260	4120	571	301	2140	79	86	99	357
27	630	379	429	1550	1910	489	418	1780	74	107	246	296
28	507	384	331	1240	1280	441	584	1570	70	76	326	268
29	412	368	296	1000	---	459	418	1230	74	74	228	311
30	363	357	290	818	---	476	379	976	92	86	190	306
31	326	---	280	693	---	459	---	803	---	74	156	---
TOTAL	8716	8666	17013	46782	15035	44231	18253	19315	6952	2420	4831	13377
MEAN	281	289	549	1509	537	1427	608	623	232	78.1	156	446
MAX	630	545	1450	5430	4120	9050	1130	2140	644	178	390	1830
MIN	130	136	280	320	150	395	301	175	70	53	64	114
CFSM	1.03	1.06	2.00	5.51	1.96	5.21	2.22	2.27	.85	.29	.57	1.63
IN.	1.18	1.18	2.31	6.35	2.04	6.01	2.48	2.62	.94	.33	.66	1.82

CAL YR 1978 TOTAL 208730 MEAN 572 MAX 6890 MIN 54 CFSM 2.09 IN 28.34
WTR YR 1979 TOTAL 205591 MEAN 563 MAX 9050 MIN 53 CFSM 2.06 IN 27.91

CATAWISSA CREEK BASIN

01540200 TREXLER RUN NEAR RINGTOWN, PA

LOCATION.--Lat 40°51'10", long 76°16'48", Schuylkill County, Hydrologic Unit 02050107, at bridge on Legislative Route 53064, 1.9 mi (3.1 km) upstream from mouth and 2.5 mi (4.0 km) west of Ringtown.

DRAINAGE AREA.--1.77 mi² (4.58 km²).

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum, water years 1959-63. August 1963 to current year.

GAGE.--Water-stage recorder and masonry control. Altitude of gage is 1,110 ft (338 m) from topographic map.

REMARKS.--Records good except for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years, 2.24 ft³/s (0.063 m³/s), 17.19 in/yr (437 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 487 ft³/s (13.8 m³/s) June 22, 1972, gage height, 5.15 ft (1.570 m), from rating curve extended above 40 ft³/s (1.13 m³/s) on basis of contracted-opening measurement with flow over road at gage height 5.15 ft (1.570 m) and culvert computation at gage height 3.95 ft (1.204 m); no flow for many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 25 ft³/s (0.71 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. 24	1800	*62 1.76	*2.77 0.844	May 24	1230	50 1.42	2.62 0.799
Mar. 5	1000	30 0.85	2.31 0.704				

Minimum discharge, 0.40 ft³/s (0.011 m³/s) July 14, gage height, 1.15 ft (0.351 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	.70	1.0	4.3	3.7	6.9	2.4	1.9	5.1	1.2	.55	.54
2	.49	.70	.95	11	3.2	7.1	2.4	1.8	4.7	1.1	.58	.54
3	.47	.66	1.1	8.7	2.9	6.6	2.2	2.0	4.5	.89	.55	.54
4	.80	.66	1.6	6.9	2.6	7.4	2.6	2.0	4.0	1.0	.51	.53
5	.70	.62	1.4	5.7	2.3	18	2.6	1.8	4.2	.93	.50	.59
6	1.9	.62	1.4	5.1	2.1	17	2.4	1.7	4.0	.82	.48	8.7
7	.80	.59	1.5	7.6	1.9	12	2.4	1.6	3.2	.75	.56	3.5
8	.70	.52	2.6	12	1.8	9.3	2.4	1.5	2.9	.71	.52	3.0
9	.70	.52	4.7	6.9	1.7	7.4	3.5	1.5	2.8	.70	.47	2.4
10	.66	.49	3.8	6.0	1.6	7.1	3.4	2.8	2.6	.70	.53	2.0
11	.62	.49	3.7	4.9	1.6	7.4	2.8	2.6	2.6	.67	.95	1.6
12	.59	.47	3.4	4.3	1.5	5.7	2.9	2.4	2.4	.64	1.3	1.4
13	.58	.47	3.2	4.0	1.4	5.1	2.9	2.5	2.1	.58	.70	1.3
14	.95	.44	2.9	3.4	1.3	4.9	3.5	2.5	2.0	.62	.57	2.5
15	.66	.44	2.5	3.0	1.3	4.2	3.0	2.4	1.8	.66	.54	1.8
16	.66	.47	2.2	2.7	1.3	3.7	2.9	2.2	1.8	.70	.55	1.4
17	.62	.59	2.1	2.5	1.2	3.4	2.8	2.0	1.7	.66	.56	1.2
18	.59	1.4	1.9	2.4	1.2	3.2	2.6	2.0	1.6	.65	.86	1.1
19	.59	.80	1.7	2.2	1.2	2.9	2.5	2.0	1.4	.60	.71	1.0
20	.59	.70	1.6	2.1	1.2	2.8	2.4	1.8	1.4	.59	.61	.96
21	.59	.70	2.0	6.9	1.2	2.6	2.2	1.7	1.4	.58	.60	4.0
22	.52	.70	1.6	4.3	1.2	2.4	2.1	1.6	1.5	.57	.59	5.2
23	.49	.85	1.4	3.2	1.3	2.2	2.0	2.8	1.4	.64	.61	3.8
24	.49	.95	1.8	21	8.4	3.2	1.9	18	1.3	.63	.83	3.4
25	.49	.85	3.7	15	8.4	3.4	1.8	16	1.2	.54	1.0	2.8
26	.62	.80	2.2	9.0	12	2.9	1.8	14	1.1	.55	.73	2.4
27	1.3	.85	2.0	7.1	7.1	2.6	2.9	10	1.0	.55	.64	2.0
28	.70	.90	1.8	6.4	7.1	2.5	2.2	9.0	1.0	.54	.63	1.9
29	.70	.90	2.4	5.3	---	2.8	1.9	7.4	1.1	1.1	.60	1.7
30	.70	1.0	1.7	4.7	---	2.5	1.9	6.2	2.2	.74	.58	1.5
31	.70	---	1.8	4.2	---	2.5	---	6.4	---	.59	.57	---
TOTAL	21.49	20.85	67.65	192.8	83.7	171.7	75.3	134.1	70.0	22.20	19.98	65.30
MEAN	.69	.70	2.18	6.22	2.99	5.54	2.51	4.33	2.33	.72	.64	2.18
MAX	1.9	1.4	4.7	21	12	18	3.5	18	5.1	1.2	1.3	8.7
MIN	.47	.44	.95	2.1	1.2	2.2	1.8	1.5	1.0	.54	.47	.53
CFSM	.39	.40	1.23	3.51	1.69	3.13	1.42	2.45	1.32	.41	.36	1.23
IN.	.45	.44	1.42	4.05	1.76	3.61	1.58	2.82	1.47	.47	.42	1.37

CAL YR 1978 TOTAL 970.37 MEAN 2.66 MAX 27 MIN .30 CFSM 1.50 IN 20.38
WTR YR 1979 TOTAL 945.07 MEAN 2.59 MAX 21 MIN .44 CFSM 1.46 IN 19.85

SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA

LOCATION.--Lat 40°57'29", long 76°37'10", Montour County, Hydrologic Unit 02050107, on right bank, 200 ft (61 m) upstream from Mill Street Bridge at Danville and 0.8 mi (1.3 km) upstream from Mahoning Creek.

DRAINAGE AREA.--11,220 mi² (29,060 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1899 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1904, 1914-17, 1923. WSP 1432: 1900-03, 1905-06, 1908-10, 1912-13, 1933.

GAGE.--Water-stage recorder. Datum of gage is 431.29 ft (131.457 m) National Geodetic Vertical Datum of 1929. Prior to June 29, 1939, nonrecording gage at or near Mill Street Bridge at same datum. Since Oct. 1, 1971, water-stage recorder for Susquehanna River above dam at Sunbury (Station 01553990) used as an auxiliary gage for this station.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation by flood-control reservoirs upstream.

AVERAGE DISCHARGE.--80 years, 15,430 ft³/s (437 m³/s), 18.68 in/yr (474 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 363,000 ft³/s (10,300 m³/s) June 25, 1972, from rating curve extended above 250,000 ft³/s (7,080 m³/s); maximum gage height, 32.32 ft (9.851 m) June 24, 1972, backwater from West Branch Susquehanna River; minimum discharge, 508 ft³/s (14.4 m³/s) Sept. 27, 1964, gage height, 1.51 ft (0.460 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1865 reached a stage of 28 ft (8.5 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 188,000 ft³/s (5,320 m³/s) Mar. 7, gage height, 23.93 ft (7.294 m); minimum, 1,860 ft³/s (52.7 m³/s) Aug. 24, gage height, 2.35 ft (0.716 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3140	9640	6260	12000	26700	33800	29500	24300	25700	3560	2540	2300
2	2940	8170	6080	30700	23600	32400	28500	20200	21800	3350	2510	2180
3	2790	7330	6040	101000	20400	36400	26800	17300	18800	3320	2710	2250
4	2760	6750	6490	106000	16200	38800	25500	16500	17600	3350	3200	2560
5	2890	6300	7410	74300	14300	70200	26000	16200	15600	3620	4150	2180
6	3380	5900	7490	50500	12600	128000	25900	15900	14500	3410	3680	5860
7	3830	5500	7610	38500	11100	176000	25700	15700	13000	3110	3170	9640
8	3960	5290	10100	42300	10300	166000	23700	14300	11200	2910	2810	9040
9	3830	5080	13600	41400	9700	126000	22000	12700	10100	2760	2460	11900
10	3800	4910	18600	36400	9100	93900	26300	11700	9210	2640	2300	9900
11	3710	4740	22900	30400	8400	71800	42700	12000	8580	2510	2490	8380
12	3590	4640	23000	23700	7700	65400	46700	11900	8340	2390	3380	6490
13	3500	4510	18800	19700	7200	58400	42100	12100	8050	2340	3770	5190
14	3800	4350	15600	18200	6900	51000	38100	11500	8050	2320	3170	4580
15	5050	4220	14000	18700	6600	45300	35700	10500	7650	2610	2810	4680
16	5930	4090	12900	19600	6400	45500	34800	9380	6790	2320	2490	4120
17	6450	3960	12000	19300	6200	41300	34600	8710	6080	3200	2300	3930
18	8880	4280	11100	18300	6100	35900	33000	8010	5500	3320	2220	4180
19	8500	4980	10200	13800	6000	31200	30500	7610	5050	2710	2270	4640
20	7140	5470	9300	11600	6000	28200	26800	7180	4610	3110	2250	4150
21	6120	5220	8710	16200	6200	26000	23200	6750	4310	3410	2150	3930
22	5570	5720	9210	31300	6600	24000	20600	6380	4120	3680	2060	7220
23	5290	5860	10100	25100	7250	23900	18500	6230	4150	3650	1970	7810
24	5220	5900	12400	32200	12900	25100	16800	10100	4180	3900	1900	6530
25	5260	5860	14400	68400	20400	29100	15400	26400	4060	3290	1950	5360
26	5050	5750	13600	86100	44500	35700	14300	34200	4020	2810	2110	4680
27	5720	5640	10800	87600	60900	43000	13700	42300	3990	3000	2040	4280
28	6340	6120	9260	59400	41800	41600	17400	45900	3800	2790	2420	3900
29	7930	6750	9000	43300	---	34900	21000	43500	3590	2860	2540	3800
30	11200	6830	8600	35700	---	29200	25500	36200	3770	3000	2760	3800
31	11800	---	9100	30400	---	27600	---	30800	---	2790	2490	---
TOTAL	165370	169760	354660	1242100	422050	1715600	811300	552450	266200	94040	81070	159460
MEAN	5335	5659	11440	40070	15070	55340	27040	17820	8873	3034	2615	5315
MAX	11800	9640	23000	106000	60900	176000	46700	45900	25700	3900	4150	11900
MIN	2760	3960	6040	11600	6000	23900	13700	6230	3590	2320	1900	2180
CFSM	.48	.50	1.02	3.57	1.34	4.93	2.41	1.59	.79	.27	.23	.47
IN.	.55	.56	1.18	4.12	1.40	5.69	2.69	1.83	.88	.31	.27	.53

CAL YR 1978 TOTAL 6233950 MEAN 17080 MAX 115000 MIN 2110 CFSM 1.52 IN 20.67
WTR YR 1979 TOTAL 6034060 MEAN 16530 MAX 176000 MIN 1900 CFSM 1.47 IN 20.01

SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1945 to June 1953, October 1956 to current year.

REMARKS.--Operated as part of the USGS-EPA surveillance network.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)
OCT 18...	0830	8960	280	7.5	11.0	20	11.6	380	63	110	57
NOV 14...	1730	4310	330	7.7	10.0	4.0	11.2	K44	55	120	71
DEC 13...	0800	19200	200	7.6	1.5	15	13.2	650	--	66	29
JAN 25...	1345	66200	170	7.0	1.0	50	14.0	110	K6000	53	32
MAR 13...	1445	57400	180	7.1	3.5	30	12.4	390	110	51	27
APR 24...	1500	16600	230	7.5	14.0	7.0	11.2	K10	K5	77	43
MAY 16...	0800	9470	240	7.3	19.0	5.0	10.0	K33	K7	91	48
JUN 26...	1800	3990	355	8.6	23.0	1.0	10.8	83	100	140	80
JUL 24...	1900	3800	367	8.5	27.0	15	7.8	K160	520	140	79
AUG 21...	1700	2130	370	8.7	26.0	3.0	10.8	K20	43	140	97
SEP 11...	1800	7930	287	7.7	21.5	9.0	9.0	330	K40	110	54

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 18...	30	8.6	11	18	.5	--	2.0	53	--	58	15
NOV 14...	32	9.3	11	17	.4	--	1.7	47	--	65	16
DEC 13...	19	4.5	7.1	19	.4	--	1.5	37	--	28	12
JAN 25...	15	3.7	8.2	25	.5	--	1.4	21	--	23	13
MAR 13...	15	3.4	4.5	16	.3	--	1.2	24	--	23	7.5
APR 24...	22	5.3	6.4	15	.3	--	1.1	34	--	36	9.3
MAY 16...	25	7.0	9.2	18	.4	--	1.5	43	--	48	12
JUN 26...	36	12	15	19	.6	--	1.8	59	--	88	16
JUL 24...	36	12	16	20	.6	18	2.0	60	.4	79	22
AUG 21...	35	13	16	20	.6	18	2.1	44	.2	110	20
SEP 11...	31	8.4	14	21	.6	16	2.1	58	2.3	46	18

K = Best estimate.

SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	FLUORIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)
OCT 18...	.1	1.3	179	158	.71	--	.07	.65	.72	.47	.25
NOV 14...	.1	1.2	199	165	.78	--	.10	4.9	5.0	4.7	.33
DEC 13...	.1	3.3	106	98	.81	--	.02	.26	.28	.17	.11
JAN 25...	.1	3.8	92	81	.72	--	.10	.75	.85	.59	.26
MAR 13...	.1	4.2	85	74	.74	--	.08	.21	.29	.13	.16
APR 24...	.1	2.8	114	103	.62	--	.08	.06	.14	.00	.18
MAY 16...	.1	.4	148	129	.44	--	.09	.49	.58	.25	.33
JUN 26...	.1	2.6	263	207	.26	--	.09	.79	.88	.34	.54
JUL 24...	.1	3.0	252	206	.17	--	.03	1.1	1.1	.73	.37
AUG 21...	.1	1.5	257	224	.46	--	.04	.61	.65	.31	.34
SEP 11...	.1	3.4	175	161	.59	.57	.06	.66	.72	.57	.15

DATE	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 18...	1.4	--	.18	.01	--	3.5	4.0	--	50	1210	84
NOV 14...	5.8	--	.04	.00	3.5	--	--	2800	17	198	69
DEC 13...	1.1	--	.09	.00	--	3.3	1.4	--	41	2130	88
JAN 25...	1.6	--	.19	.01	5.6	--	--	--	141	25200	97
MAR 13...	1.0	--	.02	.00	--	2.5	.6	58	44	6820	95
APR 24...	.76	--	.05	.01	5.6	--	--	2800	16	717	77
MAY 16...	1.0	--	.05	.01	4.7	--	--	33000	14	358	100
JUN 26...	1.1	--	.06	.01	--	3.1	2.9	140000	14	151	82
JUL 24...	1.3	--	.09	.01	4.8	--	--	120000	36	369	100
AUG 21...	1.1	--	.04	.00	6.8	--	--	--	7	40	82
SEP 11...	1.3	.72	.13	.01	--	3.6	1.7	--	42	899	83

SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)		ARSENIC SUS- PENDE TOTAL (UG/L AS AS)		ARSENIC DIS- SOLVED (UG/L AS AS)		BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)		BARIUM, SUS- PENDE RECOV- ERABLE (UG/L AS BA)		BARIUM, DIS- SOLVED (UG/L AS BA)		CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)		CADMIUM SUS- PENDE RECOV- ERABLE (UG/L AS CD)		CADMIUM DIS- SOLVED (UG/L AS CD)	
OCT 18...	0830	1		--		0		0		0		0		1		0		1	
DEC 13...	0800	1		--		1		0		0		0		0		0		2	
MAR 13...	1445	1		--		1		0		0		0		0		0		0	
JUN 26...	1800	1		--		2		<100		--		50		4		4		0	
SEP 11...	1800	1		0		1		<50		--		30		1		0		1	

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUS- PENDED RECOV. (UG/L AS CR)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	CORALT, SUS- PENDED RECOVERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUS- PENDED RECOVERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT 18...	10	10	0	9	8	1	13	8	5	4100
DEC 13...	10	10	0	1	1	0	7	6	1	2200
MAR 13...	10	2	8	2	0	2	25	22	3	2600
JUN 26...	40	30	10	3	3	0	8	3	5	1200
SEP 11...	<10	<0	<10	10	8	2	9	6	3	3100

DATE	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDE RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG)
OCT 18...	4100	20	13	11	2	720	530	190	<.5	.0
DEC 13...	2100	100	9	9	0	280	150	130	<.5	.0
MAR 13...	2500	80	4	4	0	160	20	140	<.5	.0
JUN 26...	1200	0	10	8	2	380	260	120	<.5	.0
SEP 11...	--	70	18	18	0	530	440	90	<.5	<.0

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDED TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDED RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 18...	<.5	0	0	0	0	0	0	60	50	10
DEC 13...	<.5	0	0	0	0	0	0	50	50	0
MAR 13...	<.5	0	0	0	0	0	0	90	80	10
JUN 26...	<.5	0	0	0	0	0	0	30	10	20
SEP 11...	<.5	0	0	0	0	0	0	40	0	40

SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

PHYTOPLANKTON ANALYSES, AUGUST 1978 TO SEPTEMBER 1978

DATE	AUG 23, 78	SEP 19, 78
TIME	0830	1045
TOTAL CELLS/ML	8500	180000
DIVERSITY: DIVISION	1.0	1.2
..CLASS	1.0	1.2
..ORDER	1.8	1.5
...FAMILY	2.6	2.3
....GENUS	3.4	2.9

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)				
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
...OOCYSTACEAE				
....GLOEOACTINIUM	240	3	--	-
...COELASTRACEAE				
....COELASTRUM	990	12	23000	13
...MICRACTINIACEAE				
....GOLENKINIA	--	-	*	0
...MICRACTINIUM	--	-	4100	2
...OOCYSTACEAE				
....ANKISTRODESMUS	60	1	1200	1
...CHODATELLA	--	-	1200	1
...DICTYOSPHAERIUM	2300#	27	33000#	18
...KIRCHNERIELLA	160	2	3800	2
...OOCYSTIS	--	-	2400	1
...SELENASTRUM	400	5	--	-
...TETRAEDRON	*	0	--	-
...TREUBARIA	--	-	*	0
...WESTELLA	400	5	--	-
...SCENEDESMACEAE				
....ACTINASTRUM	160	2	960	1
...SCENEDESMUS	600	7	11000	6
...TETRASPORALES				
...PALMELLACEAE				
...SPHAEROCYSTIS	320	4	3400	2
...VOLVOCALES				
...CHLAMYDOMONADACEAE				
...CHLAMYDOMONAS	930	11	--	-
...ZYGNEMATALES				
...DESMIDIACEAE				
...STAUSTRUM	*	0	--	-
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE				
...CENTRALES				
...COSCINODISCACEAE				
...CYCLOTELLA	--	-	5300	3
....MELOSIRA	220	3	--	-
...STEPHANODISCUS	600	7	--	-
...PENNALES				
...NITZSCHIIACEAE				
...NITZSCHIA	*	0	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)				
..CYANOPHYCEAE				
...CHROOCOCCALES				
...CHROOCOCCACEAE				
....AGMENELLUM	--	-	67000#	38
...ANACYSTIS	810	9	10000	6
...HORMOGONALES				
...OSCILLATORIACEAE				
...OSCILLATORIA	240	3	10000	6

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

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO JULY 1979

DATE TIME	NOV 14,78 1730	MAR 13,79 1445	APR 24,79 1500	MAY 16,79 0800	JUN 26,79 1800	JUL 24,79 1900				
TOTAL CELLS/ML	2800	58	2800	33000	140000	120000				
DIVERSITY: DIVISION	0.7	0.0	1.2	0.9	1.3	1.5				
..CLASS	0.7	0.0	1.2	0.9	1.3	1.5				
..ORDER	1.3	0.0	1.7	1.7	1.4	1.6				
...FAMILY	1.7	0.0	2.0	2.5	2.0	2.5				
....GENUS	1.9	0.0	0.0	2.8	2.8	3.3				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	*	0	--	-
....COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	--	-	25000#	21
....HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	--	-	5400	4
....SORASTRUM	--	-	--	-	--	-	--	-	2400	2
....MICRACTINIACEAE										
....GOLENKINIA	25	1	--	-	--	-	1500	1	--	-
....MICRACTINIUM	--	-	--	-	--	-	13000	9	5400	4
....OOCYSTACEAE										
....ANKISTRODESMUS	120	4	--	-	44	2	400	1	14000	10
....CHODATELLA	--	-	--	-	--	-	--	-	1000	1
....DICTYOSPHAERIUM	220	8	--	-	360	13	1600	5	3000	2
....KIRCHNERIELLA	25	1	--	-	--	-	--	-	1000	1
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	2400	2
....TETRAEDRON	--	-	--	-	--	-	1000	1	5400	4
....TREUBARIA	--	-	--	-	--	-	--	-	1200	1
....SCENEDESMACEAE							*	0	*	0
....ACTINASTRUM	--	-	--	-	--	-	3200	10	--	-
....SCENEDESMUS	99	4	--	-	110	4	2000	6	18000	13
....TETRASTRUM	--	-	--	-	--	-	810	2	--	-
....TETRASPORALES									2400	2
....PALMELLACEAE										
....SPHAEROCYSTIS	--	-	--	-	--	-	1400	4	--	-
....VOLVOCALES										
....CHLAMYDOMONADACEAE	--	-	--	-	110	4	--	-	--	-
....CHLAMYDOMONAS	25	1	--	-	--	-	810	2	1500	1
....ZYGEMATALES										
....DESMIDIACEAE										
....CLOSTERIUM	25	1	--	-	--	-	--	-	--	-
CHRYSTOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
....COSCINODISCACEAE										
....CYCLOTELLA	1900#	68	--	-	1700#	60	--	-	5000	4
....MELOSIRA	--	-	--	-	--	-	400	1	--	-
....STEPHANODISCUS	--	-	--	-	--	-	5000#	15	--	-
....PENNALES									19000#	16
....ACHNANTHACEAE										
....COCONEIS	25	1	--	-	--	-	--	-	--	-
....CYMBELLACEAE										
....CYMBELLA	25	1	--	-	22	1	--	-	--	-
....DIATOMACEAE										
....DIATOMA	74	3	--	-	--	-	--	-	--	-
....FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	44	2	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	8300#	25	--	-
....SYNEDRA	--	-	--	-	22	1	--	-	1000	1
....GOMPHONEMACEAE										
....GOMPHONEMA	--	-	58#	100	22	1	--	-	--	-
....NAVICULACEAE										
....NAVICULA	74	3	--	-	22	1	--	-	--	-
....NITZSCHACEAE										
....NITZSCHIA	150	5	--	-	44	2	8900#	27	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
....CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	1000	1	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
....CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	32000#	24	13000	11
....ANACYSTIS	--	-	--	-	--	-	42000#	31	26000#	21
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
....EUGLENACEAE										
....TRACHELOMONAS	--	-	--	-	290	10	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
 * - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541000 WEST BRANCH SUSQUEHANNA RIVER AT BOWER, PA

LOCATION.--Lat 40°53'49", long 78°40'38", Clearfield County, Hydrologic Unit 02050201, on right bank at downstream side of highway bridge at Bower, 4.6 mi (7.4 km) downstream from Chest Creek and Mahaffey.

DRAINAGE AREA.--315 mi² (816 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1913 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 726: Drainage area: WSP 1302: 1914-17, 1918(M), 1922-23, 1924(M), 1925-29, 1930-31(M), 1933(M).

GAGE.--Water-stage recorder. Datum of gage is 1,207.14 ft (367.936 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 17, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods which are fair.

AVERAGE DISCHARGE.--66 years, 557 ft³/s (15.77 m³/s), 24.04 in/yr (611 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,500 ft³/s (892 m³/s) Mar. 18, 1936, gage height, 19.74 ft (6.017 m), from floodmark in gage shelter, from rating curve extended above 7,200 ft³/s (204 m³/s) on basis of slope-area measurement of peak flow; minimum, 14 ft³/s (0.40 m³/s) Aug. 29, 1939; minimum daily, 16 ft³/s (0.45 m³/s) Sept. 29, Oct. 1, 6, 13, 1930, Aug. 29, Aug. 31 to Sept. 2, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1913, about 18.5 ft (5.64 m) May 13, 1889, discharge, about 27,000 ft³/s (760 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft³/s (125 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	0630	8,180 232	12.09 3.685	Mar. 5	1230	*12,100 343	13.78 4.200
Jan. 25	0230	7,720 219	11.86 3.615	Mar. 25	0700	6,300 178	11.09 3.380
Feb. 26	1230	ice jam	*15.15 4.618				

Minimum discharge, 64 ft³/s (1.812 m³/s) Oct. 1, 2, gage height, 4.21 ft (1.283 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	176	315	2800	360	1250	671	328	712	220	923	199
2	67	155	272	7330	300	1730	1210	306	788	204	578	178
3	64	142	263	3500	260	2000	1340	324	615	201	432	259
4	125	132	805	2100	235	4750	1060	562	515	174	333	268
5	108	124	774	1200	215	11200	970	462	439	214	271	189
6	83	119	546	960	200	7420	821	394	398	169	232	1300
7	84	114	437	760	190	4020	678	369	362	142	211	947
8	82	125	1150	880	180	2900	596	343	325	128	187	561
9	73	115	2750	680	173	2390	1580	317	305	121	176	420
10	70	108	1750	540	165	2290	1900	303	413	246	196	337
11	69	103	1060	470	157	2100	1330	358	392	285	795	293
12	72	99	794	420	150	1510	1290	369	318	163	1090	255
13	111	99	642	420	145	1160	1180	496	263	142	810	225
14	482	100	552	480	140	1300	1180	406	234	408	513	247
15	326	105	449	410	135	1200	1210	354	214	333	423	316
16	259	114	409	340	130	898	1110	421	201	294	363	220
17	339	232	512	310	125	794	946	346	184	215	297	189
18	230	447	456	290	122	739	804	303	176	164	264	169
19	186	290	391	270	119	732	690	285	176	139	277	161
20	158	224	362	260	116	685	606	268	164	126	232	154
21	136	191	2120	280	120	644	539	248	148	355	204	163
22	120	171	1420	260	130	612	484	228	208	212	187	475
23	114	186	975	600	160	592	438	216	173	288	172	290
24	117	307	752	1700	255	972	395	2410	151	1080	163	214
25	108	248	863	5770	600	5260	377	2040	141	448	182	186
26	250	216	732	2000	3480	2790	352	1420	133	586	207	174
27	878	202	584	1200	2470	1580	456	1190	125	382	583	164
28	458	411	475	880	1540	1120	472	1460	122	278	483	612
29	312	449	356	670	---	915	389	1170	122	979	329	2440
30	242	371	330	530	---	783	350	965	149	1360	290	1180
31	201	---	320	430	---	679	---	788	---	703	231	---
TOTAL	5995	5875	23616	38740	12372	67015	25424	19449	8666	10759	11634	12785
MEAN	193	196	762	1250	442	2162	847	627	289	347	375	426
MAX	878	449	2750	7330	3480	11200	1900	2410	788	1360	1090	2440
MIN	67	99	263	260	116	592	350	216	122	121	163	154
CFSM	.61	.62	2.42	3.97	1.40	6.86	2.69	1.99	.92	1.10	1.19	1.35
IN.	.71	.69	2.79	4.57	1.46	7.91	3.00	2.30	1.02	1.27	1.37	1.51

CAL YR 1978 TOTAL 246091 MEAN 674 MAX 10400 MIN 59 CFSM 2.14 IN 29.06
WTR YR 1979 TOTAL 242330 MEAN 664 MAX 11200 MIN 67 CFSM 2.11 IN 28.62

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541000 WEST BRANCH SUSQUEHANNA RIVER AT BOWER, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1975 to current year.

COAL-HYDROLOGY NETWORK

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHQS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	ALKA- LITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	
JUN 15...	1030	193	530	7.4	13.5	.0	.0	36	160	--	
AUG 01...	1300	1260	265	6.8	21.5	.0	.0	20	84	193	
DATE		SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SEDI- MENT, DIS- SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
JUN 15...	--	--	--	330	320	10	400	20	380	3	1.6
AUG 01...	.26	.26	657	7600	7500	70	570	290	280	182	619

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541200 WEST BRANCH SUSQUEHANNA RIVER AT CURWENSVILLE, PA

LOCATION.--Lat 40°57'41", long 78°31'10", Clearfield County, Hydrologic Unit 02050201, on left bank 30 ft (9 m) downstream from bridge on State Highway 453, 0.85 mi (1.37 km) downstream from Curwensville Lake, 1.1 mi (1.8 km) south of Curwensville and 1.8 mi (2.9 km) upstream from Anderson Creek.

DRAINAGE AREA.--367 mi² (951 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,124.52 ft (342.754 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 24, 1956, nonrecording gage and crest-stage gage 30 ft (9 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Curwensville Lake (station 01541180) 0.85 mi (1.36 km) upstream.

AVERAGE DISCHARGE.--24 years, 653 ft³/s (18.49 m³/s), 24.17 in/yr (614 mm/yr), adjusted for storage since November 1965.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft³/s (445 m³/s) Mar. 10, 1964, gage height, 14.19 ft (4.325 m); no flow at times; minimum daily, 19 ft³/s (0.54 m³/s) Aug. 16, 17, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,610 ft³/s (159 m³/s) Mar. 7, gage height, 8.42 ft (2.566 m); minimum daily, 71 ft³/s (2.01 m³/s) Oct. 1, 2, 3, 10, 11, 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	327	588	1370	400	2330	944	282	844	160	819	138
2	71	244	555	3000	340	1930	1240	291	703	217	819	150
3	71	125	654	3750	310	2340	1850	240	801	163	395	234
4	106	125	668	4490	290	2650	1630	207	883	142	297	235
5	127	125	649	4090	290	579	1350	258	630	171	313	235
6	129	125	771	3330	289	445	1100	273	520	186	225	1030
7	131	121	799	1180	284	3800	980	280	450	160	155	1470
8	131	121	1420	1450	289	5500	683	292	390	112	171	675
9	100	119	2750	1590	289	5200	1360	299	349	98	183	456
10	71	121	2300	888	289	4900	2190	333	358	198	166	332
11	71	119	1600	631	289	4600	2280	247	435	289	443	314
12	71	113	1000	393	263	4350	2110	268	395	180	1150	253
13	71	113	700	563	205	4100	1680	417	389	202	1050	253
14	226	131	490	790	213	3800	1410	515	299	243	593	256
15	753	278	440	1030	222	3400	1450	520	255	304	440	257
16	380	380	440	771	226	2700	1610	440	220	375	333	244
17	327	526	440	596	230	1800	1530	390	215	216	276	168
18	350	533	500	622	235	1100	1140	340	210	180	288	160
19	222	526	720	649	230	1100	931	300	190	110	252	142
20	263	518	2100	715	217	1000	793	280	185	92	230	147
21	205	511	1840	753	226	940	667	260	177	155	170	229
22	202	504	1490	579	226	880	556	249	136	248	147	286
23	168	605	1260	588	631	860	439	294	205	296	140	381
24	138	477	1000	809	963	1600	469	1340	186	1020	163	230
25	138	440	940	1480	1610	2800	426	3130	152	729	180	160
26	155	410	770	2470	2800	3900	455	1900	155	519	163	160
27	696	410	640	1930	3660	3200	553	1420	136	404	323	163
28	1040	480	540	1050	3340	2500	528	1730	127	276	653	283
29	563	464	480	840	---	1800	525	1570	168	577	372	2130
30	327	526	460	660	---	1400	504	1220	147	1600	288	2450
31	327	---	480	520	---	975	---	991	---	192	195	---
TOTAL	7701	9617	29484	43577	18856	78479	33383	20576	10310	9814	11392	13621
MEAN	248	321	951	1406	673	2532	1113	664	344	317	367	454
MAX	1040	605	2750	4490	3660	5500	2280	3130	883	1600	1150	2450
MIN	71	113	440	393	205	445	426	207	127	92	140	138
MEAN [#]	242	264	946	1399	707	2506	1105	742	344	321	364	456
CFSM [#]	.66	.72	2.58	3.81	1.93	6.83	3.01	2.02	.94	.87	.99	1.24
IN. [#]	.76	.80	2.97	4.39	2.01	7.87	3.36	2.33	1.05	1.00	1.14	1.38

CAL YR 1978 TOTAL 253729 MEAN 695 MAX 4690 MIN 70 MEAN [#] 695 CFSM[#] 1.89 IN.[#] 25.71
WTR YR 1979 TOTAL 286810 MEAN 786 MAX 5500 MIN 71 MEAN [#] 792 CFSM[#] 2.16 IN.[#] 29.06

[#] Adjusted for change in contents in Curwensville Lake.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541303 WEST BRANCH SUSQUEHANNA RIVER AT HYDE, PA

LOCATION.--Lat 41°00'16", long 78°27'25", Clearfield County, Hydrologic Unit 02050201, on right bank 60 ft (18 m) downstream from bridge on Legislative Route 17098, at intersection with State Highway 879.

DRAINAGE AREA.--474 mi² (1,228 km²).

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder. Datum of gage is 1,093.90 ft (333.421 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Curwensville Reservoir located about 5.0 mi (8.0 km) upstream.

EXTREMES

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,250 ft³/s (205 m³/s) Mar. 7, 1979, gage height, 10.14 ft (3.091 m) from rating curve extended above 6,000 ft³/s (170 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,250 ft³/s (205 m³/s) March 7, 1979, gage height, 10.14 ft (3.091 m); minimum daily discharge, 110 ft³/s (3.12 m³/s) Oct. 1, 2, 3, 10, 11, 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	410	765	1800	600	2700	1320	402	1170	210	1100	222
2	110	330	740	4000	500	2200	1590	394	951	298	900	219
3	110	210	840	4500	440	2740	2200	360	959	230	540	347
4	150	210	900	5000	400	3330	2080	370	1030	210	360	338
5	170	208	860	5200	390	3990	1780	392	800	220	410	338
6	180	206	1000	4300	380	2810	1510	401	657	258	280	1220
7	186	204	1100	1700	380	4590	1350	401	590	244	230	1990
8	180	206	1900	1800	377	6850	1050	397	520	171	320	1060
9	150	198	3700	2000	373	6440	1590	389	450	131	318	774
10	110	192	3100	1400	370	6190	2700	418	470	280	275	532
11	110	185	2200	900	360	5810	2740	462	450	380	555	508
12	110	173	1600	640	350	5530	2520	426	500	260	1340	412
13	110	163	1100	700	310	5180	2180	616	419	250	1310	400
14	330	161	740	1100	280	4850	1940	754	336	310	836	419
15	960	297	620	1400	290	4330	2010	725	275	400	624	433
16	520	482	620	1050	300	3680	2080	667	266	500	494	402
17	460	541	620	820	310	2360	1930	624	263	340	412	278
18	470	767	660	840	310	1370	1590	554	261	230	426	252
19	330	714	1000	840	300	1370	1330	490	245	130	434	227
20	360	681	2800	960	280	1350	1130	430	222	115	369	219
21	280	665	2400	1000	300	1290	952	370	216	170	342	298
22	270	647	2000	840	350	1200	832	364	155	310	248	450
23	240	643	1700	800	900	1150	649	365	202	390	211	526
24	210	721	1400	1100	1300	1650	687	1220	243	1400	224	350
25	200	690	1200	1800	2100	3950	612	3250	185	1000	281	242
26	230	661	1050	2900	3520	4650	625	2390	181	720	235	238
27	940	651	880	2800	4060	4410	720	1670	169	480	450	234
28	860	675	760	1600	3640	3400	717	2030	141	460	870	530
29	780	680	660	1200	---	2070	686	1960	204	900	558	2840
30	430	710	640	960	---	1870	686	1610	236	2100	424	2820
31	430	---	660	740	---	1370	---	1350	---	1200	344	---
TOTAL	10086	13281	40215	56690	23470	104680	43786	26251	12766	14297	15720	19118
MEAN	325	443	1297	1829	838	3377	1460	847	426	461	507	637
MAX	960	767	3700	5200	4060	6850	2740	3250	1170	2100	1340	2840
MIN	110	161	620	640	280	1150	612	360	141	115	211	219
MEAN [#]	320	376	1292	1822	872	3351	1452	925	426	465	504	639
CFSM [#]	.68	.79	2.73	3.84	1.84	7.07	3.06	1.95	.90	.98	1.06	1.35
IN. [#]	.78	.88	3.15	4.43	1.92	8.15	3.41	2.25	1.00	1.13	1.22	1.51

WTR YR 1979 TOTAL 380360 MEAN 1042 MAX 6850 MIN 110 MEAN[#] 1048 CFSM[#] 2.21 IN.[#] 29.83

[#] Adjusted for change in contents in Curwensville Lake.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541308 BRADLEY RUN NEAR ASHVILLE, PA

LOCATION.--Lat 40°30'33", long 78°35'02", Cambria County, Hydrologic Unit 02050201, on right bank 200 ft (60 m) downstream from bridge on State Highway 53 at Syberton, 0.2 mi (0.3 km) upstream from mouth, and 4.5 mi (7.2 km) southwest of Ashville.

DRAINAGE AREA.--6.77 mi² (17.53 km²).

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

REVISED RECORDS.--WDR PA-72-1: 1968(P), 1969(M), 1970-71(P).

GAGE.--Water-stage recorder. Altitude of gage is 1,770 ft (539 m) from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--12 years, 12.0 ft³/s (0.340 m³/s), 24.07 in/yr (611 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 728 ft³/s (20.6 m³/s) Aug. 7, 1977, gage height, 3.93 ft (1.198 m), from rating curve extended above 70 ft³/s (1.98 m³/s) on basis of slope-area measurement at gage height 3.82 ft (1.164 m); minimum, 1.2 ft³/s (0.034 m³/s) on many days in 1970, 1972, 1977; minimum gage height, 1.40 ft (0.427 m) Sept. 11, 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 110 ft³/s (3.12 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. 2	0315	190 5.38	2.62 0.799	May 24	0600	112 3.17	2.33 0.710
Mar. 5	2145	170 4.81	2.55 0.777	Sept. 6	0130	319 9.03	2.99 0.911
Mar. 24	2300	*371 10.5	*3.12 0.951				

Minimum discharge, 1.4 ft³/s (0.040 m³/s) on many days in October, minimum gage height, 1.41 ft (0.430 m), Nov. 9, 10, 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.9	2.5	48	7.4	12	22	9.9	13	9.9	8.5	4.2
2	1.4	1.7	2.3	92	7.2	27	40	9.3	12	8.3	7.4	6.8
3	1.4	1.7	4.2	41	7.0	27	28	16	11	6.4	6.5	7.7
4	2.1	1.9	9.5	26	6.8	56	27	19	9.8	9.1	5.8	4.8
5	1.4	1.5	5.3	21	6.6	122	25	14	8.7	7.2	5.2	9.4
6	1.5	1.5	4.2	18	6.6	92	22	13	8.1	5.3	4.8	76
7	1.5	1.7	3.9	15	6.5	66	19	12	7.6	4.8	4.4	22
8	1.4	1.9	7.7	14	5.8	56	17	11	8.9	4.4	4.3	15
9	1.4	1.5	19	13	5.3	53	23	11	7.9	4.2	3.8	12
10	1.5	1.5	9.5	12	5.2	59	20	10	7.0	5.7	4.1	9.9
11	1.5	1.5	7.7	11	5.1	48	17	10	6.5	4.4	19	8.3
12	1.4	1.5	6.2	9.5	5.0	37	16	9.0	5.9	3.8	25	7.5
13	1.7	1.9	5.8	8.8	4.9	32	15	9.4	5.6	7.5	12	6.8
14	4.2	1.9	5.3	8.2	4.8	38	16	8.1	5.1	9.5	8.9	8.7
15	1.7	1.9	4.9	7.8	4.7	30	18	8.1	4.9	9.1	8.0	6.8
16	1.9	2.1	4.9	7.3	4.6	25	16	7.6	4.8	8.7	7.1	6.0
17	3.6	3.0	6.2	6.7	4.5	24	14	7.0	4.7	6.0	6.3	5.6
18	1.5	3.3	4.9	6.4	4.5	25	13	6.5	4.7	5.1	6.6	5.2
19	1.7	2.3	4.5	6.0	4.4	25	12	6.6	4.5	4.8	6.1	5.4
20	1.5	2.1	4.6	5.7	4.3	25	11	6.1	4.2	4.3	5.4	4.7
21	1.4	1.7	30	5.5	4.6	26	11	6.1	5.1	4.2	6.7	9.7
22	1.4	1.7	12	5.3	5.0	26	10	5.8	4.3	4.2	5.5	15
23	1.4	2.1	10	5.2	5.5	25	9.3	8.3	4.0	9.5	5.0	8.6
24	1.4	2.5	9.5	7.0	5.9	77	8.6	48	3.8	5.8	5.0	6.7
25	1.5	2.1	11	11	6.3	193	8.3	26	3.8	6.2	5.0	6.1
26	3.3	1.9	8.3	10	7.0	96	9.6	21	3.5	7.7	4.8	5.7
27	4.6	1.9	7.7	9.7	6.8	61	17	21	3.4	5.3	13	5.3
28	2.8	3.0	6.7	9.2	6.4	34	13	19	3.4	8.9	6.1	17
29	2.1	2.5	6.7	8.7	---	28	11	16	6.2	27	5.2	22
30	1.9	2.8	6.7	8.2	---	23	11	14	15	16	4.8	13
31	1.7	---	9.0	7.8	---	21	---	13	---	10	4.5	---
TOTAL	59.2	60.5	240.7	465.0	158.7	1489	499.8	401.8	197.4	233.3	224.8	341.9
MEAN	1.91	2.02	7.76	15.0	5.67	48.0	16.7	13.0	6.58	7.53	7.25	11.4
MAX	4.6	3.3	30	92	7.4	193	40	48	15	27	25	76
MIN	1.4	1.5	2.3	5.2	4.3	12	8.3	5.8	3.4	3.8	3.8	4.2
CFSM	.28	.30	1.15	2.22	.84	7.09	2.47	1.92	.97	1.11	1.07	1.68
IN.	.33	.33	1.32	2.55	.87	8.18	2.75	2.21	1.08	1.28	1.24	1.88

CAL YR 1978	TOTAL	4612.5	MEAN 12.6	MAX 119	MIN 1.4	CFSM 1.86	IN 25.34
WTR YR 1979	TOTAL	4372.1	MEAN 12.0	MAX 193	MIN 1.4	CFSM 1.77	IN 24.02

WEST BRANCH SUSQUEHANNA RIVER BASIN
01541500 CLEARFIELD CREEK AT DIMELING, PA

LOCATION.--Lat 40°58'18", long 78°24'22", Clearfield County, Hydrologic Unit 02050201, on right bank at downstream side of highway bridge at Dimeling, 600 ft (180 m) downstream from Little Clearfield Creek, and 4 mi (6 km) southeast of Clearfield.

DRAINAGE AREA.--371 mi² (961 km²).

PERIOD OF RECORD.--October 1913 to current year. Monthly discharges only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 891: 1936-39. WSP 1302: 1915-17, 1918-19(M). WSP 1502: 1939.

GAGE.--Water-stage recorder. Datum of gage is 1,146.08 ft (349.325 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 17, 1928, nonrecording gage and Oct. 17, 1928 to Oct. 25, 1967, water-stage recorder at site 200 ft (61 m) upstream, all at the same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Glendale Lake (station 01541340) about 25 mi (40 km) upstream.

AVERAGE DISCHARGE.--66 years, 580 ft³/s (16.43 m³/s), 21.18 in/yr (538 mm/yr), adjusted for storage since December 1960.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,600 ft³/s (867 m³/s) Mar. 18, 1936, gage height, 18.49 ft (5.636 m), from floodmark in gage shelter, from rating curve extended above 15,000 ft³/s (425 m³/s); minimum, 6.0 ft³/s (0.17 m³/s) Oct. 1, 9, 1925; minimum daily, 7.1 ft³/s (0.20 m³/s) Oct. 1, 1925.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,990 ft³/s (255 m³/s) Mar. 5, gage height, 11.14 ft (3.395 m); minimum daily, 55 ft³/s (1.56 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	100	188	1500	540	1820	963	452	821	458	1040	300
2	63	225	167	5250	459	2240	1500	435	891	364	521	276
3	61	552	160	3290	417	2330	1720	449	778	251	360	324
4	88	547	313	1740	375	3710	1330	655	679	233	293	332
5	95	542	500	1210	350	8560	1380	649	610	254	250	261
6	79	540	340	1010	330	7400	1270	533	564	245	218	1290
7	70	532	264	904	310	4900	1120	518	521	187	196	1390
8	67	535	551	1110	295	3910	1030	514	473	161	191	777
9	63	524	1630	778	285	3310	1500	515	459	144	166	592
10	61	364	1350	520	275	3220	1900	698	388	190	177	492
11	55	246	770	430	265	3000	1440	1490	451	295	495	420
12	57	242	585	390	255	2310	1360	1070	400	210	1070	370
13	61	241	492	370	250	1900	1300	860	317	166	1010	331
14	155	177	425	460	240	1900	1180	740	267	185	598	349
15	206	105	358	400	235	1840	1190	640	242	192	484	425
16	156	107	328	360	225	1470	1130	560	223	280	419	333
17	180	128	335	330	220	1340	1020	740	209	229	354	282
18	155	207	337	310	215	1280	913	580	198	191	329	260
19	126	183	290	290	210	1260	811	460	191	157	351	246
20	111	142	266	280	200	893	701	390	176	138	302	234
21	96	120	1030	400	200	814	603	340	162	146	260	246
22	88	108	1100	300	210	778	561	310	159	134	241	482
23	83	110	689	600	300	763	534	310	160	155	222	414
24	80	154	549	2500	410	1030	511	2720	147	465	209	277
25	75	150	580	3130	900	5850	496	3220	137	390	262	224
26	81	136	520	1830	2600	3800	448	2170	127	710	593	198
27	219	126	410	1300	1500	2390	530	1720	119	466	791	184
28	232	171	310	1080	1930	1840	639	1690	116	325	729	353
29	165	233	270	909	---	1590	519	1390	122	810	460	2210
30	129	220	250	751	---	1450	469	1210	229	1830	424	1150
31	109	---	540	648	---	1030	---	920	---	1100	350	---
TOTAL	3329	7767	15897	34380	14001	79928	30068	28948	10336	11061	13365	15022
MEAN	107	259	513	1109	500	2578	1002	934	345	357	431	501
MAX	232	552	1630	5250	2600	8560	1900	3220	891	1830	1070	2210
MIN	55	100	160	280	200	763	448	310	116	134	166	184
MEAN#	110	129	591	1165	514	2568	989	938	340	356	436	449
CFSM#	.30	.35	1.59	3.14	1.39	6.92	2.67	2.53	.92	.96	1.18	1.21
IN.#	.35	.39	1.83	3.62	1.45	7.98	2.98	2.92	1.03	1.11	1.36	1.35
CAL YR 1978 TOTAL	270865		MEAN 742	MAX 7360	MIN 55	MEAN# 738	CFSM# 1.99	IN.# 27.00				
WTR YR 1979 TOTAL	264102		MEAN 724	MAX 8560	MIN 55	MEAN# 720	CFSM# 1.94	IN.# 26.37				

Adjusted for change in contents in Glendale Lake.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542000 MOSHANNON CREEK AT OSCEOLA MILLS, PA

LOCATION.--Lat 40°50'58", long 78°16'05", Clearfield County, Hydrologic Unit 02050201, on left bank 10 ft (3.0 m) upstream from Penn Central Railroad bridge at Osceola Mills, and 0.1 mi (0.2 km) downstream from Trout Run.

DRAINAGE AREA.--68.8 mi² (178.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1232: 1941-46, 1948, 1950-51, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,446.98 ft (441.040 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--39 years, 112 ft³/s (3.172 m³/s), 22.14 in/yr (562 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,120 m³/s (145 m³/s) June 23, 1972, gage height 14.25 ft (4.343 m), from rating curve extended above 1,800 ft³/s (51 m³/s) on basis of contracted-opening measurements at gage heights 7.58 ft (2.310 m), 9.00 ft (2.743 m), and at peak flow; minimum, 6.9 ft³/s (0.20 m³/s) Dec. 5, 1957; minimum daily, 5.6 ft³/s (0.16 m³/s) Oct. 11, 1978; minimum gage height, 0.14 ft (0.043 m) Oct. 25, 26, 27, 28, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17.0 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	0730	1,010 28.6	4.22 1.286	Mar. 25	0400	917 26.0	3.94 1.201
Jan. 24	2345	974 27.6	4.11 1.253	May 24	1115	864 24.5	3.79 1.155
Mar. 6	0400	*1,730 49.0	*6.26 1.908	Sept. 6	0945	778 22.0	3.54 1.079

Minimum daily discharge, 5.6 ft³/s (0.16 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	10	31	340	120	239	198	122	187	124	132	91
2	16	9.2	28	854	110	322	261	116	185	80	109	91
3	15	8.2	35	483	98	327	232	124	158	59	94	112
4	42	8.2	94	327	90	705	225	137	145	64	82	86
5	15	8.2	70	249	82	1580	244	116	133	61	72	80
6	12	8.2	61	211	76	1570	211	105	130	52	66	480
7	10	10	59	196	72	1120	172	100	118	46	59	292
8	9.2	11	140	205	68	819	164	96	122	44	56	242
9	7.1	8.2	271	160	66	643	227	91	128	41	48	211
10	6.2	7.1	186	135	63	580	220	94	107	67	89	181
11	5.6	7.0	157	115	60	523	181	120	107	53	176	160
12	6.0	7.0	149	100	58	444	189	130	92	42	189	143
13	11	7.1	138	96	56	372	181	109	82	37	137	130
14	60	8.2	128	115	54	351	183	98	75	48	118	146
15	41	9.2	116	98	51	304	191	107	69	120	116	130
16	29	15	106	86	49	270	179	128	64	72	105	107
17	34	30	109	78	48	256	168	94	61	50	92	96
18	22	40	94	72	47	220	158	89	59	41	109	86
19	14	19	84	66	46	194	147	87	55	36	116	75
20	11	16	78	64	45	187	141	84	49	33	87	67
21	9.6	17	166	90	45	185	133	82	48	32	80	86
22	8.6	17	117	80	52	181	124	75	48	31	72	126
23	8.0	22	99	69	62	176	116	92	44	41	66	75
24	8.2	34	93	270	100	270	111	574	41	48	69	61
25	8.0	28	115	565	180	686	105	436	38	87	126	58
26	20	23	105	297	483	455	109	348	34	103	75	53
27	70	22	92	227	297	361	151	299	32	75	164	48
28	23	37	82	196	230	297	133	275	33	72	105	132
29	15	35	76	170	---	272	122	237	44	166	96	314
30	12	34	72	154	---	270	124	214	87	147	102	149
31	10	---	68	135	---	214	---	194	---	124	94	---
TOTAL	575.5	515.8	3219	6303	2808	14393	5100	4973	2575	2096	3101	4108
MEAN	18.6	17.2	104	203	100	464	170	160	85.8	67.6	100	137
MAX	70	40	271	854	483	1580	261	574	187	166	189	480
MIN	5.6	7.0	28	64	45	176	105	75	32	31	48	48
CFSM	.27	.25	1.51	2.95	1.45	6.74	2.47	2.33	1.25	.98	1.45	1.99
IN.	.31	.28	1.74	3.41	1.52	7.78	2.76	2.69	1.39	1.13	1.68	2.22

CAL YR 1978	TOTAL	48365.3	MEAN 133	MAX 1340	MIN 5.6	CFSM 1.93	IN 26.15
WTR YR 1979	TOTAL	49767.3	MEAN 136	MAX 1580	MIN 5.6	CFSM 1.98	IN 26.91

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542000 MOSHANNON CREEK AT OSCEOLA MILLS, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1975 to current year.

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
JUN 14...	1640	74	560	3.7	15.5	1.0	50	0	220	--
AUG 01...	1630	124	396	3.7	17.5	.8	40	--	150	236

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
JUN 14...	--	--	6600	2200	4400	3600	0	3700	14	2.8
AUG 01...	.32	79.0	5900	3000	2900	3100	300	2800	56	19

BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE	AUG 1,79
TIME	0750
TOTAL COUNT	20
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.3
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLLEMBOLA	1
...DIPTERA	
...CHIRONOMIDAE	
....CHIRONOMUS	14
...EPHEMEROPTERA	
...BAETIDAE	
....BAETIS	1
...MEGALOPTERA	
...SIALIDAE	
....SIALIS	4

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542500 WEST BRANCH SUSQUEHANNA RIVER AT KARTHAUS, PA

LOCATION.--Lat 41°07'03", long 78°06'33", Clearfield County, Hydrologic Unit 02050201, on left bank 900 ft (270 m) upstream from bridge on State Highway 879 at Karthaus, 1,000 ft (300 m) upstream from Mosquito Creek, and 3.3 mi (5.3 km) downstream from Moshannon Creek. Records include flow of Mosquito Creek.

DRAINAGE AREA.--1,462 mi² (3,787 km²), includes that of Mosquito Creek.

PERIOD OF RECORD.--February 1940 to current year. October 1918 to September 1920 (gage heights only) in reports of Water Supply Commission of Pennsylvania.

GAGE.--Water-stage recorder. Datum of gage is 830.59 ft (253.164 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1920, nonrecording gage at site 900 ft (270 m) downstream at datum 20.88 ft (6.364 m) lower. Feb. 21 to Sept. 30, 1940, nonrecording gage at site 900 ft (270 m) downstream at present datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Curwensville Lake (station 01541180) about 50 mi (80 km) upstream and by Glendale Lake (station 01541340).

AVERAGE DISCHARGE.--39 years, 2,505 ft³/s (70.94 m³/s), 23.22 in/yr (590 mm/yr), adjusted for storage since December 1960.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,300 ft³/s (2,390 m³/s) June 23, 1972, gage height, 18.57 ft (5.660 m), from rating curve extended above 50,000 ft³/s (1,400 m³/s); minimum, 100 ft³/s (2.83 m³/s) Sept. 26, 27, 1964, gage height, 0.43 ft (0.131 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 24.5 ft (7.47 m) Mar. 18, 1936, from floodmarks at highway bridge, discharge, about 135,000 ft³/s (3,820 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37,900 ft³/s (1,070 m³/s) Mar. 5, gage height, 12.34 ft (3.761 m); minimum daily, 331 ft³/s (9.37 m³/s) Oct. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	932	1440	2730	2590	7700	3950	1970	3620	1220	3840	1140
2	365	902	1370	14200	2160	7110	4660	1670	3300	1280	3350	993
3	355	925	1320	14000	1870	8170	6150	1650	3020	1120	2410	1090
4	391	1040	1630	10900	1600	10900	6220	1930	2800	932	1660	1180
5	456	992	2320	9090	1400	32600	5610	1970	2600	923	1350	1100
6	501	978	2370	7660	1250	27900	5120	1830	2230	870	1210	3140
7	456	992	2230	5510	1200	19800	4470	1720	1990	852	1020	6280
8	428	948	2200	4690	1140	18500	3960	1640	1830	759	1240	3950
9	417	955	4920	4580	1080	16100	4310	1560	1840	655	1160	2960
10	401	925	6830	3700	1040	15000	7590	1530	1680	640	1000	2290
11	345	778	5760	2670	1010	14200	7260	2530	1710	900	1310	1910
12	331	597	4880	2170	990	12300	6900	2740	1710	1080	2670	1710
13	355	623	3790	2040	970	10900	6600	2360	1460	930	3680	1490
14	567	610	2910	2560	950	10300	6150	2450	1310	798	2730	1530
15	1250	579	2340	2590	930	9680	5920	2250	1170	945	1990	1710
16	1470	636	2010	2460	915	8330	5700	2220	1020	1070	1670	1500
17	1050	858	1970	2180	900	7200	5340	2130	1000	1160	1400	1270
18	1070	1400	1960	1890	890	5030	4780	1860	971	915	1300	1080
19	985	1460	1820	1640	880	4640	3910	1670	927	790	1420	1040
20	806	1270	1690	1670	880	4450	3440	1550	870	667	1300	955
21	821	1190	2380	1860	940	4100	2940	1410	781	604	1120	952
22	715	1130	5330	2080	1100	3840	2660	1340	801	586	1030	1390
23	682	1110	4140	1850	1540	3680	2350	1280	741	750	902	1550
24	636	1410	3470	2210	3070	3820	2140	3170	728	1190	880	1330
25	579	1410	3250	7460	4560	12300	2020	9250	757	2130	1220	1050
26	579	1320	2660	8780	8830	14000	1910	8020	657	2750	1130	902
27	1080	1270	2620	7260	10700	10700	2190	5830	623	2320	1980	850
28	2160	1300	2170	5310	9450	8880	2530	5980	609	1600	2340	992
29	1770	1410	1480	4330	---	6450	2300	5780	600	1430	2050	5940
30	1220	1400	1360	3650	---	5780	2110	5060	880	3660	1610	7240
31	978	---	1690	3050	---	4570	---	4350	---	3710	1390	---
TOTAL	23594	31350	86310	146770	64835	328930	131190	90700	44235	39236	53362	60514
MEAN	761	1045	2784	4735	2316	10610	4373	2926	1475	1266	1721	2017
MAX	2160	1460	6830	14200	10700	32600	7590	9250	3620	3710	3840	7240
MIN	331	579	1320	1640	880	3680	1910	1280	600	586	880	850
MEAN#	759	858	2857	4784	2364	10574	4352	3008	1470	1269	1723	1967
CFSM#	.52	.59	1.95	3.27	1.62	7.23	2.98	2.06	1.01	.87	1.18	1.35
IN.#	.60	.66	2.25	3.77	1.69	8.34	3.32	2.37	1.13	1.00	1.36	1.51

CAL YR 1978	TOTAL	974696	MEAN	2670	MAX	21600	MIN	312	MEAN#	2667	CFSM#	1.82	IN.#	24.76
WTR YR 1979	TOTAL	1101026	MEAN	3017	MAX	32600	MIN	331	MEAN#	3020	CFSM#	2.07	IN.#	28.00

Adjusted for change in contents in Curwensville and Glendale Reservoirs.

WEST BRANCH SUSQUEHANNA RIVER BASIN
01542810 WALDY RUN NEAR EMPORIUM, PA

LOCATION.--Lat 41°34'44", long 78°17'34", Cameron County, Hydrologic Unit 02050202, on left bank 15 ft (4.6 m) downstream from highway bridge at North Creek Chapel, 0.1 mi (0.2 km) upstream from mouth, and 5.5 mi (8.8 km) northwest of Emporium.

DRAINAGE AREA.--5.24 mi² (13.57 km²).

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum water years 1963-64. August 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,263.62 ft (385.151 m) National Geodetic Vertical Datum of 1929. July 25, 1963 to Aug. 27, 1964, crest-stage gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--15 years, 8.74 ft³/s (0.248 m³/s), 22.68 in/yr (576 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 828 ft³/s (23.4 m³/s) Sept. 28, 1967, gage height, 6.32 ft (1.926 m), from rating curve extended above 80 ft³/s (2.3 m³/s) on basis of slope-area measurements at gage heights, 5.09 ft (1.551 m), 5.86 ft (1.786 m), and at peak flow; no flow Sept. 14-19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 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	0515	*190 5.38	*4.80 1.463	Mar. 5	1215	161 4.56	4.68 1.426
Jan. 25	0245	106 3.00	4.42 1.347				

Minimum daily discharge, 0.15 ft³/s (0.004 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	1.6	3.0	4.6	4.4	6.2	13	8.4	8.7	.93	1.7	.61
2	.17	1.4	2.7	141	4.0	12	15	7.0	6.9	2.7	1.3	.51
3	.15	1.3	2.7	51	3.7	15	26	6.9	5.6	1.5	1.1	.61
4	.61	1.1	17	24	3.5	30	26	7.0	4.6	1.4	.82	.42
5	.40	.97	24	15	3.3	132	24	6.6	4.0	1.2	.68	.34
6	.32	.97	14	10	3.1	98	20	6.4	3.5	.97	.52	16
7	.32	.84	9.4	8.4	2.9	49	15	6.0	2.9	.86	.40	8.4
8	.36	.97	12	7.1	2.8	38	12	5.5	3.0	.80	3.9	4.4
9	.36	.72	45	6.2	2.7	32	20	4.9	2.4	.72	2.4	2.9
10	.29	.72	30	5.4	2.6	38	30	5.3	2.2	3.9	1.6	2.0
11	.23	.61	17	4.6	2.5	41	38	5.9	2.6	2.1	3.0	1.6
12	.19	.61	12	4.1	2.4	26	28	6.0	1.9	1.4	2.5	1.3
13	.24	.51	8.9	3.8	2.3	17	23	14	1.5	1.1	2.0	1.1
14	8.0	.51	7.1	7.0	2.2	30	21	18	1.4	.97	1.6	2.0
15	5.2	.61	5.8	5.4	2.1	37	22	15	1.3	.98	1.4	1.3
16	3.3	.51	5.1	4.5	2.0	23	21	11	1.1	1.8	1.2	.84
17	2.3	1.8	5.1	4.0	2.0	16	17	8.1	1.1	1.1	1.0	.72
18	1.5	5.8	4.8	3.6	1.9	19	12	6.7	1.0	.93	.84	.61
19	1.1	5.5	4.1	5.6	1.9	30	9.9	5.9	.94	.79	1.0	.51
20	.83	4.1	3.7	5.2	1.8	30	8.4	4.9	.79	.69	.76	.42
21	.75	3.5	9.0	4.2	1.9	32	7.1	4.3	.72	.62	.58	.84
22	.68	3.0	10	3.4	2.3	37	6.2	3.5	.72	.56	.45	.72
23	.68	3.0	9.4	2.9	2.9	43	5.5	3.1	.72	.60	.35	.42
24	.61	4.4	8.0	25	4.2	46	4.8	5.3	.68	.71	.31	.27
25	.50	5.5	8.4	73	6.4	45	4.4	5.7	.56	.89	.28	.27
26	1.2	5.1	5.2	28	7.5	30	4.4	8.9	.47	1.7	.27	.24
27	5.1	4.4	4.2	16	6.2	18	7.5	13	.42	.92	1.9	.20
28	4.1	4.1	3.4	12	5.1	12	11	20	.42	.55	2.0	3.5
29	3.0	3.2	3.0	8.4	---	13	12	21	.42	.46	1.4	6.6
30	2.4	3.2	2.7	6.6	---	14	10	16	.53	.62	1.1	4.8
31	2.0	---	3.0	5.0	---	15	---	11	---	.78	.84	---
TOTAL	47.06	70.55	299.7	546.4	90.6	1024.2	474.2	271.3	63.09	35.25	39.20	64.45
MEAN	1.52	2.35	9.67	17.6	3.24	33.0	15.8	8.75	2.10	1.14	1.26	2.15
MAX	8.0	5.8	45	141	7.5	132	38	21	8.7	3.9	3.9	16
MIN	.15	.51	2.7	2.9	1.8	6.2	4.4	3.1	.42	.46	.27	.20
CFSM	.29	.45	1.85	3.36	.62	6.30	3.02	1.67	.40	.22	.24	.41
IN.	.33	.50	2.13	3.88	.64	7.27	3.37	1.93	.45	.25	.28	.46

CAL YR 1978 TOTAL 2724.38 MEAN 7.46 MAX 97 MIN .08 CFSM 1.42 IN 19.34
WTR YR 1979 TOTAL 3026.00 MEAN 8.29 MAX 141 MIN .15 CFSM 1.58 IN 21.48

WEST BRANCH SUSQUEHANNA RIVER BASIN

01543000 DRIFTWOOD BRANCH SINNEMAHONING CREEK AT STERLING RUN, PA

LOCATION.--Lat 41°24'48", long 78°11'50", Cameron County, Hydrologic Unit 02050202, on downstream side of second pier from left bank of highway bridge at village of Sterling Run and 300 ft (90 m) upstream from Sterling Run.

DRAINAGE AREA.--272 mi² (704 km²).

PERIOD OF RECORD.--October 1913 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1272: Drainage area. WSP 1502: 1933(M), 1934-38, 1939(M).

GAGE.--Water-stage recorder and nonrecording gage. Datum of gage is 894.84 ft (272.747 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1913 to Sept. 30, 1931, nonrecording gage and Oct. 1, 1931 to Sept. 30, 1932, water-stage recorder at present site and datum. Oct. 1, 1932 to Sept. 30, 1942, nonrecording gage at site 800 ft (240 m) upstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--66 years, 449 ft³/s (12.72 m³/s), 22.41 in/yr (569 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,800 ft³/s (1,350 m³/s) July 18, 1942, gage height, 14.70 ft (4.481 m), from floodmarks at highway bridge, from rating curve extended above 11,000 ft³/s (310 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 0.4 ft³/s (0.011 m³/s) Sept. 7, 12-14, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,700 ft³/s (133 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	0830	7,810 221	5.47 1.667	Mar. 6	0100	*8,320 236	*6.01 1.832

Minimum daily discharge, 30 ft³/s (0.85 m³/s) Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	155	251	1270	340	660	820	378	406	167	294	47
2	53	135	240	6480	290	804	910	345	361	177	224	42
3	51	126	235	3010	250	880	1030	334	313	200	192	36
4	56	117	604	1520	230	1540	1040	400	278	97	150	34
5	72	110	969	1080	215	6450	1060	345	250	65	120	30
6	62	104	783	813	200	6230	941	318	237	61	98	736
7	56	99	607	665	192	3040	773	303	224	55	80	527
8	54	103	583	627	182	2230	665	283	200	44	1140	329
9	53	94	1730	420	174	1780	1320	269	204	48	418	242
10	50	87	1600	310	166	1840	1760	344	181	99	283	181
11	48	80	1080	250	160	1870	1600	712	212	216	602	146
12	46	75	825	230	154	1420	1470	527	204	102	934	128
13	54	71	668	220	148	1040	1240	709	174	61	400	116
14	478	69	548	390	144	1360	1220	658	140	54	313	110
15	407	68	444	320	139	1510	1250	600	116	54	246	146
16	290	66	381	280	135	1180	1170	527	103	164	185	116
17	251	76	438	260	132	949	996	418	92	150	143	94
18	216	300	381	240	129	918	804	366	82	80	128	82
19	192	286	331	210	126	1050	658	329	76	67	137	71
20	165	256	300	290	123	1100	556	298	68	59	122	65
21	140	235	631	520	125	1160	473	269	61	47	90	59
22	130	225	644	330	150	1260	418	246	71	40	74	61
23	120	216	584	280	240	1440	366	224	71	40	64	65
24	112	292	512	500	460	1680	334	313	61	140	56	59
25	106	288	490	2960	700	2540	308	324	52	170	52	51
26	102	280	450	1780	900	1720	298	356	45	334	48	48
27	289	272	330	1090	700	1170	412	366	40	255	173	45
28	262	278	250	815	580	868	435	527	38	190	171	76
29	230	262	190	637	---	910	412	548	65	155	119	626
30	201	251	180	512	---	885	400	541	146	140	85	389
31	187	---	320	439	---	885	---	460	---	110	61	---
TOTAL	4587	5076	17579	28748	7484	52369	25139	12637	4571	3641	6802	4757
MEAN	148	169	567	927	267	1689	838	408	152	117	219	159
MAX	478	300	1730	6480	900	6450	1760	712	406	334	1140	736
MIN	46	66	180	210	123	660	298	224	38	40	48	30
CFSM	.54	.62	2.09	3.41	.98	6.21	3.08	1.50	.56	.43	.81	.59
IN.	.63	.69	2.40	3.93	1.02	7.16	3.44	1.73	.63	.50	.93	.65

CAL YR 1978 TOTAL 145294 MEAN 398 MAX 3940 MIN 26 CFSM 1.46 IN 19.87
WTR YR 1979 TOTAL 173390 MEAN 475 MAX 6480 MIN 30 CFSM 1.75 IN 23.71

WEST BRANCH SUSQUEHANNA RIVER BASIN

01543500 SINNEMAHONING CREEK AT SINNEMAHONING, PA

LOCATION.--Lat 41°19'02", long 78°06'12", Cameron County, Hydrologic Unit 02050202, on left bank 0.2 mi (0.3 km) upstream from Grove Run and 0.7 mi (1.1 km) upstream from Penn Central Railroad bridge at Sinnemahoning. Water-quality sampling site 0.97 mi (1.56 km) downstream.

DRAINAGE AREA.--685 mi² (1,774 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 769.36 ft (234.501 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--41 years, 1,132 ft³/s (32.06 m³/s), 22.41 in/yr (569 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,800 ft³/s (1,720 m³/s) June 23, 1972, gage height, 21.78 ft (6.639 m), from rating curve extended above 31,000 ft³/s (878 m³/s) on basis of slope-area measurement at gage height, 21.58 ft (6.578 m); minimum 1.2 ft³/s (0.034 m³/s) Sept. 4, 1939, gage height, 1.18 ft (0.360 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Sept. 3, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 21.94 ft (6.687 m) Mar. 18, 1936, from floodmark, discharge, 61,200 ft³/s (1,730 m³/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,400 ft³/s (238 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	16,000 453	9.72 2.963	Mar. 5	1800	*19,200 544	*10.77 3.283
Jan. 25	Unknown	9,740 276	7.61 2.320	Mar. 25	0700	9,630 273	7.67 2.338

Minimum discharge, 97 ft³/s (2.75 m³/s) July 10; minimum gage height, 1.95 ft (0.594 m), Oct. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	446	619	2660	999	1700	2100	961	1330	321	1080	262
2	142	412	578	13900	866	2600	2420	880	1200	341	820	236
3	135	382	561	7790	661	2820	2990	851	1040	398	703	242
4	149	358	1210	4420	610	4700	2870	1060	902	264	500	232
5	196	330	2160	3300	570	16500	2890	926	801	279	398	202
6	162	314	1840	2450	530	15200	2460	845	815	214	320	2040
7	145	293	1460	2000	500	8620	2060	801	700	159	275	1910
8	142	298	1340	1900	475	6350	1770	758	614	127	3250	1250
9	142	284	4020	1240	450	5110	3650	715	616	105	1610	939
10	132	264	4240	910	430	5080	5720	689	536	227	1020	751
11	126	241	3070	800	415	5040	4640	1620	629	645	2330	626
12	117	233	2320	710	400	3900	4120	1340	566	313	2060	541
13	145	226	1820	660	390	2970	3630	1900	441	232	1540	447
14	1070	224	1520	1050	380	3560	3600	1900	376	210	1160	459
15	1130	224	1200	880	365	3810	3730	1710	333	188	942	583
16	689	211	1010	760	355	3080	3410	1520	302	288	741	412
17	627	233	1090	680	345	2510	2930	1240	277	335	585	329
18	531	765	964	620	335	2380	2360	1060	258	244	517	288
19	466	707	840	600	330	2560	1940	938	240	194	576	276
20	432	586	820	660	320	2610	1640	845	213	157	460	249
21	382	538	1990	1300	320	2660	1430	758	185	137	369	250
22	336	501	2080	1100	400	2720	1250	682	192	128	320	366
23	314	486	1820	840	580	2920	1110	597	264	123	275	314
24	288	724	1580	1800	1000	3330	982	924	200	294	275	238
25	269	734	1500	6800	1600	7900	902	1080	166	328	275	214
26	269	689	1200	4300	2000	5700	850	1070	138	1090	262	209
27	782	644	900	2700	1800	4200	1070	1040	118	860	638	190
28	744	680	680	2050	1600	2890	1230	1620	109	525	660	279
29	586	680	600	1700	---	2420	1070	1670	119	414	465	2150
30	523	627	560	1400	---	2370	1010	1710	347	398	388	1480
31	472	---	940	1170	---	2230	---	1530	---	313	318	---
TOTAL	11788	13334	46532	73150	19026	140440	71834	35240	14027	9851	25132	17964
MEAN	380	444	1501	2360	680	4530	2394	1137	468	318	811	599
MAX	1130	765	4240	13900	2000	16500	5720	1900	1330	1090	3250	2150
MIN	117	211	560	600	320	1700	850	597	109	105	262	190
CFSM	.56	.65	2.19	3.45	.99	6.61	3.50	1.66	.68	.46	1.18	.87
IN.	.64	.72	2.53	3.97	1.03	7.63	3.90	1.91	.76	.53	1.36	.98

CAL YR 1978	TOTAL	422419	MEAN	1157	MAX	11800	MIN	78	CFSM	1.69	IN	22.94
WTR YR 1979	TOTAL	478318	MEAN	1310	MAX	16500	MIN	105	CFSM	1.91	IN	25.98

WEST BRANCH SUSQUEHANNA RIVER BASIN

01543500 SINNEMAHOING CREEK AT SINNEMAHOING, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1975 to current year.

COAL-HYDROLOGY NETWORK

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
JUN 15...	1245	293	130	6.3	20.5	.0	.0	3	44	--	--
AUG 07...	1410	268	150	6.0	23.5	.0	.0	--	47	125	.17

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
JUN 15...	--	--	--	--	--	--	100	90	10	--
AUG 07...	90.5	0	<10	<10	10	10	100	90	10	18000

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
JUN 15...	--	390	60	330	--	--	--	--	5	4.0
AUG 07...	10	600	10	590	370	.00	0	50	3	2.2

BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE	AUG 7,79
TIME	1410
TOTAL COUNT	6
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.8
...FAMILY	0.0
...GENUS	0.0
....GENUS-INSECTA	0.0
ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
...PSEPHENIDAE	1
...TRICHOPTERA	3
...DIPTERA	
...CHIRONOMIDAE	1
...MEGALOPTERA	1

WEST BRANCH SUSQUEHANNA RIVER BASIN

01544000 FIRST FORK SINNEMAHONING CREEK NEAR SINNEMAHONING, PA

LOCATION.--Lat 41°24'06", long 78°01'28", Cameron County, Hydrologic Unit 02050202, on right bank 350 ft (107 m) downstream from Woodrock Run, 1500 ft (460 m) upstream from Roaring Run, 0.75 mi (1.21 km) downstream from George B. Stevenson Dam, and 7.5 mi (12.1 km) northeast of Sinnemahoning.

DRAINAGE AREA.--245 mi² (635 km²).

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 878.71 ft (267.831 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by First Fork Sinnemahoning Creek Reservoir (station 01543900) 0.75 mi (1.21 km) upstream since Jan. 31, 1956. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--26 years, 389 ft³/s (11.02 m³/s), 21.59 in/yr (548 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,200 ft³/s (289 m³/s) Mar. 1, 1956, gage height, 6.60 ft (2.012 m); minimum daily, 0.1 ft³/s (0.003 m³/s) Aug. 8, 1975.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known 80,000 ft³/s (2,270 m³/s) July 18, 1942, by slope-area measurement.

EXTREME FOR CURRENT YEAR.--Maximum discharge, 6,470 ft³/s (183 m³/s) Mar. 7, gage height, 4.43 ft (1.350 m); minimum daily, 32 ft³/s (0.91 m³/s) Oct. 9, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	133	198	647	382	292	796	262	308	278	100	120
2	33	116	184	1560	308	534	834	257	270	281	320	108
3	33	101	184	3370	249	764	933	257	237	237	270	108
4	33	89	278	4560	276	1030	961	308	207	216	203	108
5	35	92	691	2610	233	639	1010	248	175	179	156	83
6	37	82	800	1010	167	759	891	230	175	131	148	72
7	33	79	555	772	199	5110	808	243	154	122	119	120
8	33	82	504	669	231	6020	664	236	145	105	402	370
9	32	77	1450	434	180	5380	890	214	180	82	279	322
10	38	65	1730	366	160	4290	1140	202	139	94	253	231
11	38	61	1240	268	150	2230	1300	227	199	123	412	216
12	32	60	956	197	140	1510	1550	227	185	95	479	170
13	35	58	754	300	135	1150	1280	226	168	86	386	140
14	256	58	575	422	130	1160	1240	213	150	72	310	159
15	365	58	448	372	125	1420	1130	204	129	48	237	177
16	275	58	364	251	121	1280	1030	218	119	48	198	121
17	196	58	345	270	118	1000	952	194	109	79	164	91
18	141	168	304	311	115	876	774	170	98	69	144	96
19	116	229	260	259	112	989	606	165	94	46	151	92
20	113	226	247	199	109	1120	597	158	80	46	120	86
21	98	209	330	279	108	1190	457	148	69	42	97	90
22	89	184	350	345	157	1290	388	140	103	42	66	93
23	77	184	351	312	178	1620	353	123	94	39	82	89
24	67	221	333	292	226	2010	322	167	56	42	91	81
25	67	239	309	1750	284	2470	270	183	52	50	118	56
26	61	236	327	3680	323	2150	263	198	49	196	83	50
27	151	217	322	1630	308	1390	310	211	46	146	229	50
28	190	220	249	1020	269	1030	291	274	48	100	203	88
29	177	236	144	740	---	921	272	295	57	86	190	311
30	159	218	116	560	---	781	269	342	117	66	183	255
31	141	---	260	469	---	795	---	297	---	54	150	---
TOTAL	3184	4114	15158	29924	5493	53200	22581	6837	4012	3300	6343	4153
MEAN	103	137	489	965	196	1716	753	221	134	106	205	138
MAX	365	239	1730	4560	382	6020	1550	342	308	281	479	370
MIN	32	58	116	197	108	292	263	123	46	39	66	50
MEAN#	103	137	492	962	197	1716	753	222	134	106	205	138
CFSM#	.42	.56	2.01	3.93	.80	7.00	3.07	.91	.55	.43	.84	.56
IN.#	.48	.62	2.32	4.53	.83	8.07	3.43	1.05	.61	.50	.97	.62

CAL YR 1978	TOTAL	144363	MEAN	396	MAX	3890	MIN	18	MEAN#	396	CFSM#	1.62	IN.#	21.90
WTR YR 1979	TOTAL	158299	MEAN	434	MAX	6020	MIN	32	MEAN#	434	CFSM#	1.77	IN.#	24.03

Adjusted for change in contents in First Fork Sinnemahoning Creek Reservoir.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01544500 KETTLE CREEK AT CROSS FORK, PA

LOCATION.--Lat 41°28'33", long 77°49'34", Potter County, Hydrologic Unit 02050203, on right bank just upstream from abutment of former highway bridge, 0.2 mi (0.3 km) downstream from Potter-Clinton County Line, and 0.7 mi (1.1 km) southwest of Cross Fork.

DRAINAGE AREA.--136 mi² (352 km²).

PERIOD OF RECORD.--October 1940 to current year. Monthly discharge only for October, November 1940, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 1,027.12 ft (313.066 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--39 years, 227 ft³/s (6.429 m³/s), 22.68 in/yr (576 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,300 ft³/s (405 m³/s) June 23, 1972, gage height, 11.76 ft (3.584 m), from floodmark in gage well, from rating curve extended above 9,200 ft³/s (261 m³/s) on basis of slope-area measurement at gage height, 10.38 ft (3.164 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Sept. 2-4, 1971; minimum gage height -0.32 ft (-0.098 m) Aug. 23, 24, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 14.0 ft (4.27 m) Mar. 18, 1936, from information by local residents, discharge about 20,000 ft³/s (570 m³/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s (68.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 2	--	2,960	83.8	Mar. 6	--	*4,430	*7.16

Minimum daily discharge, 17 ft³/s (0.48 m³/s) Oct. 12.

a Ice jam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	42	81	260	268	220	450	178	255	69	99	34
2	20	42	78	2440	235	360	445	171	220	77	56	32
3	18	41	77	1740	190	443	440	178	187	57	59	39
4	26	40	146	1010	170	434	480	179	162	46	38	31
5	28	39	238	720	150	3270	559	163	144	44	31	27
6	22	39	246	533	135	4000	544	156	137	37	28	157
7	20	38	226	443	125	2250	494	149	119	34	26	129
8	20	39	238	374	115	1540	450	142	119	31	72	101
9	19	35	645	284	110	1120	554	135	155	29	43	82
10	18	33	750	210	105	1050	628	319	120	31	36	69
11	18	33	560	170	99	960	678	582	128	36	98	59
12	17	32	455	155	96	846	701	450	114	30	95	51
13	24	31	374	145	93	701	678	337	106	28	71	45
14	118	30	308	190	90	713	650	265	99	28	56	65
15	96	30	246	200	87	690	590	230	91	27	47	70
16	77	29	210	170	84	633	533	205	85	27	39	47
17	70	32	187	145	82	575	480	183	79	35	33	41
18	65	86	166	136	80	544	426	160	75	28	31	38
19	57	77	148	128	78	612	375	140	70	25	33	37
20	53	74	155	123	76	656	319	122	61	23	29	33
21	46	74	182	200	76	707	276	106	56	21	26	35
22	43	72	153	210	80	810	242	94	59	20	24	45
23	42	75	137	190	88	998	213	90	57	19	22	34
24	39	89	112	323	105	1430	192	152	51	18	25	30
25	37	88	130	1820	140	2190	178	194	46	30	47	27
26	36	84	110	1120	210	1580	170	158	41	63	33	26
27	67	85	100	775	180	998	202	197	39	37	99	25
28	54	92	92	587	160	731	185	303	38	28	72	53
29	46	85	88	475	---	596	179	333	38	25	56	110
30	44	82	84	392	---	518	180	347	59	24	48	79
31	43	---	100	325	---	470	---	312	---	22	40	---
TOTAL	1303	1668	6822	15993	3507	32645	12491	6730	3010	1049	1512	1651
MEAN	42.0	55.6	220	516	125	1053	416	217	100	33.8	48.8	55.0
MAX	118	92	750	2440	268	4000	701	582	255	77	99	157
MIN	17	29	77	123	76	220	170	90	38	18	22	25
CFSM	.31	.41	1.62	3.79	.92	7.74	3.06	1.60	.74	.25	.36	.40
IN.	.36	.46	1.87	4.37	.96	8.93	3.42	1.84	.82	.29	.41	.45

CAL YR 1978 TOTAL 83834 MEAN 230 MAX 2680 MIN 15 CFSM 1.69 IN 22.93
WTR YR 1979 TOTAL 88381 MEAN 242 MAX 4000 MIN 17 CFSM 1.78 IN 24.17

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545000 KETTLE CREEK NEAR WESTPORT, PA

LOCATION.--Lat 41°19'12", long 77°52'27", Clinton County, Hydrologic Unit 02050203, on left bank 0.4 mi (0.6 km) upstream from Short Bend 3.5 mi (5.6 km) upstream from mouth and Westport, and 5 mi (8 km) downstream from Kettle Creek Lake.

DRAINAGE AREA.--233 mi² (603 km²).

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 728.24 ft (221.968 m) National Geodetic Vertical Datum of 1929, unadjusted. Prior to Oct. 14, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Kettle Creek Lake (station 01544800) 5 mi (8 km) upstream since February 1962.

AVERAGE DISCHARGE.--25 years, 374 ft³/s (10.59 m³/s), 21.86 in/yr (555 mm/yr), adjusted for storage since October 1961.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,970 ft³/s (226 m³/s) Mar. 8, 1956; maximum gage height, 13.31 ft (4.057 m) Jan. 22, 1959 (ice jam); minimum discharge, 3.0 ft³/s (0.085 m³/s) Dec. 6, 1964, gage height, 1.12 ft (0.341 m); minimum daily, 4.4 ft³/s (0.12 m³/s) Nov. 3, 6, 12, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,720 ft³/s (162 m³/s) Mar. 8, gage height, 8.67 ft (2.643 m); minimum daily, 33 ft³/s (0.93 m³/s) Oct. 3, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	77	136	385	411	440	618	298	426	126	105	104
2	34	75	131	1080	290	470	768	281	387	210	151	99
3	33	73	131	2720	260	717	862	284	320	207	127	95
4	34	71	184	3960	240	973	880	317	256	150	105	92
5	36	70	362	2270	225	1190	959	275	257	136	82	72
6	40	66	502	890	210	696	947	241	243	106	65	258
7	38	64	400	687	200	3540	847	243	186	95	38	349
8	36	63	337	602	190	5500	671	243	173	85	109	251
9	35	61	929	390	183	5440	832	243	326	73	135	202
10	35	58	1330	350	176	4970	1160	242	278	54	89	162
11	34	55	1000	320	170	3820	1230	757	228	79	177	149
12	33	52	734	330	162	1380	1290	724	255	76	254	133
13	34	50	574	350	157	1100	1160	438	240	67	212	113
14	81	49	474	320	152	1060	1070	430	196	49	185	109
15	153	48	391	285	147	1290	1010	302	189	52	82	151
16	141	48	331	260	143	1190	909	311	154	52	109	126
17	123	51	317	240	138	1010	840	258	136	52	99	101
18	83	69	254	225	135	835	712	201	135	56	90	92
19	70	114	232	213	131	955	597	178	134	55	86	85
20	75	157	194	204	127	1080	521	178	124	50	75	74
21	76	132	266	230	124	1160	464	182	98	45	55	60
22	74	123	286	280	124	1260	385	179	89	41	56	97
23	72	119	264	250	140	1520	371	163	119	38	54	88
24	68	127	232	300	200	1890	322	206	109	37	69	71
25	63	136	236	1010	300	3050	302	225	89	40	137	53
26	61	137	220	3330	400	2350	270	227	79	76	101	52
27	70	136	200	2400	600	1520	313	276	66	90	176	52
28	85	141	180	957	520	1130	337	384	51	49	213	69
29	88	143	160	688	---	848	310	550	59	50	170	243
30	81	139	180	568	---	753	307	574	86	48	147	202
31	79	---	220	466	---	777	---	507	---	44	128	---
TOTAL	2001	2704	11387	26560	6255	53914	21264	9917	5488	2388	3681	3804
MEAN	64.5	90.1	367	857	223	1739	709	320	183	77.0	119	127
MAX	153	157	1330	3960	600	5500	1290	757	426	210	254	349
MIN	33	48	131	204	124	440	270	163	51	37	38	52
MEAN#	66.5	89.9	368	855	224	1739	708	320	184	75.7	119	127
CFSM#	.29	.39	1.58	3.67	.96	7.46	3.04	1.37	.80	.32	.51	.55
IN.#	.33	.44	1.82	4.23	1.00	8.60	3.39	1.58	.89	.37	.59	.61

CAL YR 1978 TOTAL 139060 MEAN 381 MAX 4200 MIN 21 MEAN# 381 CFSM# 1.64 IN.# 22.22
WTR YR 1979 TOTAL 149363 MEAN 409 MAX 5500 MIN 33 MEAN# 409 CFSM# 1.76 IN.# 23.85

Adjusted for change in contents in Kettle Creek Lake.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545500 WEST BRANCH SUSQUEHANNA RIVER AT RENOVO, PA

LOCATION.--Lat 41°19'28", long 77°45'03", Clinton County, Hydrologic Unit 02050203, on left bank at foot of Eighth Street at Renovo, 1 mi (1.6 km) upstream from Paddy Run. Water-quality sampling site 0.2 mi (0.3 km) downstream.

DRAINAGE AREA.--2,975 mi² (7,705 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1907 to current year. Monthly discharge only for some periods, published in WSP 1302. Gage height records collected July 1895 to December 1903 and October 1905 to September 1974 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1908-10, 1912-13, 1914-15(M). WRD PA-69: 1968.

GAGE.--Water-stage recorder. Datum of gage is 634.19 ft (193.301 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 17, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good. Peaks may be affected by upstream regulation.

AVERAGE DISCHARGE.--72 years, 4,972 ft³/s (140.8 m³/s), 22.68 in/yr (576 mm/yr), adjusted for storage 1961-75.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 236,000 ft³/s (6,680 m³/s) Mar. 18, 1936, gage height, 29.39 ft (8.958 m), from floodmark in gage shelter, from rating curve extended above 87,000 ft³/s (2,460 m³/s) on basis of slope-area measurement of peak flow; minimum, 80 ft³/s (2.27 m³/s) Dec. 6, 1908, gage height, -1.10 ft (-0.335 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1895, 27.3 ft (8.32 m), June 1, 1889, from floodmark, discharge, about 211,000 ft³/s (5,980 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 61,500 ft³/s (1,740 m³/s) Mar. 5, gage height, 14.71 ft 4.484 m; minimum, 559 ft³/s (15.8 m³/s) Oct. 12, gage height, 0.21 ft (0.064 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	726	2030	2950	5100	5460	11000	8200	4170	6660	1900	4760	2300
2	682	1920	2890	29600	4490	11700	8730	3700	6030	2520	5460	1900
3	651	1830	2780	31400	3850	13700	11300	3550	5420	2410	4170	1830
4	667	1850	3350	26100	3200	16500	11700	4050	4820	1970	3080	1940
5	745	1880	5840	19700	2800	51900	11500	4050	4490	1770	2320	1840
6	843	1820	6530	13300	2540	52700	10500	3760	4170	1570	2020	4900
7	816	1760	5730	10700	2430	40400	9240	3550	3640	1430	1740	10300
8	738	1750	5150	8630	2340	38700	8160	3410	3260	1280	4440	7990
9	707	1680	10300	7200	2270	34200	9110	3250	3550	1130	4280	5770
10	682	1660	15800	5800	2180	31100	16700	3110	3220	986	2890	4640
11	657	1580	12800	4000	2110	27500	15700	4640	3190	1490	3990	3730
12	587	1300	10200	3600	2050	21300	15100	5690	3320	1790	5830	3320
13	597	1150	8410	3500	1990	17900	14300	5190	2950	1610	6380	2850
14	1130	1170	6690	4500	1940	16900	13100	5450	2580	1380	5410	2690
15	3140	1140	5590	5200	1900	17700	12800	4980	2310	1240	4020	3070
16	3170	1070	4730	4200	1870	15500	12000	4670	2040	1410	3300	2840
17	2760	1270	4440	3700	1840	13100	11100	4320	1850	1710	2820	2350
18	2170	2230	4300	3300	1810	10600	9610	3740	1760	1640	2440	2030
19	2160	3210	3910	2900	1780	9900	8030	3370	1670	1270	2490	1830
20	1840	2900	3610	2600	1760	10100	7100	3100	1570	1070	2460	1720
21	1720	2650	4750	3200	1730	9900	6230	2940	1420	906	2040	1580
22	1600	2500	7910	4000	1940	9890	5510	2730	1290	837	1790	1890
23	1440	2410	7710	3800	2400	10300	5030	2530	1460	835	1580	2400
24	1360	2800	6480	4000	4100	11300	4410	3190	1290	1160	1550	2230
25	1250	3210	6340	17100	6600	22800	4170	9490	1210	2210	2480	1770
26	1180	3050	5430	22200	18000	25800	3850	10300	1140	3790	2250	1490
27	1680	2930	4500	16900	15800	18900	4190	8160	1000	4110	2940	1350
28	3170	2910	3700	11200	13500	14900	5060	8380	936	2880	4230	1420
29	3410	3050	3100	8790	---	11900	4620	9040	930	2230	3950	6310
30	2680	3030	2600	7340	---	10400	4340	8580	1150	2840	3150	10500
31	2230	---	3370	6210	---	9350	---	7760	---	4880	2680	---
TOTAL	47188	63740	181890	299770	114680	617840	271390	154850	80326	58254	102940	100780
MEAN	1522	2125	5867	9670	4096	19930	9046	4995	2678	1879	3321	3359
MAX	3410	3210	15800	31400	18000	52700	16700	10300	6660	4880	6380	10500
MIN	587	1070	2600	2600	1730	9350	3850	2530	930	835	1550	1350
CFSM	.51	.71	1.97	3.25	1.38	6.70	3.04	1.68	.90	.63	1.12	1.13
IN.	.59	.80	2.27	3.75	1.43	7.73	3.39	1.94	1.00	.73	1.29	1.26

CAL YR 1978 TOTAL 1893700 MEAN 5188 MAX 36200 MIN 410 CFSM 1.74 IN 23.68
WTR YR 1979 TOTAL 2093648 MEAN 5736 MAX 52700 MIN 587 CFSM 1.93 IN 26.18

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545500 WEST BRANCH SUSQUEHANNA RIVER AT RENOVO, PA--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1968 to current year.

pH: October 1968 to current year.

WATER TEMPERATURES: October 1968 to current year.

DISSOLVED OXYGEN: February 1975 to September 1977.

INSTRUMENTATION.--Water-quality monitor since October 1968.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (Water years 1969-71, 74-76, 78, 79): Maximum, 973 micromhos Oct. 3, 1968; minimum, 87 micromhos Feb. 25, 1975.

pH (Water years 1969-72, 74-76, 78, 79): Maximum, 6.8 units Mar. 24, 1978; minimum, 2.2 units Sept. 23, 24, 1969.

WATER TEMPERATURES (Water years 1969-71, 74-76, 78, 79): Maximum, 31.0°C June 27-30 and July 16, 1969; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 585 micromhos Oct. 8; minimum, 120 micromhos Mar. 26.

pH: Maximum, 6.6 units Mar. 5, 6; minimum, 3.6 units July 1.

WATER TEMPERATURES: Maximum, 29.0°C July 16; minimum, 0.0°C Jan. 11.

REMARKS.--Interruptions in the record were due to malfunctions of the equipment.

COAL-HYDROLOGY NETWORK

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
JUN 08...	0930	3270	210	4.5	21.0	.3	15	0	85	--	--
AUG 08...	0815	820	240	4.7	23.5	.6	30	1	21	131	.18
DATE	TIME	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
JUN 08...	--	--	--	--	--	--	--	350	280	70	--
AUG 08...	--	290	0	<10	<10	20	30	1800	1800	50	48000
DATE	TIME	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
JUN 08...	--	--	1000	0	1000	--	--	--	--	5	44
AUG 08...	--	40	1500	0	1500	200	.00	0	100	50	111

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545500 WEST BRANCH SUSQUEHANNA RIVER AT RENOVO, PA--Continued

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE	AUG 8, 79
TIME	0815
TOTAL COUNT	8
DIVERSITY: PHYLUM	0.5
.CLASS	0.5
..ORDER	2.0
...FAMILY	2.4
....GENUS	0.0
.....GENUS-INSECTA	0.0
ORGANISM	COUNT
ANNELIDA	
.OLIGOCHAETA	
..PROSOPORA	
...LUMBRICULIDAE	1
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..COLEOPTERA	
...ELMIDAE	
....OPTIOSERVUS	1
...HYDROPHILIDAE	3
..DIPTERA	
...EMPIDIDAE	1
..MEGALOPTERA	
...CORYDALIDAE	
....CORYDALUS	
.....C.CORNUTUS	1
..TRICHOPTERA	
...HYDROPSYCHIDAE	
....HYDROPSYCHE	1

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1978 to SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	481	455	473	321	243	301	284	280	282	277	196	254
2	502	471	485	304	299	302	286	279	283	---	---	---
3	524	475	507	312	303	306	282	270	276	---	---	---
4	529	482	508	340	313	325	270	256	262	---	---	---
5	543	494	519	352	329	334	256	237	243	---	---	---
6	547	496	516	370	276	326	---	---	---	---	---	---
7	581	491	555	278	272	275	---	---	---	---	---	---
8	585	520	563	275	269	271	200	188	196	---	---	---
9	565	510	549	279	266	271	---	---	---	---	---	---
10	552	530	541	281	275	278	---	---	---	259	253	257
11	556	520	543	287	279	282	---	---	---	277	257	266
12	547	495	531	288	274	282	---	---	---	298	274	286
13	531	498	515	304	269	281	---	---	---	299	285	292
14	517	431	473	320	304	313	---	---	---	306	253	292
15	444	350	380	337	319	328	202	186	196	317	304	309
16	521	408	481	348	337	343	212	200	206	342	312	326
17	456	387	414	376	339	353	223	211	217	339	313	322
18	387	357	365	373	308	342	235	223	229	314	303	308
19	408	366	394	351	328	342	242	234	238	341	310	325
20	394	348	375	330	311	319	246	236	243	336	323	330
21	388	348	370	311	301	304	238	226	233	337	313	325
22	384	373	380	302	297	300	283	229	260	324	306	315
23	380	367	372	298	293	296	253	203	228	325	315	321
24	385	371	375	310	295	299	205	195	200	---	---	---
25	383	373	379	310	298	302	195	186	191	---	---	---
26	383	354	373	298	276	283	203	193	197	---	---	---
27	374	341	351	377	267	274	225	203	216	---	---	---
28	388	318	369	267	259	261	232	224	227	---	---	---
29	341	262	291	269	260	264	247	232	238	---	---	---
30	280	254	265	287	270	280	249	236	245	---	---	---
31	266	247	257	---	---	---	277	236	252	247	230	237
MONTH	585	247	434	377	243	301	286	186	233	342	196	298

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545500 WEST BRANCH SUSQUEHANNA RIVER AT RENOVO, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1978 to SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	257	246	252	211	192	202	221	211	215	294	288	290
2	273	257	265	219	197	209	233	220	225	291	278	283
3	287	272	279	223	212	218	235	226	232	290	282	286
4	291	271	284	213	181	203	226	206	215	294	286	290
5	312	272	303	221	162	189	207	197	201	307	292	300
6	324	240	303	222	213	217	204	198	202	306	298	303
7	327	307	318	219	206	213	209	201	204	298	292	295
8	352	322	338	211	204	207	219	209	213	292	286	289
9	344	325	336	210	204	206	221	191	212	295	289	292
10	367	346	360	206	199	204	205	186	196	294	290	292
11	368	311	335	205	196	201	209	177	203	299	259	285
12	379	315	341	205	200	204	178	172	175	302	265	292
13	383	363	373	210	202	205	187	174	180	268	232	258
14	381	375	377	211	199	208	186	183	184	245	234	239
15	376	359	366	210	206	209	190	185	187	248	244	246
16	360	328	341	211	205	208	195	190	192	257	247	251
17	340	327	335	215	208	212	200	194	198	287	256	271
18	---	---	---	216	203	211	212	199	206	287	281	284
19	---	---	---	---	---	---	230	212	218	287	281	284
20	---	---	---	---	---	---	239	230	232	299	285	289
21	---	---	---	---	---	---	249	238	243	301	290	297
22	---	---	---	---	---	---	260	249	256	306	294	297
23	355	317	341	211	203	207	271	260	265	318	307	313
24	367	329	348	203	186	196	281	265	274	317	286	298
25	376	300	339	203	162	180	301	280	292	348	217	299
26	307	248	274	161	120	144	301	292	298	219	212	217
27	252	186	223	154	141	150	302	295	298	---	---	---
28	206	183	196	172	154	164	311	298	303	---	---	---
29	---	---	---	186	171	178	310	297	304	---	---	---
30	---	---	---	206	185	200	298	292	295	---	---	---
31	---	---	---	213	203	208	---	---	---	205	196	200
MONTH	383	183	314	223	120	198	311	172	231	348	196	279
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	210	205	208	483	402	450	278	257	265	334	319	330
2	231	210	219	467	426	439	268	226	247	341	331	336
3	239	220	234	448	421	435	248	241	244	353	338	343
4	246	239	244	424	405	416	258	244	250	387	353	372
5	255	246	252	405	391	396	280	257	270	402	383	395
6	258	250	254	411	390	397	304	280	294	383	225	278
7	277	256	268	436	411	425	319	303	312	280	222	252
8	284	259	277	435	429	433	---	---	---	247	227	234
9	292	257	275	445	432	439	---	---	---	236	226	230
10	314	289	298	448	441	444	---	---	---	247	237	243
11	317	304	308	459	390	433	---	---	---	264	247	255
12	312	300	306	497	409	462	---	---	---	286	264	275
13	319	312	317	497	469	483	---	---	---	298	285	291
14	323	311	316	470	414	449	---	---	---	309	294	302
15	329	322	325	453	412	433	---	---	---	325	300	316
16	330	323	326	464	453	460	---	---	---	343	323	338
17	348	324	332	478	463	471	---	---	---	347	340	343
18	365	341	352	481	438	469	304	297	301	356	342	350
19	381	364	371	437	426	432	321	303	313	360	348	352
20	393	371	382	441	423	433	340	320	331	370	359	366
21	396	391	394	440	430	437	347	340	345	374	364	370
22	396	368	385	462	430	445	354	347	350	402	363	376
23	399	386	393	472	458	465	362	353	357	438	402	426
24	402	379	390	494	472	488	364	333	356	441	405	425
25	446	403	427	520	470	499	343	290	312	405	383	391
26	454	439	449	469	389	416	368	343	356	383	379	381
27	456	437	448	388	317	347	371	345	360	403	383	393
28	461	446	456	322	313	318	365	333	346	408	319	378
29	465	456	460	315	310	314	340	290	317	355	309	329
30	461	413	450	373	314	336	290	281	285	328	254	277
31	---	---	---	373	268	328	318	290	302	---	---	---
MONTH	465	205	337	520	268	426	371	226	310	441	222	332

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545500 WEST BRANCH SUSQUEHANNA RIVER AT RENOVO, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	3.9	3.8	3.8	5.3	5.1	5.2	5.2	5.1	5.1	5.1	4.6	4.7
2	3.9	3.8	3.8	5.1	4.9	5.0	5.2	5.1	5.1	---	---	---
3	3.9	3.7	3.8	4.9	4.7	4.8	5.3	5.2	5.2	---	---	---
4	3.8	3.7	3.7	4.8	4.6	4.7	5.4	5.2	5.3	---	---	---
5	3.8	3.6	3.7	4.7	4.6	4.6	5.3	5.1	5.2	---	---	---
6	3.8	3.7	3.6	4.6	4.4	4.5	---	---	---	---	---	---
7	3.9	3.7	3.8	4.5	4.4	4.4	---	---	---	---	---	---
8	3.8	3.7	3.7	4.6	4.5	4.5	5.5	5.4	5.4	---	---	---
9	3.8	3.7	3.8	4.7	4.6	4.6	---	---	---	---	---	---
10	3.8	3.7	3.8	4.6	4.6	4.6	---	---	---	4.8	4.8	4.8
11	3.8	3.7	3.8	4.6	4.6	4.6	---	---	---	4.8	4.6	4.7
12	3.8	3.7	3.8	4.7	4.6	4.6	---	---	---	4.7	4.5	4.6
13	3.8	3.7	3.8	4.7	4.6	4.7	---	---	---	4.5	4.5	4.5
14	3.9	3.8	3.8	4.6	4.4	4.5	---	---	---	4.5	4.4	4.4
15	4.2	3.9	4.1	4.4	4.3	4.4	5.3	5.2	5.2	4.5	4.4	4.4
16	4.0	3.8	3.9	4.4	4.3	4.3	5.2	5.1	5.2	4.5	4.4	4.4
17	4.3	3.9	4.1	4.3	4.1	4.2	5.1	5.0	5.1	4.5	4.4	4.5
18	4.7	4.4	4.6	4.4	4.1	4.2	5.0	5.0	5.0	4.6	4.5	4.5
19	4.6	4.4	4.5	4.7	4.3	4.5	5.0	4.9	4.9	4.6	4.4	4.5
20	4.5	4.4	4.4	4.8	4.7	4.8	5.0	4.9	4.9	4.5	4.4	4.5
21	4.5	4.4	4.5	5.1	4.8	5.0	5.0	4.9	4.9	4.5	4.4	4.4
22	4.4	4.4	4.4	5.2	5.1	5.1	5.1	4.7	4.8	4.4	4.3	4.4
23	4.4	4.3	4.3	5.3	5.2	5.2	5.6	5.1	5.5	4.4	4.3	4.4
24	4.4	4.3	4.3	5.4	5.3	5.4	5.6	5.4	5.5	---	---	---
25	4.3	4.3	4.3	5.4	5.3	5.3	5.6	5.3	5.4	---	---	---
26	4.4	4.2	4.3	5.4	5.3	5.4	5.4	5.3	5.4	---	---	---
27	4.4	4.2	4.3	5.4	5.3	5.3	5.3	5.1	5.2	---	---	---
28	4.3	4.1	4.2	5.4	5.3	5.3	5.1	5.0	5.1	---	---	---
29	4.8	4.1	4.3	5.3	5.2	5.3	5.1	5.1	5.1	---	---	---
30	5.3	4.8	5.2	5.2	5.2	5.2	5.2	5.1	5.1	---	---	---
31	5.3	5.3	5.3	---	---	---	5.1	4.6	4.9	4.6	4.5	4.5
MONTH	5.3	3.6	4.1	5.4	4.1	4.8	5.6	4.6	5.2	5.1	4.3	4.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	4.5	4.3	4.5	5.8	5.6	5.7	4.6	4.5	4.5	4.4	4.3	4.3
2	4.4	4.4	4.4	5.8	5.6	5.7	4.5	4.5	4.5	4.4	4.2	4.4
3	4.4	4.3	4.4	5.7	5.5	5.6	4.8	4.4	4.6	4.3	4.3	4.3
4	4.4	4.3	4.3	5.8	5.5	5.7	5.1	4.8	5.0	4.3	4.2	4.2
5	4.4	4.2	4.3	6.6	5.8	6.4	5.1	5.0	5.1	4.2	4.1	4.2
6	4.6	4.2	4.3	6.6	5.6	6.6	5.0	4.7	4.9	4.2	4.2	4.2
7	4.3	4.2	4.3	6.5	6.4	6.4	5.0	4.7	4.8	4.3	4.1	4.2
8	4.2	4.1	4.2	6.5	6.2	6.4	4.7	4.6	4.6	4.2	4.1	4.1
9	4.2	4.2	4.2	6.4	6.4	6.4	4.8	4.5	4.6	4.2	4.1	4.1
10	4.2	4.2	4.2	6.4	6.4	6.4	5.0	4.7	4.8	4.1	4.1	4.1
11	4.4	4.2	4.3	6.4	6.1	6.2	5.2	4.7	4.8	4.3	4.1	4.1
12	4.4	4.1	4.3	6.1	5.9	6.1	5.2	5.0	5.2	4.2	4.1	4.2
13	4.3	4.2	4.2	5.9	5.8	5.9	5.2	5.1	5.1	4.3	4.2	4.2
14	4.2	4.2	4.2	5.9	5.7	5.7	5.1	5.1	5.1	4.3	4.2	4.3
15	4.3	4.2	4.2	5.9	5.9	5.9	5.1	5.0	5.0	4.3	4.2	4.3
16	4.3	4.2	4.3	5.9	5.9	5.9	5.0	4.9	5.0	4.4	4.3	4.4
17	4.3	4.2	4.2	5.9	5.8	5.9	5.0	4.8	4.9	4.4	4.2	4.4
18	---	---	---	5.9	5.6	5.8	4.9	4.7	4.8	4.4	4.4	4.4
19	---	---	---	---	---	---	4.7	4.7	4.7	4.4	4.3	4.3
20	---	---	---	---	---	---	4.6	4.5	4.6	4.3	4.3	4.3
21	---	---	---	---	---	---	4.6	4.4	4.5	4.5	4.3	4.3
22	---	---	---	---	---	---	4.5	4.4	4.4	4.3	4.2	4.2
23	4.3	4.2	4.2	4.7	4.6	4.7	4.4	4.3	4.3	4.2	4.2	4.2
24	4.6	4.3	4.4	4.8	4.7	4.7	4.3	4.3	4.3	4.3	4.2	4.2
25	5.8	4.4	5.1	5.1	4.5	4.8	4.3	4.2	4.2	5.3	4.0	4.5
26	6.2	5.1	5.4	5.2	4.9	5.0	4.2	4.2	4.2	5.8	5.3	5.7
27	6.0	5.4	5.8	5.2	5.1	5.1	4.2	4.2	4.2	---	---	---
28	5.9	5.6	5.8	5.2	5.1	5.2	4.3	4.2	4.2	---	---	---
29	---	---	---	5.2	5.0	5.1	4.3	4.2	4.3	---	---	---
30	---	---	---	5.0	4.7	4.8	4.4	4.3	4.3	---	---	---
31	---	---	---	4.8	4.6	4.7	---	---	---	5.0	4.8	4.9
MONTH	6.2	4.1	4.5	6.6	4.5	5.7	5.2	4.2	4.7	5.8	4.0	4.3

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545500 WEST BRANCH SUSQUEHANNA RIVER AT RENOVO, PA, Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	4.8	4.7	4.7	3.8	3.6	3.7	5.4	5.0	5.3	4.4	4.3	4.4
2	4.7	4.5	4.6	3.8	3.7	3.8	5.2	4.8	5.0	4.3	4.3	4.3
3	4.6	4.5	4.5	3.9	3.8	3.8	4.9	4.8	4.9	4.3	4.2	4.2
4	4.6	4.4	4.5	3.9	3.9	3.9	4.9	4.8	4.9	4.2	4.0	4.1
5	4.5	4.3	4.3	3.9	3.9	3.9	4.8	4.7	4.8	4.0	3.9	4.0
6	4.4	4.3	4.4	3.9	3.8	3.9	4.7	4.5	4.6	4.6	4.0	4.4
7	4.3	4.2	4.3	3.8	3.8	3.8	4.6	4.4	4.5	4.8	4.4	4.6
8	4.6	4.2	4.2	3.8	3.8	3.8	---	---	---	5.1	4.8	5.0
9	4.3	4.2	4.2	3.8	3.8	3.8	---	---	---	5.1	4.9	5.0
10	4.2	4.1	4.1	3.8	3.8	3.8	---	---	---	4.9	4.7	4.8
11	4.1	4.1	4.1	3.9	3.7	3.8	---	---	---	4.7	4.5	4.6
12	4.1	4.1	4.1	3.8	3.7	3.8	---	---	---	4.5	4.3	4.4
13	4.1	4.1	4.1	3.9	3.8	3.8	---	---	---	4.3	4.2	4.3
14	4.2	4.0	4.1	3.9	3.9	3.9	---	---	---	4.4	4.2	4.2
15	4.1	4.0	4.0	4.0	3.9	3.9	---	---	---	4.2	4.1	4.1
16	4.0	4.0	4.0	3.9	3.9	3.9	---	---	---	4.1	4.0	4.1
17	4.0	3.9	4.0	3.9	3.9	3.9	---	---	---	4.1	4.1	4.1
18	4.0	3.9	3.9	4.0	3.9	3.9	4.8	4.6	4.7	4.1	3.9	4.1
19	3.9	3.9	3.9	4.1	4.0	4.1	4.6	4.4	4.5	4.1	4.0	4.0
20	3.9	3.8	3.9	4.1	4.0	4.1	4.4	4.3	4.4	4.0	4.0	4.0
21	3.9	3.9	3.9	4.1	4.0	4.1	4.3	4.2	4.2	4.0	4.0	4.0
22	3.9	3.9	3.9	4.1	4.0	4.0	4.2	4.2	4.2	4.0	3.9	4.0
23	3.9	3.8	3.9	4.0	4.0	4.0	4.2	4.1	4.2	4.0	3.8	3.9
24	3.9	3.8	3.9	4.0	3.9	3.9	4.3	4.1	4.1	4.0	3.9	3.9
25	3.8	3.8	3.8	3.9	3.8	3.9	4.3	4.1	4.2	4.1	4.0	4.0
26	3.8	3.8	3.8	4.5	3.9	4.2	4.2	4.0	4.1	4.0	4.0	4.0
27	3.8	3.7	3.8	4.7	4.4	4.6	4.1	4.0	4.1	4.1	4.0	4.0
28	3.8	3.7	3.8	4.7	4.6	4.6	4.2	4.1	4.1	4.2	4.0	4.1
29	3.8	3.7	3.8	4.6	4.5	4.5	4.3	4.1	4.2	4.2	4.0	4.2
30	3.9	3.7	3.8	4.5	4.2	4.4	4.5	4.4	4.5	5.7	4.3	5.0
31	---	---	---	5.3	4.2	4.5	4.5	4.3	4.4	---	---	---
MONTH	4.8	3.7	4.1	5.3	3.6	4.0	5.4	4.0	4.5	5.7	3.8	4.3

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.0	18.0	18.5	11.0	9.5	10.0	4.5	3.5	4.0	3.0	1.0	2.0
2	18.0	16.5	17.5	10.5	9.0	9.5	4.0	3.5	4.0	---	---	---
3	18.5	15.5	17.0	10.5	9.0	9.5	4.5	3.5	4.0	---	---	---
4	18.5	16.5	17.5	11.0	9.5	10.0	5.5	4.5	5.0	---	---	---
5	19.0	16.5	17.5	10.5	9.5	10.0	5.5	5.0	5.5	---	---	---
6	18.0	14.5	17.5	11.0	9.5	10.0	---	---	---	---	---	---
7	14.5	13.0	14.0	10.5	10.0	10.5	---	---	---	---	---	---
8	13.0	11.5	12.5	10.5	9.5	10.0	6.5	5.0	6.0	---	---	---
9	13.5	10.5	12.0	9.5	8.5	9.0	---	---	---	---	---	---
10	14.5	10.5	11.5	9.5	8.5	9.0	---	---	---	.5	.5	.5
11	15.5	13.0	14.0	9.5	8.0	8.5	---	---	---	.5	.0	.5
12	16.5	14.0	15.0	9.0	8.5	9.0	---	---	---	.5	.5	.5
13	16.0	15.0	15.5	8.5	8.0	8.0	---	---	---	.5	.5	.5
14	15.0	13.0	14.0	9.5	8.5	9.0	---	---	---	1.0	.5	.5
15	13.0	11.0	11.5	9.5	8.5	9.0	3.0	2.5	2.5	.5	.5	.5
16	12.0	11.0	11.5	10.0	8.5	9.0	3.5	2.5	3.0	.5	.5	.5
17	12.0	10.5	11.5	9.0	8.5	8.5	4.0	3.5	3.5	.5	.5	.5
18	11.0	10.0	10.5	9.0	9.0	9.0	3.5	3.0	3.5	.5	.5	.5
19	11.5	10.5	11.0	9.0	8.0	8.5	3.0	2.0	2.5	.5	.5	.5
20	12.5	11.0	11.5	8.0	7.0	7.5	2.0	2.0	2.0	.5	.5	.5
21	13.0	11.0	12.0	7.0	6.0	6.5	2.5	2.0	2.5	.5	.5	.5
22	14.0	12.0	13.0	6.0	5.5	5.5	3.5	2.5	3.0	1.0	.5	.5
23	13.5	12.5	13.0	6.0	5.5	5.5	3.0	2.5	2.5	1.5	1.0	1.5
24	12.5	10.5	11.5	6.5	6.0	6.5	2.5	1.0	2.0	---	---	---
25	11.5	9.5	10.5	6.0	5.5	6.0	1.0	.5	1.0	---	---	---
26	12.5	11.0	12.0	5.5	4.5	5.0	1.0	.5	1.0	---	---	---
27	12.5	11.0	11.5	4.5	3.0	3.5	1.0	.5	1.0	---	---	---
28	12.5	10.5	11.5	4.0	3.5	3.5	.5	.5	.5	---	---	---
29	12.5	11.0	12.0	4.0	3.0	3.5	.5	.5	.5	---	---	---
30	11.0	9.5	10.5	5.0	4.0	4.5	.5	.5	.5	---	---	---
31	11.0	9.5	10.0	---	---	---	1.0	.5	.5	2.0	1.5	2.0

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545500 WEST BRANCH SUSQUEHANNA RIVER AT RENOVO, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1.5	.5	1.0	3.5	1.5	2.5	10.5	9.5	10.0	14.5	12.0	13.0
2	.5	.5	.5	4.0	2.0	3.5	10.0	9.5	10.0	15.5	12.0	13.5
3	.5	.5	.5	4.0	3.5	4.0	9.5	9.0	9.0	14.0	13.0	13.5
4	1.0	.5	.5	4.5	4.0	4.0	9.0	7.5	8.0	14.0	12.5	13.5
5	.5	.5	.5	5.5	4.0	5.0	7.5	6.5	7.0	15.0	11.5	13.5
6	.5	.5	.5	7.0	5.5	6.5	6.5	5.5	6.0	16.5	13.0	14.5
7	.5	.5	.5	7.0	7.0	7.0	6.5	5.0	6.0	18.0	13.5	16.0
8	.5	.5	.5	7.0	7.0	7.0	6.0	5.0	5.5	20.5	16.5	18.5
9	.5	.5	.5	7.0	7.0	7.0	5.5	5.0	5.0	22.5	18.5	20.5
10	.5	.5	.5	7.0	7.0	7.0	13.5	5.0	8.0	22.0	20.5	21.0
11	.5	.5	.5	7.0	6.0	6.5	15.5	9.0	13.5	22.5	20.0	21.0
12	.5	.5	.5	6.0	5.5	5.5	12.5	8.5	9.5	21.5	20.5	21.0
13	1.0	.5	.5	6.0	5.0	5.5	10.0	8.5	9.0	20.5	18.5	19.5
14	1.0	.5	.5	7.0	6.0	6.5	8.5	7.5	8.0	18.5	17.0	18.0
15	1.0	.5	.5	6.5	5.0	5.5	9.0	8.5	8.5	18.0	17.0	17.5
16	1.0	.5	.5	5.5	4.5	5.0	8.5	8.0	8.5	18.5	16.0	17.0
17	1.0	.5	.5	6.5	5.5	6.0	8.5	8.0	8.0	19.0	16.0	17.5
18	---	---	---	7.5	6.5	7.0	10.0	7.5	9.0	19.5	16.0	18.0
19	---	---	---	---	---	---	11.0	9.0	10.0	19.0	18.0	18.5
20	---	---	---	---	---	---	12.0	9.5	10.5	21.5	18.5	19.5
21	---	---	---	---	---	---	13.0	10.0	11.5	20.5	19.0	19.5
22	---	---	---	---	---	---	15.0	12.0	13.5	21.0	17.5	19.0
23	1.0	.5	1.0	10.0	8.0	9.0	17.0	13.5	15.0	19.5	17.0	18.0
24	1.5	1.0	1.0	10.0	9.5	10.0	17.0	14.5	16.0	17.5	16.5	17.0
25	1.5	1.0	1.0	10.0	7.5	8.5	17.5	15.5	16.5	16.5	14.5	15.5
26	3.5	1.0	1.5	7.5	5.5	6.5	17.0	16.0	16.5	14.5	14.0	14.0
27	4.0	1.5	2.5	6.0	5.0	5.5	16.0	14.0	15.5	---	---	---
28	2.5	1.5	2.0	6.5	4.5	5.5	15.0	12.5	14.0	---	---	---
29	---	---	---	7.5	6.0	7.0	14.0	12.5	13.5	---	---	---
30	---	---	---	8.5	7.5	8.0	14.0	12.0	13.0	---	---	---
31	---	---	---	9.5	8.5	9.0	---	---	---	16.5	14.0	15.5
MONTH	4.0	.5	1.0	10.0	1.5	6.5	17.5	5.0	10.5	22.5	11.5	17.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.0	16.0	16.5	22.5	21.0	21.5	26.0	24.0	25.0	25.0	22.5	24.0
2	19.0	16.0	17.5	22.0	20.0	21.0	26.0	24.5	25.0	25.0	23.5	24.0
3	19.0	17.5	18.0	23.0	19.0	21.0	26.5	23.5	25.0	26.5	23.5	24.5
4	20.5	17.0	18.5	21.5	19.5	20.5	27.0	24.0	25.5	26.5	23.5	25.0
5	20.5	18.0	19.5	20.0	18.0	19.0	28.0	25.0	26.5	25.5	24.0	24.5
6	19.5	18.5	19.0	21.0	17.0	19.0	27.5	25.5	26.5	24.0	21.0	22.0
7	22.0	18.0	20.0	23.5	18.5	21.0	26.5	23.5	25.0	21.5	20.0	21.0
8	22.0	20.5	21.5	25.0	21.0	23.0	---	---	---	21.0	18.5	20.0
9	24.5	20.5	22.5	25.5	22.5	24.0	---	---	---	19.0	17.0	18.0
10	24.5	22.5	23.5	24.0	22.5	23.5	---	---	---	19.0	16.5	18.0
11	23.5	20.0	21.5	25.5	21.5	23.5	---	---	---	20.5	18.0	19.0
12	20.0	18.0	19.0	26.5	23.5	25.0	---	---	---	20.5	17.5	19.0
13	21.0	17.0	19.0	28.0	25.0	26.5	---	---	---	20.5	19.0	19.5
14	22.0	17.5	19.5	27.0	25.5	26.5	---	---	---	21.0	19.5	20.0
15	24.0	19.5	21.5	27.5	25.0	26.0	---	---	---	20.0	18.5	19.0
16	25.0	21.5	23.0	29.0	26.0	27.5	---	---	---	19.5	17.0	18.5
17	25.5	22.5	24.0	28.5	26.0	27.5	---	---	---	20.5	17.5	19.0
18	24.0	21.5	23.0	28.0	25.5	27.0	20.0	19.0	19.5	20.5	18.0	19.5
19	24.0	20.0	22.0	28.0	25.0	26.5	22.0	18.5	20.0	20.0	18.0	19.0
20	24.5	20.5	22.5	27.0	24.5	26.0	23.5	20.5	22.0	19.0	16.5	17.5
21	23.0	20.0	21.5	27.5	24.5	26.0	25.5	22.0	23.5	17.5	16.5	17.0
22	22.5	19.0	20.5	27.5	25.0	26.5	25.5	22.5	24.0	17.0	16.0	16.5
23	22.0	20.0	21.0	26.5	25.0	25.5	24.0	22.0	23.0	18.0	15.0	16.5
24	20.5	18.5	19.5	27.0	24.0	25.5	23.5	21.5	22.5	18.0	15.5	16.5
25	22.0	17.0	19.5	27.0	25.0	26.0	24.0	21.5	22.5	17.5	15.5	16.5
26	23.0	18.5	20.5	27.0	25.5	26.0	23.0	21.5	22.0	19.0	16.0	17.5
27	24.0	20.0	22.0	26.0	24.5	25.0	22.0	21.0	21.5	19.5	17.0	18.0
28	23.5	21.0	22.0	25.0	24.0	24.5	23.0	21.5	22.0	18.5	16.0	17.5
29	23.0	20.5	21.5	24.5	23.0	23.5	23.5	22.0	22.5	16.5	15.5	16.0
30	23.5	21.0	22.0	26.0	23.0	24.5	24.5	22.0	23.0	17.0	16.0	16.0
31	---	---	---	25.0	23.5	24.5	25.5	22.5	24.0	---	---	---
MONTH	25.5	16.0	20.5	29.0	17.0	24.5	28.0	18.5	23.5	26.5	15.0	19.5

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545600 YOUNG WOMANS CREEK NEAR RENOV, PA
(Hydrologic bench-mark station)

LOCATION.--Lat 41°23'22", long 77°41'28", Clinton County, Hydrologic Unit 02050203, on left bank, 0.3 mi (0.5 km) downstream from Laureelly Fork, 1.5 mi (2.4 km) upstream from Left Branch Young Womans Creek, 3.7 mi (6.0 km) upstream from mouth, and 5 mi (8 km) northeast of Renovo.

DRAINAGE AREA.--46.2 mi² (119.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 780 ft (238 m).

REMARKS.--Records good.

AVERAGE DISCHARGE.--14 years, 78.3 ft³/s (2.217 m³/s, 22.95 in/yr (583 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,370 ft³/s (152 m³/s) June 23, 1972, gage height, 7.98 ft (2.432 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.1 ft³/s (0.031 m³/s) Sept. 6, 7, 1971; minimum gage height, 1.45 ft (0.442 m) Aug. 30, 31, Sept. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 460 ft³/s (13.0 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	1400	615 17.4	3.40 1.036	Mar. 6	0045	*1,540 43.6	*4.75 1.448
Jan. 25	0800	495 14.0	3.20 0.975	Mar. 25	0230	786 22.3	3.75 1.143

Minimum discharge, 6.2 ft³/s (0.18 m³/s) July 22, 23, 24, 25, gage height, 1.65 ft (0.503 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	20	31	80	89	67	143	52	76	29	29	18
2	10	19	30	518	76	99	158	49	68	23	19	17
3	10	19	31	457	68	113	162	53	60	19	17	21
4	14	19	65	308	63	207	169	58	53	18	12	16
5	13	18	86	223	59	1280	196	51	48	17	10	13
6	11	18	86	171	54	1240	193	48	45	15	9.0	106
7	10	18	79	143	51	760	175	47	41	13	8.8	74
8	10	18	84	134	48	510	156	45	40	12	23	61
9	11	17	243	107	46	391	205	43	43	11	11	51
10	10	16	247	94	43	351	228	44	35	13	14	42
11	9.0	15	198	84	41	337	239	46	47	13	39	36
12	8.4	14	153	77	39	291	249	45	41	11	30	30
13	13	14	130	72	37	240	232	45	38	10	24	26
14	40	14	107	80	36	245	221	43	36	9.8	21	34
15	30	14	94	63	34	240	206	42	34	9.6	18	33
16	25	14	79	56	33	222	181	40	31	9.5	16	25
17	22	19	74	51	32	196	162	37	28	8.9	13	22
18	20	42	65	48	31	181	139	35	26	9.5	13	20
19	20	33	57	45	30	191	120	34	24	8.4	13	19
20	19	30	53	60	29	209	107	33	21	7.3	11	18
21	19	30	65	116	29	225	94	31	21	6.9	10	20
22	18	30	53	104	30	240	84	29	22	6.7	9.0	24
23	17	30	47	53	33	264	76	29	21	6.2	8.4	18
24	17	36	45	130	40	375	68	50	20	6.2	12	16
25	16	34	47	444	50	692	63	48	18	10	21	14
26	19	33	41	326	74	489	60	55	16	23	14	13
27	33	33	37	231	61	346	70	63	15	12	36	12
28	23	34	35	179	53	257	62	80	15	9.4	28	32
29	21	31	34	140	---	220	56	88	15	9.6	26	69
30	20	31	33	116	---	181	54	93	19	8.9	24	51
31	20	---	33	102	---	160	---	85	---	7.6	20	---
TOTAL	538.4	713	2462	4812	1309	10819	4328	1541	1017	373.5	559.2	951
MEAN	17.4	23.8	79.4	155	46.8	349	144	49.7	33.9	12.0	18.0	31.7
MAX	40	42	247	518	89	1280	249	93	76	29	39	106
MIN	8.4	14	30	45	29	67	54	29	15	6.2	8.4	12
CFSM	.38	.52	1.72	3.36	1.01	7.55	3.12	1.08	.73	.26	.39	.69
IN.	.43	.57	1.98	3.87	1.05	8.71	3.48	1.24	.82	.30	.45	.77

CAL YR 1978	TOTAL	29600.6	MEAN 81.1	MAX 755	MIN 3.4	CFSM 1.76	IN 23.83
WTR YR 1979	TOTAL	29423.1	MEAN 80.6	MAX 1280	MIN 6.2	CFSM 1.75	IN 23.69

WEST BRANCH SUSQUEHANNA RIVER BASIN
01545600 YOUNG WOMANS CREEK NEAR RENOVO, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1965 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHQS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT											
04...	1200	14	54	6.8	12.5	11.2	300	80	260	17	8
26...	1200	18	46	6.5	11.0	12.0	88	K2	30	17	7
NOV											
28...	1245	34	42	6.6	4.0	13.2	44	K2	K7	15	3
JAN											
10...	1215	78	34	6.8	.5	14.0	48	K2	K2	14	7
MAR											
20...	1200	208	34	6.8	6.0	15.0	23	<1	<1	12	3
APR											
17...	1130	164	42	6.6	6.0	10.4	43	K1	K1	12	5
MAY											
22...	1030	30	39	6.9	11.5	11.8	212	K6	K9	14	2
JUL											
10...	0930	12	45	6.8	16.0	8.6	128	27	152	--	--
AUG											
22...	1000	8.9	46	6.8	15.5	9.6	168	K12	40	16	4
SEP											
25...	0915	12	40	7.3	10.0	11.2	156	K4	K9	16	8

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT										
04...	4.7	1.3	1.2	13	.1	--	.9	9	--	8.1
26...	4.9	1.1	.9	10	.1	--	1.0	10	--	7.9
NOV										
28...	4.2	1.1	1.1	13	.1	--	1.2	12	--	9.0
JAN										
10...	3.9	1.0	.7	9	.1	--	.6	7	--	7.2
MAR										
20...	3.2	.9	.6	9	.1	--	.6	9	--	7.1
APR										
17...	3.3	.9	.6	9	.1	--	.6	7	--	8.0
MAY										
22...	4.0	1.0	.8	10	.1	--	.8	12	--	6.7
JUL										
10...	--	--	--	--	--	--	--	--	--	--
AUG										
22...	4.7	1.1	1.2	13	.1	2.1	.9	12	3.3	7.5
SEP										
25...	4.4	1.1	1.1	13	.1	1.8	.7	8	.8	7.4

K - Best estimate.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545600 YOUNG WOMANS CREEK NEAR RENOVO, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUD- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	POTAS- SIUM 40 TOTAL (PCI/L)
OCT										
04...	1.3	.0	3.7	28	27	.31	.00	1	.04	.70
26...	1.1	.0	3.7	24	27	.17	.00	1	.05	--
NOV										
28...	1.5	.0	4.1	33	29	.38	.00	1	.09	--
JAN										
10...	1.0	.0	4.1	21	23	.38	.00	1	.21	--
MAR										
20...	.8	.0	3.8	24	22	.26	.00	1	.56	--
APR										
17...	.9	.0	3.7	26	22	.25	.01	1	.44	.40
MAY										
22...	.8	.0	3.9	30	25	.25	.00	1	.08	.60
JUL										
10...	--	--	--	--	--	--	--	1	.03	--
AUG										
22...	1.8	.0	4.3	36	29	.26	.00	1	.02	.50
SEP										
25...	1.2	.0	4.2	34	25	.20	.00	1	.03	.50

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
APR							
17...	1130	2	0	0	10	1	70
AUG							
22...	1000	0	0	0	10	2	50

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
APR							
17...	2	10	<.5	0	0	10	.00
AUG							
22...	1	20	<.5	0	0	20	.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01546500 SPRING CREEK NEAR AXEMANN, PA

LOCATION.--Lat 40°53'23", long 77°47'40", Centre County, Hydrologic Unit 02050204, on right bank at upstream side of highway bridge, 1.6 mi (2.6 km) west of Axemann, 1.8 mi (2.9 km) southwest of Bellefonte, and 2.5 mi (4.0 km) upstream from Logan Branch.

DRAINAGE AREA.--87.2 mi² (225.8 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 788.81 ft (240.429 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 19, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Occasional regulation at low flow by fish hatchery and Rockview Penitentiary above station.

AVERAGE DISCHARGE.--39 years, 89.7 ft³/s (2.540 m³/s), 13.99 in/yr (355 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,410 ft³/s (153 m³/s) June 23, 1972, gage height, 7.47 ft (2.277 m) in gage well, 8.75 ft (2.667 m) outside from floodmarks, from rating curve extended above 1,400 ft³/s (39.6 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 9.6 ft³/s (0.27 m³/s) Nov. 24, 1941, gage height, 1.69 ft (0.515 m); minimum daily, 20 ft³/s (0.57 m³/s) Dec. 20, 30, 1963, Jan. 28, 29, 31, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1936 reached a stage of 8.6 ft (2.62 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft³/s (9.91 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. 24	2400	*1,990 56.4	*5.46 1.664	May 24	1430	515 14.6	3.67 1.119
Feb. 26	0700	1,690 47.9	5.20 1.585	June 9	0130	417 11.8	3.45 1.052
Mar. 1	2400	525 14.9	3.69 1.125	Sept. 3	0500	471 13.3	3.57 1.088
Mar. 6	0500	1,140 32.3	4.64 1.414	Sept. 6	0900	582 16.5	3.80 1.158

Minimum discharge, 40 ft³/s (1.13 m³/s) Dec. 29; minimum gage height, 2.10 ft (0.640 m) Nov. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	51	47	79	114	349	159	118	164	108	76	83
2	58	52	45	326	106	408	192	116	156	102	72	97
3	58	51	46	284	103	300	169	120	147	95	72	300
4	63	51	52	189	101	382	172	122	142	97	69	177
5	58	51	49	138	95	878	193	114	138	93	68	166
6	57	51	48	110	88	977	179	110	129	88	68	439
7	56	50	48	95	86	626	174	108	127	86	68	318
8	55	51	52	90	83	454	172	106	131	83	106	250
9	56	49	70	75	80	353	193	104	243	83	78	213
10	56	50	58	67	77	315	185	116	164	86	86	190
11	57	49	55	68	74	290	169	129	166	83	118	177
12	57	49	54	66	73	253	169	122	154	83	147	164
13	57	49	52	60	72	234	166	114	144	83	133	156
14	65	49	50	64	70	228	169	108	138	81	116	161
15	56	49	50	55	68	202	166	104	131	79	104	149
16	57	49	49	56	67	185	159	102	127	78	99	138
17	57	50	50	48	66	177	156	99	122	78	93	129
18	55	50	50	51	65	174	151	97	118	76	95	125
19	56	47	50	65	66	164	147	95	114	75	93	120
20	55	47	49	57	65	159	142	93	108	75	86	116
21	54	46	55	94	68	154	140	93	106	72	88	129
22	54	46	49	73	76	149	138	90	106	72	83	161
23	54	47	47	81	110	145	133	104	102	78	81	125
24	54	48	48	410	246	156	129	357	101	79	83	118
25	54	47	54	810	386	262	129	334	99	76	81	116
26	55	46	49	234	1050	222	129	279	95	76	76	108
27	58	46	47	179	399	204	144	240	93	72	110	106
28	52	47	46	159	289	188	131	219	93	71	83	125
29	51	47	45	140	---	179	125	202	97	97	95	127
30	51	48	46	129	---	172	122	188	116	79	99	110
31	51	---	46	120	---	164	---	174	---	75	86	---
TOTAL	1735	1463	1556	4472	4243	9103	4692	4477	3871	2559	2812	4893
MEAN	56.0	48.8	50.2	144	152	294	156	144	129	82.5	90.7	163
MAX	65	52	70	810	1050	977	193	357	243	108	147	439
MIN	51	46	45	48	65	145	122	90	93	71	68	83
CFSM	.64	.56	.58	1.65	1.74	3.37	1.79	1.65	1.48	.95	1.04	1.87
IN.	.74	.62	.66	1.91	1.81	3.88	2.00	1.91	1.65	1.09	1.20	2.09

CAL YR 1978	TOTAL	46940	MEAN 129	MAX 648	MIN 42	CFSM 1.48	IN 20.02
WTR YR 1979	TOTAL	45876	MEAN 126	MAX 1050	MIN 45	CFSM 1.45	IN 19.57

WEST BRANCH SUSQUEHANNA RIVER BASIN
01547100 SPRING CREEK AT MILESBERG, PA

LOCATION.--Lat 40°55'54", long 77°47'13", Centre County, Hydrologic Unit 02050204, on left bank 60 ft (18 m) downstream from privately-owned bridge, 400 ft (122 m) west of State Route 144, 0.8 mi (1.3 km) upstream from mouth and Milesburg.

DRAINAGE AREA.--142 mi² (368 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 696.42 ft (212.269 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Occasional regulation at low flow by fish hatchery and by Rockview Penitentiary above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years, 235 ft³/s (6.655 m³/s), 22.41 in/yr (569 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,170 ft³/s (231 m³/s) June 23, 1972, gage height, 13.20 ft (4.023 m), from peak-stage indicator, from rating curve extended above 900 ft³/s (25.5 m³/s) on basis of computation of peak flow over dam; minimum, 60 ft³/s (1.70 m³/s) Sept. 30, 1969, gage height, 2.22 ft (0.677 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 570 ft³/s (16.1 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. 2	2200	734 20.8	4.78 1.457	June 9	0100	652 18.5	4.56 1.390
Jan. 25	Unknown	3,360 95.2	9.22 2.810	Aug. 27	0200	644 18.2	4.54 1.384
Feb. 26	0330	2,660 75.3	8.36 2.548	Sept. 3	0200	1,020 28.9	5.50 1.676
Mar. 6	0045	2,260 64.0	7.79 2.374	Sept. 6	1045	1,040 29.5	5.54 1.689
May 24	1200	970 27.5	5.37 1.637				

Minimum discharge, 106 ft³/s (3.00 m³/s) Nov. 27, gage height, 2.45 ft (0.747 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	147	141	179	267	766	339	255	355	237	185	211
2	155	145	137	547	251	785	388	251	336	226	172	224
3	154	144	142	547	242	610	363	262	319	213	170	662
4	166	144	157	399	237	1040	374	258	309	222	170	416
5	156	142	147	339	224	2050	413	244	296	211	168	366
6	154	142	142	309	217	1800	393	239	289	203	166	877
7	152	143	138	291	217	1140	385	237	279	199	166	719
8	152	145	155	349	211	877	376	230	304	195	235	560
9	151	144	204	289	205	723	422	226	449	193	181	474
10	150	143	181	262	199	655	408	260	347	199	185	419
11	151	141	167	246	195	600	379	265	349	193	239	385
12	151	140	163	235	195	537	390	258	326	195	281	357
13	154	141	160	230	191	496	376	255	306	191	262	336
14	170	140	156	242	189	483	385	246	294	189	232	347
15	156	140	154	224	191	437	376	244	284	185	217	310
16	153	142	151	208	187	408	366	237	274	185	209	280
17	154	144	152	215	180	390	355	230	267	183	201	260
18	150	152	150	208	178	379	341	226	260	181	205	245
19	148	141	149	203	183	360	331	224	251	178	203	230
20	147	138	148	215	178	349	319	220	244	176	195	220
21	147	139	165	235	181	336	311	224	242	174	197	250
22	148	139	150	245	228	329	301	215	239	172	189	290
23	148	140	146	230	289	321	294	269	230	178	185	260
24	147	145	145	800	534	357	286	806	224	181	187	230
25	146	140	168	1400	1060	499	281	696	220	178	187	205
26	149	139	156	840	1680	443	284	570	215	178	180	194
27	159	140	150	560	655	416	304	505	213	172	399	190
28	148	142	148	390	624	388	281	468	213	170	244	291
29	146	142	144	330	---	379	267	425	222	209	228	331
30	145	143	145	304	---	360	262	402	244	183	265	289
31	146	---	145	284	---	347	---	374	---	176	222	---
TOTAL	4708	4267	4756	11355	9388	19060	10350	9821	8400	5925	6525	10428
MEAN	152	142	153	366	335	615	345	317	280	191	210	348
MAX	170	152	204	1400	1680	2050	422	806	449	237	399	877
MIN	145	138	137	179	178	321	262	215	213	170	166	190
CFSM	1.07	1.00	1.08	2.58	2.36	4.33	2.43	2.23	1.97	1.35	1.48	2.45
IN.	1.23	1.12	1.25	2.97	2.46	4.99	2.71	2.57	2.20	1.55	1.71	2.73

CAL YR 1978 TOTAL 106658 MEAN 292 MAX 1160 MIN 137 CFSM 2.06 IN 27.94
WTR YR 1979 TOTAL 104983 MEAN 288 MAX 2050 MIN 137 CFSM 2.03 IN 27.50

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547200 BALD EAGLE CREEK BELOW SPRING CREEK AT MILESBERG, PA

LOCATION.--Lat 40°56'35", long 77°47'12", Centre County, Hydrologic Unit 02050204, on right bank 130 ft (40 m) downstream from bridge on State Highway 144 at Milesburg, 250 ft (76 m) downstream from Spring Creek.

DRAINAGE AREA.--265 mi² (686 km²).

PERIOD OF RECORD.--October 1955 to current year. Monthly discharge only for October, November 1955 published in WSP 1722. Prior to October 1967, published as North Bald Eagle Creek below Spring Creek at Milesburg.

GAGE.--Water-stage recorder. Datum of gage is 682.49 ft (208.023 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 31, 1956, nonrecording gage at site 130 ft (40 m) upstream at same datum.

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

AVERAGE DISCHARGE.--24 years, 400 ft³/s (11.33 m³/s), 20.51 in/yr (521 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,300 ft³/s (603 m³/s) June 23, 1972, gage height, 11.67 ft (3.557 m), from floodmark in gage well, from rating curve extended above 9,000 ft³/s (255 m³/s); minimum, 50 ft³/s (1.42 m³/s) Aug. 3, 1966, gage height, -0.80 ft (-0.244 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,700 ft³/s (76.5 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. 2	0900	4,570 129	5.09 1.551	May 24	1100	5,500 156	5.69 1.734
Jan. 25	0230	6,610 187	6.34 1.932	Aug. 27	0145	6,610 187	6.34 1.932
Feb. 26	0915	4,940 140	5.34 1.628	Sept. 6	0945	5,760 163	5.85 1.783
Mar. 6	--	*7,760 220	* 6.93 2.112	Sept. 29	0200	2,720 77.0	3.66 1.116
Mar. 25	0515	2,980 84.4	3.90 1.189				

Minimum discharge, 88 ft³/s (2.49 m³/s) Nov. 6, gage height, -0.48 ft (-0.146 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	120	180	768	480	1340	570	400	590	378	250	312
2	123	120	165	3600	450	1740	968	382	548	330	222	339
3	123	118	171	1540	410	1470	956	389	492	301	195	1100
4	140	118	340	872	380	2500	920	456	452	298	179	580
5	131	115	319	650	360	7050	1050	396	420	304	170	494
6	126	115	266	560	340	5420	866	375	396	279	165	3820
7	120	118	239	548	320	2820	760	361	375	252	162	1630
8	120	120	367	735	300	2100	695	350	389	240	292	985
9	117	118	934	472	282	1700	1300	337	580	228	199	753
10	117	118	609	432	261	1550	920	354	448	237	198	615
11	117	112	425	337	255	1400	785	404	476	237	311	520
12	115	112	359	314	246	1100	820	368	420	234	504	460
13	123	115	319	340	246	926	790	361	389	237	409	410
14	171	112	288	408	243	938	820	344	364	228	308	600
15	168	115	260	350	243	840	785	333	354	222	271	560
16	145	120	247	308	243	740	725	368	347	216	248	460
17	142	134	242	292	225	690	665	333	330	219	228	400
18	140	237	228	286	210	665	600	322	324	216	237	370
19	131	183	213	249	219	640	544	314	311	204	249	350
20	126	157	201	267	216	605	508	304	301	198	220	330
21	126	148	330	314	219	580	476	304	298	195	214	440
22	123	142	286	354	276	556	452	298	298	192	203	640
23	123	142	251	311	404	544	432	357	289	198	196	490
24	120	186	240	1180	765	665	404	3490	282	216	251	380
25	120	171	303	3490	1250	2080	393	2040	276	207	294	330
26	126	157	276	1300	3780	1200	393	1330	264	234	245	300
27	142	157	251	884	1810	908	532	1060	258	213	3190	280
28	134	168	215	735	1220	760	512	980	252	204	717	615
29	126	195	185	630	---	715	452	845	261	282	500	1780
30	123	180	215	580	---	655	420	765	354	290	638	884
31	123	---	230	520	---	595	---	670	---	230	381	---
TOTAL	4004	4223	9154	23626	15653	45492	20513	19390	11138	7519	11846	21227
MEAN	129	141	295	762	559	1467	684	625	371	243	382	708
MAX	171	237	934	3600	3780	7050	1300	3490	590	378	3190	3820
MIN	115	112	165	249	210	544	393	298	252	192	162	280
CFSM	.49	.53	1.11	2.88	2.11	5.54	2.58	2.36	1.40	.92	1.44	2.67
IN.	.56	.59	1.29	3.32	2.20	6.39	2.88	2.72	1.56	1.06	1.66	2.98

CAL YR 1978 TOTAL 181456 MEAN 497 MAX 5440 MIN 112 CFSM 1.88 IN 25.47
WTR YR 1979 TOTAL 193785 MEAN 531 MAX 7050 MIN 112 CFSM 2.00 IN 27.20

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547400 BALD EAGLE CREEK NEAR MILESBERG, PA

LOCATION.--Lat 40°58'31", long 75°44'35", Centre County, Hydrologic Unit 02050204, at highway bridge at Curtin, 500 ft (152 m) downstream from Antis Run, 250 ft (76 m) downstream from Nittany Creek, and 3.5 mi (5.6 km) downstream from Milesburg.

DRAINAGE AREA.--296 mi² (767 km²).

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: July 1967 to current year.

REMARKS.--The thermograph at this site records continuous water temperature of the inflow to Foster Joseph Sayers Reservoir.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 29.0°C July 17, 18, Aug. 9, 23, 1968, June 27, 30, July 16, 1969; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 23.5°C May 9; minimum, 0.0°C December 11, February 10.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.0	11.0	11.0	8.0	---	---	3.0	1.0	3.5	2.0	5.5	3.5
2	11.5	10.0	10.5	6.0	8.0	5.5	4.0	2.0	3.0	1.5	5.5	3.5
3	13.5	9.5	13.5	8.0	8.0	6.5	3.5	.5	4.0	1.5	4.5	3.5
4	14.0	11.5	11.5	8.0	9.0	7.0	3.0	.5	4.5	3.0	4.5	2.0
5	13.0	10.5	11.0	6.5	9.0	6.5	2.0	.5	4.5	1.0	4.0	2.0
6	13.5	11.5	13.5	8.0	8.0	4.5	2.0	1.0	4.5	.5	5.5	4.0
7	12.0	10.0	11.5	9.5	7.0	4.5	3.0	2.0	4.0	2.0	6.5	3.5
8	10.0	8.5	12.0	8.0	6.5	6.5	3.5	2.0	5.5	2.0	6.5	4.0
9	11.5	8.0	12.0	6.5	6.5	3.5	2.0	1.0	3.0	.5	6.5	3.5
10	13.0	8.0	11.0	6.0	3.5	1.0	3.0	1.0	2.0	.0	5.0	4.0
11	13.0	9.5	10.0	6.5	3.5	.0	2.0	.5	---	---	4.5	1.5
12	14.5	10.0	8.5	8.0	4.0	1.5	2.0	.5	---	---	4.5	1.0
13	12.0	12.0	9.0	7.0	5.0	2.0	2.0	1.5	---	---	6.5	2.0
14	12.0	10.0	13.5	9.0	4.5	2.0	2.0	1.0	---	---	7.0	4.0
15	10.0	8.0	13.5	9.0	6.0	1.0	2.0	.5	---	---	4.5	2.0
16	9.0	8.0	10.5	8.5	5.5	3.0	3.5	1.0	---	---	6.5	3.0
17	12.0	8.0	---	---	6.0	4.5	2.0	1.0	---	---	9.0	4.0
18	10.0	7.0	---	---	6.5	3.5	4.0	1.5	---	---	10.0	5.5
19	10.0	9.0	---	---	6.0	3.5	3.5	2.0	---	---	9.5	5.5
20	12.0	10.0	---	---	5.0	3.5	2.0	1.5	---	---	10.5	5.5
21	12.0	8.5	---	---	4.5	3.0	2.0	1.5	---	---	11.0	6.5
22	13.0	8.5	---	---	5.5	3.0	3.5	2.0	---	---	12.0	6.5
23	11.5	10.0	---	---	4.0	1.5	4.5	2.0	---	---	12.0	8.0
24	13.5	8.0	---	---	2.0	1.0	4.0	1.5	3.5	3.0	11.0	9.0
25	13.0	6.5	---	---	1.5	1.0	2.0	1.5	2.0	.5	9.0	6.5
26	12.0	10.5	---	---	2.0	.5	3.5	2.0	2.0	1.0	6.5	4.5
27	11.0	9.5	---	---	2.0	1.0	4.5	3.5	4.0	2.0	8.0	4.5
28	11.0	7.0	---	---	3.5	1.0	4.5	4.0	5.5	2.0	8.5	4.0
29	11.0	7.0	---	---	4.0	.5	4.5	4.0	---	---	9.5	6.5
30	11.0	6.0	---	---	3.5	1.0	4.5	3.5	---	---	11.0	9.0
31	12.0	7.0	---	---	3.5	2.0	4.5	3.5	---	---	11.0	9.0
MONTH	14.5	6.0	13.5	6.0	9.0	.0	4.5	.5	5.5	.0	12.0	1.0

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547400 BALD EAGLE CREEK NEAR MILESBERG, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547500 BALD EAGLE CREEK AT BLANCHARD, PA

LOCATION.--Lat 41°03'06", long 77°36'17", Centre County, Hydrologic Unit 02050204, on left bank, 0.4 mi (0.6 km) downstream from Foster Joseph Sayers Lake, 0.7 mi (1.1 km) upstream from Marsh Creek, and 0.9 mi (1.4 km) south of Blanchard.

DRAINAGE AREA.--339 mi² (878 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1954 to current year. Prior to October 1967, published as North Bald Eagle Creek at Blanchard.

REVISED RECORDS.--WSP 1903: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 579.79 ft (176.720 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Foster Joseph Sayers Lake (station 01547480) 0.4 mi (0.6 km) upstream.

AVERAGE DISCHARGE.--25 years, 455 ft³/s (12.89 m³/s), 18.20 in/yr (462 mm/yr), adjusted for storage since March 1971.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft³/s (286 m³/s) Mar. 10, 1964, gage height, 11.59 ft (3.533 m), from rating curve extended above 4,100 ft³/s (116 m³/s); no flow parts of June 16, Nov. 10, 1970, May 12, 18, 19, 1976, Mar. 6, 1979, result of shutoff at Sayers Lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,760 ft³/s (106 m³/s) May 22, gage height, 7.37 ft (2.246 m); minimum daily, 168 ft³/s (4.76 m³/s) Nov. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	218	276	385	508	2530	487	360	657	395	306	386
2	442	185	272	661	373	2480	591	339	535	392	306	325
3	580	168	268	1390	329	2420	943	339	535	368	292	822
4	576	184	431	2000	330	2160	1010	403	512	371	267	1100
5	574	198	451	2010	332	212	990	384	464	310	267	707
6	569	191	330	1870	332	169	689	348	439	251	261	1740
7	564	177	300	1400	334	1050	372	348	400	263	249	2660
8	560	182	292	1160	330	2200	376	350	435	263	510	2700
9	556	188	861	728	331	3090	550	353	692	263	336	1290
10	550	188	933	482	329	3400	867	353	524	263	255	651
11	545	179	686	481	329	3440	890	357	471	263	386	702
12	542	172	501	409	328	3470	956	359	470	264	547	561
13	536	172	400	375	282	3600	976	399	401	266	527	448
14	533	172	361	413	259	3610	890	419	348	263	448	545
15	435	172	307	417	305	3400	891	423	348	276	371	636
16	297	327	292	417	309	3150	702	423	348	340	318	522
17	267	446	290	415	267	1310	518	424	348	389	296	384
18	267	441	291	382	240	461	521	384	348	329	299	385
19	331	437	249	296	230	432	521	366	326	279	315	389
20	466	474	226	306	227	459	461	368	286	244	315	390
21	463	454	328	343	272	761	395	368	287	244	315	472
22	458	407	430	495	325	470	396	364	286	244	287	576
23	329	370	344	451	459	470	400	363	287	244	259	576
24	259	345	268	603	702	478	338	1130	286	254	291	481
25	227	328	333	1100	1090	1390	276	2160	242	355	379	401
26	217	312	387	2160	1510	1540	324	2290	208	350	380	384
27	343	298	384	2260	2120	974	564	2500	210	311	2000	347
28	396	288	297	2060	2500	851	559	2520	220	261	2670	572
29	395	288	239	1880	---	641	494	1580	240	248	1890	1570
30	390	284	245	1040	---	482	428	888	325	291	788	1560
31	310	---	328	720	---	483	---	773	---	306	546	---
TOTAL	13202	8245	11600	29109	15282	51583	18375	22435	11478	9160	16676	24282
MEAN	426	275	374	939	546	1664	613	724	383	295	538	809
MAX	580	474	933	2260	2500	3610	1010	2520	692	395	2670	2700
MIN	217	168	226	296	227	169	276	339	208	244	249	325
MEAN #	204	205	366	939	674	1755	755	750	387	282	542	816
CFSM#	.60	.60	1.08	2.77	1.99	5.18	2.23	2.21	1.14	.83	1.60	2.41
IN.#	.69	.67	1.25	3.19	2.07	5.97	2.49	2.55	1.27	.96	1.84	2.69
CAL YR 1978 TOTAL	221191											
MEAN 606												
MAX 3730												
MIN 168												
WTR YR 1979 TOTAL	231427											
MEAN 634												
MAX 3610												
MIN 168												
MEAN# 606												
CFSM# 640												
IN.# 1.79												
IN.# 24.23												
IN.# 25.64												

Adjusted for change in contents in Foster Joseph Sayers Lake.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547500 BALD EAGLE CREEK AT BLANCHARD, PA--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1956 to September 1957, August 1967 to current year.

REMARKS.--The thermograph at this site records continuous water temperature of the outflow from Foster Joseph Sayers Reservoir.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 33.0°C June 20, 1957; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 20.5°C Aug. 8; minimum, 0.0°C on several days during December, January and February.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	12.0	11.0	5.5	5.0	.5	.5	.5	.5	1.5	1.0
2	---	---	12.0	10.5	5.0	5.0	.5	.5	1.0	.0	3.0	1.5
3	---	---	11.5	10.5	5.0	5.0	.0	.0	.5	.0	3.0	3.0
4	---	---	11.0	10.5	5.5	5.0	.0	.0	.0	.0	3.0	2.0
5	---	---	11.0	10.0	5.5	5.0	.0	.0	.0	.0	2.0	1.5
6	---	---	11.0	10.5	5.0	4.5	.0	.0	.5	.0	4.5	1.0
7	15.5	15.0	10.5	10.5	5.0	4.5	.0	.0	.0	.0	2.0	1.5
8	15.0	14.5	10.5	10.0	5.0	5.0	.0	.0	1.0	.5	3.0	2.0
9	15.0	14.0	---	---	5.0	4.0	.5	.0	1.5	.5	3.5	3.0
10	15.0	14.5	10.0	9.5	4.5	4.0	.5	.5	1.0	.5	3.5	3.0
11	14.5	14.0	10.0	9.5	4.0	3.5	.5	.0	1.0	.5	3.5	3.5
12	15.5	14.5	9.5	9.0	4.0	3.5	1.0	.5	.5	.5	3.5	3.5
13	15.0	15.0	9.0	9.0	3.5	3.0	.5	.5	1.0	.5	4.0	3.5
14	15.0	14.0	9.5	9.0	3.5	3.0	.5	.5	.5	.5	4.0	3.5
15	14.5	14.0	---	---	3.5	3.0	.5	.0	.5	.5	3.5	3.5
16	14.0	14.0	---	---	3.5	3.0	1.0	.5	1.5	.5	4.0	3.0
17	14.5	13.5	---	---	3.5	3.0	1.0	.5	1.0	.5	4.0	3.5
18	13.5	13.0	9.5	9.0	3.5	3.0	1.0	.5	.5	.0	4.5	3.5
19	13.5	13.0	9.0	8.5	3.5	3.0	.5	.0	1.0	.5	4.5	3.5
20	13.5	13.0	9.0	8.5	3.0	3.0	.0	.0	1.5	.5	4.5	4.0
21	14.0	13.0	9.0	8.5	2.0	2.0	.0	.0	1.0	.5	5.0	4.0
22	14.0	13.0	8.5	8.0	1.5	1.0	.0	.0	1.0	.5	7.0	4.5
23	13.5	13.0	8.0	7.0	1.5	1.0	.0	.0	1.0	1.0	8.5	6.0
24	13.5	12.0	8.0	7.0	1.5	1.0	.0	.0	1.5	1.0	8.0	6.5
25	13.5	12.0	7.0	6.5	1.5	1.0	.0	.0	1.5	1.0	6.5	6.0
26	13.0	13.0	6.5	6.0	1.5	1.5	.0	.0	1.5	1.0	7.0	6.0
27	13.5	13.0	6.0	6.0	1.5	1.0	.0	.0	1.0	.5	6.5	6.0
28	13.5	12.0	6.0	5.5	1.0	.5	.0	.0	1.0	.5	7.0	6.0
29	13.0	12.0	5.5	5.5	.5	.0	.0	.0	---	---	6.5	6.5
30	12.0	11.5	6.0	5.5	.5	.0	.0	.0	---	---	6.5	6.0
31	13.0	11.5	---	---	.5	.5	.5	.0	---	---	6.5	6.0
MONTH	15.5	11.5	12.0	5.5	5.5	.0	1.0	.0	1.5	.0	8.5	1.0

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547500 BALD EAGLE CREEK AT BLANCHARD, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547700 MARSH CREEK AT BLANCHARD, PA

LOCATION.--Lat 41°03'34", long 77°36'22", Centre County, Hydrologic Unit 02050204, on right bank 20 ft (6 m) downstream from highway bridge, 0.5 mi (0.8 km) southwest of Blanchard; 0.6 mi (1.0 km) downstream from bridge on U.S. Highway 222, and 0.6 mi (1.0 km) upstream from mouth.

DRAINAGE AREA.--44.1 mi² (114.2 km²).

PERIOD OF RECORD.--October 1955 to current year. Monthly discharge only for October 1955, published in WSP 1722.

REVISED RECORDS.--WDR PA-72-1: 1971 (runoff in cubic feet per second per square mile and in inches).

GAGE.--Water-stage recorder. Datum of gage is 586.16 ft (178.662 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 31, 1956, nonrecording gage at site 20 ft (6 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--24 years, 58.4 ft³/s (1.654 m³/s), 17.93 in/yr (455 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft³/s (140 m³/s) June 23, 1972, gage-height, 6.98 ft (2.128 m), from floodmark in gage well, 7.96 ft (2.426 m) outside, from floodmarks, from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of peak flow; no flow Aug. 30, 31, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 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)
Jan. 2	0900	910 25.8	3.90 1.189	May 24	1200	684 19.4	3.60 1.097
Jan. 24	2300	1,150 32.6	4.17 1.271	Aug. 27	0330	*2,210 62.6	*5.23 1.594
Feb. 26	0400	1,200 34.0	4.22 1.286	Sept. 6	0700	582 16.5	3.44 1.049
Mar. 6	0130	1,320 37.4	4.40 1.341				

Minimum discharge, 5.5 ft³/s (0.156 m³/s) July 23, Aug. 6, 7, 8, gage height, 1.74 ft (0.530 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	11	17	100	45	224	73	32	95	19	9.4	65
2	6.7	11	16	715	35	279	121	31	79	14	11	57
3	6.7	11	18	411	27	262	138	35	65	12	10	78
4	8.8	11	38	224	21	426	157	40	55	14	7.0	52
5	8.2	10	36	144	18	1100	178	35	49	13	6.3	47
6	7.7	10	35	105	17	930	167	34	46	10	6.0	376
7	6.7	11	32	98	16	499	155	33	38	8.9	5.6	249
8	6.7	11	38	110	15	345	145	33	40	8.6	74	174
9	6.7	10	155	75	14	261	167	31	50	8.0	17	128
10	6.2	9.4	117	58	13	229	185	31	34	8.8	14	98
11	6.2	9.4	86	47	13	211	162	31	37	8.7	29	80
12	6.7	9.4	70	43	12	174	175	36	30	7.7	61	65
13	7.7	9.4	60	40	12	140	179	34	26	7.6	46	56
14	14	9.4	48	52	11	129	198	33	23	7.5	33	70
15	12	9.4	40	40	11	110	179	33	21	7.4	25	58
16	9.4	10	35	32	10	95	153	35	20	10	19	44
17	9.4	11	32	28	10	85	129	29	19	8.1	16	38
18	8.2	21	26	25	9.8	77	106	27	18	6.8	19	34
19	8.2	14	22	22	9.5	70	89	28	17	6.4	19	35
20	8.8	13	21	21	9.2	64	75	27	15	6.0	14	30
21	8.8	13	45	47	9.2	60	65	25	15	6.0	12	46
22	8.2	13	35	61	10	56	58	25	15	5.9	11	74
23	8.8	14	32	30	15	54	51	26	14	5.8	9.8	47
24	11	19	29	262	50	79	45	377	13	7.9	33	39
25	11	16	34	586	100	228	41	365	12	7.5	35	35
26	11	15	27	258	673	169	40	257	11	7.5	22	33
27	16	15	23	172	305	135	50	210	10	6.4	792	30
28	14	18	19	129	230	110	42	189	9.9	5.9	211	85
29	12	19	18	97	---	101	36	168	11	9.2	146	301
30	11	18	21	77	---	90	34	140	20	9.8	109	209
31	11	---	26	60	---	80	---	120	---	6.7	81	---
TOTAL	284.5	381.4	1251	4169	1720.7	6872	3393	2550	907.9	271.1	1903.1	2733
MEAN	9.18	12.7	40.4	134	61.5	222	113	82.3	30.3	8.75	61.4	91.1
MAX	16	21	155	715	673	1100	198	377	95	19	792	376
MIN	6.2	9.4	16	21	9.2	54	34	25	9.9	5.8	5.6	30
CFSM	.21	.29	.92	3.04	1.40	5.03	2.56	1.87	.69	.20	1.39	2.07
IN.	.24	.32	1.06	3.52	1.45	5.80	2.86	2.15	.77	.23	1.61	2.31

CAL YR 1978 TOTAL 25081.1 MEAN 68.7 MAX 735 MIN 5.8 CFSM 1.56 IN 21.16
WTR YR 1979 TOTAL 26436.7 MEAN 72.4 MAX 1100 MIN 5.6 CFSM 1.64 IN 22.30

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547800 SOUTH FORK BEECH CREEK NEAR SNOW SHOE, PA

LOCATION.--Lat 41°01'30", long 77°54'15", Centre County, Hydrologic Unit 02050204, on right bank at downstream side of bridge on State Highway 144, 0.6 mi (1.0 km) downstream from Horsehead Run, 2.5 mi (4.0 km) east of Snow Shoe, and 4.2 mi (6.8 km) upstream from confluence with North Fork Beech Creek.

DRAINAGE AREA.--12.2 mi² (31.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum, water years 1959-69. May 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (475 m) from topographic map. October 1958 to May 1970, crest-stage gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--10 years, 24.0 ft³/s (0.680 m³/s), 26.75 in/yr (679 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft³/s (33.1 m³/s) June 23, 1972, gage height, 5.36 ft (1.634 m), from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of contracted-opening measurement at gage height, 4.94 ft (1.506 m); minimum, 1.7 ft³/s (0.048 m³/s) Oct. 9, 10, 1970; minimum gage height, 0.83 ft (0.253 m) Oct. 9, 10, 1970, Sept. 4, 5, 1971, Sept. 8, 9, 10, 13, 14, 15, 25, 26, 1976, Sept. 11, 12, 13, 15, 16, 1977, July 19, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 120 ft³/s (3.40 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	0815	221 6.26	2.76 0.841	May 24	1130	170 4.81	2.47 0.753
Jan. 25	0130	160 4.53	2.42 0.738	Sept. 6	0700	267 7.56	2.91 0.887
Mar. 5	2400	*528 15.0	*3.66 1.116				

Minimum discharge, 2.9 ft³/s (0.082 m³/s), Oct. 10, 11, 12; minimum gage height, 0.83 ft (0.253 m) July 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	4.1	8.2	48	25	44	31	20	33	22	7.9	11
2	3.1	4.0	7.9	178	22	48	47	19	29	15	6.4	11
3	3.1	3.9	7.9	128	20	48	46	20	26	12	5.8	17
4	3.8	3.9	9.0	80	18	90	48	22	23	12	5.0	12
5	3.4	3.8	14	58	17	406	52	20	22	10	4.6	12
6	3.3	3.8	12	48	16	400	48	19	21	9.4	4.3	154
7	3.1	3.9	12	44	14	213	44	18	19	8.3	4.3	89
8	3.1	4.2	14	44	13	144	40	17	19	7.6	22	60
9	3.0	3.9	40	34	12	114	46	17	22	7.2	10	44
10	2.9	3.8	36	28	12	107	45	16	27	7.0	12	34
11	3.0	3.7	31	24	11	96	42	16	32	7.5	21	29
12	2.9	3.7	28	21	11	75	49	15	29	6.9	31	25
13	3.3	3.8	25	19	10	60	51	15	26	8.6	29	22
14	7.3	3.8	22	20	10	61	54	14	23	6.6	22	27
15	5.5	3.9	19	25	9.6	54	51	14	21	6.2	18	25
16	4.6	4.3	18	21	9.3	46	45	14	19	5.8	15	19
17	4.8	5.3	17	18	9.1	42	41	13	17	5.8	13	17
18	4.3	10	15	16	8.9	40	36	12	17	5.3	14	15
19	4.3	7.8	13	14	8.8	37	33	12	16	4.9	15	15
20	4.1	6.6	12	24	8.7	34	30	12	14	4.8	13	13
21	4.0	6.2	18	22	8.9	32	27	12	13	4.7	11	15
22	3.9	5.9	15	15	10	29	26	12	12	4.4	9.0	21
23	3.9	6.5	13	14	12	28	24	13	12	5.5	8.2	16
24	3.9	9.3	12	48	17	36	22	95	12	6.0	9.4	13
25	3.9	8.5	14	119	25	78	21	88	10	5.6	11	12
26	4.3	7.8	12	72	63	60	21	74	8.7	6.0	10	11
27	6.1	7.7	11	54	52	52	26	62	8.2	4.9	15	10
28	5.0	8.1	9.8	46	45	44	24	55	7.9	4.5	12	23
29	4.5	8.0	9.2	38	---	42	22	46	10	7.5	11	75
30	4.2	8.0	8.6	32	---	39	21	41	16	7.2	14	53
31	4.1	---	8.3	28	---	34	---	37	---	5.3	13	---
TOTAL	123.8	168.2	491.9	1380	498.3	2633	1113	860	564.8	234.5	396.9	900
MEAN	3.99	5.61	15.9	44.5	17.8	84.9	37.1	27.7	18.8	7.56	12.8	30.0
MAX	7.3	10	40	178	63	406	54	95	33	22	31	154
MIN	2.9	3.7	7.9	14	8.7	28	21	12	7.9	4.4	4.3	10
CFSM	.33	.46	1.30	3.65	1.46	6.96	3.04	2.27	1.54	.62	1.05	2.46
IN.	.38	.51	1.50	4.21	1.52	8.03	3.39	2.62	1.72	.71	1.21	2.74

CAL YR 1978 TOTAL 8823.6 MEAN 24.2 MAX 219 MIN 2.9 CFSM 1.98 IN 26.90
WTR YR 1979 TOTAL 9364.4 MEAN 25.7 MAX 406 MIN 2.9 CFSM 2.11 IN 28.55

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547800 SOUTH FORK BEECH CREEK NEAR SNOW SHOE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1975 to current year.

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
JUN 11...	1145	53	50	6.4	14.0	.0	.0	2	11	--	--
JUL 31...	1100	5.3	75	6.3	21.0	.0	.0	11	11	48	.07

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G AS FE)
JUN 11...	--	--	--	--	--	--	330	290	40	--
JUL 31...	.69	0	<10	<10	10	<10	250	150	100	33000

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
JUN 11...	--	120	10	110	--	--	--	--	8	1.2
JUL 31...	10	200	10	190	410	.00	0	30	1	.01

BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO JULY 1979

DATE TIME	JUL 31, 79 1100
TOTAL COUNT	12
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.8
...FAMILY	3.1
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....TIPULIDAE	
.....TIPULA	1
...EPHEMEROPTERA	
....BAETIDAE	
.....BAETIS	2
....EPHEMERELLIDAE	
.....EPHEMERELLA	1
....SIPHONURIDAE	
.....AMELETUS	1
...ODONATA	
....CORDULEGASTRIDAE	
.....CORDULEGASTER	1
...TRICHOPTERA	
....PHRYGANEIDAE	
.....OLIGOSTOMIS	1
....HYDROPSYCHIDAE	
.....HYDROPSYCHE	2
...DIPTERA	
....CHIRONOMIDAE	1
....TRICHOPTERA	
....PHILOPOTAMIDAE	
....DOLOPHILODES	2

WEST BRANCH SUSQUEHANNA RIVER BASIN
01547950 BEECH CREEK AT MONUMENT, PA

LOCATION.--Lat 41°06'42", long 77°42'09", Centre County, Hydrologic Unit 02050204, on right bank 800 ft (244 m) downstream from bridge at Monument, 850 ft (259 m) downstream from Monument Run, 0.6 mi (1.0 km) upstream from Twin Run, and 8.7 mi (14.0 km) upstream from mouth.

DRAINAGE AREA.--152 mi² (394 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (229 m) from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--11 years, 292 ft³/s (8.269 m³/s), 26.07 in/yr (662 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,740 ft³/s (276 m³/s) June 23, 1972, gage height, 15.22 ft (4.639 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of slope-area measurement of peak flow; minimum, 17 ft³/s (0.48 m³/s) Sept. 4, 5, 1971; minimum gage height, 5.11 ft (1.558 m) Sept. 23, 24, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 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. 2	1615	1,980 56.1	8.91 2.716	Mar. 6	0315	*4,370 124	*11.12 3.389
Jan. 25	0330	1,840 52.1	8.77 2.673				

Minimum discharge, 34 ft³/s (0.963 m³/s) Oct. 11, 12; minimum gage height, 5.55 ft (1.692 m), July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	52	82	140	390	660	335	195	466	148	84	125
2	39	51	79	1720	347	758	436	185	418	146	86	119
3	38	51	80	1580	307	790	471	190	368	130	90	136
4	42	50	117	1120	260	1030	497	225	327	113	84	117
5	44	49	132	840	230	3290	598	200	296	115	78	107
6	40	48	129	673	210	3900	569	185	281	105	74	930
7	37	48	127	598	190	2560	524	180	246	96	70	770
8	37	50	134	604	175	1830	476	180	252	88	235	586
9	37	48	313	476	165	1480	569	170	381	82	130	446
10	36	46	328	418	155	1340	629	160	300	79	119	356
11	35	45	298	340	145	1200	575	155	373	80	197	296
12	35	44	266	290	135	993	635	167	319	76	252	252
13	37	44	234	250	125	804	660	155	285	72	235	219
14	62	45	207	280	117	758	673	145	256	70	209	246
15	62	45	180	250	110	660	654	140	225	68	188	252
16	50	47	163	225	105	575	581	147	206	80	166	194
17	48	52	154	205	100	508	524	134	188	74	143	169
18	46	74	138	190	96	461	461	120	174	70	146	153
19	44	69	125	175	94	427	404	125	161	66	151	148
20	44	63	117	170	92	395	360	117	143	62	123	134
21	43	62	168	290	92	368	327	110	132	60	109	143
22	43	62	145	274	100	339	296	115	130	58	102	219
23	42	65	130	232	140	319	266	120	125	56	95	166
24	43	84	120	575	220	347	249	623	115	68	103	141
25	42	82	130	1660	350	706	232	777	109	66	123	132
26	44	78	115	1260	900	635	222	751	102	72	103	127
27	69	79	106	944	846	569	263	673	95	78	158	121
28	60	84	99	764	712	486	256	666	91	72	136	209
29	56	85	93	623	---	451	229	617	91	70	136	784
30	53	84	88	513	---	408	204	581	127	90	164	686
31	52	---	100	441	---	368	---	529	---	80	136	---
TOTAL	1399	1786	4697	18120	6908	29415	13175	8837	6782	2590	4225	8483
MEAN	45.1	59.5	152	585	247	949	439	285	226	83.5	136	283
MAX	69	85	328	1720	900	3900	673	777	466	148	252	930
MIN	35	44	79	140	92	319	204	110	91	56	70	107
CFSM	.30	.39	1.00	3.85	1.63	6.24	2.89	1.88	1.49	.55	.90	1.86
IN.	.34	.44	1.15	4.43	1.69	7.20	3.22	2.16	1.66	.63	1.03	2.08

CAL YR 1978	TOTAL	100762	MEAN 276	MAX 2260	MIN 35	CFSM 1.82	IN 24.66
WTR YR 1979	TOTAL	106417	MEAN 292	MAX 3900	MIN 35	CFSM 1.92	IN 26.04

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547950 BEECH CREEK AT MONUMENT, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1968 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1968 to current year.

pH: December 1968 to current year.

WATER TEMPERATURES: December 1968 to current year.

DISSOLVED OXYGEN: October 1975 to September 1977.

INSTRUMENTATION.--Water-quality monitor since December 1968.

REMARKS.--Interruptions in the record were due to malfunctions of the equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (Water years 1969-1975, 1979): Maximum recorded, 522 micromhos Sept. 16, 1978; minimum, 71 micromhos Mar. 5, 1979.

pH (Water years 1969, 1970, 1973-1976, 1979): Maximum, 7.3 units Dec. 17, 1969; minimum, 2.9 units June 29, 30, 1969.

WATER TEMPERATURES (Water years 1969-1976, 1978, 1979): Maximum, 29.0°C July 23, 1978; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 492 micromhos Oct. 12, minimum, 71 micromhos Mar. 5.

pH: Maximum, 4.7 units Jan. 5, Mar. 3-5; minimum, 3.6 units on several days in Oct., July and August.

WATER TEMPERATURES: Maximum, 26.5°C Aug. 1, minimum, 0.0°C on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS/CM at 25° C), WATER YEAR OCTOBER 1978 to SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	436	424	431	355	352	353	241	235	237	---	---	---
2	452	435	447	358	354	356	237	231	233	---	---	---
3	456	449	453	360	357	358	235	220	230	86	74	81
4	455	427	440	363	360	362	223	213	219	92	83	86
5	470	430	458	368	363	365	227	185	208	98	91	94
6	469	447	455	372	367	369	186	166	175	108	98	103
7	466	450	456	374	368	372	167	160	164	122	107	112
8	470	464	468	388	369	378	161	155	159	140	123	134
9	474	468	471	392	385	389	---	---	---	135	126	131
10	482	473	478	387	383	385	---	---	---	149	134	143
11	488	480	485	393	387	391	---	---	---	168	148	156
12	492	483	487	398	389	394	---	---	---	169	157	160
13	486	452	476	403	397	399	---	---	---	164	160	162
14	477	402	431	406	403	405	---	---	---	186	161	169
15	480	378	437	409	402	407	137	126	131	199	176	187
16	382	372	376	408	395	399	143	133	139	188	172	181
17	418	382	399	418	370	397	155	142	149	187	180	182
18	428	418	424	390	361	374	159	154	157	196	182	186
19	419	413	416	416	317	360	166	159	162	208	177	194
20	422	415	420	318	305	309	174	165	169	218	184	195
21	425	420	423	310	301	307	267	162	194	191	181	186
22	426	420	424	309	304	307	202	181	189	189	184	187
23	428	422	425	304	279	295	183	178	181	192	187	189
24	433	426	430	295	279	289	179	165	175	199	139	179
25	437	432	435	284	258	272	171	159	164	145	94	109
26	435	405	428	258	248	253	176	167	172	98	92	95
27	425	380	398	249	233	241	180	174	177	106	96	101
28	430	360	387	237	230	234	193	178	182	111	105	111
29	360	353	356	254	237	246	---	---	---	127	113	121
30	359	355	357	253	240	245	230	179	198	136	126	131
31	356	351	353	---	---	---	198	176	185	150	135	144
MONTH	492	351	430	418	230	340	267	126	181	218	74	145

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547950 BEECH CREEK AT MONUMENT, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	157	149	154	135	126	130	166	160	164	190	186	187
2	166	155	159	143	136	139	177	161	170	200	185	188
3	179	155	167	143	132	136	170	152	159	189	179	185
4	178	172	176	146	135	141	158	138	147	201	180	190
5	199	177	184	134	71	92	149	134	141	197	184	186
6	205	184	194	84	72	78	137	131	133	184	181	183
7	212	185	195	98	83	91	132	128	130	195	180	183
8	206	188	194	111	97	103	136	132	133	185	181	183
9	218	197	204	124	108	113	162	135	144	187	182	184
10	233	197	215	125	121	123	164	141	148	189	184	186
11	243	216	229	122	115	118	147	135	139	193	185	189
12	238	213	226	123	115	118	159	132	141	193	189	191
13	224	209	216	131	122	125	150	136	139	198	192	194
14	227	213	220	135	130	133	137	133	135	202	198	199
15	223	216	219	134	128	131	137	132	135	195	191	194
16	225	218	221	136	128	132	138	134	136	234	193	209
17	240	211	221	141	136	138	143	137	140	216	204	210
18	244	220	232	144	139	142	147	142	144	220	205	209
19	250	239	243	153	143	145	157	146	152	220	206	211
20	248	242	245	157	145	150	174	153	157	215	210	212
21	246	242	244	153	146	150	176	161	165	214	199	210
22	269	242	250	158	150	154	173	167	169	230	202	215
23	280	252	270	162	158	160	184	172	175	230	209	217
24	252	231	242	177	160	165	204	179	186	220	131	182
25	232	178	216	200	143	163	204	184	188	131	103	113
26	176	135	150	142	137	138	199	189	191	106	98	102
27	135	121	127	142	137	140	216	190	196	101	96	98
28	129	120	123	147	139	143	224	190	201	105	97	101
29	---	---	---	156	144	148	190	187	188	101	97	99
30	---	---	---	159	151	154	206	187	190	108	100	103
31	---	---	---	161	155	158	---	---	---	112	103	108
MONTH	280	120	205	200	71	134	224	128	158	234	96	175
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	114	107	110	334	248	289	341	299	325	253	246	249
2	119	113	116	261	241	251	350	303	326	255	244	249
3	124	117	120	271	256	263	347	307	325	274	240	257
4	130	122	126	272	248	262	348	320	327	264	249	254
5	144	129	137	298	263	285	331	323	326	260	242	255
6	157	136	148	286	281	283	331	319	329	240	125	159
7	156	146	151	297	286	290	334	312	323	---	---	---
8	160	137	154	305	297	299	365	218	284	---	---	---
9	317	138	176	311	305	307	253	235	242	---	---	---
10	155	148	151	313	305	309	249	221	241	---	---	---
11	244	142	161	325	311	322	289	224	244	---	---	---
12	155	144	148	334	324	328	273	201	221	---	---	---
13	154	141	149	352	333	340	219	183	190	---	---	---
14	158	150	154	351	299	331	186	179	181	204	178	190
15	165	158	162	333	301	321	184	178	181	217	185	196
16	172	165	168	335	278	296	197	181	188	202	182	190
17	180	171	175	317	294	305	208	192	199	214	197	204
18	189	180	183	322	297	312	215	197	204	221	208	214
19	211	189	201	337	321	328	237	215	230	231	210	220
20	211	200	205	339	331	335	243	228	235	229	215	221
21	225	208	215	343	335	339	264	240	254	247	217	225
22	229	218	224	352	340	344	278	261	268	306	232	276
23	238	230	235	352	331	349	279	273	276	272	257	263
24	239	235	236	365	303	342	286	274	279	286	262	275
25	248	238	243	365	349	356	290	267	278	293	285	290
26	272	244	252	360	340	352	281	233	276	300	292	296
27	276	260	269	352	342	349	280	208	246	307	297	302
28	275	264	268	355	351	352	276	247	254	307	237	281
29	277	241	269	353	309	336	267	238	251	285	140	183
30	307	241	291	381	344	363	295	254	269	---	---	---
31	---	---	---	347	340	343	253	246	250	---	---	---
MONTH	317	107	187	381	241	319	365	178	259	307	125	239

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547950 BEECH CREEK AT MONUMENT, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	3.7	3.6	3.7	3.8	3.8	3.8	4.1	4.1	4.1	---	---	---
2	3.7	3.6	3.7	3.8	3.8	3.8	4.1	4.1	4.1	---	---	---
3	3.7	3.7	3.7	3.8	3.8	3.8	4.1	4.1	4.1	---	---	---
4	3.7	3.6	3.7	3.8	3.8	3.8	4.1	4.1	4.1	4.6	4.4	4.5
5	3.7	3.7	3.7	3.8	3.8	3.8	4.2	4.1	4.1	4.7	4.4	4.5
6	3.7	3.7	3.7	3.8	3.7	3.8	4.2	4.2	4.2	4.6	4.5	4.6
7	3.7	3.6	3.7	3.8	3.7	3.8	4.3	4.2	4.2	4.6	4.5	4.5
8	3.7	3.7	3.7	3.8	3.7	3.7	4.2	4.2	4.2	4.5	4.4	4.5
9	3.7	3.7	3.7	3.7	3.7	3.7	---	---	---	4.5	4.5	4.5
10	3.7	3.7	3.7	3.8	3.7	3.7	---	---	---	4.5	4.4	4.4
11	3.7	3.7	3.7	3.8	3.7	3.7	---	---	---	4.5	4.4	4.5
12	3.7	3.6	3.7	3.8	3.7	3.7	---	---	---	4.5	4.4	4.4
13	3.7	3.7	3.7	3.7	3.7	3.7	---	---	---	4.4	4.4	4.4
14	3.8	3.7	3.7	3.7	3.7	3.7	---	---	---	4.4	4.3	4.3
15	3.8	3.6	3.7	3.7	3.7	3.7	4.5	4.5	4.5	4.4	4.3	4.3
16	3.8	3.8	3.8	3.7	3.7	3.7	4.5	4.4	4.5	4.4	4.3	4.3
17	3.8	3.8	3.8	3.8	3.7	3.7	4.4	4.4	4.4	4.4	4.3	4.3
18	3.8	3.8	3.8	3.8	3.8	3.8	4.4	4.4	4.4	4.3	4.3	4.3
19	3.8	3.8	3.8	3.9	3.8	3.8	4.4	4.4	4.4	---	---	---
20	3.8	3.8	3.8	3.9	3.9	3.9	4.4	4.3	4.4	4.4	4.3	4.4
21	3.8	3.8	3.8	3.9	3.8	3.9	4.4	4.2	4.3	4.4	4.3	4.4
22	3.8	3.8	3.8	3.9	3.9	3.9	4.4	4.3	4.3	4.3	4.3	4.3
23	3.8	3.8	3.8	4.0	3.8	3.9	4.3	4.3	4.3	4.3	4.2	4.3
24	3.8	3.7	3.7	4.0	3.9	3.9	4.3	4.3	4.3	4.4	4.2	4.3
25	3.7	3.7	3.7	4.0	3.9	4.0	4.4	4.3	4.3	4.6	4.4	4.5
26	3.7	3.7	3.7	4.0	4.0	4.0	4.4	4.3	4.3	4.6	4.5	4.5
27	3.8	3.7	3.7	4.1	4.0	4.0	4.3	4.3	4.3	4.5	4.5	4.5
28	3.8	3.7	3.7	4.1	4.0	4.1	4.3	4.3	4.3	4.5	4.5	4.5
29	3.8	3.8	3.8	4.1	4.0	4.0	---	---	---	4.5	4.4	4.5
30	3.8	3.8	3.8	4.1	4.0	4.1	4.3	4.2	4.2	4.4	4.4	4.4
31	3.9	3.8	3.8	---	---	---	4.3	4.2	4.2	4.4	4.4	4.4
MONTH	3.9	3.6	3.7	4.1	3.7	3.8	4.5	4.1	4.3	4.7	4.2	4.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	4.4	4.3	4.4	4.6	4.5	4.6	4.2	4.2	4.2	4.2	4.1	4.1
2	4.4	4.3	4.4	4.6	4.5	4.6	4.3	4.2	4.2	4.2	4.1	4.1
3	4.4	4.3	4.3	4.7	4.5	4.6	4.3	4.3	4.3	4.2	4.1	4.1
4	4.3	4.3	4.3	4.7	4.5	4.6	4.4	4.3	4.3	4.2	4.1	4.1
5	4.3	4.2	4.3	4.7	4.6	4.7	4.4	4.3	4.4	4.2	4.1	4.1
6	4.3	4.2	4.3	4.6	4.5	4.6	4.4	4.3	4.3	4.2	4.1	4.1
7	4.3	4.2	4.2	4.5	4.4	4.4	4.4	4.3	4.3	4.2	4.1	4.1
8	4.2	4.2	4.2	4.5	4.4	4.4	4.4	4.4	4.4	4.2	4.1	4.1
9	4.4	4.2	4.3	4.4	4.3	4.4	4.4	4.3	4.4	4.2	4.1	4.1
10	4.6	4.2	4.4	4.3	4.2	4.3	4.4	4.3	4.4	4.2	4.1	4.1
11	4.3	4.2	4.2	4.3	4.3	4.3	4.4	4.3	4.4	4.1	4.1	4.1
12	4.2	4.2	4.2	4.3	4.3	4.3	4.5	4.3	4.4	4.1	4.1	4.1
13	4.2	4.2	4.2	4.3	4.3	4.3	4.5	4.4	4.4	4.1	4.1	4.1
14	4.2	4.2	4.2	4.3	4.2	4.3	4.4	4.4	4.4	4.1	4.1	4.1
15	4.2	4.2	4.2	4.3	4.2	4.2	4.4	4.4	4.4	4.1	4.0	4.1
16	4.2	4.1	4.2	4.2	4.2	4.2	4.4	4.3	4.4	4.1	4.0	4.1
17	4.2	4.2	4.2	4.2	4.1	4.2	4.4	4.3	4.3	4.1	4.0	4.1
18	4.2	4.2	4.2	4.2	4.1	4.1	4.4	4.3	4.3	4.1	4.0	4.1
19	4.2	4.1	4.1	4.2	4.1	4.1	4.3	4.2	4.3	4.1	4.0	4.1
20	4.1	4.1	4.1	4.2	4.1	4.1	4.3	4.2	4.3	4.1	4.0	4.0
21	4.1	4.1	4.1	4.1	4.1	4.1	4.3	4.2	4.2	4.1	4.0	4.0
22	4.1	4.0	4.1	4.3	4.1	4.1	4.2	4.2	4.2	4.1	4.0	4.0
23	4.2	4.0	4.1	4.3	4.2	4.3	4.2	4.2	4.2	4.1	4.0	4.0
24	4.2	4.2	4.2	4.3	4.2	4.3	4.2	4.1	4.1	4.4	4.1	4.2
25	4.4	4.2	4.3	4.5	4.2	4.4	4.2	4.1	4.1	4.5	4.4	4.4
26	4.6	4.4	4.5	4.5	4.5	4.5	4.1	4.1	4.1	4.6	4.5	4.5
27	4.5	4.5	4.5	4.5	4.4	4.4	4.1	4.1	4.1	4.6	4.5	4.6
28	4.5	4.5	4.5	4.4	4.4	4.4	4.2	4.1	4.1	4.6	4.5	4.5
29	---	---	---	4.4	4.3	4.4	4.2	4.1	4.1	4.5	4.5	4.5
30	---	---	---	4.4	4.2	4.3	4.2	4.1	4.1	4.5	4.4	4.5
31	---	---	---	4.2	4.2	4.2	---	---	---	4.5	4.4	4.4
MONTH	4.6	4.0	4.3	4.7	4.1	4.4	4.5	4.1	4.3	4.6	4.0	4.2

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547950 BEECH CREEK AT MONUMENT, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	4.5	4.4	4.4	3.9	3.8	3.8	3.7	3.7	3.7	3.9	3.9	3.9
2	4.4	4.3	4.4	3.9	3.9	3.9	3.7	3.7	3.7	3.9	3.9	3.9
3	4.4	4.3	4.4	3.9	3.9	3.9	3.7	3.7	3.7	3.9	3.8	3.9
4	4.4	4.3	4.3	3.9	3.9	3.9	3.7	3.7	3.7	3.9	3.9	3.9
5	4.3	4.2	4.3	3.9	3.8	3.9	3.7	3.7	3.7	3.9	3.9	3.9
6	4.3	4.2	4.3	3.9	3.8	3.9	3.7	3.7	3.7	4.2	3.9	4.1
7	4.3	4.2	4.2	3.9	3.8	3.8	3.7	3.7	3.7	---	---	---
8	4.2	4.2	4.2	3.9	3.8	3.8	4.2	3.6	3.9	---	---	---
9	4.5	4.1	4.3	3.8	3.8	3.8	4.1	3.9	4.0	---	---	---
10	4.3	4.2	4.3	3.8	3.8	3.8	3.9	3.9	3.9	---	---	---
11	4.3	4.2	4.3	3.8	3.8	3.8	3.9	3.9	3.9	---	---	---
12	4.3	4.2	4.3	3.8	3.7	3.8	4.1	3.9	4.0	---	---	---
13	4.3	4.1	4.2	3.8	3.7	3.7	4.1	4.0	4.0	---	---	---
14	4.2	4.1	4.1	3.8	3.7	3.7	4.0	4.0	4.0	4.3	4.0	4.0
15	4.1	4.1	4.1	3.8	3.7	3.8	4.0	4.0	4.0	4.1	4.0	4.1
16	4.1	4.0	4.1	3.8	3.8	3.8	4.0	3.9	4.0	4.1	4.0	4.0
17	4.1	4.0	4.1	3.8	3.8	3.8	4.0	3.9	3.9	4.0	4.0	4.0
18	4.1	4.0	4.0	3.8	3.7	3.8	3.9	3.9	3.9	4.0	3.9	4.0
19	4.0	3.9	4.0	3.8	3.7	3.8	3.9	3.9	3.9	4.0	3.9	3.9
20	4.0	3.9	4.0	3.8	3.7	3.8	3.9	3.9	3.9	3.9	3.9	3.9
21	4.0	4.0	4.0	3.8	3.7	3.7	3.9	3.9	3.9	3.9	3.9	3.9
22	4.0	3.9	3.9	3.8	3.7	3.7	3.9	3.8	3.8	3.9	3.9	3.9
23	3.9	3.9	3.9	3.8	3.7	3.7	3.8	3.8	3.8	4.0	3.9	3.9
24	3.9	3.9	3.9	3.8	3.7	3.7	3.8	3.8	3.8	4.0	3.9	3.9
25	3.9	3.9	3.9	3.7	3.7	3.7	3.8	3.8	3.8	3.9	3.9	3.9
26	3.9	3.9	3.9	3.7	3.7	3.7	3.9	3.8	3.8	3.9	3.9	3.9
27	3.9	3.8	3.9	3.7	3.7	3.7	4.0	3.8	3.9	3.9	3.9	3.9
28	3.9	3.8	3.9	3.7	3.7	3.7	3.9	3.8	3.9	4.1	3.9	3.9
29	3.9	3.8	3.9	3.7	3.7	3.7	3.9	3.9	3.9	4.2	3.9	4.1
30	3.9	3.8	3.8	3.7	3.6	3.6	3.9	3.8	3.9	---	---	---
31	---	---	---	3.7	3.7	3.7	3.9	3.9	3.9	---	---	---
MONTH	4.5	3.8	4.1	3.9	3.6	3.8	4.2	3.6	3.9	4.3	3.8	4.0

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.5	12.5	13.0	8.5	5.0	6.5	2.5	1.0	1.5	---	---	---
2	13.5	11.5	12.5	8.0	4.0	6.0	2.5	.5	1.5	---	---	---
3	14.0	10.0	12.0	8.5	4.5	6.5	3.0	2.0	2.5	4.0	1.5	2.0
4	15.0	11.5	13.0	9.0	5.5	7.0	6.0	3.0	4.5	2.5	1.0	2.0
5	14.0	11.0	12.5	9.0	5.5	7.5	5.0	3.5	4.0	2.5	1.0	1.5
6	13.5	12.0	13.0	9.5	5.5	7.5	4.5	2.5	3.5	3.0	1.5	2.5
7	12.5	10.0	11.5	7.5	7.0	7.5	5.5	3.5	4.5	4.0	2.5	3.0
8	10.5	8.0	9.5	9.0	6.0	7.5	8.0	5.5	7.0	4.0	2.0	3.0
9	11.0	7.5	9.0	7.5	4.0	5.5	---	---	---	2.0	.5	1.0
10	12.0	4.5	9.0	7.0	3.5	5.0	---	---	---	1.5	.5	1.0
11	13.5	9.0	11.0	7.5	3.5	5.5	---	---	---	1.0	.5	.5
12	15.0	10.5	12.5	7.0	5.5	6.0	---	---	---	1.0	.5	.5
13	13.5	12.5	13.0	7.0	6.0	6.5	---	---	---	1.0	.5	1.0
14	12.5	10.0	11.5	9.5	6.5	8.5	---	---	---	3.0	1.0	2.5
15	10.0	7.5	8.5	9.0	6.5	7.5	3.0	1.0	2.0	1.5	.5	1.0
16	8.5	7.0	8.0	8.0	6.5	7.0	4.5	2.0	3.0	1.0	.5	.5
17	10.0	6.5	8.0	8.0	6.0	6.5	4.5	2.5	3.5	1.0	.5	.5
18	7.5	5.0	6.5	8.0	7.0	7.5	3.0	2.0	2.5	1.0	.5	1.0
19	9.0	7.5	8.0	8.0	5.0	6.5	2.5	1.0	1.5	1.0	.0	.5
20	10.5	8.0	9.0	5.5	4.0	5.0	1.5	.5	1.0	.5	.5	.5
21	11.0	6.0	8.5	4.5	3.5	4.0	3.0	1.5	2.5	.5	.5	.5
22	12.0	7.0	9.5	3.5	3.0	3.5	3.0	2.0	2.5	.5	.5	.5
23	10.5	8.5	10.0	4.0	3.5	3.5	2.5	.5	1.5	.5	.5	.5
24	10.0	7.0	8.5	5.0	4.0	4.5	1.5	.0	.5	1.0	.5	1.0
25	9.0	5.0	7.0	4.5	3.5	4.5	1.0	.5	.5	3.0	1.0	2.0
26	11.0	9.0	10.0	3.5	1.5	2.5	1.0	.0	.5	4.5	3.0	4.0
27	10.5	8.0	9.5	1.5	.5	.5	1.0	.0	.5	5.0	4.5	4.5
28	10.0	6.0	8.0	3.0	1.0	2.0	.5	.0	.0	5.0	4.5	5.0
29	9.5	6.0	7.5	2.5	1.0	2.0	---	---	---	4.5	3.5	4.0
30	8.5	4.5	6.5	4.5	2.5	3.5	.5	.0	.0	3.5	3.0	3.5
31	8.5	4.0	6.5	---	---	---	.5	.0	.5	4.0	2.5	3.0
MONTH	15.0	4.0	10.0	9.5	.5	5.5	8.0	.0	2.0	5.0	.0	2.0

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547950 BEECH CREEK AT MONUMENT, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	1.0	1.5	6.0	4.0	5.0	10.5	8.5	9.5	14.0	8.5	11.0
2	2.0	.5	1.0	6.0	4.5	5.0	9.5	8.0	8.5	14.0	7.5	10.5
3	1.0	.5	.5	5.0	3.5	4.5	8.5	7.0	7.5	11.5	9.5	10.0
4	3.0	.5	1.5	5.5	4.0	5.0	6.5	5.0	5.5	11.5	10.0	10.5
5	.5	.0	.5	4.5	3.0	4.0	7.0	5.5	6.0	14.5	8.0	11.0
6	.5	.0	.5	6.0	4.5	5.5	6.5	4.5	5.5	14.0	9.5	12.0
7	.5	.0	.5	7.0	4.5	5.5	7.5	3.5	5.5	17.0	9.5	13.5
8	.5	.5	.5	7.0	4.5	5.5	5.5	4.0	4.5	20.0	13.0	16.5
9	.5	.0	.5	7.5	4.5	6.0	5.0	4.5	5.0	21.0	14.5	17.5
10	.5	.0	.5	6.5	6.0	6.5	9.0	4.5	6.5	18.5	16.0	17.5
11	.5	.0	.5	6.0	3.5	4.5	9.0	5.0	7.0	20.5	15.0	17.5
12	.5	.5	.5	5.0	2.5	4.0	8.0	7.0	7.5	19.5	16.5	17.0
13	.5	.5	.5	6.5	3.0	5.0	8.0	7.0	7.5	17.0	14.5	15.5
14	.5	.5	.5	7.0	5.0	6.0	8.5	6.5	7.5	17.5	12.5	15.0
15	.5	.5	.5	4.5	2.0	3.0	9.0	7.0	8.0	15.5	12.5	14.0
16	.5	.5	.5	5.5	2.0	3.5	8.0	7.0	7.5	17.5	12.0	14.5
17	.5	.5	.5	7.5	3.0	5.5	8.5	6.5	7.5	17.5	10.0	14.0
18	.5	.5	.5	8.5	4.5	6.5	11.0	5.5	8.5	17.5	11.0	14.5
19	.5	.5	.5	8.0	4.0	6.0	11.5	6.0	8.5	16.0	14.5	15.0
20	.5	.5	.5	8.5	4.0	6.5	12.0	6.5	9.0	18.0	13.5	15.5
21	.5	.5	.5	9.0	5.0	7.0	13.0	7.0	10.0	17.0	14.0	15.5
22	.5	.5	.5	10.0	5.0	7.5	14.5	9.5	12.0	17.5	12.0	15.0
23	.5	.5	.5	10.5	6.0	8.5	16.0	10.5	13.0	15.0	13.0	13.5
24	.5	.5	.5	10.0	9.0	9.5	15.0	10.5	12.5	13.5	12.5	13.0
25	.5	.5	.5	9.0	6.0	7.5	16.0	11.5	13.5	12.5	10.5	11.5
26	3.0	.5	1.0	6.0	4.5	5.0	14.5	12.5	13.5	10.5	10.0	10.0
27	4.0	3.0	3.5	6.5	4.0	5.0	12.5	10.0	12.0	10.0	9.0	9.5
28	6.0	2.5	4.5	7.0	3.0	5.0	12.5	8.0	10.5	10.5	9.5	10.0
29	---	---	---	8.5	6.0	7.5	12.0	8.5	10.0	11.5	10.0	10.5
30	---	---	---	10.0	8.0	9.0	13.0	8.0	10.5	12.5	9.5	11.0
31	---	---	---	10.0	8.0	9.5	---	---	---	14.5	11.0	12.5
MONTH	6.0	.0	1.0	10.5	2.0	6.0	16.0	3.5	8.5	21.0	7.5	13.5

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

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548000 BALD EAGLE CREEK AT BEECH CREEK STATION, PA

LOCATION.--Lat 41°03'55", long 77°34'03", Clinton County, Hydrologic Unit 02050204, at downstream end of center pier of highway bridge just downstream from Beech Creek, at Beech Creek Station, and 3 mi (4.8 km) downstream from Foster Joseph Sayers Lake.

DRAINAGE AREA.--559 mi² (1,448 km²).

PERIOD OF RECORD.--July 1910 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1967, published as North Bald Eagle Creek at Beech Creek Station.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1111: 1936(M). WSP 1302: 1911(M), 1912-15, 1918, 1922, 1923-25(M), 1931. WSP 1502: 1919, 1920(M).

GAGE.--Water-stage recorder. Datum of gage is 571.74 ft (174.266 m) Pennsylvania Department of Transportation datum. Prior to Jan. 10, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good. Several observations of water temperature were made during the year. Flow regulated by Foster Joseph Sayers Lake (station 01547480) 3 mi (4.8 km) upstream.

AVERAGE DISCHARGE.--69 years, 808 ft³/s (22.88 m³/s), 19.69 in/yr (500 mm/yr), adjusted for storage since March 1971.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft³/s (725 m³/s) Mar. 18, 1936, gage height, 14.42 ft (4.395 m), from rating curve extended above 12,000 ft³/s (340 m³/s); minimum, 29 ft³/s (0.82 m³/s) Aug. 22, 1930, gage height, 1.21 ft (0.369 m); minimum daily, 80 ft³/s (2.27 m³/s) Jan. 16, 24, 25, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,790 ft³/s (249 m³/s) Mar. 6, gage height, 7.89 ft (2.405 m); minimum, 208 ft³/s (5.89 m³/s) Nov. 11-16, gage height, 1.72 ft (0.524 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	266	364	829	1050	3970	1040	650	1430	604	358	567
2	420	232	354	3950	813	4120	1320	604	1210	574	373	474
3	592	216	354	4180	706	4070	1790	612	1130	526	358	1060
4	592	224	543	3990	671	4360	1930	728	1040	514	301	1440
5	599	240	663	3470	605	6590	2070	680	920	468	297	883
6	586	236	568	3030	563	7720	1710	615	872	344	292	3350
7	574	224	469	2360	579	5560	1230	607	758	315	274	4130
8	568	224	474	2090	573	5490	1150	596	768	306	859	3830
9	561	232	1550	1390	526	5640	1500	584	1300	301	491	2260
10	555	228	1650	989	481	5630	1980	579	975	306	368	1210
11	549	216	1270	857	471	5470	1900	578	993	306	604	1180
12	543	208	971	731	472	5140	2040	573	928	297	950	958
13	543	208	791	713	444	4960	2140	606	792	297	883	738
14	574	208	698	801	411	4890	2070	623	677	297	716	859
15	531	208	592	735	461	4570	2010	613	643	312	592	1040
16	359	325	537	677	472	4200	1700	620	614	388	502	805
17	311	474	519	636	433	2280	1380	590	586	441	441	574
18	306	514	491	617	364	1180	1270	538	570	363	446	555
19	339	508	430	446	375	1090	1190	511	528	312	474	555
20	491	519	394	497	381	1070	1050	508	458	262	441	531
21	480	508	580	597	416	1370	900	502	452	262	414	636
22	474	463	663	765	502	990	848	513	446	257	373	925
23	379	425	561	685	662	962	801	506	441	257	329	805
24	297	435	469	1530	1120	1040	701	2380	430	279	414	669
25	266	420	624	4280	1870	2790	592	3830	378	388	543	549
26	244	399	630	4330	4020	2780	623	3830	324	388	491	520
27	384	384	599	3900	4180	1990	948	3850	320	349	3490	468
28	452	379	480	3410	3970	1680	975	3870	324	279	3220	790
29	430	384	384	3010	---	1410	829	2800	344	288	2410	2950
30	425	374	404	1890	---	1160	743	1890	491	363	1150	2950
31	369	---	508	1380	---	1090	---	1650	---	339	805	---
TOTAL	14054	9881	19584	58765	27591	105262	40430	37636	21142	10982	23659	38261
MEAN	453	329	632	1896	985	3396	1348	1214	705	354	763	1275
MAX	599	519	1650	4330	4180	7720	2140	3870	1430	604	3490	4130
MIN	244	208	354	446	364	962	592	502	320	257	274	468
MEAN [#]	231	259	624	1896	1113	3487	1490	1240	709	341	767	1282
CFSM [#]	.41	.46	1.12	3.39	1.99	6.24	2.67	2.22	1.27	.61	1.37	2.29
IN. [#]	.47	.51	1.29	3.91	2.07	7.19	2.98	2.56	1.42	.70	1.58	2.55
CAL YR 1978 TOTAL	383749			1051	5100	208						
WTR YR 1979 TOTAL	407247			1116	7720	208						
MEAN												
MAX												
MIN												
MEAN [#]												
CFSM [#]												
IN. [#]												

[#] Adjusted for change in contents in Foster Joseph Sayers Lake.

WEST BRANCH SUSQUEHANNA RIVER BASIN

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01548403 BABB CREEK AT MORRIS, PA

LOCATION.--Lat 41°35'43", long 77°17'39", Tioga County, Hydrologic Unit 02050205, at bridge on State Route 287 at Morris, 0.4 mi (0.6 km) upstream from Wilson Creek.

DRAINAGE AREA.--53.0 mi² (137 km²).

PERIOD OF RECORD.--November 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)
OCT 25...	1545	13	90	6.1	11.5	.1	3.2	3	0
DEC 05...	1530	54	68	6.5	4.0	.1	3.0	5	0
27...	1330	33	73	5.8	.5	.2	8.0	3	0
JAN 30...	1045	135	69	5.2	1.5	.2	9.2	2	0
FEB 22...	1230	34	86	5.4	1.0	.2	10	4	0
MAR 20...	1000	134	72	5.4	3.0	.1	5.0	4	0
APR 24...	1820	77	69	5.3	14.0	.2	8.6	2	0
MAY 31...	1530	54	64	6.9	18.0	.1	4.8	5	0
JUL 03...	0945	38	85	7.2	16.0	.1	4.0	6	0
AUG 06...	1100	5.7	90	7.4	22.0	.1	4.0	7	0
SEP 18...	1530	10	89	7.7	19.5	.1	7.0	7	0

DATE	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDED RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 25...	2	4.1	32	--	--	--	--	--	460
DEC 05...	4	2.5	23	--	--	80	--	--	50
27...	2	7.6	24	--	--	--	--	--	100
JAN 30...	2	20	25	--	--	--	--	--	100
FEB 22...	3	25	29	--	--	--	--	--	100
MAR 20...	3	25	23	450	10	440	100	20	80
APR 24...	2	16	23	--	--	--	--	--	30
MAY 31...	4	1.0	22	--	--	--	--	--	70
JUL 03...	5	.6	31	500	100	400	120	80	40
AUG 06...	6	.4	26	--	--	--	90	50	40
SEP 18...	6	.2	28	--	--	--	--	--	10

WEST BRANCH SUSQUEHANNA RIVER BASIN
01548403 BABB CREEK AT MORRIS, PA--Continued
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 25...	--	--	420	--	--	--	3	.11
DEC 05...	--	--	340	--	--	30	2	.29
27...	--	--	380	--	--	--	3	.27
JAN 30...	--	--	350	--	--	--	3	1.1
FEB 22...	--	--	420	--	--	--	3	.28
MAR 20...	290	0	290	80	20	60	1	.36
APR 24...	--	--	330	--	--	--	2	.42
MAY 31...	--	--	50	--	--	--	1	.15
JUL 03...	370	10	360	50	0	50	1	.10
AUG 06...	410	0	410	--	--	--	1	.02
SEP 18...	--	--	360	--	--	--	1	.03

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)
AUG 06...	1100	5.7	62	.08	.96	0	<10	10

DATE	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
AUG 06...	10	20	9100	250	190	.00	0	190

BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE TIME	AUG 6,79 1100
TOTAL COUNT	10
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	0.9
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...TRICHOPTERA	7
...DIPTERA	
....CHIRONOMIDAE	3

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548408 WILSON CREEK ABOVE SAND RUN NEAR ANTRIM, PA

LOCATION.--Lat 41°38'51", long 77°18'26", Tioga County, Hydrologic Unit 02050205, on left bank 0.6 mi (1.0 km) upstream from Sand Run, along Route 287, and 1.5 mi (2.4 km) northwest of Antrim

DRAINAGE AREA.--12.6 mi² (32.6 km²).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--July 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,370 ft (417 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft³/s (29.4 m³/s) Mar. 5, 1979, gage height, 3.95 ft (1.204 m); minimum 0.51 ft³/s (0.014 m³/s) Aug. 23, 1979, minimum gage height, 0.53 ft (0.162 m) July 21, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 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. 9	0200	205 5.81	2.18 0.664	Jan. 24	2300	570 16.1	3.08 .939
Jan. 1	2000	558 15.8	3.05 .930	Mar. 5	0530	*1,040 29.4	*3.95 1.204
Jan. 2	0530	490 13.9	2.90 .884				

Minimum discharge, 0.51 ft³/s (0.014 m³/s) Aug. 23, minimum gage height, 0.58 ft (0.177 m) Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, JULY TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	1.3	4.0
2										---	1.2	2.3
3										---	2.4	1.8
4										---	3.8	1.6
5										---	2.0	1.3
6										---	35	1.2
7										---	24	1.2
8										---	14	2.1
9										---	5.5	1.8
10										---	4.6	1.3
11										---	3.8	1.2
12										---	3.2	1.2
13										---	2.6	1.2
14										---	2.2	.98
15										---	2.0	.98
16										---	1.8	.98
17										---	1.6	.98
18										.98	1.4	1.7
19										.98	1.3	81
20										.92	1.2	8.9
21										.86	1.2	5.1
22										.98	1.1	3.8
23										.92	.98	3.3
24										.92	.92	2.8
25										.92	.86	2.4
26										.92	.86	2.3
27										1.1	.86	2.2
28										1.0	3.1	2.0
29										.98	1.6	1.7
30										1.0	1.4	1.6
31										1.8	6.4	---
TOTAL										---	134.18	144.92
MEAN										---	4.33	4.83
MAX										---	35	81
MIN										---	.86	.98
CFSM										---	.34	.38
IN.										---	.40	.43

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548408 WILSON CREEK ABOVE SAND RUN NEAR ANTRIM, PA --Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.7	3.8	214	15	17	18	5.8	7.6	15	2.8	.89
2	1.6	2.6	4.0	270	12	53	24	5.5	6.2	7.0	4.5	.89
3	1.6	2.5	4.0	66	11	55	25	5.5	5.8	2.9	3.0	2.0
4	2.6	2.4	15	31	10	284	36	6.2	4.6	2.4	1.2	.96
5	2.4	2.3	8.4	18	9.0	645	49	5.3	4.0	1.9	.96	.77
6	1.8	2.3	6.5	15	8.0	255	28	4.9	3.2	1.6	.89	30
7	1.7	2.3	6.2	15	7.2	102	21	4.6	2.9	1.4	.82	8.7
8	1.6	2.3	14	21	6.6	64	18	4.3	2.2	1.2	.75	4.9
9	1.6	2.4	95	13	6.1	51	51	4.0	23	1.0	.69	3.2
10	1.6	2.3	24	9.8	5.6	54	79	3.7	5.6	.96	.69	2.4
11	1.6	2.2	15	8.8	5.2	37	52	3.6	9.5	.96	1.0	1.7
12	1.6	2.2	12	8.0	4.8	26	48	3.2	5.7	.89	1.1	1.5
13	2.0	2.2	11	7.4	4.5	22	39	2.9	3.6	.89	.96	1.2
14	27	2.0	10	6.6	4.3	42	37	2.6	2.2	1.6	.82	3.4
15	7.6	2.0	7.7	6.0	4.0	19	42	2.4	1.7	1.2	.75	4.0
16	4.4	2.0	6.9	5.5	3.8	18	29	2.4	1.4	1.1	.69	2.2
17	3.7	2.4	6.3	5.1	3.6	20	26	2.2	1.2	1.2	.64	1.7
18	3.3	19	5.8	4.8	3.5	22	20	1.7	1.2	1.1	.59	1.5
19	3.0	6.0	5.4	4.6	3.5	21	16	1.7	1.2	1.0	.69	1.2
20	3.0	5.1	5.1	4.4	3.5	20	14	1.9	1.1	.82	.64	1.2
21	2.8	4.6	8.8	26	3.8	20	12	1.9	.96	.75	.59	1.2
22	2.7	4.4	7.0	20	4.8	22	9.8	1.9	.96	.69	.55	2.2
23	2.5	4.6	6.7	8.1	4.4	23	8.6	1.9	1.2	.64	.51	1.6
24	2.5	8.1	6.4	128	17	32	8.1	9.7	1.2	.59	.69	1.2
25	2.4	6.2	6.0	192	21	60	7.6	13	1.2	.72	.75	1.2
26	2.3	4.4	5.7	70	16	34	7.2	12	1.1	1.2	.69	1.2
27	7.0	3.8	5.5	43	11	24	10	11	1.0	1.0	5.4	1.1
28	3.6	3.8	4.9	34	9.2	19	8.6	15	.96	.94	1.4	2.6
29	3.2	4.2	4.5	25	---	21	7.2	12	.96	.82	1.0	8.0
30	2.8	4.2	4.2	20	---	22	6.4	13	1.2	.82	.96	5.2
31	2.6	---	4.0	18	---	19	---	9.0	---	.75	.96	---
TOTAL	109.7	117.5	329.8	1318.1	218.4	2123	757.5	174.8	104.64	55.04	37.68	99.81
MEAN	3.54	3.92	10.6	42.5	7.80	68.5	25.3	5.64	3.49	1.78	1.22	3.33
MAX	27	19	95	270	21	645	79	15	23	15	5.4	30
MIN	1.6	2.0	3.8	4.4	3.5	17	6.4	1.7	.96	.59	.51	.77
CFSM	.28	.31	.84	3.37	.62	5.44	2.01	.45	.28	.14	.10	.26
IN.	.32	.35	.97	3.89	.64	6.27	2.24	.52	.31	.16	.11	.29

WTR YR 1979 TOTAL 5445.97 MEAN 14.9 MAX 645 MIN .51 CFSM 1.18 IN 16.08

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548408 WILSON CREEK ABOVE SAND RUN NEAR ANTRIM, PA --Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: July 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily, 1,180 mg/L Sept. 19, 1978; minimum daily, 1 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 1,450 tons (1,320 tonnes) Mar. 5, 1979; minimum daily 0 ton (0 tonne) on many days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily, 769 mg/L Mar. 5; minimum daily, 1 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 1,450 tons (1,320 tonnes) Mar. 5; minimum daily, 0 ton (0 tonne) on many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)
OCT									
25...	1445	2.4	194	6.6	8.5	.1	7.4	81	0
DEC									
05...	1520	8.4	164	6.4	3.5	.2	11	52	0
27...	1415	5.6	170	7.2	1.0	.1	6.0	74	0
JAN									
30...	1130	19	120	7.0	2.0	.1	4.4	33	0
FEB									
22...	1445	4.8	193	6.9	1.0	.1	5.0	56	0
MAR									
19...	0920	16	115	7.2	2.5	.1	2.2	29	0
APR									
25...	1400	7.5	134	9.4	15.0	.0	.0	5	19
MAY									
31...	1610	8.2	138	8.7	18.0	.0	.0	31	2
JUL									
02...	1715	3.8	200	7.7	17.0	.1	4.8	74	0
27...	1430	1.0	198	8.8	21.0	.0	.0	73	1
SEP									
18...	1245	1.3	212	7.0	16.0	.3	14	93	0

DATE	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDED RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
25...	66	33	22	--	--	--	--	--	110
DEC									
05...	43	33	20	--	--	30	--	--	80
27...	60	7.5	20	--	--	--	--	--	270
JAN									
30...	27	5.3	15	--	--	--	--	--	10
FEB									
22...	46	11	17	--	--	--	--	--	40
MAR									
19...	24	2.9	15	130	90	40	160	40	120
APR									
25...	36	.0	22	--	--	--	--	--	60
MAY									
31...	28	.1	15	--	--	--	--	--	30
JUL									
02...	60	2.4	22	400	100	300	160	130	30
27...	63	.2	16	--	--	--	--	--	40
SEP									
18...	76	15	26	--	--	--	--	--	0

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548408 WILSON CREEK ABOVE SAND RUN NEAR ANTRIM, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT								
25...	--	--	30	--	--	--	3	.02
DEC								
05...	--	--	10	--	--	0	1	.02
27...	--	--	20	--	--	--	2	.03
JAN								
30...	--	--	10	--	--	--	3	.15
FEB								
22...	--	--	10	--	--	--	3	.04
MAR								
19...	10	0	10	190	190	0	6	.26
APR								
25...	--	--	50	--	--	--	3	.06
MAY								
31...	--	--	30	--	--	--	5	.11
JUL								
02...	30	20	10	20	10	10	6	.06
27...	--	--	30	--	--	--	3	.01
SEP								
18...	--	--	60	--	--	--	2	.01

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), JULY TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	---	---	---	1.3	5	.02	4.0	10	.11
2	---	---	---	1.2	5	.02	2.3	3	.02
3	---	---	---	2.4	20	.13	1.8	3	.01
4	---	---	---	3.8	17	.18	1.6	2	.01
5	---	---	---	2.0	4	.02	1.3	2	.01
6	---	---	---	35	320	28	1.2	2	.01
7	---	---	---	24	74	4.6	1.2	2	.01
8	---	---	---	14	22	.82	2.1	4	.02
9	---	---	---	5.5	5	.07	1.8	3	.01
10	---	---	---	4.6	5	.06	1.3	3	.01
11	---	---	---	3.8	4	.04	1.2	2	.01
12	---	---	---	3.2	4	.03	1.2	2	.01
13	---	---	---	2.6	3	.02	1.2	2	.01
14	---	---	---	2.2	3	.02	.98	2	.01
15	---	---	---	2.0	3	.02	.98	2	.01
16	---	---	---	1.8	3	.01	.98	2	.01
17	---	---	---	1.6	3	.01	.98	2	.01
18	.98	7	.02	1.4	3	.01	1.7	41	.19
19	.98	5	.02	1.3	2	.01	81	1180	245
20	.92	6	.01	1.2	2	.01	8.9	5	.11
21	.86	3	.01	1.2	2	.01	5.1	3	.04
22	.98	3	.01	1.1	2	.01	3.8	3	.03
23	.92	3	.01	.98	3	.01	3.3	2	.02
24	.92	3	.01	.92	3	.01	2.8	2	.02
25	.92	3	.01	.86	3	.01	2.4	2	.01
26	.92	5	.01	.86	3	.01	2.3	2	.01
27	1.1	5	.01	.86	3	.01	2.2	2	.01
28	1.0	4	.01	3.1	91	.76	2.0	2	.01
29	.98	4	.01	1.6	5	.02	1.7	1	.00
30	1.0	10	.03	1.4	2	.01	1.6	1	.00
31	1.8	6	.03	6.4	32	.55	---	---	---
TOTAL	14.28	---	0.20	134.18	---	35.51	144.92	---	245.74

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548408 WILSON CREEK ABOVE SAND RUN NEAR ANTRIM, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	1.6	1	.00	2.7	2	.01	3.8	2	.02
2	1.6	1	.00	2.6	2	.01	4.0	2	.02
3	1.6	1	.00	2.5	2	.01	4.0	2	.02
4	2.6	5	.03	2.4	2	.01	15	16	.92
5	2.4	3	.02	2.3	1	.01	8.4	2	.04
6	1.8	3	.01	2.3	1	.01	6.5	1	.02
7	1.7	2	.01	2.3	1	.01	6.2	1	.02
8	1.6	2	.01	2.3	1	.01	14	31	4.3
9	1.6	2	.01	2.4	1	.01	95	145	61
10	1.6	2	.01	2.3	1	.01	24	5	.32
11	1.6	2	.01	2.2	1	.01	15	2	.08
12	1.6	2	.01	2.2	1	.01	12	1	.03
13	2.0	4	.02	2.2	1	.01	11	1	.03
14	27	63	4.3	2.0	1	.01	10	1	.03
15	7.6	9	.19	2.0	1	.01	7.7	1	.02
16	4.4	5	.06	2.0	1	.01	6.9	1	.02
17	3.7	4	.04	2.4	3	.03	6.3	1	.02
18	3.3	3	.03	19	50	4.6	5.8	1	.02
19	3.0	10	.08	6.0	5	.08	5.4	1	.01
20	3.0	7	.06	5.1	3	.04	5.1	1	.01
21	2.8	5	.04	4.6	3	.04	8.8	4	.10
22	2.7	4	.03	4.4	2	.02	7.0	3	.06
23	2.5	3	.02	4.6	2	.02	6.7	2	.04
24	2.5	3	.02	8.1	4	.09	6.4	2	.03
25	2.4	3	.02	6.2	3	.05	6.0	2	.03
26	2.3	3	.02	4.4	2	.02	5.7	2	.03
27	7.0	14	.32	3.8	2	.02	5.5	2	.03
28	3.6	5	.05	3.8	2	.02	4.9	2	.03
29	3.2	4	.03	4.2	4	.06	4.5	2	.02
30	2.8	3	.02	4.2	3	.03	4.2	2	.02
31	2.6	2	.01	---	---	---	4.0	2	.02
TOTAL	109.7	---	5.48	117.5	---	5.28	329.8	---	67.36
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY				FEBRUARY			MARCH		
1	214	204	196	15	3	.12	17	18	1.4
2	270	72	67	12	3	.10	53	21	3.0
3	66	9	1.7	11	3	.09	55	24	4.6
4	31	4	.33	10	3	.08	284	295	420
5	18	4	.19	9.0	3	.07	645	769	1450
6	15	4	.16	8.0	3	.06	255	184	163
7	15	4	.16	7.2	3	.06	102	41	12
8	21	3	.17	6.6	3	.05	64	27	4.7
9	13	3	.11	6.1	3	.05	51	26	3.6
10	9.8	2	.05	5.6	3	.05	54	22	3.2
11	8.8	2	.05	5.2	3	.04	37	12	1.2
12	8.0	2	.04	4.8	3	.04	26	10	.70
13	7.4	2	.04	4.5	2	.02	22	10	.59
14	6.6	2	.04	4.3	2	.02	42	32	4.8
15	6.0	2	.03	4.0	2	.02	19	7	.36
16	5.5	2	.03	3.8	2	.02	18	5	.24
17	5.1	2	.03	3.6	1	.01	20	8	.43
18	4.8	2	.03	3.5	1	.01	22	10	.59
19	4.6	2	.02	3.5	1	.01	21	6	.34
20	4.4	2	.02	3.5	1	.01	20	5	.27
21	26	20	1.9	3.8	3	.03	20	5	.27
22	20	12	.76	4.8	3	.04	22	4	.24
23	8.1	4	.09	4.4	3	.04	23	6	.37
24	128	138	129	17	21	.98	32	8	.74
25	192	69	42	21	12	.74	60	39	8.2
26	70	23	4.3	16	12	.52	34	8	.73
27	43	8	.93	11	8	.24	24	5	.32
28	34	5	.46	9.2	6	.15	19	4	.21
29	25	3	.20	---	---	---	21	6	.34
30	20	3	.16	---	---	---	22	6	.36
31	18	3	.15	---	---	---	19	5	.26
TOTAL	1318.1	---	446.15	218.4	---	3.67	2123	---	2087.06

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548408 WILSON CREEK ABOVE SAND RUN NEAR ANTRIM, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL				MAY			JUNE		
1	18	4	.19	5.8	4	.06	7.6	5	.10
2	24	8	.52	5.5	3	.04	6.2	5	.08
3	25	7	.48	5.5	3	.04	5.8	4	.06
4	36	30	6.4	6.2	5	.08	4.6	4	.05
5	49	12	1.8	5.3	4	.06	4.0	4	.04
6	28	7	.54	4.9	3	.04	3.2	3	.03
7	21	5	.28	4.6	3	.04	2.9	3	.02
8	18	5	.24	4.3	3	.03	2.2	3	.02
9	51	44	10	4.0	3	.03	23	82	13
10	79	47	16	3.7	3	.03	5.6	7	.11
11	52	14	2.0	3.6	3	.03	9.5	23	.76
12	48	15	2.0	3.2	3	.03	5.7	6	.10
13	39	8	.80	2.9	3	.02	3.6	5	.05
14	37	7	.70	2.6	3	.02	2.2	5	.03
15	42	15	1.7	2.4	3	.02	1.7	4	.02
16	29	18	1.4	2.4	3	.02	1.4	3	.01
17	26	20	1.4	2.2	3	.02	1.2	3	.01
18	20	8	.43	1.7	2	.01	1.2	3	.01
19	16	8	.35	1.7	2	.01	1.2	3	.01
20	14	6	.23	1.9	4	.02	1.1	3	.01
21	12	6	.19	1.9	3	.02	.96	3	.01
22	9.8	5	.13	1.9	3	.02	.96	4	.01
23	8.6	4	.09	1.9	3	.02	1.2	5	.02
24	8.1	4	.09	9.7	12	.42	1.2	4	.01
25	7.6	3	.06	13	12	.53	1.2	3	.01
26	7.2	3	.06	12	7	.23	1.1	3	.01
27	10	7	.22	11	5	.17	1.0	4	.01
28	8.6	5	.12	15	7	.28	.96	4	.01
29	7.2	5	.10	12	5	.16	.96	4	.01
30	6.4	4	.07	13	4	.14	1.2	4	.01
31	---	---	---	9.0	6	.15	---	---	---
TOTAL	757.5	---	48.59	174.8	---	2.79	104.64	---	14.63
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY				AUGUST			SEPTEMBER		
1	15	61	4.0	2.8	11	.10	.89	4	.01
2	7.0	10	.19	4.5	23	.64	.89	4	.01
3	2.9	6	.05	3.0	11	.10	2.0	7	.05
4	2.4	6	.04	1.2	8	.03	.96	5	.01
5	1.9	5	.03	.96	7	.02	.77	5	.01
6	1.6	5	.02	.89	6	.01	30	75	11
7	1.4	5	.02	.82	5	.01	8.7	9	.23
8	1.2	4	.01	.75	6	.01	4.9	5	.07
9	1.0	4	.01	.69	6	.01	3.2	4	.03
10	.96	3	.01	.69	5	.01	2.4	3	.02
11	.96	3	.01	1.0	5	.01	1.7	3	.01
12	.89	2	.00	1.1	5	.01	1.5	3	.01
13	.89	2	.00	.96	4	.01	1.2	2	.01
14	1.6	5	.03	.82	4	.01	3.4	8	.12
15	1.2	7	.02	.75	4	.01	4.0	9	.10
16	1.1	5	.01	.69	3	.01	2.2	5	.03
17	1.2	7	.02	.64	4	.01	1.7	3	.01
18	1.1	6	.02	.59	4	.01	1.5	1	.00
19	1.0	5	.01	.69	8	.01	1.2	1	.00
20	.82	4	.01	.64	6	.01	1.2	1	.00
21	.75	4	.01	.59	4	.01	1.2	2	.01
22	.69	4	.01	.55	4	.01	2.2	4	.02
23	.64	6	.01	.51	4	.01	1.6	1	.00
24	.59	5	.01	.69	8	.01	1.2	1	.00
25	.72	6	.01	.75	8	.02	1.2	1	.00
26	1.2	6	.02	.69	8	.01	1.2	1	.00
27	1.0	4	.01	5.4	30	.63	1.1	1	.00
28	.94	4	.01	1.4	8	.03	2.6	4	.05
29	.82	5	.01	1.0	6	.02	8.0	10	.17
30	.82	4	.01	.96	4	.01	5.2	4	.06
31	.75	3	.01	.96	4	.01	---	---	---
TOTAL	55.04	---	4.63	37.68	---	1.81	99.81	---	12.04

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548410 BACKSWITCH MINE DISCHARGE AT ANTRIM, PA

LOCATION.--Lat 41°38'00", long 77°17'41", Tioga County, Hydrologic Unit 02050205, at mine discharge, 0.35 mi (0.56 km) northwest of Antrim.

DRAINAGE AREA.--not available.

PERIOD OF RECORD.--April 1978 to current year.

WATER-QUALITY DATA, OCTOBER 1978 TO JULY 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)
OCT 25...	1030	.08	1015	2.9	9.0	4.3	220	0	0
DEC 05...	1230	.08	1050	2.8	8.0	5.4	270	0	0
27...	1300	.16	980	2.7	8.0	4.7	240	0	0
MAR 19...	1715	.81	660	3.0	9.0	2.4	120	0	0
JUL 02...	1630	.09	880	3.0	9.0	3.4	170	0	0

DATE	ALKA- LITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 25...	0	.0	390	--	--	--	--	--	6400
DEC 05...	0	.0	370	--	--	18000	--	--	7200
27...	0	.0	340	--	--	--	--	--	6200
MAR 19...	0	.0	180	8400	--	8400	2000	0	2000
JUL 02...	0	.0	280	12000	0	12000	3800	0	3800

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 25...	--	--	8100	--	--	--	1	.00
DEC 05...	--	--	8800	--	--	690	0	.00
27...	--	--	6800	--	--	--	0	.00
MAR 19...	2900	0	2900	360	0	360	0	.00
JUL 02...	5600	0	5600	500	0	500	0	.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548412 MITCHELL MINE DISCHARGE NO. 1 AT ANTRIM, PA

LOCATION.--Lat 41°37'46", long 77°18'13", Tioga County, Hydrologic Unit 02050205, at mine discharge, 0.35 mi (0.56 km) north of Anna S mine entrance and 0.85 mi (1.4 km) west of Antrim.

DRAINAGE AREA.--not available.

PERIOD OF RECORD.--November 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)
OCT									
25...	1145	.02	3360	2.4	8.0	30	1490	0	0
DEC									
05...	0800	.02	2740	2.6	6.0	21	1040	0	0
27...	1130	.02	2110	2.6	7.0	15	730	0	0
JAN									
29...	1310	.03	1630	2.8	9.0	8.5	430	0	0
FEB									
23...	1210	.01	2570	2.6	8.0	19	970	0	0
MAR									
19...	1215	.02	1620	2.7	9.0	8.4	420	0	0
APR									
25...	1200	.01	1460	2.9	9.0	8.0	400	0	0
MAY									
31...	1140	.02	1970	2.8	11.0	11	570	0	0
JUL									
02...	1430	.01	3040	2.6	10.0	20	1010	0	0
27...	1515	.01	3250	2.5	11.0	26	1300	0	0
SEP									
18...	1100	.01	3730	2.6	11.0	44	2200	0	0

DATE	ALKA- LITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDE D RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE D RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
25...	0	.0	2100	--	--	--	--	--	210000
DEC									
05...	0	.0	1600	--	--	72000	--	--	140000
27...	0	.0	1000	--	--	--	--	--	68000
JAN									
29...	0	.0	650	--	--	--	--	--	39000
FEB									
23...	0	.0	1400	--	--	--	110000	0	110000
MAR									
19...	0	.0	680	31000	3000	28000	42000	5000	37000
APR									
25...	0	.0	570	--	--	--	--	--	23000
MAY									
31...	0	.0	980	--	--	--	--	--	52000
JUL									
02...	0	.0	1600	73000	1000	72000	110000	0	110000
27...	0	.0	2000	--	--	--	--	--	150000
SEP									
18...	0	.0	2300	--	--	--	--	--	170000

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548412 MITCHELL MINE DISCHARGE NO. 1 AT ANTRIM, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE D RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE D RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE D (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE D (T/DAY)
OCT 25...	--	--	62000	--	--	--	7	.00
DEC 05...	--	--	49000	--	--	9200	0	.00
27...	--	--	28000	--	--	--	0	.00
JAN 29...	--	--	16000	--	--	--	0	.00
FEB 23...	--	--	40000	--	--	--	--	--
MAR 19...	18000	0	18000	3700	400	3300	E0	--
APR 25...	--	--	15000	--	--	--	0	.00
MAY 31...	--	--	--	--	--	--	E0	--
JUL 02...	44000	0	44000	9100	0	9100	0	.00
27...	--	--	66000	--	--	--	0	.00
SEP 18...	--	--	86000	--	--	--	0	.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548413 MITCHELL MINE DISCHARGE NO. 2 AT ANTRIM, PA

LOCATION.--Lat 41°37'43", long 77°18'12", Tioga County, Hydrologic Unit 02050205, at mine discharge, 0.3 mi (0.5 km) north of Anna S mine entrance, and 0.85 mi (1.4 km) west of Antrim.

DRAINAGE AREA.--not available.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder and v-notch sharp-crested weir. Altitude of gage is 1,650 ft (503 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7.8 ft³/s (0.22 m³/s) Mar. 6, 1979, gage height, 6.85 ft (2.089 m); minimum discharge, 0.07 ft³/s (0.002 m³/s) Oct. 6 to 19, and Oct. 29 to Nov. 3, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1.0 ft³/s (0.028 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. 3	2100	1.3 0.037	5.99 1.826	Mar. 6	1600	*7.8 .22	*6.85 2.089
Jan. 26	-	2.0 .057	6.13 1.868				

Minimum discharge, 0.07 ft³/s (0.002 m³/s) Oct. 6-19, and Oct. 29 to Nov. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.07	.11	.12	.55	.20	.50	.23	.28	.11	.10	.13
2	.08	.07	.11	.28	.48	.20	.48	.22	.28	.12	.10	.12
3	.08	.07	.11	1.1	.41	.23	.45	.22	.27	.18	.10	.12
4	.08	.08	.11	1.2	.37	.31	.43	.21	.26	.19	.10	.11
5	.08	.08	.11	.92	.33	1.6	.43	.20	.24	.19	.10	.10
6	.07	.08	.12	.71	.31	7.0	.50	.20	.23	.17	.09	.10
7	.07	.08	.13	.55	.28	5.4	.65	.20	.22	.16	.09	.11
8	.07	.08	.15	.48	.26	2.7	.68	.19	.20	.14	.09	.19
9	.07	.08	.19	.43	.26	1.9	.63	.19	.20	.13	.09	.22
10	.07	.08	.35	.39	.25	1.5	.63	.18	.19	.13	.09	.20
11	.07	.08	.63	.35	.23	1.4	.68	.18	.18	.12	.09	.18
12	.07	.08	.77	.31	.23	1.4	.92	.18	.18	.12	.09	.16
13	.07	.08	.68	.28	.20	1.2	.89	.17	.17	.12	.09	.14
14	.07	.08	.50	.26	.20	1.0	.86	.17	.17	.11	.09	.13
15	.07	.08	.41	.25	.18	1.1	.80	.17	.15	.11	.09	.12
16	.07	.08	.37	.23	.18	1.1	.74	.16	.15	.11	.09	.13
17	.07	.08	.31	.22	.16	.99	.68	.15	.15	.12	.09	.16
18	.07	.08	.26	.20	.15	.86	.63	.15	.14	.13	.09	.17
19	.07	.09	.25	.20	.15	.80	.55	.15	.14	.13	.09	.15
20	.08	.09	.23	.19	.15	.83	.50	.14	.14	.13	.09	.14
21	.08	.10	.22	.18	.14	.83	.43	.14	.13	.12	.09	.13
22	.08	.10	.20	.18	.14	.77	.39	.14	.13	.12	.09	.12
23	.08	.10	.19	.19	.14	.77	.37	.14	.13	.12	.09	.12
24	.08	.11	.18	.21	.14	.74	.33	.13	.13	.12	.09	.11
25	.08	.12	.17	.41	.14	.74	.31	.13	.12	.11	.09	.11
26	.08	.12	.16	1.7	.15	.80	.29	.13	.12	.11	.08	.11
27	.08	.12	.15	1.4	.18	.83	.28	.14	.12	.11	.08	.11
28	.08	.12	.15	1.1	.19	.74	.26	.15	.12	.10	.09	.11
29	.07	.12	.14	.92	---	.65	.25	.19	.11	.10	.13	.11
30	.07	.12	.14	.77	---	.57	.24	.23	.11	.10	.15	.11
31	.07	---	.13	.63	---	.52	---	.27	---	.10	.15	---
TOTAL	2.32	2.72	7.73	16.36	6.55	39.68	15.78	5.45	5.16	3.93	2.98	4.02
MEAN	.075	.091	.25	.53	.23	1.28	.53	.18	.17	.13	.096	.13
MAX	.09	.12	.77	1.7	.55	7.0	.92	.27	.28	.19	.15	.22
MIN	.07	.07	.11	.12	.14	.20	.24	.13	.11	.10	.08	.10

CAL YR 1978 TOTAL 114.59 MEAN .31 MAX 2.7 MIN .07
WTR YR 1979 TOTAL 112.68 MEAN .31 MAX 7.0 MIN .07

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548413 MITCHELL MINE DISCHARGE NO. 2 AT ANTRIM, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1978 to September 1979.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,990 micromhos Sept. 17, 1979; minimum daily, 1,800 micromhos Mar. 27, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,990 micromhos Sept. 17; minimum daily, 1,800 micromhos Mar. 27.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)
OCT									
25...	1115	.08	3440	2.4	8.5	32	1625	0	0
DEC									
05...	0930	.11	2920	2.6	8.5	24	1200	0	0
27...	1100	.16	2600	2.5	7.5	21	1100	0	0
JAN									
29...	1320	.94	2250	2.7	8.5	17	840	0	0
FEB									
23...	1200	.16	2680	2.6	8.0	21	1040	0	0
MAR									
19...	1230	.80	2090	2.6	8.5	14	700	0	0
APR									
04...	1745	.45	2020	2.6	--	12	610	0	0
25...	1215	.30	2060	2.8	9.0	13	670	0	0
MAY									
31...	1100	.26	2550	2.6	9.0	21	1050	0	0
JUL									
02...	1450	.12	3100	2.6	9.5	24	1220	0	0
27...	1510	.10	3250	2.6	11.0	31	1550	0	0
SEP									
18...	1115	.16	3970	2.4	9.0	55	2740	0	0

DATE	ALKA- LITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDED RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
25...	0	.0	2300	--	--	--	--	--	240000
DEC									
05...	0	.0	1800	--	--	82000	--	--	180000
27...	0	.0	1600	--	--	--	--	--	140000
JAN									
29...	0	.0	1300	--	--	--	--	--	120000
FEB									
23...	0	.0	1400	--	--	--	150000	0	150000
MAR									
19...	0	.0	1100	42000	0	42000	90000	0	90000
APR									
04...	0	.0	--	--	--	--	--	--	--
25...	0	.0	1000	--	--	--	--	--	72000
MAY									
31...	0	.0	1500	--	--	--	--	--	--
JUL									
02...	0	.0	1800	75000	1000	74000	140000	0	140000
27...	0	.0	2000	--	--	--	--	--	170000
SEP									
18...	0	.0	2600	--	--	--	--	--	220000

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548413 MITCHELL MINE DISCHARGE NO. 2 AT ANTRIM, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 25...	--	--	66000	--	--	--	1	.00
DEC 05...	--	--	55000	--	--	12000	0	.00
27...	--	--	43000	--	--	--	0	.00
JAN 29...	--	--	50000	--	--	--	0	.00
FEB 23...	--	--	43000	--	--	--	0	.00
MAR 19...	31000	0	31000	6200	0	6200	E0	--
APR 04...	--	--	--	--	--	--	0	.00
25...	--	--	29000	--	--	--	0	.00
MAY 31...	--	--	--	--	--	--	E0	--
JUL 02...	45000	0	45000	9600	0	9600	0	.00
27...	--	--	66000	--	--	--	0	.00
SEP 18...	--	--	99000	--	--	--	0	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), DECEMBER 1978 TO SEPTEMBER 1979

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	2650	2420	2840	1950	2230	2570	3080	3250	3500
2			---	2110	2450	2800	1990	2250	2590	3100	3230	3500
3			---	2180	2480	2730	2020	2270	2620	3110	3230	3580
4			---	2190	2510	2790	2020	2290	2640	3100	3230	3600
5			2920	2250	2540	2240	2030	2320	2670	3090	3240	3620
6			2820	2340	2560	1980	1970	2320	2700	3080	3240	3600
7			2780	2420	2570	1970	1970	2340	2730	3070	3250	3600
8			2770	2480	2580	2040	1950	2340	2760	3080	3250	3880
9			2620	2510	2600	2130	1940	2350	2790	3080	3240	3900
10			2520	2540	2620	2170	1950	2370	2820	3080	3240	3920
11			2590	2580	2640	2220	1840	2380	2840	3070	3240	3900
12			2560	2610	2650	2240	1850	2390	2870	3080	3220	3900
13			2350	2620	2660	2260	1830	2420	2890	3090	3250	3900
14			2380	2640	2670	2250	1860	2430	2890	3090	3270	3900
15			2430	2670	2670	2190	1880	2450	2900	3090	3280	3970
16			2470	2680	2680	2170	1900	2450	2910	3110	3280	3980
17			2490	2690	2690	2110	1900	2470	2920	3140	3300	3990
18			2510	2700	2690	2100	1890	2480	2920	3180	3300	3970
19			2530	2720	2680	2090	1910	2490	2930	3200	3300	3970
20			2540	2740	2670	2070	1930	2500	2930	3220	3300	3990
21			2550	2740	2670	2040	1940	2510	2950	3230	3300	3970
22			2560	2710	2670	2010	1980	2520	2960	3250	3300	3950
23			2570	2650	2690	2010	2010	2530	2970	3240	3300	3930
24			2570	2690	2670	1980	2040	2540	2990	3250	3300	3850
25			2570	2210	2690	1940	2060	2550	2990	3260	3280	3850
26			2580	2230	2730	1840	2100	2550	3000	3250	3280	3870
27			2590	2170	2790	1800	2130	2530	3010	3250	3200	3760
28			2610	2190	2810	1810	2160	2490	3030	3270	3280	3750
29			2620	2250	---	1830	2200	2470	3040	3270	3400	3760
30			2640	2300	---	1870	2210	2520	3060	3250	3500	3770
31			2640	2360	---	1900	---	2550	---	3250	3580	---
MEAN			2580	2480	2630	2140	1980	2430	2860	3160	3290	3820

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548415 BRIDGE RUN AT MOUTH AT ANTRIM, PA

LOCATION.--Lat 41°37'32", long 77°17'43", Tioga County, Hydrologic Unit 02050205, at bridge on State Route 287, 0.6 mi (1.0 km) south of Antrim and 2.2 mi (3.5 km) north of Morris.

DRAINAGE AREA.--1.41 mi² (3.65 km²).

PERIOD OF RECORD.--November 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS CO3)
OCT									
25...	1230	1.7	916	3.0	7.5	3.0	150	0	0
DEC									
05...	1345	1.6	690	3.0	5.5	2.3	115	0	0
27...	1400	2.0	770	3.0	4.0	2.4	120	0	0
JAN									
29...	1450	7.8	590	2.9	6.0	1.6	81	0	0
FEB									
22...	1545	2.6	715	3.2	7.0	1.9	95	0	0
MAR									
20...	1110	6.3	680	3.2	8.0	1.8	89	0	0
APR									
04...	1700	5.0	600	3.1	11.0	1.4	70	0	0
26...	0915	3.8	645	3.2	10.5	1.6	81	0	0
MAY									
31...	1300	2.2	711	3.3	12.0	1.7	87	0	0
JUL									
03...	0800	1.8	780	3.2	10.5	2.3	116	0	0
27...	1400	1.3	852	3.2	14.0	2.1	100	0	0
SEP									
18...	1345	1.0	876	3.4	12.0	3.1	153	0	0

DATE	ALKA- LITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
25...	0	.0	350	--	--	--	--	--	7500
DEC									
05...	0	.0	270	--	--	6200	--	--	5700
27...	0	.0	270	--	--	--	--	--	6200
JAN									
29...	0	.0	200	--	--	--	--	--	4400
FEB									
22...	0	.0	250	--	--	--	4300	0	4300
MAR									
20...	0	.0	230	4600	0	4600	5200	0	5200
APR									
04...	0	.0	--	--	--	--	--	--	--
26...	0	.0	220	--	--	--	--	--	3300
MAY									
31...	0	.0	240	--	--	--	--	--	3800
JUL									
03...	0	.0	290	6600	100	6500	4700	0	4700
27...	0	.0	320	--	--	--	--	--	5300
SEP									
18...	0	.0	350	--	--	--	--	--	4800

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT								
25...	--	--	5400	--	--	--	3	.01
DEC								
05...	--	--	4600	--	--	220	3	.01
27...	--	--	4300	--	--	--	4	.02
JAN								
29...	--	--	3200	--	--	--	4	.08
FEB								
22...	--	--	3900	--	--	--	4	.03
MAR								
20...	3000	0	3000	280	50	230	5	.09
APR								
04...	--	--	--	--	--	--	2	.03
26...	--	--	3300	--	--	--	2	.02
MAY								
31...	--	--	2400	--	--	--	4	.02
JUL								
03...	4400	100	4300	250	0	250	11	.05
27...	--	--	4900	--	--	--	1	.00
SEP								
18...	--	--	5300	--	--	--	2	.01

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548416 ANNA S. MINE DISCHARGE NO. 1 NEAR ANTRIM, PA

LOCATION.--Lat 41°37'26", long 77°18'07", Tioga County, Hydrologic Unit 02050205, at main entrance to Anna S mines, 0.9 mi (1.4 km) southwest of Antrim.

DRAINAGE AREA.--not available.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder and v-notch sharp-crested weir. Altitude of gage is 1,670 ft (509 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.1 ft³/s (0.14 m³/s) Mar. 7, 1979, gage height, 7.41 ft (2.259 m); minimum discharge, 0.24 ft³/s (0.007 m³/s) Nov. 14 to 21, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1.5 ft³/s (0.042 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. 5	0315	1.6 0.045	6.88 2.097	Mar. 7	0115	*5.1 .14	*7.41 2.259
Jan. 27	1630	2.2 .062	7.00 2.134				

Minimum discharge, 0.24 ft³/s (0.007 m³/s) Nov. 14-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.25	.29	.57	1.6	.59	1.4	.93	.71	.47	.33	.26
2	.31	.25	.29	.75	1.5	.59	1.3	.91	.74	.45	.31	.26
3	.31	.25	.29	1.1	1.4	.62	1.3	.89	.78	.45	.31	.26
4	.29	.25	.31	1.4	1.2	.67	1.2	.87	.78	.45	.31	.26
5	.29	.25	.31	1.6	1.2	1.4	1.2	.85	.76	.45	.30	.26
6	.29	.25	.33	1.6	1.1	4.2	1.3	.83	.74	.45	.30	.26
7	.29	.25	.35	1.5	1.1	5.0	1.3	.81	.72	.43	.31	.26
8	.29	.25	.35	1.4	.99	4.5	1.3	.79	.72	.43	.30	.26
9	.29	.25	.41	1.4	.93	3.9	1.4	.78	.71	.43	.29	.26
10	.29	.25	.49	1.3	.87	3.5	1.4	.78	.69	.43	.29	.27
11	.29	.25	.59	1.2	.84	3.3	1.5	.75	.68	.42	.29	.28
12	.27	.25	.64	1.1	.81	3.0	1.6	.73	.67	.41	.29	.28
13	.27	.25	.69	1.1	.78	2.7	1.7	.72	.65	.41	.29	.28
14	.27	.24	.69	1.0	.78	2.6	1.7	.71	.64	.41	.29	.28
15	.27	.24	.69	.99	.72	2.5	1.8	.69	.63	.39	.29	.28
16	.27	.24	.69	.96	.72	2.4	1.8	.68	.62	.39	.27	.28
17	.27	.24	.69	.96	.69	2.3	1.8	.67	.60	.39	.27	.28
18	.27	.24	.69	.90	.69	2.2	1.7	.66	.60	.39	.27	.28
19	.27	.24	.67	.90	.67	1.9	1.6	.65	.58	.37	.27	.28
20	.25	.24	.67	.87	.64	1.8	1.5	.64	.57	.37	.27	.28
21	.25	.24	.67	.87	.64	1.7	1.4	.64	.57	.37	.27	.28
22	.25	.25	.64	.84	.64	1.6	1.3	.63	.55	.37	.27	.28
23	.27	.25	.64	.84	.62	1.5	1.3	.62	.55	.37	.27	.28
24	.25	.25	.64	.87	.62	1.5	1.2	.61	.53	.36	.27	.28
25	.25	.25	.64	1.3	.59	1.5	1.2	.59	.52	.35	.26	.27
26	.25	.25	.62	1.9	.59	1.6	1.1	.59	.51	.35	.26	.26
27	.25	.27	.62	2.1	.59	1.6	1.1	.58	.50	.34	.26	.26
28	.25	.27	.62	2.1	.57	1.6	1.0	.59	.50	.33	.26	.26
29	.25	.27	.59	2.0	---	1.5	.99	.61	.48	.33	.26	.26
30	.25	.29	.59	1.9	---	1.4	.96	.64	.48	.33	.26	.26
31	.25	---	.57	1.8	---	1.4	---	.67	---	.33	.26	---
TOTAL	8.43	7.52	16.97	39.12	24.09	66.57	41.35	22.11	18.78	12.22	8.75	8.10
MEAN	.27	.25	.55	1.26	.86	2.15	1.38	.71	.63	.39	.28	.27
MAX	.31	.29	.69	2.1	1.6	5.0	1.8	.93	.78	.47	.33	.28
MIN	.25	.24	.29	.57	.57	.59	.96	.58	.48	.33	.26	.26

CAL YR 1978 TOTAL 328.86 MEAN .90 MAX 4.5 MIN .10
WTR YR 1979 TOTAL 274.01 MEAN .75 MAX 5.0 MIN .24

WEST BRANCH SUSQUEHANNA RIVER BASIN

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01548416 ANNA S MINE DISCHARGE NO 1 NEAR ANTRIM, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS C03)
OCT 25...	1030	.26	1315	2.8	8.0	6.9	345	0	0
DEC 04...	1645	.31	1410	2.6	8.0	7.6	377	0	0
27...	1000	.64	1370	2.7	6.5	7.9	390	0	0
JAN 29...	1230	2.0	1420	2.9	8.5	7.8	390	0	0
FEB 23...	1100	.62	1140	2.8	8.0	5.4	270	0	0
MAR 19...	1330	2.0	1210	2.6	8.5	6.0	300	0	0
APR 04...	1800	1.2	1080	2.8	--	5.0	250	0	0
25...	1110	1.2	1010	2.8	9.0	4.5	230	0	0
MAY 31...	1200	.64	1020	3.0	8.5	4.7	240	0	0
JUL 02...	1330	.45	1140	2.9	9.0	4.8	240	0	0
27...	1610	.34	1120	2.9	11.0	5.1	260	0	0
SEP 18...	1015	.29	1250	3.0	8.5	7.0	350	0	0

DATE	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDED RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 25...	0	.0	480	--	--	--	--	--	25000
DEC 04...	0	.0	590	--	--	28000	--	--	29000
27...	0	.0	560	--	--	--	--	--	3200
JAN 29...	0	.0	600	--	--	--	--	--	39000
FEB 23...	0	.0	380	--	--	--	16000	0	16000
MAR 19...	0	.0	470	21000	0	21000	26000	0	26000
APR 04...	0	.0	--	--	--	--	--	--	--
25...	0	.0	330	--	--	--	--	--	12000
MAY 31...	0	.0	350	--	--	--	--	--	11000
JUL 02...	0	.0	420	16000	0	16000	12000	0	12000
27...	0	.0	380	--	--	--	--	--	13000
SEP 18...	0	.0	450	--	--	--	--	--	16000

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548416 ANNA S. MINE DISCHARGE NO. 1 NEAR ANTRIM, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT								
25...	--	--	8100	--	--	--	2	.00
DEC								
04...	--	--	11000	--	--	2400	0	.00
27...	--	--	9400	--	--	--	0	.00
JAN								
29...	--	--	12000	--	--	--	2	.01
FEB								
23...	--	--	5100	--	--	--	0	.00
MAR								
19...	6400	0	6400	1700	200	1500	E0	--
APR								
04...	--	--	--	--	--	--	0	.00
25...	--	--	4200	--	--	--	0	.00
MAY								
31...	--	--	--	--	--	--	0	.00
JUL								
02...	5000	0	5000	910	0	910	0	.00
27...	--	--	5300	--	--	--	0	.00
SEP								
18...	--	--	8100	--	--	--	0	.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548417 BASSWOOD RUN ABOVE HUNTER DRIFT NEAR ANTRIM, PA

LOCATION.--Lat 41°37'06", long 77°18'40", Tioga County, Hydrologic Unit 02050205, 100 ft (30 m) north of Hunter Drift mine entrance, 250 ft (76 m) upstream of Anna S mine road, and 1.6 mi (2.6 km) southwest of Antrim.

DRAINAGE AREA.--0.57 mi² (1.48 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,670 ft (509 m) from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27 ft³/s (0.76 m³/s) Mar. 5, 1979, gage height, 1.50 ft (0.457 m); minimum, zero flow for many consecutive days.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1.0 ft³/s (0.028 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. 9	0300	1.9 0.054	0.67 0.204	Mar. 5	0300	*27 0.76	*1.50 0.457
Jan. 2	0630	8.5 .24	1.01 .308	Mar. 25	0200	1.1 .031	.58 .177
Jan. 25	0130	10 .28	1.06 .323	Apr. 10	1700	1.6 .045	.65 .198

Minimum discharge, zero flow on many consecutive days.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	.00	.00	.00
2									---	.00	.00	.00
3									---	.00	.00	.00
4									---	.00	.00	.00
5									---	.00	.00	.00
6									---	.00	.14	.00
7									---	.00	.15	.00
8									---	.00	.09	.00
9									---	.00	.02	.00
10									---	.00	.01	.00
11									---	.00	.00	.00
12									---	.00	.00	.00
13									---	.00	.00	.00
14									.00	.00	.00	.00
15									.00	.00	.00	.00
16									.00	.00	.00	.00
17									.00	.00	.00	.00
18									.00	.00	.00	.00
19									.00	.00	.00	.01
20									.00	.00	.00	.00
21									.00	.00	.00	.00
22									.00	.00	.00	.00
23									.00	.00	.00	.00
24									.00	.00	.00	.00
25									.00	.00	.00	.00
26									.00	.00	.00	.00
27									.00	.00	.00	.00
28									.00	.00	.00	.00
29									.00	.00	.00	.00
30									.00	.00	.00	.00
31									---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	---	---	.00	.41	.01
MEAN	---	---	---	---	---	---	---	---	---	.000	.013	.000
MAX	---	---	---	---	---	---	---	---	---	.00	.15	.01
MIN	---	---	---	---	---	---	---	---	---	.00	.00	.00
CFSM	---	---	---	---	---	---	---	---	---	.000	.02	.000
IN.	---	---	---	---	---	---	---	---	---	.00	.03	.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548417 BASSWOOD RUN ABOVE HUNTER DRIFT NEAR ANTRIM, PA.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.74	.20	.00	.04	.00	.01	.00	.00	.00
2	.00	.00	.00	6.4	.17	.02	.08	.00	.00	.00	.00	.00
3	.00	.00	.00	2.5	.15	.02	.11	.00	.00	.00	.00	.00
4	.00	.00	.07	1.0	.13	1.7	.15	.00	.00	.00	.00	.00
5	.00	.00	.05	.41	.11	20	.33	.00	.00	.00	.00	.00
6	.00	.00	.03	.31	.09	11	.19	.00	.00	.00	.00	.01
7	.00	.00	.01	.24	.08	4.8	.08	.00	.00	.00	.00	.00
8	.00	.00	.07	.20	.07	3.0	.04	.00	.00	.00	.00	.00
9	.00	.00	.78	.15	.07	2.3	.37	.00	.00	.00	.00	.00
10	.00	.00	.20	.11	.06	2.5	.88	.00	.00	.00	.00	.00
11	.00	.00	.17	.10	.06	1.7	.71	.00	.00	.00	.00	.00
12	.00	.00	.14	.09	.05	.88	.44	.00	.00	.00	.00	.00
13	.00	.00	.11	.08	.04	.70	.31	.00	.00	.00	.00	.00
14	.00	.00	.08	.07	.03	.65	.29	.00	.00	.00	.00	.00
15	.00	.00	.06	.07	.03	.60	.28	.00	.00	.00	.00	.00
16	.00	.00	.03	.06	.02	.55	.16	.00	.00	.00	.00	.00
17	.00	.00	.01	.06	.02	.50	.09	.00	.00	.00	.00	.00
18	.00	.07	.01	.05	.02	.46	.04	.00	.00	.00	.00	.00
19	.00	.03	.01	.05	.01	.43	.02	.00	.00	.00	.00	.00
20	.00	.01	.01	.05	.01	.35	.02	.00	.00	.00	.00	.00
21	.00	.01	.01	.04	.01	.30	.01	.00	.00	.00	.00	.00
22	.00	.00	.01	.04	.00	.26	.01	.00	.00	.00	.00	.00
23	.00	.00	.01	.04	.00	.23	.01	.00	.00	.00	.00	.00
24	.00	.01	.01	1.7	.00	.17	.00	.00	.00	.00	.00	.00
25	.00	.01	.01	6.3	.00	.68	.00	.02	.00	.00	.00	.00
26	.00	.00	.01	3.6	.00	.38	.00	.04	.00	.00	.00	.00
27	.00	.00	.01	2.2	.00	.20	.00	.03	.00	.00	.00	.00
28	.00	.00	.01	1.2	.00	.11	.00	.03	.00	.00	.00	.00
29	.00	.00	.01	.46	---	.11	.00	.02	.00	.00	.00	.12
30	.00	.00	.01	.30	---	.10	.00	.01	.00	.00	.00	.02
31	.00	---	.01	.24	---	.08	---	.01	---	.00	.00	---
TOTAL	.00	.14	1.95	28.86	1.43	54.78	4.66	.16	.01	.00	.00	.15
MEAN	.000	.005	.063	.93	.051	1.77	.16	.005	.000	.000	.000	.005
MAX	.00	.07	.78	6.4	.20	20	.88	.04	.01	.00	.00	.12
MIN	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.000	.009	.11	1.63	.09	3.11	.28	.009	.000	.000	.000	.009
IN.	.00	.01	.13	1.88	.09	3.57	.30	.01	.00	.00	.00	.01

WTR YR 1979 TOTAL 92.14 MEAN .25 MAX 20 MIN .00 CFSM .44 IN 6.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548417 BASSWOOD RUN ABOVE HUNTER DRIFT NEAR ANTRIM, PA.--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE.--June 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 23 mg/L Jan. 1 and Mar. 5, 1979; minimum daily, 0 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 1.3 tons (1.2 tonnes) Mar. 5, 1979; minimum daily, 0 ton (0 tonne) on many days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 23 mg/L Jan. 1 and Mar. 5; minimum daily, 0 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 1.3 tons (1.2 tonnes) Mar. 5; minimum daily, 0 ton (0 tonne) on many days.

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), JUNE TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1							---	---	---
2							---	---	---
3							---	---	---
4							---	---	---
5							---	---	---
6							---	---	---
7							---	---	---
8							---	---	---
9							---	---	---
10							---	---	---
11							---	---	---
12							---	---	---
13							---	---	---
14							.00	0	.00
15							.00	0	.00
16							.00	0	.00
17							.00	0	.00
18							.00	0	.00
19							.00	0	.00
20							.00	0	.00
21							.00	0	.00
22							.00	0	.00
23							.00	0	.00
24							.00	0	.00
25							.00	0	.00
26							.00	0	.00
27							.00	0	.00
28							.00	0	.00
29							.00	0	.00
30							.00	0	.00
31							---	---	---
TOTAL							0.00	---	0.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548417 BASSWOOD RUN ABOVE HUNTER DRIFT NEAR ANTRIM, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), JUNE TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY				AUGUST			SEPTEMBER		
1	.00	0	.00	.00	0	.00	.00	0	.00
2	.00	0	.00	.00	0	.00	.00	0	.00
3	.00	0	.00	.00	0	.00	.00	0	.00
4	.00	0	.00	.00	0	.00	.00	0	.00
5	.00	0	.00	.00	0	.00	.00	0	.00
6	.00	0	.00	.14	10	.00	.00	0	.00
7	.00	0	.00	.15	4	.00	.00	0	.00
8	.00	0	.00	.09	2	.00	.00	0	.00
9	.00	0	.00	.02	1	.00	.00	0	.00
10	.00	0	.00	.01	1	.00	.00	0	.00
11	.00	0	.00	.00	0	.00	.00	0	.00
12	.00	0	.00	.00	0	.00	.00	0	.00
13	.00	0	.00	.00	0	.00	.00	0	.00
14	.00	0	.00	.00	0	.00	.00	0	.00
15	.00	0	.00	.00	0	.00	.00	0	.00
16	.00	0	.00	.00	0	.00	.00	0	.00
17	.00	0	.00	.00	0	.00	.00	0	.00
18	.00	0	.00	.00	0	.00	.00	0	.00
19	.00	0	.00	.00	0	.00	.01	5	.00
20	.00	0	.00	.00	0	.00	.00	0	.00
21	.00	0	.00	.00	0	.00	.00	0	.00
22	.00	0	.00	.00	0	.00	.00	0	.00
23	.00	0	.00	.00	0	.00	.00	0	.00
24	.00	0	.00	.00	0	.00	.00	0	.00
25	.00	0	.00	.00	0	.00	.00	0	.00
26	.00	0	.00	.00	0	.00	.00	0	.00
27	.00	0	.00	.00	0	.00	.00	0	.00
28	.00	0	.00	.00	0	.00	.00	0	.00
29	.00	0	.00	.00	0	.00	.00	0	.00
30	.00	0	.00	.00	0	.00	.00	0	.00
31	.00	0	.00	.00	0	.00	---	---	---
TOTAL	0.00	---	0.00	0.41	---	0.00	0.01	---	0.00
YEAR	0.42		0.00						

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548417 BASSWOOD RUN ABOVE HUNTER DRIFT NEAR ANTRIM, PA.--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	.00	0	.00	.00	0	.00	.00	0	.00
2	.00	0	.00	.00	0	.00	.00	0	.00
3	.00	0	.00	.00	0	.00	.00	0	.00
4	.00	0	.00	.00	0	.00	.07	1	.00
5	.00	0	.00	.00	0	.00	.05	1	.00
6	.00	0	.00	.00	0	.00	.03	1	.00
7	.00	0	.00	.00	0	.00	.01	1	.00
8	.00	0	.00	.00	0	.00	.07	3	.00
9	.00	0	.00	.00	0	.00	.78	10	.02
10	.00	0	.00	.00	0	.00	.20	4	.00
11	.00	0	.00	.00	0	.00	.17	2	.00
12	.00	0	.00	.00	0	.00	.14	1	.00
13	.00	0	.00	.00	0	.00	.11	1	.00
14	.00	0	.00	.00	0	.00	.08	1	.00
15	.00	0	.00	.00	0	.00	.06	1	.00
16	.00	0	.00	.00	0	.00	.03	1	.00
17	.00	0	.00	.00	0	.00	.01	1	.00
18	.00	0	.00	.07	10	.00	.01	1	.00
19	.00	0	.00	.03	3	.00	.01	1	.00
20	.00	0	.00	.01	2	.00	.01	1	.00
21	.00	0	.00	.01	1	.00	.01	1	.00
22	.00	0	.00	.00	0	.00	.01	2	.00
23	.00	0	.00	.00	0	.00	.01	2	.00
24	.00	0	.00	.01	1	.00	.01	2	.00
25	.00	0	.00	.01	1	.00	.01	2	.00
26	.00	0	.00	.00	0	.00	.01	2	.00
27	.00	0	.00	.00	0	.00	.01	2	.00
28	.00	0	.00	.00	0	.00	.01	2	.00
29	.00	0	.00	.00	0	.00	.01	2	.00
30	.00	0	.00	.00	0	.00	.01	2	.00
31	.00	0	.00	---	---	---	.01	2	.00
TOTAL	0.00	---	0.00	0.14	---	0.00	1.95	---	0.02
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	.74	23	.09	.20	1	.00	.00	0	.00
2	6.4	22	.38	.17	1	.00	.02	1	.00
3	2.5	5	.03	.15	1	.00	.02	1	.00
4	1.0	3	.01	.13	1	.00	1.7	13	.11
5	.41	2	.00	.11	1	.00	20	23	1.3
6	.31	1	.00	.09	1	.00	11	8	.24
7	.24	1	.00	.08	1	.00	4.8	3	.04
8	.20	1	.00	.07	1	.00	3.0	2	.02
9	.15	1	.00	.07	1	.00	2.3	1	.01
10	.11	1	.00	.06	1	.00	2.5	1	.01
11	.10	1	.00	.06	1	.00	1.7	1	.00
12	.09	1	.00	.05	1	.00	.88	1	.00
13	.08	1	.00	.04	1	.00	.70	1	.00
14	.07	1	.00	.03	1	.00	.65	1	.00
15	.07	1	.00	.03	1	.00	.60	1	.00
16	.06	1	.00	.02	1	.00	.55	1	.00
17	.06	1	.00	.02	1	.00	.50	1	.00
18	.05	1	.00	.02	1	.00	.46	1	.00
19	.05	1	.00	.01	1	.00	.43	1	.00
20	.05	1	.00	.01	1	.00	.35	1	.00
21	.04	1	.00	.01	1	.00	.30	1	.00
22	.04	1	.00	.00	0	.00	.26	1	.00
23	.04	1	.00	.00	0	.00	.23	1	.00
24	1.7	8	.04	.00	0	.00	.17	2	.00
25	6.3	17	.29	.00	0	.00	.68	4	.01
26	3.6	5	.05	.00	0	.00	.38	2	.00
27	2.2	3	.02	.00	0	.00	.20	1	.00
28	1.2	2	.01	.00	0	.00	.11	1	.00
29	.46	1	.00	---	---	---	.11	1	.00
30	.30	1	.00	---	---	---	.10	1	.00
31	.24	1	.00	---	---	---	.08	1	.00
TOTAL	28.86	---	0.92	1.43	---	0.00	54.78	---	1.74

01548417 BASSWOOD RUN ABOVE HUNTER DRIFT NEAR ANTRIM, PA--Continued
 SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	.04	1	.00	.00	0	.00	.01	1	.00
2	.08	1	.00	.00	0	.00	.00	0	.00
3	.11	1	.00	.00	0	.00	.00	0	.00
4	.15	1	.00	.00	0	.00	.00	0	.00
5	.33	3	.00	.00	0	.00	.00	0	.00
6	.19	2	.00	.00	0	.00	.00	0	.00
7	.08	1	.00	.00	0	.00	.00	0	.00
8	.04	1	.00	.00	0	.00	.00	0	.00
9	.37	2	.00	.00	0	.00	.00	0	.00
10	.88	2	.00	.00	0	.00	.00	0	.00
11	.71	1	.00	.00	0	.00	.00	0	.00
12	.44	1	.00	.00	0	.00	.00	0	.00
13	.31	1	.00	.00	0	.00	.00	0	.00
14	.29	1	.00	.00	0	.00	.00	0	.00
15	.28	1	.00	.00	0	.00	.00	0	.00
16	.16	1	.00	.00	0	.00	.00	0	.00
17	.09	1	.00	.00	0	.00	.00	0	.00
18	.04	1	.00	.00	0	.00	.00	0	.00
19	.02	1	.00	.00	0	.00	.00	0	.00
20	.02	1	.00	.00	0	.00	.00	0	.00
21	.01	1	.00	.00	0	.00	.00	0	.00
22	.01	1	.00	.00	0	.00	.00	0	.00
23	.01	1	.00	.00	0	.00	.00	0	.00
24	.00	0	.00	.00	0	.00	.00	0	.00
25	.00	0	.00	.02	4	.00	.00	0	.00
26	.00	0	.00	.04	2	.00	.00	0	.00
27	.00	0	.00	.03	1	.00	.00	0	.00
28	.00	0	.00	.03	1	.00	.00	0	.00
29	.00	0	.00	.02	1	.00	.00	0	.00
30	.00	0	.00	.01	1	.00	.00	0	.00
31	---	---	---	.01	1	.00	---	---	---
TOTAL	4.66	---	0.00	0.16	---	0.00	0.01	---	0.00
JULY			AUGUST			SEPTEMBER			
1	.00	0	.00	.00	0	.00	.00	0	.00
2	.00	0	.00	.00	0	.00	.00	0	.00
3	.00	0	.00	.00	0	.00	.00	0	.00
4	.00	0	.00	.00	0	.00	.00	0	.00
5	.00	0	.00	.00	0	.00	.00	0	.00
6	.00	0	.00	.00	0	.00	.01	5	.00
7	.00	0	.00	.00	0	.00	.00	0	.00
8	.00	0	.00	.00	0	.00	.00	0	.00
9	.00	0	.00	.00	0	.00	.00	0	.00
10	.00	0	.00	.00	0	.00	.00	0	.00
11	.00	0	.00	.00	0	.00	.00	0	.00
12	.00	0	.00	.00	0	.00	.00	0	.00
13	.00	0	.00	.00	0	.00	.00	0	.00
14	.00	0	.00	.00	0	.00	.00	0	.00
15	.00	0	.00	.00	0	.00	.00	0	.00
16	.00	0	.00	.00	0	.00	.00	0	.00
17	.00	0	.00	.00	0	.00	.00	0	.00
18	.00	0	.00	.00	0	.00	.00	0	.00
19	.00	0	.00	.00	0	.00	.00	0	.00
20	.00	0	.00	.00	0	.00	.00	0	.00
21	.00	0	.00	.00	0	.00	.00	0	.00
22	.00	0	.00	.00	0	.00	.00	0	.00
23	.00	0	.00	.00	0	.00	.00	0	.00
24	.00	0	.00	.00	0	.00	.00	0	.00
25	.00	0	.00	.00	0	.00	.00	0	.00
26	.00	0	.00	.00	0	.00	.00	0	.00
27	.00	0	.00	.00	0	.00	.00	0	.00
28	.00	0	.00	.00	0	.00	.00	0	.00
29	.00	0	.00	.00	0	.00	.12	3	.00
30	.00	0	.00	.00	0	.00	.02	2	.00
31	.00	0	.00	.00	0	.00	---	---	---
TOTAL	0.00	---	0.00	0.00	---	0.00	0.15	---	0.00
YEAR	92.14		2.68						

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548418 HUNTER DRIFT DISCHARGE NEAR ANTRIM, PA

LOCATION.--Lat 41°37'05", long 77°18'40", Tioga County, Hydrologic Unit 02050205, at mine entrance, 250 ft (76 m) upstream of Anna S mine road, and 1.6 mi (2.6 km) southwest of Antrim.

DRAINAGE AREA.--not available.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder and v-notch sharp-crested weir. Altitude of gage is 1,670 ft (509 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14 ft³/s (0.38 m³/s) Mar. 6, 1979, gage height, 7.97 ft (2.429 m); minimum discharge, 0.28 ft³/s (0.008 m³/s) Nov. 18, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3.0 ft³/s (0.085 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. 3	0200	3.2 0.091	7.10 2.164	Mar. 6	1330	14 .40	7.97 2.429
Jan. 25	1915	3.8 .11	7.18 2.188				

Minimum discharge, 0.28 ft³/s (0.008 m³/s) Nov. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	.33	.34	.55	1.7	.61	1.4	.92	.97	.52	.40	.33
2	.40	.33	.34	1.9	1.6	.69	1.4	.88	.97	.55	.39	.33
3	.39	.33	.33	2.8	1.5	.91	1.3	.86	.95	.53	.39	.33
4	.38	.33	.34	2.3	1.4	1.1	1.3	.83	.92	.51	.38	.33
5	.37	.32	.35	2.1	1.3	7.0	1.4	.79	.89	.50	.37	.33
6	.36	.31	.38	2.0	1.2	13	1.5	.77	.86	.49	.37	.43
7	.35	.31	.40	1.9	1.0	10	1.5	.74	.82	.47	.37	.53
8	.34	.31	.41	1.8	1.0	7.4	1.5	.72	.80	.47	.36	.56
9	.33	.31	.53	1.7	.93	5.6	1.5	.70	.76	.46	.35	.51
10	.33	.30	.83	1.6	.87	5.0	1.6	.68	.74	.45	.35	.48
11	.33	.29	.95	1.5	.80	4.5	1.9	.67	.73	.45	.35	.47
12	.33	.30	.97	1.4	.74	4.1	2.1	.65	.71	.45	.36	.45
13	.32	.31	.96	1.3	.69	3.6	2.3	.65	.69	.44	.36	.45
14	.31	.31	.93	1.2	.65	3.2	2.3	.62	.67	.44	.36	.45
15	.32	.30	.90	1.1	.63	3.0	2.2	.61	.64	.47	.35	.46
16	.33	.29	.87	1.0	.60	2.9	2.1	.59	.62	.47	.35	.48
17	.34	.29	.83	1.0	.55	2.6	2.0	.57	.60	.51	.33	.47
18	.35	.29	.81	.97	.52	2.4	1.9	.56	.60	.52	.33	.46
19	.35	.29	.78	.90	.50	2.2	1.8	.55	.57	.51	.34	.43
20	.36	.30	.75	.87	.50	2.1	1.6	.55	.56	.49	.33	.43
21	.37	.31	.72	.83	.52	1.9	1.5	.54	.55	.47	.33	.41
22	.37	.31	.71	.85	.55	1.8	1.4	.54	.54	.46	.33	.41
23	.36	.31	.69	.87	.55	1.7	1.3	.54	.52	.45	.33	.41
24	.35	.31	.67	.97	.55	1.6	1.2	.52	.51	.45	.33	.40
25	.35	.32	.65	2.9	.55	1.7	1.2	.52	.49	.44	.32	.39
26	.35	.33	.63	3.6	.57	1.8	1.1	.55	.48	.43	.31	.39
27	.35	.33	.61	3.1	.58	1.9	1.1	.59	.47	.43	.33	.38
28	.34	.33	.59	2.7	.60	1.8	1.0	.65	.46	.43	.35	.38
29	.33	.33	.57	2.4	---	1.7	.99	.76	.45	.42	.35	.46
30	.33	.33	.55	2.1	---	1.6	.95	.86	.46	.41	.35	.56
31	.33	---	.55	1.9	---	1.5	---	.93	---	.41	.33	---
TOTAL	10.83	9.36	19.94	52.11	23.14	100.91	46.34	20.91	20.00	14.50	10.85	12.90
MEAN	.35	.31	.64	1.68	.83	3.26	1.54	.67	.67	.47	.35	.43
MAX	.41	.33	.97	3.6	1.7	13	2.3	.93	.97	.55	.40	.56
MIN	.31	.29	.33	.55	.50	.61	.95	.52	.45	.41	.31	.33

CAL YR 1978 TOTAL 400.42 MEAN 1.10 MAX 6.7 MIN .29
WTR YR 1979 TOTAL 341.79 MEAN .94 MAX 13 MIN .29

WEST BRANCH SUSQUEHANNA RIVER BASIN
01548418 HUNTER DRIFT DISCHARGE NEAR ANTRIM, PA.--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)
OCT									
25...	0945	.35	1890	2.6	8.5	14	695	0	0
DEC									
04...	1455	.35	1850	2.6	8.0	17	850	0	0
27...	0800	.63	1730	2.6	9.0	11	570	0	0
JAN									
29...	0950	2.2	1540	2.7	9.0	9.3	460	0	0
FEB									
23...	0930	.55	1760	2.6	8.5	13	660	0	0
MAR									
20...	1230	2.2	1610	2.7	9.0	11	530	0	0
APR									
04...	1850	1.3	1590	2.6	--	9.8	490	0	0
25...	1000	1.2	1710	2.8	9.5	11	560	0	0
MAY									
31...	1100	.90	1900	2.7	9.0	16	780	0	0
JUL									
02...	1200	.55	2320	2.8	9.5	22	1100	0	0
27...	1650	.43	2440	2.3	8.0	24	1180	0	0
SEP									
18...	0900	.46	2640	2.7	9.0	32	1580	0	0

DATE	ALKA- LITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
25...	0	.0	880	--	--	--	--	--	92000
DEC									
04...	0	.0	900	--	--	42000	--	--	100000
27...	0	.0	760	--	--	--	--	--	82000
JAN									
29...	0	.0	590	--	--	--	--	--	63000
FEB									
23...	0	.0	970	--	--	--	100000	0	100000
MAR									
20...	0	.0	740	36000	0	36000	72000	0	72000
APR									
04...	0	.0	--	--	--	--	--	--	--
25...	0	.0	720	--	--	--	--	--	74000
MAY									
31...	0	.0	980	--	--	--	--	--	100000
JUL									
02...	0	.0	1400	77000	1000	76000	190000	0	190000
27...	0	.0	1600	--	--	--	--	--	210000
SEP									
18...	0	.0	1500	--	--	--	--	--	210000

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548418 HUNTER DRIFT DISCHARGE NEAR ANTRIM, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 25...	--	--	9100	--	--	--	4	.00
DEC 04...	--	--	8800	--	--	1400	0	.00
27...	--	--	7300	--	--	--	0	.00
JAN 29...	--	--	6100	--	--	--	0	.00
FEB 23...	--	--	15000	--	--	--	0	.00
MAR 20...	14000	0	14000	3500	0	3500	E0	--
APR 04...	--	--	--	--	--	--	0	.00
25...	--	--	13000	--	--	--	0	.00
MAY 31...	--	--	--	--	--	--	E0	--
JUL 02...	22000	0	22000	7400	100	7300	0	.00
27...	--	--	--	--	--	--	0	.00
SEP 18...	--	--	24000	--	--	--	0	.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548419 ANNA S MINE DISCHARGE NO. 2 NEAR ANTRIM, PA

LOCATION.--Lat 41°37'13", long 77°18'21", Tioga County, Hydrologic Unit 02050205, at mine discharge, 0.1 mi (0.2 km) east of Anna S Road, 0.4 mi (0.6 km) northeast of Hunter Drift mine entrance, and 1.2 mi (1.9 km) southwest of Antrim.

DRAINAGE AREA.--not available.

PERIOD OF RECORD.--November 1977 to current year.

WATER-QUALITY DATA, DECEMBER 1978 TO JULY 1979

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPEH- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)
DEC 04...	1545	.02	200	3.6	5.0	.5	27	0	0
MAR 19...	1415	.45	690	3.0	10.0	2.8	140	0	0
JUL 02...	1315	.04	370	3.6	11.0	1.3	64	0	0

DATE	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 04...	0	.0	72	--	--	1300	--	--	910
MAR 19...	0	.0	250	12000	0	12000	4100	0	4100
JUL 02...	0	.0	130	3800	0	3800	620	0	620

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
DEC 04...	--	--	1200	--	--	190	0	.00
MAR 19...	2100	0	2100	630	0	630	E0	--
JUL 02...	1200	0	1200	30	0	300	0	.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

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01548421 BASSWOOD RUN AT MOUTH NEAR ANTRIM, PA

LOCATION.--Lat 41°36'50", long 77°17'38", Tioga County, Hydrologic Unit 02050205, 20 ft (6.0 m) east of State Route 287, 1.2 mi (1.9 km) south of Antrim, and 1.4 mi (2.2 km) north of Morris.

DRAINAGE AREA.--1.22 mi² (3.16 km²).

PERIOD OF RECORD.--November 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)
OCT									
25...	1400	.47	1400	2.6	7.0	8.0	402	0	0
DEC									
04...	1600	1.7	860	2.9	5.0	4.3	215	0	0
27...	1430	.89	1140	2.7	.5	6.8	338	0	0
JAN									
29...	1530	4.8	920	2.9	4.0	4.7	240	0	0
FEB									
22...	1620	1.0	1240	2.9	2.0	7.7	380	0	0
MAR									
19...	1620	4.0	1140	2.6	6.0	6.0	300	0	0
APR									
26...	1015	1.7	1260	3.0	11.0	6.4	320	0	0
MAY									
31...	1230	1.5	1400	2.9	12.0	7.9	400	0	0
JUL									
03...	0845	.76	1680	2.9	12.5	12	590	0	0
27...	1330	.58	2040	3.2	17.5	16	800	0	0
SEP									
18...	1415	.54	2260	2.8	12.0	22	1120	0	0

DATE	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
25...	0	.0	580	--	--	--	--	--	38000
DEC									
04...	0	.0	280	--	--	13000	--	--	19000
27...	0	.0	420	--	--	--	--	--	38000
JAN									
29...	0	.0	300	--	--	--	--	--	28000
FEB									
22...	0	.0	540	--	--	--	44000	0	44000
MAR									
19...	0	.0	420	21000	0	21000	34000	0	34000
APR									
26...	0	.0	460	--	--	--	--	--	33000
MAY									
31...	0	.0	540	--	--	--	--	--	45000
JUL									
03...	0	.0	740	41000	0	41000	70000	0	70000
27...	0	.0	1000	--	--	--	--	--	86000
SEP									
18...	0	.0	1100	--	--	--	--	--	120000

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT								
25...	--	--	6300	--	--	--	5	.01
DEC								
04...	--	--	4200	--	--	480	--	--
27...	--	--	4300	--	--	--	18	.04
JAN								
29...	--	--	3400	--	--	--	4	.05
FEB								
22...	--	--	8800	--	--	--	13	.04
MAR								
19...	7800	0	7800	2200	200	2000	1	.01
APR								
26...	--	--	7900	--	--	--	1	.00
MAY								
31...	--	--	4600	--	--	--	1	.00
JUL								
03...	14000	2000	12000	4200	0	4200	2	.00
27...	--	--	20000	--	--	--	2	.00
SEP								
18...	--	--	27000	--	--	--	2	.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548422 RATTLER RUN NEAR MORRIS, PA

LOCATION.--Lat 41°36'36", long 77°18'09", Tioga County, Hydrologic Unit 02050205, 200 ft (61 m) north of Rattler Mine Road and 1.2 mi (1.9 km) northwest of Morris.

DRAINAGE AREA.--0.32 mi² (0.83 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (476 m) from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18 ft³/s (0.51 m³/s) Mar. 5, 1979, gage height, 1.10 ft (0.335 m); minimum, zero flow on several days during July and August.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5.0 ft³/s (0.142 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	1930	6.7	0.19	0.97	0.296	Jan. 24	2130	6.8	0.19	0.98	0.299
Jan. 2	0500	6.0	.17	.93	.283	Mar. 5	0630	*18	.51	*1.10	.335

Minimum discharge, zero flow Aug. 22 to 25.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	.01	.05	.12
2									---	.00	.03	.04
3									---	.00	.34	.02
4									---	.05	.14	.02
5									---	.03	.05	.01
6									---	.01	1.4	.01
7									---	.00	.72	.01
8									---	.00	.47	.03
9									---	.00	.22	.03
10									---	.00	.17	.03
11									---	.00	.12	.02
12									---	.00	.09	.02
13									---	.00	.07	.02
14									.12	.01	.06	.02
15									.12	.01	.04	.02
16									.10	.01	.04	.02
17									.12	.00	.03	.03
18									.12	.00	.02	.26
19									.12	.00	.02	1.2
20									.10	.00	.01	.14
21									.08	.00	.01	.09
22									.06	.00	.01	.07
23									.04	.00	.00	.05
24									.04	.00	.00	.04
25									.04	.00	.00	.03
26									.04	.00	.00	.02
27									.04	.00	.00	.02
28									.04	.00	.01	.02
29									.02	.01	.00	.02
30									.02	.08	.00	.02
31									---	.10	.57	---
TOTAL									---	.32	4.69	2.45
MEAN									---	.010	.15	.082
MAX									---	.10	1.4	1.2
MIN									---	.00	.00	.01
CFSM									---	.03	.47	.26
IN.									---	.04	.54	.28

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548422 RATTLER RUN NEAR MORRIS, PA --Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.09	.13	5.2	.37	.29	.48	.16	.19	.37	.02	.01
2	.02	.09	.13	6.8	.30	.38	.60	.14	.15	.16	.02	.01
3	.02	.09	.13	1.7	.27	.36	.62	.13	.14	.07	.02	.02
4	.12	.09	.61	.80	.25	1.1	.90	.15	.12	.06	.01	.01
5	.05	.09	.38	.45	.22	13	1.2	.13	.10	.05	.01	.01
6	.04	.08	.26	.38	.20	7.6	.70	.12	.08	.04	.01	.72
7	.03	.08	.20	.38	.18	1.7	.52	.11	.07	.03	.01	.08
8	.03	.09	.44	.42	.16	1.4	.45	.11	.05	.03	.01	.04
9	.03	.08	1.8	.32	.15	1.2	1.2	.10	.57	.02	.01	.03
10	.03	.08	.66	.24	.14	1.3	2.0	.09	.14	.02	.01	.03
11	.03	.07	.42	.22	.13	1.2	1.3	.09	.18	.02	.02	.02
12	.03	.07	.38	.20	.12	.81	1.2	.08	.14	.01	.03	.02
13	.08	.06	.30	.18	.11	.63	1.0	.07	.09	.01	.02	.02
14	.69	.06	.25	.16	.11	1.2	.92	.06	.05	.33	.01	.10
15	.20	.05	.22	.15	.10	.98	1.1	.06	.04	.15	.01	.08
16	.12	.05	.19	.14	.09	.69	.73	.06	.03	.25	.01	.03
17	.08	.26	.16	.13	.09	.57	.65	.05	.03	.16	.01	.03
18	.07	.30	.14	.12	.09	.52	.50	.05	.03	.05	.01	.02
19	.06	.15	.13	.12	.09	.50	.40	.04	.03	.03	.01	.02
20	.06	.13	.13	.11	.09	.48	.35	.05	.02	.03	.01	.02
21	.06	.11	.22	.65	.10	.48	.30	.05	.02	.02	.01	.03
22	.06	.10	.17	.50	.10	.50	.24	.05	.02	.02	.00	.07
23	.06	.11	.16	.20	.11	.55	.21	.05	.03	.02	.00	.04
24	.06	.20	.15	1.9	.17	.80	.20	.24	.03	.02	.00	.03
25	.06	.15	.15	3.4	.20	1.5	.19	.32	.03	.02	.00	.03
26	.08	.14	.14	1.2	.24	.85	.18	.30	.03	.02	.01	.02
27	.31	.14	.14	.75	.22	.60	.25	.28	.02	.03	.06	.02
28	.18	.13	.13	.69	.28	.48	.21	.37	.02	.02	.02	.31
29	.15	.13	.11	.63	---	.52	.18	.30	.02	.02	.02	.78
30	.14	.13	.10	.54	---	.55	.16	.32	.03	.02	.01	.23
31	.09	---	.10	.45	---	.49	---	.20	---	.02	.01	---
TOTAL	3.06	3.40	8.63	29.13	4.68	43.23	18.94	4.33	2.50	2.12	.41	2.88
MEAN	.099	.11	.28	.94	.17	1.39	.63	.14	.083	.068	.013	.096
MAX	.69	.30	1.8	6.8	.37	13	2.0	.37	.57	.37	.06	.78
MIN	.02	.05	.10	.11	.09	.29	.16	.04	.02	.01	.00	.01
CFSM	.31	.34	.88	2.94	.53	4.34	1.97	.44	.26	.21	.04	.30
IN.	.35	.39	1.00	3.38	.54	5.01	2.19	.50	.29	.25	.05	.33

WTR YR 1979 TOTAL 123.31 MEAN .34 MAX 13 MIN .00 CFSM 1.06 IN 14.29

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548422 RATTLER RUN NEAR MORRIS, PA --Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: June 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 372 mg/L Mar. 5, 1979; minimum daily, 0 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 14 tons (13 tonnes) Mar. 5, 1979; minimum daily, 0 ton (0 tonne) on many days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 372 mg/L Mar. 5; minimum daily, 0 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 14 tons (13 tonnes) Mar. 5; minimum daily, 0 ton (0 tonne) on many days.

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), JUNE TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1							---	---	---
2							---	---	---
3							---	---	---
4							---	---	---
5							---	---	---
6							---	---	---
7							---	---	---
8							---	---	---
9							---	---	---
10							---	---	---
11							---	---	---
12							---	---	---
13							---	---	---
14							.12	2	.00
15							.12	2	.00
16							.10	2	.00
17							.12	2	.00
18							.12	2	.00
19							.12	2	.00
20							.10	1	.00
21							.08	1	.00
22							.06	1	.00
23							.04	1	.00
24							.04	1	.00
25							.04	1	.00
26							.04	1	.00
27							.04	2	.00
28							.04	2	.00
29							.02	2	.00
30							.02	2	.00
31							---	---	---
TOTAL							1.22	---	0.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548422 RATTLER RUN NEAR MORRIS, PA.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), JUNE TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY				AUGUST			SEPTEMBER		
1	.01	2	.00	.05	5	.00	.12	12	.01
2	.00	0	.00	.03	3	.00	.04	3	.00
3	.00	0	.00	.34	89	.16	.02	2	.00
4	.05	5	.00	.14	10	.00	.02	1	.00
5	.03	2	.00	.05	3	.00	.01	1	.00
6	.01	2	.00	1.4	246	1.2	.01	1	.00
7	.00	0	.00	.72	12	.02	.01	1	.00
8	.00	0	.00	.47	4	.01	.03	5	.00
9	.00	0	.00	.22	3	.00	.03	2	.00
10	.00	0	.00	.17	3	.00	.03	2	.00
11	.00	0	.00	.12	2	.00	.02	1	.00
12	.00	0	.00	.09	2	.00	.02	1	.00
13	.00	0	.00	.07	2	.00	.02	1	.00
14	.01	17	.01	.06	2	.00	.02	1	.00
15	.01	8	.00	.04	2	.00	.02	1	.00
16	.01	2	.00	.04	2	.00	.02	1	.00
17	.00	0	.00	.03	1	.00	.03	3	.00
18	.00	0	.00	.02	1	.00	.26	167	.53
19	.00	0	.00	.02	1	.00	1.2	34	.28
20	.00	0	.00	.01	1	.00	.14	3	.00
21	.00	0	.00	.01	1	.00	.09	2	.00
22	.00	0	.00	.01	1	.00	.07	2	.00
23	.00	0	.00	.00	0	.00	.05	1	.00
24	.00	0	.00	.00	0	.00	.04	1	.00
25	.00	0	.00	.00	0	.00	.03	1	.00
26	.00	0	.00	.00	0	.00	.02	1	.00
27	.00	0	.00	.00	0	.00	.02	1	.00
28	.00	0	.00	.01	5	.00	.02	1	.00
29	.01	83	.02	.00	0	.00	.02	1	.00
30	.08	60	.02	.00	0	.00	.02	1	.00
31	.10	32	.01	.57	183	.32	---	---	---
TOTAL	0.32	---	0.06	4.69	---	1.71	2.45	---	0.82
YEAR	8.68		2.59						

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548422 RATTLER RUN NEAR MORRIS, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	.02	1	.00	.09	1	.00	.13	3	.00
2	.02	1	.00	.09	1	.00	.13	2	.00
3	.02	1	.00	.09	1	.00	.13	2	.00
4	.12	28	.01	.09	1	.00	.61	8	.01
5	.05	4	.00	.09	1	.00	.38	3	.00
6	.04	2	.00	.08	1	.00	.26	2	.00
7	.03	1	.00	.08	1	.00	.20	2	.00
8	.03	1	.00	.09	1	.00	.44	17	.05
9	.03	1	.00	.08	1	.00	1.8	16	.09
10	.03	1	.00	.08	1	.00	.66	8	.01
11	.03	1	.00	.07	1	.00	.42	6	.01
12	.03	1	.00	.07	1	.00	.38	4	.00
13	.08	14	.01	.06	1	.00	.30	4	.00
14	.69	75	.16	.06	1	.00	.25	3	.00
15	.20	7	.00	.05	1	.00	.22	3	.00
16	.12	4	.00	.05	1	.00	.19	3	.00
17	.08	2	.00	.26	45	.12	.16	2	.00
18	.07	2	.00	.30	9	.01	.14	2	.00
19	.06	2	.00	.15	2	.00	.13	2	.00
20	.06	1	.00	.13	1	.00	.13	2	.00
21	.06	1	.00	.11	1	.00	.22	5	.00
22	.06	1	.00	.10	1	.00	.17	4	.00
23	.06	1	.00	.11	1	.00	.16	2	.00
24	.06	1	.00	.20	3	.00	.15	2	.00
25	.06	1	.00	.15	2	.00	.15	2	.00
26	.08	10	.00	.14	1	.00	.14	2	.00
27	.31	15	.01	.14	1	.00	.14	2	.00
28	.18	5	.00	.13	1	.00	.13	2	.00
29	.15	3	.00	.13	8	.00	.11	2	.00
30	.14	2	.00	.13	5	.00	.10	2	.00
31	.09	1	.00	---	---	---	.10	2	.00
TOTAL	3.06	---	0.19	3.40	---	0.13	8.63	---	0.17

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548422 RATTLER RUN NEAR MORRIS, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	5.2	80	1.5	.37	3	.00	.29	5	.00
2	6.8	20	.40	.30	2	.00	.38	15	.02
3	1.7	9	.04	.27	2	.00	.36	8	.01
4	.80	5	.01	.25	2	.00	1.1	76	.34
5	.45	3	.00	.22	1	.00	13	372	14
6	.38	3	.00	.20	1	.00	7.6	49	1.5
7	.38	2	.00	.18	1	.00	1.7	10	.05
8	.42	2	.00	.16	1	.00	1.4	7	.03
9	.32	2	.00	.15	1	.00	1.2	5	.02
10	.24	2	.00	.14	1	.00	1.3	5	.02
11	.22	2	.00	.13	1	.00	1.2	5	.02
12	.20	2	.00	.12	1	.00	.81	4	.01
13	.18	2	.00	.11	1	.00	.63	4	.01
14	.16	2	.00	.11	1	.00	1.2	3	.01
15	.15	2	.00	.10	1	.00	.98	3	.01
16	.14	2	.00	.09	1	.00	.69	3	.01
17	.13	2	.00	.09	1	.00	.57	2	.00
18	.12	2	.00	.09	1	.00	.52	2	.00
19	.12	2	.00	.09	1	.00	.50	2	.00
20	.11	2	.00	.09	1	.00	.48	2	.00
21	.65	20	.04	.10	2	.00	.48	2	.00
22	.50	10	.01	.10	2	.00	.50	2	.00
23	.20	2	.00	.11	3	.00	.55	2	.00
24	1.9	48	.40	.17	5	.00	.80	6	.01
25	3.4	16	.18	.20	5	.00	1.5	30	.25
26	1.2	10	.03	.24	5	.00	.85	8	.02
27	.75	7	.01	.22	4	.00	.60	6	.01
28	.69	5	.01	.28	10	.01	.48	5	.01
29	.63	4	.01	---	---	---	.52	4	.01
30	.54	4	.01	---	---	---	.55	3	.00
31	.45	3	.00	---	---	---	.49	3	.00
TOTAL	29.13	---	2.65	4.68	---	0.01	43.23	---	16.37
APRIL			MAY			JUNE			
1	.48	2	.00	.16	3	.00	.19	6	.00
2	.60	2	.00	.14	3	.00	.15	4	.00
3	.62	2	.00	.13	3	.00	.14	3	.00
4	.90	25	.15	.15	2	.00	.12	2	.00
5	1.2	10	.03	.13	2	.00	.10	2	.00
6	.70	6	.01	.12	2	.00	.08	2	.00
7	.52	4	.01	.11	1	.00	.07	2	.00
8	.45	3	.00	.11	1	.00	.05	2	.00
9	1.2	40	.17	.10	1	.00	.57	85	.30
10	2.0	45	.27	.09	1	.00	.14	8	.00
11	1.3	6	.02	.09	1	.00	.18	30	.01
12	1.2	7	.02	.08	1	.00	.14	3	.00
13	1.0	5	.01	.07	1	.00	.09	2	.00
14	.92	4	.01	.06	1	.00	.05	2	.00
15	1.1	5	.01	.06	2	.00	.04	2	.00
16	.73	4	.01	.06	2	.00	.03	1	.00
17	.65	4	.01	.05	1	.00	.03	1	.00
18	.50	4	.01	.05	1	.00	.03	1	.00
19	.40	5	.01	.04	1	.00	.03	1	.00
20	.35	5	.00	.05	1	.00	.02	1	.00
21	.30	5	.00	.05	1	.00	.02	1	.00
22	.24	4	.00	.05	1	.00	.02	1	.00
23	.21	4	.00	.05	1	.00	.03	4	.00
24	.20	5	.00	.24	30	.04	.03	2	.00
25	.19	4	.00	.32	10	.01	.03	1	.00
26	.18	4	.00	.30	6	.00	.03	1	.00
27	.25	8	.01	.28	4	.00	.02	1	.00
28	.21	4	.00	.37	8	.01	.02	1	.00
29	.18	3	.00	.30	6	.00	.02	1	.00
30	.16	3	.00	.32	6	.01	.03	1	.00
31	---	---	---	.20	10	.01	---	---	---
TOTAL	18.94	---	0.76	4.33	---	0.08	2.50	---	0.31

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548422 RATTLER RUN NEAR MORRIS, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY				AUGUST			SEPTEMBER		
1	.37	80	.20	.02	1	.00	.01	1	.00
2	.16	5	.00	.02	1	.00	.01	1	.00
3	.07	3	.00	.02	1	.00	.02	10	.00
4	.06	2	.00	.01	1	.00	.01	2	.00
5	.05	1	.00	.01	1	.00	.01	1	.00
6	.04	1	.00	.01	1	.00	.72	78	.28
7	.03	1	.00	.01	1	.00	.08	8	.00
8	.03	1	.00	.01	1	.00	.04	5	.00
9	.02	1	.00	.01	1	.00	.03	4	.00
10	.02	1	.00	.01	1	.00	.03	4	.00
11	.02	1	.00	.02	20	.00	.02	2	.00
12	.01	1	.00	.03	5	.00	.02	2	.00
13	.01	1	.00	.02	3	.00	.02	2	.00
14	.33	126	.21	.01	1	.00	.10	88	.04
15	.15	25	.01	.01	1	.00	.08	10	.00
16	.25	90	.10	.01	1	.00	.03	8	.00
17	.16	16	.01	.01	1	.00	.03	6	.00
18	.05	5	.00	.01	1	.00	.02	6	.00
19	.03	2	.00	.01	1	.00	.02	4	.00
20	.03	1	.00	.01	1	.00	.02	3	.00
21	.02	1	.00	.01	1	.00	.03	20	.01
22	.02	1	.00	.00	0	.00	.07	20	.00
23	.02	1	.00	.00	0	.00	.04	5	.00
24	.02	1	.00	.00	0	.00	.03	3	.00
25	.02	6	.00	.00	0	.00	.03	3	.00
26	.02	2	.00	.01	100	.02	.02	3	.00
27	.03	1	.00	.06	68	.02	.02	2	.00
28	.02	1	.00	.02	6	.00	.31	60	.09
29	.02	1	.00	.02	3	.00	.78	26	.08
30	.02	1	.00	.01	2	.00	.23	4	.00
31	.02	1	.00	.01	1	.00	---	---	---
TOTAL	2.12	---	0.53	0.41	---	0.04	2.88	---	0.50
YEAR	123.31		21.74						

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548423 WILSON CREEK AT MORRIS, PA

LOCATION.--Lat 41°35'51", long 77°17'50", Tioga County, Hydrologic Unit 02050205, at bridge on State Route 287, 0.3 mi (0.5 km) north of Morris, and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--22.8 mi² (59.1 km²).

PERIOD OF RECORD.--November 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS C03)
OCT 25...	1515	6.1	430	3.9	12.5	1.1	56	0	0
DEC 05...	1450	20	220	5.1	4.0	.3	17	4	0
27...	1515	14	290	4.0	.5	1.1	56	0	0
JAN 29...	1600	59	310	4.0	3.0	.9	44	0	0
FEB 22...	1315	13	347	3.8	2.0	1.1	53	0	0
MAR 20...	1000	52	335	3.6	4.0	.9	47	0	0
APR 24...	1910	30	320	3.6	13.0	1.1	54	0	0
MAY 31...	1515	24	258	3.9	19.0	.8	40	0	0
JUL 03...	0930	8.7	435	3.8	15.5	1.5	74	0	0
AUG 06...	1045	3.4	665	3.3	21.5	2.6	129	--	--
SEP 18...	1500	4.4	800	3.5	20.5	3.6	180	0	0

DATE	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 25...	0	.0	190	--	--	--	--	--	1500
DEC 05...	3	51	84	--	--	1100	--	--	650
27...	0	.0	110	--	--	--	--	--	1100
JAN 29...	0	.0	100	--	--	--	--	--	2600
FEB 22...	0	.0	130	--	--	--	1900	0	1900
MAR 20...	0	.0	99	3300	0	3300	3100	400	2700
APR 24...	0	.0	110	--	--	--	--	--	590
MAY 31...	0	.0	96	--	--	--	--	--	1400
JUL 03...	0	.0	190	6800	100	6700	2200	700	1500
AUG 06...	--	--	250	--	--	--	1500	100	1400
SEP 18...	0	.0	300	--	--	--	--	--	3900

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548423 WILSON CREEK AT MORRIS, PA --Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	
AUG 06...	1045	3.4	441	.60	4.12	0	<10	10	
DATE		COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
AUG 06...	20	20	21000	60	420	.00	0	80	
DATE		MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 25...	--	--	--	3100	--	--	--	7	.12
DEC 05...	--	--	--	1400	--	--	180	28	1.5
27...	--	--	--	1800	--	--	--	7	.26
JAN 29...	--	--	--	1800	--	--	--	9	1.4
FEB 22...	--	--	--	2700	--	--	--	5	.18
MAR 20...	1800	0	1800	350	0	350	9	1.3	
APR 24...	--	--	--	1800	--	--	--	6	.49
MAY 31...	--	--	--	320	--	--	--	10	.65
JUL 03...	2800	0	2900	540	0	540	6	.14	
AUG 06...	5700	400	5300	--	--	--	6	.06	
SEP 18...	--	--	7000	--	--	--	6	.07	

BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE	AUG 6,79
TIME	1045
TOTAL COUNT	12
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.0
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0
ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....CHIRONOMIDAE	12

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548425 UNNAMED TRIBUTARY TO PAINT RUN NEAR MORRIS, PA

LOCATION.--Lat 41°36'23", long 77°19'29", Tioga County, Hydrologic Unit 02050205, 0.4 mi (0.6 km) west of Plantation Road, 0.8 mi (1.3 km) south of Rattler mine road, and 1.9 mi (3.1 km) northwest of Morris.

DRAINAGE AREA.--not available.

PERIOD OF RECORD.--November 1977 to current year.

WATER-QUALITY DATA, DECEMBER 1978 TO JULY 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)
DEC 04...	1445	.09	550	3.3	6.5	4.0	199	0	0
MAR 19...	1515	.24	500	3.1	7.5	2.1	110	0	0
JUL 02...	1030	.04	580	3.1	15.5	2.7	134	0	0

DATE	ALKA- LITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 04...	0	.0	210	--	--	15000	--	--	1800
MAR 19...	0	.0	150	10000	0	10000	1400	0	1400
JUL 02...	0	.0	220	13000	1000	12000	1600	100	1500

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
DEC 04...	--	--	7700	--	--	440	2	.00
MAR 19...	3800	0	3800	330	0	330	3	.00
JUL 02...	5800	0	5800	440	10	430	6	.00

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548427 STONY FORK NEAR MOUTH NEAR BLACKWELL, PA

LOCATION.--Lat 41°34'56", long 77°20'46", Tioga County, Hydrologic Unit 02050205, 0.85 mi (1.4 km) upstream from mouth, and 2.3 mi (3.7 km) northeast of Blackwell.

DRAINAGE AREA.--37.1 mi² (96.1 km²).

PERIOD OF RECORD.--November 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)
OCT 25...	1150	6.7	181	7.7	7.5	.0	1.2	41	0
DEC 05...	1210	37	140	7.7	5.5	.1	7.0	35	0
27...	1200	23	146	7.0	.5	.1	5.0	30	0
JAN 30...	0930	72	105	6.6	1.5	.1	4.4	12	0
FEB 22...	1100	14	133	6.6	1.0	.1	5.8	26	0
MAR 20...	0850	72	98	6.6	2.0	.1	4.0	17	0
APR 24...	1720	40	107	7.4	14.0	.1	4.0	20	0
MAY 31...	1340	51	109	7.6	15.0	.0	1.4	22	0
JUL 03...	1045	9.4	155	6.7	17.0	.1	5.4	49	0
AUG 06...	1330	3.3	180	7.4	23.5	.0	.0	--	--
SEP 18...	1615	3.7	181	7.8	19.5	.1	6.0	52	0

DATE	ALKA- LITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDED RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 25...	33	1.3	39	--	--	--	--	--	50
DEC 05...	28	1.1	26	--	--	130	--	--	130
27...	25	4.8	30	--	--	--	--	--	30
JAN 30...	10	4.8	28	--	--	--	--	--	520
FEB 22...	21	10	32	--	--	--	--	--	100
MAR 20...	14	6.8	21	420	370	50	240	230	10
APR 24...	17	1.3	26	--	--	--	--	--	20
MAY 31...	18	.9	27	--	--	--	--	--	120
JUL 03...	40	16	28	600	200	400	80	70	10
AUG 06...	--	--	33	--	--	--	60	60	0
SEP 18...	43	1.3	36	--	--	--	--	--	0

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548427 STONY FORK NEAR MOUTH NEAR BLACKWELL, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	
AUG 06...	1330	3.3	107	.15	.97	0	<10	10	
DATE	TIME	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
AUG 06...	20	20	15000	20	350	.00	0	100	
DATE	TIME	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 25...	--	--	--	310	--	--	--	12	.22
DEC 05...	--	--	--	230	--	--	10	2	.20
27...	--	--	--	330	--	--	--	6	.37
JAN 30...	--	--	--	240	--	--	--	5	.97
FEB 22...	--	--	--	310	--	--	--	4	.15
MAR 20...	150	0	150	40	10	30	4	.78	
APR 24...	--	--	--	210	--	--	--	3	.32
MAY 31...	--	--	--	--	--	--	--	7	.96
JUL 03...	150	10	140	20	10	10	1	.03	
AUG 06...	30	20	10	--	--	--	3	.03	
SEP 18...	--	--	60	--	--	--	1	.01	

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548427 STONY FORK NEAR MOUTH NEAR BLACKWELL, PA--Continued
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE	AUG 6,79
TIME	1415
TOTAL COUNT	59
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.8
...FAMILY	2.9
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
...ELMIDAE	
....STENELMIS	1
...DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	
....ATHERIX	
.....A.VARIEGATA	3
...CHIRONOMIDAE	
...POLYPEDILUM	4
..EPHEMEROPTERA	
...BAETIDAE	
....BAETIS	6
....PSEUDOCLOEON	2
...SIPHONURIDAE	
....ISONYCHIA	2
..HEMIPTERA	
...VELIIDAE	
....RHAGOVELIA	1
..PLECOPTERA	
...PERLIDAE	
....(NEO)PHASGANOPHORA	2
....PARAGNETINA	2
..TRICHOPTERA	
...GLOSSOSOMATIDAE	
....GLOSSOSOMA	1
...HYDROPSYCHIDAE	
....CHEUMATOPSYCHE	3
....SYMPHITOPSYCHE	12
...RHYACOPHILIDAE	
....RHYACOPHILA	2
...HYDROPSYCHIDAE	
....HYDROPSYCHE	1
...DIPTERA	
...CHIRONOMIDAE	1
..TRICHOPTERA	
...PHILOPOTAMIDAE	
....DOLOPHILODES	15
...DIPTERA	
...CERATOPOGONIDAE=HELEIDAE	1

WEST BRANCH SUSQUEHANNA RIVER BASIN

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01548430 BABB CREEK AT BLACKWELL, PA

LOCATION.--Lat 41°33'21", long 77°22'42", Tioga County, Hydrologic Unit 02050205, at bridge on State Route 414 at Blackwell, and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--129 mi² (334 km²).

PERIOD OF RECORD.--November 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)
OCT									
25...	1330	30	171	7.1	9.0	.0	2.2	7	0
DEC									
05...	1320	132	120	6.8	5.0	.1	4.0	13	0
27...	1045	80	130	6.2	.5	.3	14	7	--
JAN									
30...	0815	303	110	5.1	2.0	.2	9.6	2	0
FEB									
22...	0830	56	134	5.2	1.0	.5	27	2	0
MAR									
20...	0745	292	118	5.2	2.0	.2	9.0	3	0
APR									
24...	1610	230	110	5.5	16.0	.1	7.0	2	0
MAY									
31...	1345	158	107	6.1	16.5	.1	3.8	5	0
JUL									
03...	1145	63	130	6.7	19.0	.1	4.8	4	0
27...	1220	29	177	5.4	22.0	.1	6.8	1	0
SEP									
18...	1700	22	197	5.2	19.0	.3	13	5	0

DATE	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, SUS- PENDE RECOV. (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
25...	5	.9	69	--	--	--	--	--	260
DEC									
05...	11	3.3	32	--	--	90	--	--	20
27...	5	7.1	42	--	--	--	--	--	90
JAN									
30...	2	25	38	--	--	--	--	--	440
FEB									
22...	2	20	50	--	--	--	--	--	50
MAR									
20...	2	30	35	1200	480	720	490	380	110
APR									
24...	2	10	40	--	--	--	--	--	210
MAY									
31...	4	6.4	36	--	--	--	--	--	100
JUL									
03...	4	1.3	47	800	500	300	170	150	20
27...	1	6.4	70	--	--	--	--	--	30
SEP									
18...	4	50	67	--	--	--	--	--	40

WEST BRANCH SUSQUEHANNA RIVER BASIN
01548430 BABB CREEK AT BLACKWELL, PA--Continued
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE D RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE D RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE D (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE D (T/DAY)
OCT 25...	--	--	640	--	--	--	6	.49
DEC 05...	--	--	380	--	--	40	4	1.4
27...	--	--	560	--	--	--	4	.86
JAN 30...	--	--	520	--	--	--	6	4.9
FEB 22...	--	--	620	--	--	--	3	.45
MAR 20...	480	0	480	100	10	90	8	6.3
APR 24...	--	--	480	--	--	--	2	1.2
MAY 31...	--	--	--	--	--	--	3	1.3
JUL 03...	540	0	540	90	0	90	3	.51
27...	--	--	840	--	--	--	3	.23
SEP 18...	--	--	1000	--	--	--	2	.12

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548500 PINE CREEK AT CEDAR RUN, PA

LOCATION.--Lat 41°31'18", long 77°26'52", Lycoming County, Hydrologic Unit 02050205, on left bank at upstream side of highway bridge at village of Cedar Run, 2,000 ft (610 m) downstream from Cedar Run and 1.2 mi (1.9 km) upstream from Gamble Run.

DRAINAGE AREA.--604 mi² (1,564 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1918 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 780.36 ft (237.854 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 13, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--61 years, 836 ft³/s (23.68 m³/s), 18.74 in/yr (476 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 66,000 ft³/s (1,870 m³/s) June 23, 1972, gage height, 16.0 ft (4.88 m), from floodmark, from rating curve extended above 16,000 ft³/s (450 m³/s) on basis of slope-area measurement at gage height, 14.39 ft (4.386 m); minimum, 8.0 ft³/s (0.23 m³/s) Sept. 1, 2, 3, 1939: minimum gage height, 0.80 ft (0.244 m) Nov. 28, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,900 ft³/s (167 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	Unknown	13,700 388	7.86 2.396	Mar. 6	0230	*20,600 583	*9.48 2.890
Jan. 26	Unknown	9,880 280	6.87 2.094	Mar. 25	0830	7,560 214	6.17 1.881

Minimum discharge, 58 ft³/s (1.64 m³/s) Aug. 22, 23, 24, gage height, 1.69 ft (0.515 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	211	303	1200	1120	1100	1640	592	779	540	234	87
2	78	200	290	5740	926	1500	1620	562	713	361	261	78
3	78	195	277	8340	780	2300	1620	543	621	281	226	86
4	89	184	358	4790	740	3420	1480	609	550	218	178	100
5	112	174	586	2820	670	17300	2020	538	490	191	137	89
6	108	169	558	2140	620	16900	1800	516	466	169	117	665
7	93	158	533	1730	580	9330	1610	493	436	151	106	697
8	85	158	533	1720	550	6250	1450	471	389	136	101	351
9	85	163	2180	1190	520	4630	1800	449	521	124	92	270
10	85	153	2010	926	490	4160	2390	449	428	117	94	224
11	100	144	1580	800	470	3900	2600	671	495	120	112	192
12	70	135	1300	720	450	3110	2560	577	480	130	127	166
13	81	135	1090	660	430	2550	2580	553	364	116	124	148
14	426	130	937	800	410	2930	2480	528	317	107	101	163
15	524	130	770	880	390	2850	2410	483	288	108	89	272
16	310	130	680	780	380	2440	2090	464	266	130	83	202
17	252	135	590	680	360	2170	1860	421	245	187	74	152
18	217	380	520	620	350	2090	1590	384	231	137	72	135
19	205	366	473	580	340	2140	1360	367	219	115	70	123
20	200	296	434	560	330	2140	1200	364	202	100	68	114
21	189	284	586	1300	330	2270	1080	343	185	90	67	110
22	174	277	570	1100	350	2490	976	332	182	84	61	134
23	158	270	493	700	390	3030	883	310	194	78	58	144
24	153	336	440	2400	460	4350	796	436	189	79	61	117
25	148	387	500	6180	600	6740	738	641	165	80	75	102
26	144	344	450	6930	1200	4990	694	793	150	143	97	93
27	290	329	430	4510	950	3370	733	830	138	163	199	89
28	303	336	405	3340	840	2470	808	925	133	133	252	109
29	246	329	390	2380	---	2140	670	978	144	108	151	333
30	229	303	380	1850	---	1900	624	961	189	97	120	326
31	217	---	400	1300	---	1760	---	869	---	91	101	---
TOTAL	5534	6941	21046	69666	16026	128720	46162	17452	10169	4684	3708	5871
MEAN	179	231	679	2247	572	4152	1539	563	339	151	120	196
MAX	524	387	2180	8340	1200	17300	2600	978	779	540	261	697
MIN	70	130	277	560	330	1100	624	310	133	78	58	78
CFSM	.30	.38	1.12	3.72	.95	6.87	2.55	.93	.56	.25	.20	.33
IN.	.34	.43	1.30	4.29	.99	7.93	2.84	1.07	.63	.29	.23	.36

CAL YR 1978 TOTAL 383762 MEAN 1051 MAX 11100 MIN 70 CFSM 1.74 IN 23.64
WTR YR 1979 TOTAL 335979 MEAN 920 MAX 17300 MIN 58 CFSM 1.52 IN 20.69

WEST BRANCH SUSQUEHANNA RIVER BASIN
01548500 PINE CREEK AT CEDAR RUN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1975 to current year.

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
JUN 06...	1200	466	75	7.2	17.0	.0	.0	17	18	--	--
AUG 06...	1600	112	125	8.2	26.5	.0	.0	--	26	111	.15

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
JUN 06...	--	--	--	--	--	--	270	260	10	--
AUG 06...	33.6	0	<10	<10	20	10	150	120	30	11000

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, SUS- PENDE RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
JUN 06...	--	80	20	60	--	--	--	--	2	2.5
AUG 06...	<10	70	10	60	460	.00	0	90	4	1.2

BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE	AUG 6,79
TIME	1600
TOTAL COUNT	56
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.9
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
...ELMIDAE	2
...DIPTERA	
...TIPULIDAE	1
...EPHEMEROPTERA	17
...TRICHOPTERA	26
...DIPTERA	
...CHIRONOMIDAE	3
...PLECOPTERA	5
...DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	2

WEST BRANCH SUSQUEHANNA RIVER BASIN

01549500 BLOCKHOUSE CREEK NEAR ENGLISH CENTER, PA

LOCATION.--Lat 41°28'25", long 77°13'52", Lycoming County, Hydrologic Unit 02050205, on right bank just downstream from bridge on State Highway 284, 0.7 mi (1.1 km) upstream from Blacks Creek, 1.7 mi (2.7 km) upstream from confluence with Texas Creek, and 5 mi (8 km) northeast of English Center.

DRAINAGE AREA.--37.7 mi² (97.6 km²).

PERIOD OF RECORD.--October 1940 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 951: 1941. WSP 1031: 1942-44(M). WSP 1502: 1942. WDR PA-75-1: 1973(P), 1974(P).

GAGE.--Water-stage recorder. Datum of gage is 1,041.85 ft (317.556 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--39 years, 58.3 ft³/s (1.651 m³/s), 21.05 in/yr (535 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,260 ft³/s (177 m³/s) June 23, 1972, gage height, 9.34 ft (2.847 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of contracted-opening measurement at gage height, 8.81 ft (2.685 m); no flow Aug. 6, 7, 31, Sept. 2, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936 reached a stage of 9.0 ft (2.74 m), from floodmark, discharge, 5,780 ft³/s (164 m³/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31.2 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. 2	0715	1,100 31.2	4.25 1.295	Mar. 6	0030	*2,070 58.6	5.51 1.679
Jan. 24	1730	ice jam	*6.95 2.118				

Minimum discharge, 5.0 ft³/s (0.142 m³/s), Aug. 10, 23, gage height, 1.27 ft (0.387 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	20	32	150	76	70	77	34	55	77	10	11
2	11	19	29	712	65	100	85	31	48	34	14	9.8
3	10	19	29	301	57	125	88	34	40	24	16	11
4	15	18	66	160	50	433	92	40	34	20	9.3	9.4
5	15	18	63	110	45	1380	128	33	30	18	7.6	8.4
6	13	16	58	86	42	1160	108	31	28	15	6.7	295
7	11	16	53	82	39	467	97	30	26	13	6.2	99
8	10	18	59	95	37	298	90	29	23	11	6.0	68
9	10	16	228	72	35	218	151	28	30	9.9	5.2	51
10	9.0	15	134	64	33	193	172	27	22	9.1	8.4	39
11	8.5	14	108	58	31	176	162	27	42	9.5	14	31
12	8.0	13	93	54	30	143	159	24	26	9.9	25	25
13	9.0	13	79	52	28	120	147	24	20	8.9	17	21
14	36	13	70	50	27	123	145	22	17	8.2	11	89
15	24	13	59	60	26	103	141	20	15	7.9	8.8	66
16	18	12	51	50	25	97	119	20	14	9.8	7.7	42
17	15	15	48	45	24	82	108	17	13	12	6.8	36
18	14	61	44	42	23	77	91	16	12	16	6.9	32
19	13	38	41	39	22	72	79	17	11	11	7.5	28
20	15	34	39	37	22	68	70	17	11	8.6	6.5	24
21	13	32	46	82	22	67	62	16	10	7.8	5.9	31
22	13	30	40	72	23	67	56	17	18	7.2	5.2	47
23	12	32	36	40	26	69	50	17	19	6.6	5.0	28
24	13	48	32	300	32	144	45	87	12	6.5	8.6	22
25	12	42	33	700	48	239	41	96	11	6.1	19	19
26	16	36	30	341	76	181	40	102	9.5	15	9.4	18
27	44	35	28	211	62	140	52	105	8.7	12	49	16
28	26	38	27	160	56	112	48	105	8.5	8.7	19	36
29	23	34	26	124	---	104	40	91	10	8.3	18	90
30	22	34	25	101	---	95	36	79	34	7.8	18	55
31	21	---	25	86	---	84	---	66	---	6.8	13	---
TOTAL	491.5	762	1731	4536	1082	6807	2779	1302	657.7	425.6	370.7	1357.6
MEAN	15.9	25.4	55.8	146	38.6	220	92.6	42.0	21.9	13.7	12.0	45.3
MAX	44	61	228	712	76	1380	172	105	55	77	49	295
MIN	8.0	12	25	37	22	67	36	16	8.5	6.1	5.0	8.4
CFSM	.42	.67	1.48	3.87	1.02	5.84	2.46	1.11	.58	.36	.32	1.20
IN.	.48	.75	1.71	4.48	1.07	6.72	2.74	1.28	.65	.42	.37	1.34

CAL YR 1978 TOTAL 28014.7 MEAN 76.8 MAX 992 MIN 6.4 CFSM 2.04 IN 27.64
WTR YR 1979 TOTAL 22302.1 MEAN 61.1 MAX 1380 MIN 5.0 CFSM 1.62 IN 22.01

WEST BRANCH SUSQUEHANNA RIVER BASIN

01549700 PINE CREEK BELOW LITTLE PINE CREEK NEAR WATERVILLE, PA

LOCATION.--Lat 41°16'25", long 77°19'28", Lycoming County, Hydrologic Unit 02050205, on downstream side of bridge pier, 0.9 mi (1.4 km) downstream from Ramsey Run, 4 mi (6 km) downstream from Little Pine Creek 4 mi (6 km) south of Waterville, and 9.2 mi (14.8 km) upstream from mouth.

DRAINAGE AREA.--944 mi² (2,445 km²).

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WDR PA-72-1: 1964(P).

GAGE.--Nonrecording gage. Datum of gage is 570.62 ft (173.925 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flood flows subject to regulation by Little Pine Creek Reservoir 8.5 mi (13.7 km) upstream, capacity, 24,900 acre-ft (30.7 hm³).

AVERAGE DISCHARGE.--22 years, 1,432 ft³/s (40.6 m³/s), 20.64 in/yr (524 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 104,000 ft³/s (2,950 m³/s) June 23, 1972, gage height, 22.76 ft (6.937 m), from floodmarks, from rating curve extended above 22,000 ft³/s (623 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 25 ft³/s (0.71 m³/s) Sept. 25, 26, 27, 1964; minimum gage height observed, 0.97 ft (0.296 m) Sept. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 9,200 ft³/s (261 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	1100	16,300 462	8.15 2.484	Mar. 6	1130	*28,500 807	*10.65 3.246
Jan. 26	0200	18,800 532	8.70 2.652	Mar. 25	1000	11,100 314	6.87 2.094

Minimum daily discharge, 111 ft³/s (3.14 m³/s), Aug. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	350	490	1100	1900	1800	2620	960	1280	935	158	225
2	180	330	480	13300	1650	2350	2510	840	1310	627	167	176
3	148	320	460	12400	1400	3200	2470	840	1140	483	195	157
4	139	305	440	8980	1250	3560	2470	887	960	434	195	176
5	159	290	1340	4890	1120	22000	3280	911	887	346	195	160
6	148	282	1310	3360	1030	26200	3490	783	794	290	176	1990
7	140	270	1170	2300	960	18300	3400	1090	772	247	176	1450
8	135	260	2060	2500	900	14500	2580	1060	729	215	167	1390
9	133	270	5010	1850	850	9130	2620	840	627	200	158	1010
10	150	260	4220	1650	810	8630	4020	772	708	188	167	525
11	170	250	3280	1450	770	7570	4450	729	627	194	176	396
12	191	235	2600	1350	730	5820	4160	687	627	210	282	374
13	148	228	2320	1300	700	5610	4160	900	552	200	215	346
14	214	224	1870	1250	670	4750	4250	820	491	187	195	346
15	960	217	1500	1400	640	3930	3840	760	466	180	176	360
16	687	210	1300	1200	620	3530	3380	720	450	200	167	517
17	404	220	1170	1100	595	3400	3040	729	400	216	150	346
18	374	258	1050	1000	575	3200	2580	750	365	225	134	320
19	346	729	960	950	565	3200	2430	772	340	247	130	307
20	307	570	880	920	550	3200	2280	552	320	215	127	307
21	294	499	1040	2000	550	3200	2010	534	294	193	125	320
22	282	470	960	1800	580	3200	1810	517	294	177	122	320
23	247	450	880	1000	660	3200	1720	483	320	163	115	307
24	236	430	800	5190	780	3330	1590	740	307	154	111	270
25	225	483	840	12100	1100	9620	1360	998	282	149	127	236
26	225	627	770	12600	1750	8590	1280	1280	236	210	155	215
27	440	589	720	7400	1570	5670	1170	1910	195	270	195	205
28	480	560	690	4400	1450	4000	1200	1970	195	258	320	236
29	430	540	660	3490	---	3360	1200	2070	195	225	307	247
30	390	500	640	2700	---	2790	1060	1750	215	215	270	887
31	370	---	630	2320	---	2700	---	1360	---	167	247	---
TOTAL	8954	11226	42540	119250	26725	203540	78430	30014	16378	8220	5600	14121
MEAN	289	374	1372	3847	954	6566	2614	968	546	265	181	471
MAX	960	729	5010	13300	1900	26200	4450	2070	1310	935	320	1990
MIN	133	210	440	920	550	1800	1060	483	195	149	111	157
CFSM	.31	.40	1.45	4.08	1.01	6.96	2.77	1.03	.58	.28	.19	.50
IN.	.35	.44	1.68	4.70	1.05	8.02	3.09	1.18	.65	.32	.22	.56

CAL YR 1978	TOTAL	628600	MEAN	1722	MAX	15800	MIN	120	CFSM	1.82	IN	24.77
WTR YR 1979	TOTAL	564998	MEAN	1548	MAX	26200	MIN	111	CFSM	1.64	IN	22.26

WEST BRANCH SUSQUEHANNA RIVER BASIN

01550000 LYCOMING CREEK NEAR TROUT RUN, PA

LOCATION.--Lat 41°25'06", long 77°01'59", Lycoming County, Hydrologic Unit 02050206, on right bank 150 ft (46 m) upstream from highway bridge, 300 ft (91 m) upstream from Penn Central Railroad bridge, 0.5 mi (0.8 km) downstream from Grays Run, and 2.6 mi (4.2 km) northeast of village of Trout Run.

DRAINAGE AREA.--173 mi² (448 km²).

PERIOD OF RECORD.--December 1913 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 921: 1933, 1934(M), 1935-39. WSP 1302: 1914-16, 1922(M), 1923-25, 1926(M), 1927-28, 1930, 1931(M). WSP 1502: 1920-21(M), 1932(M), 1933.

GAGE.--Water-stage recorder. Datum of gage is 693.95 ft (211.516 m) National Geodetic Vertical Datum of 1929. Prior to June 1, 1939, non recording gage at site 150 ft (46 m) downstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--65 years, 285 ft³/s (8.071 m³/s), 22.41 in/yr (569 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,900 ft³/s (733 m³/s) June 22, 1972, gage height, 20.19 ft (6.154 m), from floodmark in gage shelter, from rating curve extended above 5,300 ft³/s (150 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.2 ft³/s (0.091 m³/s) Sept. 27, 1936; minimum daily, 4.0 ft³/s (0.11 m³/s) Sept. 19-24, 27, 28, 1936, Sept. 1, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,900 ft³/s (82.1 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. 2	0945	4,750 135	8.41 2.563	Mar. 6	0245	*12,000 340	*13.22 4.029
Jan. 25	0045	6,930 196	10.09 3.075				

Minimum daily discharge, 16 ft³/s (0.45 m³/s) July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	145	234	450	355	396	386	198	304	75	26	87
2	54	135	216	3360	312	616	410	178	272	75	90	87
3	50	129	209	1640	280	566	454	185	338	59	129	92
4	80	118	312	960	250	1630	420	280	249	44	87	75
5	112	112	342	707	230	7820	661	220	198	42	73	63
6	118	106	296	600	210	6630	536	195	167	34	59	589
7	87	103	276	568	195	2260	464	178	145	23	59	515
8	72	115	296	713	180	1390	430	167	117	21	44	351
9	63	103	980	500	170	999	673	151	126	19	29	276
10	50	95	678	434	160	900	840	145	97	19	36	227
11	42	87	520	350	150	870	803	129	205	20	87	191
12	36	82	445	320	145	654	737	111	167	18	164	164
13	38	80	396	300	135	540	684	106	130	19	164	145
14	148	80	355	350	130	556	667	92	109	16	114	292
15	181	77	300	300	125	490	638	77	89	20	95	420
16	129	72	272	260	120	382	562	73	74	28	75	253
17	109	87	257	230	115	360	526	59	61	80	59	209
18	98	525	242	210	110	338	449	48	53	65	54	184
19	95	360	198	190	107	312	382	46	47	61	63	167
20	100	321	195	175	104	284	338	50	42	34	48	148
21	98	296	264	260	102	268	300	44	38	23	32	161
22	90	272	230	520	100	261	272	48	61	21	23	304
23	82	272	191	380	110	253	245	61	111	28	18	209
24	85	368	174	1570	150	450	223	573	73	63	132	167
25	80	338	205	3900	261	858	202	803	50	42	205	148
26	82	296	181	1460	578	822	198	828	38	52	135	138
27	276	276	164	954	415	633	292	743	29	80	205	123
28	205	272	135	749	308	520	329	696	26	48	145	145
29	171	257	129	600	---	495	245	562	40	38	120	396
30	158	245	126	505	---	495	216	479	97	32	145	280
31	151	---	142	430	---	430	---	377	---	22	103	---
TOTAL	3199	5824	8960	23945	5607	33478	13582	7902	3553	1221	2818	6606
MEAN	103	194	289	772	200	1080	453	255	118	39.4	90.9	220
MAX	276	525	980	3900	578	7820	840	828	338	80	205	589
MIN	36	72	126	175	100	253	198	44	26	16	18	63
CFSM	.60	1.12	1.67	4.46	1.16	6.24	2.62	1.47	.68	.23	.53	1.27
IN.	.69	1.25	1.93	5.15	1.21	7.20	2.92	1.70	.76	.26	.61	1.42

CAL YR 1978 TOTAL 145512 MEAN 399 MAX 5120 MIN 14 CFSM 2.31 IN 31.29
WTR YR 1979 TOTAL 116695 MEAN 320 MAX 7820 MIN 16 CFSM 1.85 IN 25.09

WEST BRANCH SUSQUEHANNA RIVER BASIN

01551500 WEST BRANCH SUSQUEHANNA RIVER AT WILLIAMSPORT, PA

LOCATION.--Lat 41°14'17", long 76°59'56", Lycoming County, Hydrologic Unit 02050206, on left bank at upstream edge of Market Street Bridge at Williamsport, 350 ft (110 m) upstream from Hagermans Run.

DRAINAGE AREA.--5,682 mi² (14,716 km²).

PERIOD OF RECORD.--March 1895 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1925-28. WSP 1502: 1895-1904, 1912-13, 1919.

GAGE.--Water-stage recorder. Datum of gage is 494.98 ft (150.870 m) National Geodetic Vertical Datum of 1929. Mar. 1, 1895 to Sept. 30, 1928, nonrecording gage at same site and datum.

REMARKS.--Records good. Peaks may be affected by upstream regulation.

AVERAGE DISCHARGE.--84 years, 8,939 ft³/s (253.2 m³/s), 21.32 in/yr (542 mm/yr), adjusted for storage 1961-75.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 279,000 ft³/s (7,900 m³/s) June 23, 1972, gage height, 34.75 ft (10.592 m) from rating curve extended above 210,000 ft³/s (5,950 m³/s) on basis of slope-area measurement at gage height, 35.57 ft (10.232 m); minimum, 162 ft³/s (4.59 m³/s) Sept. 17, 1943; minimum daily, 251 ft³/s (7.11 m³/s) Sept. 13, 1932; minimum gage height, -0.67 ft (-0.204 m) Sept. 3, 1966.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Maximum stage known prior to 1895, 32.4 ft (9.88 m) June 1, 1889, discharge, about 252,000 ft³/s (7,140 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 147,000 ft³/s (4,160 m³/s) Mar. 6, gage height, 22.73 ft (6.928 m); minimum, 1,760 ft³/s (49.8 m³/s) July 23, gage height, 0.60 ft (0.183 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2020	3520	4870	6810	11700	22300	15100	7310	12800	3410	5530	4450
2	1920	3200	4750	39900	9300	23300	14500	6930	11100	4310	6260	3810
3	1990	3020	4650	66900	8000	24000	16700	6470	10300	4360	6730	3850
4	2140	2890	4990	49000	6800	27400	18900	6750	9230	4070	5290	4670
5	2220	2870	7110	37100	6000	91600	20500	7220	8290	3650	4080	4170
6	2340	2870	9530	26900	5100	140000	20100	6790	7740	3100	3260	8920
7	2410	2790	9500	21400	4950	94200	17800	6410	7080	2730	2870	18300
8	2300	2780	8590	18900	4800	69700	15800	6170	6340	2480	2880	17900
9	2180	2730	12400	14000	4650	59900	15400	5930	6640	2320	6040	13300
10	2110	2660	24100	10000	4500	52800	22900	5690	6810	2170	5030	9270
11	2050	2610	23000	7800	4380	48900	26500	5760	6530	2070	4430	7740
12	2020	2510	18400	6800	4300	40100	25300	7790	6490	2240	7040	6570
13	1980	2350	15400	6200	4230	32200	25000	7940	6120	2600	8900	5710
14	2210	2190	12700	8200	4130	28800	23000	7720	5340	2650	8570	5230
15	3410	2160	10600	10400	4020	29500	22100	7690	4740	2710	6940	6130
16	4960	2160	9060	9070	3920	27000	21100	7150	4300	2460	5470	5960
17	4540	2290	8010	8020	3850	23300	19200	6700	3920	3250	4600	5060
18	3950	3070	7480	6980	3750	19000	17300	6180	3620	3300	4070	4230
19	3380	4610	6990	6200	3650	16400	15200	5590	3410	2950	3750	3830
20	3350	5310	6310	5700	3550	16400	13100	5260	3210	2430	3650	3560
21	3180	4870	6530	5200	3500	16400	11700	4950	2990	2140	3510	3580
22	2980	4510	8520	8000	3900	16400	10400	4800	2930	1930	3050	4480
23	2850	4300	11000	7600	4300	16400	9450	4580	2850	1920	2680	4480
24	2580	4490	9640	11000	5200	18600	8660	7080	2820	1940	2740	4490
25	2440	5040	9440	48000	8100	29800	7840	14300	2670	1960	3270	4020
26	2360	5310	8200	50700	14000	45200	7400	20700	2420	3240	3950	3460
27	2730	5110	7200	39800	23000	35100	7470	19100	2300	4980	7320	3100
28	3580	4960	6100	27800	23800	26700	8450	17300	2150	4960	9030	3040
29	4810	4900	5300	20800	---	22000	8540	17500	2170	3850	8970	6170
30	4780	4960	4700	16800	---	18500	7840	15900	2350	3300	6980	15000
31	4060	---	4500	13800	---	16800	---	14500	---	3900	5530	---
TOTAL	89830	107040	289570	615780	191380	1148700	473250	274160	159660	93380	162420	194480
MEAN	2898	3568	9341	19860	6835	37050	15780	8844	5322	3012	5239	6483
MAX	4960	5310	24100	66900	23800	140000	26500	20700	12800	4980	9030	18300
MIN	1920	2160	4500	5200	3500	16400	7400	4580	2150	1920	2680	3040
CFSM	.51	.63	1.64	3.50	1.20	6.52	2.78	1.56	.94	.53	.92	1.14
IN.	.59	.70	1.90	4.03	1.25	7.52	3.10	1.79	1.05	.61	1.06	1.27

CAL YR 1978 TOTAL 3770530 MEAN 10330 MAX 71000 MIN 1400 CFSM 1.82 IN 24.69
WTR YR 1979 TOTAL 3799650 MEAN 10410 MAX 140000 MIN 1920 CFSM 1.83 IN 24.88

WEST BRANCH SUSQUEHANNA RIVER BASIN

01552000 LOYALSOCK CREEK AT LOYALSOCKVILLE, PA

LOCATION.--Lat 41°19'26", long 76°54'42", Lycoming County, Hydrologic Unit 02050206, on left bank 500 ft (150 m) downstream from highway bridge at Loyalsockville, 2.5 mi (4.0 km) downstream from Wallis Run and 7.3 mi (11.7 km) upstream from mouth.

DRAINAGE AREA.--443 mi² (1,147 km²).

PERIOD OF RECORD.--August 1925 to September 1974, October 1975 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1969, published as "at Loyalsock".

REVISED RECORDS.--WSP 756: Drainage area. WSP 871: 1938(M). WSP 1051: 1926(M), 1933(M), 1936(M). WSP 1302: 1926-30. WSP 1502: 1932-33, 1935(M), 1937(M).

GAGE ---Water-stage recorder. Datum of gage is 585.63 ft (178.500 m) Pennsylvania Department of Transportation datum. Prior to Sept. 16, 1926 nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--53 years, 764 ft³/s (21.64 m³/s), 23.36 in/yr (593 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88,700 ft³/s (2,510 m³/s) June 23, 1972, gage height, 14.74 ft (4.493 m), from floodmark in gage well, from rating curve extended above 16,000 ft³/s (450 m³/s) on basis of slope-area measurement at gage height, 12.20 ft (3.719 m); minimum, 11 ft³/s (0.31 m³/s) Sept. 25, 26, Nov. 24, 1964; minimum gage height, 2.11 ft (0.643 m) Aug. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,400 ft³/s (181 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	1300	19,400 549	9.42 2.871	Mar. 6	0330	*30,000 850	*10.78 3.286
Jan. 25	0515	17,200 487	9.08 2.768				

Minimum discharge, 91 ft³/s (2.58 m³/s) Aug. 10, gage height, 3.35 ft (1.021 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	570	583	1050	906	1430	704	552	799	231	107	356
2	217	526	541	13700	780	1910	713	513	694	201	141	304
3	200	487	509	6700	680	1770	780	498	1430	183	329	328
4	226	459	677	3610	610	3330	749	715	1040	179	280	405
5	368	435	941	2930	550	23100	1180	667	781	173	183	319
6	782	406	783	2500	500	17700	1080	583	704	163	141	2350
7	744	389	690	1800	460	5680	910	539	626	151	123	2210
8	534	398	679	1300	420	3370	824	507	547	135	113	1080
9	446	387	2580	2000	400	2280	1060	477	506	126	103	759
10	393	358	2240	1500	375	1910	1820	469	453	120	95	596
11	354	335	1490	1100	350	2360	1740	479	564	118	156	498
12	331	323	1220	820	335	1680	1690	444	557	116	318	427
13	314	305	1070	680	320	1360	1580	419	441	117	505	383
14	1080	302	956	610	305	1310	1490	402	383	116	340	412
15	1460	298	809	620	290	1250	1400	384	354	124	239	820
16	943	289	729	760	280	1010	1210	382	332	144	190	546
17	747	298	682	640	270	900	1080	364	299	235	159	433
18	631	971	631	560	265	860	920	335	273	207	143	384
19	569	995	539	520	255	800	820	317	248	181	145	373
20	550	722	574	470	250	760	740	313	229	148	158	349
21	522	637	633	2300	245	730	670	330	214	121	141	338
22	467	587	645	4210	250	700	600	312	228	111	123	866
23	428	568	519	2240	300	790	550	323	310	134	113	875
24	411	897	507	2940	700	960	520	1490	309	143	186	622
25	390	904	559	12100	1500	1600	490	2860	239	131	1140	513
26	387	757	640	4550	3660	1040	485	3040	206	127	649	458
27	1180	671	497	2760	2550	861	565	2430	186	120	1690	414
28	1040	665	430	2040	1480	741	818	1870	177	114	1220	405
29	798	639	390	1600	---	723	706	1460	183	120	699	763
30	682	595	370	1280	---	770	600	1190	257	113	530	739
31	615	---	420	1080	---	741	---	958	---	108	427	---
TOTAL	18049	16173	24533	80970	19286	84426	28494	25622	13569	4510	10886	19325
MEAN	582	539	791	2612	689	2723	950	827	452	145	351	644
MAX	1460	995	2580	13700	3660	23100	1820	3040	1430	235	1690	2350
MIN	200	289	370	470	245	700	485	312	177	108	95	304
CFSM	1.31	1.22	1.79	5.90	1.56	6.15	2.14	1.87	1.02	.33	.79	1.45
IN.	1.52	1.36	2.06	6.80	1.62	7.09	2.39	2.15	1.14	.38	.91	1.62

CAL YR 1978 TOTAL 406879 MEAN 1115 MAX 19500 MIN 86 CFSM 2.52 IN 34.17
WTR YR 1979 TOTAL 345843 MEAN 948 MAX 23100 MIN 95 CFSM 2.14 IN 29.04

WEST BRANCH SUSQUEHANNA RIVER BASIN
01552500 MUNCY CREEK NEAR SONESTOWN, PA

LOCATION.--Lat 41°21'25", long 76°32'06", Sullivan County, Hydrologic Unit 02050206, on right bank 150 ft (46 m) downstream from Slip Run, 185 ft (56 m) downstream from bridge on Legislative Route 611, and 1.2 mi (1.9 km) east of Sonestown.

DRAINAGE AREA.--23.8 mi² (61.6 km²).

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1502: 1941-42.

GAGE.--Water-stage recorder. Datum of gage is 1,025.01 ft (312.423 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 31, 1941, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--39 years, 48.5 ft³/s (1.374 m³/s), 27.70 in/yr (704 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,260 ft³/s (234 m³/s) June 22, 1972, gage height, 8.94 ft (2.725 m) from rating curve extended above 3,400 ft³/s (96.3 m³/s); minimum, 0.1 ft³/s (0.003 m³/s) Sept. 11, 12, 13, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of about 9.3 ft (2.8 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31.2 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. 2	0815	1,350 38.2	4.81 1.466	Mar. 6	0045	*2,470 70.0	*6.02 1.835
Jan. 25	0030	1,230 34.8	4.65 1.417	Sept. 6	0600	1,140 32.3	4.53 1.381

Minimum discharge, 2.5 ft³/s (0.071 m³/s), July 22, gage height, 1.28 ft (0.390 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	30	31	269	41	93	45	36	50	6.6	3.1	13
2	14	26	29	849	35	106	52	32	67	6.5	64	13
3	13	24	29	299	30	105	50	50	70	6.2	27	45
4	14	21	80	180	27	252	64	80	48	6.4	13	21
5	17	20	65	130	25	1440	99	58	46	6.1	9.4	17
6	93	18	53	105	22	928	74	52	46	4.9	8.6	448
7	37	17	47	84	20	299	62	45	38	4.3	7.8	178
8	29	17	58	105	19	179	56	41	31	4.0	6.7	96
9	24	15	191	82	17	126	120	36	27	3.8	6.4	62
10	20	14	113	66	15	144	117	33	25	3.8	14	46
11	18	13	82	54	14	171	105	30	28	3.9	24	37
12	16	12	67	46	13	120	97	25	22	4.2	74	30
13	17	12	56	39	12	91	86	24	17	7.2	41	25
14	89	12	48	36	12	91	89	21	15	4.1	24	32
15	56	11	42	45	11	69	84	20	13	4.1	18	31
16	44	11	36	37	10	69	74	19	12	4.4	15	23
17	39	13	34	33	9.8	53	65	15	11	5.6	13	19
18	32	126	30	30	9.3	48	56	13	9.8	3.7	13	18
19	30	61	28	28	9.0	42	49	14	9.0	3.3	14	26
20	28	48	30	27	8.8	39	44	17	7.8	2.9	12	18
21	24	43	43	180	8.7	35	40	13	7.5	2.8	10	35
22	21	37	29	109	9.0	32	36	12	18	2.8	9.4	109
23	20	47	26	67	10	31	33	27	26	4.2	9.0	56
24	19	84	33	355	20	52	30	191	11	7.9	12	42
25	17	58	53	529	150	77	29	212	8.5	3.9	23	36
26	20	48	37	203	250	65	30	252	7.1	6.4	13	31
27	84	44	28	131	127	53	55	182	6.2	9.0	53	27
28	47	44	25	99	89	47	52	144	6.0	4.4	30	27
29	40	37	23	75	---	52	41	107	6.4	4.7	21	55
30	35	35	22	59	---	52	39	82	10	4.9	18	38
31	32	---	26	49	---	48	---	62	---	3.6	15	---
TOTAL	1003	998	1494	4400	1023.6	5009	1873	1945	699.3	150.6	621.4	1654
MEAN	32.4	33.3	48.2	142	36.6	162	62.4	62.7	23.3	4.86	20.0	55.1
MAX	93	126	191	849	250	1440	120	252	70	9.0	74	448
MIN	13	11	22	27	8.7	31	29	12	6.0	2.8	3.1	13
CFSM	1.36	1.40	2.03	5.97	1.54	6.81	2.62	2.63	.98	.20	.84	2.32
IN.	1.57	1.56	2.34	6.88	1.60	7.83	2.93	3.04	1.09	.24	.97	2.59

CAL YR 1978	TOTAL	MEAN	MAX	MIN	CFSM	IN
WTR YR 1979	TOTAL	MEAN	MAX	MIN	CFSM	IN
22739.1	62.3	1060	6.6	2.62	35.54	
20870.9	57.2	1440	2.8	2.40	32.62	

WEST BRANCH SUSQUEHANNA RIVER BASIN

01553130 SAND SPRING RUN NEAR WHITE DEER, PA

LOCATION.--Lat 41°03'31", long 77°04'37", Union County, Hydrologic Unit 02050206, on right bank 12 ft (3.7 m) downstream from bridge on White Deer Creek Road, 500 ft (150 m) upstream from mouth, and 11.3 mi (18.2 km) west of White Deer.

DRAINAGE AREA.--4.93 mi² (12.77 km²).

PERIOD OF RECORD.--January 1968 to current year.

REVISED RECORDS.--WDR PA-72-1: 1970(M), 1971(P).

GAGE.--Water-stage recorder. Datum of gage is 1,037.16 ft (316.126 m) National Geodetic Vertical Datum of 1929. Prior to May 15, 1968 nonrecording gage at bridge 20 ft (6 m) upstream at same datum.

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

AVERAGE DISCHARGE.--11 years, 9.28 ft³/s (0.263 m³/s), 25.53 in/yr (648 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,000 ft³/s (28.3 m³/s) June 22, 1972, gage height, 5.68 ft (1.731 m), from rating curve extended above 200 ft³/s (5.7 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.84 ft³/s (0.024 m³/s) Sept. 25, 1970; minimum gage height, 2.57 ft (0.783 m) Sept. 9, 10, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 55 ft³/s (1.56 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. 2	Unknown	88 2.49	3.73 1.137	Mar. 5	2400	*329 9.32	*4.35 1.326
Jan. 24	2045	184 5.21	4.05 1.234	May 24	0815	184 5.21	4.05 1.234
Feb. 26	0315	105 2.97	3.80 1.158	Sept. 6	0545	147 4.16	3.95 1.204

Minimum discharge, 1.3 ft³/s (0.037 m³/s) Aug. 7, 8, 9, 22, 23, gage height, 2.75 ft (0.838 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.8	3.1	30	15	18	12	5.9	16	3.5	1.6	2.3
2	2.0	1.8	3.0	74	13	21	14	5.6	14	3.2	1.7	2.5
3	2.0	1.8	3.9	55	12	21	12	6.6	13	2.8	1.6	9.5
4	2.3	1.8	11	41	11	44	14	7.2	11	3.9	1.5	3.4
5	2.5	1.8	8.8	31	10	156	16	5.6	12	3.2	1.5	3.5
6	3.2	1.8	7.6	23	9.0	196	14	5.3	11	2.6	1.4	82
7	2.3	1.9	6.5	18	8.4	98	14	4.8	9.5	2.4	1.4	33
8	2.2	2.0	6.0	23	7.7	64	13	4.8	8.6	2.3	1.4	20
9	2.2	1.8	20	17	7.2	47	19	4.6	8.3	2.2	1.4	14
10	2.2	1.8	13	14	6.7	40	15	4.3	7.5	2.2	1.9	12
11	2.2	1.8	10	12	6.2	34	13	4.3	11	2.2	2.8	10
12	2.2	1.8	8.6	10	5.7	29	14	4.1	7.4	2.0	5.4	8.9
13	2.3	1.9	8.0	9.6	5.4	25	14	4.1	6.3	2.0	2.4	8.1
14	3.4	1.9	7.2	14	4.9	23	18	3.4	5.7	2.1	1.8	14
15	2.5	1.8	6.7	10	4.7	19	15	3.4	5.4	2.0	1.6	9.3
16	2.3	2.0	6.0	8.8	4.4	17	14	3.2	5.0	6.9	1.5	7.1
17	2.3	2.9	5.6	7.8	4.1	15	13	3.0	4.8	4.0	1.4	6.4
18	2.2	6.9	5.4	7.0	4.0	14	12	3.0	4.6	2.5	2.0	6.0
19	2.3	3.8	5.7	7.5	3.9	13	12	3.4	4.2	2.1	1.7	6.6
20	2.3	3.3	6.0	12	3.8	11	10	3.0	3.9	2.0	1.5	5.5
21	2.3	3.3	6.9	14	3.9	11	9.7	2.9	4.0	2.0	1.4	9.5
22	2.2	3.2	6.0	8.2	4.0	9.9	9.2	2.7	4.1	1.9	1.4	14
23	2.1	3.3	5.5	7.0	4.5	9.4	8.4	12	3.7	2.3	1.4	9.2
24	2.2	4.6	5.0	69	6.4	20	8.0	71	3.6	2.0	5.0	8.6
25	2.2	3.4	5.8	96	12	32	7.6	64	3.3	1.9	4.0	8.0
26	2.6	3.2	5.2	45	34	24	8.0	49	3.1	1.8	2.0	7.3
27	2.9	3.2	4.8	32	21	20	12	36	3.0	1.7	12	6.6
28	2.0	3.6	4.4	26	18	17	8.0	28	3.2	1.7	4.3	7.6
29	1.9	3.9	4.2	22	---	15	6.6	24	3.4	2.5	3.4	8.8
30	1.8	3.3	4.4	19	---	14	6.2	21	4.1	2.0	2.9	6.8
31	1.8	---	7.4	17	---	13	---	20	---	1.7	2.5	---
TOTAL	70.8	81.4	211.7	779.9	250.9	1090.3	361.7	420.2	204.7	77.6	77.8	350.5
MEAN	2.28	2.71	6.83	25.2	8.96	35.2	12.1	13.6	6.82	2.50	2.51	11.7
MAX	3.4	6.9	20	96	34	196	19	71	16	6.9	12	82
MIN	1.8	1.8	3.0	7.0	3.8	9.4	6.2	2.7	3.0	1.7	1.4	2.3
CFSM	.46	.55	1.39	5.11	1.82	7.14	2.45	2.76	1.38	.51	.51	2.37
IN.	.53	.61	1.60	5.88	1.89	8.23	2.73	3.17	1.54	.59	.59	2.64

CAL YR 1978 TOTAL 4000.2 MEAN 11.0 MAX 153 MIN 1.6 CFSM 2.23 IN 30.18
WTR YR 1979 TOTAL 3977.5 MEAN 10.9 MAX 196 MIN 1.4 CFSM 2.21 IN 30.01

WEST BRANCH SUSQUEHANNA RIVER BASIN

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA

LOCATION.--Lat 40°58'05", long 76°52'25", Union County, Hydrologic Unit 02050206, at downstream side of left abutment of Market Street bridge at Lewisburg, 0.2 mi (0.3 km) downstream from Buffalo Creek, and 7.4 mi (11.9 km), upstream from mouth.

DRAINAGE AREA.--6,847 mi² (17,734 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302. September 1913 to August 1923 (gage heights only) are contained in reports of Water Supply Commission of Pennsylvania or Pennsylvania Department of Forests and Waters.

GAGE.--Water-stage recorder. Datum of gage is 428.20 ft (130.515 m) National Geodetic Vertical Datum of 1929. Sept. 21, 1913 to Aug. 31, 1923, Dec. 7, 1939 to July 2, 1940, nonrecording gage at same site and datum. Since Oct. 1, 1942, water-stage recorder for Susquehanna River at Sunbury (station 01553990) used as an auxiliary gage for this station.

REMARKS.--Records good except those for winter periods, which are fair. Several flood-control reservoirs upstream, with a combined capacity of about 440,200 acre ft. (543 hm³).

AVERAGE DISCHARGE.--40 years, 10,850 ft³/s (307.3 m³/s), 21.52 in/yr (547 mm/yr), adjusted 1961-75.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 300,000 ft³/s (8,500 m³/s) June 24, 1972; maximum gage height, 34.23 ft (10.433 m) June 24, 1972, from floodmarks, backwater from Susquehanna River; minimum 390 ft³/s (11.0 m³/s) Nov. 16, 1964; gage height, 0.57 ft (0.174 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1936 reached a stage of 32.1 ft (9.78 m), from floodmarks, discharge, 287,000 ft³/s (8,130 m³/s), from slope-area measurement at Watsonstown, (backwater from Susquehanna River).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 165,000 ft³/s (4,670 m³/s) Mar. 6, gage height, 23.44 ft (7.145 m), (backwater from Susquehanna River); minimum, 2,170 ft³/s (61.5 m³/s) July 23, gage height, 1.67 ft (0.509 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2410	4710	6400	9700	15200	28100	18100	9060	16300	3560	5790	5920
2	2340	4110	6150	37100	12700	27400	16900	8510	14100	4710	5820	5100
3	2250	3780	5960	82600	10000	29100	18500	7970	13000	5040	8200	6020
4	2470	3630	6630	63100	8800	30700	21300	8330	12200	4860	6580	5920
5	2770	3560	8510	47500	7600	74600	24400	8840	10700	4540	5070	5750
6	3560	3590	11400	34700	6800	149000	24900	8580	9860	3910	4010	13900
7	3670	3420	11900	26900	6200	125000	22000	7970	9100	3460	3430	22500
8	3330	3500	11100	26900	5800	83500	19400	7550	8110	3080	3130	22200
9	3060	3570	14500	22400	5500	69300	18600	7270	7650	2890	4570	17200
10	2840	3410	27400	18400	5200	60000	24000	6930	8260	2680	6600	12600
11	2730	3280	28500	14200	4900	56600	31400	6930	8010	2560	4980	10000
12	2630	3160	23100	10600	4800	49600	30300	7900	7900	2470	6400	8510
13	2610	2990	19300	9030	4700	39800	29600	9590	7480	2960	10200	7420
14	3210	2750	16300	10600	4600	34500	28100	8690	6630	3080	10000	6530
15	4860	2700	13200	12700	4500	33600	26600	8950	5830	3330	8470	7510
16	6440	2680	11600	11800	4400	32100	25400	8470	5300	3030	6570	7720
17	6150	2750	10300	10000	4300	28600	23400	7830	4860	3330	5440	6700
18	5400	3970	9330	8770	4300	23500	21200	7310	4430	3960	4890	5620
19	4660	5730	8800	7650	4200	19900	18700	6600	4150	3720	4600	5010
20	4290	6690	7900	7200	4100	18900	16200	6150	3880	3180	4140	4610
21	4230	6310	7920	8080	4000	18700	14300	5800	3690	2700	4070	4510
22	3880	5830	8900	12600	4100	18700	12900	5550	3610	2430	3720	6830
23	3750	5550	11700	12600	4500	18500	11700	5670	3670	2250	3280	6870
24	3460	6080	11500	16500	10000	20100	10700	8840	3560	2840	3320	6240
25	3180	6540	12000	66700	25000	28100	9710	17900	3460	2360	5280	5690
26	3080	6930	11300	62300	40000	46700	9100	26700	3180	2840	5820	5040
27	3540	6600	10100	48800	38400	41900	9100	26500	3000	4740	7780	4490
28	4800	6470	8930	37500	31800	32000	9940	23200	2850	5830	12200	4050
29	5670	6370	10400	28500	---	26200	10700	22700	2910	4800	11200	5840
30	6110	6370	11200	23200	---	22300	9740	20700	3140	3990	9550	13300
31	5370	---	10200	17500	---	19900	---	18500	---	3640	7190	---
TOTAL	118750	137030	372430	806130	286400	1306900	566890	341490	200820	108770	192300	249600
MEAN	3831	4568	12010	26000	10230	42160	18900	11020	6694	3509	6203	8320
MAX	6440	6930	28500	82600	40000	149000	31400	26700	16300	5830	12200	22500
MIN	2250	2680	5960	7200	4000	18500	9100	5550	2850	2250	3130	4050
CAL YR 1978	TOTAL	4758530	MEAN	13040	MAX	85900	MIN	2000				
WTR YR 1979	TOTAL	4687510	MEAN	12840	MAX	149000	MIN	2250				

WEST BRANCH SUSQUEHANNA RIVER BASIN

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1944 to June 1953, February 1956 to September 1958, May 1960 to current year.

REMARKS.--Unpublished miscellaneous samples of sediment data published for water years 1962-63 available at Harrisburg office.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)
OCT 17...	1145	6240	300	7.5	12.0	2.0	11.6	103	57	120	80
NOV 14...	1030	2770	265	7.7	9.0	2.0	12.0	310	280	100	62
DEC 12...	1030	23600	145	6.7	2.0	30	13.4	100	640	44	31
JAN 24...	1430	13600	190	6.9	1.5	44	13.2	K15	120	59	43
MAR 13...	1000	40600	140	6.7	4.0	10	14.0	K1	K10	41	38
APR 24...	1230	10700	180	6.8	15.0	5.0	11.6	<1	K3	56	47
MAY 16...	1100	12400	180	7.2	18.0	1.0	12.0	K10	K7	68	52
JUN 26...	1530	3150	223	7.9	21.5	1.0	9.0	K3	108	93	59
JUL 24...	1600	2870	277	8.1	26.5	3.0	8.8	590	232	120	70
AUG 21...	1300	4040	216	7.3	22.5	2.0	10.8	K23	104	85	68
SEP 11...	1430	9950	167	7.1	18.0	1.0	9.2	160	K22	67	46

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 17...	29	11	7.5	12	.3	--	1.8	38	--	78	12
NOV 14...	26	8.6	5.5	10	.2	--	2.8	38	--	57	9.4
DEC 12...	11	4.0	3.0	13	.2	--	1.4	13	--	38	4.4
JAN 24...	15	5.3	5.2	16	.3	--	1.7	16	--	40	9.2
MAR 13...	10	4.0	2.7	12	.2	--	1.1	3	--	37	4.0
APR 24...	14	5.1	3.4	11	.2	--	1.0	9	--	45	5.2
MAY 16...	17	6.1	4.0	11	.2	--	1.2	16	--	56	5.7
JUN 26...	24	7.9	5.0	10	.2	--	1.3	34	--	52	7.1
JUL 24...	31	9.4	6.4	11	.3	7.8	1.4	46	.7	63	8.2
AUG 21...	22	7.2	5.3	12	.3	6.6	1.3	17	1.7	58	7.3
SEP 11...	18	5.4	4.5	12	.2	6.5	2.0	21	3.3	40	5.6

WEST BRANCH SUSQUEHANNA RIVER BASIN

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	FLUORIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)
OCT 17...	.1	2.6	178	165	.75	--	.06	.26	.32	.00	.32
NOV 14...	.1	1.1	164	133	.82	--	.06	.39	.45	.31	.14
DEC 12...	.1	4.7	77	75	.62	--	.07	.37	.44	.20	.24
JAN 24...	.1	4.3	101	90	.82	--	.13	.70	.83	.37	.46
MAR 13...	.1	4.8	74	66	.51	--	.05	.09	.14	.05	.09
APR 24...	.1	4.3	89	84	.46	--	.04	.02	.06	.03	.03
MAY 16...	.1	3.7	122	103	.43	--	.01	.17	.18	.05	.13
JUN 26...	.1	4.1	165	122	.80	--	.06	.23	.29	.08	.21
JUL 24...	.1	3.4	183	151	.80	--	.00	.31	.31	.13	.18
AUG 21...	.1	1.9	143	113	.58	--	.01	.17	.18	.13	.05
SEP 11...	.1	4.8	105	96	.57	.54	.02	.07	.09	.01	.08

DATE	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 17...	1.1	--	.03	.01	--	3.8	.9	--	17	286	61
NOV 14...	1.3	--	--	.08	6.4	--	--	2600	6	45	50
DEC 12...	1.1	--	.07	.00	--	2.3	1.7	--	61	3890	93
JAN 24...	1.7	--	.13	.02	1.7	--	--	--	216	7930	85
MAR 13...	.65	--	.00	.00	--	.7	.4	0	23	2520	96
APR 24...	.52	--	.00	.01	6.9	--	--	520	11	318	100
MAY 16...	.61	--	.01	.00	4.8	--	--	1800	7	234	22
JUN 26...	1.1	--	.03	.01	--	2.8	.6	4600	5	43	68
JUL 24...	1.1	--	.02	.01	2.8	--	--	6000	9	70	100
AUG 21...	.76	--	.01	.01	3.9	--	--	--	5	55	100
SEP 11...	.66	.62	.02	.01	--	3.8	--	--	15	403	80

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)		ARSENIC SUS- PENDED TOTAL (UG/L AS AS)		ARSENIC DIS- SOLVED (UG/L AS AS)		BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)		BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)		BARIUM, DIS- SOLVED (UG/L AS BA)		CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)		CADMIUM SUS- PENDED RECOV- ERABLE (UG/L AS CD)		CADMIUM DIS- SOLVED (UG/L AS CD)	
OCT 17...	1145	0	--	0		0		0		0		0		0		0		0	
DEC 12...	1030	1	0	0		0		0		0		1		0		0		1	
MAR 13...	1000	1	--	1		0		0		0		0		0		0		1	
JUN 26...	1530	2	--	1		<50		--		40		0		0		0		0	
SEP 11...	1430	1	0	1		100		70		30		0		0		0		0	

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUS- PENDED RECOV. (UG/L AS CR)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUS- PENDED RECOVERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUS- PENDED RECOVERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT 17...	10	10	0	5	3	2	7	3	4	190
DEC 12...	<10	<10	0	9	5	4	7	7	0	4100
MAR 13...	10	2	8	8	1	7	8	3	5	1400
JUN 26...	30	20	10	2	1	1	6	3	3	230
SEP 11...	<10	0	<10	5	2	3	6	0	9	460

DATE	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDED RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDED RECOV- ERABLE (UG/L AS HG)
OCT 17...	170	20	1	0	3	600	210	390	<.5	.0
DEC 12...	4100	20	10	10	0	730	220	510	<.5	.0
MAR 13...	1300	90	0	0	0	420	0	460	.5	.0
JUN 26...	230	1	15	15	0	230	30	200	<.5	.0
SEP 11...	--	30	13	13	0	320	10	310	<.5	.0

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 17...	<.5	0	0	0	0	0	0	40	30	10
DEC 12...	<.5	0	0	0	0	0	0	90	80	10
MAR 13...	.5	0	0	0	0	0	0	70	30	40
JUN 26...	<.5	0	0	0	0	0	0	40	20	20
SEP 11...	<.5	0	0	0	0	0	0	50	0	50

WEST BRANCH SUSQUEHANNA RIVER BASIN

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 14...	1030	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 13...	1000	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 16...	1100	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 13...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 16...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)
NOV 14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 13...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 16...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	AROCLOR TOT. IN BOT MAT 1254 PCB SERIES (UG/KG)	PCB, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 14...	ND	ND	9	ND	ND	ND	ND	ND	ND	ND
MAR 13...	ND	--	--	ND	ND	--	ND	--	ND	--
MAY 16...	ND	--	--	ND	ND	--	ND	--	ND	--

ND - Material specifically analyzed for but not detected.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

PHYTOPLANKTON ANALYSES, AUGUST 1978 TO SEPTEMBER 1978

DATE	AUG 22,78	SEP 20,78
TIME	1030	1130
TOTAL CELLS/ML	5500	2500
DIVERSITY: DIVISION	0.9	1.7
..CLASS	0.9	1.7
..ORDER	1.3	2.3
...FAMILY	2.5	2.9
....GENUS	2.7	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)				
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
...COELASTRACEAE				
....COELASTRUM	2300#	42	--	-
...HYDRODICTYACEAE				
...PEDIASTRUM	340	6	--	-
...OOCYSTACEAE				
....ANKISTRODESMUS	200	4	120	5
....SELENASTRUM	91	2	--	-
...SCENEDESMACEAE				
....CRUCIGENIA	73	1	--	-
....SCENEDESMUS	1200#	22	400#	16
..TETRASPORALES				
...PALMELLACEAE				
...SPHAEROCYSTIS	150	3	120	5
..VOLVOCALES				
...CHLAMYDOMONADACEAE				
....CHLAMYDOMONAS	*	0	--	-
..ZYGNEMATALES				
...DESMIDIACEAE				
....CLOSTERIUM	*	0	--	-
....COSMARIUM	*	0	43	2
....STAUSTRUM	*	0	--	-
CHRYSOPHYTA				
..BACILLARIOPHYCEAE				
...CENTRALES				
...COSCINODISCACEAE				
...CYCLOTELLA	--	-	14	1
...MELOSIRA	210	4	520#	20
...STEPHANODISCUS	*	0	--	-
..PENNALES				
...ACHNANTHACEAE				
...ACHNANTHES	*	0	14	1
...CYMBELLACEAE				
...CYMBELLA	--	-	14	1
...FRAGILARIACEAE				
...FRAGILARIA	--	-	29	1
...SYNEDRA	*	0	14	1
...GOMPHONEMATACEAE				
....GOMPHONEMA	--	-	14	1
...NAVICULACEAE				
...NAVICULA	55	1	86	3
...NITZSCHIA	150	3	200	8
CYANOPHYTA (BLUE-GREEN ALGAE)				
..CYANOPHYCEAE				
...CHROOCOCCALES				
...CHROOCOCCACEAE				
....ANACYSTIS	550	10	--	-
...HORMOGONALES				
...NOSTOCACEAE				
....APHANIZOMENON	--	-	140	6
...OSCILLATORIACEAE				
....OSCILLATORIA	--	-	780#	31
...CHROOCOCCALES				
...CHROOCOCCACEAE				
....DACTYLOCOCCOPSIS	*	0	--	-
EUGLENOPHYTA (EUGLENOIDS)				
..EUGLENOPHYCEAE				
...EUGLENALES				
...EUGLENACEAE				
....TRACHELOMONAS	--	-	43	2

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

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

WEST BRANCH SUSQUEHANNA RIVER BASIN

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO JULY 1979

DATE TIME	NOV 14,78 1030	MAR 13,79 1000	APR 24,79 1230	MAY 16,79 1100	JUN 26,79 1530	JUL 24,79 1600				
TOTAL CELLS/ML	2600	0	520	1800	4600	6000				
DIVERSITY: DIVISION	1.3	0.0	1.2	0.9	0.8	0.6				
..CLASS	1.3	0.0	1.2	0.9	0.8	0.6				
...ORDER	1.7	0.0	1.3	1.5	0.9	0.7				
...FAMILY	2.6	0.0	1.3	1.9	1.1	1.8				
....GENUS	2.7	0.0	1.5	2.1	1.3	1.9				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....CHARACIACEAE										
.....CHARACIUM	22	1	--	-	--	-	--	-	--	-
....COELASTRACEAE										
.....COELASTRUM	--	-	--	-	--	-	52	1	1300#	22
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	--	-	100	2
...OOCYSTACEAE										
....ANKISTRODESMUS	44	2	--	-	14	3	26	1	64	1
...OOCYSTIS	--	-	--	-	--	-	--	-	100	2
....SELENASTRUM	--	-	--	-	--	-	--	-	120	2
....TETRAEDRON	22	1	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	--	-	--	-	1100#	63	3600#	79
..TETRASPORALES									3600#	61
...PALMELLACEAE										
....SPHAEROCYSTIS	--	-	--	-	--	-	77	4	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	13	1	52	1
..ZYGNEMATALES									120	2
...DESMIDIACEAE										
....CLOSTERIUM	--	-	--	-	--	-	13	1	--	-
....COSMARIUM	--	-	--	-	--	-	13	1	--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
....COSCINODISCACEAE										
.....CYCLOTELLA	22	1	--	-	200#	39	26	1	26	1
....MELOSIRA	310	12	--	-	29	6	--	-	--	-
...STEPHANODISCUS	--	-	--	-	--	-	39	2	--	-
...PENNALES										
....ACHNANTHACEAE										
.....ACHNANTHES	180	7	--	-	14	3	13	1	*	0
...CYMBELLACEAE										
....CYMBELLA	110	4	--	-	--	-	13	1	--	-
...FRAGILARIACEAE										
....FRAGILARIA	270	10	--	-	--	-	140	8	--	-
....SYNEDRA	67	3	--	-	--	-	100	6	--	-
...GOMPHONEMACEAE										
....GOMPHONEMA	67	3	--	-	--	-	--	-	*	0
...NAVICULACEAE										
....NAVICULA	130	5	--	-	--	-	--	-	*	0
...NITZSCHACEAE										
....NITZSCHIA	89	3	--	-	--	-	170	9	39	1
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
....CRYPTOCHRYSIDACEAE										
.....CHROOMONAS	--	-	--	-	--	-	--	-	*	0
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	13	1	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
....CHROOCOCCACEAE										
.....AGMENELLUM	--	-	--	-	--	-	--	-	210	4
....ANACYSTIS	--	-	--	-	--	-	--	-	480	10
...HORMOGONALES									400	7
...OSCILLATORIACEAE										
....OSCILLATORIA	1200#	46	--	-	260#	50	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
....EUGLENACEAE										
.....TRACHELOMONAS	44	2	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
 * - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

WEST BRANCH SUSQUEHANNA RIVER BASIN

01553700 CHILLISQUAQUE CREEK NEAR WASHINGTONVILLE, PA

LOCATION.--Lat 41°03'40", long 76°40'50", Montour County, Hydrologic Unit 02050206, on left bank, 60 ft (18 m) upstream of bridge on State Highway 54, 0.7 mi (1.1 km) north of U.S. Post Office in Washingtonville.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--May to September 1979.

GAGE.--Water-stage recorder. Datum of gage is 503.70 ft (153.528 m) National Geodetic Vertical Datum of 1929, Pennsylvania Power and Light Co. benchmark.

REMARKS.--Records good. Flow includes diversion from West Branch Susquehanna river. Several observations of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 700 ft³/s (19.8 m³/s) Sept. 6, gage height, 5.09 ft (1.551 m); minimum discharge, 21 ft³/s (0.59 m³/s) Aug. 31, Sept. 1, gage height, 0.99 ft (0.302 m).

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								51	76	35	25	22
2								50	66	34	27	24
3								58	59	33	29	92
4								62	53	37	26	45
5								52	49	36	25	34
6								49	47	33	25	357
7								47	44	32	24	149
8								45	42	31	25	72
9								43	40	30	24	50
10								41	39	29	23	41
11								48	43	30	29	34
12								41	40	28	43	29
13								38	36	29	34	27
14								37	35	31	27	39
15								34	33	31	25	42
16								32	33	30	24	32
17								31	32	30	24	29
18								31	32	30	25	30
19								33	32	29	27	34
20								33	31	28	25	31
21								33	31	27	25	44
22								33	33	27	25	218
23								46	37	32	24	103
24								144	34	32	24	68
25								170	33	28	24	51
26								260	31	28	24	46
27								183	30	28	25	42
28								148	31	26	25	44
29								133	33	28	23	48
30								99	40	27	23	45
31								96	---	25	22	---
TOTAL								2201	1195	934	800	1922
MEAN								71.0	39.8	30.1	25.8	64.1
MAX								260	76	37	43	357
MIN								31	30	25	22	22
CFSM								.53	.30	.23	.19	.48
IN.								.61	.33	.26	.22	.53

WEST BRANCH SUSQUEHANNA RIVER BASIN

LAKES AND RESERVOIR IN WEST BRANCH SUSQUEHANNA RIVER BASIN

- 01541180 CURWENSVILLE LAKE.--Lat 40°57'13", long 78°31'40", Clearfield County, Hydrologic Unit 02050201, at Curwensville Dam on West Branch Susquehanna River, 0.7 mi (1.1 km) upstream from State Highway 453, 1.2 mi (1.9 km) south of Curwensville and 2.5 mi (4.0 km) upstream from Anderson Creek. DRAINAGE AREA, 365 mi² (945 km²). PERIOD OF RECORD, November 1965 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).
Reservoir formed by earthfill dam with excavated chute spillway with concrete control sill at elevation 1,228.00 ft (374.294 m). Storage began in November 1965. Capacity at elevation 1,228.00 ft (374.294 m) is 124,200 acre-ft (153 hm³). Conservation pool elevation, 1,155.00 ft or 352.044 m (capacity, 4,870 acre-ft or 6.00 hm³). Reservoir is used for flood control, recreation and study of water quality. Figures given herein represent total contents. Flow regulated by three gates and low-flow by-pass system. Records furnished by Corps of Engineers.
EXTREMES FOR PERIOD OF RECORD: Maximum contents, 87,650 acre-ft (108 hm³) June 25, 1972 (elevation, 1,214.11 ft or 370.061 m); minimum, 252 acre-ft (0.311 hm³) Nov. 6, 1968 (elevation, 1,136.70 ft or 346.466 m).
EXTREMES FOR CURRENT YEAR.--Maximum contents, 53,000 acre-ft (65.3 hm³) March 7 (elevation, 1,196.16 ft or 364.590 m); minimum, 4,460 acre-ft (5.50 hm³) April 8 (elevation, 1,154.25 ft or 351.815 m).
- 01541340 GLENDALE LAKE.--Lat 40°41'50", long 78°32'15", Cambria County, Hydrologic Unit 02050201, at Glendale Dam on Beaverdam Run, 1 mi (1.6 km) upstream from Dutch Run, 1.3 mi (2.1 km) southwest of Flinton, 1.9 mi (3.1 km) above mouth, and 3.4 mi (5.5 km) south of Coalport. DRAINAGE AREA, 41.9 mi² (108.5 km²). PERIOD OF RECORD, January 1963 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.
Reservoir formed by an earth and rockfill dam with ungated, concrete spillway at elevation, 1,435.00 ft (437.540 m). Storage began Dec. 1, 1960. Capacity at elevation, 1,435.50 ft (437.540 m) is 41,200 acre-ft (50.8 hm³) of which 15,900 acre-ft (19.6 hm³) is controlled storage above elevation 1,427.00 ft or 434.950 m (conservation pool). Dead storage is 25,300 acre-ft (31.2 hm³). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Outflow is controlled by 72-inch (183 mm) sluice gate and an 8-inch (20 mm) by-pass valve. Records furnished by Pennsylvania Department of Environmental Resources.
EXTREMES FOR PERIOD OF RECORD: Maximum contents, 33,390 acre-ft (41.2 hm³) June 24, 1972 (elevation, 1,431.63 ft or 436.361 m); minimum, 10,640 acre-ft (13.1 hm³) Nov. 16, 1965 (elevation, 1,415.53 ft or 431.454 m).
EXTREMES FOR CURRENT YEAR: Maximum contents, 27,090 acre-ft (33.4 hm³) Feb. 2 (elevation, 1,428.12 ft or 435.291 m); minimum, 17,570 acre-ft (21.7 hm³) Nov. 15 (elevation, 1,421.31 ft or 433.215 m).
- 01543900 FIRST FORK SINNEMAHONING CREEK RESERVOIR.--Lat 41°24'25", long 78°01'10", Cameron County, Hydrologic Unit 02050202, at control tower of George B. Stevenson Dam, on First Fork Sinnemahoning Creek, 8 mi (13 km) northeast of Sinnemahoning, and 8 mi (13 km) upstream from mouth. DRAINAGE AREA, 243 mi² (629 km²). PERIOD OF RECORD, January 1956 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.
Reservoir is formed by an earthfill dam. Storage began Jan. 31, 1956. Capacity, 75,800 acre-ft (93.5 hm³) between elevations 890.00 ft or 271.22 m (sill of outlet gates) and 1,026.00 ft or 312.725 m (crest of spillway). No dead storage. Ordinary minimum (conservation) pool elevation, 920.00 ft or 280.416 m (capacity, 2,000 acre-ft or 2.47 hm³). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Records furnished by Pennsylvania Department of Environmental Resources.
EXTREMES FOR PERIOD OF RECORD: Maximum contents, 62,030 acre-ft (76.5 hm³) June 26, 1972 (elevation, 1,015.87 ft or 309.637 m); minimum, (after first filling), 37 acre-ft (45,600 m³) many days in October 1973 (elevation, 891.84 ft or 271.833 m).
EXTREMES FOR CURRENT YEAR: Maximum contents, 25,670 acre-ft (31.7 hm³) March 7 (elevation, 976.82 ft or 297.735 m); minimum, 1,800 acre-ft (2.22 hm³) Jan. 27 (elevation, 918.33 ft or 279.907 m).
- 01544800 KETTLE CREEK LAKE (formerly published as Alvin R. Bush Reservoir).--Lat 41°21'37", long 77°55'27", Clinton County, Hydrologic Unit 02050203, at control tower of dam on Kettle Creek, 1.1 mi (1.8 km) downstream from Sugar Camp Run and 8.5 mi (13.7 km) upstream from mouth and Westport. DRAINAGE AREA, 226 mi² (585 km²). PERIOD OF RECORD, February 1962 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).
Reservoir formed by an earthfill embankment, rock faced, with ungated concrete spillway at elevation, 937.0 ft (285.60 m). Storage began Feb. 7, 1962; water in reservoir first reached conservation pool elevation in March 1962. Total capacity at elevation, 937.0 ft (285.60 m) is 75,000 acre-ft (92.5 hm³). No dead storage. Ordinary minimum (conservation) pool elevation, 840.0 ft or 256.03 m (capacity, 1,590 acre-ft or 1.96 hm³). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Storage is regulated by three gates and low-flow by-pass system. Records furnished by Corps of Engineers.
EXTREMES FOR PERIOD OF RECORD: Maximum contents, 51,666 acre-ft (63.7 hm³) June 25, 1972 (elevation, 919.13 ft or 280.151 m); minimum, no storage June 7, 1962.
EXTREMES FOR CURRENT YEAR: Maximum contents, 27,700 acre-ft (34.2 hm³) March 7 (elevation, 894.28 ft or 272.577 m); minimum, 1,570 acre-ft (1.94 hm³) March 26 (elevation, 839.88 ft or 255.995 m).
- 01547480 FOSTER JOSEPH SAYERS LAKE.--Lat 41°02'53", long 77°36'35", Centre County, Hydrologic Unit 02050204, at Foster Joseph Sayers Dam, on Bald Eagle Creek, 1 mi (1.6 km) upstream from Marsh Creek, and 1.2 mi (1.9 km) south of Blanchard. DRAINAGE AREA, 339 mi² (878 km²). PERIOD OF RECORD, March 1971 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).
Reservoir formed by an earthfill dam with ungated concrete ogee weir at elevation 657.00 ft (200.254 m) with abutting concrete gravity walls and partially paved exit channel. Storage began in March 1971. Capacity at elevation 657.00 ft (200.254 m) is 99,100 acre-ft (122 hm³). Dead storage is 25 acre-ft (30,800 m³). Ordinary minimum (conservation) pool elevation, 610.0 ft or 185.928 m (capacity, 6,300 acre-ft or 7.77 hm³). Reservoir used for flood control and recreation. Figures given herein represent total contents. Regulation is accomplished by two gates. Records furnished by Corps of Engineers.
EXTREMES FOR PERIOD OF RECORD: Maximum contents, 103,900 acre-ft (128 hm³) June 25, 1972 (elevation, 658.41 ft or 200.683 m); minimum, 4,960 acre-ft (6.12 hm³) Mar. 10, 1971 (elevation, 609.37 ft or 185.736 m).
EXTREMES FOR CURRENT YEAR: Maximum contents, 44,000 acre-ft (54.3 hm³) March 8 (elevation, 637.73 ft or 194.380 m); minimum, 6,240 acre-ft (7.69 hm³) Jan. 24 (elevation, 609.90 ft or 185.898 m).

MONTHEND ELEVATION AND CONTENTS AT 2400. WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONTH END ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979						
Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01541180 Curwensville Lake						
Sept. 30	1,161.93	9,490	--			
Oct. 31	1,161.49	9,150	- 5.5			
Nov. 30	1,156.50	5,740	-57.3			
Dec. 31	1,155.95	5,400	- 5.5			
CAL YR 1978	--	--	+ 0.4			
Jan. 31	1,155.14	4,950	- 7.3			
Feb. 28	1,158.23	6,820	+33.7			
Mar. 31	1,155.64	5,230	-25.9			
Apr. 30	1,154.78	4,750	- 8.1			
May 31	1,162.00	9,540	+77.9			
June 30	1,162.00	9,540	0.0			
July 31	1,162.28	9,770	+ 3.7			
Aug. 31	1,162.04	9,570	- 3.3			
Sept. 30	1,162.20	9,710	+ 2.4			
WTR YR 1979	--	--	+ 6.4			
01541340 Glendale Lake						
Sept. 30	1,427.08	25,430	--	920.32	2,040	--
Oct. 31	1,427.20	25,620	+ 3.1	920.40	2,050	+ 0.2
Nov. 30	1,421.59	17,910	-130	920.46	2,060	+ 0.2
Dec. 31	1,425.23	22,720	+ 78.2	921.77	2,230	+ 2.8
CAL YR 1978	--	--	- 3.8	--	--	+ 0.3
Jan. 31	1,427.53	26,150	+ 55.8	920.13	2,020	- 3.4
Feb. 28	1,428.01	26,920	+ 13.9	920.57	2,070	+ 0.9
Mar. 31	1,427.64	26,320	- 9.8	920.53	2,060	- 0.2
Apr. 30	1,427.14	25,520	- 13.4	920.53	2,060	0.0
May 31	1,427.28	25,750	+ 3.7	920.82	2,100	+ 0.6
June 30	1,427.11	25,480	- 4.5	920.97	2,120	+ 0.3
July 31	1,427.09	25,440	- 0.6	920.89	2,110	- 0.2
Aug. 31	1,427.29	25,760	+ 5.2	920.81	2,100	- 0.2
Sept. 30	1,425.17	22,640	- 52.4	920.77	2,090	- 0.2
WTR YR 1979	--	--	- 3.9	--	--	+ 0.08
01544800 Kettle Creek						
Sept. 30	840.80	1,710	--	627.40	24,600	--
Oct. 31	841.57	1,830	+ 2.0	616.11	10,960	-222
Nov. 30	841.50	1,820	- 0.2	610.77	6,800	- 69.9
Dec. 31	841.66	1,850	+ 0.5	610.03	6,320	- 7.8
CAL YR 1978	--	--	+ 0.1	--	--	+ 0.01
Jan. 31	841.00	1,740	- 1.8	610.03	6,320	0.0
Feb. 28	841.18	1,770	+ 0.5	618.66	13,430	+128
Mar. 31	841.27	1,780	+ 0.2	623.45	19,040	+ 91.2
Apr. 30	840.98	1,740	- 0.7	629.21	27,460	+142
May 31	840.97	1,740	0.0	630.16	29,090	+ 26.5
June 30	841.50	1,820	+ 1.3	630.29	29,320	+ 3.9
July 31	841.00	1,740	- 1.3	629.83	28,510	- 13.2
Aug. 31	841.10	1,760	+ 0.3	629.99	28,780	+ 4.4
Sept. 30	841.00	1,740	- 0.3	630.21	29,180	+ 6.7
WTR YR 1979	--	--	- 0.04	--	--	+ 6.3
01547480 Foster Joseph Sayers Lake						

SUSQUEHANNA RIVER BASIN

01554000 SUSQUEHANNA RIVER AT SUNBURY, PA

LOCATION.--Lat 40°50'04", long 76°49'37", Snyder County, Hydrologic Unit 02050301, on right bank at borough of Shamokin Dam, on grounds of Pennsylvania Power and Light Company generating plant, 1 mi (1.6 km) downstream from Shamokin Creek, 1.5 mi (2.4 km) downstream from Sunbury Fabridam, and 1.8 mi (2.9 km) south of Sunbury.

DRAINAGE AREA.--18,300 mi² (47,400 km²), approximately (excluding that of Shamokin Creek).

PERIOD OF RECORD.--October 1937 to current year. June 1918 to September 1918 (gage heights only) in reports of Pennsylvania Department of Forests and Waters.

REVISED RECORDS.--WSP 891: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 408.61 ft (124.544 m) National Geodetic Vertical Datum of 1929. See WSP 1903 for history of changes prior to Dec. 13, 1937. Dec. 13, 1937 to Mar. 23, 1967, water-stage recorder at site 1.7 mi (2.7 km) upstream at datum 11.05 ft (3.368 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation by upstream dam and flood-control reservoirs.

AVERAGE DISCHARGE.--42 years, 26,760 ft³/s (757.8 m³/s), 19.86 in/yr (504 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 620,000 ft³/s (17,600 m³/s) June 24, 1972, gage height, 35.80 ft (10.912 m); minimum, 964 ft³/s (27.3 m³/s) Oct. 16, 1971, gage height, 4.83 ft (1.472 m), result of shutoff at Sunbury Fabridam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 347,000 ft³/s (9,830 m³/s) Mar. 7, gage height, 27.52 ft (8.388 m); minimum, 3,640 ft³/s (103 m³/s) Nov. 2, gage height, 6.08 ft (1.853 m).

REVISIONS:--The maximum discharge for the winter year 1978 has been revised to 210,000 ft³/s (5,950 m³/s) Mar. 24, gage height, 21.31 ft (6.495 m), superseding figure published in the report for 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5950	15000	12900	19300	44500	64800	48900	34300	44600	7220	7700	8220
2	5520	9250	12300	67800	38100	65200	47000	30500	38100	7960	8400	7310
3	5170	11100	11900	181000	32700	66900	46500	26500	33500	8360	10400	8220
4	5290	10500	13100	169000	28600	70700	47900	25400	31700	8270	9890	8400
5	5560	9730	16100	123000	22300	137000	51700	25800	27400	8090	9670	8130
6	6930	9250	18500	89500	20300	306000	52500	25200	25800	7570	8400	21000
7	7700	8810	19300	69400	19000	332000	49600	24500	23500	6800	6970	36000
8	7270	8760	20700	71100	17000	262000	45200	22800	20400	6230	6470	35100
9	6970	9730	27700	67000	15000	202000	42300	20800	18500	5950	5560	31400
10	6640	8900	45400	56800	13500	160000	49700	18400	18000	5560	8670	24400
11	6430	9150	52900	46000	12500	131000	74000	18700	17000	5330	8090	19600
12	6150	7610	48800	36800	12000	114000	78800	20200	16800	5100	9450	15800
13	6070	7570	40500	30400	11000	101000	73900	22900	15700	5330	14200	13100
14	6600	7100	34100	30400	10500	88100	68200	20600	14800	5600	13500	11600
15	9100	5990	27800	31900	10500	80600	64200	20100	14100	5950	11700	12200
16	11500	5480	25400	31800	10500	79100	61700	18500	12700	5710	9300	12200
17	12500	5060	22800	30200	10000	72800	59500	17000	11400	5870	7050	10900
18	13800	6150	20800	28100	10000	62300	56100	14400	10200	7610	7520	9670
19	13600	10100	19300	22800	10000	53700	51200	14700	9400	6680	7140	9780
20	11600	13100	15400	20500	9800	48700	45200	13900	8760	6350	6680	8900
21	10300	13500	14400	26000	10500	46600	39600	13100	7780	6150	6470	8580
22	9400	11000	18500	47200	11500	44400	35300	12300	7440	6350	6150	13900
23	8850	11200	21900	42900	13500	43600	31600	12100	7650	6030	5330	16400
24	8450	11500	24100	49800	20000	45900	28800	17300	8000	6970	5330	13500
25	8130	12100	28100	134000	44800	55800	26200	42200	6030	5950	6640	11800
26	8090	12400	27600	146000	81200	81100	24300	61900	6110	5710	7910	10200
27	8490	12100	22500	135000	100000	86900	23500	71200	7220	7310	8360	9100
28	10600	12000	17000	96700	75800	76600	26800	72300	6720	8540	14700	8090
29	12500	12700	16700	74200	---	64200	32200	69100	6840	8050	13700	8950
30	15800	13000	15400	61200	---	54200	36000	60100	7100	7440	12900	15800
31	17500	---	14700	51200	---	48800	---	51900	---	6510	9300	---
TOTAL	278460	299840	726600	2087000	715100	3146000	1418400	918700	483250	206550	273550	428250
MEAN	8983	9995	23440	67320	25540	101500	47280	29640	16110	6663	8824	14280
MAX	17500	15000	52900	181000	100000	332000	78800	72300	44600	8540	14700	36000
MIN	5170	5060	11900	19300	9800	43600	23500	12100	6030	5100	5330	7310
CFSM	.49	.55	1.28	3.68	1.40	5.55	2.58	1.62	.88	.36	.48	.78
IN.	.57	.61	1.48	4.24	1.45	6.40	2.88	1.87	.98	.42	.56	.87

CAL YR 1978 TOTAL 11315850 MEAN 31000 MAX 208000 MIN 4120 CFSM 1.69 IN 23.00
WTR YR 1979 TOTAL 10981700 MEAN 30090 MAX 332000 MIN 5060 CFSM 1.64 IN 22.32

SHAMOKIN CREEK BASIN

01554500 SHAMOKIN CREEK NEAR SHAMOKIN, PA

LOCATION.--Lat 40°48'37", long 76°35'04", Northumberland County, Hydrologic Unit 02050301, on right bank at Weigh Scales, 1 mi (1.6 km) downstream from Trout Run, 1.1 mi (1.8 km) upstream from Bennys Run, and 2 mi (3.2 km) northwest of Shamokin.

DRAINAGE AREA.--54.2 mi² (140.4 km²).

PERIOD OF RECORD.--November 1939 to current year. Published as "at Weigh Scales" 1939-63.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 606.28 ft (184.794 m) National Geodetic Vertical Datum of 1929. Nov. 14, 1939 to Jan. 9, 1967, water-stage recorder at site 0.4 mi (0.6 km) upstream at datum 2.00 ft (0.610 m) higher and Jan. 10 to Dec. 10, 1967, nonrecording gage at site 0.4 mi (0.6 km) downstream at datum 11.50 ft (3.505 m) lower.

REMARKS.--Records good. Regulation by mine pumps above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--39 years, 86.9 ft³/s (2.461 m³/s), 21.77 in/yr (553 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,070 ft³/s (115 m³/s) June 22, 1972, gage height, 8.72 ft (2.658 m), from rating curve extended above 560 ft³/s (15.9 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.2 ft³/s (0.091 m³/s) Feb. 15, 1940, gage height, 0.42 ft (0.128 m), at site and datum then in use; minimum daily, 9.8 ft³/s (0.28 m³/s) Jan. 5, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 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. 24	2030	830 23.5	4.15 1.265	May 24	1000	*896 25.4	*4.26 1.298

Minimum discharge, 30 ft³/s (0.85 m³/s) Nov. 3, gage height, 2.20 ft (0.671 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	40	36	93	176	198	129	97	166	84	55	43
2	43	39	35	237	153	197	129	94	156	77	63	50
3	43	38	38	189	147	194	127	108	150	72	54	53
4	58	39	46	166	142	204	135	101	144	80	53	42
5	54	39	42	148	134	448	135	94	153	70	51	51
6	62	38	40	137	129	522	127	90	131	67	49	300
7	46	38	38	196	128	390	124	88	126	66	48	113
8	44	40	66	269	124	332	121	88	118	64	51	91
9	43	39	94	204	119	290	141	86	115	63	48	80
10	44	39	68	191	117	267	138	101	114	62	58	74
11	42	38	59	178	114	258	127	94	114	62	85	72
12	42	39	59	165	112	224	127	90	107	61	95	68
13	44	38	61	155	109	213	124	90	101	60	62	68
14	60	38	60	159	106	201	144	88	99	73	56	105
15	44	37	57	138	105	187	132	86	97	72	53	79
16	43	39	57	131	102	173	132	86	95	71	51	69
17	42	40	59	125	99	164	129	82	93	61	50	65
18	42	54	58	118	97	159	124	84	89	62	68	64
19	41	39	57	112	97	153	121	84	88	70	59	61
20	41	38	57	111	95	147	119	80	85	59	51	59
21	41	37	69	281	95	142	116	80	84	58	52	113
22	41	37	51	192	102	135	113	78	85	56	49	130
23	41	41	49	167	106	130	111	111	84	54	48	95
24	42	41	54	400	204	159	108	294	77	58	48	86
25	40	35	94	447	219	156	106	254	75	55	55	82
26	51	34	65	329	358	144	106	267	75	74	50	80
27	60	34	58	296	216	138	119	249	72	57	48	77
28	43	38	56	267	201	135	108	237	70	53	47	70
29	41	37	54	241	---	138	101	209	77	86	47	70
30	40	37	53	217	---	132	99	194	114	65	46	67
31	40	---	53	199	---	132	---	183	---	59	43	---
TOTAL	1403	1160	1743	6258	3906	6462	3672	3967	3154	2031	1693	2477
MEAN	45.3	38.7	56.2	202	140	208	122	128	105	65.5	54.6	82.6
MAX	62	54	94	447	358	522	144	294	166	86	95	300
MIN	40	34	35	93	95	130	99	78	70	53	43	42
CFSM	.84	.71	1.04	3.73	2.58	3.84	2.25	2.36	1.94	1.21	1.01	1.52
IN.	.96	.80	1.20	4.30	2.68	4.44	2.52	2.72	2.16	1.39	1.16	1.70

CAL YR 1978	TOTAL	38504	MEAN	105	MAX	465	MIN	34	CFSM	1.94	IN	26.43
WTR YR 1979	TOTAL	37926	MEAN	104	MAX	522	MIN	34	CFSM	1.92	IN	26.03

PENNS CREEK BASIN

01555000 PENNS CREEK AT PENNS CREEK, PA

LOCATION.--Lat 40°52'00", long 77°02'55", Union County, Hydrologic Unit 02050301, on left bank 200 ft (61 m) downstream from bridge on State Highway 104, 0.8 mi (1.3 km) northeast of Penns Creek, and 2.9 mi (4.7 km) upstream from Sweitzers Run.

DRAINAGE AREA.--301 mi² (780 km²).

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1965, published as Penn Creek at Penns Creek.

REVISED RECORDS.--WSP 891: 1934(M). WSP 1502: 1933(M), 1934, 1936(M). WDR PA-72-1: 1933-34(M), 1936(M), 1940(M), 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 506.72 ft (154.448 m) National Geodetic Vertical Datum of 1912. Prior to Feb. 1, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--50 years, 436 ft³/s (12.35 m³/s), 19.67 in/yr (500 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,600 ft³/s (980 m³/s) June 23, 1972, gage height, 14.85 ft (4.526 m), from floodmark in gage well, from rating curve extended above 6,800 ft³/s (193 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 7.0 ft³/s (0.20 m³/s) Sept. 27, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,100 ft³/s (87.8 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	1730	3,270 92.6	6.13 1.868	May 24	1930	3,870 110	6.64 2.024
Jan. 25	0400	*8,610 244	9.76 2.975	Sept. 3	1200	7,710 218	a9.25 2.819
Feb. 26	1100	ice jam	*13.00 3.962	Sept. 6	0830	7,360 208	b9.04 2.755
Mar. 6	1030	7,210 204	8.95 2.728				

Minimum discharge, 70 ft³/s (1.98 m³/s) Nov. 7, 10, 12, 13, 15; minimum gage height, 1.42 ft (3.481 m) Oct. 13, 25, Nov. 7, 10, 12, 13, 15.

REVISIONS.--The revised peak and daily discharges and monthly and yearly summaries shown below supersede those published in the report for 1978.

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. 9	--	---	ice jam	Feb. 11	--	---	ice jam
Jan. 26	--	---	ice jam	Feb. 14	--	---	ice jam
Jan. 4, 1978.....	520	Jan. 24, 1978	460	Feb. 19, 1978.....	350	Mar. 3, 1978	240
5.....	480	Feb. 6.....	540	20.....	330	4.....	240
6.....	470	7.....	520	21.....	310	5.....	240
7.....	450	8.....	510	22.....	290	6.....	230
8.....	700	11.....	470	23.....	280	7.....	230
17.....	740	12.....	450	24.....	270	8.....	230
18.....	700	13.....	420	25.....	270	9.....	220
19.....	650	14.....	400	26.....	270	10.....	220
20.....	620	15.....	380	27.....	260	11.....	220
21.....	570	16.....	370	28.....	260	12.....	220
22.....	530	17.....	360	Mar. 1.....	250	13.....	220
23.....	500	18.....	380	2.....	250	14.....	400
Month	Total	Mean	Max	Min.	CFSM	In.	
January 1978	35,806	1,155	5,380	450	3.84	4.43	
February	12,190	435	863	260	1.45	1.51	
March	45,302	1,461	3,860	220	4.85	5.60	
Water Year 1978	320,290	878	6,520	100	2.92	39.58	

a In gage well; 9.07 ft (2.765 m) from floodmark.
b In gage well; 8.69 ft (2.649 m) from floodmark.

PENNS CREEK BASIN

01555000 PENNS CREEK AT PENNS CREEK, PA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	77	116	383	696	1540	707	399	877	542	168	325
2	99	76	112	2600	596	1790	902	379	770	359	183	359
3	96	74	108	2060	551	1640	921	375	680	289	194	5080
4	108	74	176	1380	547	1780	896	424	617	259	163	2450
5	125	74	200	1140	454	4870	1160	399	547	275	145	1780
6	145	72	178	921	379	6540	1010	367	509	233	135	6320
7	99	72	160	793	360	4300	928	347	472	203	135	3520
8	88	74	181	1060	350	3010	859	332	416	192	227	2290
9	85	74	527	741	340	2270	940	314	770	183	285	1710
10	83	72	551	611	340	1870	1060	303	680	181	194	1360
11	81	74	383	499	330	1770	853	463	680	186	371	1110
12	81	72	351	432	320	1420	847	407	617	176	1220	960
13	83	72	314	459	320	1220	909	383	499	170	1190	817
14	123	72	289	551	310	1150	902	355	441	173	747	828
15	112	70	265	561	300	1030	877	328	399	165	571	1010
16	99	76	249	411	300	859	805	310	367	252	459	713
17	90	92	239	383	300	787	775	289	344	632	387	622
18	88	170	224	359	290	730	724	272	317	321	387	556
19	84	157	209	262	290	675	658	279	292	259	445	504
20	83	121	221	314	290	627	601	272	272	215	351	459
21	81	99	249	532	280	586	556	255	259	194	299	518
22	79	92	230	627	270	551	527	265	265	186	279	1200
23	77	90	206	499	400	523	495	387	259	189	255	747
24	77	112	200	2420	700	637	481	2450	236	183	307	606
25	76	112	383	6420	1500	1420	450	3040	224	173	441	561
26	81	99	340	2510	6750	1340	432	2390	209	173	328	513
27	110	92	252	1630	2350	1110	542	1900	200	170	454	472
28	116	101	236	1250	1430	947	547	1620	194	152	472	459
29	94	103	289	992	---	877	463	1390	206	206	407	523
30	83	112	314	877	---	823	424	1160	268	279	504	476
31	77	---	239	775	---	747	---	1010	---	192	379	---
TOTAL	2904	2727	7991	34452	21343	49439	22251	22864	12886	7362	12082	38848
MEAN	93.7	90.9	258	1111	762	1595	742	738	430	237	390	1295
MAX	145	170	551	6420	6750	6540	1160	3040	877	632	1220	6320
MIN	76	70	108	262	270	523	424	255	194	152	135	325
CFSM	.31	.30	.86	3.69	2.53	5.30	2.47	2.45	1.43	.79	1.30	4.30
IN.	.36	.34	.99	4.26	2.64	6.11	2.75	2.83	1.59	.91	1.49	4.80
CAL YR 1978	TOTAL	225665	MEAN 618	MAX 5590	MIN 70	CFSM 2.05	IN 27.89					
WTR YR 1979	TOTAL	235149	MEAN 644	MAX 6750	MIN 70	CFSM 2.14	IN 29.06					

EAST MAHANTANGO CREEK BASIN

01555500 EAST MAHANTANGO CREEK NEAR DALMATIA, PA

LOCATION.--Lat 40°36'40", long 76°54'44", Northumberland County, Hydrologic Unit 02050301, on right bank at highway bridge, 2 mi (3.2 km) upstream from mouth, and 3.2 mi (5.1 km) south of Dalmatia.

DRAINAGE AREA.--162 mi² (420 km²).

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1945 published as Mahantango Creek East near Dalmatia.

REVISED RECORDS.--WSP 891: 1933(M). WSP 1302: 1930(M), 1938(M).

GAGE.--Water-stage recorder. Datum of gage is 401.22 ft (122.292 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1929 to Feb. 11, 1930, nonrecording gage, and Feb. 12, 1930 to Nov. 18, 1973, recording gage at present site and datum. Nov. 19, 1973 to June 18, 1974, nonrecording gage at site 2 mi (3.2 km) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--50 years, 226 ft³/s (6.400 m³/s), 18.94 in/yr (481 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69,900 ft³/s (1,980 m³/s) June 22, 1972, gage height, 26.62 ft (8.114 m), from floodmark in gage shelter, from rating curve extended above 5,100 ft³/s (144 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.3 ft³/s (0.037 m³/s) Oct. 7, 1957, Nov. 3, 1964; minimum gage height, 0.84 ft (0.256 m) Sept. 21, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s (53.8 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	2100	2,790 79.0	6.49 1.978	Mar. 6	1130	2,520 71.4	6.17 1.881
Jan. 21	2000	3,790 107	7.58 2.310	May 24	1845	2,020 57.2	5.54 1.689
Jan. 24	2330	*10,600 300	*13.07 3.984	Sept. 6	1400	4,720 134	8.49 2.588
Feb. 24	--	---	ice jam				

Minimum discharge, 23 ft³/s (0.65 m³/s) Oct. 1, 3, 4, gage height, 1.42 ft (0.433 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	45	74	319	311	580	282	152	425	134	154	49
2	26	45	71	1690	275	531	279	141	374	105	196	52
3	24	42	70	1780	265	507	293	144	330	88	252	52
4	28	40	90	920	258	502	304	194	327	82	170	48
5	48	40	150	668	203	1420	483	168	272	92	128	50
6	114	38	120	492	188	2320	488	146	244	77	103	3090
7	121	36	100	521	180	1540	420	141	221	66	91	1570
8	82	35	110	1540	170	1030	366	136	200	60	82	688
9	67	34	900	920	160	770	370	134	182	55	72	442
10	59	32	580	662	150	656	438	136	171	52	66	331
11	51	31	400	540	140	620	354	241	173	52	88	269
12	46	30	320	438	130	550	346	191	165	51	202	223
13	43	31	260	416	130	520	338	176	141	49	229	191
14	71	28	221	399	130	469	382	165	129	42	167	203
15	92	28	182	354	120	403	403	146	117	67	137	300
16	62	30	157	282	120	338	374	136	110	73	112	195
17	57	32	144	280	110	311	350	124	108	176	95	163
18	52	40	124	270	110	293	315	114	105	78	92	146
19	46	97	114	250	110	268	282	126	97	66	135	136
20	46	62	134	500	110	251	258	124	88	54	106	121
21	45	49	134	2130	100	234	241	114	82	49	87	157
22	42	45	121	1260	450	218	225	121	80	46	80	1160
23	39	45	105	492	200	206	212	194	82	42	74	782
24	35	52	108	4180	350	289	197	1100	77	40	75	483
25	34	67	516	6910	1500	434	188	1470	71	39	79	364
26	36	57	492	1240	3460	420	182	1520	67	45	94	298
27	71	52	378	828	915	374	194	1140	62	78	74	253
28	90	55	311	632	626	330	221	937	59	55	68	219
29	62	67	248	497	---	311	179	828	62	203	63	215
30	52	69	251	412	---	297	160	638	182	487	60	189
31	46	---	225	354	---	275	---	516	---	226	55	---
TOTAL	1713	1354	7210	32176	10971	17267	9124	11613	4803	2829	3486	12439
MEAN	55.3	45.1	233	1038	392	557	304	375	160	91.3	112	415
MAX	121	97	900	6910	3460	2320	488	1520	425	487	252	3090
MIN	24	28	70	250	100	206	160	114	59	39	55	48
CFSM	.34	.28	1.44	6.41	2.42	3.44	1.88	2.32	.99	.56	.69	2.56
IN.	.39	.31	1.66	7.39	2.52	3.96	2.10	2.67	1.10	.65	.80	2.86
CAL YR 1978	TOTAL	101934	MEAN 279	MAX 4680	MIN 24	CFSM 1.72	IN 23.41					
WTR YR 1979	TOTAL	114985	MEAN 315	MAX 6910	MIN 24	CFSM 1.94	IN 26.40					

JUNIATA RIVER BASIN

01556000 FRANKSTOWN BRANCH JUNIATA RIVER AT WILLIAMSBURG, PA

LOCATION.--Lat 40°27'47", long 78°12'00", Blair County, Hydrologic Unit 02050302, on left bank 10 ft (3 m) downstream from highway bridge at Williamsburg, 2.5 mi (4.0 km) upstream from Clover Creek.

DRAINAGE AREA.--291 mi² (754 km²).

PERIOD OF RECORD.--October 1916 to current year. Monthly figures only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WDR PA-71-1: 1954(M), 1960(M), 1961(M), 1977 (M).

GAGE.--Water-stage recorder. Datum of gage is 831.78 ft (253.527 m) Penn Central Railroad datum. Prior to Aug. 14, 1928, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Regulation at low flow by mill above station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--63 years, 395 ft³/s (11.19 m³/s), 18.43 in/yr (468 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s (850 m³/s), Mar. 18, 1936, gage height, 18.58 ft (5.663 m), from floodmark in gage shelter, from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of slope-area measurement of peak flow; minimum, 13 ft³/s (0.37 m³/s) July 24, 1934, gage height, 0.97 ft (0.296 m); minimum daily, 31 ft³/s (0.88 m³/s) Dec. 24, 25, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 19.1 ft (5.82 m) June 1, 1889, from floodmark, discharge, about 35,500 ft³/s (1,010 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft³/s (119 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. 25	0200	4,470 127	9.92 3.024	May 24	1530	4,200 119	9.62 2.932
Mar. 5	1030	*7,900 224	*13.05 3.978				

Minimum discharge, 56 ft³/s (1.59 m³/s) Nov. 15, gage height, 2.14 ft (0.652 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	74	128	582	329	1250	563	462	542	567	421	266
2	66	70	117	3170	280	1790	1290	431	520	278	377	244
3	66	70	117	1440	200	1680	1200	455	445	233	298	374
4	74	69	338	785	160	3050	1100	918	417	244	255	247
5	76	69	283	586	150	7420	1390	673	364	332	225	223
6	69	67	202	489	145	5920	1050	601	326	228	202	2690
7	65	70	168	469	140	3350	846	538	320	197	189	1300
8	63	73	168	760	135	2480	739	476	462	180	180	794
9	62	70	613	438	130	2050	877	448	1260	168	166	586
10	65	67	438	387	130	1880	860	407	644	192	152	472
11	62	67	286	295	130	1780	743	441	567	182	593	404
12	62	66	244	263	130	1400	668	424	441	154	1240	351
13	63	69	215	286	125	1080	628	520	371	144	781	307
14	142	73	194	326	120	1070	652	410	320	301	506	320
15	128	73	168	263	120	960	693	361	289	345	410	320
16	117	73	161	241	120	833	673	338	266	400	345	252
17	114	100	164	220	120	781	617	301	247	387	292	225
18	97	157	154	225	115	710	586	280	236	250	278	210
19	86	117	138	148	110	697	570	269	220	207	280	205
20	83	99	132	185	130	678	552	261	197	180	241	182
21	82	92	510	280	150	697	520	250	194	173	313	225
22	77	89	387	368	313	664	486	244	223	161	275	648
23	73	89	301	269	567	656	458	250	185	215	225	374
24	71	82	266	1020	1090	1030	424	2410	170	304	225	275
25	69	85	438	2750	1700	3590	404	1730	166	345	298	241
26	69	79	345	1060	3510	1810	391	1120	154	718	228	223
27	100	82	275	730	1840	1180	685	873	148	355	689	207
28	94	128	210	597	1190	891	632	937	144	301	414	448
29	80	161	159	506	---	760	567	798	177	685	438	578
30	76	128	185	434	---	664	518	705	414	855	400	420
31	74	---	207	384	---	586	---	597	---	542	310	---
TOTAL	2490	2608	7711	19956	13379	53387	21382	18928	10429	9823	11246	13611
MEAN	80.3	86.9	249	644	478	1722	713	611	348	317	363	454
MAX	142	161	613	3170	3510	7420	1390	2410	1260	855	1240	2690
MIN	62	66	117	148	110	586	391	244	144	144	152	182
CFSM	.28	.30	.86	2.21	1.64	5.92	2.45	2.10	1.20	1.09	1.25	1.56
IN.	.32	.33	.99	2.55	1.71	6.82	2.73	2.42	1.33	1.26	1.44	1.74

CAL YR 1978 TOTAL 154234 MEAN 423 MAX 3740 MIN 56 CFSM 1.45 IN 19.72
WTR YR 1979 TOTAL 184950 MEAN 507 MAX 7420 MIN 62 CFSM 1.74 IN 23.64

JUNIATA RIVER BASIN

01557500 BALD EAGLE CREEK AT TYRONE, PA

LOCATION.--Lat 40°41'01", long 78°14'02", Blair County, Hydrologic Unit 02050302, on left bank, 0.2 mi (0.3 km) upstream from plant of West Virginia Pulp and Paper Co. at Tyrone, 0.2 mi (0.3 km) upstream from Laurel Run, and 1.3 mi (2.1 km) upstream from mouth.
DRAINAGE AREA.--44.1 mi² (114.2 km²).

PERIOD OF RECORD.--October 1944 to current year. Prior to October 1967, published as South Bald Eagle Creek at Tyrone.

REVISED RECORDS.--WSP 1903: 1954(M). WDR PA-75-2: 1974.

GAGE.--Water-stage recorder. Datum of gage is 921.80 ft (280.965 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1944 to Nov. 15, 1950, water-stage recorder, and Nov. 16, 1950 to Nov. 30, 1952, nonrecording gage at site 0.5 mi (0.8 km) downstream at datum 17.99 ft (5.483 m) lower.

REMARKS.--Records good except those for periods of no gage height record, Mar. 22 to May 2, and those for winter periods, which are fair. Prior to Oct. 1, 1950, daily discharges were affected by diversion from the basin of a small quantity of water for boiler feed makeup for West Virginia Pulp and Paper Co. From Oct. 1, 1950 to Nov. 30, 1952, in addition to the effects of above diversion, daily discharges were affected by diversion into the basin, by West Virginia Pulp and Paper Co., of water from ground-water sources. Daily discharges subsequent to Nov. 30, 1952 are not affected by diversion. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--35 years, 85.2 ft³/s (2.413 m³/s), 26.24 in/yr (666 mm/yr), adjusted for diversion from October 1950 to November 1952.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,140 ft³/s (146 m³/s) Nov. 25, 1950, gage height, 7.5 ft (2.29 m), from floodmarks, at site and datum then in use, from rating curve extended above 2,100 ft³/s (59.5 m³/s), on basis of contracted-opening measurement of peak flow; minimum, 1.4 ft³/s (0.040 m³/s) Sept. 12, 13, 1973; minimum gage height, 0.15 ft (0.046 m) Aug. 31, Sept. 1, 1962, Sept. 11, 1965, Sept. 1, 2, 3, 4, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 15 ft (4.6 m) Mar. 17 or 18, 1936, site and datum in use prior to Dec. 1, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 940 ft³/s (26.6 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. 2	0700	1,080 30.6	3.31 1.009	Mar. 25	Unknown	Unknown	Unknown
Jan. 24	--	--	ice jam	May 24	0900	1,010 28.6	3.21 0.978
Mar. 4	2230	*1,960 55.5	*4.37 1.332	Sept. 6	0500	1,080 30.6	3.32 1.012

Minimum discharge, 7.3 ft³/s (0.21 m³/s) Oct. 11, 12, gage height, 0.30 ft (0.091 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	9.5	35	246	27	31	120	90	101	43	71	59
2	8.4	9.5	30	814	26	30	220	78	90	29	56	60
3	8.1	9.5	43	357	25	29	210	82	78	23	47	69
4	11	9.5	118	215	25	500	190	94	69	27	40	51
5	9.5	9.5	82	155	24	1580	210	73	63	25	35	61
6	8.7	9.5	67	127	24	1100	170	68	60	20	32	706
7	8.4	9.7	58	110	23	664	150	64	54	19	30	294
8	8.1	11	103	94	22	510	140	60	72	19	27	189
9	7.9	10	215	84	21	423	170	56	82	18	24	135
10	7.9	10	142	74	21	402	160	54	60	23	34	103
11	7.6	9.7	103	66	21	349	140	56	59	20	92	76
12	7.6	9.7	90	60	21	259	130	55	54	18	137	72
13	8.4	10	79	58	21	209	130	58	50	16	80	65
14	28	11	71	64	21	215	130	51	46	16	64	76
15	14	11	61	54	21	192	130	50	41	22	56	72
16	11	12	56	51	21	162	120	52	37	21	48	55
17	18	20	56	48	21	147	110	44	35	18	42	50
18	12	42	48	47	21	145	100	43	30	15	44	44
19	11	22	43	45	20	142	95	43	32	14	44	42
20	10	17	41	43	20	167	87	42	28	13	36	37
21	10	16	94	41	21	189	82	42	27	14	34	35
22	9.5	15	65	40	22	140	76	39	26	17	31	85
23	9.2	19	58	38	25	135	70	50	24	19	29	56
24	9.2	31	55	50	27	240	64	555	22	19	29	41
25	9.2	23	76	70	30	500	63	353	21	69	31	36
26	9.5	20	82	45	35	330	66	249	20	60	34	34
27	16	21	54	37	33	240	130	209	19	36	170	33
28	11	33	69	35	32	190	110	192	19	34	59	30
29	10	34	97	32	---	160	105	165	28	140	74	280
30	9.7	34	79	30	---	140	97	145	37	90	82	243
31	9.5	---	68	28	---	130	---	116	---	68	69	---
TOTAL	326.8	508.1	2338	3258	671	9650	3775	3328	1384	985	1681	3189
MEAN	10.5	16.9	75.4	105	24.0	311	126	107	46.1	31.8	54.2	106
MAX	28	42	215	814	35	1580	220	555	101	140	170	706
MIN	7.6	9.5	30	28	20	29	63	39	19	13	24	30
CFSM	.24	.38	1.71	2.38	.54	7.05	2.86	2.43	1.05	.72	1.23	2.40
IN.	.28	.43	1.97	2.75	.57	8.14	3.18	2.81	1.17	.83	1.42	2.69
CAL YR 1978 TOTAL	37852.3			104		1740	6.5	2.36	31.93			
WTR YR 1979 TOTAL	31093.9			85.2		1580	7.6	1.93	26.23			

JUNIATA RIVER BASIN

01558000 LITTLE JUNIATA RIVER AT SPRUCE CREEK, PA

LOCATION.--Lat 40°36'45", long 78°08'27", Huntingdon County, Hydrologic Unit 02050302, on right bank 150 ft (46 m) downstream from Penn Central Railroad bridge, 0.5 mi (0.8 km) northwest of village at Spruce Creek, and 0.5 mi (0.8 km) upstream from Spruce Creek.

DRAINAGE AREA.--220 mi² (570 km²).

PERIOD OF RECORD.--June 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 751.15 ft (228.951 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Some observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years, 375 ft³/s (10.62 m³/s), 23.15 in/yr (588 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,600 ft³/s (810 m³/s) June 23, 1972, gage height, 16.98 ft (5.176 m), from rating curve extended above 5,600 ft³/s (159 m³/s) on basis of slope-area measurement of peak flow; minimum, 45 ft³/s (1.27 m³/s) Sept. 26, 1943, Oct. 4, 1949; minimum gage height, 1.41 ft (0.430 m) Sept. 26, 1943.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 19.1 ft (5.82 m) Mar. 18, 1936, from floodmarks 175 ft (53 m) downstream, discharge, 39,800 ft³/s (1,130 m³/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 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	0930	3,350 94.9	5.81 1.771	Mar. 25	0230	3,390 96.0	5.84 1.780
Jan. 24	2330	3,740 106	6.11 1.862	May 24	1200	3,940 112	6.26 1.908
Feb. 26	0700	3,000 85.0	5.53 1.686	Sept. 6	0800	3,980 113	6.29 1.917
Mar. 5	0630	*7,900 224	*8.82 2.688				

Minimum discharge, 91 ft³/s (2.58 m³/s) Oct. 22, 23, Nov. 11, minimum gage height, 1.84 ft (0.561 m) Oct. 2, 7, 8, 9, 10, 11, 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	95	138	545	300	1090	571	445	579	607	367	246
2	101	96	129	2460	230	1470	1110	408	559	293	345	230
3	99	95	133	1290	210	1300	1020	406	472	250	269	379
4	109	94	311	826	190	2890	942	564	427	259	237	246
5	111	94	256	633	180	6930	1020	421	381	278	211	218
6	103	97	200	540	170	5160	856	381	356	214	200	2260
7	101	95	180	518	160	3150	736	361	318	200	186	1160
8	99	99	219	617	160	2440	663	341	332	189	177	781
9	99	96	573	411	160	2040	837	319	502	186	165	598
10	99	94	414	361	160	1940	819	303	333	214	174	497
11	99	93	301	286	150	1770	673	331	310	200	555	420
12	99	94	268	258	150	1390	660	341	276	183	776	361
13	103	95	245	273	150	1130	610	373	252	174	523	314
14	165	97	232	313	150	1090	637	303	234	171	367	353
15	122	96	209	261	150	986	632	279	221	207	318	317
16	101	99	197	229	150	846	608	285	207	211	283	251
17	122	110	202	221	150	759	558	249	197	200	250	226
18	109	156	190	218	150	722	514	236	192	174	246	209
19	101	118	176	169	147	726	469	234	182	165	259	200
20	99	106	168	192	150	718	430	226	173	160	218	182
21	97	105	402	236	152	707	394	218	168	160	211	235
22	93	104	289	247	264	685	365	208	173	163	200	446
23	94	105	229	209	418	668	337	218	160	186	186	251
24	95	127	211	879	708	1010	313	2100	154	183	186	200
25	93	116	325	2100	1090	2500	299	1560	150	302	196	184
26	96	109	261	1000	2530	1590	310	1130	142	373	174	176
27	125	108	222	706	1480	1180	632	944	138	230	733	167
28	109	128	192	582	1030	921	555	908	137	255	334	731
29	101	150	164	494	---	785	506	760	162	711	334	1040
30	98	136	178	421	---	681	480	717	422	621	334	613
31	99	---	190	372	---	612	---	608	---	425	274	---
TOTAL	3240	3207	7404	17867	11089	49886	18556	16177	8309	8144	9288	13491
MEAN	105	107	239	576	396	1609	619	522	277	263	300	450
MAX	165	156	573	2460	2530	6930	1110	2100	579	711	776	2260
MIN	93	93	129	169	147	612	299	208	137	160	165	167
CFSM	.48	.49	1.09	2.62	1.80	7.31	2.81	2.37	1.26	1.20	1.36	2.05
IN.	.55	.54	1.25	3.02	1.88	8.44	3.14	2.74	1.40	1.38	1.57	2.28

CAL YR 1978	TOTAL	159183	MEAN 436	MAX 5730	MIN 87	CFSM 1.98	IN 26.92
WTR YR 1979	TOTAL	166658	MEAN 457	MAX 6930	MIN 93	CFSM 2.08	IN 28.18

JUNIATA RIVER BASIN

01559000 JUNIATA RIVER AT HUNTINGDON, PA

LOCATION.--Lat 40°29'05", long 78°01'09", Huntingdon County, Hydrologic Unit 02050302, on right bank 170 ft (52 m) downstream from Smithfield Bridge at Huntingdon, and 0.8 mi (1.3 km) upstream from Standing Stone Creek.

DRAINAGE AREA.--816 m² (2,113 km²).

PERIOD OF RECORD.--September 1941 to current year. Gage-height records collected in this vicinity for the period May 1895 to December 1938 are contained in reports of U.S. Weather Bureau. Prior to October 1950 published as Frankstown Branch Juniata River at Huntingdon.

REVISED RECORDS.--WDR PA-73-1: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 599.69 ft (182.786 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--38 years, 1,090 ft³/s (30.87 m³/s), 18.14 in/yr (461 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,000 ft³/s (1,610 m³/s) June 23, 1972, gage height, 20.03 ft (6.105 m), from rating curve extended above 23,000 ft³/s (651 m³/s) on basis of an average of two computations of flow over dam at gage-height, 21.87 ft (6.666 m) and 20.03 ft (6.105 m) and runoff comparison with upstream and downstream stations; minimum recorded 14 ft³/s (0.40 m³/s) Feb. 8, 1948, Aug. 2, 1954; minimum gage height recorded, 0.27 ft (0.082 m) Feb. 8, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936, reached a stage of 21.87 ft (6.666 m), from floodmark, discharge, 68,000 ft³/s (1,930 m³/s) from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,500 ft³/s (156 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	1515	8,410 238	7.26 2.213	Mar. 25	0930	9,700 275	7.86 2.396
Jan. 25	0315	11,800 334	8.77 2.673	May 24	1900	8,980 254	7.53 2.295
Feb. 26	0930	11,100 314	8.47 2.582	Sept. 6	1515	8,240 233	7.18 2.188
Mar. 5	0930	*20,800 589	*12.07 3.679				

Minimum discharge, 275 ft³/s (7.79 m³/s) Oct. 9, 10, 11, gage height, 1.26 ft (0.384 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	284	303	413	908	980	3540	1570	1220	1610	1410	1090	776
2	284	303	402	6620	860	4750	2650	1110	1580	945	992	715
3	284	303	390	4430	800	4650	3050	1080	1370	733	809	1050
4	303	303	654	2440	750	6930	2610	1810	1260	664	712	833
5	319	303	849	1890	700	19900	3420	1470	1140	842	640	704
6	298	298	625	1490	660	17100	2700	1300	1050	673	595	5160
7	284	303	537	1360	640	9720	2250	1210	989	596	563	3730
8	284	308	518	1990	620	6900	1980	1130	950	555	537	2230
9	280	308	1190	1330	600	5530	2160	1040	2340	531	522	1690
10	280	293	1310	1110	580	4940	2500	997	1450	551	505	1370
11	280	289	857	943	560	4660	1950	1070	1290	588	1060	1170
12	280	289	749	863	550	3760	1770	1110	1100	524	2590	1040
13	280	293	675	862	540	3000	1740	1130	963	488	2120	930
14	356	298	632	926	520	2790	1730	1020	869	591	1260	922
15	467	298	584	880	500	2600	1760	906	807	659	1030	989
16	346	298	557	722	490	2190	1720	865	759	780	901	802
17	362	324	537	746	490	2020	1580	795	719	852	798	726
18	368	449	537	698	480	1870	1460	741	690	625	751	682
19	324	425	499	635	480	1820	1380	719	657	549	789	654
20	308	351	475	594	510	1780	1310	704	616	504	700	618
21	308	329	825	813	560	1780	1240	675	589	487	660	639
22	303	319	1050	975	709	1710	1160	675	620	500	750	1450
23	293	319	761	802	1330	1670	1090	697	585	529	626	989
24	293	346	681	1980	2430	2120	1020	5150	544	709	636	764
25	289	351	941	8470	4060	8020	981	5180	525	615	1100	682
26	298	329	956	3270	9650	4890	981	3450	506	1360	767	639
27	346	329	763	2170	5610	3340	1460	2620	485	875	1640	618
28	373	346	626	1750	3410	2520	1680	2660	478	727	1230	802
29	329	455	561	1490	---	2130	1400	2300	546	1350	1020	2160
30	314	425	528	1280	---	1860	1310	2080	1090	2090	1080	1320
31	308	---	592	1160	---	1670	---	1800	---	1280	889	---
TOTAL	9725	9887	21274	55597	40069	142160	53612	48714	28177	24182	29362	36854
MEAN	314	330	686	1793	1431	4586	1787	1571	939	780	947	1228
MAX	467	455	1310	8470	9650	19900	3420	5180	2340	2090	2590	5160
MIN	280	289	390	594	480	1670	981	675	478	487	505	618
CFSM	.39	.40	.84	2.20	1.75	5.62	2.19	1.93	1.15	.96	1.16	1.51
IN.	.44	.45	.97	2.53	1.83	6.48	2.44	2.22	1.28	1.10	1.34	1.68
CAL YR 1978	TOTAL	466062	MEAN	1277	MAX	12600	MIN	280	CFSM	1.57	IN	21.25
WTR YR 1979	TOTAL	499613	MEAN	1369	MAX	19900	MIN	280	CFSM	1.68	IN	22.78

JUNIATA RIVER BASIN

01560000 DUNNING CREEK AT BELDEN, PA

LOCATION.--Lat 40°04'18", long 78°29'34", Bedford County, Hydrologic Unit 02050303, on left bank 10 ft (3 m) upstream from highway bridge, 0.8 mi (1.3 km) southeast of Belden, 3.8 mi (6.1 km) north of Bedford, and 4.3 mi (6.9 km) above mouth.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--May 1939 to current year.

REVISED RECORDS.--WSP 971: 1940(M). WSP 1502: 1940-41. WDR PA-72-1: 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 1,051.16 ft (320.394 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those for winter periods, which are fair. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--40 years, 228 ft³/s (6.457 m³/s), 18.00 in/yr (457 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,400 ft³/s (549 m³/s) July 20, 1977, gage height, 14.15 ft (4.313 m), from rating curve extended above 9,200 ft³/s (261 m³/s); minimum, 2.6 ft³/s (0.074 m³/s) Sept. 6, 1964; minimum gage height, 0.92 ft (0.280 m) Jan. 8, 1954, result of freeze-up.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 17.8 ft (5.43 m) Mar. 18, 1936, from floodmarks (backwater from Raytown Branch Juniata River), discharge, about 16,900 ft³/s (479 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft³/s (65.1 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. 2	1530	2,880 81.6	7.76 2.365	Mar. 6	0430	*5,420 153	*10.30 3.139
Jan. 25	0030	3,300 93.4	8.36 2.548	Mar. 25	0530	4,800 136	9.86 3.005
Feb. 26	0930	3,390 96.0	8.49 2.588	Sept. 6	1000	2,740 77.6	7.53 2.295

Minimum discharge, 21 ft³/s (0.60 m³/s) Oct. 13, gage height, 1.19 ft (0.363 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	26	79	398	98	774	304	270	279	221	292	148
2	23	26	65	2320	94	1110	1380	227	246	121	745	129
3	23	25	67	1710	88	1240	1180	292	213	126	261	143
4	24	25	295	1630	84	2190	1000	474	199	196	188	108
5	26	25	199	1630	80	4660	1070	372	165	230	140	101
6	25	25	165	509	77	4470	736	332	143	193	113	1760
7	23	25	124	273	74	2420	528	298	129	160	96	869
8	23	26	116	240	72	1760	428	258	116	129	88	505
9	24	26	501	210	70	1490	505	227	146	108	79	357
10	23	25	365	190	68	1410	458	213	157	108	67	261
11	23	24	249	170	67	1240	368	204	140	101	137	216
12	22	24	202	160	65	869	402	182	118	79	536	182
13	22	25	171	140	64	629	361	207	106	67	357	148
14	34	26	143	179	63	633	372	165	93	151	235	185
15	41	25	113	148	63	600	390	143	84	179	193	157
16	31	34	103	148	62	493	402	132	77	328	160	113
17	33	48	103	137	62	409	390	116	72	227	129	101
18	31	70	88	129	61	387	354	106	67	151	118	90
19	29	40	77	120	61	439	304	106	62	108	116	74
20	26	32	74	115	60	470	264	101	56	88	98	75
21	26	31	339	130	60	462	235	98	56	84	298	137
22	25	28	288	140	60	447	210	93	74	81	216	443
23	24	31	246	150	280	439	188	93	54	238	160	218
24	23	42	218	190	1610	966	168	1100	48	121	154	157
25	23	42	314	250	1550	3770	157	616	46	204	168	140
26	24	43	255	170	2800	1380	162	616	42	332	132	129
27	29	38	207	150	1380	741	368	497	41	160	321	110
28	37	63	193	130	834	505	413	493	40	224	285	174
29	31	88	171	120	---	402	394	413	40	493	325	261
30	28	50	174	110	---	332	325	398	81	596	235	235
31	26	---	157	100	---	295	---	314	---	350	179	---
TOTAL	825	1058	5861	12196	10007	37432	13816	9156	3190	5954	6621	7726
MEAN	26.6	35.3	189	393	357	1207	461	295	106	192	214	258
MAX	41	88	501	2320	2800	4660	1380	1100	279	596	745	1760
MIN	22	24	65	100	60	295	157	93	40	67	67	74
CFSM	.16	.21	1.10	2.29	2.08	7.02	2.68	1.72	.62	1.12	1.24	1.50
IN.	.18	.23	1.27	2.64	2.16	8.10	2.99	1.98	.69	1.29	1.43	1.67

CAL YR 1978 TOTAL 95975 MEAN 263 MAX 2940 MIN 22 CFSM 1.53 IN 20.76
WTR YR 1979 TOTAL 113842 MEAN 312 MAX 4660 MIN 22 CFSM 1.81 IN 24.62

JUNIATA RIVER BASIN

01562000 RAYSTOWN BRANCH JUNIATA RIVER AT SAXTON, PA

LOCATION.--Lat 40°12'57", long 78°15'56", Bedford County, Hydrologic Unit 02050303, on left bank, 500 ft (152 m) downstream from bridge on State Highway 913, 0.5 mi (0.8 km) west of Saxton, and 1.5 mi (2.4 km) upstream from Shoup Run.

DRAINAGE AREA.--756 mi² (1,958 km²).

PERIOD OF RECORD.--September 1911 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1302: 1912-13(M), 1914-15. WSP 1502: 1934, 1936.

GAGE.--Water-stage recorder. Datum of gage is 795.77 ft (242.551 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1931, nonrecording gage at site 0.8 mi (1.3 km) downstream at datum 4.82 ft (1.469 m) lower.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--68 years, 915 ft³/s (21.91 m³/s), 16.44 in/yr (418 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 80,500 ft³/s (2,280 m³/s) Mar. 18, 1936, gage height, 24.54 ft (7.480 m), from floodmark in gage shelter, from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of slope-area measurement of peak flow; minimum, 39 ft³/s (1.10 m³/s) Sept. 6, 7, 12, 1966, gage height, 0.84 ft (0.256 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1, 1889 reached a stage of 23.0 ft (7.01 m) at present site and datum, from floodmarks, discharge about 71,300 ft³/s (2,000 m³/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,700 ft³/s (218 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)
Feb. 26	1215	*42,900 1,215	*18.35 5.593	Mar. 25	1315	12,400 351	10.20 3.109
Mar. 6	0945	17,600 498	12.26 3.737	Sept. 6	1845	10,500 297	9.21 2.807

Minimum discharge, 100 ft³/s (2.83 m³/s) Oct. 13, gage height, 1.20 ft (0.366 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	135	267	821	390	4020	1440	1190	1220	252	1060	487
2	109	149	257	4090	380	4530	2470	1040	1170	461	1140	407
3	107	153	257	5470	360	5740	3900	943	954	353	1180	435
4	113	167	301	2540	350	6730	3350	1430	931	344	698	466
5	113	167	698	1830	340	14300	4210	1660	823	746	555	403
6	114	163	650	1400	340	16900	3560	1450	664	683	446	5950
7	111	167	492	1230	330	10600	2840	1300	620	470	367	5330
8	113	171	419	1100	330	6930	2180	1210	541	406	333	2900
9	108	176	796	1000	320	5170	2000	1020	569	324	304	1830
10	106	167	1730	950	310	4490	2140	1040	680	297	298	1310
11	103	167	1060	890	310	4170	1730	1020	881	286	326	1030
12	103	163	763	830	300	3450	1480	926	682	314	656	825
13	103	171	643	780	300	2700	1440	886	526	259	1730	699
14	115	171	558	720	300	2240	1330	893	457	338	992	705
15	113	163	519	660	290	2030	1450	741	403	547	685	901
16	113	156	714	610	290	1950	1400	635	353	628	534	702
17	135	167	413	570	280	1550	1320	585	362	1350	492	524
18	126	201	374	550	270	1340	1240	533	320	992	385	461
19	122	241	349	520	270	1260	1120	517	311	700	365	445
20	121	241	330	490	260	1280	996	494	301	485	360	376
21	116	188	380	470	260	1280	908	520	266	402	436	403
22	111	167	701	460	1300	1270	855	500	273	435	829	1460
23	109	153	674	450	1510	1160	765	490	273	1190	648	1480
24	108	149	599	540	7990	1410	708	4000	274	1620	545	986
25	104	153	842	700	29300	9060	642	3200	233	923	470	725
26	105	167	1200	580	38200	7060	679	2800	215	1120	481	630
27	114	184	873	520	31000	3850	898	2400	204	1020	391	605
28	110	184	600	480	19000	2720	1600	2100	194	619	533	526
29	110	197	412	460	---	2130	1430	1800	191	871	567	548
30	139	267	372	430	---	1770	1340	1700	211	1780	798	748
31	142	---	521	400	---	1480	---	1470	---	1580	642	---
TOTAL	3526	5265	18764	32541	134880	134570	51421	40493	15102	21795	19246	34297
MEAN	114	176	605	1050	4817	4341	1714	1306	503	703	621	1143
MAX	142	267	1730	5470	38200	16900	4210	4000	1220	1780	1730	5950
MIN	103	135	257	400	260	1160	642	490	191	252	298	376
CFSM	.15	.23	.80	1.39	6.37	5.74	2.27	1.73	.67	.93	.82	1.51
IN.	.17	.26	.92	1.60	6.64	6.62	2.53	1.99	.74	1.07	.95	1.69
CAL YR 1978	TOTAL	409396	MEAN	1122	MAX	11300	MIN	103	CFSM	1.48	IN	20.14
WTR YR 1979	TOTAL	511900	MEAN	1402	MAX	38200	MIN	103	CFSM	1.85	IN	25.19

JUNIATA RIVER BASIN

LAKE IN JUNIATA RIVER BASIN

01563100 RAYSTOWN LAKE.--Lat 40°26'06", long 78°00'25", Huntingdon County, Hydrologic Unit 02050303, at Raystown Dam on Raystown Branch Juniata River, 3.5 mi (5.6 km) south of Huntingdon and 5.7 mi (9.2 km) upstream from mouth. DRAINAGE AREA, 959 mi² (2,484 km²). PERIOD OF RECORD, October 1972 to current year. GAGE, recording. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Reservoir is formed by earthfill dam with a gated spillway in right abutment at elevation, 768.6 ft (234.27 m) and an ungated spillway, separate from embankment, at elevation 812.0 ft (247.50 m). Storage began November 1972. Capacity at elevation 768.6 ft (234.27 m) is 383,500 acre-ft (473 hm³). Capacity at elevation 812.0 ft (247.50 m) is 762,000 acre-ft (940 hm³). Conservation pool elevation is 786 ft or 240 m. Capacity at elevation 786 ft (240 m) is 514,000 acre-ft or 634 hm³. Lake is used for flood control, low-flow augmentation, and recreation. Figures given herein represent total contents. Records furnished by Corps of Engineers. EXTREMES FOR PERIOD OF RECORD: Maximum contents, 589,700 acre-ft (727 hm³) March 7, 1979 (elevation, 794.81 ft or 242.258 m); minimum 2,240 acre-ft (2.76 hm³) March 2, 1973 (elevation, 628.80 ft or 191.660 m). EXTREMES FOR CURRENT YEAR: Maximum contents, 589,700 acre-ft (727 hm³) March 7 (elevation, 794.81 ft or 242.258 m); minimum, 493,700 acre-ft (609 hm³) Nov. 26 (elevation, 783.63 ft or 238.850 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01563100 Raystown Lake			
Sept. 30	784.57	501,640	--
Oct. 31	783.81	495,200	-105
Nov. 30	783.69	494,200	- 16.8
Dec. 31	786.18	515,530	+347
CAL YR 1978	--	--	+ 74.6
Jan. 31	785.88	512,960	- 41.8
Feb. 28	787.76	528,960	+288
Mar. 31	785.76	511,910	-277
Apr. 30	786.53	518,500	+111
May 31	785.90	513,130	- 87.3
June 30	785.70	511,390	- 29.2
July 31	786.55	518,680	+119
Aug. 31	786.42	517,570	- 18.0
Sept. 30	786.33	516,800	- 12.9
WTR YR 1979	--	--	+ 20.9

JUNIATA RIVER BASIN

01563200 RAYSTOWN BRANCH JUNIATA RIVER BELOW RAYSTOWN DAM NEAR HUNTINGDON, PA

LOCATION.--Lat 40°25'44", long 77°59'29", Huntingdon County, Hydrologic Unit 02050303, on left bank 1 mi (1.6 km) downstream from Raystown Dam, 4 mi (6.4 km) south of Huntingdon, and 4.7 mi (7.6 km) upstream from mouth.

DRAINAGE AREA.--960 mi² (2,490 km²), revised.

PERIOD OF RECORD.--January 1946 to current year. Published as "near Huntingdon" prior to Oct. 1, 1969.

GAGE.--Water-stage recorder. Datum of gage is 597.36 ft (182.075 m) National Geodetic Vertical Datum of 1929. Corps of Engineers benchmark. Prior to Oct. 1, 1969, water-stage recorder at site 4.3 mi (6.9 km) upstream at datum 22.72 ft (6.925 m) higher.

REMARKS.--Records good. Flow regulated by Raystown Dam (station 01563100) 1 mi (1.6 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--33 years, 1,143 ft³/s (32.37 m³/s), 16.17 in/yr (411 mm/yr), adjusted for storage since October 1972.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 ft³/s (694 m³/s) Nov. 25, 1950, gage height, 16.74 ft (5.102 m), site and datum then in use, from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of computation of flow over dam at peak flow, maximum gage height at present site and datum, 18.54 ft (5.651 m) Apr. 3, 1970; minimum, 1.2 ft³/s (0.034 m³/s) June 30, July 20, 1973, gage height, 2.14 ft (0.652 m), result of upstream shutoff; minimum daily, 5.0 ft³/s (0.142 m³/s) October 30, 1957, May 18, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936, reached a stage of 31.0 ft (9.45 m), discharge, 87,000 ft³/s (2,460 m³/s), at previous site and datum, by computation of flow over dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,200 ft³/s (430 m³/s) Mar. 8, gage height, 14.69 ft (4.478 m); minimum discharge, 45 ft³/s (1.27 m³/s) Oct. 18, gage height, 2.60 ft (0.792 m); minimum daily discharge, 205 ft³/s (5.81 m³/s) Oct. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	279	232	232	586	656	10500	1730	1390	1770	480	1860	752
2	279	232	232	2120	656	6870	1660	1390	1410	480	1420	667
3	258	232	232	5070	656	4740	3230	1400	1040	480	1340	555
4	245	232	235	6620	656	6310	4400	1400	886	480	1210	560
5	242	232	235	2590	656	2900	4410	1400	886	466	718	586
6	242	232	235	1880	656	5740	4410	1410	741	480	485	5780
7	242	232	235	1720	656	11800	4420	2030	678	480	485	6910
8	242	235	238	1720	656	14100	3110	2260	678	475	490	4230
9	242	232	238	1720	656	14800	2410	1940	678	475	490	2050
10	242	232	235	1180	656	14000	2400	1390	678	475	475	1490
11	235	232	321	782	656	13300	2060	1390	667	475	911	1070
12	225	232	442	544	549	9760	1880	1390	672	419	1400	861
13	232	235	437	555	490	4080	1880	1390	672	369	1860	861
14	232	235	437	560	490	2980	1880	1120	539	369	1490	861
15	232	235	437	555	490	2430	1880	1010	480	369	776	861
16	232	235	437	555	490	2170	1880	776	480	437	586	861
17	232	235	437	549	490	1930	1650	672	480	475	480	607
18	219	235	437	549	490	1760	1540	672	480	475	480	470
19	225	235	437	549	490	1500	943	672	480	475	480	470
20	225	235	437	549	490	1330	855	672	480	475	480	470
21	205	232	437	776	490	1320	1000	672	485	475	480	645
22	228	232	437	1060	490	1320	1000	672	485	475	480	1480
23	228	232	437	1790	490	1310	1000	678	480	475	602	1490
24	228	232	437	2170	1270	1320	1010	2310	480	1090	672	1490
25	228	232	442	4910	3180	2970	1010	4750	475	1410	672	1020
26	228	232	442	10200	6810	7130	1000	5070	475	1730	672	770
27	232	232	461	7310	10300	9740	1000	3080	475	1720	672	770
28	232	232	485	2610	10900	8010	1000	2620	480	1410	581	770
29	232	232	485	1290	---	3720	1270	2610	480	868	650	770
30	232	232	485	1290	---	2200	1390	2610	480	1120	723	770
31	232	---	485	1080	---	1870	---	2610	---	1720	741	---
TOTAL	7307	6987	11639	65439	45615	173910	59308	53456	19670	21602	24861	40947
MEAN	236	233	375	2111	1629	5610	1977	1724	656	697	802	1365
MAX	279	235	485	10200	10900	14800	4420	5070	1770	1730	1860	6910
MIN	205	232	232	544	490	1310	855	672	475	369	475	470

CAL YR 1978 TOTAL 456867 MEAN 1252 MAX 12700 MIN 205
WTR YR 1979 TOTAL 530741 MEAN 1454 MAX 14800 MIN 205

JUNIATA RIVER BASIN

01563500 JUNIATA RIVER AT MAPLETON DEPOT, PA

LOCATION.--Lat 40°23'32" (revised), long 77°56'07" (revised), Huntingdon County, Hydrologic Unit 02050304, on right bank 0.25 mi (0.40 km) downstream from Scrub Run, and 0.3 mi (0.5 km) downstream from bridge on State Highway 655 at Mapleton Depot.

DRAINAGE AREA.--2,030 m² (5,258 km²).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WDR PA-73-1: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 557.31 ft (169.868 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated since October 1972 by Raystown Lake (Station 01563100) 12 mi (19 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--42 years, 2,495 ft³/s (70.66 m³/s), 16.69 in/yr (424 mm/yr), adjusted for storage since October 1972.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 125,000 ft³/s (3,540 m³/s) June 23, 1972, gage height, 33.07 ft (10.080 m), from rating curve extended above 39,000 ft³/s (1,100 m³/s) on basis of runoff comparison with upstream and downstream stations; minimum, 68 ft³/s (1.93 m³/s) Sept. 13, 1964; minimum daily, 101 ft³/s (2.86 m³/s) Aug. 21, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936 reached a stage of 38.2 ft (11.64 m) from floodmark, discharge, 165,000 ft³/s (4,670 m³/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31,900 ft³/s (903 m³/s) Mar. 5, gage height, 16.20 ft (4.938 m); minimum, 465 ft³/s (13.2 m³/s) Oct. 21, gage height, 2.32 ft (0.707 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	591	550	695	1610	2080	15500	3950	3060	4130	2160	3050	1770
2	591	540	682	9700	1880	13700	4810	2930	3490	1870	2640	1650
3	579	535	664	10500	1800	10600	6820	2920	3060	1460	2400	1790
4	579	530	902	10200	1700	14000	7790	3860	2740	1330	2090	1710
5	597	530	1300	4980	1600	28100	9010	3500	2590	1540	1660	1480
6	585	530	995	3880	1500	28300	8070	3250	2300	1350	1160	12200
7	555	540	851	3490	1450	24600	7440	3540	2040	1220	1120	12500
8	545	540	830	4340	1400	22900	6090	3850	1960	1160	1090	7360
9	540	540	1660	3630	1350	21900	5210	3540	3370	1130	1110	4330
10	535	535	2090	2850	1300	20200	5840	2820	2630	1130	1060	3270
11	535	525	1380	2160	1250	19200	4820	3000	2380	1200	1970	2770
12	520	530	1400	1630	1200	14900	4340	3140	2170	1080	4730	2290
13	525	530	1290	1720	1150	7630	4300	3070	1970	948	4740	2140
14	585	535	1220	1810	1150	6230	4260	2770	1760	1000	3410	2150
15	727	540	1130	1830	1100	5520	4310	2370	1550	1140	2150	2260
16	627	545	1120	1530	1100	4780	4230	2140	1480	1300	1840	1990
17	609	573	1090	1550	1050	4370	3880	1850	1420	1510	1520	1690
18	627	701	1080	1450	1050	4020	3560	1760	1380	1240	1430	1380
19	579	740	1030	1310	1000	3730	3060	1730	1330	1130	1500	1340
20	555	621	1000	1290	990	3480	2600	1700	1270	1070	1390	1280
21	530	585	1270	1790	1100	3460	2720	1660	1230	1030	1310	1350
22	545	567	1820	2420	1290	3400	2630	1650	1260	1040	1400	3460
23	535	561	1380	2880	2090	3350	2540	1740	1230	1130	1350	2930
24	515	585	1260	4820	4160	3840	2460	8570	1160	1760	1470	2590
25	525	615	1740	16400	7890	13300	2400	12000	1130	2190	2410	2130
26	535	591	1850	15100	19600	13100	2390	10200	1090	3170	1840	1680
27	573	591	1510	11100	18600	14200	2910	6910	1070	2910	2480	1630
28	645	609	1290	5600	15700	11800	3320	6210	1060	2310	2330	1680
29	579	714	1170	3370	---	7100	3070	5790	1120	2490	1930	3270
30	545	727	1130	3090	---	4820	3160	5440	1880	3530	2120	2460
31	535	---	1210	2800	---	4160	---	5050	---	3210	1910	---
TOTAL	17648	17355	38039	140830	97530	356190	131990	122020	57250	50738	62610	90530
MEAN	569	579	1227	4543	3483	11490	4400	3936	1908	1637	2020	3018
MAX	727	740	2090	16400	19600	28300	9010	12000	4130	3530	4740	12500
MIN	515	525	664	1290	990	3350	2390	1650	1060	948	1060	1280
MEAN#	464	562	1574	4501	3771	11213	4511	3849	1879	1756	2002	3005
CFSM#	.23	.28	.78	2.22	1.86	5.52	2.22	1.90	.93	.87	.99	1.48
IN.#	.26	.31	.90	2.56	1.94	6.36	2.48	2.19	1.04	1.00	1.14	1.65

CAL YR 1978	TOTAL	1063922	MEAN	2915	MAX	23200	MIN	515	MEAN#	2989	CFSM#	1.47	IN.#	20.00
WTR YR 1979	TOTAL	1182730	MEAN	3240	MAX	28300	MIN	515	MEAN#	3261	CFSM#	1.61	IN.#	21.81

Adjusted for change in contents in Raystown Lake.

JUNIATA RIVER BASIN

01564500 AUGHWICK CREEK NEAR THREE SPRINGS, PA

LOCATION.--Lat 40°12'45", long 77°55'32", Huntingdon County, Hydrologic Unit 02050304, on right bank 10 ft (3 m) downstream from bridge on State Highway 994, 300 ft (91 m) upstream from East Broad Top Railroad Bridge, 350 ft (107 m) upstream from Three Springs Creek, and 3.5 mi (5.1 km) northeast of village of Three Springs. Records include flow of Three Springs Creek.

DRAINAGE AREA.--205 mi² (531 km²), includes that of Three Springs Creek.

PERIOD OF RECORD.--May 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 618.65 ft (188.565 m) National Geodetic Vertical of 1929, unadjusted.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years, 247 ft³/s (6.995 m³/s), 16.36 in/yr (416 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,700 ft³/s (671 m³/s) June 22, 1972, gage height, 19.20 ft (5.852 m), from rating curve extended above 7,100 ft³/s (201 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 0.8 ft³/s (0.023 m³/s) Sept. 2, 3, 4, 11, 12, 13, 1966, gage height, 1.74 ft (0.530 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 19.3 ft (5.88 m) June 1, 1889, discharge not determined; previously published figure is believed to be in error and should not be used.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft³/s (59.5 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. 2	1730	2,160 61.2	8.01 2.441	Mar. 6	0530	3,430 97.1	9.69 2.954
Jan. 25	0330	7,120 202	13.14 4.005	Mar. 25	0800	2,850 80.7	8.96 2.731
Feb. 24	---	---	ice jam	Sept. 6	1530	*7,140 202	*a13.57 4.136
Feb. 26	0900	5,360 152	11.78 3.590				

Minimum daily discharge, 11 ft³/s (0.31 m³/s) Oct. 1, 2, 3; minimum gage height recorded 2.28 ft (0.695 m) Oct. 13, but may have been less during period of no gage height record Oct. 1-5.

a from floodmark.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	25	51	263	130	1260	389	252	370	282	170	55
2	11	27	50	1460	125	1440	643	229	325	214	237	46
3	11	26	43	1040	120	1460	687	229	282	119	197	54
4	12	26	86	518	120	1540	651	319	310	93	130	55
5	12	25	202	400	115	2840	932	282	245	214	93	55
6	15	20	103	340	110	2990	771	252	202	126	73	3760
7	15	19	63	310	110	1790	604	237	179	79	59	1580
8	15	19	64	280	105	1210	511	222	155	59	82	767
9	15	20	425	250	105	886	486	202	140	47	119	497
10	12	19	490	220	105	737	490	184	130	43	62	361
11	12	17	260	200	105	771	367	170	159	44	60	279
12	12	16	193	190	100	616	340	166	168	44	313	240
13	12	17	142	170	98	518	340	177	110	37	483	190
14	17	18	121	160	97	465	376	172	90	123	239	170
15	19	18	74	140	96	402	395	142	79	126	159	400
16	22	21	86	130	94	331	389	136	71	79	113	280
17	18	26	74	125	92	310	355	123	65	252	84	180
18	16	37	59	120	91	285	319	103	62	153	73	130
19	16	42	48	115	90	263	282	103	58	96	74	113
20	15	31	43	110	89	245	258	124	50	74	73	96
21	15	24	115	105	93	232	234	119	47	90	112	119
22	15	21	186	105	100	212	219	117	51	83	282	750
23	15	20	113	100	140	202	205	138	55	188	149	490
24	15	20	92	140	1340	408	188	797	47	138	119	340
25	14	21	577	200	2160	2170	179	762	40	89	540	271
26	25	24	507	190	4190	1240	174	905	37	214	207	229
27	29	24	334	170	1980	793	316	695	34	188	138	193
28	32	28	234	160	1210	596	361	631	29	123	103	168
29	30	35	181	150	---	493	288	655	30	138	83	172
30	27	49	159	145	---	418	271	547	76	325	74	153
31	25	---	174	135	---	367	---	441	---	237	68	---
TOTAL	530	735	5349	8141	13310	27490	12020	9631	3696	4117	4768	12193
MEAN	17.1	24.5	173	263	475	887	401	311	123	133	154	406
MAX	32	49	577	1460	4190	2990	932	905	370	325	540	3760
MIN	11	16	43	100	89	202	174	103	29	37	59	46
CFSM	.08	.12	.84	1.28	2.32	4.33	1.96	1.52	.60	.65	.75	1.98
IN.	.10	.13	.97	1.48	2.42	4.99	2.18	1.75	.67	.75	.87	2.21

CAL YR 1978 TOTAL 97457 MEAN 267 MAX 4040 MIN 11 CFSM 1.30 IN 17.68
WTR YR 1979 TOTAL 101980 MEAN 279 MAX 4190 MIN 11 CFSM 1.36 IN 18.51

JUNIATA RIVER BASIN

01565700 LITTLE LOST CREEK AT OAKLAND MILLS, PA

LOCATION.--Lat 40°36'19", long 77°18'42", Juniata County, Hydrologic Unit 02050304, on right bank at bridge on Legislative Route 34007, 0.8 mi (1.3 km) south of Oakland Mills, and 1 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--6.52 mi² (16.89 km²).

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum, water years 1960-63. August 1963 to current year. Prior to August 1964, published as "near Oakland Mills".

REVISED RECORDS.--WSP 1903: 1960(M). WDR PA-70-1: 1967-69(P). WDR PA-76-2: 1972(M), 1975(M).

GAGE.--Water-stage recorder. Datum at gage is 551.17 ft (167.997 m) National Geodetic Vertical Datum of 1929. June 8, 1960 to Aug. 7, 1963, crest-stage gage at same site and datum.

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, 7.73 ft³/s (0.219 m³/s), 16.10 in/yr (409 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,700 ft³/s (48.1 m³/s) Oct. 9, 1976, gage height, 8.83 ft (2.691 m), from rating curve extended above 740 ft³/s (21.0 m³/s); minimum, 0.2 ft³/s (0.006 m³/s) Nov. 2, 3, 4, 5, 6, 1963, Oct. 4, 1964, Aug. 24, Sept. 2, 1965; minimum gage height, 4.14 ft (1.262 m) July 5, 6, 7, 9, 10, 11, 12, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 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	0815	171 4.84	6.52 1.987	May 10	2000	201 5.69	6.74 2.054
Jan. 24	1830	*747 21.2	*8.29 2.527	May 23	2345	164 4.64	6.47 1.972
Feb. 26	0230	347 9.83	7.67 2.338	May 26	0830	105 2.97	5.97 1.820
Feb. 28	1600	144 4.08	6.31 1.923	Aug. 29	2000	246 6.97	7.05 2.149
Mar. 6	0045	121 3.43	6.11 1.862	Sept. 6	0645	338 9.57	7.62 2.323

Minimum discharge, 1.4 ft³/s (0.040 m³/s) Nov. 10, 11, 12, 14, 15, 16, 17, minimum gage height, 4.40 ft (1.341 m) Nov. 10, 11, 12, 14, 15, 16, 17, July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.9	4.6	16	4.9	20	5.7	4.1	15	4.1	3.1	7.1
2	1.7	1.9	3.6	81	4.3	18	23	3.6	14	3.6	6.0	35
3	1.6	1.8	3.9	33	3.9	12	17	5.1	13	2.9	4.3	25
4	2.5	1.8	9.3	31	3.6	33	21	7.1	12	4.1	3.1	15
5	1.9	1.7	5.7	30	3.4	63	23	4.6	10	3.4	2.7	23
6	1.9	1.7	4.1	22	3.2	58	16	4.1	9.7	2.7	2.3	183
7	1.8	1.7	3.4	14	3.0	23	14	3.6	8.9	2.6	2.3	27
8	1.7	1.7	7.8	38	2.8	17	12	3.4	8.2	2.4	9.3	17
9	1.6	1.6	22	12	2.7	14	16	3.1	7.4	2.4	3.1	14
10	1.7	1.6	8.5	9.1	2.6	17	14	25	7.1	2.4	2.9	11
11	1.7	1.5	5.1	7.4	2.5	16	11	31	8.2	2.4	30	10
12	1.6	1.5	4.1	6.4	2.5	11	12	18	6.4	2.3	55	8.9
13	1.7	1.5	3.9	6.0	2.5	9.3	11	12	5.7	2.3	21	8.5
14	3.6	1.5	3.4	13	2.4	9.7	16	8.9	5.4	2.2	12	15
15	2.2	1.5	2.9	6.7	2.4	7.4	15	7.1	4.9	2.0	8.9	9.7
16	1.9	1.5	2.7	5.1	2.4	6.7	13	6.0	4.6	2.4	7.1	7.4
17	2.0	2.2	2.6	4.6	2.4	6.4	11	5.1	4.3	3.1	6.4	6.4
18	1.9	3.4	2.4	4.3	2.3	6.0	9.7	4.9	4.3	2.4	7.4	5.7
19	1.9	2.2	2.2	3.9	2.3	5.7	8.5	4.9	3.6	2.0	6.7	5.4
20	1.8	2.0	2.2	3.9	2.3	5.7	7.8	4.3	3.6	2.2	5.1	4.9
21	1.8	1.8	2.9	30	2.6	5.1	7.1	4.3	3.6	2.2	4.6	13
22	1.7	1.8	2.4	15	3.0	5.1	6.4	4.6	3.6	2.0	4.1	17
23	1.6	2.0	2.2	6.7	8.5	4.9	5.7	41	3.4	2.2	3.9	10
24	1.6	2.9	3.1	252	96	7.8	5.4	89	3.2	2.4	5.1	7.1
25	1.7	2.2	34	74	125	17	5.1	53	3.1	2.0	3.6	6.0
26	3.1	1.9	11	13	161	11	5.7	67	2.9	2.7	3.2	5.7
27	4.9	2.0	7.8	19	46	7.8	9.7	40	2.7	2.0	3.9	5.1
28	2.7	2.7	5.7	11	39	6.4	6.4	38	2.9	1.9	3.1	5.1
29	2.3	3.2	5.1	7.8	---	6.4	4.9	29	3.2	11	19	5.1
30	2.0	4.1	4.6	6.4	---	5.7	4.3	22	6.7	6.0	19	5.4
31	2.0	---	4.9	5.7	---	5.4	---	18	---	3.6	9.3	---
TOTAL	63.7	60.8	188.1	788.0	539.5	441.5	337.4	571.8	191.6	91.9	277.5	518.5
MEAN	2.05	2.03	6.07	25.4	19.3	14.2	11.2	18.4	6.39	2.96	8.95	17.3
MAX	4.9	4.1	34	252	161	63	23	89	15	11	55	183
MIN	1.6	1.5	2.2	3.9	2.3	4.9	4.3	3.1	2.7	1.9	2.3	4.9
CFSM	.31	.31	.93	3.90	2.96	2.18	1.72	2.82	.98	.45	1.37	2.65
IN.	.36	.35	1.07	4.50	3.08	2.52	1.92	3.26	1.09	.52	1.58	2.96

CAL YR 1978 TOTAL 4089.2 MEAN 11.2 MAX 184 MIN 1.5 CFSM 1.72 IN 23.33
WTR YR 1979 TOTAL 4070.3 MEAN 11.2 MAX 252 MIN 1.5 CFSM 1.72 IN 23.22

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA

LOCATION.--Lat 40°28'42", long 77°07'46", Perry County, Hydrologic Unit 02050304, on right bank at downstream side of highway bridge at Newport, 1,000 ft (305 m) upstream from Little Buffalo Creek.

DRAINAGE AREA.--3,354 mi² (8,687 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1899 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1902(M). WSP 1302: 1915-17. WSP 1502: 1899-1908, 1914, 1924, 1936. WSP 1722: 1916.

GAGE.--Water-stage recorder. Datum of gage is 363.93 ft (110.926 m) National Geodetic Vertical Datum of 1929. Prior to July 16, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Raystown Lake (station 01563100) about 75 mi (120 km) upstream since October 1972.

AVERAGE DISCHARGE.--80 years, 4,313 ft³/s (122.1 m³/s), 17.46 in/yr (443 mm/yr), adjusted for storage since October 1972.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 190,000 ft³/s (5,380 m³/s) Mar. 19, 1936, gage height, 34.24 ft (10.436 m), from floodmark in gage shelter, from rating curve extended above 100,000 ft³/s (2,830 m³/s); minimum, 195 ft³/s (5.52 m³/s) July 27, 1966, gage height, 2.81 ft (0.856 m); minimum daily, 207 ft³/s (5.86 m³/s) July 27, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1, 1889 reached a stage of 35.9 ft (10.94 m) from floodmarks, discharge, 209,000 ft³/s (5,920 m³/s), from rating curve extended above 100,000 ft³/s (2,830 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 49,200 ft³/s (1,393 m³/s) Mar. 6, gage height, 16.47 ft (5.020 m); minimum, 705 ft³/s (20.0 m³/s) Oct. 25, 26, Nov. 12, gage height, 3.27 ft (0.997 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	910	797	1310	2610	4200	23000	6530	4690	8140	3820	4500	2660		
2	914	766	1290	7810	3700	22700	7060	4500	6830	4050	4420	2770		
3	907	766	1240	19200	3200	19700	8940	4360	5750	3520	3920	2630		
4	965	751	1430	15200	2900	17500	10800	4850	5250	2730	3540	2560		
5	1020	751	1740	12000	2600	33300	13400	5700	4770	2590	3020	2630		
6	1110	751	1990	7330	2400	47900	14100	5190	4360	2450	2630	10400		
7	1020	735	2010	6150	2200	40600	12200	4800	4000	2360	1890	24800		
8	937	751	1700	7270	2000	32700	11000	4940	3540	1990	2080	16100		
9	886	766	2520	7690	1900	28900	9250	5250	3390	1780	2500	10300		
10	828	751	3490	6070	1800	26200	9120	4970	4420	1680	1980	6720		
11	829	735	4150	5020	1700	25100	8820	4940	4180	1620	2410	5240		
12	829	720	2980	3900	1650	23000	7420	4630	3790	1640	6640	4540		
13	829	720	2570	3370	1600	16300	7000	4610	3420	1620	10700	3780		
14	908	735	2380	3520	1550	10800	7030	4420	2980	1480	8190	3680		
15	941	735	2140	3720	1550	9460	7240	4130	2750	1480	5990	4150		
16	941	751	2010	3270	1550	8110	7120	3590	2430	1560	4110	3890		
17	1080	782	1930	3100	1500	7120	6800	3320	2270	1780	3480	3400		
18	1030	1040	1840	2890	1500	6560	6210	2930	2180	2020	3040	3050		
19	975	1080	1760	2430	1500	6040	5640	2820	2030	2060	2920	2690		
20	975	1090	1720	2100	1500	5640	5080	2770	1950	1700	2790	2680		
21	958	1110	1760	3010	1700	5250	4310	2700	1890	1660	2710	2670		
22	958	974	1890	4420	2500	5080	4360	2720	1820	1560	2670	3880		
23	958	925	2590	5100	3500	4970	4180	2930	1800	1700	2660	5930		
24	958	975	2340	12400	9960	5130	3970	6940	1780	2060	2670	5140		
25	876	991	4740	40900	15100	9930	3840	17900	1680	2140	2670	4250		
26	751	958	4800	28100	36400	21100	3720	18900	1600	3140	3170	3770		
27	991	991	4200	20200	35800	18600	4020	15900	1540	3840	3210	3060		
28	958	1030	3220	14300	25200	17600	4830	12400	1480	3950	2960	2870		
29	925	1080	2730	8850	---	14300	5100	12200	1520	3590	3420	2840		
30	941	1130	2410	6100	---	9590	4630	10600	2540	4660	3020	3950		
31	845	---	2340	5100	---	7330	---	9250	---	4910	2840	---		
TOTAL	28953	26137	75220	273130	172660	529510	213720	199850	96080	77140	112750	157030		
MEAN	934	871	2426	8811	6166	17080	7124	6447	3203	2488	3637	5234		
MAX	1110	1130	4800	40900	36400	47900	14100	18900	8140	4910	10700	24800		
MIN	751	720	1240	2100	1500	4970	3720	2700	1480	1480	1890	2560		
MEAN#	829	854	2773	8769	6454	16803	7235	6360	3174	2607	3619	5221		
CFSM#	0.25	0.25	0.83	2.61	1.92	5.01	2.16	1.90	0.95	0.78	1.08	1.56		
IN.#	0.29	0.28	0.96	3.01	2.00	5.78	2.41	2.19	1.06	0.90	1.24	1.74		
CAL YR 1978	TOTAL	1923782	MEAN	5271	MAX	48000	MIN	720	MEAN#	5345	CFSM#	1.59	IN.#	21.64
WTR YR 1979	TOTAL	1962180	MEAN	5376	MAX	47900	MIN	720	MEAN#	5397	CFSM#	1.61	IN.#	21.85

JUNIATA RIVER BASIN

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01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1944 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1964 to current year.

WATER TEMPERATURES: October 1944 to September 1953, April 1958 to September 1962, October 1964 to current year.

SUSPENDED SEDIMENT DISCHARGE: January 1951 to current year.

REMARKS.--Unpublished records of water temperatures and specific conductance of sediment samples available in the district office at Harrisburg.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 558 micromhos Oct. 27, 1969; minimum daily, 112 micromhos Jan. 25, 1979.

WATER TEMPERATURES: Maximum daily, 31.5°C Aug. 27, 1951; minimum daily, freezing point on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily, 1,130 mg/L Mar. 2, 1954; minimum daily 0 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 365,000 tons (331,000 tonnes) June 23, 1972; minimum daily, 0 ton (0 tonne) on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 337 micromhos Oct. 23; minimum daily, 112 micromhos Jan. 25.

WATER TEMPERATURES: Maximum daily, 26.5°C Jul. 16, Aug. 6; minimum daily, freezing point many days during Jan. and Feb. based on unpublished records.

SEDIMENT CONCENTRATIONS: Maximum daily, 320 mg/L Jan. 25; minimum daily, 1 mg/L on many days during Nov., Dec., Jan., and Feb.

SEDIMENT LOADS: Maximum daily, 36,300 tons (32,900 tonnes) Jan. 25; minimum daily, 2.6 tons (2.4 tonnes) Nov. 24.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)
MAR 14...	0940	11000	185	7.4	5.0	8.0	12.8	110	140	63	26
APR 25...	0900	3840	220	9.0	16.0	2.0	12.2	K10	104	83	30
MAY 15...	1330	4100	200	7.9	19.0	10	11.0	76	K7	78	19
JUN 27...	1000	1700	251	8.4	20.0	3.0	7.6	K47	196	110	23
JUL 24...	1230	2230	232	8.2	25.0	6.0	8.6	400	292	100	24
AUG 21...	0900	2590	230	8.0	21.5	4.0	10.8	80	460	110	21
SEP 11...	0930	5280	191	7.6	18.0	7.0	9.0	430	290	85	26

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
MAR 14...	17	4.9	4.7	14	.3	--	1.4	37	--	20	8.0
APR 25...	23	6.3	5.4	12	.3	--	1.4	53	--	22	8.1
MAY 15...	22	5.6	5.1	12	.3	--	1.6	59	--	20	7.5
JUN 27...	31	9.0	8.0	13	.3	--	1.5	92	--	25	10
JUL 24...	29	7.6	7.3	13	.3	9.0	1.7	80	1.1	23	10
AUG 21...	30	7.4	4.7	9	.2	6.3	1.6	84	1.6	28	8.0
SEP 11...	24	6.1	4.9	11	.2	6.5	1.6	59	2.9	20	7.0

K = Best estimate.

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L AS N)
MAR 14...	.1	5.4	89	84	1.1	--	.05	.24	.29	.11	.18
APR 25...	.1	.8	102	99	.68	--	.03	.20	.23	.00	.26
MAY 15...	.1	4.6	120	102	.96	--	.13	.51	.64	.01	.63
JUN 27...	.1	.5	175	141	.66	--	.05	.29	.34	.12	.22
JUL 24...	.1	2.6	154	129	.91	--	.04	.36	.40	.20	.20
AUG 21...	.1	2.6	142	133	1.3	--	.02	.23	.25	.00	.26
SEP 11...	.1	5.3	115	110	1.2	1.2	.02	.36	.38	.35	.03

DATE	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR 14...	1.4	--	.04	.02	--	2.3	.7	130	21	624	84
APR 25...	.91	--	.02	.02	1.6	--	--	1200	10	104	46
MAY 15...	1.6	--	.07	.05	2.5	--	--	1300	28	316	100
JUN 27...	1.0	--	.05	.03	--	4.2	.7	7600	10	46	100
JUL 24...	1.3	--	.08	.06	4.3	--	--	850	18	108	100
AUG 21...	1.6	--	.05	.04	3.8	--	--	--	19	133	44
SEP 11...	1.6	1.2	.06	.03	--	2.4	.5	--	22	314	100

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDE TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDE RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM SUS- PENDE RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)
MAR 14...	0940	1	--	1	0	0	0	0	0	0
JUN 27...	1000	2	--	1	<50	--	40	0	0	0
SEP 11...	0930	1	0	1	100	60	40	0	0	0

DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, SUS- PENDE RECOV. (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, SUS- PENDE RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENDE RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
MAR 14...	10	3	7	0	0	0	8	6	2	550
JUN 27...	30	20	10	1	1	0	5	3	2	250
SEP 11...	<10	0	<10	2	1	1	3	2	1	610

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDE RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG)
MAR 14...	520	30	1	1	0	40	20	20	<.5	.0
JUN 27...	250	0	20	20	0	60	60	5	<.5	.0
SEP 11...	--	10	1	1	0	30	30	4	<.5	.0

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAR 14...	<.5	0	0	0	0	0	0	30	20	10
JUN 27...	<.5	0	0	0	0	0	0	20	0	20
SEP 11...	<.5	0	0	0	0	0	0	20	10	10

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, JANUARY TO MARCH 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
JAN 25...	0600	45100	1.0	426	51900	44	59
MAR 05...	2245	45600	5.0	339	41700	48	61

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
JAN 25...	73	82	90	94	98	100
MAR 05...	74	84	91	94	98	100

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO JULY 1979

DATE TIME	MAR 14,79 0940	APR 25,79 0900	MAY 15,79 1330	JUN 27,79 1000	JUL 24,79 1230					
TOTAL CELLS/ML	130	1200	1300	7600	850					
DIVERSITY: DIVISION	0.9	0.5	0.8	0.9	1.7					
..CLASS	0.9	0.5	0.8	0.9	1.7					
...ORDER	1.2	1.3	1.8	1.0	1.8					
...FAMILY	1.2	2.6	2.0	1.0	2.3					
....GENUS	1.2	2.6	2.4	1.0	2.4					
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	--	-	13	2
...OOCYSTACEAE										
....ANKISTRODESMUS	86#	67	29	2	13	1	67	1	52	6
....OOCYSTIS	--	-	--	-	--	-	--	-	52	6
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	--	-	230#	17	--	-	180#	21
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	43	4	120	9	400	5	--	-
..ZYGNEATALES										
...DESMIDIACEAE										
....COSMARIUM	--	-	--	-	--	-	67	1	--	-
CHRYCOPHYTA										
..BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	29#	22	300#	26	140	11	6200#	81	52	6
....STEPHANODISCUS	--	-	--	-	520#	38	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	--	-	--	-	--	-	--	-	26	3
...CYMBELLACEAE										
....CYMBELLA	--	-	58	5	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	29	2	--	-	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	14	1	--	-	--	-	--	-
...GOMPHONEMACEAE										
....GOMPHONEMA	--	-	43	4	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	--	-	480#	41	140	11	--	-	--	-
...NITZSCHACEAE										
....NITZSCHIA	14	11	100	9	180	13	67	1	52	6
...TABELLARIACEAE										
....TABELLARIA	--	-	43	4	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
....CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	--	-	39	5
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
....CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	870	11	390#	45
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
....EUGLENACEAE										
....TRACHELOMONAS	--	-	29	2	--	-	--	-	--	-

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

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	298	310	310	237	---	153	164	190	167	232	235	234
2	299	320	311	223	---	157	176	182	170	194	206	243
3	301	325	313	---	---	155	171	180	181	230	195	236
4	299	314	308	158	---	151	176	181	181	235	200	228
5	293	311	304	168	---	150	165	176	185	225	202	236
6	301	309	310	174	---	122	157	181	186	222	206	231
7	308	306	300	179	---	117	154	176	193	224	217	171
8	302	312	293	185	---	136	157	176	201	239	218	150
9	301	309	285	---	---	152	161	178	205	246	221	169
10	317	305	250	---	---	162	168	174	224	255	222	177
11	321	304	248	---	---	164	169	175	209	251	251	189
12	307	294	248	---	---	164	171	175	195	250	197	199
13	302	294	260	---	---	159	174	180	201	254	178	203
14	309	298	237	---	---	162	175	181	212	251	196	213
15	301	307	235	---	---	172	176	183	214	256	190	212
16	300	309	235	---	---	175	176	193	215	245	189	201
17	298	323	237	---	---	175	179	198	220	256	218	214
18	306	317	241	---	---	178	178	194	230	255	221	219
19	307	310	252	---	---	184	175	201	236	266	226	222
20	330	305	255	---	---	189	179	207	238	258	235	225
21	325	311	257	---	---	190	182	209	240	237	235	235
22	319	319	265	244	---	194	195	209	243	231	238	231
23	337	329	252	221	---	189	193	210	241	236	241	196
24	319	330	253	189	---	193	196	198	239	234	243	203
25	305	318	224	112	218	177	199	155	240	237	238	210
26	298	320	198	144	127	144	202	143	248	240	242	198
27	307	306	208	148	125	141	204	143	252	223	226	204
28	309	299	---	157	136	157	194	147	253	215	226	214
29	297	297	---	160	---	157	195	150	251	217	221	224
30	294	316	---	167	---	166	195	156	235	190	252	228
31	305	---	---	181	---	171	---	163	---	195	242	---
MEAN	307	311	263	179	152	163	179	179	217	235	220	211

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

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

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	910	10	25	797	8	17	1310	5	18
2	914	10	25	766	6	12	1290	4	14
3	907	11	27	766	7	14	1240	4	13
4	965	10	26	751	7	14	1430	3	12
5	1020	11	30	751	5	10	1740	4	19
6	1110	9	27	751	5	10	1990	12	64
7	1020	11	30	735	5	9.9	2010	6	33
8	937	10	25	751	4	8.1	1700	4	18
9	846	10	24	766	6	12	2520	7	48
10	828	12	27	751	3	6.1	3490	24	226
11	829	10	22	735	2	4.0	4150	34	381
12	829	9	20	720	2	3.9	2980	15	121
13	829	10	22	720	2	3.9	2570	11	76
14	908	10	25	735	3	6.0	2380	7	45
15	941	9	23	735	3	6.0	2140	3	17
16	941	11	28	751	3	6.1	2010	1	5.4
17	1080	8	23	782	3	6.3	1930	1	5.2
18	1030	8	22	1040	2	5.6	1840	1	5.0
19	975	8	21	1080	2	5.8	1760	1	4.8
20	975	9	24	1090	4	12	1720	1	4.6
21	958	12	31	1110	5	15	1760	1	4.8
22	958	11	28	974	5	13	1890	1	5.1
23	958	11	28	925	2	5.0	2590	2	14
24	958	12	31	975	1	2.6	2340	2	13
25	876	11	26	991	2	5.4	4740	34	435
26	751	9	18	959	1	2.6	4800	35	454
27	991	11	29	991	2	5.4	4200	22	249
28	958	13	34	1030	2	5.6	3220	11	96
29	925	7	17	1080	7	20	2730	6	44
30	941	7	18	1130	6	18	2410	4	26
31	845	6	14	---	---	---	2340	3	19
TOTAL	28953	---	770	26137	---	265.3	75220	---	2489.9
JANUARY			FEBRUARY			MARCH			
1	2610	3	21	4200	8	91	23000	60	3730
2	7810	83	2480	3700	7	70	22700	50	3060
3	19200	234	12400	3200	5	43	19700	46	2450
4	15200	77	3160	2900	5	39	17500	42	1980
5	12000	27	875	2600	4	28	33300	153	15900
6	7330	19	376	2400	4	26	47900	304	39400
7	6150	12	199	2200	4	24	40600	143	15700
8	7270	16	314	2000	2	11	32700	62	5470
9	7690	16	332	1900	3	15	28900	41	3200
10	6070	9	148	1800	4	19	26200	35	2480
11	5020	5	68	1700	2	9.2	25100	34	2300
12	3900	4	42	1650	2	8.9	23000	31	1930
13	3370	2	18	1600	1	4.3	16300	25	1100
14	3520	2	19	1550	1	4.2	10800	22	642
15	3720	1	10	1550	2	8.4	9460	20	511
16	3270	1	8.8	1550	4	17	8110	15	328
17	3100	1	8.4	1500	6	24	7120	12	231
18	2890	2	16	1500	4	16	6560	11	195
19	2430	3	20	1500	4	16	6040	10	163
20	2100	2	11	1500	5	20	5640	11	168
21	3010	8	65	1700	5	23	5250	10	142
22	4420	15	179	2500	4	27	5080	10	137
23	5100	15	207	3500	4	38	4970	10	134
24	12400	140	9140	9960	60	1610	5130	11	152
25	40900	320	36300	15100	80	3260	9930	75	2680
26	28100	190	14400	36400	314	31300	21100	186	10700
27	20200	50	2730	35800	240	23700	18600	56	2810
28	14300	22	849	25200	85	5780	17600	22	1050
29	8850	25	597	---	---	---	14300	14	541
30	6100	19	313	---	---	---	9590	12	311
31	5100	10	138	---	---	---	7330	11	218
TOTAL	273130	---	85444.2	172660	---	66232.0	529510	---	119813

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL									
1	6530	13	229	4690	11	139	8140	31	681
2	7060	16	305	4500	10	121	6830	28	516
3	8940	24	579	4360	8	94	5750	27	419
4	10800	26	758	4850	11	144	5250	26	369
5	13400	26	941	5700	15	231	4770	26	335
6	14100	32	1220	5190	13	182	4360	23	271
7	12200	20	659	4800	11	143	4000	19	205
8	11000	10	297	4940	14	187	3540	18	172
9	9250	7	175	5250	18	255	3390	17	156
10	9120	9	222	4970	22	295	4420	25	298
11	8820	10	238	4940	48	640	4180	20	226
12	7420	11	220	4630	34	425	3790	33	338
13	7000	9	170	4610	34	423	3420	24	222
14	7030	8	152	4420	30	358	2980	15	121
15	7240	9	176	4130	34	379	2750	15	111
16	7120	10	192	3590	27	262	2430	12	79
17	6800	8	147	3320	26	233	2270	11	67
18	6210	6	101	2930	22	174	2180	10	59
19	5640	5	76	2820	18	137	2030	14	77
20	5080	5	69	2770	20	150	1950	14	74
21	4310	5	58	2700	21	153	1890	12	61
22	4360	3	35	2720	20	147	1820	10	49
23	4140	5	56	2930	27	214	1800	10	49
24	3970	4	43	6940	66	1410	1780	10	48
25	3840	4	41	17900	156	7690	1680	10	45
26	3720	5	50	18900	101	5170	1600	8	35
27	4020	5	54	15900	45	1930	1540	6	25
28	4830	12	156	12400	31	1040	1480	8	32
29	5100	14	193	12200	37	1220	1520	9	37
30	4630	11	138	10600	40	1140	2540	13	89
31	---	---	---	9250	33	824	---	---	---
TOTAL	213720	---	7750	199850	---	25910	96080	---	5266
MAY									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
1	3820	27	278	4500	49	595	2660	19	136
2	4050	54	590	4420	52	621	2770	19	142
3	3520	41	390	3920	48	508	2630	24	170
4	2730	19	140	3540	31	296	2560	18	124
5	2590	16	112	3020	25	204	2630	17	121
6	2450	17	112	2630	23	163	10400	122	4430
7	2360	16	102	1890	16	82	24900	193	13000
8	1990	14	75	2080	19	107	16100	74	3220
9	1780	15	72	2500	22	148	10300	43	1200
10	1680	13	59	1980	23	123	6720	30	544
11	1620	11	48	2410	21	137	5240	22	311
12	1640	10	44	6640	104	1850	4540	18	221
13	1620	10	44	10700	105	3090	3780	15	153
14	1480	12	48	8190	58	1280	3680	15	149
15	1480	14	56	5990	42	679	4150	18	202
16	1560	13	55	4110	25	277	3890	18	189
17	1780	17	82	3480	17	160	3400	14	129
18	2020	15	82	3040	15	123	3050	12	99
19	2060	14	78	2920	14	110	2690	9	65
20	1700	11	50	2790	12	90	2680	11	80
21	1660	10	45	2710	11	80	2670	7	50
22	1560	11	46	2670	8	58	3880	16	168
23	1700	12	55	2660	9	65	5930	34	544
24	2060	14	78	2670	9	65	5140	24	333
25	2140	16	92	2670	7	50	4250	12	138
26	3140	20	170	3170	17	146	3770	8	81
27	3840	38	394	3210	11	95	3060	8	66
28	3950	40	427	2960	18	144	2870	6	46
29	3590	36	349	3420	26	240	2840	4	31
30	4660	55	692	3020	20	163	3950	9	96
31	4910	59	782	2840	24	184	---	---	---
TOTAL	77140	---	5647	112750	---	11933	157030	---	26238

JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

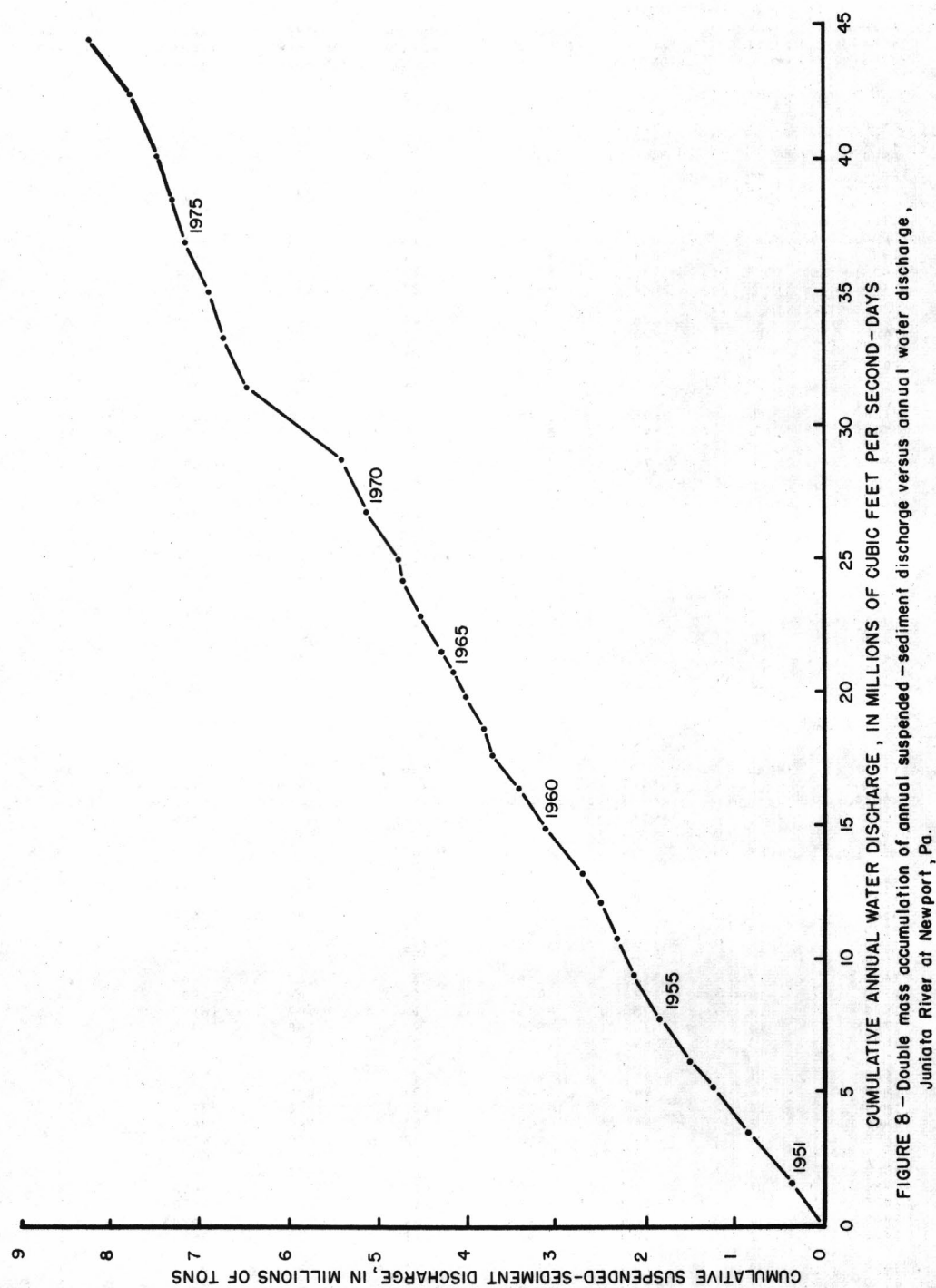


FIGURE 8 -- Double mass accumulation of annual suspended -- sediment discharge versus annual water discharge, Juniata River at Newport, Pa.

Table 1.--Suspended-sediment concentration-duration table, Juniata River at Newport

Period	Mean daily concentration, in milligrams per liter, that was equaled or exceeded for indicated percentage of time													
	1	2	5	10	20	30	40	50	60	70	80	90	95	99
1979	235	174	81	49	27	20	16	13	11	8	5	3	2	1
1952-79	224	163	84	48	27	18	13	9	7	5	4	2	2	1

LOCATION.--Lat 40°22'15", long 77°24'09", Perry County, Hydrologic Unit 02050305, on right bank 400 ft (122 m) upstream from bridge on State Highway 850 at Bixler, 2.3 mi (3.7 km) upstream from mouth, and 3.6 mi (5.8 km) west of Loysville.

PERIOD OF RECORD.--January 1954 to current year.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperatures were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,780 ft³/s (249 m³/s) Nov. 1, 1956, gage height, 10.39 ft (3.167 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s (0.042 m³/s) Feb. 2, 1959.

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)			(ft ³ /s)	(m ³ /s)	(ft)	(m)
Jan. 24	1845	*1,620	45.9	*7.42	2.262	May 28	1715	530	15.0	5.84	1.780
Feb. 26	0215	1,090	30.9	6.80	2.073	June 29	0945	539	15.3	5.86	1.786
Feb. 28	1615	265	7.50	5.08	1.548	Sept. 6	0330	765	21.7	6.30	1.920

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979												
MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.4	7.2	24	18	68	23	14	35	24	12	9.0
2	4.8	5.2	6.2	105	16	72	39	14	28	18	12	19
3	4.8	5.4	6.5	39	15	54	33	17	27	16	11	11
4	5.6	5.2	11	24	14	74	41	19	25	19	9.5	9.5
5	5.6	5.4	8.2	19	11	114	47	16	21	13	9.0	22
6	6.5	5.2	6.7	17	11	148	39	15	19	12	8.7	313
7	5.0	5.2	6.0	23	11	81	32	14	18	11	8.7	53
8	5.0	5.2	11	46	10	59	29	14	16	10	18	34
9	4.8	5.2	30	21	9.8	47	33	13	15	10	9.5	26
10	4.8	5.0	14	18	9.6	47	28	13	14	10	9.5	22
11	5.0	5.0	9.8	15	9.2	44	24	13	16	9.5	26	20
12	5.0	5.0	8.7	14	8.8	35	25	12	13	9.0	77	18
13	5.0	5.2	8.4	14	8.7	31	23	12	12	8.7	36	16
14	8.2	5.4	7.4	19	8.6	31	28	12	11	8.7	24	26
15	5.6	5.2	7.0	14	8.5	25	27	11	11	8.4	19	17
16	5.4	5.4	6.7	12	8.3	23	25	11	10	8.4	16	14
17	6.2	7.4	6.7	11	8.0	22	24	9.8	10	8.2	14	13
18	5.4	9.0	6.4	10	8.0	21	22	9.5	9.8	8.2	14	13
19	5.4	6.0	6.1	9.5	8.0	19	20	10	9.2	7.6	14	12
20	5.2	5.4	6.1	9.5	7.9	18	19	9.8	9.0	7.9	13	11
21	5.2	5.2	8.9	68	7.8	18	18	10	9.5	7.9	13	28
22	5.2	5.2	7.3	34	7.7	17	17	9.5	9.2	7.6	12	26
23	5.2	5.4	6.5	18	7.7	17	16	19	8.7	28	11	17
24	5.4	6.0	15	553	25	40	16	46	8.4	13	22	15
25	5.6	5.4	67	168	175	56	15	45	7.9	14	14	14
26	7.6	5.2	22	53	410	41	17	83	7.9	14	12	13
27	8.4	5.6	16	48	128	33	22	55	7.6	11	12	12
28	6.0	6.5	12	33	105	28	17	124	9.8	9.5	11	12
29	5.6	6.9	10	32	---	26	16	88	128	30	10	12
30	5.4	7.6	9.2	26	---	24	15	56	48	19	9.8	12
31	5.4	---	9.6	22	---	24	---	42	---	14	9.2	---
TOTAL	173.3	170.4	363.6	1519.0	1075.6	1357	750	836.6	574.0	395.6	496.9	839.5
MEAN	5.59	5.68	11.7	49.0	38.4	43.8	25.0	27.0	19.1	12.8	16.0	28.0
MAX	8.4	9.0	67	553	410	148	47	124	128	30	77	313
MIN	4.8	5.0	6.0	9.5	7.7	17	15	9.5	7.6	7.6	8.7	9.0
CFSM	.37	.38	.78	3.27	2.56	2.92	1.67	1.80	1.27	.85	1.07	1.87
IN.	.43	.42	.90	3.77	2.67	3.37	1.86	2.07	1.42	.98	1.23	2.08
CAL YR 1978	TOTAL	10611.7	MEAN	29.1	MAX	466	MIN	4.8	CFSM	1.94	IN	26.32
WTR YR 1979	TOTAL	8551.5	MEAN	23.4	MAX	553	MIN	4.8	CFSM	1.56	IN	21.21

SHERMAN CREEK BASIN

01568000 SHERMAN CREEK AT SHERMANS DALE, PA

LOCATION.--Lat 40°19'24", long 77°10'09", Perry County, Hydrologic Unit 02050305, on left bank on downstream side of bridge on State Highway 34 at Shermans Dale, and 1.2 mi (1.9 km) upstream from Fishing Run.

DRAINAGE AREA.--200 mi² (518 km²).

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some months, published in WSP 1302. Prior to October 1962, published as "at Shermantale".

REVISED RECORDS.--WSP 1302: 1930(M), WSP 1502: 1933, 1934(M), 1935-36.

GAGE.--Water-stage recorder. Datum of gage is 422.63 ft (128.818 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 29, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good, except those for winter periods, which are fair. Some regulation at low flow by mills above station. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--50 years, 289 ft³/s (8.184 m³/s), 19.62 in/yr (498 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,500 ft³/s (779 m³/s) June 23, 1972, gage height, 18.09 ft (5.514 m), from rating curve extended above 18,000 ft³/s (510 m³/s); minimum, 3.9 ft³/s (0.11 m³/s) Dec. 1, 1930; minimum gage height, 0.62 ft or 0.189 m Sept. 11, 1966.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of July 22, 1927 reached a stage of 20.34 ft (6.200 m), from floodmark, discharge, about 44,000 ft³/s (1,250 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 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. 24	2400	*11,400 323	*12.02 3.664	Mar. 5	1330	3,090 87.5	6.16 1.878
Feb. 25	--	--	ice jam	Sept. 6	1130	5,760 163	8.44 2.572
Feb. 26	0415	6,820 193	9.12 2.780				

Minimum discharge, 34 ft³/s (0.96 m³/s) Oct. 11, gage height, 0.90 ft (0.274 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	48	85	275	390	1080	414	265	502	556	107	73
2	48	47	80	1820	280	1010	856	239	426	302	132	73
3	46	46	76	1210	240	1010	790	242	379	191	233	102
4	47	46	122	651	200	994	790	348	463	155	130	80
5	52	47	153	519	180	2390	1190	268	330	205	100	85
6	70	52	107	455	170	4200	850	233	275	144	88	3720
7	62	52	86	442	170	3000	670	217	249	113	85	1070
8	56	52	88	1010	160	1600	579	205	223	102	144	519
9	57	52	506	602	160	1300	593	194	199	97	144	367
10	53	50	459	459	150	1000	583	181	186	91	91	281
11	42	53	214	375	140	880	446	186	356	93	130	230
12	43	50	165	275	140	780	438	183	245	90	681	197
13	45	52	137	278	140	660	446	194	183	83	666	170
14	62	54	122	367	135	600	519	183	158	80	298	217
15	73	59	104	341	135	511	497	160	144	83	211	337
16	56	60	105	252	130	422	451	155	132	80	160	173
17	56	71	97	261	130	394	410	139	124	83	132	141
18	49	100	93	285	130	363	367	130	124	80	122	126
19	45	98	88	211	125	337	326	137	111	70	132	118
20	41	74	83	239	125	309	298	144	102	83	120	109
21	39	63	117	1310	125	288	275	130	98	73	113	163
22	38	57	153	1090	120	268	255	130	104	71	117	675
23	39	52	109	515	120	255	239	359	105	100	102	319
24	38	69	118	2820	120	598	223	1220	93	316	122	208
25	37	62	1240	5580	7600	1270	214	1190	90	120	205	170
26	46	60	626	1400	5220	878	220	1230	83	170	163	151
27	73	63	379	1010	2260	651	472	895	79	132	120	134
28	76	64	239	872	1260	537	394	918	76	95	104	126
29	62	70	191	686	---	489	316	1070	98	104	93	128
30	52	79	199	600	---	438	288	732	867	275	93	122
31	49	---	202	420	---	402	---	598	---	137	82	---
TOTAL	1594	1802	6543	26630	20255	28914	14409	12475	6604	4374	5220	10384
MEAN	51.4	60.1	211	859	723	933	480	402	220	141	168	346
MAX	76	100	1240	5580	7600	4200	1190	1230	867	556	681	3720
MIN	37	46	76	211	120	255	214	130	76	70	82	73
CFSM	.26	.30	1.06	4.30	3.62	4.67	2.40	2.01	1.10	.71	.84	1.73
IN.	.30	.34	1.22	4.95	3.77	5.38	2.68	2.32	1.23	.81	.97	1.93

CAL YR 1978	TOTAL	155138	MEAN	425	MAX	7200	MIN	37	CFSM	2.13	IN	28.86
WTR YR 1979	TOTAL	139204	MEAN	381	MAX	7600	MIN	37	CFSM	1.91	IN	25.89

CLARK CREEK BASIN

RESERVOIR IN CLARK CREEK BASIN

01568400 DeHART RESERVOIR.--Lat 40°27'50", long 76°44'50", Dauphin County, Hydrologic Unit 02050305, at dam on Clark Creek, 1.8 mi (2.9 km) southeast of Carsonville, and 15.3 mi (24.6 km) upstream from mouth. DRAINAGE AREA, 21.7 mi² (56.2 km²). PERIOD OF RECORD: October 1940 to current year. STAFF GAGE, Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Harrisburg).

Reservoir formed by earthfill dam, with ungated concrete spillway at elevation 644.0 ft or 196.291 m (crest of spillway raised 4 ft (1.22 m) in November 1954). Storage began Jan. 21, 1940. Capacity at elevation 644.00 ft (196.291 m) is 18,480 acre-ft (22.8 hm³). Reservoir is used for municipal water supply. Figures given herein represent total contents. There are no gates on spillway and regulation is controlled by valves on pipe through dam. Records furnished by city of Harrisburg.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 19,460 acre-ft (24.0 hm³) Sept. 27, 1975 (elevation, 645.75 ft or 196.825 m); minimum (after first filling), 4,680 acre-ft (5.77 hm³) Jan. 2, 1966 (elevation, 613.33 ft or 186.943 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 19,420 acre-ft (23.9 hm³) Jan. 25 (elevation, 645.67 ft or 196.800 m); minimum, 15,630 acre-ft (19.3 hm³) Dec. 3 (elevation, 639.17 ft or 194.819 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01568400 DeHart Reservoir			
Sept. 30	642.33	17,500	--
Oct. 31	640.50	16,430	- 17.4
Nov. 30	639.33	15,730	- 11.8
Dec. 31	640.75	16,580	+ 13.8
CAL YR 1978	--	--	- 2.8
Jan. 31	644.33	18,660	+ 33.8
Feb. 28	644.58	18,800	+ 2.5
Mar. 31	644.08	18,520	- 4.6
Apr. 30	644.08	18,520	0
May 31	644.33	18,660	+ 2.3
June 30	643.58	18,230	- 7.2
July 31	642.25	17,450	- 12.7
Aug. 31	640.83	16,630	- 13.3
Sept. 30	644.08	18,520	+ 31.8
WTR YR 1979	--	--	+ 1.4

CLARK CREEK BASIN

01568500 CLARK CREEK NEAR CARSONVILLE, PA

LOCATION.--Lat 40°27'37", long 76°45'06", Dauphin County, Hydrologic Unit 02050305, on right bank 0.3 mi (0.5 km) downstream from DeHart Dam, 1.8 mi (2.9 km) southeast of Carsonville, and 15 mi (24 km) upstream from mouth.

DRAINAGE AREA.--22.5 mi² (58.3 km²).

PERIOD OF RECORD.--September 1937 to current year.

REVISED RECORDS.--WSP 1302: 1940(M). WSP 1702: 1942 (monthly mean).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 552.32 ft (168.347 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 6, 1939, water-stage recorder at site 1,700 ft (518 m) upstream at datum 9.49 ft (2.893 m) higher. Jan. 6, 1939 to July 27, 1940, nonrecording gage at site 100 ft (30 m) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by DeHart Reservoir (station 01568400). Diversion from reservoir to city of Harrisburg. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years (1937-39, 1940-78), 40.5 ft³/s (1.147 m³/s), 24.44 in/yr 620 mm/yr), adjusted for storage and diversion since 1941.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s (136 m³/s) June 22, 1972, gage height, 10.98 ft (3.347 m), from rating curve extended above 2,400 ft³/s 68.0 m³/s) on basis of computation of peak flow over dam; minimum daily, 0.2 ft³/s (0.006 m³/s) Jan. 29 to Feb. 3, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft³/s (33.7 m³/s) Jan. 25, gage height, 5.44 ft (1.658 m); minimum discharge, 3.9 ft³/s (0.11 m³/s) June 21, 22, 23, 24, gage height, 1.09 ft (0.332 m), minimum daily, 3.9 ft³/s (0.11 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	7.5	6.4	6.7	8.1	56	105	26	19	55	6.4	5.9	5.7		
2	7.5	6.4	6.7	16	45	104	39	17	47	6.4	7.0	5.8		
3	14	6.4	6.7	11	38	113	43	18	42	6.4	5.9	5.7		
4	6.7	6.4	7.3	9.7	34	120	50	24	40	6.4	5.9	5.7		
5	7.0	6.4	7.0	21	31	435	76	22	32	6.4	33	6.5		
6	7.0	6.4	6.7	52	22	768	64	20	26	6.4	6.7	24		
7	7.0	6.4	6.7	79	20	399	55	18	22	6.4	5.9	22		
8	7.0	6.7	7.0	165	18	230	52	15	18	6.4	5.8	67		
9	7.0	6.7	8.1	128	16	153	56	13	15	6.4	5.7	66		
10	7.0	6.7	7.3	95	14	123	69	13	14	6.4	5.7	52		
11	7.0	6.7	7.0	76	13	138	55	12	15	6.4	6.1	34		
12	7.0	6.7	6.7	64	12	106	49	15	12	6.4	6.3	28		
13	7.0	6.7	6.7	58	12	80	48	17	8.8	6.2	5.8	19		
14	7.0	6.7	7.0	58	11	68	53	20	6.4	6.4	5.7	19		
15	7.0	6.7	7.0	48	9.7	57	56	15	5.4	6.4	5.7	23		
16	7.0	19	7.0	37	9.4	46	49	14	4.8	6.4	5.7	17		
17	7.0	6.7	7.0	33	8.7	40	43	11	5.0	6.4	5.7	12		
18	16	6.7	7.0	29	8.4	37	38	10	4.8	6.4	5.8	9.3		
19	6.4	14	7.0	23	8.4	32	34	13	4.6	6.4	5.7	8.1		
20	6.4	6.7	7.0	24	8.3	27	29	10	4.2	6.4	5.7	7.5		
21	6.4	6.7	7.3	82	7.7	34	28	8.6	3.9	6.4	5.7	18		
22	6.4	6.7	7.0	107	7.3	18	26	8.7	4.0	6.4	5.7	110		
23	6.7	7.0	7.0	67	7.6	19	25	32	4.0	6.4	5.7	84		
24	6.7	6.7	7.5	288	27	31	22	146	4.0	6.4	5.9	59		
25	6.4	6.7	9.7	906	72	39	20	205	5.2	6.4	6.0	43		
26	6.4	6.7	7.5	389	217	36	22	196	6.2	6.4	5.8	34		
27	6.4	6.7	7.3	217	187	28	29	150	6.2	6.2	5.7	28		
28	6.4	6.7	7.3	149	128	24	32	131	6.2	6.4	5.7	24		
29	6.4	6.7	7.3	110	---	23	26	115	6.4	6.7	5.7	21		
30	6.4	7.0	7.0	83	---	22	23	86	6.7	6.2	5.7	20		
31	6.4	---	7.0	67	---	22	---	68	---	5.9	5.7	---		
TOTAL	226.5	219.1	221.5	3499.8	1048.5	3477	1237	1462.3	434.8	197.6	209.0	878.3		
MEAN	7.31	7.30	7.15	113	37.4	112	41.2	47.2	14.5	6.37	6.74	29.3		
MAX	16	19	9.7	906	217	768	76	205	55	6.7	33	110		
MIN	6.4	6.4	6.7	8.1	7.3	18	20	8.6	3.9	5.9	5.7	5.7		
(f)	20.1	18.8	18.8	20.2	20.6	20.3	19.0	19.9	20.1	20.3	21.2	20.2		
MEAN#	10.0	14.3	39.8	167	60.5	128	60.2	69.4	27.4	14.0	14.6	81.3		
CFSM#	0.44	0.65	1.77	7.42	2.69	5.69	2.68	3.08	1.22	0.62	0.65	3.61		
IN.#	0.51	0.72	2.04	8.55	2.80	6.56	2.99	3.55	1.36	0.72	0.75	4.03		
CAL YR 1978	TOTAL	11786.6	MEAN	32.3	MAX	592	MIN	6.2	MEAN#	49.6	CFSM#	2.20	IN.#	29.96
WTR YR 1979	TOTAL	13111.4	MEAN	35.9	MAX	906	MIN	3.9	MEAN#	57.3	CFSM#	2.55	IN.#	34.57

/ Diversion, equivalent in cubic feet per second, from DeHart Reservoir for municipal supply; furnished by city of Harrisburg.

Adjusted for diversion and change in reservoir contents.

STONY CREEK BASIN

01568700 STONY CREEK ABOVE PUMP-STORAGE RESERVOIR SITE NEAR DAUPHIN, PA

LOCATION.--Lat 40°27'30", long 76°39'53", Lebanon County, Hydrologic Unit 02050305, on right bank 3.1 mi (5.0 km) upstream from Rattling Run, and 16 mi (26 km) northeast of Dauphin.

DRAINAGE AREA.--11.5 mi² (29.8 km²).

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 730 ft (223 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years, 34.2 ft³/s (0.968 m³/s), 40.39 in/yr (1,026 mm/yr).EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,010 ft³/s (85.2 m³/s) Sept. 26, 1975, gage height, 10.10 ft (3.078 m), from rating curve extended above 110 ft³/s (3.12 m³/s); minimum, 3.0 ft³/s (0.085 m³/s) Feb. 22, 1977; minimum gage height, 2.12 ft (0.646 m) July 21, 22, 23, Aug. 21, 22, 1974.EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 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. 25	1645	104 2.94	4.64 1.414	Mar. 6	0130	530 15.0	6.34 1.932
Jan. 2	1700	306 8.66	5.91 1.801	Mar. 11	0730	142 4.02	4.65 1.417
Jan. 8	1245	184 5.21	5.25 1.600	May 24	2100	314 8.89	5.57 1.698
Jan. 22	0315	133 3.77	4.88 1.487	Sept. 6	0915	*1,690 47.9	*8.61 2.624
Jan. 25	0045	900 25.5	7.64 2.329	Sept. 22	0745	321 9.09	5.80 1.768
Feb. 26	0900	276 7.82	5.40 1.646				

Minimum discharge, 3.4 ft³/s (0.096 m³/s) Aug. 9, 10, gage height, 2.59 ft (0.789 m).DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	7.3	14	38	52	86	18	13	35	21	4.1	3.6
2	7.8	7.0	13	215	44	92	35	11	29	11	14	3.6
3	7.9	6.7	12	175	38	112	52	14	27	7.8	18	5.0
4	8.8	6.4	30	108	35	104	53	29	29	7.4	7.8	4.1
5	9.9	6.4	44	76	29	355	84	20	23	9.0	5.0	6.6
6	32	6.1	15	60	25	403	61	14	18	6.6	4.2	832
7	21	5.9	12	60	23	210	42	12	16	5.5	3.8	255
8	13	5.9	30	155	22	153	35	10	14	4.8	3.8	103
9	10	5.8	49	120	21	116	39	9.5	13	4.5	3.5	51
10	9.1	5.6	35	73	20	101	63	8.6	13	4.3	3.6	28
11	8.6	5.5	30	55	19	133	46	10	17	4.6	7.2	19
12	8.0	5.4	27	46	19	98	35	11	14	4.2	19	14
13	7.9	5.6	25	43	18	74	34	17	11	4.0	18	11
14	18	5.9	23	44	18	65	48	19	9.3	3.8	9.3	17
15	14	5.6	22	38	17	57	54	13	8.4	4.1	6.5	36
16	11	5.9	20	30	17	47	40	11	7.8	4.1	4.9	20
17	9.9	7.7	18	27	16	42	32	8.8	8.0	4.5	4.3	12
18	8.9	41	16	24	16	38	27	7.6	8.4	5.2	4.9	9.5
19	8.6	37	15	30	22	34	24	11	7.0	4.2	8.4	8.4
20	8.2	15	14	22	20	30	21	13	6.3	3.8	6.1	7.4
21	7.7	10	21	64	17	27	19	10	6.1	4.1	5.2	35
22	7.5	8.9	22	114	12	25	18	9.0	6.1	3.8	4.6	249
23	7.2	8.9	17	60	12	23	16	32	6.3	3.7	4.1	105
24	6.8	19	16	181	72	26	15	202	5.5	3.8	5.2	48
25	6.7	16	86	546	142	42	14	193	5.3	3.7	8.0	32
26	7.2	11	68	218	231	36	15	148	5.0	3.8	6.8	24
27	16	10	36	142	154	26	25	97	4.8	4.1	5.5	18
28	13	10	25	110	98	21	34	76	4.8	3.7	4.6	16
29	10	12	22	88	---	19	21	94	6.0	7.0	4.2	16
30	8.6	13	19	73	---	18	15	61	56	9.3	4.2	15
31	7.9	---	20	61	---	17	---	43	---	4.9	3.8	---
TOTAL	328.7	316.5	816	3096	1229	2630	1035	1227.5	420.1	176.3	212.6	2004.2
MEAN	10.6	10.6	26.3	99.9	43.9	84.8	34.5	39.6	14.0	5.69	6.86	66.8
MAX	32	41	86	546	231	403	84	202	56	21	19	832
MIN	6.7	5.4	12	22	12	17	14	7.6	4.8	3.7	3.5	3.6
CFSM	.92	.92	2.29	8.69	3.82	7.37	3.00	3.44	1.22	.50	.60	5.81
IN.	1.06	1.02	2.64	10.01	3.98	8.51	3.35	3.97	1.36	.57	.69	6.48

CAL YR 1978 TOTAL 11823.6 MEAN 32.4 MAX 298 MIN 5.4 CFSM 2.82 IN 38.24
WTR YR 1979 TOTAL 13491.9 MEAN 37.0 MAX 832 MIN 3.5 CFSM 3.22 IN 43.64

CONODOGUINET CREEK BASIN

01569800 LETORT SPRING RUN NEAR CARLISLE, PA

LOCATION.--Lat 40°14'05", long 77°08'23", Cumberland County, Hydrologic Unit 02050305, on right bank 320 ft (98 m) downstream from bridge on U.S. Highway No. 11, 3.1 mi (5.0 km) west of New Kingston and 3.7 mi (6.0 km) east of Carlisle.

DRAINAGE AREA.--21.6 mi² (55.9 km²).

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 410 ft (125 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,400 ft³/s (39.6 m³/s) Jan. 24, 1979, gage height, 6.53 ft (1.990 m) from rating curve extended above 680 ft³/s (19.3 m³/s) on basis of slope-area measurement of peak flow; minimum, no flow part of Aug. 15, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of 8.8 ft (2.68 m), discharge not determined, and flood in June 1972 reached a stage of 8.4 ft (2.56 m), discharge not determined, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 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. 25	0300	127 3.60	4.41 1.344	Feb. 26	1000	471 13.3	5.66 1.725
Jan. 21	1800	186 5.27	4.67 1.423	Mar. 5	1230	104 2.95	4.37 1.332
Jan. 24	2000	*1,400 39.6	*6.53 1.990	Sept. 6	0830	125 3.54	4.50 1.372
Feb. 25	0400	300 8.50	5.19 1.582	Sept. 21	2330	115 3.26	4.44 1.353

Minimum discharge, 27 ft³/s (0.79 m³/s) Nov. 27, gage height, 3.62 ft (1.103 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	30	32	47	77	108	63	60	55	47	33	35
2	34	30	31	78	73	100	78	59	54	44	37	35
3	34	30	32	66	70	94	74	63	54	42	34	35
4	34	30	36	61	67	92	79	61	55	44	33	35
5	36	30	33	58	66	99	84	58	53	41	32	37
6	40	30	32	54	64	96	79	56	52	40	31	89
7	37	30	32	61	63	92	74	56	50	38	32	48
8	33	30	34	69	61	88	72	55	49	37	35	43
9	32	30	46	61	59	86	78	55	49	37	32	40
10	31	30	38	58	57	84	74	53	48	37	32	40
11	31	29	36	54	56	81	72	53	50	36	37	38
12	31	29	34	52	53	79	73	55	47	36	50	37
13	36	30	34	52	53	78	70	60	47	36	40	36
14	44	29	34	57	51	75	75	48	47	41	37	43
15	36	30	32	53	51	73	71	40	46	40	35	37
16	34	31	32	51	50	72	70	40	45	37	35	40
17	34	33	31	50	48	71	70	47	44	38	34	44
18	33	34	32	48	46	70	68	48	44	36	34	40
19	34	31	31	48	47	68	68	48	43	36	33	37
20	33	30	32	46	46	68	67	45	43	36	33	34
21	32	30	34	133	46	67	67	43	43	35	38	61
22	33	30	30	113	46	66	66	44	43	34	36	78
23	33	29	30	73	47	66	66	58	42	34	36	53
24	33	29	35	452	139	74	66	69	41	34	37	49
25	34	29	73	378	240	70	65	65	40	35	38	47
26	35	29	53	121	371	66	65	68	40	35	37	46
27	34	29	50	104	194	65	68	56	40	33	35	43
28	30	32	48	97	122	64	62	56	48	33	36	44
29	30	32	45	91	---	64	60	56	53	35	37	42
30	30	33	44	86	---	63	60	52	64	35	37	40
31	30	---	44	81	---	63	---	56	---	34	36	---
TOTAL	1045	908	1160	2853	2363	2402	2104	1683	1429	1156	1102	1326
MEAN	33.7	30.3	37.4	92.0	84.4	77.5	70.1	54.3	47.6	37.3	35.5	44.2
MAX	44	34	73	452	371	108	84	69	64	47	50	89
MIN	30	29	30	46	46	63	60	40	40	33	31	34
CFSM	1.56	1.40	1.73	4.26	3.91	3.59	3.25	2.51	2.20	1.73	1.64	2.05
IN.	1.80	1.56	2.00	4.91	4.07	4.14	3.62	2.90	2.46	1.99	1.90	2.28

CAL YR 1978 TOTAL 21291 MEAN 58.3 MAX 207 MIN 29 CFSM 2.70 IN 36.67
WTR YR 1979 TOTAL 19531 MEAN 53.5 MAX 452 MIN 29 CFSM 2.48 IN 33.64

CONODOGUINET CREEK BASIN

01570000 CONODOGUINET CREEK NEAR HOGESTOWN, PA

LOCATION.--Lat 40°15'08", long 77°01'17", Cumberland County, Hydrologic Unit 02050305, on left bank 1,000 ft (305 m) upstream from highway bridge, 0.4 mi (0.6 km) downstream from Hogestown Run, and 1 mi (1.6 km) northeast of Hogestown.

DRAINAGE AREA.--470 mi² (1,217 km²).

PERIOD OF RECORD.--October 1911 to September 1917, October 1929 to September 1958, June 1967 to current year. Monthly discharges only for some periods, published in WSP 1302. October 1917 to December 1919, gage heights and discharge measurements only, contained in reports of Water Supply Commission of Pennsylvania. Published as "at Brysons Bridge" 1912-17.

REVISED RECORDS.--WSP 1722: 1913, 1917.

GAGE.--Water-stage recorder. Datum of gage is 351.00 ft (106.985 m) National Geodetic Vertical Datum of 1929. Prior to December 1919, nonrecording gage at site 2 mi (3.2 km) downstream at different datum. Oct. 1, 1929 to Aug. 3, 1931, nonrecording gage at site 1,000 ft (305 m) downstream at present datum.

REMARKS.--Records good except those for winter periods, which are fair. Since June 1969 the Riverton Consolidated Water Co. diverts water, equivalent to a mean discharge of about 6.0 ft³/s (0.17 m³/s), at a point just up-stream from gage for municipal water supply. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--47 years (1911-17, 1929-58, 1967 to current year), 598 ft³/s (16.94 m³/s), 17.28 in/yr (439 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,700 ft³/s (954 m³/s) June 23, 1972, gage height, 17.01 ft (5.185 m), from floodmark in gage shelter; minimum, 24 ft³/s (0.68 m³/s) Dec. 16, 1930; minimum daily, 26 ft³/s (0.74 m³/s) Dec. 23, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (113 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. 3	0115	4,160 118	6.39 1.948	Mar. 6	2130	5,500 156	7.37 2.246
Jan. 25	0930	*10,700 303	*10.30 3.139	Sept. 7	2045	6,700 190	8.14 2.481
Feb. 26	2230	9,960 282	9.93 3.027				

Minimum discharge, 115 ft³/s (3.26 m³/s) Oct. 25, Nov. 7, 11, 12, gage height, 1.16 ft (0.354 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	130	241	521	936	2820	667	553	863	916	256	183
2	141	128	272	2260	747	2330	1110	505	791	703	319	178
3	137	126	250	3190	691	2380	1560	490	685	521	387	173
4	141	126	285	1450	649	2030	1590	558	766	387	371	168
5	144	126	505	1120	592	3050	2270	547	728	425	275	175
6	151	123	438	963	467	5040	1970	495	592	403	229	2250
7	156	121	336	883	410	4350	1470	452	526	322	206	5640
8	148	121	298	1750	380	2780	1200	420	486	275	223	2120
9	139	123	734	1750	350	2140	1140	399	443	247	262	1110
10	135	121	1870	1110	340	1810	1260	383	407	238	266	791
11	132	121	1050	909	330	1840	1010	371	452	229	253	614
12	130	119	637	667	320	1560	896	367	580	223	609	500
13	128	121	481	614	310	1320	896	416	434	212	1180	429
14	156	123	403	691	300	1200	963	434	367	206	772	407
15	158	121	344	691	300	1090	1030	391	340	329	505	515
16	168	132	302	500	290	929	956	355	322	278	383	481
17	156	144	288	495	290	869	863	355	312	244	302	348
18	139	178	269	438	280	811	772	333	302	226	266	308
19	137	201	244	348	280	753	691	322	288	206	262	291
20	132	185	229	348	515	697	637	322	275	259	259	272
21	130	158	256	1650	462	661	592	322	266	278	266	403
22	126	144	336	3330	379	626	558	326	269	229	275	1540
23	126	137	312	1650	390	592	537	481	275	340	291	1400
24	123	139	308	3620	2590	649	510	1350	266	923	275	843
25	119	146	1660	9860	6740	943	490	2290	253	462	281	614
26	121	158	1800	5170	9140	1270	476	1910	244	467	319	500
27	148	153	1090	2100	7760	963	592	1630	238	411	285	429
28	163	156	722	1980	2880	830	936	1550	232	312	232	383
29	151	168	515	1500	---	766	697	1500	278	275	212	371
30	141	212	443	1350	---	722	603	1230	626	329	201	348
31	132	---	448	1090	---	679	---	1000	---	312	193	---
TOTAL	4349	4261	17366	53998	39118	48500	28942	22057	12906	11187	10415	23784
MEAN	140	142	560	1742	1397	1565	965	712	430	361	336	793
MAX	168	212	1870	9860	9140	5040	2270	2290	863	923	1180	5640
MIN	119	119	229	348	280	592	476	322	232	206	193	168
CFSM	.30	.30	1.19	3.71	2.97	3.33	2.05	1.52	.92	.77	.72	1.69
IN.	.34	.34	1.37	4.27	3.10	3.84	2.29	1.75	1.02	.89	.82	1.88
CAL YR 1978	TOTAL	252038	MEAN 691	MAX 6280	MIN 119	CFSM 1.47	IN 19.95					
WTR YR 1979	TOTAL	276883	MEAN 759	MAX 9860	MIN 119	CFSM 1.62	IN 21.91					

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA

LOCATION.--Lat 40°15'17", long 76°53'11", Dauphin County, Hydrologic Unit 02050305, on east bank of City Island, 60 ft (18 m) downstream from Market Street Bridge, 3,670 ft (1,120 m) upstream from sanitary dam, in Harrisburg, and 1.7 mi (2.7 km) upstream from Paxton Creek. Water-quality sampling site 600 ft (183 m) upstream.

DRAINAGE AREA.--24,100 mi² (62,400 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1890 to current year.

REVISED RECORDS.--WSP 711: 1929. WSP 1502: 1891-1923, 1926(M), 1928. WSP 1702: 1953 (total runoff in inches), 1958 (1957 calendar year mean discharge).

GAGE.--Water-stage recorder and concrete-slab control. Datum of gage is 290.01 ft (88.395 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1928, nonrecording gage at Walnut Street Bridge, and, Oct. 1, 1928 to Aug. 31, 1975, recording gage at site 3,170 ft (966 m) downstream, all gages at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation by upstream reservoirs, the 12 most effective of which have a combined capacity of 1,367,000 acre ft (1,690 hm³).

AVERAGE DISCHARGE.--89 years, 34,560 ft³/s (978.7 m³/s), 19.47 in/yr (495 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020,000 ft³/s (28,900 m³/s) June 24, 1972, gage height, 32.57 ft (9.927 m), from floodmark; minimum, 1,600 ft³/s (45.3 m³/s) Nov. 29, 1930, result of freezeup. Minimum daily discharge since construction of sanitary dam and not affected by freezeup, 1,700 ft³/s (48.1 m³/s) Sept. 18, 1964; minimum gage height, 1.83 ft (0.558 m) Sept. 13, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known during period 1786 to 1890, 26.8 ft (8.17 m) at Walnut Street Bridge June 2, 1889, discharge, 654,000 ft³/s (18,500 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180,000 ft³/s (5,100 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. 4	0300	226,000 6,400	13.67 4.167	Feb. 26	1900	188,000 5,320	12.15 3.703
Jan. 25	2000	230,000 6,510	13.83 4.215	Mar. 7	0800	*416,000 11,800	*20.43 6.227
Feb. 25	1800	257,000 7,280	14.89 4.538				

Minimum discharge, 6,730 ft³/s (191 m³/s) Nov. 18, 19, gage height, 3.33 ft (1.015 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8580	19000	15400	20600	53800	104000	54100	40700	57200	12700	12500	13600
2	7980	16400	15400	37000	50000	90600	54900	38500	49900	13600	13200	12000
3	7500	11200	14900	161000	41000	90000	55500	34700	43100	13800	15100	11200
4	7280	12900	14900	215000	36000	90000	57600	32500	40500	13000	15900	15200
5	7390	12300	16900	167000	30000	126000	64200	32700	37000	12600	14300	14700
6	7980	11600	20300	118000	25000	316000	68600	32700	33800	12200	13500	23300
7	8950	11200	22600	86200	20000	408000	64400	31400	31600	11500	11800	71000
8	9820	10800	23000	78000	19000	346000	59000	30500	28900	10300	10100	61800
9	9070	10700	26800	84100	17000	269000	53900	29500	25900	9700	9950	47600
10	8820	11500	39000	69600	15500	217000	53300	27500	24600	8700	8820	40300
11	8340	10900	53100	58400	15000	176000	67800	25300	25300	8340	11300	32000
12	8220	11100	53500	47400	14500	154000	84500	26900	23900	7980	15200	27100
13	7980	9570	46600	39000	14000	133000	83000	27500	22600	7740	25500	22600
14	8220	9320	40100	36500	13500	107000	77000	29100	21000	7740	27500	19700
15	8340	9070	34900	37700	13000	93000	72700	26800	19600	7980	23000	19600
16	10700	8460	30900	36500	13000	87300	68800	25300	18500	8340	18500	19900
17	13300	7500	28000	35200	12500	82800	66600	23200	16700	8700	14700	18300
18	14400	7500	25700	32900	12500	73300	63000	21400	15200	8820	11900	16000
19	15500	8100	23700	31000	12500	62800	58200	19200	13900	10700	11900	14300
20	15200	12200	22300	23000	12500	55300	53100	19400	12900	9700	11500	13800
21	13500	15200	18800	27000	13000	51800	47000	18300	12000	9200	10700	13800
22	12300	15700	18300	45000	14000	49500	42500	17400	11100	8700	10100	18100
23	11300	13200	22400	65000	15000	47800	39000	17900	10800	8700	9700	28400
24	10700	13300	26000	80000	19000	48300	35900	23500	10700	9450	9700	26800
25	10300	13500	33100	203000	80000	55500	33600	52000	10900	10100	9200	21900
26	10100	14100	38800	215000	143000	86000	31400	80100	9820	9950	10200	19000
27	10300	14700	35800	184000	180000	105000	30400	91300	7980	10100	12700	16400
28	10700	14400	33800	147000	134000	99500	31300	90200	9700	11800	12300	14700
29	12700	14100	21700	100000	---	84500	35600	87500	9700	12900	19200	13400
30	14400	15100	21000	75300	---	68200	38300	78200	11300	14600	18100	14600
31	17900	---	20300	62000	---	56800	---	66000	---	13800	17400	---
TOTAL	327770	364620	858000	2617400	1038300	3834000	1645200	1197200	666100	323440	435470	701100
MEAN	10570	12150	27680	84430	37080	123700	54840	38620	22200	10430	14050	23370
MAX	17900	19000	53500	215000	180000	408000	84500	91300	57200	14600	27500	71000
MIN	7280	7500	14900	20600	12500	47800	30400	17400	7980	7740	8820	11200
CFSM	.44	.50	1.15	3.50	1.54	5.13	2.28	1.60	.92	.43	.58	.97
IN.	.51	.56	1.32	4.04	1.60	5.92	2.54	1.85	1.03	.50	.67	1.08

CAL YR 1978 TOTAL 14345070 MEAN 39300 MAX 249000 MIN 6790 CFSM 1.63 IN 22.14
WTR YR 1979 TOTAL 14008600 MEAN 38380 MAX 408000 MIN 7280 CFSM 1.59 IN 21.62

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1944 to January 1953, March 1956 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1974 to current year.

pH: May 1974 to current year.

WATER TEMPERATURES: May 1974 to current year.

DISSOLVED OXYGEN: May 1974 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1963 to September 1968, April 1970 to current year.

REMARKS.--On Dec. 9, 28, 1977 and Feb. 1, 1978 there were quality data collected that show very high recorded maximum values on all parameters compared to normal yearly maximums at this location. The duration of these events lasted from approximately three to ten hours and we have every reason to believe the data is valid. Since there is no way to determine the quantity of water affected by these events the data was not used in determining the yearly maximum values.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 517 micromhos Mar. 4, 1978; minimum, 77 micromhos Sept. 27, 1975.

pH: Maximum, 10.4 Aug. 27, 1975; minimum, 6.1 May 17, 1978.

WATER TEMPERATURES: Maximum, 32.0°C Aug. 2, 3, 1975; minimum, freezing point on many days during January and February, 1977.

DISSOLVED OXYGEN: Maximum, 15.2 mg/L Jan. 23, 24, 1976; minimum, 5.1 mg/L Sept. 2, 1974.

SEDIMENT CONCENTRATIONS: Maximum daily, 879 mg/L Jun. 23, 1972; minimum daily, 0 mg/L on many days during August and September 1964.

SEDIMENT DISCHARGES: Maximum daily, 2,210,000 tons (2,000,000 tonnes) Jun. 24, 1972; minimum daily, 0 ton (0 tonne) on many days during August and September 1964.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 468 mg/L Jan. 25; minimum daily, 3 mg/L Feb. 18, 19, 20, July 12, 13.

SEDIMENT DISCHARGES: Maximum daily, 316,000 tons (287,000 tonnes) Mar. 7; minimum daily, 63 tons (57 tonnes) July 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOC- CI, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT												
16...	1400	11300	355	8.3	12.5	2.0	11.2	30	112	150	75	39
NOV												
15...	1400	8820	340	8.2	10.0	3.0	11.6	K6	34	150	81	40
DEC												
13...	1500	45700	190	6.9	3.0	20	13.8	300	1420	65	31	18
JAN												
26...	1000	221000	115	6.8	.5	80	14.0	660	K2000	40	23	11
MAR												
08...	1200	346000	120	6.9	4.0	90	12.0	K1000	K2700	35	19	9.8
APR												
25...	1100	34000	230	8.4	16.0	5.0	11.2	K <2	52	87	44	25
MAY												
15...	0930	26800	245	8.0	19.0	6.0	12.2	K30	168	97	46	27
JUN												
26...	1000	10600	307	8.5	20.0	2.0	8.5	K14	34	140	67	37
JUL												
24...	0830	9200	326	7.8	24.5	4.0	8.0	K30	540	140	88	36
AUG												
22...	1100	10100	287	8.2	22.5	5.0	8.4	K50	188	120	56	34
SEP												
10...	1330	39600	208	7.7	22.0	9.0	10.4	230	K68	82	47	22

K = Best estimate.

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)
OCT 16...	12	11	14	.4	--	2.2	72	--	71	16	.1	.3
NOV 15...	11	11	14	.4	--	6.0	64	--	67	17	.1	.2
DEC 13...	4.9	5.8	16	.3	--	1.8	34	--	32	8.6	.1	4.5
JAN 26...	3.0	4.0	17	.3	--	1.5	17	--	19	7.1	.1	3.5
MAR 08...	2.6	2.9	15	.2	--	1.4	16	--	17	4.5	.0	4.2
APR 25...	5.9	5.4	12	.3	--	1.3	43	--	34	8.7	.1	2.3
MAY 15...	7.1	6.7	13	.3	--	1.6	51	--	42	9.4	.1	2.1
JUN 26...	11	9.2	13	.3	--	1.7	71	--	62	13	.1	1.7
JUL 24...	12	10	13	.4	12	1.9	51	1.6	81	13	.1	3.3
AUG 22...	9.0	7.9	12	.3	9.7	1.8	66	.8	54	11	.1	2.3
SEP 10...	6.6	6.1	14	.3	7.8	1.7	35	1.4	41	8.4	.1	5.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)
OCT 16...	215	195	1.1	--	.04	.37	.41	.21	.20	1.5	--
NOV 15...	226	191	.94	--	.08	--	--	8.5	.28	--	--
DEC 13...	102	96	1.3	--	.01	.50	.51	.44	.07	1.8	--
JAN 26...	69	59	.76	--	.07	.86	.93	.72	.21	1.7	--
MAR 08...	54	52	.63	--	.11	.75	.86	.61	.25	1.5	--
APR 25...	121	109	.88	--	.03	.12	.15	.04	.11	1.0	--
MAY 15...	147	127	.83	--	.06	.32	.38	.03	.35	1.2	--
JUN 26...	222	178	.73	--	.07	.46	.53	.28	.25	1.3	--
JUL 24...	230	188	.46	--	.03	.51	.54	.42	.12	1.0	--
AUG 22...	189	160	1.2	--	.02	.37	.39	.16	.23	1.6	--
SEP 10...	129	117	1.0	.98	.04	1.1	1.1	1.0	.10	2.1	1.1

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	TRITIUM IN WATER MOLE- CULES (TU)	TRITIUM WATER MOLE- CULES COUNT ERROR (TU)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 16...	.06	.04	--	4.8	1.8	68.3	4.9	--	8	244	100
NOV 15...	.06	.03	5.1	--	--	67.7	4.9	3600	4	95	100
DEC 13...	.11	.04	--	4.3	.9	52.9	2.1	--	56	6910	88
JAN 26...	.22	.01	9.1	--	--	43.2	1.6	--	--	--	--
MAR 08...	.15	.01	--	3.3	1.6	39.7	1.4	320	406	379000	91
APR 25...	.02	.02	6.0	--	--	--	--	3000	11	1010	71
MAY 15...	.07	.03	16	--	--	49.2	3.1	15000	20	1450	100
JUN 26...	.04	.02	--	3.5	1.1	--	--	39000	6	172	100
JUL 24...	.05	.01	5.0	--	--	--	--	--	12	298	100
AUG 22...	.04	.02	5.4	--	--	--	--	--	9	245	72
SEP 10...	.08	.01	--	5.7	1.6	--	--	--	80	8550	88

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 15...	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 15...	0930	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)
NOV 15...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 15...	ND	--	ND	--	ND	--	ND	--	ND	--	ND

DATE	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 15...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 15...	--	ND	--	ND	--	ND	--	ND	--	ND	ND

DATE	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	AROCLOR TOT. IN BOT MAT 1254 PCB SERIES (UG/KG)	AROCLOR TOT. IN BOT MAT 1260 PCB SERIES (UG/KG)	PCB, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 15...	ND	42	45	ND	ND	ND	ND	ND	ND	ND
MAY 15...	--	--	--	ND	ND	--	ND	--	ND	--

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

PHYTOPLANKTON ANALYSES, AUGUST 1978 TO SEPTEMBER 1978

DATE	AUG 24,78	SEP 18,78
TIME	0930	1400
TOTAL CELLS/ML	25000	490000
DIVERSITY: DIVISION	1.1	0.7
..CLASS	1.1	0.7
...ORDER	1.3	0.7
...FAMILY	1.9	0.9
....GENUS	2.6	1.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)				
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
...COELASTRACEAE				
....COELASTRUM	1100	4	19000	4
...HYDRODICTYACEAE				
....PEDIASTRUM	--	-	*	0
...MICRACTINIACEAE				
....GOLENKINIA	--	-	*	0
...OOCYSTACEAE				
....ANKISTRODESMUS	740	3	*	0
....CHODATELLA	--	-	*	0
....DICTYOSPHAERIUM	890	4	21000	4
....FRANCEIA	--	-	*	0
....KIRCHNERIELLA	500	2	*	0
....OOCYSTIS	--	-	*	0
....SELENASTRUM	--	-	*	0
....TREUBARIA	--	-	*	0
....WESTELLA	200	1	--	-
...SCENEDESMACEAE				
....ACTINASTRUM	5200#	21	*	0
...SCENEDESMUS	5400#	21	14000	3
..TETRASPORALES				
...PALMELLACEAE				
....SPHAEROCYSTIS	200	1	*	0
..VOLVOCALES				
...CHLAMYDOMONADACEAE				
....CHLAMYDOMONAS	350	1	2600	1
...VOLVOCAEEAE				
....GONIUM	200	1	--	-
..ZYGNEATALES				
...DESMIDIACEAE				
....STAUSTRUM	*	0	--	-
CHRYSOPHYTA				
..BACILLARIOPHYCEAE				
...CENTRALES				
...COSCINODISCACEAE				
....CYCLOTELLA	350	1	5400	1
..PENNALES				
...FRAGILARIACEAE				
....SYNEDRA	*	0	--	-
...NITZSCHACEAE				
....NITZSCHIA	200	1	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)				
..CYANOPHYCEAE				
...CHROOCOCCALES				
...CHROOCOCCACEAE				
....AGMENELLUM	--	-	13000	3
....ANACYSTIS	9400#	38	410000#	83
....COCCOCHLORIS	150	1	--	-
....DACTYLOCOCCOPSIS	200	1	--	-

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

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO JULY 1979

DATE TIME	NOV 15,78 1400	MAR 8,79 1200	APR 25,79 1100	MAY 15,79 0930	JUN 26,79 1000	JUL 24,79 0830				
TOTAL CELLS/ML	3600	320	3000	15000	39000	35000				
DIVERSITY: DIVISION	1.4	1.0	0.9	1.0	1.4	0.3				
..CLASS	1.4	1.0	0.9	1.0	1.4	0.3				
...ORDER	2.1	1.4	1.5	1.5	1.6	0.3				
...FAMILY	2.6	1.5	1.8	2.5	2.2	2.2				
....GENUS	2.9	1.5	0.0	2.9	2.7	3.2				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...OOCYSTACEAE										
....GLOEOACTINIUM	--	-	--	-	--	-	--	-	260	1
....CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	*	0	*	0
....COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	710	5	6100#	18
....HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-			6600#	19
....MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	--	-	*	0		
....MICRACTINIUM	--	-	--	-	--	-	270	1	--	-
....OOCYSTACEAE							540	1	--	-
....ANKISTRODESMUS	62	2	--	-	27	1	640	4	1500	4
....CHODATELLA	21	1	--	-	--	-	--	-	810	2
....DICTYOSPHAERIUM	--	-	--	-	--	-	1400	9	4200	11
....KIRCHNERIELLA	--	-	29	9	--	-	--	-	270	1
....OOCYSTIS	--	-	--	-	--	-	--	-	540	1
....SELENASTRUM	--	-	--	-	--	-	--	-	430	1
....TETRAEDRON	--	-	--	-	--	-	--	-	1200	3
....TREUBARIA	--	-	--	-	--	-	--	-	*	0
....WESTELLA	--	-	--	-	--	-	*	0	270	1
....SCENEDESMACEAE									540	1
....ACTINASTRUM	--	-	--	-	--	-	1700	11	--	-
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	42	1	--	-	27	1	4100#	27	8600#	22
....TETRASTRUM	83	2	--	-	--	-	--	-	540	1
...VOLVOCALES										
...CHLAMYDOMONADACEAE	--	-	--	-	80	3	--	-	--	-
...CHLAMYDOMONAS	42	1	--	-	27	1	140	1	940	2
..ZYGNEATALES										
...DESMIDIACEAE										
....CLOSTERIUM	42	1	--	-	--	-	--	-	--	-
....COSMARIUM	21	1	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
...CYCLOTETELLA	1200#	34	--	-	2000#	68	--	-	2300	6
....MELOSIRA	83	2	--	-	--	-	--	-	--	-
....STEPHANODISCUS	21	1	--	-	--	-	2800#	19	--	-
...PENNALES										
...CYMBELLACEAE										
....CYMBELLA	83	2	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	42	1	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	110	4	--	-	--	-
....FRAGILARIA	100	3	--	-	27	1	1100	8	--	-
....SYNEDRA	62	2	--	-	27	1	--	-	1300	3
...GOMPHONEMATACEAE										
....GOMPHONEMA	21	1	14	5	27	1	--	-	--	-
...NAVICULACEAE										
....NAVICULA	210	6	--	-	160	5	140	1	--	-
...NITZSCHIA	210	6	29	9	80	3	2100	14	*	0
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	*	0	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
 * - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO JULY 1979

(CONTINUED)

DATE TIME	NOV 15, 78 1400		MAR 8, 79 1200		APR 25, 79 1100		MAY 15, 79 0930		JUN 26, 79 1000		JUL 24, 79 0830	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)												
..CYANOPHYCEAE												
...CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	29	9	--	-	--	-	16000#	41	340	1
...HORMOGONALES												
...NOSTOCACEAE												
....ANABAENA	--	-	220#	68	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE												
....OSCILLATORIA	1100#	32	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENIDS)												
..EUGLENOPHYCEAE												
...EUGLENALES												
...EUGLENACEAE												
....EUGLENA	42	1	--	-	--	-	--	-	--	-	--	-
....TRACHELOMONAS	42	1	--	-	270	9	--	-	--	-	--	-

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

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	231	228	230	242	224	235	200	192	195	168	160	163
2	233	240	232	237	230	233	200	194	199	174	166	169
3	247	234	237	238	234	236	194	191	193	188	115	140
4	245	231	243	236	233	235	191	184	188	120	113	117
5	250	245	248	239	235	237	184	182	183	115	106	109
6	248	242	246	237	231	234	190	183	187	109	106	107
7	254	248	252	232	231	232	189	174	182	117	109	112
8	259	254	257	232	229	230	179	173	177	131	113	119
9	260	250	255	232	227	230	175	158	167	139	130	133
10	249	230	237	230	227	229	160	154	158	134	131	133
11	236	228	230	234	230	233	153	124	134	144	134	140
12	250	237	245	238	233	235	135	128	132	166	144	155
13	258	241	255	244	238	240	137	131	135	214	166	175
14	264	256	260	250	244	247	132	126	129	205	166	176
15	271	265	269	253	250	252	126	124	125	180	165	175
16	276	272	275	249	239	243	127	124	125	187	179	183
17	283	254	275	242	235	239	134	128	131	193	177	182
18	251	216	229	246	235	240	138	135	136	203	195	200
19	275	239	263	243	238	241	144	138	140	206	197	201
20	274	264	267	246	237	242	147	144	145	236	196	207
21	272	257	267	241	220	231	148	146	147	264	197	226
22	256	239	246	217	179	193	155	148	153	247	228	239
23	254	239	244	220	192	210	160	155	158	226	180	198
24	265	255	262	219	213	216	162	157	160	236	178	211
25	263	254	258	221	219	221	163	156	160	179	108	142
26	255	249	251	220	216	219	192	161	172	116	94	104
27	250	246	248	215	194	204	192	133	174	120	106	110
28	255	251	253	197	186	190	172	161	165	123	115	119
29	256	255	255	192	186	190	164	159	161	117	113	115
30	256	226	247	191	189	190	161	156	159	130	117	123
31	224	213	217	---	---	---	161	155	157	138	131	135
MONTH	263	213	250	253	179	227	200	124	159	264	94	155

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	147	138	142							---	---	---
2	153	145	150							186	179	184
3	160	152	154							185	178	181
4	167	159	162							178	176	177
5	181	167	172							180	178	179
6	179	170	175							179	171	175
7	185	168	179							173	171	172
8	214	167	197							177	173	174
9	216	190	206							180	176	178
10	238	218	228							182	179	180
11	233	214	225							188	183	186
12	250	235	244							189	185	187
13	259	242	249							190	181	185
14	258	251	256							189	183	184
15	270	252	262							186	181	183
16	276	262	268							188	175	181
17	---	---	---							185	178	182
18	---	---	---							181	172	178
19	---	---	---							171	167	168
20	---	---	---							173	168	171
21	---	---	---							178	173	177
22	---	---	---							184	179	182
23	---	---	---							186	180	183
24	---	---	---							186	179	183
25	---	---	---							179	135	158
26	---	---	---							155	137	149
27	---	---	---							153	139	145
28	---	---	---							161	149	156
29	---	---	---							150	144	147
30	---	---	---							145	137	142
31	---	---	---							139	136	138
MONTH	276	138	204							190	135	172

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	140	139	139	245	224	236	259	235	243			
2	141	138	139	240	229	235	258	240	248			
3	143	140	141	240	224	232	278	248	263			
4	146	143	145	231	225	224	261	244	250			
5	145	142	145	236	226	231	256	246	250			
6	149	142	145	248	238	244	278	258	272			
7	162	149	156	245	231	234	262	236	245			
8	165	160	162	239	231	234	235	225	230			
9	167	165	166	250	241	246	226	212	220			
10	172	167	169	262	251	254	---	---	---			
11	171	165	167	264	257	261	223	211	215			
12	173	167	170	264	258	261	224	202	207			
13	175	171	173	262	256	259	208	172	187			
14	172	169	170	274	256	262	175	172	174			
15	174	171	173	296	276	288	178	165	171			
16	189	175	181	284	267	274	186	179	184			
17	193	184	192	270	264	268	194	181	183			
18	195	193	194	267	261	264	201	185	193			
19	197	193	195	273	255	264	216	202	210			
20	206	200	203	290	268	282	218	210	215			
21	208	205	206	281	257	270	211	207	209			
22	210	207	208	261	254	258	218	210	215			
23	218	210	214	272	260	267	227	212	220			
24	219	214	216	274	256	265	223	202	217			
25	224	219	222	269	253	257	228	212	220			
26	224	222	225	282	236	275	---	---	---			
27	229	226	227	268	250	257	---	---	---			
28	241	226	235	263	247	253	---	---	---			
29	264	212	249	261	249	253	---	---	---			
30	252	233	242	265	244	258	---	---	---			
31	---	---	---	259	237	246	---	---	---			
MONTH	264	138	186	296	224	256	278	165	218			

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.1	7.0	7.0							---	---	---
2	7.2	7.0	7.1							---	---	---
3	7.2	7.0	7.0							---	---	---
4	7.1	7.0	7.0							---	---	---
5	7.2	7.0	7.1							---	---	---
6	7.0	7.0	7.0							---	---	---
7	7.0	7.0	7.0							---	---	---
8	7.1	7.0	7.1							---	---	---
9	7.1	7.0	7.1							---	---	---
10	7.1	7.1	7.1							---	---	---
11	7.1	7.1	7.1							---	---	---
12	7.1	7.1	7.1							7.6	7.0	7.2
13	7.1	7.1	7.1							7.6	7.0	7.2
14	7.1	7.0	7.0							---	---	---
15	7.1	7.0	7.0							7.7	6.9	7.2
16	7.1	7.0	7.0							7.4	6.9	7.1
17	7.1	7.0	7.0							7.2	6.8	7.0
18	7.0	6.9	6.9							7.1	6.8	6.9
19	6.9	6.9	6.9							7.1	6.7	6.9
20	7.0	6.9	7.0							7.1	6.8	6.9
21	---	---	---							7.2	6.8	6.9
22	---	---	---							7.3	6.8	7.0
23	---	---	---							7.1	6.8	6.9
24	---	---	---							7.2	6.8	6.9
25	---	---	---							6.9	6.8	6.9
26	---	---	---							6.8	6.7	6.7
27	---	---	---							6.7	6.6	6.7
28	---	---	---							5.7	6.5	6.6
29	---	---	---							6.8	6.7	6.7
30	---	---	---							6.8	6.8	6.8
31	---	---	---							6.8	6.8	6.8
MONTH	7.2	6.9	7.0							7.7	6.5	6.9

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

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	18.5	16.5	17.5	11.5	10.5	11.0	4.0	3.0	3.5	3.5	1.0	2.5
2	17.5	16.0	16.5	11.0	9.5	10.5	4.0	3.0	3.5	4.5	2.5	4.0
3	17.0	14.5	15.5	11.5	10.0	11.0	4.0	3.5	3.5	2.0	.5	1.0
4	17.0	16.0	16.5	11.5	10.0	10.5	5.5	3.5	4.0	1.0	.5	.5
5	16.0	15.5	16.0	11.5	9.5	10.5	6.0	5.0	5.5	.5	.5	.5
6	17.0	15.5	16.0	11.5	10.0	10.5	5.5	4.0	5.0	.5	.5	.5
7	15.5	14.5	15.5	11.0	10.0	10.5	5.0	4.0	4.5	.5	.5	.5
8	14.0	12.5	13.0	11.0	9.0	10.0	5.5	4.5	5.0	1.0	.5	.5
9	13.5	11.0	12.5	9.5	8.0	9.0	6.0	4.5	5.5	2.0	.5	.5
10	14.5	12.0	13.5	10.0	8.0	9.0	4.0	2.5	3.0	.5	.5	.5
11	15.5	13.5	14.5	10.0	9.0	9.5	3.0	2.5	2.5	.5	.5	.5
12	17.0	14.5	15.5	9.5	9.0	9.0	3.0	2.5	3.0	.5	.5	.5
13	17.0	16.0	16.5	9.0	8.5	8.5	3.0	2.5	2.5	.5	.5	.5
14	16.5	14.5	16.0	10.5	8.0	9.5	2.5	2.0	2.5	6.5	.5	1.0
15	14.5	12.5	13.0	10.5	9.5	10.0	2.5	1.5	2.0	6.5	.5	1.5
16	12.5	11.5	12.0	9.5	9.0	9.5	3.0	2.0	2.5	.5	.0	.5
17	12.5	11.0	12.0	9.0	8.5	8.5	3.5	2.5	3.0	.5	.5	.5
18	12.5	10.5	11.5	10.0	9.0	9.5	2.5	2.0	2.5	.5	.0	.5
19	12.0	11.5	12.0	9.5	8.5	9.0	2.0	1.5	2.0	.5	.0	.5
20	12.5	11.5	12.0	8.5	8.0	8.5	1.5	1.0	1.5	.5	.0	.5
21	13.0	11.0	12.0	8.0	7.0	7.5	2.0	1.5	1.5	.0	.0	.0
22	13.5	11.5	12.5	7.5	6.5	7.0	2.0	1.0	1.5	.0	.0	.0
23	14.5	12.5	13.5	6.5	5.5	6.0	2.5	1.0	1.5	.0	.0	.0
24	13.0	10.5	11.5	6.5	5.5	6.0	1.5	1.0	1.5	.0	.0	.0
25	12.0	10.0	11.0	6.0	5.0	5.5	2.0	1.0	1.5	1.0	.0	.5
26	12.0	11.5	12.0	5.0	4.0	4.5	1.0	.5	1.0	.5	.0	.0
27	13.0	11.5	12.0	4.0	2.0	3.0	11.5	.5	3.0	1.0	.5	.5
28	13.0	11.0	12.0	3.0	2.0	2.5	7.5	.5	1.0	1.5	1.0	1.0
29	12.5	11.0	12.0	3.5	2.5	3.0	.5	.5	.5	2.0	1.5	1.5
30	12.0	10.5	11.0	4.0	3.0	3.5	1.0	.5	.5	2.0	1.5	1.5
31	11.5	10.0	11.0	---	---	---	1.0	.5	1.0	1.5	1.0	1.5
MONTH	18.5	10.0	13.5	11.5	2.0	8.0	11.5	.5	2.5	6.5	.0	1.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	1.0	.0	.5							---	---	---
2	6.5	.5	2.0							16.5	15.0	16.0
3	4.0	.5	1.0							16.0	15.5	15.5
4	1.0	.5	.5							16.0	15.0	15.5
5	4.5	.5	1.0							16.0	14.0	15.0
6	.5	.5	.5							17.0	15.0	16.0
7	.5	.5	.5							18.0	16.0	17.0
8	.5	.5	.5							20.0	17.5	18.5
9	.5	.5	.5							22.0	19.0	20.5
10	.5	.5	.5							23.5	21.0	22.5
11	.5	.5	.5							24.5	22.0	23.0
12	.5	.5	.5							23.0	21.5	22.0
13	.5	.5	.5							22.0	21.5	21.5
14	.5	.5	.5							22.0	20.0	21.0
15	.5	.5	.5							22.0	20.0	21.0
16	.5	.5	.5							21.0	20.0	20.5
17	.5	.5	.5							21.0	18.5	20.0
18	.5	.5	.5							20.5	18.5	19.5
19	.5	.5	.5							20.0	18.5	19.5
20	1.0	.5	.5							21.5	19.0	20.0
21	---	---	---							20.5	19.5	20.0
22	---	---	---							21.0	18.0	19.5
23	---	---	---							20.5	19.0	19.5
24	---	---	---							19.5	19.0	19.0
25	---	---	---							19.0	16.0	17.5
26	---	---	---							16.0	15.5	16.0
27	---	---	---							15.5	14.5	15.0
28	---	---	---							15.0	14.5	14.5
29	---	---	---							15.5	14.5	15.0
30	---	---	---							16.0	15.0	15.5
31	---	---	---							16.5	15.5	16.0
MONTH	6.5	.0	.5							24.5	14.0	18.5

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.5	16.5	17.0	24.0	21.5	22.5	27.5	26.0	27.0			
2	19.0	17.5	18.0	22.5	21.0	22.0	26.5	25.5	26.0			
3	19.5	18.5	19.0	23.5	20.5	21.5	28.0	25.0	26.5			
4	21.0	18.5	19.5	22.5	20.0	21.0	29.0	26.0	27.5			
5	22.0	20.0	21.0	20.5	18.5	19.5	29.5	27.0	28.0			
6	21.0	20.5	21.0	21.0	18.0	19.5	29.0	27.0	28.0			
7	21.5	20.0	21.0	23.0	19.5	21.5	28.0	25.5	27.0			
8	23.0	21.5	22.0	24.5	21.5	23.0	28.0	25.5	27.0			
9	24.5	21.5	23.0	25.5	23.0	24.0	28.5	26.0	27.0			
10	24.5	23.5	24.0	24.0	22.5	23.0	---	---	---			
11	24.0	20.5	22.0	25.5	22.0	23.5	26.5	24.0	25.5			
12	21.5	19.0	20.5	27.0	24.0	24.5	23.5	20.5	22.0			
13	22.0	19.5	21.0	28.5	25.0	26.5	21.5	19.5	20.5			
14	23.0	20.0	21.5	29.0	26.0	27.0	21.0	20.5	20.5			
15	24.0	20.5	22.5	28.0	25.5	26.5	20.5	19.0	19.5			
16	25.0	22.0	23.5	29.0	27.0	27.5	21.5	18.5	20.0			
17	24.5	23.0	24.0	29.5	26.0	27.5	22.5	20.0	21.0			
18	25.5	23.0	24.0	28.0	26.5	27.0	22.0	20.0	21.0			
19	24.5	21.5	23.0	28.5	25.5	27.0	22.5	20.0	21.0			
20	25.0	22.0	23.5	27.5	25.0	26.0	24.5	22.0	23.0			
21	23.5	21.0	22.5	26.0	24.5	25.0	24.5	23.0	23.5			
22	22.0	20.0	21.0	26.5	24.5	25.5	26.0	22.5	24.0			
23	24.0	21.0	22.5	26.0	25.0	25.5	24.5	23.5	23.5			
24	22.5	20.0	20.5	27.5	24.5	25.5	26.0	23.0	24.5			
25	22.0	18.5	20.0	28.0	26.0	27.0	26.5	24.0	25.5			
26	23.0	19.5	21.5	27.5	26.0	26.5	---	---	---			
27	24.0	20.0	22.0	27.0	25.0	26.0	---	---	---			
28	23.0	21.5	22.5	26.0	25.0	25.5	---	---	---			
29	23.5	21.0	22.0	25.0	24.0	24.5	---	---	---			
30	23.5	22.0	22.5	25.5	23.5	24.0	---	---	---			
31	---	---	---	27.5	24.5	25.5	---	---	---			
MONTH	25.5	16.5	21.5	29.5	18.0	24.5	29.5	18.5	24.0			

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.9	9.3	10.1	12.9	11.0	11.9	14.6	13.9	14.2			
2	10.7	9.3	10.1	13.1	11.3	12.2	14.6	14.0	14.2			
3	10.9	9.6	10.3	12.8	11.2	12.0	14.6	14.1	14.3			
4	10.5	9.4	10.0	12.6	11.2	11.9	14.4	13.8	14.1			
5	10.4	9.4	9.9	12.8	11.1	11.9	14.2	13.4	13.8			
6	10.3	9.4	9.9	12.6	11.2	11.8	14.4	13.7	14.0			
7	10.3	9.5	9.9	12.1	11.0	11.5	14.1	13.7	13.8			
8	10.7	9.9	10.3	12.5	11.0	11.7	13.7	13.2	13.5			
9	11.1	10.4	10.8	12.8	11.5	12.1	---	---	---			
10	11.1	10.4	10.7	12.6	11.5	12.0	---	---	---			
11	11.0	10.2	10.6	12.4	11.3	11.8	---	---	---			
12	10.9	9.9	10.4	12.2	11.3	11.7	---	---	---			
13	10.6	9.6	10.1	11.6	11.1	11.4	---	---	---			
14	10.2	9.2	9.7	12.2	11.2	11.6	---	---	---			
15	11.0	9.9	10.5	12.1	11.0	11.5	---	---	---			
16	11.4	10.5	10.9	12.2	10.9	11.5	---	---	---			
17	11.5	10.7	11.1	11.9	11.4	11.6	---	---	---			
18	11.5	10.8	11.1	12.0	11.2	11.5	---	---	---			
19	11.6	10.8	11.2	12.6	11.2	11.8	---	---	---			
20	12.1	10.7	11.4	12.7	11.6	12.1	---	---	---			
21	12.3	11.0	11.6	12.6	11.9	12.2	---	---	---			
22	11.9	10.8	11.3	12.5	11.8	12.1	---	---	---			
23	11.5	10.5	10.9	12.8	12.4	12.5	---	---	---			
24	12.0	10.5	11.2	12.8	12.3	12.5	---	---	---			
25	12.0	11.0	11.5	13.2	12.6	12.9	---	---	---			
26	11.6	10.7	11.2	13.9	13.0	13.4	---	---	---			
27	11.8	10.5	11.1	13.9	13.5	13.7	---	---	---			
28	12.2	10.8	11.4	14.3	13.7	13.9	---	---	---			
29	12.3	10.9	11.6	14.5	13.8	14.1	---	---	---			
30	12.1	11.1	11.6	14.5	14.0	14.3	---	---	---			
31	12.1	11.2	11.6	---	---	---	---	---	---			
MONTH	12.3	9.2	10.8	14.5	10.9	12.2	14.6	13.2	14.0			

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1										---	---	---
2										12.9	10.5	11.7
3										11.5	10.2	10.8
4										11.7	9.8	10.7
5										12.1	10.1	11.1
6										11.9	10.3	11.2
7										11.7	10.1	10.9
8										11.4	9.7	10.6
9										10.5	9.1	9.9
10										9.8	8.5	9.2
11										9.3	7.9	8.6
12										9.2	7.9	8.6
13										9.6	8.1	8.7
14										10.0	8.3	9.2
15										9.5	8.4	8.9
16										9.4	8.3	8.9
17										9.5	8.5	9.0
18										9.4	8.6	9.0
19										9.3	8.4	8.8
20										9.2	8.4	8.8
21										9.2	8.1	8.6
22										9.5	8.3	9.0
23										9.0	8.2	8.5
24										9.3	8.2	8.7
25										9.0	8.4	8.7
26										9.5	8.9	9.2
27										9.8	9.4	9.6
28										9.9	9.7	9.8
29										9.9	9.6	9.7
30										9.8	9.6	9.7
31										9.8	9.5	9.6
MONTH										12.9	7.9	9.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.6	9.3	9.4	9.2	7.2	8.1	9.3	7.0	8.2			
2	9.3	9.0	9.2	9.6	7.2	8.5	8.3	6.9	7.6			
3	9.2	8.8	9.0	10.1	8.2	9.3	9.5	7.1	8.2			
4	9.8	8.8	9.3	9.1	8.1	8.6	10.1	7.1	8.5			
5	9.6	8.5	9.1	9.9	8.4	9.2	9.4	6.8	8.1			
6	9.7	8.5	9.2	10.0	8.8	9.4	8.8	6.7	7.8			
7	10.0	8.6	9.1	9.7	8.4	9.2	9.6	6.9	8.1			
8	9.8	8.3	9.0	9.5	8.0	8.9	9.5	6.9	8.2			
9	9.6	8.2	9.0	9.6	7.6	8.7	9.9	6.6	8.3			
10	9.3	8.0	8.6	9.3	7.4	8.3	---	---	---			
11	9.2	7.9	8.6	9.7	7.6	8.7	8.3	6.7	7.6			
12	9.4	8.6	9.1	9.6	7.4	8.6	9.2	7.5	8.3			
13	10.0	8.7	9.0	9.7	7.2	8.5	8.5	8.1	8.3			
14	9.8	8.9	9.4	9.9	6.7	8.2	8.4	8.1	8.3			
15	9.7	8.6	9.2	10.7	6.8	8.8	9.2	8.2	8.7			
16	9.6	8.4	9.1	9.8	7.0	8.6	9.5	8.7	9.1			
17	9.6	8.0	8.8	10.2	6.6	8.4	9.9	8.4	9.1			
18	9.2	7.7	8.5	10.2	6.7	8.4	9.2	8.1	8.7			
19	9.3	7.7	8.6	10.2	7.0	8.8	10.2	8.4	9.2			
20	9.3	7.8	8.6	9.0	6.7	8.0	10.6	8.0	9.3			
21	9.5	7.9	8.7	9.8	6.8	8.1	10.5	7.5	8.8			
22	9.6	8.1	8.9	9.9	7.3	8.6	11.7	7.8	9.6			
23	9.2	8.2	8.7	8.8	7.1	8.1	10.4	7.4	8.8			
24	9.5	7.8	8.8	9.7	6.9	8.3	10.3	7.2	8.6			
25	9.4	8.5	9.1	10.1	7.0	8.4	9.7	7.0	8.3			
26	9.5	8.2	9.0	10.4	6.7	8.3	---	---	---			
27	9.2	7.9	8.6	10.5	7.0	8.8	---	---	---			
28	9.4	7.6	8.6	9.7	7.3	8.6	---	---	---			
29	9.5	7.6	8.5	8.8	7.3	8.0	---	---	---			
30	8.6	7.0	7.8	9.5	7.5	8.4	---	---	---			
31	---	---	---	9.8	7.4	8.4	---	---	---			
MONTH	10.0	7.0	8.9	10.7	6.6	8.6	11.7	6.6	8.5			

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	8580	8	185	19000	14	718	15400	7	291
2	7980	7	151	16400	14	620	15400	7	291
3	7500	7	142	11200	12	363	14900	8	322
4	7280	6	118	12900	15	522	14900	8	322
5	7390	6	120	12300	13	432	16900	10	456
6	7980	8	172	11600	12	376	20300	9	493
7	8950	10	242	11200	10	302	22600	10	610
8	9820	10	265	10800	10	292	23000	11	683
9	9070	8	196	10700	10	289	26800	13	941
10	8820	8	191	11500	11	342	39000	52	5480
11	8340	6	135	10900	8	235	53100	108	15500
12	8220	6	133	11100	9	270	53500	60	8670
13	7980	5	108	9570	6	155	46600	16	2010
14	8220	5	111	9320	4	101	40100	12	1300
15	8340	6	135	9070	4	98	34900	11	1040
16	10700	7	202	8460	4	91	30900	10	834
17	13300	8	287	7500	5	101	28000	9	680
18	14400	10	389	7500	6	121	25700	9	625
19	15500	16	670	8100	6	131	23700	8	512
20	15200	17	698	12200	4	132	22300	7	421
21	13500	11	401	15200	10	410	18800	7	355
22	12300	10	332	15700	7	297	18300	12	593
23	11300	8	244	13200	5	178	22400	16	968
24	10700	6	173	13300	5	180	26000	19	1330
25	10300	5	139	13500	6	219	33100	24	2140
26	10100	6	164	14100	7	266	38800	60	6290
27	10300	6	167	14700	7	278	35800	40	3870
28	10700	8	231	14400	6	233	33800	20	1830
29	12700	10	343	14100	6	228	21700	15	879
30	14400	12	467	15100	7	285	21000	11	624
31	17900	17	822	---	---	---	20300	8	438
TOTAL	327770	---	8133	364620	---	8265	858000	---	60798
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	20600	6	334	53800	25	3630	104000	150	42100
2	37000	41	4100	50000	20	2810	90600	100	24500
3	161000	295	128000	41000	18	2050	90000	65	15800
4	215000	298	173000	36000	16	1590	90000	45	10900
5	167000	122	55000	30000	14	1190	126000	95	32300
6	118000	35	11200	25000	12	842	316000	327	284000
7	86200	18	4190	20000	9	510	408000	287	316000
8	78000	24	5050	19000	8	432	346000	160	149000
9	84100	21	4770	17000	7	378	269000	124	90100
10	69600	18	3380	15500	7	359	217000	119	69700
11	58400	13	2050	15000	6	292	176000	87	41300
12	47400	9	1150	14500	6	259	154000	67	27900
13	39000	7	737	14000	6	227	133000	60	21500
14	36500	6	591	13500	5	202	107000	54	15600
15	37700	6	611	13000	5	189	93000	48	12100
16	36500	5	493	13000	4	140	87300	40	9430
17	35200	5	475	12500	4	151	82800	37	8270
18	32900	5	444	12500	3	105	73300	34	6730
19	31000	4	335	12500	3	105	62800	30	5090
20	23000	4	248	12500	3	101	55300	28	4180
21	27000	5	364	13000	6	243	51800	25	3500
22	45000	45	5470	14000	6	259	49500	20	2670
23	65000	85	14900	15000	8	324	47800	17	2190
24	80000	225	48600	19000	12	616	48300	18	2350
25	203000	468	257000	80000	160	34600	55500	26	3900
26	215000	252	146000	143000	270	104000	86000	80	18600
27	184000	132	65600	180000	245	119000	105000	140	39700
28	147000	95	37700	134000	190	68700	99500	72	19300
29	100000	65	17600	---	---	---	84500	38	8670
30	75300	40	8130	---	---	---	68200	21	3870
31	62000	30	5020	---	---	---	56800	14	2150
TOTAL	2617400	---	1002542	1038300	---	343304	3834000	---	1293400

SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	54100	11	1610	40700	38	4180	57200	31	4790
2	54900	14	2080	38500	26	2700	49900	29	3910
3	55500	17	2550	34700	16	1500	43100	27	3140
4	57600	24	3730	32500	14	1230	40500	25	2730
5	64200	63	10900	32700	19	1680	37000	22	2200
6	68600	57	10600	32700	16	1410	33800	21	1920
7	64400	24	4170	31400	15	1270	31600	19	1620
8	59000	12	1910	30500	13	1070	28900	17	1330
9	53900	9	1310	29500	10	796	25900	15	1050
10	53300	15	2160	27500	9	668	24600	18	1200
11	67800	44	8050	25300	8	546	25300	16	1090
12	84500	95	21700	26900	24	1740	23900	14	903
13	83000	63	14100	27500	27	2000	22600	14	854
14	77000	41	8520	29100	22	1730	21000	13	737
15	72700	34	6670	26800	19	1370	19600	11	582
16	68800	31	5760	25300	18	1230	18500	10	499
17	66600	28	5030	23200	16	1000	16700	9	406
18	63000	23	3910	21400	17	982	15200	8	328
19	58200	21	3300	19200	18	933	13900	7	263
20	53100	20	2870	19400	16	838	12900	5	174
21	47000	19	2410	18300	14	692	12000	4	130
22	42500	17	1950	17400	14	658	11100	4	120
23	39000	16	1680	17900	21	1010	10800	5	146
24	35900	13	1260	23500	28	1780	10700	5	144
25	33600	11	998	52000	124	17400	10900	6	177
26	31400	9	763	80100	185	40000	9820	6	159
27	30400	8	657	91300	190	46800	7980	7	151
28	31300	15	1270	90200	143	34800	9700	7	183
29	35600	29	2790	87500	98	23200	9700	6	157
30	38300	34	3520	78200	71	15000	11300	8	244
31	---	---	---	66000	39	6950	---	---	---
TOTAL	1645200	---	138228	1197200	---	217163	666100	---	31337
JULY			AUGUST			SEPTEMBER			
1	12700	10	343	12500	14	472	13600	12	441
2	13600	9	330	13200	16	570	12000	9	292
3	13800	7	261	15100	16	652	11200	6	181
4	13000	6	211	15900	18	773	15200	90	3690
5	12600	6	204	14300	12	463	14700	80	3180
6	12200	6	198	13500	11	401	23300	64	4030
7	11500	5	155	11800	9	287	71000	220	42200
8	10300	5	139	10100	7	191	61800	105	17500
9	9700	4	105	9950	5	134	47600	40	5140
10	8700	4	94	8820	4	95	40300	26	2830
11	8340	4	90	11300	6	183	32000	19	1640
12	7980	3	65	15200	22	903	27100	15	1100
13	7740	3	63	25500	47	3240	22600	12	732
14	7740	4	84	27500	40	2970	19700	10	532
15	7980	4	86	23000	26	1610	19600	14	741
16	8340	5	113	18500	13	649	19900	12	645
17	8700	6	141	14700	9	357	18300	9	445
18	8820	10	238	11900	6	193	16000	7	302
19	10700	11	318	11900	8	257	14300	6	232
20	9700	8	210	11500	6	186	13800	5	186
21	9200	6	149	10700	6	173	13800	5	186
22	8700	5	117	10100	6	164	18100	15	733
23	8700	8	188	9700	5	131	28400	39	2990
24	9450	12	306	9700	5	131	26800	22	1590
25	10100	13	355	9200	4	99	21900	13	769
26	9950	14	376	10200	10	275	19000	9	462
27	10100	12	327	12700	10	343	16400	6	266
28	11800	16	510	12300	11	365	14700	5	198
29	12900	18	627	19200	25	1300	13400	5	181
30	14600	21	828	18100	18	880	14600	7	276
31	13800	15	559	17400	15	705	---	---	---
TOTAL	323440	---	7790	435470	---	19152	701100	---	93690
YEAR	14008600		3223802						

YELLOW BREECHES CREEK BASIN

01571500 YELLOW BREECHES CREEK NEAR CAMP HILL, PA

LOCATION.--Lat 40°13'29", long 76°53'54", Cumberland County, Hydrologic Unit 02050305, on left bank 50 ft (15 m) downstream from single-span highway bridge, 150 ft (46 m) downstream from Olmsted's Mill dam, 1 mi (1.6 km) southeast of Camp Hill and 3.1 miles (5.0 km) upstream from mouth.

DRAINAGE AREA.--216 mi² (559 km²).

PERIOD OF RECORD.--April 1909 to December 1919, June 1954 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to June 1954, published as "at Olmsted's Mill".

REVISED RECORDS.--WSP 1302: 1910, 1912-13, 1914(M), 1916.

GAGE.--Water-stage recorder. Datum at gage is 307.49 ft (93.723 m) National Geodetic Vertical Datum of 1929. March 1909 to December 1919, nonrecording gage at site 50 ft (15 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. The Mechanicsburg Water Co. diverts water at a point about 4 miles (6.44 km) upstream from station for municipal water supply, equivalent to a mean discharge at station of 1.1 ft³/s (0.031 m³/s). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--35 years (1909-1919, 1954 to current year, 294 ft³/s (8.326 m³/s), 18.48 in/yr (469 mm/year).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft³/s (547 m³/s) Sept. 26, 1975, gage height, 18.77 ft (5.721 m), from floodmarks; minimum 23 ft³/s (0.651 m³/s) Sept. 12, 1966, gage height, 0.17 ft (0.052 m); minimum daily, 67 ft³/s (1.90 m³/s) Sept. 13, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 22, 1953 reached a stage of 9.4 ft (2.87 m) present datum, from floodmarks, discharge, 3,940 ft³/s (112 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,250 ft³/s (35.4 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. 21	2300	2,340 66.3	6.31 1.923	Mar. 6	1245	2,070 58.6	5.85 1.783
Jan. 25	0200	*5,980 169	*11.30 3.444	Sept. 7	0100	1,260 35.7	4.31 1.314
Feb. 26	1145	4,360 123	9.28 2.828	Sept. 22	0430	1,360 38.5	4.53 1.381

Minimum discharge, 98 ft³/s (2.78 m³/s) Aug. 30, gage height, 1.06 ft (0.323 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	135	182	277	526	1090	597	362	405	311	169	140
2	142	128	167	778	464	976	738	346	457	274	238	140
3	140	128	162	601	405	915	650	359	408	238	203	140
4	160	128	198	365	434	1100	730	393	441	224	182	142
5	160	128	214	341	330	1500	1000	380	408	244	167	162
6	190	126	180	326	310	1940	780	356	356	219	154	1010
7	170	126	167	346	300	1570	650	341	341	200	152	695
8	140	123	174	680	290	1110	570	335	323	190	169	314
9	140	126	329	461	290	898	740	329	305	182	169	261
10	140	123	353	346	280	798	650	314	294	180	162	230
11	140	123	247	326	280	839	560	308	302	182	177	214
12	140	123	216	291	270	718	540	320	294	180	255	200
13	145	126	206	300	260	638	510	320	269	172	291	192
14	210	126	195	343	250	608	604	343	258	182	206	190
15	152	128	187	332	250	572	583	305	247	247	182	310
16	150	145	182	280	240	529	529	294	241	182	169	300
17	154	172	177	272	240	512	501	272	238	180	159	250
18	137	222	169	258	240	494	481	263	249	172	159	220
19	135	192	172	219	230	481	457	272	233	169	162	210
20	130	157	167	241	302	471	441	272	216	180	167	200
21	130	147	180	1290	314	457	428	261	211	182	172	377
22	135	140	180	1270	294	441	418	263	216	177	182	962
23	135	142	169	575	302	425	412	332	216	224	162	467
24	135	152	182	1960	1220	481	396	695	200	203	192	338
25	137	152	616	4460	2070	680	389	638	195	190	206	288
26	180	145	380	2020	3780	561	386	597	192	211	174	272
27	220	150	280	1090	2630	491	451	512	187	192	157	255
28	160	154	241	898	1380	471	451	529	192	172	152	241
29	133	164	219	760	---	454	399	526	269	180	147	241
30	135	185	208	668	---	457	371	454	505	198	137	238
31	135	---	214	583	---	550	---	418	---	180	140	---
TOTAL	4652	4316	6913	22957	18181	23227	16412	11709	8668	6217	5513	9199
MEAN	150	144	223	741	649	749	547	378	289	201	178	307
MAX	220	222	616	4460	3780	1940	1000	695	505	311	291	1010
MIN	130	123	162	219	230	425	371	261	187	169	137	140
CFSM	.69	.67	1.03	3.43	3.01	3.47	2.53	1.75	1.34	.93	.82	1.42
IN.	.80	.74	1.19	3.95	3.13	4.00	2.83	2.02	1.49	1.07	.95	1.58

CAL YR 1978 TOTAL 132729 MEAN 364 MAX 2830 MIN 123 CFSM 1.69 IN 22.86
WTR YR 1979 TOTAL 137964 MEAN 378 MAX 4460 MIN 123 CFSM 1.75 IN 23.76

01573000 SWATARA CREEK AT HARPER TAVERN, PA

LOCATION.--Lat 40°24'09", long 76°34'39", Lebanon County, Hydrologic Unit 02050305, on left bank 10 ft (3 m) downstream from bridge on State Highway 934 at Harper Tavern, 6 mi (9.7 km) northwest of Annville and 8.5 mi (13.7 km) downstream from Little Swatara Creek.

DRAINAGE AREA.--337 mi² (873 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1919 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1927, published as "at Harpers".

REVISED RECORDS.--WSP 1202: 1948. WSP 1302: 1920(M), 1921, 1924-25(M), 1927-28(M), 1930(M). WSP 1903: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 356.68 ft (108.716 m) National Geodetic Vertical Datum of 1929. Prior to July 16, 1931, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--60 years, 577 ft³/s (16.34 m³/s), 23.25 in/yr (591 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 66,700 ft³/s (1,890 m³/s) June 23, 1972, gage height, 23.72 ft (7.230 m), from floodmark in gage shelter, from rating curve extended above 25,000 ft³/s (708 m³/s) on basis of slope-area measurement of peak flow; minimum, 6.0 ft³/s (0.17 m³/s) Aug. 21, 1965; minimum gage height, -0.30 ft (-0.091 m) Sept. 4, 13, 14, 1966.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of June 1, 1889, reached a stage of 25.6 ft (7.80 m), from floodmark, discharge, 88,000 ft³/s (2,490 m³/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,800 ft³/s (136 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	2330	6,520 185	8.47 2.582	Feb. 26	0930	10,700 303	11.42 3.481
Jan. 8	1230	5,840 165	7.91 2.411	Mar. 6	1000	7,680 217	9.36 2.853
Jan. 21	--	8,780 249	10.15 3.094	Sept. 6	1930	8,820 250	10.18 3.103
Jan. 25	0430	*20,500 581	*15.77 4.807	Sept. 22	0700	4,940 140	7.13 2.173
Feb. 24	1600	9,340 265	10.53 3.210				

Minimum discharge, 78 ft³/s (2.21 m³/s) Sept. 2, gage height, 0.05 ft (0.015 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	131	434	1200	867	1710	466	352	879	285	181	83
2	118	127	377	4230	726	1500	594	320	758	200	207	79
3	115	125	364	4300	647	1480	726	328	694	168	237	84
4	117	123	797	2120	621	1410	907	513	764	151	176	100
5	133	121	1040	1550	470	4020	1900	398	577	180	136	132
6	292	118	764	1280	398	7160	1400	328	497	155	120	6210
7	247	118	605	1380	350	3930	1060	309	442	130	114	3360
8	159	116	578	4940	320	2590	890	290	391	118	104	1330
9	135	113	2010	2640	310	1940	1010	280	350	112	100	849
10	131	109	2150	1700	300	1670	1530	263	336	110	97	610
11	128	109	1350	1300	280	2170	1000	250	386	109	109	470
12	122	109	1040	1060	270	1550	912	234	332	106	213	381
13	147	107	885	997	260	1310	867	280	269	101	270	320
14	1120	107	764	1060	250	1180	1370	348	242	222	155	336
15	668	107	632	855	240	997	1220	280	222	720	120	518
16	394	113	553	736	230	803	1010	247	208	178	104	305
17	309	129	518	605	220	742	890	216	201	153	94	243
18	253	452	456	584	220	688	769	198	220	134	94	213
19	216	332	403	434	210	616	659	273	191	127	134	193
20	198	225	364	523	210	558	589	276	169	125	136	174
21	181	188	548	4000	220	513	538	240	160	146	109	699
22	169	174	558	3800	240	475	494	231	155	136	98	3810
23	157	171	398	1650	300	443	456	356	179	120	90	1750
24	148	280	385	6040	5950	513	416	2150	160	116	129	1070
25	142	250	2320	16600	7460	797	381	2810	143	113	198	786
26	152	201	1480	3610	9120	720	360	3160	135	131	164	632
27	196	193	1090	2320	3010	573	456	2180	127	140	121	518
28	204	234	820	1870	1900	508	715	1820	123	138	106	438
29	157	273	694	1480	---	494	456	1720	153	134	98	425
30	142	360	632	1270	---	475	381	1280	552	573	95	377
31	132	---	589	1020	---	452	---	1050	---	270	90	---
TOTAL	6900	5315	25598	77154	35599	43987	24422	22980	10015	5601	4199	26495
MEAN	223	177	826	2489	1271	1419	814	741	334	181	135	883
MAX	1120	452	2320	16600	9120	7160	1900	3160	879	720	270	6210
MIN	115	107	364	434	210	443	360	198	123	101	90	79
CFSM	.66	.53	2.45	7.39	3.77	4.21	2.42	2.20	.99	.54	.40	2.62
IN.	.76	.59	2.83	8.52	3.93	4.86	2.70	2.54	1.11	.62	.46	2.92

CAL YR 1978 TOTAL 262366 MEAN 719 MAX 10000 MIN 107 CFSM 2.13 IN 28.96
WTR YR 1979 TOTAL 288265 MEAN 790 MAX 16600 MIN 79 CFSM 2.34 IN 31.82

SWATARA CREEK BASIN

01573000 SWATARA CREEK AT HARPER TAVERN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to current year.

WATER TEMPERATURES: October 1976 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 697 mg/L July 15, 1978; minimum daily, 1 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 22,400 tons (20,300 tonnes) Jan. 25, 1979; minimum daily, 0.29 ton (0.26 tonne) Nov. 11, 1978.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 527 mg/L July 15; minimum daily, 1 mg/L several days in Oct., Nov. and August.

SEDIMENT LOAD: Maximum daily, 22,400 tons (20,300 tonnes) Jan. 25; minimum daily, 0.29 ton (0.26 tonne) Nov. 11.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE=DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	176	186	146	---	101	138	145	129	---	165	227
2	---	183	167	141	---	111	139	143	128	151	176	234
3	---	181	156	---	---	108	144	144	128	164	171	234
4	---	183	152	---	---	109	145	153	132	---	174	220
5	---	186	155	---	---	120	134	139	135	183	182	217
6	189	184	143	---	---	94	122	137	142	178	190	145
7	171	374	127	---	---	100	125	137	141	---	192	108
8	153	179	131	---	---	106	125	140	144	---	199	129
9	172	188	133	---	---	133	130	144	146	188	210	138
10	182	187	137	---	---	131	129	145	144	185	222	146
11	192	192	118	---	---	130	128	150	143	193	226	153
12	204	190	---	---	---	---	129	152	145	205	223	158
13	194	191	133	---	---	130	133	156	147	202	207	164
14	174	189	---	---	---	126	138	146	152	205	177	168
15	137	184	137	---	---	---	126	143	156	152	192	162
16	140	204	141	---	---	125	127	152	159	201	201	156
17	152	192	---	---	---	120	128	153	158	210	211	164
18	159	194	---	---	---	128	130	156	162	212	220	175
19	165	166	---	---	---	116	130	164	158	221	223	180
20	164	152	---	---	---	111	---	153	166	225	210	184
21	174	150	---	---	---	134	---	147	173	219	193	183
22	173	159	170	---	---	137	135	150	181	218	199	---
23	171	165	152	---	---	142	136	155	182	215	212	---
24	172	164	---	---	163	138	140	144	176	214	202	133
25	180	153	---	---	80	141	141	105	170	217	233	142
26	184	159	---	---	63	132	145	109	172	218	195	150
27	183	---	---	---	89	131	145	108	183	215	187	154
28	174	146	---	---	98	134	142	114	188	206	193	155
29	173	168	---	---	---	136	135	113	192	193	208	157
30	164	177	---	---	---	135	138	117	---	142	221	156
31	173	---	138	---	---	134	---	120	---	135	224	---
MEAN	172	183	146	144	99	124	134	140	156	195	201	168

SWATARA CREEK BASIN

01573000 SWATARA CREEK AT HARPER TAVERN, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

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

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, OCTOBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT 14...	1200	1450	15.0	261	1020	54	67
DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT 14...	78	86	93	96	97	98	100

SWATARA CREEK BASIN

01573000 SWATARA CREEK AT HARPER TAVERN, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	118	3	.96	131	1	.35	434	14	16
2	118	4	1.3	127	1	.34	377	6	6.1
3	115	4	1.2	125	1	.34	364	4	3.9
4	117	5	1.6	123	1	.33	797	68	194
5	133	7	2.5	121	1	.33	1040	70	197
6	292	24	19	118	2	.64	764	19	39
7	247	22	15	118	2	.64	605	11	18
8	159	10	4.3	116	2	.63	578	32	50
9	135	3	1.1	113	1	.31	2010	192	1200
10	131	2	.71	109	2	.59	2150	40	232
11	128	2	.69	109	1	.29	1350	28	102
12	122	2	.66	109	2	.59	1040	26	73
13	147	12	4.8	107	2	.58	885	24	57
14	1120	234	728	107	2	.58	764	17	35
15	668	50	90	107	2	.58	632	9	15
16	394	11	12	113	5	1.5	553	8	12
17	309	6	5.0	129	6	2.1	518	10	14
18	253	5	3.4	452	56	80	456	9	11
19	216	5	2.9	332	28	25	403	8	8.7
20	198	5	2.7	225	6	3.6	364	6	5.9
21	181	4	2.0	188	4	2.0	548	16	24
22	169	3	1.4	174	5	2.3	558	10	15
23	157	2	.85	171	5	2.3	398	4	4.3
24	148	2	.80	280	7	5.3	385	15	16
25	142	1	.38	250	3	2.0	2320	160	1000
26	152	3	1.2	201	2	1.1	1480	50	200
27	196	8	4.2	193	2	1.0	1090	17	50
28	204	5	2.8	234	2	1.3	820	9	20
29	157	2	.85	273	3	2.2	694	7	13
30	142	2	.77	360	10	9.7	632	6	10
31	132	1	.36	---	---	---	589	5	8.0
TOTAL	6900	---	913.43	5315	---	148.52	25598	---	3649.9
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	1200	55	178	867	8	19	1710	100	462
2	4230	320	4240	726	7	14	1500	44	178
3	4300	195	2260	647	7	12	1480	38	152
4	2120	60	343	621	6	10	1410	32	122
5	1550	30	126	470	6	7.6	4020	400	5460
6	1280	12	41	398	6	6.4	7160	280	5410
7	1380	18	57	350	6	5.7	3930	110	1170
8	4940	270	3600	320	5	4.3	2590	60	420
9	2640	95	677	310	5	4.2	1940	18	94
10	1700	40	184	300	5	4.1	1670	14	63
11	1300	25	88	280	4	3.0	2170	22	129
12	1060	20	57	270	4	2.9	1550	14	59
13	997	15	40	260	4	2.8	1310	13	46
14	1060	12	34	250	4	2.7	1180	14	45
15	855	10	23	240	4	2.6	997	20	54
16	736	8	16	230	3	1.9	803	25	54
17	605	6	4.8	220	3	1.8	742	30	60
18	584	4	6.3	220	2	1.2	688	35	65
19	434	2	2.3	210	2	1.1	616	30	50
20	523	6	8.5	210	2	1.1	558	20	30
21	4000	200	2160	220	2	1.2	513	12	17
22	3800	85	872	240	5	3.2	475	12	15
23	1650	20	89	300	8	6.5	443	10	12
24	6040	375	6120	5950	285	4580	513	20	28
25	16600	500	22400	7460	300	6040	797	48	103
26	3610	95	926	9120	435	11300	720	18	35
27	2320	45	242	3010	178	1450	573	11	17
28	1870	25	126	1900	95	487	508	9	12
29	1480	18	72	---	---	---	494	9	12
30	1270	14	48	---	---	---	475	9	12
31	1020	10	28	---	---	---	452	10	12
TOTAL	77154	---	45123.9	35599	---	23976.3	43987	---	14398

SWATARA CREEK BASIN

01573000 SWATARA CREEK AT HARPER TAVERN, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	466	9	11	352	5	4.8	879	22	52
2	594	14	22	320	6	5.2	758	18	37
3	726	28	55	328	8	7.1	694	25	47
4	907	62	186	513	9	12	764	69	142
5	1900	191	1030	398	5	5.4	577	17	26
6	1400	40	151	328	3	2.7	497	15	20
7	1060	17	49	309	3	2.5	442	11	13
8	890	15	36	290	4	3.1	391	10	11
9	1010	21	68	280	6	4.5	350	8	7.6
10	1530	64	284	263	7	5.0	336	10	9.1
11	1000	18	49	250	6	4.1	386	12	13
12	912	14	34	234	7	4.4	332	10	9.0
13	867	13	30	280	8	6.0	269	8	5.8
14	1370	38	154	348	10	9.4	242	6	3.9
15	1220	27	89	280	9	6.8	222	5	3.0
16	1010	16	44	247	6	4.0	208	5	2.8
17	840	11	26	216	7	4.1	201	5	2.7
18	769	10	21	198	6	3.2	220	4	2.4
19	659	8	14	273	7	5.2	191	2	1.0
20	589	7	11	276	8	6.0	169	2	.91
21	538	6	8.7	240	5	3.2	160	2	.86
22	494	5	6.7	231	4	2.5	155	4	1.7
23	456	5	6.2	356	27	26	179	6	2.9
24	416	6	6.7	2150	425	2470	160	5	2.2
25	391	7	7.2	2810	280	2120	143	3	1.2
26	360	7	6.8	3160	185	1580	135	2	.73
27	456	15	18	2140	60	353	127	2	.69
28	715	28	54	1820	54	265	123	2	.66
29	456	7	8.6	1720	71	330	153	10	4.1
30	381	6	6.2	1240	39	135	552	60	89
31	---	---	---	1050	32	91	---	---	---
TOTAL	24422	---	2493.1	22980	---	7481.2	10015	---	513.25
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	285	28	22	181	6	2.9	83	5	1.1
2	200	15	8.1	207	19	11	79	6	1.3
3	168	14	6.4	237	24	15	84	7	1.6
4	151	13	5.3	176	7	3.3	100	6	1.6
5	140	12	5.8	136	3	1.1	132	12	4.3
6	155	8	3.3	120	2	.65	6210	517	8800
7	130	8	2.8	114	2	.62	3360	195	1770
8	118	6	1.9	104	1	.28	1330	65	233
9	112	5	1.5	100	1	.27	849	33	76
10	110	6	1.8	97	3	.79	610	17	28
11	109	4	1.2	109	5	1.5	470	11	14
12	106	5	1.4	213	11	6.3	381	9	9.3
13	101	3	.82	270	21	15	320	8	6.9
14	222	125	516	155	7	2.9	336	10	9.1
15	720	527	2150	120	7	2.3	518	37	52
16	178	33	16	104	5	1.4	305	18	15
17	153	14	5.8	94	6	1.5	243	11	7.2
18	134	11	4.0	84	5	1.3	213	6	3.5
19	127	9	3.1	134	7	2.5	193	3	1.6
20	125	9	3.0	136	6	2.2	174	2	.94
21	146	25	9.9	109	5	1.5	699	25	47
22	136	23	8.4	98	4	1.1	3810	275	2830
23	120	9	2.9	90	4	.97	1750	55	260
24	116	5	1.6	129	35	12	1070	19	55
25	113	4	1.2	198	21	11	786	13	28
26	131	6	2.1	164	10	4.4	632	11	19
27	140	17	6.4	121	6	2.0	518	9	13
28	138	5	1.9	106	5	1.4	438	6	7.1
29	134	13	4.7	98	4	1.1	425	8	9.2
30	573	166	288	95	4	1.0	377	6	6.1
31	270	25	14	90	4	.97	---	---	---
TOTAL	5601	---	3105.32	4199	---	110.25	26495	---	14310.84
YEAR	284265	---	116224.01						

SWATARA CREEK BASIN

01573086 BECK CREEK NEAR CLEONA, PA

LOCATION.--Lat 40°19'24", long 76°29'00", Lebanon County, Hydrologic Unit 02050305, on right bank at bridge on Township Road T421, 0.4 mi (0.6 km) upstream from mouth and 1 mi (1.6 km) south of Cleona.

DRAINAGE AREA.--7.87 mi² (20.38 km²).

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 414.77 ft (126.422 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--16 years, 8.58 ft³/s (0.243 m³/s), 14.80 in/yr (376 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,150 ft³/s (146 m³/s) June 22, 1972, gage height, 11.53 ft (3.514 m), from rating curve extended above 140 ft³/s (3.96 m³/s) on basis of computation of peak flow through culvert and over road; no flow Jan. 30, 31, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft³/s (2.3 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. 21	1515	108 3.06	5.23 1.594	Feb. 26	0045	268 7.59	6.06 1.847
Jan. 24	1745	*1,470 41.6	*8.44 2.572				

Minimum discharge, 1.3 ft³/s (0.037 m³/s) on Aug. 25, 26; minimum gage height, 3.42 ft (1.042 m) on Nov. 27, 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.2	3.3	8.6	10	18	14	23	28	7.8	3.0	1.5
2	4.0	3.0	2.9	18	9.6	18	17	23	27	13	11	1.7
3	4.0	3.0	2.9	14	8.9	17	18	25	28	13	9.4	1.7
4	4.0	3.0	6.0	13	8.7	16	18	28	34	15	6.5	1.8
5	4.1	3.0	4.4	12	7.8	40	22	25	29	13	6.1	3.3
6	4.4	3.0	3.4	11	7.4	39	19	24	31	7.1	5.9	35
7	3.9	3.0	3.1	13	7.4	25	18	24	28	5.8	5.9	12
8	3.8	3.0	3.3	20	7.4	20	18	24	27	5.4	5.6	11
9	3.7	3.0	11	13	6.7	18	20	23	27	5.2	5.2	9.1
10	3.6	3.0	8.0	13	6.3	17	22	23	27	5.0	6.1	8.7
11	3.6	2.9	5.8	12	6.1	20	19	23	28	5.4	5.8	8.0
12	3.6	2.9	5.4	12	6.1	15	20	23	24	5.2	7.8	7.4
13	3.7	2.8	5.2	12	6.1	14	19	26	19	5.0	6.9	6.7
14	5.2	2.8	4.9	12	6.1	14	21	27	18	5.6	5.6	7.4
15	4.4	2.8	4.7	12	6.1	12	20	26	18	3.3	5.4	7.1
16	4.0	2.9	4.4	11	6.7	11	19	28	18	3.6	4.9	7.1
17	3.9	2.9	4.7	11	6.3	12	18	27	19	3.3	4.7	7.8
18	3.7	3.3	4.4	10	6.1	15	17	29	20	3.0	5.2	7.6
19	3.6	3.3	3.9	9.4	6.1	16	17	32	19	2.8	5.4	7.4
20	3.6	2.9	3.9	9.4	6.3	16	17	31	18	2.6	4.4	7.1
21	3.4	2.8	5.4	64	6.3	16	16	30	18	3.1	4.5	10
22	3.4	2.6	4.4	18	6.3	15	20	28	15	2.8	4.5	16
23	3.4	2.6	4.2	14	6.7	15	28	29	7.6	2.4	4.9	10
24	3.4	2.9	5.2	400	92	15	29	37	7.6	2.4	3.0	9.4
25	3.4	2.9	14	63	117	15	30	35	6.9	2.4	1.3	9.1
26	3.4	2.6	8.7	24	121	14	31	37	6.3	2.6	1.3	8.2
27	3.4	2.5	7.6	19	42	13	35	29	6.5	2.6	1.4	7.4
28	3.4	2.8	6.9	16	25	12	27	29	6.7	2.8	1.6	7.1
29	3.3	2.6	6.7	14	---	12	24	29	6.9	2.9	1.7	7.1
30	3.3	3.4	6.3	13	---	12	23	27	8.2	3.1	1.5	6.7
31	3.3	---	6.7	11	---	12	---	29	---	2.8	1.4	---
TOTAL	115.8	87.4	171.7	902.4	558.5	524	636	853	576.7	160.0	147.9	250.4
MEAN	3.74	2.91	5.54	29.1	19.9	16.9	21.2	27.5	19.2	5.16	4.77	8.35
MAX	5.2	3.4	14	400	121	40	35	37	34	15	11	35
MIN	3.3	2.5	2.9	8.6	6.1	11	14	23	6.3	2.4	1.3	1.5
CFSM	.48	.37	.70	3.70	2.53	2.15	2.69	3.49	2.44	.66	.61	1.06
IN.	.55	.41	.81	4.26	2.64	2.48	3.01	4.03	2.73	.76	.70	1.18

CAL YR 1978 TOTAL 3726.2 MEAN 10.2 MAX 199 MIN 2.5 CFSM 1.30 IN 17.61
WTR YR 1979 TOTAL 4983.8 MEAN 13.7 MAX 400 MIN 1.3 CFSM 1.74 IN 23.55

SWATARA CREEK BASIN

01573160 QUITTAPAHILLA CREEK NEAR BELLEGROVE, PA

LOCATION.--Lat 40°20'34", long 76°33'46", Lebanon County, Hydrologic Unit 02050305, on right bank 210 ft (64.0 m) downstream from bridge on L.R. 38001, 0.7 mi (1.1 km) downstream from Killinger Creek and 1.8 mi (2.9 km) south of Bellegrove.

DRAINAGE AREA.--74.2 mi² (192.2 km²).

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 370 ft (113 m), from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 4,800 ft³/s (136 m³/s) Jan. 24, 1979, gage height, 13.27 ft (4.045 m) on basis of rating curve extended above 1,900 ft³/s (53.8 m³/s); minimum, 50 ft³/s (1.42 m³/s) Dec. 19, 20, 23, 24, 1978; minimum gage height 3.49 ft (1.064 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 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. 7	0330	414 11.7	5.37 1.637	Feb. 26	1100	1,780 50.4	8.92 2.719
Jan. 15	1815	1,300 36.8	7.92 2.414	Mar. 5	1530	517 14.6	5.76 1.756
Jan. 24	2215	*4,800 136	*a13.40 4.084	Sept. 6	1030	816 23.1	6.71 2.045

Minimum discharge, 49 ft³/s (1.39 m³/s) Dec. 19, 20, 23, 24, gage height, 3.49 ft (1.064 m).

a from floodmark.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	53	56	154	231	330	135	122	104	98	69	66
2	56	56	53	301	210	283	142	121	102	98	162	62
3	56	54	56	196	190	250	150	131	113	78	102	57
4	58	54	89	161	180	231	157	134	119	96	80	54
5	64	54	73	145	170	384	195	126	134	83	73	98
6	80	54	62	221	160	436	164	122	134	80	78	542
7	64	54	56	330	150	329	153	122	112	76	76	178
8	60	54	67	193	150	279	148	119	102	73	69	138
9	58	54	173	159	140	246	173	113	98	71	71	119
10	57	54	126	156	130	242	177	116	101	73	90	110
11	58	54	98	133	130	261	154	115	101	73	83	110
12	61	54	91	130	130	223	158	112	93	71	124	105
13	78	49	62	130	125	212	151	113	90	69	92	100
14	145	54	81	130	125	208	188	112	88	131	80	115
15	68	53	73	130	125	193	165	111	82	173	76	110
16	64	55	70	120	135	186	158	112	90	96	74	115
17	62	61	68	120	130	173	152	107	92	85	71	120
18	59	67	64	117	125	168	152	112	92	83	73	120
19	58	54	62	106	125	163	147	114	90	74	73	115
20	56	55	59	110	130	160	142	109	92	73	71	110
21	56	53	89	928	130	154	139	107	93	78	71	160
22	53	53	65	470	130	149	135	107	90	73	66	260
23	54	53	61	242	140	145	134	123	109	71	69	160
24	55	54	71	4000	1300	153	132	171	90	66	73	140
25	55	53	228	1620	1600	154	133	163	88	64	109	129
26	55	53	129	605	1700	145	129	164	88	73	67	123
27	55	53	120	438	731	138	154	126	88	90	69	116
28	55	55	102	366	428	140	139	134	88	62	67	115
29	54	55	92	302	---	140	129	121	92	78	67	113
30	54	70	85	270	---	136	128	119	159	74	58	108
31	54	---	95	247	---	139	---	113	---	66	60	---
TOTAL	1918	1649	2676	12730	9150	6550	4513	3791	3014	2549	2463	3968
MEAN	61.9	55.0	86.3	411	327	211	150	122	100	82.2	79.5	132
MAX	145	70	228	4000	1700	436	195	171	159	173	162	542
MIN	53	49	53	106	125	136	128	107	82	62	58	54
CFSM	.83	.74	1.16	5.54	4.41	2.84	2.02	1.64	1.35	1.11	1.07	1.78
IN.	.96	.83	1.34	6.38	4.59	3.28	2.26	1.90	1.51	1.28	1.23	1.99

CAL YR 1978 TOTAL 47380 MEAN 130 MAX 1420 MIN 49 CFSM 1.75 IN 23.75
WTR YR 1979 TOTAL 54971 MEAN 151 MAX 4000 MIN 49 CFSM 2.04 IN 27.56

SWATARA CREEK BASIN

01573560 SWATARA CREEK NEAR HERSHEY, PA

LOCATION.--Lat 40°17'54", long 76°40'05", Dauphin County, Hydrologic Unit 02050305, on left bank, 0.4 mi (0.6 km) downstream from Manada Creek, 0.5 mi (0.8 km) upstream from State Highway 39, and 1.5 mi (2.4 km) northwest of Hershey.

DRAINAGE AREA.--483 mi² (1,250 km²).

PERIOD OF RECORD.--Sept. 1975 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 340 ft (104 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 ft³/s (833 m³/s) Sept. 27, 1975, gage height, 15.36 ft (4.682 m); minimum, 79 ft³/s (2.24 m³/s) Sept. 12, 13, 1976, gage height, 1.44 ft (0.439 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,900 ft³/s (195 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. 22	0400	9,110 258	7.12 2.170	Mar. 6	1000	8,120 230	6.62 2.018
Jan. 25	0830	*26,600 753	*14.43 4.398	Sept. 7	0100	8,120 230	6.62 2.018
Feb. 26	1100	12,900 365	8.94 2.725				

Minimum discharge, 120 ft³/s (3.40 m³/s) Sept. 2, gage height, 1.54 ft (0.469 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	257	661	1490	1220	2440	659	560	1170	493	261	140
2	204	269	586	4600	1010	2090	861	526	1050	343	390	130
3	213	267	561	5370	904	2000	1040	526	968	262	440	130
4	222	249	946	2750	870	1900	1250	794	1050	240	301	145
5	232	176	1340	2030	656	4200	2460	654	820	262	226	145
6	398	175	1040	1690	510	7870	1940	537	729	247	183	6030
7	427	177	845	1730	480	5110	1560	515	618	226	188	5000
8	286	177	775	5460	470	3320	1360	472	560	200	167	1840
9	252	171	2200	3520	450	2510	1430	441	504	189	167	1180
10	222	171	2770	2230	430	2170	2040	410	461	189	161	860
11	217	165	1790	1730	410	2770	1490	410	526	189	178	679
12	217	168	1370	1400	390	2070	1370	400	493	178	309	549
13	234	168	1150	1300	370	1780	1330	430	420	172	391	461
14	1190	174	984	1420	360	1620	1790	549	362	172	262	493
15	889	177	814	1210	340	1420	1760	461	317	1010	194	729
16	562	196	710	961	330	1170	1490	400	301	277	172	461
17	447	222	676	859	320	1090	1340	362	301	240	167	362
18	385	531	631	763	320	1010	1180	334	334	226	167	317
19	335	489	572	618	310	906	1050	410	317	213	194	292
20	313	328	529	742	310	830	927	472	284	207	213	269
21	292	279	685	4830	320	764	846	410	255	213	183	900
22	278	262	813	6770	340	704	794	381	240	247	161	4940
23	257	258	606	2320	400	659	742	571	262	188	156	2700
24	240	349	560	6660	4630	698	666	2490	255	183	200	1600
25	240	390	2900	23800	9600	1050	630	3350	233	178	269	1130
26	248	323	2060	7370	11900	987	595	3770	207	183	269	927
27	292	310	1490	3080	5240	799	704	2690	207	200	200	755
28	350	339	1120	2580	2820	717	1050	2300	207	213	172	666
29	294	424	978	2010	---	688	742	2150	220	183	161	630
30	265	506	816	1750	---	673	618	1650	1020	582	150	583
31	256	---	783	1420	---	647	---	1390	---	400	145	---
TOTAL	10467	8147	33761	104463	45710	56662	35714	30815	14691	8305	6797	35043
MEAN	338	272	1089	3370	1633	1828	1190	994	490	268	219	1168
MAX	1190	531	2900	23800	11900	7870	2460	3770	1170	1010	440	6030
MIN	204	165	529	618	310	647	595	334	207	172	145	130
CFSM	.70	.56	2.26	6.98	3.38	3.79	2.46	2.06	1.01	.56	.45	2.42
IN.	.81	.63	2.60	8.05	3.52	4.36	2.75	2.37	1.13	.64	.52	2.70

CAL YR 1978	TOTAL	354773	MEAN	972	MAX	12100	MIN	160	CFSM	2.01	IN	27.32
WTR YR 1979	TOTAL	390575	MEAN	1070	MAX	23800	MIN	130	CFSM	2.22	IN	30.08

WEST CONEWAGO CREEK BASIN

01574000 WEST CONEWAGO CREEK NEAR MANCHESTER, PA

LOCATION.--Lat 40°04'56", long 76°43'13", York County, Hydrologic Unit 02050306, on left bank 500 ft (150 m) upstream from bridge on State Highway 181, 0.7 mi (1.1 km) downstream from Little Conewago Creek and 1.5 mi (2.4 km) north of Manchester.

DRAINAGE AREA.--510 mi² (1,321 km²).

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for October 1928, published in WSP 1302. Prior to October 1931, published as Conewago Creek near Manchester.

REVISED RECORDS.--WSP 741: Drainage area. WSP 1502: 1930, 1936.

GAGE.--Water-stage recorder. Datum of gage is 263.68 ft (80.370 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for periods of no gage-height record Jan. 19 to Feb. 22, which are fair. Occasional regulation by Conewago Lake, capacity, 3,570 acre-ft (4.40 hm²) since October 1959.

AVERAGE DISCHARGE.--51 years, 592 ft³/s (16.76 m³/s), 15.76 in/yr (400 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96,200 ft³/s (2,720 m³/s) Sept. 26, 1975, gage height, 32.11 ft (9.787 m), from floodmarks, from rating curve extended above 45,000 ft³/s (1,270 m³/s) on basis of slope-area measurement at gage height 30.26 ft (9.223 m); minimum, 1.9 ft³/s (0.054 m³/s) Oct. 13, 1941; minimum gage height, 1.03 ft (0.314 m) Aug. 9, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,900 ft³/s (535 m³/s) Feb. 26, gage height, 15.42 ft (4.700 m) in gage well, 16.12 ft (4.913 m) from floodmark; minimum, 39 ft³/s (1.10 m³/s) Oct. 1, gage height, 2.44 ft (0.744 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	82	350	598	830	3710	535	364	580	535	97	87
2	40	77	285	4350	740	2860	649	322	550	275	355	80
3	40	75	217	4250	660	2580	1200	292	520	233	587	72
4	41	70	261	1150	610	2100	1810	275	490	190	453	72
5	42	72	458	786	570	4140	3020	259	460	157	226	108
6	400	78	365	723	500	8140	2160	244	440	171	152	5520
7	60	80	257	744	450	6520	1250	259	379	157	117	3150
8	110	78	224	3130	420	3810	980	259	322	119	106	886
9	200	77	1220	2730	400	1960	894	279	283	104	94	574
10	130	75	2260	1200	380	1570	2080	341	263	96	87	415
11	94	77	901	814	360	2710	1350	292	244	92	91	331
12	73	77	611	676	350	1890	996	252	267	91	117	279
13	64	82	407	573	330	1400	1090	222	233	87	171	244
14	57	120	360	828	320	1200	1450	199	186	91	267	233
15	58	120	307	1040	310	1060	1640	193	166	222	157	279
16	71	180	261	893	300	848	1240	205	155	236	113	420
17	91	170	249	650	290	745	1060	208	146	149	94	252
18	75	470	224	517	280	715	826	212	155	113	85	205
19	65	280	204	340	280	656	722	374	166	104	82	183
20	60	300	183	450	280	600	642	2220	157	97	78	163
21	57	150	192	1200	270	554	580	1730	136	96	82	263
22	54	220	213	4000	270	523	535	1240	121	108	144	5490
23	53	50	213	1700	335	484	505	774	113	309	226	2050
24	53	67	192	14000	3460	567	475	621	117	292	136	972
25	52	120	3290	8000	9800	1670	475	614	115	240	129	692
26	52	210	1820	2500	15900	1370	505	493	104	166	475	554
27	54	240	923	1600	9100	886	359	399	97	129	259	464
28	56	300	630	1300	4860	707	322	369	91	124	160	399
29	57	340	407	1200	---	628	336	607	117	104	126	369
30	75	420	370	1000	---	607	369	493	818	97	106	359
31	82	---	413	920	---	561	---	614	---	99	94	---
TOTAL	2455	4757	18267	63862	52655	57771	30055	15225	7991	5083	5466	25165
MEAN	79.2	159	589	2060	1881	1864	1002	491	266	164	176	839
MAX	400	470	3290	14000	15900	8140	3020	2220	818	535	587	5520
MIN	39	50	183	340	270	484	322	193	91	87	78	72
CFSM	.16	.31	1.16	4.04	3.69	3.66	1.97	.96	.52	.32	.35	1.65
IN.	.18	.35	1.33	4.66	3.84	4.21	2.19	1.11	.58	.37	.40	1.84
CAL YR 1978 TOTAL	250017	MEAN 685	MAX 14000	MIN 39	CFSM 1.34	IN 18.24						
WTR YR 1979 TOTAL	288752	MEAN 791	MAX 15900	MIN 39	CFSM 1.55	IN 21.06						

CODORUS CREEK BASIN

01574500 CODORUS CREEK AT SPRING GROVE, PA

LOCATION.--Lat 39°52'43", long 76°51'13", York County, Hydrologic Unit 02050306, on right bank at downstream side of county highway bridge No. 132, 0.1 mi (0.2 km) downstream from unnamed tributary, 0.3 mi (0.5 km) downstream from east boundary of Spring Grove and 7 mi (11 km) southwest of York.

DRAINAGE AREA.--75.5 mi² (195.5 km²). Area of site used prior to Nov. 1, 1965, 74.3 mi² (192.4 km²).

PERIOD OF RECORD.--May 1929 to September 1964, November 1965 to current year. Monthly discharge only for some periods, published in WSP 1302. October 1962 to September 1968, published as West Branch Codorus Creek at Spring Grove.

REVISED RECORDS.--WSP 1302: 1929-30, WSP 1502: 1932(M), 1933, 1935(M), 1940, 1942(M), 1943, 1944-46(M), 1951(M), 1955(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 430.86 ft (131.326 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 18, 1930, nonrecording gage, Jan. 18, 1930 to Sept. 9, 1941, water-stage recorder at site 0.9 mi (1.4 km) upstream and Sept. 10, 1941 to Sept. 30, 1964, water-stage recorder at site 0.8 mi (1.3 km) upstream, all at datum 5.64 ft (1.719 m) higher. Nov. 1 to Dec. 20, 1965, nonrecording gage about 40 ft (12 m) downstream from gage at unknown datum, Dec. 21, 1965 to Mar. 31, 1966, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Daily discharges include water diverted around station by waste treatment plant of P.H. Glatfelter Company. Flow regulated by Lake Marburg (station 01574390) about 20 miles (32 km) upstream. Several observations of water temperature were made during the year.

COOPERATION.--Records of change in lake contents and daily diversion furnished by P.H. Glatfelter Company.

AVERAGE DISCHARGE.--48 years (1929-64, 1966 to current year), 79.6 ft³/s (2.254 m³/s), 14.32 in/yr (364 mm/yr), adjusted for diversion since March 1961 and, for storage, since 1966.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,400 ft³/s (549 m³/s) June 22, 1972, gage height, 15.57 ft (4.746 m), from floodmark in gage shelter, from rating curve extended above 1,400 ft³/s (39.6 m³/s) on basis of computations of flow over dam at gage height 6.80 ft (2.073 m) and at peak flow; no flow part of day Oct. 26, 1947; minimum daily, 0.6 ft³/s (0.017 m³/s) Sept. 4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,500 ft³/s (70.8 m³/s) Jan. 24, gage height, 8.42 ft (2.566 m) in gage well, 9.36 ft (2.853 m) from floodmarks; minimum, 8.2 ft³/s (0.23 m³/s) Dec. 28, gage height, 1.80 ft (0.549 m), minimum daily, 33 ft³/s (0.93 m³/s) Feb. 11, 12, (affected by backwater from ice).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	47	35	69	60	235	131	91	76	76	122	56
2	44	43	39	286	57	213	108	82	74	64	195	55
3	47	44	38	118	52	167	102	82	107	50	126	60
4	50	43	54	57	52	163	107	90	151	58	70	55
5	49	43	48	55	44	367	133	88	149	62	69	82
6	59	44	35	49	42	497	103	79	160	59	63	698
7	50	46	38	73	44	361	81	78	126	56	57	132
8	48	46	37	245	43	266	72	74	122	52	62	91
9	47	45	166	89	40	179	125	61	102	54	59	94
10	51	44	68	55	35	206	162	51	99	42	62	94
11	48	46	43	44	33	365	103	53	100	43	71	69
12	49	45	36	40	33	248	110	53	91	41	117	67
13	55	45	38	42	38	207	99	64	79	156	77	61
14	63	47	35	65	33	215	146	77	61	160	69	69
15	43	43	37	46	36	194	126	58	56	82	67	70
16	43	48	34	43	36	170	113	49	49	61	62	59
17	47	41	39	37	38	165	101	47	54	57	63	61
18	42	51	37	36	39	160	94	47	56	52	64	60
19	46	37	35	42	46	154	89	54	52	53	71	59
20	45	40	35	52	48	152	88	49	57	76	63	54
21	43	39	40	874	41	147	89	51	54	64	74	115
22	41	38	38	265	81	143	91	46	55	82	61	492
23	43	37	34	115	86	144	90	72	58	91	59	139
24	46	39	35	1200	636	223	89	102	53	78	84	104
25	46	38	188	558	951	210	91	75	52	54	61	103
26	48	40	55	154	1390	178	89	89	51	63	65	121
27	48	42	49	105	444	163	110	64	54	56	64	97
28	46	43	36	98	310	154	101	60	52	61	60	64
29	44	44	38	92	---	148	88	59	60	74	59	83
30	44	51	43	70	---	148	82	53	71	62	60	85
31	47	---	41	63	---	146	---	50	---	54	58	---
TOTAL	1466	1299	1524	5137	4788	6488	3113	2048	2381	2093	2314	3449
MEAN	47.3	43.3	49.2	166	171	209	104	66.1	79.4	67.5	74.6	115
MAX	63	51	188	1200	1390	497	162	102	160	160	195	698
MIN	41	37	34	36	33	143	72	46	49	41	57	54
MEAN#	8.40	17.8	54.1	272	257	187	133	66.1	70.5	56.6	59.6	151
CFSM#	0.11	0.24	0.72	3.60	3.40	2.48	1.76	0.88	0.93	0.75	0.79	2.00
IN.#	0.13	0.27	0.83	4.15	3.54	2.86	1.96	1.02	1.04	0.86	0.91	2.23
CAL YR 1978 TOTAL	36125				1190	34	MEAN#	109	CFSM#	1.44	IN.#	19.62
WTR YR 1979 TOTAL	36100				1390	33	MEAN#	110	CFSM#	1.46	IN.#	19.78

Adjusted for change in contents in Lake Marburg.

CODORUS CREEK BASIN

01575000 SOUTH BRANCH CODORUS CREEK NEAR YORK, PA

LOCATION.--Lat 39°55'14", long 76°44'57", York County, Hydrologic Unit 02050306, on right bank 100 ft (30 m) downstream from dam at pumping station of York Water Co., 200 ft (60 m) upstream from Penn Central Railroad Bridge, 0.5 mi (0.8 km) upstream from mouth, and 3 mi (4.8 km) southwest of York.

DRAINAGE AREA.--117 mi² (303 km²).

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only prior to October 1931, published in WSP 1302. May 1925 to September 1927, gage heights and discharge measurements only in reports of Pennsylvania Department of Forests and Waters.

REVISED RECORDS.--WSP 1302: 1931. WSP 1502: 1932-33, 1941, 1948.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 373.03 ft (113.700 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 21, 1928, nonrecording gage at site 180 ft (55 m) upstream at datum 5.00 ft (1.524 m) higher. Nonrecording gage June 22, 1972 to Jan. 12, 1973 at present site.

REMARKS.--Records good except those for winter periods, which are fair. Regulation at low flow by pumping plant above station. Some regulation during entire period of record from reservoirs of York Water Company, combined capacity, 2,636,000,000 gal (9.978 hm³). Diversion above station for municipal supply of city of York. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--52 years, 135 ft³/s (3.823 m³/s), 15.67 in/yr (398 mm/yr), adjusted for diversion and, since October 1966, for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft³/s (756 m³/s) June 22, 1972, gage height, 22.62 ft (6.895 m), from floodmarks, from rating curve extended above 1,800 ft³/s (51.0 m³/s) on basis of slope-area, contracted opening, and contracted-opening and flow-over-road measurements at gage heights 9.04 ft (2.755 m), 17.97 ft (5.477 m), and 22.62 ft (6.895 m); no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,200 ft³/s (317 m³/s) Sept. 6, gage height, 12.48 ft (3.804 m), from rating curve extended as explained above; minimum, 5.1 ft³/s (0.14 m³/s) Nov. 23, gage height, 0.57 ft (0.174 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	17	32	61	145	414	140	122	96	91	22	19
2	30	17	19	330	125	365	151	117	86	112	191	22
3	19	17	25	174	118	361	163	114	152	67	131	22
4	14	12	52	101	105	393	177	107	252	77	58	16
5	15	13	56	118	97	461	220	98	153	96	38	30
6	50	19	31	99	93	534	208	87	162	95	38	4270
7	14	15	22	127	88	381	102	85	122	71	22	562
8	20	15	30	483	84	377	157	74	105	68	22	193
9	30	15	265	225	80	300	147	85	91	52	23	142
10	19	15	147	151	76	251	234	85	99	69	20	122
11	14	9.3	70	119	72	261	158	92	107	66	32	105
12	14	14	63	105	68	286	145	103	89	67	193	93
13	14	20	69	104	66	261	187	104	75	68	100	102
14	18	16	65	169	64	247	246	90	67	95	46	93
15	19	16	59	145	62	212	221	87	67	104	40	107
16	19	26	52	91	60	186	204	75	59	50	28	70
17	21	25	50	81	59	162	184	59	74	39	30	68
18	18	66	57	72	58	176	173	53	105	26	27	59
19	16	31	52	70	58	162	164	80	68	26	43	59
20	17	32	50	68	57	145	146	66	155	22	27	56
21	19	15	61	2880	57	142	146	65	29	26	27	107
22	18	20	39	1110	74	133	153	65	28	46	27	922
23	17	8.0	34	290	100	127	152	93	42	56	22	190
24	17	20	44	2890	1200	240	140	289	36	35	22	127
25	17	24	254	2340	1700	260	150	169	41	24	34	81
26	17	19	85	682	2700	188	132	225	45	25	35	110
27	20	22	63	290	82	172	156	136	36	22	33	96
28	12	36	52	259	557	153	170	124	52	15	29	89
29	15	35	41	207	---	136	145	103	134	46	28	107
30	16	54	32	189	---	148	122	104	79	43	20	98
31	16	---	33	185	---	138	---	78	---	23	17	---
TOTAL	593	663.3	2004	14215	8105	7772	4993	3234	2706	1722	1425	8137
MEAN	19.1	22.1	64.6	459	289	251	166	104	90.2	55.5	46.0	271
MAX	50	66	265	2890	2700	534	246	289	252	112	193	4270
MIN	12	8.0	19	61	57	127	102	53	28	15	17	16
(f)	29.3	28.6	28.0	28.6	29.5	31.0	29.5	31.7	32.1	31.4	32.6	30.6
MEAN#	51.1	50.4	92.6	489	318	282	196	136	122	86.9	78.6	302
CFSM#	.44	.43	.79	4.18	2.72	2.41	1.68	1.16	1.04	.74	.67	2.58
IN.#	.51	.48	.91	4.82	2.83	2.78	1.87	1.34	1.16	.85	.77	2.88

CAL YR 1978 TOTAL 54114.2 MEAN 148 MAX 5090 MIN 6.5 MEAN# 178 CFSM# 1.52 IN.# 20.66
WTR YR 1979 TOTAL 55569.3 MEAN 152 MAX 4270 MIN 8.0 MEAN# 183 CFSM# 1.56 IN.# 21.22

/ Diversion for municipal supply of City of York, equivalent in cubic feet per second, furnished by York Water Co.

Adjusted for diversion and change in reservoir contents.

CODORUS CREEK BASIN

01575500 CODORUS CREEK NEAR YORK, PA

LOCATION.--Lat 39°56'46", long 76°45'20", York County, Hydrologic Unit 02050306, on left bank 0.5 mi (0.8 km) upstream from Richland Avenue Bridge, 2 mi (3 km) downstream from South Branch Codorus Creek and 2 mi (3 km) southwest of York.

DRAINAGE AREA.--222 mi² (575 km²).

PERIOD OF RECORD.--August 1940 to current year. October 1915 to August 1923, August 1926 to September 1932 (gage heights and discharge measurements only) in reports of Pennsylvania Department of Forests and Waters. Published as "at York" 1915-32.

GAGE.--Water-stage recorder. Datum of gage is 356.39 ft (108.628 m) National Geodetic Vertical Datum of 1929, Corps of Engineers benchmark. Prior to Sept. 30, 1932, nonrecording gage at site 1.6 mi (2.6 km) downstream at different datum.

REMARKS.--Records good except those for periods of no gage height record Jan. 12 to Apr. 16, and those for winter periods, which are fair. Regulation at low flows by mills and pumping plant above station. Diversion above station for municipal supply of City of York. Flood flows regulated by Indian Rock Dam (station 01574700) and by three reservoirs (combined capacity, 21,385 mil gal (80.94 hm³)). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--39 years, 249 ft³/s (7.052 m³/s), 15.23 in/yr (387 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s (850 m³/s) June 22, 1972, gage height, 26.36 ft (8.035 m), from floodmark in gage shelter, from rating curve extended above 6,600 ft³/s (187 m³/s) on basis of slope-area measurements at gage heights 26.36 ft (8.034 m), and 20.11 ft (6.130 m); minimum 3.0 ft³/s (0.085 m³/s) Oct. 25, 1966, gage height, 1.40 ft (0.427 m), result of upstream shutoff.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,180 ft³/s (232 m³/s) Sept. 6, gage height, 13.53 ft (4.124 m); minimum discharge recorded, 61 ft³/s (1.73 m³/s) Oct. 24, Nov. 3, 10, minimum gage height recorded, 1.89 ft (0.576 m) Nov. 22, 23; minimum daily, 68 ft³/s (1.93 m³/s) Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	73	92	148	170	700	350	197	171	166	107	98
2	92	73	78	728	160	640	310	193	202	209	494	98
3	82	72	84	494	150	520	280	184	256	140	466	103
4	78	69	128	231	150	480	290	202	442	144	179	97
5	82	69	138	251	130	900	360	202	294	173	142	126
6	119	75	93	221	120	1500	300	179	371	164	134	3760
7	81	73	82	256	130	1200	230	175	267	144	112	1100
8	82	73	87	899	125	900	200	164	249	142	107	352
9	90	73	469	459	120	520	340	152	214	128	107	265
10	81	73	337	297	110	730	460	138	214	132	100	237
11	76	71	150	233	100	1100	300	150	221	125	115	214
12	76	72	125	210	98	800	290	171	204	125	311	198
13	82	81	128	190	97	620	280	179	177	126	244	178
14	103	76	125	330	96	660	350	188	148	352	140	185
15	85	76	114	280	105	560	430	164	136	256	132	214
16	84	89	110	220	110	500	380	146	132	140	117	161
17	89	85	110	150	110	490	360	128	144	128	117	159
18	85	136	112	140	115	480	330	121	175	110	115	148
19	78	92	105	130	130	460	291	150	136	107	132	142
20	72	92	105	130	140	450	270	134	228	102	100	138
21	73	78	121	5000	120	430	264	132	110	136	119	209
22	69	84	97	1700	230	420	262	132	103	175	121	1510
23	69	68	87	540	250	450	259	177	117	256	110	443
24	71	82	97	5000	2000	700	244	435	108	166	110	312
25	73	82	552	4000	3000	580	246	278	112	114	150	296
26	75	79	182	700	4200	510	233	355	114	115	136	291
27	79	84	152	370	1300	470	275	231	108	110	121	262
28	71	102	121	290	1000	430	275	212	121	98	115	202
29	71	103	107	230	---	420	226	191	214	136	115	216
30	71	132	100	200	---	410	202	182	193	134	108	228
31	75	---	102	190	---	400	---	154	---	100	92	---
TOTAL	2506	2487	4490	24217	14566	19430	8887	5796	5681	4653	4768	11942
MEAN	80.8	82.9	145	781	520	627	296	187	189	150	154	398
MAX	119	136	552	5000	4200	1500	460	435	442	352	494	3760
MIN	69	68	78	130	96	400	200	121	103	98	92	97
(f)	29.3	28.6	28.0	28.6	29.5	31.0	29.5	31.7	32.1	31.4	32.6	30.6
MEAN [#]	73.9	85.8	178	918	636	637	354	218	212	170	172	465
CFSM [#]	.33	.39	.80	4.14	2.86	2.87	1.59	.98	.95	.77	.77	2.09
IN. [#]	.38	.44	.92	4.77	2.98	3.31	1.77	1.13	1.06	.89	.89	2.33
CAL YR 1978 TOTAL	103564		MEAN 284	MAX 4900	MIN 66	MEAN [#] 303	CFSM [#] 1.36	IN. [#] 18.55				
WTR YR 1979 TOTAL	109423		MEAN 300	MAX 5000	MIN 68	MEAN [#] 341	CFSM [#] 1.54	IN. [#] 20.89				

/ Diversion for municipal supply of city of York, equivalent in cubic feet per second. Records of diversion and change in contents in four reservoirs furnished by York Water Co., P.H. Glatfelter Co., and Corps of Engineers.
[#] Adjusted for diversion and change in reservoir contents.

CODORUS CREEK BASIN

LAKE AND RESERVOIR IN CODORUS CREEK BASIN

01574390 LAKE MARBURG.--Lat 39°48'26", long 76°52'58", York County, Hydrologic Unit 02050306, at dam on West Branch Codorus Creek, 0.7 mi (1.1 km) upstream from Codorus Creek and 4.5 mi (7.2 km) south of Spring Grove. DRAINAGE AREA, 23.2 mi² (60.1 km²). PERIOD OF RECORD, October 1972 to current year in reports of Geological Survey; July 1972 to September 1974 in files of P. H. Glatfelter Co., Spring Grove. Records for period December 1966 to June 1972 were lost in the flood of June 1972. NONRECORDING GAGE. Datum of gage is National Geodetic Vertical Datum of 1929.

Lake is formed by earthfill dam with two bascule spillway gates. Each is 7 ft (2 m) high and 106.5 ft (32.5 m) long. Elevation of top of gates is 623.0 ft (189.89 m). Top of dam is at elevation 627.0 ft (191.11 m). Storage began in December 1966. Capacity at elevation 627.0 ft (191.11 m) is 53,210 acre-ft (65.6 hm³), at elevation 623.0 ft or 189.89 m (normal pool) is 47,680 acre-ft (58.8 hm³), and at elevation 616.0 ft or 187.76 m (crest of spillway) is 39,430 acre-ft (48.6 hm³). Lake is used for water supply and recreation. An average of about 3,380 acre-ft (4.17 hm³) is diverted from Codorus Creek into the lake each year. Records furnished by P. H. Glatfelter Company.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 47,680 acre-ft (58.8 hm³) many times (elevation, 623.00 ft or 189.890 m); minimum, 35,520 acre-ft (43.8 hm³) Dec. 3, 1978 (elevation, 612.20 ft or 186.599 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 47,680 acre-ft (58.8 hm³) March 3 to 15, and April 17 to June 16 (elevation, 623.00 ft or 189.890 m); minimum, 35,520 acre-ft (43.8 hm³) Dec. 3 (elevation, 612.20 ft or 186.599 m).

01574700 INDIAN ROCK DAM.--Lat 39°55'22", long 76°45'14", York County, Hydrologic Unit 02050306, at dam on Codorus Creek, 0.1 mi (0.2 km) upstream from mouth of South Branch Codorus Creek, 0.3 mi (0.5 km) west of pumping station of York Water Co., and 3 mi (5 km) southwest of York. DRAINAGE AREA, 93.7 mi² (242.7 km²). PERIOD OF RECORD, September 1962 to current year in reports of Geological Survey, September 1942 to August 1962 in files of Baltimore District, Corps of Engineers. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungated concrete spillway at elevation 435.0 ft (132.59 m). Reservoir completed in June 1942; storage began in June 1946. Capacity at elevation 435.0 ft (132.59 m) is 28,000 acre-ft (34.5 hm³). No dead storage. Reservoir is used for flood control. Figures given herein represent total contents. Flood storage is regulated by three vertical-lift tractor gates. Water is stored only during high flows and released when downstream conditions warrant. Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 30,200 acre-ft (37.2 hm³) June 23, 1972 (elevation, 436.44 ft or 133.027 m); minimum, no storage many times.

EXTREMES FOR CURRENT YEAR: Maximum contents, 4,530 acre-ft (5.59 hm³) Feb. 26 (elevation, 406.80 ft or 123.993 m); minimum, 10 acre-ft (12,300 hm³) Oct. 4 (elevation, 372.17 ft or 113.437 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
	01574390	Lake Marburg		01574700	Indian Rock Dam	
Sept. 30	616.2	39,640	--	372.42	13.3	--
Oct. 31	613.9	37,250	- 38.9	372.38	12.9	- 0.01
Nov. 30	612.4	35,730	- 25.5	372.88	17.3	+ 0.07
Dec. 31	612.7	36,030	+ 4.9	372.88	17.3	0.0
CAL YR 1978	--	--	- 10.2	--	--	- 0.03
Jan. 31	618.9	42,520	+106	374.37	35.0	+ 0.3
Feb. 28	622.7	47,280	+ 85.7	377.62	92.4	+ 1.0
Mar. 31	621.7	45,950	- 21.6	378.89	118	+ 0.4
Apr. 30	623.0	47,680	+ 29.1	377.50	90	- 0.5
May 31	623.0	47,680	0	372.49	13.8	- 1.2
June 30	622.6	47,150	- 8.9	372.70	15.7	+ 0.03
July 31	622.1	46,480	- 10.9	372.48	13.7	- 0.03
Aug. 31	621.4	45,560	- 15.0	372.95	18.0	+ 0.07
Sept. 30	623.0	47,680	+ 35.6	374.68	39.3	+ 0.4
WTR YR 1979	--	--	+ 11.1	--	--	+ 0.04

CHICKIES CREEK BASIN

01575730 CHICKIES CREEK AT PINCH ROAD NEAR MANHEIM, PA

LOCATION.--Lat 40°13'00", long 76°26'05", Lancaster County, Hydrologic Unit 02050306, on right bank, 20 ft (6.1 m) upstream from bridge on Pinch Road, 400 ft (122 m) upstream from an unnamed tributary on the right bank, .8 mi (1.3 km) from Shearers Creek, and 4.2 mi (6.8 km) north-northwest from Square on State Route 72 in Manheim, Pa.

DRAINAGE AREA.--5.83 mi² (15.10 km²).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 4, 1978 to current year (discontinued)

INSTRUMENTATION: Temperature recorder since October 4, 1978.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument. Stream ice covered during some periods of winter months.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 26.0°C July 17, 1979; minimum 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum 26.0°C; minimum, 0.0°C on many days during winter periods.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	11.5	6.5	8.5	---	---	---	5.5	2.5	3.5
2	---	---	---	10.5	5.5	8.0	---	---	---	6.0	3.5	5.5
3	---	---	---	11.5	5.5	8.5	---	---	---	3.5	.0	.5
4	---	---	---	10.0	7.0	8.5	---	---	---	---	---	---
5	14.0	11.5	13.5	12.5	7.0	9.0	---	---	---	---	---	---
6	13.0	11.0	11.5	12.5	7.0	9.5	---	---	---	2.5	.0	1.5
7	---	---	---	11.0	7.5	9.5	---	---	---	1.5	.5	1.0
8	---	---	---	11.0	7.0	9.5	---	---	---	2.0	.0	1.5
9	---	---	---	9.5	5.0	7.0	---	---	---	---	---	---
10	---	---	---	10.0	5.0	7.0	---	---	---	.5	.0	.0
11	---	---	---	10.0	6.0	8.0	---	---	---	---	---	---
12	---	---	---	10.0	6.5	8.5	---	---	---	---	---	---
13	---	---	---	9.0	8.0	8.5	---	---	---	---	---	---
14	---	---	---	12.5	8.5	10.0	2.5	.0	2.0	---	---	---
15	---	---	---	12.0	10.0	11.0	3.5	.0	1.5	---	---	---
16	---	---	---	10.0	8.0	9.0	4.0	.0	2.0	---	---	---
17	---	---	---	11.0	7.5	8.5	4.0	2.0	3.0	---	---	---
18	---	---	---	12.5	9.0	11.0	3.5	1.0	2.0	.0	.0	.0
19	---	---	---	10.0	6.5	8.0	2.0	.0	1.0	.0	.0	.0
20	---	---	---	8.5	4.5	6.5	1.5	.0	.5	.0	.0	.0
21	---	---	---	7.5	6.0	6.5	3.5	1.5	2.5	---	---	---
22	---	---	---	6.0	5.0	5.5	3.5	.5	1.5	2.0	.5	1.0
23	---	---	---	6.5	5.0	5.5	2.0	.0	.5	2.5	.5	2.0
24	---	---	---	9.0	6.0	7.5	2.5	.0	1.0	2.0	.5	1.5
25	---	---	---	6.0	4.5	5.0	3.5	1.5	2.5	2.0	1.0	1.5
26	---	---	---	5.0	2.5	3.5	2.5	.5	1.5	3.5	1.5	2.5
27	---	---	---	2.5	.0	.5	2.0	.0	1.0	5.0	2.0	3.0
28	---	---	---	4.0	1.0	2.5	---	---	---	3.5	2.0	2.5
29	---	---	---	---	---	---	.5	.0	.0	4.5	2.5	3.0
30	---	---	---	---	---	---	.5	.0	.0	3.5	2.0	2.5
31	---	---	---	---	---	---	2.5	.5	1.5	2.0	.5	1.5
MONTH	14.0	11.0	12.5	12.5	.0	7.5	4.0	.0	1.5	6.0	.0	1.5

CHICKIES CREEK BASIN

01575730 CHICKIES CREEK AT PINCH ROAD NEAR MANHEIM, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	18.5	11.0	14.0
2	---	---	---	---	---	---	---	---	---	17.5	9.0	13.0
3	---	---	---	---	---	---	---	---	---	15.0	10.5	13.0
4	---	---	---	---	---	---	---	---	---	14.5	12.5	13.0
5	---	---	---	---	---	---	---	---	---	16.5	11.0	13.0
6	---	---	---	6.5	5.5	6.5	---	---	---	16.0	10.0	12.5
7	---	---	---	7.5	4.5	6.0	---	---	---	18.5	11.0	14.5
8	---	---	---	8.5	5.0	6.0	---	---	---	20.0	13.0	16.0
9	---	---	---	9.0	5.0	7.0	---	---	---	21.5	14.0	17.0
10	---	---	---	8.0	7.0	7.5	---	---	---	21.5	15.5	18.0
11	---	---	---	8.0	5.0	6.5	---	---	---	21.5	16.0	18.0
12	---	---	---	7.5	2.0	4.0	---	---	---	17.5	16.0	16.5
13	---	---	---	9.0	2.0	5.5	---	---	---	17.0	16.0	16.0
14	---	---	---	9.0	5.5	6.5	---	---	---	17.0	15.0	15.5
15	---	---	---	6.0	2.5	4.5	---	---	---	18.5	14.0	16.0
16	.0	.0	.0	6.5	.5	3.5	---	---	---	17.0	13.5	15.0
17	.0	.0	.0	8.5	3.0	5.5	---	---	---	---	---	---
18	.0	.0	.0	9.5	4.5	6.5	---	---	---	16.0	12.0	14.0
19	.5	.0	.5	9.0	4.0	6.5	16.0	7.0	11.0	16.0	14.0	14.5
20	.5	.0	.5	10.0	4.5	7.0	16.5	7.0	11.5	18.0	14.0	15.5
21	.5	.5	.5	10.5	2.5	7.5	17.5	6.5	12.5	15.5	14.0	14.5
22	1.0	.5	.5	12.0	6.0	8.5	16.0	9.5	12.5	17.5	13.5	15.0
23	1.0	.5	1.0	12.5	6.5	9.0	19.0	9.0	14.5	15.5	14.0	14.5
24	1.0	1.0	1.0	10.5	9.5	10.0	16.5	11.0	13.5	---	---	---
25	2.0	1.0	1.5	10.0	6.0	8.5	21.0	13.0	16.5	---	---	---
26	2.5	1.5	2.0	---	---	---	17.0	14.5	15.5	---	---	---
27	4.0	2.5	3.5	---	---	---	15.0	12.0	14.0	---	---	---
28	7.0	2.5	4.0	---	---	---	17.0	9.5	13.0	---	---	---
29	---	---	---	---	---	---	17.5	10.5	13.5	---	---	---
30	---	---	---	---	---	---	18.5	9.0	13.5	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	7.0	.0	1.0	12.5	.5	6.5	21.0	6.5	13.5	21.5	9.0	15.0

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

CHICKIES CREEK BASIN

01575732 SHEARERS CREEK AT MOUNTAIN ROAD NEAR MANHEIM, PA

LOCATION.--Lat 40°13'24", long 76°25'33", Lancaster County, Hydrologic Unit 02050306, on right bank, 20 ft (6 m) upstream from bridge on Mountain Road, 1.4 mi (2.2 km) upstream from mouth, and 4.4 mi (7.1 km) north-northwest from the Square on State Route 72 in Manheim, Pa.

DRAINAGE AREA.--5.82 mi² (15.07 km²).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 4, 1978 to current year (discontinued).

INSTRUMENTATION: Temperature recorder since October 4, 1978.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument. Stream ice covered during periods of winter months.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum 24.5°C October 22, 1978; minimum -1.0°C on a few days during December 1978 and January 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum 24.5°C October 22; minimum -1.0°C on a few days during December and January.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	5.0	2.5	3.0
2	---	---	---	---	---	---	4.0	4.0	4.0	5.5	3.5	5.0
3	---	---	---	---	---	---	4.0	4.0	4.0	3.5	-1.0	.5
4	15.0	13.0	14.0	---	---	---	4.0	4.0	4.0	.0	-1.0	-1.0
5	14.5	12.5	13.5	---	---	---	4.0	3.5	4.0	.5	-1.0	.0
6	15.5	13.0	14.5	---	---	---	4.0	4.0	4.0	.5	.0	.5
7	13.5	12.0	12.5	---	---	---	4.0	4.0	4.0	.5	.5	.5
8	11.5	9.0	10.5	---	---	---	---	---	---	.5	.0	.5
9	12.0	8.5	10.0	---	---	---	---	---	---	.0	-1.0	-0.5
10	12.5	6.5	10.0	---	---	---	---	---	---	---	---	---
11	14.0	9.5	11.5	---	---	---	---	---	---	---	---	---
12	15.5	9.0	13.0	---	---	---	---	---	---	---	---	---
13	15.5	9.5	13.5	---	---	---	---	---	---	---	---	---
14	15.5	12.5	14.0	---	---	---	---	---	---	---	---	---
15	12.5	9.5	11.0	---	---	---	---	---	---	---	---	---
16	10.5	8.0	9.5	---	---	---	4.5	1.0	2.5	---	---	---
17	12.0	9.0	10.0	---	---	---	4.5	2.0	3.0	---	---	---
18	10.5	6.0	9.0	---	---	---	3.5	1.5	2.5	---	---	---
19	11.5	9.0	10.5	---	---	---	2.0	.5	1.5	---	---	---
20	12.0	9.5	10.5	---	---	---	2.0	1.0	1.5	---	---	---
21	12.5	7.5	10.0	---	---	---	3.5	2.0	2.5	---	---	---
22	24.5	9.0	11.0	---	---	---	3.5	1.0	2.0	---	---	---
23	14.0	10.0	12.5	---	---	---	3.5	.0	1.5	---	---	---
24	11.5	8.5	10.0	---	---	---	2.0	.0	1.0	---	---	---
25	11.0	6.5	8.5	---	---	---	3.0	2.0	2.0	---	---	---
26	11.5	9.5	10.5	5.0	2.5	3.5	2.5	1.5	2.0	---	---	---
27	12.5	9.0	11.0	2.5	.0	.5	2.0	1.0	1.5	---	---	---
28	12.0	7.0	9.0	4.0	1.0	2.5	1.5	-0.5	.5	---	---	---
29	11.5	7.5	9.0	4.0	1.0	3.0	.5	-1.0	-0.5	---	---	---
30	---	---	---	4.0	4.0	4.0	1.5	-1.0	-0.5	---	---	---
31	---	---	---	---	---	---	2.5	1.5	2.0	---	---	---
MONTH	24.5	6.0	11.0	5.0	.0	2.5	4.5	-1.0	2.0	5.5	-1.0	1.0

CHICKIES CREEK BASIN

01575732 SHEARERS CREEK AT MOUNTAIN ROAD NEAR MANHEIM, PA--Continued
 TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	5.0	2.0	4.0	13.0	10.0	11.5	---	---	---
2	---	---	---	5.5	3.0	4.0	11.0	9.0	9.5	---	---	---
3	---	---	---	5.5	3.5	4.5	9.0	7.5	8.5	---	---	---
4	---	---	---	5.5	4.0	5.0	7.5	7.0	7.0	14.5	12.5	13.0
5	---	---	---	6.0	5.5	6.0	9.0	6.5	7.5	16.5	11.0	13.0
6	---	---	---	6.5	5.5	6.0	9.5	5.0	7.0	16.0	10.0	12.5
7	---	---	---	7.0	4.0	5.5	9.5	4.0	6.5	18.5	11.0	14.5
8	---	---	---	7.5	4.0	5.5	7.0	4.0	6.0	20.0	13.0	16.0
9	---	---	---	7.5	4.0	6.0	6.5	5.5	6.0	21.5	14.0	17.0
10	---	---	---	7.0	6.5	6.5	10.0	4.5	7.0	21.5	15.5	18.0
11	---	---	---	6.5	3.5	5.5	11.0	5.0	8.0	21.5	16.0	18.0
12	---	---	---	6.0	2.0	4.0	9.0	8.0	8.5	17.5	16.0	16.5
13	---	---	---	7.0	2.5	5.0	8.5	7.0	8.0	17.0	16.0	16.0
14	---	---	---	7.5	5.0	6.5	9.5	6.5	8.0	17.0	15.0	15.5
15	---	---	---	6.0	2.5	4.0	10.0	7.0	8.5	18.5	14.0	16.0
16	.0	.0	.0	6.5	2.0	3.5	9.0	7.5	8.5	17.0	13.5	15.0
17	.0	.0	.0	8.0	2.5	5.0	9.5	7.0	8.5	17.0	11.5	14.0
18	.0	.0	.0	9.0	4.0	6.0	13.0	7.0	9.5	15.5	12.0	13.5
19	.0	.0	.0	9.0	4.0	6.0	13.5	7.0	9.5	15.0	14.0	14.5
20	.0	.0	.0	9.5	4.0	6.5	14.0	6.5	10.0	16.5	13.5	14.5
21	.0	.0	.0	10.0	2.0	7.0	15.5	7.5	11.0	14.5	13.5	14.0
22	.5	.0	.0	11.5	5.5	8.0	14.5	9.0	11.5	16.0	13.0	14.5
23	1.5	.5	1.0	12.0	6.5	8.5	16.0	10.5	12.5	15.0	13.5	14.0
24	1.0	.0	.5	9.5	9.0	9.5	14.5	11.0	12.5	16.0	14.5	15.0
25	1.5	.5	1.0	9.5	5.5	8.0	18.0	12.5	14.5	16.0	14.0	14.5
26	1.5	.5	1.0	7.0	4.5	6.0	15.5	13.0	14.0	14.0	12.5	13.5
27	2.5	1.5	2.0	7.0	4.0	5.0	16.0	16.0	15.5	13.0	12.0	12.5
28	5.0	1.5	3.0	9.0	3.0	5.5	---	---	---	14.0	9.5	13.0
29	---	---	---	10.5	5.5	7.5	---	---	---	15.0	12.0	13.5
30	---	---	---	12.5	8.0	10.0	---	---	---	15.5	12.5	14.0
31	---	---	---	13.5	9.0	11.0	---	---	---	---	---	---
MONTH	5.0	.0	.5	13.5	2.0	6.0	18.0	4.0	9.5	21.5	9.5	14.5

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

CHICKIES CREEK BASIN

01575735 CHICKIES CREEK ABOVE MANHEIM LAKE NEAR MANHEIM, PA

LOCATION.--Lat 40°12'21", long 76°24'10", Lancaster County, Hydrologic Unit 02050306, on right bank, 1,020 ft (311 m) upstream from east property line of Frey Farm, 0.6 mi (1.0 km) upstream from dam at Manheim Lake, 1.0 mi (1.6 km) downstream from the highway bridge on State Route 72, and 2.9 mi (4.7 km) north-northwest from the square on State Route 72 in Manheim, Pa.

DRAINAGE AREA.--12.6 mi² (32.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1978 to current year (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 430 ft (131 m) from topographic map.

REMARKS.--Records good except those for period of missing record, Jan. 24, and winter periods, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 973 ft³/s (27.6 m³/s) Jan. 24, 1979, gage height, 8.40 ft (2.56 m); from floodmarks, from rating curve extended above 350 ft³/s (9.91 m³/s); minimum, 1.2 ft³/s (0.034 m³/s) Aug. 25, 1979, gage height 3.52 ft (1.073 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 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	1345	202 5.72	6.46 1.969	Feb. 24	2400	294 8.33	6.84 2.085
Jan. 8	0445	220 6.23	6.55 1.996	Feb. 26	0430	499 14.1	7.40 2.256
Jan. 21	0830	277 7.84	6.78 2.066	Sept. 6	0745	344 9.74	7.00 2.134
Jan. 24	Unknown	*973 27.6	*8.40 2.560				

Minimum discharge, 1.2 ft³/s (0.034 m³/s) Aug. 25, gage height, 3.52 ft (1.073 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.3	9.9	52	28	57	17	16	13	6.5	4.0	2.5
2	3.4	3.3	6.9	140	30	58	23	16	13	6.1	21	2.6
3	3.5	3.3	6.5	53	26	51	33	18	54	5.1	12	2.5
4	4.1	3.3	22	34	20	48	34	23	47	5.6	5.4	2.5
5	6.0	3.4	18	28	19	110	47	17	20	6.3	4.2	8.6
6	14	3.4	11	23	19	99	25	15	19	4.7	3.7	178
7	4.3	3.6	8.6	45	18	65	22	13	16	4.2	4.5	15
8	3.6	3.3	12	155	17	52	21	12	14	4.0	3.6	8.1
9	3.1	3.3	75	55	17	43	38	11	13	3.9	3.1	6.5
10	2.9	3.3	33	47	16	47	48	10	12	3.9	3.1	5.7
11	3.1	3.3	15	39	16	71	27	9.5	13	4.0	3.4	5.3
12	3.4	3.4	12	30	16	40	27	9.5	12	3.7	9.7	5.0
13	4.1	3.6	12	31	15	34	27	12	10	3.7	7.1	4.8
14	13	3.4	11	40	15	35	52	13	9.2	4.0	3.9	7.0
15	5.0	3.1	9.5	31	15	30	33	10	8.6	4.4	3.4	8.0
16	4.8	4.9	8.8	26	14	26	27	10	8.1	4.7	3.1	4.8
17	4.6	6.1	9.2	22	14	25	26	9.0	8.8	3.6	3.0	4.2
18	4.0	11	8.3	25	14	23	24	9.5	8.6	3.3	3.0	4.0
19	3.8	5.6	7.9	27	14	22	22	14	7.3	3.3	3.7	3.8
20	3.7	4.4	7.7	24	13	21	20	11	6.7	3.3	2.6	3.6
21	3.6	3.9	17	233	13	20	20	10	6.5	27	2.2	34
22	3.5	3.7	12	78	13	19	19	10	6.7	9.5	2.0	84
23	3.4	4.0	9.7	43	50	18	18	15	7.1	5.9	1.6	16
24	3.3	6.5	15	481	228	22	18	54	6.1	6.5	1.6	9.9
25	3.3	4.9	95	252	232	26	18	38	5.9	5.1	1.4	7.7
26	3.4	4.5	24	85	294	22	18	41	5.4	4.7	3.4	6.9
27	4.0	6.1	18	67	89	19	36	20	5.2	4.7	3.3	5.9
28	3.9	6.3	20	54	62	17	26	17	5.1	4.4	2.8	5.7
29	3.4	7.3	18	44	---	17	17	17	5.1	4.5	3.1	6.1
30	3.4	15	16	37	---	16	16	14	9.5	5.4	2.7	5.6
31	3.4	---	15	31	---	16	---	15	---	4.0	2.6	---
TOTAL	136.2	144.5	564.0	2332	1337	1169	799	509.5	375.9	170.0	134.2	464.3
MEAN	4.39	4.82	18.2	75.2	47.8	37.7	26.6	16.4	12.5	5.48	4.33	15.5
MAX	14	15	95	481	294	110	52	54	54	27	21	178
MIN	2.9	3.1	6.5	22	13	16	16	9.0	5.1	3.3	1.4	2.5
CFSM	.35	.38	1.44	5.97	3.79	2.99	2.11	1.30	.99	.44	.34	1.23
IN.	.40	.43	1.67	6.88	3.95	3.45	2.36	1.50	1.11	.50	.40	1.37

WTR YR 1979 TOTAL 8135.6 MEAN 22.3 MAX 481 MIN 1.4 CFSM 1.77 IN 24.02

CHICKIES CREEK BASIN

01575735 CHICKIES CREEK ABOVE MANHEIM LAKE NEAR MANHEIM, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 23, 1978 to current year (discontinued).

INSTRUMENTATION.--Temperature recorder since October 23, 1978.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument. Stream ice-covered during some periods of winter months.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum 27.5°C July 17, August 5, 6, 7, 10, 30, 1979; minimum -1.0°C on few days in January 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum 27.5°C July 17, August 5, 6, 7, 10, 30; minimum -1.0°C on few days in January.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---				5.5	3.0	4.5	---	---	---
2	---	---	---				5.0	2.0	3.5	---	---	---
3	---	---	---				5.5	4.0	4.5	---	---	---
4	---	---	---				9.5	5.5	7.5	---	---	---
5	---	---	---				8.5	5.5	7.0	---	---	---
6	---	---	---				7.0	4.5	5.5	---	---	---
7	---	---	---				7.0	3.5	5.5	---	---	---
8	---	---	---				9.0	7.0	8.5	---	---	---
9	---	---	---				9.0	5.5	8.0	---	---	---
10	---	---	---				5.5	2.5	4.0	---	---	---
11	---	---	---				3.0	2.0	2.5	---	---	---
12	---	---	---				4.0	1.5	2.5	.5	-0.5	.5
13	---	---	---				---	---	---	1.0	-0.5	.5
14	---	---	---				---	---	---	1.5	.5	1.0
15	---	---	---				---	---	---	.0	-0.5	.0
16	---	---	---				---	---	---	.5	-0.5	.5
17	---	---	---				---	---	---	.5	-0.5	.0
18	---	---	---				---	---	---	.0	-0.5	-0.5
19	---	---	---				---	---	---	-0.5	-1.0	-0.5
20	---	---	---				---	---	---	-0.5	-1.0	-0.5
21	---	---	---				---	---	---	-0.5	-1.0	-0.5
22	---	---	---				---	---	---	---	---	---
23	---	---	---				---	---	---	---	---	---
24	12.0	5.5	8.0				---	---	---	---	---	---
25	12.0	7.0	9.0				---	---	---	---	---	---
26	---	---	---				---	---	---	---	---	---
27	---	---	---				---	---	---	---	---	---
28	---	---	---				---	---	---	---	---	---
29	---	---	---				---	---	---	---	---	---
30	---	---	---				---	---	---	5.0	4.0	4.0
31	---	---	---				---	---	---	4.0	2.0	3.5
MONTH	12.0	5.5	8.5				9.5	1.5	5.5	5.0	-1.0	.5

CHICKIES CREEK BASIN

01575735 CHICKIES CREEK ABOVE MANHEIM LAKE NEAR MANHEIM, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.0	2.0	2.5	5.5	2.0	3.5	15.5	11.0	13.0	18.5	11.0	14.5
2	2.5	2.0	2.0	6.0	3.0	4.5	13.0	8.5	9.5	18.0	9.0	13.5
3	2.0	2.0	2.0	6.0	3.0	4.5	9.5	7.5	9.0	15.0	10.5	13.0
4	3.5	2.0	2.5	5.5	4.0	4.5	7.5	6.0	6.5	16.0	12.0	14.0
5	2.5	1.5	2.0	6.0	5.5	5.5	9.5	6.0	7.5	19.5	10.5	14.5
6	2.0	1.5	1.5	6.5	5.5	6.0	10.5	5.0	7.0	18.5	10.0	14.0
7	2.0	1.5	2.0	8.0	4.0	5.5	9.0	3.0	6.0	22.5	11.5	16.5
8	2.0	1.5	1.5	9.0	3.5	5.5	7.0	3.5	5.0	24.0	14.0	18.5
9	2.0	1.5	1.5	---	---	---	5.0	3.0	4.0	26.0	15.5	20.5
10	1.5	1.5	1.5	---	---	---	12.5	3.5	7.5	26.5	17.0	21.5
11	1.5	1.5	1.5	---	---	---	13.0	5.0	9.5	---	---	---
12	1.5	1.5	1.5	---	---	---	9.0	7.0	8.0	---	---	---
13	---	---	---	---	---	---	11.5	4.0	7.5	---	---	---
14	---	---	---	---	---	---	11.5	5.5	8.0	---	---	---
15	---	---	---	---	---	---	10.5	5.0	8.0	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	.0	.0	.0	---	---	---	---	---	---	---	---	---
18	.0	.0	.0	---	---	---	---	---	---	17.0	12.5	15.0
19	.0	.0	.0	---	---	---	15.0	6.5	10.0	17.0	14.0	15.5
20	.0	.0	.0	---	---	---	16.0	6.5	11.0	21.0	14.0	17.0
21	.0	.0	.0	---	---	---	17.0	7.0	12.0	17.0	14.0	15.5
22	.0	.0	.0	---	---	---	16.0	9.0	12.0	20.0	14.0	16.5
23	.0	.0	.0	---	---	---	18.0	10.5	14.0	17.0	14.5	15.5
24	.0	.0	.0	---	---	---	16.0	10.5	13.0	17.5	15.0	16.0
25	.5	.0	.5	---	---	---	20.5	12.5	16.0	18.0	14.5	15.5
26	1.0	.0	.5	---	---	---	16.5	14.0	15.0	15.5	13.0	14.0
27	3.0	1.0	2.0	8.5	3.5	5.5	15.0	12.0	14.0	14.0	11.5	12.5
28	6.0	1.0	3.0	11.0	3.0	6.5	17.5	10.0	13.5	16.0	12.0	14.0
29	---	---	---	13.5	5.5	9.5	17.5	10.0	13.5	20.0	12.0	15.5
30	---	---	---	15.0	9.0	11.5	19.0	9.0	13.5	20.5	13.0	16.5
31	---	---	---	15.5	10.0	13.0	---	---	---	19.0	14.5	16.5
MONTH	6.0	.0	1.0	15.5	2.0	6.5	20.5	3.0	10.0	26.5	9.0	15.5

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

CHICKIES CREEK BASIN

01575741 CHICKIES CREEK AT HAMAKER ROAD AT MANHEIM, PA

LOCATION.--Lat 40°10'35", long 76°23'26", Lancaster County, Hydrologic Unit 02050306, on left downstream retaining wall of bridge on Hamaker Road, 1.4 mi (2.2 km) upstream from Doe Run, 2.4 mi (3.9 km) downstream from the dam at Manheim Lake, and 0.9 mi (1.4 km) north-northeast of the Square on State Route 72 in Manheim, Pa.

DRAINAGE AREA.--21.4 mi² (55.4 km²).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 13, 1978 to current year (discontinued).

INSTRUMENTATION.--Temperature recorder since December 13, 1978.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument. Stream ice-covered during some periods of winter months.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum 29.0°C July 17, Aug. 5, 1979; minimum 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum 29.0°C July 17, Aug. 5; minimum 0.0°C on many days during winter periods.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1							---	---	---	5.0	2.5	3.5
2							---	---	---	6.0	4.5	5.5
3							---	---	---	4.0	.0	1.0
4							---	---	---	1.0	.0	.5
5							---	---	---	2.0	.5	1.0
6							---	---	---	2.5	.5	1.5
7							---	---	---	2.0	1.0	1.5
8							---	---	---	2.0	.5	1.0
9							---	---	---	1.5	.0	.5
10							---	---	---	1.5	.0	.5
11							---	---	---	1.5	.0	.5
12							---	---	---	.5	.0	.5
13							5.0	1.0	2.5	2.0	.5	1.0
14							3.5	1.5	2.5	3.0	.0	2.0
15							3.0	1.0	1.5	.5	.0	.5
16							3.5	1.0	2.5	2.0	.5	1.0
17							4.0	2.0	3.0	1.0	.0	.5
18							2.5	1.0	2.0	.5	.0	.5
19							2.0	.5	1.0	.5	.0	.0
20							1.5	1.0	1.0	.5	.0	.5
21							3.0	1.5	2.0	.5	.5	.5
22							3.0	1.0	2.0	2.0	.5	1.5
23							2.5	.0	1.5	3.0	.5	2.0
24							2.0	.0	1.0	2.0	1.0	1.5
25							3.5	2.0	2.5	2.0	1.0	1.5
26							3.0	1.0	2.0	4.0	1.5	3.0
27							2.5	.0	1.5	5.5	3.0	4.0
28							1.0	.5	.5	4.0	2.5	3.0
29							1.0	.0	.5	5.0	2.5	4.0
30							1.5	.0	1.0	---	---	---
31							2.5	1.5	2.0	---	---	---
MONTH							5.0	.0	1.5	6.0	.0	1.5

CHICKIES CREEK BASIN

01575741 CHICKIES CREEK AT HAMAKER ROAD AT MANHEIM, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	6.5	2.5	4.5	15.5	12.5	14.0	16.0	11.0	13.5
2	---	---	---	7.5	4.0	5.5	14.5	9.5	11.0	14.0	9.0	12.0
3	---	---	---	7.0	4.0	5.5	10.5	9.0	10.0	14.0	14.0	14.0
4	---	---	---	6.5	5.0	6.0	9.0	7.0	7.5	17.0	14.0	15.5
5	---	---	---	7.5	6.5	7.0	11.0	7.0	8.5	19.0	12.5	15.5
6	---	---	---	7.5	6.0	7.0	10.5	6.0	8.0	19.0	13.0	16.0
7	---	---	---	9.0	4.0	6.5	9.0	2.5	6.0	21.5	14.5	18.0
8	---	---	---	9.5	4.0	6.5	7.5	4.0	6.0	23.5	17.0	20.5
9	---	---	---	10.5	4.5	7.5	7.0	5.0	5.5	25.5	19.5	23.0
10	---	---	---	8.5	7.0	7.5	12.0	4.5	8.0	26.0	21.0	24.0
11	---	---	---	8.0	3.0	6.0	12.5	5.0	9.0	26.5	21.5	24.0
12	---	---	---	7.5	1.5	4.5	11.5	8.5	9.0	24.5	20.5	21.5
13	---	---	---	10.0	3.5	6.5	9.0	7.0	7.5	20.5	20.0	20.5
14	---	---	---	9.5	7.0	8.0	11.0	5.5	8.0	20.0	17.5	19.0
15	---	---	---	7.0	3.0	5.0	10.5	7.0	9.0	22.5	17.5	20.0
16	.5	.5	.5	7.5	1.5	4.5	9.0	7.0	8.0	22.0	18.0	20.0
17	.5	.0	.5	11.0	3.0	7.0	10.0	7.0	8.5	21.0	16.0	18.5
18	.5	.0	.5	12.0	5.5	8.5	12.5	5.5	9.0	19.0	17.0	18.0
19	.5	.0	.5	11.5	5.0	8.5	13.0	6.5	10.0	18.0	16.5	17.5
20	.5	.0	.5	12.0	6.0	9.0	14.0	7.0	10.5	20.5	17.0	18.5
21	.5	.5	.5	12.5	7.0	10.0	14.5	7.5	11.5	20.0	18.0	18.5
22	.5	.5	.5	14.0	7.5	11.0	14.0	9.5	12.0	20.5	16.5	18.5
23	.5	.5	.5	14.0	9.0	12.0	16.0	10.5	13.5	19.5	17.0	18.5
24	.5	.5	.5	13.0	12.0	12.5	15.0	11.0	12.5	20.0	16.5	18.0
25	.5	.5	.5	12.0	9.0	10.5	17.5	12.5	15.0	19.5	16.5	18.0
26	1.5	.5	1.0	8.5	5.5	7.0	16.5	14.0	14.5	17.0	14.5	16.0
27	3.5	1.5	2.0	7.5	4.0	6.0	14.0	12.5	13.5	15.5	13.0	14.5
28	6.5	2.0	4.0	9.5	3.5	7.0	15.5	9.0	12.0	17.5	14.5	15.5
29	---	---	---	13.0	7.0	10.0	15.0	10.0	12.5	20.5	14.5	17.0
30	---	---	---	14.5	11.0	13.0	15.5	9.0	12.5	21.0	16.0	18.5
31	---	---	---	15.0	12.0	14.0	---	---	---	20.0	16.5	18.0
MONTH	6.5	.0	1.0	15.0	1.5	8.0	17.5	2.5	10.0	26.5	9.0	18.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	19.5	17.0	18.0	24.0	20.0	21.5	28.0	24.5	26.0	25.5	22.0	24.0
2	19.0	17.0	18.0	21.5	20.0	20.5	27.0	23.5	25.5	26.5	23.0	24.5
3	18.5	17.0	17.5	24.5	19.0	21.5	25.5	22.5	23.5	26.5	24.0	25.0
4	21.5	16.0	18.0	21.5	16.5	19.0	28.0	24.0	25.5	27.0	23.5	25.5
5	22.0	16.0	19.0	18.5	14.5	16.5	29.0	24.0	26.0	26.5	24.0	25.0
6	21.0	17.5	19.0	21.0	16.0	18.5	28.0	24.5	26.0	25.0	23.0	24.0
7	22.5	17.0	19.5	23.0	12.0	19.0	27.0	22.5	24.5	24.5	21.5	23.5
8	23.0	19.5	21.5	24.5	18.5	21.0	28.0	24.0	25.5	24.0	20.5	22.0
9	23.5	21.0	22.0	24.5	19.5	22.0	27.5	24.0	25.5	21.5	17.0	19.5
10	23.5	20.5	22.0	22.5	21.0	21.5	27.5	24.0	25.5	21.5	17.0	19.0
11	22.0	17.5	19.5	24.5	20.5	21.5	25.0	21.5	24.0	22.5	19.0	20.5
12	20.5	14.5	17.5	27.0	22.0	24.0	21.5	18.0	19.0	22.5	18.0	20.0
13	21.0	16.0	18.5	27.5	23.5	25.0	22.5	17.0	19.5	23.0	19.0	21.0
14	22.0	16.0	19.0	27.5	24.5	26.0	22.0	20.0	21.0	24.5	21.0	22.5
15	23.5	18.0	21.0	26.5	24.0	25.0	21.0	18.0	19.5	23.0	19.5	21.0
16	24.0	20.5	22.5	28.0	24.5	26.0	22.5	17.0	19.0	21.5	17.0	19.0
17	23.5	21.5	23.0	29.0	24.5	26.5	21.5	17.0	19.0	22.0	17.5	19.5
18	24.0	22.0	23.0	27.0	24.5	25.5	19.5	18.0	18.5	22.0	17.5	19.5
19	25.0	20.5	22.5	27.5	22.5	25.0	22.5	18.5	20.0	22.0	19.5	20.5
20	25.0	21.0	23.0	25.0	23.5	24.0	25.0	20.5	22.5	19.5	15.5	17.5
21	23.0	21.0	22.0	23.5	21.0	22.5	24.0	21.5	22.5	19.5	16.5	17.5
22	23.5	20.0	21.5	24.0	20.5	22.5	25.0	20.0	22.5	19.0	18.0	18.5
23	25.5	21.0	23.0	24.0	21.5	23.0	23.5	21.0	22.0	20.0	17.0	18.0
24	24.5	20.0	22.0	24.0	21.5	22.5	25.5	21.5	23.5	18.0	15.0	16.5
25	24.0	17.5	20.5	26.5	22.5	24.5	27.0	23.5	25.0	17.5	15.5	16.5
26	25.5	19.5	22.0	25.5	24.0	25.0	26.5	24.0	25.0	19.0	15.5	17.0
27	24.0	20.0	22.0	25.0	22.5	24.0	26.5	24.0	25.0	19.0	16.0	17.5
28	21.5	18.5	20.0	24.5	22.0	23.5	27.0	24.0	25.5	18.5	17.0	18.0
29	22.0	18.5	20.0	23.5	21.5	22.5	25.5	24.0	25.0	20.5	18.5	19.5
30	22.0	20.0	21.0	24.5	21.0	22.5	27.0	23.5	25.0	20.0	19.0	20.0
31	---	---	---	27.0	23.5	25.0	27.0	23.5	25.0	---	---	---
MONTH	25.5	14.5	20.5	29.0	12.0	23.0	29.0	17.0	23.5	27.0	15.0	20.5

CHICKIES CREEK BASIN

01575744 DOE RUN BELOW OAK ROAD AT MANHEIM, PA

LOCATION.--Lat 40°09'38", long 76°23'12", Lancaster County, Hydrologic Unit 02050306, on right bank 800 ft (244 m) upstream from mouth, 250 ft (76 m) downstream from bridge on Oak Road, and 0.5 mi (.8 km) east-southeast from the Square on State Route 72 in Manheim, Pa.

DRAINAGE AREA.--5.38 mi² (13.93 km²).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 4, 1978 to current year (discontinued).

INSTRUMENTATION.--Temperature recorder since October 4, 1978.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 30.5°C May 9, July 14, 1979; minimum, 0.0°C on several days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 30.5°C May 9, July 14; minimum 0.0°C freezing point on several days during winter periods.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	21.5	16.0	18.5	14.0	3.5	11.0	9.0	5.0	6.5
2	---	---	---	17.5	11.0	14.5	6.0	1.5	4.0	9.0	5.5	7.5
3	---	---	---	20.5	10.5	15.5	10.5	3.5	5.0	5.5	1.5	2.5
4	---	---	---	18.5	7.5	12.0	16.0	9.0	12.0	4.0	2.0	3.0
5	22.5	17.0	21.0	14.0	6.0	10.0	12.5	9.0	10.5	6.5	2.5	4.5
6	20.5	13.5	17.0	22.5	12.0	19.5	14.0	9.0	11.0	7.0	3.5	5.0
7	15.0	11.0	13.0	21.5	17.0	19.5	14.5	9.5	12.0	5.0	3.0	4.0
8	15.5	9.0	10.5	21.0	17.0	19.0	16.5	9.5	13.5	4.5	2.0	3.5
9	19.5	11.0	15.0	21.0	15.5	18.5	11.0	4.0	8.0	5.5	2.0	3.5
10	21.0	14.0	16.5	21.0	11.0	18.5	3.5	.5	2.0	6.0	3.0	4.0
11	21.0	14.5	17.5	12.5	9.5	10.5	7.0	.5	4.0	6.0	2.5	3.5
12	22.5	17.5	19.5	17.0	9.0	10.5	9.0	2.0	5.5	5.5	3.5	4.0
13	22.0	17.0	20.0	19.5	16.5	18.0	10.5	2.0	6.5	5.5	2.5	4.5
14	18.5	11.5	16.5	21.0	14.5	19.0	8.5	2.5	5.5	6.0	1.5	4.0
15	14.0	8.0	10.0	---	---	---	10.5	2.0	6.5	5.0	1.0	3.0
16	17.0	13.0	15.0	---	---	---	7.5	2.0	4.5	8.5	3.0	5.5
17	17.5	14.0	15.5	---	---	---	5.5	2.5	4.5	6.0	3.5	4.5
18	17.5	13.0	15.0	15.0	8.0	12.5	9.5	2.5	6.5	5.0	1.5	3.5
19	17.5	15.5	16.5	11.0	6.0	8.0	12.0	3.5	6.5	5.0	1.0	3.0
20	17.5	12.5	16.0	---	---	---	5.0	3.5	4.5	2.5	1.5	2.0
21	14.5	6.0	10.5	17.0	15.0	16.5	6.0	2.5	4.5	2.0	.0	1.0
22	15.5	5.5	9.5	16.5	8.5	15.5	5.5	1.5	3.0	6.0	2.0	4.5
23	19.5	15.0	16.5	8.5	6.5	7.5	4.5	1.0	2.5	---	---	---
24	22.0	16.0	18.5	10.5	6.5	8.5	2.5	1.0	2.0	---	---	---
25	21.0	15.5	18.5	7.0	5.0	6.0	5.5	2.0	3.5	---	---	---
26	21.5	18.0	20.0	6.5	3.5	5.0	6.0	2.0	4.0	---	---	---
27	21.0	10.5	18.0	5.0	2.0	3.5	4.0	.5	2.5	---	---	---
28	14.0	5.5	10.0	11.5	4.5	6.5	3.5	.5	1.0	---	---	---
29	13.5	7.5	10.5	16.0	5.0	10.0	5.0	.5	2.0	---	---	---
30	21.0	14.5	18.0	13.0	6.0	10.0	5.5	.5	3.0	6.5	5.0	5.5
31	21.5	16.5	18.5	---	---	---	5.5	4.0	5.0	6.5	4.0	5.5
MONTH	22.5	5.5	15.5	22.5	2.0	13.0	16.5	.5	5.5	9.0	.0	4.0

CHICKIES CREEK BASIN

01575744 DOE RUN BELOW OAK ROAD NEAR MANHEIM, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	5.5	2.0	3.5	11.0	4.0	6.0	16.5	11.0	13.5	22.0	12.5	17.0
2	6.5	2.0	4.5	9.5	5.5	7.0	13.0	10.5	11.5	23.0	11.0	16.5
3	6.0	1.5	3.5	9.0	7.0	8.5	12.0	9.0	11.0	19.5	13.0	16.0
4	7.5	3.0	5.0	9.0	8.0	8.5	9.0	7.5	8.5	20.5	13.0	16.0
5	---	---	---	11.0	4.0	6.5	13.0	7.5	10.0	21.5	9.5	15.0
6	---	---	---	12.0	4.0	8.0	12.5	2.0	8.0	22.5	9.0	15.0
7	---	---	---	13.0	4.0	7.5	---	---	---	26.5	14.0	20.0
8	---	---	---	7.5	3.0	5.5	9.5	2.5	6.0	28.0	16.5	22.0
9	---	---	---	8.5	.0	4.0	8.5	5.5	7.0	30.5	18.5	24.0
10	---	---	---	11.0	2.0	7.0	15.5	5.5	9.5	27.5	20.0	23.0
11	---	---	---	9.0	.5	3.0	17.0	6.0	11.5	28.0	17.0	22.0
12	---	---	---	---	---	---	11.5	9.0	10.5	20.5	17.0	19.0
13	---	---	---	---	---	---	9.0	6.5	8.0	20.5	17.0	18.5
14	---	---	---	---	---	---	13.5	6.0	9.0	22.5	16.0	18.0
15	---	---	---	---	---	---	12.0	7.5	9.0	25.0	15.5	19.5
16	6.0	1.0	3.0	---	---	---	10.5	7.0	8.5	25.0	14.0	19.5
17	2.0	.5	.5	---	---	---	13.0	8.0	10.5	26.0	16.0	20.5
18	1.5	.5	.5	---	---	---	19.0	7.5	12.5	21.0	15.5	18.5
19	3.0	.5	1.5	---	---	---	19.5	7.5	13.0	19.0	15.0	16.5
20	4.0	.5	2.0	---	---	---	21.0	8.0	13.5	22.5	14.5	18.0
21	4.0	2.0	2.5	---	---	---	22.0	7.0	13.5	20.5	15.5	17.5
22	4.0	1.5	2.5	---	---	---	20.0	9.0	13.5	25.0	17.5	20.5
23	6.0	1.0	3.5	---	---	---	23.0	12.5	17.0	21.5	17.5	19.0
24	1.0	.0	.5	---	---	---	20.0	12.5	15.5	22.5	16.5	18.5
25	2.0	.0	1.0	---	---	---	25.0	14.5	18.5	22.0	14.5	17.5
26	2.0	.0	1.5	---	---	---	20.0	15.0	17.0	16.0	12.5	14.0
27	5.5	2.0	3.5	---	---	---	17.5	12.0	16.0	15.5	11.5	13.0
28	11.0	3.0	6.0	16.0	5.0	9.5	21.0	9.0	14.0	19.0	12.0	14.5
29	---	---	---	18.5	8.0	13.0	20.5	9.0	14.0	23.5	13.5	17.5
30	---	---	---	20.0	12.0	15.0	23.5	10.5	16.5	23.5	14.5	18.5
31	---	---	---	17.5	10.0	13.5	---	---	---	22.5	16.0	18.5
MONTH	11.0	.0	2.5	20.0	.0	8.0	25.0	2.0	12.0	30.5	9.0	18.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	22.5	17.5	19.5	28.0	18.5	22.0	---	---	---	26.5	20.5	23.0
2	21.0	16.0	18.0	24.0	18.0	20.5	---	---	---	28.0	22.5	24.5
3	19.5	16.0	17.0	27.5	17.0	22.0	---	---	---	27.0	23.0	25.0
4	25.5	16.5	20.5	21.0	15.0	17.5	---	---	---	28.5	21.5	24.5
5	27.0	16.5	21.5	22.0	13.0	17.0	---	---	---	27.0	23.0	25.5
6	23.5	18.0	20.5	24.0	13.0	18.5	---	---	---	26.5	22.0	24.0
7	27.0	17.5	22.0	26.0	14.5	20.0	---	---	---	26.5	20.5	23.0
8	27.5	19.5	23.0	27.5	16.0	21.5	---	---	---	23.0	17.0	20.5
9	26.0	18.5	22.0	27.0	17.0	22.0	28.0	24.0	26.0	23.5	14.0	18.5
10	24.5	18.0	21.5	25.5	19.0	22.5	30.0	24.0	26.0	24.5	14.5	20.0
11	21.0	13.0	18.5	29.0	21.0	24.5	24.0	19.5	22.0	24.5	19.0	21.5
12	24.5	12.5	18.5	28.0	23.0	25.5	19.5	16.5	17.5	25.0	17.5	21.5
13	24.5	13.5	18.5	30.0	23.5	26.0	24.5	17.0	20.5	25.5	19.0	22.0
14	27.0	16.0	21.5	30.5	21.0	24.0	25.5	20.0	21.5	26.5	22.5	24.0
15	29.0	16.5	22.5	28.5	21.0	24.5	22.5	17.5	19.5	22.0	17.0	19.5
16	26.5	16.5	21.0	27.5	23.0	26.0	24.5	17.5	20.5	22.5	14.5	18.5
17	24.5	17.5	21.5	30.0	23.5	26.0	23.5	17.5	20.0	25.0	17.5	21.5
18	26.5	18.5	22.5	26.5	20.5	25.0	19.0	17.0	18.0	25.0	19.0	22.0
19	27.0	19.5	23.0	28.0	23.5	25.5	24.5	17.5	21.0	24.5	20.5	22.5
20	---	---	---	27.0	21.5	25.0	27.0	21.0	24.0	23.0	17.0	20.0
21	---	---	---	24.0	19.5	21.5	25.5	22.0	23.5	20.5	18.5	19.5
22	---	---	---	25.0	17.0	20.5	27.0	21.0	23.5	19.0	17.0	18.5
23	---	---	---	23.5	18.5	20.5	25.5	21.5	23.5	21.0	14.5	17.5
24	---	---	---	25.0	18.5	21.5	27.0	23.0	25.0	17.0	14.0	15.0
25	---	---	---	27.5	20.0	23.5	28.0	22.0	25.0	20.0	14.0	16.5
26	---	---	---	25.5	21.0	23.0	27.5	23.0	25.0	21.0	14.0	17.0
27	---	---	---	25.5	20.0	22.5	27.5	24.5	25.5	21.0	14.5	17.5
28	---	---	---	24.5	17.5	21.0	28.0	23.5	25.5	20.0	16.0	18.0
29	27.0	20.0	23.0	21.0	19.5	20.0	26.5	24.0	25.5	20.5	16.5	18.5
30	26.5	19.0	21.5	26.5	19.0	23.0	28.0	23.5	25.5	18.0	17.0	17.5
31	---	---	---	28.0	21.5	25.0	28.0	22.0	25.0	---	---	---
MONTH	29.0	12.5	21.0	30.5	13.0	22.5	30.0	16.5	23.0	28.5	14.0	20.5

CHICKIES CREEK BASIN

01575746 CHICKIES CREEK AT MANHEIM, PA

LOCATION.--Lat 40°09'12, long 76°23'36", Lancaster County, Hydrologic Unit 02050306, on left bank, 46 ft (14 m) downstream from Penn Street bridge, 0.65 mi (1.0 km) upstream from Rife Run, 0.55 mi (.9 km) downstream from Doe Run, and 0.75 mi (1.2 km) south by east from the square on State Route 72 in Manheim, Pa.

DRAINAGE AREA.--29.0 mi² (75.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1978 to current year (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 390 ft (119 m), from topographic map.

REMARKS.--Records good, except for winter periods, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s (31.4 m³/s), July 21, gage height, 8.84 ft (2.694 m) from rating curve extended above 550 ft³/s (15.6 m³/s); minimum discharge, 5.6 ft³/s (0.16 m³/s) Aug. 31, Sept. 1, 2, gage height, 3.61 ft (1.100 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 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. 2	1630	458 13.0	6.82 2.079	Feb. 25	2230	818 23.2	7.95 2.423
Jan. 8	0830	581 16.5	7.35 2.240	July 21	1200	*1,110 31.4	*8.84 2.694
Jan. 21	1945	800 22.7	8.21 2.502	Sept. 6	0830	463 13.1	6.67 2.033
Jan. 24	1330	818 23.2	7.95 2.423				

Minimum discharge, 5.6 ft³/s (0.16 m³/s) Aug. 31, Sept. 1, 2, gage height, 3.61 ft (1.100 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	9.0	17	110	64	110	30	30	31	17	14	5.6
2	7.8	9.0	9.6	314	55	105	45	29	30	16	25	6.0
3	7.8	9.6	9.0	140	50	91	60	31	50	12	30	6.4
4	8.4	8.4	44	79	49	86	63	46	96	13	16	6.0
5	11	9.0	41	67	38	251	92	32	40	14	13	32
6	32	11	20	62	37	231	54	29	37	10	13	306
7	11	11	15	98	35	134	46	30	32	9.5	14	42
8	7.8	11	21	406	34	109	42	27	28	9.5	13	24
9	7.3	11	156	125	33	91	72	24	26	9.0	11	18
10	6.7	12	81	87	32	95	100	22	24	9.5	13	17
11	6.7	10	43	70	31	151	52	20	27	9.5	11	15
12	7.3	10	35	62	30	88	51	18	26	9.0	30	13
13	8.4	12	31	66	28	77	51	19	20	8.5	22	12
14	31	12	27	106	27	78	99	26	19	7.2	14	16
15	12	13	25	61	26	66	64	21	18	8.5	12	20
16	9.6	18	22	52	25	56	53	20	17	9.5	11	11
17	10	20	22	47	25	53	49	18	17	8.5	9.9	10
18	9.6	27	19	38	24	50	45	18	18	7.2	10	9.5
19	9.0	12	18	38	24	47	41	24	16	7.2	13	9.0
20	8.4	9.6	17	38	24	43	38	20	14	6.8	11	8.1
21	7.3	9.0	36	700	24	41	36	19	14	379	10	63
22	6.7	8.4	24	205	25	39	34	20	15	48	10	189
23	7.8	8.4	18	102	40	37	34	37	16	30	9.5	45
24	6.7	15	30	503	456	45	32	101	13	26	9.5	31
25	7.3	11	231	513	650	52	31	77	13	22	9.5	27
26	8.4	8.4	64	171	667	44	30	101	12	20	8.1	24
27	10	9.0	48	134	234	35	61	49	12	18	8.5	21
28	9.0	14	37	113	131	32	52	42	13	17	8.1	20
29	7.8	14	33	95	---	34	35	39	11	17	7.6	20
30	8.4	30	31	83	---	32	31	34	19	18	7.6	18
31	9.0	---	35	72	---	30	---	34	---	16	7.2	---
TOTAL	307.5	371.8	1259.6	4757	2918	2433	1523	1057	724	812.4	401.5	1044.6
MEAN	9.92	12.4	40.6	153	104	78.5	50.8	34.1	24.1	26.2	13.0	34.8
MAX	32	30	231	700	667	251	100	101	96	379	30	306
MIN	6.7	8.4	9.0	38	24	30	30	18	11	6.8	7.2	5.6
CFSM	.34	.43	1.40	5.28	3.59	2.71	1.75	1.18	.83	.90	.45	1.20
IN.	.39	.48	1.62	6.10	3.74	3.12	1.95	1.36	.93	1.04	.52	1.34

WTR YR 1979 TOTAL 17609.4 MEAN 48.2 MAX 700 MIN 5.6 CFSM 1.66 IN 22.59

CHICKIES CREEK BASIN

01575746 CHICKIES CREEK AT MANHEIM, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1 1978 to current year. (discontinued)

INSTRUMENTATION.--Water-temperature recorder since Oct. 1, 1978 to current year.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument. Stream ice covered during some periods of winter months.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum 28.0°C July 17, 1979; minimum -1.5°C December 24, 1978.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum 28.0°C July 17; minimum -1.5°C December 24.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.5	14.5	16.0	13.5	9.0	11.0	6.0	4.0	5.0	---	---	---
2	17.0	15.0	16.0	12.5	8.5	10.0	4.0	2.0	3.5	---	---	---
3	17.5	13.0	15.0	12.5	8.0	10.0	5.5	3.0	4.0	---	---	---
4	17.5	15.5	16.0	10.5	9.0	9.5	9.0	6.0	7.5	.0	-1.0	-0.5
5	17.0	14.5	15.5	12.0	7.5	9.5	8.5	5.5	7.0	1.5	-0.5	.0
6	17.0	14.5	16.0	14.0	9.0	11.0	6.5	4.5	5.5	2.0	.0	1.0
7	15.5	12.5	14.0	13.0	10.5	11.5	9.5	7.0	8.0	1.5	.0	1.0
8	12.5	10.5	11.5	12.5	10.0	11.5	9.5	5.5	8.0	.5	-1.0	-0.5
9	14.5	9.5	12.0	12.0	8.0	10.0	5.0	1.5	3.0	.5	-1.0	-0.5
10	15.5	10.5	12.5	12.5	8.0	10.0	3.0	.5	2.0	1.0	-0.5	.5
11	17.0	12.0	14.0	10.0	8.0	9.0	---	---	---	.5	-0.5	-0.5
12	19.0	13.0	15.5	10.5	7.0	8.5	---	---	---	.0	-0.5	-0.5
13	18.5	15.0	16.5	10.5	9.0	9.5	4.5	1.5	3.0	1.0	-0.5	.5
14	17.5	14.0	15.5	13.5	10.0	11.5	3.5	2.0	2.5	2.5	-1.0	1.0
15	13.5	11.0	12.0	13.0	12.0	12.5	4.0	1.0	2.0	-0.5	-1.0	-0.5
16	12.5	9.5	11.0	12.0	10.0	11.0	3.5	1.0	2.0	2.0	-0.5	.5
17	14.0	11.0	12.0	11.5	9.5	10.0	3.5	1.5	2.5	.5	.0	.0
18	13.5	9.0	11.0	13.0	10.0	12.0	3.0	.5	2.0	.0	.0	.0
19	13.5	12.0	12.5	10.5	8.0	9.0	2.0	.0	1.0	-0.5	-1.0	.0
20	14.0	12.0	13.0	10.0	6.5	8.0	1.0	.0	.5	-0.5	.0	-0.5
21	14.0	9.5	11.5	9.0	7.5	8.0	2.0	.5	1.5	-0.5	-1.0	-1.0
22	15.0	9.5	12.0	8.0	7.0	7.5	2.0	.0	.5	2.0	-1.0	1.5
23	16.5	12.0	15.5	7.0	5.5	6.0	1.5	-1.0	.5	3.0	.5	1.5
24	14.0	10.5	12.0	8.5	6.5	7.0	.5	-1.5	-0.5	2.0	.5	.0
25	13.5	9.0	11.0	6.5	4.5	5.5	---	---	---	1.5	.0	.0
26	14.0	12.0	13.0	5.0	3.0	4.0	---	---	---	3.0	1.0	2.0
27	14.5	11.5	13.0	3.0	.5	1.5	---	---	---	4.5	2.5	3.0
28	13.0	9.0	10.5	4.0	1.5	2.5	---	---	---	3.5	2.0	2.5
29	12.5	9.0	10.5	5.0	1.5	3.5	---	---	---	4.0	2.0	3.0
30	13.0	8.5	10.5	5.5	3.5	5.0	---	---	---	3.5	2.0	3.0
31	13.5	9.0	11.0	---	---	---	---	---	---	2.5	1.5	2.0
MONTH	19.0	8.5	13.0	14.0	.5	8.5	9.5	-1.5	3.0	4.5	-1.0	.5

CHICKIES CREEK BASIN
01575746 CHICKIES CREEK AT MANHEIM, PA--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1.5	.0	.5	6.5	3.0	4.5	14.5	13.0	13.5	18.5	14.0	16.0
2	1.5	.0	.5	7.0	4.0	6.0	13.5	9.5	10.5	17.5	12.5	15.0
3	.5	.0	.5	6.5	4.5	5.5	10.0	9.0	9.5	---	---	---
4	2.0	.5	1.0	6.5	5.0	6.0	9.0	7.0	7.5	---	---	---
5	1.0	.0	.0	7.5	6.5	7.0	10.0	6.5	8.0	16.0	13.5	15.0
6	.5	.0	.5	7.0	6.5	7.0	9.5	6.5	7.5	17.5	12.0	15.0
7	.5	.5	.5	8.5	4.5	6.5	8.5	3.0	6.0	18.0	13.0	15.5
8	.5	.5	.5	9.0	4.0	7.0	7.0	5.0	6.5	21.0	14.5	17.5
9	.5	.0	.5	10.0	4.5	7.5	7.0	5.5	6.0	24.0	17.5	20.5
10	---	---	---	9.0	7.0	7.5	11.5	4.0	7.5	26.0	19.5	22.5
11	---	---	---	7.5	4.0	6.0	12.5	10.0	11.0	26.0	21.0	23.5
12	---	---	---	6.5	2.0	4.5	12.0	9.0	10.0	26.0	21.0	23.5
13	---	---	---	9.0	3.0	6.0	9.0	7.5	8.5	23.0	19.5	21.0
14	---	---	---	9.0	7.0	8.0	11.0	6.5	8.5	20.5	19.0	19.5
15	---	---	---	6.5	4.0	4.5	10.5	8.0	9.5	20.0	17.0	18.0
16	2.0	.0	.5	6.5	4.0	5.0	10.0	7.5	8.5	22.5	17.0	19.5
17	.5	.5	.0	9.0	3.5	6.5	11.0	7.5	9.5	21.5	17.0	19.0
18	.0	.0	.0	10.5	7.5	8.5	14.0	7.5	10.5	21.5	15.5	18.5
19	.0	.0	.0	10.5	6.0	8.5	14.0	8.5	11.5	19.0	16.0	17.5
20	1.0	.0	.5	11.5	6.0	9.0	15.0	9.0	12.0	17.5	16.5	17.0
21	1.0	.0	.5	12.0	8.0	10.0	16.5	10.0	13.5	20.5	16.0	17.5
22	2.0	.5	1.0	13.0	8.5	10.5	15.5	12.0	14.0	18.0	17.0	17.5
23	1.5	.5	1.0	13.5	9.0	11.5	18.0	13.0	15.5	20.5	16.5	18.0
24	.5	.0	.0	12.5	11.5	12.0	16.0	14.0	15.0	20.0	17.5	18.0
25	.5	.0	.0	11.5	8.5	10.0	20.5	15.0	17.0	19.0	16.5	17.5
26	.5	.0	.5	8.5	8.5	8.5	18.0	16.0	17.0	19.0	16.5	17.5
27	3.0	.5	2.0	8.5	4.5	6.0	16.0	14.5	15.5	16.0	14.0	15.0
28	7.0	2.0	4.0	9.5	4.0	6.5	16.5	11.0	14.0	14.5	12.5	13.5
29	---	---	---	12.5	7.5	10.0	16.5	12.5	14.5	16.0	13.5	14.5
30	---	---	---	14.5	11.5	13.0	17.5	12.0	15.0	---	---	---
31	---	---	---	15.0	12.0	13.5	---	---	---	---	---	---
MONTH	7.0	.0	.5	15.0	2.0	8.0	20.5	3.0	11.0	26.0	12.0	18.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.0	17.5	18.5	24.0	19.5	21.5	26.5	22.5	24.5	25.0	21.0	23.0
2	19.0	17.5	18.5	21.0	19.5	20.5	26.0	23.5	24.5	26.0	22.0	24.0
3	18.5	17.5	17.5	24.0	17.5	21.0	24.5	21.5	23.0	25.5	23.0	24.0
4	21.0	16.0	18.5	21.0	16.0	18.5	26.5	22.0	24.0	26.5	22.0	24.5
5	21.5	17.0	19.5	18.5	14.5	16.5	27.0	22.0	24.5	24.5	23.5	24.0
6	21.0	18.5	19.5	21.0	14.5	17.5	27.0	23.0	24.5	24.0	22.0	23.0
7	22.0	17.5	20.0	22.5	16.0	19.0	25.0	21.0	23.0	24.0	20.5	22.0
8	23.5	20.5	22.0	24.0	17.0	20.5	26.5	21.5	24.0	21.5	18.5	20.5
9	23.5	21.0	22.0	24.5	18.5	21.5	26.5	22.0	24.0	20.5	15.5	18.0
10	23.0	21.0	22.0	22.5	20.0	21.0	27.0	23.0	24.5	21.0	15.5	18.0
11	21.0	17.0	19.5	24.5	20.0	22.0	24.0	20.0	22.0	21.0	17.0	19.0
12	20.0	14.5	17.0	27.0	21.5	24.0	20.0	16.5	17.5	21.5	16.5	19.0
13	20.5	16.0	18.0	27.5	23.0	25.0	21.5	16.0	18.5	22.0	17.0	19.5
14	22.5	16.0	19.0	27.0	24.0	25.0	21.0	18.0	19.5	23.5	20.5	21.5
15	24.0	17.5	20.5	27.0	23.0	25.0	19.5	16.5	18.0	21.0	17.5	19.5
16	24.5	19.0	21.5	27.5	24.5	25.5	21.0	15.5	18.0	20.5	15.5	17.5
17	23.0	20.0	21.5	28.0	24.0	26.0	21.0	16.0	18.5	21.5	16.0	18.5
18	24.0	20.5	22.0	26.0	24.0	25.0	18.0	17.0	17.5	21.0	16.5	19.0
19	24.0	18.5	21.5	27.5	22.0	24.5	21.5	17.0	19.0	21.0	17.5	19.0
20	24.5	19.5	22.0	25.0	23.0	24.0	24.5	19.0	21.5	19.0	14.5	16.5
21	21.5	18.5	20.5	23.5	20.5	21.5	24.0	20.5	21.5	18.0	16.0	16.5
22	23.0	18.0	20.0	23.0	19.0	21.0	24.5	19.0	21.5	17.5	17.0	17.0
23	24.0	18.5	21.0	22.0	20.5	21.0	22.5	20.0	21.0	18.5	15.0	16.5
24	21.5	17.5	19.0	23.0	20.0	21.0	25.0	21.0	22.5	17.0	14.0	15.0
25	22.5	15.5	18.5	25.0	20.5	22.5	26.5	22.5	24.0	17.5	14.5	15.5
26	23.5	16.5	20.0	24.0	21.5	23.0	25.5	23.0	24.0	18.5	14.5	16.5
27	24.5	17.5	21.0	23.5	20.5	22.0	26.0	23.0	24.5	18.5	15.5	17.0
28	22.0	18.5	21.0	23.0	20.0	21.5	27.0	22.5	24.5	18.0	16.0	17.0
29	23.0	18.0	20.5	21.5	20.5	21.0	25.0	23.0	24.0	19.5	17.0	18.0
30	23.0	19.5	21.0	24.0	19.5	21.5	27.0	22.5	24.5	18.5	17.5	18.0
31	---	---	---	26.5	21.5	23.5	27.0	22.0	24.5	---	---	---
MONTH	24.5	14.5	20.0	28.0	14.5	22.0	27.0	15.5	22.0	26.5	14.0	19.0

SUSQUEHANNA RIVER BASIN

01576000 SUSQUEHANNA RIVER AT MARIETTA, PA

LOCATION.--Lat 40°03'16", long 76°31'52", Lancaster County, Hydrologic Unit 02050306, on left bank, 420 ft (128 m) upstream from Chickies Creek and 1 mi (2 km) downstream from Marietta. Records include flow of Chickies Creek.

DRAINAGE AREA.--25,990 mi² (67,310 km²), approximately, includes that of Chickies Creek.

PERIOD OF RECORD.--October 1931 to current year.

REVISED RECORDS.--WSP 781: 1933(M). WSP 1502: 1937.

GAGE.--Water-stage recorder. Datum of gage is 200.56 ft (61.131 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation by upstream reservoirs, the 14 most effective of which have a combined capacity of 1,449,000 acre ft (1,790 hm³). Discharge below 8,000 ft³/s (227 m³/s) regulated by Metropolitan Edison Co. plant at York Haven. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--48 years, 37,170 ft³/s (1.053 m³/s), 19.42 in/yr (493 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080,000 ft³/s (30,600 m³/s) June 23, 1972, gage height, 64.54 ft (19.672 m), from floodmarks; minimum, 618 ft³/s (17.5 m³/s) Sept. 26, 1932, gage height, 30.89 ft (9.415 m), when York Haven powerplant was shut down in order to obtain current-meter measurements at low water; minimum daily, 1,380 ft³/s (39.1 m³/s) Sept. 26, 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 2, 1889 reached a stage of 58.2 ft (17.8 m) from floodmark, discharge, about 630,000 ft³/s (18,000 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 452,000 ft³/s (12,800 m³/s) Mar. 7, gage height, 53.21 ft (16.218 m); minimum, 6,400 ft³/s (181 m³/s) Oct. 5, gage height, 32.98 ft (10.052 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8690	18800	16600	22600	64100	126000	62600	42400	67700	14700	14800	16400
2	8450	18700	16800	38200	54500	110000	63200	42300	58800	14900	14100	13200
3	7500	15400	16600	133000	45900	105000	64500	38000	50300	15000	17400	12100
4	7300	11800	16600	220000	41700	104000	67500	35100	45400	14700	16700	12700
5	7220	13300	17400	188000	34600	126000	76100	34000	42600	14100	16600	16300
6	8170	12700	21000	137000	28000	318000	82000	34500	37300	13400	15100	33700
7	8400	12000	22400	104000	24000	444000	76700	33100	34300	12700	14200	76400
8	9830	11600	24200	96400	22000	388000	70300	32000	31600	11800	12000	76300
9	10100	11300	29200	101000	21000	303000	64700	30900	28300	10800	10400	58100
10	9350	11300	42200	85400	20000	245000	64000	29100	25800	9810	10300	46100
11	8990	12100	57400	71100	18500	202000	71800	27100	26500	9400	9490	36600
12	8640	10900	61400	58000	17500	173000	93800	26400	25300	9030	14200	30000
13	8450	11700	55000	47000	16500	151000	95200	28300	24000	8590	20800	25800
14	9510	9780	46000	40000	16000	125000	90900	30700	22500	8440	28800	22100
15	9940	9610	39300	39000	15500	109000	86500	28500	20800	9590	25200	20500
16	10000	9400	33800	39000	15000	100000	81000	27100	19800	9640	21100	21100
17	13300	8310	30400	38000	14500	96100	77600	24800	18600	9550	17400	20200
18	14800	8260	27500	35000	14500	87400	73700	22900	17400	9460	14300	18400
19	15500	8220	25600	32000	14500	75800	68700	20900	15800	10200	12100	16800
20	16400	11100	23800	24000	15000	66500	62900	20000	15000	11200	12600	15200
21	15300	14100	21900	29000	15500	61000	55500	19600	13500	11200	12300	14700
22	13600	16800	18900	60000	16000	57900	48800	18800	12600	10700	11100	28200
23	13200	15100	21400	67000	17500	54000	44200	18600	11700	10300	10700	31600
24	11500	14200	25100	84000	27200	53600	40100	23700	11500	10500	10300	32800
25	10800	14200	38200	204000	80700	61500	36900	47000	11500	10900	10300	27100
26	10700	14600	45100	258000	175000	85400	34100	88100	11500	11300	10600	22700
27	10900	15300	40900	205000	202000	112000	32700	101000	9560	11400	12400	19700
28	10600	15600	31600	172000	162000	113000	33100	101000	9320	11200	13300	17300
29	12300	15200	24700	112000	---	99600	35700	98400	10600	13500	15400	15900
30	14300	16100	21900	92500	---	83000	40500	91200	12500	14400	18800	14700
31	16100	---	22000	76200	---	68800	---	78200	---	16000	18500	---
TOTAL	339840	387480	934900	2908400	1209200	4304600	1895300	1293700	742080	358410	461290	812700
MEAN	10960	12920	30160	93820	43190	138900	63180	41730	24740	11560	14880	27090
MAX	16400	18800	61400	258000	202000	444000	95200	101000	67700	16000	28800	76400
MIN	7220	8220	16600	22600	14500	53600	32700	18600	9320	8440	9490	12100
CFSM	.42	.50	1.16	3.61	1.66	5.34	2.43	1.61	.95	.45	.57	1.04
IN.	.49	.55	1.34	4.16	1.73	6.16	2.71	1.85	1.06	.51	.66	1.16
CAL YR 1978 TOTAL	15911610	MEAN	43590	MAX	270000	MIN	7220	CFSM	1.68	IN	22.77	
WTR YR 1979 TOTAL	15647900	MEAN	42870	MAX	444000	MIN	7220	CFSM	1.65	IN	22.40	

CONESTOGA RIVER BASIN

01576500 CONESTOGA RIVER AT LANCASTER, PA

243

LOCATION.--Lat 40°03'00", long 76°16'39", Lancaster County, Hydrologic Unit 02050306, on left bank at Penn Central Railroad bridge, 50 ft (15 m) downstream from small tributary, 500 ft (150 m) downstream from diversion dam at city water works, and 0.75 mi (1.21 km) east of Lancaster.

DRAINAGE AREA.--324 mi² (839 km²).

PERIOD OF RECORD.--September 1928 to March 1932; August, September 1932; April 1933 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1973, published as Conestoga Creek at Lancaster.

REVISED RECORDS.--WSP 1202: Drainage area. WSP 1502: 1943(E).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 245.63 ft (74.868 m) National Geodetic Vertical Datum of 1929. Prior to May 1, 1933, at site 600 ft (183 m) upstream at different datum, excluding small tributary.

REMARKS.--Records good except those for periods of no gage-height record, Jan. 28-31, June 9-26, and those for winter periods, which are fair. Regulation at low flow by waterworks and mill above station. Diversion above station for municipal supply of city of Lancaster. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--49 years, (1928-31, 1933-to current year), 404 ft³/s (11.44 m³/s), 16.93 in/yr (430 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88,300 ft³/s (2,500 m³/s) June 23, 1972, gage height 27.80 ft (8.473 m), from floodmark, from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement and contracted-opening measurement of peak flows; minimum daily discharge, 7 ft³/s (0.20 m³/s) Aug. 11, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft³/s (79.3 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. 2	2115	3,740	106	May 24	1000	4,780	135
Jan. 8	1430	4,820	136	July 21	1800	7,230	205
Jan. 21	2100	9,830	278	Sept. 6	1145	4,430	125
Jan. 25	1100	*13,000	368	Sept. 22	0945	4,180	118
Feb. 26	1000	12,900	365				

Minimum discharge, 30 ft³/s (0.85 m³/s) Sept. 5, gage height, 2.60 ft (0.792 m).
a in gage well; from floodmark 16.46 ft (5.017 m)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	101	226	658	806	1270	394	447	553	280	269	128
2	129	100	172	2280	707	1130	428	422	949	298	324	130
3	130	103	142	1800	664	1040	473	412	896	252	335	131
4	137	98	266	883	653	951	601	531	982	241	269	151
5	144	96	465	767	558	1250	847	460	723	262	237	149
6	198	97	289	704	498	1720	590	401	724	239	224	2600
7	185	100	211	722	500	1260	492	379	588	218	217	949
8	145	98	197	3600	480	1050	460	362	516	209	208	506
9	136	110	1120	2160	460	926	511	333	466	210	199	362
10	131	100	1120	1060	440	854	1160	325	442	200	197	326
11	127	96	508	887	430	1350	664	312	430	200	243	298
12	123	95	382	735	400	984	592	298	448	191	433	276
13	114	95	328	770	390	834	625	311	391	182	469	254
14	112	97	308	1100	370	803	829	365	355	179	288	246
15	115	98	279	917	350	796	794	349	350	185	248	283
16	123	101	258	696	340	672	655	308	316	186	229	244
17	122	108	249	646	330	647	606	285	330	197	217	227
18	136	194	237	583	320	622	557	269	350	169	215	216
19	131	184	222	494	310	590	516	399	340	166	230	207
20	123	134	216	537	310	559	490	381	360	156	224	200
21	112	117	311	6370	350	537	463	315	272	2720	211	283
22	108	104	330	4270	400	532	449	302	289	766	208	2710
23	106	105	247	1260	582	508	436	440	375	441	185	923
24	106	116	240	3350	2840	483	416	3130	365	373	177	608
25	104	128	1330	7720	6490	649	404	1230	320	335	180	503
26	106	111	691	1930	9560	529	397	1020	280	313	182	448
27	114	114	475	1430	2380	450	685	852	265	328	173	408
28	135	115	368	1270	1420	428	1020	728	259	294	168	376
29	116	144	351	1110	---	428	572	676	266	276	163	381
30	108	238	326	1010	---	423	485	597	260	361	149	363
31	107	---	326	944	---	393	---	642	---	289	144	---
TOTAL	3911	3497	12190	52663	33338	24668	17611	17281	13460	10716	7215	14886
MEAN	126	117	393	1699	1191	796	587	557	449	346	233	496
MAX	198	238	1330	7720	9560	1720	1160	3130	982	2720	469	2710
MIN	104	95	142	494	310	393	394	269	259	156	144	128
(/)	11.4	9.6	9.9	11.0	9.3	11.3	11.7	12.9	13.0	14.2	11.1	10.9
MEAN#	0.47	0.43	1.27	4.03	1.70	1.20	0.87	0.89	0.70	0.60	0.44	0.50
CFSM#	0.42	0.39	1.24	5.28	3.70	2.49	1.85	1.76	1.43	1.11	0.75	1.56
IN.#	0.48	0.44	1.43	6.09	3.85	2.87	2.06	2.03	1.60	1.28	0.86	1.74

CAL YR 1978 TOTAL 193518 MEAN 530 MAX 13400 MIN 95 MEAN# 539 CFSM# 1.66 IN.# 22.60
WTR YR 1979 TOTAL 211436 MEAN 579 MAX 9560 MIN 95 MEAN# 591 CFSM# 1.82 IN.# 24.75

/ Diversion above station for municipal supply, equivalent in cubic feet per second, furnished by the city of Lancaster.

Adjusted for diversion.

PEQUEA CREEK BASIN

01576771 SITE NO. 1 ON PEQUEA CREEK TRIBUTARY AT STRASBURG, PA

LOCATION.--Lat 40°05'15", long 76°11'15", Lancaster County, Hydrologic Unit 02050306, on right bank 25 ft (7.6 m) downstream from North Star Road (T477), 0.58 mi (0.93 km) north of Strasburg, and 0.88 mi (1.42 km) upstream from mouth.

DRAINAGE AREA.--0.56 mi² (1.45 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 380 ft (116 m), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 440 ft³/s (12.5 m³/s) Sept. 6, 1979, gage height 4.35 ft (1.326 m) Sept. 6, 1979; minimum, 0.12 ft³/s (0.003 m³/s) part or all of each day Sept. 11-13, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 440 ft³/s (12.5 m³/s) Sept. 6, gage height, 4.35 ft (1.326 m) Sept. 6; minimum, 0.12 ft³/s (0.003 m³/s) part or all of each day Sept. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	.36	.29	.24	.18
2								---	.53	.18	.29	.25
3								---	1.0	.24	.24	.18
4								---	.89	.38	.24	.18
5								---	.57	.36	.18	8.5
6								---	.51	.30	.18	17
7								---	.43	.36	.18	.63
8								---	.51	.43	.23	.52
9								---	.51	.43	.18	.39
10								---	.51	.43	.33	.20
11								---	.65	.43	1.1	.12
12								---	.51	.36	2.7	.12
13								---	.51	.30	.43	.12
14								---	.51	.30	.36	2.1
15								---	.51	.30	.30	.20
16								---	.51	2.2	.30	.15
17								---	1.3	.40	.30	.15
18								---	.43	.18	.32	.15
19								---	.36	.18	.24	.15
20								---	.36	.18	.18	.15
21								---	.43	2.3	.37	12
22								---	.51	.24	.27	7.2
23								---	.57	.30	.30	.63
24								1.3	.57	.30	.35	.57
25								.53	.57	.30	.39	.49
26								.51	.51	.30	.24	.39
27								.43	.57	.24	1.1	.39
28								.43	.64	.24	.30	.45
29								.43	.40	.58	.56	.45
30								.36	.43	2.3	.24	.54
31								.36	---	.24	.18	---
TOTAL								---	16.67	15.57	12.82	54.55
MEAN								---	.66	.50	.41	1.82
MAX								---	1.3	2.3	2.7	17
MIN								---	.36	.18	.18	.12

PEQUEA CREEK BASIN

01576771 SITE NO. 1 ON PEQUEA CREEK TRIBUTARY AT STRASBURG, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1979 to current year.

WATER-QUALITY DATA, MAY TO SEPTEMBER 1979

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
MAY								
22...	1250	.29	7.5	7.5	7.3	.05	.05	7.5
23...	2018	28	1.9	.87	.87	.08	.04	.95
JUN								
18...	1600	.39	6.9	6.8	6.6	.05	.04	6.8
AUG								
07...	1255	.18	6.0	5.8	5.6	.05	.05	5.8
29...	1430	.24	5.9	5.7	5.7	.06	.06	5.8
SEP								
05...	1648	.18	7.0	5.8	5.8	.09	.01	5.9
05...	1830	2.5	4.5	2.2	2.1	.14	.09	2.3
05...	1900	7.6	1.5	1.2	.09	.09	.01	1.3
05...	1918	21	1.5	1.5	.70	.05	.04	1.5
05...	1951	73	2.8	1.2	.76	.08	.06	1.3
05...	2008	51	2.2	1.3	.82	.09	.07	1.4
05...	2045	92	1.8	1.0	.75	.10	.05	1.1
05...	2130	17	2.8	1.5	1.1	.12	.06	1.6
05...	2215	5.8	3.4	1.7	1.5	.08	.07	1.8
05...	2305	31	1.9	1.1	.74	.09	.05	1.2
05...	2335	61	2.2	1.1	.69	.12	.04	1.2
06...	0001	44	2.3	1.2	.91	.11	.03	1.3
06...	0055	43	2.5	1.1	.89	.08	.03	1.2
06...	0153	12	3.2	1.5	1.5	.08	.04	1.6
06...	0250	419	1.5	.82	.54	.07	.02	.89
06...	0338	58	2.1	1.4	1.1	.06	.02	1.5
06...	0632	5.0	3.7	2.7	2.3	.04	.04	2.7
06...	0848	2.3	4.8	3.6	3.3	.05	.05	3.6
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- GEN,NH4 + ORG. DIS. TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
MAY								
22...	7.3	.08	.04	.74	.17	.82	.61	8.3
23...	.91	.45	.22	1.5	.73	1.9	.95	2.9
JUN								
18...	6.6	.07	.01	.39	.25	.46	.20	7.3
AUG								
07...	5.6	.09	.05	.52	.38	.61	.18	6.4
29...	5.8	.07	.07	.35	.00	.42	.42	6.2
SEP								
05...	5.8	.13	.00	1.1	1.1	1.2	.00	7.1
05...	2.2	.41	.34	2.5	2.0	2.9	.60	5.2
05...	.10	.59	.01	3.2	1.4	3.8	2.4	5.1
05...	.74	.24	.10	3.6	.65	3.8	3.1	5.3
05...	.82	.39	.39	4.7	1.6	5.1	3.1	6.4
05...	.89	.40	.40	7.8	.90	8.2	6.9	9.6
05...	.80	.20	.20	3.5	.79	3.7	2.7	4.8
05...	1.2	.25	.21	3.2	1.4	3.4	1.8	5.0
05...	1.6	.35	.23	2.9	1.6	3.2	1.4	5.0
05...	.79	.17	.13	3.3	.97	3.5	2.4	4.7
05...	.73	.13	.09	3.2	1.4	3.3	1.8	4.5
06...	.94	.14	.05	2.5	1.4	2.6	1.2	3.9
06...	.92	.18	.18	1.9	1.4	2.1	.50	3.3
06...	1.5	.17	.17	1.9	1.5	2.1	.40	3.7
06...	.56	.05	.00	7.8	.94	7.8	6.9	8.7
06...	1.1	.21	.21	2.6	.78	2.8	1.8	4.3
06...	2.3	.16	.01	1.5	1.4	1.7	.30	4.4
06...	3.4	.18	.06	1.2	1.3	1.4	.00	5.0

PEQUEA CREEK BASIN

01576771 SITE NO. 1 ON PEQUEA CREEK TRIBUTARY AT STRASBURG, PA--Continued

WATER-QUALITY DATA, MAY TO SEPTEMBER 1979

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTH- SOLVED (MG/L AS P)	CARBON, ORGANIC SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
MAY								
22...	.19	.12	.13	.10	7.6	1.1	204	.16
23...	4.8	.23	.33	.16	5.8	50	4508	347
JUN								
18...	.12	.11	.11	.10	3.0	.3	53	.06
AUG								
07...	.38	.35	.30	.30	1.9	.5	11	.01
29...	.23	.21	.21	.19	5.4	.4	3	.00
SEP								
05...	.23	.22	.08	.07	3.7	.1	120	.06
05...	1.7	1.2	1.4	.37	17	4.1	220	1.5
05...	1.3	.50	.39	.01	9.3	9.6	560	12
05...	1.4	.41	.41	.41	7.1	12	911	53
05...	2.6	.68	.59	.51	5.9	23	2014	399
05...	3.2	.96	1.2	.96	9.2	25	2007	278
05...	2.3	.83	.87	.78	7.0	14	1509	378
05...	1.9	.98	1.2	.93	7.8	24	791	37
05...	1.6	.89	.96	.84	9.7	6.7	499	7.9
05...	1.6	.83	.88	.81	6.6	10	891	75
05...	1.6	.78	.80	.70	6.3	8.0	1205	200
06...	1.6	.93	.93	.73	8.5	4.7	617	74
06...	.90	.89	.81	.80	8.8	3.2	612	71
06...	1.7	.98	.98	1.0	8.6	7.4	273	8.8
06...	3.4	.64	.63	.58	5.7	30	2929	3310
06...	1.7	.60	.77	.11	6.3	12	1100	172
06...	.85	.72	.61	.48	10	2.2	97	1.3
06...	.61	.56	.41	.41	12	1.9	38	.24

PESTICIDE ANALYSES, JUNE TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	AME- TRYNE TOTAL (UG/L)	ATRA- TONE, TOTAL (UG/L)	ATRA- ZINE, TOTAL (UG/L)	CYANA- ZINE, TOTAL (UG/L)	CYPRA- ZINE, TOTAL (UG/L)
JUN							
18...	1600	.39	.0	.0	.30	.0	.0
AUG							
07...	1255	.18	.0	.0	.20	.0	.0
29...	1430	.24	.0	.0	.10	.0	.0
SEP							
05...	1648	.18	.0	.0	.10	.0	.0
05...	1918	21	.0	.0	.00	.0	.0
05...	1951	73	.0	.1	.10	.0	.0
06...	0001	44	.0	.1	.00	.0	.0
06...	0255	332	.0	.0	.30	.0	.0
06...	0848	2.3	.0	.1	.20	.0	.0

DATE	PROME- TONE TOTAL (UG/L)	PROME- TRYNE TOTAL (UG/L)	PROPA- ZINE, TOTAL (UG/L)	SIME- TONE, TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)	SIMA- ZINE TOTAL (UG/L)
JUN						
18...	.1	.0	.0	.0	.0	.0
AUG						
07...	.1	.1	.0	.0	.0	.0
29...	.1	.0	.0	.0	.0	.0
SEP						
05...	.1	.0	.0	.0	.0	.0
05...	.0	.0	.0	.0	.0	.0
05...	.1	.0	.1	.0	.0	.0
06...	.0	.0	.1	.0	.0	.0
06...	.0	.0	.0	.0	.0	.0
06...	.2	.0	.1	.0	.0	.0

PEQUEA CREEK BASIN

01576771 SITE NO. 1 ON PEQUEA CREEK TRIBUTARY AT STRASBURG, PA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM
SEP								
05...	1842	2.7	60	74	85	93	98	99
05...	1918	21	40	55	74	89	--	--
05...	1951	73	37	50	68	85	--	--
06...	0001	44	47	58	73	85	95	98
06...	0255	332	37	52	72	85	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
SEP							
05...	100	--	--	--	--	--	--
05...	--	--	96	99	100	--	--
05...	--	--	90	97	99	100	--
06...	99	100	--	--	--	--	--
06...	--	--	93	96	98	99	100

CHEMISTRY OF PRECIPITATION, SEPTEMBER 1979

DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
SEP										
05-06	.13	.01	.14	.08	.02	.10	.24	.03	.01	2.2

PEQUEA CREEK BASIN

01576772 SITE NO. 2 ON PEQUEA CREEK TRIBUTARY AT STRASBURG, PA

LOCATION.--Lat 39°56'20", long 76°11'40", Lancaster County, Hydrologic Unit 02050306, on right bank, 50 ft (15 m) upstream from Jackson Street (LR 36024), 0.72 mi (1.2 km) north of Strasburg, and 0.73 mi (1.2 km) upstream from mouth.

DRAINAGE AREA.--0.59 mi² (1.53 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 370 ft (116 m), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 485 ft³/s (13.7 m³/s) Sept. 6, 1979, gage height 4.72 ft (1.439 m) Sept. 6, 1979, from rating curve extended above 200 ft³/s (5.66 m³/s) on basis of computation of peak flow through contracted-opening and flow over road; minimum 0.25 ft³/s (0.007 m³/s) part or all of each day Sept. 11-13, 18, 19, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 485 ft³/s (13.7 m³/s) Sept. 6, gage height, 4.72 ft (1.439 m) Sept. 6, from rating curve extended above 200 ft³/s (5.66 m³/s) on basis of computation of peak flow through contracted-opening and flow over road; minimum, 0.25 ft³/s (0.007 m³/s) part or all of each day Sept. 11-13, 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	.40	.30	.25	.29
2								---	.50	.19	.30	.36
3								---	1.1	.25	.25	.29
4								---	.93	.40	.25	.29
5								---	.65	.38	.19	8.6
6								---	.56	.34	.19	20
7								---	.48	.40	.19	.66
8								---	.56	.48	.24	.60
9								---	.56	.48	.19	.46
10								---	.56	.48	.35	.34
11								---	.70	.48	1.2	.25
12								---	.56	.40	2.8	.25
13								---	.56	.34	.48	.25
14								---	.56	.34	.40	2.2
15								---	.56	.34	.34	.46
16								---	.56	2.4	.34	.34
17								---	1.4	.42	.34	.29
18								---	.48	.24	.44	.25
19								---	.40	.24	.29	.25
20								---	.40	.24	.24	.29
21								---	.48	2.4	.40	13
22								---	.56	.29	.29	9.4
23								1.0	.65	.34	.33	.66
24								1.7	.65	.34	.45	.60
25								.87	.65	.34	.43	.52
26								.56	.56	.34	.29	.52
27								.48	.65	.29	1.1	.52
28								.48	.68	.29	.34	.52
29								.48	.42	.61	.68	.52
30								.40	.45	2.4	.34	.56
31								.40	---	.29	.29	---
TOTAL	---	---	---	---	---	---	---	---	18.23	17.07	14.21	63.54
MEAN	---	---	---	---	---	---	---	---	.61	.55	.46	2.12
MAX	---	---	---	---	---	---	---	---	1.4	2.4	2.8	20
MIN	---	---	---	---	---	---	---	---	.40	.19	.19	.25

PEQUEA CREEK BASIN

01576772 SITE NO. 2 ON PEQUEA CREEK TRIBUTARY AT STRASBURG, PA--Continued

PERIOD OF RECORD.--May 1979 to current year.

REMARKS.--Soil sample analyses were run on samples collected from the top 4 inches (10.2 cm) of soil at 8 sites in the drainage basin and composited for analysis.

WATER-QUALITY DATA, MAY TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW+ INSTAN- TANEOUS (CFS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
MAY								
22...	1300	.28	9.8	7.0	6.9	.08	.08	7.1
23...	2025	30	2.6	1.0	.96	.10	.04	1.1
JUN								
18...	1605	.40	6.2	5.9	5.8	.07	.07	6.0
AUG								
07...	1400	.19	6.1	5.5	5.2	.08	.08	5.6
29...	1445	.26	7.1	5.6	5.5	.09	.09	5.7
SEP								
05...	1558	.23	6.4	5.5	5.5	.08	.07	5.6
05...	1835	1.7	5.5	3.4	3.0	.15	.13	3.5
05...	1908	7.4	2.8	1.4	1.4	.13	.12	1.5
05...	1918	14	2.0	1.2	.73	.09	.07	1.3
05...	1947	69	2.7	1.0	.74	.08	.08	1.1
05...	2035	100	2.7	2.0	1.0	.10	.08	2.1
05...	2108	49	2.7	.89	.84	.11	.06	1.0
05...	2200	9.5	2.8	1.5	1.3	.14	.07	1.6
05...	2303	20	2.8	1.2	1.0	.12	.07	1.3
05...	2325	60	1.7	.68	.55	.10	.04	.78
06...	0100	44	2.0	1.0	.90	.10	.04	1.1
06...	0200	12	2.3	1.6	.55	.08	.01	1.7
06...	0240	227	1.8	.93	.54	.07	.01	1.0
06...	0255	470	.86	.71	.07	.08	.01	.79
06...	0335	127	.86	1.0	.09	.06	.01	1.1
06...	0430	26	1.1	1.4	.11	.05	.01	1.4
06...	0855	2.4	4.3	3.6	3.0	.04	.03	3.6

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
MAY									
22...	7.0	.46	.19	3.7	2.6	4.2	1.4	2.8	11
23...	1.0	.60	.38	1.9	1.2	2.5	.90	1.6	3.6
JUN									
18...	5.9	.09	.02	.51	.23	.60	.35	.25	6.6
AUG									
07...	5.3	.17	.07	1.0	.71	1.2	.42	.78	6.8
29...	5.6	.15	.11	1.5	1.4	1.6	.10	1.5	7.3
SEP									
05...	5.6	.10	.04	.74	.74	.84	.00	.78	6.4
05...	3.1	.88	.48	2.5	1.9	3.4	1.0	2.4	6.9
05...	1.5	.59	.23	3.8	1.1	4.4	3.1	1.3	5.9
05...	.80	.24	.18	6.7	1.0	6.9	5.7	1.2	8.2
05...	.82	.43	.28	9.0	1.6	9.4	7.5	1.9	11
05...	1.1	.44	.20	4.7	1.4	5.1	3.5	1.6	7.2
05...	.90	.41	.11	3.5	1.7	3.9	2.1	1.8	4.9
05...	1.4	.30	.13	2.6	1.3	2.9	1.5	1.4	4.5
05...	1.1	.33	.17	4.0	1.5	4.3	2.6	1.7	5.6
05...	.59	.20	.04	2.5	1.1	2.7	1.6	1.1	3.5
06...	.94	.14	.01	2.0	1.1	2.1	1.0	1.1	3.2
06...	.56	.23	.03	2.2	1.7	2.4	.70	1.7	4.1
06...	.55	.21	.00	9.7	1.2	9.9	8.7	1.2	11
06...	.08	.13	.00	4.7	.78	4.8	4.0	.78	5.6
06...	.10	.12	.00	3.0	.76	3.1	2.3	.76	4.2
06...	.12	.12	.00	1.7	1.0	1.8	.80	1.0	3.2
06...	3.0	.15	.01	1.4	1.3	1.5	.20	1.3	5.1

PEQUEA CREEK BASIN

01576772 SITE NO. 2 ON PEQUEA CREEK TRIBUTARY AT STRASBURG, PA--Continued

WATER-QUALITY DATA, MAY TO SEPTEMBER 1979

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC, DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC, PEN- DEDED (MG/L AS C)	SEDI- MENT, SUS- PEN- DEDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PEN- DEDED (T/DAY)
MAY								
22...	.31	.24	.22	.19	5.3	1.1	151	.12
23...	.38	.37	.30	.29	7.2	80	6677	548
JUN								
18...	.17	.16	.15	.14	4.4	.5	101	.11
AUG								
07...	.50	.41	.38	.37	3.9	1.0	16	.01
29...	.31	.29	.28	.26	3.2	.5	21	.01
SEP								
05...	.30	.27	.27	.27	4.4	.2	50	.03
05...	1.1	.99	.96	.96	13	2.6	83	.38
05...	1.9	.82	.80	.80	16	14	786	16
05...	3.0	.52	.49	.49	17	27	1480	56
05...	4.0	.69	.69	.69	8.8	55	3017	567
05...	2.6	1.0	1.0	1.0	7.7	15	1596	431
05...	2.0	.96	.91	.91	7.7	8.4	998	134
05...	1.9	.96	1.0	.67	14	5.1	556	14
05...	2.1	1.1	1.0	.24	11	9.3	708	39
05...	1.8	.86	.87	.81	7.5	8.9	919	150
06...	1.5	.97	1.0	.97	7.7	5.3	445	53
06...	1.5	1.1	1.0	.60	9.6	3.3	251	8.5
06...	4.7	1.1	1.1	.00	15	50	4033	2470
06...	3.5	.69	.75	.45	5.5	30	2712	3440
06...	2.1	.65	.72	.08	6.6	12	1460	501
06...	1.3	.83	.86	.40	11	3.8	370	26
06...	.61	.55	.55	.50	14	1.0	50	.33

PESTICIDE ANALYSES, JUNE TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	AME- TRYNE TOTAL (UG/L)	ATRA- TONE, TOTAL (UG/L)	ATRA- ZINE, TOTAL (UG/L)	CYANNA- ZINE, TOTAL (UG/L)	CYPRA- ZINE, TOTAL (UG/L)
JUN							
18...	1605	.40	.0	.0	.40	.0	.0
AUG							
07...	1400	.19	.0	.0	.10	.0	.0
29...	1445	.26	.0	.0	.10	.0	.0
SEP							
05...	1558	.23	.0	.0	.20	.0	.0
05...	1918	14	.0	.0	.10	.0	.0
05...	2000	68	.0	.0	.00	.0	.0
05...	2200	9.5	.0	.0	.50	.0	.0
06...	0245	--	.0	.0	.20	.0	.0
06...	0855	2.4	.0	.0	.30	.0	.0

DATE	PROME- TONE TOTAL (UG/L)	PROME- TRYNE TOTAL (UG/L)	PROPA- ZINE, TOTAL (UG/L)	SIME- TONE, TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)	SIMA- ZINE TOTAL (UG/L)
JUN						
18...	.1	.0	.0	.0	.0	.0
AUG						
07...	.1	.1	.0	.0	.0	.0
29...	.1	.0	.0	.0	.0	.0
SEP						
05...	.0	.0	.0	.0	.0	.0
05...	.0	.0	.0	.0	.0	.0
05...	.0	.0	.0	.0	.0	.0
05...	.0	.0	.0	.0	.0	.0
06...	.0	.0	.0	.0	.0	.0
06...	.2	.0	.0	.0	.0	.0

PEQUEA CREEK BASIN

01576772 SITE NO. 2 ON PEQUEA CREEK TRIBUTARY AT STRASBURG, PA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SFD. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM
SEP											
05...	1918	14	36	50	71	89	--	--	97	99	100
05...	2200	9.5	60	75	89	96	99	100	--	--	--
06...	0255	470	36	51	70	84	--	--	92	97	100

CHEMISTRY AND PARTICLE-SIZE DISTRIBUTION OF SOIL, MAY TO AUGUST 1979

DATE	TIME	NITRO- GEN, NO2+N03 TOT. IN SOIL (MG/KG AS N)	NITRO- GEN, NH4 TOTAL IN SOIL (MG/KG AS N)	NITRO- GEN, NH4 + ORG. TOT. IN SOIL (MG/KG AS N)	NITRO- GEN, TOT IN SOIL (MG/KG AS N)	PHOS- PHORUS, TOTAL IN SOIL (MG/KG AS P)	CARBON ORGANIC TOT. IN SOIL (G/KG AS C)	CARBON INOR- GANIC, TOT. IN SOIL (G/KG AS C)	SED. FALL DIAM. % FINER THAN .004 MM	SED. FALL DIAM. % FINER THAN .008 MM	SED. FALL DIAM. % FINER THAN .016 MM	SED. FALL DIAM. % FINER THAN .031 MM
MAY												
22...	1300	24	10	14000	14000	640	34	1.1	19	30	47	69
AUG												
07...	1330	32	1.0	19000	19000	900	36	.7	20	33	52	72

DATE	SED. FALL DIAM. % FINER THAN .062 MM	SED. FALL DIAM. % FINER THAN .125 MM	SED. FALL DIAM. % FINER THAN .250 MM	SED. FALL DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SIEVE DIAM. % FINER THAN 2.00 MM
MAY										
22...	--	--	--	--	86	94	98	99	100	--
AUG										
07...	--	--	--	--	88	94	97	99	100	--

DATE	ATRA- ZINE TOT. IN SOIL (MG/KG)	PROMO- TONE TOT. IN SOIL (MG/KG)	PROMO- TRYNE TOT. IN SOIL (MG/KG)	PROPA- ZINE TOT. IN SOIL (MG/KG)	SIMA- ZINE TOT. IN SOIL (MG/KG)
MAY					
22...	.0	.0	.0	.0	.0
AUG					
07...	.0	.0	.0	.0	.0

PEQUEA CREEK BASIN

01576782 GOODS RUN TRIBUTARY AT WILLOW STREET, PA

LOCATION.--Lat 39°55'20", long 76°15'10", Lancaster County, Hydrologic Unit 02050306, on left bank at end of culvert pipe, 100 ft (30 m) upstream from State Route 272 at Willow Street, and 0.34 mi (0.55 km) upstream from mouth.

DRAINAGE AREA.--0.23 mi² (0.60 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 380 ft (116 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61.5 ft³/s (1.74 m³/s) Sept. 22, 1979, gage height, 2.48 ft (0.756 m) Sept. 22, 1979; minimum, 0.01 ft³/s (0.0003 m³/s) Aug. 31, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 61.5 ft³/s (1.74 m³/s) Sept. 22, gage height, 2.48 ft (0.756 m) Sept. 22; minimum, 0.01 ft³/s (0.0003 m³/s) Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	.08	.11	.05	.03
2								---	.07	.05	.06	.03
3								---	.49	.05	.05	.03
4								---	.29	.11	.05	.03
5								---	.18	.04	.05	2.8
6								---	.08	.04	.05	3.8
7								---	.10	.04	.04	.11
8								---	.10	.04	.07	.07
9								---	.08	.04	.04	.05
10								---	.08	.04	.10	.05
11								---	.08	.03	.09	.04
12								---	.05	.04	1.3	.04
13								---	.04	.05	.07	.03
14								---	.04	.14	.06	.35
15								---	.04	.03	.06	.06
16								---	.04	1.8	.05	.05
17								---	.05	.14	.05	.04
18								---	.05	.06	.07	.04
19								---	.05	.06	.05	.04
20								---	.05	.05	.03	.04
21								---	.05	.94	.07	5.1
22								---	.05	.08	.03	2.8
23								.89	.04	.07	.08	.17
24								.68	.04	.06	.21	.11
25								.74	.04	.05	.12	.10
26								.20	.05	.06	.04	.07
27								.10	.05	.05	.08	.08
28								.08	.08	.06	.03	.08
29								.08	.06	.74	.03	.08
30								.07	.08	.10	.03	.07
31								.07	---	.06	.02	---
TOTAL	---	---	---	---	---	---	---	---	2.58	5.23	3.13	16.39
MEAN	---	---	---	---	---	---	---	---	.086	.17	.10	.55
MAX	---	---	---	---	---	---	---	---	.49	1.8	1.3	5.1
MIN	---	---	---	---	---	---	---	---	.04	.03	.02	.03

PEQUEA CREEK BASIN

01576782 GOODS RUN TRIBUTARY AT WILLOW STREET, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1979 to current year.

REMARKS.--Soil sample analyses were run on samples collected from the top 4 inches (10.2 cm) of soil at 8 sites in the drainage basin and composited for analysis.

WATER-QUALITY DATA, MAY TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
MAY									
22...	1500	.03	4.8	3.8	3.8	.04	.04	3.8	3.8
24...	1226	.03	1.8	1.1	1.1	.03	.03	1.1	1.1
JUN									
18...	1315	.05	3.9	3.8	3.8	.04	.03	3.8	3.8
AUG									
07...	1130	.05	3.7	3.4	3.4	.01	.01	3.4	3.4
29...	1620	.03	4.1	4.0	4.0	.02	.02	4.0	4.0
SEP									
05...	1620	.02	2.2	1.7	1.6	.04	.03	1.7	1.6
05...	1700	.67	4.2	1.4	1.4	.07	.07	1.5	1.5
05...	1830	3.8	.59	.09	.00	.03	.03	.12	.00
05...	1835	7.0	1.1	.45	.45	.04	.04	.49	.49
05...	1841	23	.54	.25	.25	.01	.01	.26	.26
05...	1902	5.2	1.5	.40	.35	.02	.02	.42	.37
05...	1915	12	1.3	.22	.20	.03	.03	.23	.23
05...	1945	3.3	.90	.38	.37	.02	.02	.40	.39
05...	2015	18	.62	.24	.24	.01	.01	.25	.25
05...	2020	31	.78	.15	.15	.01	.01	.16	.16
05...	2036	13	.71	.22	.22	.02	.01	.24	.23
05...	2200	1.3	1.3	.62	.61	.03	.02	.65	.63
05...	2248	17	.63	.15	.15	.01	.01	.16	.16
05...	2330	38	.52	.15	.15	.02	.01	.17	.16
06...	0030	18	1.1	.35	.31	.02	.01	.37	.32
06...	0139	6.5	1.4	.79	.71	.02	.02	.81	.73
06...	0208	24	.70	.27	.27	.01	.01	.28	.28
06...	0305	12	1.4	.66	.63	.02	.02	.68	.65
06...	0325	43	.77	.38	.34	.02	.01	.40	.35
06...	0655	1.0	3.2	2.4	2.4	.03	.02	2.4	2.4

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
MAY								
22...	.02	.02	.98	.98	1.0	.00	1.0	4.8
24...	.15	.06	.64	.64	.79	.09	.70	1.9
JUN								
18...	.09	.05	.31	.07	.40	.28	.12	4.2
AUG								
07...	.02	.00	.49	.33	.51	.18	.33	3.9
29...	.20	.03	.20	.11	.40	.26	.14	4.4
SEP								
05...	.06	.02	.62	.62	.68	.00	.64	2.4
05...	.12	.12	6.9	2.6	7.0	4.3	2.7	6.9
05...	.12	.01	9.6	.58	9.7	9.1	.59	9.8
05...	.15	.00	2.8	.65	2.9	2.3	.65	3.4
05...	.10	.00	1.0	.28	1.1	.82	.28	1.4
05...	.15	.06	1.0	1.0	1.2	.00	1.1	1.6
05...	.17	.17	.93	.93	1.1	.00	1.1	1.3
05...	.10	.00	.51	.51	.61	.03	.51	1.0
05...	.05	.04	.33	.33	.38	.00	.37	.63
05...	.05	.01	1.1	.61	1.1	.48	.62	1.3
05...	.09	.04	.44	.44	.53	.02	.48	.78
05...	.06	.03	.64	.64	.70	.00	.67	1.4
05...	.07	.07	.81	.40	.88	8.3	.47	1.0
05...	.03	.02	.73	.34	.76	.40	.36	.93
06...	.08	.08	.67	.67	.75	.00	.75	1.1
06...	.02	.00	.70	.65	.72	.07	.65	1.5
06...	.00	.00	.49	.42	.49	.07	.42	.77
06...	.04	.04	.70	.70	.74	.00	.74	1.4
06...	.05	.05	.53	.37	.58	.15	.42	.98
06...	.03	.00	.80	.76	.83	.07	.76	3.2

PEQUEA CREEK BASIN

01576782 GOODS RUN TRIBUTARY AT WILLOW STREET, PA--Continued

WATER-QUALITY DATA, MAY TO SEPTEMBER 1979

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
MAY								
22...	.03	.00	.03	.00	20	.7	106	.01
24...	.06	.03	.03	.00	3.8	.8	27	.00
JUN								
18...	.04	.02	.03	.01	3.9	.3	119	.02
AUG								
07...	.04	.01	.01	.01	2.7	--	49	.01
29...	.03	.03	.03	.03	9.0	.7	73	.01
SEP								
05...	.06	.02	.03	.00	27	.7	97	.01
05...	1.4	.10	.42	.03	54	11	716	1.3
05...	2.5	.06	.09	.00	13	61	1403	15
05...	.75	.05	.06	.00	7.5	30	925	17
05...	.35	.07	.02	.00	6.7	8.4	603	38
05...	.31	.21	.18	.08	6.1	1.5	62	.87
05...	.15	.15	.05	.05	3.6	1.4	88	2.9
05...	.25	.23	.19	.17	11	1.0	19	.17
05...	.16	.11	.08	.04	2.7	2.0	183	8.9
05...	.26	.08	.08	.03	2.5	3.5	286	24
05...	.26	.19	.15	.10	3.5	1.6	73	2.7
05...	.18	.16	.12	.10	5.1	.8	14	.05
05...	.13	.09	.05	.01	3.1	1.6	96	4.5
05...	.21	.11	.11	.06	3.1	1.8	107	11
06...	.19	.15	.16	.14	9.3	.7	17	.83
06...	.20	.17	.14	.12	8.7	1.3	30	.53
06...	.13	.09	.08	.05	3.5	2.2	45	3.0
06...	.20	.18	.15	.13	6.0	1.2	52	1.7
06...	.18	.13	.13	.08	3.3	1.4	35	4.1
06...	.22	.19	.15	.12	6.1	.3	9	.02

PEQUEA CREEK BASIN

01576782 GOODS RUN TRIBUTARY AT WILLOW STREET, PA--Continued

PESTICIDE ANALYSES, JUNE TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	AMF TRYNE TOTAL (UG/L)	ATRA- TONE, TOTAL (UG/L)	ATRA- ZINE, TOTAL (UG/L)	CYANA- ZINE, TOTAL (UG/L)	CYPRA- ZINE, TOTAL (UG/L)
JUN							
18...	1315	.05	.0	.0	.00	.0	.0
AUG							
07...	1130	.05	.0	.0	.00	.0	.0
29...	1620	.03	.0	.0	.00	.0	.0
SEP							
05...	1620	.02	.0	.0	.00	.0	.0
05...	1700	.67	.0	.0	.00	.0	.0
05...	1835	7.0	.0	.0	.00	.0	.0
05...	2020	31	.0	.0	.00	.0	.0
05...	2248	17	.0	.0	.00	.0	.0
05...	2330	38	.0	.1	.00	.0	.0
06...	0240	23	.0	.1	.00	.0	.0
06...	0655	1.0	.0	.0	.00	.0	.0

DATE	PROME- TONE TOTAL (UG/L)	PROME- TRYNE TOTAL (UG/L)	PROPA- ZINE TOTAL (UG/L)	SIME TONE, TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)	SIMA- ZINE TOTAL (UG/L)
JUN						
18...	.2	.0	.0	.0	.0	.0
AUG						
07...	.1	.0	.0	.0	.0	.0
29...	.3	.1	.0	.0	.0	.0
SEP						
05...	.2	.0	.0	.0	.0	.0
05...	.0	.0	.0	.0	.0	.0
05...	.6	.0	.0	.0	.0	.0
05...	.6	.0	.0	.0	.0	.0
05...	1.0	.0	.0	.0	.0	.0
05...	.4	.0	.0	.0	.0	.0
06...	.4	.0	.0	.0	.0	.0
06...	1.0	.2	.0	.0	.0	.0

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	ODE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
SFP									
05...	2330	38	.0	.00	.00	.4	.02	.00	.03

DATE	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN, TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)
SEP									
05...	.02	.02	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOTAL TRI- THION, TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	2,4-DP TOTAL (UG/L)	MIREX, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
SEP									
05...	.00	.00	.00	.00	.06	.00	.00	.00	.03

PEQUEA CREEK BASIN

01576782 GOODS RUN TRIBUTARY AT WILLOW STREET, PA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
SEP 05...	1700	.67	28	41	64	84	97	100	--	--
05...	1835	7.0	19	29	44	60	72	89	97	100

CHEMISTRY AND PARTICLE-SIZE DISTRIBUTION OF SOIL, MAY TO AUGUST 1979

DATE	TIME	NITRO- GEN NO2+NO3 TOT. IN SOIL (MG/KG AS N)	NITRO- GEN, NH4 TOTAL IN SOIL (MG/KG AS N)	NITRO- GEN, NH4 + ORG. TOT. IN SOIL (MG/KG AS N)	NITRO- GEN, TOT. IN SOIL (MG/KG AS N)	PHOS- PHORUS, TOTAL IN SOIL (MG/KG AS P)	CARBON ORGANIC TOT. IN SOIL (G/KG AS C)	CARBON INOR- GANIC, TOT. IN SOIL (G/KG AS C)	SED. FALL DIAM. % FINER THAN .004 MM	SED. FALL DIAM. % FINER THAN .008 MM	SED. FALL DIAM. % FINER THAN .016 MM	SED. FALL DIAM. % FINER THAN .031 MM
MAY 22...	1500	6.3	7.6	5100	5110	280	17	1.8	21	30	42	59
AUG 07...	1130	.3	83	5400	5400	370	20	0.3	21	30	44	59

DATE	SED. FALL DIAM. % FINER THAN .062 MM	SED. FALL DIAM. % FINER THAN .125 MM	SED. FALL DIAM. % FINER THAN .250 MM	SED. FALL DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SIEVE DIAM. % FINER THAN 2.00 MM
MAY 22...	--	--	--	--	72	81	86	90	93	96
AUG 07...	--	--	--	--	71	82	88	93	96	98

DATE	ATRA- ZINE TOT. IN SOIL (MG/KG)	PROMO- TONE TOT. IN SOIL (MG/KG)	PROMO- TRYNE TOT. IN SOIL (MG/KG)	PROPA- ZINE TOT. IN SOIL (MG/KG)	SIMA- ZINE TOT. IN SOIL (MG/KG)
MAY 22...	.0	.0	.0	.0	.0
AUG 07...	.0	.0	.0	.0	.0

CHEMISTRY OF PRECIPITATION, SEPTEMBER 1979

DATE	NITRO- GEN, NITRATE (MG/L AS N)	NITRO- GEN, NITRITE (MG/L AS N)	NITRO- GEN, NO2+NO3 (MG/L AS N)	NITRO- GEN, AMMONIA (MG/L AS N)	NITRO- GEN, ORGANIC (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO. (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
SEP 05-06	.05	.01	.06	.08	.43	.51	.57	.06	.06	1.5

PEQUEA CREEK BASIN

01576783 GOODS RUN TRIBUTARY AT WEST WILLOW, PA

LOCATION.--Lat 39°55'30", long 76°16'15", Lancaster County, Hydrologic Unit 02050306, on right bank 0.18 mi (0.29 km) upstream from Penn Grant Road (LR 36137), 0.55 mi (0.88 km) southwest of West Willow, and 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--0.18 mi² (0.47 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 380 ft (116 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16.0 ft³/s (0.453 m³/s) Sept. 22, 1979, gage height, 2.19 ft (0.668 m) Sept. 22, 1979, from rating curve extended above 11.0 ft³/s (0.312 m³/s); minimum, 0.04 ft³/s (0.001 m³/s) part or all of each day Aug. 29 to Sept. 5, Sept. 20, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16.0 ft³/s (0.453 m³/s) Sept. 22, gage height, 2.19 ft (0.668 m) Sept. 22, from rating curve extended above 11.0 ft³/s (0.312 m³/s); minimum, 0.04 ft³/s (0.001 m³/s) part or all of each day Aug. 29 to Sept. 5, Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	.27	.11	.09	.04
2								---	.27	.09	.09	.04
3								---	.34	.09	.09	.04
4								---	.43	.09	.07	.04
5								---	.34	.09	.07	.09
6								---	.30	.09	.05	1.5
7								---	.30	.09	.05	.16
8								---	.27	.09	.07	.14
9								---	.27	.09	.05	.09
10								---	.27	.09	.05	.09
11								---	.23	.09	.05	.09
12								---	.23	.09	.22	.07
13								---	.19	.09	.11	.07
14								---	.19	.09	.09	.09
15								.19	.19	.07	.07	.07
16								.19	.19	.51	.07	.05
17								.19	.19	.11	.05	.05
18								.23	.19	.09	.05	.05
19								.19	.19	.09	.05	.05
20								.19	.16	.09	.05	.04
21								.16	.16	.57	.05	1.4
22								.14	.16	.11	.05	1.9
23								.27	.16	.11	.07	.34
24								.64	.14	.11	.07	.27
25								.67	.14	.09	.05	.23
26								.48	.14	.09	.05	.19
27								.30	.14	.09	.05	.19
28								.30	.14	.07	.05	.19
29								.27	.14	.09	.04	.19
30								.27	.14	.09	.04	.19
31								.27	---	.09	.04	---
TOTAL	---	---	---	---	---	---	---	---	6.47	3.75	2.05	7.95
MEAN	---	---	---	---	---	---	---	---	.22	.12	.066	.27
MAX	---	---	---	---	---	---	---	---	.43	.57	.22	1.9
MIN	---	---	---	---	---	---	---	---	.14	.07	.04	.04

PEQUEA CREEK BASIN

01576783 GOODS RUN TRIBUTARY AT WEST WILLOW, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1979 to current year.

REMARKS.--Soil sample analyses were run on samples collected from the top 4 inches (10.2 cm) of soil at 8 sites in the drainage basin and composited for analysis.

WATER-QUALITY DATA, MAY TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
MAY								
22...	1630	.13	24	24	24	.02	.01	24
JUN								
18...	1230	.19	23	23	23	.04	.04	23
AUG								
07...	1505	.03	21	21	21	.01	.01	21
29...	1715	.03	20	E20	20	.01	.01	E20
SEP								
05...	1645	.02	15	18	15	.02	.02	18
05...	2145	.27	15	13	13	.26	.13	13
05...	2340	.93	8.1	9.0	4.5	.25	.12	9.2
06...	0120	1.7	15	7.8	7.8	.17	.16	8.0
06...	0230	10	10	6.0	6.0	.13	.13	6.1
06...	0240	12	9.3	6.2	5.3	.15	.08	6.3
06...	0300	11	13	5.4	5.4	.55	.28	5.9
06...	0405	9.4	14	8.2	7.3	.17	.15	8.4
06...	0430	6.8	15	15	9.8	.16	.16	15
06...	0500	3.7	14	11	8.4	.16	.16	11
06...	0710	.61	16	14	12	.21	.12	14

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
MAY									
22...	24	.09	.09	.09	.01	.18	.08	.10	24
JUN									
18...	23	.04	.04	.26	.20	.30	.06	.24	23
AUG									
07...	21	.02	.01	.20	.20	.22	.00	.21	21
29...	20	.02	.02	.00	.00	.02	.00	.02	20
SEP									
05...	15	.17	.17	.03	.01	.20	.20	.18	18
05...	13	.41	.41	2.3	1.2	2.7	1.1	1.6	16
05...	4.6	1.2	1.0	9.8	2.5	11	7.5	3.5	20
06...	8.0	2.0	1.5	7.2	5.7	9.2	2.0	7.2	17
06...	6.1	1.8	1.6	12	2.4	14	10	4.0	20
06...	5.4	1.5	1.7	10	2.4	12	8.1	3.9	18
06...	5.7	5.1	2.1	9.9	5.3	15	7.6	7.4	21
06...	7.4	2.9	.21	6.1	6.1	9.0	2.7	6.3	17
06...	10	3.8	.43	18	4.9	22	17	5.3	37
06...	8.6	3.4	.64	E9.0	4.4	12	1.7	5.0	23
06...	12	1.8	1.2	2.3	2.3	4.1	.50	3.5	18

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO. TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO. DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
MAY								
22...	.14	.12	.09	.07	8.7	.1	109	.04
JUN								
18...	.12	.11	.11	.10	2.5	.4	137	.07
AUG								
07...	.20	.19	.19	.19	2.1	.2	156	.01
29...	.23	.22	.20	.20	1.6	.3	133	.01
SEP								
05...	.22	.19	.18	.15	2.9	2.4	123	.01
05...	1.7	1.3	1.3	1.3	9.5	2.7	129	.09
05...	4.4	2.7	3.0	1.5	19	16	961	2.4
06...	4.5	3.6	3.3	2.4	20	12	211	.97
06...	5.2	2.5	2.3	.77	17	40	2810	77
06...	6.5	3.4	3.0	3.0	20	36	2550	83
06...	7.9	5.3	7.0	2.6	18	31	1180	37
06...	5.5	4.7	4.6	3.8	17	20	240	6.1
06...	5.3	4.5	5.3	4.5	18	12	370	6.8
06...	5.0	4.2	5.0	4.1	18	40	185	1.9
06...	2.8	2.5	1.9	1.6	13	2.6	63	.10

PESTICIDE ANALYSES, JUNE TO SEPTEMBER 1979

DATE	PROME-TONE TOTAL (UG/L)	PROME-TONE, DIS-SOLVED (UG/L)	PROME-TRYNE TOTAL (UG/L)	PROME-TRYNE, DIS-SOLVED (UG/L)	PROPA-ZINE, TOTAL (UG/L)	PROPA-ZINE, DIS-SOLVED (UG/L)	SIME-TONE, TOTAL (UG/L)	SIME-TONE, DIS-SOLVED (UG/L)	SIMA-ZINE TOTAL (UG/L)	SIMA-ZINE DIS-SOLVED (UG/L)	SIME-TRYNE TOTAL (UG/L)	SIME-TRYNE DIS-SOLVED (UG/L)
JUN 18...	.0	--	.0	--	.0	--	.0	--	.0	--	.0	--
AUG 07...	.0	--	.1	--	.1	--	.0	--	.0	--	.0	--
29...	.0	--	.0	--	.1	--	.0	--	.0	--	.0	--
SEP 05...	.0	--	.0	--	.0	--	.0	--	.0	--	.0	--
05...	.0	--	.0	--	.0	--	.0	--	.0	--	.0	--
06...	.0	--	.0	--	.2	--	.0	--	.0	--	.0	--
06...	.0	.0	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0
06...	.0	--	.0	--	.2	--	.0	--	.0	--	.0	--
06...	.0	--	.0	--	.2	--	.0	--	.0	--	.0	--

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
SEP									
06...	0120	1.7	.0	.00	.00	.7	.00	.00	.00
06...	0300	11	.0	.00	.00	.5	.00	.00	.00

[illegible][illegible]

PEQUEA CREEK BASIN

01576783 GOOD RUN TRIBUTARY AT WEST WILLOW, PA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
SEP										
06...	0120	1.7	50	62	77	87	94	98	100	--
06...	0300	11	26	37	57	75	93	98	99	100
06...	0430	6.8	42	49	62	76	86	93	98	100

CHEMISTRY AND PARTICLE-SIZE DISTRIBUTION OF SOIL, MAY TO SEPTEMBER 1979

DATE	TIME	NITRO- GEN NO2+N03 TOT. IN SOIL (MG/KG AS N)	NITRO- GEN, NH4 TOTAL IN SOIL (MG/KG AS N)	NITRO- GEN, NH4 + ORG. TOT. IN SOIL (MG/KG AS N)	NITRO- GEN, TOT IN SOIL (MG/KG AS N)	PHOS- PHORUS, TOTAL IN SOIL (MG/KG AS P)	CARBON ORGANIC TOT. IN SOIL (G/KG AS C)	CARBON INOR- GANIC, TOT. IN SOIL (G/KG AS C)	SED. FALL DIAM. % FINER THAN .004 MM	SED. FALL DIAM. % FINER THAN .008 MM	SED. FALL DIAM. % FINER THAN .016 MM	SED. FALL DIAM. % FINER THAN .031 MM
MAY												
22...	1615	15	12	6600	6620	1000	21	.1	18	28	42	59
AUG												
07...	1500	9.5	24	7500	7510	620	19	.1	19	30	46	63

DATE	SED. FALL DIAM. % FINER THAN .062 MM	SED. FALL DIAM. % FINER THAN .125 MM	SED. FALL DIAM. % FINER THAN .250 MM	SED. FALL DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SIEVE DIAM. % FINER THAN 2.00 MM
MAY										
22...	--	--	--	--	71	78	83	86	89	93
AUG										
07...	--	--	--	--	79	87	92	95	98	99

DATE	ATRA- ZINE TOT. IN SOIL (MG/KG)	PROMO- TONE TOT. IN SOIL (MG/KG)	PROMO- TRYNE TOT. IN SOIL (MG/KG)	PROPA- ZINE TOT. IN SOIL (MG/KG)	SIMA- ZINE TOT. IN SOIL (MG/KG)
MAY					
22...	.38	.0	.0	.0	.0
AUG					
07...	.25	.0	.0	.0	.0

CHEMISTRY OF PRECIPITATION, SEPTEMBER 1979

DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+N03 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
SEP										
05-06	.05	.01	.06	.06	.10	.16	.22	.01	.00	1.8

PEQUEA CREEK BASIN

01576787 PEQUEA CREEK AT MARTIC FORGE, PA

LOCATION.--Lat 39°54'21", long 76°19'43", Lancaster County, Hydrologic Unit 02050306, on left bank 400 ft (122 m) upstream from bridge on State Highway 324 at Martic Forge and 3.4 mi (5.5 km) upstream from mouth.

DRAINAGE AREA.--148 mi² (383 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 228.50 ft (69.65 m), by barometer.

REMARKS.--Records good except those for winter periods, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s (354 m³/s) Jan. 26, 1978, gage height, 16.44 ft (5.011 m); minimum, 63.0 ft³/s (1.78 m³/s) Aug. 31, 1977, gage height, 1.70 ft (0.518 m); minimum daily, 68 ft³/s (1.93 m³/s) July 29, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (36.8 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. 9	1100	1,460 41.4	5.07 1.545	July 17	0330	1,690 47.9	5.37 1.637
Jan. 8	1330	1,770 50.1	5.46 1.664	July 22	0200	2,350 66.6	6.09 1.856
Jan. 21	1900	8,450 239	11.89 3.624	Aug. 30	0300	3,440 97.4	7.13 2.173
Jan. 24	2100	*8,700 246	*12.17 3.709	Sept. 6	1100	6,200 176	9.60 2.926
Feb. 26	0630	8,070 228	11.47 3.496	Sept. 22	1830	5,180 147	8.66 2.640

Minimum discharge 80 ft³/s (2.27 m³/s) part of each day Nov. 9, 10, 14, 15, 26, 27; minimum gage height, 1.83 ft (0.558 m) Nov. 14, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	87	123	195	277	517	191	191	159	151	131	134
2	94	85	101	541	257	432	200	184	176	147	125	127
3	90	87	96	450	247	360	212	184	385	136	142	124
4	92	87	141	206	247	322	226	178	329	129	124	117
5	96	84	224	204	235	406	251	172	251	134	117	124
6	378	82	145	211	224	453	205	169	226	129	112	3340
7	133	82	117	235	204	368	191	167	202	124	108	375
8	105	82	123	1300	193	315	191	165	191	115	108	241
9	97	80	822	381	184	292	222	161	184	120	106	209
10	94	80	464	247	176	280	280	159	182	118	104	191
11	94	82	204	245	173	437	219	161	189	117	115	182
12	92	82	173	235	169	313	212	161	184	108	322	176
13	92	82	162	243	171	280	207	165	172	110	229	167
14	92	80	151	628	176	275	241	187	165	132	136	187
15	99	80	143	270	180	243	238	165	159	233	122	260
16	90	92	138	220	182	241	207	163	155	128	117	167
17	90	92	134	209	187	238	198	144	153	495	113	180
18	97	168	128	202	193	236	191	142	238	129	112	163
19	90	116	126	182	198	226	187	161	155	118	118	159
20	90	90	124	218	206	224	187	157	147	113	113	144
21	89	85	149	5310	215	219	184	147	142	635	110	257
22	87	82	145	2000	226	212	182	146	142	671	110	3030
23	85	82	132	338	237	209	182	164	157	159	106	408
24	84	86	152	3920	1110	236	178	443	146	147	110	292
25	85	87	470	3510	3840	248	180	263	140	134	122	231
26	85	80	214	525	6140	221	180	216	138	129	113	241
27	99	89	176	409	1490	207	412	205	134	129	127	224
28	99	101	156	377	792	198	274	174	136	124	276	216
29	90	110	151	343	---	198	214	167	140	122	147	216
30	87	166	154	324	---	195	198	163	138	322	861	216
31	87	---	156	294	---	193	---	157	---	155	156	---
TOTAL	3176	2768	5894	23972	18129	8794	6440	5581	5415	5713	4912	12098
MEAN	102	92.3	190	773	647	284	215	180	181	184	158	403
MAX	378	168	822	5310	6140	517	412	443	385	671	861	3340
MIN	84	80	96	182	169	193	178	142	134	108	104	117
CFSM	.69	.62	1.28	5.22	4.37	1.92	1.45	1.22	1.22	1.24	1.07	2.72
IN.	.80	.70	1.48	6.03	4.56	2.21	1.62	1.40	1.36	1.44	1.23	3.04

WTR YR 1979 TOTAL 102892 MEAN 282 MAX 6140 MIN 80 CFSM 1.91 IN 25.86

PEQUEA CREEK BASIN

01576787 PEQUEA CREEK AT MARTIC FORGE, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1977 to current year.

PERIOD OF DAILY RECORD.--

KJELDAHL NITROGEN DISCHARGE: February 1977 to March 1979.
 NITRITE PLUS NITRATE DISCHARGE: February 1977 to March 1979.
 PHOSPHORUS DISCHARGE: February 1977 to March 1979.
 DISSOLVED ORGANIC CARBON DISCHARGE: February 1977 to March 1979.
 SUSPENDED ORGANIC CARBON DISCHARGE: February 1977 to March 1979.
 SUSPENDED SEDIMENT DISCHARGE: February 1977 to March 1979.

EXTREMES FOR PERIOD OF DAILY RECORD.--

KJELDAHL NITROGEN CONCENTRATIONS: Maximum daily, 25 mg/L Jan. 24, 1979; minimum daily, 0.00 mg/L Apr. 8, 1978.
 KJELDAHL NITROGEN DISCHARGES: Maximum daily, 260 tons (236 tonnes) Jan. 24, 1979; minimum daily, 0.00 ton (0.00 tonne) Apr. 8, 1978.
 NITRITE PLUS NITRATE CONCENTRATIONS: Maximum daily, 7.6 mg/L Jan. 4-6, 1978; minimum daily, 0.85 mg/L Feb. 26, 1979.
 NITRITE PLUS NITRATE DISCHARGES: Maximum daily, 24 tons (22 tonnes) Jan. 26, 1978; minimum daily, 0.77 ton (0.70 tonne) Jul. 29, 1977.
 PHOSPHORUS CONCENTRATIONS: Maximum daily, 5.8 mg/L Jun. 2, 1977; minimum daily, 0.01 mg/L on several days during April and May 1978.
 PHOSPHORUS DISCHARGES: Maximum daily, 47 tons (43 tonnes) Jan. 25, 1979; minimum daily, 0.01 ton (0.01 tonne) on many days during March, April and May 1978, Nov. 8-14, 1978.
 DISSOLVED ORGANIC CARBON CONCENTRATIONS: Maximum daily, 30 mg/L Apr. 5, 1977; minimum daily, 0.2 mg/L Jan. 31, 1978.
 DISSOLVED ORGANIC CARBON DISCHARGES: Maximum daily, 222 tons (201 tonnes) Jan. 24, 1979; minimum daily, 0.20 ton (0.18 tonne) Jan. 31, Feb. 1, 1978.
 SUSPENDED ORGANIC CARBON CONCENTRATIONS: Maximum daily, 84 mg/L Jun. 2, 1977; minimum daily, 0.0 mg/L Feb. 24, 25, 1978.
 SUSPENDED ORGANIC CARBON DISCHARGES: Maximum daily, 444 tons (403 tonnes) Jan. 26, 1978; minimum daily, 0.00 ton (0.00 tonne) Jan. 31-Feb. 3, 1978.
 SEDIMENT CONCENTRATIONS: Maximum daily, 6630 mg/L Jun. 2, 1977; minimum daily, 3 mg/L Nov. 5, 11, 1978.
 SEDIMENT DISCHARGES: Maximum daily, 67,900 tons (61,600 tonnes) Jan. 26, 1978; minimum daily, 0.66 tons (0.60 tonnes) Nov. 11, 1978.

EXTREMES FOR CURRENT YEAR.--

KJELDAHL NITROGEN CONCENTRATIONS: Maximum daily, 25 mg/L Jan. 24; minimum daily, 0.02 mg/L Feb. 19.
 KJELDAHL NITROGEN DISCHARGES: Maximum daily, 260 tons (236 tonnes) Jan. 24; minimum daily, 0.01 ton (0.01 tonne) Feb. 19.
 NITRITE PLUS NITRATE CONCENTRATIONS: Maximum daily, 7.2 mg/L Jan. 12, Feb. 7-14, 19; minimum daily, 0.85 mg/L Feb. 26.
 NITRITE PLUS NITRATE DISCHARGES: Maximum daily, 15 tons (14 tonnes) Jan. 21; minimum daily, 0.84 ton (0.76 tonne) Oct. 10.
 PHOSPHORUS CONCENTRATIONS: Maximum daily, 4.6 mg/L Jan. 25; minimum daily, 0.04 mg/L Nov. 8-10, 12, 13.
 PHOSPHORUS DISCHARGES: Maximum daily, 47 tons (43 tonnes) Jan. 25; minimum daily, 0.01 ton (0.01 tonne) Nov. 8-14.
 DISSOLVED ORGANIC CARBON CONCENTRATIONS: Maximum daily, 21 mg/L Jan. 24; minimum daily, 0.7 mg/L Feb. 17.
 DISSOLVED ORGANIC CARBON DISCHARGES: Maximum daily, 222 tons (201 tonnes) Jan. 24; minimum daily, 0.35 ton (0.32 tonne) Feb. 17.
 SUSPENDED ORGANIC CARBON CONCENTRATIONS: Maximum daily, 36 mg/L Jan. 24; minimum daily, 0.2 mg/L Feb. 16-18.
 SUSPENDED ORGANIC CARBON DISCHARGES: Maximum daily, 386 tons (350 tonnes) Jan. 24; minimum daily, 0.10 ton (0.09 tonne) Feb. 16-18.
 SEDIMENT CONCENTRATIONS: Maximum daily, 4,850 mg/L Jan. 24; minimum daily, 3 mg/L Nov. 5, 11.
 SEDIMENT DISCHARGES: Maximum daily, 51,400 tons (46,600 tonnes) Jan. 24; minimum daily, 0.66 ton (0.60 tonne) Nov. 11.

PEQUEA CREEK BASIN
01576787 PEQUEA CREEK AT MARTIC FORGE, PA--Continued
WATER-QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	STREAM- FLOW (CFS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
APR									
09-11	--	--	267	5.5	5.3	5.1	.03	.03	5.3
23...	1010	187	--	5.4	5.2	5.2	.04	.04	5.2
27-29	--	--	333	5.2	4.4	4.2	.09	.06	4.5
MAY									
22...	1115	147	--	5.6	5.5	5.3	.10	.09	5.6
23-24	--	--	363	5.8	4.5	4.4	.14	.10	4.6
JUN									
02-05	--	--	303	5.2	4.5	4.3	.16	.13	4.7
17-18	--	--	300	5.1	4.8	4.4	.15	.06	4.9
25...	1030	139	--	5.6	5.3	5.2	.03	.02	5.3
JUL									
14-16	--	--	214	5.2	4.6	4.1	.07	.06	4.7
16-18	--	--	386	4.0	3.4	2.8	.10	.08	3.5
21-22	--	--	904	3.3	2.5	2.3	.16	.01	2.7
30-31	--	--	271	5.4	4.6	4.6	.08	.07	4.5
AUG									
07...	0800	110	--	5.8	5.6	5.5	.03	.03	5.6
11-14	--	--	227	4.8	3.9	3.9	.06	.05	3.9
27-29	--	--	209	4.9	4.2	4.2	.10	.06	4.3
29...	1730	122	--	4.3	--	3.4	--	.08	--
29...	1840	110	--	--	3.3	--	.11	--	3.4
29-31	--	--	402	4.5	2.8	2.8	.07	.05	2.9
SEP									
05...	1630	115	--	4.5	4.9	4.4	.03	.03	4.9
05...	2310	202	--	4.8	4.4	4.0	.05	.04	4.4
05-07	--	--	1911	2.7	1.9	1.4	.09	.04	2.0
06...	0150	2539	--	4.0	3.2	2.6	.11	.09	3.3
06...	0555	3737	--	2.8	1.8	1.5	.11	.05	1.9
06...	0955	5979	--	2.2	1.3	1.1	.10	.03	1.4
06...	1115	6165	--	2.4	1.4	1.3	.09	.04	1.5
06...	1425	4248	--	3.0	1.9	1.7	.16	.06	2.1
06...	1915	2145	--	3.0	1.7	1.6	.12	.06	1.8
07...	0350	447	--	3.9	2.5	2.5	.09	.05	2.6
07...	1330	322	--	4.2	3.3	3.3	.05	.04	3.4
14-15	--	--	257	1.9	5.2	.95	.04	.05	5.2
21-24	--	--	1250	3.1	2.4	2.3	.05	.03	2.4

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
APR									
09-11	5.1	.06	.06	.56	.35	.62	--	.41	5.9
23...	5.2	.01	.01	.22	.22	.23	.00	.23	5.4
27-29	4.3	.50	.44	2.4	.41	2.9	2.1	.85	7.4
MAY									
22...	5.4	.08	.08	.67	.16	.75	.51	.24	6.4
23-24	4.5	.46	.46	2.0	.84	2.5	1.1	1.3	7.1
JUN									
02-05	4.4	.20	.20	1.3	.64	1.5	.66	.84	6.2
17-18	4.5	.15	.04	2.7	.53	2.8	2.2	.57	7.7
25...	5.2	.02	.02	.38	.38	.40	.00	.40	5.7
JUL									
14-16	4.2	.19	.09	2.7	.89	2.9	1.9	.98	7.6
16-18	2.9	.25	.25	7.3	.85	7.5	6.4	1.1	11
21-22	2.3	.40	.40	7.4	.57	7.8	6.8	.97	11
30-31	4.7	.13	.11	1.6	.59	1.7	1.0	.70	6.2
AUG									
07...	5.5	.03	.03	.45	.25	.48	.20	.28	6.1
11-14	3.9	.19	.19	1.2	.71	1.4	.50	.90	5.3
27-29	4.3	.04	.01	1.8	.54	1.8	1.3	.55	6.1
29...	3.5	--	.13	--	.69	--	--	.82	--
29...	--	--	--	--	--	--	--	--	--
29-31	2.8	.10	.04	3.1	1.7	3.2	1.5	1.7	6.1
SEP									
05...	4.4	.11	.11	.02	.00	.13	.13	.11	5.0
05...	4.0	.14	.12	2.2	.64	2.3	1.5	.76	6.7
05-07	1.4	.20	.20	4.4	1.1	4.6	3.3	1.3	6.6
06...	2.7	.33	.33	9.7	.97	10	8.7	1.3	13
06...	1.5	.20	.20	6.1	1.1	6.3	5.0	1.3	8.2
06...	1.1	.22	.22	3.3	.88	3.5	2.4	1.1	4.9
06...	1.3	.29	.26	4.8	.84	5.1	4.0	1.1	6.6
06...	1.8	.28	.28	3.9	.92	4.2	3.0	1.2	6.3
06...	1.7	.34	.34	2.5	.96	2.8	1.5	1.3	4.6
07...	2.5	.17	.14	1.8	1.3	2.0	.60	1.4	4.6
07...	3.3	.23	.23	1.0	.70	1.2	.27	.93	4.6
14-15	1.0	.07	.03	1.1	.89	1.2	.28	.92	6.4
21-24	2.3	.19	.14	2.7	.61	2.9	2.2	.75	5.3

PEQUEA CREEK BASIN

01576787 PEQUEA CREEK AT MARTIC FORGE, PA--Continued

WATER-QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
APR								
09-11	.10	.07	.04	.03	2.4	.0	33	24
23...	.03	.02	.01	.02	2.3	.4	14	7.1
27-29	.71	.12	.19	.11	16	7.8	756	680
MAY								
22...	.11	.05	.06	.04	10	.6	44	17
23-24	.65	.15	.17	.08	43	4.4	425	417
JUN								
02-05	.47	.15	.11	.11	4.6	--	303	248
17-18	.93	.07	.29	.04	7.9	8.7	924	748
25...	.11	.06	.05	.05	2.0	.9	29	11
JUL								
14-16	.80	.08	.09	.04	7.5	15	717	414
16-18	3.4	.14	.15	.14	--	31	3160	3290
21-22	3.6	1.1	1.5	.99	5.2	25	3540	8640
30-31	.67	.23	.15	.13	4.5	.1	360	263
AUG								
07...	.14	.10	.10	.10	2.3	.6	21	6.2
11-14	.48	.25	.21	.21	5.6	2.1	136	83
27-29	.56	.16	.17	.11	5.7	4.0	286	161
29...	--	.25	--	.22	--	--	--	--
29...	.40	--	.27	--	--	1.5	53	16
29-31	2.4	.10	.14	.05	5.8	40	2700	2930
SEP								
05...	.14	.10	.12	.12	2.6	.4	26	8.1
05...	.43	.14	.10	.10	3.5	4.0	263	143
05-07	2.5	.22	.25	.17	6.6	25	2100	10800
06...	3.2	.22	.41	.13	5.6	45	4410	30200
06...	2.5	.32	.36	.23	6.6	23	2210	22300
06...	3.0	.12	.26	.10	5.5	46	3590	58000
06...	2.8	.16	.27	.12	7.8	20	2230	37100
06...	2.1	.34	.41	.25	5.8	18	1700	19500
06...	1.6	.45	.49	.34	8.7	11	1280	7410
07...	.85	.36	.32	.21	8.6	2.2	348	420
07...	.48	.24	.19	.19	8.0	2.8	125	109
14-15	.31	.11	.08	.08	4.8	2.0	179	124
21-24	1.9	.35	.33	.21	5.3	18	1400	4730

PESTICIDE ANALYSES, APRIL TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	STREAM- FLOW (CFS)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
SEP										
06...	1115	6165	--	.0	.00	.00	.1	.01	.00	.04

DATE	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)
SEP									
06...	.04	.03	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	2,4-DP, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
SEP									
06...	.00	.00	.00	.00	.09	.02	.00	.00	.00

PEQUEA CREEK BASIN

01576787 PEQUEA CREEK AT MARTIC FORGE, PA--Continued

PESTICIDE ANALYSES, APRIL TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	STREAM- FLOW (CFS)	AME- TRYNE TOTAL (UG/L)	ATRA- TONE TOTAL (UG/L)	ATRA- ZINE, TOTAL (UG/L)	CYANA- ZINE, TOTAL (UG/L)
APR							
09-11	--	--	267	.0	.0	.00	.0
23...	1010	187	--	.0	.0	.10	.0
27-29	--	--	333	.0	.0	.90	.0
MAY							
23-24	--	--	363	.0	.0	4.6	.0
JUN							
02-05	--	--	303	.0	.0	2.4	.0
17-18	--	--	300	.0	.0	3.8	.0
25...	1030	139	--	.0	.0	.40	.0
25...	1100	--	--	.0	.0	.50	.0
JUL							
14-16	--	--	214	.0	.0	3.2	.0
16-18	--	--	386	.0	.0	2.7	.0
21-22	--	--	904	.0	.0	1.5	.0
30-31	--	--	271	.0	.0	.70	.0
AUG							
07...	0800	110	--	.0	.0	.20	.0
11-14	--	--	227	.0	.0	.50	.0
27-29	--	--	209	.0	.0	.30	.0
29...	1840	110	--	.0	.0	.30	.0
29-31	--	--	402	.0	.0	.40	.0
SEP							
05...	1630	115	--	.0	.0	.10	.0
05-07	--	--	1911	.0	.0	.00	.0
06...	0150	2539	--	.0	.0	.00	.0
06...	0555	3737	--	.0	.0	.00	.0
06...	1115	6165	--	.0	.0	.60	.0
07...	1330	322	--	.0	.0	.00	.0
14-15	--	--	257	.0	.0	.20	.0
21-24	--	--	1250	.0	.0	.30	.0

DATE	CYPR- ZINE, TOTAL (UG/L)	PROME- TONE TOTAL (UG/L)	PROME- TRYNE TOTAL (UG/L)	PROPA- ZINE, TOTAL (UG/L)	SIME- TONE, TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)	SIMA- ZINE TOTAL (UG/L)
APR							
09-11	.0	.0	.0	.0	.0	.0	.0
23...	.0	.0	.1	.0	.0	.0	.0
27-29	.0	.2	.4	.0	.0	.0	.0
MAY							
23-24	.0	.0	.5	.0	.0	.0	.0
JUN							
02-05	.0	.0	.5	.0	.0	.0	.0
17-18	.0	.0	.1	.0	.0	.0	.9
25...	.0	.0	.4	.0	.0	.0	.0
25...	.0	.0	.4	.0	.0	.0	.0
JUL							
14-16	.0	.1	.4	.0	.0	.0	.0
16-18	.0	.0	.5	.0	.0	.0	.0
21-22	.0	.2	.1	.0	.0	.0	.0
30-31	.0	.3	.5	.0	.0	.0	.0
AUG							
07...	.0	.0	.3	.0	.0	.0	.0
11-14	.0	.1	.3	.0	.0	.0	.0
27-29	.0	.1	.4	.0	.0	.0	.0
29...	.0	.1	.3	.0	.0	.0	.0
29-31	.0	.0	.2	.0	.0	.0	.4
SEP							
05...	.0	.0	.1	.0	.0	.0	.0
05-07	.0	.1	.0	.0	.0	.0	.0
06...	.0	.1	.0	.0	.0	.0	.0
06...	.0	.1	.2	.0	.0	.0	.0
06...	.0	.0	.2	.0	.0	.0	.0
07...	.0	.0	.2	.0	.0	.0	.0
14-15	.0	.0	.0	.0	.0	.0	.0
21-24	.0	.0	.3	.0	.0	.0	.0

PEQUEA CREEK BASIN

01576787 PEQUEA CREEK AT MARTIC FORGE, PA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
SEP												
06...	0150	2540	30	41	58	77	--	--	--	89	97	100
06...	0555	3740	37	48	63	77	91	98	100	83	--	--
06...	1115	6160	49	64	79	88	--	--	--	93	98	100

TOTAL KJELDAHL NITROGEN AS N, OCTOBER 1978 TO MARCH 1979

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	.30	.10	.18	.04	1.3	.43	.56	.29	.36	.27	1.7	2.40
2	.47	.12	.31	.07	1.3	.35	2.8	4.10	.33	.23	.89	1.00
3	.42	.10	.28	.07	.91	.24	2.8	3.40	.30	.20	.58	.57
4	.36	.09	.25	.06	.60	.23	1.1	.62	.30	.20	.50	.44
5	.47	.12	.26	.06	1.2	.75	.55	.30	.29	.18	---	---
6	3.2	3.20	.25	.06	1.3	.51	.38	.22	.32	.19	---	---
7	2.6	.93	.24	.05	1.3	.41	.49	.31	.39	.21	---	---
8	1.8	.51	.22	.05	.80	.27	4.8	17.00	.37	.19	---	---
9	1.3	.33	.19	.04	5.7	13.00	1.9	2.00	.32	.16	---	---
10	.84	.21	.13	.03	3.3	4.10	.82	.55	.28	.13	---	---
11	.65	.16	.08	.02	1.3	.72	.69	.46	.26	.12	---	---
12	.55	.14	.07	.02	.85	.40	.80	.51	.23	.10	---	---
13	.54	.13	.16	.04	.40	.18	.86	.56	.20	.09	---	---
14	.54	.13	.29	.06	.34	.14	2.8	4.70	.16	.08	---	---
15	.54	.14	.23	.05	.41	.16	2.4	1.80	.12	.06	---	---
16	.54	.13	.19	.05	.58	.22	1.4	.83	.10	.05	---	---
17	.53	.13	.30	.07	.59	.21	1.1	.62	.10	.06	---	---
18	.50	.13	1.1	.51	.42	.15	1.1	.60	.06	.03	---	---
19	.46	.11	1.0	.33	.39	.13	1.1	.54	.02	.01	---	---
20	.41	.10	.73	.18	.48	.16	.90	.53	.13	.07	---	---
21	.32	.08	.68	.16	.48	.19	9.9	142.00	.24	.14	---	---
22	.30	.07	.62	.14	.36	.14	4.6	25.00	.39	.24	---	---
23	.31	.07	.45	.10	.53	.19	1.6	1.40	.64	.41	---	---
24	.32	.07	.24	.05	.78	.32	25	260.00	5.6	17.00	---	---
25	.33	.08	.30	.07	3.3	4.80	9.5	90.00	8.8	91.00	---	---
26	.31	.07	.33	.07	2.1	1.20	1.2	1.70	6.4	106.00	---	---
27	.29	.08	.38	.09	1.4	.67	.50	.55	2.5	9.10	---	---
28	.27	.07	.39	.11	.72	.30	.41	.42	2.9	6.20	---	---
29	.25	.06	.58	.17	.50	.20	.46	.43	---	---	---	---
30	.29	.07	.97	.43	.50	.21	.46	.40	---	---	---	---
31	.31	.07	---	---	.50	.21	.40	.32	---	---	---	---
TOTAL	---	7.80	---	3.25	---	31.19	---	562.16	---	232.72	---	4.41

PEQUEA CREEK BASIN

01576787 PEQUEA CREEK AT MARTIC FORGE, PA--Continued

TOTAL NITRATE PLUS NITRITE AS N, OCTOBER 1978 TO MARCH 1979

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	5.8	1.5	5.1	1.2	5.3	1.8	6.1	3.2	7.1	5.3	3.7	5.2
2	5.8	1.5	5.0	1.2	5.3	1.4	4.3	6.3	7.6	5.3	4.4	5.1
3	5.7	1.4	5.0	1.2	5.1	1.3	3.4	4.1	7.1	4.7	5.3	5.1
4	5.7	1.4	5.0	1.2	5.0	1.9	4.6	2.6	6.6	4.4	5.3	4.6
5	5.6	1.4	5.1	1.2	4.4	2.7	6.4	3.5	6.7	4.2	---	---
6	4.7	4.8	5.2	1.2	4.4	1.7	6.5	3.7	7.0	4.2	---	---
7	3.7	1.3	5.2	1.2	4.5	1.4	6.4	4.0	7.2	4.0	---	---
8	3.8	1.1	5.1	1.1	4.9	1.6	2.8	9.8	7.2	3.8	---	---
9	3.6	.91	5.0	1.1	3.4	7.6	3.3	3.4	7.2	3.6	---	---
10	3.3	.84	5.1	1.1	2.9	3.7	5.7	3.8	7.2	3.4	---	---
11	4.3	1.1	5.2	1.2	4.2	2.3	6.9	4.6	7.2	3.4	---	---
12	5.6	1.4	5.2	1.2	5.5	2.6	7.2	4.6	7.2	3.3	---	---
13	5.8	1.4	5.3	1.2	6.3	2.8	7.0	4.6	7.2	3.3	---	---
14	5.6	1.4	5.2	1.1	6.4	2.6	4.4	7.5	7.2	3.4	---	---
15	5.6	1.5	4.8	1.0	6.4	2.5	4.4	3.2	7.1	3.4	---	---
16	5.5	1.3	4.8	1.2	6.4	2.4	5.9	3.5	7.0	3.4	---	---
17	5.5	1.3	5.2	1.3	6.4	2.3	6.6	3.7	6.8	3.4	---	---
18	5.5	1.4	4.3	2.0	6.4	2.2	5.7	3.1	6.9	3.6	---	---
19	5.5	1.3	4.5	1.4	6.4	2.2	5.3	2.6	7.2	3.8	---	---
20	5.5	1.3	4.6	1.1	6.4	2.1	7.1	4.2	6.9	3.8	---	---
21	5.1	1.2	4.6	1.1	6.3	2.5	1.1	15	6.6	3.8	---	---
22	5.2	1.2	4.7	1.0	6.2	2.4	.96	5.2	6.3	3.9	---	---
23	5.3	1.2	4.9	1.1	6.0	2.1	4.1	3.7	6.0	3.8	---	---
24	5.3	1.2	5.2	1.1	5.5	2.3	1.4	14	3.6	11	---	---
25	5.3	1.2	5.3	1.2	4.1	5.8	1.2	12	1.3	13	---	---
26	5.3	1.2	5.3	1.1	4.0	2.3	4.4	6.2	.85	14	---	---
27	5.3	1.4	5.2	1.2	4.5	2.1	5.4	6.0	1.7	6.1	---	---
28	5.3	1.5	5.4	1.5	6.1	2.6	5.8	5.9	2.7	5.8	---	---
29	5.8	1.4	5.4	1.6	6.2	2.5	5.9	5.5	---	---	---	---
30	5.3	1.2	5.1	2.3	6.2	2.6	6.0	5.2	---	---	---	---
31	5.1	1.2	---	---	6.2	2.6	6.3	5.0	---	---	---	---
TOTAL	---	43.45	---	37.6	---	78.9	---	169.7	---	139.0	---	20.0

TOTAL PHOSPHORUS AS P, OCTOBER 1978 TO MARCH 1979

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	.11	.03	.08	.02	.23	.08	.23	.12	.08	.06	.53	.74
2	.10	.03	.08	.02	.26	.07	.99	1.4	.08	.06	.31	.36
3	.10	.02	.08	.02	.21	.05	.86	1.0	.08	.05	.19	.19
4	.11	.03	.08	.02	.19	.07	.32	.18	.07	.05	.15	.13
5	.12	.03	.08	.02	.38	.23	.14	.08	.07	.04	---	---
6	1.5	1.5	.08	.02	.42	.16	.09	.05	.08	.05	---	---
7	1.4	.49	.07	.02	.35	.11	.12	.08	.08	.04	---	---
8	.94	.27	.04	.01	.27	.09	1.7	6.1	.08	.04	---	---
9	.67	.17	.04	.01	2.5	5.6	.69	.71	.07	.03	---	---
10	.46	.12	.04	.01	1.5	1.9	.18	.12	.06	.03	---	---
11	.27	.07	.05	.01	.50	.28	.10	.07	.06	.03	---	---
12	.17	.04	.04	.01	.20	.09	.09	.06	.06	.03	---	---
13	.15	.04	.04	.01	.13	.06	.10	.07	.06	.03	---	---
14	.15	.04	.06	.01	.11	.04	.66	1.1	.05	.02	---	---
15	.15	.04	.07	.02	.10	.04	.62	.45	.07	.03	---	---
16	.14	.03	.08	.02	.10	.04	.41	.24	.05	.02	---	---
17	.14	.03	.08	.02	.13	.05	.36	.20	.05	.03	---	---
18	.13	.03	.30	.14	.12	.04	.33	.18	.06	.03	---	---
19	.13	.03	.30	.09	.12	.04	.27	.13	.06	.03	---	---
20	.13	.03	.21	.05	.11	.04	.26	.16	.06	.03	---	---
21	.11	.03	.20	.05	.10	.04	2.1	30	.06	.03	---	---
22	.10	.02	.21	.05	.10	.04	1.6	8.8	.06	.04	---	---
23	.09	.02	.16	.04	.10	.04	.43	.39	.07	.04	---	---
24	.09	.02	.07	.02	.16	.07	4.5	47	1.0	3.1	---	---
25	.08	.02	.07	.02	1.2	1.6	4.6	43	1.6	17	---	---
26	.08	.02	.08	.02	.64	.37	.42	.60	2.0	33	---	---
27	.08	.02	.09	.02	.30	.14	.19	.21	.99	3.7	---	---
28	.09	.02	.10	.03	.20	.08	.15	.15	.91	1.9	---	---
29	.08	.02	.13	.04	.20	.08	.13	.12	---	---	---	---
30	.08	.02	.28	.12	.20	.08	.10	.09	---	---	---	---
31	.08	.02	---	---	.20	.08	.10	.08	---	---	---	---
TOTAL	---	3.30	---	0.96	---	11.70	---	142.94	---	59.54	---	1.42

PEQUEA CREEK BASIN

01576787 PEQUEA CREEK AT MARTIC FORGE, PA--Continued

DISSOLVED ORGANIC CARBON AS C, OCTOBER 1978 TO MARCH 1979

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	1.5	.38	5.4	1.3	4.9	1.6	2.8	1.5	1.7	1.3	4.3	6.0
2	1.4	.36	5.9	1.4	4.6	1.2	6.7	9.8	1.5	1.0	2.7	3.2
3	1.7	.41	6.5	1.5	3.5	.91	8.0	9.7	1.0	.67	1.9	1.9
4	1.7	.42	7.1	1.7	3.0	1.2	4.5	2.5	1.0	.67	2.3	2.0
5	2.0	.52	8.9	2.0	5.1	3.1	2.6	1.4	1.1	.70	---	---
6	5.1	5.2	11	2.4	6.2	2.4	2.7	1.5	.9	.54	---	---
7	6.9	2.5	9.5	2.1	6.4	2.0	2.9	1.9	.9	.50	---	---
8	10	2.8	3.9	.86	6.3	2.1	6.5	23	.8	.42	---	---
9	7.7	2.0	2.3	.50	9.7	21	4.8	4.9	.8	.40	---	---
10	5.0	1.3	2.3	.50	8.6	11	3.8	2.5	.8	.38	---	---
11	4.4	1.1	3.0	.66	6.3	3.5	2.4	1.6	.8	.37	---	---
12	3.9	.97	2.9	.64	3.7	1.7	3.9	2.5	.8	.36	---	---
13	2.2	.55	2.9	.64	2.0	.87	2.2	1.4	.8	.37	---	---
14	2.2	.55	3.5	.76	1.7	.69	8.2	14	.9	.43	---	---
15	2.2	.59	5.6	1.2	1.5	.58	6.3	4.6	.9	.44	---	---
16	2.1	.51	5.6	1.4	1.4	.52	5.6	3.3	.8	.39	---	---
17	2.3	.56	4.0	.99	1.4	.51	5.2	2.9	.7	.35	---	---
18	2.5	.65	5.7	2.6	1.4	.48	4.8	2.6	.8	.42	---	---
19	2.3	.56	4.4	1.4	1.3	.44	4.4	2.2	1.0	.53	---	---
20	2.2	.53	4.7	1.1	1.5	.50	3.6	2.2	1.2	.67	---	---
21	2.1	.50	8.4	1.9	1.6	.64	7.2	103	1.3	.75	---	---
22	2.2	.52	5.5	1.2	1.7	.67	6.7	36	1.6	.98	---	---
23	2.3	.53	3.6	.80	1.6	.57	5.9	5.4	1.7	1.1	---	---
24	2.4	.54	3.1	.67	2.0	.82	21	222	12	37	---	---
25	2.4	.55	2.6	.61	5.1	7.2	7.7	72	16	170	---	---
26	2.5	.57	2.3	.50	5.5	3.2	3.3	4.6	11	188	---	---
27	2.5	.67	2.2	.53	3.2	1.5	1.6	1.8	7.4	27	---	---
28	2.6	.70	1.7	.46	2.5	1.0	1.4	1.4	6.8	14	---	---
29	2.9	.70	2.1	.63	2.5	1.0	1.6	1.5	---	---	---	---
30	3.2	.75	4.4	2.0	2.5	1.0	1.6	1.4	---	---	---	---
31	3.9	.92	---	---	2.5	1.0	1.2	.95	---	---	---	---
TOTAL	---	29.41	---	34.95	---	74.90	---	546.05	---	449.74	---	13.1

SUSPENDED ORGANIC CARBON AS C, OCTOBER 1978 TO MARCH 1979

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	1.0	.25	.7	.16	1.5	.50	1.1	.58	.6	.45	1.9	2.60
2	1.1	.28	.6	.14	1.0	.27	6.9	10.00	.8	.56	1.5	1.80
3	.7	.17	.6	.14	1.0	.26	6.7	8.20	.6	.40	.9	.83
4	.8	.20	.6	.14	1.3	.49	2.4	1.30	.8	.53	.8	.65
5	1.0	.26	.6	.14	3.3	2.00	.8	.44	.9	.57	---	---
6	14	14.00	.9	.20	1.3	.51	1.0	.57	.6	.36	---	---
7	8.2	2.90	.9	.20	1.0	.32	1.0	.63	.8	.44	---	---
8	6.8	1.90	.6	.13	1.1	.37	15	52.00	.7	.36	---	---
9	3.8	.96	.6	.13	2.9	64.00	2.9	3.00	.6	.30	---	---
10	2.3	.58	.6	.13	11	14.00	.8	.53	.5	.24	---	---
11	1.9	.48	.6	.13	2.3	1.30	.5	.33	.5	.23	---	---
12	1.5	.37	.6	.13	1.1	.51	.4	.25	.4	.18	---	---
13	1.1	.27	.6	.13	.5	.22	.6	.38	.3	.14	---	---
14	1.1	.27	.6	.13	.6	.24	3.9	6.60	.3	.14	---	---
15	1.1	.29	.6	.13	.2	.08	2.1	1.50	.3	.15	---	---
16	1.2	.29	.7	.17	.4	.15	.5	.30	.2	.10	---	---
17	1.1	.27	.8	.20	.6	.22	.4	.23	.2	.10	---	---
18	1.0	.26	2.9	1.30	.5	.17	.4	.22	.2	.10	---	---
19	1.0	.24	2.5	.78	.5	.17	.4	.20	.3	.16	---	---
20	1.1	.27	1.0	.24	.4	.13	.8	.49	.3	.17	---	---
21	1.4	.34	.8	.18	.5	.20	17	239.00	.3	.17	---	---
22	1.3	.31	.8	.18	.6	.23	15	79.00	.3	.18	---	---
23	1.2	.28	1.0	.22	.7	.25	2.2	2.00	.4	.26	---	---
24	1.1	.25	1.5	.32	1.4	.56	36	386.00	5.3	16.00	---	---
25	1.1	.25	1.6	.38	12	18.00	19	179.00	9.2	95.00	---	---
26	1.0	.23	1.3	.28	4.3	2.50	2.7	3.80	11	188.00	---	---
27	1.0	.27	1.1	.26	1.3	.62	.6	.66	7.0	26.00	---	---
28	.9	.24	.8	.22	.9	.38	.8	.81	3.8	8.20	---	---
29	.8	.19	1.0	.29	.9	.37	.9	.83	---	---	---	---
30	.8	.19	2.4	1.10	.9	.37	.9	.79	---	---	---	---
31	.8	.19	---	---	.9	.38	.5	.40	---	---	---	---
TOTAL	---	27.25	---	8.28	---	109.77	---	980.04	---	339.49	---	5.88

PEQUEA CREEK BASIN

01576787 PEQUEA CREEK AT MARTIC FORGE, PA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), OCTOBER 1978 TO MARCH 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	94	18	4.6	87	10	2.4	123	23	7.6
2	94	17	4.3	85	4	.92	101	17	4.6
3	90	13	3.2	87	5	1.2	96	17	4.4
4	92	18	4.5	87	9	2.1	141	28	10
5	96	30	7.8	84	3	.68	224	82	49
6	378	910	928	82	7	1.6	145	44	17
7	133	316	113	82	11	2.4	117	33	10
8	105	170	48	82	11	2.4	123	35	12
9	97	80	20	80	7	1.5	822	1630	3620
10	94	70	18	80	4	.86	464	520	651
11	94	47	12	82	3	.66	204	77	42
12	92	33	8.2	82	6	1.3	173	32	15
13	92	28	7.0	82	6	1.3	162	18	7.9
14	92	29	7.2	80	7	1.5	151	28	11
15	99	30	8.0	80	9	1.9	143	26	10
16	90	27	6.6	92	12	3.0	138	24	8.9
17	90	28	6.8	92	7	1.7	134	25	9.0
18	97	31	8.1	168	74	34	128	21	7.3
19	90	29	7.0	116	39	12	126	16	5.4
20	40	26	6.3	90	22	5.4	124	17	5.7
21	89	21	5.0	85	18	4.1	149	17	6.8
22	87	18	4.2	82	13	2.9	145	21	8.2
23	85	17	3.9	82	12	2.7	132	21	7.5
24	84	16	3.6	86	12	2.6	152	48	20
25	85	15	3.4	87	11	2.6	470	636	907
26	85	16	3.7	80	12	2.6	214	138	80
27	99	23	6.2	89	15	3.6	176	42	20
28	99	21	5.6	101	12	3.3	156	28	12
29	90	15	3.6	110	18	5.4	151	27	11
30	87	13	3.0	166	40	18	154	27	11
31	87	13	3.0	---	---	---	156	27	11
TOTAL	3176	---	1273.8	2768	---	126.62	5894	---	5602.3
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	195	60	32	277	28	21	517	349	488
2	541	648	946	257	37	26	432	172	201
3	450	431	523	247	63	42	360	131	127
4	206	80	45	247	43	29	322	107	93
5	204	35	20	235	23	15	406	---	---
6	211	27	15	224	30	18	453	---	---
7	235	44	28	204	47	26	368	---	---
8	1300	1890	6640	193	42	22	315	---	---
9	381	261	268	184	36	18	292	---	---
10	247	45	30	176	37	18	280	---	---
11	245	30	20	173	37	17	437	---	---
12	235	25	16	149	29	13	313	---	---
13	243	36	24	171	19	8.8	280	---	---
14	628	425	721	176	17	8.1	275	---	---
15	270	146	106	180	17	8.3	243	---	---
16	220	48	28	182	21	10	241	---	---
17	209	28	16	187	34	17	238	---	---
18	202	27	15	193	37	19	236	---	---
19	182	26	13	198	32	17	226	---	---
20	216	66	39	206	31	17	224	---	---
21	5310	2450	35100	215	30	17	219	---	---
22	2000	1190	6440	226	29	18	212	---	---
23	338	100	91	237	34	22	209	---	---
24	3920	4850	51400	1110	1400	4200	236	---	---
25	3510	3000	28400	3840	2060	21300	248	---	---
26	525	313	444	6140	2820	46800	221	---	---
27	409	112	124	1490	944	3490	207	---	---
28	377	72	73	792	781	1670	198	---	---
29	343	67	62	---	---	---	198	---	---
30	324	53	46	---	---	---	195	---	---
31	294	35	28	---	---	---	193	---	---
TOTAL	23972	---	131753	18129	---	77887.2	8794	---	909

PEQUEA CREEK BASIN

01576788 PEQUEA CREEK TRIBUTARY NEAR MT. NEBO, PA

LOCATION.--Lat 39°55'40", long 76°17'20", Lancaster County, Hydrologic Unit 02050306, on left bank 75 ft (23 m) upstream from Steinman Farm Road (T403), 1.3 mi (2.1 km) northeast of Mt. Nebo, and 2.45 mi (3.9 km) upstream from mouth.

DRAINAGE AREA.--0.20 mi² (0.52 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 600 ft (183 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10.2 ft³/s (0.289 m³/s) Sept. 22, 1979, gage height, 0.97 ft (0.296 m) Sept. 22, 1979; minimum 0.07 ft³/s (0.002 m³/s) part or all of each day Aug. 15-18, 25-31, Sept. 1-5, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10.2 ft³/s (0.289 m³/s) Sept. 22, gage height, 0.97 ft (0.296 m) Sept. 22; minimum, 0.07 ft³/s (0.002 m³/s) part or all of each day Aug. 15-18, 25-31, Sept. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	.28	.15	.09	.07
2								---	.28	.15	.12	.07
3								---	.31	.15	.12	.07
4								---	.31	.15	.12	.07
5								---	.28	.15	.09	.15
6								---	.25	.15	.09	.48
7								---	.25	.15	.09	.15
8								---	.25	.15	.09	.15
9								---	.25	.15	.09	.18
10								---	.25	.12	.09	.18
11								---	.25	.12	.12	.18
12								---	.25	.12	.27	.18
13								---	.25	.09	.15	.18
14								---	.21	.14	.09	.28
15								---	.25	.12	.09	.21
16								---	.25	.14	.07	.18
17								---	.25	.15	.07	.18
18								---	.25	.12	.07	.18
19								---	.25	.12	.09	.18
20								---	.25	.09	.09	.18
21								---	.21	.09	.09	.82
22								---	.21	.15	.09	1.5
23								.33	.18	.15	.09	.95
24								.38	.18	.12	.12	.88
25								.31	.18	.09	.07	.75
26								.31	.18	.09	.07	.34
27								.31	.18	.09	.12	.28
28								.31	.18	.09	.09	.25
29								.31	.18	.15	.39	.21
30								.28	.15	.12	.12	.18
31								.28	---	.09	.07	---
TOTAL	---	---	---	---	---	---	---	---	7.00	3.91	3.42	9.66
MEAN	---	---	---	---	---	---	---	---	.23	.13	.11	.32
MAX	---	---	---	---	---	---	---	---	.31	.15	.39	1.5
MIN	---	---	---	---	---	---	---	---	.15	.09	.07	.07

PEQUEA CREEK BASIN

01576788 PEQUEA CREEK TRIBUTARY NEAR MT. NEBO, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1979 to current year.

REMARKS.--Soil sample analyses were run on samples collected from the top 4 inches (10.2 cm) of soil at 8 sites in the drainage basin and composited for analysis.

WATER-QUALITY DATA, MAY TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
MAY								
22...	1015	.25	2.9	3.3	2.9	.00	.00	3.3
JUN								
18...	1410	.25	3.9	3.7	3.7	.00	.00	3.7
AUG								
07...	0955	.09	2.6	2.6	2.6	.00	.00	2.6
29...	1910	.07	2.8	2.7	2.7	.00	.00	2.7
SEP								
05...	1535	.09	3.0	2.9	2.8	.00	.00	2.9
05...	1850	.42	2.3	1.7	1.7	.00	.00	1.7
05...	1930	.42	2.2	1.7	1.6	.00	.00	1.7
05...	2100	.42	2.3	1.5	1.5	.00	.00	1.5
05...	2300	.68	2.1	1.1	1.1	.01	.01	1.1
06...	0045	.62	1.7	1.1	1.1	.01	.00	1.1
06...	0220	1.8	1.6	.88	.85	.01	.00	.89
06...	0250	2.8	2.1	1.5	1.3	.01	.00	1.5
06...	0425	1.1	1.7	1.3	1.2	.01	.00	1.3
06...	0740	.42	2.3	1.8	1.8	.00	.00	1.8

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
MAY									
22...	2.9	.01	.01	.28	.03	.29	.25	.04	3.6
JUN									
18...	3.7	.01	.00	.23	.16	.24	.08	.16	3.9
AUG									
07...	2.6	.02	.02	.15	.02	.17	.13	.04	2.8
29...	2.7	.02	.02	.07	.07	.09	.00	.09	2.8
SEP									
05...	2.8	.12	.12	.12	.12	.24	.00	.24	3.1
05...	1.7	.03	.03	1.5	.60	1.5	.87	.63	3.2
05...	1.6	.00	.00	.81	.57	.81	.24	.57	2.5
05...	1.5	.06	.06	.74	.71	.80	.00	.77	2.3
05...	1.1	.11	.11	1.4	.89	1.5	.50	1.0	2.6
06...	1.1	.12	.12	.59	.44	.71	.15	.56	1.8
06...	.85	.06	.06	2.7	.71	2.8	2.0	.77	3.7
06...	1.3	.00	.00	4.3	.82	4.3	3.5	.82	5.8
06...	1.2	.07	.07	.71	.40	.78	.31	.47	2.1
06...	1.8	.06	.06	.42	.42	.48	.00	.48	2.3

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
MAY								
22...	.03	.00	.02	.00	1.0	.3	5	.00
JUN								
18...	.01	.01	.02	.00	2.9	.4	10	.01
AUG								
07...	.02	.02	.00	.00	1.3	.4	3	.00
29...	.01	.01	.01	.01	2.0	.5	4	.00
SEP								
05...	.02	.01	.00	.00	5.6	.7	8	.00
05...	.22	.02	.00	.00	6.9	8.7	219	.25
05...	.12	.05	.00	.00	12	4.9	109	.12
05...	.09	.03	.00	.00	9.0	2.6	67	.08
05...	.15	.04	.00	.00	10	5.8	153	.28
06...	.11	.02	.03	.01	9.2	4.0	105	.18
06...	.34	.03	.01	.01	7.1	15	281	1.4
06...	.81	.02	.01	.00	5.6	33	1390	11
06...	.14	.02	.00	.00	6.6	3.6	163	.50
06...	.03	.01	.00	.00	3.7	.9	27	.03

PEQUEA CREEK BASIN

01576788 PEQUEA CREEK TRIBUTARY NEAR MT. NEBO, PA--Continued

PESTICIDE ANALYSES, JUNE TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	AME- RYNE TOTAL (UG/L)	ATRA- TONE, TOTAL (UG/L)	ATRA- ZINE, TOTAL (UG/L)	CYANA- ZINE, TOTAL (UG/L)	CYPR- AZINE TOTAL (UG/L)
JUN							
18...	1410	.25	.0	.0	.00	.0	.0
AUG							
07...	0955	.09	.0	.0	.00	.0	.0
29...	1910	.07	.0	.0	.00	.0	.0
SEP							
05...	1535	.09	.0	.0	.00	.0	.0
05...	1850	.42	.0	.1	.10	.0	.0
05...	2300	.68	.0	.0	.00	.0	.0
06...	0220	1.8	.0	.1	.00	.0	.0
06...	0250	2.8	.0	.1	.00	.0	.0
06...	0740	.42	.0	.0	.00	.0	.0

DATE	PROMETONE TOTAL (UG/L)	PROMETRYNE TOTAL (UG/L)	PROPACHLORZINE, TOTAL (UG/L)	SIMETONE, TOTAL (UG/L)	SIMETRYNE TOTAL (UG/L)	SIMACHLORZINE TOTAL (UG/L)
JUN						
18...	.0	.0	.0	.0	.0	.0
AUG						
07...	.0	.0	.0	.0	.0	.0
29...	.0	.0	.0	.0	.0	.0
SEP						
05...	.0	.0	.0	.0	.0	.0
05...	.0	.1	.0	.0	.0	.0
05...	.0	.0	.0	.0	.0	.0
06...	.0	.0	.0	.0	.0	.0
06...	.0	.0	.0	.0	.0	.0
06...	.0	.0	.0	.0	.0	.0

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
SEP 06...	0250	2.8	.0	.00	.00	.1	.00	.00	.01

DATE	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)
SEP 06...	.00	.02	.00	.00	.00	.00	.00	.00	.00

[illegible]

PEQUEA CREEK BASIN

01576788 PEQUEA CREEK TRIBUTARY NEAR MT. NEBO, PA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
SEP							
05...	1850	.42	62	76	89	96	99
05...	2300	.68	54	69	83	92	97
06...	0220	1.8	47	59	76	88	96
06...	0250	2.8	45	61	79	93	--

DATE	TIME	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
SEP								
05...	100	--	--	--	--	--	--	--
05...	99	99	100	--	--	--	--	--
06...	99	100	--	--	--	--	--	--
06...	--	--	--	97	98	99	100	--

CHEMISTRY AND PARTICLE-SIZE DISTRIBUTION OF SOIL, MAY TO AUGUST 1979

DATE	TIME	NITRO- GEN, NO2+NO3 TOT. IN SOIL (MG/KG AS N)	NITRO- GEN, NH4 TOT. IN SOIL (MG/KG AS N)	NITRO- GEN, NH4 + ORG. TOT. IN SOIL (MG/KG AS N)	NITRO- GEN, TOT IN SOIL (MG/KG AS N)	PHOS- PHORUS, TOTAL IN SOIL (MG/KG AS P)	CARBON ORGANIC TOTAL IN SOIL (G/KG AS C)	CARBON INOR- GANIC, TOT. IN SOIL (G/KG AS C)	SED. FALL DIAM. % FINER THAN .004 MM	SED. FALL DIAM. % FINER THAN .008 MM	SED. FALL DIAM. % FINER THAN .016 MM	SED. FALL DIAM. % FINER THAN .031 MM
MAY												
22...	1030	2.3	14	16000	16000	200	60	.0	23	34	46	58
AUG												
07...	1000	2.7	98	12000	12000	340	77	.1	24	35	45	59

DATE	TIME	SED. FALL DIAM. % FINER THAN .062 MM	SED. FALL DIAM. % FINER THAN .125 MM	SED. FALL DIAM. % FINER THAN .250 MM	SED. FALL DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN .062 MM	SED. SIEVE DIAM. % FINER THAN .125 MM	SED. SIEVE DIAM. % FINER THAN .250 MM	SED. SIEVE DIAM. % FINER THAN .500 MM	SED. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SIEVE DIAM. % FINER THAN 2.00 MM
MAY											
22...	--	--	--	--	--	66	73	84	90	93	96
AUG											
07...	--	--	--	--	--	65	71	82	87	90	93

DATE	TIME	ATRA- ZINE TOT. IN SOIL (MG/KG)	PROMO- TONE TOT. IN SOIL (MG/KG)	PROMO- TRYNE TOT. IN SOIL (MG/KG)	PROPA- ZINE TOT. IN SOIL (MG/KG)	SIMA- ZINE TOT. IN SOIL (MG/KG)
------	------	---	--	---	--	---

MAY						
22...	.0	.0	.0	.0	.0	.0
AUG						
07...	.0	.0	.0	.0	.0	.0

CHEMISTRY OF PRECIPITATION, SEPTEMBER 1979

DATE	TIME	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO. TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
SEP											
05-06		.06	.00	.06	.00	.42	.42	.48	.01	.00	1.2

OCTORARO CREEK BASIN

01578400 BOWERY RUN NEAR QUARRYVILLE, PA

LOCATION.--Lat 39°53'41", long 76°06'50", Lancaster County, Hydrologic Unit 02050306, on left bank at single-span bridge, 1.1 mi (1.8 km) upstream from mouth and 2.5 mi (4.0 km) east of Quarryville.

DRAINAGE AREA.--5.98 mi² (15.49 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 468.08 ft (142.671 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--17 years, 8.15 ft³/s (0.231 m³/s), 18.51 in/yr (470 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6,740 ft³/s (191 m³/s), probably occurred Jan. 26, 1978, gage height, 10.2 ft (3.109 m) from floodmark, from rating curve extended above 620 ft³/s (17.6 m³/s) on basis of slope-area measurement of peak flow; minimum 1.0 ft³/s (0.028 m³/s) Sept. 1, 2, 3, 4, 9, 10, 11, 12, 1966; minimum gage height, 2.32 ft (0.707 m) July 6, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 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. 6	0130	496 14.0	5.36 1.634	May 24	0115	228 6.46	4.53 1.381
Dec. 9	0530	436 12.3	5.21 1.588	July 14	1745	722 20.4	5.84 1.780
Jan. 2	1215	202 5.72	4.42 1.347	July 16	2330	389 11.0	5.08 1.548
Jan. 7	2400	359 10.2	4.99 1.521	July 21	1130	640 18.1	5.68 1.731
Jan. 21	0445	733 20.8	5.86 1.786	Aug. 29	2145	1,070 30.3	6.40 1.951
Jan. 24	1530	685 19.4	5.77 1.759	Sept. 6	0400	*1,520 43.0	*6.97 2.124
Feb. 26	Unknown	Unknown	Unknown	Sept. 21	2345	722 20.4	5.84 1.780

Minimum discharge, 3.4 ft³/s (0.096 m³/s) Sept. 4, 5, gage height, 2.48 ft (0.756 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	4.2	4.7	13	11	21	7.4	6.8	7.4	5.9	7.4	3.9
2	3.8	4.2	4.2	65	10	20	7.7	6.8	7.4	5.5	6.8	3.8
3	3.8	4.2	4.2	11	9.7	14	8.4	6.8	10	5.4	6.6	3.6
4	3.8	4.2	9.7	7.4	9.7	14	9.7	6.8	18	5.5	6.1	3.5
5	3.8	4.2	18	6.8	8.6	27	9.7	6.6	8.6	5.4	5.4	14
6	41	4.2	5.9	6.8	8.6	24	7.7	6.6	8.1	5.0	5.2	204
7	5.4	4.2	5.2	88	8.9	13	7.4	6.3	7.4	5.0	5.2	11
8	4.2	4.2	7.0	11	8.9	11	7.4	6.3	7.2	5.0	5.2	8.1
9	4.0	4.0	97	10	8.4	11	15	5.9	6.8	4.8	5.0	7.0
10	4.0	4.0	11	8.9	7.7	11	11	5.9	6.6	4.8	5.2	6.6
11	4.0	4.2	6.8	7.7	7.3	27	8.1	5.9	8.4	4.8	5.7	6.3
12	4.0	4.2	6.1	7.0	7.0	11	8.4	6.3	6.8	4.7	26	5.9
13	4.0	4.0	5.7	18	6.7	10	7.7	8.1	6.3	4.6	7.7	5.7
14	5.4	4.0	5.6	27	6.5	10	13	8.4	5.9	78	5.9	19
15	4.4	4.0	5.6	7.9	6.4	8.9	8.9	6.6	5.9	14	5.4	7.0
16	4.2	4.7	5.6	6.8	6.3	8.6	8.4	6.3	5.9	21	4.9	5.7
17	4.8	4.8	6.1	6.6	6.2	8.6	8.1	5.9	5.9	24	4.7	5.5
18	4.4	13	5.9	5.9	6.0	8.6	7.7	5.9	5.9	6.8	4.9	5.5
19	4.4	4.2	5.7	5.7	7.1	8.4	7.4	6.6	5.7	6.3	4.9	5.4
20	4.4	3.8	5.9	17	7.2	8.1	7.4	6.3	5.5	6.1	4.7	5.2
21	4.0	3.6	8.9	300	7.4	8.1	7.2	5.9	5.5	55	4.7	90
22	4.0	3.6	6.1	21	7.6	7.7	7.2	5.9	5.9	7.2	4.7	101
23	3.8	4.0	5.9	15	8.0	7.7	6.8	13	5.9	6.6	5.0	11
24	4.0	4.6	17	324	50	11	6.8	49	5.7	7.2	5.0	9.4
25	4.0	4.0	32	39	78	9.7	6.8	13	5.5	6.8	6.1	8.9
26	4.4	3.8	6.8	21	100	8.4	7.4	9.7	5.4	6.6	4.9	8.6
27	5.4	4.6	5.9	17	67	7.7	16	8.6	5.4	6.6	9.1	8.1
28	4.4	6.3	5.2	15	34	7.4	8.6	8.1	5.4	7.2	5.9	8.1
29	4.2	7.0	4.8	17	---	7.4	7.7	8.1	5.9	11	136	8.1
30	4.2	9.1	4.7	13	---	7.4	7.2	7.4	5.5	16	11	7.9
31	4.2	---	5.9	12	---	7.4	---	7.2	---	8.4	4.1	---
TOTAL	168.2	143.1	329.1	1131.5	510.2	365.1	258.2	267.0	205.8	361.2	329.4	597.8
MEAN	5.43	4.77	10.6	36.5	18.2	11.8	8.61	8.61	6.86	11.7	10.6	19.9
MAX	41	13	97	324	100	27	16	49	18	78	136	204
MIN	3.8	3.6	4.2	5.7	6.0	7.4	6.8	5.9	5.4	4.6	4.1	3.5
CFSM	.91	.80	1.77	6.10	3.04	1.97	1.44	1.44	1.15	1.96	1.77	3.33
IN.	1.05	.89	2.05	7.04	3.17	2.27	1.61	1.66	1.28	2.25	2.05	3.72

CAL YR 1978 TOTAL 4459.9 MEAN 12.2 MAX 350 MIN 3.6 CFSM 2.04 IN 27.74
WTR YR 1979 TOTAL 4666.6 MEAN 12.8 MAX 324 MIN 3.5 CFSM 2.14 IN 29.02

POTOMAC RIVER BASIN

01603500 EVITTS 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) City of Cumberland datum.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--47 years, 32.2 ft³/s (0.912 m³/s), 14.48 in/yr (368 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)
Jan. 4	--	---	ice jam	Mar. 5	2230	*925	26.2 3.45 1.052
Jan. 24	1630	614 17.4	3.10 0.945	Mar. 25	0200	747	21.2 3.26 0.994
Feb. 24	1630	Unknown	*a3.58 1.091	Sept. 6	Unknown	Unknown	Unknown
Feb. 26	0100	765 21.7	3.28 1.000				

Minimum discharge, 4.2 ft³/s (0.12 m³/s) Oct. 23, gage height, 1.14 ft (0.347 m).

a Ice jam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.6	11	64	22	150	52	41	44	14	16	30
2	5.1	4.6	8.5	259	18	229	145	37	39	13	50	29
3	5.1	4.6	10	98	20	238	94	43	38	12	21	45
4	6.2	4.6	38	70	20	493	107	59	36	65	17	30
5	5.9	4.6	21	49	15	811	121	56	31	31	16	35
6	5.6	4.6	15	43	14	676	90	45	28	17	15	370
7	5.1	4.8	13	44	16	337	75	42	26	14	13	180
8	4.8	5.4	35	70	14	223	67	40	26	12	13	100
9	4.6	5.1	92	48	13	163	74	38	60	12	14	60
10	4.6	4.8	41	42	12	134	62	46	59	16	12	47
11	4.6	4.6	29	38	12	111	50	40	44	14	13	38
12	4.6	4.6	26	34	11	88	46	38	33	12	26	34
13	4.6	4.8	23	30	11	74	43	43	29	23	57	30
14	5.1	5.1	21	30	11	67	44	34	25	59	21	42
15	5.1	5.4	19	28	11	55	41	31	23	28	17	34
16	5.4	9.7	18	26	10	48	39	29	22	30	15	25
17	5.1	11	17	24	10	44	35	27	24	32	14	23
18	4.8	10	16	21	9.0	41	32	25	21	23	13	20
19	4.6	6.8	15	20	14	39	30	26	18	19	15	20
20	4.4	5.6	15	18	15	36	28	24	17	21	16	17
21	4.4	5.4	32	52	22	34	27	24	17	22	16	40
22	4.4	5.4	21	48	35	32	26	22	17	18	26	85
23	4.6	5.4	17	33	80	30	26	46	16	18	18	34
24	4.4	9.5	22	249	200	143	24	144	15	16	15	26
25	4.6	7.4	60	167	350	341	24	106	14	24	16	24
26	4.6	6.2	33	75	521	125	41	77	12	37	14	23
27	5.4	6.8	25	58	203	90	88	73	12	20	13	21
28	4.8	11	22	51	146	71	59	75	12	17	40	24
29	4.6	13	19	43	---	63	51	66	15	22	160	24
30	4.6	12	18	37	---	55	46	52	17	30	65	21
31	4.6	---	19	26	---	50	---	46	---	19	40	---
TOTAL	151.4	197.4	771.5	1895	1835.0	5091	1687	1495	790	710	817	1531
MEAN	4.88	6.58	24.9	61.1	65.5	164	56.2	48.2	26.3	22.9	26.4	51.0
MAX	6.2	13	92	259	521	811	145	144	60	65	160	370
MIN	4.4	4.6	8.5	18	9.0	30	24	22	12	12	12	17
CFSM	.16	.22	.83	2.02	2.17	5.43	1.86	1.60	.87	.76	.87	1.69
IN.	.19	.24	.95	2.33	2.26	6.27	2.08	1.84	.97	.87	1.01	1.89

CAL YR 1978 TOTAL 13214.3 MEAN 36.2 MAX 476 MIN 4.4 CFSM 1.20 IN 16.28
WTR YR 1979 TOTAL 16971.3 MEAN 46.5 MAX 811 MIN 4.4 CFSM 1.54 IN 20.90

TONOLOWAY CREEK BASIN

01613050 TONOLOWAY CREEK NEAR NEEDMORE, PA

LOCATION.--Lat 39°53'54", long 78°07'57", Fulton County, Hydrologic Unit 02070004, on left bank 10 ft (3 m) downstream from bridge on Legislative Route 29015, 0.2 mi (0.3 km) upstream from Foster Creek, and 3.5 mi (5.6 km) north of Needmore.

DRAINAGE AREA.--10.7 mi² (27.7 km²).

PERIOD OF RECORD.--Occasional discharge measurements and annual maximums, water years 1963-65. October 1965 to current year.

REVISED RECORDS.--WDR PA-69-1: 1966-68(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 688.94 ft (209.989 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 2, 1965, crest-stage gage at same site at datum 2.0 ft (0.61 m) higher.

REMARKS.--Records good except for periods of no gage-height record Feb. 11 to Mar. 5 and winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 12.6 ft³/s (0.357 m³/s), 15.99 in/yr (406 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,300 ft³/s (36.8 m³/s) June 22, 1972, 9.17 ft (2.795 m), from rating curve extended above 540 ft³/s (15.3 m³/s) on basis of contracted-opening measurement of peak flow; no flow on many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 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. 21	--	---	ice jam	Feb. 24	Unknown	*375	10.6
Jan. 24	1230	ice jam	*6.02 1.835	Sept. 6	0230	256	7.25
							5.73 1.746
							5.19 1.582

Minimum discharge, 0.10 ft³/s (0.003 m³/s) Oct. 1, 3, gage height, 2.74 ft (0.835 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.47	3.2	8.7	5.2	60	21	15	14	4.5	12	5.2
2	.19	.47	2.7	39	5.1	67	38	13	12	3.9	10	4.9
3	.16	.47	2.5	41	5.0	80	40	13	12	2.9	7.2	4.9
4	.35	.53	5.6	32	4.9	110	44	13	11	8.2	6.0	3.9
5	.53	.53	6.4	17	4.8	150	46	12	9.2	6.8	4.9	12
6	.35	.53	4.5	10	4.7	160	37	11	8.2	4.5	3.9	160
7	.22	.53	3.4	8.6	4.6	79	28	10	7.2	3.4	3.4	53
8	.16	.61	3.9	7.9	4.5	51	23	9.7	6.8	2.9	3.2	27
9	.19	.61	15	7.2	4.5	37	23	9.2	7.2	2.5	2.5	17
10	.14	.53	19	6.5	4.4	35	18	8.7	6.4	2.9	2.7	12
11	.16	.53	12	6.0	4.4	31	15	8.2	6.8	2.7	3.9	9.7
12	.14	.61	7.7	5.4	4.3	27	14	7.7	5.6	2.3	10	7.7
13	.12	.69	5.6	5.0	4.3	23	13	8.7	4.9	2.1	6.4	6.4
14	.87	.98	4.5	4.7	4.2	20	15	7.2	4.2	5.6	4.9	11
15	.69	.98	5.2	4.4	4.2	16	13	7.2	3.9	4.9	3.9	8.7
16	.41	1.5	3.4	4.2	4.1	13	12	7.2	3.7	11	3.4	6.9
17	.47	1.8	2.9	4.0	4.1	12	11	6.0	4.2	20	2.9	5.6
18	.41	2.3	2.5	3.9	4.0	11	10	6.0	3.9	11	3.2	5.2
19	.35	1.5	2.3	3.7	4.0	11	9.2	6.0	3.2	6.8	2.9	4.6
20	.35	1.1	2.3	3.6	10	10	8.7	5.6	2.7	7.2	2.7	4.2
21	.35	.98	3.7	3.5	17	9.2	8.2	6.0	2.9	6.8	8.2	13
22	.35	.87	3.4	3.5	28	8.7	8.2	5.6	3.2	6.0	5.6	22
23	.30	.87	3.4	3.4	46	9.2	7.7	9.2	2.7	5.6	4.5	16
24	.22	1.8	4.5	4.4	80	42	7.2	30	2.3	4.9	4.2	13
25	.26	1.6	21	6.4	140	58	7.2	34	2.1	5.6	10	10
26	.35	1.2	18	6.2	210	38	11	31	2.0	6.0	10	8.2
27	.78	1.4	12	5.9	120	27	21	27	1.8	4.5	7.7	6.9
28	.69	2.0	10	5.7	56	21	22	25	2.0	4.9	6.0	6.4
29	.53	2.7	6.2	5.5	---	18	21	21	2.1	17	8.2	6.0
30	.47	2.7	5.1	5.4	---	15	17	17	4.2	24	8.2	5.2
31	.47	---	4.5	5.3	---	14	---	15	---	16	6.4	---
TOTAL	11.17	33.39	206.4	278.0	792.3	1263.1	569.4	405.2	162.4	217.4	179.0	476.6
MEAN	.36	1.11	6.66	8.97	28.3	40.7	19.0	13.1	5.41	7.01	5.77	15.9
MAX	.87	2.7	21	41	210	160	46	34	14	24	12	160
MIN	.12	.47	2.3	3.4	4.0	8.7	7.2	5.6	1.8	2.1	2.5	3.9
CFSM	.03	.10	.62	.84	2.65	3.80	1.78	1.22	.51	.66	.54	1.49
IN.	.04	.12	.72	.97	2.75	4.39	1.98	1.41	.56	.76	.62	1.66
CAL YR 1978	TOTAL	5084.07	MEAN 13.9	MAX 180	MIN .12	CFSM 1.30	IN 17.67					
WTR YR 1979	TOTAL	4594.36	MEAN 12.6	MAX 210	MIN .12	CFSM 1.18	IN 15.97					

POTOMAC RIVER BASIN

01614090 CONOCOCHEAQUE CREEK NEAR FAYETTEVILLE, PA

LOCATION.--Lat 39°55'48", long 77°26'23", Adams County, Hydrologic Unit 02070004, on right bank 20 ft (6 m) downstream from bridge on State Highway 233, 0.3 mi (0.5 km) upstream from Birch Run, 1.3 mi (2.1 km) upstream from Chambersburg Reservoir Dam, 4 mi (6 km) northeast of Fayetteville, and 12 mi (19 km) east of Chambersburg.

DRAINAGE AREA.--5.05 mi² (13.08 km²).

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 1,132.76 ft (345.265 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--19 years, 7.30 ft³/s (0.207 m³/s), 19.63 in/yr (499 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 392 ft³/s (11.1 m³/s) June 22, 1972, gage height 3.45 ft (1.052 m), from rating curve extended above 160 ft³/s (4.53 m³/s) on basis of contracted opening and flow-over-road measurement of peak flow; no flow June 19, 20, 1978, when diverted for bridge construction upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 70 ft³/s (1.98 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. 24	1530	*385 10.9	*3.40 1.036	Sept. 6	0145	343 9.714	3.36 1.024
Mar. 5	2300	101 2.86	2.67 0.814	Sept. 21	2330	77 2.181	2.47 0.753

Minimum discharge, 0.88 ft³/s (0.025 m³/s) Oct. 1, 3, 4, 12, 13, 24, Nov. 10, 11, gage height, 0.90 ft (0.274 m) Oct. 1, 3, 4, 12, 13, 24, Nov. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	.99	1.8	7.2	16	25	12	8.7	9.9	5.7	2.1	1.5
2	.95	.97	1.6	18	14	28	18	8.4	9.4	4.1	3.2	1.5
3	.92	.97	1.7	12	13	28	17	9.0	10	3.2	4.0	1.5
4	1.3	.95	4.1	11	12	30	17	9.5	10	3.8	2.4	1.5
5	1.1	.95	2.3	9.6	11	67	20	8.8	8.3	3.6	2.0	11
6	1.1	.92	1.8	8.9	9.6	83	18	8.0	7.7	2.8	1.9	101
7	.97	.92	1.6	11	8.6	61	17	7.6	7.3	2.5	1.9	27
8	.92	.92	2.0	17	7.6	45	16	7.2	6.6	2.4	2.4	19
9	.92	.90	7.6	12	6.7	35	21	6.9	6.0	2.3	2.1	15
10	.95	.87	3.6	11	6.0	33	18	6.5	6.0	2.4	1.8	12
11	.95	.87	2.4	10	5.4	31	15	6.3	6.3	2.4	1.9	11
12	.92	.87	2.1	9.6	5.2	23	15	6.3	5.4	2.3	6.1	9.4
13	.97	.99	2.0	9.4	5.1	21	15	7.7	4.8	2.4	3.2	8.4
14	1.9	1.1	1.9	11	5.0	20	18	6.8	4.5	3.4	2.3	22
15	1.3	.99	1.9	8.9	4.9	18	16	6.0	4.3	2.5	2.1	13
16	1.1	1.5	1.8	7.6	4.9	16	15	6.1	4.1	2.5	1.9	9.4
17	1.2	1.8	1.8	7.0	4.8	15	14	5.3	4.3	2.7	1.8	8.5
18	1.1	2.8	1.7	6.6	4.8	14	13	5.2	4.4	2.2	1.9	8.0
19	1.1	1.6	1.7	6.0	4.7	13	12	6.2	3.8	2.1	2.0	7.6
20	1.0	1.4	1.7	6.5	4.7	13	12	5.3	3.5	5.6	1.8	6.9
21	.95	1.3	2.2	21	4.7	12	11	5.5	3.5	3.7	3.8	27
22	.92	1.2	2.0	16	4.7	11	11	5.1	3.5	2.6	2.4	35
23	.90	1.3	1.8	12	4.6	11	10	8.9	3.3	5.4	2.1	21
24	.87	1.8	3.1	128	15	22	9.8	15	3.1	4.1	2.6	18
25	.90	1.5	10	121	22	21	9.4	13	2.9	2.9	2.1	16
26	1.1	1.3	4.2	60	44	15	12	12	2.8	3.0	1.9	15
27	1.5	1.4	3.5	42	30	14	15	12	2.7	2.4	1.8	13
28	1.1	1.6	3.1	32	24	13	11	14	2.7	2.3	1.7	13
29	1.0	1.7	3.0	25	---	13	9.5	12	3.3	2.7	1.7	12
30	.99	2.0	2.9	21	---	13	9.1	11	7.4	2.7	1.7	11
31	.99	---	3.1	18	---	12	---	10	---	2.3	1.5	---
TOTAL	32.81	38.38	86.0	696.3	303.0	776	426.8	260.3	161.8	95.0	72.1	476.2
MEAN	1.06	1.28	2.77	22.5	10.8	25.0	14.2	8.40	5.39	3.06	2.33	15.9
MAX	1.9	2.8	10	128	44	83	21	15	10	5.7	6.1	101
MIN	.87	.87	1.6	6.0	4.6	11	9.1	5.1	2.7	2.1	1.5	1.5
CFSM	.21	.25	.55	4.46	2.14	4.95	2.81	1.66	1.07	.61	.46	3.15
IN.	.24	.28	.63	5.13	2.23	5.72	3.14	1.92	1.19	.70	.53	3.51

CAL YR 1978 TOTAL 2869.35 MEAN 7.86 MAX 86 MIN .87 CFSM 1.56 IN 21.13
WTR YR 1979 TOTAL 3424.69 MEAN 9.38 MAX 128 MIN .87 CFSM 1.86 IN 25.22

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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 when continuous records are available, will give a picture of the low-flow potentiality of the 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 1979

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements Date	Discharge (cfs)
SUSQUEHANNA RIVER BASIN						
Chemung River basin						
01516300	Tioga River at Covington, Pa.	Lat 41°44'42", long 77°04'49", Tioga County, at bridge on L.R. 58060, 0.1 mile west of Covington.	105	1970-79	5-11-79	155
01530850	Bentley Creek at Ridgebury, Pa.	Lat 41°58'25", long 76°43'12", Bradford County, at bridge on L.R. 08068, at Ridgebury and 300 ft downstream from Three Falls Glen.	47.2	1970-79	5-11-79	53
Sugar Run Creek basin						
01533100	Sugar Run Creek at Sugar Run, Pa.	Lat 41°38'31", long 76°13'55", Bradford County, at bridge on rural road, 0.3 mile east of Sugar Run and 0.4 mile upstream from mouth.	56.6	1970-79	5-11-79	24
Tunkhannock Creek basin						
01533840	Tunkhannock Creek at Glenwood, Pa.	Lat 41°39'03", long 75°43'15", Susquehanna County, at bridge on State Highway 374 at Glenwood and 0.4 mile upstream from East Branch Tunkhannock Creek.	107	1970-74 1976-79	4-24-79	109
Lackawanna River basin						
01534170	East Branch Lackawanna River at Uniondale, Pa.	Lat 41°43'08", long 75°28'49", Susquehanna County, at bridge on L.R. 57041, 0.3 mile east of intersection of State Highway 171 and L.R. 57041 and 0.7 mile east of Uniondale.	17.3	1951 1970-74 1976-79	4-24-79	28
01535540	Spring Brook near Spring Brook, Pa.	Lat 41°17'07", long 75°35'33", Lackawanna County, at bridge on private road, 1.5 miles south of Spring Brook and 1.8 miles upstream from Watres Reservoir dam.	8.98	1970-74 1976-79	4-24-79	13
Abrahams Creek basin						
01536200	Abrahams Creek near Dallas, Pa.	Lat 41°20'41", long 75°54'00", Luzerne County, at culvert on L.R. 40131, 1.7 miles upstream from Francis Slocum State Park dam and 3 miles east of Dallas.	2.79	1970-74 1976-79	4-24-79	3.0

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Date	Measurements Discharge (cfs)
SUSQUEHANNA RIVER BASIN--Continued						
Little Wapwallopen Creek basin						
01537900	Little Wapwall-open Creek nr Wapwallopen, Pa.	Lat 41°05'43", long 76°07'18", Luzerne County, at bridge on State Highway 239, 1 mile downstream from Pond Creek and 2 miles north of Wapwallopen.	39.4	1970-74 1976-79	4-24-79	35
Nescopeck Creek basin						
01538520	Little Nescopeck Creek at Syberts-ville, Pa.	Lat 41°00'12", long 76°04'25", Luzerne County, at bridge on county road, at Sybertsville and 0.6 mile upstream from mouth.	13.8	1970-74 1976-79	4-23-79	1.7
Fishing Creek basin						
01538970	Fishing Creek at Forks, Pa.	Lat 41°06'27", long 76°21'44", Columbia County, at bridge on L.R. 19068, at Forks, 0.2 mile upstream from Huntingdon Creek.	114	1970-79 Discontinued	10-13-78 4-23-79	106 186
Catawissa Creek basin						
01540350	Catawissa Creek at Catawissa, Pa.	Lat 40°57'00", long 76°27'56", Columbia County, at bridge on Second Street, at Catawissa and 0.2 mile upstream from mouth.	149	1949-50 1970-79	10-13-78 4-23-79	61 225
West Branch Susquehanna River basin						
01541325	Clearfield Creek at Flinton, Pa.	Lat 40°43'05", long 78°31'38", Cambria County, at bridge on L.R. 11063, 0.2 mile upstream from Beaverdam Run and 0.5 mile northwest of Flinton.	98.1	1970-79 Discontinued	11-08-78 4-25-79	26 104
01541331	Killbuck Run near St. Augustine, Pa.	Lat 40°39'42", long 78°34'55", Cambria County, 800 ft upstream from mouth and 3.3 miles north of St. Augustine.	7.13	1968-79 Discontinued	11-08-78 4-25-79	1.6 6.1
01542330	Black Moshannon Creek near Philipsburg, Pa.	Lat 40°52'43", long 78°04'36", Centre County, at bridge on Shirk Road, 0.5 mile southeast of Black Moshannon State Airport and 6 miles east of Philipsburg.	2.33	1970-79	5-08-79	3.0
01542950	Sinnemahoning Portage Creek near Emporium, Pa.	Lat 41°32'36", long 78°12'43", Cameron County, at bridge on State Highway 155, 2.6 miles north of intersection with State Highway 120, and 2.8 miles above mouth.	59.8	1976-79	5-09-79	55
01543700	First Fork Sinnemahoning Creek at Wharton, Pa.	Lat 41°31'08", long 78°01'40", Potter County, at bridge on State Highway 872, 0.8 mile southwest of Wharton and 1 mile downstream from East Fork Sinnemahoning.	182	1970-79	11-13-78 5-01-79	42 193
01545610	Left Branch Young Womans Creek near Renovo, Pa.	Lat 41°22'19", long 77°42'01", Clinton County, at bridge on L.R. 18022, 400 ft upstream from mouth and 4 miles northeast of Renovo.	35.9	1970-79	5-09-79	35
01545680	Tangascootack Creek near Lock Haven, Pa.	Lat 41°10'32", long 77°32'53", Clinton County, at bridge on State Highway 120, 600 ft upstream from mouth and 7 miles northwest of Lock Haven.	36.5	1970-79	5-09-79	39
01547280	Antis Run near Milesburg, Pa.	Lat 40°58'35", long 77°44'42", Centre County, at bridge on U.S. Highway 220 at Curtin, 500 ft upstream from mouth and 3.7 miles east of Milesburg.	1.56	1956-57 1970-79	5-08-79	1.8
01547600	Romola Branch near Howard, Pa.	Lat 41°03'27", long 77°41'10", Centre County, at bridge on L.R. 14009, at Romola, 200 ft upstream from mouth and 3.4 miles northwest of Howard.	5.05	1956-57 1970-79	5-08-79	4.3
01549550	Little Pine Creek near English Center, Pa.	Lat 41°24'46", long 77°19'19", Lycoming County, at bridge on L.R. 41021, 2.4 miles southwest of English Center.	135	1970-79	5-08-79	99

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Date	Measurements Discharge (cfs)
01549790	Larrys Creek at Larrys Creek, Pa.	Lat 41°13'10", long 77°13'12", Lycoming County, at bridge on U.S. Highway 220, at Larrys Creek, 0.2 mile upstream from mouth.	89.0	1970-79	5-08-79	82
01551830	Loyalsock Creek near Forksville, Pa.	Lat 41°28'10", long 76°35'05", Sullivan County, at bridge on State Highway 154, at Worlds End, 1.8 miles south-east of Forksville.	131	1970-79	5-11-79	154
01553110	White Deer Hole Creek at Allenwood, Pa.	Lat 41°06'14", long 76°53'54", Union County, at bridge on county road 0.9 mile upstream from mouth and 0.4 mile south of Allenwood.	66.4	1970-79	5-09-79	65
01553480	Buffalo Creek at Lewisburg, Pa.	Lat 40°58'19", long 76°53'30", Union County, at bridge on U.S. Highway 15, at Lewisburg and 0.6 mile upstream from mouth.	134	1970-79 Discontinued	5-09-79	119
Mahanoy Creek basin						
01555250	Mahanoy Creek at Dornsife, Pa.	Lat 40°44'40", long 76°47'28", Northumberland County, at bridge on State Highway 225 at Dornsife, 1.9 miles upstream from Schwaben Creek.	117	1949-50 1970-79	10-12-78 4-23-79	105 246
Wiconisco Creek basin						
01555570	Wiconisco Creek near Elizabethville, Pa.	Lat 40°33'40", long 76°48'30", Dauphin County, at bridge on State Highway 225 and 1 mile north of Elizabethville.	79.2	1949-50 1970-79	10-12-78 4-23-79	29 144
Juniata River basin						
01555578	Frankstown Branch Juniata River at East Freedom, Pa.	Lat 40°21'23", long 78°25'41", Blair County, at bridge on State Highway 164, 400 ft upstream from South Dry Run and 0.2 mile east of East Freedom.	47.4	1970-79	11-08-78 4-26-79	7.2 48
01559750	Raystown Branch Juniata River near Manns Choice, Pa.	Lat 40°01'03", long 78°37'07", Bedford County, at bridge on State Highway 31, 0.3 mile upstream from Shawnee Branch and 2 miles northwest of Manns Choice.	50.8	1952-53 1970-79 Discontinued	11-07-78 4-26-79	64 71
01559756	Shawnee Branch at Shellsburg, Pa.	Lat 40°02'17", long 78°39'16", Bedford County, at covered bridge, 0.3 mile upstream from mouth and 0.9 mile southwest of Shellsburg.	18.6	1968-79 Discontinued	11-07-78 4-26-79	3.6 15
01564550	Blacklog Creek near Orbisonia, Pa.	Lat 40°13'55", long 77°52'25", Huntingdon County, at bridge on U.S. Highway 522, 0.5 mile downstream from Shade Creek and 1.4 miles southeast of Orbisonia.	65.0	1970-79 Discontinued	4-24-79	59
01566900	Buffalo Creek near Newport, Pa.	Lat 40°29'37", long 77°08'20", Perry County, at bridge on L.R. 50013, 0.4 mile upstream from mouth and 1.2 miles north of Newport.	69.5	1958 1970-79 Discontinued	4-27-79	84
Yellow Breeches Creek basin						
01571110	Yellow Breeches Creek near Walnut Bottom, Pa.	Lat 40°05'47", long 77°23'34", Cumberland County, at bridge on State Highway 174, 0.7 mile northeast of Walnut Bottom.	16.4	1970-79	5-03-79	8.8
01571185	Mountain Creek at Pine Grove Furnace, Pa.	Lat 40°01'51", long 77°18'18", Cumberland County, at bridge on county road, 0.2 mile south of Pine Grove Furnace and 0.5 mile upstream from Toms Run.	13.9	1970-79	4-24-79	27

Discharge measurements made at low-flow partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements Date	Discharge (cfs)
SUSQUEHANNA RIVER BASIN--Continued						
Yellow Breeches Creek basin--Continued						
01571190	Mountain Creek near Mount Holly Springs, Pa.	Lat 40°05'36", long 77°11'14", Cumberland County, 0.6 mile upstream from reservoir dam and 2 miles south of Mount Holly Springs.	37.4	1970-79	4-24-79	73
Swatara Creek basin						
01571824	Swatara Creek at Ravine, Pa.	Lat 40°34'30", long 76°24'10", Schuylkill County, at bridge on Spittler Road and 0.1 mi east of Ravine.	44.6	1975-79	4-20-76 ^a 4-20-77 ^a 5-02-78 ^a 10-12-78 ^b 10-13-78 ^b 5-10-79 ^b	60 25 65 28 28 61
01572950	Swatara Creek tributary near Harper Tavern, Pa.	Lat 40°26'28", long 76°36'00", Lebanon County, at bridge just west of State Highway 443 in Indiantown Gap Military Reservation, 1.9 miles upstream from State Memorial Lake dam and 2.5 miles north of Harper Tavern.	5.48	1970-79 Discontinued	10-13-78 4-23-79	2.4 9.6
Beaver Creek basin						
01573940	Beaver Creek at Rossville, Pa.	Lat 40°04'39", long 76°54'56", York County, at bridge on Squire Gratz Road 4,000 ft upstream from mouth and 1 mile north of Rossville.	8.21	1968-79 Discontinued	4-24-79	7.2
POTOMAC RIVER BASIN						
Wills Creek basin						
01600400	Shaffers Run near Fairhope, Pa.	Lat 39°50'57", long 78°47'53", Somerset County, at bridge on L.R. 05012, 0.8 mile upstream from mouth and 1 mile north of Fairhope.	9.77	1970-79 Discontinued	11-07-78 5-10-79	.40 12
*01600700	Little Wills Creek at Bard, Pa.	Lat 39°55'35", long 78°39'40", Bedford County, at bridge on State Highway 96, at Bard.	10.2	1970-79	11-07-78 4-26-79	.32 6.3
Town Creek basin						
01608900	Town Creek at Chaneyville, Pa.	Lat 39°48'31", long 78°29'46", Bedford County, at ford on county road, 1.2 miles downstream from Confluence of Elk Lick and Wilson Run and 1.2 miles south of Chaneyville.	36.3	1970-79 Discontinued	5-10-79	34
Sideling Hill Creek basin						
01610130	West Branch Sideling Hill Creek at Purcell, Pa.	Lat 39°47'11", long 78°21'53", Bedford County, at bridge on L.R. 05009, 0.2 mile south of Purcell, and 0.4 mile upstream from mouth.	21.3	1970-79 Discontinued	6-21-79	.68
Tonoloway Creek basin						
01613080	Little Tonoloway Creek at Warfordsburg, Pa.	Lat 39°45'30", long 78°11'19", Fulton County, at bridge on U.S. Highway 522, 0.2 mile upstream from Cove Run, and 0.5 mile north of Warfordsburg.	44.8	1968-79 Discontinued	6-21-79	5.6
Licking Creek basin						
01613450	Licking Creek nr Hustontown, Pa.	Lat 40°00'54", long 78°02'33", Fulton County, 200 ft downstream from Fortune Teller Creek and 2.8 miles south of Hustontown.	20.4	1970-79 Discontinued	4-24-79	15
Monocacy Creek basin						
*01638900	White Run near Gettysburg, Pa.	Lat 39°47'45", long 77°11'50", Adams County, at concrete bridge on U.S. Highway 140, 1 mile above mouth and 2.5 miles southeast of Gettysburg. Datum of gage is 414.65 ft above mean sea level.	12.4	1961-79	5-03-79	1.6

* Also a crest-stage partial-record station.

a Previously published as a miscellaneous station.

b Also a miscellaneous station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum Gage height (feet)	Dis-charge (ft ³ /s)
SUSQUEHANNA RIVER BASIN							
Sugar Creek basin							
01531250	North Branch Sugar Creek tributary near Columbia Cross Roads, Pa.	Lat 41°50'25", long 76°49'38", Bradford County, at bridge on secondary road, 14 miles upstream from mouth and 1.5 miles west of Columbia Cross Roads.	8.83	1962-68 [#] 1969-79	3-06-79	4.51	a
Towanda Creek basin							
01532200	South Branch Towanda Creek at New Albany, Pa.	Lat 41°35'25", long 76°26'00", Bradford County, at bridge on gravel road, 0.1 mile below French Creek, 0.7 mi above Beaver Run and 0.8 mile south of New Albany.	13.3	1963-79	3-05-79	b5.54	669
Tuscarora Creek basin							
01533250	Tuscarora Creek near Silvara, Pa.	Lat 41°42'25", long 76°07'10", Bradford County, at culvert on gravel road, 1 mile northeast of Silvara, 1.1 miles above Mill Creek, and 4.6 miles above mouth.	11.8	1963-79	3-05-79	5.27	c340
Fishing Creek basin							
01538800	Huntington Creek near Pikes Creek, Pa.	Lat 41°18'40", long 76°08'50", Luzerne County, at bridge on State Highway 118, 1.5 miles above Mitchler Run, and 2.8 miles west of Pikes Creek.	4.94	1960-79	3-05-79	d9.54	895
West Branch Susquehanna River basin							
01542720	Wilson Run at Penfield, Pa.	Lat 41°12'58", long 78°35'00", Clearfield County, at wooden bridge, 200 ft north of State Highway 153, 0.8 mile northwest of Penfield, and 0.7 mile above mouth.	8.34	1962-79	3-05-79	3.09	302
01544450	Germania Branch at Germania, Pa.	Lat 41°38'49", long 77°39'22", Potter County, at concrete bridge on private road, 50 ft below Baders Hollow, 0.3 mile east of Germania and 4.6 miles above mouth.	2.40	1964-79	5-10-79	2.45	98
01545800	West Branch Susquehanna River at Lock Haven, Pa.	Lat 41°03'17", long 77°26'32", Clinton County, on right bank, 50 feet downstream from Jay St. Bridge and 2.3 miles upstream from Bald Eagle Creek.	3,345	1975-79	3-06-79	19.85	68,900

[#] Operated as a continuous-record station.

a Not determined.

b. Maximum gage height 6.04 ft January 25, 1979 (ice jam).

c Approximately.

d Outside highwater mark.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum Gage height (feet)	Dis-charge (ft ³ /s)
SUSQUEHANNA RIVER BASIN--Continued							
West Branch Susquehanna River basin--Continued							
01548020	Bull Run near Loganton, Pa.	Lat 41°00'30", long 77°19'35", Clinton County, at pipe culvert on State Route 477, and 2 miles southeast of Loganton.	1.99	1963-79	3-05-79	6.43	78
01553050	White Deer Hole Creek near Elimsport, Pa.	Lat 41°07'05", long 77°04'00", Lycoming County, at bridge on L.R. 41001, 2.5 miles west of Elimsport, and 12.5 miles above mouth. Datum of gage is 650.84 ft NGVD of 1929.	18.2	1961-79	3-05-79	ef4.56	960
Juniata River basin							
01556400	Sandy Run near Bellwood, Pa.	Lat 40°33'47", long 78°20'35", Blair County, at bridge on private road, 0.6 mile above mouth, and 2.5 miles south of Bellwood.	5.58	1962-79	9-26-75 2-17-76 7-20-77 5-15-78 9-06-79	4.30 4.19 5.89 4.28 5.39	g145 g128 g679 g142 439
01556500	Little Juniata River at Tipton, Pa.	Lat 40°37'40", long 78°17'38", Blair County, at Tipton, 100 ft below bridge on State Highway 220, and 150 ft below Tipton Run. Datum of gage is 946.76 ft NGVD of 1929.	93.7	1946-62 [†] 1963-79	3-06-79	6.94	2,940
01557100	Schell Run at Tyrone, Pa.	Lat 40°40'00", long 78°15'00", Blair County, 0.2 mile above U.S. Highway 220 between 5th Street and Shippen Street, Tyrone. Datum of gage is 919.11 ft NGVD of 1929.	1.68	1958-62 [†] 1963-79	5-15-78 3-06-79	d2.97 2.70	g252 145
01565920	Lick Run near East Waterford, Pa.	Lat 40°21'15", long 77°38'55", Juniata County, at culvert on L.R. 34070, 0.7 mile above mouth, and 1.5 miles southwest of East Waterford.	8.38	1962-79	9-06-79	5.85	241
Conodoguinet Creek basin							
01569340	Newburg Run at Newburg, Pa.	Lat 40°07'40", long 77°32'50", Cumberland County, at concrete bridge on State Highway 696, 0.4 mile above mouth, and 0.8 mile south of Newburg.	5.29	1964-79	6-29-79	e4.49	166
Paxton Creek basin							
01571000	Paxton Creek near Penbrook, Pa.	Lat 40°18'30", long 76°51'00", on right bank, 92 feet upstream from culvert on North Progress Ave. and 2 miles north of Penbrook, Dauphin County.	11.2	1940-50 1974-79	1-24-79	8.59	3,000

† Operated as a continuous-record station.

d Outside highwater mark.

e Using auxiliary gage.

f Maximum gage height, 6.92 ft at base gage and 4.66 ft at auxiliary gage, Feb. 26, 1979 (ice jam).

g Revised

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
SUSQUEHANNA RIVER BASIN--Continued							
Swatara Creek basin							
01572900	Reeds Creek near Ono, Pa.	Lat 40°24'25", long 76°33'15", Lebanon County, at concrete culvert on U.S. Highway 22, 1 mile west of Ono, and 1.1 miles above mouth. Datum of gage is 367.72 ft NGVD of 1929.	8.63	1962-79	1-24-79	8.08	2,070
Conestoga River basin							
01576320	Stony Run at Reamstown, Pa.	Lat 40°12'44", long 76°07'30", Lancaster County, at single-span bridge, 0.1 mile southeast of U.S. Highway 222, 0.1 mile northwest of Reamstown, and 0.7 mile above mouth.	3.55	1964-79	9-06-79	4.40	400
Conowingo Creek basin							
01578200	Conowingo Creek near Buck, Pa.	Lat 39°50'35", long 76°11'45", Lancaster County, at concrete bridge on L.R. 36135, 2 miles above Jackson Run, and 2.5 miles southeast of Buck.	8.71	1963-79	9-06-79	8.30	1,400
POTOMAC RIVER BASIN							
Wills Creek basin							
*01600700	Little Wills Cr at Bard, Pa.	Lat 39°55'35", long 78°39'40", Bedford County, at bridge on State Highway 96 at Bard. Datum of gage is 1,264.2 ft NGVD of 1929.	10.2	1961-79	3-06-79	8.19	497
Monocacy Creek basin							
*01638900	White Run near Gettysburg, Pa.	Lat 39°47'45", long 77°11'50", Adams County, at concrete bridge on U.S. Highway 140, 1 mile above mouth, and 2.5 miles southeast of Gettysburg. Datum of gage is 414.65 ft NGVD of 1929.	12.4	1961-79	9-06-79	e9.94	2,350

* Also low-flow partial-record station.

e Using auxiliary gage.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1979

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Date	Measurements Discharge (ft ³ /s)
SUSQUEHANNA RIVER BASIN						
West Branch Susquehanna River basin						
Anderson Creek	West Branch Susquehanna River	Lat 40°58'31", long 78°31'50", Clear- field County, at bridge on Meadow Street in Curwensville and 0.7 mi upstream from mouth.	76.5	1975-78	11-08-78 5-22-79 8-08-79	45 75 127
Alder Run	West Branch Susquehanna River	Lat 41°00'50", long 78°11'59", Centre County, at bridge on county road, 80 ft downstream from Mons Run, 170 ft downstream from Hubler Run, and 2.2 mi northwest of Kylertown.	-	1975-78	5-31-79 6-19-79	16 2.7
Moshannon Creek	West Branch Susquehanna River	Lat 41°02'12", long 78°03'28", Centre County, at bridge on State Highway 53, 3.0 mi west of Moshannon and 5.0 mi upstream from mouth.	263	1945 1949 1975-78	5-30-79 9-24-79	843 289
Mosquito Creek	West Branch Susquehanna River	Lat 40°07'03", long 78°06'35", Clear- field County, at mouth, at Karthaus	71.2	1940-78	12-12-78 4-17-79 5-31-79	244 374 191
Driftwood Branch	Bennett Branch Sinnemahoning Creek	Lat 41°20'02", long 78°08'10", Cameron County, at county bridge at Driftwood and 1,000 ft above mouth.	367	1975-78	1-30-79 6-18-79 7-23-79	798 160 74
*First Fork Sinnemahon- ing Creek	Sinnemahoning Creek	Lat 41°31'08", long 78°01'40", Potter County, at bridge on State Highway 872, 0.8 mi southwest of Wharton and 1 mi downstream from East Fork.	182	1968-72 1974-78	1-29-79 5-01-79	520 193
Mahonoy Creek basin						
Mahanoy Creek	Susquehanna River	Lat 40°43'28", long 76°48'17", Northumberland County, at bridge on county road, 1.8 mi northeast of Herndon, 4.4 mi from mouth.	155	1974-78	9-19-79	193
Juniata River basin						
Three Springs Creek	Aughwick Creek	Lat 40°12'48", long 77°55'34", Hunting- don County, at mouth and 3.5 mi northeast of Three Springs.	31.4	1940-78a	3-01-79 4-19-79 9-07-79	282 37 43
Paxton Creek basin						
Paxton Creek	Susquehanna River	Lat 40°16'30", long 76°52'50", Dauphin County, at bridge on Calder Street, Harrisburg, Pennsylvania.	-	1973-78	6-05-79	15
Swatara Creek basin						
Swatara Creek	Susquehanna River	Lat 40°34'30", long 76°24'10", Schuylkill County, at bridge on Spittler Road and 0.1 mi east of Ravine	44.6	1974-78	10-12-78 4-05-79 5-10-79 9-06-79	b 28 b 189 b 61 b 856

* Also low-flow partial-record station.

a Most years during period.

b base flow.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1979--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
SUSQUEHANNA RIVER BASIN--Continued						
Conewago Creek basin						
Long Arm Creek	South Branch Conewago Creek	Lat 39°45'24", long 76°59'44", York County, at Long Arm Reservoir, 3.5 miles south of Hanover, Pa., 1,600 ft upstream from mouth.	5.6	1970-78	5-10-79	3.2
South Branch Conewago Creek	Conewago Creek	Lat 39°44'08", long 76°57'36", York County, at Sheppard-Meyers Reservoirs, 4.7 miles south of Hanover, Pa.	--	1970-78	11-06-78 5-10-79	1.6 5.3
Codorus Creek basin						
Codorus Creek	Susquehanna River	Lat 39°48'57", long 76°52'43", York County, at Lake Marburg, 3,000 ft below dam, 5.7 miles east of Hanover, Pa.	--	1970-78	5-10-79	28
Octoraro Creek basin						
Octoraro Creek	Susquehanna River	Lat 39°47'49", long 76°02'35", Chester County, at Octoraro Reser- voir, 3.4 miles west of Oxford, Pa.	-	1970-78	5-09-79	92

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.

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
CHEMUNG RIVER BASIN											
01516208 - TIOGA R AT COUNTY BRIDGE, PA (LAT 41 40 41 LONG 076 56 30)											
JUN , 1979											
05...	1615	21	50	7.2	16.5	.0	.0	11	7.7	--	--
AUG											
10...	0945	2.2	48	6.7	14.5	.0	.0	14	14	34	.05
01516250 - TIOGA RIVER ABOVE MORRIS RUN, PA. (LAT 41 39 32 LONG 077 02 53)											
JUN , 1979											
05...	1900	49	115	5.1	17.0	.0	.0	3	37	--	--
AUG											
10...	1345	10	190	4.7	23.0	.0	.0	0	71	134	.18
01516255 - MORRIS RN NR MORRIS RUN, PA (LAT 41 40 16 LONG 077 01 25)											
JUN , 1979											
05...	1800	4.9	1710	3.0	14.5	6.1	303	0	940	--	--
AUG											
10...	1245	2.4	2150	2.9	17.0	12	596	--	270	1980	2.69
01516260 - COAL RUN AT BLOSSBURG, PA (LAT 41 40 17 LONG 077 03 41)											
JUN , 1979											
06...	0815	4.1	2000	2.6	--	12	596	0	950	--	--
AUG											
10...	1500	4.4	2380	2.6	13.0	18	894	--	700	1910	2.60
01516265 - JOHNSON C AT BLOSSBURG, PA (LAT 41 40 21 LONG 077 04 21)											
JUN , 1979											
06...	0920	12	205	6.4	12.5	.0	.0	3	69	--	--
AUG											
10...	1615	4.5	310	4.9	21.0	.5	25	1	130	235	.32
TOWANDA CREEK BASIN											
01531910 - TOWANDA C AT POWELL, PA (LAT 41 42 18 LONG 076 30 32)											
JUN , 1979											
05...	1245	51	155	8.1	--	.0	.0	45	21	--	--
AUG											
09...	1345	5.8	200	8.1	25.0	.0	.0	62	22	96	.13
01531916 - SCHRADER C AT POWELL, PA (LAT 41 42 18 LONG 076 30 19)											
JUN , 1979											
05...	1345	84	50	7.5	20.0	.0	.0	7	12	--	--
AUG											
09...	1500	6.7	72	6.6	27.5	.0	.0	4	18	54	.07
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01540590 - LESLE RN NR CARROLLTOWN, PA (LAT 40 36 22 LONG 078 45 10)											
JUN , 1979											
07...	1715	4.4	1130	4.5	22.0	--	--	0	520	--	--
AUG											
07...	1900	6.2	1200	6.0	21.0	.0	.0	12	480	822	1.12
01540592 - W BR SUSQUEHANNA R NR SPANGLER, PA (LAT 40 37 42 LONG 078 45 56)											
JUN , 1979											
07...	1615	13	1300	3.3	21.5	--	--	0	580	--	--
AUG											
07...	1656	8.7	1250	3.4	26.0	3.9	194	--	540	881	1.20

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
CHEMUNG RIVER BASIN										
01516208 - TIOGA R AT COUNTY BRIDGE, PA (LAT 41 40 41 LONG 076 56 30)										
JUN , 1979										
05...	--	--	--	--	--	--	80	60	20	--
AUG										
10...	.21	0	<10	<10	<10	<10	70	60	10	20000
01516250 - TIOGA RIVER ABOVE MORRIS RUN, PA. (LAT 41 39 32 LONG 077 02 53)										
JUN , 1979										
05...	--	--	--	--	--	--	190	40	150	--
AUG										
10...	3.65	0	<10	<10	20	10	160	60	100	11000
01516255 - MORRIS RN NR MORRIS RUN, PA (LAT 41 40 16 LONG 077 01 25)										
JUN , 1979										
05...	--	--	--	--	--	--	15000	1000	14000	--
AUG										
10...	12.8	0	<10	<10	10	20	19000	0	19000	21000
01516260 - COAL RUN AT BLOSSBURG, PA (LAT 41 40 17 LONG 077 03 41)										
JUN , 1979										
06...	--	--	--	--	--	--	64000	4000	60000	--
AUG										
10...	22.8	0	<10	70	10	50	84000	0	84000	42000
01516265 - JOHNSON C AT BLOSSBURG, PA (LAT 41 40 21 LONG 077 04 21)										
JUN , 1979										
06...	--	--	--	--	--	--	520	380	140	--
AUG										
10...	2.90	0	<10	<10	10	20	1300	930	370	16000
TOWANDA CREEK BASIN										
01531910 - TOWANDA C AT POWELL, PA (LAT 41 42 18 LONG 076 30 32)										
JUN , 1979										
05...	--	--	--	--	--	--	100	90	10	--
AUG										
09...	1.52	0	<10	<10	<10	10	90	80	10	13000
01531916 - SCHRADER C AT POWELL, PA (LAT 41 42 18 LONG 076 30 19)										
JUN , 1979										
05...	--	--	--	--	--	--	110	100	10	--
AUG										
09...	.99	0	<10	<10	20	<10	40	30	10	12000
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01540590 - LESLE RN NR CARROLLTOWN, PA (LAT 40 36 22 LONG 078 45 10)										
JUN , 1979										
07...	--	--	--	--	--	--	5100	3600	1500	--
AUG										
07...	13.8	1	<10	10	30	30	5700	0	8000	35000
01540592 - W BR SUSQUEHANNA R NR SPANGLER, PA (LAT 40 37 42 LONG 078 45 56)										
JUN , 1979										
07...	--	--	--	--	--	--	19000	13000	5800	--
AUG										
07...	20.9	0	<10	20	20	20	21000	3000	18000	39000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, FM BOT- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
------	---	---	---	--	--	---	--	---	---	--

CHEUNG RIVER BASIN

01516208 - TIOGA R AT COUNTY BRIDGE, PA (LAT 41 40 41 LONG 076 56 30)

JUN , 1979										
05...	--	30	0	40	--	--	--	--	1	.06
AUG										
10...	<10	20	0	20	320	.00	0	80	1	.01

01516250 - TIOGA RIVER ABOVE MORRIS RUN, PA. (LAT 41 39 32 LONG 077 02 53)

JUN , 1979										
05...	--	1100	0	1200	--	--	--	--	1	.13
AUG										
10...	<10	3500	0	3600	70	.00	0	70	2	.05

01516255 - MORRIS RN NR MORRIS RUN, PA (LAT 41 40 16 LONG 077 01 25)

JUN , 1979										
05...	--	26000	0	47000	--	--	--	--	1	.01
AUG										
10...	10	62000	0	64000	100	.00	0	50	8	.05

01516260 - COAL RUN AT BLOSSBURG, PA (LAT 41 40 17 LONG 077 03 41)

JUN , 1979										
06...	--	14000	0	14000	--	--	--	--	12	.13
AUG										
10...	40	16000	0	17000	2800	.00	0	260	1	.01

01516265 - JOHNSON C AT BLOSSBURG, PA (LAT 41 40 21 LONG 077 04 21)

JUN , 1979										
06...	--	1200	0	1200	--	--	--	--	3	.10
AUG										
10...	10	3800	0	3900	360	.00	0	60	7	.09

TOWANDA CREEK BASIN

01531910 - TOWANDA C AT POWELL, PA (LAT 41 42 18 LONG 076 30 32)

JUN , 1979										
05...	--	10	10	0	--	--	--	--	--	--
AUG										
09...	<10	10	0	10	340	.00	0	50	2	.03

01531916 - SCHRADER C AT POWELL, PA (LAT 41 42 18 LONG 076 30 19)

JUN , 1979										
05...	--	50	0	50	--	--	--	--	1	.23
AUG										
09...	20	10	0	10	360	.00	0	70	1	.02

WEST BRANCH SUSQUEHANNA RIVER BASIN

01540590 - LESLE RN NR CARROLLTOWN, PA (LAT 40 36 22 LONG 078 45 10)

JUN , 1979										
07...	--	1100	0	1100	--	--	--	--	43	.52
AUG										
07...	10	1000	0	1100	430	.00	0	60	43	.72

01540592 - W BR SUSQUEHANNA R NR SPANGLER, PA (LAT 40 37 42 LONG 078 45 56)

JUN , 1979										
07...	--	1500	0	1600	--	--	--	--	75	2.6
AUG										
07...	20	1700	0	1700	170	.00	2	30	45	1.1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01540595 - FOX RN AT SPANGLER, PA (LAT 40 38 19 LONG 078 46 04)											
JUN , 1979											
07...	1445	7.6	680	3.9	22.5	--	--	0	250	--	--
AUG											
07...	1430	3.2	825	3.3	26.0	1.7	84	--	370	579	.79
01540640 - W BR SUSQUEHANNA R AT CHERRY TREE, PA (LAT 40 42 26 LONG 078 48 10)											
JUN , 1979											
13...	1325	62	735	7.2	16.5	.0	.0	62	300	--	--
AUG											
02...	0800	74	600	7.0	19.0	.0	.0	39	230	404	.55
01540710 - CUSH C NR GLEN CAMPBELL, PA (LAT 40 49 51 LONG 078 47 27)											
JUN , 1979											
13...	1445	16	380	6.9	15.0	.0	.0	23	140	--	--
AUG											
03...	1230	17	310	7.0	19.0	.0	.0	25	91	214	.29
01540715 - CHEST C AT PATTON, PA (LAT 40 38 02 LONG 078 38 50)											
JUN , 1979											
12...	1630	48	155	7.2	17.0	.0	.0	31	46	--	--
AUG											
02...	1130	--	190	7.0	20.5	.0	.0	27	38	112	.15
01540720 - BRUBAKER RN NR HASTINGS, PA (LAT 40 42 15 LONG 078 41 35)											
JUN , 1979											
13...	1030	7.1	517	7.6	10.5	.0	.0	34	200	--	--
AUG											
02...	1345	11	440	6.9	19.5	.0	.0	15	160	286	.39
01540723 - L BRUBAKER RN NR HASTINGS, PA (LAT 40 42 21 LONG 078 41 42)											
JUN , 1979											
13...	1130	6.2	640	7.1	14.0	.0	.0	37	290	--	--
AUG											
02...	1530	4.2	675	6.9	22.0	.0	.0	33	330	539	.73
01540753 - S BR BEAR RN AT MCGEES MILLS, PA (LAT 40 53 01 LONG 078 45 56)											
JUN , 1979											
13...	1615	15	430	4.1	19.5	.8	40	0	160	--	--
AUG											
03...	1030	5.9	545	3.6	19.0	.9	45	--	220	326	.44
01540800 - WILSON RUN AT NEWBURG, PA. (LAT 40 50 05 LONG 078 40 40)											
JUN , 1979											
13...	1840	7.7	290	7.3	15.5	.0	.0	20	100	--	--
AUG											
02...	1700	21	150	7.1	22.0	.0	.0	12	59	133	.18
01540823 - CHEST C AT MAHAFFEY, PA (LAT 40 52 06 LONG 078 43 14)											
JUN , 1979											
13...	1745	114	380	7.6	18.5	.0	.0	27	130	--	--
AUG											
03...	0800	191	270	--	19.5	.0	.0	17	81	187	.25

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE- RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
------	---	---	--	--	--	--	---	--	--	--

WEST BRANCH SUSQUEHANNA RIVER BASIN

01540595 - FOX RN AT SPANGLER, PA (LAT 40 38 19 LONG 078 46 04)

JUN , 1979										
07...	--	--	--	--	--	--	8200	7900	320	--
AUG										
07...	5.00	0	<10	20	20	30	14000	0	14000	41000

01540640 - W BR SUSQUEHANNA R AT CHERRY TREE, PA (LAT 40 42 26 LONG 078 48 10)

JUN , 1979										
13...	--	--	--	--	--	--	5300	4800	510	--
AUG										
02...	81.0	0	<10	10	10	20	4200	3400	840	37000

01540710 - CUSH C NR GLEN CAMPBELL, PA (LAT 40 49 51 LONG 078 47 27)

JUN , 1979										
13...	--	--	--	--	--	--	430	360	70	--
AUG										
03...	10.0	0	<10	<10	20	20	440	380	60	19000

01540715 - CHEST C AT PATTON, PA (LAT 40 38 02 LONG 078 38 50)

JUN , 1979										
12...	--	--	--	--	--	--	1200	990	210	--
AUG										
02...	--	--	--	--	--	--	950	780	170	--

01540720 - BRUBAKER RN NR HASTINGS, PA (LAT 40 42 15 LONG 078 41 35)

JUN , 1979										
13...	--	--	--	--	--	--	920	730	190	--
AUG										
02...	8.60	1	<10	<10	30	20	1000	950	50	20000

01540723 - L BRUBAKER RN NR HASTINGS, PA (LAT 40 42 21 LONG 078 41 42)

JUN , 1979										
13...	--	--	--	--	--	--	5000	2200	2800	--
AUG										
02...	6.14	1	<10	10	20	20	6600	4800	1800	27000

01540753 - S BR BEAR RN AT MCGEES MILLS, PA (LAT 40 53 01 LONG 078 45 56)

JUN , 1979										
13...	--	--	--	--	--	--	3900	1100	2800	--
AUG										
03...	5.23	0	<10	<10	10	10	1300	200	1100	31000

01540800 - WILSON RUN AT NEWBURG, PA. (LAT 40 50 05 LONG 078 40 40)

JUN , 1979										
13...	--	--	--	--	--	--	250	230	20	--
AUG										
02...	7.83	0	<10	<10	30	<10	2000	2000	30	14000

01540823 - CHEST C AT MAHAFFEY, PA (LAT 40 52 06 LONG 078 43 14)

JUN , 1979										
13...	--	--	--	--	--	--	520	510	10	--
AUG										
03...	96.4	0	<10	<10	20	<10	850	810	40	12000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM ROT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN ROT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01540595 - FOX RN AT SPANGLER, PA (LAT 40 38 19 LONG 078 46 04)										
JUN , 1979										
07...	--	900	0	900	--	--	--	--	25	.52
AUG										
07...	20	1400	0	1400	330	.00	0	60	36	.31
01540640 - W BR SUSQUEHANNA R AT CHERRY TREE, PA (LAT 40 42 26 LONG 078 48 10)										
JUN , 1979										
13...	--	820	40	780	--	--	--	--	74	12
AUG										
02...	20	860	10	850	260	.00	0	70	43	8.6
01540710 - CUSH C NR GLEN CAMPBELL, PA (LAT 40 49 51 LONG 078 47 27)										
JUN , 1979										
13...	--	910	0	910	--	--	--	--	3	.13
AUG										
03...	20	620	30	590	790	.00	0	110	4	.19
01540715 - CHEST C AT PATTON, PA (LAT 40 38 02 LONG 078 38 50)										
JUN , 1979										
12...	--	140	30	110	--	--	--	--	14	1.8
AUG										
02...	--	130	10	120	--	--	--	--	12	--
01540720 - BRUBAKER RN NR HASTINGS, PA (LAT 40 42 15 LONG 078 41 35)										
JUN , 1979										
13...	--	620	20	600	--	--	--	--	7	.13
AUG										
02...	20	710	10	700	1200	.00	0	130	19	.58
01540723 - L BRUBAKER RN NR HASTINGS, PA (LAT 40 42 21 LONG 078 41 42)										
JUN , 1979										
13...	--	1400	0	1400	--	--	--	--	23	.39
AUG										
02...	40	1900	0	1900	610	.00	0	100	61	.70
01540753 - S BR BEAR RN AT MCGEE'S MILLS, PA (LAT 40 53 01 LONG 078 45 56)										
JUN , 1979										
13...	--	3100	0	3100	--	--	--	--	36	1.5
AUG										
03...	10	3900	0	4000	180	.00	0	30	2	.03
01540800 - WILSON RUN AT NEWBURG, PA. (LAT 40 50 05 LONG 078 40 40)										
JUN , 1979										
13...	--	360	20	340	--	--	--	--	2	.04
AUG										
02...	<10	340	30	310	1100	.00	0	90	37	2.2
01540823 - CHEST C AT MAHAFFEY, PA (LAT 40 52 06 LONG 078 43 14)										
JUN , 1979										
13...	--	330	30	300	--	--	--	--	7	2.2
AUG										
03...	10	320	40	280	840	.00	0	90	22	11

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01541100 - BELL RN AT BELLS LANDING, PA (LAT 40 55 00 LONG 078 38 00)											
JUN , 1979											
15...	0910	8.6	363	6.5	13.5	.0	.0	4	150	--	--
AUG											
01...	1115	24	227	6.6	20.0	.0	.0	8	93	164	.22
01541207 - ANDERSON C NR PENFIELD, PA (LAT 41 07 51 LONG 078 36 14)											
JUN , 1979											
13...	1305	2.8	67	6.4	14.0	.0	.0	8	11	--	--
AUG											
07...	1115	2.8	67	6.3	17.0	.0	.0	7	12	42	.06
01541220 - L ANDERSON C NR ROCKTON, PA (LAT 41 03 11 LONG 078 39 24)											
JUN , 1979											
12...	1425	4.6	683	3.4	14.0	2.0	99	0	250	--	--
AUG											
01...	1730	32	447	3.6	22.0	1.1	55	--	170	268	.36
01541245 - KRATZER RN AT BRIDGEPORT, PA (LAT 40 58 30 LONG 078 33 06)											
JUN , 1979											
15...	0750	5.0	267	5.2	12.5	.0	.0	2	110	--	--
AUG											
01...	1600	16	198	6.4	21.0	.0	.0	2	61	137	.19
01541248 - ANDERSON C AT CURWENSVILLE, PA (LAT 40 58 31 LONG 078 31 50)											
JUN , 1979											
15...	0655	44	185	4.2	15.0	.3	15	0	57	--	--
AUG											
01...	1450	2.6	145	4.3	24.0	.3	15	--	48	92	.13
01541305 - MOOSE C AT CLEARFIELD, PA (LAT 41 02 10 LONG 078 26 56)											
JUN , 1979											
15...	0640	8.8	365	4.7	13.0	.5	25	1	130	--	--
AUG											
06...	1200	12	350	4.5	19.0	.5	25	--	130	239	.33
01541320 - CLEARFIELD C AT ASHVILLE, PA (LAT 40 33 40 LONG 078 33 05)											
JUN , 1979											
07...	1845	41	339	6.5	19.0	--	--	10	100	--	--
AUG											
14...	1720	63	230	7.1	18.0	.0	.0	20	64	162	.22
01541322 - CLEARFIELD C AT FRUGALITY, PA (LAT 40 39 13 LONG 078 29 47)											
JUN , 1979											
11...	1450	82	262	5.5	16.0	.0	.0	1	99	--	--
JUL											
31...	1545	190	214	6.2	21.0	.0	.0	6	69	152	.21
01541323 - SANDY RN AT VAN ORMER, PA (LAT 40 40 00 LONG 078 29 37)											
JUN , 1979											
11...	1605	2.6	90	6.4	16.0	.0	.0	8	27	--	--
JUL											
31...	1710	3.6	76	6.6	22.0	.0	.0	11	18	52	.07

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G AS FE)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01541100 - BELL RN AT BELLS LANDING, PA (LAT 40 55 00 LONG 078 38 00)										
JUN , 1979										
15...	--	--	--	--	--	--	1400	1400	10	--
AUG										
01...	10.8	0	<10	<10	20	<10	650	590	60	16000
01541207 - ANDERSON C NR PENFIELD, PA (LAT 41 07 51 LONG 078 36 14)										
JUN , 1979										
13...	--	--	--	--	--	--	870	670	200	--
AUG										
07...	.32	0	<10	<10	10	<10	1100	880	220	14000
01541220 - L ANDERSON C NR ROCKTON, PA (LAT 41 03 11 LONG 078 39 24)										
JUN , 1979										
12...	--	--	--	--	--	--	12000	0	13000	--
AUG										
01...	23.5	0	<10	<10	10	20	4400	900	3500	42000
01541245 - KRATZER RN AT BRIDGEPORT, PA (LAT 40 58 30 LONG 078 33 06)										
JUN , 1979										
15...	--	--	--	--	--	--	4600	4500	130	--
AUG										
01...	6.28	0	<10	10	30	20	960	930	30	22000
01541248 - ANDERSON C AT CURWENSVILLE, PA (LAT 40 58 31 LONG 078 31 50)										
JUN , 1979										
15...	--	--	--	--	--	--	300	170	130	--
AUG										
01...	.66	0	<10	<10	10	<10	3000	2900	130	6500
01541305 - MOOSE C AT CLEARFIELD, PA (LAT 41 02 10 LONG 078 26 56)										
JUN , 1979										
15...	--	--	--	--	--	--	430	190	240	--
AUG										
06...	7.81	0	<10	<10	20	10	330	120	210	15000
01541320 - CLEARFIELD C AT ASHVILLE, PA (LAT 40 33 40 LONG 078 33 05)										
JUN , 1979										
07...	--	--	--	--	--	--	800	770	30	--
AUG										
14...	27.8	0	<10	10	10	500	1200	1100	60	16000
01541322 - CLEARFIELD C AT FRUGALITY, PA (LAT 40 39 13 LONG 078 29 47)										
JUN , 1979										
11...	--	--	--	--	--	--	1400	1100	260	--
JUL										
31...	78.0	0	<10	<10	10	20	1600	1500	130	18000
01541323 - SANDY RN AT VAN ORMER, PA (LAT 40 40 00 LONG 078 29 37)										
JUN , 1979										
11...	--	--	--	--	--	--	160	150	10	--
JUL										
31...	.51	0	<10	10	10	<10	190	140	50	14000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM ROT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01541100 - BELL RN AT BELLS LANDING, PA (LAT 40 55 00 LONG 078 38 00)										
JUN , 1979 15...	--	820	10	810	--	--	--	--	1	.02
AUG 01...	10	820	70	750	1200	.00	0	80	163	11
01541207 - ANDERSON C NR PENFIELD, PA (LAT 41 07 51 LONG 078 36 14)										
JUN , 1979 13...	--	130	20	110	--	--	--	--	4	.03
AUG 07...	10	120	0	130	520	.00	0	50	6	.05
01541220 - L ANDERSON C NR ROCKTON, PA (LAT 41 03 11 LONG 078 39 24)										
JUN , 1979 12...	--	6700	0	7100	--	--	--	--	--	--
AUG 01...	10	5500	0	5500	190	.00	0	30	23	2.0
01541245 - KRATZER RN AT BRIDGEPORT, PA (LAT 40 58 30 LONG 078 33 06)										
JUN , 1979 15...	--	1500	0	1600	--	--	--	--	24	.32
AUG 01...	30	1300	0	1300	1100	.00	1	140	23	1.1
01541248 - ANDERSON C AT CURWENSVILLE, PA (LAT 40 58 31 LONG 078 31 50)										
JUN , 1979 15...	--	870	0	1200	--	--	--	--	1	.12
AUG 01...	10	990	70	920	220	.00	0	20	--	--
01541305 - MOOSE C AT CLEARFIELD, PA (LAT 41 02 10 LONG 078 26 56)										
JUN , 1979 15...	--	4100	0	4900	--	--	--	--	3	.07
AUG 06...	20	4700	300	4400	630	.00	0	60	2	.07
01541320 - CLEARFIELD C AT ASHVILLE, PA (LAT 40 33 40 LONG 078 33 05)										
JUN , 1979 07...	--	250	30	220	--	--	--	--	13	1.5
AUG 14...	270	170	0	310	520	.00	0	80	3	.51
01541322 - CLEARFIELD C AT FRUGALITY, PA (LAT 40 39 13 LONG 078 29 47)										
JUN , 1979 11...	--	1100	0	1100	--	--	--	--	14	3.1
JUL 31...	10	930	10	920	320	.00	0	70	31	16
01541323 - SANDY RN AT VAN ORMER, PA (LAT 40 40 00 LONG 078 29 37)										
JUN , 1979 11...	--	20	10	10	--	--	--	--	3	.02
JUL 31...	10	0	0	0	890	.00	0	70	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01541324 - POWELL RN AT VAN ORMER, PA (LAT 40 40 19 LONG 078 29 34)											
JUN , 1979											
11...	1650	10	347	3.7	13.5	.8	40	0	140	--	--
JUL											
31...	1830	14	332	3.9	18.5	.8	40	--	130	233	.32
01541335 - SLATE LICK RUN NR FRUGALITY, PA. (LAT 40 38 16 LONG 078 32 15)											
JUN , 1979											
12...	--	3.2	172	7.7	17.0	.0	.0	46	19	--	--
AUG											
01...	1700	11	190	6.9	18.5	.0	.0	27	22	103	.14
01541361 - BLAIN RN AT COALPORT, PA (LAT 40 44 35 LONG 078 32 02)											
JUN , 1979											
12...	0930	1.8	348	7.1	11.0	.0	.0	25	130	--	--
AUG											
01...	1215	2.1	260	6.9	21.0	.0	.0	24	76	182	.25
01541362 - N WITMER RN AT IRVONA, PA (LAT 40 46 20 LONG 078 33 20)											
JUN , 1979											
12...	1100	13	185	7.2	14.0	.0	.0	19	56	--	--
AUG											
01...	0915	69	130	7.2	19.0	.0	.0	15	34	96	.13
01541368 - PINE RN NR IRVONA, PA (LAT 40 49 27 LONG 078 31 29)											
JUN , 1979											
12...	1315	3.2	940	4.9	16.0	1.4	70	2	470	--	--
AUG											
01...	1430	3.5	630	5.0	20.0	.6	30	2	290	183	.25
01541410 - CLEARFIELD C NR MADERA, PA (LAT 40 48 30 LONG 078 28 14)											
JUN , 1979											
14...	1450	137	290	6.5	20.0	.0	.0	6	120	--	--
AUG											
07...	1145	95	320	--	22.5	.0	.0	5	130	223	.30
01541414 - SHOFF MINE AT MADERA, PA (LAT 40 49 30 LONG 078 26 59)											
JUN , 1979											
14...	1300	E.20	4000	2.6	11.5	.0	.0	0	2100	--	--
AUG											
07...	1100	.08	5000	2.5	13.5	56	2780	--	2800	4180	5.68
01541418 - L MUDDY RN AT SMOKE RUN, PA (LAT 40 47 32 LONG 078 25 42)											
JUN , 1979											
14...	1810	19	570	5.1	18.5	.0	.0	3	250	--	--
AUG											
07...	0800	11	710	4.1	16.0	1.4	70	--	340	548	.75
01541420 - MUDDY RN AT MADERA, PA (LAT 40 49 11 LONG 078 26 15)											
JUN , 1979											
14...	1625	41	565	5.0	16.0	.0	.0	2	250	--	--
AUG											
07...	0930	26	640	4.8	17.0	.5	25	1	310	479	.65

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G AS FE)
------	---	---	--	--	--	--	---	--	--	--

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541324 - POWELL RN AT VAN ORMER, PA (LAT 40 40 19 LONG 078 29 34)

JUN , 1979										
11...	--	--	--	--	--	--	1000	140	860	--
JUL										
31...	9.25	2	<10	<10	10	20	960	280	680	31000

01541335 - SLATE LICK RUN NR FRUGALITY, PA. (LAT 40 38 16 LONG 078 32 15)

JUN , 1979										
12...	--	--	--	--	--	--	560	470	90	--
AUG										
01...	3.11	0	<10	10	20	<10	530	440	90	2400

01541361 - BLAIN RN AT COALPORT, PA (LAT 40 44 35 LONG 078 32 02)

JUN , 1979										
12...	--	--	--	--	--	--	2000	700	1300	--
AUG										
01...	1.07	0	<10	10	30	20	1500	1100	400	40000

01541362 - N WITMER RN AT IRVONA, PA (LAT 40 46 20 LONG 078 33 20)

JUN , 1979										
12...	--	--	--	--	--	--	640	620	20	--
AUG										
01...	18.1	0	<10	10	10	50	1300	1200	70	25000

01541368 - PINE RN NR IRVONA, PA (LAT 40 49 27 LONG 078 31 29)

JUN , 1979										
12...	--	--	--	--	--	--	18000	0	18000	--
AUG										
01...	1.77	6	<10	<10	20	10	7900	400	7500	76000

01541410 - CLEARFIELD C NR MADERA, PA (LAT 40 48 30 LONG 078 28 14)

JUN , 1979										
14...	--	--	--	--	--	--	500	230	270	--
AUG										
07...	57.2	0	<10	<10	20	20	300	40	260	22000

01541414 - SHOFF MINE AT MADERA, PA (LAT 40 49 30 LONG 078 26 59)

JUN , 1979										
14...	--	--	--	--	--	--	600000	60000	540000	--
AUG										
07...	.90	--	--	--	--	--	730000	0	760000	--

01541418 - L MUDDY RN AT SMOKE RUN, PA (LAT 40 47 32 LONG 078 25 42)

JUN , 1979										
14...	--	--	--	--	--	--	2300	1300	1000	--
AUG										
07...	16.4	0	<10	<10	10	20	5900	3400	2500	47000

01541420 - MUDDY RN AT MADERA, PA (LAT 40 49 11 LONG 078 26 15)

JUN , 1979										
14...	--	--	--	--	--	--	2400	900	1500	--
AUG										
07...	33.6	0	<10	<10	<10	30	2800	1700	1100	45000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01541324 - POWELL RN AT VAN ORMER, PA (LAT 40 40 19 LONG 078 29 34)										
JUN , 1979 11...	--	1400	0	1500	--	--	--	--	3	.08
JUL 31...	10	1600	0	1700	290	.00	0	30	3	.12
01541335 - SLATE LICK RUN NR FRUGALITY, PA. (LAT 40 38 16 LONG 078 32 15)										
JUN , 1979 12...	--	50	10	40	--	--	--	--	5	.04
AUG 01...	10	50	20	30	810	.00	0	50	9	.27
01541361 - BLAIN RN AT COALPORT, PA (LAT 40 44 35 LONG 078 32 02)										
JUN , 1979 12...	--	430	20	410	--	--	--	--	69	.34
AUG 01...	90	290	0	290	600	.00	0	130	9	.05
01541362 - N WITMER RN AT IRVONA, PA (LAT 40 46 20 LONG 078 33 20)										
JUN , 1979 12...	--	80	20	60	--	--	--	--	3	.11
AUG 01...	10	120	30	90	870	.00	0	100	34	6.4
01541368 - PINE RN NR IRVONA, PA (LAT 40 49 27 LONG 078 31 29)										
JUN , 1979 12...	--	2100	0	2500	--	--	--	--	31	.27
AUG 01...	<10	1500	0	1500	280	.00	0	40	16	.15
01541410 - CLEARFIELD C NR MADERA, PA (LAT 40 48 30 LONG 078 28 14)										
JUN , 1979 14...	--	740	20	720	--	--	--	--	1	.37
AUG 07...	10	1000	0	1100	550	.00	0	100	2	.51
01541414 - SHOFF MINE AT MADERA, PA (LAT 40 49 30 LONG 078 26 59)										
JUN , 1979 14...	--	7400	0	8100	--	--	--	--	309	--
AUG 07...	--	9700	100	9600	--	--	--	--	165	.04
01541418 - L MUDDY RN AT SMOKE RUN, PA (LAT 40 47 32 LONG 078 25 42)										
JUN , 1979 14...	--	2800	0	3100	--	--	--	--	15	.77
AUG 07...	10	4400	0	4500	230	.00	0	60	15	.45
01541420 - MUDDY RN AT MADERA, PA (LAT 40 49 11 LONG 078 26 15)										
JUN , 1979 14...	--	2700	0	3000	--	--	--	--	14	1.5
AUG 07...	20	3600	0	3700	230	.00	0	60	13	.91

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01541425 - JAPLING RN AT MADERA, PA (LAT 40 49 45 LONG 078 26 10)											
JUN , 1979											
14...	1120	2.7	1800	3.1	15.5	9.2	457	0	900	--	--
AUG											
07...	1345	1.4	1800	3.0	20.5	1.3	65	--	950	1520	2.07
01541430 - PINE RN NR MADERA, PA (LAT 40 51 04 LONG 078 26 50)											
JUN , 1979											
14...	0840	2.0	755	3.3	11.5	2.6	129	0	260	--	--
AUG											
07...	1500	1.1	900	3.0	19.5	3.0	149	--	340	490	.67
01541435 - LOST RN NR MADERA, PA (LAT 40 51 37 LONG 078 26 43)											
JUN , 1979											
14...	0950	2.1	1800	3.4	11.5	4.5	223	0	990	--	--
AUG											
07...	1700	1.1	2000	3.1	20.5	4.8	238	--	1100	1720	2.34
01541470 - UPPER MORGAN RN NR KELLEYTOWN, PA (LAT 40 52 48 LONG 078 25 56)											
AUG , 1979											
08...	0945	2.9	920	3.3	19.0	1.7	84	--	420	613	.83
01541475 - POTTS RN AT KELLYTOWN, PA (LAT 40 52 54 LONG 078 27 38)											
JUN , 1979											
15...	1450	8.5	500	4.0	17.0	.8	40	0	210	--	--
AUG											
08...	0800	4.9	500	3.8	18.5	1.0	50	--	230	326	.44
01541480 - MORGAN RN NR MINERAL SPRINGS, PA (LAT 40 57 27 LONG 078 22 28)											
JUN , 1979											
15...	1010	8.0	405	4.0	13.0	.9	45	0	150	--	--
AUG											
08...	1215	13	300	4.2	18.5	.0	.0	46	120	188	.26
01541485 - L CLEARFIELD C NR GLEN RICHEY, PA (LAT 40 55 51 LONG 078 27 53)											
JUN , 1979											
15...	1320	18	368	7.8	20.5	.0	.0	49	100	--	--
AUG											
07...	1830	19	340	7.4	22.0	.0	.0	--	95	195	.27
01541513 - LONG RN AT MOUNT HOPE, PA (LAT 40 59 34 LONG 078 24 22)											
JUN , 1979											
15...	1150	1.8	960	4.0	14.0	.9	45	0	460	--	--
AUG											
08...	1430	8.9	650	4.4	20.0	.6	30	--	310	475	.65
01541520 - ROARING RN AT MINERAL SPRINGS, PA (LAT 40 59 48 LONG 078 21 40)											
JUN , 1979											
15...	0900	5.4	1500	3.3	14.5	3.9	194	0	660	--	--
AUG											
06...	1600	7.7	875	3.6	23.0	1.4	70	--	380	622	.85
01541550 - CLEARFIELD CR AT CLEARFIELD, PA. (LAT 41 01 04 LONG 078 24 28)											
JUN , 1979											
15...	0810	--	420	4.6	18.0	.4	20	0	180	--	--
AUG											
06...	1330	--	400	4.7	24.5	.0	.0	1	170	317	.43

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS AS)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
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WEST BRANCH SUSQUEHANNA RIVER BASIN

01541425 - JAPLING RN AT MADERA, PA (LAT 40 49 45 LONG 078 26 10)

JUN , 1979	--	--	--	--	--	--	110000	0	110000	--
AUG 14...	--	--	--	--	--	--	110000	0	110000	120000
AUG 07...	5.91	0	<10	<10	10	10	110000	0	110000	120000

01541430 - PINE RN NR MADERA, PA (LAT 40 51 04 LONG 078 26 50)

JUN , 1979	--	--	--	--	--	--	13000	0	14000	--
AUG 14...	--	--	--	--	--	--	13000	0	14000	59000
AUG 07...	1.52	0	<10	<10	10	<10	11000	1400	9600	59000

01541435 - LOST RN NR MADERA, PA (LAT 40 51 37 LONG 078 26 43)

JUN , 1979	--	--	--	--	--	--	16000	0	17000	--
AUG 14...	--	--	--	--	--	--	16000	0	17000	51000
AUG 07...	5.25	0	<10	<10	10	20	11000	1000	10000	51000

01541470 - UPPER MORGAN RN NR KELLEYTOWN, PA (LAT 40 52 48 LONG 078 25 56)

AUG , 1979	4.95	0	<10	<10	10	10	2900	300	2600	53000
AUG 08...	4.95	0	<10	<10	10	10	2900	300	2600	53000

01541475 - POTTS RN AT KELLYTOWN, PA (LAT 40 52 54 LONG 078 27 38)

JUN , 1979	--	--	--	--	--	--	1900	920	980	--
AUG 15...	--	--	--	--	--	--	1900	920	980	51000
AUG 08...	4.36	0	<10	10	<10	20	2900	2400	470	51000

01541480 - MORGAN RN NR MINERAL SPRINGS, PA (LAT 40 57 27 LONG 078 22 28)

JUN , 1979	--	--	--	--	--	--	590	20	570	--
AUG 15...	--	--	--	--	--	--	590	20	570	6800
AUG 08...	6.60	2	<10	<10	10	<10	550	300	250	6800

01541485 - L CLEARFIELD C NR GLEN RICHEY, PA (LAT 40 55 51 LONG 078 27 53)

JUN , 1979	--	--	--	--	--	--	530	520	10	--
AUG 15...	--	--	--	--	--	--	530	520	10	14000
AUG 07...	10.4	0	<10	<10	10	<10	710	680	30	14000

01541513 - LONG RN AT MOUNT HOPE, PA (LAT 40 59 34 LONG 078 24 22)

JUN , 1979	--	--	--	--	--	--	280	30	250	--
AUG 15...	--	--	--	--	--	--	280	30	250	16000
AUG 08...	11.5	0	<10	<10	20	<10	350	200	150	16000

01541520 - ROARING RN AT MINERAL SPRINGS, PA (LAT 40 59 48 LONG 078 21 40)

JUN , 1979	--	--	--	--	--	--	13000	0	14000	--
AUG 15...	--	--	--	--	--	--	13000	0	14000	19000
AUG 06...	13.0	0	<10	<10	10	10	2100	0	2300	19000

01541550 - CLEARFIELD CR AT CLEARFIELD, PA. (LAT 41 01 04 LONG 078 24 28)

JUN , 1979	--	--	--	--	--	--	710	210	500	--
AUG 15...	--	--	--	--	--	--	710	210	500	18000
AUG 06...	--	0	<10	<10	10	10	810	420	390	18000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS HG)	SELE- NIUM, TOTAL FM BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01541425 - JAPLING RN AT MADARA, PA (LAT 40 49 45 LONG 078 26 10)										
JUN , 1979	--	7500	0	7800	--	--	--	--	127	.93
AUG 14...	--	7500	0	7800	--	--	--	--	127	.93
AUG 07...	30	8000	500	7500	60	.00	0	20	106	.41
01541430 - PINE RN NR MADARA, PA (LAT 40 51 04 LONG 078 26 50) ¹⁾										
JUN , 1979	--	2900	0	3300	--	--	--	--	8	.04
AUG 14...	--	2900	0	3300	--	--	--	--	8	.04
AUG 07...	10	4900	300	4600	110	.00	0	10	8	.02
01541435 - LOST RN/NR MADARA, PA (LAT 40 51 37 LONG 078 26 43)										
JUN , 1979	--	23000	0	36000	--	--	--	--	8	.05
AUG 14...	--	23000	0	36000	--	--	--	--	8	.05
AUG 07...	10	35000	0	35000	340	.58	0	30	1	.00
01541470 - UPPER MORGAN RN NR KELLEYTOWN, PA (LAT 40 52 48 LONG 078 25 56)										
AUG , 1979	10	10000	0	10000	130	.00	0	20	1	.01
AUG 08...	10	10000	0	10000	130	.00	0	20	1	.01
01541475 - POTTS, RN AT KELLYTOWN, PA (LAT 40 52 54 LONG 078 27 38)										
JUN , 1979	--	3600	0	3900	--	--	--	--	5	.11
AUG 15...	--	3600	0	3900	--	--	--	--	5	.11
AUG 08...	<10	3800	200	3600	230	.00	0	40	7	.09
01541480 - MORGAN RN NR MINERAL SPRINGS, PA (LAT 40 57 27 LONG 078 22 28)										
JUN , 1979	--	4600	0	5100	--	--	--	--	1	.02
AUG 15...	--	4600	0	5100	--	--	--	--	1	.02
AUG 08...	10	4100	0	4200	970	.85	0	50	10	.35
01541485 - L CLEARFIELD C NR GLEN RICHEY, PA (LAT 40 55 51 LONG 078 27 53)										
JUN , 1979	--	60	0	60	--	--	--	--	5	.24
AUG 15...	--	60	0	60	--	--	--	--	5	.24
AUG 07...	10	70	10	60	510	.00	0	40	6	.32
01541513 - LONG RN AT MOUNT HOPE, PA (LAT 40 59 34 LONG 078 24 22)										
JUN , 1979	--	9900	0	10000	--	--	--	--	2	.01
AUG 15...	--	9900	0	10000	--	--	--	--	2	.01
AUG 08...	10	6900	800	6100	1200	.00	0	20	4	.10
01541520 - ROARING RN AT MINERAL SPRINGS, PA (LAT 40 59 48 LONG 078 21 40)										
JUN , 1979	--	19000	0	19000	--	--	--	--	18	.26
AUG 15...	--	19000	0	19000	--	--	--	--	18	.26
AUG 06...	20	13000	0	14000	240	.00	0	30	7	.15
01541550 - CLEARFIELD CR AT CLEARFIELD, PA. (LAT 41 01 04 LONG 078 24 28)										
JUN , 1979	--	2160	0	2600	--	--	--	--	13	--
AUG 15...	--	2160	0	2600	--	--	--	--	13	--
AUG 06...	20	2800	0	2800	230	.00	0	30	7	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01541695 - TROUT RN AT SHAWVILLE, PA (LAT 41 04 25 LONG 078 21 43.01)											
JUN , 1979											
12...	1630	31	53	5.5	16.0	.0	.0	1	17	--	--
AUG											
03...	0750	150	57	6.5	14.0	.0	.0	2	14	31	.04
01541710 - MILLSTONE RN NR SHAWVILLE, PA (LAT 41 03 02 LONG 078 20 21)											
JUN , 1979											
12...	1750	7.2	833	3.4	14.0	1.5	74	0	290	--	--
AUG											
03...	1000	5.8	1075	3.3	17.0	2.2	109	--	420	683	.93
01541720 - SURVEYOR RN AT SURVEYOR, PA (LAT 41 04 26 LONG 078 19 39)											
JUN , 1979											
12...	1845	3.8	975	3.4	14.0	1.9	94	0	520	--	--
AUG											
03...	1130	9.8	928	3.6	17.0	2.0	99	--	460	755	1.03
01541750 - DEER C NR FRENCHVILLE, PA (LAT 41 04 42 LONG 078 14 11)											
JUN , 1979											
13...	0800	20	630	3.7	9.0	1.0	50	0	270	--	--
AUG											
03...	1300	57	316	4.0	16.0	.6	30	--	120	221	.30
01541900 - ROLLING STONE RN NR ROLLING STONE, PA (LAT 41 03 25 LONG 078 09 36)											
JUN , 1979											
13...	1000	1.2	1455	2.5	11.0	4.5	223	0	730	--	--
AUG											
07...	2020	.71	1725	3.0	20.0	9.0	447	0	900	1520	2.07
01541950 - MOWRY RN AT ROLLING STONE, PA (LAT 41 03 23 LONG 078 09 19)											
JUN , 1979											
13...	0920	.67	297	4.1	10.5	.7	35	0	120	--	--
AUG											
08...	0800	.56	--	--	--	1.0	50	--	250	387	.53
01542004 - TROUT RN AT EDENDALE, PA (LAT 40 50 12 LONG 078 16 06)											
JUN , 1979											
14...	1730	13	253	3.9	16.5	.7	35	0	67	--	--
AUG											
01...	0905	17	189	3.8	15.5	.6	30	--	58	99	.13
01542006 - COLD STREAM ABOVE GLASS CITY, PA (LAT 40 52 04 LONG 078 12 26)											
JUN , 1979											
14...	1520	30	50	6.7	15.0	.0	.0	5	7.6	--	--
AUG											
02...	1040	15	33	6.6	18.0	.0	.0	9	9.6	25	.03
01542008 - COLD STREAM AT PHILIPSBURG, PA (LAT 40 54 11 LONG 078 12 39)											
JUN , 1979											
14...	0730	33	130	4.2	9.5	.6	30	0	38	--	--
AUG											
02...	0740	17	128	4.5	19.5	.3	15	--	43	79	.11

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01541695 - TROUT RN AT SHAWVILLE, PA (LAT 41 04 25 LONG 078 21 43.01)										
JUN , 1979										
12...	--	--	--	--	--	--	240	230	10	--
AUG										
03...	12.6	0	<10	<10	10	<10	120	50	70	7600
01541710 - MILLSTONE RN NR SHAWVILLE, PA (LAT 41 03 02 LONG 078 20 21)										
JUN , 1979										
12...	--	--	--	--	--	--	3200	300	2900	--
AUG										
03...	10.9	0	<10	<10	10	10	3700	300	3400	31000
01541720 - SURVEYOR RN AT SURVEYOR, PA (LAT 41 04 26 LONG 078 19 39)										
JUN , 1979										
12...	--	--	--	--	--	--	4600	400	4200	--
AUG										
03...	20.0	0	<10	<10	10	10	4000	400	3600	35000
01541750 - DEER C NR FRENCHVILLE, PA (LAT 41 04 42 LONG 078 14 11)										
JUN , 1979										
13...	--	--	--	--	--	--	3000	100	2900	--
AUG										
03...	34.5	0	<10	<10	10	<10	1600	400	1200	26000
01541900 - ROLLING STONE RN NR ROLLING STONE, PA (LAT 41 03 25 LONG 078 09 36)										
JUN , 1979										
13...	--	--	--	--	--	--	26000	26000	30	--
AUG										
07...	2.91	0	<10	<10	<10	10	31000	0	35000	9400
01541950 - MOWRY RN AT ROLLING STONE, PA (LAT 41 03 23 LONG 078 09 19)										
JUN , 1979										
13...	--	--	--	--	--	--	250	0	250	--
AUG										
08...	.59	0	<10	10	<10	10	2400	1900	480	35000
01542004 - TROUT RN AT EDENDALE, PA (LAT 40 50 12 LONG 078 16 06)										
JUN , 1979										
14...	--	--	--	--	--	--	2100	600	1500	--
AUG										
01...	4.68	3	<10	<10	10	20	1400	550	850	51000
01542006 - COLD STREAM ABOVE GLASS CITY, PA (LAT 40 52 04 LONG 078 12 26)										
JUN , 1979										
14...	--	--	--	--	--	--	200	130	70	--
AUG										
02...	1.06	0	<10	<10	10	<10	170	120	50	13000
01542008 - COLD STREAM AT PHILIPSBURG, PA (LAT 40 54 11 LONG 078 12 39)										
JUN , 1979										
14...	--	--	--	--	--	--	3300	1800	1500	--
AUG										
02...	3.73	1	<10	<10	10	20	1900	1100	810	26000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL FM BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01541695 - TROUT RN AT SHAWVILLE, PA (LAT 41 04 25 LONG 078 21 43.01)										
JUN , 1979										
12...	--	60	0	60	--	--	--	--	1	.08
AUG										
03...	10	100	0	100	850	.00	0	40	1	.40
01541710 - MILLSTONE RN NR SHAWVILLE, PA (LAT 41 03 02 LONG 078 20 21)										
JUN , 1979										
12...	--	6400	0	6700	--	--	--	--	6	.12
AUG										
03...	10	11000	0	11000	120	.00	0	30	2	.03
01541720 - SURVEYOR RN AT SURVEYOR, PA (LAT 41 04 26 LONG 078 19 39)										
JUN , 1979										
12...	--	10000	0	10000	--	--	--	--	4	.04
AUG										
03...	10	12000	0	13000	170	.00	1	30	3	.08
01541750 - DEER C NR FRENCHVILLE, PA (LAT 41 04 42 LONG 078 14 11)										
JUN , 1979										
13...	--	7400	0	7700	--	--	--	--	4	.22
AUG										
03...	<10	4100	3100	1000	360	.00	0	20	4	.62
01541900 - ROLLING STONE RN NR ROLLING STONE, PA (LAT 41 03 25 LONG 078 09 36)										
JUN , 1979										
13...	--	18000	0	18000	--	--	--	--	20	.06
AUG										
07...	<10	30000	3000	27000	130	.00	0	20	13	.02
01541950 - MOWRY RN AT ROLLING STONE, PA (LAT 41 03 23 LONG 078 09 19)										
JUN , 1979										
13...	--	150	0	3900	--	--	--	--	1	.00
AUG										
08...	20	7800	0	8000	330	.00	0	40	37	.06
01542004 - TROUT RN AT EDENDALE, PA (LAT 40 50 12 LONG 078 16 06)										
JUN , 1979										
14...	--	850	0	900	--	--	--	--	3	.11
AUG										
01...	10	830	0	890	80	.00	1	20	3	.14
01542006 - COLD STREAM ABOVE GLASS CITY, PA (LAT 40 52 04 LONG 078 12 26)										
JUN , 1979										
14...	--	20	10	10	--	--	--	--	1	.08
AUG										
02...	<10	40	0	40	240	.00	0	40	3	.13
01542008 - COLD STREAM AT PHILIPSBURG, PA (LAT 40 54 11 LONG 078 12 39)										
JUN , 1979										
14...	--	300	0	530	--	--	--	--	6	.53
AUG										
02...	30	1100	100	1000	100	.00	0	120	7	.33

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01542100 - EMIGH RN AT HAWK RUN, PA (LAT 40 55 17 LONG 078 12 38)											
JUN , 1979											
14...	0925	2.3	448	5.7	13.5	.0	.0	2	180	--	--
AUG											
02...	1200	4.3	466	4.4	25.0	1.1	55	--	230	345	.47
01542105 - ONEMILE RN NR PHILIPSBURG, PA (LAT 40 54 49 LONG 078 12 02)											
JUN , 1979											
14...	0845	.78	1350	2.9	9.5	6.0	298	0	560	--	--
AUG											
02...	0920	.58	1300	3.1	22.0	6.6	328	--	550	845	1.15
01542108 - HAWK RN NR HAWK RUN, PA (LAT 40 55 18 LONG 078 11 33)											
JUN , 1979											
14...	1040	7.0	1150	3.2	14.5	4.0	199	0	530	--	--
AUG											
02...	1330	5.1	1200	3.3	25.0	7.5	372	--	560	885	1.20
01542200 - UNNAMED TRIB TO MOSHANNON C AT MUNSON, PA (LAT 40 57 14 LONG 078 10 25)											
JUN , 1979											
14...	1145	.33	1215	3.2	15.0	5.0	248	0	530	--	--
AUG											
02...	1500	.52	938	3.4	22.5	3.0	149	--	380	136	.19
01542204 - BLACK BEAR RN NR WINBURNE, PA (LAT 40 56 40 LONG 078 08 10)											
JUN , 1979											
14...	1235	--	50	6.7	11.5	.0	.0	4	12	--	--
AUG											
02...	1630	4.5	53	6.4	19.0	.0	.0	10	8.5	39	.05
01542207 - SULPHUR RN NR WINBURNE, PA (LAT 40 57 39 LONG 078 08 33)											
JUN , 1979											
14...	1330	7.6	1750	2.9	17.0	9.0	447	0	820	--	--
AUG											
02...	1800	5.9	1800	3.2	19.0	11	546	--	830	1350	1.84
01542300 - MOSHANNON C NR MOSHANNON, PA (LAT 41 02 10 LONG 078 03 36)											
JUN , 1979											
13...	1715	249	716	3.6	18.5	1.0	50	0	260	--	--
AUG											
08...	1630	189	775	3.2	27.0	.0	.0	--	300	475	.65
01542400 - BLK MOSHANNON C AT MOSHANNON, PA (LAT 41 02 08 LONG 078 03 22)											
JUN , 1979											
13...	1630	107	114	5.3	17.0	.0	.0	2	37	--	--
AUG											
08...	1530	72	170	4.7	22.5	.3	15	0	53	98	.13
01542508 - MOSQUITO C NR KARTHAUS, PA (LAT 41 07 45 LONG 078 07 59)											
JUN , 1979											
13...	1100	70	65	5.6	12.5	.0	.0	3	20	--	--
AUG											
08...	1000	--	36	4.5	19.0	.0	.0	--	26	32	.04

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G AS FE)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01542100 - EMIGH RN AT HAWK RUN, PA (LAT 40 55 17 LONG 078 12 38)										
JUN , 1979										
14...	--	--	--	--	--	--	400	90	310	--
AUG										
02...	4.05	2	<10	10	20	20	270	30	240	24000
01542105 - ONEMILE RN NR PHILIPSBURG, PA (LAT 40 54 49 LONG 078 12 02)										
JUN , 1979										
14...	--	--	--	--	--	--	34000	0	38000	--
AUG										
02...	1.32	2	<10	<10	10	10	36000	4000	32000	45000
01542108 - HAWK RN NR HAWK RUN, PA (LAT 40 55 18 LONG 078 11 33)										
JUN , 1979										
14...	--	--	--	--	--	--	38000	0	41000	--
AUG										
02...	12.3	0	<10	<10	20	20	45000	3000	42000	160000
01542200 - UNNAMED TRIB TO MOSHANNON C AT MUNSON, PA (LAT 40 57 14 LONG 078 10 25)										
JUN , 1979										
14...	--	--	--	--	--	--	46000	0	50000	--
AUG										
02...	.19	0	<10	<10	20	10	24000	0	24000	160000
01542204 - BLACK BEAR RN NR WINBURNE, PA (LAT 40 56 40 LONG 078 08 10)										
JUN , 1979										
14...	--	--	--	--	--	--	120	70	50	--
AUG										
02...	.48	0	<10	<10	<10	<10	420	410	10	2200
01542207 - SULPHUR RN NR WINBURNE, PA (LAT 40 57 39 LONG 078 08 33)										
JUN , 1979										
14...	--	--	--	--	--	--	67000	0	70000	--
AUG										
02...	21.7	0	<10	<10	10	10	79000	3000	76000	100000
01542300 - MOSHANNON C NR MOSHANNON, PA (LAT 41 02 10 LONG 078 03 36)										
JUN , 1979										
13...	--	--	--	--	--	--	5200	1600	3600	--
AUG										
08...	242	1	<10	<10	<10	20	2100	400	1700	76000
01542400 - BLK MOSHANNON C AT MOSHANNON, PA (LAT 41 02 08 LONG 078 03 22)										
JUN , 1979										
13...	--	--	--	--	--	--	560	300	260	--
AUG										
08...	19.1	0	<10	<10	10	<10	1900	1300	600	7200
01542508 - MOSQUITO C NR KARTHAUS, PA (LAT 41 07 45 LONG 078 07 59)										
JUN , 1979										
13...	--	--	--	--	--	--	60	20	40	--
AUG										
08...	--	--	--	--	--	--	1900	1700	250	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
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WEST BRANCH SUSQUEHANNA RIVER BASIN

01542100 - EMIGH RN AT HAWK RUN, PA (LAT 40 55 17 LONG 078 12 38)

JUN , 1979										
14...	--	3200	0	3200	--	--	--	--	50	.31
AUG										
02...	20	5000	0	5400	570	.00	0	80	13	.15

01542105 - ONEMILE RN NR PHILIPSBURG, PA (LAT 40 54 49 LONG 078 12 02)

JUN , 1979										
14...	--	6500	0	6700	--	--	--	--	26	.05
AUG										
02...	10	8500	0	9000	160	.00	0	20	30	.05

01542108 - HAWK RN NR HAWK RUN, PA (LAT 40 55 18 LONG 078 11 33)

JUN , 1979										
14...	--	4400	0	4600	--	--	--	--	38	.72
AUG										
02...	20	5500	0	5600	60	.00	0	20	41	.57

01542200 - UNNAMED TRIB TO MOSHANNON C AT MUNSON, PA (LAT 40 57 14 LONG 078 10 25)

JUN , 1979										
14...	--	4300	0	6500	--	--	--	--	52	.05
AUG										
02...	20	3600	0	3600	70	.00	0	30	26	.04

01542204 - BLACK BEAR RN NR WINBURNE, PA (LAT 40 56 40 LONG 078 08 10)

JUN , 1979										
14...	--	20	20	0	--	--	--	--	1	--
AUG										
02...	<10	130	100	30	330	.00	0	20	22	.27

01542207 - SULPHUR RN NR WINBURNE, PA (LAT 40 57 39 LONG 078 08 33)

JUN , 1979										
14...	--	4600	0	4800	--	--	--	--	81	1.7
AUG										
02...	20	8700	3400	5300	60	.00	1	20	67	1.1

01542300 - MOSHANNON C NR MOSHANNON, PA (LAT 41 02 10 LONG 078 03 36)

JUN , 1979										
13...	--	3400	0	3500	--	--	--	--	7	4.7
AUG										
08...	<10	4500	0	4500	70	.00	0	20	2	1.0

01542400 - BLK MOSHANNON C AT MOSHANNON, PA (LAT 41 02 08 LONG 078 03 22)

JUN , 1979										
13...	--	500	0	650	--	--	--	--	3	.87
AUG										
08...	<10	1400	0	1400	510	.00	0	20	37	7.2

01542508 - MOSQUITO C NR KARTHAUS, PA (LAT 41 07 45 LONG 078 07 59)

JUN , 1979										
13...	--	180	0	240	--	--	--	--	1	.19
AUG										
08...	--	290	20	270	--	--	--	--	35	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	ALKA- LITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01542520 - SALTICK RN NR POTTERSDALE, PA (LAT 41 09 15 LONG 078 06 00)											
JUN , 1979											
13...	1230	.54	2000	2.2	16.0	5.0	248	0	1000	--	--
AUG											
08...	1130	1.5	1475	3.5	20.5	4.2	209	--	820	1320	1.80
01542524 - STERLING RN NR PINE GLEN, PA (LAT 41 06 59 LONG 078 02 51)											
JUN , 1979											
13...	1445	9.1	87	5.4	13.5	.0	.0	3	31	--	--
AUG											
08...	1315	12	181	4.6	20.5	.0	.0	0	72	646	.88
01542610 - S BR BENNETT BR SINNEMAHOING C NR PENFIELD, PA (LAT 41 10 27 LONG 078 35 00)											
JUN , 1979											
12...	0900	4.8	80	6.9	12.0	.0	.0	6	12	--	--
AUG											
07...	1750	4.5	73	6.4	21.0	.0	.0	33	13	50	.07
01542615 - MOUNTAIN RN NR PENFIELD, PA (LAT 41 11 40 LONG 078 36 02)											
JUN , 1979											
12...	1000	12	100	6.4	12.5	.0	.0	12	20	--	--
AUG											
07...	1630	2.4	143	6.4	21.5	.0	.0	16	34	99	.13
01542721 - WILSON RN NR PENFIELD, PA (LAT 41 12 32 LONG 078 34 30)											
JUN , 1979											
12...	1100	9.4	102	6.4	12.0	.0	.0	8	25	--	--
AUG											
07...	1500	1.2	160	6.5	21.0	.0	.0	6	48	106	.14
01542725 - MOOSE RN AT PENFIELD, PA (LAT 41 12 24 LONG 078 34 14)											
JUN , 1979											
12...	1200	1.9	975	3.7	12.0	1.5	74	0	460	--	--
AUG											
07...	1315	1.0	1180	3.5	17.5	1.9	94	--	620	1010	1.37
01542732 - KERSEY RN AT WEEDVILLE, PA (LAT 41 16 29 LONG 078 29 37)											
JUN , 1979											
14...	1015	21	72	6.1	10.5	.0	.0	2	22	--	--
AUG											
02...	1715	29	105	6.4	22.5	.0	.0	3	35	64	.09
01542743 - LAUREL RN NR WEEDVILLE, PA (LAT 41 16 42 LONG 078 27 22)											
JUN , 1979											
14...	1220	--	62	6.5	14.5	.0	.0	2	20	--	--
01542748 - MEDIX RN NR MEDIX RUN, PA (LAT 41 16 29 LONG 078 24 06)											
JUN , 1979											
14...	1430	14	50	6.8	16.0	.0	.0	10	9.8	--	--
AUG											
02...	1430	60	39	6.9	20.0	.0	.0	5	13	35	.05
01542750 - BENNETT BR SINNEMAHOING C AT MEDIX RUN, PA (LAT 41 17 21 LONG 078 23 48)											
JUN , 1979											
14...	1325	113	218	4.1	18.0	.5	25	0	71	--	--
AUG											
02...	1545	212	100	6.5	23.0	.0	.0	3	29	68	.09

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECov. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECov. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECov. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECov. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECov- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECov- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECov. FM BOT- TOM MA- TERIAL (UG/G AS FE)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01542520 - SALTICK RN NR POTTERSDALE, PA (LAT 41 09 15 LONG 078 06 00)										
JUN , 1979	--	--	--	--	--	--	16000	0	17000	--
AUG 13...	--	--	--	--	--	--				
AUG 08...	5.60	0	<10	<10	40	20	9500	700	8800	33000
01542524 - STERLING RN NR PINE GLEN, PA (LAT 41 06 59 LONG 078 02 51)										
JUN , 1979	--	--	--	--	--	--	130	50	80	--
AUG 13...	--	--	--	--	--	--				
AUG 08...	21.6	1	<10	<10	10	<10	350	110	240	2700
01542610 - S BR BENNETT BR SINNEMAHONING C NR PENFIELD, PA (LAT 41 10 27 LONG 078 35 00)										
JUN , 1979	--	--	--	--	--	--	920	540	380	--
AUG 12...	--	--	--	--	--	--				
AUG 07...	.61	1	<10	10	10	<10	910	620	290	28000
01542615 - MOUNTAIN RN NR PENFIELD, PA (LAT 41 11 40 LONG 078 36 02)										
JUN , 1979	--	--	--	--	--	--	160	120	40	--
AUG 12...	--	--	--	--	--	--				
AUG 07...	.65	2	<10	10	10	<10	200	150	50	20000
01542721 - WILSON RN NR PENFIELD, PA (LAT 41 12 32 LONG 078 34 30)										
JUN , 1979	--	--	--	--	--	--	390	350	40	--
AUG 12...	--	--	--	--	--	--				
AUG 07...	.37	3	<10	10	20	10	300	220	80	24000
01542725 - MOOSE RN AT PENFIELD, PA (LAT 41 12 24 LONG 078 34 14)										
JUN , 1979	--	--	--	--	--	--	6100	1100	5000	--
AUG 12...	--	--	--	--	--	--				
AUG 07...	2.95	1	<10	10	10	40	4300	500	3800	87000
01542732 - KERSEY RN AT WEEDVILLE, PA (LAT 41 16 29 LONG 078 29 37)										
JUN , 1979	--	--	--	--	--	--	180	130	50	--
AUG 14...	--	--	--	--	--	--				
AUG 02...	5.13	0	<10	20	20	30	1600	1500	110	34000
01542743 - LAUREL RN NR WEEDVILLE, PA (LAT 41 16 42 LONG 078 27 22)										
JUN , 1979	--	--	--	--	--	--	170	160	10	--
AUG 14...	--	--	--	--	--	--				
01542748 - MEDIX RN NR MEDIX RUN, PA (LAT 41 16 29 LONG 078 24 06)										
JUN , 1979	--	--	--	--	--	--	50	40	10	--
AUG 14...	--	--	--	--	--	--				
AUG 02...	5.72	0	<10	<10	<10	<10	480	460	20	11000
01542750 - BENNETT BR SINNEMAHONING C AT MEDIX RUN, PA (LAT 41 17 21 LONG 078 23 48)										
JUN , 1979	--	--	--	--	--	--	840	140	700	--
AUG 14...	--	--	--	--	--	--				
AUG 02...	38.9	--	--	--	--	--	1200	1100	130	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L T/DAY)
------	--	---	--	--	--	--	--	--	--

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542520 - SALTICK RN NR POTTERSDALE, PA (LAT 41 09 15 LONG 078 06 00)

JUN , 1979	--	45000	15000	30000	--	--	--	--	9	.01
13...										
AUG										
08...	30	40000	0	41000	820	.00	0	140	13	.06

01542524 - STERLING RN NR PINE GLEN, PA (LAT 41 06 59 LONG 078 02 51)

JUN , 1979	--	600	20	580	--	--	--	--	3	.07
13...										
AUG										
08...	<10	2300	0	2900	100	.00	0	10	5	.17

01542610 - S BR BENNETT BR SINNEMAHONING C NR PENFIELD, PA (LAT 41 10 27 LONG 078 35 00)

JUN , 1979	--	120	20	100	--	--	--	--	5	.06
12...										
AUG										
07...	10	70	0	70	800	.00	0	50	5	.06

01542615 - MOUNTAIN RN NR PENFIELD, PA (LAT 41 11 40 LONG 078 36 02)

JUN , 1979	--	50	0	60	--	--	--	--	1	.03
12...										
AUG										
07...	10	60	0	60	550	.00	0	80	2	.01

01542721 - WILSON RN NR PENFIELD, PA (LAT 41 12 32 LONG 078 34 30)

JUN , 1979	--	3500	3400	110	--	--	--	--	3	.08
12...										
AUG										
07...	<10	140	0	160	1100	.00	0	90	3	.01

01542725 - MOOSE RN AT PENFIELD, PA (LAT 41 12 24 LONG 078 34 14)

JUN , 1979	--	2600	0	3000	--	--	--	--	13	.07
12...										
AUG										
07...	10	3900	0	4000	250	.00	0	40	10	.03

01542732 - KERSEY RN AT WEEDVILLE, PA (LAT 41 16 29 LONG 078 29 37)

JUN , 1979	--	150	20	130	--	--	--	--	1	.06
14...										
AUG										
02...	70	360	20	340	200	.00	1	100	38	3.0

01542743 - LAUREL RN NR WEEDVILLE, PA (LAT 41 16 42 LONG 078 27 22)

JUN , 1979	--	70	10	60	--	--	--	--	3	--
14...										

01542748 - MEDIX RN NR MEDIX RUN, PA (LAT 41 16 29 LONG 078 24 06)

JUN , 1979	--	0	0	0	--	--	--	--	1	.04
14...										
AUG										
02...	10	30	0	30	270	.00	0	50	18	2.9

01542750 - BENNETT BR SINNEMAHONING C AT MEDIX RUN, PA (LAT 41 17 21 LONG 078 23 48)

JUN , 1979	--	480	20	460	--	--	--	--	4	1.2
14...										
AUG										
02...	--	230	10	220	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
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DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01542755 - SPRING RN NR WEEDVILLE, PA (LAT 41 19 27 LONG 078 27 28)											
JUN , 1979											
14...	0845	5.2	150	6.7	9.0	.0	.0	2	50	--	--
AUG											
02...	1815	8.0	250	5.8	19.5	.0	.0	4	110	194	.26
01542760 - TROUT RN AT BENZETTE, PA (LAT 41 18 50 LONG 078 23 05)											
JUN , 1979											
14...	1555	30	142	6.5	19.0	.0	.0	5	49	--	--
AUG											
02...	1930	53	180	6.6	21.5	.0	.0	6	63	140	.19
01542770 - DENTS RN AT DENTS RUN, PA (LAT 41 21 20 LONG 078 15 47)											
JUN , 1979											
14...	1715	12	550	3.7	18.0	.8	40	0	240	--	--
AUG											
07...	1030	11	608	3.4	17.5	1.3	65	--	440	443	.60
01542775 - E BR HICKS RN NR HUSTON HILL, PA (LAT 41 22 47 LONG 078 16 46)											
JUN , 1979											
14...	1820	7.3	55	6.7	15.0	.0	.0	10	14	--	--
AUG											
02...	1300	24	51	7.1	17.5	.0	.0	6	8.1	38	.05
01542780 - MIX RN NR DRIFTWOOD, PA (LAT 41 20 10 LONG 078 11 53)											
JUN , 1979											
15...	1035	23	50	7.3	13.5	.0	.0	7	13	--	--
AUG											
07...	1215	21	40	7.4	17.0	.0	.0	6	6.3	68	.09
01542790 - BENNETT BR SINNEMAHONING C AT DRIFTWOOD, PA (LAT 41 20 02 LONG 078 08 08)											
JUN , 1979											
15...	1145	171	180	4.4	20.0	.0	.0	0	64	--	--
AUG											
03...	1415	350	170	5.0	24.0	.0	.0	1	48	98	.13
01542800 - DRIFTWOOD BR SINNEMAHONING C NR LOCKWOOD, PA (LAT 41 32 02 LONG 078 18 47)											
JUN , 1979											
12...	1520	19	--	7.0	50.0	.0	.0	10	8.1	--	--
AUG											
03...	0815	8.5	59	6.8	19.0	.0	.0	15	2.5	50	.07
01542835 - BIG RN AT TRUMAN, PA (LAT 41 28 38 LONG 078 22 08)											
JUN , 1979											
12...	1755	2.2	68	7.1	13.5	.0	.0	11	12	--	--
AUG											
02...	1015	2.2	66	7.1	18.5	.0	.0	4	11	51	.07
01542845 - WEST CREEK AT HOWARD SIDING, PA (LAT 41 28 37 LONG 078 19 28)											
JUN , 1979											
12...	1845	26	80	7.3	16.5	.0	.0	7	18	--	--
AUG											
02...	1115	15	81	6.8	23.5	.0	.0	10	14	55	.07

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01542755 - SPRING RN NR WEEDVILLE, PA (LAT 41 19 27 LONG 078 27 28)										
JUN , 1979 14...	--	--	--	--	--	--	180	130	50	--
AUG 02...	4.22	0	<10	10	20	20	1800	1600	170	40000
01542760 - TROUT RN AT BENZETTE, PA (LAT 41 18 50 LONG 078 23 05)										
JUN , 1979 14...	--	--	--	--	--	--	120	110	10	--
AUG 02...	20.1	0	<10	<10	10	20	1000	980	20	15000
01542770 - DENTS RN AT DENTS RUN, PA (LAT 41 21 20 LONG 078 15 47)										
JUN , 1979 14...	--	--	--	--	--	--	1100	120	980	--
AUG 07...	14.2	0	<10	20	20	20	1500	500	1000	56000
01542775 - E BR HICKS RN NR HUSTON HILL, PA (LAT 41 22 47 LONG 078 16 46)										
JUN , 1979 14...	--	--	--	--	--	--	170	140	30	--
AUG 02...	2.54	0	<10	10	10	20	540	510	30	34000
01542780 - MIX RN NR DRIFTWOOD, PA (LAT 41 20 10 LONG 078 11 53)										
JUN , 1979 15...	--	--	--	--	--	--	150	140	10	--
AUG 07...	3.93	0	<10	<10	10	<10	140	120	20	8600
01542790 - BENNETT BR SINNEMAHONING C AT DRIFTWOOD, PA (LAT 41 20 02 LONG 078 08 08)										
JUN , 1979 15...	--	--	--	--	--	--	90	40	50	--
AUG 03...	92.6	0	<10	<10	10	<10	710	650	60	12000
01542800 - DRIFTWOOD BR SINNEMAHONING C NR LOCKWOOD, PA (LAT 41 32 02 LONG 078 18 47)										
JUN , 1979 12...	--	--	--	--	--	--	170	130	40	--
AUG 03...	1.15	0	<10	<10	20	10	220	180	40	23000
01542835 - BIG RN AT TRUMAN, PA (LAT 41 28 38 LONG 078 22 08)										
JUN , 1979 12...	--	--	--	--	--	--	180	170	10	--
AUG 02...	.31	0	<10	<10	10	<10	150	110	40	9400
01542845 - WEST CREEK AT HOWARD SIDING, PA (LAT 41 28 37 LONG 078 19 28)										
JUN , 1979 12...	--	--	--	--	--	--	290	230	60	--
AUG 02...	2.24	0	<10	<10	10	<10	270	220	50	11000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01542755 - SPRING RN NR WEEDVILLE, PA (LAT 41 19 27 LONG 078 27 28)										
JUN , 1979										
14...	--	740	0	740	--	--	--	--	1	.01
AUG										
02...	30	2600	0	2600	230	.00	0	80	74	1.6
01542760 - TROUT RN AT BENZETTE, PA (LAT 41 18 50 LONG 078 23 05)										
JUN , 1979										
14...	--	450	40	410	--	--	--	--	1	.08
AUG										
02...	110	980	20	960	590	.00	0	90	35	5.0
01542770 - DENTS RN AT DENTS RUN, PA (LAT 41 21 20 LONG 078 15 47)										
JUN , 1979										
14...	--	4900	0	4900	--	--	--	--	1	.03
AUG										
07...	20	6500	0	6900	200	.00	0	90	4	.13
01542775 - E BR HICKS RN NR HUSTON HILL, PA (LAT 41 22 47 LONG 078 16 46)										
JUN , 1979										
14...	--	20	0	20	--	--	--	--	3	.06
AUG										
02...	20	50	10	40	270	.00	0	100	18	1.2
01542780 - MIX RN NR DRIFTWOOD, PA (LAT 41 20 10 LONG 078 11 53)										
JUN , 1979										
15...	--	20	20	0	--	--	--	--	--	--
AUG										
07...	30	20	0	40	440	.00	0	60	5	.29
01542790 - BENNETT BR SINNEMAHONING C AT DRIFTWOOD, PA (LAT 41 20 02 LONG 078 08 08)										
JUN , 1979										
15...	--	630	10	620	--	--	--	--	1	.46
AUG										
03...	10	640	20	620	550	.00	0	30	12	11
01542800 - DRIFTWOOD BR SINNEMAHONING C NR LOCKWOOD, PA (LAT 41 32 02 LONG 078 18 47)										
JUN , 1979										
12...	--	10	10	0	--	--	--	--	3	.15
AUG										
03...	<10	40	10	30	160	.00	0	80	3	.07
01542835 - BIG RN AT TRUMAN, PA (LAT 41 28 38 LONG 078 22 08)										
JUN , 1979										
12...	--	20	10	10	--	--	--	--	7	.04
AUG										
02...	10	20	0	30	480	.00	0	70	4	.02
01542845 - WEST CREEK AT HOWARD SIDING, PA (LAT 41 28 37 LONG 078 19 28)										
JUN , 1979										
12...	--	30	10	20	--	--	--	--	4	.28
AUG										
02...	10	30	10	20	370	.00	0	70	4	.16

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01542886 - PARKER RUN AT GARDEAU, PA (LAT 41 37 16 LONG 078 13 33)											
JUN , 1979											
12...	1630	5.7	67	7.0	13.5	.0	.0	9	16	--	--
JUL											
31...	1800	1.1	72	7.2	22.5	.0	.0	12	15	52	.07
01542990 - HUNTS RN AT CAMERON, PA (LAT 41 27 08 LONG 078 10 29)											
JUN , 1979											
15...	0800	14	50	6.7	12.0	.0	.0	10	8.0	--	--
AUG											
03...	1000	34	48	7.5	15.5	.0	.0	10	14	38	.05
01543004 - STERLING RN NR STERLING RUN, PA (LAT 41 25 24 LONG 078 13 11)											
JUN , 1979											
15...	0915	6.7	110	5.6	12.0	.0	.0	2	39	--	--
AUG											
03...	1230	36	105	5.2	17.0	.0	.0	2	35	78	.11
01543008 - TANNERY HOLLOW RN NR STERLING RUN, PA (LAT 41 25 19 LONG 078 13 24)											
JUN , 1979											
14...	2000	1.8	50	6.7	14.0	.0	.0	8	8.6	--	--
AUG											
03...	1130	8.3	40	6.9	15.0	.0	.0	6	9.4	34	.05
01544204 - COOKS RN NR KEATING, PA (LAT 41 17 16 LONG 077 54 16)											
JUN , 1979											
08...	1400	20	50	5.4	16.0	.0	.0	2	18	--	--
AUG											
07...	1530	3.6	71	7.4	18.5	.0	.0	4	28	62	.08
01544208 - CROWLEY HOLLOW NR KEATING, PA (LAT 41 17 22 LONG 077 54 00)											
JUN , 1979											
08...	1500	2.3	1530	2.7	18.0	8.4	417	0	630	--	--
AUG											
07...	1645	1.3	1950	2.5	19.5	14	695	--	870	1420	1.93
01545017 - TWOMILE RN NR WESTPORT, PA (LAT 41 18 57 LONG 077 51 30)											
JUN , 1979											
08...	1245	8.9	520	3.4	15.0	1.7	84	0	190	--	--
AUG											
07...	1800	1.9	950	3.3	19.0	3.2	159	--	370	712	.97
01545490 - DRURY RN AT DRURY RUN, PA (LAT 41 19 45 LONG 077 46 47)											
JUN , 1979											
08...	1130	16	165	4.8	14.5	.0	.0	2	60	--	--
AUG											
07...	1915	3.6	186	5.2	20.0	.0	.0	10	71	138	.19
01545504 - PADDY RN NR RENOVO, PA (LAT 41 19 50 LONG 077 43 42)											
JUN , 1979											
08...	1630	18	50	6.3	16.0	.0	.0	6	9.4	--	--
AUG											
08...	0945	31	38	6.7	17.5	.0	.0	3	9.5	18	.02

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01542886 - PARKER RUN AT GARDEAU, PA (LAT 41 37 16 LONG 078 13 33)										
JUN , 1979										
12...	--	--	--	--	--	--	160	120	40	--
JUL										
31...	.16	0	<10	<10	10	<10	140	100	40	13000
01542990 - HUNTS RN AT CAMERON, PA (LAT 41 27 08 LONG 078 10 29)										
JUN , 1979										
15...	--	--	--	--	--	--	70	60	10	--
AUG										
03...	3.49	0	<10	<10	<10	<10	130	120	10	21000
01543004 - STEHLING RN NR STERLING RUN, PA (LAT 41 25 24 LONG 078 13 11)										
JUN , 1979										
15...	--	--	--	--	--	--	60	50	10	--
AUG										
03...	7.69	0	<10	<10	30	10	210	160	50	17000
01543008 - TANNERY HOLLOW RN NR STERLING RUN, PA (LAT 41 25 19 LONG 078 13 24)										
JUN , 1979										
14...	--	--	--	--	--	--	80	70	10	--
AUG										
03...	.77	0	<10	<10	<10	10	160	130	30	15000
01544204 - COOKS RN NR KEATING, PA (LAT 41 17 16 LONG 077 54 16)										
JUN , 1979										
08...	--	--	--	--	--	--	90	80	10	--
AUG										
07...	.62	0	<10	<10	<10	<10	70	50	20	2400
01544208 - CROWLEY HOLLOW NR KEATING, PA (LAT 41 17 22 LONG 077 54 00)										
JUN , 1979										
08...	--	--	--	--	--	--	50000	1000	49000	--
AUG										
07...	5.25	0	<10	<10	20	10	58000	0	58000	61000
01545017 - TWOMILE RN NR WESTPORT, PA (LAT 41 18 57 LONG 077 51 30)										
JUN , 1979										
08...	--	--	--	--	--	--	2900	200	2700	--
AUG										
07...	3.65	3	<10	<10	<10	20	6900	0	6900	42000
01545490 - DRURY RN AT DRURY RUN, PA (LAT 41 19 45 LONG 077 46 47)										
JUN , 1979										
08...	--	--	--	--	--	--	110	90	20	--
AUG										
07...	1.35	0	<10	<10	20	20	180	120	60	18000
01545504 - PADDY RN NR RENOVO, PA (LAT 41 19 50 LONG 077 43 42)										
JUN , 1979										
08...	--	--	--	--	--	--	80	20	60	--
AUG										
08...	1.51	0	<10	<10	<10	<10	420	380	40	9000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

 COAL-HYDROLOGY NETWORK
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RFOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01542886 - PARKER RUN AT GARDEAU, PA (LAT 41 37 16 LONG 078 13 33)										
JUN , 1979										
12...	--	20	0	30	--	--	--	--	2	.03
JUL										
31...	20	30	0	30	690	.00	0	80	1	.00
01542990 - HUNTS RN AT CAMERON, PA (LAT 41 27 08 LONG 078 10 29)										
JUN , 1979										
15...	--	0	0	0	--	--	--	--	1	.04
AUG										
03...	<10	30	10	20	380	.00	0	60	2	.18
01543004 - STERLING RN NR STERLING RUN, PA (LAT 41 25 24 LONG 078 13 11)										
JUN , 1979										
15...	--	430	40	390	--	--	--	--	2	.04
AUG										
03...	10	640	0	640	1400	.00	0	60	4	.39
01543008 - TANNERY HOLLOW RN NR STERLING RUN, PA (LAT 41 25 19 LONG 078 13 24)										
JUN , 1979										
14...	--	10	10	0	--	--	--	--	2	.01
AUG										
03...	30	30	10	20	520	.00	0	80	2	.05
01544204 - COOKS RN NR KEATING, PA (LAT 41 17 16 LONG 077 54 16)										
JUN , 1979										
08...	--	160	0	190	--	--	--	--	1	.06
AUG										
07...	10	210	0	220	160	.00	0	20	1	.01
01544208 - CROWLEY HOLLOW NR KEATING, PA (LAT 41 17 22 LONG 077 54 00)										
JUN , 1979										
08...	--	8100	0	8500	--	--	--	--	23	.15
AUG										
07...	10	13000	0	13000	70	.00	0	20	2	.01
01545017 - TWOMILE RN NR WESTPORT, PA (LAT 41 18 57 LONG 077 51 30)										
JUN , 1979										
08...	--	4700	4700	0	--	--	--	--	1	.02
AUG										
07...	20	11000	0	11000	140	.00	0	40	6	.03
01545490 - DRURY RN AT DRURY RUN, PA (LAT 41 19 45 LONG 077 46 47)										
JUN , 1979										
08...	--	1500	0	1500	--	--	--	--	1	.05
AUG										
07...	10	1400	0	1500	680	.00	0	80	7	.07
01545504 - PADDY RN NR RENOVO, PA (LAT 41 19 50 LONG 077 43 42)										
JUN , 1979										
08...	--	10	0	30	--	--	--	--	1	.05
AUG										
08...	20	20	0	20	240	.00	0	40	13	1.1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01545660 - BAKER RN NR HYNERS, PA (LAT 41 14 45 LONG 077 36 30.01)											
JUN , 1979											
08...	1745	43	50	6.2	15.5	.0	.0	2	7.4	--	--
AUG											
08...	1130	39	30	6.5	17.0	.0	.0	6	1.9	40	.05
01545680 - TANGASCOOTACK CREEK NEAR LOCK HAVEN, PA. (LAT 41 10 32 LONG 077 32 53)											
JUN , 1979											
07...	1715	55	65	6.7	16.0	.0	.0	3	24	--	--
AUG											
08...	1300	31	230	6.7	20.5	.0	.0	3	78	135	.18
01547704 - SANDY RN NR SNOW SHOE, PA (LAT 41 04 24 LONG 077 52 12)											
JUN , 1979											
11...	1730	35	525	3.7	14.0	1.5	74	0	210	--	--
JUL											
31...	1830	8.9	750	3.4	22.0	2.0	99	--	280	480	.65
01547706 - WOLF RN NR SNOW SHOE, PA (LAT 41 05 22 LONG 077 52 07)											
JUN , 1979											
11...	1455	24	50	5.2	13.0	.0	.0	1	9.4	--	--
JUL											
31...	1615	4.7	--	5.8	21.5	.0	.0	3	7.5	20	.03
01547760 - N FK BEECH C AT CLARENCE, PA (LAT 41 03 02 LONG 077 56 25)											
JUN , 1979											
11...	1310	27	314	4.0	15.0	.5	25	0	100	--	--
JUL											
31...	1400	5.2	525	3.7	21.0	.8	40	--	210	340	.46
01547980 - BEECH C AT BEECH CREEK, PA (LAT 41 04 29 LONG 077 35 30)											
JUN , 1979											
07...	1430	273	150	4.3	17.0	.0	.0	0	48	--	--
AUG											
13...	1000	249	215	4.1	15.0	.4	20	--	80	133	.18

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G AS FE)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01545660 - BAKER RN NR HYNER, PA (LAT 41 14 45 LONG 077 36 30.01)										
JUN , 1979										
08...	--	--	--	--	--	--	50	40	10	--
AUG										
08...	4.28	0	<10	<10	<10	<10	160	120	40	3500
01545680 - TANGASCOOTACK CREEK NEAR LOCK HAVEN, PA. (LAT 41 10 32 LONG 077 32 53)										
JUN , 1979										
07...	--	--	--	--	--	--	100	90	10	--
AUG										
08...	11.3	0	<10	<10	30	<10	7800	7800	40	28000
01547704 - SANDY RN NR SNOW SHOE, PA (LAT 41 04 24 LONG 077 52 12)										
JUN , 1979										
11...	--	--	--	--	--	--	6400	300	6100	--
JUL										
31...	11.5	0	<10	<10	10	30	8000	800	7200	84000
01547706 - WOLF RN NR SNOW SHOE, PA (LAT 41 05 22 LONG 077 52 07)										
JUN , 1979										
11...	--	--	--	--	--	--	60	50	10	--
JUL										
31...	.26	0	<10	<10	10	<10	180	160	20	6100
01547760 - N FK BEECH C AT CLARENCE, PA (LAT 41 03 02 LONG 077 56 25)										
JUN , 1979										
11...	--	--	--	--	--	--	1600	200	1400	--
JUL										
31...	4.82	0	<10	<10	10	10	2000	100	1900	14000
01547980 - BEECH C AT BEECH CREEK, PA (LAT 41 04 29 LONG 077 35 30)										
JUN , 1979										
07...	--	--	--	--	--	--	240	90	150	--
AUG										
13...	89.4	0	<10	<10	10	<10	530	280	250	5600

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	DIS- CHARGE, SUS- PENDE (T/DAY)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01545660 - BAKER RN NR HYNER, PA (LAT 41 14 45 LONG 077 36 30.01)										
JUN , 1979										
08...	--	10	0	10	--	--	--	--	1	.12
AUG										
08...	<10	20	0	40	260	.00	0	20	7	.75
01545680 - TANGASCOOTACK CREEK NEAR LOCK HAVEN, PA. (LAT 41 10 32 LONG 077 32 53)										
JUN , 1979										
07...	--	360	0	400	--	--	--	--	2	.30
AUG										
08...	10	2700	100	2600	910	.00	0	50	355	30
01547704 - SANDY RN NR SNOW SHOE, PA (LAT 41 04 24 LONG 077 52 12)										
JUN , 1979										
11...	--	5800	0	6100	--	--	--	--	12	1.1
JUL										
31...	10	8300	700	7600	120	.00	0	20	6	.14
01547706 - WOLF RN NR SNOW SHOE, PA (LAT 41 05 22 LONG 077 52 07)										
JUN , 1979										
11...	--	70	0	70	--	--	--	--	1	.06
JUL										
31...	10	10	0	20	230	.00	0	20	1	.01
01547760 - N FK BEECH C AT CLARENCE, PA (LAT 41 03 02 LONG 077 56 25)										
JUN , 1979										
11...	--	1900	0	2200	--	--	--	--	4	.29
JUL										
31...	20	4400	300	4100	290	.13	0	50	3	.04
01547980 - BEECH C AT BEECH CREEK, PA (LAT 41 04 29 LONG 077 35 30)										
JUN , 1979										
07...	--	1100	0	1100	--	--	--	--	1	.74
AUG										
13...	<10	1900	0	2000	40	.00	0	10	6	4.0

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01548423 - WILSON C AT MORRIS, PA (LAT 41 35 51 LONG 077 17 50)											
OCT , 1978											
25...	1515	6.1	430	3.9	12.5	1.1	56	0	190	--	--
DEC											
05...	1450	20	220	5.1	4.0	.3	17	3	84	--	--
27...	1515	14	290	4.0	.5	1.1	56	0	110	--	--
JAN , 1979											
29...	1600	59	310	4.0	3.0	.9	44	0	100	--	--
FEB											
22...	1315	13	347	3.8	2.0	1.1	53	0	130	--	--
MAR											
20...	1000	52	335	3.6	4.0	.9	47	0	99	--	--
APR											
24...	1910	30	320	3.6	13.0	1.1	54	0	110	--	--
MAY											
31...	1515	24	258	3.9	19.0	.8	40	0	96	--	--
JUL											
03...	0930	8.7	435	3.8	15.5	1.5	74	0	190	--	--
AUG											
06...	1045	3.4	665	3.3	21.5	2.6	129	--	250	441	.60
SEP											
18...	1500	4.4	800	3.5	20.5	3.6	180	0	300	--	--

01548427 - STONY FK NR MOUTH NR BLACKWELL, PA (LAT 41 34 56 LONG 077 20 46)

OCT , 1978											
25...	1150	6.7	181	7.7	7.5	.0	1.2	33	39	--	--
DEC											
05...	1210	37	140	7.7	5.5	.1	7.0	28	26	--	--
27...	1200	23	146	7.0	.5	.1	5.0	25	30	--	--
JAN , 1979											
30...	0930	72	105	6.6	1.5	.1	4.4	10	28	--	--
FEB											
22...	1100	14	133	6.6	1.0	.1	5.8	21	32	--	--
MAR											
20...	0850	72	98	6.6	2.0	.1	4.0	14	21	--	--
APR											
24...	1720	40	107	7.4	14.0	.1	4.0	17	26	--	--
MAY											
31...	1340	51	109	7.6	15.0	.0	1.4	18	27	--	--
JUL											
03...	1045	9.4	155	6.7	17.0	.1	5.4	40	28	--	--
AUG											
06...	1330	3.3	180	7.4	23.5	.0	.0	--	33	107	.15
06...	1415	3.3	--	--	--	--	--	46	--	--	--
SEP											
18...	1615	3.7	181	7.8	19.5	.1	6.0	43	36	--	--

01549543 - L PINE C NR ENGLISH CENTER, PA (LAT 41 26 08 LONG 077 17 25.01)

JUN , 1979											
06...	1615	83	70	6.7	14.0	.0	.0	16	9.5	--	--
AUG											
13...	1500	54	94	7.3	20.0	.0	.0	10	9.4	67	.09

01549547 - ENGLISH RN AT ENGLISH CENTER, PA (LAT 41 26 08 LONG 077 17 25)

JUN , 1979											
06...	1515	5.1	50	6.9	11.5	.0	.0	3	10	--	--
AUG											
13...	1330	3.1	47	7.3	15.5	.0	.0	7	23	42	.06

01549560 - OTTER RN AT CARSONTOWN, PA (LAT 41 24 25 LONG 078 20 05)

JUN , 1979											
06...	1415	29	60	6.5	12.0	.0	.0	5	20	--	--
AUG											
13...	1200	6.3	130	6.3	16.0	.0	.0	2	43	101	.14

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE- D RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
------	---	---	--	--	--	--	---	--	--	--

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548423 - WILSON C AT MORRIS, PA (LAT 41 35 51 LONG 077 17 50)

OCT , 1978										
25...	--	--	--	--	--	--	--	--	1500	--
DEC										
05...	--	--	--	--	--	--	--	--	650	--
27...	--	--	--	--	--	--	--	--	1100	--
JAN , 1979										
29...	--	--	--	--	--	--	--	--	2600	--
FEB										
22...	--	--	--	--	--	--	1900	0	1900	--
MAR										
20...	--	--	--	--	--	--	3100	400	2700	--
APR										
24...	--	--	--	--	--	--	--	--	590	--
MAY										
31...	--	--	--	--	--	--	--	--	1400	--
JUL										
03...	--	--	--	--	--	--	2200	700	1500	--
AUG										
06...	4.12	0	<10	10	20	20	1500	100	1400	21000
SEP										
18...	--	--	--	--	--	--	--	--	3900	--

01548427 - STONY FK NR MOUTH NR BLACKWELL, PA (LAT 41 34 56 LONG 077 20 46)

OCT , 1978										
25...	--	--	--	--	--	--	--	--	50	--
DEC										
05...	--	--	--	--	--	--	--	--	130	--
27...	--	--	--	--	--	--	--	--	30	--
JAN , 1979										
30...	--	--	--	--	--	--	--	--	520	--
FEB										
22...	--	--	--	--	--	--	--	--	100	--
MAR										
20...	--	--	--	--	--	--	240	230	10	--
APR										
24...	--	--	--	--	--	--	--	--	20	--
MAY										
31...	--	--	--	--	--	--	--	--	120	--
JUL										
03...	--	--	--	--	--	--	80	70	10	--
AUG										
06...	.97	--	--	--	--	--	60	60	0	--
06...	--	0	<10	10	20	20	--	--	--	15000
SEP										
18...	--	--	--	--	--	--	--	--	0	--

01549543 - L PINE C NR ENGLISH CENTER, PA (LAT 41 26 08 LONG 077 17 25.01)

JUN , 1979										
06...	--	--	--	--	--	--	70	60	10	--
AUG										
13...	9.79	0	<10	<10	10	<10	70	50	20	13000

01549547 - ENGLISH RN AT ENGLISH CENTER, PA (LAT 41 26 08 LONG 077 17 25)

JUN , 1979										
06...	--	--	--	--	--	--	50	40	10	--
AUG										
13...	.36	0	<10	<10	20	<10	90	70	20	11000

01549560 - OTTER RN AT CARSONTOWN, PA (LAT 41 24 25 LONG 078 20 05)

JUN , 1979										
06...	--	--	--	--	--	--	50	40	10	--
AUG										
13...	1.73	0	<10	<10	60	10	70	60	10	10000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
------	--	---	---	--	---	--	---	--	---	--

WEST BRANCH SUSQUEHANNA RIVER BASIN

01548423 - WILSON C AT MORRIS, PA (LAT 41 35 51 LONG 077 17 50)

OCT , 1978										
25...	--	--	--	3100	--	--	--	--	7	.12
DEC										
05...	--	--	--	1400	--	--	--	--	28	1.5
27...	--	--	--	1800	--	--	--	--	7	.26
JAN , 1979										
29...	--	--	--	1800	--	--	--	--	9	1.4
FEB										
22...	--	--	--	2700	--	--	--	--	5	.18
MAR										
20...	--	1800	0	1800	--	--	--	--	9	1.3
APR										
24...	--	--	--	1800	--	--	--	--	6	.49
MAY										
31...	--	--	--	320	--	--	--	--	10	.65
JUL										
03...	--	2800	0	2900	--	--	--	--	6	.14
AUG										
06...	60	5700	400	5300	420	.00	0	80	2	.02
SEP										
18...	--	--	--	7000	--	--	--	--	6	.07

01548427 - STONY FK NR MOUTH NR BLACKWELL, PA (LAT 41 34 56 LONG 077 20 46)

OCT , 1978										
25...	--	--	--	310	--	--	--	--	12	.22
DEC										
05...	--	--	--	230	--	--	--	--	2	.20
27...	--	--	--	330	--	--	--	--	6	.37
JAN , 1979										
30...	--	--	--	240	--	--	--	--	5	.97
FEB										
22...	--	--	--	310	--	--	--	--	4	.15
MAR										
20...	--	150	0	150	--	--	--	--	4	.78
APR										
24...	--	--	--	210	--	--	--	--	3	.32
MAY										
31...	--	--	--	--	--	--	--	--	7	.96
JUL										
03...	--	150	10	140	--	--	--	--	1	.03
AUG										
06...	--	30	20	10	--	--	--	--	3	.03
06...	20	--	--	--	350	.00	0	100	2	.02
SEP										
18...	--	--	--	60	--	--	--	--	1	.01

01549543 - L PINE C NR ENGLISH CENTER, PA (LAT 41 26 08 LONG 077 17 25.01)

JUN , 1979										
06...	--	0	0	0	--	--	--	--	1	.22
AUG										
13...	10	30	10	20	340	.00	0	40	1	.15

01549547 - ENGLISH RN AT ENGLISH CENTER, PA (LAT 41 26 08 LONG 077 17 25)

JUN , 1979										
06...	--	20	0	20	--	--	--	--	1	.01
AUG										
13...	20	20	0	20	310	.00	0	90	2	.02

01549560 - OTTER RN AT CARSONTOWN, PA (LAT 41 24 25 LONG 078 20 05)

JUN , 1979										
06...	--	180	0	190	--	--	--	--	1	.08
AUG										
13...	10	160	10	150	820	.00	0	70	3	.05

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
WEST BRANCH SUSQUEHANNA RIVER BASIN											
01549782 - LARRYS C NR SALLADASBURG, PA (LAT 41 19 15 LONG 077 11 29)											
JUN , 1979											
06...	1745	35	55	6.9	12.5	.0	.0	4	9.0	--	--
AUG											
08...	1545	8.3	65	7.0	21.0	.0	.0	16	8.8	40	.05
01549903 - RED RN AT RALSTON, PA (LAT 41 30 33 LONG 076 57 13)											
JUN , 1979											
07...	0915	5.6	100	4.1	14.0	.0	.0	0	23	--	--
AUG											
09...	1700	3.2	77	4.3	18.0	.3	15	--	36	59	.08
01549906 - MINERS RN NR RALSTON, PA (LAT 41 30 58 LONG 076 55 02)											
JUN , 1979											
07...	1100	2.2	50	4.6	13.0	.0	.0	1	9.3	--	--
AUG											
09...	1815	.66	36	5.2	17.0	.0	.0	1	5.6	37	.05
01549909 - FROZEN RN NR RALSTON, PA (LAT 41 29 12 LONG 076 58 25)											
JUN , 1979											
07...	1230	5.9	50	5.1	13.5	.0	.0	1	7.6	--	--
AUG											
08...	1730	3.2	23	6.0	18.5	.0	.0	3	8.8	22	.03
01551810 - LOYALSOCK C AT LOPEZ, PA (LAT 41 27 31 LONG 076 19 53)											
JUN , 1979											
05...	1100	61	50	6.5	16.0	.0	.0	3	7.3	--	--
AUG											
09...	1105	3.1	47	6.2	19.0	.0	.0	2	8.8	23	.03
01551817 - BIRCH C NR RINGDALE, PA (LAT 41 27 22 LONG 076 26 38)											
JUN , 1979											
05...	0920	43	67	6.8	13.5	.0	.0	9	13	--	--
AUG											
09...	0930	1.9	83	6.7	16.0	.0	.0	3	16	52	.07
01555831 - GLENWHITE RN NR ALTOONA, PA (LAT 40 29 47 LONG 078 29 10)											
JUN , 1979											
08...	0830	10	259	4.2	18.0	--	--	0	94	--	--
AUG											
14...	1500	9.3	198	4.1	16.0	.9	45	--	78	152	.21
01555835 - KITTANING C NR ALTOONA, PA (LAT 40 29 54 LONG 078 29 04)											
JUN , 1979											
08...	0730	15	800	3.0	19.0	--	--	0	250	--	--
AUG											
14...	1330	4.9	700	3.1	17.0	3.3	164	--	260	440	.60
01555849 - SUGAR RN NR ALTOONA, PA (LAT 40 28 04 LONG 078 26 23)											
JUN , 1979											
08...	0945	9.2	320	4.6	19.0	--	--	0	120	--	--
AUG											
14...	1050	11	280	5.6	18.0	.0	.0	2	100	194	.26

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01549782 - LARRYS C NR SALLADASBURG, PA (LAT 41 19 15 LONG 077 11 29)										
JUN , 1979										
06...	--	--	--	--	--	--	90	80	10	--
AUG										
08...	.90	0	<10	<10	10	<10	150	110	40	7900
01549903 - RED RN AT RALSTON, PA (LAT 41 30 33 LONG 076 57 13)										
JUN , 1979										
07...	--	--	--	--	--	--	230	110	120	--
AUG										
09...	.52	0	<10	10	10	20	470	300	170	13000
01549906 - MINERS RN NR RALSTON, PA (LAT 41 30 58 LONG 076 55 02)										
JUN , 1979										
07...	--	--	--	--	--	--	70	50	20	--
AUG										
09...	.07	0	<10	<10	10	<10	80	0	180	78000
01549909 - FROZEN RN NR RALSTON, PA (LAT 41 29 12 LONG 076 58 25)										
JUN , 1979										
07...	--	--	--	--	--	--	50	30	20	--
AUG										
08...	.19	0	<10	<10	20	<10	70	50	20	11000
01551810 - LOYALSOCK C AT LOPEZ, PA (LAT 41 27 31 LONG 076 19 53)										
JUN , 1979										
05...	--	--	--	--	--	--	200	130	70	--
AUG										
09...	.19	0	<10	10	<10	10	170	110	60	11000
01551817 - BIRCH C NR RINGDALE, PA (LAT 41 27 22 LONG 076 26 38)										
JUN , 1979										
05...	--	--	--	--	--	--	210	150	60	--
AUG										
09...	.27	0	<10	<10	10	10	60	50	10	8400
01555831 - GLENWHITE RN NR ALTOONA, PA (LAT 40 29 47 LONG 078 29 10)										
JUN , 1979										
08...	--	--	--	--	--	--	540	110	430	--
AUG										
14...	3.84	--	--	--	--	--	950	120	830	--
01555835 - KITTANING C NR ALTOONA, PA (LAT 40 29 54 LONG 078 29 04)										
JUN , 1979										
08...	--	--	--	--	--	--	15000	0	15000	--
AUG										
14...	5.85	--	--	--	--	--	16000	15000	1500	--
01555849 - SUGAR RN NR ALTOONA, PA (LAT 40 28 04 LONG 078 26 23)										
JUN , 1979										
08...	--	--	--	--	--	--	400	290	110	--
AUG										
14...	5.92	1	<10	10	30	40	1300	850	450	26000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RFOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
WEST BRANCH SUSQUEHANNA RIVER BASIN										
01549782 - LARRYS C NR SALLADASBURG, PA (LAT 41 19 15 LONG 077 11 29)										
JUN , 1979										
06...	--	20	10	10	--	--	--	--	1	.10
AUG										
08...	<10	30	0	30	10	.00	0	40	--	--
01549903 - RED RN AT RALSTON, PA (LAT 41 30 33 LONG 076 57 13)										
JUN , 1979										
07...	--	560	0	560	--	--	--	--	1	.02
AUG										
09...	50	830	30	800	260	.00	0	60	8	.07
01549906 - MINERS RN NR RALSTON, PA (LAT 41 30 58 LONG 076 55 02)										
JUN , 1979										
07...	--	190	0	210	--	--	--	--	1	.01
AUG										
09...	10	210	0	230	290	.00	0	20	1	.00
01549909 - FROZEN RN NR RALSTON, PA (LAT 41 29 12 LONG 076 58 25)										
JUN , 1979										
07...	--	90	0	100	--	--	--	--	1	.02
AUG										
08...	20	70	10	60	650	.00	0	50	3	.03
01551810 - LOYALSOCK C AT LOPEZ, PA (LAT 41 27 31 LONG 076 19 53)										
JUN , 1979										
05...	--	90	0	90	--	--	--	--	1	.17
AUG										
09...	40	50	10	40	400	.00	0	50	3	.03
01551817 - BIRCH C NR RINGDALE, PA (LAT 41 27 22 LONG 076 26 38)										
JUN , 1979										
05...	--	30	30	0	--	--	--	--	2	.24
AUG										
09...	30	20	10	10	940	.00	0	80	22	.12
01555831 - GLENWHITE RN NR ALTOONA, PA (LAT 40 29 47 LONG 078 29 10)										
JUN , 1979										
08...	--	1400	0	1500	--	--	--	--	6	.17
AUG										
14...	--	1400	0	1400	--	--	--	--	2	.05
01555835 - KITTANING C NR ALTOONA, PA (LAT 40 29 54 LONG 078 29 04)										
JUN , 1979										
08...	--	4000	0	4200	--	--	--	--	23	.94
AUG										
14...	--	4100	0	4100	--	--	--	--	16	.21
01555849 - SUGAR RN NR ALTOONA, PA (LAT 40 28 04 LONG 078 26 23)										
JUN , 1979										
08...	--	440	20	420	--	--	--	--	7	.17
AUG										
14...	50	490	100	390	770	.00	0	70	13	.40

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
JUNIATA RIVER BASIN											
01555855 - BLAIRS GAP RN NR FOOT OF TEN, PA (LAT 40 25 09 LONG 078 28 43)											
JUN , 1979											
08...	1100	14	95	7.2	19.0	--	--	18	15	--	--
AUG											
14...	0800	22	110	7.3	19.0	.0	.0	15	14	60	.08
01556430 - BELLS GAP RN NR BLANDBURG, PA (LAT 40 38 27 LONG 078 24 01)											
JUN , 1979											
11...	1245	20	61	6.9	12.0	.0	.0	5	20	--	--
JUL											
31...	1315	37	58	6.1	14.0	.0	.0	4	16	44	.06
01556432 - SHAW RN NR BLANDBURG, PA (LAT 40 38 22 LONG 078 23 44)											
JUN , 1979											
11...	1130	8.1	55	6.5	11.0	.0	.0	3	14	--	--
JUL											
31...	1115	11	65	6.4	13.0	.0	.0	4	16	39	.05
01561430 - SANDY RN AT HOPEWELL, PA (LAT 40 07 41 LONG 078 15 41)											
JUN , 1979											
14...	1400	10	645	3.1	19.0	--	--	0	230	--	--
AUG											
21...	1400	12	460	3.4	18.5	1.2	60	--	140	258	.35
01561600 - SIXMILE RN NR RIDDLESBURG, PA (LAT 40 09 43 LONG 078 15 11)											
JUN , 1979											
14...	1515	11	605	3.5	19.0	--	--	0	250	--	--
AUG											
21...	1545	9.6	572	4.0	19.0	.9	45	--	230	374	.51
01562008 - SHOUP RN NR SAXTON, PA (LAT 40 13 20 LONG 078 12 54)											
JUN , 1979											
14...	1700	13	400	3.6	16.0	--	--	0	160	--	--
AUG											
21...	1820	25	339	4.0	16.0	.6	30	--	110	193	.26
01562250 - TATMAN RN NR ENTRIEN, PA (LAT 40 18 03 LONG 078 09 47)											
JUN , 1979											
15...	0830	3.1	80	7.3	16.5	--	--	21	11	--	--
AUG											
22...	0900	1.5	103	7.3	17.0	.0	.0	26	--	--	--
01562450 - GREAT TROUGH C NR CASSVILLE, PA (LAT 40 16 47 LONG 078 02 52)											
JUN , 1979											
15...	1015	9.2	80	6.3	18.5	--	--	4	27	--	--
AUG											
22...	1115	12	103	6.6	18.5	.0	.0	8	22	66	.09
POTOMAC RIVER BASIN											
01600490 - WILLS C AT GLENCOE, PA (LAT 39 49 12 LONG 078 50 41)											
JUN , 1979											
12...	1930	34	60	6.8	12.2	--	--	12	16	--	--
AUG											
17...	1330	13	100	7.8	14.5	.0	.0	20	12	58	.08

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
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JUNIATA RIVER BASIN

01555855 - BLAIRS GAP RN NR FOOT OF TEN, PA (LAT 40 25 09 LONG 078 28 43)

JUN , 1979										
08...	--	--	--	--	--	--	350	340	10	--
AUG										
14...	3.60	1	<10	<10	20	<10	250	230	20	12000

01556430 - BELLS GAP RN NR BLANDBURG, PA (LAT 40 38 27 LONG 078 24 01)

JUN , 1979										
11...	--	--	--	--	--	--	50	40	10	--
JUL										
31...	4.49	0	<10	<10	40	10	70	70	0	6100

01556432 - SHAW RN NR BLANDBURG, PA (LAT 40 38 22 LONG 078 23 44)

JUN , 1979										
11...	--	--	--	--	--	--	80	70	10	--
JUL										
31...	1.18	0	<10	10	50	20	140	80	60	10000

01561430 - SANDY RN AT HOPEWELL, PA (LAT 40 07 41 LONG 078 15 41)

JUN , 1979										
14...	--	--	--	--	--	--	11000	2000	9000	--
AUG										
21...	8.85	--	--	--	--	--	6300	2800	3500	--

01561600 - SIXMILE RN NR RIDDLESBURG, PA (LAT 40 09 43 LONG 078 15 11)

JUN , 1979										
14...	--	--	--	--	--	--	3200	3200	10	--
AUG										
21...	9.70	1	<10	<10	40	30	6000	4000	2000	22000

01562008 - SHOUP RN NR SAXTON, PA (LAT 40 13 20 LONG 078 12 54)

JUN , 1979										
14...	--	--	--	--	--	--	340	0	350	--
AUG										
21...	13.3	--	--	--	--	--	340	160	180	--

01562250 - TATMAN RN NR ENTRIEN, PA (LAT 40 18 03 LONG 078 09 47)

JUN , 1979										
15...	--	--	--	--	--	--	1900	1900	10	--
AUG										
22...	--	--	--	--	--	--	1100	1100	40	--

01562450 - GREAT TROUGH C NR CASSVILLE, PA (LAT 40 16 47 LONG 078 02 52)

JUN , 1979										
15...	--	--	--	--	--	--	360	210	150	--
AUG										
22...	2.16	0	<10	<10	10	<10	610	560	50	16000

POTOMAC RIVER BASIN

01600490 - WILLS C AT GLENCOE, PA (LAT 39 49 12 LONG 078 50 41)

JUN , 1979										
12...	--	--	--	--	--	--	450	430	20	--
AUG										
17...	2.13	0	<10	10	10	10	300	250	50	18000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
------	--	---	---	--	---	--	---	--	---	--

JUNIATA RIVER BASIN

01555855 - BLAIRS GAP RN NR FOOT OF TEN, PA (LAT 40 25 09 LONG 078 28 43)

JUN , 1979										
08...	--	40	40	0	--	--	--	--	30	1.2
AUG										
14...	20	30	20	10	220	.00	0	50	11	.66

01556430 - BELLS GAP RN NR BLANDBURG, PA (LAT 40 38 27 LONG 078 24 01)

JUN , 1979										
11...	--	130	20	110	--	--	--	--	1	.05
JUL										
31...	10	120	0	130	1500	.00	1	130	1	.10

01556432 - SHAW RN NR BLANDBURG, PA (LAT 40 38 22 LONG 078 23 44)

JUN , 1979										
11...	--	100	40	60	--	--	--	--	2	.04
JUL										
31...	80	2200	2000	200	1800	.00	0	110	5	.15

01561430 - SANDY RN AT HOPEWELL, PA (LAT 40 07 41 LONG 078 15 41)

JUN , 1979										
14...	--	2200	0	2600	--	--	--	--	13	.38
AUG										
21...	--	1900	100	1800	--	--	--	--	86	2.9

01561600 - SIXMILE RN NR RIDDLESBURG, PA (LAT 40 09 43 LONG 078 15 11)

JUN , 1979										
14...	--	1300	0	1400	--	--	--	--	7	.21
AUG										
21...	40	1600	0	1600	660	.00	0	70	139	3.6

01562008 - SHOUP RN NR SAXTON, PA (LAT 40 13 20 LONG 078 12 54)

JUN , 1979										
14...	--	1300	0	1300	--	--	--	--	2	.07
AUG										
21...	--	1100	0	1100	--	--	--	--	4	.28

01562250 - TATMAN RN NR ENTRIKEN, PA (LAT 40 18 03 LONG 078 09 47)

JUN , 1979										
15...	--	110	90	20	--	--	--	--	19	.16
AUG										
22...	--	160	100	60	--	--	--	--	108	.45

01562450 - GREAT TROUGH C NR CASSVILLE, PA (LAT 40 16 47 LONG 078 02 52)

JUN , 1979										
15...	--	130	0	170	--	--	--	--	14	.35
AUG										
22...	10	90	20	70	50	.00	0	30	13	.42

POTOMAC RIVER BASIN

01600490 - WILLS C AT GLENCOE, PA (LAT 39 49 12 LONG 078 50 41)

JUN , 1979										
12...	--	30	30	0	--	--	--	--	15	1.4
AUG										
17...	30	20	20	0	420	.00	0	60	4	.15

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	ALKA- LITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED PER AC-FT)
------	------	---	--	---------------	-----------------------------	--	----------------------------------	--	---	--	--

POTOMAC RIVER BASIN

01600498 - WILLS C NR HYNDMAN, PA (LAT 39 50 04 LONG 078 44 54)

JUN , 1979											
12...	1600	188	75	8.1	8.1	--	--	206	19	--	--
AUG											
17...	1114	34	100	7.5	16.0	.0	.0	30	15	60	.08

01601080 - GLADDENS RN NR HYNDMAN, PA (LAT 39 44 42 LONG 078 45 15)

JUN , 1979											
12...	1430	7.9	160	7.7	19.5	--	--	70	43	--	--
AUG											
17...	0845	4.0	219	7.7	14.5	.0	.0	48	62	166	.23

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)
------	---	---	--	--	--	--	--	---	--	--

01600498 - WILLS C NR HYNDMAN, PA (LAT 39 50 04 LONG 078 44 54)

JUN , 1979										
12...	--	--	--	--	--	--	290	270	20	--
AUG										
17...	5.54	3	<10	10	40	10	170	140	30	21000

01601080 - GLADDENS RN NR HYNDMAN, PA (LAT 39 44 42 LONG 078 45 15)

JUN , 1979										
12...	--	--	--	--	--	--	220	210	10	--
AUG										
17...	1.81	0	<10	10	10	<10	540	510	30	17000

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
------	--	---	--	--	---	--	---	--	--	---

01600498 - WILLS C NR HYNDMAN, PA (LAT 39 50 04 LONG 078 44 54)

JUN , 1979										
12...	--	20	20	0	--	--	--	--	12	6.1
AUG										
17...	40	20	10	10	990	.00	0	70	4	.37

01601080 - GLADDENS RN NR HYNDMAN, PA (LAT 39 44 42 LONG 078 45 15)

JUN , 1979										
12...	--	30	30	0	--	--	--	--	22	.47
AUG										
17...	10	50	30	20	940	.00	0	90	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

CHEUNG RIVER BASIN

01516255 MORRIS RN NR MORRIS RUN, PA

DATE AUG 10, 79
TIME 1245

TOTAL COUNT 1

DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.0
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM COUNT

ARTHROPODA (ARTHROPODS)

..INSECTA	
...COLEOPTERA	
...STAPHYLINIDAE	1

TOWANDA CREEK BASIN

01531910 TOWANDA C AT POWELL, PA

DATE AUG 9, 79
TIME 1345

TOTAL COUNT 112

DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.6
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM COUNT

ARTHROPODA (ARTHROPODS)

..INSECTA	
...COLEOPTERA	
...ELMIDAE	1
...EPHEMEROPTERA	39
...TRICHOPTERA	58
...DIPTERA	
...CHIRONOMIDAE	4
...PLECOPTERA	4
...MEGALOPTERA	2
...DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	4

01531916 SCHRADER C AT POWELL, PA

DATE AUG 9, 79
TIME 1530

TOTAL COUNT 62

DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.9
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM COUNT

ARTHROPODA (ARTHROPODS)

..INSECTA	
...COLEOPTERA	
...ELMIDAE	1
...DIPTERA	
...TIPULIDAE	1
...EPHEMEROPTERA	7
...TRICHOPTERA	52
...PLECOPTERA	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01540640 W BR SUSQUEHANNA R AT CHERRY TREE, PA

DATE	AUG 2,79
TIME	0800
TOTAL COUNT	14
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.7
...FAMILY	2.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
...DYTISCIDAE	
....AGARUS	1
...DIPTERA	
...CHIRONOMIDAE	
...CHIRONOMUS	3
...TIPULIDAE	
....GONOMYIA	1
...EPHEMEROPTERA	
...LEPTOPHLEBIIDAE	
...PARALEPTOPHLEBIA	2
...MEGALOPTERA	
...SIALIDAE	
....SIALIS	5
...DIPTERA	
...CHIRONOMIDAE	2

01540710 CUSH C NR GLEN CAMPBELL, PA

DATE	AUG 3,79
TIME	1230
TOTAL COUNT	18
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	2.1
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...ODONATA	
...AESHNIDAE	3
...COLEOPTERA	
...ELMIDAE	--
...DIPTERA	
...SIMULIIDAE	--
...EPHEMEROPTERA	8
...TRICHOPTERA	3
...DIPTERA	
...CHIRONOMIDAE	2
...PLECOPTERA	--
...MEGALOPTERA	2
...DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01540715 CHEST C AT PATTON, PA

DATE	AUG 2,79
TIME	1130
TOTAL COUNT	89
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.6
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...ODONATA	
...AESHNIDAE	1
...COLEOPTERA	
...ELMIDAE	1
...DIPTERA	
...SIMULIIDAE	1
...EPHEMEROPTERA	28
...TRICHOPTERA	49
...PLECOPTERA	6
...MEGALOPTERA	1
...DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	2

01540720 BRUBAKER RN NR HASTINGS, PA

DATE	AUG 2,79
TIME	1345
TOTAL COUNT	61
DIVERSITY: PHYLUM	0.1
..CLASS	0.1
...ORDER	1.8
...FAMILY	2.0
....GENUS	0.0
....GENUS-INSECTA	2.3

ORGANISM	COUNT
ANNELIDA	
..OLIGOCHAETA	
...PROSOPORA	
...LUMBRICULIDAE	1
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
...ELMIDAE	
...STENELMIS	1
...DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	
...ATHERIX	
...A.VARIEGATA	2
...CHIRONOMIDAE	
...POLYPEDILUM	1
...TIPULIDAE	
...TIPULA	2
...EPHEMEROPTERA	
...BAETIDAE	
...BAETIS	21
...PSEUDOCLOEON	2
...MEGALOPTERA	
...SIALIDAE	
...SIALIS	5
...TRICHOPTERA	
...HYDROPSYCHIDAE	
...CHEUMATOPSYCHE	5
...SYMPHITOPSYCHE	21

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01540723 L BRUBAKER RN NR HASTINGS, PA

DATE	AUG 2, 79
TIME	1530
TOTAL COUNT	1
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.0
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....TIPULIDAE	1

01540753 S BR BEAR RN AT MCGEES MILLS, PA

DATE	AUG 3, 79
TIME	1030
TOTAL COUNT	13
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.6
....FAMILY	0.6
.....GENUS	0.6
.....GENUS-INSECTA	0.6

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....CHIRONOMIDAE	
.....CHIRONOMUS	11
...MEGALOPTERA	
....SIALIDAE	
.....SIALIS	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01540800 WILSON RUN AT NEWBURG, PA.

DATE AUG 2, 79
TIME 1700

TOTAL COUNT 65

DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	2.1
...FAMILY	3.2
....GENUS	3.5
....GENUS-INSECTA	3.5

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....CHIRONOMIDAE	
....CHAETOCLODIUS	1
....CONCHAPELOPIA, ARCTO, RHEO	1
....MICROTENDIPES	1
....POLYPEDILUM	1
...TIPULIDAE	
....DICRANOTA	2
....TIPULA	4
..EPHEMEROPTERA	
...BAETIDAE	
....BAETIS	11
...HEPTAGENIIDAE	
....HEPTAGENIA	1
....STENONEMA	3
...LEPTOPHLEBIIDAE	
....UNKNOWN GENUS	2
...SIPHONURIDAE	
....ISONYCHIA	1
..ODONATA	
...AESHNIDAE	
....BOYERIA	2
...CORDULEGASTRIDAE	
....CORDULEGASTER	2
..PLECOPTERA	
...PELTOPERLIDAE	
....PELTOPERLA	1
...PERLIDAE	
....ACRONEURIA	12
..TRICHOPTERA	
...HYDROPSYCHIDAE	
....SYMPHITOPSYCHE	8
..PLECOPTERA	
...LEUCTRIDAE	
....LEUCTRA	11
..TRICHOPTERA	
...PHILOPOTAMIDAE	
....DOLOPHILODES	1

01540823 CHEST C AT MAHAFFEY, PA

DATE AUG 3, 79
TIME 0800

TOTAL COUNT 58

DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.5
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...ODONATA	
....AESHNIDAE	1
...COLEOPTERA	
....GYRINIDAE	1
...EPHEMEROPTERA	11
..TRICHOPTERA	36
..PLECOPTERA	9

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
 BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979
 WEST BRANCH SUSQUEHANNA RIVER BASIN

01541100 BELL RN AT BELLS LANDING, PA

DATE	AUG 1,79
TIME	1115
TOTAL COUNT	26
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.7
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
...TIPULIDAE	3
..EPHEMEROPTERA	2
..ODONATA	
...CORDULEGASTRIDAE	1
..TRICHOPTERA	5
..PLECOPTERA	15

01541207 ANDERSON C NR PENFIELD, PA

DATE	AUG 7,79
TIME	1115
TOTAL COUNT	29
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.9
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
...TIPULIDAE	4
..EPHEMEROPTERA	8
..TRICHOPTERA	13
..DIPTERA	
...CHIRONOMIDAE	1
..PLECOPTERA	1
..MEGALOPTERA	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541220 L ANDERSON C NR ROCKTON, PA

DATE	AUG 1, 79
TIME	1730
TOTAL COUNT	4
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	0.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..DIPTERA	
...CHIRONOMIDAE	
....CHIRONOMUS	1
....CHIRONOMIDAE	3

01541245 KRATZER RN AT BRIDGEPORT, PA

DATE	AUG 1, 79
TIME	1600
TOTAL COUNT	1
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	0.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..ODONATA	
...CORDULEGASTRIDAE	
....CORDULEGASTER	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541248 ANDERSON C AT CURWENSVILLE, PA

DATE	AUG 1, 79
TIME	1450
TOTAL COUNT	25
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.0
....FAMILY	1.1
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...MEGALOPTERA	
....CORDALIDAE	
.....NIGRONIA	4
....SIALIDAE	
.....SIALIS	1
...PLECOPTERA	
....LEUCTRIDAE	
.....LEUCTRA	1
..DIPTERA	
...CHIRONOMIDAE	19

01541305 MOOSE C AT CLEARFIELD, PA

DATE	AUG 6, 79
TIME	1200
TOTAL COUNT	7
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.7
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....CHIRONOMIDAE	
.....CARDIOCLADIUS	1
....TIPULIDAE	
.....DICRANOTA	1
....ORMOSIA	1
...TRICHOPTERA	1
..PLECOPTERA	1
...MEGALOPTERA	1
..DIPTERA	
...CHIRONOMIDAE	
....UNKN PODONOMINAE #3	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541320 CLEARFIELD C AT ASHVILLE, PA

DATE	AUG 14, 79
TIME	1720
TOTAL COUNT	2
DIVERSITY: PHYLUM	0.0
.CLASS	1.0
..ORDER	1.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.CRUSTACEA	
..DECAPODA	
...ASTACIDAE	1
.INSECTA	
..PLECOPTERA	1

01541322 CLEARFIELD C AT FRUGALITY, PA

DATE	JUL 31, 79
TIME	1710
TOTAL COUNT	24
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	1.8
...FAMILY	3.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..DIPTERA	
...CHIRONOMIDAE	
....THIENEMANNIELLA	1
...TABANIDAE	
....CHRYSOPTERA	1
...TIPULIDAE	
....HEMATOPHAGA	2
..EPHEMEROPTERA	
...EPHEMERIDAE	
....EPHEMERA	1
...HEPTAGENIIDAE	
....HEPTAGENIA	1
..ODONATA	
...AESHNIDAE	
....BOYERIA	1
...CORDULEGASTRIDAE	
....CORDULEGASTER	6
...GOMPHIDAE	
....LANTHUS	1
..PLECOPTERA	
...PELTOPERLIDAE	
....PELTOPERLA	1
...TRICHOPTERA	
...GLOSSOSOMATIDAE	
....GLOSSOSOMA	1
...HYDROPSYCHIDAE	
....CHEUMATOPSYCHE	1
..DIPTERA	
...MUSCIDAE	1
...CHIRONOMIDAE	6

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541324 POWELL RN AT VAN ORMER, PA

DATE JUL 31, 79
TIME 1830

TOTAL COUNT 7

DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.1
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
...TIPULIDAE	1
...TRICHOPTERA	1
...MEGALOPTERA	5

01541335 SLATE LICK RUN NR FRUGALITY, PA.

DATE AUG 1, 79
TIME 1700

TOTAL COUNT 111

DIVERSITY: PHYLUM	0.1
..CLASS	0.1
...ORDER	1.6
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...ODONATA	
...AESHNIDAE	5
...COLEOPTERA	
...URYOPTIDAE	1
...ELMIDAE	4
...DIPTERA	
...SIMULIIDAE	4
...EPHEMEROPTERA	77
...ODONATA	
...CORDULEGASTRIDAE	1
...TRICHOPTERA	6
...DIPTERA	
...CHIRONOMIDAE	5
...PLECOPTERA	1
...MEGALOPTERA	3
...DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	3
MOLLUSCA (MOLLUSCS)	
..BIVALVIA	
...NUCULOIDEA	
...SPHAERIIDAE	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541361 BLAIN RN AT COALPORT, PA

DATE	AUG 1, 79
TIME	1215
TOTAL COUNT	40
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	2.3
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...ODONATA	
...AESHNIDAE	3
...HEMIPTERA	1
...COLEOPTERA	
...DYTISCIDAE	1
...DIPTERA	
...TIPULIDAE	2
...TRICHOPTERA	14
...DIPTERA	
...CHIRONOMIDAE	9
...PLECOPTERA	3
...MEGALOPTERA	7

01541362 N. WITMER RN AT IRVONA, PA

DATE	AUG 1, 79
TIME	0915
TOTAL COUNT	48
DIVERSITY: PHYLUM	0.0
..CLASS	0.1
..ORDER	2.4
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPOD (ARTHROPODS)	
..INSECTA	
...ODONATA	
...AGRIIDAE	2
..CRUSTACEA	
...DECAPODA	
...ASTACIDAE	1
..INSECTA	
...DIPTERA	
...SIMULIIDAE	1
...TIPULIDAE	4
...EPHEMEROPTERA	17
...TRICHOPTERA	7
...DIPTERA	
...CHIRONOMIDAE	2
...PLECOPTERA	11
...MEGALOPTERA	3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541368 PINE RN NR IRVONA, PA

DATE	AUG 1, 79
TIME	1430
TOTAL COUNT	10
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....CHIRONOMIDAE	3
...MEGALOPTERA	6
...DIPTERA	
....CERATOPOGONIDAE=HELEIDAE	1

01541410 CLEARFIELD C NR MADERA, PA

DATE	AUG 7, 79
TIME	1145
TOTAL COUNT	14
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	0.9
...FAMILY	0.9
....GENUS	0.9
....GENUS-INSECTA	0.9

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
....GYRINIDAE	
....DINEUTUS	1
...EPHEMEROPTERA	
....BAETIDAE	
....BAETIS	2
...TRICHOPTERA	
....HYDROPSYCHIDAE	
....HYDROPSYCHE	11

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541418 L MUDDY RN AT SMOKE RUN, PA

DATE	AUG 7,79
TIME	0800
TOTAL COUNT	1
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.0
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...TRICHOPTERA	
....HYDROPSYCHIDAE	
.....DIPLECTRONA	1

01541425 JAPLING RN AT MADERA, PA

DATE	AUG 7,79
TIME	1345
TOTAL COUNT	10
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.0
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....CHIRONOMIDAE	10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541430 PINE RN NR MADER, PA

DATE	AUG 7,79
TIME	1500
TOTAL COUNT	21
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.8
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....CHIRONOMIDAE	5
...MEGALOPTERA	16

01541470 UPPER MORGAN RN NR KELLEYTOWN, PA

DATE	AUG 8,79
TIME	0945
TOTAL COUNT	11
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	2.2
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPOD)	
..INSECTA	
...HEMIPTERA	3
...COLEOPTERA	
....DYTISCIDAE	3
...LEPIDOPTERA	1
...DIPTERA	
....CHIRONOMIDAE	2
...MEGALOPTERA	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541475 POTTS RN AT KELLYTOWN, PA

DATE	AUG 8,79
TIME	0800
TOTAL COUNT	4
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	0.8
...FAMILY	1.5
....GENUS	1.5
....GENUS-INSECTA	1.5

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....CHIRONOMIDAE	
....CHIRONOMUS	1
...TIPULIDAE	
....TIPULA	2
..MEGALOPTERA	
...SIALIDAE	
....SIALIS	1

01541480 MORGAN RN NR MINERAL SPRINGS, PA

DATE	AUG 8,79
TIME	1215
TOTAL COUNT	23
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	2.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
....ELMIDAE	--
...DIPTERA	
....TIPULIDAE	
....TIPULA	--
..EPHEMEROPTERA	3
..ODONATA	
...GOMPHIDAE	2
..TRICHOPTERA	4
...DIPTERA	
....CHIRONOMIDAE	1
..PLECOPTERA	1
..MEGALOPTERA	12
...DIPTERA	
....ATHERICIDAE=RHAGIONIDAE	--
NEMATODA (NEMATODES)	
..UNKNOWN CLASS	
..UNKNOWN ORDER	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541485 L CLEARFIELD C NR GLEN RICHEY, PA

DATE	AUG 7, 79
TIME	1830
TOTAL COUNT	34
DIVERSITY: PHYLUM	0.2
..CLASS	0.2
...ORDER	2.2
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
....ELMIDAE	2
...DIPTERA	
....TIPULIDAE	
.....TIPULA	2
...EPHEMEROPTERA	15
...TRICHOPTERA	3
...PLECOPTERA	8
...MEGALOPTERA	1
...DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	2
NEMATODA (NEMATODES)	
..UNKNOWN CLASS	
..UNKNOWN ORDER	1

01541513 LONG RN AT MOUNT HOPE, PA

DATE	AUG 8, 79
TIME	1430
TOTAL COUNT	22
DIVERSITY: PHYLUM	0.3
..CLASS	0.3
...ORDER	1.6
....FAMILY	1.8
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ANNELIDA	
..OLIGOCHAETA	
...PLESIOPORA	
...ENCHYTRAEIDAE	1
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...HEMIPTERA	
...CORIXIDAE	1
...MEGALOPTERA	
...CORYDALIDAE	
....NIGRONIA	1
...TRICHOPTERA	
...HYDROPSYCHIDAE	
....DIPLECTRONA	12
...LIMNAPHILIDAE	
....HYDATOPHYLAX	1
...PLECOPTERA	
...LEUCTRIDAE	
....LEUCTRA	6

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541520 ROARING RN AT MINERAL SPRINGS, PA

DATE	AUG 6,79
TIME	1600
TOTAL COUNT	12
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	1.4
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..COLEOPTERA	
...DYTISCIDAE	7
...DIPTERA	
...CHIRONOMIDAE	2
..MEGALOPTERA	3

01541550 CLEARFIELD CR AT CLEARFIELD, PA.

DATE	AUG 6,79
TIME	1330
TOTAL COUNT	10
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	1.5
...FAMILY	2.0
....GENUS	2.6
....GENUS-INSECTA	2.6

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..COLEOPTERA	
...GYRINIDAE	
....GYRINUS	1
...HYDROPHILIDAE	
....BEROSUS	1
..DIPTERA	
...CHIRONOMIDAE	
....CHIRONOMUS	2
..MEGALOPTERA	
...SIALIDAE	
....SIALIS	3
...CORYDALIDAE	
....CORYDALUS	
.....C.CORNUTUS	1
..DIPTERA	
...CHIRONOMIDAE	
....PSUEDORTHOCCLADIUS	1
....UNKNOWN GENUS	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541695 TROUT RN AT SHAWVILLE, PA

DATE	AUG 3,79
TIME	0950
TOTAL COUNT	36
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	2.3
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPOD)	
.INSECTA	
..HEMIPTERA	1
..DIPTERA	
...TIPULIDAE	4
..EPHEMEROPTERA	4
..TRICHOPTERA	10
..DIPTERA	
...CHIRONOMIDAE	4
..PLECOPTERA	9
..MEGALOPTERA	4

01541900 ROLLING STONE RN NR ROLLING STONE, PA

DATE	AUG 7,79
TIME	2020
TOTAL COUNT	26
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	0.7
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..COLEOPTERA	
...DYTISCIDAE	3
..DIPTERA	
...CHIRONOMIDAE	22
..MEGALOPTERA	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541950 MOWRY RN AT ROLLING STONE, PA

DATE	AUG 8,79
TIME	0800
TOTAL COUNT	4
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	0.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..MEGALOPTERA	4

01542004 TROUT RN AT EDENDALE, PA

DATE	AUG 1,79
TIME	0905
TOTAL COUNT	2
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	0.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
...DIPTERA	
...CHIRONOMIDAE	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542006 COLD STREAM ABOVE GLASS CITY, PA

DATE	AUG 2, 79
TIME	1040
TOTAL COUNT	18
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	2.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
...TIPULIDAE	
....TIPULA	3
...EPHEMEROPTERA	7
...ODONATA	
...CORDULEGASTRIDAE	
....CORDULEGASTER	1
...LEPIDOPTERA	1
...DIPTERA	
...CHIRONOMIDAE	3
...PLECOPTERA	3

01542008 COLD STREAM AT PHILIPSBURG, PA

DATE	AUG 2, 79
TIME	0740
TOTAL COUNT	15
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
...DYTISCIDAE	1
...TRICHOPTERA	1
...DIPTERA	
...CHIRONOMIDAE	12
...MEGALOPTERA	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542100 EMIGH RN AT HAWK RUN, PA

DATE	AUG 2,79
TIME	1200
TOTAL COUNT	1
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.0
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...ODONATA	
....LIBELLULIDAE	
.....SYMPETRUM	1

01542105 ONEMILE RN NR PHILIPSBURG, PA

DATE	AUG 2,79
TIME	0920
TOTAL COUNT	10
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.5
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...LEPIDOPTERA	1
....DIPTERA	
.....CHIRONOMIDAE	9

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542200 UNNAMED TRIB TO MOSHANNON C AT MUNSON, PA

DATE AUG 2,79
TIME 1500

TOTAL COUNT 21

DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.7
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...TRICHOPTERA	1
...DIPTERA	
....CHIRONOMIDAE	18
...MEGALOPTERA	2

01542204 BLACK BEAR RN NR WINBURNE, PA

DATE AUG 2,79
TIME 1630

TOTAL COUNT 19

DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	2.2
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....TIPULIDAE	3
...EPHEMEROPTERA	7
...ODONATA	
....GOMPHIDAE	3
...TRICHOPTERA	4
...MEGALOPTERA	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542207 SULPHUR RN NR WINBURNE, PA

DATE	AUG 2, 79
TIME	1800
TOTAL COUNT	14
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	0.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..DIPTERA	
...CHIRONOMIDAE	
....CHIRONOMUS	14

01542300 MOSHANNON C NR MOSHANNON, PA

DATE	AUG 8, 79
TIME	1630
TOTAL COUNT	22
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	0.8
...FAMILY	0.8
....GENUS	0.8
....GENUS-INSECTA	0.8

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..DIPTERA	
...CHIRONOMIDAE	
....CHIRONOMUS	17
...MEGALOPTERA	
...SIALIDAE	
....SIALIS	5

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542400 BLK MOSHANNON C AT MOSHANNON, PA

DATE	AUG 8,79
TIME	1530
TOTAL COUNT	9
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.7
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....TIPULIDAE	1
...ODONATA	
....GOMPHIDAE	1
...PLECOPTERA	5
...MEGALOPTERA	2

01542520 SALTICK RN NR POTTERSDALE, PA

DATE	AUG 8,79
TIME	1130
TOTAL COUNT	9
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	0.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....CHIRONOMIDAE	
....CHIRONOMUS	9

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542524 STERLING RN NR PINE GLEN, PA

DATE	AUG 8,79
TIME	1315
TOTAL COUNT	12
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	1.9
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..DIPTERA	
...SIMULIIDAE	1
...TABANIDAE	1
...TIPULIDAE	1
..ODONATA	
...GOMPHIDAE	1
..DIPTERA	
...CHIRONOMIDAE	1
..PLECOPTERA	3
..MEGALOPTERA	4

01542610 S BR BENNETT BR SINNEMAHOING C NR PENFIELD, PA

DATE	AUG 7,79
TIME	1750
TOTAL COUNT	21
DIVERSITY: PHYLUM	0.6
.CLASS	0.6
..ORDER	2.2
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..COLEOPTERA	
...ELMIDAE	1
..DIPTERA	
...TIPULIDAE	3
..EPHEMEROPTERA	2
..ODONATA	
...GOMPHIDAE	1
..TRICHOPTERA	8
..DIPTERA	
...CHIRONOMIDAE	2
...ATHERICIDAE=RHAGIONIDAE	1
MOLLUSCA (MOLLUSCS)	
.BIVALVIA	
..NUCULOIDEA	
...SPHAERIIDAE	3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542721 WILSON RN NR PENFIELD, PA

DATE	AUG 7,79
TIME	1500
TOTAL COUNT	38
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	2.1
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
...TIPULIDAE	5
..EPHEMEROPTERA	10
..ODONATA	
...GOMPHIDAE	1
..TRICHOPTERA	8
..DIPTERA	
...CHIRONOMIDAE	4
..PLECOPTERA	10

01542725 MOOSE RN AT PENFIELD, PA

DATE	AUG 7,79
TIME	1315
TOTAL COUNT	3
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.6
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
...CHIRONOMIDAE	1
..PLECOPTERA	1
..MEGALOPTERA	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542732 KERSEY RN AT WEEDVILLE, PA

DATE	AUG 2, 79
TIME	1715
TOTAL COUNT	7
DIVERSITY: PHYLUM	0.0
..CLASS	0.6
...ORDER	1.7
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
....ASTACIDAE	1
..INSECTA	
...DIPTERA	
...TIPULIDAE	1
..MEGALOPTERA	4
..ODONATA	
...COENAGRIDA	1

01542748 MEDIX RN NR MEDIX RUN, PA

DATE	AUG 2, 79
TIME	1430
TOTAL COUNT	27
DIVERSITY: PHYLUM	0.0
..CLASS	0.2
...ORDER	1.5
...FAMILY	2.5
....GENUS	2.8
....GENUS-INSECTA	2.7

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
....ASTACIDAE	
....CAMBARUS	1
..INSECTA	
...DIPTERA	
...TIPULIDAE	
....HEMATODA	3
..EPHEMEROPTERA	
...BAETIDAE	
....BAETIS	3
...HEPTAGENIIDAE	
....EPEORUS	3
....UNKNOWN GENUS	8
...SIPHONURIDAE	
....ISONYCHIA	5
..MEGALOPTERA	
...CORYDALIDAE	
....NIGRONIA	1
..TRICHOPTERA	
...HYDROPSYCHIDAE	
....SYMPHITOPSYCHE	2
..PLECOPTERA	
...LEUCTRIDAE	
....LEUCTRA	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542755 SPRING RN NR WEEDVILLE, PA

DATE	AUG 2,79
TIME	1815
TOTAL COUNT	9
DIVERSITY: PHYLUM	0.0
.CLASS	0.5
..ORDER	1.8
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.CRUSTACEA	
..DECAPODA	
...ASTACIDAE	1
.INSECTA	
..TRICHOPTERA	3
..PLECOPTERA	4
..MEGALOPTERA	1

01542760 TROUT RN AT BENZETTE, PA

DATE	AUG 2,79
TIME	1930
TOTAL COUNT	3
DIVERSITY: PHYLUM	0.0
.CLASS	0.9
..ORDER	0.9
...FAMILY	0.9
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.CRUSTACEA	
..DECAPODA	
...ASTACIDAE	1
.INSECTA	
..DIPTERA	
...CHIRONOMIDAE	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542770 DENTS RN AT DENTS RUN, PA

DATE	AUG 7,79
TIME	1115
TOTAL COUNT	4
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	0.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
...DYTISCIDAE	
....AGABUS	4

01542775 E BR HICKS RN NR HUSTON HILL, PA

DATE	AUG 2,79
TIME	1300
TOTAL COUNT	18
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.5
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...EPHEMEROPTERA	8
...DIPTERA	
...CHIRONOMIDAE	7
...PLECOPTERA	3

01542780 MIX RN NR DRIFTWOOD, PA

DATE	AUG 7,79
TIME	1215
TOTAL COUNT	71
DIVERSITY: PHYLUM	0.0
..CLASS	0.1
..ORDER	1.5
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
...ASTACIDAE	1
..INSECTA	
...COLEOPTERA	
...PSEPHENIDAE	1
...ELMIDAE	2
...DIPTERA	
...TIPULIDAE	3
...EPHEMEROPTERA	52
...TRICHOPTERA	4
...DIPTERA	
...CHIRONOMIDAE	3
...PLECOPTERA	4
...MEGALOPTERA	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542790 BENNETT BR SINNEMAHONING C AT DRIFTWOOD, PA

DATE	AUG 2, 79
TIME	1545
TOTAL COUNT	14
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	0.9
...FAMILY	1.5
....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..DIPTERA	
...CHIRONOMIDAE	
....CHIRONOMUS	5
...TIPULIDAE	
....HEXATOMA	1
..MEGALOPTERA	
...SIALIDAE	
....SIALIS	4
..DIPTERA	
...CHIRONOMIDAE	3
...CERATOPOGONIDAE=HELEIDAE	1

01542800 DRIFTWOOD BR SINNEMAHONING C NR LOCKWOOD, PA

DATE	AUG 3, 79
TIME	0815
TOTAL COUNT	91
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	1.8
...FAMILY	0.0
....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPOD)	
.INSECTA	
..HEMIPTERA	4
..COLEOPTERA	
...ELMIDAE	46
..DIPTERA	
...TIPULIDAE	3
..EPHEMEROPTERA	28
..ODONATA	
...GOMPHIDAE	1
..DIPTERA	
...CHIRONOMIDAE	2
...PLECOPTERA	4
..DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542835 BIG RN AT TRUMAN, PA

DATE	AUG 2, 79
TIME	1015
TOTAL COUNT	40
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	2.1
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..ODONATA	
...AESMIDAE	1
..DIPTERA	
...SIMULIIDAE	1
...TIPULIDAE	4
..EPHEMEROPTERA	9
..TRICHOPTERA	13
..DIPTERA	
...CHIRONOMIDAE	4
..PLECOPTERA	8

01542845 WEST CREEK AT HOWARD SIDING, PA

DATE	AUG 2, 79
TIME	1115
TOTAL COUNT	15
DIVERSITY: PHYLUM	0.0
.CLASS	0.4
..ORDER	2.6
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.CRUSTACEA	
..DECAPODA	
...ASTACIDAE	1
.INSECTA	
..EPHEMEROPTERA	4
..ODONATA	
...GOMPHIDAE	1
..TRICHOPTERA	4
..DIPTERA	
...CHIRONOMIDAE	1
..PLECOPTERA	2
..MEGALOPTERA	1
..DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01542886 PARKER RUN AT GARDEAU, PA

DATE	JUL 31, 79
TIME	1800
TOTAL COUNT	76
DIVERSITY: PHYLUM	0.0
..CLASS	0.1
...ORDER	1.8
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0
ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
...ASTACIDAE	1
..INSECTA	
...COLEOPTERA	
...PSEPHENIDAE	1
...ELMIDAE	4
..DIPTERA	
...TIPULIDAE	4
...EPHEMEROPTERA	9
..TRICHOPTERA	48
..DIPTERA	
...CHIRONOMIDAE	2
..PLECOPTERA	6
..MEGALOPTERA	1

01542990 HUNTS RN AT CAMERON, PA

DATE	AUG 3, 79
TIME	1000
TOTAL COUNT	27
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.7
...FAMILY	3.4
....GENUS	3.6
....GENUS-INSECTA	3.6
ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...CHIRONOMIDAE	
....POLYPEDILUM	2
..EPHEMEROPTERA	
...BAETIDAE	
....BAETIS	3
....PSEUDOCLOEON	2
...EPHEMERELLIDAE	
....EPHEMERELLA	1
...HEPTAGENIIDAE	
....HEPTAGENIA	2
...LEPTOPHEBIIDAE	
....UNKNOWN GENUS	1
...SIPHONURIDAE	
....ISONYCHIA	5
..PLECOPTERA	
...PELTOPERLIDAE	
....PELTOPERLA	1
...PERLIDAE	
....(NEO)PHASGANOPHORA	2
...PTERONARCIDAE	
....PTERONARCYS	1
..TRICHOPTERA	
...GLOSSOSOMATIDAE	
....GLOSSOSOMA	1
...HYDROPSYCHIDAE	
....CHEUMATOPSYCHE	1
..PLECOPTERA	
...LEUCTRIDAE	
....LEUCTRA	1
..TRICHOPTERA	
...PHILOPOTAMIDAE	
....DOLOPHILODES	4

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01543004 STERLING RN NR STERLING RUN, PA

DATE	AUG 3,79
TIME	1230
TOTAL COUNT	14
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...TRICHOPTERA	8
...PLECOPTERA	6

01543008 TANNERY HOLLOW RN NR STERLING RUN, PA

DATE	AUG 3,79
TIME	1130
TOTAL COUNT	24
DIVERSITY: PHYLUM	0.0
..CLASS	0.2
...ORDER	2.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
....ASTACIDAE	1
..INSECTA	
...DIPTERA	
....ATHERICIDAE=RHAGIONIDAE	
....ATHERIX	
.....A.VARIEGATA	1
...EMPIDIDAE	1
...EPHEMEROPTERA	1
...BAETIDAE	
....BAETIS	3
...PLECOPTERA	
...PERLIDAE	
....ACRONEURIA	1
...PTERONARCIDAE	
....PTERONARCYS	1
...TRICHOPTERA	
....GLOSSOSOMATIDAE	
....GLOSSOSOMA	2
...HYDROPSYCHIDAE	
....CHEUMATOPSYCHE	4
....SYMPHITOPSYCHE	2
...PLECOPTERA	
...LEUCTRIDAE	
....LEUCTRA	2
...DIPTERA	
...CHIRONOMIDAE	1
...PLECOPTERA	1
...TRICHOPTERA	
...PHILOPOTAMIDAE	
....DOLOPHILODES	3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01544204 COOKS RUN NEAR KEATING, PA

DATE	AUG 7,79
TIME	1530
TOTAL COUNT	3
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.6
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPOD)	
..INSECTA	
...HEMIPTERA	1
...DIPTERA	
....CHIRONOMIDAE	1
....MEGALOPTERA	1

01544208 CROWLEY HOLLOW NR KEATING, PA

DATE	AUG 7,79
TIME	1730
TOTAL COUNT	14
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	0.0
...FAMILY	0.4
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....CHIRONOMIDAE	
....CHIRONOMUS	13
....CERATOPOGONIDAE=HELEIDAE	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545017 TWOMILE RN NR WESTPORT, PA

DATE	AUG 7,79
TIME	1800
TOTAL COUNT	3
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.6
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	1
...DIPTERA	
....CHIRONOMIDAE	1
....MEGALOPTERA	1

01545490 DRURY RN AT DRURY RUN, PA

DATE	AUG 7,79
TIME	2000
TOTAL COUNT	10
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	0.9
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...TRICHOPTERA	8
...DIPTERA	
....CHIRONOMIDAE	1
....MEGALOPTERA	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545504 PADDY RN NR RENOVO, PA

DATE	AUG 8,79
TIME	1020
TOTAL COUNT	20
DIVERSITY: PHYLUM	0.0
.CLASS	0.3
..ORDER	1.8
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
....ASTACIDAE	1
..INSECTA	
...COLEOPTERA	
....ELMIDAE	1
...DIPTERA	
....TIPULIDAE	1
...EPHEMEROPTERA	12
..DIPTERA	
...CHIRONOMIDAE	1
..PLECOPTERA	3
..MEGALOPTERA	1

01545660 BAKER RN NR HYNERS, PA

DATE	AUG 8,79
TIME	1130
TOTAL COUNT	26
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	1.9
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....TIPULIDAE	7
...EPHEMEROPTERA	6
..TRICHOPTERA	4
..PLECOPTERA	9

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545680 TANGASCOOTACK CREEK NEAR LOCK HAVEN, PA.

DATE	AUG 8,79
TIME	1315
TOTAL COUNT	26
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.7
....FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...EPHEMEROPTERA	1
...TRICHOPTERA	23
...DIPTERA	
...CHIRONOMIDAE	1
...PLECOPTERA	1

01547704 SANDY RN NR SNOW SHOE, PA

DATE	JUL 31,79
TIME	1830
TOTAL COUNT	58
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.6
....FAMILY	1.7
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
...DYTISCIDAE	
....AGABUS	5
...DIPTERA	
...CHIRONOMIDAE	
....CHIRONOMUS	30
....POLYPEDILUM	1
...MEGALOPTERA	
...SIALIDAE	
....SIALIS	14
...TRICHOPTERA	
...PHRYGANEIDAE	
....OLIGOSTOMIS	5
...DIPTERA	
...CHIRONOMIDAE	1
...CERATOPOGONIDAE=HELEIDAE	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547706 WOLF RN NR SNOW SHOE, PA

DATE	JUL 31,79
TIME	1615
TOTAL COUNT	24
DIVERSITY: PHYLUM	0.0
..CLASS	0.2
...ORDER	1.2
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
....ASTACIDAE	1
..INSECTA	
...EPHEMEROPTERA	1
...ODONATA	
...GOMPHIDAE	1
...TRICHOPTERA	1
...DIPTERA	
...CHIRONOMIDAE	1
...PLECOPTERA	19

01547760 N FK BEECH C AT CLARENCE, PA

DATE	JUL 31,79
TIME	1400
TOTAL COUNT	20
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.6
...FAMILY	1.7
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
....DYTISCIDAE	
....AGABUS	3
...DIPTERA	
...CHIRONOMIDAE	
....CHIRONOMUS	1
....THIENEMANNIELLA	2
...MEGALOPTERA	
...CORYDALIDAE	
....NIGRONIA	1
...SIALIDAE	
....SIALIS	1
...TRICHOPTERA	
...PHRYGANEIDAE	
....OLIGOSTOMIS	3
...DIPTERA	
...CHIRONOMIDAE	9

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01549543 L PINE C NR ENGLISH CENTER, PA

DATE	AUG 13, 79
TIME	1500
TOTAL COUNT	123
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.6
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
...ELMIDAE	
....STENELMIS	1
..DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	
....ATHERIX	
.....A.VARIEGATA	5
...CHIRONOMIDAE	
...POLYPEDILUM	2
...TIPULIDAE	
....HEXATOMA	4
..EPHEMEROPTERA	
...BAETIDAE	
....BAETIS	1
....PSEUDOCLOEON	3
...HEPTAGENIIDAE	
....EPEORUS	5
....UNKNOWN GENUS	3
...SIPHONURIDAE	
...ISONYCHIA	14
..PLECOPTERA	
...PELTOPERLIDAE	
....PELTOPERLA	1
...PERLIDAE	
....(NEO)PHASGANOPHORA	3
....ACRONEURIA	1
....PARAGNETINA	2
...PTERONARCIDAE	
....PTERONARCYS	1
..TRICHOPTERA	3
...BRACHYCENTRIDAE	
....BRACHYCENTRUS	2
...HYDROPSYCHIDAE	
....CHEUMATOPSYCHE	4
....SYMPHITOPSYCHE	31
..DIPTERA	
...CHIRONOMIDAE	2
..TRICHOPTERA	
...PHILOPOTAMIDAE	
....DOLOPHILODES	35

01549547 ENGLISH RN AT ENGLISH CENTER, PA

DATE	AUG 13, 79
TIME	1330
TOTAL COUNT	58
DIVERSITY: PHYLUM	0.0
..CLASS	0.1
...ORDER	1.8
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
...ASTACIDAE	1
..INSECTA	
...DIPTERA	
...TIPULIDAE	9
..EPHEMEROPTERA	3
...ODONATA	
...GOMPHIDAE	1
..TRICHOPTERA	32
..PLECOPTERA	12

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01549560 OTTER RN AT CARSONTOWN, PA

DATE	AUG 13, 79
TIME	1245
TOTAL COUNT	20
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	0.3
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...TRICHOPTERA	19
...DIPTERA	
....CHIRONOMIDAE	1

01549782 LARRYS C NR SALLADASBURG, PA

DATE	AUG 8, 79
TIME	1545
TOTAL COUNT	62
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
...ORDER	1.7
....FAMILY	0.0
.....GENUS	0.0
.....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
....SIMULIIDAE	1
...EPHEMEROPTERA	12
...TRICHOPTERA	37
...DIPTERA	
....CHIRONOMIDAE	3
...PLECOPTERA	7
...MEGALOPTERA	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01549903 RED RN AT RALSTON, PA

DATE	AUG 9,79
TIME	1700
TOTAL COUNT	8
DIVERSITY: PHYLUM	0.0
..CLASS	0.8
...ORDER	2.5
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
...ASTACIDAE	2
..INSECTA	
...COLEOPTERA	
...ELMIDAE	1
...TRICHOPTERA	1
...DIPTERA	
...CHIRONOMIDAE	2
..PLECOPTERA	1
..MEGALOPTERA	1

01549906 MINERS RN NR RALSTON, PA

DATE	AUG 9,79
TIME	1845
TOTAL COUNT	43
DIVERSITY: PHYLUM	0.0
..CLASS	0.6
...ORDER	1.5
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
...ASTACIDAE	6
..INSECTA	
...TRICHOPTERA	7
...DIPTERA	
...CHIRONOMIDAE	3
..PLECOPTERA	27

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

WEST BRANCH SUSQUEHANNA RIVER BASIN

01549909 FROZEN RN NR RALSTON, PA

DATE	AUG 8,79
TIME	1800
TOTAL COUNT	20
DIVERSITY: PHYLUM	0.0
..CLASS	0.3
..ORDER	1.9
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..CRUSTACEA	
...DECAPODA	
....ASTACIDAE	1
..INSECTA	
...EPHEMEROPTERA	2
...TRICHOPTERA	8
...DIPTERA	
...CHIRONOMIDAE	2
..PLECOPTERA	7

01551810 LOYALSOCK C AT LOPEZ, PA

DATE	AUG 9,79
TIME	1145
TOTAL COUNT	89
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.8
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...COLEOPTERA	
...PSEPHENIDAE	3
...DIPTERA	
...TIPULIDAE	3
...EPHEMEROPTERA	6
...TRICHOPTERA	50
...DIPTERA	
...CHIRONOMIDAE	8
..PLECOPTERA	16
...DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	3

01551817 BIRCH C NR RINGDALE, PA

DATE	AUG 9,79
TIME	0930
TOTAL COUNT	56
DIVERSITY: PHYLUM	0.0
..CLASS	0.0
..ORDER	1.7
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
..INSECTA	
...DIPTERA	
...TIPULIDAE	2
...EPHEMEROPTERA	14
...TRICHOPTERA	30
...DIPTERA	
...CHIRONOMIDAE	2
..PLECOPTERA	8

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

JUNIATA RIVER BASIN

01555855 BLAIRS GAP RN NR FOOT OF TEN, PA

DATE	AUG 14, 79
TIME	0800
TOTAL COUNT	9
DIVERSITY: PHYLUM	0.0
.CLASS	0.5
..ORDER	2.1
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..ODONATA	
...AESHNIDAE	1
..CRUSTACEA	
...DECAPODA	
...ASTACIDAE	1
.INSECTA	
..EPHEMEROPTERA	1
..TRICHOPTERA	3
..PLECOPTERA	3

01556430 BELLS GAP RN NR BLANDBURG, PA

DATE	JUL 31, 79
TIME	1315
TOTAL COUNT	7
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	0.6
...FAMILY	2.2
....GENUS	2.2
....GENUS-INSECTA	2.2

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..PLECOPTERA	
...PELTOPERLIDAE	
...PELTOPERLA	1
...PERLIDAE	
...ACRONEURIA	2
...PERLODIDAE	
...ISOPERLA	2
..TRICHOPTERA	
...RHYACOPHILIDAE	
...RHYACOPHILA	1
..PLECOPTERA	
...LEUCTRIDAE	
...LEUCTRA	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

JUNIATA RIVER BASIN

01556432 SHAW RN NR BLANDBURG, PA

DATE	JUL 31,79
TIME	1115
TOTAL COUNT	13
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	2.0
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..DIPTERA	
...SIMULIIDAE	1
...TIPULIDAE	3
..EPHEMEROPTERA	2
..TRICHOPTERA	4
..PLECOPTERA	3

01562250 TATMAN RN NR ENTRIEN, PA

DATE	AUG 22,79
TIME	0900
TOTAL COUNT	13
DIVERSITY: PHYLUM	0.0
.CLASS	0.9
..ORDER	2.2
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..ODONATA	
...AESHNIDAE	2
..CRUSTACEA	
..AMPHIPODA	
...GAMMARIDAE	4
.INSECTA	
..ODONATA	
...GOMPHIDAE	2
..TRICHOPTERA	2
..PLECOPTERA	2
..MEGALOPTERA	1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

POTOMAC RIVER BASIN

01600490 WILLS C AT GLENCOE, PA

DATE	AUG 17, 79
TIME	1330
TOTAL COUNT	6
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	1.9
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..TRICHOPTERA	1
..PLECOPTERA	2
..MEGALOPTERA	2
..DIPTERA	
...ATHERICIDAE=RHAGIONIDAE	1

01600498 WILLS C NR HYNDMAN, PA

DATE	AUG 17, 79
TIME	1114
TOTAL COUNT	8
DIVERSITY: PHYLUM	0.0
.CLASS	0.0
..ORDER	1.6
...FAMILY	0.0
....GENUS	0.0
....GENUS-INSECTA	0.0

ORGANISM	COUNT
ARTHROPODA (ARTHROPODS)	
.INSECTA	
..TRICHOPTERA	3
..PLECOPTERA	3
..MEGALOPTERA	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

COAL-HYDROLOGY NETWORK
BENTHIC INVERTEBRATE ANALYSES, OCTOBER 1978 TO AUGUST 1979

POTOMAC RIVER BASIN

01601080 GLADDENS RN NR HYNDMAN, PA

DATE AUG 17, 79
TIME 0845

TOTAL COUNT 15

DIVERSITY: PHYLUM 0.6
 .CLASS 0.6
 ..ORDER 2.4
 ...FAMILY 0.0
 GENUS 0.0
 GENUS-INSECTA 0.0

ORGANISM COUNT

ARTHROPODA (ARTHROPODS)

.INSECTA
..DIPTERA
...TIPULIDAE 1
..EPHEMEROPTERA 1
..TRICHOPTERA 1
..DIPTERA
...CHIRONOMIDAE 3
..PLECOPTERA 4
..MEGALOPTERA 3

MOLLUSCA (MOLLUSCS)

.GASTROPODA
..MESOGASTROPODA
...VIVIPARIDAE 2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

Miscellaneous sites are particular sites other than gaging stations and partial-record stations where chemical-quality, biological, and or sediment data are collected to give better areal coverage in a river basin.

 RADIOCHEMICAL DATA COLLECTED NEAR THREE-MILE ISLAND
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, DIS- SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)
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SUSQUEHANNA RIVER BASIN

01570500 - SUSQUEHANNA RIVER AT HARRISBURG, PA. (LAT 40 15 27 LONG 076 53 12)

APR , 1979								
06...	1030	80020	69400	<1.3	1.5	--	--	1.6
12...	0900	80020	84900	<1.0	.9	--	--	1.3
19...	0830	80020	59000	<1.1	<.4	--	--	1.4
MAY								
01...	0830	80020	41200	<1.4	1.0	--	--	1.6

01575700 - SUSQUEHANNA RIVER NEAR BAINBRIDGE, PA (LAT 40 03 48 LONG 076 38 10)

APR , 1979								
06...	1330	80020	--	<1.1	.9	--	--	2.0
10...	1200	80020	--	<1.4	.5	--	--	1.7
12...	1130	80020	--	<1.2	.9	--	--	2.1
16...	1330	80020	--	<1.1	.6	--	--	1.5
19...	1100	80020	--	<1.1	.9	--	--	1.4
24...	0900	80020	--	<1.2	<.4	--	--	1.1
MAY								
01...	1030	80020	--	<1.6	.6	--	--	1.5

01576003 - SUSQUEHANNA R AT COLUMBIA, PA. (LAT 40 59 03 LONG 076 43 26)

APR , 1979								
06...	1510	80020	83200	<1.2	1.8	--	--	1.5
12...	1300	80020	95600	<1.3	1.0	--	--	1.7
19...	1200	80020	68800	<1.1	.9	--	--	1.9
MAY								
01...	1200	80020	43700	<1.7	<.5	--	--	1.4

01578310 - SUSQUEHANNA RIVER AT CONOWINGO, MD. (LAT 39 39 26 LONG 076 10 31)

APR , 1979								
02...	1530	80020	82300	<1.0	.8	<.7	.5	1.7
06...	1700	80020	83500	<1.4	.8	--	--	1.6
12...	1540	80020	99500	<1.3	.4	--	--	1.7
19...	1515	80020	78100	<1.1	.6	--	--	1.4
MAY								
01...	1515	80020	75100	<1.5	.5	--	--	2.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

RADIOCHEMICAL DATA COLLECTED NEAR THREE-MILE ISLAND
WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)	TRITIUM TOTAL (PCI/L)	TRITIUM IN WATER MOLE- CULES COUNT ERROR (TU)	TRITIUM WATER MOLE- CULES COUNT ERROR (TU)
------	---	--	--	---	---	-----------------------------	--	--

SUSQUEHANNA RIVER BASIN

01570500 - SUSQUEHANNA RIVER AT HARRISBURG, PA. (LAT 40 15 27 LONG 076 53 12)

APR , 1979

06...	1.2	1.4	1.3	--	--	<200	44.1	4.9
12...	1.2	1.2	1.2	--	--	<200	43.5	4.9
19...	.6	1.3	.6	--	--	<200	51.7	4.3
MAY 01...	.8	1.5	.9	--	--	<200	37.3	4.1

01575700 - SUSQUEHANNA RIVER NEAR BAINBRIDGE, PA (LAT 40 03 48 LONG 076 38 10)

APR , 1979

06...	.9	1.8	.9	--	--	<200	36.9	4.8
10...	.5	1.6	.6	--	--	<200	47.6	4.9
12...	.6	2.0	.6	--	--	<200	51.8	4.9
16...	.7	1.4	.7	--	--	<200	49.0	4.2
19...	.6	1.3	.6	--	--	<200	47.0	4.2
24...	<.5	1.1	<.6	--	--	<200	--	--
MAY 01...	<.6	1.3	<.7	--	--	<200	51.6	4.2

01576003 - SUSQUEHANNA R AT COLUMBIA, PA. (LAT 40 59 03 LONG 076 43 26)

APR , 1979

06...	1.1	1.4	1.1	--	--	<200	47.3	4.9
12...	1.0	1.6	1.0	--	--	<200	41.7	4.2
19...	<.5	1.7	<.5	--	--	<200	48.6	4.2
MAY 01...	.7	1.3	.8	--	--	<200	51.2	4.2

01578310 - SUSQUEHANNA RIVER AT CONOWINGO, MD. (LAT 39 39 26 LONG 076 10 31)

APR , 1979

02...	.6	1.6	.6	.04	<.01	--	--	--
06...	.8	1.5	.8	--	--	<200	54.0	4.9
12...	.6	1.5	.7	--	--	<200	43.2	4.2
19...	<.5	1.3	<.5	--	--	<200	47.2	4.2
MAY 01...	<.5	1.9	.6	--	--	<200	47.4	4.1

ADAMS COUNTY

395846077040601. Local number, AD 146.

LOCATION.--Lat 39°58'46", long 77°04'06", Hydrologic Unit 02050306, at State Game Land Number 249.

Owner: U.S. Geological Survey.

AQUIFER.--Shale and sandstone of Gettysburg Formation of Upper Triassic age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 100 ft (30.5 m), cased to 17 ft (5.1 m), open hole.

DATUM.--Altitude of land-surface datum is 540 ft (165 m). Measuring point: Top of casing, 2.00 ft (61 cm) above land-surface datum.

REMARKS.--Water-quality records for 1973-75 are available in files of district office.

PERIOD OF RECORD.--January 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.87 ft (3.008 m) below land-surface datum, June 21, 1972; lowest, 13.55 ft (4.130 m) below land-surface datum, August 11, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.21	12.77	11.89	11.77	12.03	11.04	11.11	11.95	11.57	12.37	12.90	13.00
10	13.05	12.83	11.55	11.61	12.31	11.29	11.34	12.24	12.05	12.66	13.06	12.26
15	12.80	12.77	11.90	11.69	12.32	11.59	11.30	12.15	12.43	12.59	12.84	12.36
20	12.84	12.54	11.95	11.94	12.34	11.66	11.72	12.27	12.66	12.90	12.95	12.58
25	12.75	12.43	11.20	11.11	10.65	11.31	11.95	10.94	12.82	12.68	12.73	11.60
EOM	12.85	12.00	11.98	11.42	---	11.67	11.92	11.63	12.23	12.79	12.86	11.82

WTR YR 1979 HIGH 10.65 FEB 25 LOW 13.29 OCT 2 AND OTHERS

BEDFORD COUNTY

400217078281901. Local number, BD 150.

LOCATION.--Lat 40°02'17", long 78°28'19", Hydrologic Unit 02050303, at Bedford.

Owner: U.S. Geological Survey.

AQUIFER.--Shale of Onondaga Formation of Middle Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 150 ft (45.7 m), cased to 47 ft (14.3 m), open hole.

DATUM.--Altitude of land-surface datum is 1,160 ft (354 m). Measuring point: Top of casing, 3.05 ft (93 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--July 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.38 ft (0.12 m) above land-surface datum, May 20, 1978; lowest, 41.42 ft (12.625 m) below land-surface datum, Feb. 12, 13, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.10	26.20	28.15	22.98	19.57	12.74	4.61	5.61	6.32	14.12	9.54	13.63
10	23.72	26.66	27.83	22.35	---	9.64	4.44	5.36	7.90	14.98	10.95	10.37
15	24.21	27.07	26.54	22.72	---	9.74	4.90	7.14	9.51	15.84	10.33	11.41
20	24.76	27.43	26.90	23.13	---	10.20	5.80	8.42	10.82	16.41	11.40	12.35
25	25.15	27.71	26.19	21.93	---	9.96	7.17	7.81	12.06	15.23	11.92	10.92
EOM	25.76	28.01	25.29	19.45	16.75	7.38	6.06	5.09	12.92	8.34	12.95	11.72

WTR YR 1979 HIGH 3.99 APR 6 LOW 28.18 DEC 7

BLAIR COUNTY

402452078271301. Local number, BA 74.

LOCATION.--Lat 40°24'52", long 78°27'13", Hydrologic Unit 02050302, at National Park Land.

Owner: U.S. Geological Survey.

AQUIFER.--Shale of Brallier Formation of Upper Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 150 ft (45.7 m), cased to 14 ft (4.3 m), open hole.

DATUM.--Altitude of land-surface datum is 1,130 ft (344 m). Measuring point: Top of casing, 1.80 ft (55 cm) above land-surface datum.

REMARKS.--None.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.45 ft (3.19 m) below land-surface datum, Mar. 21, 1978; lowest, 18.65 ft (5.685 m) below land-surface datum, Oct. 29, 30, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.97	14.90	13.84	12.63	12.64	11.23	11.13	11.36	---	13.05	11.70	11.68
10	15.25	15.17	13.62	12.62	12.92	11.20	11.36	11.64	---	13.20	12.22	11.32
15	15.00	15.22	13.38	12.78	12.88	11.73	11.12	12.09	---	13.32	11.45	11.87
20	14.65	14.90	13.35	12.72	13.19	11.73	11.40	12.30	12.77	12.65	11.77	12.30
25	14.79	14.60	12.92	12.24	12.26	11.48	11.89	---	13.10	12.15	12.09	11.98
EOM	14.82	14.30	12.99	12.33	11.91	11.63	11.67	---	13.22	10.90	11.28	11.54

WTR YR 1979 HIGH 10.90 JUL 31 LOW 15.27 OCT 13

BRADFORD COUNTY

414330076280501. Local number, BR 92.

LOCATION.--Lat 41°43'30", long 76°28'05", Hydrologic Unit 02050106, at Monroeton.

Owner: U.S. Geological Survey.

AQUIFER.--Shale of Gardeau Formation of Upper Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 117 ft (35.7 m), cased to 55 ft (16.8 m), open hole.

DATUM.--Altitude of land-surface datum is 750 ft (229 m). Measuring point: Top of casing, 3.05 ft (93 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--May 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.53 ft (0.47 m) below land-surface datum, Jan. 28, 1978; lowest, 11.07 ft (3.374 m) below land-surface datum, Aug. 30, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.69	10.13	10.24	4.40	5.25	2.67	7.01	8.15	6.41	9.90	10.87	11.07
10	10.67	10.24	9.51	4.86	6.66	2.38	6.31	8.64	7.48	10.13	10.95	10.85
15	10.27	10.36	9.19	5.60	7.70	3.68	5.55	9.04	8.16	10.33	10.97	10.82
20	10.19	10.40	9.30	6.45	8.44	4.98	6.10	9.29	8.85	10.47	11.05	10.80
25	10.26	10.29	9.51	5.10	7.16	5.88	7.03	8.42	9.26	10.66	11.02	10.70
EOM	10.00	10.25	9.60	3.68	4.78	6.64	7.56	5.25	9.57	10.79	11.01	10.68

WTR YR 1979 HIGH 1.65 MAR 6 LOW 11.07 SEP 5

CAMERON COUNTY

412732078034201. Local number, CM 13.

LOCATION.--Lat 41°27'32", long 78°03'42", Hydrologic Unit 02050202, at Sinnemahoning State Park.

Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Catskill Formation of Upper Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 102 ft (31.1 m), cased to 57 ft (17.4 m), open hole.

DATUM.--Altitude of land-surface datum is 1,010 ft (308 m). Measuring point: Top of casing, 3.07 ft (94 cm) above land-surface datum.

REMARKS.--None.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.35 ft (6.203 m) below land-surface datum, Feb. 20, 1976; lowest, 25.98 ft (7.919 m) below land-surface datum, Sept. 10, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.53	23.32	23.15	---	23.04	22.64	22.52	22.96	23.18	23.42	23.27	23.01
10	23.75	23.47	23.12	---	23.20	22.41	22.66	23.06	23.36	23.35	23.07	22.93
15	23.46	23.53	22.99	---	23.11	22.71	22.50	23.17	23.51	23.46	23.03	23.02
20	23.25	23.53	22.95	---	23.28	22.60	22.71	23.25	23.65	23.56	---	23.13
25	23.31	23.45	22.91	---	23.14	22.39	22.70	23.08	23.73	23.56	23.10	---
EOM	23.51	23.34	23.25	22.71	23.04	22.63	22.86	23.28	23.50	23.39	22.95	23.01

WTR YR 1979 HIGH 22.32 MAR 7 LOW 23.78 JUN 26

CENTRE COUNTY

404518077575501. Local number, CE 118.

LOCATION.--Lat 40°45'18", long 77°57'55", Hydrologic Unit 02050302, at State Game Land Number 176.

Owner: U.S. Geological Survey.

AQUIFER.--Sandstone and dolomite of Gatesburg Formation of Upper Cambrian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 130 ft (39.6 m), cased to 40 ft (12.2 m), open hole.

DATUM.--Altitude of land-surface datum is 1,150 ft (351 m). Measuring point: Top of casing, 2.50 ft (76 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--January 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 51.91 ft (15.82 m) below land-surface datum, Sept. 8, 1978; and others; lowest, 80.14 ft (24.427 m) below land-surface datum, March 26, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.12	52.78	53.62	54.70	55.59	56.23	55.93	55.72	55.45	55.14	55.05	55.12
10	---	52.94	53.85	54.86	55.79	55.76	55.93	55.68	55.42	---	55.06	55.12
15	---	53.12	53.96	55.02	---	55.97	55.84	55.67	55.41	---	55.08	55.14
20	---	53.24	54.08	55.10	---	56.02	55.86	55.65	55.36	---	55.08	55.17
25	52.48	53.33	54.28	55.22	---	55.98	55.81	55.57	55.23	55.06	55.11	55.20
EOM	52.68	53.48	54.52	55.35	56.31	55.97	55.77	55.53	55.15	55.04	55.10	55.20

WTR YR 1979 HIGH 52.05 OCT 1 LOW 56.39 MAR 3 AND OTHERS

CENTRE COUNTY

410048077394801. Local number, CE-121

LOCATION.--Lat 41°00'48", long 77°39'48", Hydrologic Unit 02050204, at Howard.

Owner: U.S. Corps of Engineers.

AQUIFER.--Cayuga group.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in (15 cm), depth 20 ft (6.1 m), cased to 20 ft (6.1 m), open end.

DATUM.--Altitude of land-surface datum is 630 ft (192 m). Measuring point: Top of casing, 2 ft (61 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--July 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.90 ft (1.19 m), below land surface datum May 17, 1978; lowest 18.22 ft (5.55 m) below land-surface datum, Dec. 31, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.76	14.70	17.55	13.80	8.49	5.51	5.67	6.11	5.66	6.17	6.48	5.25
10	9.93	15.21	16.81	13.85	8.39	4.50	5.55	6.30	5.57	6.41	5.71	5.12
15	10.60	15.81	17.42	14.47	8.31	5.40	5.30	6.35	5.87	6.59	5.84	5.54
20	11.84	16.21	17.98	15.25	---	6.47	5.84	6.32	6.20	6.54	5.94	5.82
25	12.86	16.74	18.09	8.56	---	5.58	6.01	4.99	6.42	6.52	5.63	5.80
EOM	13.88	17.25	18.22	8.79	7.07	6.66	6.08	5.40	5.92	6.50	5.42	5.14

WTR YR 1979 HIGH 4.27 MAR 5 LOW 18.22 DEC 31

CLEARFIELD COUNTY

405810078313301. Local number, CF 4.

LOCATION.--Lat 40°58'10", long 78°31'33", Hydrologic Unit 02050201, at Curwensville.

Owner: Jared I. McNaull.

AQUIFER.--Shale and sandstone of Clarion Formation of Middle Pennsylvanian age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 5 ft (1.5 m), depth 30 ft (9.1 m), casing information not available.

DATUM.--Altitude of land-surface datum is 1,160 ft (354 m). Measuring point: Top of 1-inch pipe in cover at land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.61 ft (5.063 m) below land-surface datum, March 10, 1979; lowest measured, 21.44 ft (6.535 m) below land-surface datum, Nov. 16, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 7	20.01	DEC 2	19.34	FEB 3	19.10	APR 7	17.72	JUNE 2	18.74	AUG 4	18.94
14	20.14	9	19.08	10	19.65	14	17.03	9	19.41	11	19.62
21	19.19	16	18.90	17	19.88	21	17.95	16	19.77	18	19.39
28	19.41	23	18.82	24	19.43	28	18.83	23	19.93	25	19.55
NOV 4	19.51	30	19.29	MAR 3	17.42	MAY 7	19.24	30	20.02	SEP 1	19.33
11	20.01	JAN 6	18.09	10	16.61	12	19.50	JULY 7	20.82	8	18.54
18	20.10	13	18.80	17	18.01	19	19.58	14	19.98	15	18.86
25	19.66	20	19.33	24	18.63	26	19.20	21	19.94	22	19.10
		27	18.38	31	17.92			28	19.39	28	18.94

WTR YR 1979 HIGH 16.61 MAR 10 LOW 20.14 OCT 14

CLEARFIELD COUNTY

405719078315301. Local number, CF-125

LOCATION.--Lat 40°57'19", long 78°31'53", Hydrologic unit 02050201 near Curwensville.

Owner: U.S. Corps of Engineers.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in (15 cm), depth 14.50 ft (4.42 m) cased to 14.50 ft (4.42 m), open end.

DATUM.--Altitude of land-surface datum is 973 ft (296 m). Measuring point: Top of casing, 2.50 ft (76 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--July 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 5.59 ft (1.70 m) below land-surface datum, March 6, 1975; lowest 6.49 ft (1.98 m) below land-surface datum, Oct. 17, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.46	6.38	6.36	---	6.29	5.97	5.95	6.19	6.14	6.35	6.24	6.28
10	6.48	6.43	6.29	---	---	5.74	6.00	6.20	6.17	6.33	6.26	6.21
15	6.44	6.46	6.28	---	---	5.88	5.94	6.22	6.23	6.32	6.28	6.28
20	6.44	6.41	6.25	---	---	5.95	6.02	6.22	6.27	6.35	6.28	6.29
25	6.39	6.38	---	6.15	---	5.89	6.07	6.06	6.33	6.35	6.28	6.31
EOM	6.39	6.38	---	6.18	6.13	5.97	6.15	6.12	6.27	6.27	6.30	6.12
WTR YR 1979	HIGH	5.74	MAR 10	LOW	6.49	OCT 17						

CLINTON COUNTY

411424077462201. Local number, CN 1.

LOCATION.--Lat 41°14'24", long 77°46'22", Hydrologic Unit 02050203, at Sproul State Forest.
 Owner: Commonwealth of Pennsylvania.
 QUIFIER.--Sandstone of Pocono Formation of Upper Mississippian age.
 WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (15 cm), depth 78 ft (23.8 m), cased to 38 ft (11.6 m), open hole.
 DATUM.--Altitude of land-surface datum is 2,050 ft (625 m). Measuring point: Top of platform, 0.20 ft (6 cm) above land-surface datum.
 REMARKS.--None.
 PERIOD OF RECORD.--August 1950 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 44.00 ft (13.411 m) below land-surface datum, Jan. 13, 1951; lowest, 57.24 ft (17.447 m) below land-surface datum, Dec. 21, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	50.62	---	---	---	---	48.25	46.18	47.17	48.20	49.18	---	49.67
10	50.60	---	---	47.99	---	47.38	46.29	47.51	48.21	49.29	---	49.26
15	50.50	---	---	---	---	46.76	46.12	47.92	48.23	49.49	49.87	48.93
20	50.36	49.93	---	47.94	48.50	46.47	46.32	48.23	48.48	49.70	49.78	48.69
25	50.30	49.66	48.53	---	48.67	46.10	46.55	48.39	48.80	49.77	49.78	---
EOM	---	---	---	---	48.65	46.27	46.91	48.33	48.94	---	49.70	---

WTR YR 1979 HIGH 46.10 MAR 25 LOW 50.67 OCT 1 AND OTHERS

COLUMBIA COUNTY

410033076264901. Local number, CO 45.

LOCATION.--Lat 41°00'33", long 76°26'49", Hydrologic Unit 02050107, at Bloomsburg.
 Owner: U.S. Geological Survey
 QUIFIER.--Shale of Bloomsburg Formation of Silurian age.
 WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 282 ft (85.9 m), cased to 32 ft (9.8 m), open hole.
 DATUM.--Altitude of land-surface datum is 690 ft (210 m). Measuring point: Top of plywood cover, 2.60 ft (79 cm) above land-surface datum.
 REMARKS.--None.
 PERIOD OF RECORD.--October 1970 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 76.1 ft (23.2 m) below land-surface datum, Dec. 22, 1977; lowest, 88.78 ft (27.060 m) below land-surface datum, Oct. 20, 1972 and others.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	84.90	84.99	84.53	82.91	---	---	82.64	83.00	82.56	85.05	---	84.50
10	84.92	85.45	84.09	82.58	---	82.23	82.62	83.40	83.02	85.31	---	83.94
15	84.59	85.72	84.10	82.86	---	82.54	82.24	83.25	---	85.49	---	84.27
20	84.82	85.50	84.45	83.15	---	82.60	82.68	83.50	---	85.65	84.29	84.47
25	85.18	85.26	83.27	82.00	---	82.75	82.98	79.83	85.21	85.37	84.54	83.74
EOM	84.90	85.17	83.89	---	---	83.01	83.08	82.29	85.24	---	84.63	83.90

WTR YR 1979 HIGH 79.72 MAY 26 LOW 85.83 JUL 23

CUMBERLAND COUNTY

400209077183301. Local number, CU 2.

LOCATION.--Lat 40°02'09", long 77°18'33", Hydrologic Unit 02050305, at Michaux State Forest.

Owner: Commonwealth of Pennsylvania.

AQUIFER.--Metarhyolite of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (15 cm), depth 37 ft (11.3 m), casing information not available.

DATUM.--Altitude of land-surface datum is 955 ft (291 m). Measuring point: Top of casing, 1.5 ft (46 cm) above land-surface datum.

REMARKS.--None.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.51 ft (2.899 m) below land-surface datum, April 18, 1961; lowest, 33.50 ft (10.211 m) below land-surface datum, Feb. 3, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.09	26.96	27.71	23.16	15.92	13.25	12.34	14.33	15.81	19.07	21.85	24.18
10	25.46	27.21	27.40	21.86	16.05	12.01	12.04	14.88	15.67	19.51	22.29	22.42
15	---	27.46	27.07	21.07	16.17	12.33	12.03	15.61	16.27	20.09	22.72	22.17
20	---	27.60	---	20.54	16.66	12.78	12.58	16.41	17.07	20.65	23.08	22.09
25	26.39	27.73	26.14	17.87	16.57	12.95	13.13	16.75	17.85	21.05	23.43	20.64
EOM	26.68	27.78	24.86	16.33	---	12.64	13.77	16.68	18.42	21.48	23.86	20.33

WTR YR 1979 HIGH 11.85 APR 9 LOW 27.79 NOV 29 AND OTHERS

DAUPHIN COUNTY

402118076462201. Local number, DA 350.

LOCATION.--Lat 40°21'18", long 76°46'22", Hydrologic Unit 02050305, at R. D. 1, Linglestown.

Owner: William R. Miller.

AQUIFER.--Hamburg Sequence of Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (15 cm), depth 225 ft (68.6 m), cased to 19 ft (5.79 m), open hole.

DATUM.--Altitude of land-surface datum is 450 ft (137 m). Measuring point: Top of casing, 1.34 ft (41 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--September 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.15 ft (35 cm) below land-surface datum, June 22, 1972; lowest, 6.95 ft (2.118 m) below land-surface datum, Sept. 11, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.18	5.28	4.36	4.05	4.39	3.69	3.63	4.45	4.28	5.30	4.70	5.46
10	5.15	5.39	4.13	4.00	4.66	3.89	3.79	4.73	4.67	5.42	5.07	4.69
15	4.83	5.46	4.50	4.24	4.75	4.15	3.73	4.87	4.91	5.20	4.93	4.81
20	4.99	4.99	4.64	4.42	4.89	4.23	4.14	4.99	5.18	5.41	5.14	5.05
25	5.10	5.03	3.84	3.53	3.61	4.22	4.47	3.80	5.28	5.49	5.20	4.33
EOM	5.16	4.77	4.45	3.91	---	4.46	4.44	3.83	4.99	5.37	5.36	4.61

WTR YR 1979 HIGH 3.05 FEB 26 LOW 5.50 JUL 13

FRANKLIN COUNTY

395958077393301. Local number, FR 2.

LOCATION.--Lat 39°59'58", long 77°39'33", Hydrologic Unit 02070004, at Chambersburg.

Owner: U.S. Army Letterkenny Ordnance Depot.

AQUIFER.--St. Paul Group of Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (20.3 cm) to 6 in (15 cm), depth 441 ft (134 m), cased to 60 ft (18.3 m), open hole.

DATUM.--Altitude of land-surface datum is 694 ft (212 m). Measuring point: Top of casing, 2.49 ft (76 cm) above land-surface datum.

REMARKS.--None.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.22 ft (3.12 m) below land-surface datum, Mar. 22, 1978; lowest, 62.98 ft (19.196 m) below land-surface datum, Dec. 11, 1973.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.67	48.82	33.59	24.97	26.86	12.82	25.90	40.28	27.15	40.71	48.07	47.72
10	48.78	48.91	29.99	22.35	34.04	14.14	23.78	45.49	33.15	46.06	46.28	30.83
15	48.06	48.85	34.23	26.14	40.10	20.80	26.21	45.67	40.21	47.03	42.85	38.76
20	48.71	47.43	41.73	32.35	44.65	26.70	30.48	46.28	45.42	47.90	46.58	45.59
25	48.83	47.31	35.95	21.86	32.50	30.48	36.05	29.42	46.40	48.26	44.00	30.04
EOM	48.80	39.83	33.64	21.21	---	31.60	37.95	26.62	41.10	48.37	46.89	37.58

WTR YR 1979 HIGH 10.60 MAR 6 LOW 48.93 NOV 11 AND OTHERS

FRANKLIN COUNTY

394731077411701. Local number, FR 332.

LOCATION.--Lat 39°47'31", long 77°41'17", Hydrologic Unit 02070004, near Greencastle.

Owner: Borough of Greencastle.

AQUIFER.--Stonehenge Formation of Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (20 cm), depth 296 ft (90 m), cased to 92 ft (28 m), open hole.

DATUM.--Altitude of land-surface datum is 730 ft (223 m). Measuring point: Top of casing, 1 ft (30 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--March 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.30 ft (3.749 m) below land-surface datum, Sept. 27, 1975, lowest, 36.68 ft (11.18 m) below land-surface datum, Sept. 6, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.34	34.87	33.64	27.18	23.91	18.62	25.21	27.94	27.00	29.77	30.72	31.85
10	33.89	34.64	30.70	25.63	24.65	19.87	24.52	27.54	27.75	30.41	30.78	29.08
15	33.39	34.83	32.93	26.79	25.39	21.51	25.83	28.68	28.72	30.53	30.81	29.29
20	34.05	34.08	32.81	28.75	27.25	23.60	27.36	29.63	29.48	31.10	31.12	30.25
25	34.72	34.32	31.67	18.90	22.06	24.39	28.51	28.09	30.01	31.18	30.54	27.12
EOM	---	32.78	31.62	20.83	---	26.21	28.78	29.13	29.98	30.60	31.21	28.45

WTR YR 1979 HIGH 17.15 MAR 1 LOW 34.97 NOV 7

FULTON COUNTY

400302078090401. Local number, FU 93.

LOCATION.--Lat 40°03'02", long 78°09'04", Hydrologic Unit 02050304, at Buchanan State Forest.

Owner: Commonwealth of Pennsylvania.

AQUIFER.--Sandstone of Pocono Formation of Lower Mississippian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (15 cm), depth 191 ft (58.2 m), cased to 45 ft (13.7 m), open hole.

DATUM.--Altitude of land-surface datum is 1,180 ft (360 m). Measuring point: Top of casing, 2.0 ft (61 cm) above land-surface datum.

REMARKS.--Water level above and below (-) land surface datum.

PERIOD OF RECORD.--July 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.00 ft (61 cm) above land-surface datum, Feb. 22, 1971; lowest, -4.46 ft (-1.359 m) below land-surface datum, Sept. 12, 1966.

WATER LEVEL, IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-2.37	---	-1.84	.06	---	1.45	1.43	.76	.72	-0.73	-0.31	-1.16
10	-2.45	---	-1.16	-0.13	---	1.45	.92	.41	.03	-1.05	---	.70
15	-2.49	---	-1.34	---	---	.94	.83	.00	-0.28	-0.77	-0.32	.61
20	-2.49	---	-1.50	---	---	.54	.43	-0.17	---	-0.15	---	-0.01
25	-2.51	-2.35	-0.94	.67	---	1.23	.10	.96	---	-0.11	-0.44	.73
EOM	-2.55	-2.23	-0.95	.19	1.23	.98	.90	1.24	-1.17	.62	-0.91	.18

WTR YR 1979 MAX 1.45 MAR 5 AND OTHERS MIN -2.55 OCT 29 AND OTHERS

HUNTINGDON COUNTY

401843078075401. Local number, HU 301.

LOCATION.--Lat 40°18'43", long 78°07'54", Hydrologic Unit 02050303, at Trough Creek State Park.

Owner: U.S. Geological Survey.

AQUIFER.--Burgoon Sandstone of Lower Mississippian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 105 ft (32 m), cased to 18 ft (5.5 m), open hole.

DATUM.--Altitude of land-surface datum is 970 ft (296 m). Measuring point: Top of casing, 3.30 ft (1.01 m) above land-surface datum.

REMARKS.--None.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.82 ft (14.880 m) below land-surface datum, June 23, 1972; lowest, 55.58 ft (16.941 m) below land-surface datum, Sep. 16, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	55.16	55.23	54.92	53.96	54.25	52.67	53.32	54.05	53.68	54.78	54.71	54.97
10	55.25	55.34	54.90	54.16	54.14	52.79	53.59	54.19	54.20	54.89	54.83	53.99
15	55.22	55.40	54.83	54.36	54.06	53.67	53.59	54.11	54.50	55.01	54.29	54.17
20	55.17	55.31	54.91	54.18	54.51	53.92	53.92	54.21	54.82	55.11	54.52	54.45
25	55.17	55.21	54.63	53.19	53.72	53.46	54.19	53.45	54.99	54.79	54.65	54.11
EOM	55.32	55.18	54.62	53.73	53.27	53.61	54.11	53.31	54.76	54.44	54.87	54.23

WTR YR 1979 HIGH 52.25 MAR 6 LOW 55.43 NOV 16 AND OTHERS

JUNIATA COUNTY

402411077374801. Local number, JU 351.

LOCATION.--Lat 40°24'11", long 77°37'48", Hydrologic Unit 02050304, at State Game Land Number 215.

Owner: U.S. Geological Survey.

AQUIFER.--Shale of Mahantango Formation of Middle Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 110 ft (33.5 m), cased to 18 ft (5.5 m), open hole.

DATUM.--Altitude of land-surface datum is 635 ft (194 m). Measuring point: Top of plywood cover, 3.55 ft (1.08 m) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.20 ft (3.41 m) below land-surface datum, May 15, 1978; lowest, 15.40 ft (4.694 m) below land-surface datum, Sep. 15, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.93	14.57	13.56	12.96	13.41	12.10	12.54	13.10	13.09	13.15	13.23	13.81
10	14.86	14.67	13.17	13.17	13.62	12.69	12.93	13.25	13.41	13.68	13.23	13.02
15	14.81	14.72	13.70	13.45	13.54	13.16	12.79	13.34	13.61	14.01	12.68	12.96
20	14.76	14.42	13.82	13.44	13.62	13.32	13.13	13.38	14.17	13.84	13.22	13.46
25	14.74	14.30	13.12	11.90	12.53	12.51	13.31	12.59	14.48	13.68	13.40	13.04
EOM	14.56	14.20	13.48	13.13	12.30	13.10	13.25	12.74	14.35	12.84	13.88	13.28

WTR YR 1979 HIGH 11.79 MAR 6 LOW 14.94 OCT 4

LANCASTER COUNTY

400506076235201. Local number, LN 514.

LOCATION.--Lat 40°05'06", long 76°23'52", Hydrologic Unit 02050306, near Landisville.

Owner: Benjamin Landis.

AQUIFER.--Shale and limestone of Kinzers Formation of Lower Cambrian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (15 cm), depth 260 ft (79.2 m), casing information not available.

DATUM.--Altitude of land-surface datum is 415 ft (126 m). Measuring point: Top of casing, 1 ft (30 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--January 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.92 ft (5.16 m) below land-surface datum, Mar. 28, 1978; lowest, 35.47 ft (10.811 m) below land-surface datum, Nov. 15, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.08	33.26	33.15	31.14	30.64	30.60	32.16	32.42	31.72	32.81	32.76	32.99
10	33.09	33.32	32.69	29.64	31.86	28.80	31.86	32.64	32.18	32.89	32.90	32.81
15	33.15	33.28	33.09	30.11	32.49	28.82	31.27	32.68	32.53	32.95	32.78	32.89
20	33.13	33.26	33.23	31.49	32.81	30.08	31.08	32.71	32.60	32.95	32.96	32.95
25	33.18	33.24	32.66	27.35	32.18	31.15	31.74	31.62	32.72	32.48	32.91	32.24
EOM	33.21	33.22	32.83	28.88	---	32.08	32.11	30.90	32.78	32.77	32.93	32.57

WTR YR 1979 HIGH 27.35 JAN 25 LOW 33.32 NOV 10

LUZERNE COUNTY

411800076162501. Local number, LU 243.

LOCATION.--Lat 41°18'00", long 76°16'25", Hydrologic Unit 02050107, at Ricketts Glen State Park, Fairmount Township. Owner: Commonwealth of Pennsylvania.

AQUIFER.--Sandstone of Catskill Formation of Upper Devonian age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (15 cm), depth 160 ft (48.8 m), cased to 40 ft (12.2 m), open hole.

DATUM.--Altitude of land-surface datum is 1,266 ft (386 m). Measuring point: Top of casing, 1.3 ft (40 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--November 1948 to July 1950, July 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.08 ft (10.997 m) below land-surface datum, March 31, 1950; lowest, 58.70 ft (17.891 m) below land-surface datum, Oct. 5, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.68	53.83	52.82	50.25	51.29	51.22	51.90	52.06	51.16	54.16	55.06	55.43
10	53.98	54.08	51.97	50.20	51.96	49.20	51.53	51.82	51.79	54.46	55.13	54.30
15	54.40	54.23	51.73	50.97	52.43	50.26	51.03	52.36	52.47	54.98	54.99	54.50
20	54.20	53.88	52.12	51.19	52.92	51.05	51.38	53.00	---	54.80	55.26	54.60
25	54.56	53.22	52.36	50.39	---	51.61	52.04	52.42	53.45	54.81	---	53.84
EOM	53.89	52.75	52.52	50.63	52.11	51.93	52.31	51.13	53.93	55.05	55.34	53.97

WTR YR 1979 HIGH 48.72 MAR 8 LOW 55.60 SEP 3

LYCOMING COUNTY

412427076594401. Local number, LY 112.

LOCATION.--Lat 41°24'27", long 76°59'44", Hydrologic Unit 02050206, at State Game Land Number 133, near Trout Run. Owner: U.S. Geological Survey.

AQUIFER.--Shale of Catskill Formation of Upper Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 200 ft (61 m), cased to 23 ft (7.0 m), open hole.

DATUM.--Altitude of land-surface datum is 1,400 ft (427 m). Measuring point: Top of plywood cover, 3.07 ft (94 cm) above land-surface datum.

REMARKS.--None.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 76.10 ft (23.195 m) below land-surface datum, June 23, 1972; lowest, 93.45 ft (28.483 m) below land-surface datum, March 20, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	87.81	88.05	87.15	84.23	86.68	82.39	86.50	87.88	87.20	89.28	86.33	86.77
10	88.32	88.67	85.48	85.45	87.67	---	85.50	88.35	88.02	89.53	87.33	85.21
15	88.42	89.17	86.11	86.37	88.28	---	85.35	88.85	88.45	89.89	86.54	86.59
20	88.10	88.57	87.10	86.81	89.01	---	86.50	89.23	89.08	89.93	87.38	87.35
25	88.37	87.84	87.64	83.90	87.97	---	87.31	88.66	89.46	88.91	87.90	87.29
EOM	87.86	87.39	88.24	85.47	85.89	86.34	87.60	86.40	89.71	88.64	85.82	87.09

WTR YR 1979 HIGH 82.39 MAR 5 LOW 90.11 JUL 23

MIFFLIN COUNTY

389

404210077331001. Local number, MF 1.

LOCATION.--Lat 40°42'10", long 77°33'10", Hydrologic Unit 02050304, at village of Naginey.

Owner: Charles C. Naginey.

AQUIFER.--Limestone of Nealmont Formation of Middle Ordovician age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in (91 cm), depth 28 ft (8.5 m), cased with stone.

DATUM.--Altitude of land-surface datum is 680 ft (207 m). Measuring point: Top of wooden cover at land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--May 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.03 ft (1.228 m) below land-surface datum, June 26, 1972; lowest measured, 24.94 ft (7.602 m) below land-surface datum, Sep. 10, 1973.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 5	23.20	DEC 4	21.98	FEB 5	18.55	APR 2	17.62	JUNE 4	16.96	AUG 6	21.91
9	23.95	11	18.92	12	18.57	10	17.19	11	10.80	13	15.96
16	23.96	18	19.95	21	18.20	16	17.97	18	16.20	20	18.80
23	23.98	26	16.99	26	10.98	23	18.98	26	20.78	27	20.09
31	23.96	JAN 1	19.94	MAR 5	13.94	30	18.90	JULY 2	15.60	SEP 4	20.92
NOV 6	23.98	8	17.92	12	15.32	MAY 7	18.40	9	19.95	10	17.10
13	24.90	15	18.99	19	17.50	15	18.92	16	20.60	17	18.70
20	22.93	25	15.56	26	16.93	21	19.34	23	21.21	24	17.98
27	23.93	29	14.50			28	13.93	30	20.92		

WTR YR 1979 HIGH 10.80 June 11 LOW 24.90 Nov. 13

PERRY COUNTY

402339077074502. Local number, PE 518.

LOCATION.--Lat 40°23'39", long 77°07'45", Hydrologic Unit 02050305, at State Game Land Number 256.

Owner: U.S. Geological Survey.

AQUIFER.--Shale of Mahantango Formation of Middle Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 138 ft (42.1 m), cased 17 ft (5.2 m), open hole.

DATUM.--Altitude of land-surface datum is 590 ft (180 m). Measuring point: Top of plywood cover, 3.05 ft (93 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.48 ft (2.89 m) below land-surface datum, May 17, 1978; lowest, 19.51 ft (5.947 m) below land-surface datum, August 19, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.21	12.41	11.73	10.39	10.91	10.23	9.99	11.25	10.62	11.32	11.44	11.60
10	12.42	12.52	11.40	10.41	---	10.07	10.47	11.17	11.14	11.42	11.53	10.83
15	12.53	12.54	11.39	10.96	---	10.78	10.60	11.39	11.12	11.69	11.51	11.23
20	12.42	12.48	11.73	11.02	---	11.01	10.62	11.38	11.74	11.84	11.25	11.74
25	12.41	12.93	11.16	9.76	---	10.85	11.15	10.24	11.36	11.54	11.17	11.03
EOM	12.42	12.43	10.94	10.35	10.52	10.97	11.13	10.69	11.25	11.32	11.39	11.35

WTR YR 1979 HIGH 9.76 JAN 25 LOW 12.95 OCT 1

POTTER COUNTY

414640077493801. Local number, PO 72.

LOCATION.--Lat 41°46'40", long 77°49'38", Hydrologic Unit 02050205, at Denton Hill State Park.

Owner: U.S. Geological Survey.

AQUIFER.--Shale of Catskill Formation of Upper Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 110 ft (33.5 m), cased to 21 ft (6.4 m), open hole.

DATUM.--Altitude of land-surface datum is 1,810 ft (552 m). Measuring point: Top of plywood cover, 1.10 ft (34 cm) above land-surface datum.

REMARKS.--None.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.20 ft (1.585 m) below land-surface datum, March 23, 1968; lowest, 29.94 ft (9.13 m) below land-surface datum, August 24, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.65	22.43	---		---	17.76	16.02	20.57	21.22	27.11	27.60	29.42
10	28.97	23.53	---		---	13.95	17.39	21.15	22.80	27.82	28.67	26.79
15	21.65	24.49	---		---	14.48	15.16	18.79	23.19	28.23	29.00	27.17
20	23.39	19.60	20.60		---	14.59	17.80	20.99	24.72	27.97	29.65	28.71
25	24.77	19.47	---		---	---	19.91	21.66	26.27	28.60	29.71	29.03
EOM	21.05	20.39	---		22.60	15.99	20.13	18.97	26.54	28.68	29.07	26.94

WTR YR 1979 HIGH 12.10 MAR 6 LOW 29.94 AUG 24

SNYDER COUNTY

403939076591001. Local number, SN 130.

LOCATION.--Lat 40°39'39", long 76°59'10", Hydrologic Unit 02050301, at State Game Land Number 194.

Owner: U.S. Geological Survey.

AQUIFER.--Shale of Marine Beds of Chemung Formation of Upper Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 100 ft (30.5 m), cased to 40 ft (12.2 m), open hole.

DATUM.--Altitude of land-surface datum is 740 ft (226 m). Measuring point: Top of plywood cover, 3.55 ft (1.08 m) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.45 ft (3.795 m) below land-surface datum, Sept. 26, 1975; lowest, 19.45 ft (5.928 m) below land-surface datum, Feb. 8, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.43	19.36	18.65	18.18	18.93	---	18.50	19.08	18.76	19.19	19.33	19.29
10	19.38	19.41	18.29	18.38	19.09	---	18.63	19.12	18.97	19.23	19.33	18.93
15	19.39	19.45	18.91	18.81	19.11	---	18.64	19.12	19.06	19.23	18.89	19.01
20	19.36	19.41	19.08	18.98	19.18	---	18.74	19.15	19.13	19.27	19.15	19.13
25	19.39	19.30	18.61	17.38	18.89	---	18.94	16.53	19.18	19.32	19.24	18.83
EOM	19.35	19.22	18.80	18.63	18.38	18.89	19.05	18.25	19.10	19.28	19.24	19.07

WTR YR 1979 HIGH 16.53 MAY 25 LOW 19.47 NOV 17

SULLIVAN COUNTY

413026076352901. Local number, SU 34.

LOCATION.--Lat 41°30'26", long 76°35'29", Hydrologic Unit 02050206, near Forksville.

Owner: U.S. Geological Survey.

AQUIFER.--Shale of Catskill Formation of Upper Devonian age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in (15 cm), depth 50 ft (15.2 m), cased to 34 ft (10.4 m), open hole.

DATUM.--Altitude of land-surface datum is 1,060 ft (323 m). Measuring point: Top of casing, 2.00 ft (61 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--April 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.42 ft (2.262 m) below land-surface datum, June 23, 1972; lowest, 31.12 ft (9.485 m) below land-surface datum, Sept. 4, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.98	26.34	26.49	22.48	26.23	17.97	25.92	26.72	25.44	28.38	29.15	28.25
10	26.27	27.05	22.95	24.01	26.73	22.74	24.35	27.00	26.36	28.70	29.43	25.32
15	24.96	27.82	25.47	25.08	27.38	24.56	23.92	27.42	26.79	28.80	28.90	26.79
20	25.25	27.14	26.45	26.24	27.90	25.85	25.60	---	---	28.40	29.10	27.50
25	26.46	26.63	26.82	16.44	25.94	26.10	26.48	---	27.98	29.00	29.16	---
EOM	25.44	26.39	27.33	24.76	23.98	26.08	26.41	---	28.27	29.17	26.89	---

WTR YR 1979 HIGH 12.02 MAR 6 LOW 29.43 AUG 10 AND OTHERS

SUSQUEHANNA COUNTY

415323077451301. Local number, SQ 61.

LOCATION.--Lat 41°53'23", long 77°45'13", Hydrologic Unit 02050101, at State Game Land Number 175.

Owner: U.S. Geological Survey.

AQUIFER.--Sandstone and shale of Susquehanna Group of Upper Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 175 ft (53.3 m), cased to 80 ft (24.4 m), open hole.

DATUM.--Altitude of land-surface datum is 1,270 ft (387 m). Measuring point: Top of casing, 3.0 ft (91 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--July 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.49 ft (6.55 m) below land-surface datum, Apr. 3, 1978; lowest, 37.11 ft (11.311 m) below land-surface datum, Oct. 22, 1973.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.48	32.71	31.98	25.39	28.67	26.84	29.66	27.22	27.30	---	---	34.73
10	34.32	33.29	31.00	25.57	29.98	23.58	29.32	28.17	28.26	---	---	33.30
15	34.01	33.87	29.17	27.73	---	25.99	27.51	29.49	27.94	---	---	33.48
20	33.78	33.81	30.21	28.86	---	28.08	28.15	30.65	29.37	---	---	33.82
25	33.86	32.73	30.41	27.86	32.14	29.37	29.27	30.68	---	---	34.77	33.54
EOM	33.23	32.06	31.16	26.67	29.50	29.73	26.71	27.17	---	---	34.62	33.51

WTR YR 1979 HIGH 22.95 MAR 8 LOW 34.82 AUG 26 AND OTHERS

TIOGA COUNTY

41451007733301. Local number, TI 1.

LOCATION.--Lat 41°45'10", long 77°33'33", Hydrologic Unit 02050205, at Gaines.

Owner: Mrs. Ruth K. Wilson.

AQUIFER.--Alluvium of Holocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 30 in (76 cm), depth 23 ft (7.0 m), cased with stone.

DATUM.--Altitude of land-surface datum is 1,290 ft (393 m). Measuring point: Top of wooden cover, 3.80 ft (1.2 m) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--August 1935 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.17 ft (1.271 m) below land-surface datum, April 22, 1961; lowest measured, 22.04 ft (6.718 m) below land-surface datum, Nov. 6, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 7	18.80	DEC 2	18.50	FEB 3	6.80	APR 7	12.70	JUN 2	17.95	AUG 4	18.78
14	18.64	9	17.40	10	6.70	14	11.00	30	18.86	11	18.95
21	18.40	16	17.60	17	6.75	21	13.64	JUL 7	18.96	18	19.10
28	17.90	23	17.05	24	6.70	28	15.90	14	18.97	25	19.55
NOV 4	18.17	30	17.00	MAR 3	6.90	MAY 5	16.70	21	18.85	SEP 1	19.57
11	18.80	JAN 6	16.98	10	5.50	12	17.50	28	18.80	8	17.35
18	18.75	13	17.00	17	8.08	19	18.07			15	18.50
25	18.50	20	17.00	24	9.00	26	17.35			22	18.85
		27	5.90	31	12.50						

WTR YR 1979 HIGH 5.50 March 10 LOW 19.57 SEP 1

TIOGA COUNTY

414513077333701. Local number, TI 100.

LOCATION.--Lat 41°45'13", long 77°33'37", Hydrologic Unit 02050205, at State Game Land Number 208.

Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Oswayo Formation of Upper Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 77 ft (23.5 m), cased to 67 ft (20.4 m), open hole.

DATUM.--Altitude of land-surface datum is 1,310 ft (399 m). Measuring point: Top of casing, 4.0 ft (1.2 m) above land-surface datum.

REMARKS.--Water-quality records for 1973-75 are available in files of district office.

PERIOD OF RECORD.--July 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.02 ft (9.45 m) below land-surface datum, Mar. 27, 1978; lowest, 34.66 ft (10.564 m) below land-surface datum, Oct. 18, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.77	32.72	32.87	32.28	32.04	31.48	31.60	32.17	32.53	32.99	33.14	33.34
10	32.87	32.95	32.72	32.37	32.34	31.17	31.69	32.21	32.64	32.97	33.15	33.20
15	32.59	32.99	32.55	32.53	32.37	31.64	31.36	32.49	32.79	33.02	33.32	33.23
20	32.62	33.19	32.75	32.35	32.54	31.53	31.73	32.35	32.88	33.09	33.35	33.29
25	32.63	32.89	32.55	31.83	32.30	31.40	31.72	32.30	32.93	33.20	33.27	33.42
EOM	32.78	32.89	32.74	31.78	32.44	31.58	32.12	32.65	32.69	33.06	33.35	33.34

WTR YR 1979 HIGH 31.17 MAR 10 LOW 33.47 SEP 27

TIOGA COUNTY

415422077091101. Local number, TI 101.

LOCATION.--Lat 41°54'22", long 77°09'11", Hydrologic Unit 02050104, at Tioga.

Owner: U.S. Corps of Engineers.

AQUIFER.--Shale of Devonian marine.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in (15 cm), depth 32 ft (9.75 m), cased to 32 ft (9.75 m), open end.

DATUM.--Altitude of land surface datum is 1,070 ft (326 m). Measuring point: Top of casing 2.50 ft (76 cm) above land surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 13.49 ft (4.11 m) below land-surface datum, March 23, 1978; lowest water level, 18.47 ft (5.63 m) below land-surface datum, June 7, 1973.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.02	16.44	17.21	15.08	15.32	---	14.83	14.78	15.90	16.24	16.33	16.93
10	17.25	16.68	---	15.39	15.72	---	14.59	14.77	16.02	16.33	16.54	16.35
15	16.75	16.90	16.35	15.68	15.96	---	14.49	14.74	16.12	16.44	16.76	16.51
20	16.41	16.78	---	15.78	---	14.98	14.67	15.15	16.26	16.48	16.94	16.68
25	16.58	16.83	16.35	15.55	---	---	14.77	15.15	16.07	16.58	---	16.94
EOM	16.25	17.01	16.49	15.13	---	14.95	14.78	---	16.20	16.60	16.66	16.96

WTR YR 1979 HIGH 14.45 APR 12 LOW 17.33 OCT 14

TIOGA COUNTY

415411077083901. Local number, TI-102

LOCATION.--Lat 41°54'11", long 77°08'39", Hydrologic Unit 02050104, at Tioga.

Owner: U.S. Corps of Engineers.

AQUIFER.--Outwash.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in (15 cm), depth 26 ft (7.92 m), cased to 26 ft (7.92 m) open end.

DATUM.--Altitude of land-surface datum is 1,060 ft (323 m). Measuring point: Top of casing 2.50 ft (76 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 6.72 ft (2.05 m) below land-surface datum, April 1, 1978 and April 19, 1974; lowest 10.64 ft (3.24 m) below land-surface datum, Sept. 13, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.72	9.59	9.94	9.28	8.86	7.43	8.00	8.31	8.68	9.12	9.33	9.78
10	9.82	9.76	9.81	9.17	9.07	7.66	7.98	8.45	8.81	9.23	9.47	9.56
15	9.76	9.86	9.63	9.23	---	7.67	7.75	8.48	8.88	9.37	9.63	9.62
20	9.60	9.81	9.67	9.27	---	7.71	7.91	8.59	9.00	9.38	9.75	9.70
25	9.67	9.83	9.75	9.20	---	---	8.04	8.62	8.95	9.50	---	9.83
EOM	9.49	9.90	9.89	8.71	8.88	7.96	8.16	---	9.03	9.48	9.67	9.85

WTR YR 1979 HIGH 6.94 MAR 7 LOW 10.00 DEC 7

TIOGA COUNTY

415407077080401. Local number, TI-103

LOCATION.--Lat 41°54'07", long 77°08'04", Hydrologic Unit 02050104, at Tioga.

Owner: U.S. Corps of Engineers.

AQUIFER.--Outwash.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in (15 cm), depth 22 ft (6.71 m), cased to 22 ft (6.71 m) open end.

DATUM.--Altitude of land-surface datum is 1,020 ft (311 m). Measuring point: Top of casing 2.50 ft (76 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 6.20 ft (1.89 m) below land-surface datum, March 30, 1978; lowest, 13.02 ft (3.97 m) below land-surface datum, Oct. 16, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		10.38	10.33	8.57	8.78	8.13		9.41	9.81	10.23	10.31	10.91
10		10.41	9.95	8.87	9.07	7.49		9.61	9.91	10.35	10.45	10.61
15		10.44	9.91	8.92	9.30	6.65		9.64	9.91	10.42	10.49	10.74
20		10.33	9.97	8.94	9.48	7.85		9.80	10.14	10.46	10.74	10.77
25		10.33	10.03	8.70	8.77	---		9.86	10.09	10.48	---	10.86
EOM		10.33	10.02	8.34	8.76	---		9.56	10.24	10.47	10.82	10.86

WTR YR 1979 HIGH 6.65 MAR 14 AND OTHERS LOW 10.91 SEP 5 AND OTHERS

TIOGA COUNTY

415129077141601. Local number, TI-104

LOCATION.--Lat 41°51'29", long 77°14'16", Hydrologic Unit 0205014, at Crooked Creek.

Owner: U.S. Corps of Engineers.

AQUIFER.--Outwash.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in (15 cm), depth 27 ft (8.23 m), cased to 27 ft (8.23 m), open end.

DATUM.--Altitudes of land-surface datum is 1,130 ft (344 m). Measuring point: Top of casing, 2.50 ft (76 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15 ft (4.57 m) below land surface datum, April 14, 15, 16, 1978; lowest water level, 20.72 ft (6.32 m) below land-surface datum, Nov. 6, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.15	19.45	19.82	19.50	18.47	18.58	16.46	16.53	18.01	18.20	18.93	19.62
10	19.26	20.28	19.80	19.19	18.46	17.62	16.46	16.67	17.92	18.31	19.05	19.62
15	19.32	20.01	19.68	19.01	18.54	17.03	16.41	16.79	17.91	18.44	19.17	19.64
20	19.34	19.91	19.66	18.95	18.65	16.78	16.36	16.93	17.96	18.58	19.30	19.69
25	19.35	19.85	19.66	18.92	18.68	16.55	16.37	17.07	18.04	18.73	19.43	19.79
EOM	19.40	19.83	19.70	18.61	18.67	---	16.43	18.30	18.14	18.86	19.53	19.86

WTR YR 1979 HIGH 16.36 APR 20 AND OTHERS LOW 20.72 NOV 6

TIOGA COUNTY

414835077045701. Local number, TI-105

LOCATION.--Lat 41°48'35", long 77°04'57", Hydrologic Unit 02050104, at Mansfield.

Owner: U.S. Corps of Engineers.

AQUIFER.--Outwash.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in (15 cm) depth 29 ft (8.84 m), cased to 29 ft (8.84 m), open end.

DATUM.--Altitude of land-surface datum is 1,120 ft (341 m). Measuring point: Top of casing, 2.40 ft (73 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.53 ft (77 cm) below land-surface datum, Oct. 1, 1975; lowest 9.50 ft (2.90 m) below land-surface datum, Nov. 6, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.90	7.79	8.24	7.92	6.74	6.85	6.43	6.91	8.05	7.86	8.06	8.51
10	7.94	8.80	8.23	7.66	---	5.70	6.59	7.05	7.83	7.90	8.10	8.52
15	7.98	8.44	8.14	7.55	---	5.61	6.60	7.13	7.74	8.00	8.18	8.54
20	7.91	8.30	8.10	7.51	---	5.80	6.63	7.20	7.74	8.03	8.28	8.56
25	7.92	8.25	8.09	7.47	---	6.01	6.70	7.28	7.77	8.08	8.36	8.60
EOM	7.84	8.24	8.12	6.81	7.17	6.24	6.80	7.21	---	8.06	8.45	8.62

WTR YR 1979 HIGH 4.22 MAY 21 LOW 9.50 NOV 6

TIOGA COUNTY

415931077083701. Local number, TI-108

LOCATION.--Lat 41°59'31", long 77°08'37", Hydrologic Unit 02050104, at Lawrenceville.

Owner: U.S. Corps of Engineers.

AQUIFER.--Shale of Devonian Marine.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (15 cm), depth 102 ft (31.1 m), cased to 75 ft (22.9 m), open hole.

DATUM.--Altitude of land-surface datum is 1,020 ft (311 m). Measuring point: Top of casing, 9.54 ft (2.91 m), above land surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 16.11 ft (4.91 m) below land-surface datum, March 28, 1978; lowest, 20.22 ft (6.16 m) below land-surface datum, Sept. 11, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	19.03	19.25	18.43	18.14	17.47	17.07	17.83	18.47	18.90	19.62	20.31
10	19.63	19.21	19.02	18.52	18.37	16.40	16.92	18.05	18.64	19.09	19.77	19.93
15	19.30	19.33	19.00	18.54	18.44	16.62	16.84	18.22	18.70	19.32	19.97	20.00
20	19.10	19.27	18.99	18.56	18.69	16.80	17.07	18.36	18.97	19.48	20.09	20.10
25	19.10	19.23	19.02	18.33	18.29	16.63	17.41	18.35	18.91	19.59	---	20.23
EOM	18.98	19.29	19.20	17.88	18.24	16.99	17.63	18.34	18.92	19.62	20.21	20.18

WTR YR 1979 HIGH 16.31 MAR 11 LOW 20.31 SEP 5

TIOGA COUNTY

415921077090201. Local number, TI-109

LOCATION.--Lat 41°59'21", long 77°09'02", Hydrologic Unit 02050104, at Lawrenceville.

Owner: U.S. Corps of Engineers.

AQUIFER.--Outwash.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in (15 cm), depth 17 ft (5.18 m), cased to 17 ft (5.18 m), open end.

DATUM.--Altitude of land-surface datum is 1,000 ft (304.8 m). Measuring point: Top of casing, 3.40 ft (1.04 m) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 3.55 ft (1.08 m) below land-surface datum, March 6, 1979; lowest, 9.22 ft (2.81 m) below land-surface datum, Sept. 18, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.60	7.38	7.66	5.90	---	4.30	6.18	6.67	7.13	6.85	7.24	7.72
10	8.50	7.59	7.20	6.34	---	4.25	---	6.83	7.29	7.11	7.46	7.29
15	7.85	7.71	7.21	6.54	---	5.47	---	6.88	7.22	7.35	7.66	7.08
20	7.51	7.69	7.18	6.68	---	5.82	6.19	6.98	7.44	7.47	7.78	7.25
25	7.48	7.66	7.30	---	---	5.95	6.36	7.14	7.10	7.54	---	7.34
EOM	7.24	7.67	7.31	---	6.22	6.20	6.55	6.98	6.84	7.53	7.60	7.18

WTR YR 1979 HIGH 3.55 MAR 6 LOW 8.68 OCT 1

TIOGA COUNTY

415834077135601. Local number, TI-110

LOCATION.--Lat 41°58'34", long 77°13'56", Hydrologic Unit 02050104, at Nelson.

Owner: U.S. Corps of Engineers.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in (15 cm), depth 33 ft (10.05 m), cased to 33 ft (10.05 m), open end.

DATUM.--Altitude of land-surface datum is 1,110 ft (338 m). Measuring point: Top of casing, 3.10 ft (94 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 1.32 ft (40 cm) below land-surface datum Nov. 16, 1977; lowest, 12.16 ft (3.71 m) below land-surface datum, Sept. 30, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.89	4.52	6.34	5.30	1.96	2.13	2.22	2.32	4.32	4.75	5.24	12.11
10	3.99	5.89	6.41	4.40	2.00	2.10	2.25	2.37	4.39	4.82	5.34	12.12
15	4.10	5.99	6.47	4.32	2.04	2.11	2.25	2.44	4.46	4.90	5.45	12.12
20	4.20	6.09	6.54	4.32	2.12	2.13	2.26	2.58	4.53	4.99	5.61	12.12
25	4.27	6.17	6.59	4.18	---	2.15	2.28	2.67	4.62	5.05	5.96	12.15
EOM	4.40	6.26	6.68	1.92	2.14	2.19	2.30	4.27	4.70	5.16	10.99	12.16

WTR YR 1979 HIGH 1.92 JAN 30 AND OTHERS LOW 12.16 SEP 30

UNION COUNTY

405928077115501. Local number, UN 51.

LOCATION.--Lat 40°59'28", long 77°11'55", Hydrologic Unit 02050206, at Raymond B. Winter State Park.

Owner: U.S. Geological Survey.

AQUIFER.--Shale of Reedsville Formation of Upper Ordovician age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 115 ft (35.1 m), cased to 91 ft (27.7 m), open hole.

DATUM.--Altitude of land-surface datum is 1,550 ft (472 m). Measuring point: Top of plywood cover, 3.58 ft (1.09 m) above land-surface datum.

REMARKS.--None.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 25.26 ft (7.70 m) below land-surface datum, Apr. 10, 1978; lowest, 41.50 ft (12.649 m) below land-surface datum, Nov. 6, 7, 8, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.80	41.16	41.29	38.96	34.26	38.07	34.80	37.33	34.79	39.08	40.23	39.99
10	40.88	41.22	41.09	37.17	35.84	29.95	34.46	37.77	35.79	39.34	40.35	33.72
15	40.95	41.28	40.73	36.34	36.93	31.09	34.92	---	36.87	39.61	40.40	33.49
20	41.02	41.29	40.34	36.60	37.80	33.33	35.42	---	37.68	39.73	40.47	35.02
25	41.02	41.32	39.88	36.69	---	34.98	35.99	38.33	38.29	39.89	40.48	36.07
EOM	41.10	41.32	39.63	32.73	38.33	34.49	36.75	35.30	38.73	40.08	40.33	36.67

WTR YR 1979 HIGH 29.62 MAR 11 LOW 41.34 NOV 28 AND OTHERS

YORK COUNTY

400320076451501. Local number, YO 180.

LOCATION.--Lat 40°03'20", long 76°45'15", Hydrologic Unit 02050306, near Zions View.

Owner: New York Wire Cloth Company.

AQUIFER.--Shale of New Oxford Formation of Upper Triassic age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (20 cm), depth 490 ft (149 m), casing information not available.

DATUM.--Altitude of land-surface datum is 360 ft (110 m). Measuring point: Top of casing at land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--March 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.89 ft (6.06 m) below land-surface datum, Apr. 16, 1979; lowest, 37.55 ft (11.445 m) below land-surface datum, Nov. 3, 4, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.11	27.96	27.36	---	21.19	21.83	21.01	21.35	22.55	24.60	23.77	24.60
10	27.38	28.31	26.52	---	21.86	21.09	20.55	22.09	22.92	24.93	23.28	23.20
15	27.41	28.58	25.42	---	22.22	21.05	19.90	22.63	23.10	25.24	23.05	22.67
20	27.31	28.61	25.06	---	22.99	20.91	19.90	23.00	23.52	25.52	23.28	22.87
25	27.43	28.37	24.63	20.36	22.61	21.06	20.20	22.88	24.06	25.01	23.82	21.94
EOM	27.84	28.13	23.87	20.76	---	21.41	20.69	22.67	24.24	24.37	24.07	21.25

WTR YR 1979 HIGH 19.89 APR 16 LOW 28.66 NOV 16

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound 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}	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	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	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	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}	megagrams (Mg) or metric tons

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