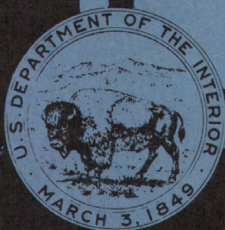
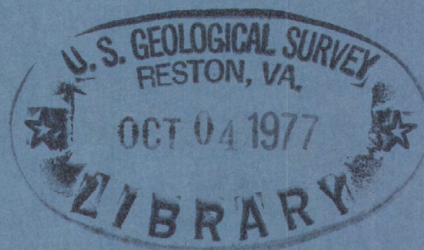


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# Water Resources Data for Pennsylvania Water Year 1976

Volume 2. Susquehanna and Potomac River Basins



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT PA-76-2

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



# CALENDAR FOR WATER YEAR 1976

1975

## OCTOBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## NOVEMBER

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30						

## DECEMBER

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1976

## JANUARY

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## FEBRUARY

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## MARCH

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## APRIL

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## JUNE

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## JULY

S	M	T	W	T	F	S
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18	19	20	21	22	23	24
25	26	27	28	29	30	31

## AUGUST

S	M	T	W	T	F	S
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8	9	10	11	12	13	14
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22	23	24	25	26	27	28
29	30	31				

## SEPTEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		



# **Water Resources Data for Pennsylvania Water Year 1976**

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**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

V. E. McKelvey, Director

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

1977



#### 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 N. H. Beamer, District Chief, and J. T. Callahan, 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 J. S. Cragwall, Jr., Chief Hydrologist, U.S. Geological Survey, and G. W. Whetstone, 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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17b. Identifiers/Open-Ended Terms			
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(Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (t) water temperature, (s) sediment)

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## INTRODUCTION

Water resources data for the 1976 water year for Pennsylvania consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This report contains discharge records for 92 gaging stations; stage and contents for 10 lakes and reservoirs; water quality for 38 gaging stations, 15 partial-record stations, and water levels for 30 observation wells. Also included are 24 crest-stage partial-record stations and 46 low-flow partial-record stations. Additional water data were collected at various sites, not involved in the systematic data-collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Pennsylvania.

Since 1962, the Pennsylvania Department of Environmental Resources (DER) has collected and analyzed water-quality samples throughout the state as part of the Pennsylvania Water-Quality Network<sup>1/</sup>. Beginning with the 1976 water year, these water-quality data will be included in the "Water Resources Data for Pennsylvania" to provide users with a more comprehensive collection of water-resources data for the state.

This report contains records of DER samples for 29 gaging stations, 28 water-quality stations, and 56 partial-record stations. All DER analyses are distinguished from USGS analyses by the value 9813 under the column heading "Code for Agency Collecting Sample".

At this time records of Pennsylvania Water-Quality Network samples collected prior to October 1975 are available only through the DER. Historical data provided by the DER will be published in the future as a separate data report. All requests and questions concerning the data should be directed to the Pennsylvania Department of Environmental Resources, Bureau of Water-Quality Management, 14th Floor, Fulton Building, P.O. Box 2063, Harrisburg, Pennsylvania 17120.

Records of discharge or state 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 of the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Virginia 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report PA-76-2." Water-Data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22161.

## 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, M. K. Goddard, secretary, through the following: Office of Resources Management, C. H. McConnell, deputy secretary; State Soil and Water Conservation Commission, 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.

State Department of Transportation, J. B. Wilson, secretary, through the Bureau of Materials Testing and Research, L. D. Sandvig, director.

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

City of Harrisburg, H. A. Swenson, mayor.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 39 gaging stations. State Department of Environmental Resources, Bureau of Water-Quality Management, in providing records for 113 water quality stations, the National Weather Service, NOAA, U.S. Department of Commerce.

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.

<sup>1/</sup> Commonwealth of Pennsylvania, Department of Environmental Resources, 1975, Pennsylvania Water-Quality Network - Sampling Station Descriptions: Publication No. 33, 62 p.



## HYDROLOGIC CONDITIONS

Runoff for the 1976 water year was above average. At the index station used for the Susquehanna River basin, Susquehanna River at Harrisburg, Pa. (01570500) streamflow was 116 percent of the 1931-60 median.

Excessive runoff occurred during October, February and August. This resulted in lowland flooding, flooded basements, washed-out bridges, and other property damage at various sites in the Juniata River and Susquehanna River basins. It was otherwise normal in the basin except for some deficiencies during April and May.

Figure 1 on page 3, for which records for the Susquehanna River at Harrisburg were used, shows a comparison of the monthly and yearly mean discharges for the 1976 water year with the median discharges for the standard reference period, 1931-60.

Ground-water levels of the 1976 water year were mostly above their monthly means in October and November. There was a general decline in the water levels during the period December through May except during February. Recovery started in June and continued through September.

Ground-water levels in October and November of 1975 were above those in the corresponding months in 1974. A general decline in the water levels started in December and continued through June except during February. Recovery seemed to be occurring during the last quarter.

Comparison of 1976 water levels in network observation wells with a) 1975 water levels and b) monthly mean water levels for period of record is shown in figure 2.

## DEFINITION OF TERMS

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

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

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.

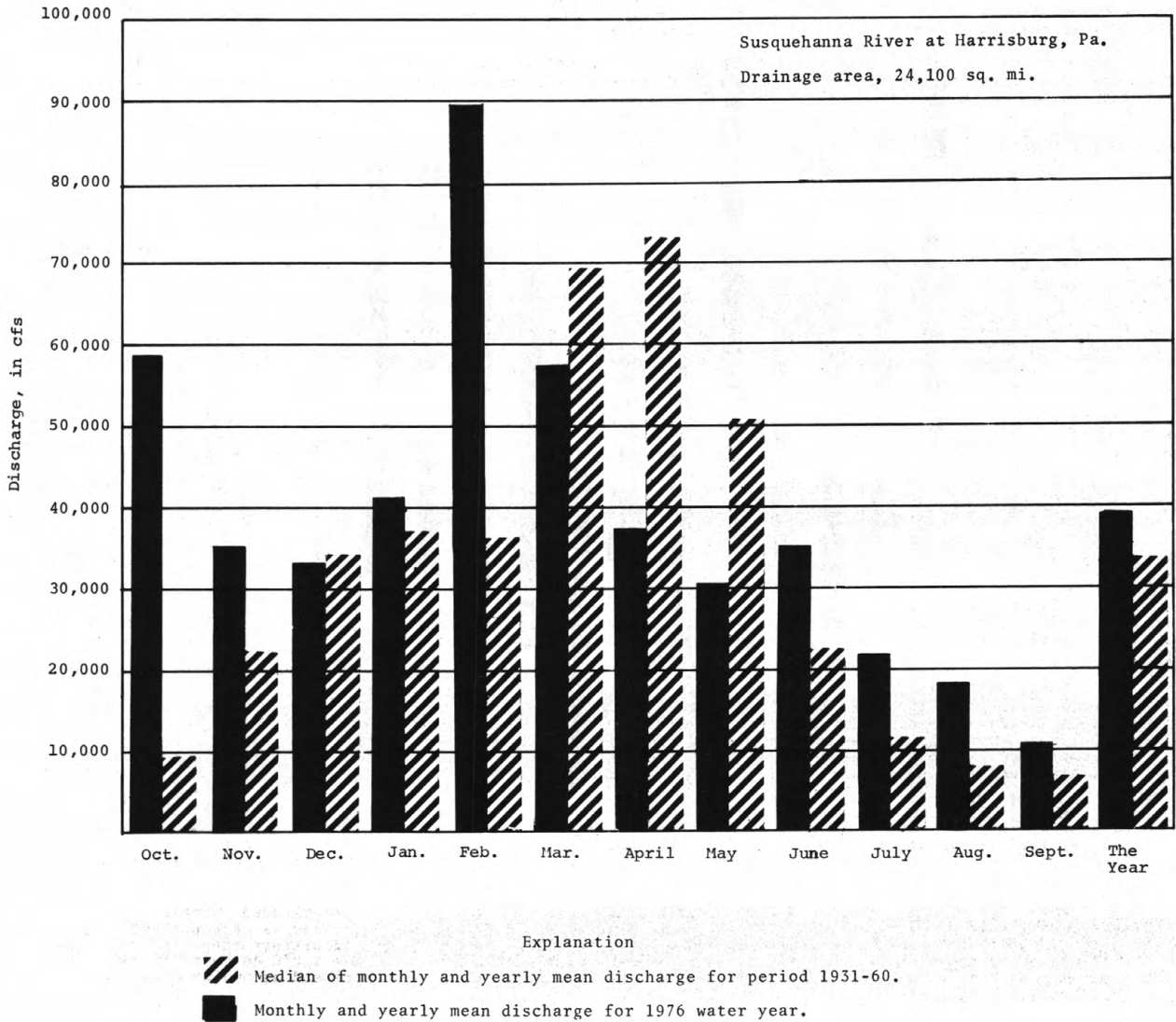


Figure 1.--Comparison of discharge at Susquehanna River at Harrisburg during 1976 water year with median discharge for period 1931-60.



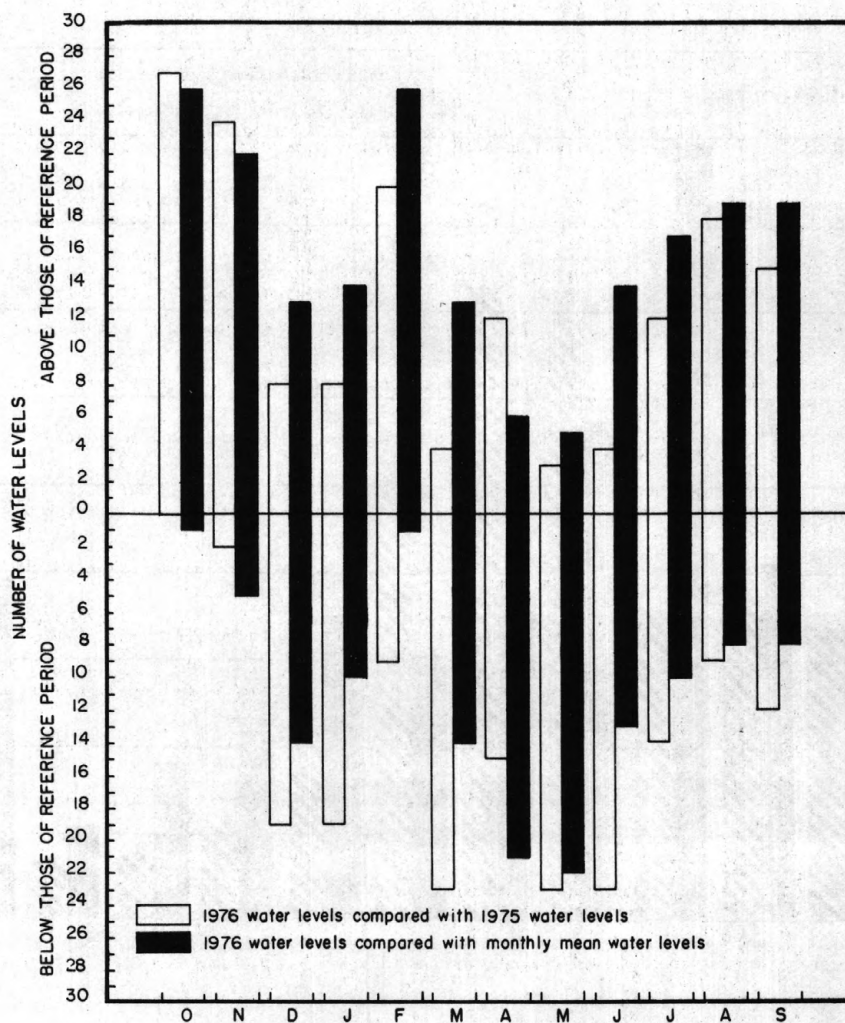


Figure 2.--Comparison of 1976 water levels in network observation wells with  
a) 1975 water levels and  
b) monthly mean water levels for period of record.

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/m<sup>3</sup>), and periphyton and benthic organisms in grams per square meter (g/m<sup>2</sup>).

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

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

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

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

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

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

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

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

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

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

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

Cubic foot per second (FT<sup>3</sup>/S, ft<sup>3</sup>/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

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

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

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

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

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

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

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



Drainage area of a stream at a 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 ( $\text{CaCO}_3$ ).

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

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

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

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

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

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

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters ( $\text{m}^2$ ), 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 .....	.004 - .062	Sedimentation.
Sand .....	.062 - 2.0	Sedimentation or sieve.
Gravel .....	2.0 - 64.0	Sieve.

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

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

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

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

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

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

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

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Substrate is the physical surface upon which an organism lived.

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

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

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time 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 (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45 micrometer filter.

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

Kingdom.....	Animal
Phylum.....	Arthropoda
Class.....	Insecta
Order.....	Ephemeroptera
Family.....	Ephemeridae
Genus.....	Hexagenia
Species.....	<u>Hexagenia limbata</u>

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

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

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

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

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

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 unstream 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 within a 1-second grid. See figure 3 below.

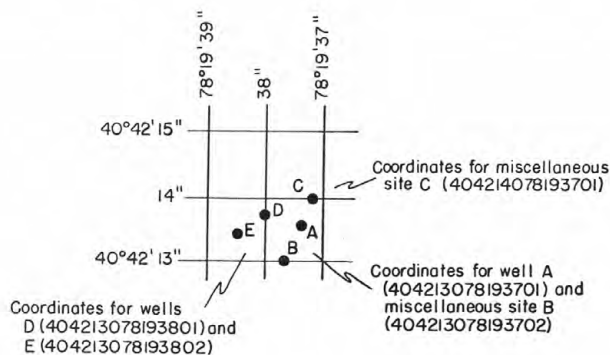


Figure 3.--System for numbering wells and miscellaneous sites (latitude and longitude)

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.

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

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

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

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water 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 engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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

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

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

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

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents.

This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

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

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

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

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

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

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

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.

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.

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). Prices are subject to change.

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. 1976. 65 pages. \$1.60.
- 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. \$0.85.
- 2-D1. APPLICATION OF SURFACE GEOPHYSICS TO GROUND-WATER INVESTIGATIONS, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. \$1.90.
- 2-E1. APPLICATION OF BOREHOLE GEOPHYSICS TO WATER-RESOURCES INVESTIGATIONS, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. \$1.75.
- 3-A1. GENERAL FIELD AND OFFICE PROCEDURES FOR INDIRECT DISCHARGE MEASUREMENTS, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages. \$1.00.
- 3-A2. MEASUREMENT OF PEAK DISCHARGE BY THE SLOPE-AREA METHOD, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages. \$0.20.
- 3-A3. MEASUREMENT OF PEAK DISCHARGE AT CULVERTS BY INDIRECT METHODS, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. \$0.40.
- 3-A4. MEASUREMENT OF PEAK DISCHARGE AT WIDTH CONTRACTIONS BY INDIRECT METHODS, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages. \$0.35.
- 3-A5. MEASUREMENT OF PEAK DISCHARGE AT DAMS BY INDIRECT METHODS, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages. \$0.30.
- 3-A6. GENERAL PROCEDURE FOR GAGING STREAMS, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages. \$0.20.
- 3-A7. STAGE MEASUREMENTS AT GAGING STATIONS, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages. \$0.45.
- 3-A8. DISCHARGE MEASUREMENTS AT GAGING STATIONS, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages. \$1.25.
- 3-A11. MEASUREMENT OF DISCHARGE BY MOVING-BOAT METHOD, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. \$0.40.
- 3-A12. FLUOROMETRIC PROCEDURES FOR DYE TRACING, by J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. \$0.35. Not currently available.
- 3-B1. AQUIFER-TEST DESIGN, OBSERVATION, AND DATA ANALYSIS, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages. \$0.70.
- 3-B2. INTRODUCTION TO GROUND-WATER HYDRAULICS, A PROGRAMED TEXT FOR SELF-INSTRUCTION, BY G.D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages. \$2.50.
- 3-C1. FLUVIAL SEDIMENT CONCEPTS, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. \$0.65.
- 3-C2. FIELD METHODS FOR MEASUREMENT OF FLUVIAL SEDIMENT, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages. \$2.50.
- 3-C3. COMPUTATION OF FLUVIAL-SEDIMENT DISCHARGE, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages. \$1.15.
- 4-A1. SOME STATISTICAL TOOLS IN HYDROLOGY, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages. \$0.30.
- 4-A2. FREQUENCY CURVES, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages. \$0.20.
- 4-B1. LOW-FLOW INVESTIGATIONS, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages. \$0.65.
- 4-B2. STORAGE ANALYSES FOR WATER SUPPLY, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages. \$0.75.
- 4-B3. REGIONAL ANALYSES OF STREAMFLOW CHARACTERISTICS, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages. \$0.65.
- 4-D1. COMPUTATION OF RATE AND VOLUME OF STREAM DEPLETION BY WELLS, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages. \$0.65.
- 5-A1. METHODS FOR COLLECTION AND ANALYSIS OF WATER SAMPLES FOR DISSOLVED MINERALS AND GASES, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 pages. \$2.40.
- 5-A2. DETERMINATION OF MINOR ELEMENTS IN WATER BY EMISSION SPECTROSCOPY, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. \$0.80.
- 5-A3. METHODS FOR ANALYSIS OF ORGANIC SUBSTANCES IN WATER, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. \$0.90.
- 5-A4. METHODS FOR COLLECTION AND ANALYSIS OF AQUATIC BIOLOGICAL AND MICROBIOLOGICAL SAMPLES, by K. V. Slack, R. C. Averett, P. E. Greenson, and R. G. Lipscomb: USGS--TWRI Book 5, Chapter A4. 1973. 165 pages. \$2.85.
- 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. \$16.00.
- 5-C1. LABORATORY THEORY AND METHODS FOR SEDIMENT ANALYSIS, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages. \$0.65.
- 7-C1. FINITE DIFFERENCE MODEL FOR AQUIFER SIMULATION IN TWO DIMENSIONS WITH RESULTS OF NUMERICAL EXPERIMENTS, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages. \$2.30.
- 8-A1. METHODS OF MEASURING WATER LEVELS IN DEEP WELLS, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages. \$0.70.
- 8-B2. CALIBRATION AND MAINTENANCE OF VERTICAL-AXIS TYPE CURRENT METERS, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages. \$0.40.

\*Looseleaf format. Available only by subscription. Additional supplements will be issued to subscribers at no extra cost.

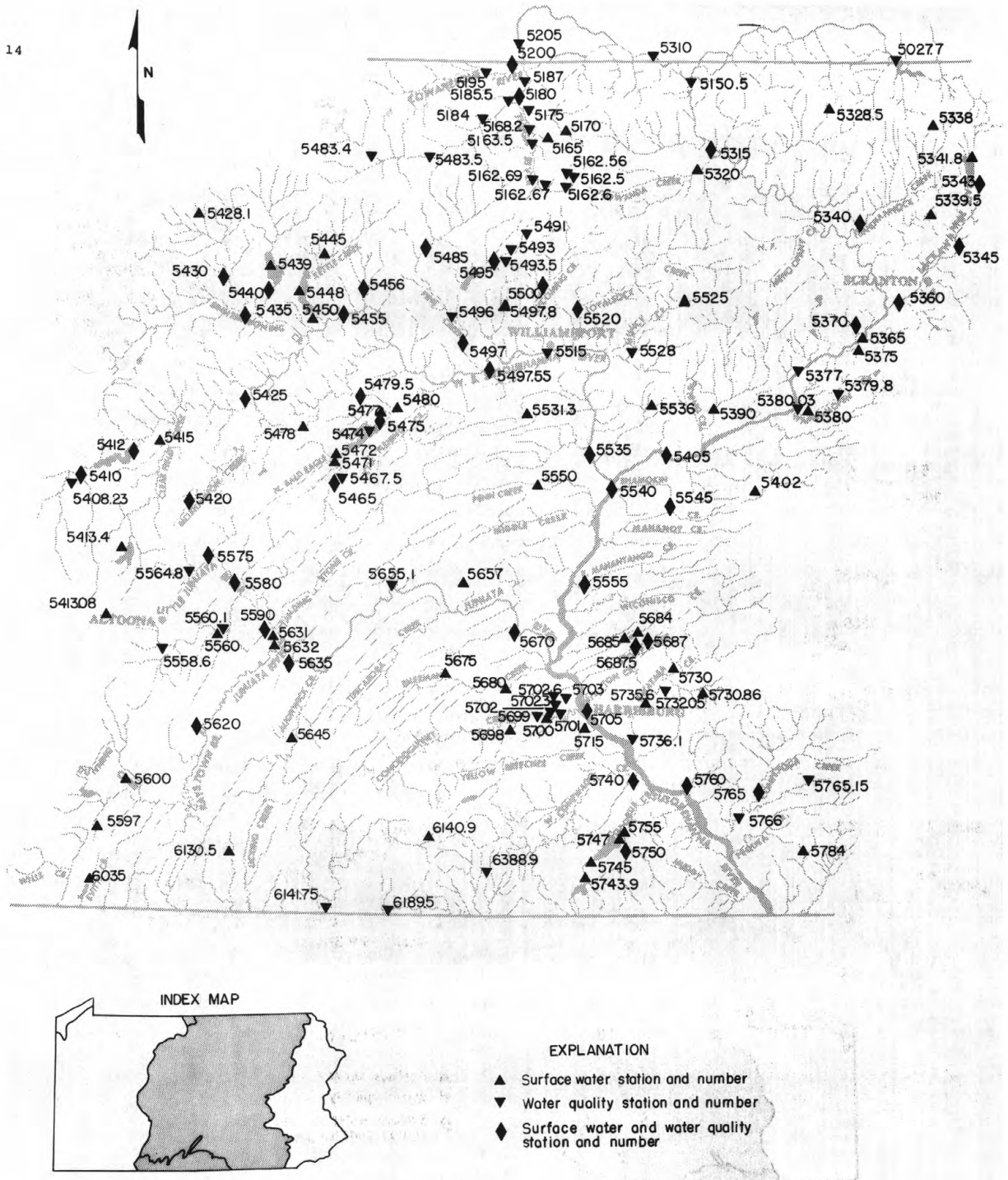


FIGURE 4 – Locations of data collection stations





Figure 6.--Locations of ground-water level wells

## SUSQUEHANNA RIVER BASIN

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## 01502770 SUSQUEHANNA RIVER NEAR GREAT BEND, PA

LOCATION.--Lat 41°57'48", long 75°44'33", Susquehanna County, Hydrologic Unit 02050101, State Highway 11 bridge north of Hallstead, 0.5 mi (0.8 km) south of Great Bend, and 6.2 mi (10.0 km) upstream from gaging station at Conklin, N.Y.

DRAINAGE AREA.--2,086 mi<sup>2</sup> (5,400 km<sup>2</sup>).

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

REMARKS.--Operated as part of the USGS-EPA surveillance network. Records of discharge are given for 01503000 Susquehanna River at Conklin, N.Y.

COOPERATION.--Seven water-quality analyses were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	BICARBONATE (HCO3) (MG/L)
OCT 15...	1145	2530	195	7.2	15.0	6	10.2	6	100	160	76
NOV 12...	1145	2240	200	7.4	10.0	3	10.8	7	230	21	73
DEC 09...	1300	4150	180	7.8	3.0	1	13.6	5	120	39	66
FEB 24...	1145	20300	130	7.1	1.5	35	13.4	8	170	1100	29
MAR 24...	1130	6200	150	6.5	4.5	10	12.2	11	820	840	46
APR 28...	1230	10200	130	7.5	7.0	10	11.6	17	1100	2000	40
MAY 25...	1130	7600	135	7.7	9.5	3	10.2	15	210	44	56
JUN 10...	1100	4490	150	8.2	20.0	10	9.0	24	220	160	66
JUL 12...	1400	3740	125	7.0	21.0	250	7.6	61	5500	>10000	48
AUG 17...	1145	4000	140	7.8	20.0	6	14.8	61	110	70	57
SEP 16...	1145	868	195	7.3	18.5	4	8.4	11	100	120	83

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	SUSPENDED SOLIDS (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT 15...	0	62	7.7	15	5.0	108	11	.52	--	--
NOV 12...	0	60	4.6	14	4.0	102	12	.52	--	--
DEC 09...	0	54	1.7	12	4.3	97	7	.51	.01	.52
FEB 24...	0	24	3.7	12	2.5	66	86	.63	--	--
MAR 24...	0	38	23	12	3.5	82	18	.57	.01	.58
APR 28...	0	33	2.0	9.9	3.5	74	24	.38	.01	.39
MAY 25...	0	46	1.8	10	3.3	78	14	.37	.01	.38
JUN 10...	0	54	.7	7.7	2.9	90	15	.54	.06	.60
JUL 12...	0	39	7.7	10	4.8	96	86	.40	.02	.42
AUG 17...	0	47	1.4	10	4.4	89	24	.39	.03	.42
SEP 16...	0	68	6.7	10	6.5	108	12	.53	.01	.54



## SUSQUEHANNA RIVER BASIN

01502770 SUSQUEHANNA RIVER NEAR GREAT BEND, PA --Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	CHLORO-PHYLL A (UG/L)	CHLORO-PHYLL B (UG/L)
OCT 15...	.02	.24	.26	--	.04	.01	200	--	2.20	--
NOV 12...	.00	.26	.26	--	.03	.01	180	2.2	3.80	--
DEC 09...	.01	.16	.17	.69	.02	.01	270	2.2	.000	.000
FEB 24...	.05	.41	.46	--	.16	.05	490	4.5	--	--
MAR 24...	.09	.41	.50	1.1	.04	.01	890	3.2	.000	.000
APR 28...	.03	.32	.35	.74	.05	.01	590	8.7	2.42	.000
MAY 25...	.01	.22	.23	.61	.06	.01	370	4.6	.000	.000
JUN 10...	.04	.29	.33	.93	.05	.01	410	4.5	8.29	.000
JUL 12...	.06	1.3	1.4	1.8	.27	.04	21000	17	--	--
AUG 17...	.01	.47	.48	.90	.05	.02	630	6.5	5.55	1.08
SEP 16...	.01	.22	.23	.77	.04	.01	520	2.6	8.84	.000

DATE	TIME	CODE FOR AGENCY COLLECTING SAMPLE	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	HARDNESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)
FEB 25...	1000	9813	15800	190	6.7	1.5	17	12.1	42	0	0
MAR 08...	1000	9813	12200	100	--	1.0	20	12.3	43	0	0
APR 19...	1000	9813	5280	100	7.6	15.0	12	10.0	53	--	--
MAY 06...	1030	9813	6980	130	7.1	11.0	6	9.5	48	0	0
JUN 23...	1515	9813	E4000	220	7.6	22.0	4	11.0	40	0	6
JUL 21...	1430	9813	1770	170	7.5	22.0	6	--	70	0	0
AUG 30...	1515	9813	2120	140	6.7	24.0	1	10.0	52	--	0

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
FEB 25...	14	1.5	36	8.0	4.0	1.2	.05	.05	.08	--	1530
MAR 08...	16	.0	44	8.0	5.0	1.2	.04	.05	.06	--	950
APR 19...	--	--	4	6.0	4.0	.92	.02	.06	--	.09	800
MAY 06...	16	2.0	52	6.0	5.0	.70	.01	.11	.07	--	430
JUN 23...	8.0	5.0	8	36	34	1.0	.02	.13	.16	--	420
JUL 21...	--	--	70	6.0	6.0	.82	.02	.05	.06	--	640
AUG 30...	18	1.5	36	10	11	.59	.03	.03	.05	--	80

## SUSQUEHANNA RIVER BASIN

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01515050 SUSQUEHANNA RIVER AT SAYRE, PA

LOCATION.--Lat 41°58'52", long 76°30'26", Bedford County, Hydrologic Unit 02050103, at bridge on East Lockhart Street in Sayre, 0.4 mi (2.0 km) downstream from gaging station.

DRAINAGE AREA.--4,770 mi<sup>2</sup> (12,350 km<sup>2</sup>).

PERIOD OF RECORD.--July 1974 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	BICARBONATE (HCO <sub>3</sub> ) (MG/L)
OCT 15...	1615	5340	240	7.7	15.0	4	10.0	8	120	280	91
NOV 12...	1545	4480	235	7.3	11.0	4	10.4	3	190	800	88
DEC 09...	1645	7960	180	7.4	3.0	1	14.0	7	130	110	68
FEB 24...	1545	41700	140	7.3	2.0	30	13.2	12	500	540	32
MAR 24...	1545	15900	170	7.5	7.0	10	11.8	11	100	100	49
APR 28...	1645	19500	140	8.1	8.0	15	11.2	15	1200	380	42
MAY 25...	1450	12300	150	7.7	12.0	4	10.6	18	230	60	66
JUN 10...	1500	7420	170	8.6	22.0	10	--	25	80	310	89
JUL 13...	0745	14600	130	6.9	18.5	250	7.4	54	9200	>10000	47
AUG 17...	1550	9600	160	7.7	21.0	10	13.2	62	360	160	63
SEP 16...	1530	2140	240	7.7	20.0	4	8.4	11	88	170	98

DATE	CARBONATE (CO <sub>3</sub> ) (MG/L)	ALKALINITY AS CaCO <sub>3</sub> (MG/L)	CARBON DIOXIDE (CO <sub>2</sub> ) (MG/L)	DISSOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	SUSPENDED SOLIDS (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT 15...	0	75	2.9	17	9.0	137	7	.84	--	--
NOV 12...	0	72	7.1	18	9.5	122	11	.52	--	--
DEC 09...	0	56	4.3	13	6.8	109	2	.56	.01	.57
FEB 24...	0	26	2.6	12	5.5	77	83	.88	--	--
MAR 24...	0	40	2.5	13	6.8	86	23	.69	.01	.70
APR 28...	0	34	.5	10	5.2	81	35	.47	.01	.48
MAY 25...	0	54	2.1	12	5.2	85	16	.42	.01	.43
JUN 10...	0	73	.4	21	11	152	11	.31	.02	.33
JUL 13...	0	39	9.5	11	6.9	80	356	.53	.04	.57
AUG 17...	0	52	2.0	10	6.3	103	51	.44	.03	.47
SEP 16...	0	80	3.1	13	11	133	6	.64	.02	.66

## SUSQUEHANNA RIVER BASIN

01515050 SUSQUEHANNA RIVER AT SAYRE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)
OCT										
15...	.06	.39	.45	--	.06	.03	180	1.4	1.90	--
NOV										
12...	.01	.36	.37	--	.05	.02	170	2.3	3.60	--
DEC										
09...	.05	.20	.25	.82	.03	.01	240	2.1	.000	.000
FEB										
24...	.07	.45	.52	--	.17	.05	440	4.7	--	--
MAR										
24...	.04	.27	.31	1.0	.05	.02	770	19	.000	.000
APR										
28...	.05	.35	.40	.88	.07	.01	760	3.1	--	--
MAY										
25...	.04	.31	.35	.78	.07	.01	430	3.4	.000	.000
JUN										
10...	.05	.28	.33	.66	.09	.04	550	3.8	5.09	.000
JUL										
13...	.09	1.4	1.5	2.1	.29	.05	17000	60	--	--
AUG										
17...	.03	.55	.58	1.1	.09	.03	1400	--	10.6	2.66
SEP										
16...	.03	.25	.28	.94	.06	.03	300	4.6	12.2	2.13



## CHEMUNG RIVER BASIN

21

01516250 TIOGA RIVER ABOVE MORRIS RUN NEAR BLOSSBURG, PA

LOCATION.--Lat 41°39'32", long 77°02'53", Tioga County, Hydrologic Unit 02050104, at bridge on Gulick Street 0.4 mi (0.6 km) upstream from Morris Run and 1.0 mi (1.6 km) southeast of Blossburg.

DRAINAGE AREA.--57.5 mi<sup>2</sup> (149 km<sup>2</sup>).

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CaCO3 (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT 06...	1130	75	58	6.6	12.0	10.1	94	.0	2.0	4	0
NOV 10...	1030	50	47	6.7	12.5	9.7	91	.0	2.0	5	0
DEC 09...	1045	63	46	5.6	1.0	13.1	92	.1	5.0	14	0
JAN 06...	1045	--	53	6.1	.0	14.8	101	.0	2.0	3	0
FEB 04...	1040	--	51	5.9	.0	13.4	92	.0	2.0	4	0
MAR 08...	1015	190	50	5.4	1.5	13.0	93	.0	2.0	2	0
APR 05...	1015	136	46	5.9	4.0	12.2	93	.4	20	4	0
MAY 05...	1030	70	42	6.0	8.5	11.0	94	.0	.0	13	0
JUN 01...	1025	66	45	6.2	13.0	10.2	96	.2	10	14	0
JUL 12...	1000	44	46	6.5	17.5	8.4	88	.2	12	1	0
AUG 10...	0940	206	52	6.5	14.5	9.4	91	.2	12	4	0
SEP 07...	0915	13	92	6.7	11.5	10.5	96	.1	3.0	6	0

DATE	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT 06...	3	1.6	15	5600	60	280	70	210	139	28
NOV 10...	4	1.6	13	2600	30	170	40	130	67	9.0
DEC 09...	11	56	13	1100	20	120	10	110	21	3.6
JAN 06...	2	3.8	16	600	--	120	--	--	E0	--
FEB 04...	3	8.1	19	1400	10	190	0	190	37	--
MAR 08...	2	13	13	710	40	180	0	180	20	10
APR 05...	3	8.1	13	380	20	150	10	140	5	1.8
MAY 05...	11	21	12	170	70	120	0	120	E0	--
JUN 01...	11	14	12	180	0	120	0	120	E0	--
JUL 12...	1	.5	15	150	30	190	0	190	E0	--
AUG 10...	4	2.0	21	390	120	170	0	170	5	2.8
SEP 07...	4	1.9	31	70	10	160	10	150	E0	--

.01516250 TIOGA RIVER ABOVE MORRIS RUN NEAR BLOSSBURG, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
DEC. 09...	1045	2.3	.26	.01	.27	.01	.06	.07	.34	.03	.01
MAR. 02...	1015	1.0	.59	--	--	.01	.13	.14	.73	.01	.01
JUNE 01...	1025	1.7	.27	.01	.28	.01	.07	.08	.36	.03	.01
SEP. 07...	0915	2.1	.27	.01	.28	.03	.07	.10	.38	.02	.01

DATE	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CH) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 09...	20	0	1	0	2	0	1	<.5	0	0	30
MAR. 08...	120	0	0	<10	2	0	4	<.5	0	0	50
JUNE 01...	10	0	1	10	2	0	1	<.5	0	0	20
SEP. 07...	20	2	1	<10	8	0	6	<.5	0	0	50

## CHEMUNG RIVER BASIN

23

01516256 MORRIS RUN NEAR BLOSSBURG, PA

LOCATION.--Lat 41°39'47", long 77°02'23", Tioga County, Hydrologic Unit 02050104, 1.5 mi (2.4 km) southwest of the village of Morris Run, 1.0 mi (1.6 km) southeast of Blossburg and 0.7 mi (1.1 km) upstream from mouth.

DRAINAGE AREA.--7.13 mi<sup>2</sup> (18.5 km<sup>2</sup>).

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CaCO <sub>3</sub> (MG/L)	BICARBONATE (HCO <sub>3</sub> ) (MG/L)	CARBONATE (CO <sub>3</sub> ) (MG/L)
OCT 06...	1235	8.9	2270	3.0	12.5	9.4	88	9.0	440	0	0
NOV 10...	1130	6.6	1660	3.1	13.0	9.4	89	6.0	290	0	0
DEC 09...	1200	6.4	1470	3.0	3.0	12.5	93	.5	25	0	0
JAN 06...	1110	5.6	2010	3.0	.0	13.8	95	8.0	402	0	0
FEB 04...	1130	8.4	1480	2.8	3.0	12.3	91	5.2	259	0	0
MAR 08...	1115	16	1210	3.0	4.0	11.8	90	4.0	201	0	0
APR 05...	1115	11	1140	3.0	7.0	10.8	88	4.3	214	0	0
MAY 05...	1130	5.9	1290	2.9	10.0	10.2	90	5.6	278	0	0
JUN 01...	1115	7.1	1410	2.9	13.5	9.6	91	5.6	278	0	0
JUL 12...	1045	6.2	1650	3.0	15.0	9.0	88	9.2	454	0	0
AUG 10...	1040	12	1383	3.1	14.5	9.3	91	5.9	294	0	0
SEP 07...	1010	3.1	2240	2.7	9.0	10.9	94	10	503	0	0

DATE	ALKALINITY AS CaCO <sub>3</sub> (MG/L)	CARBON DIOXIDE (CO <sub>2</sub> ) (MG/L)	DISSOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT 06...	0	.0	1300	20000	19000	80000	0	80000	86	2.1
NOV 10...	0	.0	850	23000	18000	44000	10000	34000	155	2.8
DEC 09...	0	.0	730	16000	16000	45000	1000	44000	E0	--
JAN 06...	0	.0	1100	28000	28000	60000	0	60000	E0	--
FEB 04...	0	.0	850	16000	16000	40000	0	40000	E0	--
MAR 08...	0	.0	670	13000	13000	30000	0	30000	E0	--
APR 05...	0	.0	540	11000	7300	28000	0	28000	E0	--
MAY 05...	0	.0	610	12000	12000	32000	17000	15000	E0	--
JUN 01...	0	.0	720	13000	12000	32000	25000	7000	E0	--
JUL 12...	0	.0	900	18000	18000	42000	0	45000	E0	--
AUG 10...	0	.0	680	14000	14000	65000	31000	34000	E0	--
SEP 07...	0	.0	1400	28000	28000	76000	0	76000	E0	--



## CHEMUNG RIVER BASIN

01516256 MORRIS RUN NEAR BLOSSBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
DEC. 09...	1200	2.6	.14	.01	.15	.16	.04	.20	.35	.04	.01
MAR. 08...	1115	2.5	.75	--	--	.13	.06	.19	.94	.07	.00
JUNE 01...	1115	2.4	.16	.01	.17	.14	.06	.20	.37	.07	.01
SEP. 07...	1010	3.9	.11	.01	.12	.19	.01	.20	.32	.02	.02

DATE	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 09...	24000	0	3	10	630	160	5	<.5	3	0	3000
MAR. 08...	22000	0	3	<10	670	180	7	<.5	1	0	2000
JUNE 01...	23000	0	4	20	700	150	6	<.5	0	0	2300
SEP. 07...	44000	0	7	10	1300	290	10	<.5	1	0	4400

## CHEMUNG RIVER BASIN

25

01516260 COAL CREEK AT BLOSSBURG, PA

LOCATION.--Lat 41°40'17", long 77°03'41", Tioga County, Hydrologic Unit 02050104, at Main Street Bridge at Blossburg.

DRAINAGE AREA.--1.81 mi<sup>2</sup> (4.69 km<sup>2</sup>).

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	BICAR- BONATE (HCO3) (MG/L)
OCT.										
06...	1330	6.1	2220	2.8	11.5	10.3	94	13	660	0
NOV.										
10...	1225	3.9	2160	2.6	12.0	9.9	92	12	616	0
DEC.										
09...	1250	5.0	1910	2.8	6.5	11.6	95	12	596	0
JAN.										
06...	1215	6.0	1980	2.8	6.0	11.8	94	11	547	0
FEB.										
04...	1215	8.0	1840	2.6	7.0	11.0	90	10	496	0
MAR.										
08...	1200	15	1540	2.6	7.5	10.8	90	8.0	400	0
APR.										
05...	1200	9.0	1660	2.6	9.0	10.4	90	9.4	467	0
MAY										
05...	1210	4.5	2040	2.6	11.0	10.4	94	13	646	0
JUNE										
01...	1200	5.4	1790	2.6	11.0	10.4	94	11	546	0
JULY										
12...	1130	5.3	1820	2.6	11.5	10.0	91	11	556	0
AUG.										
10...	1120	7.4	1780	2.7	12.5	10.0	93	10	495	0
SEP.										
07...	1055	2.5	2150	2.6	11.0	10.6	96	14	801	0

DATE	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUS- PENDE MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	SUS- PENDE SEDI- MENT (MG/L)
OCT.										
06...	0	0	.0	1100	72000	70000	15000	0	15000	E0
NOV.										
10...	0	0	.0	1100	86000	86000	20000	1000	19000	E0
DEC.										
09...	0	0	.0	1000	79000	78000	14000	0	14000	E0
JAN.										
06...	0	0	.0	990	76000	76000	14000	0	14000	E0
FEB.										
04...	0	0	.0	930	63000	63000	14000	0	14000	E0
MAR.										
08...	0	0	.0	770	55000	55000	11000	0	11000	E0
APR.										
05...	0	0	.0	770	55000	52000	11000	0	11000	E0
MAY										
05...	0	0	.0	960	76000	76000	15000	1000	14000	E0
JUNE										
01...	0	0	.0	890	63000	59000	13000	5900	7100	E0
JULY										
12...	0	0	.0	1100	66000	69000	15000	0	15000	E0
AUG.										
10...	0	0	.0	830	62000	62000	28000	14000	14000	E0
SEP.										
07...	0	0	.0	1200	89000	90000	21000	0	21000	E0

## CHEMUNG RIVER BASIN

01516260 COAL CREEK AT BLOSSBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
DEC. 09...	1250	1.3	.05	.01	.06	.21	.03	.24	.30	.03	.02
MAR. 08...	1200	1.1	2.4	--	--	.17	.05	.22	2.6	.04	.03
JUNE 01...	1200	1.1	.08	.01	.09	.21	.04	.25	.34	.05	.04
SEP. 07...	1055	2.1	.00	.01	.01	.26	.12	.38	.39	.05	.05

DATE	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CORAL TIN (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 09...	35000	2	0	0	290	130	0	<.5	2	0	1200
MAR. 08...	28000	3	0	10	280	120	0	<.5	1	0	980
JUNE 01...	30000	0	0	30	300	120	2	<.5	0	0	1100
SEP. 07...	19000	2	0	20	410	160	7	<.5	0	0	1800



## CHEMUNG RIVER BASIN

27

01516267 BEAR CREEK AT BLOSSBURG, PA

LOCATION.--Lat 41°41'00", long 77°03'53", Tioga County, Hydrologic Unit 02050104, at Main Street Bridge at Blossburg.

DRAINAGE AREA.--0.73 mi<sup>2</sup> (1.89 km<sup>2</sup>).

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CaCO <sub>3</sub> (MG/L)	BICARBONATE (HCO <sub>3</sub> ) (MG/L)
OCT.										
06...	1445	.92	1250	3.0	13.0	9.8	92	4.6	230	0
NOV.										
10...	1330	.41	1330	2.8	14.0	9.6	92	4.0	223	0
DEC.										
09...	1350	.68	1200	3.0	4.5	12.0	92	5.2	258	0
JAN.										
06...	1255	.87	1150	3.0	1.5	13.0	93	4.0	197	0
FEB.										
04...	1300	1.3	1090	3.2	5.5	11.9	94	3.7	182	0
MAR.										
08...	1245	3.2	720	2.9	6.0	11.6	93	2.4	117	0
APR.										
05...	1240	1.8	811	2.8	9.0	10.6	91	3.7	184	0
MAY										
05...	1450	.59	1170	2.8	13.5	9.6	91	5.6	278	0
JUNE										
01...	1240	.72	953	2.9	11.0	10.3	93	4.4	218	0
JULY										
12...	1300	.67	1060	2.9	12.5	9.8	91	3.7	185	0
AUG.										
10...	1200	1.4	1100	2.9	11.5	10.2	95	4.1	203	0
SEP.										
07...	1140	.21	1430	2.6	12.0	10.0	92	5.8	285	0

DATE	CARBONATE (CO <sub>3</sub> ) (MG/L)	ALKALINITY AS CaCO <sub>3</sub> (MG/L)	CARBON DIOXIDE (CO <sub>2</sub> ) (MG/L)	DISSOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	SUSPENDED SEDIMENT (MG/L)
OCT.										
06...	0	0	.0	440	16000	15000	7000	0	7000	E0
NOV.										
10...	0	0	.0	500	12000	12000	9000	0	9000	E0
DEC.										
09...	0	0	.0	490	13000	13000	9600	0	9800	E0
JAN.										
06...	0	0	.0	430	12000	12000	8000	0	8000	E0
FEB.										
04...	0	0	.0	400	12000	12000	7000	0	7000	E0
MAR.										
08...	0	0	.0	260	6900	7000	4000	0	4000	E0
APR.										
05...	0	0	.0	310	7700	7400	5500	0	5700	E0
MAY										
05...	0	0	.0	480	11000	10000	9500	0	9500	E0
JUNE										
01...	0	0	.0	360	7700	8000	6600	0	6900	E0
JULY										
12...	0	0	.0	450	8200	8300	7500	0	7500	E0
AUG.										
10...	0	0	.0	490	11000	11000	9900	0	11000	E0
SEP.										
07...	0	0	.0	750	12000	12000	13000	1000	12000	E0

## CHEMUNG RIVER BASIN

01516267 BEAR CREEK AT BLOSSBURG, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
DEC. 09...	1350	13	.07	.01	.08	.10	.01	.11	.19	.01	.01
MAR. 08...	1245	.9	.50	--	--	.07	.07	.14	.64	.00	.00
JUNE 01...	1240	1.2	.14	.01	.15	.09	.09	.18	.33	.01	.01
SEP. 07...	1140	1.4	.04	.01	.05	.15	.03	.18	.23	.02	.01

DATE	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 09...	16000	0	1	0	130	60	8	<.5	1	0	550
MAR. 08...	8200	0	1	<10	60	30	7	<.5	0	0	300
JUNE 01...	13000	0	2	10	100	40	11	<.5	0	0	450
SEP. 07...	23000	0	1	<10	200	70	13	<.5	0	0	780

## CHEMUNG RIVER BASIN

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01516269 TIOGA RIVER AT BLOSSBURG, PA

LOCATION.--Lat 41°41'31", long 77°04'09", Tioga County, Hydrologic Unit 02050104, at bridge on secondary road 500 ft (152 m) northwest of U.S. Highway 15, 0.6 mi (1.0 km) downstream from Bear Creek.

DRAINAGE AREA.--87.6 mi<sup>2</sup> (227 km<sup>2</sup>).

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CaCO3 (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT. 06...	1530	122	486	3.6	15.0	9.2	90	1.2	60	0	0
NOV. 10...	1420	114	339	3.6	14.5	9.2	89	1.0	42	0	0
DEC. 09...	1500	111	331	3.5	2.5	12.6	92	1.3	65	0	0
JAN. 06...	1330	--	438	3.8	.0	13.5	92	1.2	57	0	0
FEB. 04...	1330	184	342	4.0	1.0	13.1	92	.8	38	0	0
MAR. 08...	1330	302	258	3.6	4.5	12.0	93	.7	35	0	0
APR. 05...	1315	216	263	3.3	8.5	10.6	90	1.0	50	0	0
MAY 05...	1520	101	324	3.7	16.0	9.0	90	1.1	55	0	0
JUNE 01...	1320	118	316	3.6	14.5	9.4	91	1.0	50	0	0
JULY 12...	1405	72	458	3.4	18.0	8.3	87	1.3	65	0	0
AUG. 10...	1235	218	261	3.9	16.5	8.8	87	.8	33	0	0
SEP. 07...	1215	28	827	3.2	18.0	9.2	97	2.5	125	0	0

DATE	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 06...	0	.0	160	18000	3000	6300	0	6300	446	147
NOV. 10...	0	.0	130	7200	1700	4100	100	4000	102	31
DEC. 09...	0	.0	110	5000	3400	3800	0	3800	38	11
JAN. 06...	0	.0	160	15000	4900	5000	100	4900	192	--
FEB. 04...	0	.0	100	5000	3000	3300	0	3300	50	25
MAR. 08...	0	.0	99	4000	3500	2600	0	2600	22	18
APR. 05...	0	.0	92	3400	2900	2400	0	2400	E0	--
MAY 05...	0	.0	110	3700	3400	3100	100	3000	E0	--
JUNE 01...	0	.0	110	3100	2000	2900	0	2900	9	2.9
JULY 12...	0	.0	200	4400	3700	5000	0	5000	16	3.1
AUG. 10...	0	.0	94	2900	2200	2900	0	2900	9	5.3
SEP. 07...	0	.0	320	8700	7600	12000	100	11000	18	1.4



## CHEMUNG RIVER BASIN

01516269 TIOGA RIVER AT BLOSSBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)
DEC. 09...	1500	6.3	.25	.01	.26	.06	.04	.10	.36	.06	.01
MAR. 08...	1330	2.6	.63	--	--	.05	.10	.15	.78	.01	.01
JUNE 01...	1320	3.5	.28	.01	.29	.05	.13	.18	.47	.01	.01
SEP. 07...	1215	5.3	.22	.01	.23	.08	.00	.08	.31	.16	.02

DATE	DIS-SOLVED ALUM- INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD- MIUM (CD) (UG/L)	DIS-SOLVED CHRO- MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED SELE- NIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
DEC. 09...	3300	0	1	0	52	10	10	<.5	1	0	490
MAR. 08...	3100	0	1	<10	51	20	3	<.5	0	0	410
JUNE 01...	3300	0	1	<10	56	20	10	<.5	0	0	540
SEP. 07...	10000	0	3	<10	200	60	57	<.5	0	0	2600

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LOCATION.--Lat 41°47'34", long 77°04'44", Tioga County, Hydrologic Unit 02050104, 0.6 mi (0.9 km) downstream from Slate Creek and 1.0 mi (1.6 km) south of Mansfield.

PERIOD OF RECORD.--May 1975 to April 1976 (discontinued).

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)
OCT.												
07...	0800	154	338	4.0	9.5	10.4	91	.8	41	0	0	0
NOV.												
11...	0740	242	162	5.1	8.0	11.0	92	.2	9.0	2	0	2
DEC.												
10...	0830	699	118	5.6	1.5	13.0	93	.2	10	13	0	11
JAN.												
07...	0800	112	274	3.6	.0	13.4	92	.7	34	0	0	0
FEB.												
04...	1445	269	231	4.5	.0	13.2	90	.6	30	0	0	0
MAR.												
08...	1430	417	202	4.2	4.5	11.8	91	.4	17	0	0	0
APR.												
05...	1430	306	178	4.4	9.0	10.6	91	.4	20	0	0	

[illegible][illegible]

## 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 mi<sup>2</sup> (31.6 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 1,337.50 ft (407.670 m) above mean sea level. Prior to June 28, 1954, nonrecording gage at site 30 ft (9 m) downstream at same datum.

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

AVERAGE DISCHARGE.--22 years, 12.2 ft<sup>3</sup>/s (0.346 m<sup>3</sup>/s), 13.58 in/yr (345 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,580 ft<sup>3</sup>/s (158 m<sup>3</sup>/s) June 23, 1972, gage height, 10.44 ft (3.182 m), from floodmark, from rating curve extended above 490 ft<sup>3</sup>/s (13.9 m<sup>3</sup>/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 ft<sup>3</sup>/s (7.93 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 26	1630	298 8.44	4.22 1.286	Mar. 3	0400	288 8.16	4.17 1.271
Feb. 16	2245	*447 12.7	*4.82 1.469				

Minimum daily discharge, 0.90 ft<sup>3</sup>/s (0.025 m<sup>3</sup>/s) Sept. 9, 15.

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

PAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	6.3	12	13	19	12	48	8.8	7.1	6.0	7.5	1.4
2	27	6.3	8.6	15	16	12	28	13	6.9	4.8	3.4	1.7
3	16	6.1	8.0	10	13	102	25	9.6	5.3	3.9	2.7	1.4
4	13	5.8	7.8	8.3	11	81	21	8.8	4.6	3.7	2.3	1.3
5	11	5.4	7.3	8.0	10	58	18	7.9	4.0	3.5	2.0	1.2
6	9.5	5.1	8.6	7.0	9.2	38	16	7.1	4.4	3.1	1.9	1.1
7	8.3	4.9	7.8	7.5	8.7	28	14	7.1	7.9	9.6	16	1.0
8	7.0	5.4	7.5	7.3	8.3	21	13	6.7	4.8	6.5	37	.95
9	7.5	4.9	18	6.6	8.1	18	11	6.0	3.9	4.8	10	.90
10	7.3	7.5	44	6.1	8.0	20	9.9	5.5	3.5	3.7	7.0	2.5
11	6.6	6.8	22	5.8	8.5	17	9.9	7.6	3.2	4.0	5.1	1.5
12	6.3	12	17	5.6	36	17	9.1	8.8	3.0	3.9	4.1	1.1
13	5.6	25	18	5.4	44	17	7.9	6.5	2.6	4.4	5.1	1.0
14	5.3	15	18	10	33	13	7.4	5.5	2.6	4.4	5.3	.97
15	4.9	13	21	8.0	18	12	6.9	5.3	5.1	3.5	9.2	.90
16	6.1	11	28	7.2	91	11	6.7	15	4.8	3.6	8.3	1.9
17	8.0	8.3	17	6.6	158	12	6.2	18	8.5	7.0	5.3	2.3
18	79	7.0	14	6.2	93	11	5.5	22	4.4	3.0	4.2	3.5
19	32	6.6	12	5.8	90	16	5.1	19	3.7	2.3	3.6	2.1
20	43	6.4	11	6.0	52	15	4.8	18	24	2.0	3.0	1.7
21	27	7.0	10	5.6	36	26	4.6	14	64	2.9	2.7	1.5
22	21	6.2	9.0	5.4	64	19	6.0	12	37	2.7	2.0	1.3
23	16	5.8	8.4	5.2	32	16	4.9	10	21	2.3	1.8	1.3
24	14	5.6	8.0	5.1	29	15	4.9	9.1	16	2.3	1.9	1.2
25	13	5.6	8.9	5.0	21	14	11	8.5	14	1.8	2.0	1.1
26	12	5.2	68	134	19	13	16	9.9	9.6	1.5	2.0	1.3
27	10	12	45	118	18	21	11	7.6	7.4	1.5	2.0	2.5
28	9.2	8.9	26	39	15	22	9.3	6.5	6.5	1.4	1.8	2.4
29	8.3	7.3	16	31	13	16	8.8	5.8	6.7	3.0	1.9	1.9
30	7.8	7.3	15	23	---	14	8.2	7.6	6.7	3.9	1.6	1.8
31	6.8	---	20	24	---	15	---	7.6	---	3.6	1.5	---
TOTAL	465.5	239.7	541.9	550.7	1058.3	722	358.1	304.8	303.2	114.6	164.2	46.72
MEAN	15.0	7.99	17.5	17.8	36.5	23.3	11.9	9.83	10.1	3.70	5.30	1.56
MAX	79	25	68	134	158	102	48	22	64	9.6	37	3.5
MIN	4.9	4.9	7.3	5.0	8.0	11	4.6	5.3	2.6	1.4	1.5	.90
CFSM	1.23	.65	1.43	1.46	2.99	1.91	.98	.81	.83	.30	.43	.13
IN.	1.42	.73	1.65	1.68	3.23	2.20	1.09	.93	.92	.35	.50	.14

CAL YR 1975	TOTAL	6466.30	MEAN 17.7	MAX 808	MIN 1.2	CFSM 1.45	IN 19.72
WTR YR 1976	TOTAL	4869.72	MEAN 13.3	MAX 158	MIN .90	CFSM 1.09	IN 14.85

## CHEMUNG RIVER BASIN

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01516820 TIOGA RIVER AT LAMBS CREEK, PA

LOCATION.--Lat 41°50'29", long 77°06'13", Tioga County, Hydrologic Unit 02050104, at bridge on Legislative Route 58044, 500 ft (152 m) upstream from Lambs Creek, and 2.7 mi (4.3 km) northwest of Mansfield.

DRAINAGE AREA.--186 mi<sup>2</sup> (482 km<sup>2</sup>).

PERIOD OF RECORD.--September 1973 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CaCO3 (MG/L)
OCT 07...	0920	167	298	4.4	10.5	10.4	93	.5	26
NOV 11...	0920	261	164	6.3	8.0	11.0	92	.1	5.0
DEC 10...	0940	755	123	6.1	2.0	13.2	96	.1	5.0
JAN 07...	0900	132	265	4.5	.0	13.8	95	.5	25
FEB 04...	1545	301	220	5.1	.5	13.4	93	.4	22
MAR 08...	1530	450	172	5.1	4.5	12.0	93	.3	15
APR 05...	1530	350	166	4.8	9.0	10.6	91	.2	10
MAY 05...	1630	147	215	4.8	16.0	9.6	96	.3	15
JUN 01...	1445	200	197	5.2	16.0	9.6	96	.1	5.0
JUL 12...	1525	106	280	4.5	20.0	9.2	100	.6	28
AUG 10...	1355	312	183	5.3	18.0	9.0	95	.2	11
SEP 07...	1400	36	567	3.7	18.5	9.7	103	1.4	67

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARRON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT 07...	0	0	0	.0	130	6.0	.66	--	--
NOV 11...	7	0	6	5.6	57	5.0	.34	--	--
DEC 10...	20	0	16	25	35	5.0	.37	.03	.40
JAN 07...	0	0	0	.0	260	5.0	--	--	--
FEB 04...	0	0	0	.0	92	6.0	--	--	--
MAR 08...	0	0	0	.0	69	4.5	.70	--	--
APR 05...	2	0	2	51	57	5.7	--	--	--
MAY 05...	0	0	0	.0	81	3.8	--	--	--
JUN 01...	4	0	3	40	75	5.1	.42	.01	.43
JUL 12...	0	0	0	.0	140	5.0	--	--	--
AUG 10...	3	0	2	24	71	3.2	--	--	--
SEP 07...	0	0	0	.0	240	6.8	.35	.01	.36



## CHEMUNG RIVER BASIN

01516820 TIOGA RIVER AT LAMBS CREEK, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	POTEN- TIAL ALGAL GROWTH BOTTLE TEST (MG/L)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
OCT 07...	.09	.15	.24	.90	.05	.02	--	49	22
NOV 11...	.02	.26	.28	.62	.07	.06	--	134	94
DEC 10...	.05	.40	.45	.85	.21	.04	--	300	612
JAN 07...	--	--	--	--	--	--	--	E0	--
FEB 04...	--	--	--	--	--	--	--	51	41
MAR 08...	.09	.16	.25	.95	.02	.02	--	E0	--
APR 05...	--	--	--	--	--	--	.0	16	15
MAY 05...	--	--	--	--	--	--	.0	11	4.4
JUN 01...	.04	.16	.20	.63	.06	.01	--	17	9.2
JUL 12...	--	--	--	--	--	--	--	E0	--
AUG 10...	--	--	--	--	--	--	--	27	23
SEP 07...	.17	.08	.25	.61	.03	.01	--	E0	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT 07...	0920	3600	--	--	--	--	--
DEC 10...	0940	40	0	2	0	12	0

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT 07...	220	--	4500	--	--	450
DEC 10...	50	4	710	<.5	0	60

## CHEMUNG RIVER BASIN

35

01517000 ELK RUN NEAR MAINESBURG, PA

LOCATION.--Lat 41°48'54", long 76°57'55", Tioga County, Hydrologic Unit 02050104, on left bank 250 ft (76 m) downstream from highway bridge, 0.5 mi (0.8 km) upstream from small tributary, 2.8 mi (4.5 km) northeast of Mainesburg, 5.5 mi (8.8 km) upstream from mouth, and 5.8 mi (9.3 km) east of Mansfield.

DRAINAGE AREA.--10.2 mi<sup>2</sup> (26.4 km<sup>2</sup>).

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

GAGE.--Water-stage recorder and masonry control. Datum of gage is 1,385.05 ft (422.163 m) above mean sea level. Prior to Aug. 29, 1956, nonrecording gage and crest-stage gage at bridge 250 ft (76 m) upstream at same datum.

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

AVERAGE DISCHARGE.--22 years, 10.7 ft<sup>3</sup>/s (0.303 m<sup>3</sup>/s), 14.26 in/yr (362 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,940 ft<sup>3</sup>/s (112 m<sup>3</sup>/s) June 22, 1972, gage height, 6.00 ft (1.829 m) in gage well, 6.75 ft (2.057 m) outside from floodmarks, from rating curve extended above 300 ft<sup>3</sup>/s (8.50 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; no flow on many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 230 ft<sup>3</sup>/s (6.51 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 26	1100	Ice jam	*2.26 0.689	Feb. 16	2300	*376	10.6 2.22 0.677
Jan. 27	0600	257 7.28	1.93 0.588				

Minimum discharge, 0.43 ft<sup>3</sup>/s (0.012 m<sup>3</sup>/s) Sept. 8-10, gage height, 0.23 ft (0.070 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	4.8	7.4	10	16	12	35	7.2	5.6	4.4	5.6	.61
2	18	4.8	5.6	10	12	12	30	11	5.1	3.2	3.0	.80
3	11	4.8	5.4	8.0	10	86	22	8.2	4.0	2.6	2.2	.75
4	8.2	4.4	5.6	6.4	8.6	52	18	7.2	3.2	2.1	1.6	.65
5	7.0	4.2	6.0	5.5	7.7	28	15	6.7	2.6	2.0	1.3	.57
6	6.3	3.8	6.3	4.8	7.0	29	12	6.2	2.7	1.6	1.3	.53
7	5.1	3.8	5.6	5.2	6.6	26	11	6.0	6.3	5.3	14	.46
8	4.8	4.0	4.2	4.8	6.3	21	9.6	5.5	3.8	4.0	26	.43
9	5.4	3.8	18	4.5	6.1	17	8.4	5.0	2.7	2.8	9.2	.43
10	5.4	4.6	38	4.2	6.0	17	7.6	4.6	2.4	2.0	6.6	1.6
11	5.4	4.6	17	4.1	53	17	7.4	6.0	1.8	2.2	4.8	1.1
12	5.4	8.6	12	4.0	26	12	6.3	6.9	1.5	2.2	4.0	.75
13	4.6	18	12	3.9	34	12	5.6	5.4	1.3	2.7	5.2	.65
14	4.0	11	12	10	24	12	5.1	4.6	1.3	2.7	5.6	.57
15	3.8	8.7	14	7.8	20	9.7	5.3	4.6	2.9	2.0	8.8	.57
16	4.8	8.2	20	5.6	74	9.2	5.3	13	3.8	4.4	7.4	1.3
17	7.1	7.4	15	4.5	136	20	5.1	12	7.4	7.6	5.4	3.2
18	67	7.0	11	3.6	63	12	4.8	14	3.3	2.2	4.2	4.4
19	30	6.6	9.3	3.0	72	13	4.6	13	1.9	1.4	3.4	2.6
20	33	6.3	8.0	2.9	47	15	4.4	14	22	1.1	3.0	1.5
21	22	6.6	7.2	2.8	33	21	4.2	11	48	1.3	2.6	1.3
22	16	6.3	6.8	2.8	50	16	4.8	8.0	29	1.6	1.9	1.1
23	13	5.4	6.4	2.8	30	13	4.8	7.0	16	1.2	1.5	1.0
24	11	4.8	6.2	2.8	28	13	4.6	6.7	11	1.1	1.4	.86
25	11	4.8	6.5	3.0	22	13	9.0	6.6	11	.92	1.1	.80
26	9.2	4.4	50	74	17	12	14	7.4	7.4	.75	1.1	1.0
27	7.8	9.1	32	124	16	17	10	6.3	5.1	.65	1.1	1.7
28	7.0	6.0	20	41	15	20	8.0	4.8	4.2	.65	1.0	1.4
29	6.3	4.6	14	26	12	16	7.2	4.4	4.4	2.0	.92	1.2
30	6.0	4.6	12	21	---	14	6.7	5.4	5.1	3.8	.75	1.0
31	5.1	---	13	24	---	13	---	5.4	---	2.7	.65	---
TOTAL	362.7	186.0	406.5	437.0	858.3	599.9	295.8	234.1	226.8	75.17	136.62	34.83
MEAN	11.7	6.20	13.1	14.1	29.6	19.4	9.86	7.55	7.56	2.42	4.41	1.16
MAX	67	18	50	124	136	86	35	14	48	7.6	26	4.4
MIN	3.8	3.8	4.2	2.8	6.0	9.2	4.2	4.4	1.3	.65	.65	.43
CFSM	1.15	.61	1.28	1.38	2.90	1.90	.97	.74	.74	.24	.43	.11
IN.	1.32	.68	1.48	1.59	3.13	2.19	1.08	.85	.83	.27	.50	.13

CAL YR 1975	TOTAL	4953.02	MEAN 13.6	MAX 710	MIN .92	CFSM 1.33	IN 18.06
WTR YR 1976	TOTAL	3853.72	MEAN 10.5	MAX 136	MIN .43	CFSM 1.03	IN 14.05

## CHEMUNG RIVER BASIN

01517500 MILL CREEK NEAR TIOGA, PA

LOCATION.--Lat 41°52'50", long 77°07'05", Tioga County, Hydrologic Unit 02050104, 2.5 mi (4.0 km) south of Tioga and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--76.8 mi<sup>2</sup> (199 km<sup>2</sup>).

PERIOD OF RECORD.--September 1973 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER, 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CAC03 (MG/L)
OCT									
07...	1045	45	160	7.2	12.0	10.3	95	.0	2.0
NOV									
11...	1030	49	182	8.2	9.5	12.2	107	.0	20
DEC									
10...	1200	228	116	6.7	1.5	13.1	94	.1	5.0
JAN									
07...	0955	--	150	6.6	.0	13.2	90	.1	5.0
FEB									
05...	0805	--	129	6.6	.0	14.0	96	.0	1.0
MAR									
09...	0845	104	114	7.2	.0	13.7	94	.0	2.0
APR									
06...	0800	92	120	7.4	4.5	12.9	100	.1	5.0
MAY									
05...	1730	45	134	9.0	16.0	10.4	104	.0	.0
JUN									
01...	1545	43	140	8.4	17.0	10.0	103	.1	5.0
JUL									
12...	1635	24	179	8.6	19.0	9.1	97	.0	.0
AUG									
10...	1455	80	140	8.2	19.5	9.2	99	.0	.0
SEPT									
07...	1515	6.5	193	9.0	22.0	10.9	124	.0	.0

## CHEMUNG RIVER BASIN

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01517500 MILL CREEK NEAR TIOGA, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARRON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT 07...	60	0	49	6.1	19	5.5	.52	--	--
NOV 11...	64	0	52	.6	17	6.0	.09	--	--
DEC 10...	37	0	30	12	16	5.1	.37	.01	.38
JAN 07...	51	0	42	18	21	5.0	--	--	--
FEB 05...	42	0	34	17	19	4.0	--	--	--
MAR 09...	34	0	28	3.4	20	4.0	.54	--	--
APR 06...	40	0	33	2.5	17	4.4	--	--	--
MAY 05...	49	0	40	.1	17	2.3	--	--	--
JUN 01...	60	0	49	.4	14	4.2	.19	.01	.20
JUL 12...	71	2	62	.3	17	5.3	--	--	--
AUG 10...	58	0	48	.6	22	4.3	--	--	--
SEP 07...	86	6	76	.2	17	6.0	.01	.01	.02

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	POTEN- TIAL ALGAL GROWTH BOTTLE TEST (MG/L)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
OCT 07...	.03	.21	.24	.76	.03	.01	--	10	1.2
NOV 11...	.00	.17	.17	.26	.01	.01	--	E0	--
DEC 10...	.03	.40	.43	.81	.10	.03	--	44	27
JAN 07...	--	--	--	--	--	--	--	E0	--
FEB 05...	--	--	--	--	--	--	--	E0	--
MAR 09...	.01	.16	.17	.71	.01	.01	--	E0	--
APR 06...	--	--	--	--	--	--	.5	E0	--
MAY 05...	--	--	--	--	--	--	.1	E0	--
JUN 01...	.02	.21	.23	.43	.02	.01	--	4	.46
JUL 12...	--	--	--	--	--	--	--	E0	--
AUG 10...	--	--	--	--	--	--	--	4	.86
SEP 07...	.02	.16	.18	.20	.02	.01	--	E0	--



## 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.

DRAINAGE AREA.--282 mi<sup>2</sup> (730 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level. 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.

AVERAGE DISCHARGE.--38 years, 334 ft<sup>3</sup>/s (9.459 m<sup>3</sup>/s), 16.02 in/yr (407 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,000 ft<sup>3</sup>/s (1,670 m<sup>3</sup>/s) June 22, 1972, gage height, 19.70 ft (6.005 m), from floodmark, from rating curve extended above 8,000 ft<sup>3</sup>/s (227 m<sup>3</sup>/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; minimum, 4.5 ft<sup>3</sup>/s (0.13 m<sup>3</sup>/s) Aug. 10, 11, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,240 ft<sup>3</sup>/s (177 m<sup>3</sup>/s) Jan. 26, gage height, 6.99 ft (2.131 m), no peak above base of 6,500 ft<sup>3</sup>/s (184 m<sup>3</sup>/s); minimum 40 ft<sup>3</sup>/s (1.13 m<sup>3</sup>/s) Sept. 10, gage height, 0.08 ft (0.024 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	590	206	322	250	400	440	1130	178	257	278	395	59
2	690	203	290	210	310	400	778	293	281	218	240	61
3	550	194	256	170	280	2110	700	247	218	178	181	59
4	417	186	224	150	250	1800	580	212	187	164	144	56
5	359	173	224	140	230	1400	486	190	167	155	121	54
6	318	160	233	130	220	1030	420	178	155	136	110	50
7	283	150	256	200	210	802	380	172	297	153	440	48
8	246	157	200	190	200	652	329	170	206	231	1210	45
9	256	155	240	170	210	514	289	155	161	193	610	43
10	297	227	1110	150	250	503	264	144	153	144	405	56
11	266	359	640	140	800	514	250	167	128	134	293	80
12	273	322	494	135	503	385	228	334	113	155	237	59
13	246	884	438	130	450	390	209	237	96	136	209	50
14	224	600	550	350	540	352	196	196	89	158	231	45
15	200	467	530	350	355	290	181	184	281	134	267	41
16	209	413	761	280	830	260	172	712	215	115	420	56
17	215	362	526	250	3720	230	164	1330	415	131	250	84
18	1900	325	455	220	2150	210	153	1030	244	103	196	158
19	1000	300	310	180	2130	260	142	872	190	87	164	115
20	1090	276	290	170	1550	420	131	724	904	76	144	80
21	854	276	260	170	1110	508	123	547	1970	84	131	71
22	668	273	240	160	1640	569	131	425	1390	123	115	61
23	545	240	220	160	1190	390	142	356	833	91	105	52
24	455	215	210	170	859	365	123	301	610	96	94	54
25	397	206	250	330	766	338	181	274	519	80	87	50
26	378	197	695	600	712	313	361	334	385	65	100	48
27	325	279	980	3860	670	356	274	281	289	59	94	113
28	293	347	521	1140	586	724	221	234	244	59	84	110
29	269	253	425	854	486	410	202	206	309	100	89	84
30	249	227	350	646	---	361	184	247	257	410	76	69
31	224	---	350	467	---	347	---	305	---	202	63	---
TOTAL	14286	8632	12850	12522	23607	17643	9124	11235	11563	4448	7305	2011
MEAN	461	288	415	404	814	569	304	362	385	143	236	67.0
MAX	1900	884	1110	3860	3720	2110	1130	1330	1970	410	1210	158
MIN	200	150	200	130	200	210	123	144	89	59	63	41
CFSM	1.63	1.02	1.47	1.43	2.89	2.02	1.08	1.28	1.37	.51	.84	.24
IN.	1.88	1.14	1.70	1.65	3.11	2.33	1.20	1.48	1.53	.59	.96	.27
CAL YR 1975 TOTAL	162546			MEAN 445	MAX 17600	MIN 28	CFSM 1.58	IN 21.44				
WTR YR 1976 TOTAL	135226			MEAN 369	MAX 3860	MIN 41	CFSM 1.31	IN 17.84				

## CHEMUNG RIVER BASIN

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01518000 TIOGA RIVER AT TIOGA, PA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1971, October 1971 to September 1972, September 1973 to current year.

COOPERATION.--Four water-quality analyses were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)
OCT									
07...	1130	283	259	6.0	13.0	10.2	96	.2	10
NOV									
11...	1120	355	173	6.9	9.5	11.0	96	.1	5.0
DEC									
10...	1330	998	119	6.4	2.0	13.0	94	.1	5.0
JAN									
07...	1035	E200	239	5.7	.0	13.4	92	.2	10
FEB									
05...	0900	E230	180	6.4	.0	14.0	96	.2	9.0
MAR									
09...	0930	486	159	6.1	.0	13.6	93	.0	2.0
APR									
06...	0900	425	157	6.4	5.0	11.9	93	.1	5.0
MAY									
06...	1030	181	185	6.6	14.5	9.6	93	.1	5.0
JUN									
02...	0805	293	177	6.7	13.0	10.0	94	.1	5.0
JUL									
13...	1030	134	243	5.8	15.5	9.0	89	.2	7.0
AUG									
11...	0815	301	179	6.3	17.0	9.2	95	.1	6.0
SEP									
08...	0745	45	429	4.8	16.0	9.0	90	.5	27

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT									
07...	4	0	3	6.4	100	5.0	.68	--	--
NOV									
11...	18	0	15	3.6	51	5.0	.29	--	--
DEC									
10...	22	0	18	14	29	4.9	.39	.01	.40
JAN									
07...	4	0	3	13	120	5.0	--	--	--
FEB									
05...	8	0	7	5.1	63	7.0	--	--	--
MAR									
09...	6	0	5	7.6	61	4.0	.97	--	--
APR									
06...	16	0	13	10	47	6.0	--	--	--
MAY									
06...	15	0	12	6.0	61	3.2	--	--	--
JUN									
02...	24	0	20	7.7	53	5.3	.37	.01	.38
JUL									
13...	4	0	3	10	98	4.9	--	--	--
AUG									
11...	6	0	5	4.8	68	4.0	--	--	--
SEP									
08...	2	0	1	51	180	6.9	.35	.01	.36

## CHEMUNG RIVER BASIN

01518000 TIOGA RIVER AT TIOGA, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT 07...	.09	.20	.29	.97	.04	.02	49	37
NOV 11...	.01	.21	.22	.51	.03	.02	52	50
DEC 10...	.04	.40	.44	.84	.16	.02	176	474
JAN 07...	--	--	--	--	--	--	20	19
FEB 05...	--	--	--	--	--	--	14	--
MAR 09...	.05	.25	.30	1.3	.02	.01	19	25
APR 06...	--	--	--	--	--	--	36	41
MAY 06...	--	--	--	--	--	--	10	4.9
JUN 02...	.04	.21	.25	.63	.05	.01	19	15
JUL 13...	--	--	--	--	--	--	14	5.1
AUG 11...	--	--	--	--	--	--	19	15
SEP 08...	.15	.05	.20	.56	.02	.01	6	.73

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT 07...	1130	250	190	3400	340
NOV 11...	1120	30	10	1400	160

DATE	TIME	CODE FOR AGENCY COLLECTING SAMPLE	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	HARDNESS (CA, MG)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY C02 AS CAC03 (MG/L)
OCT 29...	1015	9813	273	90	6.6	13.0	27	11.0	78	0	0
FEB 18...	0945	9813	2180	80	6.0	1.0	80	12.7	34	0	0
MAY 25...	1200	9813	271	200	7.1	--	17	--	78	--	0
AUG 24...	1515	9813	94	350	6.8	24.0	2	10.0	158	--	34

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 29...	20	7.0	14	80	8.0	.86	.02	.10	.17	1190	2.0
FEB 18...	8.7	3.0	14	30	6.0	1.2	.07	.08	.10	4750	--
MAY 25...	16	9.0	8	62	5.0	.77	.02	.34	.07	1390	--
AUG 24...	27	22	12	142	10	.78	.01	.08	.06	170	--

## CHEMUNG RIVER BASIN

41

01518400 CROOKED CREEK AT MIDDLEBURY CENTER, PA

LOCATION (Revised).--Lat 41°51'13", long 77°15'24", Tioga County, Hydrologic Unit 02050104, at bridge on Route 287, 0.9 mi (1.4 km) east of Middlebury Center, 8.2 mi (13.2 km) southwest of Tioga, and 11.4 mi (18.3 km) upstream from mouth.

DRAINAGE AREA.--71.5 mi<sup>2</sup> (185 km<sup>2</sup>), revised.

PERIOD OF RECORD.--September 1973 to August 1974, April 1976 to current year.

## WATER QUALITY DATA, APRIL 1976 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)
APR									
06...	1000	--	135	6.7	4.5	13.4	104	--	--
MAY									
06...	0830	32	158	7.3	11.5	9.4	86	.2	10
JUN									
01...	1645	157	134	8.1	15.5	9.7	96	.2	10
JUL									
13...	0840	20	214	7.4	16.0	7.8	78	.1	6.0
AUG									
10...	1550	20	198	7.7	20.0	8.8	96	.0	2.0
SEP									
07...	1625	4.3	239	8.5	19.0	11.0	117	.0	.0

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
APR									
06...	--	--	--	--	--	--	--	--	--
MAY									
06...	76	0	62	6.1	16	4.6	--	--	--
JUN									
01...	53	0	43	.7	14	4.3	.21	.01	.22
JUL									
13...	86	0	71	5.5	18	6.6	--	--	--
AUG									
10...	93	0	76	3.0	18	8.8	--	--	--
SEP									
07...	100	1	84	.5	22	11	.02	.02	.04

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	POTEN- TIAL ALGAL GROWTH BOTTLE TEST (MG/L)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
APR									
06...	--	--	--	--	--	--	.7	--	--
MAY									
06...	--	--	--	--	--	--	.2	5	.43
JUN									
01...	.01	.24	.25	.47	.05	.02	--	5	2.1
JUL									
13...	--	--	--	--	--	--	--	E0	--
AUG									
10...	--	--	--	--	--	--	--	E0	--
SEP									
07...	.03	.27	.30	.34	.03	.01	--	5	.06



## CHEMUNG RIVER BASIN

01518550 CROOKED CREEK AT TIOGA, PA

LOCATION.--Lat 41°54'55", long 77°08'42", Tioga County, Hydrologic Unit 02050104, at bridge on secondary road 500 ft (152 m) north of State Highway 287 and 1.3 mi (2.1 km) upstream from mouth.

DRAINAGE AREA.--131 mi<sup>2</sup> (339 km<sup>2</sup>).

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TOTAL ACIDITY AS H <sup>+</sup> (MG/L)	TOTAL ACIDITY AS CaCO <sub>3</sub> (MG/L)
OCT 07...	1145	75	182	7.2	13.0	9.6	91	.0	1.0
NOV 11...	1150	209	152	7.3	10.0	10.6	94	.1	5.0
DEC 10...	1410	260	131	6.9	1.5	13.0	92	.1	5.0
JAN 07...	1140	88	161	7.0	.0	14.0	96	.1	4.0
FEB 05...	0915	111	133	7.6	.0	13.6	93	.1	4.0
MAR 09...	1015	181	119	7.3	1.0	13.0	92	.0	2.0
APR 06...	1045	159	125	8.1	7.0	12.8	105	.1	5.0
MAY 06...	0930	62	158	8.0	13.5	10.9	104	.0	.0
JUN 02...	0900	214	138	7.7	14.0	10.0	96	.0	.0
JUL 13...	0940	36	194	7.6	18.0	8.4	88	.1	4.0
AUG 11...	0850	42	192	7.8	18.5	8.8	93	.0	2.0
SEP 08...	0825	9.1	234	7.8	17.0	8.4	87	.0	2.0

DATE	BICARBONATE (HCO <sub>3</sub> ) (MG/L)	CARBONATE (CO <sub>3</sub> ) (MG/L)	ALKALINITY AS CaCO <sub>3</sub> (MG/L)	CARBON DIOXIDE (CO <sub>2</sub> ) (MG/L)	DISSOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT 07...	69	0	57	7.0	20	5.5	.70	--	--
NOV 11...	53	0	43	4.3	18	6.0	.29	--	--
DEC 10...	46	0	38	9.3	16	6.3	.32	.03	.35
JAN 07...	57	0	47	9.1	22	5.5	--	--	--
FEB 05...	46	0	38	1.8	20	4.5	--	--	--
MAR 09...	36	0	30	2.9	19	4.0	.36	--	--
APR 06...	46	0	38	.6	18	5.2	--	--	--
MAY 06...	61	0	50	1.0	17	4.8	--	--	--
JUN 02...	56	0	46	1.8	14	4.7	.19	.01	.20
JUL 13...	85	0	70	3.4	17	5.2	--	--	--
AUG 11...	91	0	75	2.3	20	7.4	--	--	--
SEP 08...	107	0	88	2.7	22	8.0	.09	.01	.10

## CHEMUNG RIVER BASIN

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01518550 CROOKED CREEK AT TIOGA, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	SUS- PENDE SEDIMENT (MG/L)	SUS- PENDE SEDIMENT DIS- CHARGE (T/DAY)
OCT								
07...	.07	.49	.56	1.3	.30	.13	4500	911
NOV								
11...	.03	.60	.63	.92	.15	.08	108	61
DEC								
10...	.04	.37	.41	.76	.16	.05	169	119
JAN								
07...	--	--	--	--	--	--	E0	--
FEB								
05...	--	--	--	--	--	--	5	1.5
MAR								
09...	.02	.17	.19	.55	.01	.01	8	3.9
APR								
06...	--	--	--	--	--	--	8	3.4
MAY								
06...	--	--	--	--	--	--	12	2.0
JUN								
02...	.01	.29	.30	.50	.05	.02	16	9.2
JUL								
13...	--	--	--	--	--	--	30	2.9
AUG								
11...	--	--	--	--	--	--	17	1.9
SEP								
08...	.02	.11	.13	.23	.05	.01	13	.32

## CHEMUNG RIVER BASIN

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA.

LOCATION.--Lat 41°57'27", long 77°06'58", Tioga County, Hydrologic Unit 02050104, at bridge on Township Route 773, 0.4 mi (0.6 km) west of intersection of U.S. Highway 15 and State Highway 328, and 3.5 mi (5.6 km) downstream from Crooked Creek.

DRAINAGE AREA.--446 mi<sup>2</sup> (1,160 km<sup>2</sup>).

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

REMARKS.--Records of discharge are computed from 01518000 Tioga River at Tioga and 01518500 Crooked Creek at Tioga.

COOPERATION.--Eight water-quality analyses were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CaCO3 (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT 07...	1330	401	247	6.6	13.0	9.8	92	.1	4.0	21
NOV 11...	1300	632	183	6.8	10.5	10.4	93	.1	6.0	32
DEC 10...	1515	1410	121	6.5	1.5	13.2	94	.1	5.0	26
JAN 07...	1330	496	208	7.1	.0	13.6	93	.1	5.0	22
FEB 05...	1035	--	163	7.2	.0	13.5	92	.1	6.0	18
MAR 09...	1110	717	146	6.6	1.0	13.4	94	.1	5.0	15
APR 06...	1145	636	145	6.5	6.0	11.6	93	.1	5.0	18
MAY 06...	1120	284	177	7.0	13.5	9.6	91	.1	5.0	24
JUN 02...	1000	576	159	7.0	14.0	9.6	92	.1	5.0	34
JUL 13...	1115	168	230	6.7	16.5	8.8	89	.1	6.0	27
AUG 11...	0945	375	182	6.7	18.0	8.8	93	.1	3.0	21
SEP 08...	0925	58	364	6.7	18.0	8.6	90	.0	7.0	9

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT 07...	0	17	8.4	79	6.0	.77	--	--	.11	.27
NOV 11...	0	26	8.1	44	5.5	.27	--	--	.02	.39
DEC 10...	0	21	13	27	5.5	.36	.02	.38	.03	.38
JAN 07...	0	18	2.8	65	6.0	--	--	--	--	--
FEB 05...	0	15	1.8	50	5.5	--	--	--	--	--
MAR 09...	0	12	6.0	46	4.0	.59	--	--	.06	.18
APR 06...	0	15	9.1	39	4.4	--	--	--	--	--
MAY 06...	0	20	3.8	51	5.1	--	--	--	--	--
JUN 02...	0	28	5.4	37	5.0	.24	.01	.25	.02	.18
JUL 13...	0	22	8.6	78	4.8	--	--	--	--	--
AUG 11...	0	17	6.7	57	5.3	--	--	--	--	--
SEP 08...	0	7	2.9	150	7.5	.35	.01	.36	.05	.00

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT										
07...	.38	1.2	.04	.02	170	50	2500	240	36	39
NOV										
11...	.41	.68	.06	.04	40	50	940	200	50	85
DEC										
10...	.41	.79	.18	.02	40	40	360	20	266	1010
JAN										
07...	--	--	--	--	--	--	--	--	48	64
FEB										
05...	--	--	--	--	--	--	--	--	11	--
MAR										
09...	.24	.83	.01	.01	--	--	--	--	21	41
APR										
06...	--	--	--	--	--	--	--	--	16	27
MAY										
06...	--	--	--	--	--	--	--	--	12	9.2
JUN										
02...	.20	.45	.04	.01	--	--	--	--	12	19
JUL										
13...	--	--	--	--	--	--	--	--	8	4.4
AUG										
11...	--	--	--	--	--	--	--	--	16	17
SEP										
08...	.05	.41	.01	.01	--	--	--	--	E0	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
OCT										
29...	1100	9813	150	7.0	11.5	17	10.1	72	--	--
FEB										
18...	0920	9813	75	6.0	2.0	100	12.7	35	0	0
MAR										
09...	1115	9813	270	--	1.0	14	10.7	56	0	0
APR										
14...	1130	9813	160	7.5	9.0	8	11.5	89	0	0
MAY										
25...	1230	9813	180	7.1	--	34	--	70	--	0
JUN										
29...	1330	9813	210	6.5	22.0	30	--	100	0	0
JUL										
21...	1515	9813	290	7.7	25.0	2	10.0	97	--	0
AUG										
24...	1515	9813	360	7.2	--	1	10.0	156	--	40

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
OCT										
29...	11	11	--	--	6.0	.70	.02	.07	.04	920
FEB										
18...	9.5	2.5	18	.2	6.0	1.1	.06	.10	.19	5800
MAR										
09...	14	5.0	24	40	5.0	1.2	.07	.04	.04	1000
APR										
14...	20	9.0	1	58	6.0	.98	.02	.07	.08	1570
MAY										
25...	16	7.0	24	44	5.0	.75	.03	.29	.11	2250
JUN										
29...	19	13	24	56	6.0	.85	.02	.06	.08	2290
JUL										
21...	31	4.7	90	22	22	.66	.03	.07	.05	130
AUG										
24...	24	23	10	138	10	.66	.01	.07	.06	250



## CHEMUNG RIVER BASIN

01519500 COWANESQUE RIVER AT NELSON, PA

LOCATION.--Lat 41°58'41", long 77°14'15", Tioga County, Hydrologic Unit 02050104, at Legislative Route 58050 bridge, 6.8 mi (10.9 km) southwest of Lawrenceville, and 8.3 mi (13.4 km) upstream from mouth.

DRAINAGE AREA.--266 mi<sup>2</sup> (689 km<sup>2</sup>).

PERIOD OF RECORD.--September 1973 to August 1974, April 1976 to current year.

## WATER QUALITY DATA, APRIL TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)
APR 06...	1250	--	170	8.3	7.5	13.2	110	--	--
MAY 06...	1215	139	206	8.2	14.5	10.8	105	.1	5.0
JUN 02...	1120	389	155	7.7	14.5	9.5	94	.2	10
JUL 13...	1200	77	258	7.9	16.5	9.3	94	.0	2.0
AUG 11...	1025	80	286	8.2	19.5	9.3	100	.0	1.0
SEP 08...	1025	16	393	8.3	18.5	10.2	108	.0	.0

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
APR 06...	--	--	--	--	--	--	--	--	--
MAY 06...	68	0	56	.7	23	12	--	--	--
JUN 02...	63	0	52	2.0	16	5.1	.38	.03	.41
JUL 13...	97	0	80	2.0	32	12	--	--	--
AUG 11...	102	0	84	1.0	27	19	--	--	--
SEP 08...	119	0	98	1.0	43	39	.12	.03	.15

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	POTEN- TIAL ALGAL GROWTH BOTTLE TEST (MG/L)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
APR 06...	--	--	--	--	--	--	1.2	--	--
MAY 06...	--	--	--	--	--	--	.7	7	2.6
JUN 02...	.04	.89	.93	1.3	.11	.03	--	116	122
JUL 13...	--	--	--	--	--	--	--	4	.83
AUG 11...	--	--	--	--	--	--	--	7	1.5
SEP 08...	.03	.37	.40	.55	.03	.01	--	E0	--

## CHEMUNG RIVER BASIN

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01520000 COWANESQUE RIVER NEAR LAWRENCEVILLE, PA

LOCATION.--Lat 41°59'04", long 77°09'06", Tioga County, Hydrologic Unit 02050104, on left bank 0.8 mi (1.3 km) downstream from Cook Creek, 1.8 mi (2.9 km) southwest of Lawrenceville, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--298 mi<sup>2</sup> (772 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 998.03 ft (304.200 m) above mean sea level.

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

AVERAGE DISCHARGE.--25 years, 285 ft<sup>3</sup>/s (8.07 m<sup>3</sup>/s), 13.04 in/yr (331 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,700 ft<sup>3</sup>/s (1,240 m<sup>3</sup>/s) Sept. 26, 1975, gage height, 18.13 ft (5.526 m), from floodmark, from rating curve extended above 6,000 ft<sup>3</sup>/s (170 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 0.8 ft<sup>3</sup>/s (0.023 m<sup>3</sup>/s) Aug. 31, Sept. 1, 27, 1964; minimum gage height, 1.77 ft (0.539 m) Sept. 13, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,300 ft<sup>3</sup>/s (178 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 27	0715	13,900 394	10.73 3.27	Mar. 3	0930	7,740 219	8.44 2.57
Feb. 17	0845	12,100 343	10.17 3.10	June 19	2315	*16,100 456	*11.25 3.43

Minimum discharge, 13.0 ft<sup>3</sup>/s (0.368 m<sup>3</sup>/s) Sept. 14, 15, gage height, 6.77 ft (2.063 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	142	302	225	500	464	566	186	325	266	57	21
2	385	137	240	180	350	476	456	292	476	200	66	22
3	290	135	196	160	290	3370	430	225	249	156	50	21
4	230	130	170	150	270	1740	370	196	200	133	41	21
5	200	121	183	145	255	1230	330	177	167	121	35	20
6	170	115	225	140	245	838	320	162	150	108	32	19
7	155	109	266	210	240	668	290	156	846	100	231	18
8	142	133	170	180	235	563	260	162	316	115	478	17
9	153	140	214	155	240	452	230	145	233	119	176	16
10	214	598	542	143	260	452	210	135	257	104	115	16
11	167	703	428	140	1260	476	190	142	180	95	85	17
12	145	440	345	150	915	360	172	180	150	102	68	21
13	135	782	325	140	814	350	160	142	128	94	57	19
14	126	500	830	360	1000	321	148	126	119	90	56	16
15	119	410	1240	370	647	292	137	119	870	81	65	16
16	119	355	1090	300	2130	274	159	915	365	85	63	19
17	126	302	726	260	7630	244	150	668	605	74	57	22
18	1850	261	584	220	3870	240	133	726	302	72	46	61
19	814	233	340	195	2990	321	124	488	2330	57	38	52
20	906	210	325	180	1860	441	117	488	9110	50	35	36
21	661	207	300	173	1180	417	111	330	3900	49	31	31
22	500	218	280	170	1820	509	111	249	1640	66	29	29
23	416	183	270	168	1100	355	117	214	862	59	26	26
24	360	162	260	165	814	350	109	186	584	50	25	25
25	306	156	270	200	750	330	183	173	612	46	23	23
26	261	153	500	760	668	325	434	221	392	38	24	23
27	221	193	700	4840	647	309	335	186	279	35	63	30
28	200	274	330	1320	563	417	249	153	233	33	40	74
29	183	193	280	870	482	345	225	135	297	36	32	54
30	167	180	240	640	---	306	200	253	253	68	26	41
31	153	---	250	470	---	302	---	398	---	65	23	---
TOTAL	10214	7875	12421	13779	34025	17537	7026	8328	26430	2767	2193	826
MEAN	329	263	401	444	1173	566	234	269	881	89.3	70.7	27.5
MAX	1850	782	1240	4840	7630	3370	566	915	9110	266	478	74
MIN	119	109	170	140	235	240	109	119	119	33	23	16
CFSM	1.10	.88	1.35	1.49	3.94	1.90	.79	.90	2.96	.30	.24	.09
IN.	1.28	.98	1.55	1.72	4.25	2.19	.88	1.04	3.30	.35	.27	.10

CAL YR 1975	TOTAL	176379	MEAN 483	MAX 20000	MIN 24	CFSM 1.62	IN 22.02
WTR YR 1976	TOTAL	143421	MEAN 392	MAX 9110	MIN 16	CFSM 1.32	IN 17.90

## CHEMUNG RIVER BASIN

01520000 COWANESQUE RIVER AT LAWRENCEVILLE, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Eight water-quality analyses for the 1976 water year were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CAC03 (MG/L)
OCT 07...	1430	155	241	7.2	14.0	10.2	98	.0	2.0
NOV 11...	1435	521	182	7.1	10.5	10.3	92	.1	6.0
DEC 11...	0810	452	168	7.2	1.0	12.9	91	.1	5.0
JAN 07...	1430	E210	220	7.2	.0	14.4	99	.0	2.0
FEB 05...	1145	E255	175	6.7	.0	13.8	95	.0	2.0
MAR 09...	1200	410	150	7.1	1.0	13.6	96	.0	1.0
APR 06...	1335	E320	165	9.1	8.0	16.1	135	.0	.0
MAY 06...	1330	159	190	8.5	15.5	11.8	117	.1	5.0
JUN 02...	1225	428	152	7.3	15.5	9.0	89	.5	25
JUL 13...	1255	92	251	8.0	17.0	9.8	101	.0	1.0
AUG 11...	1120	85	262	8.3	20.5	9.6	106	.0	.0
SEP 08...	1140	17	375	8.2	20.5	9.0	99	.0	1.0

DATE	BICARBONATE (HC03) (MG/L)	CARBONATE (C03) (MG/L)	ALKALINITY AS CAC03 (MG/L)	CARBON DIOXIDE (C02) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT 07...	83	0	68	8.4	26	12	1.2	--	--
NOV 11...	58	0	48	7.4	21	8.5	.38	--	--
DEC 11...	60	0	49	6.1	20	7.9	.39	.01	.40
JAN 07...	70	0	57	7.1	27	14	--	--	--
FEB 05...	55	0	45	18	25	10	--	--	--
MAR 09...	44	0	36	5.6	22	7.5	.79	--	--
APR 06...	44	6	46	.1	22	8.9	--	--	--
MAY 06...	67	0	55	.3	21	8.8	--	--	--
JUN 02...	62	0	51	5.0	15	5.1	.40	.04	.44
JUL 13...	98	0	80	1.6	29	12	--	--	--
AUG 11...	103	0	85	.8	26	17	--	--	--
SEP 08...	115	0	95	1.2	39	38	.00	.01	.01

## 01520000 COWANESQUE RIVER AT LAWRENCEVILLE, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	SUSPENDED SEDIMENT (T/DAY)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT 07...	.07	.51	.58	1.8	.06	.03	14	5.9
NOV 11...	.04	.63	.67	1.0	.12	.10	108	152
DEC 11...	.03	.23	.26	.66	.06	.02	17	21
JAN 07...	--	--	--	--	--	--	E0	--
FEB 05...	--	--	--	--	--	--	E0	--
MAR 09...	.09	.26	.35	1.1	.03	.02	12	13
APR 06...	--	--	--	--	--	--	3	1.7
MAY 06...	--	--	--	--	--	--	10	4.3
JUN 07...	.05	.78	.83	1.3	.18	.05	191	221
JUL 17...	--	--	--	--	--	--	E0	--
AUG 11...	--	--	--	--	--	--	F0	--
SEP 08...	.01	.27	.28	.29	.03	.02	E0	--

DATE	TIME	CODE FOR AGENCY COLLECTING SAMPLE	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	HARDNESS (CA, MG)	MINERAL ACIDITY (METHYL ORANGE) AS CaCO3 (MG/L)	ACIDITY CO2 AS CaCO3 (MG/L)
OCT 29...	1135	9813	180	170	7.5	13.0	5	11.7	69	0	0
FEB 18...	0940	9813	3650	90	6.3	2.0	150	12.0	38	0	0
MAR 09...	1130	9813	422	290	--	1.0	17	11.5	138	0	0
APR 14...	1145	9813	150	170	8.0	11.0	2	11.1	85	0	0
MAY 25...	1300	9813	170	210	7.6	--	4	--	74	--	0
JUN 29...	1400	9813	274	215	7.5	26.0	25	--	82	0	0
JUL 21...	1515	9813	49	210	7.7	24.0	2	10.0	85	--	0
AUG 24...	1515	9813	25	460	7.7	24.0	<1	10.0	164	--	0

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 29...	24	1.5	66	28	13	.79	.05	.03	.05	210	5.0
FEB 18...	11	.0	28	2.0	7.0	1.2	.06	.12	--	12800	--
MAR 09...	16	24	52	16	8.0	1.4	.07	.08	.07	780	--
APR 14...	23	6.5	52	32	14	.66	.03	.03	.07	170	--
MAY 25...	22	4.5	64	18	10	.61	.03	.24	.05	200	--
JUN 29...	23	6.0	70	16	13	1.0	.06	.04	.10	1370	--
JUL 21...	28	3.2	82	16	9.0	.66	.02	.08	--	170	--
AUG 24...	55	6.5	120	26	42	4.3	.05	.03	.07	60	--

## CHEMUNG RIVER BASIN

01520500 TIOGA RIVER AT LINDLEY, NY

LOCATION.--Lat 42°01'50", long 77°08'00", Steuben County, 800 ft (244 m) downstream from gaging station located on left bank just downstream from bridge on County Highway 120 at Lindley, and 6 mi (10 km) upstream from Canisteo River. Sediment samples are collected from the bridge.

DRAINAGE AREA.--771 mi<sup>2</sup> (2,000 km<sup>2</sup>).

PERIOD OF RECORD.--July 1964 to October 1965, September 1973 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1974 to current year.

WATER TEMPERATURES: August 1974 to current year.

SUSPENDED SEDIMENT DISCHARGE: August 1974 to current year.

REMARKS.--Records affected by upstream construction. Mean daily concentrations during low flow periods determined from once daily samples.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 405 micromhos Aug. 29, 1974; minimum daily, 84 micromhos Feb. 25, 1975.

WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 2, 3, 1975; minimum daily, freezing point on several days each year.

SEDIMENT CONCENTRATIONS: Maximum daily, 2,200 mg/l Feb. 17, 1976; minimum daily, 1 mg/l June 30, July 1, 2, 1975.

SEDIMENT LOADS: Maximum daily, 194,000 tons (175,997 t) Sept. 26, 1975; minimum daily, 0.46 tons (0.42 t) July 2, 1975.

## EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum daily, 25.5°C July 6; minimum daily, freezing point Dec. 24, 25.

SEDIMENT CONCENTRATIONS: Maximum daily, 2,200 mg/l Feb. 17; minimum daily, 3 mg/l Jan. 25.

SEDIMENT LOADS: Maximum daily, 109,000 tons (98,900 t) June 20; minimum daily, 1.7 tons (1.5 t) Sept. 26.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CaCO3 (MG/L)
OCT.									
07...	1515	610	238	7.1	14.0	9.6	92	.1	5.0
NOV.									
11...	1530	1010	176	7.1	10.5	10.0	89	.1	6.0
DEC.									
11...	0845	1530	145	6.1	1.5	12.9	92	.1	5.0
JAN.									
07...	1515	E500	210	7.2	.0	13.4	92	.1	4.0
FEB.									
05...	1215	E660	171	7.4	.0	13.6	93	.1	4.0
MAR.									
09...	1245	E1100	147	6.7	1.5	13.3	95	.0	1.0
APR.									
06...	1425	925	153	7.5	8.0	12.5	105	.1	5.0
MAY									
06...	1350	435	200	7.4	14.5	9.8	95	--	--
JUNE									
02...	1315	1010	156	7.5	16.0	9.2	92	.1	5.0
JULY									
13...	1320	285	238	7.5	17.0	8.3	86	.0	2.0
AUG.									
11...	1200	478	193	7.6	20.0	8.6	94	.0	2.0
SEP.									
08...	1200	79	353	7.4	19.0	9.0	96	.1	3.0



## CHEMUNG RIVER BASIN

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01520500 TIOGA RIVER AT LINDLEY, NY--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	BICARBONATE (HCO <sub>3</sub> ) (MG/L)	CARBONATE (CO <sub>3</sub> ) (MG/L)	ALKALINITY AS CACO <sub>3</sub> (MG/L)	CARBON DIOXIDE (CO <sub>2</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT.									
07...	45	0	37	5.7	59	9.0	.93	--	--
NOV.									
11...	47	0	39	6.0	33	7.0	.41	--	--
DEC.									
11...	40	0	33	51	26	6.5	.52	.01	.53
JAN.									
07...	42	0	34	4.2	47	8.5	--	--	--
FEB.									
05...	34	0	28	2.2	41	8.5	--	--	--
MAR.									
09...	26	0	21	8.3	37	6.0	.70	--	--
APR.									
06...	35	0	29	1.8	34	7.0	--	--	--
MAY									
06...	--	--	--	--	--	7.1	--	--	--
JUNE									
02...	47	0	39	2.4	28	4.9	.31	.03	.34
JULY									
13...	52	0	43	2.6	61	6.9	--	--	--
AUG.									
11...	42	0	34	1.7	49	6.9	--	--	--
SEP.									
08...	39	0	32	2.5	110	14	.27	.01	.28

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJFL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT.								
07...	.07	.30	.37	1.3	.06	.03	48	79
NOV.								
11...	.03	.61	.64	1.0	.13	.07	111	303
DEC.								
11...	.03	.25	.28	.81	.07	.01	47	194
JAN.								
07...	--	--	--	--	--	--	21	--
FEB.								
05...	--	--	--	--	--	--	E0	--
MAR.								
09...	.06	.22	.28	.98	.05	.02	17	55
APR.								
06...	--	--	--	--	--	--	4	10
MAY								
06...	--	--	--	--	--	--	9	11
JUNE								
02...	.04	.61	.65	.99	.17	.04	157	428
JULY								
13...	--	--	--	--	--	--	9	6.9
AUG.								
11...	--	--	--	--	--	--	15	19
SEP.								
08...	.03	.10	.13	.41	.02	.01	18	3.8

DATE	TIME	TOTAL ALUM- INUM (AL) (UG/L)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT.									
07...	1515	380	120	2100	20	1400	1400	120	90
NOV.									
11...	1530	2600	30	4700	120	520	450	130	70
DEC.									
11...	0845	1200	30	3000	40	260	250	40	30

## 01520500 TIOGA RIVER AT LINDLEY, NY--Continued

## CHEMICAL ANALYSES, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TOTAL NITRITE +PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL KJEL. NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL ALUMI- NUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)
MAY 26...	1100	11	75	710	5500	6	1	8	10	9	15000	16

DATE	TIME	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL SILVER IN BOTTOM MA- TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	ORGANIC CARBON IN BOT- TOM MA- TERIAL (C) (G/KG)	IN- ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)	TOTAL CYANIDE IN BOTTOM MA- TERIAL (UG/G)	PCB IN BOTTOM MA- TERIAL (UG/KG)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)
MAY 26...	360	.0	.0	21	0	0	41	12	1.3	0	0	.0	0

DATE	TIME	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	BED MAT. FALL DIAM. % FINER THAN .004 MM	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM
MAY 26...		.0	.0	.0	.0	.0	.0	.0	.0	0	1	16	100

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP.
1	197	218	174	157	149	---	143	182	---	194	225	---
2	192	217	170	167	154	---	132	169	---	208	219	343
3	191	223	166	174	173	---	134	152	---	220	237	354
4	203	222	177	180	178	---	139	166	---	228	236	356
5	213	225	182	190	174	---	145	162	---	233	268	360
6	220	225	187	---	---	---	151	178	---	239	234	355
7	237	235	174	---	---	---	150	183	---	242	232	350
8	240	235	177	---	---	---	158	190	---	231	140	361
9	247	238	178	---	---	---	156	193	---	222	174	367
10	248	228	147	---	---	152	166	193	---	232	191	369
11	---	164	141	---	---	148	174	200	190	245	217	364
12	236	175	155	---	---	151	178	183	---	---	225	371
13	231	143	157	---	---	160	172	178	228	239	235	343
14	241	151	158	---	---	156	188	189	240	271	231	342
15	---	149	136	---	---	163	---	189	202	244	231	354
16	232	160	140	---	---	165	196	---	166	262	195	356
17	254	155	135	---	---	160	---	114	170	264	216	307
18	138	160	146	---	---	182	194	114	173	267	238	330
19	150	167	155	---	---	180	209	126	174	---	256	295
20	153	184	---	---	---	153	211	138	103	275	278	255
21	145	179	170	---	---	150	213	149	131	288	285	295
22	158	186	164	---	---	138	222	158	128	303	289	267
23	163	174	173	---	---	149	220	161	136	267	294	317
24	171	189	167	---	---	151	---	162	162	278	301	324
25	179	191	189	---	---	154	---	179	172	283	313	328
26	176	198	181	---	---	152	192	176	180	301	317	308
27	186	189	138	---	---	157	166	---	193	300	312	317
28	190	183	140	122	---	147	174	---	208	310	309	333
29	198	167	157	138	---	149	177	---	201	283	323	270
30	201	185	160	141	---	156	176	---	204	198	327	310
31	212	---	168	150	---	157	---	---	---	227	326	---

## 01520500 TIOGA RIVER AT LINDLEY, NY--Continued

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

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

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1190	70	225	456	17	21	748	35	71
2	1380	95	354	440	13	15	722	30	58
3	1110	65	195	425	8	9.2	598	10	16
4	851	38	87	404	8	8.7	528	12	17
5	712	26	50	379	6	6.1	522	20	28
6	616	28	47	354	7	6.7	592	20	32
7	545	35	52	335	8	7.2	684	18	33
8	489	22	29	359	12	12	489	10	13
9	472	22	28	389	10	11	562	25	38
10	592	27	43	814	150	750	2070	260	1570
11	506	17	23	1490	170	684	1500	53	215
12	489	43	57	904	32	78	1120	30	91
13	446	55	66	2110	260	1480	1000	25	67
14	404	20	22	1420	55	1520	1800	75	364
15	369	14	14	1140	27	83	2290	250	1550
16	369	27	27	983	20	53	2480	200	1340
17	389	20	21	855	16	37	1670	40	180
18	4690	570	9330	767	22	46	1380	27	101
19	2520	88	599	696	22	41	880	30	71
20	2690	100	726	646	15	26	840	25	57
21	2100	75	425	628	25	42	780	20	42
22	1540	74	308	646	20	35	740	14	28
23	1220	56	184	562	14	21	720	32	62
24	1030	28	78	500	8	11	680	50	92
25	904	37	90	472	20	25	715	24	46
26	841	22	50	462	37	46	1100	75	223
27	728	15	29	557	45	68	2270	220	1350
28	652	18	32	848	45	103	1290	35	122
29	592	13	21	610	13	21	1070	29	84
30	551	17	25	545	10	15	911	22	54
31	500	25	34	---	---	---	969	32	84
TOTAL	31487	---	13271	21196	---	5281.9	33720	---	8099

01520500 TIOGA RIVER AT LINDLEY, NY--Continued

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	933	23	58	1200	33	107	1150	28	87
2	680	14	26	840	55	125	1110	33	99
3	600	15	24	760	31	64	6890	1600	29800
4	540	18	26	720	20	39	4770	480	6180
5	500	28	38	660	11	20	3660	160	1580
6	500	39	53	640	7	12	2550	70	482
7	580	25	39	620	8	13	1930	42	219
8	580	18	28	600	10	16	1560	27	114
9	540	10	15	620	7	12	1200	20	65
10	500	8	11	640	10	17	1100	25	74
11	490	8	11	2100	215	2150	1000	36	97
12	490	7	9.3	2170	140	820	960	29	75
13	520	7	9.8	1620	120	525	900	23	56
14	680	14	26	2290	240	1480	840	18	41
15	720	24	47	1380	65	242	780	14	29
16	680	12	22	3490	800	9800	720	14	27
17	600	9	15	16200	2200	96500	660	32	57
18	580	8	13	8600	500	11600	600	36	58
19	520	8	11	7030	350	6640	754	45	92
20	500	6	8.1	4780	210	2710	1150	95	295
21	520	6	8.4	3140	115	975	1020	60	165
22	580	4	6.3	4420	350	4180	1460	100	394
23	660	4	7.1	3210	125	1080	961	22	57
24	760	4	8.2	2210	95	567	918	17	42
25	900	3	7.3	2000	65	351	848	13	30
26	1550	60	251	1780	65	312	801	10	22
27	12300	1000	40000	1660	60	269	741	13	26
28	4030	135	1470	1450	40	157	1360	90	360
29	2730	79	582	1230	32	106	890	17	41
30	1950	47	247	---	---	---	801	13	28
31	1390	35	131	---	---	---	748	9	18
TOTAL	39103	---	43208.5	78060	---	140889	44832	---	40710
DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2060	240	1600	472	8	10	841	40	91
2	1570	38	161	715	18	35	1030	175	487
3	1480	25	100	628	12	20	671	60	109
4	1210	12	39	534	8	12	534	23	33
5	1060	10	29	483	6	7.8	451	20	24
6	933	8	20	435	8	9.4	404	18	20
7	855	10	23	419	7	7.9	1540	350	1200
8	761	12	25	425	6	6.9	767	80	166
9	684	10	18	379	7	7.2	562	38	58
10	622	9	15	354	6	5.7	580	21	33
11	580	8	13	364	10	9.8	430	14	16
12	540	8	12	690	50	93	359	16	16
13	494	6	8.0	483	13	17	298	17	14
14	451	9	11	404	8	8.7	264	15	11
15	425	10	11	379	7	7.2	1260	1190	7400
16	440	8	9.5	1480	180	2200	801	300	649
17	419	7	7.9	3900	390	4700	1480	405	1690
18	374	6	6.1	2870	320	2900	787	85	181
19	345	8	7.5	2390	100	645	1950	350	1840
20	317	8	6.8	1900	110	564	18800	2150	109000
21	303	7	5.7	1320	52	185	10400	900	25300
22	298	9	7.2	998	33	89	4960	450	6030
23	326	9	7.9	828	20	45	2800	340	2570
24	294	8	6.4	703	15	28	1860	280	1410
25	399	17	18	622	28	47	1650	240	1070
26	940	50	127	787	30	64	1180	100	319
27	828	34	76	671	23	42	828	50	112
28	628	13	22	534	14	20	671	42	76
29	557	8	12	456	10	12	821	70	155
30	506	6	8.2	574	120	186	703	48	91
31	---	---	---	1090	220	647	---	---	---
TOTAL	20699	---	2413.2	28287	---	12631.6	59682	---	160171

## CHEMUNG RIVER BASIN

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01520500 TIOGA RIVER AT LINDLEY, NY--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	715	48	93	500	90	121	102	11	3.0
2	557	26	39	394	45	48	102	16	4.4
3	451	18	22	285	37	28	100	200	54
4	404	13	14	235	30	19	97	100	26
5	384	10	10	197	17	9.0	97	9	2.4
6	331	9	8.0	178	20	9.6	92	28	7.0
7	298	8	6.4	604	140	460	85	18	4.1
8	425	13	15	2290	350	2360	79	10	2.1
9	409	10	11	983	80	212	77	10	2.1
10	331	7	6.3	646	36	63	88	35	8.3
11	290	6	4.7	483	23	30	110	25	7.4
12	321	10	8.7	384	19	20	102	38	10
13	290	14	11	326	16	14	90	80	19
14	308	90	75	335	15	14	79	40	8.5
15	281	28	21	364	17	17	77	11	2.3
16	259	20	14	562	34	52	88	13	3.1
17	251	14	9.5	379	20	20	116	11	3.4
18	231	15	9.4	294	14	11	219	18	11
19	193	14	7.3	247	12	8.0	208	16	9.0
20	171	12	5.5	215	12	7.0	147	15	6.0
21	168	15	6.8	193	15	7.8	122	14	4.6
22	231	15	9.4	175	28	13	110	12	3.6
23	204	20	11	161	17	7.4	100	11	3.0
24	189	18	9.2	147	13	5.2	95	9	2.3
25	171	22	10	134	300	109	90	10	2.4
26	144	18	7.0	147	200	79	88	7	1.7
27	131	14	5.0	193	30	16	134	14	5.1
28	125	15	5.1	154	14	5.8	208	20	11
29	168	42	19	144	13	5.1	164	13	5.8
30	551	140	208	131	28	9.9	131	12	4.2
31	340	48	44	110	14	4.2	---	---	---
TOTAL	9322	---	725.3	11590	---	3785.0	3397	---	236.8
YEAR 381375.0			431422.3						

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)	SUS.	SUS.	SUS.	
						SED. FALL DIAM. % FINER THAN .002 MM	SED. FALL DIAM. % FINER THAN .004 MM	SED. FALL DIAM. % FINER THAN .008 MM	
OCT 18...	1250	7180	11.0	818	15900	36	50	65	
MAY 18...	0630	4650	11.0	533	6690	--	34	42	
DATE		SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
OCT 18...	79	87	95	--	98	99	100	--	
MAY 18...	51	64	--	77	84	94	99	100	



## CHEMUNG RIVER BASIN

01531000 CHEMUNG RIVER AT CHEMUNG, NY

LOCATION.--Lat 42°00'08", long 76°38'06", Chemung County, at bridge on State Highway 427, 0.7 mi (1.1 km) southwest of Chemung, and 10 mi (16 km) upstream from mouth.

DRAINAGE AREA.--2,510 mi<sup>2</sup> (6,500 km<sup>2</sup>).

PERIOD OF RECORD.--March 1962 to March 1964, February 1966 to May 1967, August 1974 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1974 to current year.

WATER TEMPERATURES: March 1962 to March 1964, August 1974 to current year.

SUSPENDED SEDIMENT DISCHARGE: March 1962 to March 1964, August 1974 to current year.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 480 micromhos Aug. 30, 1974; minimum daily, 103 micromhos Feb. 25, 1975.

WATER TEMPERATURES: Maximum daily, 27.5°C Aug. 4, 1975; minimum daily, 0.5°C on several days during December 1974 and January 1975.

SEDIMENT CONCENTRATIONS: Maximum daily, 3,050 mg/l June 20, 1976; minimum daily, 1 mg/l on several days.

SEDIMENT LOADS: Maximum daily, 402,000 tons (364,694 t) Sept. 26, 1975; minimum daily, 0.85 tons (0.77 t) Sept. 20, 1974, Oct. 13, 1975.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 457 micromhos Sept. 13; minimum daily, 116 micromhos June 21.

WATER TEMPERATURES: Maximum daily, 23.5°C Aug. 27, 29; minimum daily, 1.0°C Jan. 10, 15, 31, Feb. 6.

SEDIMENT CONCENTRATIONS: Maximum daily, 3,050 mg/l June 20; minimum daily, 1 mg/l Sept. 28.

SEDIMENT LOADS: Maximum daily, 225,000 tons (204,120 t) June 20; minimum daily, 1.1 tons (1.0 t) Sept. 28.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	BICARBONATE (HCO3) (MG/L)
OCT 16...	0745	1370	325	7.4	15.5	8	9.8	5	73	200	120
NOV 13...	0800	3660	235	7.0	9.5	35	10.0	7	5700	6500	77
DEC 10...	0800	3370	240	7.5	3.0	30	12.2	15	3000	6200	76
FEB 25...	0720	8320	210	7.2	3.0	30	13.4	5	190	760	49
MAR 25...	0715	3200	240	7.2	7.5	6	11.4	9	100	260	72
APR 29...	0700	3400	230	7.7	8.5	5	11.2	15	80	340	68
MAY 25...	1745	2470	250	8.0	13.5	4	11.0	14	70	40	78
JUN 10...	1730	2070	260	8.5	23.5	5	--	24	380	110	65
JUL 12...	1750	1430	300	7.8	21.5	2	9.2	13	100	130	116
AUG 17...	1845	1090	320	8.7	23.0	7	11.0	59	70	60	100
SEP 16...	1700	344	460	7.9	20.0	3	8.0	21	80	70	146

## CHEMUNG RIVER BASIN

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01531000 CHEMUNG RIVER AT CHEMUNG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	SUS- PENDE SOLIDS (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT 16...	0	98	7.6	37	19	206	10	.93	--	--
NOV 13...	0	63	12	26	12	126	48	.43	--	--
DEC 10...	0	62	3.8	25	15	135	49	.49	.02	.51
FEB 25...	0	40	4.9	24	14	127	51	.97	--	--
MAR 25...	0	59	7.3	26	12	129	8	.71	.03	.74
APR 29...	0	56	2.2	22	12	138	17	.47	.02	.49
MAY 25...	0	64	1.2	28	9.8	142	15	.46	.02	.48
JUN 10...	0	53	.3	9.0	2.6	100	17	.42	.03	.45
JUL 12...	0	95	2.9	30	16	184	84	.40	.03	.43
AUG 17...	0	82	.3	41	17	204	25	.28	.03	.31
SEP 16...	0	120	2.9	49	36	257	5	.91	.09	1.0

DATE	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	CHLORO- PHYLL. A (UG/L)	CHLORO- PHYLL. B (UG/L)
OCT 16...	.10	.44	.54	--	.11	.07	190	1.4	.800	--
NOV 13...	.03	.44	.47	--	.10	.07	550	4.6	--	--
DEC 10...	.07	.37	.44	.95	.11	.04	2600	4.1	--	--
FEB 25...	.05	.39	.44	--	.14	.04	350	3.0	--	--
MAR 25...	.07	.21	.28	1.0	.06	.03	480	2.5	.000	.000
APR 29...	.07	.36	.43	.92	.05	.02	420	3.4	3.93	.000
MAY 25...	.05	.25	.30	.78	.08	.03	460	2.9	3.87	.000
JUN 10...	.07	.51	.58	1.0	.05	.01	310	3.3	9.13	.000
JUL 12...	.04	.21	.25	.68	.09	.02	260	--	21.7	.000
AUG 17...	.04	.51	.55	.86	.08	.02	540	4.0	29.7	.621
SEP 16...	.07	.31	.38	1.4	.14	.10	220	3.3	8.97	.000

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
MAY 17...	0945	14700	12.5	740	29400	52	71	85	93	98	99	100

## CHEMUNG RIVER BASIN

01531000 CHEMUNG RIVER AT CHEMUNG, PA--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	285	249	226	206	196	---	212	219	256	335	405
2	237	297	234	236	---	183	---	218	219	271	291	422
3	235	285	243	246	244	173	---	200	203	277	288	434
4	247	293	239	---	246	132	---	216	244	284	284	425
5	262	299	242	257	248	135	---	209	232	284	298	417
6	274	307	240	277	241	149	---	228	246	275	310	428
7	280	318	247	283	---	191	229	311	192	307	323	425
8	294	325	246	---	256	186	237	246	199	305	285	429
9	296	324	242	---	257	205	244	248	201	304	179	432
10	306	318	209	308	262	220	252	251	219	303	195	440
11	302	315	187	---	272	229	258	262	234	301	224	449
12	302	231	198	294	213	218	263	251	245	288	250	447
13	293	225	209	297	192	234	268	233	265	297	271	457
14	298	192	212	310	197	230	280	231	279	306	286	432
15	305	201	202	311	187	239	283	240	291	186	289	444
16	339	201	176	278	188	241	281	253	268	294	303	449
17	344	215	166	277	149	---	284	223	205	310	314	438
18	216	228	179	---	120	264	286	145	225	319	317	433
19	157	227	197	---	133	269	292	145	231	322	319	410
20	173	241	199	312	139	252	302	157	168	330	325	401
21	178	247	232	315	169	220	314	174	116	336	340	399
22	192	245	228	---	188	206	315	215	141	345	349	425
23	205	250	237	---	155	204	326	192	163	356	361	415
24	221	257	245	---	188	204	330	199	192	354	370	419
25	227	251	251	---	177	224	323	214	217	373	380	412
26	230	271	255	307	209	---	301	216	224	364	388	409
27	244	277	238	178	201	---	196	217	233	368	390	397
28	253	267	189	148	207	---	190	209	255	371	376	392
29	262	240	205	166	185	---	209	227	260	379	388	385
30	269	245	219	183	---	---	203	231	233	362	396	388
31	279	---	232	203	---	---	---	344	---	323	394	---

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
AM VALUES

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

## 01531000 CHEMUNG RIVER AT CHEMUNG, PA--Continued

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

OCTOBER					NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	4980	58	780	1580	2	8.5	1910	12	62	
2	4610	55	693	1480	4	16	2710	12	88	
3	4170	32	360	1430	4	15	2260	9	55	
4	3220	24	209	1370	3	11	2000	9	49	
5	2690	14	102	1320	2	7.1	1760	6	29	
6	2320	13	81	1220	4	13	1740	5	23	
7	2020	12	65	1130	7	21	2200	8	48	
8	1800	8	39	1120	2	6.0	2300	7	43	
9	1670	9	41	1220	3	9.9	1800	6	29	
10	1760	12	57	1230	2	6.6	4000	89	1130	
11	1910	12	62	3500	95	1150	4950	114	1600	
12	1780	11	53	2970	85	682	3820	27	278	
13	1710	9	42	4430	50	598	3270	19	168	
14	1550	16	67	4290	42	486	3750	12	121	
15	1410	11	42	3440	20	186	6630	82	1420	
16	1370	10	37	2930	12	95	8550	170	3660	
17	1460	12	47	2610	10	70	6300	82	1390	
18	9920	387	12300	2350	6	38	4800	25	324	
19	11400	264	8840	2150	9	52	3570	17	164	
20	7980	69	1480	1980	6	32	2910	17	134	
21	7740	92	2010	1930	7	36	2500	14	94	
22	5430	37	542	1940	11	58	2300	8	50	
23	4340	23	270	1870	11	56	2200	4	24	
24	3570	21	202	1780	9	43	2000	7	38	
25	3100	20	167	1760	7	33	1800	7	34	
26	2810	17	129	1690	6	27	2200	9	53	
27	2510	10	68	1640	6	27	4340	45	527	
28	2240	10	60	2000	9	49	4170	45	507	
29	2020	8	44	2320	10	63	3290	12	107	
30	1850	4	20	1810	6	29	2750	8	59	
31	1720	4	19	---	---	---	2730	5	37	
TOTAL	107060	---	28928	62490	---	3924.1	101510	---	12345	
JANUARY					FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	2910	6	47	4200	20	227	5640	64	1030	
2	2500	7	47	3100	19	159	6140	64	1060	
3	2100	5	28	2400	19	123	19400	685	46200	
4	1800	4	19	2300	14	87	20700	383	22100	
5	1700	6	28	2300	6	37	17500	262	13200	
6	1500	6	24	2200	4	24	11300	92	2810	
7	1600	6	26	2100	4	23	8010	50	1080	
8	1700	7	32	2000	4	22	6200	21	352	
9	1500	7	28	1900	4	21	5200	17	239	
10	1400	7	26	1900	3	15	4500	20	243	
11	1400	7	26	2700	22	160	4200	21	238	
12	1400	5	19	7950	225	5000	3800	17	174	
13	1400	5	19	5430	76	1110	3400	14	129	
14	1600	6	26	6880	106	1970	3200	12	104	
15	1900	7	36	5560	98	1470	2900	10	78	
16	2200	5	30	6940	180	3370	2700	10	73	
17	1800	4	19	33100	1760	171000	2400	8	52	
18	1400	5	19	40900	550	60700	2200	7	42	
19	1100	5	15	31200	340	28600	2500	8	54	
20	1100	4	12	23400	225	14200	3980	31	333	
21	1200	4	13	14500	152	5950	4000	26	281	
22	1300	4	14	14900	179	7780	4950	44	588	
23	1400	4	15	17200	287	14500	3860	35	365	
24	1500	4	16	9640	82	2130	3330	17	153	
25	1570	4	17	8010	52	1120	3080	7	58	
26	1870	66	333	7370	49	975	2890	7	55	
27	17100	895	45000	7250	51	998	2710	7	51	
28	15300	190	7850	6490	51	894	3330	38	342	
29	8550	105	2420	5280	35	499	3200	34	294	
30	6440	50	869	---	---	---	2690	15	109	
31	4900	33	437	---	---	---	2510	12	81	
TOTAL	95140	---	57510	279100	---	323164	172420	---	91968	

## CHEMUNG RIVER BASIN

01531000 CHEMUNG RIVER AT CHEMUNG, PA--Continued

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

DAY	APRIL				MAY				JUNE			
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)			
1	5000	99	1500	2450	19	126	2880	36	285			
2	5770	128	1990	2930	16	127	3350	48	445			
3	4580	65	804	3390	24	220	2950	32	255			
4	3960	44	470	2570	17	118	2140	23	133			
5	3420	32	295	2210	12	72	1730	11	51			
6	2970	21	168	1990	11	59	1460	9	35			
7	2710	14	102	1790	12	58	2210	37	221			
8	2450	11	73	1810	12	59	4250	82	941			
9	2220	9	54	1710	8	37	2310	30	187			
10	1980	9	48	1560	9	38	2080	30	168			
11	1830	6	30	1630	14	62	1700	23	106			
12	1740	5	23	2740	28	207	1360	16	59			
13	1600	3	13	2280	21	129	1080	19	55			
14	1480	2	8.0	1820	13	64	932	14	35			
15	1350	3	11	1640	12	53	1350	32	140			
16	1300	10	35	2150	27	157	2490	47	349			
17	1340	19	69	10500	425	13500	2730	172	1250			
18	1270	10	34	6740	105	1820	2420	102	666			
19	1120	12	36	7910	122	3010	1580	71	303			
20	1010	13	35	8170	83	1850	25500	3050	225000			
21	945	16	41	6380	68	1170	28000	841	72900			
22	932	11	28	4410	36	429	12800	223	7710			
23	945	12	31	3490	25	236	6970	129	2430			
24	959	15	39	2920	16	126	4710	89	1130			
25	1130	12	37	2550	17	117	3800	68	698			
26	4560	85	1200	2600	48	337	3500	57	539			
27	5430	72	1060	2850	33	254	2610	42	296			
28	3820	24	248	2470	22	147	2410	40	260			
29	3350	20	181	1980	16	86	2610	81	571			
30	2890	20	156	1740	13	61	2430	145	951			
31	---	---	---	2520	33	225	---	---	---			
TOTAL	74061	---	8819.0	101900	---	24954	136342	---	318169			
DAY	JULY				AUGUST				SEPTEMBER			
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)			
1	2150	48	279	1150	14	43	391	4	4.2			
2	1960	37	196	1440	23	89	391	4	4.2			
3	1620	31	136	1520	16	66	383	5	5.2			
4	1570	28	119	1500	13	53	383	4	4.1			
5	1410	20	76	1480	11	44	383	4	4.1			
6	1200	13	42	1460	9	35	375	4	4.1			
7	1100	12	36	1440	9	35	367	6	5.9			
8	1150	15	47	6800	460	10500	367	7	6.9			
9	1350	13	47	4680	225	2840	367	5	5.0			
10	1370	12	44	2510	58	393	360	6	5.8			
11	1120	9	27	1800	37	180	360	3	2.9			
12	1270	12	41	1370	24	89	352	8	7.6			
13	1460	17	67	1100	17	50	352	6	5.7			
14	1810	21	103	1150	25	78	352	4	3.8			
15	1600	21	91	1030	27	75	352	3	2.9			
16	1250	17	57	1090	18	53	352	6	5.7			
17	1090	14	41	1170	22	69	344	8	7.4			
18	986	11	29	905	13	32	344	12	11			
19	905	11	27	755	9	18	439	15	18			
20	790	9	19	665	9	16	491	10	13			
21	709	12	23	590	8	13	415	14	16			
22	743	14	28	535	5	7.2	360	14	14			
23	778	11	23	526	7	9.9	352	10	9.5			
24	698	12	23	526	14	20	344	10	9.3			
25	611	11	18	448	11	13	337	11	10			
26	562	10	15	407	7	7.7	337	8	7.3			
27	517	8	11	491	10	13	337	2	1.8			
28	491	8	11	491	6	8.0	399	1	1.1			
29	553	9	13	473	6	7.7	482	3	3.9			
30	1280	24	83	431	8	9.3	482	5	6.5			
31	2020	41	224	407	8	8.8	---	---	---			
TOTAL	36123	---	1996	40340	---	14875.6	11350	---	206.9			
YEAR	1217836		886859.6									



## SUSQUEHANNA RIVER BASIN

61

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 mi<sup>2</sup> (20,194 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level. Prior to Oct. 18, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--63 years, 10,550 ft<sup>3</sup>/s (298.8 m<sup>3</sup>/s), 18.32 in/yr (465 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 320,000 ft<sup>3</sup>/s (9,060 m<sup>3</sup>/s) June 24, 1972, gage height, 35.42 ft (10.189 m) from floodmarks, from rating curve extended above 180,000 ft<sup>3</sup>/s (5,100 m<sup>3</sup>/s); minimum,

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 68,000 ft<sup>3</sup>/s (1,930 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 18	0530	*101,000 2,860	*16.61 5.063	Mar. 4	0230	71,300 2,020	13.23 4.033

Minimum discharge, 2,600 ft<sup>3</sup>/s (73.6 m<sup>3</sup>/s) Sept. 10, gage height 1.07 ft (0.326 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26400	6890	11100	10600	22600	35100	20600	18400	9010	16300	5850	5290
2	19200	6720	12700	9440	21200	35700	32400	17300	9710	16400	8650	4220
3	13500	6770	12800	8480	14900	51300	31400	19100	10700	14400	6510	3790
4	11100	6580	12000	8020	16300	62300	26300	18400	9300	10400	5240	3950
5	9650	6200	10700	6870	16100	58700	20700	18200	7410	9140	4350	3680
6	8570	5820	9970	5760	14400	52000	17500	15800	6360	7870	3670	3360
7	7710	5690	10300	5570	12600	45700	15000	13000	6800	6670	3790	3180
8	7290	5630	11300	6190	11600	38900	13100	11600	12700	6170	12400	3010
9	7080	5680	10000	5510	11400	31200	11600	10800	12300	6020	17100	2750
10	6740	5650	12500	4500	10500	26000	10300	9670	9880	6150	14700	2650
11	6690	6940	16300	5440	11000	23800	9260	8590	7800	6110	12000	2850
12	6690	7900	14700	5290	17700	21700	8670	10400	6610	15000	11200	3450
13	6830	12500	12500	5170	16100	18500	8200	12700	6200	16500	8080	3860
14	7460	18300	11100	6030	17700	17000	7640	11800	6110	15000	8820	3540
15	7910	17000	13600	7170	16400	16100	7040	9370	5810	13100	9020	2990
16	37700	15200	16800	8030	16100	14900	6590	8250	6450	10400	10900	2720
17	58900	13400	15800	7720	60400	12900	10400	14600	7540	8600	11400	3040
18	61900	12200	12800	6620	95200	11000	23900	13300	9720	8130	9020	4430
19	51900	11400	10600	5470	90800	10300	17500	15700	8440	7380	7040	6070
20	38600	10700	8130	5490	84100	12800	13000	20000	21300	6420	5710	5800
21	29000	10300	6590	5620	65500	15700	11200	28800	40700	5430	4970	4790
22	22100	13000	6750	8980	59300	21600	9640	28100	23700	4950	4410	4180
23	18400	16400	7010	13900	71600	23900	8240	22900	16300	4770	4000	3610
24	15500	14900	6960	14600	56000	21000	7600	19000	12200	4570	3560	3350
25	13200	11900	6150	15400	47300	17600	7430	15700	10900	4160	3180	3110
26	11600	10600	6650	16900	41100	15700	14600	13400	11300	3740	2990	2940
27	10300	10300	12400	39300	38500	14500	26100	12700	9420	3450	3850	3260
28	9350	12200	15500	54900	40600	15900	25100	11900	8340	3210	4810	5790
29	8600	13100	13400	45900	38300	18300	22100	10900	7830	3200	6030	6840
30	7870	12100	11100	37000	---	17100	21200	9210	8780	5520	5200	6100
31	7290	---	10400	27400	---	14400	---	8690	---	7880	6130	---
TOTAL	555030	311970	348610	413270	1035300	791600	464310	458280	329620	257040	224580	118600
MEAN	17900	10400	11250	13330	35700	25540	15480	14780	10990	8292	7245	3953
MAX	61900	18300	16800	54900	95200	62300	32400	28800	40700	16500	17100	6840
MIN	6690	5630	6150	4500	10500	10300	6590	8250	5810	3200	2990	2650
CFSM	2.30	1.33	1.44	1.71	4.58	3.28	1.99	1.90	1.41	1.06	.93	.51
IN.	2.65	1.49	1.66	1.97	4.94	3.78	2.22	2.19	1.57	1.23	1.07	.57

CAL YR 1975 TOTAL 4940790 MEAN 13540 MAX 197000 MIN 1420 CFSM 1.74 IN 23.57  
WTR YR 1976 TOTAL 5308210 MEAN 14500 MAX 95200 MIN 2650 CFSM 1.86 IN 25.33

## SUSQUEHANNA RIVER BASIN

01531500 SUSQUEHANNA RIVER AT TOWANDA, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)
OCT 29...	1130	9813	8560	150	--	--	6	9.3	67	0	0
FEB 17...	1330	9813	63900	90	7.0	2.0	75	13.3	39	0	0
MAR 09...	0940	9813	31900	260	--	1.0	9	11.0	69	0	0
APR 14...	1000	9813	7710	170	7.8	8.0	2	12.0	86	0	0
MAY 25...	0945	9813	16000	150	7.1	--	8	--	64	--	0
JUN 29...	1115	9813	7570	205	7.5	26.0	17	--	88	0	0
AUG 23...	1515	9813	3940	280	7.1	24.0	4	10.0	110	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 29...	25	.5	70	22	9.0	1.1	.09	.09	.03	250	4.0
FEB 17...	--	--	34	--	--	1.4	.10	.33	1.3	23800	--
MAR 09...	18	5.5	56	12	8.0	1.5	.03	.07	.06	720	--
APR 14...	27	4.5	62	26	11	1.2	.04	.07	.08	280	--
MAY 25...	16	5.5	54	10	6.0	--	.03	.24	.07	500	--
JUN 29...	24	7.0	78	16	10	1.1	.04	.04	.11	1060	--
AUG 23...	31	8.0	84	20	21	1.0	.06	.99	.10	330	--

## 01532000 TOWANDA CREEK NEAR MONROETON, PA

LOCATION.--Lat 41°42'27", long 76°28'20", Bradford County, Hydrologic Unit 02050106, at Lehigh Valley Railroad Bridge, 1,000 ft (305 m) upstream from South Branch Towanda Creek, and 0.5 mi (0.8 km) south of Monroeton.

DRAINAGE AREA.--215 mi<sup>2</sup> (557 km<sup>2</sup>).

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.

GAGE.--Non-recording gage. Datum of gage is 753.70 ft (229.728 m) above mean sea level. Prior to Oct. 1, 1942, nonrecording gage at site 1 mi (1.6 km) upstream at datum 20.44 ft (6.230 m) higher.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--62 years, 287 ft<sup>3</sup>/s (8.128 m<sup>3</sup>/s), 18.06 in/yr (459 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 50,000 ft<sup>3</sup>/s (1,420 m<sup>3</sup>/s) Sept. 26, 1975, gage height, about 15.7 ft (4.79 m); minimum observed, 0.7 ft<sup>3</sup>/s (0.020 m<sup>3</sup>/s) Sept. 15, 17, 21, 22, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,300 ft<sup>3</sup>/s (122 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0900	6,240 177	7.2 2.19	Feb. 17	1200	*13,800 391	*9.5 2.90
Jan. 27	Unk.	/11,800 334	/9.0 2.74	Mar. 3	0600	7,250 205	7.5 2.29

Minimum daily discharge, 21 ft<sup>3</sup>/s (0.59 m<sup>3</sup>/s) Sept. 9, 26.

/ At least.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	146	321	351	405	338	439	131	154	667	228	32
2	330	138	278	208	270	343	685	217	177	238	144	32
3	270	133	224	190	230	4300	585	192	141	174	98	32
4	228	128	177	170	200	2420	483	174	123	217	74	28
5	192	123	163	160	180	1380	400	160	104	234	44	28
6	171	116	177	155	180	883	338	146	102	209	48	26
7	154	114	214	150	165	655	297	144	141	177	1120	25
8	144	123	208	190	160	499	252	136	116	238	744	23
9	141	118	177	170	155	400	224	126	98	177	424	21
10	166	118	1230	160	150	364	202	116	106	138	373	30
11	157	195	614	150	382	391	192	111	91	160	241	42
12	189	160	585	145	434	313	171	126	75	138	189	32
13	166	932	386	140	301	321	157	121	72	126	166	28
14	144	614	377	200	373	301	151	106	68	126	133	25
15	136	434	351	180	263	281	141	102	180	111	208	22
16	154	355	546	160	830	252	136	98	157	87	274	28
17	168	297	364	150	10700	248	126	131	552	79	221	81
18	3410	263	338	145	2220	231	121	131	248	64	171	99
19	1430	234	208	140	2420	228	114	205	186	54	131	68
20	1110	214	301	135	1450	301	106	211	259	47	111	51
21	757	214	234	130	911	355	104	168	1200	53	109	44
22	557	224	224	125	1680	509	102	144	932	75	75	39
23	434	205	177	115	1050	400	104	126	530	66	72	34
24	351	180	149	112	704	338	98	121	355	98	58	30
25	301	160	309	110	596	285	106	116	285	53	53	26
26	270	150	661	500	552	281	259	205	211	38	50	21
27	231	310	1040	11800	530	245	205	168	163	42	50	46
28	205	325	557	2390	409	596	157	136	146	44	47	65
29	189	250	414	806	355	391	141	121	274	48	44	54
30	174	221	342	619	---	346	133	128	552	293	36	46
31	157	---	386	386	---	305	---	144	---	114	32	---
TOTAL	12786	7194	11732	20542	28255	18500	7229	4461	7798	4384	5768	1158
MEAN	412	240	378	663	974	597	241	144	260	141	186	38.6
MAX	3410	932	1230	11800	10700	4300	939	217	1200	667	1120	99
MIN	136	114	149	110	150	228	98	98	68	38	32	21
CFSM	1.92	1.12	1.76	3.08	4.53	2.78	1.12	.67	1.21	.66	.87	.18
IN.	2.21	1.24	2.03	3.55	4.89	3.20	1.25	.77	1.35	.76	1.00	.20

CAL YR 1975	TOTAL	130671	MEAN	358	MAX	19000	MIN	14	CFSM	1.67	IN	22.61
WTR YR 1976	TOTAL	129807	MEAN	355	MAX	11800	MIN	21	CFSM	1.65	IN	22.46

## 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 mi<sup>2</sup> (14.69 km<sup>2</sup>).

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum, water years 1960-65. August 1965 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 1,077.51 ft (328.425 m) above mean sea level. 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.

AVERAGE DISCHARGE.--11 years, 8.79 ft<sup>3</sup>/s (0.25 m<sup>3</sup>/s), 21.05 in/yr (535 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft<sup>3</sup>/s (31.7 m<sup>3</sup>/s) June 22, 1972, gage height, 6.85 ft (2.088 m), from rating curve extended above 50 ft<sup>3</sup>/s (0.85 m<sup>3</sup>/s); minimum daily, 0.1 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) on many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft<sup>3</sup>/s (4.25 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0600	313 8.86	5.62 1.713	Feb. 17	0100	178 5.04	5.20 1.585
Jan. 27	0615	*500 14.2	*6.01 1.832	July 30	0030	187 5.30	5.25 1.600

Minimum discharge, 0.33 ft<sup>3</sup>/s (0.009 m<sup>3</sup>/s) July 29, gage height, 3.73 ft (1.137 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	2.9	9.7	7.8	16	12	47	4.3	2.1	7.1	7.5	1.3
2	9.7	2.9	7.6	21	24	11	25	6.7	1.9	3.8	4.6	1.3
3	6.7	2.9	6.7	10	88	29	18	6.0	1.4	2.7	3.6	1.6
4	5.5	2.9	5.9	7.2	103	31	14	4.9	1.2	3.5	3.0	1.3
5	4.5	2.4	5.9	5.8	76	22	11	4.3	.95	3.3	2.6	1.1
6	3.9	2.2	6.7	5.0	50	16	9.1	4.0	6.3	2.1	2.7	1.1
7	3.4	2.0	6.3	4.5	25	13	7.9	4.0	14	2.5	14	.89
8	3.1	3.1	4.9	4.1	15	10	7.1	3.5	4.9	2.7	11	.78
9	2.9	2.4	5.5	4.3	10	9.1	6.0	3.1	3.1	2.1	21	.74
10	2.9	2.6	9.7	3.9	8.6	9.1	5.4	2.9	2.2	1.4	13	2.3
11	2.6	2.4	6.3	3.4	5.0	8.3	5.0	2.7	1.9	2.3	9.3	1.4
12	2.6	19	5.5	3.0	4.2	7.1	4.9	4.9	1.4	2.3	6.5	1.2
13	2.4	34	5.1	2.7	3.8	7.5	4.3	3.1	1.2	3.5	5.4	.85
14	2.2	26	5.5	51	3.5	6.7	3.6	2.7	1.1	3.5	33	.75
15	2.0	21	5.5	28	3.3	5.6	3.6	2.5	.95	2.3	22	.65
16	2.0	19	6.3	18	17	5.3	3.2	2.1	.85	1.9	17	3.3
17	2.2	15	5.1	12	113	6.7	2.9	2.3	2.1	1.7	11	8.7
18	120	13	4.5	16	79	15	2.5	3.1	1.1	1.3	7.7	7.1
19	107	11	11	24	96	6.7	2.3	6.7	.85	.95	5.6	3.8
20	49	9.7	9.7	20	48	8.3	2.3	13	1.4	1.3	4.4	2.5
21	27	24	4.5	13	34	11	2.3	6.7	5.6	.66	3.7	2.3
22	18	15	4.2	7.0	65	8.7	2.3	5.6	4.6	.68	3.2	1.9
23	13	12	4.2	5.4	37	7.9	2.0	4.6	3.8	.62	2.9	1.7
24	9.7	11	8.1	4.8	25	7.5	2.0	3.8	2.3	1.0	2.4	1.6
25	8.1	9.7	9.7	4.5	20	7.5	4.0	3.5	2.1	.57	2.0	1.4
26	6.3	8.6	33	71	19	6.7	8.0	3.1	1.4	.46	1.9	4.0
27	5.9	15	25	186	19	11	6.0	2.9	1.1	.43	2.2	12
28	4.9	10	12	53	17	15	4.9	2.3	1.3	.41	1.9	5.3
29	4.5	8.1	11	28	14	9.5	4.6	1.9	1.7	2.3	1.8	3.8
30	3.6	7.6	9.5	20	---	9.1	4.0	2.1	14	29	1.6	3.3
31	3.1	---	8.5	17	---	8.7	---	1.9	---	5.8	1.3	---
TOTAL	448.7	317.4	263.1	661.4	1038.4	342.0	225.2	125.2	88.80	94.18	229.8	79.96
MEAN	14.5	10.6	8.49	21.3	35.8	11.0	7.51	4.04	2.96	3.04	7.41	2.67
MAX	120	34	33	186	113	31	47	13	14	29	33	12
MIN	2.0	2.0	4.2	2.7	3.3	5.3	2.0	1.9	.85	.41	1.3	.65
CFSM	2.56	1.87	1.50	3.76	6.31	1.94	1.32	.71	.52	.54	1.31	.47
IN.	2.94	2.08	1.73	4.34	6.81	2.24	1.48	.82	.58	.62	1.51	.52

CAL YR 1975	TOTAL	3860.32	MEAN	10.6	MAX	215	MIN	.42	CFSM	1.87	IN	25.32
WTR YR 1976	TOTAL	3914.14	MEAN	10.7	MAX	186	MIN	.41	CFSM	1.89	IN	25.68

## TUNKHANNOCK CREEK BASIN

65

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 mi<sup>2</sup> (19.11 km<sup>2</sup>).

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum, water years 1963-73. October 1973 to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 1196.29 ft (364.629 m) above mean sea level. 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 fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,460 ft<sup>3</sup>/s (69.7 m<sup>3</sup>/s) Aug. 27, 1967, gage height, 12.66 ft (3.859 m), at present site and datum, from highwater mark, result of contracted-opening measurement; minimum, 0.01 ft<sup>3</sup>/s (0.000 m<sup>3</sup>/s) Aug. 6, 1976, gage height, 1.73 ft (0.527 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft<sup>3</sup>/s (5.1 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0600	*318 9.01	*4.44 1.353	Jan. 27	0545	224 6.34	4.11 1.252

Minimum discharge, 0.01 ft<sup>3</sup>/s (0.000 m<sup>3</sup>/s) Aug. 6, gage height, 1.73 ft (0.527 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	5.2	15	10	19	15	49	8.4	5.8	12	2.3	1.4
2	14	4.9	13	23	28	14	25	13	5.2	6.0	1.2	1.9
3	10	4.6	14	11	79	31	19	14	3.9	3.6	.60	1.6
4	8.5	4.6	11	8.8	55	39	15	11	3.6	4.6	.42	1.3
5	7.5	4.1	9.8	7.7	10	32	12	9.3	3.6	4.3	.32	1.3
6	6.5	3.9	12	7.2	9.4	25	9.3	8.4	14	2.8	.32	1.0
7	5.5	3.6	11	6.8	12	20	7.6	8.0	25	3.3	.34	.91
8	4.7	5.5	9.3	6.6	8.0	17	6.5	6.5	12	3.6	.40	.91
9	4.4	4.6	8.0	6.4	6.9	15	5.8	5.5	7.6	3.0	6.2	.83
10	4.2	8.4	9.8	6.2	6.2	15	4.9	4.6	6.2	2.0	4.4	3.6
11	4.5	8.0	8.4	6.6	5.8	14	4.6	5.2	4.9	2.2	.68	2.3
12	4.5	17	7.2	7.0	5.6	14	4.6	9.3	4.1	2.3	.26	1.9
13	3.8	40	6.9	6.3	6.0	19	4.1	5.8	3.6	3.9	.20	1.6
14	4.3	30	6.9	71	6.5	15	3.4	4.9	3.6	4.4	13	1.2
15	3.7	26	7.2	37	8.9	13	3.4	4.4	3.6	3.6	9.1	1.1
16	4.1	22	8.0	24	11	12	3.1	3.9	3.6	3.1	7.8	4.9
17	4.4	19	6.5	16	68	13	2.7	8.9	4.4	2.5	6.8	9.3
18	101	15	6.0	24	51	20	2.3	15	3.6	2.0	5.9	5.8
19	89	13	5.7	35	64	12	2.2	31	3.6	1.4	5.2	6.9
20	48	12	5.3	28	41	14	2.2	37	3.9	1.9	4.6	3.9
21	31	27	5.0	15	31	22	2.2	24	7.2	1.4	3.9	3.1
22	23	24	4.8	9.8	67	19	2.2	18	4.6	.96	3.4	2.3
23	17	18	4.6	7.6	40	15	1.9	15	4.1	.93	2.7	1.9
24	14	15	4.4	6.9	28	14	1.9	13	3.4	1.6	2.5	1.6
25	13	14	4.3	6.2	24	12	5.5	11	4.1	.92	2.2	1.4
26	11	16	45	71	23	10	16	9.3	3.6	.75	4.1	4.4
27	9.3	19	27	126	24	13	10	8.4	3.3	.64	3.4	11
28	8.4	14	14	55	21	19	8.9	6.9	3.9	.60	2.5	7.6
29	7.6	11	12	33	18	13	9.3	5.5	5.0	3.0	2.9	4.6
30	6.5	11	11	23	---	12	7.2	5.5	26	15	2.2	3.6
31	5.5	---	9.4	20	---	11	---	5.2	---	2.1	1.6	---
TOTAL	491.9	420.4	322.5	722.1	777.3	529	251.8	335.9	191.0	100.40	101.44	95.15
MEAN	15.9	14.0	10.4	23.3	26.8	17.1	8.39	10.8	6.37	3.24	3.27	3.17
MAX	101	40	45	126	79	39	49	37	26	15	13	11
MIN	3.7	3.6	4.3	6.2	5.6	10	1.9	3.9	3.3	.60	.20	.83
CFSM	2.15	1.90	1.41	3.16	3.63	2.32	1.14	1.46	.86	.44	.44	.43
IN.	2.48	2.12	1.63	3.64	3.92	2.67	1.27	1.69	.96	.51	.51	.48

CAL YR 1975 TOTAL 4743.60 MEAN 13.0 MAX 202 MIN .65 CFSM 1.76 IN 23.91  
WTR YR 1976 TOTAL 4338.89 MEAN 11.9 MAX 126 MIN .20 CFSM 1.61 IN 21.87



## 01533950 SOUTH BRANCH TUNKHANNOCK CREEK NEAR MONTDALE, PA

LOCATION.--Lat 41°34'29", long 75°38'32", Lackawanna County, Hydrologic Unit 02050106, on right bank 70 ft (21 m) upstream from highway bridge, 0.6 mi (1.0 km) downstream from Scott, 1.0 mi (1.6 km) upstream from East Benton, 3.5 mi (5.6 km) northwest of Montdale, 7.5 mi (12.1 km) west of Carbondale, and 16 mi (26 km) upstream from mouth.

DRAINAGE AREA.--12.6 m<sup>2</sup> (32.6 km<sup>2</sup>).

PERIOD OF RECORD.--August 1960 to current year.

REVISED RECORDS.--WDR PA-72: 1961(P), 1962(M), 1964(P), 1965-66(M), 1969-70(P).

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 1,090 ft or 332 m (from topographic map).

REMARKS.--Records good except those for winter periods or those for period of no gage-height record, which are fair.

AVERAGE DISCHARGE.--16 years, 16.4 ft<sup>3</sup>/s (0.46 m<sup>3</sup>/s), 17.68 in/yr (449 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,440 ft<sup>3</sup>/s (40.8 m<sup>3</sup>/s) Apr. 2, 1970, gage height, 5.73 ft (1.747 m), from rating curve extended above 350 ft<sup>3</sup>/s (9.91 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 5.43 ft (1.655 m); minimum, 0.08 ft<sup>3</sup>/s (0.002 m<sup>3</sup>/s) July 23, 1968; minimum gage height, 0.95 ft (0.290 m) Mar. 16, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft<sup>3</sup>/s (8.50 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0730	804 22.8	4.87 1.484	Feb. 17	0015	804 22.8	4.87 1.484
Jan. 26	2045	*1,140 32.3	*5.40 1.646	Apr. 1	1000	495 14.0	4.23 1.289

Minimum discharge, 1.3 ft<sup>3</sup>/s (0.037 m<sup>3</sup>/s) Aug. 6; minimum gage height, 0.98 ft (0.299 m) Sept. 9, 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	8.6	28	17	56	13	234	13	9.3	20	4.2	2.2
2	19	7.9	18	25	77	11	89	32	12	9.0	3.1	2.4
3	13	7.6	15	13	63	66	56	27	9.0	6.7	2.8	2.2
4	11	7.3	13	19	48	61	42	23	6.4	6.2	2.4	2.1
5	9.0	6.7	12	25	46	45	32	17	4.5	28	2.1	2.1
6	7.9	6.1	13	9.8	30	33	25	13	5.0	13	2.1	2.0
7	7.3	5.9	12	9.7	22	26	20	12	56	35	7.0	1.9
8	6.7	8.3	9.0	9.6	15	21	17	10	30	32	11	1.8
9	6.7	6.7	9.5	9.4	11	17	14	8.1	13	15	7.9	1.7
10	6.7	14	14	9.1	9.9	15	11	7.5	15	9.0	56	4.2
11	7.0	10	10	9.0	8.3	14	11	7.2	12	8.6	18	3.1
12	6.7	43	8.3	9.7	6.7	12	9.5	14	9.0	7.3	10	2.9
13	6.4	149	7.6	9.0	13	20	9.0	7.8	7.0	15	7.9	2.2
14	6.1	74	7.6	59	16	14	7.9	6.5	5.2	13	6.7	2.1
15	5.9	54	7.9	13	13	10	7.3	5.9	6.2	7.0	6.1	2.1
16	6.1	45	9.0	12	87	9.0	7.0	5.6	5.7	10	6.4	8.3
17	7.3	35	7.3	12	298	13	6.4	27	5.6	7.9	4.9	14
18	245	29	8.3	11	99	15	5.9	25	4.9	5.1	4.2	5.4
19	256	25	7.6	11	115	11	5.4	56	4.3	4.3	3.8	4.0
20	118	22	6.6	13	59	15	5.1	59	4.2	3.6	3.6	3.4
21	64	72	6.4	12	39	30	4.7	36	14	3.8	3.3	3.6
22	42	43	6.2	11	88	31	4.7	28	13	3.8	3.1	3.0
23	30	30	6.0	12	45	19	4.7	22	7.8	4.2	2.9	2.8
24	25	26	5.8	11	35	17	4.5	18	5.8	4.2	2.8	2.6
25	22	21	5.8	10	25	15	6.1	15	6.5	3.1	2.6	2.5
26	19	20	81	394	22	14	28	13	5.6	2.6	4.2	9.9
27	15	26	45	472	21	15	12	12	4.3	2.5	7.0	16
28	14	20	26	116	17	45	9.0	9.8	3.6	2.4	3.6	7.6
29	12	15	25	56	14	21	8.3	8.4	7.3	6.1	3.0	5.1
30	11	14	17	35	---	18	7.3	8.9	31	7.9	2.6	4.3
31	9.5	---	20	44	---	17	---	8.4	---	4.2	2.4	---
TOTAL	1034.3	852.1	467.9	1478.3	1398.9	683.0	703.8	556.1	323.2	356.3	207.7	127.5
MEAN	33.4	28.4	15.1	47.7	48.2	22.0	23.5	17.9	10.8	11.5	6.70	4.25
MAX	256	149	81	472	298	66	234	59	56	62	56	16
MIN	5.9	5.9	5.8	9.0	6.7	9.0	4.5	5.6	3.6	2.4	2.1	1.7
CFSM	2.65	2.25	1.20	3.79	3.83	1.75	1.87	1.42	.86	.91	.53	.34
IN.	3.05	2.52	1.38	4.36	4.13	2.02	2.08	1.64	.95	1.05	.61	.38
CAL YR 1975	TOTAL	9611.0	MEAN	26.3	MAX	503	MIN	2.5	CFSM	2.09	IN	28.37
WTR YR 1976	TOTAL	8189.1	MEAN	22.4	MAX	472	MIN	1.7	CFSM	1.78	IN	24.18

## 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. Water-quality sampling site at bridge 300 ft (91 m) downstream.

DRAINAGE AREA.--383 mi<sup>2</sup> (992 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level (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.

AVERAGE DISCHARGE.--62 years, 539 ft<sup>3</sup>/s (15.3 m<sup>3</sup>/s), 19.11 in/yr (485 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,600 ft<sup>3</sup>/s (952 m<sup>3</sup>/s) Mar. 10, 1964, gage height, 14.26 ft (4.346 m), from rating curve extended above 4,700 ft<sup>3</sup>/s (133 m<sup>3</sup>/s) on basis of contracted-opening measurement at gage height, 13.96 ft (4.255 m); minimum, 6.2 ft<sup>3</sup>/s (0.18 m<sup>3</sup>/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 ft<sup>3</sup>/s (161 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	1600	*13,300 377	*10.69 3.258	Jan. 27	1330	12,000 340	10.23 3.118

Minimum discharge, 67 ft<sup>3</sup>/s (1.90 m<sup>3</sup>/s) Sept. 9, 10, gage height, 1.34 ft (0.408 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	830	367	687	553	1050	767	2830	345	295	917	336	104
2	733	357	681	415	1530	694	2090	606	325	488	239	100
3	618	334	576	452	910	1970	1420	540	267	356	177	99
4	513	321	507	405	823	2000	1100	574	223	336	142	92
5	442	299	468	330	700	1770	888	464	195	350	122	86
6	381	278	468	258	630	1310	747	409	218	280	111	81
7	344	266	502	376	558	1040	656	384	1330	248	259	74
8	308	304	415	367	547	866	576	376	628	383	632	72
9	287	308	405	280	470	720	513	324	458	294	946	68
10	274	304	463	250	330	675	463	294	525	231	1070	94
11	278	405	447	240	270	675	431	274	408	236	786	217
12	304	431	390	230	220	588	395	401	340	333	524	169
13	274	2500	362	370	420	649	357	337	271	271	407	146
14	247	1820	353	662	580	637	334	285	234	346	426	162
15	231	1410	353	707	490	535	304	263	260	277	361	174
16	224	1260	390	524	3500	496	291	248	242	244	378	198
17	220	1070	357	447	8000	479	274	444	242	360	305	447
18	6440	917	330	310	3700	421	254	579	219	264	243	356
19	6970	816	231	280	4390	485	235	951	186	207	208	278
20	4540	740	258	290	2990	612	213	1370	186	176	184	264
21	2390	971	278	270	1930	675	202	1010	414	159	170	291
22	1570	1300	278	250	3390	995	192	850	400	157	157	223
23	1160	837	270	240	2560	681	185	673	315	154	139	186
24	925	720	200	230	1570	624	172	567	268	185	124	141
25	795	656	200	220	1280	576	202	489	280	153	112	95
26	728	624	660	1940	1150	541	754	443	246	122	104	92
27	650	727	1400	9590	1110	496	543	399	189	108	366	351
28	564	774	770	4820	987	823	431	344	162	101	264	314
29	512	618	570	2410	837	630	401	300	361	116	183	256
30	468	576	510	1580	---	553	365	292	585	313	147	216
31	395	---	460	1040	---	502	---	286	---	249	117	---
TOTAL	34615	22310	14239	30336	46922	24485	17818	15121	10272	8419	9739	5446
MEAN	1117	744	459	979	1618	790	594	488	342	272	314	182
MAX	6970	2500	1400	9590	8000	2000	2830	1370	1330	917	1070	447
MIN	220	266	200	220	220	421	172	248	162	101	104	68
CFSM	2.92	1.94	1.20	2.56	4.22	2.06	1.55	1.27	.89	.71	.82	.48
IN.	3.36	2.17	1.38	2.95	4.56	2.38	1.73	1.47	1.00	.82	.95	.53

CAL YR 1975 TOTAL 274648 MEAN 752 MAX 11900 MIN 82 CFSM 1.96 IN 26.68  
WTR YR 1976 TOTAL 239722 MEAN 655 MAX 9590 MIN 68 CFSM 1.71 IN 23.28

## TUNKHANNOCK CREEK BASIN

01534000 TUNKHANNOCK CREEK NEAR TUNKHANNOCK, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
OCT 29...	0800	9813	512	100	--	--	2	9.1	42	0	0
FEB 17...	1040	9813	8000	100	6.1	3.5	20	13.3	30	0	0
MAR 09...	0830	9813	721	230	--	1.0	2	11.5	62	0	0
APR 14...	0830	9813	334	130	7.8	8.0	<1	11.0	84	0	0
MAY 25...	0730	9813	496	120	7.5	--	2	--	36	--	0
JUN 29...	1015	9813	431	185	7.5	22.0	27	--	60	0	0
JUL 21...	1515	9813	156	280	7.1	24.0	6	10.0	100	--	0
AUG 30...	1515	9813	140	140	7.5	20.0	2	10.0	54	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 29...	14	1.5	28	20	7.0	1.2	.05	.05	.00	80	3.0
FEB 17...	11	.5	22	10	17	1.1	.06	.25	.15	1580	--
MAR 09...	12	7.5	36	16	14	1.1	.05	.02	.05	160	--
APR 14...	16	10	26	26	15	1.0	.03	.04	.07	70	--
MAY 25...	13	.5	32	10	7.0	.63	.03	.20	.08	120	--
JUN 29...	20	2.5	50	10	19	.60	.03	.04	.08	170	--
JUL 21...	35	3.0	90	20	18	1.7	.41	.07	.22	620	--
AUG 30...	16	3.0	36	12	12	.73	.04	.05	.05	110	--

## LACKAWANNA RIVER BASIN

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## RESERVOIR IN LACKAWANNA RIVER BASIN

01534180 STILLWATER RESERVOIR.--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 mi<sup>2</sup> (96.1 km<sup>2</sup>). PERIOD OF RECORD, December 1959 to current year. GAGE, water-stage recorder. Datum of gage is at mean sea level (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 hm<sup>3</sup>). 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, 5,860 acre-ft (7.23 hm<sup>3</sup>) Apr. 5, 1960 (elevation, 1,603.2 ft or 488.66 m); minimum, 242 acre-ft (0.298 hm<sup>3</sup>) Sept. 10, 1960 (elevation, 1,568.85 ft or 478.185 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 3,100 acre-ft (3.82 hm<sup>3</sup>) Oct. 20 (elevation 1,591.12 ft or 484.973 m); minimum, 515 acre-ft (0.635 hm<sup>3</sup>) Apr. 24 (elevation, 1,573.15 ft or 479.496 m).

## MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs.)
01534180 STILLWATER RESERVOIR			
Sept. 30 .....	1,577.78	978	-
Oct. 31 .....	1,574.06	606	-6.0
Nov. 30 .....	1,574.61	661	+9
Dec. 31 .....	1,574.37	637	-4
CAL YR 1975 .....	-	-	+1
Jan. 31 .....	1,575.98	798	+2.6
Feb. 29 .....	1,576.09	809	+2
Mar. 31 .....	1,574.18	618	-3.1
Apr. 30 .....	1,574.60	660	+7
May 31 .....	1,573.93	593	-1.1
June 30 .....	1,575.66	766	+2.9
July 31 .....	1,574.30	630	-2.2
Aug. 31 .....	1,573.43	543	-1.4
Sept. 30 .....	1,573.93	593	+8
WTR YR 1976 .....	-	-	-5

## 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 400 ft (122 m) downstream 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. Water-quality sampling site 900 ft (274 m) upstream.

DRAINAGE AREA.--38.8 mi<sup>2</sup> (100 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 1,551.28 ft (472.830 m) above mean sea level. Prior to Dec. 11, 1958, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated since December 1959 by Stillwater Lake 1.3 mi (2.1 km) upstream (see p.69).

AVERAGE DISCHARGE.--18 years, 71.6 ft<sup>3</sup>/s (2.03 m<sup>3</sup>/s), 25.06 in/yr (637 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft<sup>3</sup>/s (39.4 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 6.41 ft (1.954 m), from rating curve extended above 600 ft<sup>3</sup>/s (17.0 m<sup>3</sup>/s); minimum, 0.8 ft<sup>3</sup>/s (0.023 m<sup>3</sup>/s) Dec. 18, 1975, gage height, 1.32 ft (0.402 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, 2,530 ft<sup>3</sup>/s (71.6 m<sup>3</sup>/s) May 22, 1942, from computation of flow over dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 722 ft<sup>3</sup>/s (20.4 m<sup>3</sup>/s) Oct. 21, gage height, 4.48 ft (1.366 m); minimum, 0.8 ft<sup>3</sup>/s (0.023 m<sup>3</sup>/s) Dec. 18, gage height, 1.32 ft (0.402 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	45	78	57	190	161	132	56	34	94	60	19
2	137	43	83	48	160	134	245	69	35	83	49	16
3	97	40	77	48	180	130	222	82	34	57	39	16
4	77	39	67	46	140	138	169	85	30	44	31	15
5	63	36	60	43	120	220	123	75	26	38	25	15
6	57	34	57	38	115	242	92	63	26	32	23	15
7	52	32	61	37	92	205	78	54	72	29	40	14
8	48	34	57	38	76	146	69	49	102	35	85	14
9	43	36	54	36	70	110	60	45	74	34	94	12
10	40	39	61	34	65	90	51	42	53	29	104	14
11	43	45	69	34	57	85	46	38	43	28	130	20
12	47	49	63	34	52	74	43	44	35	39	101	22
13	46	136	56	34	52	77	39	44	29	42	70	19
14	47	188	51	40	56	85	37	39	26	49	56	16
15	45	167	51	49	60	80	34	36	23	49	49	14
16	43	136	56	50	55	72	32	33	21	51	54	15
17	41	113	57	46	80	64	30	40	21	111	50	30
18	160	99	45	40	310	58	28	51	20	119	40	54
19	231	85	33	36	300	56	26	67	19	87	33	53
20	366	75	37	32	370	64	24	134	18	63	28	43
21	670	80	35	33	360	85	22	163	22	49	25	35
22	509	132	37	33	330	124	20	124	40	40	22	28
23	321	130	38	30	430	115	20	90	43	36	20	23
24	188	108	37	32	400	92	19	72	36	36	19	19
25	130	92	35	27	320	77	21	64	30	33	17	17
26	102	80	42	26	263	67	48	57	26	30	16	18
27	85	82	74	110	235	61	78	51	22	26	51	87
28	74	102	87	460	227	83	75	44	22	26	57	113
29	66	94	74	400	195	90	69	38	32	28	42	78
30	58	80	63	340	---	77	63	35	50	58	31	54
31	50	---	58	280	---	64	---	34	---	78	24	---
TOTAL	4176	2451	1753	2591	5360	3226	2015	1918	1064	1553	1485	908
MEAN	135	81.7	56.5	83.6	185	104	67.2	61.9	35.5	50.1	47.9	30.3
MAX	670	188	87	460	430	242	245	163	102	119	130	113
MIN	40	32	33	26	52	56	19	33	18	26	16	12
MEAN#	129	82.6	56.1	86.2	185	101	67.9	60.8	38.4	47.9	46.5	31.1
CFSM#	3.32	2.13	1.45	2.22	4.77	2.60	1.75	1.57	.99	1.23	1.20	.80
IN.#	3.83	2.38	1.67	2.56	5.14	3.00	1.95	1.81	1.10	1.42	1.38	.89

CAL YR 1975 TOTAL 35090 MEAN 96.1 MAX 925 MIN 11 MEAN# 96.2 CFSM# 2.48 IN.# 33.67  
WTR YR 1976 TOTAL 28500 MEAN 77.9 MAX 670 MIN 12 MEAN# 77.4 CFSM# 1.99 IN.# 27.13

NOTE.--No gage-height record Jan. 20 to Feb. 25.  
# Adjusted for change in contents in Stillwater Lake.



## LACKAWANNA RIVER BASIN

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01534300 LACKAWANNA RIVER NEAR FOREST CITY, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, JANUARY TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
JAN 21...	1515	9813	E33	80	7.0	.0	<1	12.0	35	0	0
FEB 25...	0900	9813	E320	50	6.6	1.5	4	11.0	24	0	0
MAY 11...	1000	9813	38	60	7.8	15.0	3	9.6	22	0	0
AUG 06...	1535	9813	24	70	7.2	25.0	5	11.3	30	0	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
JAN 21...	8.0	3.5	16	20	8.0	1.1	.11	.02	.06	10
FEB 25...	4.0	3.5	12	6.0	4.0	.86	.05	.06	.04	360
MAY 11...	8.0	1.0	22	6.0	5.0	.66	.02	.13	.09	300
AUG 06...	11	.5	38	10	5.0	.50	.03	.04	.04	900

## 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 mi<sup>2</sup> (280 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level.

REMARKS.--Records good. Regulation at low flow by mine pumps above station. Flow regulated since December 1959 by Stillwater Lake about 17 mi (27 km) upstream (see p. 69).

AVERAGE DISCHARGE.--37 years, 203 ft<sup>3</sup>/s (5.75 m<sup>3</sup>/s), 25.53 in/yr (648 mm/yr), adjusted for storage since December 1959.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,510 ft<sup>3</sup>/s (269 m<sup>3</sup>/s) May 22, 1942, gage height, 10.58 ft (3.225 m), from rating curve extended above 2,200 ft<sup>3</sup>/s (62.3 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 3.0 ft<sup>3</sup>/s (0.085 m<sup>3</sup>/s) Oct. 9, 11, 1943; minimum daily, 13 ft<sup>3</sup>/s (0.368 m<sup>3</sup>/s) Nov. , 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,140 ft<sup>3</sup>/s (60.6 m<sup>3</sup>/s) Oct. 19, gage height, 5.39 ft (1.643 m); minimum, 37 ft<sup>3</sup>/s (1.05 m<sup>3</sup>/s) Sept. 10, 15, gage height, 1.77 ft (0.539 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	467	150	239	167	440	402	705	184	145	209	128	55
2	346	143	228	145	485	348	644	271	143	187	104	52
3	276	135	212	145	370	388	565	290	131	153	92	49
4	237	128	190	138	331	455	460	275	119	153	79	46
5	208	121	175	121	279	540	361	239	106	150	71	46
6	190	113	172	108	246	530	298	218	138	121	76	45
7	174	108	172	113	212	465	257	196	290	110	92	42
8	161	115	161	115	196	370	225	187	246	133	135	41
9	152	110	158	98	181	294	205	169	190	119	153	40
10	143	128	181	94	167	257	184	153	169	104	239	55
11	153	138	175	96	161	242	169	150	148	98	215	52
12	153	190	167	106	158	215	156	187	135	123	178	52
13	144	606	156	102	158	235	145	158	119	115	145	46
14	141	560	148	148	164	228	138	145	108	123	123	42
15	135	470	148	128	150	212	128	128	108	117	110	40
16	135	397	153	128	196	196	119	128	94	145	110	52
17	133	348	148	119	838	184	115	212	92	193	102	92
18	767	302	138	102	826	167	108	215	87	193	89	89
19	1410	264	108	98	1000	169	104	310	83	156	79	89
20	1070	239	108	104	971	196	98	450	89	128	72	79
21	1210	335	108	104	899	260	94	485	148	115	66	71
22	893	383	108	98	1160	318	90	411	145	102	61	61
23	655	344	106	102	1080	287	89	327	148	90	58	53
24	475	298	98	94	796	253	85	279	133	90	56	48
25	370	257	96	94	754	225	98	249	131	81	52	45
26	306	235	150	239	622	202	202	215	115	74	50	58
27	264	264	215	1250	575	199	196	190	98	71	119	150
28	228	271	193	1090	535	267	190	175	104	66	104	158
29	202	246	172	925	470	235	178	158	138	96	83	121
30	184	225	164	733	---	212	167	150	153	115	69	96
31	161	---	169	500	---	196	---	140	---	131	59	---
TOTAL	11543	7623	4916	7604	14420	8747	6573	7044	4053	3861	3169	1965
MEAN	372	254	159	245	497	282	219	227	135	125	102	65.5
MAX	1410	606	239	1250	1160	540	705	485	290	209	239	158
MIN	133	108	96	94	150	167	85	128	83	66	50	40
MEAN#	366	255	159	248	497	279	220	226	138	123	101	66.3
CFSM#	3.39	2.36	1.47	2.30	4.60	2.58	2.04	2.09	1.28	1.14	.94	.61
IN.#	3.91	2.63	1.70	2.65	4.96	2.97	2.28	2.41	1.43	1.31	1.08	.68
CAL YR 1975 TOTAL	97149		MEAN 266	MAX 1860	MIN 59	MEAN# 266	CFSM# 2.46	IN.# 33.49				
WTR YR 1976 TOTAL	81518		MEAN 223	MAX 1410	MIN 50	MEAN# 222	CFSM# 2.06	IN.# 28.01				

# Adjusted for change in contents in Stillwater Lake.

## LACKAWANNA RIVER BASIN

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01534500 LACKAWANNA RIVER AT ARCHBALD, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, JANUARY TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
JAN 21...	1515	9813	108	270	7.1	1.0	9	12.0	156	0	28
FEB 19...	0945	9813	1000	120	4.5	4.0	6	11.7	65	0	0
MAY 06...	1200	9813	218	220	7.0	14.0	3	9.7	102	0	0
AUG 06...	1525	9813	76	250	7.2	24.0	2	10.0	130	0	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
JAN 21...	28	21	6	100	50	.92	.10	.02	.05	2340
FEB 19...	9.5	10	14	48	7.0	.74	.04	.10	--	600
MAY 06...	11	18	20	52	6.0	.52	.01	.29	.14	230
AUG 06...	19	20	38	78	10	.82	.03	.06	.17	470

## 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 on Old Forge, and 0.5 mi (0.8 km) upstream from St. Johns Creek. Water-quality sampling site 200 ft (61 m) upstream.

DRAINAGE AREA.--332 mi<sup>2</sup> (860 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level. Prior to Oct 1, 1974, water-stage recorder at same site and datum and Oct 1, 1974 to Aug. 17, 1975, nonrecording gage at site 150 ft (45.720 m) upstream at different datum.

REMARKS.--Records good. Flow regulated since December 1959 by Stillwater Lake about 33 mi (53 km) upstream (see p. 69).

AVERAGE DISCHARGE.--38 years, 503 ft<sup>3</sup>/s (14.2 m<sup>3</sup>/s), 20.57 in/yr (522 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,000 ft<sup>3</sup>/s (878 m<sup>3</sup>/s) Aug. 19, 1955, gage height, 20.05 ft (6.111 m), from floodmark, from rating curve extended above 5,000 ft<sup>3</sup>/s (142 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 15.30 ft or 4.663 m and of peak flow; minimum, 20 ft<sup>3</sup>/s (0.57 m<sup>3</sup>/s) Sept. 21, 1964, gage height, 1.28 ft (0.390 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,780 ft<sup>3</sup>/s (192 m<sup>3</sup>/s) Jan. 27, gage height, 7.44 ft (2.268 m); minimum, 67 ft<sup>3</sup>/s (1.90 m<sup>3</sup>/s) Sept. 10, gage height, 2.26 ft (0.689 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	794	276	656	380	1160	734	1970	315	315	416	218	91
2	545	262	625	321	1600	649	1830	628	325	335	183	93
3	409	239	559	345	992	822	1410	579	251	260	158	85
4	336	219	490	326	857	857	1110	551	214	296	136	83
5	290	203	433	259	710	965	875	440	179	320	121	79
6	253	185	421	222	614	920	702	395	260	235	172	77
7	239	171	427	240	524	798	621	360	628	247	226	77
8	239	219	380	258	488	656	524	320	434	269	360	75
9	227	219	347	176	416	537	458	287	325	218	380	73
10	223	266	398	146	340	488	400	264	269	183	965	142
11	266	305	398	165	385	458	370	264	226	176	766	95
12	235	477	369	198	375	405	340	345	199	187	524	87
13	196	2300	325	190	375	494	310	278	169	191	385	83
14	182	1850	310	519	422	544	282	247	148	202	310	77
15	171	1360	305	329	350	452	260	218	230	183	256	73
16	164	1080	320	300	464	422	239	222	165	222	264	142
17	174	890	300	265	2540	405	206	446	151	282	210	239
18	1590	727	276	186	2380	360	191	600	133	278	172	151
19	3770	679	192	195	2690	370	179	947	124	226	148	133
20	2960	580	194	206	2320	452	165	1060	158	191	133	121
21	2580	954	188	199	1920	614	155	965	282	183	121	121
22	1890	1230	188	184	2210	798	148	848	278	158	110	98
23	1360	982	190	141	2170	642	139	642	251	172	105	89
24	982	838	166	182	1530	572	133	524	206	148	108	87
25	769	727	158	183	1410	506	169	452	226	124	98	81
26	648	663	472	1050	1180	452	512	400	176	115	93	155
27	538	752	682	6100	1070	440	422	350	142	110	142	251
28	452	744	538	4000	974	742	365	305	145	105	155	243
29	398	648	445	2470	830	572	335	269	235	350	124	191
30	358	580	401	1800	---	494	301	260	330	470	108	148
31	305	---	431	1200	---	446	---	239	---	235	98	---
TOTAL	23543	20625	11584	22735	33296	18066	15121	14020	7174	7087	7349	3540
MEAN	759	688	374	733	1148	583	504	452	239	229	237	118
MAX	3770	2300	682	6100	2690	965	1970	1060	628	470	965	251
MIN	164	171	158	141	340	360	133	218	124	105	93	73
MEAN#	753	689	374	736	1148	580	505	451	242	227	236	119
CFSM#	2.27	2.08	1.13	2.22	3.46	1.75	1.52	1.36	.73	.68	.71	.36
IN.#	2.62	2.32	1.30	2.56	3.73	2.02	1.70	1.57	.81	.78	.82	.40

CAL YR 1975 TOTAL 195638 MEAN 536 MAX 6900 MIN 97 MEAN# 536 CFSM# 1.61 IN.# 21.91  
WTR YR 1976 TOTAL 184140 MEAN 503 MAX 6100 MIN 73 MEAN# 502 CFSM# 1.51 IN.# 20.63

# Adjusted for change in contents in Stillwater Lake.

## LACKAWANNA RIVER BASIN

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01536000 LACKAWANNA RIVER AT OLD FORGE, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, JANUARY 1976 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
JAN 21...	1515	9813	203	180	6.7	5.0	2	10.0	100	0	0
FEB 19...	1045	9813	2740	130	5.1	5.0	20	12.1	60	0	0
MAR 08...	1300	9813	656	150	--	5.0	5	10.7	71	0	0
APR 19...	1300	9813	180	200	6.7	21.0	2	9.7	91	0	0
MAY 06...	1400	9813	395	220	7.0	15.0	4	10.2	84	0	0
JUN 22...	1515	9813	251	240	7.0	20.0	9	10.0	72	0	0
AUG 06...	1515	9813	127	210	6.8	18.0	7	--	61	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
JAN 21...	16	15	14	80	12	1.6	.05	.02	.45	330	--
FEB 19...	10	8.5	14	40	17	1.1	.04	.13	.13	1060	--
MAR 08...	10	6.0	20	46	13	1.3	.10	.49	.28	330	--
APR 19...	16	12	14	64	14	1.5	.05	.44	.48	--	--
MAY 06...	14	12	24	42	14	1.0	.03	.30	.43	350	--
JUN 22...	15	8.5	22	44	21	2.1	.10	.98	.11	650	--
AUG 06...	16	5.2	16	44	15	1.9	.04	.29	.54	630	120



## 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 mi<sup>2</sup> (25,800 km<sup>2</sup>), 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) above mean sea level. See WSP 1722 for history of changes prior to Mar. 23, 1949.

REMARKS.--Records good.

AVERAGE DISCHARGE.--77 years, 13,270 ft<sup>3</sup>/s (376 m<sup>3</sup>/s), 18.09 in/yr 459 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 345,000 ft<sup>3</sup>/s (9,770 m<sup>3</sup>/s) June 24, 1972, gage height, 40.91 ft (12.469 m), from floodmark, from rating curve extended above 200,000 ft<sup>3</sup>/s (5,664 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 528 ft<sup>3</sup>/s (15.0 m<sup>3</sup>/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 ft<sup>3</sup>/s (6,570 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 82,000 ft<sup>3</sup>/s (2,320 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 19	2300	90,100 2,550	17.83 5.435	Feb. 19	0200	*118,000 3,340	*21.34 6.504

Minimum discharge, 3,520 ft<sup>3</sup>/s (99.7 m<sup>3</sup>/s) Sept. 10, gage height, 1.13 ft (0.344 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36000	10800	15400	15000	29900	41100	22100	22900	10600	15500	9550	6540
2	28600	10000	14900	13800	29500	39000	37200	21000	11200	20000	7460	6110
3	25900	9260	15900	12700	24400	44400	39700	20900	11700	18400	9460	5070
4	23800	8730	15500	11400	19500	71600	36800	22000	12200	16000	7640	4470
5	20000	8350	14500	10700	17000	70900	30400	20900	10600	12600	6270	4500
6	16200	8210	13200	9500	18000	64400	24700	20400	8820	11100	5400	4320
7	13500	8050	12600	9000	16000	56100	21300	17700	9960	9540	5110	4050
8	11700	7860	12900	9200	15000	48900	18800	15300	10500	8730	8170	3850
9	10400	7490	13400	8100	14500	40700	16600	13700	15000	8050	18100	3700
10	9490	7300	12600	7000	13500	33400	14900	12700	14400	7530	21100	3740
11	8980	7700	16800	6400	13900	29400	13400	11400	11800	7760	18500	3670
12	8760	8900	18500	6000	15200	27100	12100	10600	9400	8100	15000	3600
13	8290	16400	16700	6700	20600	24700	11200	12600	7960	15900	12200	3870
14	8030	23400	14700	8400	20500	22100	10500	14600	7360	17600	10200	4360
15	7910	24800	13700	10500	21500	20400	9750	13300	7380	16400	10900	4270
16	7910	22100	16300	9900	19600	19300	8980	10900	7200	14500	11200	4070
17	8320	19800	19200	9000	41800	18300	8370	10600	7660	12000	12900	4420
18	31300	17700	17500	7800	102000	15900	13100	17500	9010	10000	12900	5060
19	71600	16200	14700	7000	115000	14300	24600	17700	10800	9240	10400	5710
20	83100	14900	12000	6400	110000	14500	18300	20800	9720	8440	8360	6990
21	74600	14800	9790	6000	91600	17700	14600	26500	30800	7540	6920	6930
22	59200	16300	8210	6500	73600	21700	12800	32500	38100	6520	6060	5890
23	44300	17900	8770	5800	80700	27100	11200	30000	24800	6030	5410	5100
24	33600	19600	10600	5400	76700	27200	9650	24700	18500	5900	4960	4700
25	26300	17600	18800	5700	60400	23800	9000	20900	14700	5580	4520	4120
26	22200	15100	25000	13300	51400	20600	10500	17900	13300	5010	4150	4000
27	19100	14100	21900	49000	46200	18900	19100	15900	13000	4550	4120	4140
28	16600	15100	22300	78400	44500	19100	28800	14900	10900	4270	5230	4680
29	14800	16200	20200	59800	45300	20800	26500	13800	10100	4340	5170	6430
30	13200	16200	18300	49300	---	21600	24000	12700	10900	4920	6720	7760
31	11800	---	16300	37400	---	20000	---	11000	---	7260	5790	---
TOTAL	775490	420850	481170	501100	1247800	955000	558950	548300	388370	309310	279870	145890
MEAN	25020	14030	15520	16160	43030	30810	18630	17690	12950	9978	9028	4863
MAX	83100	24800	25000	78400	115000	71600	39700	32500	38100	20000	21100	7760
MIN	7910	7300	8210	5400	13500	14300	8370	10600	7200	4270	4120	3600
CFSM	2.51	1.41	1.56	1.62	4.32	3.09	1.87	1.78	1.30	1.00	.91	.49
IN.	2.90	1.57	1.80	1.87	4.66	3.57	2.09	2.05	1.45	1.16	1.05	.54

CAL YR 1975 TOTAL 6513060 MEAN 17840 MAX 244000 MIN 1900 CFSM 1.79 IN 24.33  
WTR YR 1976 TOTAL 6612100 MEAN 18070 MAX 115000 MIN 3600 CFSM 1.81 IN 24.70

## 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. Water-quality sampling site 150 ft (46 m) downstream.

DRAINAGE AREA.--32.4 mi<sup>2</sup> (83.9 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level.

REMARKS.--Records good, except those for periods of no gage-height record or winter periods, which are fair. Some regulation by Huntsville Reservoir 5.9 mi (9.5 km) upstream (usable capacity, 256,900,000 ft<sup>3</sup> (7.28 hm<sup>3</sup>)). Diversion from reservoir for municipal supply.

AVERAGE DISCHARGE.--35 years, 44.9 ft<sup>3</sup>/s (1.27 m<sup>3</sup>/s), 18.83 in/yr (478 mm/yr), adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,390 ft<sup>3</sup>/s (96.0 m<sup>3</sup>/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 ft<sup>3</sup>/s (34.0 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 0.1 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) Sept. 12, 1944; minimum daily, 0.5 ft<sup>3</sup>/s (0.014 m<sup>3</sup>/s) Sept. 20, Oct. 8, 1946.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 630 ft<sup>3</sup>/s (17.8 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0600	848 24.0	2.77 0.844	June 30	1645	*902 25.5	2.84 0.866
Jan. 27	Unk.	765 21.7	2.66 0.811				

Minimum discharge, 5.0 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s) Sept. 9, 10, gage height, 0.31 ft (0.094 m); minimum daily, 7.4 ft<sup>3</sup>/s (0.21 m<sup>3</sup>/s) Sept. 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	35	26	42	51	90	51	223	37	31	249	23	11		
2	31	25	38	41	110	47	164	51	30	135	20	12		
3	27	24	32	39	80	70	130	39	25	89	20	11		
4	24	23	28	36	70	72	104	35	21	70	19	11		
5	23	23	27	32	56	66	81	32	19	55	19	11		
6	22	20	27	31	50	58	69	29	29	42	20	11		
7	20	20	28	28	45	49	62	30	47	55	35	9.8		
8	20	28	24	27	40	43	52	28	25	64	40	9.8		
9	19	25	24	26	38	39	46	26	21	43	40	7.4		
10	20	36	29	25	38	41	39	24	21	32	44	18		
11	24	34	25	24	36	43	38	25	20	123	29	13		
12	24	72	24	23	37	38	33	29	19	74	25	11		
13	19	175	23	50	43	61	32	24	19	52	28	9.0		
14	17	122	23	60	47	56	30	23	19	42	27	8.6		
15	16	87	24	45	40	47	28	21	23	32	26	8.2		
16	16	70	25	38	87	47	28	27	19	31	26	19		
17	23	57	22	27	276	48	25	80	19	28	21	25		
18	334	50	23	24	230	39	24	78	17	24	19	14		
19	271	45	20	25	227	44	23	78	17	22	17	11		
20	179	41	21	23	177	56	24	62	39	20	16	9.8		
21	119	83	21	22	135	83	23	53	100	24	16	9.8		
22	87	75	20	20	161	85	23	44	120	23	19	7.8		
23	71	56	20	19	123	66	22	37	130	32	17	9.0		
24	63	50	21	18	93	58	23	34	72	28	16	9.0		
25	61	46	20	80	81	53	28	31	52	21	14	8.6		
26	56	42	91	220	76	48	69	30	37	18	17	16		
27	46	47	69	500	70	52	35	28	29	18	20	23		
28	41	43	41	330	62	83	30	25	35	18	15	18		
29	39	37	34	220	55	56	28	23	43	42	14	13		
30	35	34	38	140	---	49	26	27	256	52	14	12		
31	27	---	53	90	---	47	---	25	---	25	11	---		
TOTAL	1809	1516	957	2334	2673	1695	1562	1135	1354	1583	687	366.8		
MEAN	58.4	50.5	30.9	75.3	92.2	54.7	52.1	36.6	45.1	51.1	22.2	12.2		
MAX	334	175	91	500	276	85	223	80	256	149	44	25		
MIN	16	20	20	18	36	38	22	21	17	18	11	7.4		
(f)	3.59	3.61	3.49	3.49	3.73	3.59	3.87	3.99	5.11	4.49	3.99	3.66		
MEAN#	62.0	54.1	34.4	78.8	95.9	58.3	56.0	40.6	50.2	55.6	26.2	15.9		
CFSM#	1.91	1.67	1.06	2.43	2.96	1.80	1.73	1.25	1.55	1.72	.81	.49		
IN.#	2.20	1.86	1.22	2.80	3.19	2.08	1.93	1.44	1.73	1.98	.93	.55		
CAL YR 1975	TOTAL	18072.4	MEAN	49.5	MAX	878	MIN	9.4	MEAN#	55.6	CFSM#	1.72	IN.#	23.28
WTR YR 1976	TOTAL	17671.8	MEAN	48.3	MAX	500	MIN	7.4	MEAN#	52.2	CFSM#	1.61	IN.#	21.92

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

# Adjusted for diversion.

## TOBY CREEK BASIN

01537000 TOBY CREEK AT LUZERNE, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, JANUARY 1976 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
JAN 21...	1515	9813	22	70	7.3	.0	1	12.0	42	0	0
FEB 17...	0900	9813	253	90	6.3	3.5	15	13.1	26	0	0
MAR 08...	1430	9813	40	140	--	5.0	2	10.7	84	0	0
APR 19...	1430	9813	22	160	7.2	20.0	3	9.0	66	0	0
MAY 17...	1045	9813	72	150	7.6	15.0	55	9.7	54	0	0
JUN 22...	1515	9813	102	140	6.7	20.0	25	10.0	40	0	0
AUG 23...	1515	9813	18	210	6.7	24.0	6	10.0	55	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
JAN 21...	8.7	5.0	16	20	7.0	.94	.09	.07	.06	20
FEB 17...	8.7	1.0	16	16	18	1.3	.06	.20	.16	1040
MAR 08...	12	13	26	2.0	19	1.3	.10	.54	.30	180
APR 19...	16	6.5	30	18	22	1.5	.12	.76	.61	250
MAY 17...	10	7.0	24	16	17	1.0	.07	.27	.45	4650
JUN 22...	11	3.0	24	24	14	1.0	.04	.13	.61	1970
AUG 23...	152	4.2	34	20	25	1.1	.04	.06	.62	1090

SOLOMON CREEK BASIN

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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 mi<sup>2</sup> (40.7 km<sup>2</sup>).

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 fair. Regulation by mine pumps above station.

AVERAGE DISCHARGE.--36 years, 20.0 ft<sup>3</sup>/s (0.57 m<sup>3</sup>/s), 17.30 in/yr (439 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,450 ft<sup>3</sup>/s (69.4 m<sup>3</sup>/s) Aug. 18, 1955, gage height, 9.83 ft (2.996 m), from rating curve extended above 380 ft<sup>3</sup>/s (10.8 m<sup>3</sup>/s) on basis of computation of peak flow through culvert; minimum, 0.13 ft<sup>3</sup>/s (0.004 m<sup>3</sup>/s) Sept. 16, Oct 20, 1969; minimum daily, 0.50 ft<sup>3</sup>/s (0.014 m<sup>3</sup>/s) Sept. 23, 1969; minimum gage height, 0.14 ft (0.043 m) Aug. 16, 25, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 11.4 ft (3.47 m) Sept. 16, 1933, from floodmark.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 238 ft<sup>3</sup>/s (6.74 m<sup>3</sup>/s) June 28, gage height, 3.45 ft (1.052 m), no peak above base of 320 ft<sup>3</sup>/s (9.06 m<sup>3</sup>/s); minimum, 0.29 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/s) Sept. 14, 15, 16, gage height, 0.77 ft (0.235 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	9.4	12	19	48	13	47	12	15	78	5.7	2.0
2	19	8.5	11	20	45	12	37	12	9.4	52	5.7	2.0
3	15	7.7	9.7	18	37	17	34	12	7.2	37	4.9	1.9
4	12	7.2	8.6	16	39	16	29	8.0	6.1	29	4.5	1.6
5	11	6.5	8.1	14	29	13	24	5.5	5.5	23	4.3	1.5
6	9.7	6.1	8.2	12	28	13	20	9.4	11	17	4.7	1.3
7	8.5	5.9	8.3	11	23	12	18	10	13	18	17	1.1
8	7.7	7.7	8.8	8.6	17	12	15	9.4	7.7	14	17	.88
9	7.2	5.9	8.8	8.0	15	11	13	8.8	8.0	12	13	.88
10	6.5	10	8.8	7.7	18	11	12	7.5	7.0	9.4	27	11
11	7.5	7.2	7.5	7.6	16	10	11	7.7	5.5	37	21	1.5
12	6.5	27	7.2	7.4	13	9.4	9.1	8.2	7.0	16	19	1.1
13	6.1	65	6.7	10	12	13	8.2	6.7	6.1	13	17	.88
14	5.3	49	6.7	42	12	13	7.5	6.1	4.1	13	14	.64
15	4.9	40	6.5	13	11	12	6.7	5.7	4.1	11	13	.52
16	4.5	33	6.5	12	22	14	6.1	6.1	3.6	19	14	12
17	10	27	6.0	9.7	50	13	5.5	22	4.3	13	10	8.2
18	67	22	5.6	12	56	16	5.3	59	3.3	11	9.1	3.2
19	89	19	5.2	13	58	13	4.5	67	2.7	10	8.2	2.6
20	86	17	4.8	14	49	14	4.3	55	11	9.1	7.2	3.0
21	66	38	4.5	12	40	16	3.8	47	17	11	6.5	2.9
22	54	30	4.2	9.2	41	14	3.6	37	27	11	5.7	2.4
23	41	27	3.8	8.4	32	13	3.3	29	23	12	5.1	2.3
24	31	22	3.5	7.8	27	13	3.2	24	17	8.0	4.5	2.1
25	26	18	3.8	7.4	24	12	10	21	28	5.9	4.1	2.0
26	22	15	27	81	21	11	18	19	14	5.3	10	14
27	19	17	14	161	19	14	9.1	14	12	4.9	10	21
28	16	14	12	105	17	16	8.8	11	31	4.9	3.9	18
29	14	11	12	68	15	12	8.8	9.7	57	14	2.9	15
30	12	10	18	49	---	12	8.5	9.7	87	12	2.4	17
31	11	---	23	41	---	12	---	8.0	---	6.5	2.2	---
TOTAL	719.4	583.1	280.8	824.8	834	402.4	394.3	567.5	454.6	537.0	293.6	154.50
MEAN	23.2	19.4	9.06	26.6	28.8	13.0	13.1	18.3	15.2	17.3	9.47	5.15
MAX	89	65	27	161	58	17	47	67	87	78	27	21
MIN	4.5	5.9	3.5	7.4	11	9.4	3.2	5.5	2.7	4.9	2.2	.52
CFSM	1.48	1.24	.58	1.69	1.83	.83	.83	1.17	.97	1.10	.60	.33
IN.	1.70	1.38	.67	1.95	1.98	.95	.93	1.34	1.08	1.27	.70	.37

CAL YR 1975 TOTAL 6514.80 MEAN 17.8 MAX 200 MIN .30 CFSM 1.13 IN 15.44  
WTR YR 1976 TOTAL 6046.00 MEAN 16.5 MAX 161 MIN .52 CFSM 1.05 IN 14.32

## 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 mi<sup>2</sup> (26,300 km<sup>2</sup>).

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 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	SUSPENDED SOLIDS (MG/L)
OCT												
07...	1045	13900	190	6.4	14.5	6	8.4	13	1.6	E7600	158	16
21...	1240	75500	145	6.9	12.0	50	8.6	19	1.5	4600	82	134
NOV												
04...	0955	8890	310	6.8	12.0	6	10.2	8	1.0	1100	278	10
18...	1010	18100	190	6.7	7.5	5	11.2	8	1.0	670	126	10
DEC												
02...	1305	15100	210	7.1	5.0	3	11.6	8	1.2	300	122	9
17...	0950	19600	210	6.9	4.5	3	12.8	7	.4	250	126	7
FEB												
19...	1320	115000	135	6.8	3.0	150	12.8	29	1.8	1300	61	395
MAR												
04...	1345	70000	160	6.6	6.0	65	12.0	28	.6	1630	80	240
16...	1400	19500	225	6.8	4.0	5	12.4	7	1.0	420	122	10
30...	1430	22000	220	7.0	11.0	10	10.6	10	1.4	70	108	22
APR												
14...	1200	10600	260	6.8	10.0	5	11.6	8	1.4	E160	151	8
29...	1030	27200	190	7.1	9.0	10	10.2	15	2.3	740	132	50
MAY												
12...	1030	10800	225	7.2	14.0	4	10.0	14	1.7	770	115	10
25...	1415	21000	180	6.8	14.0	10	9.4	12	1.0	320	131	27
JUN												
09...	1315	15500	225	7.2	22.0	15	10.4	30	3.4	520	139	43
23...	1315	24300	180	7.2	22.0	130	7.4	41	2.7	87100	104	273
JUL												
08...	1340	8900	265	7.0	22.0	15	7.8	16	1.6	1500	157	37
20...	1115	8600	260	7.4	23.0	10	8.4	17	1.4	1100	144	27
AUG												
04...	1115	7800	260	7.3	22.0	30	7.0	21	2.6	1030	145	60
18...	1230	13100	200	7.1	21.5	7	7.4	23	1.2	1700	141	64
31...	1100	5720	300	7.4	21.0	1	7.6	19	3.6	1500	197	24
SEP												
15...	1015	4390	355	7.3	21.0	5	8.0	21	2.9	480	204	20
28...	0915	4690	340	7.2	16.0	6	9.2	17	3.1	3100	195	25



## SUSQUEHANNA RIVER BASIN

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01537700 SUSQUEHANNA RIVER NEAR HUNLOCK CREEK, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT											
07...	.79	.07	.28	.35	1.1	.08	310	1	1	0	0
21...	.29	.03	.36	.39	.68	.16	2400	1	1	0	10
NOV											
04...	.76	.09	.25	.34	1.1	.06	110	0	0	0	0
18...	.52	.07	.27	.34	.86	.05	150	1	1	0	0
DEC											
02...	.54	.04	.19	.23	.77	.05	130	0	1	0	0
17...	.70	.06	.11	.17	.87	.04	170	0	0	<10	10
FEB											
19...	.72	.11	1.2	1.3	2.0	.31	5500	7	1	10	10
MAR											
04...	.75	.10	.68	.78	1.5	.20	2700	6	0	<10	10
16...	.94	.13	.18	.31	1.3	.08	260	1	1	<10	0
30...	.71	.07	.48	.55	1.3	.06	380	0	0	0	0
APR											
14...	--	--	--	--	--	.05	110	0	0	10	10
29...	.56	.09	.59	.68	1.2	.09	680	0	0	20	0
MAY											
12...	.41	.09	.26	.35	.76	.06	140	0	0	<10	0
25...	.47	.06	.47	.53	1.0	.07	350	0	1	<10	80
JUN											
09...	.38	.13	.50	.63	1.0	.10	300	0	0	10	0
23...	.73	.01	.77	.78	1.5	.27	5100	9	1	<10	10
JUL											
08...	.62	.09	.39	.48	1.1	.09	360	1	0	<10	10
20...	.57	.05	.25	.30	.87	.08	410	2	1	<10	0
AUG											
04...	.69	.07	.43	.50	1.2	.12	820	1	1	10	0
18...	.56	.04	.61	.65	1.2	.12	840	1	0	<10	10
31...	.68	.09	.29	.38	1.1	.10	240	1	0	<10	10
SEP											
15...	.69	.20	.35	.55	1.2	.11	140	2	0	10	0
28...	.88	.13	.36	.49	1.4	.10	220	1	0	10	7
DATE	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT											
07...	1900	8	280	2	20	3.8	0	.000	.000	16	600
21...	4800	9	210	1	30	3.4	1	--	--	134	27300
NOV											
04...	2200	2	370	0	10	3.0	0	.000	.000	10	240
18...	1400	4	180	0	20	2.8	0	.000	.000	10	489
DEC											
02...	1300	5	210	0	10	2.9	0	.000	.000	9	367
17...	1200	2	150	1	10	2.8	3	1.40	.000	7	370
FEB											
19...	12000	14	460	3	50	7.1	0	6.40	.000	392	122000
MAR											
04...	5400	7	220	1	20	--	2	9.00	1.50	240	50500
16...	1600	2	240	0	10	2.3	1	1.50	.500	10	526
30...	1500	3	170	1	10	7.5	0	.000	.000	22	1310
APR											
14...	1700	0	330	0	10	2.3	0	.000	.000	50	1430
29...	1900	5	170	1	20	4.2	0	9.92	.000	8	588
MAY											
12...	1600	8	250	0	10	2.7	0	18.4	.000	10	292
25...	1700	11	270	0	80	3.1	0	7.39	.000	27	1530
JUN											
09...	1700	7	200	0	10	6.3	--	44.5	.000	43	1800
23...	11000	19	420	0	50	11	--	.000	.000	273	17900
JUL											
08...	3200	9	410	0	10	4.6	1	--	--	37	889
20...	2800	10	300	0	20	4.3	0	21.2	1.58	27	627
AUG											
04...	3200	14	350	0	30	5.3	0	6.63	.000	60	1260
18...	3000	16	260	0	20	7.6	1	4.95	1.24	64	2260
31...	2500	1	370	0	20	7.0	0	6.83	.966	24	371
SEP											
15...	2300	7	420	0	10	4.5	1	28.0	14.8	20	237
28...	2800	19	500	0	50	4.4	0	7.54	.000	25	317

## SUSQUEHANNA RIVER BASIN

01537700 SUSQUEHANNA RIVER NEAR HUNLOCK CREEK, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)				
DATE	TIME											
DEC 17...	0950	62	0	51	12	35	9.2	4				
MAR 04...	1345	37	0	30	15	17	8.0	130				
JUN 09...	1315	71	0	58	7.2	31	9.9	39				
SEP 15...	1015	89	0	73	7.1	68	16	16				

DATE	TIME	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL KJEL. NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL ALUMI- NUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)
MAY 12...	1145	22	42	1400	5600	24	0	100	14	21	19000	36

DATE	TIME	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL SILVER IN BOTTOM MA- TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)	IN- ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)	TOTAL CYANIDE IN BOTTOM MA- TERIAL (UG/G)	PCB IN BOTTOM MA- TERIAL (UG/KG)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)
MAY 12...	340	.1	24	2	0	78	66	.4	0	75	.0	16	

DATE	TIME	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	BED MAT. FALL DIAM. % FINER THAN .004 MM	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM
MAY 12...		.0	.0	.0	1.4	.0	.0	.0	.0	0	1	11	100

## WAPWALLOPEN CREEK BASIN

83

01537980 WAPWALLOPEN CREEK AT DORRANCE, PA

LOCATION.--Lat 41°04'19", long 76°08'07", Luzerne County, Hydrologic Unit 02050107, at bridge on Legislative Route 40022, 0.8 mi (1.3 km) southeast of Dorrance and 5.1 mi (8.2 km) upstream from Balliet Run.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)
DEC 17...	1515	9813	80	7.2	3.0	2	12.0	43	--	0
FEB 26...	1230	9813	80	7.3	7.0	2	10.7	25	0	0
MAR 10...	0830	9813	120	--	.5	1	12.3	41	0	0
APR 20...	1030	9813	80	7.5	17.0	1	9.5	28	0	0
MAY 18...	1030	9813	100	6.8	15.0	40	9.7	20	0	0
JUN 22...	1515	9813	210	7.2	20.0	4	10.0	47	0	0
AUG 06...	1515	9813	70	6.7	--	4	11.0	45	0	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
DEC 17...	8.0	5.7	12	12	8.0	1.6	.03	.02	.12	320
FEB 26...	8.0	1.0	12	12	12	1.5	.09	.12	.09	140
MAR 10...	8.0	5.0	22	14	11	1.8	.14	.14	.10	170
APR 20...	7.1	2.5	14	14	11	.96	.03	.03	1.0	140
MAY 18...	7.1	.5	12	10	10	1.4	.06	.10	.36	1820
JUN 22...	8.0	6.5	8	36	38	1.0	.02	.13	.15	470
AUG 06...	9.5	5.0	40	10	6.0	.64	.02	.03	.05	990

## 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 mi<sup>2</sup> (113.4 km<sup>2</sup>).

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) above mean sea level (Penn Central Railroad benchmark). Prior to Mar. 15, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--57 years, 63.7 ft<sup>3</sup>/s (1.80 m<sup>3</sup>/s), 19.75 in/yr (502 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,410 ft<sup>3</sup>/s (153 m<sup>3</sup>/s) June 22, 1972, gage height, 11.04 ft (3.365 m), from rating curve extended above 1,300 ft<sup>3</sup>/s (36.8 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; minimum, 1.1 ft<sup>3</sup>/s (0.031 m<sup>3</sup>/s) Aug. 4, 1955, gage height, 0.44 ft (0.314 m); minimum daily, 1.5 ft<sup>3</sup>/s (0.042 m<sup>3</sup>/s) Aug. 31, 1953, Aug. 5, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 580 ft<sup>3</sup>/s (16.4 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 19	1300	648 18.4	4.36 1.329
Jan. 27	0030	*1,530 43.3	*6.58 2.006

Minimum discharge, 13 ft<sup>3</sup>/s (0.368 m<sup>3</sup>/s) Sept. 6, 7, 9, 10, gage height, 1.38 ft (0.421 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	50	88	98	130	75	214	47	62	164	31	16
2	84	47	79	80	185	71	154	71	68	90	28	16
3	71	45	71	79	129	77	132	55	48	66	27	18
4	62	42	66	80	148	86	114	54	40	60	24	16
5	54	40	62	101	122	78	104	48	35	57	21	15
6	49	38	61	176	100	69	94	45	44	47	21	13
7	45	36	62	205	96	62	87	44	87	45	38	14
8	41	57	55	134	90	60	79	41	49	46	90	14
9	40	47	57	132	86	57	73	37	47	41	62	13
10	41	49	66	170	91	60	69	37	45	34	101	24
11	56	56	59	178	83	62	64	36	33	80	68	25
12	67	101	53	170	77	60	59	48	29	56	50	18
13	46	304	51	134	77	86	56	38	27	42	45	16
14	39	158	49	191	84	86	53	35	27	42	34	14
15	36	121	47	114	70	69	50	34	27	37	34	14
16	33	105	53	94	102	66	48	34	30	44	70	32
17	33	91	48	78	306	65	45	118	39	42	37	90
18	250	83	46	51	240	65	41	209	27	29	31	38
19	364	78	45	74	243	67	39	202	23	25	27	28
20	288	71	57	93	183	75	37	150	35	23	25	23
21	205	154	55	97	148	73	36	129	97	23	23	30
22	154	137	41	90	164	74	35	104	164	33	20	24
23	126	95	39	74	134	62	33	88	97	30	20	20
24	107	86	34	70	113	60	32	78	75	46	18	19
25	98	83	50	66	107	59	35	73	87	26	18	18
26	88	79	200	345	100	56	141	70	56	20	17	33
27	78	95	160	1230	98	56	73	64	46	19	41	132
28	71	91	88	597	87	122	56	56	40	18	26	97
29	65	74	71	236	79	78	50	50	65	27	20	57
30	60	69	75	162	---	71	46	53	127	119	16	51
31	54	---	119	130	---	69	---	48	---	42	16	---
TOTAL	2902	2582	2107	5529	3672	2176	2149	2196	1676	1473	1099	938
MEAN	93.6	86.1	68.0	178	127	70.2	71.6	70.8	55.9	47.5	35.5	31.3
MAX	364	304	200	1230	306	122	214	209	164	164	101	132
MIN	33	36	34	51	70	56	32	34	23	18	16	13
CFSM	2.14	1.97	1.55	4.06	2.90	1.60	1.63	1.62	1.28	1.08	.81	.71
IN.	2.46	2.19	1.79	4.70	3.12	1.85	1.83	1.87	1.42	1.25	.93	.80

CAL YR 1975 TOTAL 30882 MEAN 84.6 MAX 978 MIN 11 CFSM 1.93 IN 26.23  
WTR YR 1976 TOTAL 28499 MEAN 77.9 MAX 1230 MIN 13 CFSM 1.78 IN 24.20

## WAPWALLOPEN CREEK BASIN

85

## 01538003 WAPWALLOPEN CREEK AT WAPWALLOPEN, PA

LOCATION.--Lat 41°04'17", long 76°08'02", Luzerne County, Hydrologic Unit 12150107, 150 ft (46 m) downstream from bridge on State Route 239 at Wapwallopen and 300 ft (91 m) upstream from mouth.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
DEC 17...	1515	9813	80	7.5	3.0	1	12.0	37	--	0
JAN 20...	1515	9813	100	2.5	.0	1	13.0	33	0	0
FEB 19...	1330	9813	80	5.8	5.0	4	12.0	32	0	0
MAR 10...	0900	9813	100	--	1.0	<1	12.0	20	0	0
APR 20...	1100	9813	80	7.1	17.0	1	10.0	34	0	0
MAY 18...	1130	9813	80	7.0	15.0	50	9.3	12	0	0
JUN 22...	1515	9813	240	7.0	20.0	4	10.0	42	0	4
AUG 06...	1520	9813	70	7.0	26.0	4	10.0	27	0	--

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
DEC 17...	7.1	4.7	12	12	9.0	1.8	.04	.02	.11	100
JAN 20...	9.5	2.0	16	22	12	1.9	.06	.06	.06	<10
FEB 19...	6.3	2.0	12	20	13	1.2	.05	.07	.05	320
MAR 10...	4.0	4.5	18	12	10	1.5	.07	.03	.13	90
APR 20...	5.5	5.0	6	12	9.0	1.0	.02	.02	.28	210
MAY 18...	6.3	.5	8	12	8.0	1.1	.04	.07	.50	3150
JUN 22...	8.0	5.5	8	36	39	1.2	.03	.13	.15	440
AUG 06...	9.5	1.0	38	10	6.0	.60	.03	.04	.06	890



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 mi<sup>2</sup> (710 km<sup>2</sup>).

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) above mean sea level (revised).

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by mill above stations.

AVERAGE DISCHARGE.--38 years, 475 ft<sup>3</sup>/s (13.5 m<sup>3</sup>/s), 23.54 in/yr (598 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,900 ft<sup>3</sup>/s (875 m<sup>3</sup>/s) June 22, 1972, gage height, 15.18 ft (4.627 m), from floodmark in gage shelter, from rating curve extended above 9,500 ft<sup>3</sup>/s (269 m<sup>3</sup>/s) on basis of contracted-opening measurement at gage height, 12.08 ft (3.682 m); minimum, 7.6 ft<sup>3</sup>/s (0.22 m<sup>3</sup>/s) July 19, 1939; minimum gage height, 1.54 ft (0.469 m) Aug. 11, 1966; minimum daily discharge, 8.4 ft<sup>3</sup>/s (0.24 m<sup>3</sup>/s) Sept. 12, 13, 18, 19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft<sup>3</sup>/s (113 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	1200	*9,700 275	*9.43 2.874	Jan. 27	1830	5,820 165	7.62 2.323

Minimum discharge, 45 ft<sup>3</sup>/s (1.27 m<sup>3</sup>/s) Sept. 9, 10, gage height, 1.84 ft (0.561 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	964	316	399	661	884	661	1440	227	254	563	240	72
2	770	296	388	509	996	594	1430	410	311	444	194	74
3	620	282	357	491	633	627	1140	357	227	372	171	72
4	509	263	321	433	620	682	924	321	186	336	143	66
5	433	245	306	357	545	675	762	291	164	449	130	62
6	383	232	301	306	491	620	654	272	153	341	143	58
7	341	219	301	326	405	557	581	263	210	326	383	55
8	306	236	272	336	399	509	509	254	183	433	497	53
9	282	236	272	272	372	473	461	227	147	399	449	48
10	282	249	346	263	341	449	416	210	127	306	433	110
11	306	467	326	277	394	449	388	202	116	341	372	140
12	336	533	287	282	410	427	346	263	104	331	306	90
13	277	1580	268	277	378	503	321	223	92	268	277	74
14	245	1260	268	627	416	539	296	190	90	240	461	64
15	223	964	268	485	378	479	272	183	110	210	336	58
16	206	785	282	378	614	473	258	175	104	190	321	78
17	202	654	263	326	2320	467	240	357	97	179	263	433
18	5720	557	249	272	2510	399	223	388	90	153	219	533
19	3790	491	194	268	2510	438	206	467	82	136	190	306
20	2700	444	194	272	2160	485	194	473	107	121	171	219
21	1800	563	206	272	1540	551	183	503	509	118	157	219
22	1330	620	190	260	1800	710	171	455	792	143	143	186
23	1010	485	183	250	1720	620	164	405	948	157	133	150
24	792	438	147	240	1240	588	150	362	740	268	118	130
25	682	416	140	240	1020	545	164	326	732	167	107	116
26	607	399	640	956	940	503	527	306	533	124	102	150
27	527	433	1060	4350	932	473	372	291	416	107	104	485
28	467	479	725	3330	852	675	287	254	351	102	99	581
29	421	399	581	1870	747	533	245	223	725	160	94	438
30	378	378	545	1330	---	497	227	227	575	575	82	367
31	336	---	740	932	---	467	---	232	---	336	76	---
TOTAL	27245	14919	11019	21448	28567	16668	13551	9337	9275	8395	6914	5487
MEAN	879	497	355	692	985	538	452	301	309	271	223	183
MAX	5720	1580	1060	4350	2510	710	1440	503	948	575	497	581
MIN	202	219	140	240	341	399	150	175	82	102	76	48
CFSM	3.21	1.81	1.30	2.53	3.59	1.96	1.65	1.10	1.13	.99	.81	.67
IN.	3.70	2.03	1.50	2.91	3.88	2.26	1.84	1.27	1.26	1.14	.94	.74

CAL YR 1975	TOTAL	251103	MEAN 688	MAX 16400	MIN 58	CFSM 2.51	IN 34.09
WTR YR 1976	TOTAL	172825	MEAN 472	MAX 5720	MIN 48	CFSM 1.72	IN 23.46

## CATAWISSA CREEK BASIN

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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 mi<sup>2</sup> (4.58 km<sup>2</sup>).

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 poor.

AVERAGE DISCHARGE.--13 years, 2.10 ft<sup>3</sup>/s (0.059 m<sup>3</sup>/s), 16.11 in/yr (409 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 487 ft<sup>3</sup>/s (13.8 m<sup>3</sup>/s) June 22, 1972, gage height, 5.15 ft (1.570 m), from rating curve extended above 40 ft<sup>3</sup>/s (1.13 m<sup>3</sup>/s) on basis of contracted-opening and flow-over-road measurement of peak flow; no flow for many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 25 ft<sup>3</sup>/s (0.708 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0620	39 1.10	2.47 0.753	Feb. 16	1950	34 0.963	2.38 0.725
Jan. 26	1900	*63 1.78	*2.78 0.847				

Minimum discharge, 0.38 ft<sup>3</sup>/s (0.011 m<sup>3</sup>/s) Sept. 13, 14, gage height, 1.14 ft (0.347 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	2.2	2.9	3.2	8.2	2.6	8.4	1.8	2.5	1.2	.59	.49
2	6.0	2.1	2.5	2.4	6.4	2.5	6.0	1.8	2.6	1.2	.55	.66
3	4.7	2.0	2.2	2.8	4.3	2.4	5.5	1.8	1.9	1.1	.55	.55
4	3.8	1.9	2.1	2.4	3.8	2.5	4.9	1.6	1.7	1.3	.55	.52
5	3.5	1.9	2.1	2.0	3.4	2.1	4.2	1.5	1.5	1.1	.52	.49
6	2.9	1.8	2.0	1.9	3.2	2.0	3.7	1.5	1.6	1.0	.52	.47
7	2.5	1.7	1.9	1.8	2.9	2.0	3.4	1.5	1.8	1.1	.62	.47
8	2.2	2.2	1.9	1.7	2.6	1.9	2.9	1.5	1.6	1.1	1.3	.44
9	2.1	1.7	2.0	2.9	2.4	1.9	2.6	1.4	1.5	1.1	.73	.44
10	2.0	2.3	2.1	1.6	2.2	1.9	2.4	1.4	1.4	.90	1.1	1.0
11	2.8	1.8	1.8	1.5	3.5	2.0	2.2	1.4	1.4	1.6	.66	.55
12	2.2	3.0	1.7	1.4	2.5	1.9	2.0	1.5	1.3	1.1	.59	.47
13	1.9	4.5	1.7	1.3	4.0	3.0	1.9	1.4	1.3	1.0	.55	.44
14	1.8	3.0	1.6	4.3	3.0	2.2	1.8	1.3	1.3	.95	.55	.42
15	1.7	2.8	1.6	1.8	2.2	2.1	1.7	1.3	1.2	.90	1.5	.47
16	1.6	2.6	1.6	1.6	9.0	2.1	1.6	1.8	1.1	.85	1.1	1.7
17	1.9	2.5	1.5	1.8	8.2	2.1	1.5	3.8	1.2	.80	.70	2.2
18	11	2.4	1.4	1.7	7.9	2.0	1.5	4.9	1.1	.70	.62	1.2
19	7.6	2.3	1.3	1.6	7.9	2.2	1.4	5.3	1.0	.70	.59	1.1
20	7.4	2.2	1.4	1.4	6.6	2.1	1.4	6.9	2.1	.66	.59	1.1
21	6.4	3.3	1.3	1.4	5.7	2.4	1.3	9.3	4.3	.70	.59	1.1
22	5.7	2.7	1.3	1.3	6.4	2.1	1.3	7.1	5.7	.70	.55	.95
23	4.9	2.6	1.3	1.1	4.9	2.0	1.2	6.2	3.0	1.1	.55	.85
24	4.3	2.5	1.3	1.0	4.3	2.0	1.2	5.3	2.6	.85	.55	.80
25	4.0	2.4	1.2	.93	4.0	2.0	1.8	4.3	2.2	.70	.55	.70
26	3.5	2.4	5.3	18	3.7	2.0	2.8	3.8	1.9	.66	.60	1.1
27	3.2	2.7	2.9	24	3.4	2.9	1.4	3.4	1.7	.62	.60	1.5
28	2.9	2.9	2.6	11	3.0	3.3	1.4	2.8	1.6	.62	.56	1.1
29	2.7	2.8	2.6	8.2	2.8	2.8	1.4	2.5	1.5	.75	.54	.95
30	2.5	2.6	2.9	6.4	---	2.8	1.4	2.6	1.2	.70	.52	.95
31	2.3	---	3.5	5.1	---	3.8	---	2.2	---	.62	.49	---
TOTAL	119.4	73.8	63.5	119.53	132.4	71.6	76.2	94.9	56.8	28.38	20.58	25.18
MEAN	3.85	2.46	2.05	3.86	4.57	2.31	2.54	3.06	1.89	.92	.66	.84
MAX	11	4.5	5.3	24	9.0	3.8	8.4	9.3	5.7	1.6	1.5	2.2
MIN	1.6	1.7	1.2	.93	2.2	1.9	1.2	1.3	1.0	.62	.49	.42
CFSM	2.18	1.39	1.16	2.18	2.58	1.31	1.44	1.73	1.07	.52	.37	.47
IN.	2.51	1.55	1.33	2.51	2.78	1.50	1.60	1.99	1.19	.60	.43	.53

CAL YR 1975	TOTAL	1302.56	MEAN	3.57	MAX	80	MIN	.55	CFSM	2.02	IN	27.36
WTR YR 1976	TOTAL	882.27	MEAN	2.41	MAX	24	MIN	.42	CFSM	1.36	IN	18.53

## SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA  
(National Stream-Quality Accounting Network)

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 mi<sup>2</sup> (29,060 km<sup>2</sup>), 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) above mean sea level. Prior to June 29, 1939, nonrecording gage at or near Mill Street Bridge at same datum. Since Oct. 1, 1971, water-stage recorder at gaging-station site on Susquehanna River at Sunbury used as an auxiliary gage for this station.

REMARKS.--Records good.

AVERAGE DISCHARGE.--77 years, 15,250 ft<sup>3</sup>/s (432 m<sup>3</sup>/s), 18.46 in/yr (469 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 363,000 ft<sup>3</sup>/s (10,300 m<sup>3</sup>/s) June 25, 1972, from rating curve extended above 230,000 ft<sup>3</sup>/s (6,500 m<sup>3</sup>/s); maximum gage height, 32.32 ft (9.851 m) June 24, 1972, backwater from West Branch Susquehanna River; minimum discharge, 508 ft<sup>3</sup>/s (14.4 m<sup>3</sup>/s) Sept. 27, 1964, gage height, 1.51 ft (0.460 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1899, 28 ft (8.5 m) Mar. 18, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 120,000 ft<sup>3</sup>/s (3,400 m<sup>3</sup>/s) Feb. 19, gage height, 18.13 ft (5.526 m); minimum, 4,090 ft<sup>3</sup>/s (116 m<sup>3</sup>/s) Sept. 10, 12, 13, gage height, 3.16 ft (0.963 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45400	13200	17500	17800	36600	46000	26300	24500	12200	16400	9190	6430
2	35100	12300	16700	16600	34800	41400	39900	23400	12800	19900	10100	7270
3	29100	11400	16600	15400	31800	58200	45000	21600	12600	21100	8810	6560
4	27400	10700	17100	14200	24300	77200	41600	23000	13200	19200	10100	5500
5	24200	10200	16400	13700	19000	71300	35300	22400	12800	16000	8270	4940
6	19700	9790	15300	11600	20000	62800	29100	21400	11200	13600	6960	4960
7	16600	9620	14300	9300	18000	54900	24800	20200	10500	12200	6630	4720
8	14300	9550	13900	9000	17000	47500	21600	17300	11700	11300	6850	4430
9	12900	9370	14600	8800	16000	39600	19100	15300	13000	10500	11400	4200
10	11800	8930	14500	7400	15500	33100	17000	14300	15400	9500	22700	4310
11	11100	9420	15000	7000	15900	30100	15700	13300	14200	9210	21700	4580
12	10900	9800	19000	6600	16400	28000	14200	12400	11900	9920	18000	4210
13	10400	17600	18700	7300	19600	26400	13100	12000	9910	9950	14900	4100
14	9840	26200	16900	9100	22700	23500	12400	14300	8770	19900	12800	4380
15	9500	29700	15100	10000	22500	21700	11700	15100	8320	17300	11400	4840
16	9330	27100	15400	11000	22700	20800	11000	13400	8510	16400	12600	4960
17	9380	23900	18200	9900	32800	19300	10300	12800	8320	14300	12600	5900
18	24300	21200	19700	8600	87100	17000	9850	14200	8790	12300	14000	6520
19	71900	19000	16600	7600	117000	15800	21100	22000	10700	10700	12700	6430
20	94100	17400	14500	7100	116000	15900	22300	21400	11400	10100	10700	6980
21	85800	16900	12200	600	107000	19200	16600	25400	15200	9330	8940	8170
22	71500	18500	10500	7100	85800	23300	14400	33900	46300	8420	7630	7700
23	54300	18800	9250	6200	82400	28400	12900	34600	34600	7560	6740	6510
24	41500	20900	8940	5700	87600	28800	11500	29800	24800	7420	6040	5720
25	32600	21100	8790	6000	70600	25700	10500	25000	19200	6920	5540	5050
26	26900	18300	9790	10000	59400	22300	11900	21300	15900	6330	5070	4820
27	23200	16300	14300	50000	51800	20500	14200	18100	14900	5670	4940	5590
28	19900	16300	21900	95000	47800	21100	26500	16600	13700	5200	4930	6340
29	17600	17200	21700	79800	48000	22200	28900	15600	13100	5030	5810	6440
30	16000	17700	20000	60700	---	23300	25600	14800	12400	6180	6130	8380
31	14400	---	19300	46600	---	22200	---	13500	---	6540	7170	---
TOTAL	900950	488380	482670	581700	1346100	1007500	614350	602900	436320	354380	311350	170940
MEAN	29060	16280	15570	18760	46420	32500	20480	19450	14540	11430	10040	5698
MAX	94100	29700	21900	95000	117000	77200	45000	34600	46300	21100	22700	8380
MIN	9330	8930	8790	5700	15500	15800	9850	12000	8320	5030	4930	4100
CFSM	2.59	1.45	1.39	1.67	4.14	2.90	1.83	1.73	1.30	1.02	.89	.51
IN.	2.99	1.62	1.60	1.93	4.46	3.34	2.04	2.00	1.45	1.17	1.03	.57

CAL YR 1975 TOTAL 7305260 MEAN 20010 MAX 236000 MIN 2490 CFSM 1.78 IN 24.22  
WTR YR 1976 TOTAL 7297540 MEAN 19940 MAX 117000 MIN 4100 CFSM 1.78 IN 24.20

## SUSQUEHANNA RIVER BASIN

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01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

## WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1963 to September 1972, April 1974 to current year.

WATER TEMPERATURES: October 1945 to June 1953, October 1956 to September 1970, October 1975 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1961 to September 1962, October 1963 to September 1964, October 1965 to September 1966, April 1974 to current year.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,030 micromhos Sept. 26, 29, 30, 1963; minimum daily 85 micromhos June 16, 1969.

WATER TEMPERATURES: Maximum daily, 27.0°C Aug. 26; minimum daily, freezing point on several days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily 1,520 mg/l June 22, 1976; minimum daily, 2 mg/l Nov. 6, 1974.

SEDIMENT DISCHARGES: Maximum daily, 556,000 tons (504,403 t) Sept. 28, 1975; minimum daily, 18 tons (16 t) Nov. 6, 1974.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum daily, 27.0°C Aug. 26, 1976; minimum daily, freezing point on several days during December through February.

SEDIMENT CONCENTRATIONS: Maximum daily, 1,520 mg/l June 22; minimum daily, 3 mg/l Nov. 29, Dec. 4.

SEDIMENT DISCHARGES: Maximum daily, 256,000 tons (232,000 t) Feb. 19; minimum daily, 139 tons (126 t) Nov. 29, Dec. 4.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
OCT										
07...	1400	16500	190	6.5	15.0	7	9.4	9	1.2	E8800
21...	1030	87700	135	6.7	11.5	65	2.0	27	2.0	3500
NOV										
04...	1145	10700	295	6.9	12.0	5	10.2	7	1.1	1300
18...	1235	21100	190	6.8	8.0	5	11.2	7	1.1	730
DEC										
02...	1020	16800	200	7.2	4.5	4	11.8	7	.8	490
17...	1115	18200	220	7.2	4.0	4	12.4	7	.8	210
FEB										
18...	1015	88000	160	7.1	2.5	65	12.8	33	3.4	1200
MAR										
03...	0930	42080	170	7.0	5.0	6	12.0	--	.5	510
16...	1130	20900	215	7.1	4.5	5	12.2	7	.8	340
30...	1120	23300	210	6.9	10.0	7	10.4	11	2.1	180
APR										
13...	1000	13200	220	6.7	8.0	4	11.2	8	1.0	E50
29...	1400	28700	230	7.4	11.0	20	11.0	17	1.8	370
MAY										
11...	1045	13350	205	7.1	15.5	2	10.6	10	1.6	240
25...	1130	24900	170	6.9	14.0	15	9.4	12	1.3	390
JUN										
08...	1200	12000	265	7.3	20.0	15	10.4	20	3.5	590
23...	1030	34700	150	7.2	21.0	600	7.0	62	2.1	3500
JUL										
08...	1130	11300	220	7.2	22.0	20	8.2	18	1.5	690
20...	1500	10000	270	7.7	24.5	15	9.4	16	1.5	970
AUG										
03...	1030	8160	280	7.8	22.0	10	9.4	20	3.0	--
17...	1330	12500	200	7.6	22.5	4	9.2	16	1.8	1900
SEP										
01...	1500	6390	300	8.0	22.5	1	10.2	22	2.8	650
14...	1030	4300	270	7.6	21.0	6	9.4	16	2.4	310
28...	1215	6260	300	7.4	16.0	5	9.0	16	1.8	1200



## SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	STREP- TOCOCCI (COL- ONIES PER 100 ML)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	SUS- PENDE SOLIDS (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
OCT									
07...	--	150	5	.73	.06	.28	.34	1.1	.06
21...	3800	93	176	.34	.03	.57	.60	.94	.20
NOV									
04...	--	233	8	.78	.07	.30	.37	1.2	.06
18...	580	106	--	.57	.08	.24	.32	.89	.05
DEC									
02...	--	126	5	.58	.05	.24	.29	.87	.04
17...	88	124	5	.74	.05	.32	.37	1.1	.05
FEB									
18...	2600	84	359	.87	.13	.86	.99	1.9	.27
MAR									
03...	440	85	84	.79	.09	.22	.31	1.1	.07
16...	--	117	11	.95	.12	.12	.24	1.2	.07
30...	--	102	20	.76	.07	.36	.43	1.2	.11
APR									
13...	34	143	8	.80	.06	.14	.20	1.0	.05
29...	--	119	54	.67	.09	.66	.75	1.4	.12
MAY									
11...	105	110	10	.54	.13	.30	.43	.97	.09
25...	--	113	35	.47	.05	.38	.43	.90	.08
JUN									
08...	250	121	30	.39	.14	.41	.55	.94	.10
23...	--	89	860	.73	.03	1.8	1.8	2.5	.60
JUL									
08...	360	153	44	1.0	.07	.31	.38	1.4	.08
20...	--	139	31	.62	.01	.19	.20	.82	.08
AUG									
03...	--	153	31	.37	.08	.70	.78	1.2	.08
17...	--	154	33	.54	.05	.53	.58	1.1	.08
SEP									
01...	--	182	19	.52	.06	.52	.58	1.1	.08
14...	95	200	10	.39	--	--	.50	.89	.06
28...	--	153	19	.88	.04	.38	.42	1.3	.03

DATE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL SILVER (AG) (UG/L)
OCT									
07...	420	0	1	0	10	1900	9	290	2
21...	3200	2	1	<10	10	6100	10	260	1
NOV									
04...	300	0	0	10	0	1800	3	330	0
18...	300	0	1	<10	0	1300	4	210	0
DEC									
02...	270	0	1	0	0	1300	7	230	0
17...	200	0	1	10	10	1100	4	190	0
FEB									
18...	3400	5	1	10	10	7600	12	380	1
MAR									
03...	320	1	0	<10	0	1100	0	140	0
16...	280	1	1	0	0	1300	2	220	0
30...	470	0	0	0	10	1500	5	190	1
APR									
13...	250	0	1	10	10	1300	2	300	0
29...	1	0	0	10	0	2100	7	210	1
MAY									
11...	100	0	0	<10	0	330	8	80	0
25...	470	0	1	10	10	1500	7	160	0
JUN									
08...	350	5	0	20	10	1900	6	280	0
23...	17000	26	0	20	30	36000	44	1000	0
JUL									
08...	610	1	1	10	0	2300	7	260	0
20...	600	1	1	<10	0	2400	8	200	0
AUG									
03...	580	0	1	10	10	2000	2	320	0
17...	530	1	0	<10	10	2000	9	210	0
SEP									
01...	360	1	0	<10	10	1600	3	320	0
14...	240	2	0	10	0	940	5	230	0
28...	570	1	0	10	7	2100	9	380	0



## SUSQUEHANNA RIVER BASIN

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01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT									
07...	20	4.2	0	--	.000	.000	--	--	--
21...	40	6.8	0	1200	--	--	167	39500	96
NOV									
04...	20	3.1	0	--	.000	.000	--	--	--
18...	20	3.7	0	--	.600	.000	12	684	96
DEC									
02...	10	3.5	0	--	.000	.000	--	--	--
17...	20	2.4	3	680	26.0	.000	5	246	98
FEB									
18...	40	7.3	1	8300	14.0	.000	359	85300	83
MAR									
03...	10	2.2	0	890	.000	.000	31	3520	84
16...	10	8.1	0	--	.000	.000	--	--	--
30...	10	2.5	1	--	.000	.000	--	--	--
APR									
13...	20	2.1	0	1900	.000	.000	8	285	98
29...	20	2.6	0	--	15.3	.000	--	--	--
MAY									
11...	10	2.9	0	18000	20.3	.000	10	360	98
25...	10	3.1	0	--	9.17	.000	--	--	--
JUN									
08...	20	8.7	0	76000	60.3	.000	30	972	96
23...	130	16	0	--	.000	.000	860	80600	99
JUL									
08...	30	4.1	0	14000	--	--	44	1340	99
20...	20	3.6	0	--	14.9	.000	31	837	95
AUG									
03...	30	--	0	37000	40.0	4.92	31	683	94
17...	20	5.6	2	--	20.4	1.36	--	--	--
SEP									
01...	30	8.8	0	--	29.4	6.13	--	--	--
14...	20	5.3	1	240000	30.1	14.0	10	116	92
28...	40	4.4	0	--	13.4	3.66	19	321	94

## SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
DEC 17...	1115	82	37	23	6.0	6.3	2.3	55	0	45	5.6
MAR 03...	0930	56	23	16	4.0	4.1	1.2	41	0	34	6.6
JUN 08...	1200	97	42	27	7.2	7.9	1.4	67	0	55	5.4
SEP 14...	1030	140	78	35	12	11	1.9	72	0	59	2.9

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)
DEC 17...	39	8.7	.2	3.4	117	20	0	1	<10	3	2
MAR 03...	24	7.9	.1	4.5	82	30	0	0	<10	2	2
JUN 08...	44	11	.1	.4	132	80	0	0	20	3	0
SEP 14...	78	14	.1	.8	189	130	0	3	<10	4	2

DATE	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC 17...	0	260	2	190	<.5	<.5	1	1	0	0
MAR 03...	0	240	3	120	<.5	<.5	0	0	0	10
JUN 08...	0	10	2	110	<.5	<.5	0	0	0	0
SEP 14...	10	740	8	210	<.5	<.5	0	0	0	20

## 01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

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

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct 21	1030	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Achnanthes	72	6	
		....Cocconeis	72	6	
		....Cymbella	72	6	
		....Diatoma	72	6	
		....Gomphonema	72	6	
		....Navicula	564	47	
		....Nitzschia	204	17	
		....Synedra	72	6	
		TOTAL	1,200		
Nov 18	1235	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Cyclotella	230	18	
		....Gomphonema	120	9	
		....Navicula	380	29	
		....Nitzschia	280	22	
		CYANOPHYTA			
		.Myxophyceae			
		....Aphanizomenon	200	15	
		OTHER	90	7	
		TOTAL	1,300		
Dec 17	1115	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Cyclotella	43	6	
		....Diatoma	200	30	
		....Gomphonema	43	6	
		....Navicula	100	15	
		....Nitzschia	43	6	
		....Synedra	170	25	
		OTHER	81	12	
		TOTAL	680		
Feb 18	1015	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Diatoma	250	3	
		....Gomphonema	550	7	
		....Melosira	250	3	
		....Navicula	690	8	
		....Nitzschia	250	3	
		CYANOPHYTA			
		.Myxophyceae			
		....Oscillatoria	4,800	58	
		OTHER	410	5	
		TOTAL	8,300		
Mar 3	0930	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Cyclotella	15	2	
		....Cymbella	15	2	
		....Diatoma	58	6	
		....Navicula	72	8	
		....Nitzschia	130	15	
		CYANOPHYTA			
		.Myxophyceae			
		....Oscillatoria	600	67	
		TOTAL	890		

## SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

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

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
April 13	1000	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Cyclotella	320	17	
		....Navicula	90	5	
		....Synedra	90	5	
		CYANOPHYTA			
		.Myxophyceae			
		....Oscillatoria	1,200	63	
		OTHER	200	10	
		TOTAL	1,900		
May 11	1045	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Actinastrum	1,600	9	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Cyclotella	11,000	61	
		....Nitzschia	1,000	6	
		CYANOPHYTA			
		.Myxophyceae			
		....Agmenellum	3,300	18	
		OTHER	1,100	6	
		TOTAL	18,000		
June 8	1200	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Coelastrum	2,300	3	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Cyclotella	34,000	45	
		....Nitzschia	12,000	16	
		CYANOPHYTA			
		.Myxophyceae			
		....Anacystis	6,800	9	
		....Oscillatoria	10,000	13	
		OTHER	10,900	14	
		TOTAL	76,000		
July 8	1130	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Ankistrodesmus	830	6	
		....Kirchneriella	170	1	
		....Scenedesmus	3,660	26	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Achnanthes	280	2	
		....Cyclotella	6,700	48	
		....Gomphonema	280	2	
		....Navicula	280	2	
		....Nitzschia	1,800	13	
		TOTAL	14,000		

## SUSQUEHANNA RIVER BASIN

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01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

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

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Aug 3	1030	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Actinastrum	3,100	8	
		....Ankistrodesmus	1,200	3	
		....Chlamydomonas	1,100	3	
		....Crucigenia	1,600	4	
		....Micractinium	2,000	5	
		....Pediastrum	3,200	9	
		....Scenedesmus	6,600	18	
		....Tetrastrum	1,300	4	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Cyclotella	2,900	8	
		....Melosira	2,600	7	
		CYANOPHYTA			
		.Myxophyceae			
		....Anacystis	2,600	7	
		....Oscillatoria	4,100	11	
		OTHER	4,700	13	
		TOTAL	37,000		
Sept 14	1030	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Coelastrum	180,000	75	
		....Dictyosphaerium	11,000	5	
		....Pediastrum	11,000	5	
		....Scenedesmus	7,400	3	
		CYANOPHYTA			
		.Myxophyceae			
		....Anacystis	10,000	4	
		OTHER	20,600	8	
		TOTAL	240,000		

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## PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m <sup>2</sup> )		Chlorophyll a (mg/m <sup>2</sup> )	Chlorophyll b (mg/m <sup>2</sup> )	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
May 5	47	8.31	7.31	1.74	0.046	580	Polyethylene strip



## SUSQUEHANNA RIVER BASIN

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	237	194		---	---	197	142	207	197	230	231
2	169	234	197		---	153	168	172	207	194	221	227
3	178	239	203		---	157	154	175	196	---	213	268
4	189	259	184		---	141	148	174	236	---	218	---
5	195	252	208		---	138	153	177	---	183	170	297
6	200	259	203		---	139	155	182	225	193	222	269
7	229	273	212		---	140	167	174	229	220	208	272
8	240	272	214		---	145	163	---	234	200	186	276
9	241	266	217		---	149	189	191	222	243	228	262
10	246	271	---		219	154	199	202	218	228	179	300
11	244	275	---		235	175	209	199	227	237	170	284
12	270	244	---		219	183	181	222	212	212	---	272
13	276	168	---		229	188	219	204	205	248	248	303
14	259	168	---		215	183	245	228	233	220	167	---
15	281	187	---		220	198	---	212	---	194	151	299
16	282	189	---		206	---	248	---	245	168	174	284
17	287	162	---		210	204	251	216	255	189	---	---
18	212	171	---		154	217	257	214	263	208	170	204
19	126	170	---		127	226	244	194	---	214	180	227
20	128	208	---		115	229	202	193	256	188	195	256
21	117	188	---		119	231	---	184	200	212	183	---
22	111	---	---		126	231	185	159	132	218	---	215
23	125	185	---		127	218	205	162	133	214	201	239
24	145	183	---		131	177	---	160	145	218	183	249
25	149	193	---		130	---	223	167	189	---	224	255
26	160	183	---		---	177	---	161	---	244	184	263
27	182	185	---		149	172	237	180	215	---	192	272
28	183	---	---		158	197	213	178	200	248	218	273
29	193	177	---		164	200	205	205	232	264	225	221
30	204	190	---		---	190	170	214	194	169	253	245
31	230	---	---		---	183	---	---	---	234	225	---

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

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

01540500 SUSQUEHANNA RIVER AT DANVILLE, PA--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	45400	66	8200	13200	13	463	17500	9	425
2	35100	44	4170	12300	25	830	16700	7	316
3	29100	40	3140	11400	28	862	16600	5	224
4	27400	51	3770	10700	20	578	17100	3	139
5	24200	48	3140	10200	20	551	16400	11	487
6	19700	30	1600	9790	21	555	15300	11	454
7	16600	18	807	9620	12	312	14300	9	347
8	14300	15	579	9550	21	541	13900	8	300
9	12900	19	662	9370	27	683	14600	8	315
10	11800	16	510	8930	21	506	14500	6	235
11	11100	19	569	9420	10	254	15000	5	202
12	10900	17	500	9800	8	212	19000	6	308
13	10400	18	505	17600	9	428	18700	16	808
14	9840	14	372	26200	10	707	16900	24	1100
15	9500	16	410	29700	8	642	15100	21	856
16	9330	18	453	27100	11	805	15400	16	665
17	9380	16	405	23900	14	903	18200	13	639
18	24300	130	10800	21200	8	458	19700	11	585
19	71900	365	71000	19000	6	308	16600	10	448
20	94100	344	87300	17400	8	376	14500	10	391
21	85800	165	38200	16900	5	228	12200	11	362
22	71500	90	17400	18500	5	250	10500	10	283
23	54300	55	8060	18800	6	305	9250	11	275
24	41500	35	3920	20900	5	282	8940	22	531
25	32600	32	2820	21100	5	285	8790	25	593
26	26900	27	1960	18300	5	247	9790	12	317
27	23200	26	1630	16300	5	220	14300	28	1080
28	19900	18	967	16300	4	176	21900	50	2680
29	17600	21	998	17200	3	139	21700	25	1460
30	16000	18	778	17700	4	191	20000	16	864
31	14400	10	389	---	---	---	19300	19	990
TOTAL	900950	---	276014	488380	---	13297	482670	---	18679

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	17800	16	769	36600	50	4940	46000	34	4220
2	16600	11	493	34800	41	3850	41400	25	2790
3	15400	12	499	31800	31	2660	58200	27	4240
4	14200	12	460	24300	22	1440	77200	85	17700
5	13700	13	481	19000	22	1130	71300	102	19600
6	11600	14	438	20000	22	1190	62800	135	22900
7	9300	15	377	18000	22	1070	54900	100	14800
8	9000	14	340	17000	21	964	47500	51	6540
9	8800	13	309	16000	21	907	39600	33	3530
10	7400	12	240	15500	21	879	33100	30	2680
11	7000	13	246	15900	7	301	30100	19	1540
12	6600	12	214	16400	5	221	28000	14	1060
13	7300	15	296	19600	11	582	26400	15	1070
14	9100	14	344	22700	21	1290	23500	16	1020
15	10000	13	351	22500	31	1880	21700	12	703
16	11000	12	356	22700	31	1900	20800	11	618
17	9900	12	321	32800	55	4870	19300	11	573
18	8600	12	279	87100	575	135000	17000	9	413
19	7600	11	226	117000	810	256000	15800	6	256
20	7100	10	192	116000	300	94000	15900	5	215
21	6600	10	178	107000	190	54900	19200	7	363
22	7100	11	211	85800	155	35900	23300	22	1380
23	6200	11	184	82400	125	27800	28400	21	1610
24	5700	12	185	87600	150	35500	28800	22	1710
25	6000	11	178	70600	105	20000	25700	22	1530
26	10000	45	1220	59400	68	10900	22300	21	1260
27	50000	295	39800	51800	55	7690	20500	21	1160
28	95000	465	119000	47800	47	6070	21100	21	1200
29	79800	280	60300	48000	42	5440	22200	22	1320
30	60700	120	19700	---	---	---	23300	22	1380
31	46600	65	8180	---	---	---	22200	17	1020
TOTAL	581700	---	256367	1346100	---	719274	1007500	---	120401

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	26300	19	1350	24500	20	1320	12200	15	494
2	39900	54	5820	23400	14	885	12800	21	726
3	45000	95	11600	21600	21	1220	12600	34	1160
4	41600	79	8870	23000	21	1300	13200	28	998
5	35300	59	5620	22400	19	1150	12800	22	760
6	29100	34	2670	21400	17	982	11200	24	726
7	24800	20	1340	20200	14	764	10500	18	510
8	21600	22	1280	17300	16	747	11700	40	1260
9	19100	16	825	15300	16	661	13000	32	1120
10	17000	14	643	14300	13	502	15400	36	1500
11	15700	15	636	13300	15	539	14200	28	1070
12	14200	14	537	12400	15	502	11900	21	675
13	13100	8	283	12000	14	454	9910	20	535
14	12400	14	469	14300	17	656	8770	20	474
15	11700	17	537	15100	16	652	8320	20	449
16	11000	15	445	13400	18	651	8510	20	460
17	10300	10	278	12800	20	691	8320	19	427
18	9850	11	293	14200	35	1340	8790	18	427
19	21100	22	1250	22000	65	3860	10700	27	780
20	22300	23	1380	21400	67	3870	11400	26	800
21	16600	20	896	25400	64	4390	15200	54	2220
22	14400	22	855	33900	71	6500	46300	1520	195000
23	12900	28	975	34600	73	6820	34600	570	53200
24	11500	21	652	29800	60	4830	24800	200	13400
25	10500	9	255	25000	35	2360	19200	105	5440
26	11900	14	450	21300	34	1960	15900	90	3860
27	14200	34	1300	18100	27	1320	14900	68	2740
28	26500	59	4220	16600	29	1300	13700	40	1480
29	28900	58	4530	15600	22	927	13100	36	1270
30	25600	38	2630	14800	19	759	12400	34	1140
31	---	---	---	13500	16	583	---	---	---
TOTAL	614350	---	62889	602900	---	54495	436320	---	295101
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	16400	67	2970	9190	46	1140	6430	31	538
2	19900	69	3710	10100	52	1420	7270	43	844
3	21100	68	3870	8810	39	928	6560	37	655
4	19200	57	2950	10100	55	1500	5500	30	445
5	16000	47	2030	8270	40	893	4940	31	413
6	13600	40	1470	6960	26	489	4960	32	429
7	12200	41	1350	6630	31	555	4720	23	293
8	11300	41	1250	6850	44	814	4430	18	215
9	10500	36	1020	11400	50	1480	4200	18	204
10	9500	28	718	22700	130	8050	4310	19	221
11	9210	23	572	21700	112	6560	4580	26	322
12	9920	28	750	18000	100	4860	4210	27	307
13	9950	28	752	14900	93	3740	4100	24	266
14	19900	113	5850	12800	81	2800	4380	17	201
15	17300	250	11700	11400	61	1880	4840	24	314
16	16400	225	9960	12600	51	1740	4960	26	348
17	14300	125	4830	12600	35	1190	5900	35	558
18	12300	50	1660	14000	46	1740	6520	34	599
19	10700	38	1100	12700	36	1230	6430	27	469
20	10100	32	873	10700	24	693	6980	36	678
21	9330	27	680	8940	36	869	8170	47	1040
22	8420	25	568	7630	41	845	7700	41	852
23	7560	31	633	6740	40	728	6510	34	598
24	7420	27	541	6040	41	669	5720	30	463
25	6920	20	374	5540	27	404	5050	25	341
26	6330	10	171	5070	24	329	4820	19	247
27	5670	14	214	4940	22	293	5590	27	408
28	5200	18	253	4930	23	306	6340	30	514
29	5030	21	285	5810	25	392	6440	17	296
30	6180	43	717	6130	28	463	8380	21	475
31	6540	39	689	7170	32	619	---	---	---
TOTAL	354380	---	64510	311350	---	49619	170940	---	13553
YEAR	7297540		1944199						

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01540823 CHEST CREEK AT MAHAFFEY, PA

LOCATION.--Lat 40°52'06", long 78°43'14", Clearfield County, Hydrologic Unit 02050201, at bridge on Township Route 324 at Mahaffey, 0.7 mi (1.1 km) downstream from Snyder Run and 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LITY AS CAC03 (MG/L)
OCT 21...	1515	9813	200	--	--	6	--	84	19	8.7	17
DEC 04...	1100	9813	252	7.0	.1	2	14.0	140	30	15	25
JAN 14...	1230	9813	350	7.5	1.0	10	13.0	110	22	13	15
FEB 26...	1000	9813	250	6.5	5.0	15	11.7	124	28	13	14
MAR 16...	0915	9813	240	6.5	4.5	4	12.5	100	24	9.2	16
APR 19...	1145	9813	290	7.0	19.1	2	9.8	164	36	17	27
MAY 17...	1300	9813	340	6.8	19.0	3	9.0	176	40	18	35
JUL 13...	1300	9813	200	7.0	18.0	25	9.0	86	23	6.7	21
AUG 17...	0915	9813	260	7.6	13.1	7	9.7	120	28	11	25

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
OCT 21...	69	5.0	160	--	--	.87	.03	.02	.02	1670
DEC 04...	104	11	268	--	--	.90	.04	.05	.02	470
JAN 14...	15	2.0	220	--	--	1.1	.02	.13	.04	1260
FEB 26...	122	7.0	226	18	244	2.1	.02	.24	.03	1060
MAR 16...	84	6.0	194	2	196	1.3	.17	.31	.10	420
APR 19...	128	7.0	244	10	--	1.1	.02	.10	.03	320
MAY 17...	144	9.0	284	4	--	.58	.02	.12	.02	490
JUL 13...	60	8.0	150	46	--	3.2	.03	.10	.07	2360
AUG 17...	64	8.0	198	22	--	1.0	.01	.31	.05	850

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INIUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG 17...	0915	9813	<500	<3	<20	<20	<50	220	<2.0	20	20



## 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 mi<sup>2</sup> (816 km<sup>2</sup>).

## 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) above mean sea level. 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.--63 years, 551 ft<sup>3</sup>/s (15.6 m<sup>3</sup>/s), 23.75 in/yr (603 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,500 ft<sup>3</sup>/s (892 m<sup>3</sup>/s) Mar. 18, 1936, gage height, 19.74 ft (6.017 m), from floodmark in gage shelter, from rating curve extended above 7,200 ft<sup>3</sup>/s (204 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 14 ft<sup>3</sup>/s (0.40 m<sup>3</sup>/s) Aug. 29, 1939; minimum daily, 16 ft<sup>3</sup>/s (0.45 m<sup>3</sup>/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 ft<sup>3</sup>/s (760 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,270 ft<sup>3</sup>/s (263 m<sup>3</sup>/s) Feb. 17, gage height, 12.60 ft (3.840 m); minimum, 62 ft<sup>3</sup>/s (1.76 m<sup>3</sup>/s) Sept. 15, 16, gage height, 4.19 ft (1.28 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	703	263	321	2100	659	432	653	269	226	184	144	88
2	608	253	304	1470	520	429	668	358	543	153	118	87
3	606	248	277	1870	480	518	684	341	332	133	103	87
4	468	235	254	1330	440	2100	637	311	237	122	93	83
5	394	228	242	953	470	1730	658	268	198	120	85	82
6	347	213	271	560	430	1200	588	251	171	110	88	74
7	310	201	318	600	400	914	541	241	179	102	1140	70
8	278	248	268	500	370	738	480	235	156	101	1500	69
9	279	216	325	430	350	639	425	209	139	96	668	69
10	2630	406	454	360	330	586	386	192	129	92	453	71
11	1500	492	414	380	760	674	372	185	119	1040	341	82
12	1030	883	383	350	1100	620	344	210	115	1750	266	76
13	781	1580	408	390	900	847	308	182	106	767	221	71
14	638	996	548	540	800	772	284	164	159	470	326	63
15	504	750	932	480	1350	684	266	160	133	384	470	62
16	446	608	1110	400	2710	620	249	162	109	313	613	73
17	608	514	894	340	8320	550	238	206	129	309	368	159
18	1380	449	726	300	6680	510	219	303	118	228	276	331
19	911	400	450	350	4680	585	202	325	127	191	226	232
20	1180	365	470	280	2760	779	194	272	622	172	189	150
21	1010	366	410	300	1800	796	186	290	468	158	168	213
22	836	380	360	300	1520	920	294	272	403	155	144	172
23	703	319	300	280	1160	728	275	212	255	178	131	129
24	596	283	270	260	894	658	225	187	197	414	125	108
25	520	272	280	280	773	608	235	181	294	228	114	98
26	462	260	500	500	678	560	530	278	250	152	114	95
27	410	302	1050	1900	608	526	408	222	171	131	236	400
28	370	314	728	1460	537	679	342	179	142	123	144	866
29	338	267	604	1120	477	532	310	162	241	120	121	448
30	312	252	1130	895	---	492	278	157	218	178	103	317
31	284	---	2160	750	---	462	---	154	---	129	93	---
TOTAL	21442	12563	17161	22028	42956	22888	11479	7138	6686	8803	9181	4925
MEAN	692	419	554	711	1481	738	383	230	223	284	296	164
MAX	2630	1580	2160	2100	8320	2100	684	358	622	1750	1500	866
MIN	278	201	242	260	330	429	186	154	106	92	85	62
CFSM	2.20	1.33	1.76	2.26	4.70	2.34	1.22	.73	.71	.90	.94	.52
IN.	2.53	1.48	2.03	2.60	5.07	2.70	1.36	.84	.79	1.04	1.08	.58

CAL YR 1975 TOTAL 264059 MEAN 723 MAX 11800 MIN 70 CFSM 2.30 IN 31.18  
WTR YR 1976 TOTAL 187250 MEAN 512 MAX 8320 MIN 62 CFSM 1.63 IN 22.11



## WEST BRANCH SUSQUEHANNA RIVER BASIN

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

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA.MG)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
DEC 02...	1230	9813	304	290	6.5	3.0	15	12.0	132	33	11
JAN 14...	1315	9813	540	240	7.5	1.0	15	13.0	98	21	10
MAR 16...	0845	9813	620	240	6.5	4.1	14	12.7	92	24	7.7
APR 19...	1245	9813	201	330	7.0	20.0	3	10.0	172	39	18
MAY 13...	1130	9813	182	380	6.0	14.0	2	10.5	146	39	11
JUL 13...	1330	9813	711	240	6.0	19.0	17	9.0	82	21	6.7
AUG 05...	1330	9813	85	540	5.8	22.0	2	9.0	224	56	20

DATE	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
DEC 02...	17	120	7.0	264	--	.80	.01	.08	.05	1660
JAN 14...	11	60	12	216	--	.95	.04	.12	.06	3030
MAR 16...	--	84	5.0	178	18	1.0	.03	.36	.09	1280
APR 19...	25	152	7.0	300	6	1.5	.02	<.10	.02	360
MAY 13...	27	136	7.0	290	10	1.1	.02	.12	.01	230
JUL 13...	54	64	9.0	168	20	2.1	.03	.10	.05	1520
AUG 05...	18	174	12	416	4	.55	.02	.23	.05	260

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG 05...	1330	9813	600	<3	<20	<20	<50	350	<2.0	<20	40

## 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. Water-quality sampling site at bridge 30 ft (9 m) upstream.

DRAINAGE AREA.--367 mi<sup>2</sup> (951 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 1,124.52 ft (342.754 m) above mean sea level. 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 0.85 mi (1.36 km) upstream (see p. 203).

AVERAGE DISCHARGE.--21 years, 633 ft<sup>3</sup>/s (17.9 m<sup>3</sup>/s), 23.42 in/yr (595 mm/yr), adjusted for storage since November 1965.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft<sup>3</sup>/s (445 m<sup>3</sup>/s) Mar. 10, 1964, gage height, 14.19 ft (4.325 m); no flow at times; minimum daily, 19 ft<sup>3</sup>/s (0.54 m<sup>3</sup>/s) Aug. 16, 17, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,720 ft<sup>3</sup>/s (134 m<sup>3</sup>/s) Feb. 23, gage height, 7.62 ft (2.323 m); minimum daily, 61 ft<sup>3</sup>/s (1.73 m<sup>3</sup>/s) Aug. 6. Sept. 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1530	266	443	2450	700	1090	678	174	239	378	195	104
2	585	266	477	2420	480	714	790	178	514	310	169	105
3	630	414	473	1800	400	590	798	183	590	203	122	105
4	630	477	469	1710	350	1020	806	191	382	128	112	105
5	624	432	428	1710	400	2150	806	294	237	128	108	105
6	509	366	388	1290	380	2270	806	418	239	128	61	108
7	346	326	394	700	360	1830	720	278	239	129	1050	108
8	346	268	401	520	330	1190	585	323	216	131	1930	77
9	1150	266	404	430	360	924	505	315	174	129	846	61
10	2760	446	465	370	360	680	458	315	172	131	532	62
11	1820	672	523	340	370	700	461	315	166	404	446	63
12	1170	870	541	350	430	760	461	315	158	2290	401	64
13	951	1710	580	440	550	798	443	281	147	1210	278	81
14	702	1800	595	510	700	862	418	230	141	461	271	98
15	636	1180	727	560	800	933	391	211	141	382	458	94
16	536	1160	1430	600	620	924	357	211	141	375	838	95
17	485	1120	1640	470	460	846	315	261	166	273	536	203
18	870	1060	1010	390	565	714	315	294	179	273	284	369
19	1210	990	727	300	2450	606	312	493	187	268	284	411
20	1570	702	500	270	3970	660	278	514	595	179	278	249
21	1690	580	530	320	4500	702	230	394	696	156	268	193
22	1240	501	480	310	4500	1070	271	394	536	172	246	195
23	838	497	370	300	4520	1400	331	343	354	174	164	179
24	720	469	330	290	4370	1000	334	234	276	385	132	154
25	518	372	300	270	4010	748	334	234	281	385	135	111
26	514	320	400	260	3560	702	360	271	414	181	122	99
27	518	334	734	1100	2190	672	153	397	337	129	174	326
28	624	397	1280	1800	1350	684	109	348	223	129	256	776
29	630	428	1200	1870	1250	734	112	211	158	129	176	690
30	493	428	990	1520	---	702	169	170	286	197	131	428
31	388	---	1090	1120	---	618	---	174	---	227	114	---
TOTAL	27233	19117	20319	26790	45285	29293	13106	8964	8584	10174	11117	5818
MEAN	878	637	655	864	1562	945	437	289	286	328	359	194
MAX	2760	1800	1640	2450	4520	2270	806	514	696	2290	1930	776
MIN	346	266	300	260	330	590	109	170	141	128	61	61
MEAN <sup>#</sup>	859	567	667	847	1585	921	487	319	288	323	358	197
CFSM <sup>#</sup>	2.34	1.54	1.82	2.31	4.32	2.51	1.33	.87	.78	.88	.98	.54
IN. <sup>#</sup>	2.70	1.72	2.10	2.66	4.66	2.89	1.48	1.00	.87	1.02	1.13	.60

CAL YR 1975 TOTAL 319098 MEAN 874 MAX 5720 MIN 45 MEAN<sup>#</sup> 875 CFSM<sup>#</sup> 2.38 IN.<sup>#</sup> 32.42  
WTR YR 1976 TOTAL 225800 MEAN 617 MAX 4520 MIN 61 MEAN<sup>#</sup> 616 CFSM<sup>#</sup> 1.68 IN.<sup>#</sup> 22.83

<sup>#</sup> Adjusted for change in contents in Curwensville Lake.

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01541200 WEST BRANCH SUSQUEHANNA RIVER AT CURWENSVILLE, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
DEC 03...	1200	9813	473	260	6.7	5.0	5	13.0	122	31	10
JAN 14...	1130	9813	E550	260	6.8	2.0	4	13.0	110	27	10
MAR 16...	0800	9813	933	220	6.5	3.7	1	13.7	82	20	7.2
APR 19...	1320	9813	312	270	6.6	16.8	3	10.1	132	32	12
MAY 13...	1210	9813	261	300	5.5	15.0	2	9.5	138	32	14
JUN 15...	1220	9813	140	320	3.6	25.0	3	8.0	122	30	11
JUL 13...	1130	9813	846	266	6.5	21.0	12	10.0	114	27	11
AUG 05...	1430	9813	221	320	7.0	--	1	8.0	122	24	15

DATE	ALKA- LITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
DEC 03...	18	110	6.0	244	--	--	1.0	.01	.09	.05	470
JAN 14...	12	92	7.0	244	--	--	1.0	.04	.12	.02	--
MAR 16...	14	72	5.0	152	4	156	1.0	.10	.44	.07	280
APR 19...	16	106	7.0	244	6	--	1.8	.02	.10	.01	410
MAY 13...	16	108	7.0	224	4	--	1.3	.02	.10	.06	300
JUN 15...	22	106	8.0	284	4	--	.40	.02	.12	.01	350
JUL 13...	18	98	9.0	188	20	--	1.6	.03	.10	.04	1360
AUG 05...	14	96	9.0	240	8	--	.80	.02	.25	.05	190

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INIUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG 05...	1430	9813	400	<3	<20	<20	<50	180	<2.0	<20	20

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 mi<sup>2</sup> (17.53 km<sup>2</sup>).

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

REVISED RECORDS.--WDR PA-72: 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 periods of no gage-height record, and those for winter periods, which are fair.

AVERAGE DISCHARGE.--9 years, 12.8 ft<sup>3</sup>/s (0.36 m<sup>3</sup>/s), 25.68 in/yr (652 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 679 ft<sup>3</sup>/s (19.2 m<sup>3</sup>/s) June 23, 1972, gage height, 3.82 ft (1.164 m), from rating curve extended above 70 ft<sup>3</sup>/s (2.0 m<sup>3</sup>/s) on basis of a slope-area measurement of peak flow; minimum, 1.2 ft<sup>3</sup>/s (0.034 m<sup>3</sup>/s) on many days in 1970, 1972; minimum gage height, 1.41 ft (0.430 m) Aug. 28, 29, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 110 ft<sup>3</sup>/s (3.12 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 17	2025	*367 10.4	*3.11 0.948	July 10	1120	335 9.49	3.03 0.924
June 20	0325	178 5.04	2.58 0.786	Aug. 7	0415	134 3.79	2.42 0.738

Minimum discharge, 1.9 ft<sup>3</sup>/s (0.054 m<sup>3</sup>/s) Sept. 8, 9, 14, 15, gage height, 1.44 ft (0.439 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	6.1	5.1	6.7	8.4	14	17	5.5	6.0	5.2	4.3	2.4
2	7.4	5.8	6.4	16	8.2	12	16	6.0	7.6	4.8	4.0	2.6
3	7.0	5.8	5.4	20	7.6	12	15	5.6	5.0	5.5	3.8	2.5
4	6.6	5.7	5.0	14	7.1	33	14	5.1	4.2	5.1	3.6	2.4
5	6.2	5.3	4.7	13	6.6	19	15	4.9	3.9	4.8	3.5	2.6
6	6.0	5.3	4.7	14	6.6	17	13	4.6	3.7	4.1	4.0	2.5
7	5.7	4.9	4.6	11	6.1	15	12	4.5	3.5	4.0	3.1	2.3
8	5.5	4.4	5.0	9.2	6.0	14	11	4.4	3.4	3.8	9.9	2.1
9	12	4.3	4.7	8.6	5.8	13	10	4.3	3.2	3.6	7.4	2.4
10	17	4.1	4.5	8.2	5.6	12	9.5	4.2	3.1	6.0	6.3	3.8
11	14	5.8	6.3	7.8	17	15	9.0	4.2	3.1	29	5.4	2.4
12	11	7.2	5.4	7.7	14	15	8.4	4.0	3.0	15	4.8	2.2
13	10	11	4.9	7.4	13	16	7.8	3.5	3.1	11	5.8	2.2
14	9.2	11	4.9	6.8	23	16	7.3	3.2	3.2	9.1	5.5	2.1
15	8.0	8.9	5.6	6.4	17	15	6.9	3.1	3.1	7.6	6.9	2.2
16	7.7	7.7	7.8	6.7	28	14	6.5	4.0	3.6	6.8	5.3	4.5
17	8.0	7.2	8.7	6.6	123	14	6.0	7.6	4.0	6.1	4.6	12
18	17	6.7	8.4	6.4	146	12	5.8	7.8	3.7	5.2	4.2	4.7
19	14	6.6	7.7	6.2	119	13	5.4	8.4	11	4.9	3.8	3.5
20	15	6.2	7.5	6.0	83	15	5.2	6.9	44	7.7	3.6	4.6
21	16	6.4	7.4	6.7	55	15	5.6	6.4	17	6.4	3.4	4.2
22	14	6.2	6.7	6.6	47	15	6.2	5.8	14	7.1	3.2	3.2
23	12	5.8	6.7	5.8	46	14	6.3	5.1	9.9	10	3.2	2.7
24	11	5.6	6.2	5.6	32	14	5.7	4.8	8.4	6.1	3.1	2.4
25	9.6	5.3	6.0	5.4	27	13	6.0	4.7	8.3	5.2	2.9	2.2
26	8.9	5.3	5.7	8.5	24	12	6.5	5.0	6.9	4.9	2.9	2.9
27	8.3	5.2	5.5	24	21	13	6.1	4.3	6.0	4.9	3.0	12
28	7.5	6.5	7.4	15	18	14	5.5	3.9	5.3	4.6	3.0	8.2
29	7.0	5.5	9.4	11	16	12	5.4	3.7	6.3	5.6	2.8	4.8
30	6.9	5.0	7.0	9.5	---	12	5.2	3.7	5.6	5.0	2.6	5.5
31	6.4	---	6.5	8.8	---	13	---	4.2	---	4.5	2.6	---
TOTAL	302.9	186.8	191.8	295.6	937.0	453	259.3	153.4	213.1	267.6	160.4	114.1
MEAN	9.77	6.23	6.19	9.54	32.3	14.6	8.64	4.95	7.10	8.63	5.17	3.80
MAX	17	11	9.4	24	146	33	17	8.4	44	60	31	12
MIN	5.5	4.1	4.5	5.4	5.6	12	5.2	3.1	3.0	3.6	2.6	2.1
CFSM	1.44	.92	.91	1.41	4.77	2.16	1.28	.73	1.05	1.27	.76	.56
IN.	1.66	1.03	1.05	1.62	5.15	2.49	1.42	.84	1.17	1.47	.88	.63

CAL YR 1975 TOTAL 4602.6 MEAN 12.6 MAX 130 MIN 1.5 CFSM 1.86 IN 25.29  
WTR YR 1976 TOTAL 3535.0 MEAN 9.66 MAX 146 MIN 2.1 CFSM 1.43 IN 19.42

NOTE.--No gage-height record Mar. 8 to June 17.

## 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 mi<sup>2</sup> (961 km<sup>2</sup>).

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) above mean sea level. 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 about 25 mi (40 km) upstream (see p. 203).

AVERAGE DISCHARGE.--63 years, 572 ft<sup>3</sup>/s (16.2 m<sup>3</sup>/s), 20.92 in/yr (351 mm/yr), adjusted for storage since December 1960.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,600 ft<sup>3</sup>/s (867 m<sup>3</sup>/s) Mar. 18, 1936, gage height, 18.49 ft (5.636 m), from floodmark in gage shelter, from rating curve extended above 15,000 ft<sup>3</sup>/s (425 m<sup>3</sup>/s); minimum, 6.0 ft<sup>3</sup>/s (0.17 m<sup>3</sup>/s) Oct. 1, 9, 1925; minimum daily, 7.1 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s) Oct. 1, 1925.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,090 ft<sup>3</sup>/s (201 m<sup>3</sup>/s) Feb. 18, gage height, 9.98 ft (3.042 m); minimum, 63 ft<sup>3</sup>/s (1.78 m<sup>3</sup>/s) Sept. 9, 10, 15, 16, gage height, 2.87 ft (0.875 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150	381	297	1840	811	740	904	253	291	201	130	79
2	1010	368	310	1530	680	720	930	295	390	178	125	79
3	771	358	285	1340	460	820	861	287	276	165	106	78
4	637	345	265	1350	440	1760	801	264	218	175	96	76
5	547	327	250	1000	410	1720	837	239	191	165	92	75
6	486	246	257	720	390	1200	765	232	184	153	99	71
7	440	231	281	600	400	989	683	228	181	147	699	67
8	396	235	261	520	370	879	617	228	172	142	989	65
9	958	224	265	470	350	801	556	214	165	130	486	63
10	1230	301	381	440	340	759	508	211	156	150	339	76
11	874	410	420	440	699	813	482	208	153	849	261	86
12	718	564	377	450	1270	813	457	214	150	801	213	89
13	630	1460	363	410	1130	904	418	175	145	390	188	75
14	570	930	415	460	1870	885	390	159	162	287	216	67
15	519	718	508	430	1590	807	354	153	153	253	271	63
16	491	600	624	400	2310	795	328	197	156	232	329	74
17	502	519	624	380	6150	777	311	381	208	211	264	256
18	1170	460	559	350	6700	683	295	385	165	175	200	430
19	993	420	420	440	5400	694	280	428	324	156	170	246
20	1010	391	410	630	3850	813	268	354	1090	142	149	182
21	1110	391	360	450	2770	801	260	320	891	142	137	192
22	916	400	330	350	2470	855	295	311	699	139	127	188
23	818	349	320	340	2020	795	316	260	498	168	123	149
24	725	314	300	330	1560	765	276	242	452	165	115	124
25	674	297	380	640	1360	717	276	228	390	168	106	110
26	618	281	680	1600	1160	688	316	246	303	139	103	104
27	547	302	778	2120	920	678	316	218	253	122	120	238
28	486	336	687	1420	840	795	283	197	242	117	112	738
29	455	302	559	1170	800	705	268	184	264	114	103	475
30	430	273	536	1020	---	644	257	188	232	145	91	323
31	405	---	1240	881	---	644	---	188	---	142	83	---
TOTAL	22286	12733	13742	24521	49520	26459	13908	7687	9154	6663	6642	4938
MEAN	719	424	443	791	1708	854	464	248	305	215	214	165
MAX	1230	1460	1240	2120	6700	1760	930	428	1090	849	989	738
MIN	396	224	250	330	340	644	257	153	145	114	83	63
MEAN <sup>†</sup>	690	439	428	804	1692	862	457	252	312	211	215	174
CFSM <sup>†</sup>	1.86	1.18	1.15	2.17	4.56	2.32	1.23	.68	.84	.57	.58	.47
IN <sup>†</sup>	2.14	1.32	1.33	2.50	4.92	2.68	1.37	.78	.94	.66	.67	.52

CAL YR 1975 TOTAL 283699 MEAN 777 MAX 7660 MIN 88 MEAN<sup>†</sup> 775 CFSM<sup>†</sup> 2.09 IN<sup>†</sup> 28.38  
WTR YR 1976 TOTAL 198253 MEAN 542 MAX 6700 MIN 63 MEAN<sup>†</sup> 540 CFSM<sup>†</sup> 1.46 IN<sup>†</sup> 19.83

<sup>†</sup> Adjusted for change in contents of Glendale Lake.



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 mi<sup>2</sup> (178.2 km<sup>2</sup>).

## 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) above mean sea level.

REMARKS.--Records good except those for winter periods and those for periods of no gage-height record, which are fair.

AVERAGE DISCHARGE.--36 years, ft<sup>3</sup>/s (3.12 m<sup>3</sup>/s), 21.71 in/yr (551 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,120 m<sup>3</sup>/s (145 m<sup>3</sup>/s) June 23, 1972, gage height 14.25 ft (4.343 m), from rating curve extended above 1,800 ft<sup>3</sup>/s (51 m<sup>3</sup>/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 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s) Dec. 5, 1957, minimum daily, 7.8 ft<sup>3</sup>/s (0.22 m<sup>3</sup>/s) Sept. 21, 1955; 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 ft<sup>3</sup>/s (17.0 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 17	Unk.	*1,150 32.6	*4.41 1.344	June 20	0845	915 25.9	3.80 1.158

Minimum discharge, 15 ft<sup>3</sup>/s (0.425 m<sup>3</sup>/s) Sept. 25, 26, gage height, 0.16 ft (0.049 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	77	77	188	84	140	157	53	69	101	33	22
2	149	76	65	149	80	135	134	63	82	93	29	22
3	134	73	62	153	54	130	132	57	49	84	27	22
4	121	69	59	143	55	325	134	52	42	77	25	22
5	105	65	59	134	51	213	134	48	38	74	25	22
6	87	62	65	136	48	185	147	42	38	65	34	22
7	79	59	63	119	46	172	117	44	41	66	145	22
8	70	59	56	114	44	157	112	43	36	62	63	22
9	140	56	69	110	48	147	103	42	34	60	38	22
10	125	74	96	100	57	143	98	41	33	52	33	35
11	118	69	77	94	80	155	98	42	33	74	28	28
12	110	126	73	88	120	134	91	44	32	62	25	24
13	103	159	73	83	180	157	86	37	29	52	26	22
14	99	121	79	87	260	134	81	37	42	48	39	22
15	90	110	82	78	270	126	77	36	31	51	36	23
16	86	105	87	74	360	126	76	42	35	44	38	37
17	125	101	82	71	1100	123	71	77	56	44	27	89
18	190	96	79	76	860	114	68	69	31	38	24	57
19	150	91	77	70	740	123	65	63	56	37	22	31
20	185	87	74	64	600	123	63	55	549	36	22	30
21	165	91	71	61	490	128	62	55	444	35	22	34
22	140	87	68	59	420	126	74	51	681	34	22	24
23	130	79	67	62	330	117	65	48	456	34	22	20
24	125	74	65	55	260	115	62	47	303	36	29	18
25	119	71	64	54	230	117	63	47	232	34	23	17
26	112	68	94	98	200	112	74	55	174	32	24	20
27	105	82	105	188	170	121	60	49	141	30	31	103
28	98	73	84	126	160	134	56	43	126	30	25	99
29	94	65	77	117	150	110	56	41	118	31	22	49
30	89	62	93	112	---	110	51	44	106	38	21	44
31	82	---	153	100	---	110	---	42	---	32	22	---
TOTAL	3706	2487	2395	3163	7547	4362	2667	1509	4137	1586	1002	1024
MEAN	120	82.9	77.3	102	260	141	88.9	48.7	138	51.2	32.3	34.1
MAX	190	159	153	188	1100	325	157	77	681	101	145	103
MIN	70	56	56	54	44	110	51	36	29	30	21	17
CFSM	1.74	1.20	1.12	1.48	3.78	2.05	1.29	.71	2.01	.74	.47	.50
IN.	2.00	1.34	1.29	1.71	4.08	2.36	1.44	.82	2.24	.86	.54	.55

CAL YR 1975	TOTAL	52694	MEAN	144	MAX	1310	MIN	28	CFSM	2.09	IN	28.49
WTR YR 1976	TOTAL	35585	MEAN	97.2	MAX	1100	MIN	17	CFSM	1.41	IN	19.24

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01542000 MOSHANNON CREEK AT OSCEOLA MILLS, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
DEC 01...	1400	9813	79	500	4.7	3.0	30	11.0	170	--	58	41
MAY 13...	0920	9813	37	625	3.7	10.0	25	10.0	202	67	--	45
AUG 04...	1430	9813	26	--	4.8	19.0	--	8.0	304	--	--	62

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
DEC 01...	16	16	192	4.0	392	--	.35	.01	.12	.04	9430
MAY 13...	21	--	220	25	474	26	.46	.02	.16	.03	6880
AUG 04...	3.6	37	--	7.0	648	16	.36	.01	.23	.12	9200

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG 04...	1430	9813	6600	<3	<20	<20	<50	4800	<2.0	200	250

## 01542500 WEST BRANCH SUSQUEHANNA RIVER AT KARTHAUS, PA

LOCATION.--Lat 41°06'56", long 78°06'43", 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 5.3 mi (5.3 km) downstream from Moshannon Creek. Records include flow of Mosquito Creek. Water-quality sampling site at bridge 900 ft (270 m) downstream.

DRAINAGE AREA.--1,462 mi<sup>2</sup> (3,787 km<sup>2</sup>), includes that of Mosquito Creek.

## WATER-DISCHARGE RECORDS

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) above mean sea level. 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 about 50 mi (80 km) upstream and by Glendale Lake (see p. 203).

AVERAGE DISCHARGE.--36 years (1940-76), 2,464 ft<sup>3</sup>/s (69.8 m<sup>3</sup>/s), 22.89 in/yr (581 mm/yr), adjusted for storage since December 1960.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,300 ft<sup>3</sup>/s (2,390 m<sup>3</sup>/s) June 23, 1972, gage height, 18.57 ft (5.660 m), from rating curve extended above 50,000 ft<sup>3</sup>/s (1,400 m<sup>3</sup>/s); minimum, 100 ft<sup>3</sup>/s (2.83 m<sup>3</sup>/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 ft<sup>3</sup>/s (3,820 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,000 ft<sup>3</sup>/s (595 m<sup>3</sup>/s) Feb. 17, gage height, 9.34 ft (2.847 m); minimum daily, 320 ft<sup>3</sup>/s (9.06 m<sup>3</sup>/s) Sept. 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6740	1480	1420	6160	3300	3690	3220	949	1070	1430	768	450
2	3690	1340	1480	6300	2840	3310	3720	1040	1500	1360	689	428
3	3290	1300	1470	5280	2000	2880	3530	1070	1840	1190	645	416
4	2780	1350	1410	4950	1800	4260	3410	1030	1620	1040	549	401
5	2460	1390	1360	4400	1600	6990	3270	1020	1220	984	498	391
6	2250	1290	1310	3770	1700	6660	3180	1120	1060	918	512	374
7	1880	1140	1350	3000	1600	5790	2940	1090	1070	1120	1220	360
8	1580	1110	1350	2500	1500	4660	2650	980	1010	1060	4550	340
9	1980	1080	1370	1900	1400	3990	2330	988	939	1020	2920	330
10	5400	1230	1780	1600	1400	3440	2080	964	844	894	1970	320
11	5620	1970	2000	1660	2000	3200	1920	968	804	1110	1330	330
12	3600	2320	1960	1680	3010	3200	1830	964	752	2450	1130	330
13	3260	4270	1900	1820	4290	3420	1730	942	708	3860	1020	350
14	2740	5350	2020	2580	5250	3570	1610	905	696	2090	960	350
15	2340	4020	2400	2900	5680	3350	1510	844	702	2230	1170	340
16	2150	3440	3550	2970	6500	3290	1420	793	699	1690	1560	360
17	1950	3140	4510	2700	17200	3190	1330	1030	772	1500	1910	471
18	3270	2910	3800	2020	19500	2890	1240	1340	736	1230	1240	1100
19	4320	2720	2820	1600	19100	2630	1180	1510	764	1090	953	1150
20	4170	2460	2400	1500	16700	2710	1150	1710	2580	1000	883	958
21	4790	2250	2000	1400	13800	2910	1100	1530	6220	913	830	771
22	4460	1930	1700	1300	12700	3080	1090	1310	7840	842	783	679
23	3450	1760	1600	1300	11300	3540	1210	1260	6130	848	746	631
24	3100	1620	1500	1200	9890	3440	1190	1130	3990	901	670	574
25	2720	1490	1400	1200	8730	2980	1140	966	3390	994	612	501
26	2370	1340	1700	1600	7720	2760	1220	1100	2750	985	567	456
27	2190	1300	2570	3540	6920	2630	1290	1190	2280	765	573	679
28	1990	1460	3500	5010	4680	2990	1100	1170	1830	639	571	1500
29	2090	1450	3040	5200	4130	2890	957	1080	1550	601	667	2130
30	1960	1370	2830	4590	---	2690	916	958	1360	621	588	1350
31	1680	---	3410	3900	---	2570	---	923	---	645	479	---
TOTAL	96270	61280	66910	91530	198240	109600	56463	33874	58726	38020	33563	18820
MEAN	3105	2043	2158	2953	6836	3535	1882	1093	1958	1226	1083	627
MAX	6740	5350	4510	6300	19500	6990	3720	1710	7840	3860	4550	2130
MIN	1580	1080	1310	1200	1400	2570	916	793	696	601	479	320
MEAN#	3058	1987	2155	2949	6843	3519	1924	1127	1967	1217	1083	639
CFSM#	2.09	1.36	1.47	2.02	4.68	2.41	1.32	.77	1.35	.83	.74	.44
IN.#	2.41	1.52	1.70	2.33	5.05	2.78	1.47	.89	1.51	.96	.85	.49

CAL YR 1975 TOTAL 1179791 MEAN 3232 MAX 27100 MIN 434 MEAN# 3232 CFSM# 2.21 IN.# 30.02  
WTR YR 1976 TOTAL 863296 MEAN 2359 MAX 19500 MIN 320 MEAN# 2356 CFSM# 1.61 IN.# 21.94

# Adjusted for change in contents in Curwensville and Glendale Reservoirs.

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01542500 WEST BRANCH SUSQUEHANNA RIVER AT KARTHAUS, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
DEC 03...	1030	9813	1470	320	5.0	3.0	6	11.0	130	16	35
MAY 12...	1300	9813	970	380	4.0	16.0	2	9.0	142	--	34
AUG 04...	1130	9813	542	540	4.8	23.0	0	8.0	208	29	48

DATE	TIME	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
DEC 03...	11		1	145	7.0	292	--	.70	.00	.12	.02	1260
MAY 12...	13		21	140	6.0	318	2	1.1	.02	.19	.01	580
AUG 04...	21		10	198	11	418	2	.57	.01	.22	.05	580

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG 04...	1130	9813	2700	<3	<20	<20	<50	2880	2.0	86	60

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 mi<sup>2</sup> (13.57 km<sup>2</sup>).

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) above mean sea level. 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.

AVERAGE DISCHARGE.--12 years (1964-76), 8.76 ft<sup>3</sup>/s (0.25 m<sup>3</sup>/s), 22.70 in/yr (577 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 828 ft<sup>3</sup>/s (23.4 m<sup>3</sup>/s) Sept. 28, 1967, gage height, 6.32 ft (1.926 m), from rating curve extended above 80 ft<sup>3</sup>/s (2.3 m<sup>3</sup>/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.--Maximum discharge, 224 ft<sup>3</sup>/s (6.34 m<sup>3</sup>/s) Feb. 17, gage height, 4.95 ft (1.509 m); minimum, 0.12 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) Sept. 9, gage height, 3.22 ft (0.981 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	2.9	11	9.2	9.4	15	9.2	6.1	3.5	1.2	1.0	.30
2	5.7	2.9	16	8.5	8.1	12	12	5.2	3.2	1.0	.82	.34
3	4.2	2.9	14	8.2	14	22	12	5.2	2.9	.82	.67	.30
4	3.3	2.6	10	6.8	9.2	38	12	4.4	2.6	.74	.67	.26
5	3.1	2.4	8.0	5.0	5.0	43	9.8	4.1	2.4	.74	.60	.30
6	2.8	2.2	8.0	5.2	4.8	24	8.1	4.1	2.2	.67	.67	.20
7	2.6	2.4	7.9	4.5	4.3	16	6.6	4.1	2.6	2.0	5.6	.18
8	2.4	3.1	9.0	4.0	3.9	11	5.2	3.5	2.0	1.2	4.8	.16
9	2.8	2.6	9.7	3.5	3.7	8.1	4.1	2.9	1.8	1.0	4.1	.14
10	2.6	12	8.7	3.2	3.4	7.1	3.8	2.6	1.6	.91	2.9	.74
11	2.4	25	7.0	3.3	5.7	5.6	3.5	2.6	1.6	3.5	2.2	.60
12	2.4	24	5.8	3.4	7.0	4.4	2.9	2.4	1.2	4.1	1.6	.48
13	2.2	34	5.3	3.1	8.3	4.8	2.6	2.0	1.1	3.2	1.4	.30
14	2.2	27	5.6	9.9	9.8	4.1	2.4	2.0	1.0	2.4	1.6	.23
15	2.2	17	23	8.6	12	3.8	2.2	1.8	1.0	3.5	1.4	.20
16	2.4	12	60	7.1	27	4.1	2.2	9.8	1.0	2.4	1.2	.43
17	3.3	8.8	34	5.3	182	4.1	2.0	44	1.2	2.6	.91	1.2
18	31	7.0	20	15	123	3.5	1.8	27	.91	2.2	.82	.91
19	29	5.9	13	41	125	4.1	1.8	17	.91	1.8	.74	.54
20	19	5.4	9.7	18	63	5.2	1.6	13	1.4	1.4	.60	.60
21	14	5.5	7.6	6.1	34	9.8	1.8	16	2.6	1.8	.60	.67
22	12	4.7	6.2	4.9	46	16	2.9	17	2.6	1.2	.60	.54
23	9.3	3.9	5.5	10	46	16	2.4	13	1.4	1.6	.54	.38
24	7.4	3.6	6.4	6.1	26	13	2.4	9.2	1.1	1.4	.54	.34
25	6.5	3.6	10	3.6	18	9.8	3.2	7.1	2.6	1.1	.48	.26
26	5.7	3.3	7.8	9.8	22	7.6	7.1	6.1	1.6	1.0	.54	.74
27	4.9	4.4	9.4	45	27	7.6	10	4.4	1.2	.91	.48	1.8
28	4.2	4.0	8.0	33	24	7.6	9.8	3.8	1.1	.91	.43	.91
29	3.9	3.7	6.6	21	18	7.6	8.1	3.5	1.0	1.6	.74	.67
30	3.3	4.7	6.9	14	---	7.6	6.6	3.5	1.4	1.2	.43	.54
31	3.1	---	8.5	11	---	7.1	---	3.2	---	1.0	.34	---
TOTAL	206.4	243.5	368.6	337.3	889.6	349.6	160.1	250.6	52.72	51.10	40.02	15.26
MEAN	6.66	8.12	11.9	10.9	30.7	11.3	5.34	8.08	1.76	1.65	1.29	.51
MAX	31	34	60	45	182	43	12	44	3.5	4.1	5.6	1.8
MIN	2.2	2.2	5.3	3.1	3.4	3.5	1.6	1.8	.91	.67	.34	.14
CFSM	1.27	1.55	2.27	2.08	5.86	2.16	1.02	1.54	.34	.31	.25	.10
IN.	1.47	1.73	2.62	2.39	6.31	2.48	1.14	1.78	.37	.36	.28	.11

CAL YR 1975 TOTAL 3618.59 MEAN 9.91 MAX 207 MIN .28 CFSM 1.89 IN 25.68  
WTR YR 1976 TOTAL 2964.80 MEAN 8.10 MAX 182 MIN .14 CFSM 1.55 IN 21.04



## 01543000 DRIFTWOOD BRANCH SINNEMAHOING 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 mi<sup>2</sup> (704 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level. 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.--63 years, 448 ft<sup>3</sup>/s (12.7 m<sup>3</sup>/s), 22.37 in/yr (568 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,800 ft<sup>3</sup>/s (1,350 m<sup>3</sup>/s) July 18, 1942, gage height, 14.70 ft (4.481 m), from floodmarks at highway bridge, from rating curve extended above 11,000 ft<sup>3</sup>/s (310 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum observed, 0.4 ft<sup>3</sup>/s (0.011 m<sup>3</sup>/s) Sept. 7, 12-14, 1930.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,200 ft<sup>3</sup>/s (317 m<sup>3</sup>/s) Feb. 17, gage height, 7.44 ft (2.268 m); minimum, 26 ft<sup>3</sup>/s (0.74 m<sup>3</sup>/s) Sept. 1, gage height, -0.30 ft (-0.091 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	561	182	419	585	598	782	634	328	244	156	286	32
2	492	175	484	507	486	659	689	356	292	130	174	37
3	391	168	522	522	334	920	696	345	217	100	136	41
4	307	161	484	455	434	1520	665	312	181	83	100	39
5	267	161	419	378	397	2020	590	287	160	70	90	39
6	244	164	426	240	362	1500	506	277	142	63	90	40
7	230	158	469	220	320	1070	440	277	163	253	609	32
8	213	204	419	210	310	818	373	258	146	144	910	32
9	209	200	469	205	300	659	340	230	118	83	737	31
10	205	499	507	200	302	569	312	217	107	64	569	42
11	189	960	448	200	398	522	287	209	127	280	419	58
12	174	920	392	210	492	441	248	217	100	499	309	48
13	160	1140	359	200	469	419	235	181	81	352	264	41
14	142	1060	372	484	617	392	217	163	72	292	327	36
15	130	836	845	537	659	352	193	160	68	930	238	35
16	156	659	2520	455	764	327	177	149	64	746	201	35
17	142	522	1840	392	7690	333	163	531	83	577	174	70
18	1080	434	1240	240	5850	280	146	506	72	392	152	162
19	1240	378	845	235	5220	292	139	434	63	309	127	70
20	1020	346	668	230	3180	385	133	415	237	222	107	45
21	837	340	553	225	2030	434	133	526	248	258	92	56
22	745	321	448	220	2160	693	199	499	391	372	76	52
23	609	269	398	215	1980	728	201	440	277	258	87	44
24	499	232	280	210	1460	710	170	362	201	309	102	40
25	426	222	304	210	1110	625	177	302	317	232	90	35
26	378	213	426	373	1010	515	339	350	287	178	83	36
27	321	264	601	1560	1090	492	391	292	205	164	76	181
28	286	309	469	1590	1060	609	385	244	160	147	61	118
29	253	258	398	1110	890	515	379	213	142	151	52	79
30	222	274	385	863	---	492	350	209	160	258	51	58
31	200	---	585	650	---	466	---	205	---	175	42	---
TOTAL	12328	12029	18994	13931	41972	20539	9907	9494	5125	8247	6831	1664
MEAN	398	401	613	449	1447	663	330	306	171	266	220	55.5
MAX	1240	1140	2520	1590	7690	2020	696	531	391	930	910	181
MIN	130	158	280	200	300	280	133	149	63	63	42	31
CFSM	1.46	1.47	2.25	1.65	5.32	2.44	1.21	1.13	.63	.98	.81	.20
IN.	1.69	1.65	2.60	1.91	5.74	2.81	1.35	1.30	.70	1.13	.93	.23

CAL YR 1975 TOTAL 197073 MEAN 540 MAX 8190 MIN 22 CFSM 1.99 IN 26.95  
WTR YR 1976 TOTAL 161061 MEAN 440 MAX 7690 MIN 31 CFSM 1.62 IN 22.03

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01543000 DRIFTWOOD BRANCH SINNEMAHOING CREEK AT STERLING RUN, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION:--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA.MG) (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
DEC 01...	1000	9813	434	60	7.0	4.0	5	13.0	24	--	6.3
MAY 12...	0930	9813	217	85	7.5	14.0	1	10.5	26	--	6.3
AUG 24...	1420	9813	102	80	7.0	26.0	3	9.1	26	0	7.1

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
DEC 01...	2.0	11	14	4.0	76	--	.36	.01	.06	.02	230
MAY 12...	2.3	13	10	5.0	22	2	.29	.00	.17	.01	150
AUG 24...	2.0	14	12	6.0	48	2	.24	.01	.35	.04	340

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG 24...	1420	9813	150	<3	<20	10	<50	20	<2.0	20	30

## 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 mi<sup>2</sup> (1,774 km<sup>2</sup>).

## 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) above mean sea level.

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

AVERAGE DISCHARGE.--38 years, 1,120 ft<sup>3</sup>/s (31.7 m<sup>3</sup>/s), 22.20 in/yr (564 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,800 ft<sup>3</sup>/s (1,720 m<sup>3</sup>/s) June 23, 1972, gage height, 21.78 ft (6.639 m), from rating curve extended above 31,000 ft<sup>3</sup>/s (878 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 21.58 ft (6.578 m); minimum 1.2 ft<sup>3</sup>/s (0.034 m<sup>3</sup>/s) Sept. 4, 1939, gage height, 1.18 ft (0.360 m); minimum daily, 1.4 ft<sup>3</sup>/s (0.040 m<sup>3</sup>/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 ft<sup>3</sup>/s (1,730 m<sup>3</sup>/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,400 ft<sup>3</sup>/s (238 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 27	0030	12,100 343	8.42 2.566	Feb. 17	1330	*21,500 609	*11.45 3.490

Minimum discharge, 89 ft<sup>3</sup>/s (2.52 m<sup>3</sup>/s) Sept. 15, gage height, 1.94 ft (0.591 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1560	503	974	2160	1710	1790	1850	740	835	492	352	142
2	1380	492	1060	1920	1350	1550	1900	938	1730	405	454	139
3	1110	507	1110	1870	950	1850	1820	857	1220	340	346	139
4	868	492	1050	1600	1210	3700	1730	824	974	292	292	129
5	740	414	962	1260	1090	4710	1580	740	802	298	260	121
6	644	381	962	900	914	3730	1370	710	680	265	235	115
7	598	361	1170	840	850	2880	1210	730	690	240	244	105
8	532	500	998	800	800	2270	1020	700	589	432	1900	98
9	616	484	1100	750	760	1820	890	616	484	454	2050	94
10	1010	896	1340	710	720	1560	791	573	439	378	1380	116
11	760	2260	1260	690	1090	1440	740	556	439	412	1110	162
12	662	2150	1130	670	1440	1170	671	607	384	1190	813	152
13	616	3070	1020	650	1380	1110	598	507	321	857	634	121
14	581	2790	1110	1580	1950	1010	556	462	298	662	573	102
15	532	2320	2160	1660	2060	879	515	439	287	1620	700	94
16	540	1880	5580	1440	2660	824	492	418	260	2350	926	98
17	532	1500	4520	1180	18400	824	462	1240	281	1520	813	162
18	2550	1270	3430	760	14900	710	418	1260	271	1060	634	556
19	2760	1060	2520	720	13300	730	398	1240	244	750	507	287
20	2550	950	2060	690	8960	962	378	1130	532	581	432	202
21	2250	926	1660	1090	5570	1170	371	1230	750	469	371	194
22	1970	902	1370	890	5220	1790	484	1130	1220	690	327	194
23	1650	760	1220	750	4730	1770	564	986	857	564	298	155
24	1380	662	902	835	3620	1700	454	857	616	616	271	132
25	1190	625	890	835	2910	1530	469	750	986	625	240	121
26	1060	598	1260	1430	2540	1330	780	890	890	447	225	113
27	926	690	1790	4020	2620	1230	902	813	625	371	225	358
28	846	926	1410	3860	2440	1890	868	653	499	333	207	432
29	736	750	1190	3010	2080	1520	835	581	477	309	194	292
30	652	740	1170	2400	---	1440	770	556	469	412	190	221
31	565	---	2010	1890	---	1370	---	548	---	432	159	---
TOTAL	34366	31859	50388	43860	108224	52259	25886	24281	19149	19866	17362	5346
MEAN	1109	1062	1625	1415	3732	1686	863	783	638	641	560	178
MAX	2760	3070	5580	4020	18400	4710	1900	1260	1730	2350	2050	556
MIN	532	361	890	650	720	710	371	418	244	240	159	94
CFSM	1.62	1.55	2.37	2.07	5.45	2.46	1.26	1.14	.93	.94	.82	.26
IN.	1.87	1.73	2.74	2.38	5.88	2.84	1.41	1.32	1.04	1.08	.94	.29

CAL YR 1975 TOTAL 520466 MEAN 1426 MAX 21200 MIN 52 CFSM 2.08 IN 28.26  
WTR YR 1976 TOTAL 432846 MEAN 1183 MAX 18400 MIN 94 CFSM 1.73 IN 23.51

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01543500 SINNEMAHOING CREEK AT SINNEMAHOING, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 06...	1300	9813	644	100	--	--	3	--	42	1	8.7
DEC 01...	1100	9813	962	90	7.0	4.0	3	12.0	38	--	7.1
MAY 11...	1300	9813	532	60	7.0	16.0	1	10.0	22	--	4.7
AUG 05...	1330	9813	260	150	6.0	26.0	6	8.6	54	2	12

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
OCT 06...	4.8	2	39	4.0	72	--	.12	.01	.10	--	2200
DEC 01...	4.8	6	24	3.0	72	--	.25	.02	.04	.05	330
MAY 11...	2.3	12	12	3.0	20	4	.65	.00	.19	.02	230
AUG 05...	5.3	3	42	6.0	108	12	.10	.01	.25	.07	120

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PR) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG 05...	1330	9813	480	<3	30	30	<50	580	<2.0	30	80

## 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 mi<sup>2</sup> (635 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 878.71 ft (267.831 m) above mean sea level. Prior to Apr. 1, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good except those for no gage-height record, Feb. 10 to Apr. 7, and winter periods, which are fair. Flow regulated by First Fork Sinnemahoning Creek Reservoir 0.75 mi (1.21 km) upstream since Jan. 31, 1956 (see p. 203).

AVERAGE DISCHARGE.--23 years, 379 ft<sup>3</sup>/s (10.7 m<sup>3</sup>/s), 20.99 in/yr (533 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,200 ft<sup>3</sup>/s (289 m<sup>3</sup>/s) Mar. 1, 1956, gage height, 6.60 ft (2.012 m); minimum daily, 0.1 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) Aug. 8, 1975, from rating curve extended below 70 ft<sup>3</sup>/s (1.98 m<sup>3</sup>/s).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known 80,000 ft<sup>3</sup>/s (2,270 m<sup>3</sup>/s) July 18, 1942, by slope-area measurement.

EXTREME FOR CURRENT YEAR.--Maximum discharge, 5,620 ft<sup>3</sup>/s (159 m<sup>3</sup>/s) Feb. 21, gage height, 4.13 ft (1.259 m); minimum, 39 ft<sup>3</sup>/s (1.10 m<sup>3</sup>/s) Oct. 3, Sept. 2, 3; minimum daily, 38 ft<sup>3</sup>/s (1.08 m<sup>3</sup>/s) Sept. 24, 25, 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3340	182	254	379	554	674	484	271	313	242	145	56
2	844	182	299	345	470	615	785	321	350	198	138	49
3	357	174	379	359	283	674	897	284	350	172	109	42
4	315	163	421	309	390	1640	810	274	338	163	100	49
5	266	152	366	261	316	2100	674	272	277	146	98	47
6	236	144	360	185	266	1650	568	272	234	104	94	44
7	204	134	352	175	243	1130	462	275	262	137	345	44
8	174	148	332	160	240	906	369	262	222	152	818	44
9	195	155	361	150	235	692	312	220	187	146	682	44
10	182	174	520	145	230	624	284	206	190	121	514	56
11	159	455	404	140	251	560	274	207	174	153	326	69
12	144	844	344	150	363	401	233	227	145	286	281	56
13	137	924	324	140	408	382	213	199	128	204	236	44
14	137	888	327	287	421	344	207	171	117	169	217	41
15	137	768	552	314	560	321	191	159	118	211	231	41
16	128	632	1800	277	683	282	177	159	130	195	245	41
17	118	484	1700	263	853	282	171	201	150	226	195	58
18	421	408	1270	174	1130	266	156	202	135	212	167	78
19	615	344	833	225	1460	241	142	182	144	181	148	62
20	726	325	648	216	2160	246	141	194	691	156	124	51
21	674	308	503	256	5060	344	141	455	845	176	105	49
22	632	291	414	233	4810	568	146	615	822	187	105	51
23	536	239	379	175	4400	785	153	603	645	152	94	42
24	442	212	250	161	3820	717	151	464	464	170	81	38
25	401	212	226	191	2590	599	145	362	583	140	76	38
26	344	203	383	227	980	514	214	459	563	121	74	38
27	298	214	413	1000	802	428	246	361	420	117	102	94
28	271	226	374	1860	862	428	271	353	342	107	86	102
29	256	221	334	1190	828	448	306	338	326	127	71	69
30	222	212	314	776	---	414	277	334	279	179	76	60
31	195	---	396	635	---	421	---	303	---	151	69	---
TOTAL	13106	10018	15832	11358	35668	19696	9600	9205	9944	5201	6152	1597
MEAN	423	334	511	366	1230	635	320	297	331	168	198	53.2
MAX	3340	924	1800	1860	5060	2100	897	615	845	286	818	102
MIN	118	134	226	140	230	241	141	159	117	104	69	38
MEAN#	319	334	511	367	1229	635	320	297	331	168	198	52.5
CFSM#	1.30	1.36	2.09	1.50	5.02	2.59	1.31	1.21	1.35	.69	.81	.21
IN.#	1.50	1.52	2.41	1.73	5.41	2.99	1.46	1.40	1.51	.80	.93	.23

CAL YR 1975 TOTAL 184095.90 MEAN 504 MAX 5460 MIN 38 MEAN# 504 CFSM# 2.06 IN.# 27.95  
WTR YR 1976 TOTAL 147377.00 MEAN 403 MAX 5060 MEAN# 394 CFSM# 1.61 IN.# 21.88

# 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 mi<sup>2</sup> (352 km<sup>2</sup>).

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) above mean sea level, adjustment of 1912.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--36 years, 224 ft<sup>3</sup>/s (6.344 m<sup>3</sup>/s), 22.41 in/yr (569 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,300 ft<sup>3</sup>/s (405 m<sup>3</sup>/s) June 23, 1972, gage height, 11.76 ft (3.584 m), from floodmark in gage well, from rating curve extended above 9,200 ft<sup>3</sup>/s (261 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 10.38 ft (3.164 m); minimum daily, 1.2 ft<sup>3</sup>/s (0.034 m<sup>3</sup>/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 ft<sup>3</sup>/s (570 m<sup>3</sup>/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft<sup>3</sup>/s (68.0 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 17	1930	3,240 91.8	5.75 1.753	June 20	1200	*4,230 120	*6.59 2.009

Minimum discharge, 25 ft<sup>3</sup>/s (0.71 m<sup>3</sup>/s) Sept. 15, 16, gage height, -0.19 ft (-0.058 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	429	116	136	209	341	426	387	102	436	199	63	44
2	358	108	136	185	289	370	470	118	447	169	58	42
3	279	101	157	186	242	736	477	112	425	141	52	39
4	229	93	164	170	195	1080	436	109	370	125	48	37
5	192	86	165	149	168	1150	373	104	307	114	46	36
6	169	79	171	123	152	896	328	104	265	100	48	34
7	149	75	170	110	144	676	287	109	287	123	185	31
8	132	83	157	150	138	521	246	104	214	112	199	30
9	131	72	188	133	132	415	214	97	192	114	173	29
10	119	232	247	125	133	354	192	94	173	88	149	38
11	106	491	242	118	185	307	178	99	156	94	123	38
12	97	561	239	112	180	259	156	114	137	111	105	32
13	89	611	231	110	189	246	143	95	120	91	99	29
14	84	590	240	200	234	214	133	92	107	84	99	26
15	79	495	312	251	262	194	123	92	156	102	114	25
16	87	404	638	236	326	187	118	97	123	89	111	28
17	84	327	730	210	2510	180	109	112	169	91	88	39
18	293	275	623	180	2540	160	100	171	151	81	78	62
19	348	236	482	158	2010	164	94	230	500	76	74	47
20	377	209	390	143	1620	180	92	304	3570	70	69	39
21	350	199	319	132	1110	227	89	508	3360	77	63	40
22	329	175	269	122	1100	284	95	504	1810	88	59	36
23	298	149	233	118	1200	344	88	422	1080	94	56	33
24	268	134	179	115	909	357	81	344	740	95	51	31
25	241	126	175	112	685	338	92	293	616	81	48	29
26	216	117	234	304	553	298	112	290	451	80	59	30
27	191	135	257	798	527	287	97	235	367	80	105	86
28	172	131	234	983	545	290	95	212	313	79	62	79
29	156	114	221	751	495	265	95	197	273	79	73	76
30	139	115	222	490	---	265	97	276	233	88	58	74
31	124	---	227	395	---	265	---	351	---	77	49	---
TOTAL	6315	6639	8388	7578	19114	11935	5597	6091	17548	3092	2664	1239
MEAN	204	221	271	244	659	385	187	196	585	99.7	85.9	41.3
MAX	429	611	730	983	2540	1150	477	508	3570	199	199	86
MIN	79	72	136	110	132	160	81	92	107	70	46	25
CFSM	1.50	1.63	1.99	1.79	4.85	2.83	1.38	1.44	4.30	.73	.63	.30
IN.	1.73	1.82	2.29	2.07	5.23	3.26	1.53	1.67	4.80	.85	.73	.34
CAL YR 1975	TOTAL	114078	MEAN 313	MAX 6600	MIN 29	CFSM 2.30	IN 31.20					
WTR YR 1976	TOTAL	96200	MEAN 263	MAX 3570	MIN 25	CFSM 1.93	IN 26.31					

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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## 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 mi<sup>2</sup> (603 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 728.24 ft (221.968 m) above mean sea level, unadjusted. Prior to Oct. 14, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Regulation from Kettle Creek Lake 5 mi (8 km) upstream since February 1962 (see p. 203).

AVERAGE DISCHARGE.--22 years, 364 ft<sup>3</sup>/s (10.3 m<sup>3</sup>/s), 21.18 in/yr (538 mm/yr), adjusted for storage since October 1961.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,440 ft<sup>3</sup>/s (182 m<sup>3</sup>/s) Oct. 1 stage falling, peak occurred Sept. 27, 1975; maximum peak discharge, 5,380 ft<sup>3</sup>/s (152 m<sup>3</sup>/s) June 21, gage height, 8.38 ft (2.554 m); minimum discharge, 40 ft<sup>3</sup>/s (1.13 m<sup>3</sup>/s) Sept. 9, gage height, 1.71 ft (0.521 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6010	195	217	426	609	674	609	158	603	318	109	62
2	3220	195	229	380	535	582	765	172	674	242	112	67
3	479	177	252	376	394	777	831	178	658	226	101	67
4	385	169	284	342	330	1660	789	175	582	207	90	65
5	330	155	284	284	270	2100	669	169	455	183	73	63
6	295	141	281	250	250	1550	555	163	385	163	69	60
7	256	143	288	230	240	1160	474	163	421	169	246	56
8	223	145	273	266	230	894	385	166	342	195	459	48
9	229	146	303	240	220	680	338	158	277	175	355	42
10	229	207	421	220	240	576	299	140	266	150	291	46
11	204	685	435	210	314	524	291	140	249	158	242	54
12	180	1030	431	210	359	403	242	175	210	175	186	60
13	172	1170	416	200	385	389	226	156	183	166	180	56
14	163	1140	407	300	484	351	223	143	169	138	198	49
15	150	900	499	412	540	314	210	143	172	135	226	46
16	156	691	1140	376	603	303	192	145	192	148	259	46
17	158	540	1440	350	1070	303	183	169	239	140	229	52
18	431	455	1140	310	408	249	161	217	210	130	186	65
19	696	385	807	260	855	246	153	288	270	112	163	75
20	724	359	663	240	2800	273	148	363	3200	107	140	75
21	666	347	550	220	4280	342	150	759	5330	112	130	73
22	596	291	450	210	4090	440	148	913	4520	183	112	69
23	530	263	398	200	4120	561	150	741	2360	172	105	63
24	446	226	330	190	3970	479	128	555	1310	198	103	54
25	415	223	255	190	3110	614	128	459	1080	163	94	49
26	367	204	347	300	1390	576	169	499	713	126	92	46
27	333	223	509	783	849	445	175	363	603	121	112	81
28	272	242	407	1510	855	469	161	334	479	103	128	148
29	274	220	380	1380	795	450	156	330	450	107	109	90
30	238	204	394	913	---	431	156	330	385	156	105	63
31	213	---	435	741	---	431	---	489	---	126	83	---
TOTAL	19040	11471	14665	12519	34595	19246	9264	9353	26987	5004	5087	1890
MEAN	614	382	473	404	1193	621	309	302	900	161	164	63.0
MAX	6010	1170	1440	1510	4280	2100	831	913	5330	318	459	148
MIN	150	141	217	190	220	246	128	140	169	103	69	42
MEAN#	372	382	473	403	1193	622	308	304	898	162	164	63.0
CFSM#	1.60	1.64	2.03	1.73	5.12	2.67	1.32	1.30	3.85	.70	.70	.27
IN.#	1.84	1.83	2.34	1.99	5.52	3.08	1.47	1.50	4.30	.81	.81	.30

CAL YR 1975 TOTAL 198447 MEAN 544 MAX 6280 MIN 50 MEAN# 544 CFSM# 2.33 IN.# 31.6  
WTR YR 1976 TOTAL 169121 MEAN 462 MAX 6010 MIN 42 MEAN# 442 CFSM# 1.90 IN.# 25.9

# Adjusted for change in contents of 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 mi<sup>2</sup> (7,705 km<sup>2</sup>).

## 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). WDR PA-69: 1968.

GAGE.--Water-stage recorder. Datum of gage is 634.19 ft (193.301 m) above mean sea level. Prior to Mar. 17, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Curwensville, Glendale, and Kettle Creek Lakes and First Fork Sinnemahoning Creek Reservoir about 15 mi (24 km) upstream (see p.203).

AVERAGE DISCHARGE.--69 years, 4,937 ft<sup>3</sup>/s (139.8 m<sup>3</sup>/s), 22.53 in/yr (572 mm/yr), adjusted for storage 1961-75.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 236,000 ft<sup>3</sup>/s (6,680 m<sup>3</sup>/s) Mar. 18, 1936, gage height, 29.39 ft (8.958 m), from floodmark in gage shelter, from rating curve extended above 87,000 ft<sup>3</sup>/s (2,460 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 80 ft<sup>3</sup>/s (2.27 m<sup>3</sup>/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 ft<sup>3</sup>/s (5,980 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 45,800 ft<sup>3</sup>/s (1,300 m<sup>3</sup>/s) Feb. 17, gage height, 12.43 ft (3.788 m); minimum, 577 ft<sup>3</sup>/s (16.3 m<sup>3</sup>/s) Sept. 15, 16, gage height, 0.23 ft (0.070 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20600	3040	3150	8910	7450	7850	6860	2420	3140	3220	1690	953
2	11700	2780	3550	9680	6550	6980	8260	2720	5510	2980	1810	900
3	6470	2680	3640	8910	4910	7040	8280	2810	5290	2650	1540	863
4	5510	2570	3730	8110	4660	10900	7950	2710	5030	2290	1360	818
5	4800	2630	3610	7270	4810	16900	7350	2560	4040	2140	1190	790
6	4300	2510	3420	6150	4200	15100	6720	2610	3400	1950	1110	747
7	3870	2280	3640	5400	3930	12200	6170	2630	3290	2080	2060	706
8	3260	2200	3540	5430	3570	10100	5510	2500	3120	2640	7280	675
9	3150	2310	3580	4730	3670	8200	4900	2350	2650	2520	7430	639
10	6260	2510	4600	3450	3580	7290	4360	2220	2420	2240	5020	693
11	7260	5400	4970	3290	3810	6760	4020	2200	2300	2280	3840	739
12	5530	6760	4740	3410	5460	6070	3770	2270	2100	3690	2960	782
13	4650	9630	4460	3460	6400	6040	3440	2210	1840	6080	2700	720
14	4270	11100	4560	4520	8150	6120	3260	2020	1690	4370	2560	653
15	3710	9640	5540	5920	9350	5730	3060	1900	1660	5330	3200	602
16	3530	7810	12100	5640	9980	5460	2900	1820	1790	5500	3910	614
17	3340	6790	13800	5320	34500	5430	2720	2310	2120	4410	3990	726
18	6020	6020	11200	4020	39900	5000	2530	3570	1910	3580	3420	1340
19	9090	5420	8560	3090	36300	4630	2350	4090	1720	2950	2510	2090
20	9020	4990	6910	3520	34700	4850	2260	4090	7640	2520	2160	1730
21	9100	4650	6210	3940	31700	5350	2180	4660	16400	2300	1940	1420
22	8640	4310	5520	3710	28700	6600	2160	4720	18000	2540	1780	1220
23	7480	3770	4990	3070	26800	7220	2440	4470	13500	2300	1650	1090
24	6390	3390	4440	2760	23300	7140	2370	3840	8960	2640	1500	978
25	5810	3150	3520	3140	19600	6750	2270	3260	7550	2460	1370	873
26	5080	2980	4010	3350	13600	6200	2470	3460	6780	2330	1300	796
27	4620	2840	5660	8400	12100	5580	3030	3600	5360	1960	1720	936
28	4140	3310	6390	13600	10200	6410	2940	3190	4410	1690	1460	2060
29	3990	3230	5920	12700	8820	6310	2640	3110	3810	1600	1320	2760
30	3840	3060	5500	10300	---	5870	2540	2880	3410	1790	1290	2620
31	3360	---	6440	8670	---	5740	---	2950	---	1760	1140	---
TOTAL	188790	133760	171900	183870	410700	227820	121710	92150	150840	88790	78210	32533
MEAN	6090	4459	5545	5931	14160	7349	4057	2973	5028	2864	2523	1084
MAX	20600	11100	13800	13600	39900	16900	8280	4720	18000	6080	7430	2760
MIN	3150	2200	3150	2760	3570	4630	2160	1820	1660	1600	1110	602
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-

CAL YR 1975	TOTAL	2399077	MEAN	6573	MAX	59500	MIN	683	CFSM	-	IN.	-
WTR YR 1976	TOTAL	1881073	MEAN	5140	MAX	39900	MIN	602	CFSM	-	IN.	-

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 current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 973 micromhos Oct. 3, 1968; minimum, 87 micromhos Feb. 25, 1975.

pH: Maximum, 6.4 Sept. 30, 1971, Dec. 9, 1974; minimum, 2.2 Sept. 23, 24, 1969.

WATER TEMPERATURES: Maximum, 31.0°C June 27-30 and July 16, 1969; minimum, freezing point on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 14.0 mg/l Feb. 14, 1975; minimum, 6.5 mg/l Aug. 3, 1975.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 596 micromhos Sept. 19; minimum, 138 micromhos Dec. 26.

pH: Maximum, 6.2 Dec. 16, 19; minimum, 3.5 Sept. 19.

WATER TEMPERATURES: Maximum, 27.0°C Aug. 22; minimum, freezing point on many days during Dec. and Jan.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT										
22...	1550	8530	190	5.2	13.0	.2	10	71	.27	--
NOV										
24...	1330	3360	240	4.5	5.5	.2	12	89	.27	--
DEC										
11...	1330	5010	225	4.4	3.5	.5	25	80	.28	.01
MAR										
18...	1230	5040	230	4.5	2.0	.5	25	85	.46	.00
JUN										
23...	1300	12800	170	4.8	18.0	.3	15	45	.35	.00
SEP										
14...	1330	644	520	3.6	22.0	1.2	60	190	.31	.00

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED KJEL. NITROGEN (N) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)
OCT										
22...	--	.02	.18	.20	.00	.00	--	--	--	--
NOV										
24...	--	.06	.18	.24	.00	.00	--	--	--	--
DEC										
11...	.29	.05	.10	.15	.01	.00	930	0	2	0
MAR										
18...	.46	.05	.08	.13	.01	.00	1200	0	2	<10
JUN										
23...	.35	.06	.44	.50	.01	.01	610	0	2	10
SEP										
14...	.31	.06	.02	.08	.01	.01	2100	0	2	<10

DATE	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT									
22...	--	--	--	--	--	--	--	--	--
NOV									
24...	--	--	--	--	--	--	--	--	--
DEC									
11...	20	10	110	4	1100	<.5	0	0	70
MAR									
18...	16	10	340	3	1100	<.5	0	0	70
JUN									
23...	13	20	220	4	720	3.0	0	1	60
SEP									
14...	41	10	180	9	2800	<.5	0	1	120



## WEST BRANCH SUSQUEHANNA RIVER BASIN

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

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	299	286	291	276	262	271	237	216	228
2	---	---	---	302	292	296	276	268	272	214	189	204
3	---	---	---	316	302	309	277	265	273	190	178	183
4	282	252	263	325	315	321	266	255	260	191	178	183
5	290	278	284	340	323	333	262	255	258	196	189	193
6	311	291	302	334	324	330	265	259	262	203	186	197
7	319	309	314	328	319	325	265	258	262	202	189	194
8	329	313	320	335	319	326	273	259	269	224	185	207
9	345	327	337	337	326	331	270	245	262	249	221	237
10	---	---	---	337	281	316	250	239	245	256	239	248
11	---	---	---	299	243	279	278	248	259	257	248	252
12	---	---	---	248	212	230	280	265	275	264	241	250
13	---	---	---	226	211	217	267	258	262	265	254	260
14	---	---	---	227	205	219	264	255	260	275	252	267
15	---	---	---	216	200	208	259	225	248	277	257	265
16	---	---	---	202	189	194	227	216	223	281	248	264
17	---	---	---	193	189	191	225	216	220	254	243	248
18	---	---	---	195	188	192	221	206	215	271	249	256
19	---	---	---	206	191	199	213	187	201	270	257	264
20	---	---	---	212	205	207	---	---	---	---	---	---
21	---	---	---	216	208	211	---	---	---	---	---	---
22	---	---	---	227	214	219	---	---	---	---	---	---
23	---	---	---	245	226	236	213	206	209	---	---	---
24	215	203	209	252	242	248	229	210	219	292	266	281
25	227	212	218	256	250	253	230	221	226	293	268	284
26	242	223	232	263	252	256	232	138	208	297	264	280
27	---	---	---	265	253	258	252	217	228	267	194	239
28	---	---	---	275	257	268	271	237	255	---	---	---
29	274	260	267	290	274	284	237	227	231	---	---	---
30	281	274	278	285	272	280	232	219	227	---	---	---
31	288	279	283	---	---	---	227	210	217	---	---	---
MONTH	---	---	---	340	188	261	280	138	243	---	---	---
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	248	234	241	228	215	219	309	295	302
2	---	---	---	262	247	255	225	216	220	312	295	304
3	---	---	---	264	229	256	217	203	208	314	295	304
4	---	---	---	229	213	224	207	200	204	319	311	314
5	---	---	---	227	198	216	214	206	209	311	299	305
6	---	---	---	195	188	191	220	214	216	327	291	307
7	---	---	---	195	189	191	226	217	221	323	286	305
8	---	---	---	198	191	194	229	224	226	321	288	303
9	---	---	---	221	197	211	240	227	233	313	292	302
10	---	---	---	229	218	222	246	238	243	319	312	317
11	---	---	---	250	224	237	254	244	249	319	299	314
12	---	---	---	277	250	264	264	252	259	314	306	309
13	---	---	---	273	258	265	273	263	269	315	286	311
14	---	---	---	281	261	273	276	270	273	330	314	323
15	---	---	---	276	261	267	285	274	280	330	322	326
16	---	---	---	265	260	262	295	284	289	331	297	322
17	---	---	---	267	259	263	304	293	296	332	285	317
18	---	---	---	269	266	268	309	299	304	314	283	294
19	---	---	---	271	264	269	315	298	308	306	282	295
20	---	---	---	274	265	270	321	307	314	302	275	288
21	---	---	---	274	255	266	324	316	320	286	241	268
22	---	---	---	256	236	247	326	311	320	241	223	231
23	---	---	---	242	230	237	341	319	327	236	220	225
24	---	---	---	230	220	226	355	342	349	233	228	231
25	---	---	---	224	218	220	352	337	343	236	210	230
26	---	---	---	232	220	225	342	335	339	243	209	234
27	---	---	---	235	218	230	339	323	328	255	228	242
28	225	211	218	241	224	229	330	314	326	264	254	261
29	236	225	232	245	235	241	313	285	294	268	256	263
30	---	---	---	236	227	230	299	291	295	260	239	248
31	---	---	---	231	227	229	---	---	---	249	242	245
MONTH	---	---	---	281	188	239	355	200	276	332	209	285



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

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	254	240	247	297	278	289	372	329	341	372	357	367
2	242	209	221	318	296	309	381	366	373	385	363	373
3	231	218	228	326	314	320	368	361	364	388	375	384
4	241	230	237	327	317	323	369	363	366	410	380	399
5	230	212	221	331	315	323	365	351	361	433	404	418
6	220	205	214	355	328	337	367	359	363	436	419	431
7	219	205	213	360	309	332	365	308	335	449	428	440
8	228	217	223	346	281	327	404	292	343	460	436	450
9	243	228	237	324	300	307	353	255	286	470	442	457
10	246	240	244	323	291	303	268	248	256	471	444	459
11	255	241	246	310	293	303	268	249	258	474	432	463
12	271	253	261	303	277	289	259	247	252	467	431	454
13	281	266	272	384	281	325	274	258	266	464	427	450
14	292	278	283	296	266	275	278	262	273	484	452	470
15	295	286	291	269	222	252	294	263	280	503	476	491
16	304	260	288	227	198	210	300	285	293	504	482	494
17	270	245	255	234	214	228	319	301	313	492	451	481
18	289	262	277	245	233	241	315	270	294	520	473	500
19	314	287	302	264	243	255	273	256	265	596	474	554
20	286	177	215	286	263	275	291	273	283	535	474	511
21	216	181	193	294	282	290	310	290	300	473	427	448
22	192	169	180	292	268	282	321	310	317	427	407	416
23	183	166	172	306	272	289	336	320	329	436	422	430
24	207	183	197	328	289	306	346	334	341	448	434	441
25	221	205	215	325	301	314	358	339	346	456	443	449
26	238	220	229	377	325	353	364	300	352	457	418	449
27	255	235	244	371	334	351	300	214	244	440	400	426
28	267	254	259	333	315	323	303	262	283	458	400	419
29	273	265	269	318	289	306	357	304	322	523	459	503
30	279	269	274	311	292	302	390	358	379	469	394	430
31	---	---	---	331	308	319	382	367	375	---	---	---
MONTH	314	166	240	384	198	299	404	214	315	596	357	449

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	4.1	4.0	4.0	4.3	4.2	4.2	5.0	4.5	4.6
2	---	---	---	4.0	3.9	4.0	4.2	4.2	4.2	5.1	4.9	5.0
3	---	---	---	4.0	3.9	3.9	4.3	4.2	4.2	5.1	5.0	5.0
4	4.6	4.1	4.4	3.9	3.9	3.9	4.4	4.3	4.4	5.0	4.7	4.8
5	4.5	4.1	4.3	3.9	3.9	3.9	4.4	4.4	4.4	4.7	4.6	4.6
6	4.2	4.1	4.1	4.0	3.9	3.9	4.5	4.4	4.4	4.7	4.6	4.7
7	4.1	4.0	4.0	4.0	3.9	4.0	4.5	4.4	4.4	4.8	4.6	4.7
8	4.0	3.9	4.0	4.0	3.9	4.0	4.4	4.3	4.3	4.7	4.5	4.6
9	4.0	3.9	3.9	4.0	3.9	3.9	4.4	4.3	4.3	4.5	4.4	4.4
10	---	---	---	4.2	3.9	4.0	4.4	4.3	4.4	4.5	4.4	4.5
11	---	---	---	5.2	4.0	4.4	4.4	4.3	4.3	4.5	4.4	4.5
12	---	---	---	5.7	5.1	5.4	4.4	4.3	4.3	4.4	4.3	4.4
13	---	---	---	5.9	5.5	5.7	4.5	4.4	4.4	4.3	4.2	4.3
14	---	---	---	6.1	5.5	5.8	4.5	4.4	4.5	4.4	4.2	4.2
15	---	---	---	6.1	6.0	6.1	5.5	4.5	4.8	4.3	4.2	4.2
16	---	---	---	6.1	5.8	5.9	6.2	5.6	6.1	4.5	4.3	4.4
17	---	---	---	5.8	5.6	5.7	6.1	5.9	6.0	4.5	4.5	4.5
18	---	---	---	5.6	5.4	5.5	6.0	5.9	6.0	4.6	4.5	4.5
19	---	---	---	5.4	4.9	5.1	6.2	5.5	5.9	4.7	4.5	4.6
20	---	---	---	4.9	4.8	4.8	---	---	---	---	---	---
21	---	---	---	4.8	4.7	4.7	---	---	---	---	---	---
22	---	---	---	4.7	4.6	4.7	---	---	---	---	---	---
23	---	---	---	4.6	4.5	4.5	4.3	4.2	4.3	---	---	---
24	5.7	5.3	5.4	4.5	4.4	4.4	4.3	4.1	4.2	4.4	4.2	4.3
25	5.3	4.6	5.0	4.4	4.3	4.3	4.3	4.2	4.2	4.4	4.3	4.3
26	4.7	4.3	4.4	4.4	4.2	4.3	5.2	4.2	4.5	4.3	4.2	4.3
27	---	---	---	4.3	4.2	4.3	4.3	4.1	4.2	---	---	---
28	---	---	---	4.3	4.2	4.2	4.5	4.0	4.1	---	---	---
29	4.1	4.0	4.1	4.2	4.1	4.1	4.9	4.5	4.8	---	---	---
30	4.1	4.0	4.0	4.2	4.1	4.2	4.9	4.9	4.9	---	---	---
31	4.1	4.0	4.0	---	---	---	4.9	4.6	4.8	4.2	3.8	4.0
MONTH	---	---	---	6.1	3.9	4.6	6.2	4.0	4.6	---	---	---

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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

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

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	4.4	4.3	4.4	4.4	4.3	4.4	4.1	4.0	4.0
2	---	---	---	4.4	4.3	4.3	4.5	4.4	4.4	4.0	4.0	4.0
3	---	---	---	4.4	4.2	4.2	4.7	4.5	4.6	4.0	3.9	4.0
4	---	---	---	4.5	4.4	4.4	4.8	4.6	4.6	4.0	3.9	3.9
5	---	---	---	4.9	4.4	4.6	4.6	4.5	4.6	4.0	4.0	4.0
6	---	---	---	5.1	4.8	4.9	4.6	4.5	4.5	4.0	3.9	4.0
7	---	---	---	5.1	4.9	5.0	4.5	4.5	4.5	4.0	3.9	4.0
8	---	---	---	5.0	4.7	4.8	4.5	4.5	4.5	4.1	3.9	4.0
9	---	---	---	4.7	4.5	4.6	4.5	4.4	4.4	4.1	4.0	4.0
10	---	---	---	4.5	4.4	4.5	4.4	4.3	4.4	4.0	3.9	4.0
11	---	---	---	4.4	4.3	4.4	4.3	4.2	4.3	4.0	3.9	4.0
12	---	---	---	4.3	4.2	4.3	4.2	4.2	4.2	4.0	3.9	4.0
13	---	---	---	4.3	4.2	4.3	4.2	4.2	4.2	4.1	3.9	4.0
14	---	---	---	4.4	4.3	4.3	4.2	4.1	4.1	4.0	3.9	3.9
15	---	---	---	4.4	4.4	4.4	4.1	4.1	4.1	4.0	3.9	3.9
16	---	---	---	4.4	4.3	4.4	4.1	4.0	4.1	4.1	3.9	4.0
17	---	---	---	4.4	4.3	4.4	4.1	4.0	4.0	4.1	3.9	4.0
18	---	---	---	4.4	4.3	4.4	4.0	4.0	4.0	4.2	4.0	4.0
19	---	---	---	4.4	4.2	4.3	4.0	3.9	4.0	4.1	4.0	4.0
20	---	---	---	4.3	4.2	4.2	4.0	3.9	3.9	4.3	4.0	4.1
21	---	---	---	4.2	4.1	4.2	3.9	3.9	3.9	4.5	4.2	4.3
22	---	---	---	4.3	4.2	4.3	4.0	3.9	3.9	4.8	4.5	4.7
23	---	---	---	4.5	4.3	4.4	3.9	3.9	3.9	4.8	4.7	4.7
24	---	---	---	4.7	4.5	4.6	3.9	3.8	3.8	4.7	4.6	4.6
25	---	---	---	4.7	4.5	4.6	3.9	3.8	3.9	4.7	4.5	4.6
26	---	---	---	4.6	4.3	4.4	3.9	3.9	3.9	4.7	4.4	4.5
27	---	---	---	4.4	4.3	4.3	4.0	3.9	4.0	4.5	4.3	4.4
28	4.7	4.6	4.7	4.4	4.2	4.3	4.1	4.0	4.0	4.3	4.2	4.2
29	4.5	4.4	4.4	4.4	4.2	4.2	4.2	4.1	4.2	4.3	4.2	4.2
30	---	---	---	4.4	4.3	4.4	4.2	4.1	4.1	4.4	4.2	4.4
31	---	---	---	4.4	4.3	4.3	---	---	---	4.4	4.4	4.4
MONTH	---	---	---	5.1	4.1	4.4	4.8	3.8	4.2	4.8	3.9	4.2

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.4	4.3	4.3	3.8	3.7	3.8	3.9	3.8	3.9	4.0	3.9	4.0
2	4.5	4.3	4.4	3.8	3.7	3.8	3.9	3.8	3.8	4.0	3.8	3.9
3	4.3	4.2	4.3	3.8	3.8	3.8	3.9	3.9	3.9	3.9	3.8	3.8
4	4.4	4.2	4.2	3.8	3.8	3.8	3.9	3.9	3.9	3.9	3.7	3.8
5	4.6	4.4	4.5	3.8	3.7	3.8	3.9	3.8	3.9	3.8	3.7	3.8
6	4.7	4.5	4.6	3.8	3.7	3.7	3.9	3.8	3.8	3.8	3.7	3.8
7	4.6	4.4	4.5	3.8	3.7	3.8	4.0	3.8	3.9	3.8	3.8	3.8
8	4.4	4.3	4.4	3.8	3.7	3.7	4.1	3.7	3.9	3.8	3.7	3.8
9	4.4	4.2	4.3	3.8	3.7	3.7	4.8	3.9	4.5	3.8	3.6	3.7
10	4.2	4.2	4.2	3.8	3.7	3.8	5.0	4.8	4.9	3.9	3.7	3.8
11	4.2	4.1	4.2	3.9	3.7	3.8	4.8	4.7	4.7	3.9	3.7	3.8
12	4.2	4.1	4.1	3.9	3.8	3.8	4.7	4.5	4.6	3.8	3.7	3.8
13	4.1	4.1	4.1	4.6	3.7	4.1	4.5	4.3	4.4	3.8	3.7	3.8
14	4.1	4.0	4.0	5.0	4.6	4.9	4.4	4.2	4.3	3.7	3.7	3.7
15	4.0	3.9	4.0	5.0	4.6	4.8	4.3	4.1	4.2	3.7	3.6	3.7
16	4.3	3.9	4.0	4.6	4.2	4.4	4.2	4.0	4.1	3.7	3.6	3.7
17	4.1	4.0	4.1	4.2	4.1	4.2	4.1	3.9	4.0	3.8	3.7	3.7
18	4.1	4.0	4.0	4.1	4.1	4.1	4.3	4.1	4.2	3.7	3.6	3.7
19	4.1	3.9	3.9	4.1	4.0	4.0	4.4	4.3	4.4	3.8	3.5	3.6
20	5.2	4.0	4.5	4.0	3.9	4.0	4.3	4.2	4.3	3.8	3.6	3.7
21	4.6	4.1	4.2	4.0	3.9	3.9	4.2	4.1	4.2	3.8	3.8	3.8
22	4.4	4.2	4.3	4.0	3.9	3.9	4.1	4.1	4.1	3.9	3.8	3.8
23	4.3	4.1	4.2	4.0	3.9	3.9	4.1	4.0	4.0	3.9	3.8	3.8
24	4.1	3.9	4.0	3.9	3.8	3.9	4.0	4.0	4.0	3.9	3.8	3.8
25	3.9	3.9	3.9	3.9	3.8	3.8	4.0	4.0	4.0	3.8	3.8	3.8
26	3.9	3.9	3.9	3.8	3.7	3.8	4.1	3.9	3.9	4.0	3.8	3.8
27	3.9	3.8	3.9	3.9	3.7	3.8	4.3	4.0	4.2	4.0	3.9	3.9
28	3.8	3.8	3.8	3.9	3.8	3.9	4.2	4.1	4.1	4.0	3.8	3.9
29	3.9	3.8	3.8	4.1	3.8	4.0	4.1	3.9	4.0	3.8	3.7	3.7
30	3.8	3.8	3.8	4.0	4.0	4.0	3.9	3.9	3.9	4.2	3.8	4.0
31	---	---	---	4.0	3.9	4.0	4.0	3.9	3.9	---	---	---
MONTH	5.2	3.8	4.1	5.0	3.7	4.0	5.0	3.7	4.1	4.2	3.5	3.8

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

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

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

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

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

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

[illegible]



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

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

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				---	---	---	---	---	---	10.1	9.4	9.7
2				---	---	---	---	---	---	---	---	---
3				---	---	---	9.9	9.5	9.7	---	---	---
4				---	---	---	10.7	9.2	10.3	10.1	9.3	9.7
5				---	---	---	11.0	10.7	10.8	10.0	9.2	9.7
6				10.8	10.4	10.6	10.9	10.6	10.7	9.5	8.8	9.2
7				11.0	10.7	10.9	10.9	10.5	10.7	9.2	8.7	8.9
8				11.2	10.9	11.0	10.8	10.5	10.6	9.8	8.9	9.2
9				11.3	11.1	11.2	11.1	10.2	10.7	9.6	9.0	9.3
10				11.4	11.2	11.3	11.0	10.2	10.6	9.5	8.9	9.2
11				11.3	11.1	11.2	10.6	10.2	10.4	---	---	---
12				11.2	11.1	11.1	11.1	10.5	10.8	---	---	---
13				11.1	10.8	11.0	11.1	10.4	10.8	---	---	---
14				11.3	11.0	11.2	10.9	10.2	10.6	---	---	---
15				11.2	10.9	11.1	10.6	10.0	10.3	---	---	---
16				10.9	10.7	10.8	10.1	9.4	9.9	---	---	---
17				11.2	10.8	11.0	9.8	9.0	9.5	---	---	---
18				11.5	11.2	11.4	9.6	8.8	9.2	---	---	---
19				11.4	10.9	11.3	9.4	8.7	9.0	---	---	---
20				10.9	10.3	10.8	9.3	8.6	8.9	---	---	---
21				10.4	10.1	10.2	9.2	8.5	8.8	---	---	---
22				10.8	10.2	10.6	9.2	8.4	8.8	---	---	---
23				11.1	10.4	10.9	9.4	8.7	9.1	---	---	---
24				11.0	10.6	10.8	9.6	8.9	9.2	---	---	---
25				10.6	10.4	10.5	9.6	8.9	9.3	9.5	8.9	9.2
26				10.7	10.3	10.5	10.0	9.2	9.7	9.7	9.1	9.4
27				10.3	10.1	10.2	10.6	9.9	10.3	9.7	9.0	9.4
28				---	---	---	10.7	10.2	10.5	9.4	8.8	9.1
29				---	---	---	10.6	9.9	10.3	9.3	8.7	9.0
30				---	---	---	10.3	9.5	10.0	9.3	8.8	9.1
31				---	---	---	---	---	---	9.3	8.8	9.1
MONTH				---	---	---	11.1	8.4	10	---	---	---
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.2	8.6	8.9	---	---	---	8.3	7.6	8.0	8.9	8.3	8.5
2	---	---	---	---	---	---	8.5	8.0	8.2	9.0	8.3	8.6
3	---	---	---	8.6	8.0	8.3	8.5	7.9	8.2	9.1	8.4	8.8
4	---	---	---	8.5	7.9	8.2	8.4	7.8	8.1	8.8	8.2	8.5
5	9.3	8.5	9.0	8.6	7.8	8.2	8.2	7.7	7.8	8.6	8.0	8.3
6	9.2	8.6	8.9	8.3	7.7	8.0	8.2	7.7	7.9	8.8	8.3	8.6
7	9.3	8.6	9.0	8.6	7.7	8.1	---	---	---	8.9	8.3	8.6
8	9.1	8.4	8.7	8.5	8.1	8.2	---	---	---	8.7	8.0	8.4
9	8.9	8.2	8.5	8.5	7.8	8.2	---	---	---	8.4	7.8	8.1
10	8.8	8.0	8.4	8.4	7.8	8.1	---	---	---	8.4	7.7	8.1
11	8.5	7.9	8.2	8.4	7.8	8.0	---	---	---	8.9	8.2	8.5
12	8.6	7.9	8.2	8.3	7.8	8.1	---	---	---	9.0	8.4	8.7
13	8.7	7.9	8.4	8.3	7.9	8.1	---	---	---	8.7	8.2	8.4
14	8.7	7.9	8.4	8.6	8.2	8.4	---	---	---	8.6	8.0	8.3
15	8.4	7.6	8.0	---	---	---	---	---	---	8.5	7.9	8.2
16	8.2	7.6	7.9	---	---	---	---	---	---	8.6	8.1	8.3
17	8.8	7.9	8.3	8.6	8.0	8.4	---	---	---	8.7	8.1	8.4
18	8.7	7.9	8.2	8.7	8.2	8.5	8.2	7.7	8.0	8.7	8.1	8.4
19	8.4	7.8	8.1	8.7	8.1	8.4	8.3	7.7	8.0	---	---	---
20	8.8	7.9	8.4	8.5	7.9	8.2	8.2	7.6	7.9	---	---	---
21	---	---	---	8.4	7.8	8.1	8.1	7.5	7.8	---	---	---
22	---	---	---	8.6	8.0	8.3	7.9	7.3	7.6	---	---	---
23	---	---	---	8.4	7.9	8.1	7.9	7.2	7.5	---	---	---
24	---	---	---	8.4	7.7	8.1	7.9	7.3	7.6	---	---	---
25	---	---	---	8.3	7.8	8.0	8.0	7.4	7.6	9.4	8.9	9.1
26	---	---	---	8.3	7.7	8.0	7.9	7.3	7.5	9.3	8.9	9.0
27	---	---	---	8.4	7.7	8.0	8.6	7.5	8.0	9.3	8.7	9.0
28	---	---	---	8.3	7.7	8.0	8.4	7.6	8.0	9.4	8.7	9.0
29	---	---	---	8.1	7.7	7.9	8.3	7.6	8.0	9.2	8.6	8.9
30	---	---	---	8.3	7.7	7.9	8.7	7.9	8.3	9.2	8.6	8.9
31	---	---	---	8.2	7.6	7.8	8.9	8.3	8.5	---	---	---
MONTH	---	---	---	8.7	7.6	8.1	---	---	---	9.4	7.7	8.6



## WEST BRANCH SUSQUEHANNA RIVER BASIN

01545600 YOUNG WOMANS CREEK NEAR RENOVO, 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 Laureilly 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 mi<sup>2</sup> (119.7 km<sup>2</sup>).

## 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.--11 years (1965-76), 76.2 ft<sup>3</sup>/s (2.158 m<sup>3</sup>/s), 22.40 in/yr (569 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,370 ft<sup>3</sup>/s (152 m<sup>3</sup>/s) June 23, 1972, gage height, 7.98 ft (2.432 m), from rating curve extended above 1,000 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 1.1 ft<sup>3</sup>/s (0.031 m<sup>3</sup>/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 ft<sup>3</sup>/s (13.0 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 17	1815	*672 19.0	*3.48 1.061	June 21	2045	538 15.2	3.27 0.997

Minimum discharge, 9.1 ft<sup>3</sup>/s (0.26 m<sup>3</sup>/s) Sept. 15, gage height, 1.71 ft (0.521 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	48	57	82	127	138	214	36	156	65	37	14
2	144	46	52	76	110	124	261	41	153	56	31	14
3	119	45	57	72	90	135	266	37	139	48	28	13
4	100	41	54	66	80	248	229	36	124	46	25	12
5	85	40	54	62	70	287	192	35	106	42	23	13
6	78	38	57	58	70	248	163	35	99	37	24	12
7	69	37	57	56	66	203	141	36	119	58	56	11
8	62	38	52	58	62	166	121	33	93	50	44	10
9	62	35	64	54	58	138	102	32	84	46	38	10
10	57	78	82	52	56	124	90	31	76	38	36	18
11	50	110	78	49	71	113	80	36	68	39	33	14
12	46	135	76	47	66	97	72	40	60	38	30	12
13	45	166	73	46	64	95	66	34	51	34	32	10
14	43	169	80	70	76	82	61	32	46	31	37	9.7
15	41	147	97	62	80	78	55	32	48	37	50	9.5
16	43	130	133	56	103	76	51	37	55	31	50	14
17	45	110	147	52	520	71	47	46	72	29	40	20
18	116	97	144	50	632	64	44	68	47	25	37	22
19	108	85	133	47	632	66	41	80	49	22	34	15
20	116	80	119	45	520	73	40	103	224	20	31	14
21	110	78	105	45	385	92	38	166	505	33	28	15
22	105	71	92	43	423	108	40	167	435	31	26	13
23	97	62	85	40	412	119	37	145	307	36	24	12
24	90	54	78	38	320	121	35	126	225	37	22	11
25	85	52	71	36	244	116	40	109	193	28	19	9.8
26	78	48	97	70	199	105	43	103	141	25	21	11
27	73	59	92	220	182	108	38	85	113	24	23	43
28	66	57	85	240	172	113	36	75	94	23	19	33
29	62	48	80	199	153	103	35	69	85	40	23	22
30	57	48	82	166	---	103	34	118	75	51	17	18
31	50	---	87	141	---	110	---	140	---	39	15	---
TOTAL	2468	2252	2620	2398	6043	3824	2712	2163	4042	1159	953	455.0
MEAN	79.6	75.1	84.5	77.4	208	123	90.4	69.8	135	37.4	30.7	15.2
MAX	166	169	147	240	632	287	266	167	505	65	56	43
MIN	41	35	52	36	56	64	34	31	46	20	15	9.5
CFSM	1.72	1.63	1.83	1.68	4.50	2.66	1.96	1.51	2.92	.81	.66	.33
IN.	1.99	1.81	2.11	1.93	4.87	3.08	2.18	1.74	3.25	.93	.77	.37

CAL YR 1975	TOTAL	40406.0	MEAN	111	MAX	2220	MIN	10	CFSM	2.40	IN	32.53
WTR YR 1976	TOTAL	31089.0	MEAN	84.9	MAX	632	MIN	9.5	CFSM	1.84	IN	25.03

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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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 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA,MG) (MG/L)
OCT 22...	1400	105	40	6.2	11.5	7.6	1000	0	10	12
NOV 24...	1100	54	41	6.8	3.0	13.0	B3	B1	B3	15
DEC 11...	1200	78	40	6.3	3.0	13.6	B6	B2	B5	18
JAN 14...	1545	70	38	6.6	.0	13.6	B7	--	--	13
FEB 11...	1215	76	41	7.1	1.5	13.6	40	B2	B1	13
MAR 18...	1345	71	37	7.2	2.5	13.8	B13	B1	B2	15
APR 20...	1200	40	34	7.3	16.0	10.0	B12	B2	B0	14
MAY 18...	1500	95	37	7.7	11.0	13.2	150	50	--	15
JUN 23...	1200	310	39	6.9	12.5	10.0	230	50	200	11
JUL 15...	1045	43	46	6.8	15.0	9.2	140	20	320	14
AUG 20...	1100	32	36	6.8	15.0	16.6	35	27	B10	16
SEP 14...	1215	9.7	42	6.9	16.0	10.0	40	B8	35	16

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT 22...	3	3.0	1.0	.6	.8	11	0	9	11	7.6
NOV 24...	9	4.9	.6	.7	.8	7	0	6	1.8	8.2
DEC 11...	5	5.0	1.3	.9	.7	16	0	13	13	8.2
JAN 14...	0	3.9	.8	.6	.9	19	0	16	7.6	8.5
FEB 11...	5	3.5	1.0	.6	.4	9	0	7	1.1	9.1
MAR 18...	10	3.0	1.8	.7	.5	6	0	5	.6	8.7
APR 20...	2	4.0	.9	.6	.7	14	0	11	1.1	8.8
MAY 18...	5	4.3	1.1	1.0	.8	12	0	10	.4	8.4
JUN 23...	0	3.0	.9	1.5	.8	16	0	13	3.2	2.8
JUL 15...	0	3.7	1.1	.8	2.7	18	0	15	4.6	4.9
AUG 20...	7	4.2	1.3	.7	.8	11	0	9	2.8	5.8
SEP 14...	2	4.5	1.2	.8	.8	17	0	14	3.4	3.3

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01545600 YOUNG WOMANS CREEK NEAR RENOVO, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTMBER 1976

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT 22...	1.4	.1	4.6	30	25	.18	.01	5	1.4
NOV 24...	1.3	.1	3.9	16	24	.23	.01	2	.29
DEC 11...	1.6	.1	3.9	37	30	.38	.01	2	.42
JAN 14...	1.6	.1	3.7	19	29	.41	.02	--	--
FEB 11...	1.2	.0	3.8	35	24	.39	.02	--	--
MAR 18...	1.3	.1	3.9	27	23	.34	.01	--	--
APR 20...	1.0	.0	4.0	21	27	.32	.02	--	--
MAY 18...	2.3	.1	4.1	18	28	.41	.03	--	--
JUN 23...	.0	.1	4.5	24	21	.36	.07	--	--
JUL 15...	2.6	.1	4.7	27	29	.31	.03	--	--
AUG 20...	.7	.1	4.7	28	24	.35	.01	--	--
SEP 14...	1.2	.1	4.4	23	25	.22	.01	--	--

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
OCT 22...	1400	0	0	0	0	0	30
MAY 18...	1500	0	0	0	<10	0	220

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT 22...	0	0	<.5	0	0	10
MAY 18...	2	30	<.5	0	0	0

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01545600 YOUNG WOMANS CREEK NEAR RENOVO, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	SUS- PENED GROSS BETA AS CS-137 (PC/L)	DIS- SOLVED GROSS BETA AS AS SR90 /Y90 (PC/L)	SUS- PENED GROSS BETA AS AS SR90 /Y90 (PC/L)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L)	DIS- SOLVED URANIUM (U) (UG/L)
OCT 22...	1400	28	<1	<.4	<.4	1.2	<.4	1.0	<.4	<.01	.01
DATE	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)
OCT 22...	.0	0	.00	.0	.0	0	.00	.0	.00	.0	.00
DATE	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)
OCT 22...	.0	.00	.00	.0	.00	.0	.00	.00	.0	.00	.0
DATE	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOTAL TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT 22...	.00	.0	.00	.00	.00	.00	0	0	.00	.00	.00

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 mi<sup>2</sup> (225.8 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 788.81 ft (240.429 m) above mean sea level. 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.--36 years, 86.3 ft<sup>3</sup>/s (2.44 m<sup>3</sup>/s), 13.44 in/yr (341 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,410 ft<sup>3</sup>/s (153 m<sup>3</sup>/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 ft<sup>3</sup>/s (39.6 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; minimum, 9.6 ft<sup>3</sup>/s (0.27 m<sup>3</sup>/s) Nov. 24, 1941, gage height, 1.69 ft (0.515 m); minimum daily, 20 ft<sup>3</sup>/s (0.57 m<sup>3</sup>/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 ft<sup>3</sup>/s (9.91 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 27	0730	*791 22.4	*4.16 1.268	Feb. 16	2400	462 13.1	3.57 1.088
Feb. 11	1730	530 15.0	3.71 1.131	Aug. 7	1100	361 10.2	3.34 1.018

Minimum discharge, 61 ft<sup>3</sup>/s (1.728 m<sup>3</sup>/s) Sept. 23, 25, gage height, 2.15 ft (0.655 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	95	87	155	140	146	147	83	94	105	95	72
2	162	93	85	130	132	142	133	85	101	99	78	75
3	138	92	84	127	121	147	127	82	93	93	74	73
4	127	90	83	120	118	189	128	80	89	92	71	73
5	121	89	83	113	114	163	125	78	86	90	69	75
6	117	87	80	108	112	156	122	78	86	87	77	72
7	112	90	79	107	106	155	119	78	88	89	169	73
8	108	89	79	106	104	152	117	75	84	91	99	73
9	129	86	92	100	102	151	115	74	81	97	86	73
10	117	117	122	96	101	152	111	74	79	91	81	83
11	106	104	101	96	310	149	110	75	78	99	79	73
12	102	148	98	96	191	142	109	77	76	93	75	72
13	99	149	95	95	191	149	107	73	75	87	83	70
14	99	135	94	151	202	141	103	73	80	79	91	70
15	97	126	94	116	160	140	103	71	77	149	100	70
16	99	120	95	108	212	140	101	76	75	156	99	93
17	100	116	92	103	415	138	98	91	87	106	86	95
18	159	110	90	95	405	130	96	91	75	95	84	78
19	129	107	86	93	358	130	98	86	76	90	81	70
20	138	104	85	94	305	127	96	82	161	87	79	72
21	131	104	83	94	261	134	94	82	215	88	78	72
22	126	97	82	91	256	129	101	77	184	88	78	68
23	123	94	80	87	223	124	94	75	152	85	76	66
24	120	93	78	88	203	126	92	74	140	82	75	66
25	115	90	76	86	192	126	91	76	132	78	73	65
26	111	89	97	178	181	124	98	124	123	77	76	68
27	109	93	102	651	172	123	88	91	115	75	75	93
28	105	85	91	235	160	124	85	87	108	75	76	90
29	103	85	88	186	151	118	84	85	106	94	73	73
30	101	87	95	164	---	117	83	103	114	97	72	73
31	98	---	129	147	---	119	---	94	---	79	72	---
TOTAL	3651	3064	2805	4216	5698	4303	3175	2550	3130	2893	2580	2239
MEAN	118	102	90.5	136	196	139	106	82.3	104	93.3	83.2	74.6
MAX	162	149	129	651	415	189	147	124	215	156	169	95
MIN	97	85	76	86	101	117	83	71	75	75	69	65
CFSM	1.35	1.17	1.04	1.56	2.25	1.59	1.22	.94	1.19	1.07	.95	.86
IN.	1.56	1.31	1.20	1.80	2.43	1.84	1.35	1.09	1.34	1.23	1.10	.96

CAL YR 1975 TOTAL 44070 MEAN 121 MAX 610 MIN 49 CFSM 1.39 IN 18.80  
WTR YR 1976 TOTAL 40304 MEAN 110 MAX 651 MIN 65 CFSM 1.26 IN 17.19



## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01546500 SPRING CREEK NEAR AXEMANN, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality samples were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA.MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY C02 AS CAC03 (MG/L)
OCT 29...	1330	9813	106	290	8.0	13.0	3	9.0	168	0	0
NOV 25...	1330	9813	90	270	8.0	7.0	3	9.0	174	--	--
JAN 29...	1445	9813	182	240	6.7	3.0	5	8.0	168	0	0
FEB 23...	1210	9813	213	250	--	--	6	--	168	0	0
MAR 31...	1400	9813	114	320	7.1	10.0	5	8.0	150	--	0
APR 21...	1230	9813	91	340	6.8	18.0	<1	8.0	144	0	0
MAY 11...	1400	9813	69	470	--	15.0	3	11.7	288	0	0
JUN 24...	1415	9813	135	400	7.0	17.0	9	11.0	114	0	0
JUL 27...	1150	9813	72	460	7.8	15.0	5	--	384	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 29...	54	8.0	180	30	17	4.5	.12	.07	.51	80	1.0
NOV 25...	51	11	180	20	18	3.3	.03	.06	.50	90	--
JAN 29...	52	9.5	160	18	15	2.6	.07	.14	.25	280	--
FEB 23...	46	13	154	18	14	2.0	.05	.07	.25	180	--
MAR 31...	50	6.0	154	24	17	2.6	.12	.15	.46	180	--
APR 21...	23	2.5	174	4.0	19	3.5	.11	.07	.66	130	--
MAY 11...	52	39	184	8.0	20	4.5	.07	.10	.79	100	--
JUN 24...	48	.5	164	24	15	1.5	.04	.06	.36	450	--
JUL 27...	53	62	180	14	22	4.3	.02	.12	.61	190	--

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01546750 LOGAN BRANCH AT BELLEFONTE, PA

LOCATION.--Lat 40°54'27", long 77°46'57", Centre County, Hydrologic Unit 02050204, at bridge on State Route 26 at Bellefonte, and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA.MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 29...	1400	9813	270	8.5	14.0	2	9.0	156	0	0	45
NOV 25...	1400	9813	250	8.5	6.0	1	9.0	186	0	0	50
JAN 29...	1430	9813	220	6.7	3.0	6	8.0	144	0	0	48
MAR 31...	1300	9813	300	7.5	10.0	5	8.0	114	--	0	46
APR 21...	1400	9813	300	6.7	18.0	2	8.0	144	0	0	47
MAY 18...	1400	9813	420	6.7	18.0	7	8.0	136	0	0	36
JUN 24...	1055	9813	370	6.8	19.0	15	11.0	88	0	0	35
JUN 24...	1100	9813	450	6.8	19.0	10	10.0	150	--	2	43
JUL 27...	1120	9813	420	7.3	18.0	3	--	250	--	0	52

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 29...	10	150	34	11	3.1	.07	.03	.05	80	2.0
NOV 25...	15	156	28	12	3.0	.05	.05	.05	110	--
JAN 29...	6.0	132	24	12	2.0	.03	.04	.10	360	--
MAR 31...	.0	144	24	12	2.2	.03	.05	.10	220	--
APR 21...	6.5	148	18	12	2.5	.07	.02	.09	150	--
MAY 18...	11	146	36	12	3.2	.10	.10	.14	240	--
JUN 24...	.5	128	32	11	2.8	.04	.04	.12	500	--
JUN 24...	10	8	30	11	37	.04	.07	.12	440	--
JUL 27...	29	156	26	14	3.0	.09	.05	.10	140	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN 24...	1100	9813	750	<3	20	40	<50	30	40	20

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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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 mi<sup>2</sup> (368 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 696.42 ft (212.269 m) above mean sea level.

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

AVERAGE DISCHARGE.--9 years, 216 ft<sup>3</sup>/s (6.12 m<sup>3</sup>/s), 20.66 in/yr (525 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,170 ft<sup>3</sup>/s (231 m<sup>3</sup>/s) June 23, 1972, gage height, 13.20 ft (4.023 m), from peak-stage indicator, from rating curve extended above 900 ft<sup>3</sup>/s (25.5 m<sup>3</sup>/s) on basis of computation of peak flow over dam; minimum, 60 ft<sup>3</sup>/s (1.70 m<sup>3</sup>/s) Sept. 30, 1969, gage height, 2.22 ft (0.677 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 570 ft<sup>3</sup>/s (16.1 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 27	0730	*1,140 32.3	*5.77 1.759	Feb. 18	1015	868 24.6	5.02 1.530
Feb. 11	1700	932 26.4	5.18 1.579	Aug. 7	1415	666 18.9	4.46 1.359

Minimum discharge, 108 ft<sup>3</sup>/s (3.06 m<sup>3</sup>/s) Sept. 22, gage height, 2.50 ft (0.762 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285	199	189	327	305	316	313	195	239	236	217	163
2	301	197	183	288	289	305	287	197	248	224	195	163
3	259	194	181	284	266	310	276	191	234	213	188	161
4	242	191	177	267	261	387	279	188	224	210	184	160
5	231	189	176	246	253	346	279	186	215	204	180	160
6	228	184	175	236	248	335	271	184	217	195	206	154
7	217	185	173	236	236	335	266	186	220	210	433	154
8	211	183	172	234	232	330	258	182	208	210	271	153
9	242	179	196	221	224	324	253	180	201	204	235	151
10	226	203	251	212	224	324	246	180	195	195	221	167
11	213	211	219	209	582	324	244	184	193	217	208	151
12	207	247	215	206	411	313	239	186	184	199	199	147
13	201	308	211	205	411	330	234	180	182	191	210	146
14	201	279	210	275	436	310	227	178	193	184	230	149
15	197	261	211	235	361	305	224	176	182	355	247	147
16	201	252	211	221	481	310	222	188	184	319	256	182
17	209	242	204	212	848	305	217	204	201	258	221	193
18	304	232	202	199	844	289	215	206	180	239	212	169
19	262	223	193	195	746	289	215	204	184	227	206	156
20	279	219	192	196	648	281	210	193	335	217	197	158
21	266	220	189	196	561	292	208	188	468	220	193	158
22	264	210	187	193	547	287	222	182	433	224	189	149
23	256	202	184	186	481	274	210	176	372	217	185	146
24	247	200	178	185	439	276	206	174	338	210	180	144
25	238	196	176	181	411	276	210	180	310	201	176	144
26	231	191	217	314	381	271	220	274	284	199	180	151
27	224	199	223	946	366	268	206	220	263	195	178	201
28	219	191	204	487	341	274	197	206	248	193	174	187
29	213	184	199	411	327	258	193	206	248	213	169	163
30	211	184	216	366	---	258	191	251	256	234	165	163
31	205	---	277	327	---	258	---	239	---	197	165	---
TOTAL	7290	6355	6191	8496	12160	9360	7038	6064	7439	6810	6470	4790
MEAN	235	212	200	274	419	302	235	196	248	220	209	160
MAX	304	308	277	946	848	387	313	274	468	355	433	201
MIN	197	179	172	181	224	258	191	174	180	184	165	144
CFSM	1.65	1.49	1.41	1.93	2.95	2.13	1.65	1.38	1.75	1.55	1.47	1.13
IN.	1.91	1.66	1.62	2.23	3.19	2.45	1.84	1.59	1.95	1.78	1.69	1.25

CAL YR 1975 TOTAL 92848 MEAN 254 MAX 994 MIN 132 CFSM 1.79 IN 24.32  
WTR YR 1976 TOTAL 88463 MEAN 242 MAX 946 MIN 144 CFSM 1.70 IN 23.17

## 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 U.S. Highway 220 at Milesburg, 250 ft (76 m) downstream from Spring Creek.

DRAINAGE AREA.--265 mi<sup>2</sup> (686 km<sup>2</sup>).

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) above mean sea level. Prior to Aug. 31, 1956, nonrecording gage at site 130 ft (40 m) upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--21 years, 380 ft<sup>3</sup>/s (10.8 m<sup>3</sup>/s), 19.47 in/yr (495 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,700 ft<sup>3</sup>/s (76.5 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 27	0915	3,200 90.6	3.58 1.091	June 21	0345	*5,620 159	*5.11 1.558
Feb. 14	1530	4,720 134	4.59 1.399				

Minimum discharge, 143 ft<sup>3</sup>/s (4.05 m<sup>3</sup>/s) Sept. 22, gage height, -0.36 ft (-0.110 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1800	282	317	1100	563	474	729	242	463	328	228	184
2	920	279	307	777	488	452	654	252	506	299	205	184
3	600	275	296	660	390	479	606	240	419	277	196	181
4	520	272	289	541	380	999	555	233	370	268	189	176
5	480	265	280	431	370	853	517	222	332	259	185	176
6	400	259	280	354	360	723	466	224	325	242	220	169
7	350	259	300	377	361	622	435	227	323	304	1250	169
8	350	265	330	381	358	555	401	220	292	316	517	169
9	430	255	400	290	347	517	377	215	272	290	346	168
10	470	475	730	280	337	498	358	214	257	250	289	186
11	430	596	860	270	952	546	354	218	250	306	252	172
12	400	866	620	260	916	522	339	228	237	280	233	168
13	380	1380	540	260	870	654	326	215	228	246	237	165
14	350	925	500	431	1180	601	314	212	245	231	275	167
15	310	687	465	365	980	565	305	209	235	692	303	164
16	290	570	470	324	1920	550	299	227	239	435	339	211
17	280	493	439	293	4590	522	289	247	300	327	265	251
18	898	439	418	249	3420	466	281	250	238	286	246	244
19	671	405	358	252	2480	466	276	253	238	263	231	190
20	729	381	365	269	1780	475	271	235	2130	247	222	184
21	627	385	358	272	1290	507	266	226	4760	244	216	191
22	565	369	328	262	1180	517	287	215	2830	253	211	177
23	493	331	317	243	937	470	272	208	1270	242	208	167
24	439	317	269	249	786	466	263	205	793	235	199	163
25	401	310	293	240	706	457	269	214	621	221	199	160
26	377	299	405	453	635	431	290	558	494	212	199	172
27	354	331	531	1930	598	426	268	395	416	207	234	465
28	339	335	435	1240	539	484	253	320	370	206	208	412
29	324	299	397	942	498	413	242	295	352	217	197	260
30	314	296	448	753	---	418	238	463	357	251	189	228
31	296	---	859	617	---	422	---	484	---	210	186	---
TOTAL	15587	12900	13204	15365	30211	16550	10800	8166	20162	8644	8474	6073
MEAN	503	430	426	496	1042	534	360	263	672	279	273	202
MAX	1800	1380	860	1930	4590	999	729	558	4760	692	1250	465
MIN	280	255	269	240	337	413	238	205	228	206	185	160
CFSM	1.90	1.62	1.61	1.87	3.93	2.02	1.36	.99	2.54	1.05	1.03	.76
IN.	2.19	1.81	1.85	2.16	4.24	2.32	1.52	1.15	2.83	1.21	1.19	.85

CAL YR 1975	TOTAL	185115	MEAN	507	MAX	5740	MIN	143	CFSM	1.91	IN	25.99
WTR YR 1976	TOTAL	166136	MEAN	454	MAX	4760	MIN	160	CFSM	1.71	IN	23.32

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 mi<sup>2</sup> (767 km<sup>2</sup>).

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.

COOPERATION.--Water-quality data for the 1976 water year were furnished by the Pennsylvania Department of Environmental Resources.

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, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 22.0°C June 19-21; minimum, freezing point Jan. 7.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 29...	1200	9813	260	8.5	13.0	3	8.0	150	0	0	48
NOV 25...	1230	9813	230	8.0	7.0	1	9.0	162	0	0	44
JAN 28...	1300	9813	200	7.7	3.0	16	8.0	84	0	0	16
FEB 23...	1115	9813	170	--	--	10	--	120	0	0	28
MAR 31...	1015	9813	220	7.5	10.0	15	8.0	102	--	0	28
APR 21...	1100	9813	300	6.7	18.0	<1	8.0	144	0	0	48
MAY 11...	1300	9813	400	--	15.0	5	11.5	204	0	0	48
JUN 23...	1415	9813	200	8.0	20.0	15	9.0	120	0	0	21
JUL 21...	1230	9813	400	7.5	16.0	2	--	160	--	0	46

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 29...	7.5	144	26	14	2.5	.07	.03	.14	50	3.0
NOV 25...	13	148	28	14	2.0	.02	.04	.12	120	--
JAN 28...	10	72	24	15	1.9	.06	.09	.16	780	--
FEB 23...	12	78	26	11	2.0	.03	.05	.12	200	--
MAR 31...	7.5	86	32	13	1.7	.05	.06	.16	520	--
APR 21...	5.5	148	18	15	2.0	.04	.07	.16	300	--
MAY 11...	20	156	12	15	2.6	.05	.07	.32	160	--
JUN 23...	16	60	26	9.0	.73	.02	.05	.13	670	--
JUL 21...	11	142	22	16	3.0	.02	.04	.23	140	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INIUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN 23...	1415	9813	530	<3	<10	<10	<50	40	<10	20



## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

## 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 mi<sup>2</sup> (878 km<sup>2</sup>).

## 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) above mean sea level.

REMARKS.--Records good. Flow regulated by Foster Joseph Sayers Lake 0.4 mi (0.6 km) upstream (see p.203 ).

AVERAGE DISCHARGE.--22 years, 432 ft<sup>3</sup>/s (12.2 m<sup>3</sup>/s), 17.31 in/yr (440 mm/yr), adjusted for storage since March 1971.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft<sup>3</sup>/s (286 m<sup>3</sup>/s) Mar. 10, 1964, gage height, 11.59 ft (3.533 m), from rating curve extended above 4,100 ft<sup>3</sup>/s (116 m<sup>3</sup>/s); no flow parts of June 16, Nov. 10, 1970, May 12, 18, 19, 1976, result of shutoff at lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,690 ft<sup>3</sup>/s (76.2 m<sup>3</sup>/s) Oct. 1, gage height, 6.79 ft (2.070 m), was not independent of the same peak discharge that occurred Sept. 28, 1975; maximum independent peak discharge, 2,170 ft<sup>3</sup>/s (61.5 m<sup>3</sup>/s) June 22, gage height, 6.14 ft (1.871 m); no flow parts of May 12, 18, 19, result of upstream shutoff; minimum daily, 58 ft<sup>3</sup>/s (1.64 m<sup>3</sup>/s) Feb. 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2200	332	298	1030	533	534	407	186	575	346	167	196
2	899	290	322	1090	532	468	312	186	560	297	167	196
3	477	290	339	897	420	469	241	175	432	276	234	196
4	446	290	339	712	367	756	245	168	368	276	217	196
5	446	290	339	533	441	965	246	169	342	276	202	196
6	355	290	338	401	405	964	249	167	344	242	222	196
7	313	290	337	421	367	957	250	167	343	230	1300	196
8	314	290	334	440	368	718	251	167	307	254	704	196
9	404	290	408	440	413	619	228	167	276	271	427	196
10	485	367	778	387	368	618	196	167	276	271	312	274
11	480	417	874	348	651	618	196	168	229	468	281	206
12	440	887	698	347	1070	620	198	152	207	406	242	189
13	440	1450	567	364	852	620	200	156	207	280	230	178
14	407	1400	583	545	986	623	188	154	207	217	230	178
15	343	1420	510	501	1080	729	167	154	207	390	230	178
16	322	1400	510	391	1090	774	150	151	216	588	346	361
17	425	1370	423	351	737	768	150	148	230	369	331	348
18	951	1270	382	270	58	630	150	137	267	285	301	279
19	858	1330	383	224	458	564	151	129	332	230	301	240
20	788	1140	383	295	978	566	153	138	1130	207	258	228
21	731	1280	383	359	1430	565	180	145	1420	209	237	224
22	597	1250	383	341	1590	567	193	150	1910	211	237	212
23	547	1210	382	327	1700	567	193	150	2100	369	210	208
24	547	802	333	324	1750	567	194	166	2050	399	196	196
25	547	1140	309	293	1710	567	196	175	1490	246	196	189
26	446	1100	311	409	1660	567	194	310	455	192	196	189
27	388	1050	525	921	1270	567	194	386	414	167	196	327
28	388	749	646	1290	869	567	195	280	367	167	196	516
29	388	371	449	1330	636	458	190	280	345	167	196	351
30	388	298	497	1270	---	405	186	791	348	167	196	270
31	388	---	813	760	---	406	---	579	---	167	196	---
TOTAL	17148	24353	14176	17611	24789	19383	6243	6618	17954	8640	8954	7105
MEAN	553	812	457	568	855	625	208	213	598	279	289	237
MAX	2200	1450	874	1330	1750	965	407	791	2100	588	1300	516
MIN	313	290	298	224	58	405	150	129	207	167	167	178
MEAN <sup>#</sup>	473	452	462	556	1006	616	383	280	599	284	282	212
CFSM <sup>#</sup>	1.40	1.33	1.36	1.64	2.97	1.82	1.13	.83	1.77	.84	.84	.63
IN. <sup>#</sup>	1.61	1.48	1.57	1.89	3.20	2.10	1.26	.96	1.98	.97	.97	.70

CAL YR 1975 TOTAL 206047 MEAN 565 MAX 2820 MIN 160 MEAN<sup>#</sup> 565 CFSM<sup>#</sup> 1.67 IN.<sup>#</sup> 22.64  
WTR YR 1976 TOTAL 172974 MEAN 473 MAX 2200 MIN 58 MEAN<sup>#</sup> 465 CFSM<sup>#</sup> 1.37 IN.<sup>#</sup> 18.68

<sup>#</sup> Adjusted for change in contents in Foster Joseph Sayers Lake.

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, freezing point Jan. 13, 14, 1957, Jan. 26, Feb. 18, 23, 1968.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 23.0°C July 31, Aug. 5, 6; minimum, 1.0°C on many days during Dec., Jan., and Feb.

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01547500 BALD EAGLE CREEK AT BLANCHARD, PA--Continued

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

## 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 mi<sup>2</sup> (114.2 km<sup>2</sup>).

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

REVISED RECORDS.--WDR PA-72: 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) above mean sea level. 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.

AVERAGE DISCHARGE.--21 years, 56.3 ft<sup>3</sup>/s (1.594 m<sup>3</sup>/s), 17.34 in/yr (440 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft<sup>3</sup>/s (140 m<sup>3</sup>/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 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/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 ft<sup>3</sup>/s (12.7 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 27	1600	*746 21.1	*3.92 1.195	Feb. 16	2200	625 17.7	3.65 1.113

Minimum discharge, 5.6 ft<sup>3</sup>/s (0.159 m<sup>3</sup>/s) Sept. 9; minimum gage height, 1.96 ft (0.597 m) Sept. 9, 10, 11, 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	27	31	165	87	54	84	17	206	31	13	7.1
2	60	26	28	142	74	51	95	19	226	27	12	10
3	42	24	28	126	68	51	90	17	165	22	11	8.5
4	34	23	27	100	62	106	84	16	115	21	10	7.5
5	30	21	26	85	58	106	70	15	84	19	10	7.5
6	26	20	27	80	54	95	63	14	67	17	16	6.7
7	23	19	27	71	50	82	52	15	58	32	106	6.3
8	21	21	24	62	48	67	47	14	45	31	56	5.9
9	24	19	53	45	44	58	42	13	38	27	38	5.6
10	23	47	155	53	42	52	38	13	32	19	31	6.3
11	20	58	129	49	151	52	37	13	28	42	24	5.9
12	19	126	105	45	106	47	34	14	24	25	21	5.9
13	17	223	87	37	106	67	31	13	22	21	19	8.0
14	17	191	75	53	131	65	29	13	20	19	19	18
15	16	142	69	41	131	67	28	13	18	38	20	14
16	17	105	66	34	277	67	27	22	17	28	20	9.0
17	22	82	58	24	555	61	25	27	20	23	15	7.5
18	123	66	54	17	496	52	23	22	17	20	13	8.5
19	97	56	51	16	383	49	22	23	17	18	12	7.5
20	103	51	47	18	277	47	22	21	250	16	11	6.7
21	90	49	41	18	206	52	21	22	360	16	11	6.3
22	82	44	36	17	176	51	24	20	251	15	10	5.6
23	73	37	33	16	134	49	22	19	195	72	10	5.3
24	62	33	24	17	106	49	20	18	134	43	9.6	5.0
25	54	31	26	16	90	51	20	19	101	25	9.0	4.7
26	49	28	58	45	77	45	21	34	72	21	12	4.6
27	44	36	71	424	79	47	19	35	54	19	11	26
28	39	33	60	555	67	52	18	37	43	17	9.6	20
29	36	28	58	394	61	45	17	35	38	16	9.0	11
30	33	27	80	239	---	47	16	128	35	15	8.0	11
31	28	---	135	101	---	52	---	140	---	13	7.5	---
TOTAL	1386	1693	1789	3105	4196	1836	1141	841	2752	768	583.7	261.9
MEAN	44.7	56.4	57.7	100	145	59.2	38.0	27.1	91.7	24.8	18.8	8.73
MAX	123	223	155	555	555	106	95	140	360	72	106	26
MIN	16	19	24	16	42	45	16	13	17	13	7.5	4.6
CFSM	1.01	1.28	1.31	2.27	3.29	1.34	.86	.61	2.08	.56	.43	.20
IN.	1.17	1.43	1.51	2.62	3.54	1.55	.96	.71	2.32	.65	.49	.22

CAL YR 1975	TOTAL	25631.5	MEAN 70.2	MAX 1320	MIN 4.2	CFSM 1.59	IN 21.62
WTR YR 1976	TOTAL	20352.6	MEAN 55.6	MAX 555	MIN 4.6	CFSM 1.26	IN 17.17



## WEST BRANCH SUSQUEHANNA RIVER BASIN

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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 mi<sup>2</sup> (31.6 km<sup>2</sup>).

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 fair.

AVERAGE DISCHARGE.--7 years, 23.2 ft<sup>3</sup>/s (0.66 m<sup>3</sup>/s), 25.82 in/yr (656 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft<sup>3</sup>/s (33.1 m<sup>3</sup>/s) June 23, 1972, gage height, 5.36 ft (1.634 m), from rating curve extended above 600 ft<sup>3</sup>/s (17.0 m<sup>3</sup>/s) on basis of contracted-opening measurement at gage height, 4.94 ft (1.506 m); minimum, 1.7 ft<sup>3</sup>/s (0.048 m<sup>3</sup>/s) Oct. 9, 10, 1970; minimum gage height, 0.83 ft (0.253 m) Oct. 9, 10, 1970, Sept. 4, 5, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 120 ft<sup>3</sup>/s (3.40 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 15	1845	221 6.26	2.76 0.841	June 20	2145	*230	6.51 *2.80 0.853

Minimum discharge, 2.3 ft<sup>3</sup>/s (0.065 m<sup>3</sup>/s) Sept. 8, 9, 10, 13, 14, 15, 25, 26, gage height, 0.83 ft (0.253 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	16	16	30	24	27	31	8.9	27	16	5.6	2.7
2	31	16	15	27	23	26	28	8.8	30	14	5.2	3.4
3	27	15	15	27	22	26	27	8.1	29	13	4.9	2.9
4	21	15	14	26	21	41	27	7.7	27	12	4.6	2.7
5	19	14	14	23	20	37	25	7.3	25	10	4.4	2.6
6	17	13	14	21	19	35	24	7.0	23	9.1	6.3	2.5
7	16	13	14	19	18	34	23	7.5	22	12	19	2.5
8	15	14	13	21	17	31	21	6.8	19	10	11	2.4
9	21	13	16	18	16	30	19	6.5	17	12	7.5	2.3
10	23	24	22	16	17	28	18	6.3	15	8.7	6.2	3.5
11	19	26	19	14	21	27	18	7.2	14	16	5.4	2.8
12	17	32	18	13	24	25	17	7.3	13	13	5.0	2.5
13	17	41	18	12	24	31	16	6.4	11	10	4.6	2.4
14	16	39	22	15	32	28	14	6.3	10	8.7	4.9	2.3
15	16	35	27	13	31	27	14	6.1	9.3	40	5.2	2.3
16	16	31	29	12	55	29	14	6.5	9.4	26	5.3	3.6
17	17	28	27	11	179	27	13	7.0	11	20	4.3	6.1
18	38	25	27	10	178	26	12	7.8	8.4	16	4.0	5.0
19	37	23	24	10	114	27	12	8.0	10	14	3.7	3.5
20	41	22	22	10	83	29	11	7.3	80	12	3.6	3.3
21	38	22	21	9.8	74	31	11	6.9	155	11	3.5	3.6
22	35	21	19	9.6	55	30	12	6.4	122	11	3.4	3.0
23	32	18	18	9.6	49	27	11	6.2	81	10	3.3	2.7
24	29	16	19	9.6	43	27	10	6.0	56	9.3	3.2	2.4
25	26	16	15	9.5	41	27	11	6.4	44	7.8	3.1	2.4
26	24	15	21	19	37	24	11	17	34	7.0	3.2	2.6
27	22	17	22	34	37	26	9.6	16	28	6.6	3.6	7.1
28	21	16	19	31	32	27	9.0	15	24	6.4	3.2	8.3
29	19	15	17	30	30	24	8.5	15	20	6.1	3.0	5.0
30	18	14	18	27	---	24	8.3	20	19	6.1	2.7	4.2
31	17	---	26	25	---	23	---	24	---	5.7	2.7	---
TOTAL	739	625	601	562.1	1336	881	485.4	283.7	993.1	379.5	155.6	102.6
MEAN	23.8	20.8	19.4	18.1	46.1	28.4	16.2	9.15	33.1	12.2	5.02	3.42
MAX	41	41	29	34	179	41	31	24	155	40	19	8.3
MIN	15	13	13	9.5	16	23	8.3	6.0	8.4	5.7	2.7	2.3
CFSM	1.95	1.70	1.59	1.48	3.78	2.33	1.33	.75	2.71	1.00	.41	.28
IN.	2.25	1.91	1.83	1.71	4.07	2.69	1.48	.86	3.03	1.16	.47	.31

CAL YR 1975	TOTAL	9544.9	MEAN 26.2	MAX 345	MIN 2.1	CFSM 2.15	IN 29.10
WTR YR 1976	TOTAL	7144.0	MEAN 19.5	MAX 179	MIN 2.3	CFSM 1.60	IN 21.78

## 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 mi<sup>2</sup> (394 km<sup>2</sup>).

## 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.--8 years, 290 ft<sup>3</sup>/s (8.21 m<sup>3</sup>/s), 25.91 in/yr (658 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,740 ft<sup>3</sup>/s (276 m<sup>3</sup>/s) June 23, 1972, gage height, 15.22 ft (4.639 m), from rating curve extended above 2,500 ft<sup>3</sup>/s (70.8 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 17 ft<sup>3</sup>/s (0.48 m<sup>3</sup>/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 ft<sup>3</sup>/s (42.5 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 18	0730	*2,130 60.3	*8.99 2.740	June 21	0245	1,530 43.3	8.36 2.548

Minimum discharge. 33 ft<sup>3</sup>/s (0.935 m<sup>3</sup>/s) Sept. 25, 26, gage height, 5.26 ft (1.603 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	597	173	163	377	329	327	456	95	547	206	107	59
2	518	165	155	363	299	301	470	97	926	180	98	59
3	422	156	151	375	260	288	461	96	776	156	90	60
4	358	148	146	356	240	407	431	92	609	146	83	55
5	311	141	143	319	240	396	391	89	480	143	77	52
6	279	133	145	284	228	392	353	83	401	130	79	48
7	249	128	150	290	215	383	318	84	367	203	281	45
8	224	130	140	266	209	362	285	84	301	225	225	42
9	240	123	168	225	197	341	257	80	260	256	171	41
10	247	176	291	212	183	321	237	78	233	197	148	47
11	214	216	278	215	225	321	223	77	209	307	130	53
12	194	249	276	212	234	295	204	82	186	307	117	46
13	179	408	274	189	237	333	189	80	163	266	109	41
14	169	408	286	225	317	321	177	76	146	238	105	37
15	162	394	306	192	333	314	167	75	134	373	107	36
16	159	361	325	183	477	325	159	75	125	331	109	44
17	164	323	325	162	1580	325	149	87	149	292	95	63
18	344	291	324	115	2040	299	141	90	127	245	83	69
19	317	265	305	120	1810	299	139	98	123	213	77	56
20	359	245	291	130	1480	310	133	101	795	188	72	46
21	355	241	271	120	1140	321	130	100	1470	166	69	47
22	350	225	250	115	1000	329	127	100	1310	161	65	44
23	333	199	234	110	810	310	128	98	965	169	64	39
24	309	183	206	105	666	317	122	97	705	263	61	36
25	289	175	203	100	570	317	119	96	592	191	58	34
26	270	164	262	197	498	299	119	145	446	169	64	34
27	250	178	286	396	473	302	118	216	356	156	117	66
28	232	174	254	387	407	357	112	188	300	143	90	95
29	216	155	241	409	361	314	106	179	263	132	77	74
30	200	149	261	383	---	317	100	235	235	127	68	58
31	183	---	343	353	---	321	---	305	---	115	63	---
TOTAL	8693	6476	7453	7485	17058	10164	6521	3478	13699	6394	3159	1526
MEAN	280	216	240	241	588	328	217	112	457	206	102	50.9
MAX	597	408	343	409	2040	407	470	305	1470	373	281	95
MIN	159	123	140	100	183	288	100	75	123	115	58	34
CFSM	1.84	1.42	1.58	1.59	3.87	2.16	1.43	.74	3.01	1.36	.67	.33
IN.	2.13	1.58	1.82	1.83	4.17	2.49	1.60	.85	3.35	1.56	.77	.37

CAL YR 1975	TOTAL	129739	MEAN	355	MAX	4900	MIN	51	CFSM	2.34	IN	31.75
WTR YR 1976	TOTAL	92106	MEAN	252	MAX	2040	MIN	34	CFSM	1.66	IN	22.54

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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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 current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 519 micromhos Sept. 14, 1972; minimum, 75 micromhos May 14, 1975.

pH: Maximum, 7.3 Dec. 17, 1969; minimum, 2.9 June 29, 30, 1969.

WATER TEMPERATURES: Maximum, 28.5°C June 20, 1971; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

pH: Maximum, 4.6 Feb. 21, 23, June 5, 6; minimum, 3.2 July 24.

WATER TEMPERATURES: Maximum, 24.0°C Aug. 22, 24; minimum, freezing point on many days during December, January, and February.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)
OCT 22...	1200	352	195	3.7	11.5	.4	20	68	--	--	--
NOV 24...	1530	180	220	4.1	4.0	.4	22	92	--	--	--
DEC 11...	1715	273	250	4.2	4.5	.5	25	72	2100	0	1
MAR 18...	1710	295	160	4.4	3.5	.4	20	56	1700	0	1
JUN 23...	1810	888	115	4.2	15.5	.4	20	27	1200	0	1
SEP 14...	1800	37	380	3.6	20.5	.9	45	140	2900	0	2

DATE	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT 22...	--	--	--	--	--	--	--	--	--	--
NOV 24...	--	--	--	--	--	--	--	--	--	--
DEC 11...	0	38	10	340	3	1600	<.5	1	0	10
MAR 18...	<10	20	10	480	3	1200	<.5	0	0	90
JUN 23...	<10	16	10	310	3	670	2.3	0	0	60
SEP 14...	<10	63	10	220	4	3300	<.5	0	1	190

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C)<sup>1</sup>, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	230	220	225	224	208	214	173	160	168
2	---	---	---	236	229	232	224	206	213	161	147	155
3	---	---	---	241	234	237	210	206	208	150	144	146
4	209	194	197	248	239	241	209	203	205	146	142	144
5	216	206	211	254	245	249	209	201	205	148	140	144
6	224	215	219	257	251	253	211	204	208	---	---	---
7	226	221	223	261	255	258	210	204	207	---	---	---
8	238	225	232	267	258	262	205	197	200	---	---	---
9	293	232	250	267	262	265	204	174	198	---	---	---
10	292	235	250	268	222	244	218	177	198	182	168	175
11	237	228	233	252	202	222	187	165	175	180	173	176
12	234	228	231	219	183	197	167	156	161	182	175	177
13	237	228	233	244	162	194	159	153	155	191	174	182
14	239	231	234	163	142	151	160	156	158	218	170	188
15	235	229	232	144	136	139	162	150	156	221	190	198
16	236	223	230	143	137	140	154	149	152	196	189	193
17	---	---	---	148	139	144	152	145	148	207	189	196
18	---	---	---	154	146	150	147	141	144	227	179	208
19	---	---	---	162	152	157	142	136	140	250	193	222
20	---	---	---	169	160	164	148	141	144	210	183	197
21	---	---	---	175	166	170	154	147	151	191	182	186
22	---	---	---	180	175	177	158	153	155	205	186	191
23	178	172	175	186	177	180	165	157	161	206	185	198
24	183	175	179	191	183	187	177	158	167	209	192	202
25	189	181	185	198	190	194	185	163	173	205	191	198
26	192	186	189	202	197	199	178	164	170	205	193	199
27	197	190	193	214	195	202	193	179	187	250	178	210
28	205	196	199	217	204	209	181	171	175	176	142	156
29	211	202	206	209	203	205	173	169	171	143	129	135
30	216	210	213	213	206	210	172	157	166	131	124	127
31	222	213	216	---	---	---	190	163	176	129	121	123
MONTH	---	---	---	268	136	202	224	136	176	250	121	178
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	128	124	126	202	191	195	160	138	149	232	219	226
2	135	109	128	205	198	201	143	126	132	237	219	227
3	148	122	135	210	201	205	130	121	125	235	226	230
4	147	124	134	227	194	210	130	125	127	234	225	229
5	143	131	135	212	194	200	137	124	129	241	226	232
6	149	139	143	199	186	192	141	132	136	243	236	240
7	160	142	150	188	179	184	150	137	142	243	233	238
8	162	145	154	189	178	183	153	143	148	247	239	242
9	---	---	---	185	179	182	159	147	153	247	238	243
10	---	---	---	200	182	190	167	153	160	---	---	---
11	---	---	---	216	199	209	169	161	165	---	---	---
12	---	---	---	217	205	210	174	163	169	---	---	---
13	---	---	---	226	199	211	184	169	175	---	---	---
14	---	---	---	214	199	205	189	175	182	259	248	252
15	---	---	---	199	188	194	195	183	188	262	251	256
16	---	---	---	190	175	182	198	188	193	261	224	249
17	---	---	---	171	165	168	208	194	199	243	223	232
18	---	---	---	167	158	162	212	198	205	245	214	231
19	---	---	---	171	164	168	217	204	210	226	214	220
20	---	---	---	173	161	166	219	208	213	223	216	219
21	142	125	131	166	154	159	222	211	216	222	213	218
22	147	140	143	175	156	162	222	206	215	228	218	222
23	149	138	142	158	151	155	226	215	221	220	208	214
24	163	145	152	161	152	156	227	214	221	216	205	211
25	170	157	163	159	151	155	224	216	219	213	205	208
26	175	165	170	161	150	156	225	217	220	276	202	226
27	190	172	182	162	150	158	224	218	221	265	198	219
28	187	177	183	194	156	171	228	218	222	200	183	188
29	194	180	187	165	154	159	231	220	225	185	165	171
30	---	---	---	161	155	158	233	221	227	167	139	150
31	---	---	---	159	146	155	---	---	---	162	143	153
MONTH	---	---	---	227	146	179	233	121	184	276	139	220

01547950 BEECH CREEK AT MONUMENT, PA--Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	164	119	137									
2	---	---	---									
3	---	---	---									
4	---	---	---									
5	110	95	102									
6	111	103	107									
7	128	108	119									
8	136	119	126									
9	139	126	132									
10	146	132	138									
11	154	140	146									
12	163	146	153									
13	165	154	159									
14	177	162	167									
15	---	---	---									
16	---	---	---									
17	---	---	---									
18	---	---	---									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	---	---	---									

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

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



## WEST BRANCH SUSQUEHANNA RIVER BASIN

01547950 BEECH CREEK AT MONUMENT, PA--Continued

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

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.3	4.3	3.9	3.9	3.9
2	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.4	4.4	3.9	3.9	3.9
3	4.3	4.3	4.3	4.3	4.2	4.3	4.4	4.3	4.4	3.9	3.9	3.9
4	4.3	4.2	4.3	4.3	4.2	4.3	4.4	4.4	4.4	3.9	3.9	3.9
5	4.4	4.2	4.3	4.3	4.3	4.3	4.4	4.4	4.4	3.9	3.9	3.9
6	4.4	4.4	4.4	4.3	4.3	4.3	4.4	4.4	4.4	3.9	3.9	3.9
7	4.4	4.3	4.4	4.3	4.3	4.3	4.4	4.3	4.3	3.9	3.9	3.9
8	4.4	4.3	4.4	4.4	4.3	4.3	4.3	4.3	4.3	3.9	3.8	3.9
9	---	---	---	4.3	4.3	4.3	4.3	4.3	4.3	3.9	3.9	3.9
10	---	---	---	4.3	4.2	4.3	4.3	4.2	4.3	---	---	---
11	---	---	---	4.3	4.2	4.2	4.2	4.2	4.2	---	---	---
12	---	---	---	4.3	4.2	4.2	4.2	4.2	4.2	---	---	---
13	---	---	---	4.3	4.2	4.3	4.2	4.2	4.2	---	---	---
14	---	---	---	4.3	4.3	4.3	4.2	4.1	4.2	3.9	3.8	3.8
15	---	---	---	4.3	4.3	4.3	4.2	4.1	4.1	3.8	3.8	3.8
16	---	---	---	4.3	4.3	4.3	4.2	4.1	4.1	3.9	3.8	3.8
17	---	---	---	4.4	4.3	4.4	4.1	4.1	4.1	3.9	3.8	3.9
18	---	---	---	4.4	4.3	4.4	4.1	4.0	4.1	3.9	3.8	3.9
19	---	---	---	4.4	4.3	4.4	4.1	4.0	4.0	3.9	3.9	3.9
20	---	---	---	4.4	4.4	4.4	4.1	4.0	4.0	4.0	3.9	3.9
21	4.6	4.5	4.6	4.4	4.4	4.4	4.0	4.0	4.0	4.0	3.9	3.9
22	4.5	4.5	4.5	4.4	4.4	4.4	4.0	4.0	4.0	4.0	3.9	3.9
23	4.6	4.5	4.5	4.5	4.4	4.4	4.0	3.9	3.9	4.0	3.9	4.0
24	4.5	4.4	4.5	4.5	4.4	4.4	4.0	3.9	4.0	4.0	3.9	4.0
25	4.5	4.4	4.4	4.4	4.3	4.3	4.0	3.9	3.9	4.0	3.9	4.0
26	4.4	4.4	4.4	4.3	4.3	4.3	4.0	3.9	3.9	4.0	3.8	3.9
27	4.4	4.3	4.3	4.4	4.3	4.3	3.9	3.9	3.9	4.0	3.8	4.0
28	4.4	4.3	4.4	4.5	4.2	4.4	3.9	3.9	3.9	4.0	4.0	4.0
29	4.4	4.3	4.3	4.4	4.4	4.4	3.9	3.9	3.9	4.1	4.0	4.1
30	---	---	---	4.4	4.3	4.3	4.0	3.9	4.0	4.2	4.1	4.2
31	---	---	---	4.3	4.3	4.3	---	---	---	4.2	4.2	4.2
MONTH	---	---	---	4.5	4.2	4.3	4.4	3.9	4.1	4.2	3.8	3.9
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.4	4.2	4.3	4.0	4.0	4.0	3.9	3.8	3.8	3.9	3.8	3.9
2	---	---	---	4.0	3.9	4.0	3.9	3.8	3.8	3.9	3.8	3.8
3	---	---	---	4.0	3.9	4.0	3.8	3.8	3.8	3.8	3.7	3.8
4	---	---	---	4.0	3.9	3.9	3.8	3.7	3.8	3.8	3.7	3.8
5	4.6	4.5	4.5	4.0	3.6	3.9	3.8	3.7	3.8	3.8	3.7	3.8
6	4.6	4.5	4.5	3.9	3.6	3.8	3.8	3.7	3.8	3.8	3.7	3.8
7	4.5	4.1	4.4	4.0	3.8	3.9	4.0	3.7	3.8	3.8	3.7	3.8
8	4.4	4.1	4.3	4.0	3.9	3.9	4.0	3.9	3.9	3.8	3.7	3.7
9	4.4	4.1	4.3	4.0	3.3	3.9	4.0	3.9	3.9	3.8	3.7	3.7
10	4.4	4.2	4.3	4.0	3.8	3.9	3.9	3.9	3.9	3.8	3.7	3.7
11	4.3	4.1	4.2	4.1	3.9	4.0	3.9	3.9	3.9	3.7	3.6	3.7
12	4.3	4.0	4.2	4.1	4.0	4.1	3.9	3.8	3.9	3.7	3.7	3.7
13	4.2	4.0	4.2	4.1	4.0	4.0	3.9	3.8	3.9	3.7	3.7	3.7
14	4.2	4.0	4.1	4.1	4.0	4.0	3.9	3.8	3.8	3.7	3.7	3.7
15	---	---	---	4.1	3.8	4.0	3.9	3.8	3.9	3.7	3.7	3.7
16	---	---	---	4.1	4.0	4.1	3.9	3.8	3.8	3.7	3.7	3.7
17	---	---	---	4.1	4.0	4.1	3.9	3.8	3.8	3.7	3.7	3.7
18	---	---	---	4.1	4.0	4.1	3.8	3.7	3.8	3.7	3.6	3.7
19	---	---	---	4.0	3.9	4.0	3.8	3.7	3.8	3.7	3.6	3.7
20	---	---	---	4.0	3.4	3.9	3.9	3.7	3.8	3.7	3.7	3.7
21	---	---	---	4.0	3.7	3.9	3.9	3.6	3.8	3.7	3.7	3.7
22	---	---	---	3.9	3.8	3.9	3.8	3.6	3.7	3.7	3.7	3.7
23	---	---	---	4.2	3.8	3.9	3.8	3.7	3.8	3.8	3.7	3.7
24	---	---	---	4.0	3.2	3.8	3.8	3.6	3.7	3.7	3.7	3.7
25	---	---	---	4.0	3.3	3.9	3.8	3.6	3.7	3.8	3.7	3.7
26	4.4	4.2	4.3	4.0	3.9	4.0	3.9	3.7	3.8	3.7	3.7	3.7
27	4.3	4.1	4.2	3.9	3.8	3.9	4.1	3.9	4.0	3.8	3.6	3.7
28	4.2	4.1	4.2	3.9	3.8	3.8	4.0	3.9	3.9	3.7	3.6	3.7
29	4.1	4.0	4.1	3.9	3.6	3.8	3.9	3.9	3.9	3.8	3.7	3.8
30	4.1	3.9	4.0	3.8	3.6	3.8	3.9	3.9	3.9	3.9	3.8	3.8
31	---	---	---	3.9	3.8	3.8	3.9	3.8	3.9	---	---	---
MONTH	---	---	---	4.2	3.2	3.9	4.1	3.6	3.8	3.9	3.6	3.7

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

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

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

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

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

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

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	12.3	11.4	11.9	11.8	10.8	11.2	12.0	11.4	11.7
2	---	---	---	11.5	10.7	11.1	12.1	11.7	11.9	12.5	12.0	12.2
3	---	---	---	11.1	10.3	10.8	12.1	11.8	11.9	12.1	11.8	12.0
4	---	---	---	10.6	10.2	10.4	12.4	12.0	12.2	12.5	11.8	12.3
5	---	---	---	10.6	10.1	10.3	12.5	12.2	12.3	12.8	12.4	12.6
6	---	---	---	10.9	10.2	10.5	12.3	11.8	12.1	---	---	---
7	---	---	---	10.6	9.9	10.3	12.4	11.8	12.1	---	---	---
8	---	---	---	10.2	9.6	9.9	12.5	12.2	12.4	---	---	---
9	---	---	---	10.2	9.6	9.9	12.2	11.8	12.1	---	---	---
10	---	---	---	10.1	9.6	9.9	11.9	11.3	11.7	12.8	12.7	12.8
11	---	---	---	10.8	10.1	10.5	11.8	11.6	11.7	12.8	12.5	12.7
12	---	---	---	11.2	10.8	11.0	11.7	11.5	11.6	12.6	12.5	12.6
13	---	---	---	10.9	10.6	10.7	11.7	11.5	11.6	12.6	12.3	12.5
14	---	---	---	11.1	10.8	10.9	11.5	11.2	11.4	---	---	---
15	---	---	---	11.3	11.0	11.1	11.4	10.8	11.2	---	---	---
16	---	---	---	11.2	10.9	11.1	11.4	10.8	11.1	---	---	---
17	---	---	---	11.3	10.9	11.1	11.8	11.4	11.6	---	---	---
18	---	---	---	11.3	10.8	11.0	12.5	11.7	12.0	---	---	---
19	---	---	---	11.1	10.8	10.9	12.7	12.5	12.6	---	---	---
20	---	---	---	11.2	10.7	11.0	12.6	12.2	12.4	---	---	---
21	---	---	---	10.9	10.6	10.7	12.3	12.1	12.2	---	---	---
22	---	---	---	11.5	11.0	11.2	12.6	12.2	12.4	---	---	---
23	11.4	10.5	10.9	12.0	11.6	11.8	12.8	12.4	12.5	---	---	---
24	11.4	10.5	11.0	12.3	11.9	12.1	13.1	12.8	13.0	---	---	---
25	10.8	10.0	10.5	12.3	12.0	12.1	13.1	12.6	13.0	13.4	13.3	13.4
26	10.7	10.3	10.5	12.2	11.9	12.0	13.1	12.1	12.6	13.5	13.3	13.4
27	11.3	10.7	10.9	11.9	11.5	11.7	12.2	11.9	12.0	13.5	13.2	13.4
28	11.2	11.0	11.1	11.9	11.6	11.8	12.4	12.0	12.2	13.5	13.2	13.4
29	11.4	10.6	11.1	12.0	11.6	11.7	12.3	12.0	12.1	13.5	13.0	13.3
30	12.0	11.0	11.4	11.7	11.0	11.4	12.0	11.6	11.9	13.2	12.9	13.1
31	12.3	11.6	12.0	---	---	---	11.7	11.4	11.5	13.4	12.8	13.2
MONTH	---	---	---	12.3	9.6	11.0	13.1	10.8	12.0	---	---	---

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

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

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.9	12.6	12.7	---	---	---	10.7	10.1	10.4	10.4	9.6	10.0
2	13.5	12.6	13.2	---	---	---	10.8	10.4	10.6	10.3	9.1	9.7
3	13.4	13.2	13.3	---	---	---	11.0	10.1	10.5	10.1	9.5	9.8
4	13.4	13.2	13.3	---	---	---	10.8	10.3	10.5	10.6	9.7	10.2
5	13.4	13.2	13.3	---	---	---	11.1	10.1	10.6	10.9	9.0	9.9
6	13.3	13.1	13.2	---	---	---	10.9	10.3	10.6	10.1	9.1	9.5
7	13.4	12.8	13.0	---	---	---	11.0	9.9	10.4	9.7	9.1	9.4
8	13.2	12.9	13.0	---	---	---	10.9	10.0	10.4	10.4	9.0	9.7
9	---	---	---	---	---	---	11.2	10.1	10.6	10.6	9.2	9.8
10	---	---	---	---	---	---	11.1	9.7	10.4	---	---	---
11	---	---	---	---	---	---	10.7	9.9	10.2	---	---	---
12	---	---	---	---	---	---	11.3	10.1	10.7	---	---	---
13	---	---	---	---	---	---	11.2	9.8	10.5	---	---	---
14	---	---	---	---	---	---	10.9	9.5	10.1	9.8	8.6	9.2
15	---	---	---	---	---	---	10.4	9.4	9.9	9.2	8.3	8.7
16	---	---	---	---	---	---	10.0	8.9	9.8	---	---	---
17	---	---	---	---	---	---	9.6	8.4	9.0	---	---	---
18	---	---	---	---	---	---	9.5	8.4	8.8	---	---	---
19	---	---	---	---	---	---	9.4	8.2	8.7	---	---	---
20	---	---	---	10.8	9.5	10.2	9.3	8.2	8.7	---	---	---
21	---	---	---	10.5	9.8	10.1	9.2	8.2	8.6	10.0	8.9	9.5
22	---	---	---	11.2	10.6	10.9	8.9	8.3	8.6	10.3	9.0	9.6
23	---	---	---	11.7	10.7	11.2	9.3	8.2	8.8	10.4	9.0	9.7
24	---	---	---	11.6	10.4	10.9	9.7	8.5	9.1	10.3	9.3	9.7
25	---	---	---	11.0	10.3	10.7	9.7	9.1	9.4	10.3	9.8	10.0
26	---	---	---	11.2	10.1	10.6	10.4	9.5	10.0	10.2	9.9	10.1
27	---	---	---	10.7	10.1	10.4	10.9	10.4	10.5	10.6	9.4	10.0
28	---	---	---	10.7	10.0	10.4	11.0	10.0	10.4	10.3	9.2	9.8
29	---	---	---	11.1	10.5	10.7	10.9	9.5	10.1	10.1	9.7	9.9
30	---	---	---	10.7	10.3	10.5	10.8	9.1	9.9	10.0	9.8	9.9
31	---	---	---	10.5	10.3	10.4	---	---	---	10.0	9.7	9.9
MONTH	---	---	---	---	---	---	11.3	8.2	9.9	---	---	---
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.1	9.8	9.9	9.5	9.1	9.3	9.0	8.5	8.8	9.5	8.3	8.9
2	---	---	---	9.6	8.7	9.2	9.5	8.6	8.9	9.2	8.5	8.9
3	---	---	---	9.6	8.6	9.1	9.6	8.5	9.0	9.7	8.4	9.0
4	---	---	---	9.5	8.9	9.2	9.5	8.4	8.9	9.5	8.3	8.9
5	10.6	9.5	10.1	9.5	8.5	9.0	9.4	8.4	8.8	9.0	8.1	8.5
6	10.4	9.8	10.1	9.5	8.4	9.0	9.2	8.6	8.9	9.6	8.3	8.8
7	10.2	9.2	9.8	9.4	9.0	9.2	9.2	8.9	9.1	9.8	8.2	8.9
8	10.1	9.1	9.6	9.4	8.9	9.2	9.3	9.0	9.2	9.2	7.8	8.5
9	9.9	9.0	9.5	9.6	8.7	9.1	9.5	8.9	9.2	9.0	7.7	8.3
10	9.6	8.9	9.3	9.4	8.7	9.1	9.4	8.8	9.1	8.9	7.8	8.4
11	9.6	8.8	9.2	9.2	8.5	8.9	9.5	8.5	9.0	9.7	8.7	9.1
12	9.5	8.6	9.1	9.3	8.9	9.1	9.3	8.4	8.8	9.8	8.2	9.0
13	9.7	9.1	9.3	9.6	9.1	9.4	9.2	8.3	8.7	9.5	8.0	8.7
14	9.5	8.6	9.1	9.9	9.2	9.6	9.0	8.4	8.6	9.2	7.9	8.5
15	---	---	---	9.9	9.0	9.5	9.1	8.5	8.9	8.9	9.0	8.4
16	---	---	---	9.8	9.1	9.5	9.5	8.6	9.0	8.9	8.1	8.5
17	---	---	---	9.6	9.0	9.3	9.7	8.5	9.0	9.1	8.3	8.7
18	---	---	---	9.9	8.9	9.4	9.6	8.3	8.8	9.1	8.4	8.8
19	---	---	---	9.8	8.7	9.2	9.5	8.3	8.8	9.3	8.1	8.6
20	---	---	---	9.6	8.8	9.2	9.5	8.3	8.8	9.4	8.3	8.8
21	---	---	---	9.5	9.0	9.3	9.3	8.1	8.6	9.4	8.4	8.8
22	---	---	---	9.7	9.1	9.4	9.1	7.9	8.4	9.9	8.8	9.3
23	---	---	---	9.5	9.1	9.2	9.1	8.2	8.6	10.6	8.7	9.6
24	---	---	---	9.3	8.5	9.0	9.2	8.1	8.6	9.9	8.7	9.2
25	---	---	---	9.7	8.7	9.2	9.2	8.0	8.6	10.3	8.9	9.5
26	9.8	8.9	9.4	10.0	8.7	9.3	8.9	8.1	8.4	---	---	---
27	9.8	8.8	9.3	9.6	8.9	9.2	8.9	8.0	8.4	---	---	---
28	9.6	8.8	9.2	9.5	8.6	9.1	8.6	7.8	8.2	---	---	---
29	9.4	8.7	9.1	9.2	8.6	8.9	8.5	7.8	8.1	10.8	9.4	10.0
30	9.3	8.9	9.1	9.0	8.5	8.7	9.1	8.1	8.5	10.9	9.8	10.3
31	---	---	---	9.0	8.4	8.6	9.6	8.2	8.8	---	---	---
MONTH	---	---	---	10.0	8.4	9.2	9.7	7.8	8.8	10.9	7.7	8.9



## 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 mi<sup>2</sup> (1,448 km<sup>2</sup>).

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) above mean sea level (Pennsylvania Department of Transportation bench mark). Prior to Jan. 10, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Foster Joseph Sayers Lake 3 mi (4.8 km) upstream (see p.203).

AVERAGE DISCHARGE.--66 years, 795 ft<sup>3</sup>/s (22.5 m<sup>3</sup>/s), 19.31 in/yr (490 mm/yr), adjusted for storage since March 1971.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft<sup>3</sup>/s (725 m<sup>3</sup>/s) Mar. 18, 1936, gage height, 14.42 ft (4.395 m), from rating curve extended above 12,000 ft<sup>3</sup>/s (340 m<sup>3</sup>/s); minimum, 29 ft<sup>3</sup>/s (0.82 m<sup>3</sup>/s) Aug. 22, 1930, gage height, 1.21 ft (0.369 m); minimum daily, 80 ft<sup>3</sup>/s (2.27 m<sup>3</sup>/s) Jan. 16, 24, 25, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,720 ft<sup>3</sup>/s (134 m<sup>3</sup>/s) June 21, gage height, 5.72 ft (1.743 m); minimum, 246 ft<sup>3</sup>/s (6.97 m<sup>3</sup>/s) May 16, gage height, 1.89 ft (0.576 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3500	512	500	1980	1090	993	1100	308	1660	609	326	304
2	1720	464	518	2000	1010	874	1010	317	2210	530	313	317
3	1000	452	536	1720	802	850	906	299	1660	476	355	308
4	874	440	530	1350	728	1450	866	281	1280	458	345	299
5	810	435	524	1060	763	1760	786	277	1030	458	322	299
6	672	425	524	810	714	1720	728	272	906	410	340	290
7	588	420	530	842	637	1670	679	277	850	482	2040	290
8	554	420	518	842	637	1320	623	272	721	567	1150	286
9	665	415	665	749	672	1130	560	268	630	602	693	286
10	763	560	1430	665	595	1090	494	263	581	512	518	370
11	714	686	1530	616	1080	1100	476	268	500	866	470	308
12	651	1490	1270	623	1690	1060	446	281	440	826	415	286
13	623	2690	1040	595	1370	1140	425	259	415	623	395	268
14	581	2540	1070	890	1710	1130	405	250	400	518	390	268
15	506	2480	984	786	1860	1230	375	250	390	818	390	263
16	476	2350	1010	651	2280	1320	350	277	385	1040	506	452
17	588	2230	890	554	4060	1300	335	313	440	749	476	500
18	1580	1980	826	405	3820	1080	326	295	425	581	425	410
19	1380	2030	794	370	3750	984	317	308	464	488	420	355
20	1330	1720	778	500	3790	1000	317	295	2500	430	380	326
21	1240	1900	749	567	3740	1020	331	304	4130	415	350	322
22	1060	1820	714	524	3720	1030	355	299	4570	410	345	308
23	975	1720	693	458	3500	1010	345	295	4250	581	322	295
24	930	1150	616	500	3290	1010	335	304	3740	858	304	286
25	898	1590	567	458	3050	1020	340	317	2840	494	299	272
26	756	1520	686	658	2860	993	345	518	1090	415	313	277
27	665	1480	984	1780	2280	984	331	665	898	370	380	494
28	637	1070	1080	2420	1550	1080	322	518	756	360	340	735
29	616	581	842	2480	1170	890	313	512	686	345	326	506
30	602	482	914	2320	---	826	304	1390	658	345	317	385
31	574	---	1570	1510	---	834	---	1230	---	331	308	---
TOTAL	28528	38052	25882	31683	58218	34898	14845	11982	41505	16967	14273	10365
MEAN	920	1268	835	1022	2008	1126	495	387	1384	547	460	346
MAX	3500	2690	1570	2480	4060	1760	1100	1390	4570	1040	2040	735
MIN	476	415	500	370	595	826	304	250	385	331	299	263
MEAN#	840	908	840	1010	2159	1117	670	454	1385	552	455	321
CFSM#	1.50	1.62	1.50	1.81	3.86	2.00	1.20	.81	2.48	.99	.81	.57
IN.#	1.73	1.81	1.73	2.09	4.16	2.31	1.34	.93	2.77	1.14	.93	.64

CAL YR 1975 TOTAL 415890 MEAN 1139 MAX 10300 MIN 233 MEAN# 1140 CFSM# 2.04 IN.# 27.70  
WTR YR 1976 TOTAL 327199 MEAN 894 MAX 4570 MIN 250 MEAN# 886 CFSM# 1.58 IN.# 21.59

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



## WEST BRANCH SUSQUEHANNA RIVER BASIN

151

01548240 PINE CREEK AT GALETON; PA

LOCATION.--Lat 41°44'19", long 77°37'34", Potter County, Hydrologic Unit 02050205, 0.3 mi (0.5 km) east of Galeton, 0.5 mi (0.8 km) downstream from bridge on Legislative Route 52061, and 0.9 mi (1.5 km) downstream from South Branch.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
OCT 06...	1530	9813	60	--	--	4	--	48	33	6.2
DEC 01...	1500	9813	63	7.0	5.0	3	12.1	24	5.5	2.3
JAN 06...	1515	9813	20	--	--	3	--	26	7.1	2.0
FEB 24...	1445	9813	50	6.5	6.0	5	11.6	22	5.5	2.0
MAR 15...	1230	9813	120	6.5	5.1	5	13.3	22	4.7	2.3
APR 07...	0730	9813	60	7.0	5.0	3	11.0	46	6.3	7.2
MAY 10...	1300	9813	60	7.0	13.0	1	10.3	24	6.3	2.0
JUN 09...	0730	9813	75	7.0	15.0	3	9.0	28	7.1	2.3
JUL 15...	1330	9813	75	6.7	18.0	10	9.0	28	8.0	2.0
AUG 12...	1230	9813	40	7.0	17.0	1	9.0	24	6.3	2.0

DATE	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
OCT 06...	15	16	3.0	44	--	.50	.01	.10	.03	380
DEC 01...	15	8.0	8.0	44	--	.72	.02	.06	.02	450
JAN 06...	12	10	3.0	72	--	.64	.01	.11	.05	260
FEB 24...	9	13	3.0	24	20	.88	.01	.10	.02	550
MAR 15...	12	8.0	3.0	228	2	.89	.03	.25	.09	300
APR 07...	15	10	6.0	48	10	.32	.02	.30	.12	230
MAY 10...	15	6.0	3.0	46	2	.90	.01	.10	.03	180
JUN 09...	19	6.0	2.0	58	2	1.0	.03	<.10	.05	460
JUL 15...	19	25	4.0	72	20	1.3	.03	.10	.02	570
AUG 12...	18	4.0	5.0	46	2	.90	.02	.10	.08	230

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG 12...	1230	9813	<500	<3	<20	<20	<50	40	<2.0	40	30

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01548310 MARSH CREEK AT ANSONIA, PA

LOCATION.--Lat 41°44'47", long 77°25'38", Tioga County, Hydrologic Unit 02050205, at bridge on U.S. Route 6 at Ansonia, and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--81.8 mi<sup>2</sup> (212 km<sup>2</sup>) approximately.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)
FEB 18...	1110	9813	65	6.1	2.0	40	11.7	25	0	0
MAR 09...	1330	9813	180	--	1.5	7	10.7	62	0	0
APR 14...	1350	9813	110	7.6	9.0	3	10.5	73	0	0
MAY 25...	1400	9813	110	7.7	--	8	--	36	--	0
JUN 29...	1500	9813	135	6.8	18.0	11	--	52	0	0
JUL 21...	0902	9813	280	7.7	20.0	3	11.0	100	--	0
AUG 24...	1515	9813	120	7.2	22.0	<1	10.0	44	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
FEB 18...	8.0	1.0	24	20	7.0	1.0	.05	.10	.07	1560
MAR 09...	10	9.0	36	10	6.0	.92	.06	.10	.07	330
APR 14...	13	9.5	32	22	6.0	.58	.03	.04	.19	600
MAY 25...	12	--	34	10	5.0	.71	.05	.26	.14	670
JUN 29...	16	3.0	52	14	7.0	.54	.05	.10	.33	1740
JUL 21...	36	2.0	92	20	18	1.6	.35	.06	.21	240
AUG 24...	13	2.5	28	12	8.0	.54	.02	.03	.06	70

## WEST BRANCH SUSQUEHANNA RIVER BASIN

153

01548352 PINE CREEK AT ANSONIA, PA

LOCATION.--Lat 41°43'58", long 77°25'45", Tioga County, Hydrologic Unit 02050205, 0.1 mi (0.2 km) upstream from Darling Run, 0.7 mi (1.1 km) downstream from Marsh Creek and 1.0 mi (1.6 km) south of Ansonia.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 29...	1300	9813	90	7.2	11.5	5	11.1	40	0	0	11
FEB 18...	1100	9813	60	6.5	3.0	35	11.7	25	0	0	6.3
MAR 09...	1300	9813	140	--	1.5	4	11.5	56	0	0	8.0
APR 14...	1350	9813	90	7.6	10.0	2	11.5	59	0	0	10
JUN 29...	1515	9813	--	6.8	19.0	--	--	--	--	--	--
JUL 21...	1515	9813	280	6.8	19.0	3	10.0	100	--	0	35
AUG 24...	1515	9813	120	7.7	24.0	<1	10.0	47	--	0	12

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 29...	3.0	30	16	5.0	.67	.03	.04	.05	370	2.0
FEB 18...	2.0	16	20	5.0	1.2	.05	.07	.08	2460	--
MAR 09...	9.0	24	10	4.0	1.1	.04	.05	.03	210	--
APR 14...	8.0	22	.1	5.0	.74	.03	.04	.10	240	--
JUN 29...	--	--	--	--	--	--	--	--	--	--
JUL 21...	3.0	92	18	18	1.8	.48	.07	.21	210	--
AUG 24...	3.7	32	14	8.0	.62	.01	.04	.06	40	--

## 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 downstream 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 mi<sup>2</sup> (1,564 km<sup>2</sup>).

## 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) above mean sea level. Prior to Feb. 13, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and those for the period Aug. 19 to Sept. 30 when discharge was determined from twice-daily gage-height observations, which are fair.

AVERAGE DISCHARGE.--58 years, 826 ft<sup>3</sup>/s (23.39 m<sup>3</sup>/s), 18.60 in/yr (472 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 66,000 ft<sup>3</sup>/s (1,870 m<sup>3</sup>/s) June 23, 1972, gage height, 16.0 ft (4.88 m), from floodmark, from rating curve extended above 16,000 ft<sup>3</sup>/s (450 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 14.39 ft (4.386 m); minimum, 8.0 ft<sup>3</sup>/s (0.23 m<sup>3</sup>/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 ft<sup>3</sup>/s (167 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 27	0400	Ice jam	*8.97 2.73	June 15	1030	6,850 194	6.18 1.88
Feb. 17	1900	11,500 326	7.56 2.30	June 20	1030	*14,100 399	8.37 2.55
Mar. 3	1000	7,770 220	6.43 1.96				

Minimum daily discharge, 83 ft<sup>3</sup>/s (2.35 m<sup>3</sup>/s) Sept. 9, 15.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1850	523	676	893	1550	1680	1990	483	1750	749	351	125
2	1640	499	681	743	1220	1500	1850	623	1700	631	309	119
3	1300	468	679	700	888	5660	1720	569	1400	522	255	119
4	1050	440	690	660	780	5940	1540	528	1190	464	223	114
5	892	406	686	630	700	5010	1370	493	996	456	204	110
6	772	373	715	610	680	3700	1210	472	875	388	198	105
7	671	353	830	600	640	2750	1090	467	1410	425	456	96
8	590	371	705	630	600	2110	939	457	1010	504	985	87
9	557	368	786	590	570	1660	822	412	822	504	669	83
10	593	891	1560	570	550	1440	733	387	865	403	584	92
11	505	1710	1410	550	871	1310	675	387	709	373	496	130
12	463	1630	1250	540	1060	1080	607	572	612	513	433	136
13	422	2340	1120	530	893	1020	541	430	522	418	388	105
14	394	2010	1340	780	1130	932	497	384	472	395	380	92
15	373	1730	1650	670	1010	823	460	373	3170	425	418	83
16	382	1480	2490	620	1410	768	440	1200	1740	433	488	110
17	374	1260	2540	590	9500	736	406	2680	2180	456	366	152
18	2130	1090	2230	560	9470	623	368	2310	1360	380	302	255
19	1890	969	1710	540	8100	684	342	2150	1090	337	262	249
20	2030	860	1350	520	6420	850	322	1830	9120	309	236	152
21	1950	836	1150	520	4510	900	307	1640	9990	309	217	130
22	1710	799	980	490	4770	1250	316	1290	6470	388	198	110
23	1470	691	860	470	4490	1270	331	1120	4030	330	180	101
24	1220	602	780	460	3500	1310	288	985	2720	351	168	92
25	1070	555	740	450	2760	1230	342	897	2310	275	163	87
26	969	525	1210	1590	2290	1100	557	1160	1640	236	152	87
27	843	596	1430	4200	2110	1020	530	951	1260	217	157	198
28	788	722	1080	3550	2100	1340	470	801	1030	210	157	242
29	715	575	969	2980	1910	1030	481	719	1010	255	157	163
30	641	540	914	2290	---	973	478	1380	822	548	157	119
31	575	---	947	1710	---	968	---	1930	---	358	141	---
TOTAL	30829	26212	36158	31236	76482	52667	22022	30080	64275	12562	9850	3843
MEAN	994	874	1166	1008	2637	1699	734	970	2143	405	318	128
MAX	2130	2340	2540	4200	9500	5940	1990	2680	9990	749	985	255
MIN	373	353	676	450	550	623	288	373	472	210	141	83
CFSM	1.65	1.45	1.93	1.67	4.37	2.81	1.22	1.61	3.55	.67	.53	.21
IN.	1.90	1.61	2.23	1.92	4.71	3.24	1.36	1.85	3.96	.77	.61	.24

CAL YR 1975	TOTAL	431806	MEAN	1183	MAX	32900	MIN	84	CFSM	1.96	IN	26.59
WTR YR 1976	TOTAL	396216	MEAN	1083	MAX	9990	MIN	83	CFSM	1.79	IN	24.40

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01548500 PINE CREEK AT CEDAR RUN, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
NOV 24...	0945	9813	615	70	6.5	3.0	1	13.2	37	0	0
FEB 04...	1045	9813	780	70	--	.0	2	--	45	0	0
MAY 06...	0945	9813	472	90	10.7	14.5	1	--	30	0	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
NOV 24...	8.0	3.0	26	16	5.0	.68	.02	.02	.05	10
FEB 04...	8.0	6.0	22	12	4.0	1.0	.03	.02	.05	130
MAY 06...	9.5	1.5	28	10	4.0	.50	.01	.09	.05	70



## WEST BRANCH SUSQUEHANNA RIVER BASIN

## 01549100 BLOCKHOUSE CREEK TRIBUTARY AT LIBERTY, PA

LOCATION.--Lat 41°34'04", long 77°06'06", Tioga County, Hydrologic Unit 02050205, on left bank at downstream side of bridge on gravel road between U.S. Route 15 and State Highway 414, 0.7 mi (1.1 km) north of Liberty, and 100 ft (305 m) upstream from confluence with Block house Creek.

DRAINAGE AREA.--1.08 mi<sup>2</sup> (2.80 km<sup>2</sup>).

PERIOD OF RECORD.--October 1972 to current year.

## PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: April 1973 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1972 to current year.

REMARKS.--Unpublished records of pH and specific conductance of instantaneous sediment samples available at the district office in Harrisburg. Mean concentrations of suspended sediment are water-weighted means.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 27.0°C July 8, 1973, July 8, 1974; minimum, freezing point on many days during winter months.

SEDIMENT CONCENTRATIONS: Maximum, 3,710 mg/l Feb. 2, 1973; minimum, 1 mg/l on many days each year.

SEDIMENT LOADS: Maximum, 351 tons (318 t) Feb. 2, 1973; minimum, 0 tons (0 t) on many days each year.

## EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 23.0°C July 24; minimum, freezing point on many days.

SEDIMENT CONCENTRATIONS: Maximum, 570 mg/l May 16; minimum, 1 mg/l on many days.

SEDIMENT LOADS: Maximum, 15 tons (14 t) Jan. 27; minimum, 0 tons (0 t) on many days.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
NOV. 17...	0900	109	7.0	4.5	37	20	2.5	13	1.1	3.7	1.3
DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)
NOV. 17...	21	0	17	3.4	19	5.7	.1	6.1	74	66	1.2
DATE	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
NOV. 17...	.01	1.2	1.2	.02	.25	.27	1.5	.12	.09	90	40

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

[illegible]

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.0	6	.03	.87	1	0	1.5	2	.01
2	2.4	5	.03	.87	1	0	1.4	2	.01
3	1.6	6	.03	.82	1	0	1.1	2	.01
4	1.4	5	.02	.78	1	0	1.1	2	.01
5	1.3	4	.01	.69	1	0	1.0	2	.01
6	1.3	4	.01	.65	1	0	1.1	2	.01
7	1.1	4	.01	.65	2	0	1.1	2	.01
8	1.0	4	.01	.73	2	0	.87	2	0
9	1.1	4	.01	.65	2	0	2.2	81	.48
10	1.1	5	.01	1.7	434	2.0	3.5	6	.06
11	1.1	20	.06	1.6	44	.19	2.8	4	.03
12	1.3	2	.01	2.9	27	.21	2.2	3	.02
13	1.0	2	.01	4.0	8	.09	2.1	3	.02
14	.97	1	0	3.1	6	.05	2.8	4	.03
15	.82	17	.04	2.2	2	.01	3.0	3	.02
16	1.1	18	.05	1.9	2	.01	3.3	4	.04
17	1.9	71	.36	1.6	1	0	2.4	3	.02
18	8.3	24	.54	1.5	1	0	2.1	3	.02
19	4.6	3	.04	1.3	1	0	1.7	3	.01
20	4.8	12	.16	1.2	1	0	1.5	3	.01
21	3.6	3	.03	1.4	3	.01	1.4	3	.01
22	3.1	6	.05	1.2	2	.01	1.3	3	.01
23	2.4	2	.01	1.1	2	.01	1.2	3	.01
24	2.0	2	.01	.92	2	0	1.1	3	.01
25	1.9	2	.01	.87	2	0	.87	3	.01
26	1.8	2	.01	.87	2	0	3.2	32	.28
27	1.5	2	.01	2.0	20	.11	3.1	6	.05
28	1.3	2	.01	1.6	2	.01	2.1	2	.01
29	1.2	2	.01	1.2	2	.01	1.7	2	.01
30	1.1	2	.01	1.1	2	.01	1.6	1	0
31	.92	1	0	---	---	---	1.6	1	0
TOTAL	61.01	---	1.60	41.97	---	2.73	57.94	---	1.23

01549100 BLOCKHOUSE CREEK TRIBUTARY AT LIBERTY, PA--Continued

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.5	1	0	2.0	2	.01	1.7	4	.02
2	1.2	1	0	1.8	3	.01	1.7	4	.02
3	1.1	1	0	1.5	3	.01	9.3	250	6.3
4	1.1	1	0	1.2	2	.01	10	51	1.4
5	.92	1	0	1.1	2	.01	7.3	8	.16
6	.82	2	0	1.1	2	.01	4.9	6	.08
7	.73	1	0	.97	2	.01	3.8	4	.04
8	.78	2	0	.97	2	.01	3.2	4	.03
9	.69	3	.01	.87	2	0	2.4	3	.02
10	.61	2	0	.82	3	.01	2.4	3	.02
11	.61	1	0	2.0	32	.17	2.3	2	.01
12	.61	1	0	1.5	2	.01	1.9	2	.01
13	.61	3	0	1.9	44	.23	2.2	4	.02
14	1.5	8	.03	1.7	8	.04	1.9	2	.01
15	.92	1	0	1.4	2	.01	1.7	2	.01
16	.73	1	0	5.9	330	5.3	1.7	2	.01
17	.61	1	0	15	150	6.1	1.6	2	.01
18	.57	1	0	8.6	147	3.4	1.5	2	.01
19	.47	2	0	8.3	15	.34	1.7	2	.01
20	.50	2	0	5.5	5	.07	1.9	2	.01
21	.54	1	0	4.2	3	.03	2.6	22	.15
22	.54	1	0	4.9	117	1.5	2.2	5	.03
23	.47	1	0	3.8	5	.05	1.8	3	.01
24	.47	1	0	3.0	5	.04	1.7	3	.01
25	.44	1	0	2.6	5	.04	1.6	3	.01
26	4.1	452	5.0	2.4	4	.03	1.5	3	.01
27	19	292	15	2.3	4	.02	2.2	123	.73
28	5.1	7	.10	2.0	4	.02	2.4	6	.04
29	3.5	5	.05	1.8	4	.02	1.7	3	.01
30	3.2	5	.04	---	---	---	1.6	3	.01
31	2.6	3	.02	---	---	---	1.9	8	.04
TOTAL	56.54	---	20.25	91.13	---	17.51	86.3	---	9.25
DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.6	40	.50	.57	5	.01	1.6	10	.04
2	3.8	4	.04	.92	4	.01	1.5	8	.03
3	3.3	4	.04	1.1	4	.01	1.1	7	.02
4	2.8	2	.02	.97	3	.01	1.0	5	.01
5	2.2	2	.01	.47	3	0	.82	5	.01
6	1.9	2	.01	.41	5	.01	.87	7	.02
7	1.7	2	.01	.47	5	.01	1.2	10	.03
8	1.6	2	.01	.44	4	0	.87	8	.02
9	1.4	2	.01	.41	4	0	.78	9	.02
10	1.3	2	.01	.35	4	0	.69	5	.01
11	1.2	3	.01	.61	148	.24	.57	5	.01
12	1.0	3	.01	.82	6	.01	.47	4	.01
13	.92	4	.01	.50	5	.01	.41	4	0
14	.92	4	.01	.41	5	.01	.38	3	0
15	.82	5	.01	.35	4	0	2.8	119	.90
16	.82	5	.01	6.4	570	9.8	3.5	342	3.2
17	.69	5	.01	6.7	32	.58	4.0	15	.16
18	.61	5	.01	4.6	32	.40	2.3	5	.03
19	.57	5	.01	3.6	10	.10	1.7	8	.04
20	.50	6	.01	3.2	15	.13	9.4	105	2.7
21	.47	6	.01	2.8	5	.04	13	32	1.1
22	.61	9	.01	2.0	4	.02	6.5	15	.26
23	.54	6	.01	1.6	4	.02	4.6	10	.12
24	.50	6	.01	1.4	4	.02	3.5	10	.09
25	.87	9	.02	1.9	88	.45	3.0	15	.12
26	1.1	6	.02	2.1	7	.04	2.0	10	.05
27	.78	4	.01	1.5	4	.02	1.6	8	.03
28	.61	3	0	1.2	20	.06	1.4	10	.04
29	.54	3	0	1.1	8	.02	1.5	8	.03
30	.50	3	0	1.6	33	.14	1.9	120	.62
31	---	---	---	1.6	8	.03	---	---	---
TOTAL	39.17	---	.85	52.10	---	12.20	74.96	---	9.72

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01549100 BLOCKHOUSE CREEK TRIBUTARY AT LIBERTY, PA--Continued

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

DAY	JULY				AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	1.6	10	.04	.69	6	.01	.27	1	0	
2	1.1	8	.02	.57	6	.01	.27	1	0	
3	.82	8	.02	.50	6	.01	.25	1	0	
4	.78	8	.02	.44	4	0	.25	1	0	
5	.73	7	.01	.41	4	0	.23	1	0	
6	.65	7	.01	.44	6	.01	.21	1	0	
7	1.0	20	.05	2.4	130	.84	.19	2	0	
8	1.6	340	1.5	2.8	50	.38	.21	3	0	
9	1.1	15	.04	1.9	6	.03	.19	5	0	
10	.78	10	.02	1.6	6	.03	.65	39	.07	
11	.73	12	.02	1.2	6	.02	.41	5	.01	
12	.73	10	.02	1.1	6	.02	.30	3	0	
13	.69	8	.01	.92	6	.01	.25	3	0	
14	.69	8	.01	.87	5	.01	.23	3	0	
15	.65	10	.02	1.1	27	.08	.21	3	0	
16	.78	273	.57	1.1	6	.02	.41	8	.01	
17	.87	32	.08	.73	4	.01	.78	172	.36	
18	.61	15	.02	.57	4	.01	.65	8	.01	
19	.50	10	.01	.54	4	.01	.44	5	.01	
20	.41	10	.01	.47	4	.01	.32	3	0	
21	.54	15	.02	.44	4	0	.27	2	0	
22	.54	10	.01	.44	4	0	.25	2	0	
23	.54	15	.02	.38	4	0	.24	1	0	
24	.54	12	.02	.35	4	0	.23	1	0	
25	.41	10	.01	.32	4	0	.22	1	0	
26	.32	10	.01	.32	4	0	.24	15	.01	
27	.30	6	0	.35	4	0	.61	12	.02	
28	.27	8	.01	.32	4	0	.44	2	0	
29	1.6	219	.95	.41	45	.05	.35	2	0	
30	1.6	10	.04	.30	2	0	.30	2	0	
31	.82	8	.02	.27	1	0	---	---	---	
TOTAL	24.30	---	3.61	24.25	---	1.57	9.87	---	.50	
YEAR	619.54		81.02							



## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01549300 BLOCKHOUSE CREEK AT BUTTONWOOD, PA

LOCATION.--Lat 41°29'43", long 77°09'02", Lycoming County, Hydrologic Unit 02050205, on left bank 100 ft (31 m) upstream from confluence with Steam Valley Run, near intersection of U.S. Route 15 and State Highway 284.

DRAINAGE AREA.--22.3 mi<sup>2</sup> (57.8 km<sup>2</sup>).

PERIOD OF RECORD.--October 1972 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: March 1973 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1972 to current year.

REMARKS.--Unpublished records of pH and specific conductance of instantaneous sediment samples available at the district office in Harrisburg. Mean concentrations of suspended sediment are water-weighted means.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 30.0°C Aug. 1, 2, 1975; minimum, freezing point on several days during December 1973, January to March 1974.

SEDIMENT CONCENTRATIONS: Maximum, 3,200 mg/l Feb. 2, 1973; minimum, 1 mg/l on many days each year.

SEDIMENT LOADS: Maximum, 6,300 tons (5,700 t) Feb. 2, 1973; minimum, 0 tons (0 t) on several days during October 1972.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 24.5 °C Aug. 22; minimum, 0.5°C on many days during January, February, and March.

SEDIMENT CONCENTRATIONS: Maximum, 890 mg/l May 16; minimum, 1 mg/l on many days.

SEDIMENT LOADS: Maximum, 656 tons (595 t) Feb. 24; minimum, 0.01 tons (0.01 t) Sept. 14, 15.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CaCO3 (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	
NOV. 17...	1430	108	7.0	7.5	42	24	3.7	15	1.0	3.6	1.2	
DATE		BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)
NOV. 17...	22	0	18	3.5	16	7.6	.1	4.7	71	64	.88	
DATE		TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
NOV. 17...	.01	.89	.95	.01	.11	.12	1.0	.05	.02	30	20	

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01549300 BLOCKHOUSE CREEK AT BUTTONWOOD, PA--Continued

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

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

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

## 01549300 BLOCKHOUSE CREEK AT BUTTONWOOD, PA--Continued

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

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

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	42	2	.23	19	1	.05	32	2	.17
2	52	7	.98	19	1	.05	26	1	.07
3	35	2	.19	17	7	.32	24	1	.06
4	30	2	.16	16	3	.13	23	1	.06
5	27	2	.15	15	2	.08	22	1	.06
6	26	2	.14	14	1	.04	24	4	.26
7	24	2	.13	13	1	.04	24	4	.26
8	21	6	.34	15	1	.04	19	8	.41
9	23	9	.56	13	1	.04	59	66	11
10	23	6	.37	47	260	33	93	10	2.5
11	21	7	.40	33	13	1.2	52	4	.56
12	22	8	.48	81	140	31	46	7	.87
13	19	9	.46	98	15	4.0	42	3	.34
14	17	7	.32	64	4	.69	53	4	.57
15	15	15	.61	52	3	.42	49	7	.93
16	19	12	.62	44	2	.24	63	15	2.6
17	25	110	7.4	39	3	.32	47	2	.25
18	197	185	98	33	3	.27	41	1	.11
19	72	7	1.4	30	2	.16	33	2	.18
20	103	18	5.0	28	6	.45	30	1	.08
21	70	9	1.7	29	1	.08	28	1	.08
22	59	7	1.1	26	1	.07	27	1	.07
23	48	10	1.3	23	1	.06	25	4	.27
24	41	3	.33	21	1	.06	24	3	.19
25	39	3	.32	19	1	.05	23	2	.12
26	34	2	.18	19	2	.10	72	15	2.9
27	29	5	.39	47	25	3.2	69	5	.93
28	27	2	.15	31	2	.17	40	2	.22
29	25	2	.14	25	1	.07	34	1	.09
30	22	2	.12	25	1	.07	34	2	.18
31	20	2	.11	---	---	---	39	8	.84
TOTAL	1227	---	123.78	955	---	76.47	1217	---	27.23

01549300 BLOCKHOUSE CREEK AT BUTTONWOOD, PA--Continued

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	32	2	.17	31	2	.17	30	5	.41
2	27	2	.15	28	2	.15	29	2	.16
3	25	1	.07	26	2	.14	158	297	127
4	22	1	.06	24	2	.13	190	33	17
5	20	9	.49	21	1	.06	110	2	.59
6	19	5	.26	22	1	.06	78	2	.42
7	18	2	.10	20	2	.11	59	1	.16
8	19	1	.05	19	1	.05	46	1	.12
9	18	2	.10	18	1	.05	37	1	.10
10	17	1	.05	17	1	.05	37	1	.10
11	16	1	.04	39	6	.63	35	1	.09
12	15	1	.04	29	2	.16	29	1	.08
13	14	1	.04	33	5	.45	35	2	.19
14	25	1	.07	34	4	.37	29	1	.08
15	20	1	.05	24	2	.13	27	1	.07
16	16	1	.04	146	296	117	28	1	.08
17	16	1	.04	372	130	131	26	1	.07
18	15	1	.04	219	13	7.7	24	2	.13
19	14	1	.04	232	15	9.4	31	1	.08
20	13	1	.04	136	3	1.1	32	1	.09
21	13	1	.04	94	2	.51	49	9	1.2
22	12	2	.06	136	10	3.7	37	1	.10
23	11	1	.03	84	3	.68	32	1	.09
24	11	1	.03	66	6	1.1	32	1	.09
25	10	1	.03	56	2	.30	31	1	.08
26	135	491	179	48	3	.39	29	1	.08
27	372	181	182	43	7	.81	46	121	15
28	100	7	1.9	37	1	.10	46	8	.99
29	67	5	.90	33	1	.09	32	2	.17
30	46	4	.50	---	---	---	30	2	.16
31	36	3	.29	---	---	---	37	5	.50
TOTAL	1194	---	366.72	2087	---	276.59	1471	---	165.48
DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	142	35	13	10	1	.03	34	3	.28
2	86	2	.46	16	2	.09	32	2	.17
3	73	2	.39	12	1	.03	25	1	.07
4	59	1	.16	11	1	.03	22	1	.06
5	48	1	.13	10	1	.03	19	1	.05
6	42	1	.11	9.7	1	.03	19	1	.05
7	36	1	.10	10	2	.05	28	2	.15
8	31	1	.08	9.3	2	.05	18	1	.05
9	28	1	.08	8.9	1	.02	16	3	.13
10	25	1	.07	8.5	1	.02	16	2	.09
11	23	1	.06	11	15	.45	13	1	.04
12	20	1	.05	17	4	.18	11	1	.03
13	19	1	.05	10	2	.05	10	1	.03
14	17	1	.05	9.3	2	.05	9.4	2	.05
15	15	1	.04	8.9	1	.02	104	780	219
16	15	1	.04	273	890	656	67	159	29
17	13	1	.04	225	33	20	79	41	8.7
18	12	1	.03	140	7	2.6	35	2	.19
19	11	1	.03	92	3	.75	30	2	.16
20	11	2	.06	76	2	.41	261	132	93
21	10	1	.03	63	1	.17	335	61	55
22	12	2	.06	47	1	.13	158	3	1.3
23	11	1	.03	38	1	.10	95	3	.77
24	10	1	.03	33	1	.09	67	3	.54
25	14	2	.08	38	6	.62	65	6	1.1
26	19	2	.10	47	2	.25	43	4	.46
27	13	1	.04	31	1	.08	33	3	.27
28	11	1	.03	26	1	.07	31	6	.50
29	10	1	.03	23	1	.06	29	5	.39
30	10	1	.03	37	5	.50	46	82	10
31	---	---	---	33	2	.18	---	---	---
TOTAL	846	---	15.49	1383.6	---	683.14	1750.4	---	421.63

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01549300 BLOCKHOUSE CREEK AT BUTTONWOOD, PA--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	28	4	.30	18	4	.19	5.1	2	.03
2	23	4	.25	13	3	.11	5.1	2	.03
3	19	4	.21	10	3	.08	5.1	2	.03
4	19	83	4.3	9.0	3	.07	4.6	2	.02
5	17	4	.18	8.2	3	.07	4.6	2	.02
6	14	4	.15	8.6	3	.07	4.3	2	.02
7	25	7	.47	75	82	17	4.1	2	.02
8	30	94	7.6	87	52	12	3.8	2	.02
9	29	25	2.0	41	5	.55	3.6	2	.02
10	18	3	.15	33	5	.45	9.4	7	.18
11	18	5	.24	26	4	.28	6.0	3	.05
12	17	5	.23	22	4	.24	4.8	3	.04
13	16	4	.17	20	4	.22	4.3	2	.02
14	15	4	.16	19	4	.21	3.8	1	.01
15	14	6	.23	24	13	.84	3.6	1	.01
16	13	2	.07	24	5	.32	6.9	3	.06
17	28	78	5.9	16	4	.17	14	33	1.2
18	12	3	.10	12	3	.10	12	7	.23
19	9.8	3	.08	11	3	.09	7.9	3	.06
20	9.0	3	.07	10	3	.08	6.0	2	.03
21	13	5	.18	9.4	3	.08	6.0	2	.03
22	12	3	.10	8.6	3	.07	5.1	2	.03
23	13	6	.21	8.2	3	.07	4.3	2	.02
24	13	4	.14	7.9	3	.06	4.1	2	.02
25	8.6	4	.09	6.9	3	.06	3.8	2	.02
26	7.9	4	.09	6.6	3	.05	4.6	5	.06
27	7.2	3	.06	6.9	3	.06	14	6	.23
28	6.9	2	.04	6.6	3	.05	11	3	.09
29	45	360	44	7.9	7	.15	6.9	2	.04
30	38	15	1.5	6.0	3	.05	5.7	2	.03
31	18	4	.19	5.4	2	.03	---	---	---
TOTAL	556.4	---	69.46	567.2	---	33.87	184.5	---	2.67
YEAR	13439.1		2262.53						



## WEST BRANCH SUSQUEHANNA RIVER BASIN

01549350 STEAM VALLEY RUN AT BUTTONWOOD, PA

LOCATION.--Lat 41°29'39", long 77°09'03", Lycoming County, Hydrologic Unit 02050205, on right bank at upstream end of bridge on State Highway 284, 500 ft (152 m) upstream from confluence with Blockhouse Creek.

DRAINAGE AREA.--5.34 mi<sup>2</sup> (13.8 km<sup>2</sup>).

PERIOD OF RECORD.--October 1972 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: February 1973 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1972 to current year.

REMARKS.--Unpublished records of pH and specific conductance of instantaneous sediment samples available at the district office in Harrisburg. Mean concentrations of suspended sediment are water-weighted means.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 25.5°C Aug. 2, 1975; minimum, 0.5°C on many days each year.

SEDIMENT CONCENTRATIONS: Maximum, 5,670 mg/l June 20, 1974; minimum, 1 mg/l on many days.

SEDIMENT LOADS: Maximum, 601 tons (545 t) Sept. 26, 1975; minimum, 0 tons (0 t) on many days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum, 1,030 mg/l May 16; minimum, 1 mg/l on many days.

SEDIMENT LOADS: Maximum, 189 tons (171 t) May 16; minimum, 0.0 tons (0.0 t) on many days during August and September.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CAC03 (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
NOV. 17...	1350	50	6.6	8.0	17	8	2.5	6.0	.4	1.7	.7

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CAC03 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)
NOV. 17...	10	0	8	4.0	7.7	3.7	.0	4.2	36	31	.24

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
NOV. 17...	.01	.25	.26	.01	.00	.01	.26	.05	.01	20	40

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

[illegible]

## TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	17	11	.50	6.9	1	.02	8.8	2	.05
2	16	9	.39	6.4	1	.02	7.9	1	.02
3	11	1	.03	5.9	4	.06	7.8	2	.04
4	9.1	1	.02	5.6	2	.03	7.4	1	.02
5	7.8	1	.02	5.5	1	.01	7.1	2	.04
6	6.3	1	.02	5.5	1	.01	7.6	3	.06
7	5.8	2	.03	5.5	1	.01	6.9	2	.04
8	5.4	2	.03	5.5	1	.01	6.3	2	.03
9	5.4	2	.03	5.5	1	.01	13	30	1.1
10	5.3	10	.14	10	77	2.1	18	11	.53
11	5.3	2	.03	7.8	3	.06	15	4	.16
12	5.3	2	.03	17	40	1.8	14	3	.11
13	5.3	2	.03	27	9	.66	13	2	.07
14	5.3	2	.03	27	3	.22	13	2	.07
15	5.3	14	.20	22	2	.12	13	2	.07
16	5.4	8	.12	18	2	.10	14	3	.11
17	8.0	70	1.5	14	1	.04	14	2	.08
18	29	47	3.7	12	1	.03	14	2	.08
19	23	5	.31	10	1	.03	13	9	.32
20	29	12	.94	9.6	1	.03	11	2	.06
21	27	3	.22	9.2	2	.05	10	2	.05
22	24	3	.19	8.1	1	.02	9.0	2	.05
23	19	2	.10	6.8	1	.02	8.1	2	.04
24	16	2	.09	6.1	1	.02	7.1	2	.04
25	14	3	.11	5.8	1	.02	6.5	2	.04
26	12	2	.06	5.5	1	.01	14	4	.15
27	11	2	.06	10	12	.32	12	2	.06
28	9.5	1	.03	7.9	2	.04	11	2	.06
29	8.8	1	.02	7.4	2	.04	10	2	.05
30	8.2	1	.02	7.6	2	.04	9.8	2	.05
31	7.5	1	.02	---	---	---	9.8	2	.05
TOTAL	367.0	---	9.02	301.1	---	5.95	332.1	---	3.70

01549350 STEAM VALLEY RUN AT BUTTONWOOD, PA--Continued

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.6	2	.05	14	4	.15	12	2	.06
2	7.5	2	.04	12	4	.13	11	2	.06
3	6.8	2	.04	9.5	5	.13	13	12	.42
4	6.2	2	.03	8.0	5	.11	31	50	4.2
5	5.8	3	.05	6.9	1	.02	33	3	.27
6	5.6	3	.05	6.7	1	.02	29	2	.16
7	5.4	2	.03	6.4	2	.03	23	2	.12
8	5.6	2	.03	6.0	1	.02	18	1	.05
9	5.2	3	.04	5.7	1	.02	15	1	.04
10	4.9	4	.05	5.6	1	.02	12	1	.03
11	4.7	2	.03	6.5	4	.07	10	1	.03
12	4.4	2	.02	5.8	3	.05	8.5	1	.02
13	4.3	2	.02	6.1	4	.07	9.1	2	.05
14	6.1	4	.07	5.9	5	.08	7.6	1	.02
15	5.0	2	.03	5.8	3	.05	6.7	1	.02
16	4.9	2	.03	15	150	6.1	6.7	1	.02
17	4.7	2	.03	74	159	32	6.2	1	.02
18	4.4	3	.04	78	30	6.3	6.0	3	.05
19	4.2	2	.02	74	21	4.2	6.4	2	.03
20	4.0	2	.02	54	6	.87	6.9	1	.02
21	3.9	2	.02	38	4	.41	10	16	.43
22	3.7	2	.02	38	14	1.4	12	1	.03
23	3.6	2	.02	37	3	.30	13	3	.11
24	3.5	2	.02	29	3	.23	13	2	.07
25	3.4	2	.02	22	3	.18	13	2	.07
26	14	265	10	18	3	.15	11	1	.03
27	50	148	20	17	2	.09	13	57	2.0
28	34	19	1.7	16	2	.09	14	4	.15
29	27	11	.80	15	2	.08	12	2	.06
30	20	5	.27	---	---	---	12	2	.06
31	16	4	.17	---	---	---	13	8	.28
TOTAL	287.4	---	33.76	635.9	---	53.37	407.1	---	8.98

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	35	23	2.2	4.5	5	.06	12	3	.10
2	36	5	.49	5.4	4	.06	12	3	.10
3	30	3	.24	5.0	3	.04	12	3	.10
4	24	3	.19	4.7	2	.03	12	3	.10
5	18	3	.15	4.5	2	.02	11	3	.09
6	15	3	.12	4.4	2	.02	11	3	.09
7	12	3	.10	4.6	3	.04	10	3	.08
8	11	3	.09	4.3	2	.02	8.5	3	.07
9	9.5	3	.08	4.1	2	.02	8.5	13	.30
10	8.5	3	.07	3.9	2	.02	7.6	3	.06
11	7.6	3	.06	5.4	43	.63	6.6	3	.05
12	7.0	3	.06	5.0	3	.04	6.0	2	.03
13	6.4	3	.05	4.2	2	.02	5.4	2	.03
14	5.7	3	.05	3.9	2	.02	5.2	2	.03
15	5.1	3	.04	3.7	2	.02	8.3	33	.74
16	4.6	3	.04	68	1030	189	7.6	25	.51
17	4.2	3	.03	103	19	5.3	9.2	5	.12
18	3.8	4	.04	64	34	5.9	7.2	3	.06
19	3.4	4	.04	38	9	.92	8.0	19	.41
20	3.6	4	.04	29	6	.47	25	148	10
21	3.5	4	.04	23	17	1.1	55	13	1.9
22	4.6	8	.10	18	4	.19	44	7	.83
23	4.0	4	.04	16	3	.13	29	5	.39
24	3.9	4	.04	14	3	.11	22	4	.24
25	4.8	5	.06	13	6	.21	18	5	.24
26	5.5	6	.09	12	6	.19	14	2	.08
27	4.4	4	.05	10	4	.11	12	2	.06
28	4.1	3	.03	9.1	2	.05	10	6	.16
29	4.1	3	.03	8.6	2	.05	9.0	2	.05
30	4.0	2	.02	12	14	.45	12	102	3.3
31	---	---	---	11	3	.09	---	---	---
TOTAL	293.3	---	4.68	516.3	---	205.33	418.1	---	20.32

01549350 STEAM VALLEY RUN AT BUTTONWOOD, PA--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9.0	2	.05	2.3	2	.01	1.2	1	0
2	7.6	1	.02	1.9	2	.01	1.3	1	0
3	6.6	1	.02	1.7	2	.01	1.0	1	0
4	8.3	100	2.2	1.5	2	.01	.90	1	0
5	7.5	2	.04	1.4	2	.01	.83	1	0
6	6.2	2	.03	1.7	3	.01	.66	1	0
7	9.8	25	.66	12	31	1.0	.55	1	0
8	9.2	16	.40	9.6	8	.21	.46	1	0
9	8.9	4	.10	6.3	3	.05	.39	2	0
10	7.7	2	.04	5.6	3	.05	3.0	130	1.1
11	7.4	2	.04	4.9	2	.03	1.1	2	.01
12	6.7	1	.02	4.4	2	.02	.76	2	0
13	6.2	1	.02	4.2	2	.02	.49	2	0
14	5.6	1	.02	4.1	2	.02	.40	2	0
15	5.6	2	.03	4.2	4	.05	.35	2	0
16	4.9	1	.01	3.7	2	.02	2.2	9	.05
17	4.3	1	.01	3.2	2	.02	5.9	150	2.4
18	3.8	1	.01	2.8	2	.02	3.3	4	.04
19	3.5	1	.01	2.6	1	.01	2.0	3	.02
20	3.3	1	.01	2.5	2	.01	1.5	3	.01
21	3.8	2	.02	2.3	1	.01	1.3	3	.01
22	3.4	2	.02	2.2	2	.01	.99	3	.01
23	3.5	3	.03	1.9	1	.01	.83	3	.01
24	3.2	2	.02	1.7	2	.01	.67	3	.01
25	2.7	2	.01	1.5	2	.01	.57	3	0
26	2.4	2	.01	3.1	91	.76	1.8	18	.09
27	2.3	2	.01	2.7	3	.02	3.7	4	.04
28	2.2	2	.01	1.9	2	.01	3.1	3	.03
29	4.6	87	1.1	2.8	33	.25	1.8	2	.01
30	3.5	4	.04	1.6	1	0	1.5	2	.01
31	2.6	3	.02	1.3	1	0	---	---	---
TOTAL	166.3	---	5.03	103.6	---	2.68	44.55	---	3.85
YEAR	3872.75		356.67						



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 mi<sup>2</sup> (97.6 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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: 1973(P), 1974(P).

GAGE.--Water-stage recorder. Datum of gage is 1,041.85 ft (317.556 m) above mean sea level.

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

AVERAGE DISCHARGE.--36 years, 57.1 ft<sup>3</sup>/s (1.617 m<sup>3</sup>/s), 20.56 in/yr (522 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,260 ft<sup>3</sup>/s (177 m<sup>3</sup>/s) June 23, 1972, gage height, 9.34 ft (2.847 m), from rating curve extended above 1,200 ft<sup>3</sup>/s (34.0 m<sup>3</sup>/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 ft<sup>3</sup>/s (164 m<sup>3</sup>/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,030 ft<sup>3</sup>/s (29.2 m<sup>3</sup>/s) May 16, gage height, 4.29 ft (1.308 m), no peak above base of 1,100 ft<sup>3</sup>/s (31.2 m<sup>3</sup>/s); minimum, 5.8 ft<sup>3</sup>/s (0.16 m<sup>3</sup>/s) Sept. 9, 10, gage height, 1.23 ft (0.375 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	34	56	59	85	70	231	20	78	46	20	7.4
2	102	32	47	49	71	63	186	29	78	38	15	7.4
3	69	30	45	44	52	175	153	24	66	31	13	7.4
4	56	28	41	40	44	284	121	22	57	34	12	7.0
5	48	26	40	37	39	224	98	21	49	32	11	7.0
6	42	24	42	34	39	172	83	19	45	26	11	6.7
7	38	23	42	32	37	132	74	20	53	40	89	6.2
8	33	25	35	34	34	106	63	19	38	41	108	6.0
9	33	22	66	32	32	87	54	18	32	50	57	6.0
10	34	65	172	30	30	81	49	17	31	32	44	13
11	30	65	115	28	66	74	45	20	25	31	34	9.4
12	31	119	98	26	52	62	39	34	22	30	28	7.4
13	27	223	87	25	57	70	38	22	19	26	26	6.7
14	25	169	95	43	62	59	34	19	17	26	24	6.5
15	23	129	89	35	50	53	32	19	112	25	26	6.0
16	29	104	109	28	123	52	30	249	59	23	32	9.8
17	27	83	89	27	577	49	28	487	112	34	20	25
18	299	70	84	26	444	46	25	308	50	21	16	22
19	169	61	76	24	448	52	23	205	42	17	15	13
20	207	55	69	23	312	59	22	158	300	15	13	9.8
21	169	55	61	23	218	78	21	128	586	19	12	9.0
22	141	48	54	22	253	78	24	96	344	19	11	8.0
23	110	41	48	20	195	74	22	78	202	18	11	7.2
24	90	37	42	19	153	73	20	66	132	21	9.8	7.0
25	79	34	40	18	123	70	25	66	119	15	9.0	6.7
26	70	31	246	168	106	63	33	85	80	13	9.0	7.4
27	59	70	110	550	96	74	25	62	62	12	11	20
28	52	56	75	246	87	90	22	50	52	12	9.0	18
29	46	46	65	160	76	71	21	45	50	36	12	12
30	41	45	63	114	---	70	19	73	68	54	9.0	9.4
31	37	---	67	102	---	74	---	76	---	22	7.7	---
TOTAL	2302	1850	2368	2118	3961	2785	1660	2555	2980	859	724.5	294.4
MEAN	74.3	61.7	76.4	68.3	137	89.8	55.3	82.4	99.3	27.7	23.4	9.81
MAX	299	223	246	550	577	284	231	487	586	54	108	25
MIN	23	22	35	18	30	46	19	17	17	12	7.7	6.0
CFSM	1.97	1.64	2.03	1.81	3.63	2.38	1.47	2.19	2.63	.73	.62	.26
IN.	2.27	1.83	2.34	2.09	3.91	2.75	1.64	2.52	2.94	.85	.71	.29

CAL YR 1975 TOTAL 27264.3 MEAN 74.7 MAX 1370 MIN 5.6 CFSM 1.98 IN 26.90  
WTR YR 1976 TOTAL 24456.9 MEAN 66.8 MAX 586 MIN 6.0 CFSM 1.77 IN 24.13

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01549500 BLOCKHOUSE CREEK NEAR ENGLISH CENTER, PA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1972 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: April 1973 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1972 to current year.

REMARKS.--Unpublished records of pH and specific conductance of instantaneous sediment samples available at the district office in Harrisburg. Mean concentrations of suspended sediment are water-weighted means.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 27.5°C July 8, Aug. 9, 1973; minimum, 0.5°C on many days each year.

SEDIMENT CONCENTRATIONS: Maximum 2,980 mg/l Feb. 24, 1975; minimum, 1 mg/l on many days each year.

SEDIMENT DISCHARGES: Maximum, 10,200 tons (9,253 t) Feb. 24, 1975; minimum, 0.01 tons (0.01 t) on many days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum, 833 mg/l May 16; minimum, 1 mg/l on many days.

SEDIMENT DISCHARGES: Maximum, 561 tons (509 t) Feb. 17; minimum, 0.05 tons (0.05 t) Jan. 24, 25.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS CAC03 (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
NOV. 17...	1050	74	6.9	5.5	28	14	2.5	10	.7	2.3	1.1
DATE	BICARBONATE (HC03) (MG/L)	CARBONATE (C03) (MG/L)	ALKALINITY AS CAC03 (MG/L)	CARBON DIOXIDE (C02) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)
NOV. 17...	17	0	14	3.4	12	3.5	.0	4.1	52	45	.53
DATE	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE PLUS NITRITE (N) (MG/L)	DIS-SOLVED NITRATE PLUS NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHOPHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
NOV. 17...	.01	.54	.55	.01	.10	.11	.65	.08	.01	10	10

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01549500 BLOCKHOUSE CREEK NEAR ENGLISH CENTER, PA--Continued

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

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

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				---	---	---	19.0	16.0	18.0	---	---	---
2				---	---	---	20.0	14.0	16.5	---	---	---
3				---	---	---	21.5	14.0	17.5	---	---	---
4				---	---	---	21.5	14.0	17.5	---	---	---
5				---	---	---	27.5	14.0	19.5	---	---	---
6				---	---	---	21.5	16.5	18.0	---	---	---
7				---	---	---	17.0	15.0	16.0	---	---	---
8				---	---	---	17.0	16.0	16.5	---	---	---
9				---	---	---	17.5	15.5	16.5	---	---	---
10				---	---	---	18.5	15.5	17.0	---	---	---
11				---	---	---	21.5	15.0	18.0	---	---	---
12				---	---	---	20.5	16.0	18.0	---	---	---
13				---	---	---	21.0	17.0	19.0	---	---	---
14				---	---	---	21.0	17.0	19.0	---	---	---
15				20.0	---	---	18.5	17.0	18.0	---	---	---
16				20.5	16.5	18.0	19.0	15.0	16.5	---	---	---
17				21.0	16.0	18.0	20.5	13.5	17.0	---	---	---
18				21.5	14.0	17.5	22.0	15.5	18.0	---	---	---
19				23.0	14.5	19.0	21.5	15.0	18.0	---	---	---
20				23.5	16.5	20.0	23.5	16.0	19.0	16.0	---	---
21				20.0	17.5	18.5	24.0	16.5	19.5	22.5	9.0	14.5
22				21.0	17.0	19.0	24.5	18.0	21.0	17.0	5.5	10.5
23				19.0	17.0	17.5	24.0	17.0	20.0	23.5	3.5	11.5
24				24.0	17.0	20.0	30.0	15.5	20.0	19.0	5.0	10.0
25				23.5	16.0	19.0	30.0	13.0	20.0	20.0	2.5	10.0
26				24.0	14.5	18.0	30.5	18.0	22.0	13.5	8.0	11.5
27				24.5	14.5	18.0	---	---	---	14.0	13.0	13.5
28				25.5	16.0	20.0	---	---	---	14.0	11.5	13.0
29				20.5	17.5	19.0	---	---	---	14.5	10.0	12.0
30				20.0	17.0	18.5	---	---	---	12.0	10.0	11.0
31				22.0	17.0	19.5	---	---	---	---	---	---
MONTH				---	---	---	30.5	13.0	18.5	---	---	---

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	86	2	.46	34	2	.18	56	3	.45
2	102	3	.83	32	1	.09	47	2	.25
3	69	1	.19	30	1	.08	45	2	.24
4	56	1	.15	28	1	.08	41	2	.22
5	48	1	.13	26	1	.07	40	2	.22
6	42	1	.11	24	1	.06	42	2	.23
7	38	1	.10	23	2	.12	42	2	.23
8	33	1	.09	25	2	.14	35	2	.19
9	33	1	.09	22	2	.12	66	17	3.0
10	34	1	.09	65	22	3.9	172	17	7.9
11	30	1	.08	65	8	1.4	115	4	1.2
12	31	1	.08	119	32	10	98	3	.79
13	27	1	.07	223	9	5.4	87	2	.47
14	25	1	.07	169	4	1.8	95	2	.51
15	23	1	.06	129	3	1.0	89	2	.48
16	29	2	.16	104	2	.56	109	6	1.8
17	27	7	.51	83	2	.45	89	3	.72
18	299	74	60	70	2	.38	84	2	.45
19	169	4	1.8	61	2	.33	76	3	.62
20	207	12	6.7	55	2	.30	69	3	.56
21	169	3	1.4	55	2	.30	61	2	.33
22	141	2	.76	48	2	.26	54	2	.29
23	110	2	.59	41	2	.22	48	1	.13
24	90	2	.49	37	2	.20	42	1	.11
25	79	2	.43	34	2	.18	40	1	.11
26	70	2	.38	31	2	.17	246	15	10
27	59	2	.32	70	7	1.3	110	15	4.5
28	52	2	.28	56	3	.45	75	2	.41
29	46	2	.25	46	2	.25	65	1	.18
30	41	2	.22	45	2	.24	63	1	.17
31	37	2	.20	---	---	---	67	1	.18
TOTAL	2302	---	77.09	1850	---	30.03	2368	---	36.94

01549500 BLOCKHOUSE CREEK NEAR ENGLISH CENTER, PA--Continued

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	59	1	.16	85	3	.69	70	2	.38
2	49	1	.13	71	2	.38	63	2	.34
3	44	1	.12	52	1	.14	175	240	113
4	40	1	.11	44	1	.12	284	108	83
5	37	2	.20	39	1	.11	224	6	3.6
6	34	2	.18	39	1	.11	172	4	1.9
7	32	1	.09	37	1	.10	132	3	1.1
8	34	1	.09	34	1	.09	106	3	.86
9	32	1	.09	32	1	.09	87	2	.47
10	30	1	.08	30	1	.08	81	1	.22
11	28	1	.08	66	1	.18	74	1	.20
12	26	1	.07	52	6	.84	62	1	.17
13	25	1	.07	57	7	1.1	70	2	.38
14	43	5	.58	62	4	.67	59	2	.32
15	35	3	.28	50	2	.27	53	2	.29
16	28	1	.08	123	220	73	52	2	.28
17	27	2	.15	577	360	561	49	2	.26
18	26	2	.14	444	19	23	46	3	.37
19	24	2	.13	448	48	58	52	4	.56
20	23	2	.12	312	9	7.6	59	8	1.3
21	23	2	.12	218	7	4.1	78	19	4.0
22	22	2	.12	253	19	13	78	6	1.3
23	20	2	.11	195	5	2.6	74	2	.40
24	19	1	.05	153	4	1.7	73	1	.20
25	18	1	.05	123	3	1.0	70	1	.19
26	168	733	332	106	2	.57	63	1	.17
27	550	267	396	96	7	1.8	74	75	15
28	246	32	21	87	2	.47	90	5	1.2
29	160	12	5.2	76	2	.41	71	2	.38
30	114	8	2.5	---	---	---	70	2	.38
31	102	4	1.1	---	---	---	74	5	1.0
TOTAL	2118	---	761.20	3961	---	753.22	2785	---	233.22
DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	231	72	45	20	2	.11	78	3	.63
2	186	8	4.0	29	3	.23	78	3	.63
3	153	5	2.1	24	2	.13	66	3	.53
4	121	3	.98	22	2	.12	57	2	.31
5	98	3	.79	21	2	.11	49	2	.26
6	83	2	.45	19	2	.10	45	2	.24
7	74	2	.40	20	2	.11	53	3	.43
8	63	2	.34	19	2	.10	38	2	.21
9	54	2	.29	18	2	.10	32	3	.26
10	49	2	.26	17	2	.09	31	3	.25
11	45	2	.24	20	5	.27	25	3	.20
12	39	2	.21	34	7	.64	22	3	.18
13	38	2	.21	22	3	.18	19	3	.15
14	34	2	.18	19	3	.15	17	3	.14
15	32	2	.17	19	2	.10	112	661	200
16	30	2	.16	249	833	560	59	126	20
17	28	2	.15	487	110	145	112	99	30
18	25	2	.14	308	19	16	50	5	.68
19	23	2	.12	205	10	5.5	42	5	.57
20	22	2	.12	158	6	2.6	300	185	150
21	21	2	.11	128	4	1.4	586	80	127
22	24	3	.19	96	3	.78	344	10	9.3
23	22	2	.12	78	2	.42	202	8	4.4
24	20	2	.11	66	2	.36	132	5	1.8
25	25	3	.20	66	5	.89	119	8	2.6
26	33	3	.27	85	7	1.6	80	3	.65
27	25	2	.14	62	3	.50	62	2	.33
28	22	2	.12	50	3	.41	52	3	.42
29	21	2	.11	45	2	.24	50	6	.81
30	19	2	.10	73	8	1.6	68	53	9.7
31	---	---	---	76	4	.82	---	---	---
TOTAL	1660	---	57.78	2555	---	740.66	2980	---	562.68



## WEST BRANCH SUSQUEHANNA RIVER BASIN

01549500 BLOCKHOUSE CREEK NEAR ENGLISH CENTER, PA--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	46	66	8.2	20	3	.16	7.4	3	.06
2	38	12	1.2	15	2	.08	7.4	2	.04
3	31	8	.67	13	2	.07	7.4	2	.04
4	34	30	2.8	12	2	.06	7.0	2	.04
5	32	12	1.0	11	2	.06	7.0	2	.04
6	26	15	1.1	11	3	.09	6.7	2	.04
7	40	19	2.1	89	69	17	6.2	2	.03
8	41	70	7.7	108	36	10	6.0	2	.03
9	50	108	15	57	7	1.1	6.0	3	.05
10	32	9	.78	44	6	.71	13	8	.28
11	31	7	.59	34	5	.46	9.4	3	.08
12	30	5	.41	28	5	.38	7.4	2	.04
13	26	5	.35	26	4	.28	6.7	2	.04
14	26	4	.28	24	4	.26	6.5	2	.04
15	25	7	.47	26	6	.42	6.0	2	.03
16	23	6	.37	32	5	.43	9.8	3	.08
17	34	37	3.4	20	4	.22	25	35	2.4
18	21	4	.23	16	3	.13	22	9	.53
19	17	3	.14	15	3	.12	13	3	.11
20	15	3	.12	13	3	.11	9.8	3	.08
21	19	4	.21	12	3	.10	9.0	3	.07
22	19	3	.15	11	3	.09	8.0	2	.04
23	18	3	.15	11	3	.09	7.2	2	.04
24	21	3	.17	9.8	3	.08	7.0	2	.04
25	15	2	.08	9.0	3	.07	6.7	2	.04
26	13	2	.07	9.0	3	.07	7.4	3	.06
27	12	2	.06	11	5	.15	20	5	.27
28	12	2	.06	9.0	4	.10	18	3	.15
29	36	213	21	12	5	.16	12	2	.06
30	54	37	5.4	9.0	4	.10	9.4	2	.05
31	22	3	.18	7.7	4	.08	---	---	---
TOTAL	859	---	74.44	724.5	---	33.23	294.4	---	4.90
YEAR	24456.9		3365.39						

## WEST BRANCH SUSQUEHANNA RIVER

177

01549600 LITTLE PINE CREEK AT WATERVILLE, PA

LOCATION.--Lat 41°18'34", long 77°21'45", Lycoming County, Hydrologic Unit 02050205, at bridge on State Route 44 at Waterville and 600 ft (183 m) upstream from mouth.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 29...	0920	9813	60	6.5	11.0	1	--	35	0	0	8.0
NOV 24...	1200	9813	50	6.5	6.5	<1	12.5	28	0	0	6.3
DEC 02...	1200	9813	50	6.5	4.5	1	13.0	27	--	--	7.1
JAN 13...	1000	9813	49	--	.0	1	--	25	0	0	7.1
FEB 04...	1155	9813	49	--	.0	2	--	24	0	0	4.7
MAR 11...	1510	9813	60	--	5.0	1	--	24	0	0	6.3
APR 21...	0930	9813	60	7.0	17.0	1	10.0	36	0	0	6.3
MAY 06...	1050	9813	90	--	15.5	2	10.5	40	0	0	9.5
JUL 08...	1420	9813	70	7.2	20.0	2	9.1	28	0	0	4.7

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 29...	3.5	22	10	4.0	.68	.04	.04	.02	<20	6.0
NOV 24...	3.0	14	14	4.0	.62	.02	.02	.04	80	--
DEC 02...	2.0	28	14	5.0	.72	.04	.02	.03	<10	--
JAN 13...	1.5	8	16	4.0	.84	.03	.02	.01	20	--
FEB 04...	3.0	12	8.0	5.0	1.0	.03	.02	.05	50	--
MAR 11...	2.0	12	14	5.0	1.1	.02	.02	.04	50	--
APR 21...	4.0	16	8.0	5.0	.74	.02	.02	.04	80	--
MAY 06...	4.0	26	10	5.0	.50	.01	.10	.07	190	--
JUL 08...	4.0	16	10	4.0	.62	.01	.03	.04	230	--

## 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. Water-quality sampling site at railroad bridge 1.0 mi (1.6 km) upstream.

DRAINAGE AREA.--944 mi<sup>2</sup> (2,445 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WDR PA-72: 1964(P).

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 570.62 ft (173.925 m) above mean sea level.

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 hm<sup>3</sup>).

AVERAGE DISCHARGE.--19 years, 1,381 ft<sup>3</sup>/s (39.11 m<sup>3</sup>/s), 19.83 in/yr (504 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 104,000 ft<sup>3</sup>/s (2,950 m<sup>3</sup>/s) June 23, 1972, gage height, 22.76 ft (6.937 m), from floodmarks, from rating curve extended above 22,000 ft<sup>3</sup>/s (623 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum observed, 25 ft<sup>3</sup>/s (0.71 m<sup>3</sup>/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 ft<sup>3</sup>/s (261 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 17	2300	*17,200 487	*8.4 2.56	June 21	0600	16,700 473	8.3 2.53

Minimum daily discharge, 156 ft<sup>3</sup>/s (4.42 m<sup>3</sup>/s) Sept. 9, 15.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4690	1080	1150	1600	2200	2560	3360	760	3400	1240	570	224
2	2830	1000	1300	1300	1800	2280	3690	880	3280	1000	480	213
3	2400	940	1200	1200	1500	5050	3550	850	2630	840	400	207
4	2060	880	1250	1140	1320	8220	3000	800	2240	720	371	197
5	1760	830	1210	1080	1220	7710	2490	780	1700	540	335	192
6	1480	770	1180	1050	1200	5780	2160	750	1500	440	328	182
7	1320	730	1240	1020	1100	4500	1960	740	2500	424	950	176
8	1190	720	1310	1070	1020	3420	1830	710	1900	642	1750	161
9	1080	720	1260	1030	980	2740	1490	670	1390	633	1270	156
10	1120	820	2720	1000	960	2360	1370	642	1240	580	992	182
11	1040	3000	2650	970	2240	2200	1250	615	1190	560	850	210
12	970	2380	2360	940	1900	1870	1120	860	1000	680	730	235
13	893	4400	2300	920	1800	1760	1010	760	860	651	651	187
14	820	3840	2600	1350	2000	1610	915	651	800	579	620	171
15	780	3280	2510	1180	1800	1480	871	600	5000	624	760	156
16	770	2760	3480	1050	4000	1400	830	1700	2360	670	893	171
17	780	2300	3550	1000	13700	1380	770	5890	3280	710	680	207
18	3400	1990	3280	970	15400	1190	710	3890	1990	560	543	240
19	3300	1740	2670	920	13400	1200	651	4060	1700	480	464	315
20	3340	1620	2300	890	11300	1500	624	3320	15000	475	408	270
21	3440	1500	1950	890	9870	1750	597	3420	16000	490	370	250
22	3040	1380	1700	850	8470	2000	642	2800	11200	507	340	210
23	2670	1260	1500	810	7260	2080	615	2300	6730	472	310	190
24	2250	1150	1420	780	5620	2160	588	1940	4430	490	285	176
25	2020	1050	1400	770	4400	2050	860	1670	3610	410	271	170
26	1800	1010	2100	2800	3630	1900	780	2050	2700	380	258	166
27	1600	1100	2400	7000	3280	2500	780	1770	2050	370	252	241
28	1450	1430	2000	5800	3040	2200	770	1420	1610	350	265	424
29	1370	1280	1720	4700	2790	1870	770	1380	1580	520	275	357
30	1220	1100	1620	3800	---	1780	770	2300	1320	1080	277	300
31	1120	---	1700	3000	---	1700	---	3600	---	630	258	---
TOTAL	58003	48060	61030	52880	129200	82200	40823	54578	106190	18747	17206	6536
MEAN	1871	1602	1969	1706	4455	2652	1361	1761	3540	605	555	218
MAX	4690	4400	3550	7000	15400	8220	3690	5890	16000	1240	1750	424
MIN	770	720	1150	770	960	1190	588	600	800	350	252	156
CFSM	1.98	1.70	2.09	1.81	4.72	2.81	1.44	1.87	3.75	.64	.59	.23
IN.	2.29	1.89	2.40	2.08	5.09	3.24	1.61	2.15	4.18	.74	.68	.26

CAL YR 1975	TOTAL	729852	MEAN	2000	MAX	52000	MIN	120	CFSM	2.12	IN	28.76
WTR YR 1976	TOTAL	675453	MEAN	1846	MAX	16000	MIN	156	CFSM	1.96	IN	26.62

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01549700 PINE CREEK BELOW LITTLE PINE CREEK NEAR WATERVILLE, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
OCT											
29...	0945	9813	1400	70	6.3	10.0	1	--	28	0	0
NOV											
24...	1245	9813	1150	60	7.0	6.0	1	13.3	37	0	0
DEC											
02...	1220	9813	1300	70	6.7	3.0	1	13.3	38	0	0
JAN											
13...	1030	9813	920	60	--	.0	1	--	35	0	0
FEB											
23...	0900	9813	7300	48	--	--	7	--	25	0	0
MAR											
11...	1545	9813	2150	65	--	5.0	2	--	42	0	0
APR											
21...	1100	9813	600	70	7.2	20.0	1	9.3	82	0	0
MAY											
11...	0900	9813	620	80	--	13.5	<1	--	20	0	0
JUL											
08...	1450	9813	640	80	8.0	20.0	1	9.3	38	0	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT											
29...	7.1	2.5	20	20	4.0	.50	.05	.03	.03	<20	4.0
NOV											
24...	8.0	3.0	20	18	4.0	.58	.02	.02	.05	130	--
DEC											
02...	8.7	3.5	30	16	5.0	.66	.05	.02	.04	30	--
JAN											
13...	8.7	3.0	12	20	5.0	.86	.03	.04	.05	10	--
FEB											
23...	6.3	2.0	12	14	5.0	1.1	.02	.02	.06	400	--
MAR											
11...	6.3	6.5	18	18	4.0	1.0	.02	.02	.04	150	--
APR											
21...	8.0	15	20	10	5.0	.66	.03	.04	.04	20	--
MAY											
11...	8.0	.0	136	8.0	4.0	.42	.03	.05	.07	60	--
JUL											
08...	8.0	4.5	20	10	5.0	.66	.02	.12	.05	140	--

01549755 ANTEN CREEK NEAR JERSEY SHORE, PA

LOCATION.--Lat 41°09'40", long 77°13'03", Lycoming County, Hydrologic Unit 02050206, on right bank 150 ft (46 m) upstream from bridge on State Highway 44, 1.4 mi (2.3 km) upstream from Morgan Valley Run, and 3.5 mi (5.6 km) southeast of Jersey Shore.

DRAINAGE AREA.--53.3 mi<sup>2</sup> (138.0 km<sup>2</sup>).

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 630 ft (192 m) from topographic map.

REVISED RECORDS.--WDR PA-75: 1974(M).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 678 ft<sup>3</sup>/s (19.2 m<sup>3</sup>/s) Feb. 25, 1975, gage height, 5.44 ft (1.658 m), from rating curve extended above 210 ft<sup>2</sup>/s (5.95 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 5.38 ft (1.640 m); minimum, 9.6 ft<sup>3</sup>/s (0.27 m<sup>3</sup>/s) Nov. 11, 1974, gage height, 3.30 ft (1.006 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft<sup>3</sup>/s (17.0 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 27	1430	*360 10.2	*4.70 1.433	Feb. 18	0900	*360 10.2	*4.70 1.433

No peak above base.

Minimum daily discharge, 16 ft<sup>3</sup>/s (0.453 m<sup>3</sup>/s) Aug. 25, Sept. 3, 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	55	47	130	107	93	126	32	137	78	28	21
2	156	51	45	112	93	86	122	40	201	67	25	18
3	125	47	43	112	80	82	133	34	192	63	25	16
4	103	43	43	100	75	105	127	32	162	61	24	17
5	89	41	42	89	69	100	115	32	133	67	24	18
6	82	38	44	75	65	95	105	30	112	59	22	17
7	73	38	41	73	59	98	98	30	100	63	52	17
8	67	36	60	71	57	95	89	28	89	71	40	17
9	63	34	130	59	53	91	82	28	78	86	30	28
10	59	34	117	55	49	89	75	27	69	75	23	25
11	57	36	112	55	155	89	71	28	63	80	17	18
12	53	68	112	53	144	84	67	32	59	78	17	17
13	51	148	105	51	107	98	65	28	55	71	17	16
14	49	148	98	94	115	93	62	27	51	65	18	17
15	49	133	87	67	89	89	59	27	47	65	34	25
16	49	112	82	55	132	93	55	50	45	61	30	34
17	47	95	76	45	291	93	53	95	47	55	26	26
18	153	84	72	36	342	89	49	98	42	51	24	22
19	140	78	64	32	315	86	47	98	38	47	21	17
20	170	71	61	36	271	82	45	89	60	43	19	25
21	167	69	59	38	224	84	43	100	170	42	18	28
22	156	65	55	36	210	80	43	89	184	43	17	24
23	135	57	53	30	184	75	42	89	156	42	17	21
24	115	53	45	30	159	75	40	84	138	42	17	21
25	103	51	45	30	146	78	42	80	122	36	16	19
26	93	49	77	82	133	78	45	86	103	34	17	21
27	82	57	105	301	122	75	40	75	89	32	28	27
28	75	53	80	265	110	80	38	73	80	32	24	28
29	69	47	73	198	100	69	36	71	71	30	24	25
30	63	45	89	156	---	67	34	89	89	34	24	25
31	59	---	143	122	---	63	---	91	---	30	21	---
TOTAL	2942	1936	2305	2688	4056	2654	2048	1812	2982	1703	739	650
MEAN	94.9	64.5	74.4	86.7	140	85.6	68.3	58.5	99.4	54.9	23.8	21.7
MAX	190	148	143	301	342	105	133	100	201	86	52	34
MIN	47	34	41	30	49	63	34	27	38	30	16	16
CFSM	1.78	1.21	1.40	1.63	2.63	1.61	1.28	1.10	1.86	1.03	.45	.41
IN.	2.05	1.35	1.61	1.88	2.83	1.85	1.43	1.26	2.08	1.19	.52	.45

CAL YR 1975 TOTAL 33038 MEAN 90.5 MAX 638 MIN 18 CFSM 1.70 IN 23.06  
WTR YR 1976 TOTAL 26515 MEAN 72.4 MAX 342 MIN 16 CFSM 1.36 IN 18.51



WEST BRANCH SUSQUEHANNA RIVER BASIN  
01549755 ANTES CREEK NEAR JERSEY SHORE, PA--Continued  
WATER-QUALITY RECORDS

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PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: February 1976 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 243 micromhos Sept 18, 1976; minimum 133 micromhos June 4, 5, 1976.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 243 micromhos Sept 18; minimum, 133 micromhos June 4, 5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	146	169	196	154	193	223	222
2					---	148	150	196	149	195	223	223
3					---	149	---	196	135	193	221	222
4					---	155	---	196	133	190	223	221
5					---	157	---	201	133	190	223	222
6					---	159	---	204	135	192	237	221
7					---	157	---	204	138	192	236	221
8					---	155	154	204	141	198	236	222
9					---	155	155	204	141	204	236	224
10					---	157	157	204	141	199	234	233
11					---	160	159	204	143	188	236	242
12					---	162	160	204	143	185	242	242
13					---	163	162	206	141	184	246	241
14					---	163	165	207	141	184	245	241
15					---	162	170	207	143	186	243	242
16					---	162	176	210	141	187	239	242
17					---	162	176	209	143	187	236	242
18					---	160	176	162	144	187	229	243
19					---	160	179	149	144	188	226	241
20					---	160	181	148	141	188	225	231
21					---	160	183	151	143	190	225	223
22					---	165	185	149	143	198	226	220
23					---	165	188	146	138	204	225	220
24					138	165	190	141	142	204	224	220
25					140	162	190	141	148	206	226	220
26					141	163	190	141	149	206	232	220
27					141	163	192	146	151	206	232	220
28					143	162	192	146	154	207	229	220
29					144	160	195	146	160	217	228	220
30					---	162	196	149	181	223	225	220
31					---	163	---	154	---	221	221	---
MONTH					---	159	176	178	144	197	231	228

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01549780 LARRYS CREEK AT COGAN HOUSE, PA

LOCATION.--Lat 41°25'04", long 77°09'46", Lycoming County, Hydrologic Unit 02050206, on right bank, attached to upstream wingwall of bridge on State Highway 184 at Cogan House, 0.7 mi (1.1 km) upstream from Wolf Run, 2.3 mi (3.7 km) upstream from Wendell Run, and 15 mi (24 km) northwest of Williamsport.

DRAINAGE AREA.--6.80 mi<sup>2</sup> (17.61 km<sup>2</sup>).

PERIOD OF RECORD.--April 1960 to current year.

REVISED RECORDS.--WDR PA-72: 1964(M), 1967(M).

GAGE.--Water-stage recorder. Altitude of gage is 1,370 ft (418 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Regulation at low flow from several ponds.

AVERAGE DISCHARGE.--16 years, 10.3 ft<sup>3</sup>/s (0.292 m<sup>3</sup>/s), 20.50 in/yr (521 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,130 ft<sup>3</sup>/s (32.0 m<sup>3</sup>/s) June 22, 1972, gage height, 5.29 ft (1.612 m), from rating curve extended above 130 ft<sup>3</sup>/s (3.68 m<sup>3</sup>/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 ft<sup>3</sup>/s (4.25 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 27	1545	177 5.01	2.61 0.796	May 16	1900	*205 5.81	*2.74 0.835

Minimum discharge, 0.93 ft<sup>3</sup>/s (0.026 m<sup>3</sup>/s) Sept. 8, 9, gage height, 0.99 ft (0.302 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	6.6	11	11	13	12	53	4.5	16	8.2	2.4	1.3
2	14	6.6	9.5	10	12	11	48	5.2	16	6.8	2.3	1.8
3	10	6.2	9.5	9.5	10	12	35	4.5	15	6.0	2.1	1.4
4	8.5	5.8	9.0	8.8	9.3	28	27	3.9	13	7.2	1.9	1.3
5	7.5	5.4	8.5	8.3	8.4	31	22	3.9	11	6.4	1.8	1.3
6	7.0	5.0	9.0	7.8	8.3	26	18	3.6	10	5.2	2.1	1.1
7	6.2	5.0	8.0	7.6	7.5	20	15	3.9	9.8	10	12	1.1
8	5.4	5.4	7.5	8.2	6.9	16	13	3.6	8.2	8.7	8.2	1.1
9	5.4	4.6	13	7.4	6.6	14	12	3.6	10	8.7	5.2	1.1
10	5.0	10	24	7.0	6.3	13	10	3.3	8.7	7.7	4.5	3.1
11	5.0	8.0	24	6.8	9.0	11	9.8	4.2	7.2	7.7	3.9	1.6
12	4.6	16	20	6.5	7.5	9.5	8.7	4.2	6.4	6.8	3.6	1.4
13	4.3	36	17	6.4	7.0	11	8.2	3.6	6.0	6.4	3.3	1.2
14	4.0	35	16	10	7.5	9.0	7.7	3.3	5.6	5.6	3.1	1.2
15	4.0	27	14	8.2	6.6	8.5	6.8	3.3	8.2	5.6	3.3	1.2
16	4.3	21	15	7.1	25	8.0	6.4	58	6.8	5.2	2.9	2.9
17	6.2	17	13	6.8	84	7.7	6.0	82	8.2	4.5	2.4	6.8
18	29	14	12	6.6	68	7.4	5.6	48	6.0	4.2	2.3	3.6
19	22	12	11	5.9	67	8.5	5.2	35	6.0	3.6	1.9	2.4
20	28	11	10	5.7	53	9.0	5.2	31	16	3.6	1.9	2.1
21	27	11	9.5	5.6	37	12	4.8	24	40	4.5	1.8	1.9
22	24	9.5	8.5	5.3	40	13	6.8	20	37	3.9	1.8	1.6
23	19	8.5	8.0	5.0	37	14	4.8	16	27	3.6	1.6	1.4
24	15	8.0	7.6	4.7	28	13	4.5	14	20	3.3	1.5	1.4
25	13	7.0	7.4	4.6	22	13	5.2	12	16	2.9	1.5	1.3
26	11	6.6	24	40	18	11	5.6	12	12	2.6	1.9	2.1
27	9.5	11	17	104	17	14	4.5	9.2	10	2.6	2.3	3.3
28	8.5	9.0	15	41	16	16	4.5	8.2	8.7	2.4	1.8	2.4
29	7.5	8.5	13	29	13	16	4.2	7.2	7.7	3.6	1.9	1.8
30	7.0	9.5	12	20	---	16	4.2	15	13	3.3	1.4	1.6
31	6.6	---	12	15	---	18	---	13	---	2.6	1.3	---
TOTAL	342.5	346.2	395.0	429.8	650.9	428.6	371.7	463.2	385.5	163.4	89.9	57.8
MEAN	11.0	11.5	12.7	13.9	22.4	13.8	12.4	14.9	12.9	5.27	2.90	1.93
MAX	29	36	24	104	84	31	53	82	40	10	12	6.8
MIN	4.0	4.6	7.4	4.6	6.3	7.4	4.2	3.3	5.6	2.4	1.3	1.1
CFSM	1.62	1.69	1.87	2.04	3.29	2.03	1.82	2.19	1.90	.78	.43	.28
IN.	1.87	1.89	2.16	2.35	3.56	2.34	2.03	2.53	2.11	.89	.49	.32

CAL YR 1975	TOTAL	4813.2	MEAN	13.2	MAX	260	MIN	1.2	CFSM	1.94	IN	26.33
WTR YR 1976	TOTAL	4124.5	MEAN	11.3	MAX	104	MIN	1.1	CFSM	1.66	IN	22.56

## 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. Water-quality sampling site at bridge 150 ft (46 m) downstream.

DRAINAGE AREA.--173 mi<sup>2</sup> (448 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level. Prior to June 1, 1939, nonrecording gage at site 150 ft (46 m) downstream at same datum.

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

AVERAGE DISCHARGE.--62 years (1914-76), 280 ft<sup>3</sup>/s (7.930 m<sup>3</sup>/s), 22.00 in/yr (559 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,900 ft<sup>3</sup>/s (733 m<sup>3</sup>/s) June 22, 1972, gage height, 20.19 ft (6.154 m), from floodmark in gage shelter, from rating curve extended above 5,300 ft<sup>3</sup>/s (150 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 3.2 ft<sup>3</sup>/s (0.091 m<sup>3</sup>/s) Sept. 27, 1936; minimum daily, 4.0 ft<sup>3</sup>/s (0.11 m<sup>3</sup>/s) Sept. 19-24, 27, 28, 1936, Sept. 1, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,900 ft<sup>3</sup>/s (82.1 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0615	3,030 85.8	6.53 1.990	Feb. 17	1730	3,180 90.1	6.68 2.036
Jan. 27	0845	*4,120 117	*7.52 2.292				

Minimum discharge, 24 ft<sup>3</sup>/s (0.68 m<sup>3</sup>/s) Sept. 9, 10, gage height, 2.55 ft (0.777 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	496	200	315	350	474	437	1410	125	243	399	128	45
2	539	188	292	288	371	390	1050	206	266	305	106	43
3	425	173	269	240	319	1180	833	173	212	245	86	40
4	350	159	250	210	240	1530	666	153	182	212	69	36
5	305	150	237	190	205	1170	549	142	159	228	58	34
6	275	139	234	175	202	869	470	133	147	182	56	33
7	246	130	246	160	190	683	421	133	191	222	455	30
8	221	150	206	206	175	549	368	128	150	270	626	28
9	206	139	246	156	165	462	329	117	130	303	385	25
10	218	234	899	147	160	421	298	108	173	209	298	71
11	203	329	580	140	329	398	275	106	139	197	234	84
12	218	413	487	133	266	346	246	167	106	194	188	56
13	191	1020	429	130	224	361	224	125	93	174	165	43
14	170	733	462	180	262	339	209	103	84	171	147	36
15	156	569	445	160	234	308	191	95	266	152	184	33
16	182	474	520	148	282	298	179	398	259	163	201	51
17	179	409	429	145	2440	279	164	622	672	182	140	98
18	1720	361	390	138	2080	240	150	433	437	147	112	144
19	1060	325	315	127	2280	266	136	413	386	136	101	103
20	941	298	298	125	1650	346	128	357	821	125	103	76
21	754	298	298	125	1140	429	119	329	1770	124	92	64
22	606	285	269	115	1690	479	139	269	1620	173	81	54
23	501	246	253	106	1330	413	139	234	997	165	71	45
24	429	224	203	102	948	390	117	209	703	222	64	39
25	386	209	191	98	2440	368	139	191	602	140	58	37
26	357	197	496	357	688	339	218	315	449	106	56	43
27	315	325	677	2860	644	339	176	240	348	92	69	106
28	285	350	462	1410	569	564	147	194	293	84	62	128
29	262	279	398	935	492	405	133	170	286	89	66	101
30	237	266	375	688	---	375	122	215	447	298	60	79
31	215	---	375	496	---	386	---	243	---	158	51	---
TOTAL	12648	9272	11546	10840	22489	15359	9745	6846	12631	5867	4572	1805
MEAN	408	309	372	350	775	495	325	221	421	189	147	60.2
MAX	1720	1020	899	2860	2440	1530	1410	622	1770	399	626	144
MIN	156	130	191	98	160	240	117	95	84	84	51	25
CFSM	2.36	1.79	2.15	2.02	4.48	2.86	1.88	1.28	2.43	1.09	.85	.35
IN.	2.72	1.99	2.48	2.33	4.84	3.30	2.10	1.47	2.72	1.26	.98	.39

CAL YR 1975	TOTAL	131417	MEAN 360	MAX 10400	MIN 20	CFSM 2.08	IN 28.26
WTR YR 1976	TOTAL	123620	MEAN 338	MAX 2860	MIN 25	CFSM 1.95	IN 26.58

WEST BRANCH SUSQUEHANNA RIVER BASIN  
01550000 LYCOMING CREEK NEAR TROUT RUN, PA--Continued

WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
OCT 27...	1600	9813	308	90	6.7	11.5	1	--	28	0	0
NOV 18...	1330	9813	357	50	6.5	8.5	<1	11.1	26	--	0
DEC 03...	0900	9813	272	50	6.7	2.0	<1	13.0	24	0	0
JAN 06...	0930	9813	175	50	--	.0	<1	--	29	0	0
FEB 27...	0820	9813	661	50	--	--	2	--	38	0	0
MAR 04...	0830	9813	1590	50	--	4.0	20	--	21	0	0
APR 20...	0840	9813	128	60	7.0	15.0	<1	10.3	30	0	0
MAY 10...	1330	9813	108	60	--	--	<1	--	30	0	0
JUN 17...	1145	9813	705	70	6.7	18.0	5	9.3	20	0	0
JUL 07...	0945	9813	171	70	6.8	17.0	1	9.7	26	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 27...	7.1	2.5	12	14	4.0	.86	.03	.02	.02	<20	--
NOV 18...	8.0	1.5	16	8.0	4.0	.90	.03	<.02	.03	<10	3.0
DEC 03...	7.1	1.5	50	12	4.0	.96	.05	<.02	.04	110	--
JAN 06...	7.1	2.5	20	14	4.0	1.0	.03	.02	.07	<10	--
FEB 27...	5.5	6.0	12	6.0	3.0	1.4	.05	.03	.04	80	--
MAR 04...	8.0	.2	12	10	4.0	1.3	.02	.04	.12	1150	--
APR 20...	7.1	3.0	14	16	3.0	.92	.02	.02	.05	100	--
MAY 10...	7.1	3.0	20	8.0	4.0	.84	.03	.04	.04	40	--
JUN 17...	6.3	1.0	20	80	4.0	.84	.03	.05	.07	390	--
JUL 07...	7.1	2.0	18	6.0	4.0	1.0	.04	.04	.04	60	--

## 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 mi<sup>2</sup> (14,716 km<sup>2</sup>).

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) above mean sea level. Mar. 1, 1895 to Sept. 30, 1928, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Glendale, Curwensville, Kettle Creek, Foster Joseph Sayers Lake, First Fork Sinnemahoning Creek Reservoir (see p.203) and by Little Pine Creek Reservoir (capacity, 24,900 acre-ft or 30.7 hm<sup>3</sup>) about 40 mi (60 km) upstream.

AVERAGE DISCHARGE.--81 years, 8,864 ft<sup>3</sup>/s (251.0 m<sup>3</sup>/s), 21.18 in/yr (538 mm/yr), adjusted for storage 1961-75.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 279,000 ft<sup>3</sup>/s (7,900 m<sup>3</sup>/s) June 23, 1972, gage height, 34.75 ft (10.592 m) from rating curve extended above 210,000 ft<sup>3</sup>/s (5,950 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 33.57 ft (10.232 m); minimum, 162 ft<sup>3</sup>/s (4.59 m<sup>3</sup>/s) Sept. 17, 1943; minimum daily, 251 ft<sup>3</sup>/s (7.11 m<sup>3</sup>/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 ft<sup>3</sup>/s (7,140 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 82,400 ft<sup>3</sup>/s (2,330 m<sup>3</sup>/s) Feb. 18, gage height, 16.44 ft (5.011 m); minimum, 1,420 ft<sup>3</sup>/s (40.2 m<sup>3</sup>/s) Sept. 15, gage height, 0.15 ft (0.046 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36900	6460	6220	12800	15700	14900	14400	4470	10800	7400	3470	2180
2	27200	5930	6530	15100	13900	13200	18300	4600	13200	6600	3200	2050
3	16000	5550	6740	14800	11900	14500	17600	4950	13500	5830	3200	1920
4	11600	5300	6810	13200	8870	20900	16000	4780	11800	5260	2910	1840
5	10100	5060	6790	11700	8790	29000	14500	4640	10200	4960	2640	1740
6	8900	4970	6610	9660	8200	29200	12900	4430	8640	4480	2590	1660
7	8090	4750	6580	8940	7720	24000	11700	4460	8010	4500	3870	1590
8	7360	4520	6730	8660	7300	19900	10600	4380	8030	5840	8400	1530
9	6650	4430	6710	8110	7370	16400	9500	4200	6850	6500	11500	1490
10	6740	4650	9730	6670	7290	14100	8550	4000	6130	5690	9270	1630
11	9840	7240	11800	5790	7480	12900	7830	3880	5680	4960	7290	1670
12	9790	11100	11200	5920	9890	11800	7280	4020	5080	5490	5910	1640
13	7970	18500	10200	6590	11400	11100	6760	4220	4570	6660	4990	1640
14	7260	21700	9750	6870	12800	11100	6330	3920	4090	8040	4670	1560
15	6690	20400	10000	9100	15900	10800	5990	3660	4350	6450	4570	1470
16	6090	17000	12400	9560	16900	10400	5640	3950	6780	8250	5460	1570
17	5970	14500	19800	9180	42900	10200	5350	9600	6340	7560	6150	2010
18	13100	12600	19200	7900	79700	9700	5010	9710	6350	6400	5670	2450
19	17800	11300	15800	6020	70500	9030	4680	10500	5210	5420	4910	2550
20	18100	10300	12700	5120	65600	8980	4380	9880	8980	4590	3930	3100
21	18000	9720	11100	6150	56300	9590	4220	10200	36300	4180	3490	2750
22	17000	9380	10000	7630	49600	10900	4190	10300	41300	4170	3170	2390
23	15300	8680	9120	8350	47700	12000	4180	9540	33700	4280	2960	2110
24	13000	7850	8630	6800	40800	12700	4310	8660	23600	4540	2750	1950
25	11500	7050	7340	6060	34300	12300	4290	7670	18100	4580	2590	1800
26	10500	7000	7380	6330	27300	11500	4440	7450	14700	4030	2750	1730
27	9320	6930	10300	16500	22300	10700	4770	7870	11300	3670	2880	1900
28	8560	7290	11700	28200	19900	11100	5080	7170	9480	3290	2960	2510
29	7890	6970	111400	26600	16900	11700	4870	6470	8230	3150	2650	3460
30	7500	6330	10200	24800	---	10800	4590	7160	7900	3560	2390	3790
31	7050	---	11000	20400	---	10500	---	11000	---	3940	2310	---
TOTAL	367770	273460	310470	339510	745210	425900	238240	201740	359200	164270	135500	61680
MEAN	11860	9115	10020	10950	25700	13740	7941	6508	11970	5299	4371	2056
MAX	36900	21700	19800	28200	79700	29200	18300	11000	41300	8250	11500	3790
MIN	5970	4430	6220	5120	7290	8980	4180	3660	4090	3150	2310	1470
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-

CAL YR 1975 TOTAL 4537090 MEAN 12430 MAX 142000 MIN 1570 CFSM - IN. -  
WTR YR 1976 TOTAL 3622950 MEAN 9899 MAX 79700 MIN 1470 CFSM - IN. -



## 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. Water-quality sampling site at bridge 500 ft (150 m) upstream.

DRAINAGE AREA.--443 mi<sup>2</sup> (1,147 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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, 1933, 1935(M), 1937(M).

GAGE.--Water-stage recorder. Datum of gage is 585.63 ft (178.500 m) above mean sea level, Pennsylvania Department of Transportation benchmark. Prior to Sept. 16, 1926 nonrecording gage at same site and datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 1-31, which are poor.

AVERAGE DISCHARGE.--50 years, 748 ft<sup>3</sup>/s (21.18 m<sup>3</sup>/s), 22.95 in/yr (583 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88,700 ft<sup>3</sup>/s (2,510 m<sup>3</sup>/s) June 23, 1972, gage height, 14.74 ft (4.493 m), from floodmark in gage well, from rating curve extended above 16,000 ft<sup>3</sup>/s (450 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 12.20 ft (3.719 m); minimum, 11 ft<sup>3</sup>/s (0.31 m<sup>3</sup>/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 ft<sup>3</sup>/s (181 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	Unk.	*22,000 623	*9.98 3.042	Feb. 17	2045	7,540 214	7.54 2.298
Jan. 27	1230	19,900 564	9.65 2.941				

Minimum discharge, 40 ft<sup>3</sup>/s (1.13 m<sup>3</sup>/s) Sept. 9, 10, gage height, 3.44 ft (1.049 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1300	529	820	901	1180	923	2060	342	466	1010	205	67
2	1300	505	820	724	1000	840	1910	546	555	723	178	62
3	1100	482	733	640	800	1540	1570	546	505	538	160	62
4	890	459	668	600	700	2080	1320	513	421	451	138	60
5	780	436	614	560	610	1880	1130	466	363	451	120	60
6	700	399	597	520	605	1500	978	428	329	392	116	56
7	640	377	623	500	560	1230	880	406	377	436	227	51
8	580	436	563	623	510	1050	790	392	428	723	752	47
9	540	466	597	563	480	923	704	363	342	659	451	47
10	560	482	1310	480	460	850	641	342	363	498	356	62
11	540	780	1140	440	659	820	597	329	342	443	377	88
12	560	989	945	415	597	752	546	377	282	490	301	131
13	520	3110	860	390	546	800	505	385	232	428	244	102
14	490	2350	820	380	580	923	474	329	221	406	216	85
15	470	1660	780	660	546	790	443	308	342	377	269	74
16	520	1350	820	520	588	752	421	308	505	335	295	85
17	500	1130	762	470	4990	714	399	414	474	301	257	140
18	5000	989	695	440	4990	623	377	466	421	288	210	260
19	3000	880	580	410	5360	668	349	742	329	251	174	215
20	2500	810	686	390	3860	800	329	752	521	216	151	190
21	1900	790	555	380	2480	989	308	714	1830	205	134	167
22	1500	1060	505	350	3890	1540	295	605	1900	238	124	147
23	1200	850	474	330	3340	1160	282	529	1320	238	113	124
24	1100	733	513	315	2050	1010	269	474	978	269	99	102
25	940	686	459	305	1640	923	276	436	820	251	94	88
26	850	659	934	1040	1460	850	505	555	677	194	94	82
27	780	733	2100	11700	1360	790	555	538	538	169	99	151
28	680	1060	1280	5120	1200	1270	428	459	459	151	96	295
29	620	850	1000	2580	1040	1010	385	399	436	156	91	251
30	600	771	890	1770	---	890	356	406	733	251	82	188
31	560	---	978	1310	---	830	---	443	---	263	74	---
TOTAL	33220	26811	25121	35826	48081	31720	20082	14312	17509	11801	6297	3539
MEAN	1072	894	810	1156	1658	1023	669	462	584	381	203	118
MAX	5000	3110	2100	11700	5360	2080	2060	752	1900	1010	752	295
MIN	470	377	459	305	460	623	269	308	221	151	74	47
CFSM	2.42	2.02	1.83	2.61	3.74	2.31	1.51	1.04	1.32	.86	.46	.27
IN.	2.79	2.25	2.11	3.01	4.04	2.66	1.69	1.20	1.47	.99	.53	.30

WTR YR 1976 TOTAL 274319 MEAN 750 MAX 11700 MIN 47 CFSM 1.69 IN 23.04

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01552000 LOYALSOCK CREEK AT LOYALSOCKVILLE, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY C02 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 27...	1515	9813	80	7.0	13.0	1	--	22	0	0	7.1
NOV 17...	1530	9813	50	6.5	8.0	<1	12.0	20	--	0	5.5
DEC 03...	1000	9813	50	6.3	3.0	<1	13.3	23	0	0	7.1
JAN 14...	0925	9813	50	--	.0	<1	--	29	0	0	8.7
FEB 25...	1245	9813	44	--	--	1	--	27	0	0	5.5
MAR 03...	1220	9813	48	--	--	1	--	27	0	0	5.5
APR 19...	1150	9813	50	7.5	19.0	1	10.0	28	0	0	7.1
MAY 10...	0900	9813	60	--	--	<1	--	30	0	0	7.1
JUN 17...	1245	9813	80	7.3	23.0	1	8.7	20	0	0	7.1
JUL 07...	1150	9813	70	7.2	20.0	1	9.0	22	--	0	7.1
AUG 16...	1200	9813	70	1.7	21.0	<1	--	24	0	0	8.0

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 27...	1.0	16	12	4.0	.54	.06	.02	.02	100	--
NOV 17...	1.5	16	8.0	4.0	.72	.03	<.02	.04	110	2.0
DEC 03...	1.0	24	10	4.0	.82	.07	<.00	.03	90	--
JAN 14...	1.5	16	8.0	4.0	.84	.03	.02	.03	<10	--
FEB 25...	3.0	12	10	4.0	1.1	.05	.03	.03	40	--
MAR 03...	3.0	6	10	4.0	1.1	.03	.02	.04	<10	--
APR 19...	2.5	14	6.0	3.0	.64	.02	.04	.04	60	--
MAY 10...	3.0	20	8.0	4.0	.68	.03	.03	.04	30	--
JUN 17...	.5	22	12	4.0	.82	.02	.05	.06	90	--
JUL 07...	1.0	16	6.0	5.0	.78	.04	.04	.04	70	--
AUG 16...	1.0	16	8.0	4.0	1.0	.01	.03	.01	10	--

## 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 mi<sup>2</sup> (61.6 km<sup>2</sup>).

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) above mean sea level. Prior to Mar. 31, 1941, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--36 years, 47.3 ft<sup>3</sup>/s (1.34 m<sup>3</sup>/s), 26.99 in/yr (686 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,260 ft<sup>3</sup>/s (234 m<sup>3</sup>/s) June 22, 1972, gage height, 8.94 ft (2.725 m) from rating curve extended above 3,400 ft<sup>3</sup>/s (96.3 m<sup>3</sup>/s); minimum, 0.1 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/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 ft<sup>3</sup>/s (31.2 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0530	1,280 36.2	5.08 1.548	Jan. 26	1800	*1,810 51.3	*5.51 1.679

Minimum daily discharge, 3.5 ft<sup>3</sup>/s (0.099 m<sup>3</sup>/s) Aug. 30, 31.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	45	89	79	85	84	140	23	30	82	6.0	3.7
2	62	43	85	70	73	49	100	37	28	61	5.4	3.7
3	48	42	83	69	82	58	87	31	20	48	5.1	3.9
4	40	40	80	62	85	72	75	29	17	37	4.5	3.9
5	34	38	78	54	61	65	64	26	15	31	4.3	4.1
6	31	36	77	50	56	56	55	24	16	24	8.9	3.9
7	27	35	77	56	51	51	49	26	23	48	100	3.9
8	24	44	72	45	46	44	42	22	16	52	37	4.1
9	22	38	77	36	42	40	37	20	11	42	23	3.9
10	22	68	93	30	39	37	33	18	7.2	31	33	12
11	20	72	85	27	37	35	30	20	7.2	30	22	6.6
12	19	110	82	24	36	30	26	30	6.6	28	18	4.8
13	17	188	78	22	35	54	23	19	6.3	26	15	4.8
14	16	133	69	424	34	41	21	18	6.6	25	16	4.8
15	15	104	65	288	51	37	19	18	8.9	20	15	5.1
16	15	89	65	208	94	39	18	21	6.3	19	18	8.0
17	16	78	60	171	362	34	15	35	9.8	17	13	36
18	474	71	54	185	326	39	15	54	6.6	14	6.6	16
19	203	66	56	238	347	39	13	70	6.0	12	6.3	8.9
20	158	62	50	478	240	45	12	70	20	11	6.3	7.2
21	125	94	45	299	176	84	12	64	44	12	6.0	8.0
22	104	82	44	208	319	84	11	54	30	13	6.0	6.0
23	88	72	43	130	217	70	11	48	21	14	6.0	5.4
24	78	69	43	110	147	61	10	42	16	15	6.0	5.1
25	74	65	42	100	121	54	13	37	15	11	6.0	4.8
26	67	62	154	509	113	47	42	41	11	9.3	4.8	7.2
27	62	95	118	594	111	48	22	33	9.3	7.5	4.1	52
28	58	94	94	262	101	62	18	23	20	5.7	3.9	35
29	54	86	83	157	94	45	15	20	45	7.5	3.7	21
30	51	85	83	107	---	41	17	21	94	12	3.5	17
31	47	---	88	80	---	40	---	19	---	6.9	3.5	---
TOTAL	2138	2206	2312	5172	3581	1585	1045	1013	572.8	771.9	416.9	310.8
MEAN	69.0	73.5	74.6	167	123	51.1	34.8	32.7	19.1	24.9	13.4	10.4
MAX	474	188	154	594	362	84	140	70	94	82	100	52
MIN	15	35	42	22	34	30	10	18	6.0	5.7	3.5	3.7
CFSM	2.90	3.09	3.13	7.02	5.17	2.15	1.46	1.37	.80	1.05	.56	.44
IN.	3.34	3.45	3.61	8.08	5.60	2.48	1.63	1.58	.90	1.21	.65	.49

CAL YR 1975	TOTAL	26746.6	MEAN 73.3	MAX 2500	MIN 7.6	CFSM 3.08	IN 41.80
WTR YR 1976	TOTAL	21124.4	MEAN 57.7	MAX 594	MIN 3.5	CFSM 2.42	IN 33.02

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01552800 MUNCY CREEK AT HUGHESVILLE, PA

LOCATION.--Lat 41°14'55", long 76°43'03", Lycoming County, Hydrologic Unit 02050206, at bridge on U.S. Route 220, 0.3 mi (0.5 km) northeast of Hughesville and 4.2 mi (6.8 km) upstream from Little Muncy Creek.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
OCT 27...	1430	9813	90	6.6	12.5	2	--	28	0	0
NOV 17...	1445	9813	60	6.6	8.0	1	12.8	33	--	0
DEC 03...	1130	9813	60	6.5	2.0	2	13.3	32	0	0
JAN 14...	1030	9813	60	--	.0	2	--	26	0	0
FEB 25...	1135	9813	55	--	--	1	--	31	0	0
MAR 03...	0930	9813	60	--	4.0	1	--	27	0	0
APR 28...	0930	9813	80	6.6	8.0	<1	12.0	24	0	0
MAY 10...	1045	9813	70	--	--	<1	--	32	0	0
JUL 07...	1740	9813	100	7.5	19.0	5	9.0	60	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
OCT 27...	8.7	1.5	18	14	4.0	.69	.05	.02	.02	20
NOV 17...	8.0	--	22	6.0	4.0	.90	.02	.02	.04	260
DEC 03...	7.1	3.5	28	10	5.0	1.0	.07	.02	.04	160
JAN 14...	8.7	1.0	16	8.0	5.0	1.0	.06	.02	.03	<10
FEB 25...	5.5	4.0	14	8.0	4.0	1.3	.04	.03	.03	50
MAR 03...	8.0	1.5	12	18	5.0	1.3	.02	.03	.04	20
APR 28...	9.5	.0	24	10	5.0	1.1	.04	.03	.04	<10
MAY 10...	10	1.5	24	8.0	5.0	.76	.02	.06	.05	<10
JUL 07...	11	8.0	26	6.0	7.0	.94	.03	.03	.03	830



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 mi<sup>2</sup> (12.77 km<sup>2</sup>).

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

REVISED RECORDS.--WDR PA-72: 1970(M), 1971(P).

GAGE.--Water-stage recorder. Datum of gage is 1,037.16 ft (316.126 m) above mean sea level. Prior to May 15, 1968 nonrecording gage at bridge 20 ft (6 m) upstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years, 8.62 ft<sup>3</sup>/s (0.24 m<sup>3</sup>/s), 23.74 in/yr (603 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,000 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/s) June 22, 1972, gage height, 5.68 ft (1.731 m), from rating curve extended above 200 ft<sup>3</sup>/s (5.7 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 0.84 ft<sup>3</sup>/s (0.024 m<sup>3</sup>/s) Sept. 25, 1970; minimum gage height, 2.57 ft (0.783 m) Sept. 9, 10, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 83 ft<sup>3</sup>/s (2.35 m<sup>3</sup>/s) Oct. 18, gage height, 3.78 ft (1.152 m); minimum, 1.5 ft<sup>3</sup>/s (0.042 m<sup>3</sup>/s) Sept. 9, 10, gage height, 2.74 ft (0.835 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.2	7.2	8.4	9.7	12	14	4.9	13	6.3	2.6	2.0
2	9.6	6.9	6.8	7.5	12	12	12	5.4	19	5.7	2.4	2.3
3	8.8	6.6	6.6	7.8	27	12	12	4.7	18	4.9	2.4	2.2
4	8.2	6.4	6.4	7.5	15	14	12	4.3	16	4.9	2.3	2.0
5	7.6	6.2	6.2	10	7.4	12	11	4.1	14	4.7	2.3	2.0
6	7.0	6.0	6.1	12	6.8	11	10	3.9	12	4.7	2.4	1.8
7	6.3	5.7	6.0	9.0	6.4	11	9.7	3.9	12	6.6	5.4	1.7
8	6.3	6.6	9.9	6.8	6.2	10	9.3	3.7	11	6.0	4.1	1.7
9	6.0	5.9	13	6.2	5.9	10	9.0	3.7	9.7	6.0	2.9	1.6
10	6.0	9.0	10	5.9	5.8	10	8.7	3.7	8.7	4.7	2.6	2.4
11	5.7	13	10	5.6	7.8	10	8.4	3.9	8.1	4.7	2.4	1.8
12	5.4	17	9.7	5.3	7.2	9.3	7.8	4.3	7.5	4.7	2.2	1.7
13	5.2	31	9.0	5.2	7.2	11	7.5	3.9	6.9	4.7	2.2	1.6
14	4.9	27	9.0	7.8	7.5	9.7	7.5	3.7	6.6	4.5	2.4	1.6
15	4.9	23	8.7	6.3	6.9	9.0	6.9	3.4	6.6	4.9	2.3	1.6
16	5.2	19	8.1	6.6	14	9.0	6.6	6.4	4.5	4.5	2.4	3.5
17	5.2	16	7.8	6.9	29	9.0	6.3	6.9	4.9	4.1	2.0	8.1
18	25	14	7.5	10	34	8.7	6.0	5.7	4.0	3.7	2.0	3.9
19	12	12	7.2	7.5	32	9.0	5.7	6.0	4.5	3.7	2.0	2.8
20	16	12	6.9	6.6	27	9.0	5.4	6.6	7.0	3.5	2.0	2.4
21	14	11	6.6	5.4	23	9.3	5.4	7.0	13	3.7	1.8	2.4
22	13	10	6.6	4.9	23	8.1	5.7	6.3	11	3.7	1.8	2.2
23	12	9.2	7.5	4.5	22	7.8	5.2	6.1	9.0	3.5	1.8	2.0
24	11	8.6	6.3	4.3	19	7.8	4.7	5.8	8.7	3.5	1.7	2.0
25	10	8.4	12	4.1	17	7.8	5.4	5.8	8.4	3.2	1.7	1.8
26	9.8	8.8	15	7.2	17	7.5	5.7	5.6	7.5	2.9	2.5	2.4
27	9.4	9.0	11	20	16	8.4	4.9	5.2	6.6	2.8	2.8	3.9
28	8.9	7.8	8.6	14	15	8.4	4.5	5.0	6.3	2.8	2.3	3.5
29	8.4	7.4	7.9	13	14	7.5	4.3	5.9	6.3	2.8	2.2	2.8
30	8.0	7.3	8.4	12	---	7.2	4.3	6.4	6.9	2.9	2.0	2.4
31	7.6	---	9.0	10	---	7.8	---	8.4	---	2.8	2.0	---
TOTAL	277.4	338.0	261.0	248.3	440.8	295.3	225.9	160.6	277.7	132.1	73.9	74.1
MEAN	8.95	11.3	8.42	8.01	15.2	9.53	7.53	5.18	9.26	4.26	2.38	2.47
MAX	25	31	15	20	34	14	14	8.4	19	6.6	5.4	8.1
MIN	4.9	5.7	6.0	4.1	5.8	7.2	4.3	3.4	4.0	2.8	1.7	1.6
CFSM	1.82	2.29	1.71	1.62	3.08	1.93	1.53	1.05	1.88	.86	.48	.50
IN.	2.09	2.55	1.97	1.87	3.33	2.23	1.70	1.21	2.09	1.00	.56	.56

CAL YR 1975 TOTAL 3723.4 MEAN 10.2 MAX 101 MIN 1.4 CFSM 2.07 IN 28.09  
WTR YR 1976 TOTAL 2805.1 MEAN 7.66 MAX 34 MIN 1.6 CFSM 1.55 IN 21.16



01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA  
(National Stream-Quality Accounting Network)

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 mi<sup>2</sup> (17,734 km<sup>2</sup>).

## 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) above mean sea level. 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 station on Susquehanna River at Sunbury used as an auxiliary gage for this station.

REMARKS.--Records good. Flow regulated by Glendale, Curwensville, Kettle Creek, Foster Joseph Sayers Lakes, First Fork Sinnemahoning Creek Reservoir (see p.203) and Little Pine Creek Reservoir, capacity 24,900 acre-ft (30.7 hm<sup>3</sup>) about 75 mi (120 km) upstream.

AVERAGE DISCHARGE.--37 years (1939-76), 10,620 ft<sup>3</sup>/s (301 m<sup>3</sup>/s), 21.06 in/yr (535 mm/yr), adjusted for storage 1961-75.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 300,000 ft<sup>3</sup>/s (8,500 m<sup>3</sup>/s) June 24, 1972; maximum gage height, 34.23 ft (10.433 m) June 24, 1972, from floodmarks, backwater from Susquehanna River; minimum discharge, not determined.

PERIOD OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1939, 32.1 ft (9.78 m) Mar. 19, 1936, from floodmarks, discharge, 287,000 ft<sup>3</sup>/s (8,130 m<sup>3</sup>/s), from slope-area measurement at Watsontown, (backwater from Susquehanna River).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 89,900 ft<sup>3</sup>/s (2,550 m<sup>3</sup>/s) Feb. 18, gage height, 16.02 ft (4.883 m), (backwater from Susquehanna River); minimum daily, 2,020 ft<sup>3</sup>/s (57.2 m<sup>3</sup>/s) Aug. 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41900	8070	7960	15000	18000	18000	15800	5460	11200	9960	4560	2740
2	33300	7470	8010	15700	15500	16000	22300	5720	12400	7940	3780	2560
3	21900	6970	8330	15600	13000	14900	21600	6020	13800	6850	3660	2430
4	14700	6610	8180	14600	9900	22600	19800	6100	12700	6300	3460	2330
5	12600	6310	8190	13400	9700	31400	18000	5820	11300	6280	3290	2250
6	11200	6080	7990	11000	9100	34600	16000	5600	9880	5200	3120	2140
7	10100	5880	7820	10000	8500	29700	14400	5390	8870	5260	3320	2090
8	9220	5750	7960	9700	8400	23500	13100	5060	8620	6960	6270	2100
9	8350	5540	8010	8800	8200	19800	11700	4850	8020	8640	9710	2060
10	8030	5830	11400	7600	7800	16900	10600	4540	6700	7990	9970	2060
11	10100	7550	14100	6500	8600	15300	9730	4540	6480	7260	8240	2180
12	11500	12300	13700	6600	10000	14200	9040	4620	6080	6530	7000	2170
13	10000	23200	12600	7400	13100	13300	8430	4760	5670	6040	5680	2150
14	8720	27200	11700	7800	14100	13400	7800	4570	5200	6970	5340	2120
15	8180	25000	11600	10000	16200	13000	7380	4210	4840	7260	5010	2050
16	7380	21200	12600	11000	18500	12400	6970	4140	6450	6710	5080	2030
17	7080	17800	19100	10400	35500	12200	6620	6300	6660	8330	5650	2240
18	24600	15600	20900	8800	84000	11600	6260	10200	7360	7270	5260	3070
19	29700	13800	18000	6800	82000	11000	5890	9630	6430	6460	5080	3390
20	25900	12600	14700	5700	75800	10700	5510	10000	5840	5620	4490	3260
21	24900	11800	12800	7000	65200	11200	5290	9810	22100	5000	3940	3450
22	23400	11700	11700	8600	56600	12800	5120	9200	42000	4830	3650	2990
23	19500	10900	10900	9400	55200	14100	5130	8980	39100	4900	3440	2560
24	16700	9930	10000	7600	48700	14500	5090	8850	29300	4980	3260	2300
25	14400	8850	8380	7000	40700	14400	5130	8360	21400	5290	3060	2110
26	13100	8680	8990	7200	33600	13800	5500	8080	18600	5080	2960	2020
27	11700	8650	13000	41400	26900	12800	5810	8330	14700	4650	3610	2260
28	10700	9250	14200	36100	23500	13000	6120	8150	11700	4410	3500	2760
29	9930	9020	13900	35000	20400	13800	6030	7340	9770	4020	3200	3590
30	9320	8220	12500	31000	---	13000	5730	7080	9180	4340	2930	4280
31	8790	---	13400	24600	---	12300	---	9610	---	4860	2740	---
TOTAL	476900	337760	362620	417300	836700	500200	291880	211330	382350	192190	144260	75740
MFAN	15380	11260	11700	13460	28850	16140	9729	6817	12750	6200	4654	2525
MAX	41900	27200	20900	41400	84000	34600	22300	10200	42000	9960	9970	4280
MIN	7080	5540	7820	5700	7800	10700	5090	4140	4840	4020	2740	2020
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-

CAL YR 1975	TOTAL	5350290	MEAN	14660	MAX	206000	MIN	1900	CFSM	-	IN.	-
WTR YR 1976	TOTAL	4229230	MEAN	11560	MAX	84000	MIN	2020	CFSM	-	IN.	-

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.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to current year.

WATER TEMPERATURES: October 1974 to current year.

SUSPENDED SEDIMENT DISCHARGE: Water years 1963-64, January 1966 to September 1968, October 1974 to current year.

REMARKS.--Unpublished miscellaneous samples of sediment data published for water years 1962-63 available at Harrisburg office.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 330 micromhos Aug. 24, 1975; minimum daily, 86 micromhos Feb. 19, 1976.

WATER TEMPERATURES: Maximum daily, 28.0°C Aug. 3, 1975; minimum daily, freezing point Jan. 16, 1975,

Jan. 21, 29, Feb. 4, 1976.

SEDIMENT CONCENTRATIONS: Maximum daily, 410 mg/l Sept. 27, 1975; minimum daily, 1 mg/l on several days

during October 1974, April, July 1975.

SEDIMENT DISCHARGES: Maximum daily, 250,000 tons (226,800 t) Sept. 27, 1975; minimum daily, 6.1 tons

(5.5 t) Sept. 27, 1976.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 321 micromhos Sept. 16; minimum daily, 86 micromhos Feb. 19.

WATER TEMPERATURES: Maximum daily, 24.5°C Aug. 29; minimum daily, freezing point Jan. 21, 29, Feb. 4.

SEDIMENT CONCENTRATIONS: Maximum daily, 270 mg/l Feb. 18; minimum daily, 1 mg/l on many days.

SEDIMENT DISCHARGES: Maximum daily, 61,200 tons (55,500 t) Feb. 18; minimum daily, 6.1 tons (5.5 t) Sept. 27.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT 16...	1530	7300	200	6.7	16.0	--	--	110	270	.69
NOV 19...	1220	13700	160	6.6	9.5	--	--	160	230	.51
DEC 17...	1330	20100	175	6.8	5.0	1	--	96	180	.49
FEB 18...	1315	84700	120	6.2	3.0	--	--	240	1200	.57
MAR 03...	1315	14560	155	6.2	6.0	3	11.6	93	920	.63
APR 13...	1200	8380	220	6.7	10.0	--	11.0	29	77	.53
MAY 14...	1015	4600	220	7.2	18.0	--	--	390	85	.37
JUN 08...	1010	8620	140	6.5	18.5	1	--	125	130	.35
JUL 07...	1030	5160	180	6.8	22.5	--	--	510	25	.40
AUG 03...	1200	3660	200	7.5	22.5	--	--	--	--	.44
SEP 14...	1230	2120	280	7.9	21.0	4	--	3900	38000	.60

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL PHYTOPLANKTON (CELLS PER ML)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT 16...	.04	.44	.48	1.2	.03	240	1	20	100
NOV 19...	.02	.09	.11	.62	.02	250	8	296	98
DEC 17...	.05	.08	.13	.62	.02	380	13	706	91
FEB 18...	.05	.95	1.0	1.6	.73	10000	275	62900	81
MAR 03...	.07	.17	.24	.87	.03	710	10	393	86
APR 13...	--	--	.00	.53	.01	400	4	91	100
MAY 14...	.04	.19	.23	.60	.03	3100	7	87	99
JUN 08...	--	--	.23	.58	.02	2200	13	303	96
JUL 07...	--	--	.23	.63	.02	1600	11	153	99
AUG 03...	--	--	2.3	2.7	.04	5500	14	138	84
SEP 14...	--	--	.63	1.2	.05	4800	4	23	100

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)
DEC 17...	1330	60	47	15	5.5	2.9	1.0	16	0	13
MAR 03...	1315	54	46	14	4.7	25	1.1	10	0	8
JUN 08...	1010	49	32	12	4.5	2.8	1.3	20	0	16
SEP 14...	1230	100	63	26	9.5	5.4	1.6	50	0	41

DATE	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDED ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)
DEC 17...	4.1	48	4.4	.2	5.0	92	90	3	2	1
MAR 03...	10	42	6.1	.1	5.1	79	104	1	1	0
JUN 08...	10	34	4.2	.1	4.4	86	73	0	0	0
SEP 14...	1.0	59	8.0	.1	1.0	155	135	2	2	0

DATE	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS- PENDED COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
DEC 17...	1	0	1	<10	0	<10	9	1	8	10
MAR 03...	1	1	0	<10	0	<10	7	0	7	0
JUN 08...	0	0	0	20	10	10	2	1	1	10
SEP 14...	1	0	2	10	0	<10	0	0	3	0

DATE	SUS- PENDED COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDED LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDED MAN- GANESE (MN) (UG/L)
DEC 17...	10	0	330	0	2	0	2	440	450	10
MAR 03...	0	0	480	10	0	0	2	460	460	0
JUN 08...	10	0	230	30	9	6	3	200	220	20
SEP 14...	0	0	120	60	7	1	6	40	80	40

DATE	TOTAL MERCURY (HG) (UG/L)	SUS- PENDED MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDED ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC 17...	<.5	.0	<.5	1	0	1	30	0	30
MAR 03...	<.5	.0	<.5	0	0	0	30	10	20
JUN 08...	<.5	.0	<.5	0	0	0	10	0	10
SEP 14...	<.5	.0	<.5	0	0	0	10	10	0

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TOTAL ALDRIN (UG/L)	TOTAL ATRA-ZINE (UG/L)	TOTAL CHLOR-DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI-AZINON (UG/L)	TOTAL DI-ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	TOTAL HEPTA-CHLOR (UG/L)
OCT 16...	1530	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
NOV 19...	1220	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 18...	1315	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 14...	1015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METH-OXY-CHLOR (UG/L)	TOTAL METHYL PARA-THION (UG/L)	TOTAL METHYL TRI-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOX-APHENE (UG/L)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT 16...	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--
NOV 19...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 18...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
FEB 19...	1000	82600	4.0	222	49500	52	56

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
FEB 19...	67	68	85	94	98	100

ND - Material specifically analyzed for but not detected.

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL KJEL. NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL ALUMI- NUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)
NOV 19...	1220	--	--	--	--	--	--	--	--	--	--
MAY 05...	1340	33	64	1700	9300	30	1	0	34	26	16000
14...	1015	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELF- NIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL SILVER IN BOTTOM MA- TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	ORGANIC CARBON IN BOT- TOM MA- TERIAL (C) (G/KG)	IN- ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)	TOTAL CYANIDE IN BOTTOM MA- TERIAL (UG/G)	PCB IN BOTTOM MA- TERIAL (UG/KG)
NOV 19...	--	--	--	--	--	--	--	--	--	--	--
MAY 05...	62	580	.1	47	1	0	190	30	.1	0	26
14...	--	--	--	--	--	--	--	--	--	--	--

DATE	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)
NOV 19...	--	12	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 05...	.0	5	2.1	1.5	8.6	--	4.8	.0	--	.0	.0
14...	ND	ND	ND	--	--	ND	.8	ND	ND	ND	ND

DATE	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	METHOX- YCHLOR IN BOT- TOM MA- TERIAL (UG/KG)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	BED MAT. FALL DIAM. % FINER THAN .004 MM	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM
NOV 19...	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--
MAY 05...	.0	--	--	--	--	--	0	--	1	14	100
14...	ND	ND	ND	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

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

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct 16	1530	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Achnanthes	17	7	
		....Fragilaria	88	37	
		....Gomphonema	17	7	
		....Nitzschia	100	42	
		....Synedra	17	7	
		TOTAL	240		
Nov 19	1220	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Achnanthes	87	35	
		....Asterionella	22	9	
		....Cyclotella	65	26	
		....Navicula	32	12	
		....Nitzschia	22	9	
		....Synedra	22	9	
		TOTAL	250		
Dec 17	1330	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Achnanthes	77	20	
		....Asterionella	15	4	
		....Cyclotella	15	4	
		....Cymbella	62	16	
		....Navicula	15	4	
		....Nitzschia	15	4	
		....Synedra	181	48	
		TOTAL	380		
Feb 18	1315	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Eunotia	800	8	
		....Navicula	800	8	
		....Nitzschia	1,700	17	
		CYANOPHYTA			
		.Myxophyceae			
		....Lyngbya	3,900	39	
		....Oscillatoria	1,000	10	
		OTHER	1,800	18	
		TOTAL	10,000		
Mar 3	1315	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Achnanthes	46	7	
		....Cyclotella	22	3	
		....Gomphonema	22	3	
		....Melosira	22	3	
		....Navicula	22	3	
		....Nitzschia	46	7	
		CYANOPHYTA			
		.Myxophyceae			
		....Oscillatoria	530	74	
		TOTAL	710		

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

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

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Apr 13	1200	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Achnanthes	37	9	
		....Cyclotella	12	3	
		....Cymbella	12	3	
		....Frustulia	12	3	
		....Gomphonema	24	6	
		....Hannaea	24	6	
		....Navicula	61	15	
		....Nitzschia	24	6	
		....Synedra	120	30	
		CYANOPHYTA			
		.Myxophyceae			
		....Oscillatoria	74	19	
		TOTAL	400		
May 14	1015	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Scenedesmus	341	11	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Achnanthes	806	26	
		....Cymbella	87	3	
		....Hannaea	87	3	
		....Navicula	290	9	
		....Nitzschia	248	8	
		....Synedra	868	28	
		CYANOPHYTA			
		.Myxophyceae			
		....Oscillatoria	290	9	
		OTHER	83	3	
		TOTAL	3,100		
June 8	1010	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Crucigenia	300	14	
		....Scenedesmus	99	5	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Achnanthes	99	5	
		....Cymbella	75	3	
		....Navicula	75	3	
		....Nitzschia	200	9	
		CYANOPHYTA			
		.Myxophyceae			
		....Anacystis	1,200	54	
		OTHER	152	7	
		TOTAL	2,200		

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

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

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 7	1030	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Cosmarium	240	15	
		....Scenedesmus	260	16	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Achnanthes	320	20	
		....Gomphonema	25	1	
		....Melosira	170	11	
		....Navicula	25	1	
		....Nitzschia	110	7	
		....Synedra	340	22	
		CYANOPHYTA			
		.Myxophyceae			
		....Anacystis	110	7	
		TOTAL	1,600		
Aug 3	1200	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Ankistrodesmus	870	16	
		....Pediastrum	430	8	
		....Scenedesmus	760	14	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Melosira	2,600	47	
		OTHER	840	15	
		TOTAL	5,500		
Sept 14	1230	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Ankistrodesmus	290	6	
		....Crucigenia	1,700	35	
		....Dictyosphaerium	510	11	
		....Kirchneriella	290	6	
		....Scenedesmus	290	6	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Navicula	360	8	
		....Nitzschia	720	15	
		CYANOPHYTA			
		.Myxophyceae			
		....Anacystis	290	6	
		OTHER	350	7	
		TOTAL	4,800		

## PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m <sup>2</sup> )		Chlorophyll a (mg/m <sup>2</sup> )	Chlorophyll b (mg/m <sup>2</sup> )	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
Dec 10	22	18	17	26	0.10	15	Polyethylene strip
May 13	31	21.7	20.5	23.7	2.59	52	
June 11	24	17.1	14.5	8.94	1.43	280	
Aug 24	22	31.2	21.2	28.1	2.35	360	

## WEST BRANCH SUSQUEHANNA RIVER BASIN

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01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	162	161	---	---	123	138	166	129	135	202	224
2	126	169	167	---	---	133	122	190	109	136	199	226
3	125	172	168	---	---	139	115	174	105	145	181	215
4	127	172	159	---	---	132	116	156	121	131	177	206
5	145	171	169	---	---	115	113	166	118	151	184	216
6	170	180	164	---	---	117	116	157	120	158	187	220
7	175	185	167	---	---	119	121	171	128	160	191	235
8	171	189	162	---	---	122	132	169	131	162	194	239
9	---	191	156	---	147	118	129	179	127	155	192	248
10	---	196	163	---	---	133	140	172	129	---	195	237
11	---	194	147	---	---	137	148	168	129	---	213	245
12	207	193	139	161	---	135	151	178	138	163	200	249
13	244	164	134	---	---	132	149	171	141	164	195	229
14	217	134	141	---	---	145	151	172	148	171	262	241
15	207	133	145	---	---	153	159	---	146	181	173	291
16	200	139	141	---	172	151	160	---	151	191	179	321
17	202	142	144	---	---	163	168	185	154	206	177	282
18	183	139	148	---	114	148	183	175	126	198	200	243
19	118	138	114	---	86	161	170	120	145	163	182	249
20	139	142	---	---	---	169	176	125	146	132	185	241
21	134	152	---	---	---	157	171	129	151	157	190	252
22	130	153	---	---	---	158	186	128	102	160	---	255
23	134	160	---	---	95	150	160	133	107	159	197	257
24	138	161	---	---	99	153	182	128	112	170	182	270
25	136	166	---	---	100	135	194	119	113	174	186	292
26	137	169	---	---	106	139	178	120	121	172	192	294
27	142	171	---	---	132	136	170	122	128	176	194	299
28	143	162	---	---	119	131	188	126	129	177	190	301
29	147	166	---	---	129	137	193	124	129	188	225	272
30	150	166	---	---	---	132	200	140	133	190	216	259
31	156	---	---	---	---	142	---	140	---	180	227	---

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

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

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	41900	32	3620	8070	5	109	7960	4	86
2	33300	26	2340	7470	6	121	8010	2	43
3	21900	24	1420	6970	5	94	8330	2	45
4	14700	22	873	6610	5	89	8180	2	44
5	12600	10	340	6310	5	85	8190	2	44
6	11200	8	242	6080	5	82	7990	2	43
7	10100	6	164	5880	4	64	7820	2	42
8	9220	5	124	5750	4	62	7960	3	64
9	8350	5	113	5540	5	75	8010	3	65
10	8030	4	87	5830	4	63	11400	7	215
11	10100	15	409	7550	6	122	14100	6	228
12	11500	9	279	12300	11	365	13700	6	222
13	10000	10	270	23200	38	2380	12600	5	170
14	8720	6	141	27200	30	2200	11700	3	95
15	8180	2	44	25000	24	1620	11600	3	94
16	7380	2	40	21200	17	973	12600	5	170
17	7080	2	38	17800	10	481	19100	15	774
18	24600	120	7970	15600	8	337	20900	28	1580
19	29700	68	5450	13800	7	261	18000	6	292
20	25900	27	1890	12600	6	204	14700	11	437
21	24900	19	1280	11800	9	287	12800	8	276
22	23400	12	758	11700	11	347	11700	6	190
23	19500	12	632	10900	7	206	10900	4	118
24	16700	9	406	9930	5	134	10000	3	81
25	14400	7	272	8850	3	72	8380	3	68
26	13100	7	248	8680	2	47	8990	5	121
27	11700	5	158	8650	2	47	13000	12	421
28	10700	4	116	9250	4	100	14200	10	383
29	9930	3	80	9020	3	73	13900	8	300
30	9320	3	75	8220	2	44	12500	7	236
31	8790	4	95	---	---	---	13400	9	326
TOTAL	476900	---	29974	337760	---	11144	362620	---	7273
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	15000	8	324	18000	6	292	18000	11	535
2	15700	10	424	15500	5	209	16000	10	432
3	15600	13	548	13000	5	175	14900	12	483
4	14600	7	276	9900	4	107	22600	28	1710
5	13400	5	181	9700	4	105	31400	50	4240
6	11000	4	119	9100	4	98	34600	42	3920
7	10000	3	81	8500	4	92	29700	30	2410
8	9700	3	79	8400	3	68	23500	20	1270
9	8800	3	71	8200	3	66	19800	14	748
10	7600	4	82	7800	3	63	16900	11	502
11	6500	3	53	8600	5	116	15300	10	413
12	6600	3	53	10000	25	675	14200	9	345
13	7400	3	60	13100	30	1060	13300	10	359
14	7800	3	63	14100	35	1330	13400	10	362
15	10000	4	108	16200	40	1750	13000	9	316
16	11000	5	148	18500	55	2750	12400	11	368
17	10400	5	140	35500	130	12500	12200	17	560
18	8800	4	95	84000	270	61200	11600	12	376
19	6800	4	73	82000	170	37600	11000	10	297
20	5700	3	46	75800	80	16400	10700	8	231
21	7000	8	151	65200	35	6160	11200	10	302
22	8600	6	139	56600	32	4890	12800	17	588
23	9400	5	127	55200	44	6560	14100	12	457
24	7600	4	82	48700	37	4870	14500	11	431
25	7000	3	57	40700	24	2640	14400	11	428
26	7200	5	97	33600	20	1810	13800	12	447
27	41400	55	6150	26900	16	1160	12800	15	518
28	36100	25	2440	23500	14	888	13000	12	421
29	35000	15	1420	20400	12	661	13800	11	410
30	31000	8	670	---	---	---	13000	10	351
31	24600	6	399	---	---	---	12300	11	365
TOTAL	417300	---	14756	836700	---	166295	500200	---	24595



01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	15800	17	725	5460	2	29	11200	10	302
2	22300	25	1510	5720	3	46	12400	22	737
3	21600	20	1170	6020	4	65	13800	24	894
4	19800	22	1180	6100	4	66	12700	14	480
5	18000	14	680	5820	4	63	11300	9	275
6	16000	11	475	5600	5	76	9880	6	160
7	14400	10	389	5390	6	87	8870	5	120
8	13100	9	318	5060	5	68	8620	12	279
9	11700	8	253	4860	5	66	8020	6	130
10	10600	7	200	4540	5	61	6700	7	127
11	9730	6	158	4540	4	49	6480	8	140
12	9040	5	122	4620	9	112	6080	6	98
13	8430	3	68	4760	13	167	5670	4	61
14	7800	1	21	4570	9	111	5200	3	42
15	7380	1	20	4210	6	68	4840	2	26
16	6970	1	19	4140	5	56	6450	35	610
17	6620	1	18	6300	26	442	6660	18	324
18	6260	1	17	10200	35	964	7360	70	1390
19	5890	1	16	9630	28	728	6430	10	174
20	5510	1	15	10000	15	405	5840	28	442
21	5290	1	14	9810	10	265	22100	118	7040
22	5120	1	14	9200	11	273	42000	128	14500
23	5130	1	14	8980	8	194	39100	50	5280
24	5090	1	14	8850	7	167	29300	31	2450
25	5130	1	14	8360	7	158	21400	24	1390
26	5500	1	15	8080	7	153	18600	19	954
27	5810	1	16	8330	8	180	14700	15	595
28	6120	1	17	8150	7	154	11700	12	379
29	6030	1	16	7340	8	159	9770	7	185
30	5730	1	15	7080	9	172	9180	6	149
31	---	---	---	9610	20	519	---	---	---
TOTAL	291880	---	7523	211330	---	6123	382350	---	39733
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9960	10	269	4560	9	111	2740	10	74
2	7940	6	129	3780	6	61	2560	9	62
3	6850	5	92	3660	8	79	2430	8	52
4	6300	4	68	3460	6	56	2330	9	57
5	6280	11	187	3290	5	44	2250	8	49
6	5200	5	70	3120	5	42	2140	8	46
7	5260	6	85	3320	9	81	2090	8	45
8	6960	10	188	6270	43	728	2100	8	45
9	8640	24	560	9710	47	1230	2060	7	39
10	7990	15	324	9970	18	485	2060	10	56
11	7260	7	137	8240	11	245	2180	9	53
12	6530	6	106	7000	8	151	2170	11	64
13	6040	12	196	5680	7	107	2150	9	52
14	6970	15	282	5340	6	87	2120	10	57
15	7260	7	137	5010	5	68	2050	43	238
16	6710	12	217	5080	6	82	2030	62	340
17	8330	9	202	5650	9	137	2240	43	260
18	7270	7	137	5260	7	99	3070	15	124
19	6460	6	105	5080	5	69	3390	13	119
20	5620	10	152	4490	4	48	3260	12	106
21	5000	9	121	3940	4	43	3450	10	93
22	4830	7	91	3650	4	39	2990	6	48
23	4900	7	93	3440	4	37	2560	4	28
24	4980	6	81	3260	3	26	2300	4	25
25	5290	9	129	3060	3	25	2110	2	11
26	5080	8	110	2960	2	16	2020	2	11
27	4650	11	138	3610	2	19	2260	1	6.1
28	4410	5	60	3500	1	9.5	2760	2	15
29	4020	3	33	3200	3	26	3590	3	29
30	4340	15	176	2930	4	32	4280	6	69
31	4860	18	236	2740	8	59	---	---	---
TOTAL	192190	---	4911	144260	---	4341.5	75740	---	2273.1
YEAR	4229230		318941.6						

## WEST BRANCH SUSQUEHANNA RIVER BASIN

01553600 EAST BRANCH CHILLISQUAQUE CREEK NEAR WASHINGTONVILLE, PA

LOCATION.--Lat 41°04'57", long 76°39'17", Montour County, Hydrologic Unit 02050206, on right bank 30 ft (9 m) upstream from highway bridge on Legislative Route 47017, 0.2 mi (0.3 km) downstream from White Hall Creek, 0.7 mi (1.1 km) upstream from Middle Branch Chillisquaque Creek, 2.3 mi (3.7 km) upstream from mouth, and 2.5 mi (4.0 km) northeast of Washingtonville.

DRAINAGE AREA.--9.48 mi<sup>2</sup> (24.55 km<sup>2</sup>).

PERIOD OF RECORD.--April 1960 to current year. Prior to October 1969, published as White Hall Creek near Washingtonville.

REVISED RECORDS.--WDR PA-75: 1972(P), 1973, 1974(P).

GAGE.--Water-stage recorder. Altitude of gage is 530 ft (160 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record, and those for winter periods, which are fair.

AVERAGE DISCHARGE.--16 years, 11.9 ft<sup>3</sup>/s (0.34 m<sup>3</sup>/s), 17.02 in/yr (432 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,390 ft<sup>3</sup>/s (124 m<sup>3</sup>/s) June 22, 1972, gage height, 11.11 ft (3.386 m), from floodmark in gage shelter, from rating curve extended above 350 ft<sup>3</sup>/s (9.91 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow at site 0.7 mi (1.1 km) upstream, adjusted for intervening area; no flow on many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft<sup>3</sup>/s (8.50 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0600	*1,160 32.9	*8.51 2.594	Feb. 16	2115	408 11.6	6.04 1.841
Jan. 27	0615	645 18.3	7.15 2.179				

No flow Aug. 5, Sept. 6, 7, 8, 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	3.2	7.8	25	13	11	76	3.0	5.1	2.4	.20	.03
2	6.6	3.1	6.3	15	52	9.6	38	4.0	4.8	1.9	.12	.04
3	4.8	3.0	5.7	12	28	10	24	3.3	3.0	1.5	.04	.03
4	3.9	2.8	4.9	9.6	17	20	17	2.7	2.4	1.8	.01	.02
5	3.2	2.6	4.8	7.0	9.2	15	13	2.5	2.1	2.1	0	.01
6	2.9	2.4	4.8	5.4	7.2	12	10	2.5	2.1	1.4	.02	0
7	2.6	2.3	4.5	5.2	5.6	10	8.2	2.5	2.7	1.6	17	0
8	2.5	3.1	3.9	5.7	5.0	8.7	7.0	2.2	2.0	2.5	4.5	0
9	2.4	2.6	10	5.2	4.5	8.0	5.9	2.1	1.6	3.2	2.5	0
10	2.4	3.7	26	5.0	4.1	8.7	5.2	2.0	1.6	1.6	2.6	.36
11	2.2	4.6	13	4.8	26	11	4.9	1.9	1.4	1.6	1.7	.57
12	2.0	45	10	4.7	22	9.6	4.2	2.5	1.2	1.4	1.3	.39
13	1.8	79	9.2	4.5	18	15	3.9	1.9	1.0	1.1	1.1	.31
14	1.7	36	8.5	30	23	12	3.6	1.7	1.0	1.0	1.5	.23
15	1.6	19	8.0	14	12	11	3.5	1.7	7.4	.76	1.1	.17
16	1.4	13	8.9	8.0	78	11	3.2	1.9	3.9	.63	1.1	.82
17	2.1	9.9	6.6	5.9	85	10	3.1	3.5	2.2	.51	.84	1.7
18	319	7.8	5.4	4.2	82	9.9	2.7	5.6	1.7	.38	.65	1.6
19	66	6.8	4.5	3.3	65	11	2.6	4.9	1.4	.29	.56	.80
20	41	6.1	4.2	3.3	38	10	2.4	9.6	4.3	.20	.52	.60
21	25	15	4.2	5.1	26	15	2.3	15	12	.26	.48	.86
22	18	10	3.6	4.8	46	13	2.3	8.5	7.6	.47	.43	.63
23	12	7.0	3.3	4.0	23	11	2.2	6.4	6.3	.35	.37	.52
24	9.2	6.4	2.7	3.8	17	11	2.1	5.1	5.4	.47	.30	.69
25	8.2	6.1	2.6	3.6	16	10	2.6	4.3	15	.26	.22	.70
26	6.8	5.9	52	78	16	8.7	6.8	4.6	5.4	.10	.19	1.4
27	5.6	8.5	34	397	18	9.6	3.6	3.7	3.7	.02	.19	6.5
28	4.9	6.8	19	94	14	15	2.8	3.0	3.0	.01	.19	4.6
29	4.5	5.7	13	30	12	9.2	2.6	2.6	3.0	.51	.15	2.4
30	3.9	5.4	25	14	---	8.5	2.5	3.0	2.6	.51	.06	1.9
31	3.3	---	35	10	---	8.7	---	2.7	---	.29	.03	---
TOTAL	580.1	332.8	351.4	822.1	782.6	343.2	268.2	120.9	116.9	31.12	39.97	27.88
MEAN	18.7	11.1	11.3	26.5	27.0	11.1	8.94	3.90	3.90	1.00	1.29	.93
MAX	319	79	52	397	85	20	76	15	15	3.2	17	6.5
MIN	1.4	2.3	2.6	3.3	4.1	8.0	2.1	1.7	1.0	.01	0	0
CFSM	1.97	1.17	1.19	2.80	2.85	1.17	.94	.41	.41	.11	.14	.10
IN.	2.28	1.31	1.38	3.23	3.07	1.35	1.05	.47	.46	.12	.16	.11

CAL YR 1975	TOTAL	5709.87	MEAN 15.6	MAX 600	MIN 0	CFSM 1.65	IN 22.40
WTR YR 1976	TOTAL	3817.17	MEAN 10.4	MAX 397	MIN 0	CFSM 1.10	IN 14.98

## 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 mi<sup>2</sup> (945 km<sup>2</sup>). PERIOD OF RECORD, November 1965 to current year. GAGE, water-stage recorder. Datum of gage is at mean sea level (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 hm<sup>3</sup>). Conservation pool elevation, 1,155.00 ft or 352.044 m (capacity, 4,870 acre-ft or 6.00 hm<sup>3</sup>). 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 hm<sup>3</sup>) June 25, 1972 (elevation, 1,214.11 ft or 370.061 m); minimum, 252 acre-ft (0.311 hm<sup>3</sup>) Nov. 6, 1968 (elevation, 1,136.70 ft or 346.466 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 44,880 acre-ft (55.3 hm<sup>3</sup>) Feb. 20 (elevation, 1,191.15 ft or 363.063 m); minimum, 4,050 acre-ft (4.99 hm<sup>3</sup>) Jan. 19 (elevation, 1,153.43 ft or 351.565 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 mi<sup>2</sup> (108.5 km<sup>2</sup>). PERIOD OF RECORD, January 1963 to current year. GAGE, water-stage recorder. Datum of gage is at mean sea level.

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 hm<sup>3</sup>) of which 15,900 acre-ft (19.6 hm<sup>3</sup>) is controlled storage above elevation 1,427.00 ft or 434.950 m (conservation pool). Dead storage is 25,300 acre-ft (31.2 hm<sup>3</sup>). 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 hm<sup>3</sup>) June 24, 1972 (elevation, 1,431.63 ft or 436.361 m); minimum, 10,640 acre-ft (13.1 hm<sup>3</sup>) Nov. 16, 1965 (elevation, 1,415.53 ft or 431.454 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 28,580 acre-ft (35.2 hm<sup>3</sup>) Feb. 19 (elevation, 1,429.05 ft or 435.574 m); minimum, 24,430 acre-ft (30.1 hm<sup>3</sup>) Mar. 3 (elevation, 1,426.42 ft or 434.773 m).

01543900 FIRST FORK SINNEMAHOING 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 Sinnemaehoning Creek, 8 mi (13 km) northeast of Sinnemaehoning, and 8 mi (13 km) upstream from mouth. DRAINAGE AREA, 243 mi<sup>2</sup> (629 km<sup>2</sup>). PERIOD OF RECORD, January 1956 to current year. GAGE, water-stage recorder. Datum of gage is at mean sea level, datum unknown.

Reservoir is formed by an earthfill dam. Storage began Jan. 31, 1956. Capacity, 75,800 acre-ft (93.5 hm<sup>3</sup>) between elevations 890.00 ft or 271.272 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 hm<sup>3</sup>). 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 hm<sup>3</sup>) June 26, 1972 (elevation, 1,015.87 ft or 309.637 m); minimum, (after first filling), 37 acre-ft (45,600 m<sup>3</sup>) many days in October 1973 (elevation, 891.84 ft or 271.833 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 32,520 acre-ft (40.1 hm<sup>3</sup>) Feb. 20 (elevation, 986.28 ft or 300.618 m); minimum, 1,390 acre-ft (1.71 hm<sup>3</sup>) Mar. 19 (elevation, 914.26 ft or 278.666 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 mi<sup>2</sup> (585 km<sup>2</sup>). PERIOD OF RECORD, February 1962 to current year. GAGE, water-stage recorder. Datum of gage is at mean sea level (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 hm<sup>3</sup>). No dead storage. Ordinary minimum (conservation) pool elevation, 840.0 ft or 256.03 m (capacity, 1,590 acre-ft or 1.96 hm<sup>3</sup>). 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, 51,660 acre-ft (63.7 hm<sup>3</sup>) June 25, 1972 (elevation, 919.13 ft or 280.151 m); minimum, no storage June 7, 1962.

EXTREMES FOR CURRENT YEAR: Maximum contents, 24,400 acre-ft (30.1 hm<sup>3</sup>) Feb. 20 (elevation, 890.00 ft or 271.272 m); minimum, 1,610 acre-ft (1.99 hm<sup>3</sup>) June 26 (elevation, 840.12 ft or 256.069 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 mi<sup>2</sup> (878 km<sup>2</sup>). PERIOD OF RECORD, March 1971 to current year. GAGE, water-stage recorder. Datum of gage is at mean sea level (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 hm<sup>3</sup>). Dead storage is 25 acre-ft (30,800 m<sup>3</sup>). Ordinary minimum (conservation) pool elevation, 610.00 ft or 185.928 m (capacity, 6,300 acre-ft or 7.77 hm<sup>3</sup>). 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 hm<sup>3</sup>) June 25, 1972 (elevation, 658.41 ft or 200.683 m); minimum, 4,960 acre-ft (6.12 hm<sup>3</sup>) Mar. 10, 1971 (elevation, 609.37 ft or 185.736 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 35,380 acre-ft (43.6 hm<sup>3</sup>) June 22 (elevation, 633.57 ft or 193.112 m); minimum, 6,000 acre-ft (7.40 hm<sup>3</sup>) Jan. 31 (elevation 609.50 ft or 185.776 m).





## SUSQUEHANNA RIVER BASIN

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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, and 1.8 mi (2.9 km) south of Sunbury. Water-quality sampling site 1.7 mi (2.7 km) upstream.

DRAINAGE AREA.--18,300 mi<sup>2</sup> (47,400 km<sup>2</sup>), approximately (excluding that of Shamokin Creek).

## WATER-DISCHARGE RECORDS

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) above mean sea level. 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.

AVERAGE DISCHARGE.--39 years, 26,180 ft<sup>3</sup>/s (741 m<sup>3</sup>/s), 19.43 in/yr (494 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 620,000 ft<sup>3</sup>/s (17,600 m<sup>3</sup>/s) June 24, 1972, gage height, 35.80 ft (10.912 m), from rating curve extended above 290,000 ft<sup>3</sup>/s (8,200 m<sup>3</sup>/s) on basis of runoff comparisons with upstream stations; minimum, 964 ft<sup>3</sup>/s (27.3 m<sup>3</sup>/s) Oct. 16, 1971, gage height, 4.83 ft (1.472 m), result of shutoff at Sunbury Fabridam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 203,000 ft<sup>3</sup>/s (5,750 m<sup>3</sup>/s) Feb. 19, gage height, 21.37 ft (6.514 m); minimum, 5,700 ft<sup>3</sup>/s (161 m<sup>3</sup>/s) July 12, gage height, 6.53 ft (1.990 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91000	22700	26700	33200	59200	65200	40600	30900	26400	25800	12900	9040
2	72600	21000	26000	34200	54100	58200	57200	30300	27900	28200	14600	9280
3	55500	19500	25900	34600	47100	57200	68200	28800	29700	29700	12500	8890
4	44700	18300	26300	31700	37500	79600	63800	30400	28400	27000	14100	7680
5	39300	17100	25800	29800	31700	106000	57200	29500	26600	23900	12000	6900
6	33500	16500	24500	26300	34000	104000	48600	28200	23100	20400	10300	6680
7	29000	16000	23200	19400	31500	91800	42000	26700	20600	18800	10300	6460
8	25400	15800	22600	19000	30800	79200	37200	23300	21700	19200	13900	6160
9	23000	15400	23200	18600	28400	68200	33000	21000	21500	20200	22500	5780
10	21300	15100	26800	15400	26100	57500	29700	19700	23700	18200	34700	6080
11	21600	16600	30100	14700	26200	49700	27000	18600	22300	16700	31700	6420
12	24100	22100	33800	13900	30000	45600	24700	17400	19300	15500	26500	6080
13	22200	39700	33200	15300	32700	42500	22800	16600	16300	17200	22400	5830
14	19600	54400	30500	18900	38200	41000	21200	18600	14200	28200	19000	5910
15	18500	56400	28400	24100	39700	37700	20200	19700	13300	26900	17300	6290
16	17600	51100	28700	23600	42400	35600	18900	18000	15500	25100	18600	6820
17	17100	44400	37000	25100	62500	34400	17700	19700	15600	25100	19500	7400
18	45800	39300	42500	21800	157000	32100	16600	25900	16700	21100	21200	9130
19	97200	35000	37300	17300	200000	29400	23700	33200	17000	18300	19900	9940
20	117000	32200	31400	17300	192000	27800	29900	33000	18400	16300	16600	13600
21	110000	30300	27000	15900	171000	29000	23900	36900	39500	14700	13700	12300
22	95500	31600	23400	16900	142000	34500	20800	44200	89600	13600	11800	11300
23	76800	31200	20600	15800	135000	40300	19000	45900	77000	12800	10600	9840
24	61400	31500	18500	14700	135000	45100	17600	40800	55700	12600	9550	8530
25	50100	31400	17700	13600	113000	43800	16300	34900	43200	12500	8800	7720
26	42600	28700	19300	15200	94700	39900	17700	30600	36100	11600	8420	7350
27	37300	26300	28200	67500	80300	35900	20000	27900	31300	10300	8910	7880
28	32800	26500	35900	127000	72500	35200	31200	26000	23700	9500	8470	9350
29	29400	27200	37800	113000	69000	36700	35800	23800	24200	8920	9200	10000
30	26900	27100	34600	91300	---	37400	32200	22900	23000	10300	8910	12100
31	24900	---	33900	74700	---	36700	---	25800	---	11500	10200	---
TOTAL	1423700	860400	880800	1019800	2213100	1557200	934700	849200	861500	570120	479060	246740
MEAN	45930	28680	28410	32900	76310	50230	31160	27390	28720	18390	15450	8225
MAX	117000	56400	42500	127000	200000	106000	68200	45900	89600	29700	34700	13600
MIN	17100	15100	17700	13600	26100	27800	16300	16600	13300	8920	8420	5780
CFSM	2.51	1.57	1.55	1.80	4.17	2.74	1.70	1.50	1.57	1.00	.84	.45
IN.	2.89	1.75	1.79	2.07	4.50	3.17	1.90	1.73	1.75	1.16	.97	.50

CAL YR 1975 TOTAL 13023420 MEAN 35680 MAX 425000 MIN 4570 CFSM 1.95 IN 26.47  
WTR YR 1976 TOTAL 11896320 MEAN 32500 MAX 200000 MIN 5780 CFSM 1.78 IN 24.18



SUSQUEHANNA RIVER BASIN  
01554000 SUSQUEHANNA RIVER AT SUNBURY, PA

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1972 to current year.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	SUS- PENDE D SOLIDS (MG/L)
OCT												
08...	1300	24500	180	6.3	16.0	5	9.2	9	1.0	970	145	85
22...	1025	97100	140	6.8	12.5	30	9.6	15	1.6	1800	80	134
NOV												
04...	1415	18100	275	7.1	13.0	4	10.4	5	.5	770	226	9
19...	1000	35300	180	6.6	8.0	3	11.6	8	1.4	1200	107	8
DEC												
02...	0910	26100	200	7.2	4.0	3	12.2	8	2.2	600	119	4
17...	0945	36000	200	7.1	4.0	2	12.4	2	.8	280	109	5
FEB												
19...	1000	202600	120	6.9	3.0	180	12.6	35	2.8	1200	67	605
MAR												
04...	0945	74960	160	6.9	5.5	10	12.0	8	.8	670	83	31
16...	0930	35800	200	7.2	5.0	4	12.2	8	2.4	235	107	11
30...	0930	37500	200	7.0	10.0	4	10.4	8	1.0	130	91	16
APR												
14...	0930	21400	240	6.9	10.0	3	11.7	6	.9	105	127	12
29...	1530	35700	250	7.1	12.0	20	10.6	15	2.0	220	131	53
MAY												
12...	1330	17200	230	7.8	15.0	2	11.2	10	1.8	180	102	5
25...	0930	35300	150	7.0	14.5	10	9.0	13	.6	470	106	29
JUN												
09...	0945	21000	200	7.6	20.0	4	8.8	11	2.1	2900	130	12
22...	1030	94100	180	7.1	23.0	50	6.2	26	3.0	1200	99	176
JUL												
07...	1300	18200	215	7.4	24.5	15	8.8	12	1.9	540	124	15
21...	1330	14500	240	7.5	24.5	6	9.2	14	1.7	2500	224	17
AUG												
04...	1415	14200	280	7.8	24.0	10	10.5	18	4.0	300	146	14
17...	1045	19100	190	7.7	23.0	9	8.6	17	1.6	510	138	17
SEP												
01...	1200	8840	310	7.8	22.0	2	9.4	20	3.1	140	196	14
15...	1400	6290	320	8.1	22.0	4	9.8	14	3.1	590	183	19
28...	1400	9530	315	7.4	18.0	7	10.3	16	2.5	420	165	57

## SUSQUEHANNA RIVER BASIN

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01554000 SUSQUEHANNA RIVER AT SUNBURY, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT											
08...	.53	.10	.27	.37	.53	.05	360	2	1	0	10
22...	.36	.03	.40	.43	.79	.13	2100	1	0	<10	10
NOV											
04...	.73	.07	.34	.41	1.1	.05	170	0	1	10	0
19...	.57	.05	.19	.24	.81	.05	230	2	1	10	0
DEC											
02...	.58	.04	.23	.27	.85	.05	200	0	1	0	0
17...	.62	.04	.14	.18	.80	.04	290	1	1	<10	0
FEB											
19...	.74	.08	1.3	1.4	2.1	.40	7400	8	1	10	10
MAR											
04...	.77	.09	.23	.32	1.1	.07	530	1	1	<10	10
16...	.86	.10	.13	.23	1.1	.06	330	1	1	<10	0
30...	.70	.05	.78	.83	1.5	.04	300	0	0	0	0
APR											
14...	.70	.04	.09	.13	.83	.04	100	0	0	10	10
29...	.68	.06	.54	.60	1.3	.08	600	0	0	20	0
MAY											
12...	.33	.09	.29	.38	.71	.05	100	0	0	<10	0
25...	.46	.04	.24	.28	.74	.05	300	1	0	10	0
JUN											
09...	.40	.11	.29	.40	.80	.06	180	1	0	10	10
22...	.66	.00	.80	.80	1.5	.20	2500	5	1	30	10
JUL											
07...	.60	.03	.37	.40	1.0	.06	490	1	1	<10	0
21...	.48	.03	.32	.35	.83	.05	230	0	0	10	0
AUG											
04...	.36	.07	.63	.70	1.1	.07	560	0	1	<10	0
17...	.55	.05	.45	.50	1.1	.08	630	1	0	<10	10
SEP											
01...	.36	.11	.29	.40	.76	.06	210	1	0	<10	30
15...	.31	.10	.43	.53	.84	.06	180	3	0	10	0
28...	.87	.05	.48	.53	1.4	.08	880	2	0	10	8

DATE	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT											
08...	1200	9	450	4	30	2.4	0	.000	.000	8	562
22...	3900	4	280	1	30	3.4	0	--	--	8	2200
NOV											
04...	1300	9	350	0	20	3.2	4	.000	.000	9	440
19...	900	6	240	0	20	2.5	0	.000	.000	8	762
DEC											
02...	1000	5	240	0	10	2.6	0	.000	.000	5	352
17...	890	3	300	1	30	1.8	3	5.20	.000	5	486
FEB											
19...	17000	20	770	1	70	14	1	16.0	.000	605	331000
MAR											
04...	1300	4	190	1	20	2.6	1	.000	.000	31	6270
16...	1000	2	290	0	20	1.3	0	.000	.000	11	1060
30...	980	2	230	1	10	5.5	1	.000	.000	16	1620
APR											
14...	1000	1	310	0	10	1.5	0	2.50	.700	12	693
29...	1600	10	210	1	10	2.9	0	15.9	.000	53	5110
MAY											
12...	630	5	180	0	10	2.9	0	28.1	.000	5	232
25...	920	9	170	0	10	2.8	0	6.06	.000	29	2760
JUN											
09...	680	5	190	0	20	5.1	18	25.8	.000	12	680
22...	6000	14	620	0	50	9.9	--	.000	.000	176	44700
JUL											
07...	1700	6	200	0	30	5.9	0	12.0	.000	15	737
21...	1100	7	130	0	10	5.1	0	31.7	.000	17	666
AUG											
04...	1300	4	220	0	20	--	0	34.4	1.23	14	537
17...	2000	9	220	0	20	4.8	1	20.1	6.74	17	877
SEP											
01...	690	13	160	0	10	7.0	0	23.5	5.89	14	334
15...	490	12	160	0	10	2.6	1	33.1	1.80	19	323
28...	2600	14	450	0	30	5.9	0	7.03	.568	57	1470

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 mi<sup>2</sup> (140.4 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level. 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.

AVERAGE DISCHARGE.--36 years (1940-76), 85.1 ft<sup>3</sup>/s (2.41 m<sup>3</sup>/s), 21.32 in/yr (542 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,070 ft<sup>3</sup>/s (115 m<sup>3</sup>/s) June 22, 1972, gage height, 8.72 ft (2.658 m), from rating curve extended above 320 ft<sup>3</sup>/s (9.06 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 3.2 ft<sup>3</sup>/s (0.091 m<sup>3</sup>/s) Feb. 15, 1940, gage height, 0.42 ft (0.128 m), at site and datum then in use; minimum daily, 9.8 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) Jan. 5, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 692 ft<sup>3</sup>/s (19.6 m<sup>3</sup>/s) Jan. 26, gage height, 3.92 ft (1.195 m), no peak above base of 700 ft<sup>3</sup>/s (19.8 m<sup>3</sup>/s); minimum, 32 ft<sup>3</sup>/s (0.91 m<sup>3</sup>/s) Sept. 7, 9, 13, 15, gage height, 2.25 ft (0.686 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	309	109	105	102	233	123	213	91	90	63	41	36
2	270	107	98	91	224	120	149	81	90	61	39	42
3	234	105	93	98	175	120	157	78	81	58	38	41
4	214	102	95	93	159	121	163	73	77	58	39	37
5	194	100	93	87	144	116	154	71	76	57	39	37
6	179	95	93	83	137	112	144	71	80	55	41	36
7	165	95	91	82	132	109	135	71	74	70	43	34
8	155	112	86	83	128	105	127	70	70	59	59	33
9	148	95	89	80	120	103	122	69	69	55	41	33
10	142	120	91	78	117	104	119	68	67	52	49	51
11	148	102	84	78	132	104	113	71	66	68	40	41
12	133	165	82	77	122	102	106	73	65	54	38	37
13	125	186	82	80	119	120	103	66	63	52	55	34
14	122	155	82	108	124	105	100	65	62	52	44	34
15	117	148	80	84	116	99	96	65	62	52	76	33
16	115	145	80	78	129	101	95	98	67	50	61	57
17	128	139	77	76	189	98	93	117	61	50	47	85
18	330	133	76	73	179	96	89	152	58	47	44	55
19	182	128	73	68	211	96	86	108	58	45	43	46
20	172	125	75	66	200	96	85	113	80	46	42	44
21	161	148	74	66	194	108	83	136	97	45	43	42
22	155	125	72	66	202	97	81	116	95	45	42	41
23	148	117	71	65	183	93	80	111	108	67	40	41
24	142	115	70	66	168	92	79	108	82	51	40	39
25	142	112	69	65	154	91	106	106	71	45	40	40
26	133	107	145	245	153	90	114	108	67	42	44	58
27	128	112	96	370	147	115	83	103	65	43	44	79
28	122	105	84	273	136	120	79	95	72	44	40	61
29	120	102	78	235	129	100	76	93	68	56	39	51
30	117	100	90	210	---	99	73	101	68	50	37	54
31	112	---	96	190	---	101	---	89	---	45	37	---
TOTAL	5062	3609	2670	3516	4556	3256	3303	2837	2209	1637	1365	1352
MEAN	163	120	86.1	113	157	105	110	91.5	73.6	52.8	44.0	45.1
MAX	330	186	145	370	233	123	213	152	108	70	76	85
MIN	112	95	69	65	116	90	73	65	58	42	37	33
CFSM	3.01	2.21	1.59	2.08	2.90	1.94	2.03	1.69	1.36	.97	.81	.83
IN.	3.47	2.48	1.83	2.41	3.13	2.23	2.27	1.95	1.52	1.12	.94	.93

CAL YR 1975	TOTAL	44950	MEAN 123	MAX 1350	MIN 41	CFSM 2.27	IN 30.85
WTR YR 1976	TOTAL	35372	MEAN 96.6	MAX 370	MIN 33	CFSM 1.78	IN 24.28

## SHAMOKIN CREEK BASIN

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01554500 SHAMOKIN CREEK NEAR SHAMOKIN, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources

## WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)
NOV 25...	1300	9813	109	440	4.7	10.0	51	6.0	414	4	100
FEB 18...	1400	9813	175	440	5.1	5.0	70	11.0	324	0	84

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
NOV 25...	66	57	0	396	7.0	.50	.02	.96	.31	29000
FEB 18...	51	49	2	260	13	.72	.06	.78	.34	26000

## 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 mi<sup>2</sup> (780 km<sup>2</sup>).

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: 1933-34(M), 1936(M), 1940(M), 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 506.72 ft (154.448 m) above mean sea level. Prior to Feb. 1, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--47 years, 421 ft<sup>3</sup>/s (11.9 m<sup>3</sup>/s), 18.99 in/yr (482 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,600 ft<sup>3</sup>/s (980 m<sup>3</sup>/s) June 23, 1972, gage height, 14.85 ft (4.526 m), from floodmark in gage well, from rating curve extended above 6,000 ft<sup>3</sup>/s (170 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; minimum, 7.0 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s) Sept. 27, 1932; minimum daily, 21 ft<sup>3</sup>/s (0.59 m<sup>3</sup>/s) Aug. 30, Sept. 3, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,110 ft<sup>3</sup>/s (145 m<sup>3</sup>/s) Jan. 27, gage height, 7.26 ft (2.213 m); minimum, 83 ft<sup>3</sup>/s (2.35 m<sup>3</sup>/s) Sept. 8, gage height, 1.45 ft (0.442 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	756	357	371	841	555	574	698	222	380	498	203	113
2	670	343	360	652	501	532	631	258	360	362	197	111
3	579	329	339	600	408	532	575	227	350	318	175	109
4	492	319	325	546	423	659	543	208	370	295	163	107
5	442	305	312	475	400	662	516	197	360	295	157	103
6	404	292	312	437	353	575	481	193	350	274	154	101
7	371	286	309	445	346	532	454	186	340	269	203	97
8	346	329	292	433	357	504	423	179	340	284	338	94
9	339	295	366	375	332	491	396	171	330	321	268	93
10	339	430	829	322	322	478	374	167	330	280	220	106
11	322	654	628	367	691	489	359	166	314	451	195	117
12	295	806	561	402	852	478	336	185	292	511	178	105
13	276	1890	523	366	541	479	342	172	271	350	173	96
14	260	1410	496	602	745	504	342	163	265	309	222	92
15	248	1080	479	545	565	448	329	161	256	326	228	90
16	239	901	478	413	728	441	318	222	239	418	238	134
17	251	778	449	359	2520	439	305	802	286	349	221	218
18	1550	691	421	298	2670	401	292	584	265	295	193	279
19	795	624	364	405	2310	407	281	504	229	265	178	168
20	870	573	379	434	1900	410	270	429	490	244	166	137
21	772	560	367	354	1470	416	260	391	1490	230	158	129
22	675	523	349	332	1470	449	258	354	1310	240	153	121
23	614	467	328	296	1240	398	251	317	897	228	146	108
24	560	434	332	318	1010	384	240	294	710	285	139	102
25	532	415	300	321	914	382	246	282	647	240	132	97
26	501	396	424	388	823	375	270	329	536	204	137	105
27	459	446	660	2810	756	373	251	349	455	193	163	159
28	430	459	497	1500	686	399	231	293	408	188	146	258
29	411	389	433	908	619	355	221	268	388	193	132	207
30	400	364	443	734	---	339	211	270	448	335	122	165
31	375	---	684	609	---	339	---	320	---	242	115	---
TOTAL	15573	17145	13410	17887	26507	14244	10704	8863	13706	9292	5613	3921
MEAN	502	572	433	577	914	459	357	286	457	300	181	131
MAX	1550	1890	829	2810	2670	662	698	802	1490	511	338	279
MIN	239	286	292	296	322	339	211	161	229	188	115	90
CFSM	1.67	1.90	1.44	1.92	3.04	1.52	1.19	.95	1.52	1.00	.60	.44
IN.	1.92	2.12	1.66	2.21	3.28	1.76	1.32	1.10	1.69	1.15	.69	.48

CAL YR 1975 TOTAL 211127 MEAN 578 MAX 7210 MIN 72 CFSM 1.92 IN 26.09  
WTR YR 1976 TOTAL 156865 MEAN 429 MAX 2810 MIN 90 CFSM 1.43 IN 19.39



## 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 mi<sup>2</sup> (420 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level (revised). Oct. 1, 1929 to Feb. 11, 1930, nonrecording gage, and Feb. 12, 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.

AVERAGE DISCHARGE.--47 years, 220 ft<sup>3</sup>/s (6.23 m<sup>3</sup>/s), 18.44 in/yr (468 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69,900 ft<sup>3</sup>/s (1,980 m<sup>3</sup>/s) June 22, 1972, gage height, 26.62 ft (8.114 m), from floodmark in gage shelter, from rating curve extended above 4,000 ft<sup>3</sup>/s (113 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 1.3 ft<sup>3</sup>/s (0.037 m<sup>3</sup>/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 ft<sup>3</sup>/s (53.8 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	1400	2,130 60.3	5.77 1.759	Jan. 26	2330	*4,990 141	*8.43 2.569

Minimum discharge, 38 ft<sup>3</sup>/s (1.08 m<sup>3</sup>/s) Sept. 9, gage height, 1.44 ft (0.439 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	421	135	171	473	405	212	884	124	131	155	96	45
2	343	130	166	413	405	202	866	166	139	124	81	47
3	275	125	153	367	374	215	639	145	124	101	72	51
4	232	120	145	343	350	222	505	137	112	107	64	48
5	205	115	139	293	293	220	417	126	102	104	60	45
6	184	109	137	268	247	212	353	124	98	89	58	44
7	169	107	135	280	220	202	312	122	101	102	61	41
8	154	119	128	236	210	194	277	117	93	113	93	39
9	152	113	137	170	200	192	247	112	89	105	107	39
10	145	122	175	160	190	194	228	109	83	91	91	63
11	157	187	168	170	374	199	215	107	79	104	91	86
12	160	209	149	150	367	199	197	117	78	131	75	56
13	135	970	141	140	271	231	182	105	71	99	73	47
14	124	765	139	210	274	259	173	98	70	92	84	44
15	118	537	137	190	209	245	164	96	70	88	133	42
16	112	417	141	170	233	236	157	96	75	83	367	91
17	111	339	137	160	986	233	149	265	72	77	189	155
18	1380	293	135	150	554	207	139	296	67	72	135	189
19	874	262	117	140	537	204	131	253	64	70	107	131
20	569	236	166	130	469	197	128	222	78	67	92	105
21	433	250	139	125	397	194	129	222	135	67	81	96
22	361	286	162	120	405	197	119	202	207	69	75	86
23	303	228	171	115	374	173	115	180	343	83	70	78
24	262	212	119	110	318	168	109	168	277	139	63	72
25	240	204	131	110	296	166	115	157	171	93	58	67
26	218	192	441	1350	274	162	225	166	129	71	57	77
27	192	192	585	2860	259	175	162	149	102	64	56	164
28	176	189	367	1520	242	473	137	129	102	61	55	239
29	163	171	293	705	225	385	128	119	164	104	54	217
30	154	162	274	501	---	346	122	147	129	212	49	194
31	141	---	360	385	---	312	---	143	---	124	45	---
TOTAL	8663	7496	5958	12514	10358	7026	7724	4719	3555	3061	2792	2698
MEAN	279	250	192	404	357	227	257	152	119	98.7	90.1	89.9
MAX	1380	970	585	2860	986	473	884	296	343	212	367	239
MIN	111	107	117	110	190	162	109	96	64	61	45	39
CFSM	1.72	1.54	1.19	2.49	2.20	1.40	1.59	.94	.73	.61	.56	.55
IN.	1.99	1.72	1.37	2.87	2.38	1.61	1.77	1.08	.82	.70	.64	.62

CAL YR 1975	TOTAL	133775	MEAN	367	MAX	14200	MIN	32	CFSM	2.27	IN	30.72
WTR YR 1976	TOTAL	76564	MEAN	209	MAX	2860	MIN	39	CFSM	1.29	IN	17.58

## EAST MAHANTANGO CREEK BASIN

01555500 EAST MAHANTANGO CREEK NEAR DALMATIA, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
OCT 21...	1230	9813	430	120	6.8	12.0	11	10.3	65	0	0
FEB 29...	1140	9813	222	120	6.8	8.0	3	12.3	59	--	0
MAY 10...	1115	9813	109	135	8.0	16.0	2	10.3	61	0	0
AUG 11...	1200	9813	93	180	7.5	22.0	15	8.6	66	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL RESI- DUAL CHLO- RINE (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
OCT 21...	13	7.5	16	30	.00	8.0	134	3.8	.04	.04	.05
FEB 29...	7.0	7.7	16	34	--	7.0	86	1.3	.09	.04	.06
MAY 10...	13	6.5	20	30	--	8.0	--	1.3	.03	.04	.05
AUG 11...	19	4.5	32	42	--	12	170	1.9	.03	.04	.06

DATE	TOTAL ALUM- INIUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 21...	--	--	--	--	430	--	--	--	--	3.0
FEB 29...	100	<3	<10	20	280	<50	160	40	10	--
MAY 10...	110	<3	<10	<10	140	<50	20	<10	<10	--
AUG 11...	500	<3	<10	10	570	<50	80	<10	<10	--

## JUNIATA RIVER BASIN

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01555860 BEAVERDAM BRANCH JUNIATA RIVER AT HOLLIDAYSBURG, PA

LOCATION.--Lat 40°25'54", long 78°21'30", Blair County, Hydrologic Unit 02050302, 2000 ft (610 m) upstream from mouth, and 0.8 mi (1.3 km) east of Hollidaysburg.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 23...	1155	9813	180	6.7	13.0	8	11.0	81	0	0	24
NOV 18...	1115	9813	180	6.7	7.5	6	12.0	92	--	0	28
DEC 03...	1150	9813	230	6.8	3.0	11	12.5	92	0	0	35
JAN 22...	1145	9813	280	6.8	.5	8	14.0	231	0	0	32
FEB 24...	1230	9813	170	6.5	5.0	10	12.1	100	0	0	21
APR 14...	1515	9813	220	6.7	11.0	7	12.3	105	0	0	29
MAY 20...	1120	9813	360	6.7	11.0	5	10.7	120	0	0	31
JUN 17...	1110	9813	--	--	--	--	--	--	--	--	--
JUL 21...	1130	9813	370	6.7	20.0	7	7.1	128	--	0	41

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 23...	4.5	36	52	11	--	1.3	.07	.46	.21	680	4.0
NOV 18...	5.0	48	66	16	--	1.4	.13	.90	.33	740	2.0
DEC 03...	1.0	70	82	21	--	1.7	.11	1.5	.63	1070	--
JAN 22...	37	54	74	10	--	2.0	.10	1.0	.71	940	--
FEB 24...	11	28	50	14	--	1.9	.03	.31	.22	1200	--
APR 14...	7.5	40	58	20	--	1.9	.04	1.0	.51	580	--
MAY 20...	10	48	62	22	--	1.8	.15	.88	.53	770	--
JUN 17...	8.0	--	58	17	--	--	--	--	--	--	--
JUL 21...	6.0	62	76	27	288	3.0	.44	.63	.65	940	--

## 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 mi<sup>2</sup> (754 km<sup>2</sup>).

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: 1954(M), 1960(M), 1961(M).

GAGE.--Water-stage recorder. Datum of gage is 831.78 ft (253.53 m) above mean sea level (Penn Central Railroad bench mark). Prior to Aug. 14, 1928, nonrecording gage at same site and datum.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Regulation at low flow by mill above station.

AVERAGE DISCHARGE.--60 years, 391 ft<sup>3</sup>/s (11.1 m<sup>3</sup>/s), 18.25 in/yr (464 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,600 ft<sup>3</sup>/s (1,350 m<sup>3</sup>/s) Mar. 18, 1936, gage height, 18.58 ft (5.663 m), from floodmark in gage shelter, from rating curve extended above 7,300 ft<sup>3</sup>/s (207 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 13 ft<sup>3</sup>/s (0.368 m<sup>3</sup>/s) July 24, 1934, gage height, 0.97 ft (0.296 m); minimum daily, 31 ft<sup>3</sup>/s (0.878 m<sup>3</sup>/s) Dec. 24, 25, 1950.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 19.1 ft (5.82 m) June 1, 1889, from floodmark, discharge about 35,500 ft<sup>3</sup>/s (1,010 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,560 ft<sup>3</sup>/s (186 m<sup>3</sup>/s) Feb. 17, gage height, 11.93 ft (3.636 m); minimum, 73 ft<sup>3</sup>/s (2.07 m<sup>3</sup>/s) Sept. 16, gage height, 2.27 ft (0.692 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	530	252	212	1360	310	404	592	177	210	240	154	112
2	482	241	189	843	270	378	511	211	195	195	143	108
3	414	233	182	720	200	688	498	183	185	176	130	115
4	372	236	173	587	200	543	544	172	170	188	120	106
5	337	223	168	452	235	494	594	166	155	172	111	100
6	278	198	165	378	210	456	502	154	150	154	111	94
7	217	196	168	391	185	424	470	162	160	152	112	90
8	196	206	160	327	170	410	428	158	170	148	671	87
9	721	206	191	256	175	424	387	150	150	139	716	84
10	663	250	351	296	180	544	358	148	135	128	377	84
11	511	245	264	303	267	507	339	148	130	240	285	109
12	417	433	232	334	861	622	313	160	125	1070	236	89
13	371	671	232	332	1190	594	294	145	120	464	204	81
14	333	482	243	305	1250	552	282	139	115	339	185	79
15	291	410	261	222	1770	522	268	139	110	279	251	77
16	276	344	305	195	2250	530	257	162	110	263	477	104
17	333	316	289	190	5670	440	246	265	135	268	400	273
18	1430	297	298	190	3600	443	235	193	120	212	267	979
19	837	278	266	205	2600	457	223	197	115	186	221	308
20	1230	278	294	230	2010	517	214	182	540	166	189	212
21	896	256	278	235	1430	587	209	175	2900	154	168	195
22	739	227	255	220	1330	523	221	170	1300	241	153	178
23	608	210	238	210	966	503	207	170	640	433	141	142
24	518	210	198	220	768	465	202	170	531	390	131	128
25	454	209	206	230	623	429	206	185	437	323	124	115
26	395	198	397	490	576	392	245	200	351	253	118	118
27	352	211	499	890	513	421	204	190	288	218	204	280
28	320	209	383	970	463	341	192	180	250	196	255	327
29	298	187	338	600	432	330	184	160	238	184	175	208
30	284	182	440	440	---	350	176	170	231	180	141	213
31	261	---	830	360	---	335	---	190	---	172	120	---
TOTAL	15364	8094	8705	12981	30704	14625	9601	5371	10466	7923	7090	5195
MEAN	496	270	281	419	1059	472	320	173	349	256	229	173
MAX	1430	671	830	1360	5670	688	594	265	2900	1070	716	979
MIN	196	182	160	190	170	330	176	139	110	128	111	77
CFSM	1.70	.93	.97	1.44	3.64	1.62	1.10	.59	1.20	.88	.79	.59
IN.	1.96	1.03	1.11	1.66	3.93	1.87	1.23	.69	1.34	1.01	.91	.66

CAL YR 1975 TOTAL 186352 MEAN 511 MAX 4940 MIN 71 CFSM 1.76 IN 23.82  
WTR YR 1976 TOTAL 136119 MEAN 372 MAX 5670 MIN 77 CFSM 1.28 IN 17.40

NOTE.--No gage-height record Feb. 11-19, May 21 to June 23.

## JUNIATA RIVER BASIN

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01556010 FRANKSTOWN BRANCH JUNIATA RIVER NEAR WILLIAMSBURG, PA

LOCATION.--Lat 40°28'34", long 78°10'39", Blair County, Hydrologic Unit 02050302, 300 ft (91 m) upstream from Clover Creek and 1.6 mi (2.6 km) northeast of Williamsburg.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY C02 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 23...	1050	9813	200	6.7	13.2	9	10.0	91	0	0	26
NOV 18...	1015	9813	200	7.0	9.0	6	11.5	96	--	0	29
DEC 03...	1030	9813	270	7.0	6.0	4	12.0	120	0	0	33
JAN 22...	1230	9813	260	7.2	3.0	3	13.7	150	0	0	35
FEB 24...	1020	9813	180	--	--	9	--	108	0	0	24
24...	1130	9813	170	6.7	4.0	9	12.7	100	0	0	--
APR 12...	1115	9813	--	--	--	--	--	122	--	--	42
14...	1215	9813	250	7.5	13.0	3	13.3	108	0	0	33
MAY 12...	1115	9813	460	--	13.5	3	11.5	122	0	0	42
JUL 21...	1230	9813	430	7.2	22.0	6	8.5	130	--	0	42

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 23...	6.0	78	32	13	1.9	.05	.09	.09	630	6.0
NOV 18...	5.5	86	40	22	1.8	.04	.09	.12	260	4.0
DEC 03...	9.0	110	54	33	2.5	.08	.24	.20	--	--
JAN 22...	15	86	46	34	2.2	.05	.28	.17	190	--
FEB 24...	12	58	32	14	2.0	.02	.11	.13	500	--
24...	9.5	60	32	14	2.0	.04	.10	.13	480	--
APR 12...	4.0	--	36	41	2.2	.13	.13	--	210	--
14...	6.0	80	36	23	2.0	.09	.12	.14	220	--
MAY 12...	4.0	118	36	41	2.2	.13	.13	.24	210	--
JUL 21...	6.0	112	66	24	3.2	.02	.08	.21	520	--



## JUNIATA RIVER BASIN

01556480 LITTLE JUNIATA RIVER AT TIPTON, PA

LOCATION.--Lat 40°37'39", long 78°17'42", Blair County, Hydrologic Unit 02050302, at bridge on U.S. Route 220, 0.6 mi (1.0 km) southeast of Tipton and 2.1 mi (3.4 km) upstream from Fry Hollow.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 23...	1330	9813	120	6.7	13.0	3	--	43	0	0	14
NOV 18...	1235	9813	120	6.8	9.5	2	12.5	54	--	0	15
DEC 03...	1300	9813	170	7.0	3.0	2	13.1	62	0	0	16
JAN 22...	1035	9813	170	6.8	.5	1	14.1	54	0	0	15
FEB 24...	0900	9813	120	--	--	4	--	108	0	0	14
APR 14...	1500	9813	160	8.7	13.0	2	14.5	56	0	0	18
MAY 12...	0845	9813	310	--	11.5	4	9.2	108	0	0	24
JUL 21...	1045	9813	220	7.0	21.0	1	9.1	65	--	0	22

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 23...	1.5	32	22	13	--	.90	.05	.15	.17	200	4.0
NOV 18...	4.0	38	24	13	--	.94	.06	.21	.31	210	2.0
DEC 03...	5.0	146	32	18	--	1.4	.13	.57	.99	--	--
JAN 22...	4.0	40	32	22	--	1.2	.08	.59	.55	130	--
FEB 24...	18	32	18	11	--	1.0	.05	.22	.17	170	--
APR 14...	2.5	38	18	15	--	1.7	.24	.06	.45	130	--
MAY 12...	11	66	34	26	--	3.2	.88	1.3	1.0	220	--
JUL 21...	2.2	48	20	18	148	1.8	.06	.05	.44	170	--

## 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 1.5 mi (2.1 km) upstream from mouth.  
DRAINAGE AREA.--44.1 mi<sup>2</sup> (114.2 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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). Complete table of revised figures of discharge, in cubic feet per second, for water year 1974, superseding those published in 1974 annual report, are given herein.

GAGE.--Water-stage recorder. Datum of gage is 921.80 ft (280.965 m) above mean sea level. 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. 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.

AVERAGE DISCHARGE.--32 years, 75.5 ft<sup>3</sup>/s (2.14 m<sup>3</sup>/s), 23.25 in/yr (591 mm/yr), adjusted for diversion from October 1950 to November 1952.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,140 ft<sup>3</sup>/s (146 m<sup>3</sup>/s) Nov. 25, 1950, gage height, 7.5 ft (2.286 m), from floodmarks, at site and datum then in use, from rating curve extended above 2,100 ft<sup>3</sup>/s (59.5 m<sup>3</sup>/s), on basis of contracted-opening measurement of peak flow; minimum, 1.4 ft<sup>3</sup>/s (0.040 m<sup>3</sup>/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 (4.572 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 ft<sup>3</sup>/s (26.6 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)
Feb. 17	1500	1,240	35.1	3.69	1.125	June 21	2130	*2,870	81.3	5.24	1.597

Minimum discharge, 7.0 ft<sup>3</sup>/s (0.198 m<sup>3</sup>/s) Sept. 8, 9, 10, 14, 15, gage height, 0.38 ft (0.116 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	47	48	197	100	77	154	30	23	52	15	8.6
2	83	45	44	141	67	71	136	31	26	45	14	8.6
3	64	44	43	118	69	71	122	29	21	41	13	8.9
4	53	42	41	97	82	179	118	28	19	38	13	8.2
5	47	40	45	102	72	129	102	26	18	36	13	7.8
6	42	38	41	92	77	114	88	25	18	32	16	7.5
7	38	38	41	149	71	102	81	26	19	47	50	7.2
8	35	39	39	95	75	90	74	24	18	38	23	7.2
9	195	36	57	106	70	85	67	24	17	31	18	7.0
10	141	92	112	116	69	85	61	23	17	28	15	10
11	118	74	84	99	182	102	59	23	18	38	14	9.2
12	102	203	74	94	154	85	55	24	17	31	13	9.2
13	90	223	69	84	120	110	51	22	16	26	13	9.6
14	81	154	66	127	146	94	48	22	21	24	15	7.2
15	72	116	66	77	136	88	46	22	18	25	16	7.2
16	71	95	71	66	403	88	44	22	20	23	15	13
17	90	81	67	56	1080	82	42	22	31	21	13	20
18	197	71	69	50	853	85	39	26	21	20	11	16
19	141	59	59	66	671	84	38	24	26	19	11	11
20	151	61	58	74	512	82	36	22	369	19	10	12
21	122	60	56	73	349	94	35	21	964	19	10	13
22	110	56	57	71	303	88	36	20	1160	19	10	10
23	99	51	58	64	223	81	34	19	421	19	9.6	8.9
24	85	47	56	79	179	79	34	19	229	19	14	8.6
25	78	46	74	67	144	78	34	19	154	17	10	7.8
26	72	44	110	132	122	72	42	35	108	16	10	10
27	65	56	100	258	106	75	34	24	82	15	12	65
28	60	49	64	268	94	74	31	21	67	15	10	33
29	57	44	58	233	84	63	30	20	63	16	9.6	20
30	53	43	90	179	---	65	29	22	60	17	8.6	17
31	49	---	149	136	---	71	---	22	---	15	8.6	---
TOTAL	2749	2094	2066	3566	6613	2743	1800	737	4061	821	433.4	388.7
MEAN	88.7	69.8	66.6	115	228	88.5	60.0	23.8	135	26.5	14.0	13.0
MAX	197	223	149	268	1080	179	154	35	1160	52	50	65
MIN	35	36	39	50	67	63	29	19	16	15	8.6	7.0
CFSM	2.01	1.58	1.51	2.61	5.17	2.01	1.36	.54	3.06	.60	.32	.29
IN.	2.32	1.77	1.74	3.01	5.58	2.31	1.52	.62	3.43	.69	.37	.33

CAL YR 1975	TOTAL	37597.8	MEAN	103	MAX	1360	MIN	9.8	CFSM	2.34	IN	31.71
WTR YR 1976	TOTAL	28072.1	MEAN	76.7	MAX	1160	MIN	7.0	CFSM	1.74	IN	23.68

## JUNIATA RIVER BASIN

01557500 BALD EAGLE CREEK AT TYRONE, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
NOV 18...	1300	9813	71	70	6.8	9.5	<1	13.5	36	--	0
FEB 24...	1345	9813	E179	60	6.7	7.0	5	12.1	27	0	0
APR 14...	1415	9813	E48	80	7.0	13.0	1	11.5	24	0	0
MAY 20...	1030	9813	22	170	7.0	11.5	1	11.1	64	0	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINEITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 18...	9.5	3.0	24	14	4.0	.40	.04	.02	.04	140	1.0
FEB 24...	8.0	1.5	20	8.0	4.0	.42	.03	.04	.07	90	--
APR 14...	88	.5	24	10	4.0	.54	.02	.04	.07	130	--
MAY 20...	16	6.0	42	14	6.0	.70	.03	.03	.08	150	--

## 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. Water-quality sampling site 0.4 mi (0.6 km) downstream.

DRAINAGE AREA.--220 mi<sup>2</sup> (570 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 751.15 ft (228.951 m) above mean sea level.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--38 years, 367 ft<sup>3</sup>/s (10.4 m<sup>3</sup>/s), 22.65 in/yr (575 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,600 ft<sup>3</sup>/s (810 m<sup>3</sup>/s) June 23, 1972, gage height, 16.98 ft (5.176 m), from rating curve extended above 5,600 ft<sup>3</sup>/s (159 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 15.77 ft (4.807 m); minimum, 45 ft<sup>3</sup>/s (1.27 m<sup>3</sup>/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 ft<sup>3</sup>/s (1,130 m<sup>3</sup>/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft<sup>3</sup>/s (85.0 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 17	1700	6,090 172	7.43 2.265	June 21	2400	*7,160 203	*8.00 2.438

Minimum discharge, 95 ft<sup>3</sup>/s (2.69 m<sup>3</sup>/s) Sept. 6, 7, 8, gage height, 1.83 ft (0.558 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	488	284	213	892	384	437	664	160	149	311	130	101
2	452	275	192	664	344	405	585	182	209	271	122	101
3	377	263	189	592	302	399	543	163	149	251	117	101
4	331	251	176	520	315	868	549	157	135	239	115	101
5	304	243	173	432	302	657	514	152	128	239	115	99
6	284	231	176	353	293	585	454	146	122	213	122	97
7	262	224	176	330	271	525	415	149	128	251	437	97
8	244	231	166	300	271	481	379	152	122	243	259	99
9	675	217	206	280	263	454	349	138	118	202	173	99
10	570	349	399	275	255	448	325	135	115	185	152	110
11	493	363	302	289	734	537	315	135	115	368	138	115
12	442	611	267	293	713	464	289	146	112	415	130	106
13	407	860	255	271	839	514	267	130	108	255	127	106
14	372	630	255	394	1140	464	255	128	128	217	141	101
15	348	498	263	311	884	437	243	128	115	220	166	101
16	339	415	293	280	1800	432	235	138	108	199	166	135
17	420	368	271	255	5170	432	220	185	160	185	132	329
18	932	329	271	199	4270	384	213	163	120	169	122	206
19	706	302	243	190	3170	405	202	169	112	160	117	138
20	892	284	230	190	2440	432	195	157	1010	157	112	120
21	727	284	220	200	1740	481	192	160	2100	152	110	143
22	657	263	210	190	1550	476	202	149	4090	166	108	117
23	579	239	200	190	1200	437	192	143	1570	166	108	108
24	514	224	199	190	980	432	182	141	972	160	112	103
25	470	217	202	217	790	420	192	141	748	145	106	101
26	437	206	275	297	678	394	224	185	567	135	106	103
27	394	235	353	592	604	389	189	163	454	130	189	384
28	368	220	275	503	531	415	176	141	384	130	115	373
29	344	195	251	459	481	344	166	138	399	135	108	243
30	325	189	297	432	---	344	163	135	349	138	103	255
31	297	---	585	405	---	344	---	143	---	130	101	---
TOTAL	14450	9500	7783	10985	32714	14236	9089	4652	15096	6337	4359	4392
MEAN	466	317	251	354	1128	459	303	150	503	204	141	146
MAX	932	860	585	892	5170	868	664	185	4090	415	437	384
MIN	244	189	166	190	255	344	163	128	108	130	101	97
CFSM	2.12	1.44	1.14	1.61	5.13	2.09	1.38	.68	2.29	.93	.64	.66
IN.	2.44	1.61	1.32	1.86	5.53	2.41	1.54	.79	2.55	1.07	.74	.74

CAL YR 1975	TOTAL	167994	MEAN 460	MAX 5220	MIN 89	CFSM 2.09	IN 28.41
WTR YR 1976	TOTAL	133593	MEAN 365	MAX 5170	MIN 97	CFSM 1.66	IN 22.59

## JUNIATA RIVER BASIN

01558000 LITTLE JUNIATA RIVER AT SPRUCE CREEK, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA.MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)
OCT 30...	1200	9813	329	110	7.5	10.0	4	13.0	108	0	0
NOV 17...	1355	9813	353	140	7.7	9.0	--	14.0	82	0	0
DEC 12...	1515	9813	267	180	--	4.0	7	10.0	34	--	--
JAN 21...	1050	9813	E200	180	7.1	3.0	1	15.0	93	0	0
28...	1315	9813	476	240	7.5	12.0	2	14.0	120	0	0
FEB 24...	1015	9813	940	120	--	--	5	--	73	0	0
APR 01...	1445	9813	671	150	7.0	9.0	20	11.0	87	0	0
MAY 12...	1015	9813	155	260	--	12.5	3	11.5	120	0	0
JUN 29...	1240	9813	399	200	7.5	19.0	23	10.0	95	0	0
JUL 22...	0940	9813	166	260	6.3	17.0	3	7.2	100	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 30...	--	--	72	20	8.0	1.2	.06	.03	.11	140	--
NOV 17...	19	8.5	58	10	8.0	1.1	.04	.02	.11	130	2.0
DEC 12...	20	<.5	58	30	23	1.5	.04	.28	.30	240	--
JAN 21...	25	7.5	68	30	13	1.7	.09	.15	.18	90	--
28...	26	13	82	24	11	1.4	.04	.05	.20	1090	--
FEB 24...	17	7.0	50	18	7.0	1.2	.03	.08	.12	180	--
APR 01...	18	5.0	236	114	10	1.3	.07	.10	.18	480	--
MAY 12...	28	12	88	26	12	1.6	.09	.12	.29	80	--
JUN 29...	20	10	68	14	9.0	1.4	.04	.06	.15	940	--
JUL 22...	29	6.5	80	20	12	1.7	.05	.11	.25	230	--



## 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 m<sup>2</sup> (2,113 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 599.69 ft (182.786 m) above mean sea level.

REMARKS.--Records good.

AVERAGE DISCHARGE.--35 years, 1,067 ft<sup>3</sup>/s (30.2 m<sup>3</sup>/s), 17.76 in/yr (451 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,000 ft<sup>3</sup>/s (1,610 m<sup>3</sup>/s) June 23, 1972, gage height, 20.03 ft (6.105 m); from rating curve extended above 20,000 ft<sup>3</sup>/s (566 m<sup>3</sup>/s); minimum observed, 14 ft<sup>3</sup>/s (0.40 m<sup>3</sup>/s) Feb. 8, 1948, Aug. 2, 1954; minimum gage height observed, 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 ft<sup>3</sup>/s (1,930 m<sup>3</sup>/s) by computation of flow over dam and runoff comparison with downstream stations.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,500 ft<sup>3</sup>/s (156 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 17	2245	*14,000 396	*10.01 3.05	June 22	0715	8,880 251	7.90 2.41

Minimum discharge, 306 ft<sup>3</sup>/s (8.67 m<sup>3</sup>/s) Sept. 7, 8, 9, 10, gage height, 1.28 ft (0.390 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1610	846	650	2720	1080	1190	1560	565	576	824	420	342
2	1460	819	650	2040	1000	1120	1470	598	1020	728	390	342
3	1260	788	609	1680	844	1080	1380	581	734	650	390	346
4	1120	762	598	1490	919	1800	1370	548	626	650	380	333
5	1030	757	581	1190	898	1590	1480	526	576	638	375	333
6	948	702	576	1000	818	1390	1290	521	554	598	375	319
7	820	682	576	1050	818	1280	1200	505	559	576	905	315
8	750	697	559	1060	759	1190	1110	495	521	638	1210	315
9	1750	675	614	857	779	1150	1040	480	490	565	740	315
10	2100	766	1120	824	746	1150	982	470	470	526	592	333
11	1560	1020	919	837	1610	1330	940	470	450	505	521	360
12	1340	1050	805	824	2500	1310	891	495	435	1510	480	337
13	1220	2010	766	779	2020	1350	844	470	420	961	460	324
14	1120	1480	759	1050	3560	1400	811	455	435	728	480	319
15	1020	1240	772	1000	2630	1280	785	455	450	638	668	310
16	973	1100	837	863	3930	1230	766	465	470	632	779	370
17	979	1010	831	792	11200	1260	740	592	532	603	587	716
18	3210	940	805	662	11600	1130	716	559	485	543	500	1140
19	2280	884	753	662	7460	1110	692	559	465	500	460	565
20	2730	844	766	734	5430	1160	674	526	2370	470	435	465
21	2320	831	785	753	3850	1150	668	515	5140	455	420	460
22	2010	818	740	710	3410	1380	680	500	6820	455	405	430
23	1750	740	704	656	2820	1200	674	475	3180	638	380	385
24	1530	704	650	674	2280	1180	644	465	2070	626	390	365
25	1380	686	644	692	2010	1140	650	465	1630	632	375	351
26	1260	668	779	779	1720	1090	716	753	1290	526	375	351
27	1150	680	1180	2040	1560	1030	662	686	1060	475	521	603
28	1070	710	1010	1810	1400	1100	609	537	919	455	480	837
29	1000	644	877	1380	1280	961	587	495	891	445	410	609
30	953	620	884	1250	---	933	570	526	870	450	370	559
31	886	---	1590	1140	---	954	---	609	---	475	346	---
TOTAL	44589	26173	24389	33998	80931	37618	27201	16361	36508	19115	15619	13149
MEAN	1438	872	787	1097	2791	1213	907	528	1217	617	504	438
MAX	3210	2010	1590	2720	11600	1800	1560	753	6820	1510	1210	1140
MIN	750	620	559	656	746	933	570	455	420	445	346	310
CFSM	1.76	1.07	.96	1.34	3.42	1.49	1.11	.65	1.49	.76	.62	.54
IN.	2.03	1.19	1.11	1.55	3.69	1.71	1.24	.75	1.66	.87	.71	.60

CAL YR 1975 TOTAL 500947 MEAN 1372 MAX 16100 MIN 295 CFSM 1.68 IN 22.84  
WTR YR 1976 TOTAL 375651 MEAN 1026 MAX 11600 MIN 310 CFSM 1.26 IN 17.13

## JUNIATA RIVER BASIN

01559000 JUNIATA RIVER AT HUNTINGDON, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
NOV 17...	1500	9813	1010	170	7.5	9.0	3	12.0	100	0	0
JAN 21...	1140	9813	750	240	7.3	1.0	3	13.0	90	0	0
FEB 17...	1225	9813	12000	120	7.0	5.0	65	13.0	50	0	0
MAY 26...	1255	9813	919	310	6.8	16.0	6	9.0	120	0	0
AUG 23...	1430	9813	385	400	8.6	25.5	2	17.1	128	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	26	8.5	82	14	11	1.6	.05	.02	.10	230	3.0
JAN 21...	34	1.0	106	38	19	1.7	.08	.09	.11	110	--
FEB 17...	19	.5	48	20	9.0	1.5	.08	.13	1.2	7850	--
MAY 26...	33	9.0	104	24	16	1.6	.07	.18	.17	430	--
AUG 23...	38	8.0	118	28	20	1.6	.02	.04	.16	230	--

## 01559700 BUFFALO RUN TRIBUTARY NEAR MANNS CHOICE, PA

LOCATION.--Lat 39°58'40", long 78°37'08", Bedford County, Hydrologic Unit 02050303, at left downstream end of bridge on State Highway 96, 2,000 ft (610 m) upstream from mouth, 2.3 mi (3.7 km) south of Manns Choice, and 11 mi (18 km) southwest of Bedford.

DRAINAGE AREA.--5.28 mi<sup>2</sup> (13.68 km<sup>2</sup>).

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR PA-70: 1968-69(P). WDR PA-72: 1970(M).

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 1,230 ft (375 m), from topographic map.

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

AVERAGE DISCHARGE.--15 years, 5.26 ft<sup>3</sup>/s (0.149 m<sup>3</sup>/s), 13.53 in/yr (344 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,010 ft<sup>3</sup>/s (28.6 m<sup>3</sup>/s) Sept. 28, 1967, gage height, 4.26 ft (1.298 m), from rating curve extended above 150 ft<sup>3</sup>/s (4.25 m<sup>3</sup>/s); no flow Aug. 4-11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 75 ft<sup>3</sup>/s (2.12 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0245	82 2.3	1.84 0.561	July 11	1000	*427 12.1	*3.06 0.933
Feb. 16	1800	107 3.0	2.01 0.613				

Minimum discharge, 0.47 ft<sup>3</sup>/s (0.013 m<sup>3</sup>/s) Sept. 6, 7, 8, 9, 10, gage height, 0.29 ft (0.088 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	4.0	1.2	28	4.1	4.5	12	1.4	1.1	.60	.54	.54
2	6.8	3.7	1.1	21	3.2	4.1	11	1.4	1.2	.60	.54	.54
3	5.3	3.4	1.1	16	2.6	3.7	11	1.4	1.1	.47	.54	.54
4	4.5	3.4	.98	13	2.5	5.3	16	1.2	.87	.47	.54	.54
5	3.4	3.4	.98	11	2.5	4.1	12	1.2	.77	.41	.54	.54
6	2.8	3.4	.98	11	2.5	3.7	12	1.1	.87	.36	.61	.47
7	2.5	3.4	.87	6.6	5.3	3.4	12	1.2	.98	.41	3.6	.47
8	2.2	3.1	.87	4.5	1.4	3.4	10	1.1	.77	.41	2.6	.47
9	7.4	2.8	1.8	3.5	2.0	3.4	8.7	1.1	.77	.41	1.2	.47
10	5.3	4.5	2.0	3.2	2.0	4.1	7.4	1.1	.68	.32	.85	1.0
11	3.1	3.7	1.2	3.0	30	6.8	6.3	1.1	.68	38	.77	.61
12	2.2	26	1.1	2.8	14	5.8	5.8	1.1	.68	11	.69	.61
13	2.2	13	1.4	2.7	23	14	4.9	.98	.60	4.9	.69	.61
14	2.2	10	1.2	4.1	22	10	4.5	.98	.60	4.2	.94	.61
15	2.0	8.7	1.2	3.4	20	10	4.1	.98	.53	3.6	.77	.61
16	2.0	6.8	1.4	2.5	49	12	3.7	6.8	.53	2.3	.69	2.7
17	16	5.3	1.2	2.8	55	10	3.1	2.2	.77	1.7	.61	9.1
18	29	4.5	1.2	3.2	45	10	2.8	2.0	.53	1.2	.61	2.6
19	13	3.4	1.2	2.3	32	8.1	2.5	1.6	.53	.94	.54	1.7
20	28	3.1	1.1	2.0	22	6.8	2.2	1.1	7.4	.77	.54	1.3
21	17	3.1	1.2	1.8	17	7.4	2.2	.98	4.1	.77	.54	1.1
22	15	2.2	1.1	1.8	15	5.8	2.5	.98	2.8	.85	.54	.94
23	12	2.0	1.1	1.8	12	4.9	2.0	.87	1.4	.85	.54	.77
24	10	1.8	1.1	1.8	10	4.5	1.8	.87	1.2	.77	.54	.77
25	9.2	1.6	1.0	1.8	8.1	4.5	2.0	.98	1.2	.61	.54	.77
26	8.0	1.4	4.0	3.1	6.8	4.5	2.0	1.1	1.1	.54	1.2	.85
27	7.0	1.6	6.0	19	6.3	5.8	1.6	.98	.87	.54	1.0	2.2
28	6.1	1.4	4.5	5.8	5.3	4.9	1.6	.77	.77	1.1	.69	2.2
29	5.3	1.1	3.6	4.5	4.9	4.1	1.4	.98	.68	1.2	.61	1.4
30	4.8	1.1	4.5	4.5	---	6.3	1.4	2.2	.77	.61	.61	4.2
31	4.4	---	10	4.5	---	5.8	---	1.6	---	.61	.54	---
TOTAL	246.1	136.9	62.18	197.0	425.5	191.7	170.5	43.35	36.85	81.52	25.76	41.23
MEAN	7.94	4.56	2.01	6.35	14.7	6.18	5.68	1.40	1.23	2.63	.83	1.37
MAX	29	26	10	28	55	14	16	6.8	7.4	38	3.6	9.1
MIN	2.0	1.1	.87	1.8	1.4	3.4	1.4	.77	.53	.32	.54	.47
CFSM	1.50	.86	.38	1.20	2.78	1.17	1.08	.27	.23	.50	.16	.26
IN.	1.73	.96	.44	1.39	3.00	1.35	1.20	.31	.26	.57	.18	.29

CAL YR 1975	TOTAL	2797.61	MEAN 7.66	MAX 92	MIN .50	CFSM 1.45	IN 19.71
WTR YR 1976	TOTAL	1658.59	MEAN 4.53	MAX 55	MIN .32	CFSM .86	IN 11.68

## 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 mi<sup>2</sup> (445 km<sup>2</sup>).

PERIOD OF RECORD.--May 1939 to current year.

REVISED RECORDS.--WSP 971: 1940(M). WSP 1502: 1940-41. WDR PA-72: 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 1,051.16 ft (320.394 m) above mean sea level.

REMARKS.--Records good.

AVERAGE DISCHARGE.--37 years, 222 ft<sup>3</sup>/s (6.29 m<sup>3</sup>/s), 17.53 in/yr (445 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft<sup>3</sup>/s (340 m<sup>3</sup>/s) June 23, 1972, gage height, 12.67 ft (3.862 m), from rating curve extended above 4,000 ft<sup>3</sup>/s (113 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; minimum, 2.6 ft<sup>3</sup>/s (0.074 m<sup>3</sup>/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 ft<sup>3</sup>/s (479 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,270 ft<sup>3</sup>/s (121 m<sup>3</sup>/s) Feb. 17, gage height, 9.61 ft (2.929 m); minimum, 18 ft<sup>3</sup>/s (0.51 m<sup>3</sup>/s) Sept. 14, 15, gage height, 1.31 ft (0.399 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	114	83	1440	204	183	355	62	58	81	55	37
2	186	107	77	923	186	160	376	69	83	71	46	37
3	148	102	73	639	171	151	369	60	71	64	42	36
4	127	98	68	456	201	292	452	55	66	62	39	35
5	112	92	66	320	151	225	428	51	62	58	36	30
6	100	85	68	250	127	219	366	50	69	55	35	28
7	92	81	69	220	140	207	324	50	87	46	352	25
8	83	81	62	190	160	195	271	50	62	45	460	23
9	317	75	79	170	122	189	228	45	55	45	216	22
10	355	83	160	160	132	192	201	43	51	42	157	28
11	310	98	117	150	776	264	180	42	46	40	124	29
12	275	201	98	145	812	237	160	45	46	1170	102	24
13	231	488	102	140	840	369	140	40	42	562	87	21
14	198	334	119	189	1200	348	129	39	40	292	135	19
15	168	282	127	168	844	341	119	40	39	198	289	19
16	148	234	165	129	1490	313	112	85	36	163	148	53
17	201	201	171	146	3200	296	102	135	53	192	98	237
18	1180	171	177	163	2710	243	96	89	45	127	79	129
19	732	154	150	168	1420	250	87	96	45	102	68	81
20	993	140	145	124	990	247	83	79	460	85	58	64
21	744	140	135	107	675	303	81	73	504	75	51	62
22	544	129	130	102	589	334	81	66	585	69	48	55
23	396	112	125	110	448	324	77	64	412	124	45	46
24	310	102	120	98	348	296	69	60	264	135	40	42
25	261	98	115	98	299	264	75	58	207	114	37	40
26	225	92	275	127	261	228	102	75	163	98	39	45
27	195	94	440	376	250	204	77	64	127	85	140	68
28	171	89	324	296	222	198	69	55	102	79	69	110
29	151	81	261	261	204	160	66	50	89	79	57	73
30	137	79	299	237	---	204	62	58	81	66	46	112
31	122	---	648	219	---	189	---	71	---	60	40	---
TOTAL	9428	4237	5048	8321	19172	7625	5337	1919	4050	4484	3238	1630
MEAN	304	141	163	268	661	246	178	61.9	135	145	104	54.3
MAX	1180	488	648	1440	3200	369	452	135	585	1170	460	237
MIN	83	75	62	98	122	151	62	39	36	40	35	19
CFSM	1.77	.82	.95	1.56	3.84	1.43	1.03	.36	.78	.84	.60	.32
IN.	2.04	.92	1.09	1.80	4.15	1.65	1.15	.42	.88	.97	.70	.35
CAL YR 1975	TOTAL	112485	MEAN 308	MAX 2940	MIN 20	CFSM 1.79	IN 24.33					
WTR YR 1976	TOTAL	74489	MEAN 204	MAX 3200	MIN 19	CFSM 1.19	IN 16.11					

## 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. Pennsylvania Department of Environmental Resources water-quality sampling site at bridge 500 ft (152 m) upstream.

DRAINAGE AREA.--756 mi<sup>2</sup> (1,958 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level. 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.

AVERAGE DISCHARGE.--65 years, 899 ft<sup>3</sup>/s (25.5 m<sup>3</sup>/s), 16.15 in/yr (410 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 80,500 ft<sup>3</sup>/s (2,280 m<sup>3</sup>/s) Mar. 18, 1936, gage height, 24.54 ft (7.480 m), from floodmark in gage shelter, from rating curve extended above 17,000 ft<sup>3</sup>/s (481 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 39 ft<sup>3</sup>/s (1.10 m<sup>3</sup>/s) Sept. 6, 7, 12, 1966, gage height, 0.84 ft (0.256 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1911, 23.0 ft (7.01 m) at present site, June 1, 1889, from floodmarks, discharge about 71,300 ft<sup>3</sup>/s (2,020 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,700 ft<sup>3</sup>/s (218 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	1745	8,560 242	8.34 2.542	Feb. 18	1015	*8,640 245	*8.39 2.557

Minimum discharge, 122 ft<sup>3</sup>/s (3.46 m<sup>3</sup>/s) Sept. 15, gage height, 1.25 ft (0.381 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	540	403	4380	1090	776	1230	340	360	430	310	189
2	920	516	397	4290	956	720	1730	340	330	375	280	176
3	784	492	386	2930	680	673	1730	340	320	340	256	176
4	652	469	365	2390	696	840	1650	330	300	315	238	168
5	568	452	350	1750	808	896	2200	305	265	290	220	168
6	510	430	340	1250	728	768	2010	295	256	280	207	168
7	474	414	340	1160	638	712	1640	290	252	270	252	156
8	436	403	335	1230	596	688	1410	280	295	261	1630	144
9	638	397	350	780	610	704	1320	275	256	247	1290	140
10	1110	425	458	820	624	666	1020	265	234	234	712	144
11	1010	469	617	880	1810	736	947	256	225	458	522	140
12	912	832	504	920	4010	965	808	256	216	2840	447	148
13	688	2570	452	920	3050	1160	720	252	202	1530	397	144
14	617	2320	441	820	4220	1680	659	252	198	792	381	133
15	554	1610	469	620	3290	1470	610	247	184	547	365	126
16	516	1280	492	600	3290	1350	568	270	180	492	547	164
17	528	1070	534	620	6860	1480	534	610	189	469	430	335
18	4990	912	528	650	8200	1150	504	652	198	419	360	1270
19	4540	800	561	645	5440	1000	469	469	198	350	310	610
20	3920	720	370	938	3800	992	441	458	792	315	275	408
21	3400	768	534	1020	2850	1070	419	392	5030	295	247	340
22	2520	673	522	956	2300	1080	430	350	3630	381	234	285
23	1890	589	447	808	1990	1110	425	325	2320	360	220	261
24	1500	528	440	848	1610	1080	403	310	1590	414	216	238
25	1340	498	575	938	1290	938	375	300	1060	386	198	225
26	1040	480	1000	1110	1150	904	430	360	800	345	193	220
27	912	469	1780	2960	1160	848	452	330	638	310	207	229
28	808	452	1480	3340	947	864	403	315	534	295	256	256
29	720	441	1260	1990	848	832	365	275	480	330	300	340
30	659	408	1050	1540	---	792	345	275	463	554	238	340
31	603	---	1340	1230	---	1030	---	325	---	360	211	---
TOTAL	40889	22427	19120	45333	65541	29974	26247	10339	21995	15284	11949	7841
MEAN	1319	748	617	1462	2260	967	875	334	733	493	385	261
MAX	4990	2570	1780	4380	8200	1680	2200	652	5030	2840	1630	1270
MIN	436	397	335	600	596	666	345	247	180	234	193	126
CFSM	1.74	.99	.82	1.93	2.99	1.28	1.16	.44	.97	.65	.51	.35
IN.	2.01	1.10	.94	2.23	3.23	1.47	1.29	.51	1.08	.75	.59	.39

CAL YR 1975	TOTAL	459434	MEAN	1259	MAX	14900	MIN	148	CFSM	1.67	IN	22.61
WTR YR 1976	TOTAL	316939	MEAN	866	MAX	8200	MIN	126	CFSM	1.15	IN	15.60



## JUNIATA RIVER BASIN

01562000 RAYSTOWN BRANCH JUNIATA RIVER AT SAXTON, PA

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1972 to current year.

REMARKS.--Water-quality data for the 1976 water year were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 22...	1430	9813	2390	110	6.7	14.0	8	10.0	56	0	0	16
NOV 20...	1140	9813	720	130	6.8	7.5	<1	16.5	77	0	0	19
DEC 08...	1310	9813	330	160	7.5	1.5	4	13.7	--	0	0	30
JAN 22...	1330	9813	983	190	7.0	.0	1	14.1	144	0	0	29
FEB 24...	1305	9813	1620	120	--	--	7	--	78	0	0	15
APR 14...	1120	9813	660	160	7.0	11.0	1	11.1	72	0	0	22
MAY 10...	1300	9813	261	270	--	15.0	2	10.0	116	0	0	31
JUL 21...	1330	9813	280	250	7.5	23.5	3	9.1	105	--	0	35

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 22...	6.3	40	22	6.0	--	1.5	.02	.02	.05	370	7.0
NOV 20...	7.0	62	26	7.0	--	1.3	.03	.03	.04	190	--
DEC 08...	--	88	30	7.0	--	1.5	.06	.03	.03	270	--
JAN 22...	17	72	34	10	--	2.2	.03	.02	.06	300	--
FEB 24...	10	40	16	9.0	--	1.7	.01	.04	.08	350	--
APR 14...	4.0	48	30	8.0	--	1.6	.04	.03	.08	230	--
MAY 10...	9.5	98	32	9.0	--	1.5	.05	.11	.08	180	--
JUL 21...	4.2	84	26	--	182	1.5	.01	.08	.07	320	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC 08...	1310	9813	90	<3	10	20	<50	40	<5.0	<10	10

## JUNIATA RIVER BASIN

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## 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 mi<sup>2</sup> (2,484 km<sup>2</sup>). PERIOD OF RECORD, October 1972 to current year. GAGE, recording. Datum of gage is at mean sea level (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 hm<sup>3</sup>). Capacity at elevation 812.0 ft (247.50 m) is 762,000 acre-ft (940 hm<sup>3</sup>). Conservation pool elevation is 786 ft or 240 m. Capacity at elevation 786 ft (240 m) is 514,000 acre-ft or 634 hm<sup>3</sup>. 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, 542,300 acre-ft (669 hm<sup>3</sup>) Feb. 19, 1976 (elevation, 789.33 ft or 240.588 m); minimum (after first filling), 2,240 acre-ft (2.76 hm<sup>3</sup>) Mar. 2, 1973 (elevation, 628.8 ft or 191.66 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 542,300 acre-ft (669 hm<sup>3</sup>) Feb. 19 (elevation, 789.33 ft or 240.588 m); minimum, 424,800 acre-ft (524 hm<sup>3</sup>) Nov. 10 (elevation, 774.95 ft or 236.205 m).

## MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01563100 RAYSTOWN LAKE			
Sept. 30	782.12	481,180	-
Oct. 31	774.92	426,020	-897
Nov. 30	774.92	426,020	0
Dec. 31	777.05	441,680	+255
CAL YR 1975	-	-	+19.6
Jan. 31	785.70	511,390	1,134
Feb. 29	786.10	514,850	+60.2
Mar. 31	786.56	518,760	+63.6
Apr. 30	785.94	513,480	-88.7
May 31	785.85	512,700	-12.7
June 30	786.89	521,560	+149
July 31	785.90	513,130	-137
Aug. 31	785.40	508,780	-70.7
Sept. 30	783.92	496,130	-213
WTR YR 1976	-	-	+20.6

## 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 mi<sup>2</sup> (2,490 km<sup>2</sup>). Area at site used prior to Oct. 1, 1969, 957 mi<sup>2</sup> (2,480 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level (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 1 mi (1.6 km) upstream (see p.227 ).

AVERAGE DISCHARGE.--30 years, 1,112 ft<sup>3</sup>/s (31.5 m<sup>3</sup>/s), 15.73 in/yr (400 mm/yr), adjusted for storage since October 1972.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 ft<sup>3</sup>/s (694 m<sup>3</sup>/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 ft<sup>3</sup>/s (453 m<sup>3</sup>/s) on basis of computation of flow over dam at gage height, 31.0 ft (9.45 m); minimum, 1.2 ft<sup>3</sup>/s (0.034 m<sup>3</sup>/s) June 30, July 20, 1973, gage height, 2.14 ft (0.652 m), result of upstream shutoff; minimum daily, 5.0 ft<sup>3</sup>/s (0.142 m<sup>3</sup>/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 ft<sup>3</sup>/s (2,460 m<sup>3</sup>/s), at site and datum then in use, by computation of flow over dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,190 ft<sup>3</sup>/s (260 m<sup>3</sup>/s) Feb. 20, gage height, 11.42 ft (3.481 m); minimum, 44 ft<sup>3</sup>/s (1.25 m<sup>3</sup>/s) May 17, gage height, 2.57 ft (0.783 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7740	659	597	527	754	1360	2120	501	502	493	488	489
2	6080	658	566	527	892	1250	2940	500	503	493	488	489
3	3940	658	516	528	1030	1060	2930	502	503	493	488	489
4	3170	658	495	530	883	941	2920	503	503	493	487	484
5	3120	658	493	531	883	1420	2910	503	503	493	486	484
6	2450	657	493	531	883	1460	2910	503	503	493	484	484
7	1300	656	493	531	888	1070	2890	507	503	493	488	484
8	1300	657	493	531	879	990	1860	508	503	490	488	484
9	1300	659	496	532	884	950	1030	508	503	489	489	484
10	1300	608	533	531	883	951	1030	512	503	489	489	484
11	1300	574	597	531	1480	953	1030	512	503	490	489	484
12	1300	796	597	532	4250	1000	1030	513	502	491	489	484
13	1300	2170	597	532	5110	1510	1030	512	500	1740	489	484
14	1290	3160	592	534	4950	2370	920	513	498	2390	490	484
15	1290	2660	545	533	5280	2700	670	512	498	1140	489	484
16	1290	1630	510	533	4000	2260	671	514	498	489	489	484
17	1290	1620	511	536	4700	1940	671	424	498	489	489	476
18	1310	1390	511	535	3590	1900	672	468	498	489	489	475
19	1320	903	511	533	7100	1370	674	513	499	489	489	476
20	3190	865	511	532	8810	1020	613	512	501	489	488	476
21	5240	865	512	506	8910	1320	581	512	3660	489	488	475
22	5350	974	512	467	7040	1330	582	507	6630	489	486	475
23	5190	981	512	466	2930	1020	581	507	4330	489	484	475
24	3530	835	512	466	2250	1020	582	503	2840	489	484	475
25	2560	741	512	468	1590	1030	582	503	1640	489	484	475
26	2540	681	513	471	1200	1030	578	507	672	489	493	475
27	2510	682	512	478	1200	1030	581	503	493	489	493	475
28	2480	682	513	479	1200	1030	532	502	493	489	493	475
29	2260	646	517	479	1320	1030	503	502	493	488	493	475
30	1500	596	518	582	---	1030	502	502	494	488	493	475
31	895	---	519	752	---	1030	---	501	---	489	493	---
TOTAL	80635	29979	16309	16244	85769	40375	37125	15589	31769	18992	15149	14412
MEAN	2601	999	526	524	2958	1302	1238	503	1059	613	489	480
MAX	7740	3160	597	752	8910	2700	2940	514	6630	2390	493	489
MIN	895	574	493	466	754	941	502	424	493	488	484	475
MEAN#	1704	999	781	1658	3018	1566	1149	490	1208	476	418	267
CFSM#	1.77	1.04	.81	1.73	3.14	1.42	1.20	.51	1.26	.50	.44	.28
IN.#	2.04	1.16	.93	1.99	3.39	1.64	1.34	.59	1.41	.58	.51	.31

CAL YR 1975 TOTAL 561795 MEAN 1539 MAX 11300 MIN 166 MEAN# 1559 CFSM# 1.62 IN.# 22.02  
WTR YR 1976 TOTAL 402347 MEAN 1099 MAX 8910 MIN 424 MEAN# 1120 CFSM# 1.17 IN.# 15.89

# Adjusted for change in contents in Raystown Lake.

## JUNIATA RIVER BASIN

229

01563500 JUNIATA RIVER AT MAPLETON DEPOT, PA

LOCATION.--Lat 40°23'32", long 77°56'07", 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 m<sup>2</sup> (5,258 km<sup>2</sup>).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WDR PA-73: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 557.31 ft (169.868 m) above mean sea level.

REMARKS.--Records good. Flow regulated since October 1972 by Raystown Lake 12 mi (19 km) upstream (see p.227).

AVERAGE DISCHARGE.--39 years, 2,437 ft<sup>3</sup>/s (69.0 m<sup>3</sup>/s), 16.30 in/yr (414 mm/yr), adjusted for storage since October 1972.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 125,000 ft<sup>3</sup>/s (3,540 m<sup>3</sup>/s) June 23, 1972, gage height, 33.07 ft (10.080 m), from rating curve extended above 39,000 ft<sup>3</sup>/s (1,100 m<sup>3</sup>/s); minimum 68 ft<sup>3</sup>/s (1.93 m<sup>3</sup>/s) Sept. 13, 1964; minimum daily, 101 ft<sup>3</sup>/s (2.86 m<sup>3</sup>/s) Aug. 21, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 38.2 ft (11.64 m) Mar. 18, 1936, from floodmark, discharge, 165,000 ft<sup>3</sup>/s (4,670 m<sup>3</sup>/s), from rating curve extended above 39,000 ft<sup>3</sup>/s (1,100 m<sup>3</sup>/s) on basis of runoff comparison with upstream and downstream stations.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,400 ft<sup>3</sup>/s (634 m<sup>3</sup>/s) Feb. 17, gage height, 13.79 ft (4.203 m); minimum, 847 ft<sup>3</sup>/s (24.0 m<sup>3</sup>/s) Sept. 7, 8, 9, 10, 14, 15, gage height, 2.88 ft (0.878 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9480	1770	1520	5020	2500	3190	4500	1280	1540	1710	1050	902
2	7940	1730	1510	3970	2440	2990	5400	1350	2430	1540	1020	902
3	5710	1700	1390	3210	2320	2760	5120	1320	1940	1440	993	902
4	4550	1660	1330	2860	2260	3590	5020	1250	1630	1410	979	902
5	4380	1640	1290	2360	2280	3880	5120	1210	1480	1380	965	888
6	3890	1590	1290	2070	2130	3710	4830	1200	1400	1310	965	867
7	2360	1560	1290	2040	2100	3030	4700	1190	1420	1280	1380	853
8	2280	1570	1270	2150	2030	2830	3880	1170	1320	1380	2340	853
9	3350	1550	1340	1830	2060	2710	2580	1150	1250	1270	1610	853
10	4230	1570	2400	1660	2010	2710	2480	1080	1200	1210	1290	895
11	3320	1910	2210	1770	3420	2970	2420	1130	1160	1260	1170	930
12	3030	2100	1930	1770	7670	3050	2360	1180	1130	2560	1110	902
13	2830	5360	1810	1690	7980	3590	2280	1150	1090	2490	1070	867
14	2700	5550	1760	2100	9610	4520	2200	1110	1100	3260	1150	860
15	2570	4800	1720	2170	9140	4730	1830	1120	1140	2400	1350	853
16	2490	3320	1750	1860	8880	4310	1790	1160	1150	1540	1580	972
17	2500	3140	1750	1730	19600	3910	1750	1520	1260	1410	1310	1190
18	5880	2850	1690	1490	19300	3650	1720	1420	1240	1240	1150	2210
19	4670	2290	1560	1400	17100	3210	1670	1410	1110	1170	1080	1280
20	6180	2130	1600	1560	16300	2790	1600	1330	3210	1130	1030	1090
21	8120	2110	1650	1630	14200	2990	1520	1280	10100	1130	1010	1060
22	7800	2170	1570	1490	12300	3460	1540	1250	15300	1210	986	1030
23	7320	2120	1520	1350	7160	2830	1550	1180	9060	1420	972	965
24	5820	1890	1420	1400	5630	2790	1480	1160	5720	1410	965	930
25	4370	1750	1400	1450	4770	2740	1490	1150	4250	1270	951	916
26	4200	1650	1690	1550	3850	2680	1600	1980	2650	1160	951	923
27	4030	1650	2400	4000	3590	2580	1560	2010	2060	1110	1090	1120
28	3880	1730	2160	4290	3350	2670	1420	1480	1840	1090	1130	1680
29	3600	1610	1900	3010	3250	2470	1320	1340	1770	1090	1010	1360
30	2820	1490	1870	2700	---	2420	1290	1400	1770	1220	944	1220
31	2180	---	2950	2650	---	2460	---	1610	---	1110	909	---
TOTAL	138480	67960	52940	70230	199230	98220	78020	40570	83720	45610	35510	31175
MEAN	4467	2265	1708	2265	6870	3168	2601	1309	2791	1471	1145	1039
MAX	9480	5550	2950	5020	19600	4730	5400	2010	15300	3260	2340	2210
MIN	2180	1490	1270	1350	2010	2420	1290	1080	1090	1090	909	853
MEAN#	3570	2265	1963	3399	6930	3232	2512	1296	2940	1334	1074	826
CFSM#	1.76	1.12	.97	1.67	3.41	1.59	1.24	.64	1.45	.66	.53	.41
IN.#	2.03	1.25	1.12	1.92	3.68	1.83	1.38	.74	1.62	.76	.61	.46

CAL YR 1975 TOTAL 1217403 MEAN 3335 MAX 22700 MIN 841 MEAN# 3355 CFSM# 1.65 IN.# 22.46  
WTR YR 1976 TOTAL 941665 MEAN 2573 MAX 19600 MIN 853 MEAN# 2594 CFSM# 1.28 IN.# 17.40

# Adjusted for change in contents in Raystown Lake.

## JUNIATA RIVER BASIN

01563500 JUNIATA RIVER AT MAPLETON DEPOT, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, NOVEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)
NOV 17...	1145	9813	3150	150	7.3	10.0	3	11.0	88	0	0
JAN 21...	1300	9813	1640	210	7.3	1.0	2	17.0	90	0	0
FEB 17...	1345	9813	22000	120	7.1	5.0	62	14.0	54	0	0
MAY 26...	1325	9813	2260	200	7.1	15.0	28	9.0	78	0	0
AUG 23...	1325	9813	965	320	8.7	23.5	2	8.6	100	--	0

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	21	8.5	64	14	8.0	1.3	.03	.03	.07	270	2.0
JAN 21...	26	6.0	86	34	14	1.9	.07	.04	.07	70	--
FEB 17...	16	1.1	46	20	8.0	1.5	.08	.13	1.0	4650	--
MAY 26...	22	5.5	62	20	10	1.3	.06	.11	.15	1000	--
AUG 23...	32	5.0	88	24	16	1.3	.03	.03	.20	120	--



## 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 mi<sup>2</sup> (531 km<sup>2</sup>), includes that at 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) above mean sea level, unadjusted.

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, which are fair.

AVERAGE DISCHARGE.--38 years, 244 ft<sup>3</sup>/s (6.91 m<sup>3</sup>/s), 16.16 in/yr (410 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,700 ft<sup>3</sup>/s (671 m<sup>3</sup>/s) June 22, 1972, gage height, 19.20 ft (5.852 m), from rating curve extended above 2,900 ft<sup>3</sup>/s (82.1 m<sup>3</sup>/s) on basis of contracted-opening measurement at gage height, 18.04 ft (5.499 m); minimum, 0.8 ft<sup>3</sup>/s (0.023 m<sup>3</sup>/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 ft<sup>3</sup>/s (59.5 m<sup>3</sup>/s) and maximum (\*).

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	1400	*6,420 182	*11.79 3.594	June 21	1430	5,400 153	10.92 3.328
Jan. 27	2230	2,190 62.0	7.94 2.420				

Minimum discharge, 10 ft<sup>3</sup>/s (0.283 m<sup>3</sup>/s) Sept. 9, 10, gage height, 2.30 ft (0.701 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	144	115	1590	366	206	910	91	135	125	31	13
2	186	127	112	920	381	192	860	115	133	104	27	13
3	150	122	104	658	299	182	618	101	120	87	23	13
4	123	115	98	542	324	274	546	86	100	75	21	13
5	106	109	91	390	330	251	526	78	81	69	20	12
6	96	103	91	342	245	228	418	74	70	61	19	12
7	87	98	91	300	233	206	372	72	67	57	23	11
8	78	100	84	260	219	193	324	68	61	53	142	11
9	354	97	109	200	210	185	280	62	53	51	135	10
10	522	144	297	212	190	210	252	60	47	46	64	15
11	345	224	240	252	481	270	233	59	42	114	43	16
12	273	439	199	238	558	340	212	67	38	203	34	17
13	219	1470	179	210	434	480	190	67	34	114	33	16
14	186	775	165	180	585	410	177	57	35	69	48	14
15	160	505	161	150	437	370	167	55	34	57	93	13
16	142	374	163	140	607	420	157	60	36	72	79	38
17	162	302	150	130	1870	340	148	142	76	62	51	75
18	4200	255	139	125	1440	297	139	163	55	47	36	67
19	1510	224	97	120	1060	299	130	169	39	37	29	40
20	995	205	120	115	758	288	123	127	250	32	24	27
21	690	208	130	151	574	291	119	103	3490	47	21	22
22	519	219	120	142	521	327	114	87	1800	115	20	20
23	404	173	112	119	433	272	111	73	662	95	18	18
24	327	155	103	111	348	262	100	67	397	84	17	16
25	286	148	95	123	316	255	103	62	302	80	16	15
26	260	140	238	181	281	245	159	106	236	50	16	17
27	233	135	481	1220	270	228	133	169	179	38	16	21
28	210	137	354	1420	243	414	107	94	153	34	18	24
29	192	123	286	739	220	291	97	73	159	40	18	27
30	179	115	278	554	---	308	91	107	146	41	16	27
31	161	---	523	432	---	333	---	192	---	35	14	---
TOTAL	13579	7489	5525	12266	14233	8867	7916	2906	9030	2194	1165	653
MEAN	438	250	178	396	491	286	264	93.7	301	70.8	37.6	21.8
MAX	4200	1470	523	1590	1870	480	910	192	3490	203	142	75
MIN	78	97	84	111	190	182	91	55	34	32	14	10
CFSM	2.14	1.22	.87	1.93	2.40	1.40	1.29	.46	1.47	.35	.18	.11
IN	2.46	1.36	1.00	2.23	2.58	1.61	1.44	.53	1.64	.40	.21	.12

CAL YR 1975	TOTAL	121356	MEAN 332	MAX 5820	MIN 13	CFSM 1.62	IN 22.02
WTR YR 1976	TOTAL	85823	MEAN 234	MAX 4200	MIN 10	CFSM 1.14	IN 15.57

## JUNIATA RIVER BASIN

01565510 KISHACOQUILLAS CREEK AT LEWISTOWN, PA

LOCATION.--Lat 40°36'22", long 77°33'55" Mifflin County, Hydrologic Unit 02050304, at bridge on U.S. Route 522 in Lewistown and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 08...	1115	9813	250	7.5	13.0	4	13.0	132	0	0	46
NOV 18...	1000	9813	160	7.1	9.0	4	13.0	91	--	0	27
DEC 04...	1330	9813	220	7.5	5.0	3	14.0	144	0	0	38
JAN 05...	1515	9813	200	--	--	3	--	150	--	0	38
FEB 24...	1530	9813	150	--	--	6	--	108	0	0	24
APR 29...	1430	9813	290	8.0	15.0	2	13.0	150	0	0	37
MAY 14...	0845	9813	320	--	14.5	2	9.1	127	0	0	43
JUN 30...	1420	9813	270	7.6	19.0	60	8.0	134	--	0	35
AUG 05...	1325	9813	320	9.0	20.0	3	9.5	165	0	0	44
19...	0915	9813	370	8.1	18.0	6	8.1	140	--	0	46

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 08...	4.0	460	26	7.0	3.0	.03	.05	.08	210	5.0
NOV 18...	5.7	80	10	6.0	1.9	.05	.02	.08	110	2.0
DEC 04...	12	114	10	9.0	2.3	.05	.05	.10	220	--
JAN 05...	13	112	22	7.0	3.0	.06	.06	.10	170	--
FEB 24...	11	72	14	7.0	1.6	.02	.06	.12	240	--
APR 29...	14	114	20	7.0	1.7	.05	.03	.20	140	--
MAY 14...	4.5	72	22	8.0	2.1	.06	.08	.20	120	--
JUN 30...	11	100	14	7.0	2.4	.04	.04	.29	1540	--
AUG 05...	13	150	24	11	3.2	.03	.03	.09	150	--
19...	6.0	84	16	11	2.4	.03	.11	.15	280	--

## 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 mi<sup>2</sup> (16.89 km<sup>2</sup>).

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: 1967-69(P).

GAGE.--Water-stage recorder. Datum at gage is 551.17 ft (167.997 m) above mean sea level. June 8, 1960 to Aug. 7, 1963, crest-stage gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--13 years (1963-76), 6.81 ft<sup>3</sup>/s (0.193 m<sup>3</sup>/s), 14.18 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 894 ft<sup>3</sup>/s, revised (25.3 m<sup>3</sup>/s) June 22, 1972, gage height, 8.41 ft (2.563 m) from rating curve extended above 250 ft<sup>3</sup>/s (7.08 m<sup>3</sup>/s); minimum, 1963-74, 0.2 ft<sup>3</sup>/s (0.006 m<sup>3</sup>/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 ft<sup>3</sup>/s (2.83 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 13	0800	*293 8.30	7.31 2.228	July 29	1730	165 4.67	6.41 1.954
Jan. 27	0615	268 7.59	*7.32 2.231	Aug. 15	1830	136 3.85	6.26 1.908
June 23	2215	138 3.91	6.31 1.923				

Minimum discharge, 1.3 ft<sup>3</sup>/s (0.037 m<sup>3</sup>/s) July 28; minimum gage height, 4.40 ft (1.341 m) Aug. 7, Sept. 13, 20.

REVISIONS.--The maximum discharge for water years 1972 and 1975 have been revised to 894 ft<sup>3</sup>/s (25.3 m<sup>3</sup>/s) June 22, 1972, gage height, 8.41 ft (2.563 m) and 427 ft<sup>3</sup>/s (12.1 m<sup>3</sup>/s) Sept. 26, 1975, gage height, 7.91 ft (2.41 m), respectively. These figures supersede those published in the reports for 1972 and 1975.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	24	4.9	85	4.6	5.6	14	2.3	8.6	6.2	5.9	2.7
2	12	15	4.6	52	5.5	5.7	13	2.2	9.0	4.4	4.6	2.7
3	9.9	15	4.4	35	3.6	6.0	13	2.2	8.6	3.6	4.1	2.7
4	9.5	15	4.1	22	3.6	6.6	12	2.2	8.6	3.1	3.8	2.5
5	8.6	15	4.1	14	3.8	5.8	10	2.2	8.2	2.9	3.4	2.3
6	6.9	15	3.8	9.5	2.9	5.6	9.9	2.0	8.2	2.5	3.4	2.2
7	7.4	15	3.8	22	2.5	5.4	9.4	2.2	7.8	2.4	4.1	2.2
8	6.9	15	3.4	13	2.3	5.2	9.0	2.0	7.8	2.3	11	2.0
9	6.5	15	7.8	8.2	2.2	4.9	7.4	1.8	7.8	2.2	4.6	2.0
10	6.2	15	21	6.1	9.9	4.9	7.0	1.7	7.8	2.1	3.8	4.4
11	5.5	15	12	7.0	24	4.4	6.6	1.8	7.4	2.1	3.8	2.3
12	5.2	15	9.0	7.9	15	9.4	6.6	1.7	7.4	14	4.1	2.2
13	77	15	7.4	4.1	15	6.6	5.5	1.7	7.0	10	7.0	2.0
14	27	15	6.6	11	17	5.9	5.2	1.7	7.0	7.5	20	1.8
15	27	15	6.5	13	24	5.2	4.9	1.7	7.0	6.0	36	2.0
16	24	15	6.2	12	17	4.9	4.6	2.0	7.0	7.3	65	7.0
17	21	14	5.5	11	12	4.4	3.8	1.8	6.6	5.0	23	5.9
18	18	14	5.2	11	11	4.4	3.6	1.7	6.6	4.0	8.6	3.6
19	17	14	3.8	10	7.0	3.8	3.6	1.8	6.6	3.0	7.0	2.7
20	15	14	3.8	9.9	5.9	4.4	3.4	1.7	18	2.3	5.9	2.7
21	14	12	3.8	9.4	5.5	3.6	3.2	1.8	36	2.7	5.2	2.5
22	13	8.6	3.6	9.4	5.2	3.4	3.0	1.7	26	2.5	4.9	2.0
23	12	7.4	3.4	9.0	4.9	2.9	2.9	1.8	20	2.5	4.6	2.0
24	11	7.0	2.9	8.6	4.6	2.7	2.7	1.7	17	2.7	4.1	2.0
25	10	7.0	2.9	8.2	7.4	2.7	2.7	1.8	14	2.2	3.8	2.0
26	9.9	5.9	14	32	7.4	2.5	2.5	1.8	12	2.0	4.1	13
27	9.5	5.9	13	122	6.6	2.2	2.5	1.8	11	1.8	4.1	26
28	8.6	5.9	8.6	15	5.9	4.1	2.3	1.8	10	1.8	3.6	12
29	8.2	5.2	7.4	8.2	5.8	26	2.3	1.8	9.0	31	3.4	7.0
30	8.6	5.2	8.2	6.2	---	20	2.2	6.6	8.2	17	2.9	8.6
31	44	---	27	4.9	---	17	---	9.0	---	7.4	2.9	---
TOTAL	473.4	375.1	222.7	596.6	242.1	196.2	178.8	70.0	326.2	166.5	272.7	135.0
MEAN	15.3	12.5	7.18	19.2	8.35	6.33	5.96	2.26	10.9	5.37	8.80	4.50
MAX	77	24	27	122	24	26	14	9.0	36	31	65	26
MIN	5.2	5.2	2.9	4.1	2.2	2.2	2.2	1.7	6.6	1.8	2.9	1.8
CFSM	2.35	1.92	1.10	2.94	1.28	.97	.91	.35	1.67	.82	1.35	.69
IN.	2.70	2.14	1.27	3.40	1.38	1.12	1.02	.40	1.86	.95	1.56	.77

CAL YR 1975 TOTAL 4170.4 MEAN 11.4 MAX 239 MIN 1.1 CFSM 1.75 IN 23.79  
WTR YR 1976 TOTAL 3255.3 MEAN 8.89 MAX 122 MIN 1.7 CFSM 1.36 IN 18.57

## 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 mi<sup>2</sup> (8,687 km<sup>2</sup>).

## 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) above mean sea level. Prior to July 16, 1929 nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Raystown Lake about 75 mi (120 km) upstream since October 1972 (see p. 227).

AVERAGE DISCHARGE.--77 years, 4,266 ft<sup>3</sup>/s (121 m<sup>3</sup>/s), 17.27 in/yr 439 mm/yr, adjusted for storage since October 1972.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 190,000 ft<sup>3</sup>/s (5,380 m<sup>3</sup>/s) Mar. 19, 1936, gage height, 34.24 ft (10.436 m), from floodmark in gage shelter, from rating curve extended above 100,000 ft<sup>3</sup>/s (2,830 m<sup>3</sup>/s); minimum, 195 ft<sup>3</sup>/s (5.52 m<sup>3</sup>/s) July 27, 1966, gage height, 2.81 ft (0.856 m); minimum daily, 207 ft<sup>3</sup>/s (5.86 m<sup>3</sup>/s) July 27, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 35.9 ft (10.94 m) June 1, 1889, from floodmarks, discharge, 209,000 ft<sup>3</sup>/s (5,920 m<sup>3</sup>/s) from rating curve extended above 100,000 ft<sup>3</sup>/s (2,830 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32,200 ft<sup>3</sup>/s (912 m<sup>3</sup>/s) Feb. 18, gage height, 13.00 ft (3.962 m); minimum, 1,160 ft<sup>3</sup>/s (32.9 m<sup>3</sup>/s) Sept. 10, gage height, 3.53 ft (1.076 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12700	3730	2740	8980	5190	5190	5990	2230	4100	2980	1870	1290
2	11700	3140	2670	11800	4860	5020	9220	2410	4400	2840	1660	1270
3	9490	3010	2660	8280	4260	4800	9740	2410	4750	2550	1600	1260
4	7130	2920	2510	6710	4140	4750	8690	2360	4160	2310	1570	1260
5	5890	2820	2380	5760	4110	5530	8210	2210	3440	2230	1500	1240
6	5620	2740	2330	4690	3860	5840	7940	2060	3050	2170	1390	1230
7	5160	2660	2300	4230	3550	5560	7340	2020	2880	2070	1390	1210
8	3600	2630	2270	4260	3460	4750	6890	2000	2770	2050	1740	1200
9	3460	2610	2390	4030	3540	4560	5860	1950	2560	2050	2910	1190
10	5200	2740	4070	3540	3440	4420	4420	1910	2390	2000	2730	1280
11	6180	3490	4880	3440	4100	4450	4180	1870	2230	2150	2120	1340
12	5000	4320	4470	3540	8120	4750	3970	1890	2100	2160	1900	1290
13	4470	10400	3850	3590	11000	5280	3820	1870	2080	3100	1730	1290
14	4120	12700	3540	3820	11900	6360	3660	1870	2040	3080	1910	1270
15	3880	10300	3420	4180	13300	7250	3540	1810	2000	4210	2670	1240
16	3670	8340	3290	3870	12100	7340	3190	1830	1970	4210	2950	1450
17	3600	6260	3190	3620	19600	6860	3050	2790	2000	2640	2630	1900
18	14300	5620	3100	2950	31000	6160	2950	3070	2020	2310	2360	2670
19	17500	5080	2840	2450	26700	5730	2910	2950	2100	2010	1960	2930
20	11200	4420	2820	2590	23700	5300	2840	2680	2360	1890	1740	2340
21	12100	4080	2720	3020	21200	4750	2820	2590	4500	1800	1640	1910
22	12400	4070	2770	2980	18900	4940	2720	2340	19000	1760	1570	1680
23	11300	3910	2700	2500	15800	5420	2680	2210	18700	1860	1530	1600
24	10200	3740	2610	2340	10500	4750	2700	2080	10800	2130	1480	1550
25	8100	3430	2540	2610	8660	4560	2700	2040	7510	2100	1400	1500
26	6510	3230	3190	3120	7430	4480	3030	2060	5750	2010	1390	1550
27	6130	3110	4130	8900	6280	4400	2980	2700	4040	1860	1400	2020
28	5780	3090	4880	13100	5840	4580	2910	3420	3220	1700	1410	2140
29	5490	3030	4310	9020	5440	4640	2660	2610	3220	1740	1570	2370
30	5250	2890	3950	6540	---	4450	2340	3260	3030	2670	1430	2400
31	4420	---	5500	5580	---	4210	---	4800	---	1990	1300	---
TOTAL	231550	134510	101020	156040	301980	161080	135950	74300	135170	72630	56450	48870
MEAN	7469	4484	3259	5034	10410	5196	4532	2397	4506	2343	1821	1629
MAX	17500	12700	5500	13100	31000	7340	9740	4800	19000	4210	2950	2930
MIN	3460	2610	2270	2340	3440	4210	2340	1810	1970	1700	1300	1190
MEAN#	6572	4484	3514	6168	10470	5260	4443	2384	4655	2206	1750	1416
CFSM#	1.96	1.34	1.05	1.84	3.12	1.57	1.32	.71	1.39	.66	.52	.42
IN.#	2.26	1.50	1.21	2.12	3.36	1.81	1.47	.82	1.55	.76	.60	.47
CAL YR 1975 TOTAL	2093880			5737	MAX 41300	MIN 1240	MEAN# 5757	CFSM# 1.72	IN.# 23.14			
WTR YR 1976 TOTAL	1609550			4398	MAX 31000	MIN 1190	MEAN# 4419	CFSM# 1.32	IN.# 17.93			

# Adjusted for change in contents in Raystown Lake.



## 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. Some flow regulation at low flow powerplants and mills above station.

COOPERATION.--Eight water-quality analyses were furnished by the Pennsylvania Department of Environmental Resources.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 558 micromhos Oct. 27, 1969; minimum daily, 119 micromhos June 22, 1972.

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 t) June 23, 1972; minimum daily, 0 tons (0 t) on many days.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 322 micromhos Sept. 21; minimum daily, 140 micromhos Feb. 19.

WATER TEMPERATURES: Maximum daily, 26.0°C Aug. 26, 27; minimum daily, freezing point on many days during Dec. through Feb.

SEDIMENT CONCENTRATIONS: Maximum daily, 269 mg/l June 22; minimum daily, 1 mg/l on many days.

SEDIMENT LOADS: Maximum daily, 19,300 tons (17,500 t) Feb. 18; minimum daily, 6.1 tons (5.5 t) Dec. 8.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 19...	1300	5080	176	8.2	10.0	68	0	56	.7	21	5.6
JAN 07...	1315	4230	200	8.1	.0	--	--	--	--	--	--
FEB 06...	1235	3770	210	8.1	.5	--	--	--	--	--	--
MAR 12...	1230	4750	180	8.4	6.0	63	2	55	.4	23	7.5
MAY 19...	1100	3000	200	7.7	13.5	--	--	--	--	--	--
JUN 22...	1410	20800	180	7.7	21.0	48	0	39	1.5	11	4.2
JUL 15...	1530	4260	225	7.2	23.0	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
NOV 19...	97	103	--	--	--	--	--	--	--	--	--
JAN 07...	--	--	1.3	--	--	.00	.40	.40	--	.03	.02
FEB 06...	--	--	1.2	--	--	.00	.14	.14	--	.03	.02
MAR 12...	105	--	.81	--	--	.01	.22	.23	--	.01	.01
MAY 19...	--	--	.74	.06	.80	.13	.42	.55	1.4	.09	.05
JUN 22...	95	--	1.1	.02	1.1	.07	.53	.60	1.7	.11	.04
JUL 15...	--	--	1.1	.02	1.1	.05	.73	.78	1.9	.12	.05



## JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE	DIS- SOLVED CAL- CIUM (CA)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED PO- TAS- SIUM (K)	DIS- SOLVED FLUO- RIDE (F)	DIS- SOLVED SILICA (SI02)	DIS- SOLVED NITRATE (N)	
			HARD- NESS (MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
NOV 19...	1300	84	28	23	6.4	4.1	1.8	.0	4.1	.77

DATE	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
NOV 19...	.01	.78	.04	80	0	0	0	1	0

DATE	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV 19...	110	30	4	10	0	<.5	0	0	7

DATE	TIME	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL KJEL. NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL ALUMI- NUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)
APR 19...	1430	57	290	410	5900	7	1	5	12	21	11000	46

DATE	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL SILVER IN BOTTOM MA- TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	ORGANIC CARBON IN BOT- TOM MA- TERIAL (C) (G/KG)	IN- ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)	TOTAL CYANIDE IN BOTTOM MA- TERIAL (UG/G)	PCB IN BOTTOM MA- TERIAL (UG/KG)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)
APR 19...	350	.0	25	0	0	140	22	.3	0	200	.0	17

DATE	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	BED MAT. FALL DIAM. % FINER THAN .004 MM	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM
APR 19...	.0	.0	.0	3.4	.0	.0	.0	.0	0	1	13	100

## JUNIATA RIVER BASIN

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01567000, JUNIATA RIVER AT NEWPORT, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT 20...	1400	9813	10800	120	6.8	13.0	20	9.3	--	62
NOV 17...	1030	9813	6260	120	8.0	8.5	3	10.7	--	64
DEC 11...	1700	9813	5020	150	7.6	3.0	8	13.0	--	82
FEB 18...	1110	9813	32000	110	7.0	4.0	70	12.2	--	58
MAR 12...	0900	9813	E4750	170	8.7	4.0	3	13.2	.5	88
APR 15...	0900	9813	E3540	160	9.2	12.5	1	12.1	--	86
MAY 04...	1330	9813	2390	120	8.1	13.5	2	11.0	--	103
JUL 14...	1335	9813	2720	260	8.3	22.0	4	--	.7	108

DATE	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL RESI- DUAL CHLO- RINE (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT 20...	0	0	17	4.5	52	20	.00	7.0	116	--
NOV 17...	--	0	19	4.0	50	16	--	7.0	92	--
DEC 11...	0	0	22	6.5	64	26	.00	--	142	--
FEB 18...	0	0	16	4.0	48	24	.00	8.0	104	128
MAR 12...	0	0	21	8.5	72	24	.00	10	124	4
APR 15...	0	0	24	6.5	58	14	.00	8.0	132	4
MAY 04...	0	0	27	8.5	82	24	.00	12	124	18
JUL 14...	0	0	32	7.0	92	16	.00	13	188	4

DATE	TOTAL RESI- DUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	PHENOLS (UG/L)	PHENOLS (DIRECT PHOTO- METRIC) (UG/L)
OCT 20...	--	1.3	.04	.05	.09	--	840	--	--
NOV 17...	--	1.2	.04	.03	.05	--	110	--	--
DEC 11...	--	1.6	.04	.03	.05	--	--	--	--
FEB 18...	--	1.7	.05	.15	.26	--	2800	<1	--
MAR 12...	128	1.7	.04	.03	.05	--	70	<10	--
APR 15...	--	1.2	.03	.02	.07	--	20	<10	--
MAY 04...	--	1.5	.06	.09	.13	--	320	<10	--
JUL 14...	192	1.2	.06	.05	.08	.02	250	--	<10

## JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
FEB 18...	0545	31800	5.0	202	17300	39	57
MAY 31...	0620	5440	17.0	43	632	21	52

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
FEB 18...	71	78	85	90	96	99	100
MAY 31...	74	86	95	98	100	--	--

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	213	222	160	---	191	184	226	166	213	237	290
2	192	220	214	161	---	190	162	214	185	211	247	292
3	190	221	203	159	---	191	151	222	180	216	252	292
4	203	236	218	---	---	191	149	230	177	220	252	302
5	210	240	226	---	---	187	154	232	183	222	249	265
6	220	237	230	---	---	189	155	240	195	224	265	265
7	221	241	217	---	---	197	158	233	197	232	252	268
8	221	236	223	---	---	185	169	240	193	239	248	269
9	227	239	231	---	---	191	163	234	195	246	244	278
10	237	234	220	---	203	192	184	235	200	233	255	279
11	220	232	188	---	204	194	185	236	206	227	271	278
12	227	202	207	---	188	192	188	240	212	238	249	271
13	201	177	191	---	173	182	193	234	206	242	244	272
14	222	164	203	---	175	187	185	237	213	239	227	274
15	224	158	180	---	174	183	193	240	219	255	230	282
16	228	159	192	---	173	173	197	243	230	197	220	272
17	229	164	204	---	163	---	192	226	229	202	231	266
18	161	172	204	---	145	179	207	202	231	203	241	256
19	168	177	215	---	140	178	211	208	234	230	264	232
20	154	188	208	---	148	183	216	206	222	231	282	255
21	160	197	212	---	153	172	218	203	210	242	240	322
22	173	190	205	---	153	194	217	214	208	245	243	302
23	179	191	215	---	163	183	218	208	149	234	244	257
24	182	198	---	---	167	179	225	217	159	239	244	245
25	187	206	---	---	170	192	220	220	163	233	251	254
26	188	182	---	---	174	183	218	228	176	248	249	254
27	195	216	210	---	177	190	221	224	183	261	270	258
28	201	208	193	---	182	178	213	212	197	260	271	257
29	208	213	186	---	185	187	215	207	209	239	268	265
30	209	240	188	---	---	184	218	175	208	231	267	257
31	208	---	198	---	---	193	---	170	---	225	270	---

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

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

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

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	12700	28	960	3730	3	30	2740	1	7.4
2	11700	26	821	3140	2	17	2670	1	7.2
3	9490	20	512	3010	2	16	2660	1	7.2
4	7130	18	347	2920	2	16	2510	1	6.8
5	5890	17	270	2820	2	15	2380	1	6.4
6	5620	16	243	2740	2	15	2330	1	6.3
7	5160	12	167	2660	1	7.2	2300	1	6.2
8	3600	9	87	2630	1	7.1	2270	1	6.1
9	3460	10	93	2610	1	7.0	2390	2	13
10	5200	22	309	2740	1	7.4	4070	10	110
11	6180	29	484	3490	4	38	4880	13	171
12	5000	19	256	4320	9	105	4470	12	145
13	4470	15	181	10400	46	1290	3850	7	73
14	4120	14	156	12700	49	1680	3540	4	38
15	3880	13	136	10300	22	612	3420	2	18
16	3670	11	109	8340	15	338	3290	3	27
17	3600	9	87	6260	8	135	3190	2	17
18	14300	96	3850	5620	4	61	3100	2	17
19	17500	105	4960	5080	2	27	2840	2	15
20	11200	42	1270	4420	1	12	2820	2	15
21	12100	26	849	4080	2	22	2720	1	7.3
22	12400	25	837	4070	2	22	2770	1	7.5
23	11300	19	580	3910	2	21	2700	1	7.3
24	10200	14	386	3740	2	20	2610	1	7.0
25	8100	12	262	3430	3	28	2540	2	14
26	6510	10	176	3230	2	17	3190	3	26
27	6130	9	149	3110	2	17	4130	4	45
28	5780	7	109	3090	1	8.3	4880	5	66
29	5490	7	104	3030	1	8.2	4310	2	23
30	5250	6	85	2890	1	7.8	3950	2	21
31	4420	5	60	---	---	---	5500	7	104
TOTAL	231550	---	18895	134510	---	4607.0	101020	---	1040.7

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

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8980	22	533	5190	14	196	5190	6	84
2	11800	36	1150	4860	9	118	5020	5	68
3	8280	24	537	4260	9	104	4800	4	52
4	6710	16	290	4140	10	112	4750	4	51
5	5760	12	187	4110	10	111	5530	12	179
6	4690	10	127	3860	10	104	5840	14	221
7	4230	9	103	3550	10	96	5560	12	180
8	4260	7	81	3460	9	84	4750	5	64
9	4030	7	76	3540	9	86	4560	3	464
10	3540	6	57	3440	8	74	4420	2	24
11	3440	4	37	4100	23	255	4450	3	36
12	3540	4	38	8120	87	1910	4750	3	38
13	3590	6	58	11000	60	1780	5280	3	43
14	3820	5	52	11900	42	1350	6360	5	86
15	4180	6	68	13300	45	1620	7250	8	157
16	3870	5	52	12100	33	1080	7340	6	119
17	3620	5	49	19600	126	7280	6860	4	74
18	2950	5	40	31000	230	19300	6160	1	17
19	2450	5	33	26700	135	9730	5730	1	15
20	2590	5	35	23700	55	3520	5300	2	29
21	3020	6	49	21200	31	1770	4750	3	38
22	2980	6	48	18900	25	1280	4940	4	53
23	2500	6	40	15800	23	981	5420	5	73
24	2340	7	44	10500	19	539	4750	3	38
25	2610	7	49	8660	12	281	4560	3	37
26	3120	10	84	7430	10	201	4480	2	24
27	8900	58	1680	6280	8	136	4400	3	276
28	13100	137	4940	5840	7	110	4580	6	74
29	9020	65	1580	5440	7	103	4640	5	63
30	6540	26	459	---	---	---	4450	4	488
31	5580	18	271	---	---	---	4210	3	821
TOTAL	156040	---	12847	301980	---	54311	161080	---	3986
DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5990	18	291	2230	6	36	4100	35	387
2	9220	43	1070	2410	10	65	4400	46	546
3	9740	38	999	2410	14	91	4750	55	705
4	8690	18	422	2360	5	32	4160	44	494
5	8210	10	222	2210	9	54	3440	30	279
6	7940	9	193	2060	7	39	3050	20	165
7	7340	7	139	2020	8	44	2880	18	140
8	6890	5	93	2000	9	49	2770	12	90
9	5860	5	79	1950	8	42	2560	16	111
10	4420	3	36	1910	10	52	2390	11	71
11	4180	2	23	1870	9	45	2230	14	84
12	3970	2	21	1890	10	51	2100	15	85
13	3820	1	10	1870	8	40	2080	18	101
14	3660	1	9.9	1870	11	56	2040	17	94
15	3540	1	9.6	1810	9	44	2000	15	81
16	3190	3	26	1830	9	44	1970	18	96
17	3050	3	25	2790	56	422	2000	21	113
18	2950	4	32	3070	72	597	2020	20	109
19	2910	3	24	2950	44	350	2100	18	102
20	2840	3	23	2680	25	181	2360	29	185
21	2820	8	61	2590	18	126	4500	82	1370
22	2720	4	29	2340	25	158	19000	269	13700
23	2680	7	51	2210	18	107	18700	154	7910
24	2700	5	36	2080	23	129	10800	74	2180
25	2700	6	44	2040	19	105	7510	57	1160
26	3030	5	41	2060	16	89	5750	49	761
27	2980	8	64	2700	34	248	4040	40	436
28	2910	7	55	3420	46	425	3220	29	252
29	2660	5	36	2610	27	190	3220	32	278
30	2340	3	19	3260	49	431	3030	34	278
31	---	---	---	4800	62	804	---	---	---
TOTAL	135950	---	4183.5	74300	---	5146	135170	---	32363



## JUNIATA RIVER BASIN

241

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

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

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2980	26	209	1870	38	192	1290	11	38
2	2840	26	199	1660	19	85	1270	11	38
3	2550	15	103	1600	19	82	1260	9	31
4	2310	15	94	1570	18	76	1260	10	34
5	2230	12	72	1500	17	69	1240	6	20
6	2170	6	35	1390	14	53	1230	7	23
7	2070	6	34	1390	11	41	1210	10	33
8	2050	5	28	1740	22	103	1200	8	26
9	2050	6	33	2910	38	299	1190	8	26
10	2000	6	32	2730	26	192	1280	10	35
11	2150	9	52	2120	21	120	1340	10	36
12	2160	7	41	1900	15	77	1290	7	24
13	3100	29	250	1730	14	65	1290	11	38
14	3080	28	233	1910	40	206	1270	8	27
15	4210	36	409	2670	55	396	1240	8	27
16	4210	64	718	2950	58	462	1450	8	31
17	2640	46	327	2630	40	284	1900	12	62
18	2310	20	125	2360	26	166	2670	24	173
19	2010	12	65	1960	20	106	2930	37	294
20	1890	11	56	1740	19	89	2340	24	152
21	1800	11	53	1640	15	66	1910	18	93
22	1760	9	43	1570	12	51	1680	16	73
23	1860	16	80	1530	13	54	1600	13	56
24	2130	13	75	1480	14	56	1550	13	54
25	2100	11	62	1400	13	49	1500	9	36
26	2010	12	65	1390	13	49	1550	9	38
27	1860	10	50	1400	13	49	2020	12	65
28	1700	8	37	1410	10	38	2140	14	81
29	1740	12	56	1570	14	59	2370	14	90
30	2670	66	476	1430	16	62	2400	16	104
31	1990	68	365	1300	14	49	---	---	---
TOTAL	72630	---	4477	56450	---	3745	48870	---	1858
YEAR	1609550		147459.2						

## JUNIATA RIVER BASIN

01567000 JUNIATA RIVER AT NEWPORT, PA--Continued

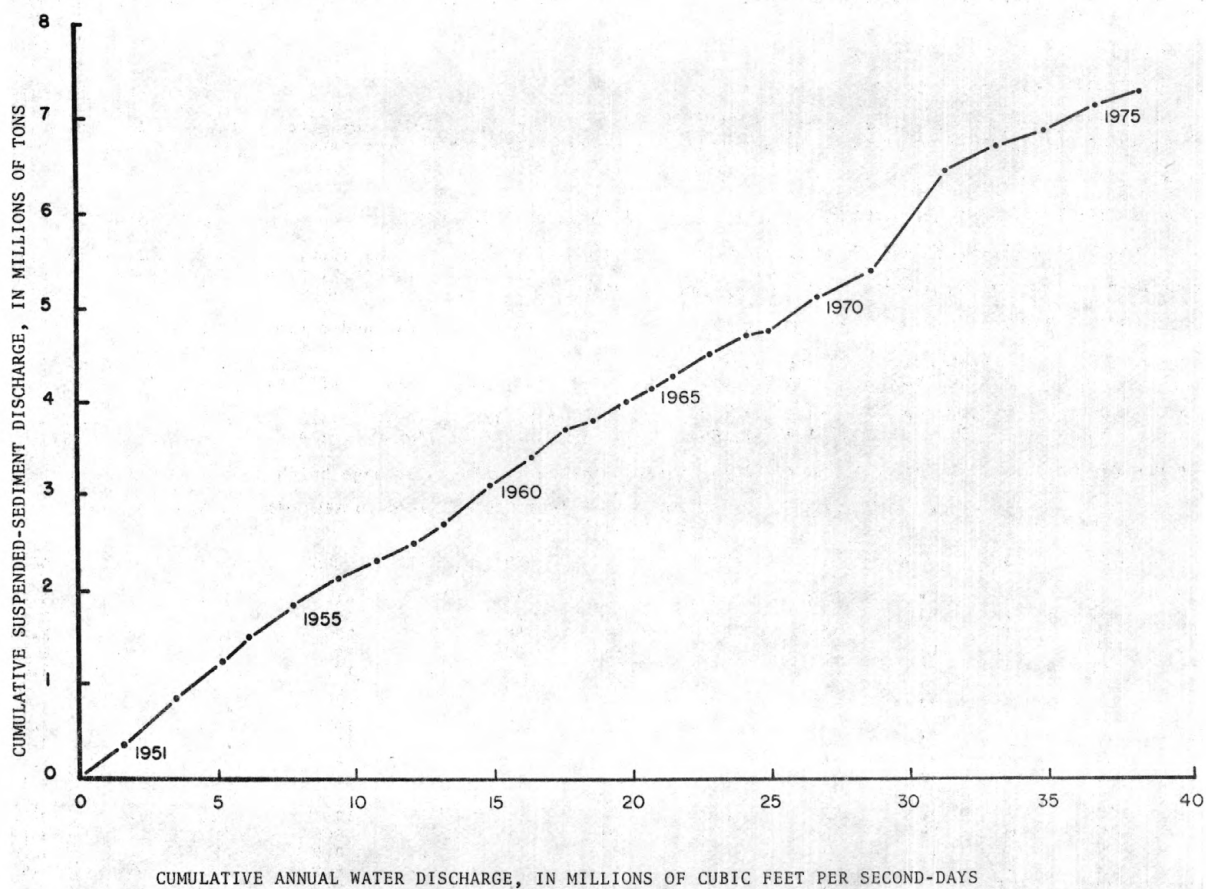


Figure 5.--Double mass accumulation of annual suspended-sediment discharge versus annual water discharge, Juniata River at Newport, Pennsylvania

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
1976	135	98	60	43	24	17	13	11	8	6	4	2	1	1
1951-76	252	172	89	50	27	18	13	10	7	5	4	3	2	1

## SHERMAN CREEK BASIN

243

01567500 BIXLER RUN NEAR LOYSVILLE, PA

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.

DRAINAGE AREA.--15.0 mi<sup>2</sup> (38.8 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 601.22 ft (183.252 m) above mean sea level. Prior to May 14, 1954, nonrecording gage and crest-stage gage 400 ft (122 m) downstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--22 years, 17.6 ft<sup>3</sup>/s (0.498 m<sup>3</sup>/s), 15.95 in/yr (405 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,780 ft<sup>3</sup>/s (249 m<sup>3</sup>/s) Nov. 1, 1956, gage height, 10.39 ft (3.167 m), from rating curve extended above 1,000 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 1.5 ft<sup>3</sup>/s (0.042 m<sup>3</sup>/s) Feb. 2, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft<sup>3</sup>/s (7.08 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0530	*1,040 29.5	*6.83 2.082	Feb. 11	1445	312 8.84	4.97 1.515
Jan. 27	1145	302 8.55	4.93 1.503	May 30	1015	279 7.90	4.83 1.472

Minimum discharge, 2.8 ft<sup>3</sup>/s (0.079 m<sup>3</sup>/s) Aug. 29, 30, Sept. 5, 6, 7, 8, 9, gage height, 2.34 ft (0.713 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	13	12	105	18	17	86	16	41	8.1	4.3	3.2
2	16	13	11	51	17	16	50	17	35	7.2	4.0	3.4
3	14	12	11	43	15	16	36	14	25	6.9	4.0	3.4
4	13	12	10	31	15	23	33	12	20	6.9	3.8	3.2
5	12	11	10	24	14	19	27	12	17	6.6	3.8	3.2
6	11	11	11	21	13	17	24	11	16	6.3	4.0	3.0
7	11	11	10	20	12	16	21	11	14	6.3	4.5	3.0
8	10	11	9.8	20	12	15	20	10	13	6.3	8.1	3.0
9	17	10	25	17	11	16	18	10	12	6.1	5.0	3.0
10	15	18	33	16	12	16	17	9.8	11	5.8	4.3	5.6
11	16	15	21	16	136	19	17	9.8	10	7.8	4.0	3.6
12	13	65	19	15	29	18	15	10	9.5	6.6	3.8	3.4
13	12	72	17	15	29	29	15	8.9	8.9	5.8	3.8	3.4
14	11	40	16	25	23	25	14	8.9	8.9	5.6	4.0	3.4
15	10	28	16	16	19	24	14	8.6	8.3	15	4.8	3.4
16	10	23	15	15	41	24	13	19	9.2	19	4.8	12
17	19	20	14	13	92	22	12	14	9.2	6.9	3.6	24
18	369	19	13	11	56	20	12	15	7.8	5.8	3.6	7.8
19	84	17	11	11	48	20	12	13	9.8	5.3	3.4	5.3
20	53	17	11	11	36	18	11	11	20	4.8	3.4	4.8
21	35	21	11	12	31	21	11	10	22	7.5	3.2	4.5
22	28	17	11	11	33	18	11	9.2	15	7.2	3.2	4.0
23	24	15	10	10	25	17	10	8.9	11	12	3.2	3.8
24	21	14	9.5	10	23	17	10	8.3	10	8.3	3.2	3.8
25	20	14	9.5	9.5	22	17	27	8.6	9.5	5.8	3.2	3.8
26	19	13	49	54	20	15	33	12	8.3	5.3	3.4	6.3
27	17	14	33	199	19	23	18	9.2	7.8	5.3	3.6	8.3
28	16	13	24	31	18	24	16	8.1	9.2	5.0	3.6	6.3
29	15	12	21	24	17	20	15	8.1	11	5.3	3.2	5.0
30	15	12	54	20	---	21	14	102	8.6	5.0	3.0	7.2
31	14	---	70	17	---	23	---	43	---	4.8	3.2	---
TOTAL	958	583	597.8	893.5	856	606	632	468.4	418.0	220.6	121.0	158.1
MEAN	30.9	19.4	19.3	28.8	29.5	19.5	21.1	15.1	13.9	7.12	3.90	5.27
MAX	369	72	70	199	136	29	86	102	41	19	8.1	24
MIN	10	10	9.5	9.5	11	15	10	8.1	7.8	4.8	3.0	3.0
CFSM	2.06	1.29	1.29	1.92	1.97	1.30	1.41	1.01	.93	.47	.26	.35
IN.	2.38	1.45	1.48	2.22	2.12	1.50	1.57	1.16	1.04	.55	.30	.39

CAL YR 1975	TOTAL	8699.9	MEAN 23.8	MAX 469	MIN 4.4	CFSM 1.59	IN 21.57
WTR YR 1976	TOTAL	6512.4	MEAN 17.8	MAX 369	MIN 3.0	CFSM 1.19	IN 16.15

01568000 SHERMAN CREEK AT SHERMAN'S 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 Sherman's Dale, and 1.2 mi (1.9 km) upstream from Fishing Run. Water-quality sampling site at bridge 10.2 mi (16.4 km) downstream.

DRAINAGE AREA.--200 mi<sup>2</sup> (518 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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 Shermendale".

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) above mean sea level. Prior to Jan. 29, 1930, nonrecording gage at same site and datum.

REMARKS.--Records fair. Some regulation at low flow by mills above station.

AVERAGE DISCHARGE.--47 years, 282 ft<sup>3</sup>/s (7.99 m<sup>3</sup>/s), 19.15 in/yr (486 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,500 ft<sup>3</sup>/s (779 m<sup>3</sup>/s) June 23, 1972, gage height, 18.09 ft (5.514 m), from rating curve extended above 18,000 ft<sup>3</sup>/s (510 m<sup>3</sup>/s); minimum, 3.9 ft<sup>3</sup>/s (0.11 m<sup>3</sup>/s) Dec. 1, 1930; minimum gage height, 0.62 ft or 0.189 m Sept. 11, 1966; minimum daily discharge, 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) Dec. 24, 25, 1930, Sept. 30, 1941.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of July 22, 1927 reached a stage of 20.34 ft or 6.200 m, from floodmark, discharge, about 44,000 ft<sup>3</sup>/s (1,250 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,150 ft<sup>3</sup>/s (231 m<sup>3</sup>/s) Oct. 18, gage height, 10.66 ft (3.249 m); minimum, 20 ft<sup>3</sup>/s (0.57 m<sup>3</sup>/s) Sept. 9, gage height, 0.75 ft (0.229 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	281	197	161	1400	381	262	1720	136	791	92	52	24
2	236	186	156	740	451	245	1070	199	1250	82	49	25
3	192	179	144	600	230	242	788	153	711	77	43	27
4	166	168	135	530	318	308	672	128	517	85	40	26
5	149	156	128	381	296	296	581	119	396	80	35	26
6	137	149	126	320	200	253	484	114	322	73	39	25
7	124	142	128	290	190	230	423	111	276	72	42	24
8	114	164	118	240	180	216	372	103	232	108	88	24
9	171	149	166	190	170	216	332	98	199	79	89	22
10	250	236	535	190	170	225	304	96	173	66	58	28
11	211	494	357	220	551	245	285	93	156	84	48	34
12	186	447	290	220	417	302	256	101	139	86	42	30
13	147	1270	250	247	305	409	235	95	125	74	40	28
14	131	805	227	318	391	522	221	86	121	63	37	26
15	120	572	219	271	278	428	208	84	143	113	47	23
16	112	459	211	213	327	406	196	99	177	184	64	124
17	124	381	200	171	1070	395	185	228	139	106	52	290
18	4920	327	180	100	898	321	173	245	117	70	39	293
19	1440	290	150	159	825	321	164	213	102	64	35	76
20	1060	259	150	184	660	315	156	154	291	57	34	53
21	776	318	150	179	543	327	155	131	442	65	31	47
22	607	347	145	166	564	363	144	113	467	100	31	40
23	494	245	140	140	494	290	134	102	253	110	33	34
24	417	219	130	166	406	286	127	97	182	135	30	33
25	384	205	130	159	381	281	135	93	154	84	30	31
26	353	192	700	363	350	268	306	155	129	67	31	36
27	305	197	450	1640	331	315	195	195	110	58	28	54
28	271	197	330	1010	302	791	153	124	99	56	27	61
29	250	166	280	551	278	515	139	106	99	54	30	49
30	245	156	740	462	---	478	130	1140	99	54	29	46
31	216	---	930	347	---	510	---	1030	---	53	25	---
TOTAL	14589	9272	8156	12167	11957	10581	10443	5941	8411	2551	1298	1659
MEAN	471	309	263	392	412	341	348	192	280	82.3	41.9	55.3
MAX	4920	1270	930	1640	1070	791	1720	1140	1250	184	89	293
MIN	112	142	118	100	170	216	127	84	99	53	25	22
CFSM	2.36	1.55	1.32	1.96	2.06	1.71	1.74	.96	1.40	.41	.21	.28
IN.	2.71	1.72	1.52	2.26	2.22	1.97	1.94	1.11	1.56	.47	.24	.31

CAL YR 1975 TOTAL 131371 MEAN 360 MAX 7290 MIN 30 CFSM 1.80 IN 24.43  
WTR YR 1976 TOTAL 97025 MEAN 265 MAX 4920 MIN 22 CFSM 1.33 IN 18.05

## CLARK CREEK BASIN

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## 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 mi<sup>2</sup> (56.2 km<sup>2</sup>). PERIOD OF RECORD: October 1940 to current year. STAFF GAGE, Datum of gage is at mean sea level (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 hm<sup>3</sup>). 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 hm<sup>3</sup>) Sept. 27, 1975 (elevation, 645.75 ft or 196.825 m); minimum (after first filling), 4,680 acre-ft (5.77 hm<sup>3</sup>) Jan. 2, 1966 (elevation, 613.33 ft or 186.943 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 18,750 acre-ft (23.1 hm<sup>3</sup>) Jan. 28 to Feb. 4 (elevation, 644.50 ft or 196.444 m); minimum, 17,260 acre-ft (21.3 hm<sup>3</sup>) Sept. 25-28 (elevation, 641.92 ft or 195.657 m).

## MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01568400 DeHART RESERVOIR			
Sept. 30 .....	644.42	18,710	-
Oct. 31 .....	644.08	18,520	-3.1
Nov. 30 .....	644.08	18,520	0
Dec. 31 .....	644.17	18,570	+ .8
CAL YR 1975 .....	-	-	+2.0
Jan. 31 .....	644.50	18,750	+2.9
Feb. 29 .....	644.17	18,570	-3.1
Mar. 31 .....	644.04	18,500	-1.1
Apr. 30 .....	644.04	18,500	0
May 31 .....	644.04	18,500	0
June 30 .....	644.04	18,500	0
July 31 .....	643.83	18,380	-2.0
Aug. 31 .....	642.83	17,790	-9.6
Sept. 30 .....	642.00	17,310	-8.1
WTR YR 1976 .....	-	-	-1.9



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 mi<sup>2</sup> (58.3 km<sup>2</sup>).

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) above mean sea level. 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. Flow regulated by DeHart Reservoir (see p. 245). Diversion from reservoir to city of Harrisburg.

AVERAGE DISCHARGE.--38 years (1937-39, 1940-76), 39.4 ft<sup>3</sup>/s (1.12 m<sup>3</sup>/s), 23.78 in/yr (604 mm/yr), adjusted for storage and diversion since 1941.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft<sup>3</sup>/s (136 m<sup>3</sup>/s) June 22, 1972, gage height, 10.98 ft (3.347 m), from rating curve extended above 240 ft<sup>3</sup>/s (6.80 m<sup>3</sup>/s) on basis of computation of peak flow over dam; minimum daily, 0.2 ft<sup>3</sup>/s (0.006 m<sup>3</sup>/s) Jan. 29 to Feb. 3, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 254 ft<sup>3</sup>/s (7.19 m<sup>3</sup>/s) Jan. 27, gage height, 3.12 ft (0.951 m); minimum daily, 3.9 ft<sup>3</sup>/s (0.110 m<sup>3</sup>/s) July 31.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	11	20	59	124	30	126	19	16	6.4	4.0	4.5
2	50	11	18	53	89	28	129	33	24	4.8	4.0	4.5
3	33	13	15	48	70	26	105	28	19	4.3	4.0	4.5
4	26	9.1	14	45	59	29	94	22	15	4.3	4.0	4.5
5	21	13	13	37	51	29	78	19	13	4.3	4.0	4.5
6	17	7.8	12	32	44	26	64	20	11	4.3	4.0	4.5
7	12	8.1	13	28	37	24	53	16	10	4.6	4.2	4.5
8	10	8.3	13	28	32	21	44	14	12	4.5	4.3	4.5
9	13	8.5	18	24	27	24	38	13	6.4	4.5	8.4	4.5
10	10	17	14	20	23	21	31	13	5.5	4.3	4.3	4.8
11	10	42	14	19	21	21	30	12	5.0	4.5	22	4.5
12	9.9	52	13	17	20	23	26	12	5.1	4.3	4.2	4.5
13	8.2	121	13	16	18	26	21	10	5.1	4.3	4.2	4.5
14	7.5	102	11	16	19	31	18	9.1	4.8	4.3	15	4.5
15	7.0	82	11	14	18	29	17	8.2	4.8	4.3	4.5	4.5
16	11	69	10	13	19	30	15	10	4.6	5.3	16	5.7
17	9.7	62	9.7	12	50	25	16	18	4.6	4.3	16	8.1
18	52	45	8.6	11	71	22	15	19	4.6	4.3	4.5	4.6
19	69	40	7.6	10	75	21	14	20	4.6	4.3	4.5	4.5
20	57	34	8.6	9.2	70	22	15	8.5	5.0	4.2	4.5	4.5
21	52	42	8.1	8.6	62	25	18	8.5	5.1	5.7	4.5	4.5
22	39	50	7.3	8.5	67	26	16	7.7	6.2	4.0	4.3	4.5
23	37	40	7.1	8.2	66	27	12	6.9	22	4.3	4.3	4.5
24	29	33	7.1	8.1	53	18	12	6.7	28	4.2	4.3	4.5
25	30	28	7.3	14	45	17	15	6.5	19	4.0	4.5	4.5
26	29	25	18	151	39	17	23	7.3	11	4.0	4.5	4.8
27	24	26	33	225	37	18	18	6.3	7.6	4.0	4.5	4.8
28	21	24	30	153	34	27	15	9.1	6.4	4.0	4.5	4.6
29	18	22	29	115	32	25	13	7.1	10	5.5	4.5	4.6
30	17	21	25	87	---	23	12	16	10	4.0	4.5	4.8
31	12	---	32	79	---	26	---	16	---	3.9	4.5	---
TOTAL	814.3	1066.8	460.4	1368.6	1372	757	1103	421.9	305.4	138.0	189.5	141.3
MEAN	26.3	35.6	14.9	44.1	47.3	24.4	36.8	13.6	10.2	4.45	6.11	4.71
MAX	73	121	33	225	124	31	129	33	28	6.4	22	8.1
MIN	7.0	7.8	7.1	8.1	18	17	12	6.3	4.6	3.9	4.0	4.5
(/)	20.2	18.6	18.8	19.7	21.0	19.6	19.6	19.2	21.4	21.7	21.8	20.9
MEAN#	43.4	54.2	34.5	66.7	65.2	42.9	56.4	32.8	31.6	24.2	18.3	17.5
CFSM#	1.93	2.41	1.53	2.96	2.90	1.91	2.51	1.46	1.40	1.08	.81	.78
IN.#	2.22	2.69	1.76	3.41	3.13	2.20	2.80	1.68	1.56	1.24	.93	.87

CAL YR 1975 TOTAL 14283.7 MEAN 39.1 MAX 1410 MIN 5.8 MEAN# 61.3 CFSM# 2.72 IN.# 36.93  
WTR YR 1976 TOTAL 8138.2 MEAN 22.2 MAX 225 MIN 3.9 MEAN# 40.5 CFSM# 1.80 IN.# 24.49

/ 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

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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 mi<sup>2</sup> (29.8 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,010 ft<sup>3</sup>/s (85.2 m<sup>3</sup>/s) Sept. 26, 1975, gage height, 10.10 ft (3.078 m), from rating curve extended above 110 ft<sup>3</sup>/s (3.12 m<sup>3</sup>/s); minimum, 3.2 ft<sup>3</sup>/s (0.091 m<sup>3</sup>/s) Aug. 21, 22, 1974; 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 ft<sup>3</sup>/s (2.83 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	1730	166 4.70	5.05 1.539	Apr. 1	1400	158 4.47	4.98 1.518
Nov. 13	0630	164 4.64	5.03 1.533	June 23	1745	171 4.84	5.05 1.539
Jan. 27	1645	*220 6.23	*5.41 1.649	July 24	1515	115 3.26	4.67 1.423

Minimum discharge, 5.3 ft<sup>3</sup>/s (0.150 m<sup>3</sup>/s) Sept. 9; minimum gage height, 2.36 ft (0.719 m) June 13, 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	17	21	61	46	33	118	19	28	36	22	6.5
2	42	16	20	52	85	32	86	42	45	25	16	6.9
3	33	15	13	39	71	32	62	29	32	21	14	7.2
4	28	14	17	35	48	41	53	20	20	19	12	6.8
5	24	14	16	32	38	41	48	17	16	19	11	6.5
6	22	13	16	26	35	36	41	16	15	17	11	5.7
7	19	13	15	23	31	31	36	15	14	26	17	5.7
8	17	19	14	22	29	28	32	14	12	41	39	5.6
9	18	17	18	23	27	27	29	13	11	29	44	5.3
10	19	27	39	19	25	27	26	12	9.9	21	28	16
11	25	84	32	18	26	28	25	12	9.3	22	21	11
12	28	65	24	17	28	29	23	14	8.7	21	15	7.9
13	21	143	21	17	27	37	22	12	8.4	19	13	6.3
14	17	90	19	20	29	48	21	11	8.7	18	12	5.6
15	14	65	19	19	27	41	20	11	8.9	18	16	5.4
16	13	51	19	17	18	37	19	11	8.6	42	39	33
17	14	42	18	16	74	34	18	41	9.9	41	24	72
18	111	35	17	18	77	28	17	33	8.7	22	14	56
19	100	31	16	14	73	28	16	24	8.4	17	12	24
20	66	28	15	14	66	31	16	20	19	14	10	14
21	53	39	15	13	53	33	21	16	36	14	9.7	12
22	41	60	14	12	54	35	18	14	57	15	8.9	9.3
23	33	40	14	11	58	28	16	12	131	24	8.4	7.9
24	29	31	13	10	45	25	14	11	89	80	7.9	7.1
25	28	27	13	10	41	23	16	9.9	41	47	7.9	6.6
26	28	25	41	31	38	22	36	14	27	21	7.9	14
27	24	25	70	196	38	23	26	15	21	16	7.9	32
28	22	25	40	165	37	38	18	11	18	14	8.1	38
29	20	22	27	86	35	31	15	10	48	23	7.5	25
30	20	21	25	65	---	25	14	40	50	59	6.6	17
31	18	---	35	50	---	25	---	43	---	39	6.6	---
TOTAL	999	1114	696	1151	1279	977	922	581.9	819.5	840	477.4	476.3
MEAN	32.2	37.1	22.5	37.1	44.1	31.5	30.7	18.8	27.3	27.1	15.4	15.9
MAX	111	143	70	196	85	48	118	43	131	80	44	72
MIN	13	13	13	10	18	22	14	9.9	8.4	14	6.6	5.3
CFSM	2.80	3.23	1.96	3.23	3.83	2.74	2.67	1.63	2.37	2.36	1.34	1.38
IN.	3.23	3.60	2.25	3.72	4.14	3.16	2.98	1.88	2.65	2.72	1.54	1.54

CAL YR 1975	TOTAL	13976.3	MEAN 38.3	MAX 1610	MIN 4.7	CFSM 3.33	IN 45.21
WTR YR 1976	TOTAL	10333.1	MEAN 28.2	MAX 196	MIN 5.3	CFSM 2.45	IN 33.42

## 01568700 STONY CREEK ABOVE PUMP-STORAGE RESERVOIR SITE NEAR DAUPHIN, PA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: March 1974 to July 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 22.0°C July 9, 1974; minimum, freezing point on many days each year.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 20.0°C June 28; minimum, freezing point on many days during January and February.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	BICAR- BONATE (HCO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT												
06...	1210	22	21	5.0	13.0	1	9.6	.2	10	2	2	32
14...	1010	17	28	5.6	13.0	2	9.0	.3	15	1	1	4.0
20...	1015	66	36	4.4	11.0	1	--	--	--	--	--	--
28...	1005	22	26	5.0	10.5	2	10.0	.2	10	1	1	16
NOV												
03...	1045	15	24	5.2	10.5	2	10.8	.3	15	1	1	10
11...	1030	98	32	--	11.0	2	--	--	--	--	--	--
17...	1020	42	38	4.2	6.5	1	9.0	.4	20	0	0	.0
24...	1010	30	28	4.8	5.5	2	12.0	.3	15	2	2	51
DEC												
08...	1010	14	31	4.8	2.0	2	12.4	.4	20	3	2	76
17...	0920	13	27	4.7	3.0	2	12.8	.2	10	3	2	96
22...	0945	10	27	5.0	.5	2	12.2	.1	5.0	4	3	64
29...	1130	21	28	4.8	.5	1	13.4	.2	10	2	2	51
JAN												
12...	1430	13	29	5.3	.0	--	13.6	.0	.0	2	2	16
FEB												
09...	1130	20	30	5.0	.0	2	14.0	.1	5.0	3	2	48
18...	1245	72	34	4.6	3.5	2	10.8	.2	10	0	0	.0
23...	1055	52	36	4.9	3.0	2	12.4	.1	5.0	1	1	20
MAR												
01...	1145	24	27	5.4	6.5	2	11.8	.0	.0	1	1	6.4
08...	1040	21	75	5.3	4.5	2	13.2	.1	5.0	2	2	16
15...	1010	32	29	4.5	4.0	4	12.4	.1	5.0	2	2	101
22...	1320	23	27	5.3	5.5	1	11.8	.1	5.0	2	2	16
29...	1230	22	30	5.0	6.5	2	11.6	.1	5.0	2	2	32
APR												
05...	1030	45	50	4.9	5.5	4	11.2	.2	10	1	1	20
12...	1020	18	24	5.0	5.0	2	12.0	.1	5.0	2	2	32
19...	0950	12	33	5.4	15.5	2	9.6	.1	5.0	4	3	25
27...	1100	21	26	5.0	8.0	1	10.8	.0	.0	2	2	32
MAY												
03...	1250	23	28	5.2	12.0	2	10.0	.1	5.0	1	1	10
11...	1010	8.2	34	5.5	12.0	1	10.0	.0	.0	4	3	20
24...	1030	7.5	26	6.0	13.0	2	10.2	.1	5.0	4	3	6.4
JUN												
01...	1230	20	29	5.4	14.5	2	9.2	.1	5.0	1	1	6.4
07...	1130	11	46	5.7	14.5	2	12.6	.1	5.0	0	0	.0
14...	1130	5.8	26	6.3	16.0	2	9.0	.1	5.0	6	5	4.8
22...	1100	55	30	4.8	17.5	3	7.0	.1	5.0	1	1	25
28...	1120	--	26	5.2	19.0	2	8.4	.2	10	2	2	20
JUL												
07...	1035	18	20	5.6	16.5	2	7.8	.1	5.0	1	1	4.0
AUG												
18...	1000	--	26	4.7	18.0	2	8.8	.1	5.0	1	1	32

01568700 STONY CREEK ABOVE PUMP-STORAGE RESERVOIR SITE NEAR DAUPHIN, PA--Continued

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

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

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

## STONY CREEK BASIN

01568750 STONY CREEK BELOW PUMP-STORAGE RESERVOIR NEAR DAUPHIN, PA.

LOCATION.--Lat 40°24'51", long 76°46'50", Dauphin County, Hydrologic Unit 02050305, on right bank at Water Tank Trail, 3.8 mi (6.1 km) downstream from Rattling Run, and 9 mi (14.5 km) northeast of Dauphin.

DRAINAGE AREA.--21.9 mi<sup>2</sup> (56.7 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to Sept. 1976 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 560 ft (171 m).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,110 ft<sup>3</sup>/s (145 m<sup>3</sup>/s) Sept. 26, 1975, gage height, 8.66 ft (2.640 m), from rating curve extended above 150 ft<sup>3</sup>/s (4.25 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 7.0 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s) Aug. 21, 1974, gage height, 1.33 ft (0.405 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft<sup>3</sup>/s (5.10 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Nov. 13	1230	238 6.74	3.19 0.972	Apr. 1	1945	242 6.85	3.23 0.985
Jan. 27	1545	*467 13.2	*4.04 1.231				

Minimum discharge, 9.0 ft<sup>3</sup>/s (0.25 m<sup>3</sup>/s) Jan. 17, 18, gage height, 1.36 ft (0.415 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	34	38	79	61	48	183	31	46	45	35	14
2	98	33	37	67	90	47	144	54	62	34	27	14
3	76	32	34	53	81	46	95	45	52	28	24	15
4	61	31	32	48	59	56	82	34	37	27	22	14
5	49	30	30	38	49	56	75	30	30	25	21	14
6	41	29	30	34	45	50	65	27	27	23	21	13
7	37	28	28	34	42	47	58	27	27	35	25	13
8	34	36	27	32	39	43	53	25	24	54	53	13
9	34	35	30	28	36	42	49	24	21	40	59	12
10	37	57	43	27	34	42	46	23	20	30	45	26
11	42	99	40	27	35	45	43	22	18	29	35	23
12	46	111	32	28	37	46	41	25	17	30	27	16
13	38	206	27	27	36	56	38	23	17	26	24	13
14	32	143	26	30	40	66	36	21	17	25	24	12
15	29	101	25	28	38	60	35	20	17	24	33	12
16	28	84	25	26	41	56	33	21	17	40	54	45
17	29	72	23	24	100	53	32	40	19	48	41	76
18	122	65	22	22	114	47	30	48	17	30	27	64
19	138	59	22	21	99	47	29	34	16	24	23	35
20	91	55	20	22	87	48	28	28	24	21	21	22
21	75	68	20	22	73	52	31	25	61	21	20	19
22	63	84	20	21	75	54	30	23	81	22	19	16
23	55	67	20	20	76	48	27	20	125	30	18	15
24	48	55	18	19	63	43	25	19	121	62	17	14
25	50	50	18	18	57	42	27	18	57	72	16	13
26	50	47	47	59	54	40	49	28	38	34	16	18
27	45	46	72	324	54	41	42	28	31	26	16	37
28	41	45	51	229	53	57	30	22	27	24	17	41
29	39	41	35	108	50	51	27	19	58	35	16	33
30	38	38	32	79	---	43	25	62	55	65	15	25
31	36	---	43	62	---	43	---	64	---	57	14	---
TOTAL	1724	1881	967	1656	1718	1515	1508	930	1178	1086	825	697
MEAN	55.6	62.7	31.2	53.4	59.2	48.9	50.3	30.0	39.3	35.0	26.6	23.2
MAX	138	206	72	324	114	66	183	64	125	72	59	76
MIN	28	28	18	18	34	40	25	18	16	21	14	12
CFSM	2.54	2.86	1.42	2.44	2.70	2.23	2.30	1.37	1.79	1.60	1.21	1.06
IN.	2.93	3.19	1.64	2.81	2.92	2.57	2.56	1.58	2.00	1.84	1.40	1.18

CAL YR 1975	TOTAL	24897.1	MEAN 68.2	MAX 3570	MIN 7.3	CFSM 3.11	IN 42.29
WTR YR 1976	TOTAL	15685.0	MEAN 42.9	MAX 324	MIN 12	CFSM 1.96	IN 26.64



## STONY CREEK BASIN

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01568750 STONY CREEK BELOW PUMP-STORAGE RESERVOIR SITE NEAR DAUPHIN, PA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: March 1974 to July 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 24.0°C Aug. 4, 1975; minimum, freezing point on several days during December 1974, January to March 1975.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 27.0°C July 6; minimum, freezing point on many days during December to February.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	BICAR- BONATE (HCO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARRON DIOXIDE (CO2) (MG/L)
OCT.												
06...	1310	32	24	5.3	13.0	2	10.0	.2	10	2	2	16
14...	1115	25	24	5.7	12.0	1	10.0	.2	10	1	1	3.2
20...	1125	76	31	4.5	11.5	1	10.0	.4	20	0	0	.0
28...	1100	34	24	5.1	11.5	1	10.6	.2	10	1	1	13
NOV.												
03...	1145	24	22	5.3	10.5	1	11.0	.2	10	1	1	8.0
11...	0950	267	28	5.1	10.5	2	10.2	.2	10	2	2	25
17...	1110	53	29	4.4	6.5	2	12.0	.3	15	0	0	.0
24...	1100	47	23	5.0	5.5	2	12.4	.2	10	2	2	32
DEC.												
08...	1100	26	24	5.1	2.0	1	13.0	.2	10	4	3	51
17...	1025	22	24	4.8	3.5	2	13.2	.1	5.0	3	2	76
22...	1310	18	22	5.0	.5	3	13.6	.1	5.0	2	2	32
29...	1245	34	28	5.0	1.0	1	13.4	.2	10	2	2	32
JAN.												
12...	1320	29	24	5.7	.0	2	14.2	.0	.0	2	2	6.4
FEB.												
03...	1030	88	32	5.1	.0	1	14.0	.1	5.0	1	1	13
09...	1030	36	24	5.5	.0	2	14.4	.1	5.0	2	2	10
18...	1350	116	38	5.1	5.5	2	12.2	.1	5.0	2	2	25
23...	0955	80	32	5.2	3.0	1	13.2	.1	5.0	1	1	10
MAR.												
01...	1040	235	26	5.4	6.0	1	12.0	.0	.0	3	2	19
08...	1130	187	29	5.8	5.0	1	13.4	.1	5.0	3	2	7.6
15...	0915	53	30	4.8	4.5	3	12.2	.1	5.0	2	2	51
22...	1140	44	26	5.7	5.5	1	12.2	.0	.0	2	2	6.4
29...	1115	41	28	5.3	6.5	2	12.0	.1	5.0	2	2	16
APR.												
05...	0930	64	27	5.1	4.5	2	12.0	.1	5.0	3	2	38
12...	1120	37	28	5.6	5.0	2	11.8	.1	5.0	1	1	4.0
19...	0850	26	31	5.9	15.5	2	9.6	.1	5.0	3	2	6.0
27...	0955	40	28	5.5	8.5	2	11.2	.1	5.0	2	2	10
MAY												
03...	1130	42	28	5.7	11.0	1	10.4	.1	5.0	2	2	6.4
11...	1050	18	22	5.8	13.0	2	10.2	.0	.0	3	2	7.6
17...	1055	176	25	5.5	15.0	2	9.2	.1	5.0	4	3	20
24...	1130	15	24	6.4	14.0	1	9.6	.0	.0	5	4	3.2
JUNE												
01...	1115	38	29	5.6	14.5	1	10.0	.1	5.0	2	2	8.0
07...	1045	22	28	5.6	14.5	2	9.8	.0	.0	0	0	.0
14...	1045	11	25	6.6	16.5	2	8.8	.1	5.0	4	3	1.6
22...	1000	82	27	4.9	18.0	3	9.6	.2	10	1	1	20
28...	1015	--	53	5.0	20.0	2	8.6	.2	10	2	2	32
JULY												
07...	0945	16	19	5.8	18.5	1	8.4	.1	5.0	2	2	5.1
SEP.												
30...	1330	26	28	6.6	11.0	--	11.4	6.0	298	0	0	.0

01568750 STONY CREEK BELOW PUMP-STORAGE RESERVOIR SITE NEAR DAUPHIN, PA--Continued

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

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

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	6.0	12.0	11.0	14.5	14.0	24.0	14.5				
2	7.0	5.5	11.5	10.0	14.5	13.5	19.5	10.5				
3	7.0	5.0	11.5	11.0	14.5	12.0	24.0	10.5				
4	7.0	5.0	11.0	10.0	15.0	14.0	21.0	10.5				
5	7.0	4.0	11.5	9.0	15.0	13.5	24.0	11.0				
6	8.0	6.0	14.0	11.0	15.0	13.5	27.0	13.0				
7	9.0	6.5	14.0	13.5	16.5	13.0	---	---				
8	8.5	6.5	13.0	11.0	18.5	15.5	---	---				
9	7.0	5.5	12.0	10.0	19.0	16.5	---	---				
10	8.0	5.5	13.5	10.5	19.5	18.0	---	---				
11	8.5	7.0	13.5	13.0	---	---	---	---				
12	7.0	5.0	13.5	11.5	---	---	---	---				
13	8.5	5.0	13.0	10.5	---	---	---	---				
14	10.0	6.5	14.0	12.0	---	---	---	---				
15	10.5	8.5	15.5	13.5	20.0	17.0	---	---				
16	12.0	9.5	16.0	15.5	20.5	19.0	---	---				
17	15.0	11.5	15.5	15.0	21.0	19.0	---	---				
18	16.5	13.5	15.0	12.0	21.5	19.0	---	---				
19	18.0	15.0	12.0	10.5	21.0	20.0	---	---				
20	18.5	15.5	12.0	10.5	20.5	19.0	---	---				
21	18.5	16.5	14.5	12.0	19.5	19.0	---	---				
22	18.0	16.5	15.0	13.5	19.0	18.0	---	---				
23	16.5	15.0	---	---	19.0	18.0	---	---				
24	15.5	14.0	---	---	19.5	18.5	---	---				
25	15.0	12.0	14.5	14.0	20.5	19.0	---	---				
26	12.0	9.5	14.0	12.0	21.0	19.5	---	---				
27	8.5	8.5	14.0	11.0	21.0	19.0	---	---				
28	10.0	8.0	15.0	13.0	22.0	19.5	---	---				
29	11.5	9.5	14.5	14.0	21.0	20.0	---	---				
30	13.0	10.0	14.5	13.0	19.5	18.5	---	---				
31	---	---	14.0	13.0	---	---	---	---				
MONTH	18.5	4.0	16.0	9.0	22.0	12.0	---	---				

## CONODOGUINET CREEK BASIN

253

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 mi<sup>2</sup> (55.9 km<sup>2</sup>).

PERIOD OF RECORD.--June to September 1976.

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, 129 ft<sup>3</sup>/s (3.65 m<sup>3</sup>/s) Sept. 16, 1976, gage height, 4.42 ft (1.347 m); minimum, no flow part of Aug. 15, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of 8.8 ft (2.7 m), discharge not determined, and flood in June 1972 reached a stage of 8.4 ft (2.6 m), discharge not determined, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September, 129 ft<sup>3</sup>/s (3.65 m<sup>3</sup>/s) Sept. 16, gage height, 4.42 ft (1.347 m); minimum not determined; minimum daily, 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	44	38	36
2									---	43	38	37
3									---	48	37	37
4									---	49	37	36
5									---	44	36	35
6									---	43	38	33
7									---	46	38	34
8									---	48	42	35
9									---	44	38	33
10									---	44	38	47
11									---	50	37	36
12									---	45	34	34
13									---	42	29	35
14									---	41	10	34
15									46	52	13	34
16									46	47	47	78
17									47	44	51	48
18									43	41	48	41
19									43	42	46	39
20									56	40	45	38
21									59	46	42	38
22									50	44	40	36
23									47	46	40	35
24									46	45	40	34
25									45	40	39	33
26									43	40	38	33
27									41	39	38	34
28									44	38	38	33
29									46	44	36	33
30									49	41	36	36
31									---	39	36	---
TOTAL									---	1359	1163	1125
MEAN									---	43.8	37.5	37.5
MAX									---	52	51	78
MIN									---	38	10	33
CFSM									---	2.03	1.74	1.74
IN.									---	2.34	2.00	1.94

## CONODOGUINET CREEK BASIN

01569900 CONODOGUINET CREEK NEAR NEW KINGSTON, PA

LOCATION.--Lat 40°15'36", long 77°06'11", Cumberland County, Hydrologic Unit 02050305, at bridge on Legislative Route 21102, 2.2 mi (3.5 km) northwest of New Kingston and 4.5 mi (7.2 km) downstream from Letort Spring Run.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)
OCT 23...	1035	9813	180	7.1	15.0	13	9.1	120	0	0	41	4.0
NOV 20...	1530	9813	200	8.1	11.0	2	13.0	132	0	0	47	3.5
DEC 23...	1330	9813	220	8.2	1.0	1	12.2	180	--	0	51	13
JAN 15...	1215	9813	240	8.1	2.0	4	12.3	138	0	0	48	4.0
FEB 16...	1045	9813	185	7.6	7.0	38	9.7	114	0	0	39	4.0
MAR 25...	1510	9813	250	9.1	11.5	2	12.5	150	--	0	41	11
APR 13...	1515	9813	240	8.5	12.5	3	16.0	152	0	0	44	10
MAY 06...	1200	9813	380	8.5	17.0	1	--	136	0	0	54	.0
JUN 22...	1130	9813	250	7.2	21.0	50	7.7	78	0	0	27	2.5
AUG 17...	1030	9813	400	8.0	18.5	55	7.7	180	--	0	56	9.5

DATE	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 23...	106	18	9.0	226	--	2.3	.05	.07	.10	340	6.0
NOV 20...	126	18	20	214	--	2.6	.05	.08	.11	70	--
DEC 23...	140	20	12	--	--	2.9	.09	.09	.13	40	--
JAN 15...	120	18	16	236	--	3.0	.04	.10	.13	70	--
FEB 16...	106	20	15	190	86	2.3	.07	.18	.24	1100	--
MAR 25...	108	18	14	180	--	2.3	.08	.07	.08	70	--
APR 13...	112	24	13	--	--	2.2	.05	.08	.13	130	--
MAY 06...	148	18	16	--	--	2.8	.07	.05	.13	110	--
JUN 22...	78	12	14	116	--	2.3	.05	.18	.25	2430	--
AUG 17...	156	12	20	574	--	12	.05	.15	.20	510	--

## 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 mi<sup>2</sup> (1,217 km<sup>2</sup>).

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) above mean sea level. 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.

AVERAGE DISCHARGE.--44 years (1911-17, 1929-58, 1967-76), 589 ft<sup>3</sup>/s (16.7 m<sup>3</sup>/s), 17.01 in/yr (432 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,700 ft<sup>3</sup>/s (954 m<sup>3</sup>/s) June 23, 1972, gage height, 17.01 ft (5.185 m), from floodmark in gage shelter; minimum, 24 ft<sup>3</sup>/s (0.68 m<sup>3</sup>/s) Dec. 16, 1930; minimum daily, 26 ft<sup>3</sup>/s (0.74 m<sup>3</sup>/s) Dec. 23, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft<sup>3</sup>/s (113 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct. 19	0130	*7,700	218	Apr. 1	2145	4,050	115
Jan. 28	0345	4,050	115				

Minimum discharge, 98 ft<sup>3</sup>/s (2.78 m<sup>3</sup>/s) Sept. 9, 10, 15; minimum gage height, 1.08 ft (0.329 m) Sept. 9, 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	528	378	2810	811	511	2950	283	1330	248	205	121
2	1010	503	375	2680	1380	486	2930	310	1970	232	189	123
3	843	482	363	1760	798	465	1840	326	1220	233	180	119
4	716	465	353	1480	718	496	1430	292	838	309	173	114
5	643	447	340	1050	771	532	1300	268	629	247	169	110
6	591	432	336	837	610	482	1050	258	511	222	172	110
7	541	418	332	740	500	434	967	255	459	274	193	108
8	497	429	325	620	460	407	767	250	412	339	240	104
9	548	438	352	540	450	401	676	243	362	244	434	100
10	1300	423	562	450	430	416	605	234	327	223	315	128
11	1050	485	678	420	535	453	567	230	304	254	235	130
12	960	571	544	400	898	557	522	241	286	256	204	117
13	787	1270	482	390	601	702	476	243	270	279	193	110
14	667	1360	447	500	597	1090	451	233	261	237	308	104
15	584	1010	427	557	565	980	430	227	257	248	407	100
16	522	822	422	490	516	822	411	230	304	350	344	215
17	498	704	397	460	1040	793	397	317	274	338	259	298
18	4360	630	379	351	1510	675	381	437	259	268	218	716
19	6780	566	330	332	1490	622	363	466	247	225	193	355
20	2910	523	305	320	1320	596	349	375	333	205	175	259
21	2140	518	348	413	1100	574	338	318	744	216	168	223
22	1620	606	335	390	1030	643	327	285	903	280	163	207
23	1320	552	311	380	988	584	315	261	635	276	158	178
24	1110	474	294	360	804	520	306	246	441	409	148	161
25	986	446	285	340	731	497	309	235	360	345	146	149
26	919	429	497	767	679	486	348	283	318	266	146	158
27	818	421	1180	2530	642	469	354	440	283	232	144	180
28	735	424	1140	3210	637	1080	318	385	262	217	139	199
29	669	402	830	1350	545	1130	295	301	263	223	139	188
30	622	382	738	1100	---	881	283	969	252	287	132	185
31	569	---	1270	844	---	902	---	1890	---	230	128	---
TOTAL	38525	17160	15355	28871	23156	19686	22055	11331	15314	8212	6417	5369
MEAN	1243	572	495	931	798	635	735	366	510	265	207	179
MAX	6780	1360	1270	3210	1510	1130	2950	1890	1970	409	434	716
MIN	497	382	285	320	430	401	283	227	247	205	128	100
CFSM	2.64	1.22	1.05	1.98	1.70	1.35	1.56	.78	1.09	.56	.44	.38
IN.	3.05	1.36	1.22	2.29	1.83	1.56	1.75	.90	1.21	.65	.51	.42

CAL YR 1975	TOTAL	293738	MEAN 805	MAX 14100	MIN 119	CFSM 1.71	IN 23.25
WTR YR 1976	TOTAL	211451	MEAN 578	MAX 6780	MIN 100	CFSM 1.23	IN 16.74



## CONODOGUINET CREEK BASIN

01570100 CONODOGUINET CREEK TRIBUTARY NO. 1 NEAR ENOLA, PA

LOCATION.--Lat 40°17'27", long 76°59'38", Cumberland County, Hydrologic Unit 02050305, on right bank 720 ft (219 m) upstream from bridge on State Highway 944, 3.2 mi (5.15 km) upstream from mouth, and 3.3 mi (5.31 km) west of Enola.

DRAINAGE AREA.--0.77 mi<sup>2</sup> (1.99 km<sup>2</sup>).

PERIOD OF RECORD.--October 1969 to September 1971 (partial-record station), May 1972 to September 1976 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: June 1969 to September 1976 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum, 570 mg/l July 3, 1976; minimum, 1 mg/l on many days each year.

SEDIMENT LOADS: Maximum, 285 tons (258 t) June 22, 1972; minimum, 0 tons (0 t) on many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum, 570 mg/l July 3; minimum, 1 mg/l on many days.

SEDIMENT LOADS: Maximum, 47 tons (43 t) July 7; minimum, 0 tons (0 t) on many days.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)
MAY 07...	1445	.25	267	8.0	17.0	2	9.8	130	20	47	4.2

DATE	TIME	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARRON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
MAY 07...	3.4	.1	1.0	140	0	115	2.2	14	2.9	.1	147	

DATE	TIME	TOTAL NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)
MAY 07...	3	.54	.01	.24	.25	.79	.01	20	0	0	<10	

DATE	TIME	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	OIL AND GREASE (MG/L)
MAY 07...		0	0	50	1	20	<.5	0	0	10	0

## 01570100 CONODOGUINET CREEK TRIBUTARY NO. 1 NEAR ENOLA, PA--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.79	1	0	.31	1	0	.50	1	0
2	.63	1	0	.31	1	0	.45	1	0
3	.53	1	0	.27	1	0	.40	1	0
4	.45	1	0	.27	1	0	.40	1	0
5	.40	1	0	.27	1	0	.40	1	0
6	.40	1	0	.27	1	0	.45	1	0
7	.35	1	0	.27	1	0	.40	1	0
8	.31	1	0	.35	1	0	.40	1	0
9	.35	1	0	.31	1	0	1.3	20	.12
10	.35	1	0	.57	5	.01	1.4	3	.01
11	.40	1	0	.45	3	0	.88	3	0
12	.31	1	0	3.5	38	.46	.70	2	0
13	.27	1	0	4.0	6	.07	.63	2	0
14	.23	1	0	1.6	1	.01	.63	2	0
15	.23	1	0	1.3	1	0	.63	1	0
16	.19	1	0	1.1	1	0	.63	1	0
17	.65	15	.04	.88	1	0	.56	1	0
18	4.8	30	.65	.79	1	0	.50	1	0
19	1.3	5	.02	.70	1	0	.45	1	0
20	1.0	4	.01	.63	1	0	.40	1	0
21	.88	3	.01	1.2	10	.04	.40	1	0
22	.63	3	.01	.88	3	.01	.40	1	0
23	.56	3	0	.63	2	0	.40	1	0
24	.50	2	0	.63	1	0	.35	1	0
25	.45	2	0	.56	1	0	.35	1	0
26	.45	1	0	.50	1	0	5.2	66	.96
27	.40	1	0	.50	1	0	2.7	3	.02
28	.35	1	0	.50	1	0	1.8	2	.01
29	.35	1	0	.45	1	0	1.3	2	.01
30	.31	1	0	.45	1	0	2.1	40	.41
31	.27	1	0	---	---	---	3.5	39	.57
TOTAL	19.09	---	.74	24.45	---	.60	30.61	---	2.11

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.2	39	.96	4.8	70	1.4	.70	2	0
2	2.3	2	.02	4.4	20	.30	.65	2	0
3	2.3	2	.02	1.7	5	.02	.60	2	0
4	1.8	4	.02	1.9	25	.24	1.3	4	.01
5	1.2	3	.01	1.4	5	.02	.80	3	.01
6	1.1	2	.01	1.2	4	.01	.63	2	0
7	1.1	2	.01	.98	3	.01	.50	2	0
8	1.2	4	.01	.88	2	0	.45	2	0
9	.88	3	.01	.70	2	0	.50	2	0
10	.56	2	0	1.2	20	.12	.80	2	0
11	.56	2	0	1.8	24	.21	1.6	3	.01
12	.50	2	0	1.2	2	.01	1.0	3	.01
13	.56	2	0	1.2	2	.01	2.0	3	.01
14	1.1	4	.02	1.1	2	.01	1.0	3	.01
15	.70	2	0	1.0	1	0	.79	3	.01
16	.63	2	0	1.7	45	.40	.79	3	.01
17	.50	1	0	3.8	26	.40	.79	3	.01
18	.35	1	0	2.9	29	.29	.79	3	.01
19	.31	1	0	2.5	5	.03	.70	3	.01
20	.31	1	0	2.0	5	.03	.70	3	.01
21	.31	1	0	1.4	4	.02	.79	7	.02
22	.35	1	0	1.8	4	.02	.70	2	0
23	.32	1	0	1.1	3	.01	.70	2	0
24	.32	1	0	.88	3	.01	.63	2	0
25	.29	1	0	.79	3	.01	.63	2	0
26	13	312	21	.77	2	0	.63	1	0
27	16	112	5.2	.75	2	0	1.2	34	.33
28	5.1	10	.14	.73	2	0	1.1	5	.02
29	3.1	3	.03	.70	2	0	.70	2	.01
30	2.3	3	.02	---	---	---	.70	2	.01
31	1.7	2	.01	---	---	---	1.9	90	1.3
TOTAL	66.95	---	27.49	47.28	---	3.58	26.77	---	1.81

01570100 CONODOGUINET CREEK TRIBUTARY NO. 1 NEAR ENOLA, PA--Continued

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.7	360	18	.72	13	.04	2.1	500	15
2	2.8	5	.04	.50	5	.01	1.9	15	.08
3	2.0	4	.02	.40	5	.01	.98	5	.01
4	1.8	3	.02	.35	4	0	.56	5	.01
5	1.5	3	.01	.31	4	0	.40	5	.01
6	1.3	2	.01	.27	5	0	.35	4	0
7	1.2	2	.01	.31	5	0	.31	4	0
8	1.1	2	.01	.31	4	0	.27	4	0
9	.98	2	.01	.27	3	0	.23	4	0
10	.88	2	0	.27	3	0	.19	4	0
11	.79	1	0	.31	4	0	.16	4	0
12	.65	1	0	.35	5	0	.16	7	0
13	.63	1	0	.27	3	0	.19	6	0
14	.56	1	0	.23	2	0	.19	3	0
15	.50	1	0	.23	2	0	.16	3	0
16	.50	2	0	.50	350	11	.14	5	0
17	.45	1	0	.84	33	.10	.19	4	0
18	.45	1	0	.82	19	.05	.13	3	0
19	.40	1	0	.45	6	.01	.30	46	.15
20	.40	1	0	.31	5	0	.56	16	.03
21	.35	1	0	.27	4	0	.42	10	.02
22	.40	1	0	.19	3	0	.40	5	.01
23	.35	1	0	.16	2	0	.27	3	0
24	.31	1	0	.16	2	0	.19	2	0
25	.58	30	.11	.19	7	0	.16	3	0
26	.93	18	.06	.62	20	.04	.13	2	0
27	.45	4	0	.31	4	0	.13	4	0
28	.40	3	0	.19	3	0	.19	4	.01
29	.35	3	0	.19	2	0	.19	3	0
30	.31	3	0	2.4	81	.49	.13	2	0
31	---	---	---	.88	4	.01	---	---	---
TOTAL	32.02	---	18.30	13.58	---	11.76	11.68	---	15.33
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.11	1	0	.16	2	0	.11	5	0
2	.09	1	0	.16	1	0	.13	1	0
3	1.8	570	29	.13	2	0	.13	1	0
4	.27	10	.01	.11	1	0	.13	1	0
5	.16	4	0	.11	1	0	.13	1	0
6	.13	2	0	.18	18	.04	.13	1	0
7	5.3	540	47	.19	3	0	.13	1	0
8	1.6	13	.10	.61	57	.17	.11	1	0
9	.56	8	.01	.19	3	0	.09	1	0
10	.35	3	0	.27	7	.04	.28	33	.08
11	1.2	110	1.3	.14	5	0	.13	3	0
12	.56	4	.01	.11	6	0	.11	2	0
13	.40	2	0	2.4	150	12	.11	1	0
14	.31	2	0	1.7	110	1.4	.13	1	0
15	1.1	170	7.2	3.9	150	10	.13	2	0
16	1.2	32	.21	1.6	6	.03	.95	83	.32
17	.35	4	0	.88	3	0	1.2	160	2.5
18	.27	2	0	.63	3	0	.50	6	.01
19	.19	2	0	.45	2	0	.31	3	0
20	.16	1	0	.40	1	0	.27	2	0
21	.51	47	.17	.31	1	0	.23	2	0
22	.35	3	0	.27	1	0	.19	1	0
23	1.0	40	.45	.23	1	0	.16	1	0
24	.95	10	.04	.19	1	0	.16	1	0
25	.40	3	0	.19	1	0	.16	1	0
26	.31	2	0	.19	1	0	.29	8	.01
27	.27	2	0	.16	1	0	.27	2	0
28	.23	1	0	.16	1	0	.23	1	0
29	.25	7	.01	.13	1	0	.19	1	0
30	.27	3	0	.13	1	0	.35	13	.02
31	.19	2	0	.11	1	0	---	---	---
TOTAL	20.84	---	85.51	16.39	---	23.68	7.44	---	2.94
YEAR	317.10		193.85						

## CONODOGUINET CREEK BASIN

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01570180 CONODOGUINET CREEK TRIBUTARY AT INTERSTATE 81 NEAR ENOLA, PA

LOCATION.--Lat 40°17'23", long 76°58'54", Cumberland County, Hydrologic Unit 02050305, on left bank downstream of storm drainage outfall pipe, 700 ft (213 m) north of Wertzville Road on northbound entrance ramp of Interstate 81 at Wertzville Road interchange, and 2.2 mi (3.5 km) west of Enola.

DRAINAGE AREA.--0.03 mi<sup>2</sup> (0.07 km<sup>2</sup>)

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

GAGE.--Water-stage recorder and concrete control.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2.65 ft<sup>3</sup>/s (0.075 m<sup>3</sup>/s) July 7, 1976, gage height, 3.5 ft (1.07 m); minimum, 0.008 ft<sup>3</sup>/s (0.00023 m<sup>3</sup>/s) Sept 14, 15, 1976, gage height, 1.1 ft (0.34 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.65 ft<sup>3</sup>/s (0.075 m<sup>3</sup>/s) July 7, gage height, 3.5 ft (1.07 m); minimum, 0.008 ft<sup>3</sup>/s (0.00023 m<sup>3</sup>/s) Sept 14, 15, gage height, 1.1 ft (0.34 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	.01	.03	.35	.27	.02	.60	.05	.42	.02	.02	.01
2	---	.01	.03	.09	.11	.02	.07	.03	.08	.02	.02	.01
3	---	.01	.02	.16	.03	.02	.04	.02	.04	.63	.02	.01
4	---	.01	.02	.07	.06	.06	.04	.02	.03	.01	.02	.01
5	---	.01	.02	.04	.02	.03	.03	.02	.02	.02	.02	.01
6	---	.01	.02	.04	.02	.02	.03	.01	.02	.02	.05	.01
7	---	.01	.02	.03	.02	.02	.02	.01	.02	1.2	.03	.01
8	---	.01	.02	.03	.01	.02	.02	.01	.02	.12	.24	.01
9	---	.01	.25	.02	.02	.02	.02	.01	.02	.06	.04	.01
10	---	.06	.10	.02	.05	.06	.02	.01	.02	.04	.06	.17
11	---	.02	.04	.02	.05	.10	.02	.02	.02	.16	.03	.02
12	---	.57	.03	.02	.02	.07	.02	.02	.01	.05	.02	.02
13	---	.20	.03	.04	.04	.13	.02	.01	.01	.04	.35	.01
14	---	.06	.02	.05	.04	.05	.02	.01	.01	.04	.27	.01
15	---	.04	.02	.02	.03	.04	.02	.01	.01	.30	.52	.01
16	---	.03	.02	.02	.08	.04	.01	.06	.01	.10	.10	.60
17	.37	.03	.02	.02	.24	.04	.01	.06	.01	.03	.05	.18
18	.58	.02	.02	.02	.18	.03	.01	.06	.01	.03	.04	.06
19	.07	.02	.01	.02	.10	.03	.01	.02	.08	.02	.03	.04
20	.06	.02	.01	.02	.05	.02	.01	.02	.17	.02	.02	.03
21	.04	.07	.01	.02	.04	.03	.01	.02	.08	.16	.02	.03
22	.03	.03	.01	.02	.05	.02	.01	.01	.04	.04	.02	.02
23	.03	.02	.01	.02	.03	.02	.01	.01	.02	.32	.02	.02
24	.02	.02	.01	.02	.03	.02	.01	.01	.02	.11	.01	.02
25	.02	.02	.01	.02	.03	.02	.05	.02	.02	.04	.01	.02
26	.02	.02	.57	1.2	.03	.02	.04	.14	.02	.03	.01	.05
27	.02	.02	.11	.81	.02	.10	.02	.03	.01	.03	.01	.06
28	.02	.03	.07	.09	.02	.05	.02	.02	.04	.02	.01	.04
29	.02	.03	.05	.05	.02	.03	.01	.04	.04	.03	.01	.04
30	.01	.03	.15	.03	---	.03	.01	.04	.02	.02	.01	.12
31	.01	---	.34	.03	---	.32	---	.06	---	.02	.01	---
TOTAL	---	1.45	2.09	3.41	1.71	1.50	1.23	.88	1.34	3.75	2.09	1.66
MEAN	---	.048	.067	.11	.059	.048	.041	.028	.045	.12	.067	.055
MAX	---	.57	.57	1.2	.27	.32	.60	.14	.42	1.2	.52	.60
MIN	---	.01	.01	.02	.01	.02	.01	.01	.01	.01	.01	.01
CFSM	---	1.71	2.39	3.93	2.11	1.71	1.46	1.00	1.61	4.29	2.39	1.96
IN.	---	1.86	2.68	4.37	2.19	1.92	1.58	1.13	1.72	4.81	2.68	2.13

## 01570200 CONODOGUINET CREEK TRIBUTARY NO. 2 NEAR ENOLA, PA

LOCATION.--Lat 40°17'21", long 76°58'35", Cumberland County, Hydrologic Unit 02050305, on right bank 100 ft (30 m) upstream from bridge on Valley Street, 1.7 mi (2.7 km) upstream from mouth, and 2.4 mi (3.9 km) west of Enola.

DRAINAGE AREA.--0.76 mi<sup>2</sup> (1.97 km<sup>2</sup>).

PERIOD OF RECORD.--October 1969 to September 1972, May 1973 to September 1976 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1972 to September 1976 (discontinued).

REMARKS.--Unpublished sediment records from April 1969 to September 1972 available at the district office in Harrisburg.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum, 1,460 mg/l Apr. 14, 1974; minimum, 1 mg/l on several days during October, November 1972, December 1974 and April 1975.

SEDIMENT LOADS: Maximum, 126 tons (114 t) Sept. 14, 1973; minimum, 0 tons (0 t) on many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum, 500 mg/l Jan. 26; minimum, 2 mg/l on many days.

SEDIMENT LOADS: Maximum, 51 tons (46 t) Jan. 26; minimum, 0 tons (0 t) on many days.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)
MAY 07...	1400	.31	326	8.0	19.0	2	9.8	130	43	42	6.8

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
MAY 07...	13	.5	2.0	109	0	89	1.6	20	30	.1	167

DATE	TOTAL NON-FILTRABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)
MAY 07...	5	.24	.01	.47	.48	.72	.01	20	0	10	<10

DATE	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	OIL AND GREASE (MG/L)
MAY 07...	0	0	50	2	70	<.5	0	0	10	0



01570200 CONODOGUINET CREEK TRIBUTARY NO. 2 NEAR ENOLA, PA--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.85	4	.01	.32	3	0	.45	5	.01
2	.72	4	.01	.32	3	0	.40	4	0
3	.60	4	.01	.32	3	0	.40	4	0
4	.55	3	0	.32	2	0	.36	3	0
5	.50	3	0	.32	2	0	.36	2	0
6	.45	3	0	.29	2	0	.40	3	0
7	.36	3	0	.29	2	0	.45	2	0
8	.36	3	0	.36	3	0	.40	2	0
9	.40	6	.01	.32	2	0	1.5	41	.20
10	.45	6	.01	.61	7	.03	1.8	11	.05
11	.50	8	.01	.45	3	0	1.1	6	.02
12	.40	5	.01	5.0	60	1.1	.78	5	.01
13	.36	4	0	4.7	24	.52	.66	5	.01
14	.36	3	0	1.8	5	.02	.60	5	.01
15	.36	3	0	1.2	3	.01	.55	4	.01
16	.40	3	0	.92	3	.01	.55	4	.01
17	2.5	23	.48	.85	3	.01	.55	4	.01
18	7.5	40	1.8	.72	3	.01	.50	4	.01
19	1.5	7	.03	.66	3	.01	.40	3	0
20	1.2	5	.02	.60	3	0	.40	3	0
21	.95	4	.01	1.2	26	.10	.36	3	0
22	.72	3	.01	.72	5	.01	.32	3	0
23	.60	3	0	.60	4	.01	.32	3	0
24	.55	3	0	.55	3	0	.29	3	0
25	.55	3	0	.50	3	0	.29	3	0
26	.50	3	0	.45	3	0	5.0	65	1.9
27	.50	3	0	.45	3	0	2.1	12	.09
28	.45	3	0	.45	2	0	1.3	5	.02
29	.40	3	0	.45	2	0	1.1	4	.01
30	.36	3	0	.40	2	0	1.9	27	.16
31	.32	3	0	---	---	---	4.4	37	.50
TOTAL	26.22	---	2.42	26.14	---	1.84	29.99	---	3.03

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.9	35	1.1	5.4	60	1.4	.65	4	.01
2	2.4	10	.08	4.5	20	.35	.65	4	.01
3	2.6	15	.15	1.2	5	.02	.60	4	.01
4	2.1	5	.03	1.6	23	.10	.85	12	.04
5	1.4	4	.02	1.0	6	.02	.80	5	.01
6	1.1	4	.01	.90	5	.01	.70	4	.01
7	1.0	4	.01	.85	5	.01	.60	4	.01
8	1.0	4	.01	.75	4	.01	.56	4	.01
9	.85	4	.01	.70	4	.01	.58	5	.01
10	.72	3	.01	.87	10	.04	.80	10	.03
11	.66	3	.01	1.4	5	.02	1.4	18	.09
12	.66	3	.01	.90	5	.01	1.0	10	.03
13	.70	8	.02	.98	5	.01	2.0	15	.09
14	1.4	15	.06	.98	4	.01	.90	7	.02
15	.83	7	.02	.87	4	.01	.86	4	.01
16	.60	4	.01	1.6	35	.25	.82	4	.01
17	.55	4	.01	3.8	50	.89	.80	4	.01
18	.60	4	.01	3.0	30	.40	.78	4	.01
19	.68	4	.01	2.1	19	.12	.75	6	.02
20	.36	4	0	1.5	5	.02	.70	5	.01
21	.36	3	0	1.4	5	.02	.65	5	.01
22	.36	3	0	1.3	5	.02	.60	4	.01
23	.50	3	0	1.2	5	.02	.55	4	.01
24	.45	3	0	.98	5	.01	.50	3	0
25	.40	3	0	.85	5	.01	.50	3	0
26	16	500	51	.85	4	.01	.45	3	0
27	17	240	13	.85	4	.01	.87	45	.40
28	4.5	26	.37	.75	4	.01	.93	10	.06
29	3.0	15	.11	.70	4	.01	.55	8	.01
30	2.4	10	.06	---	---	---	.50	6	.01
31	1.8	9	.04	---	---	---	2.5	120	2.2
TOTAL	73.88	---	66.17	43.78	---	3.83	25.40	---	3.16

01570200 CONODOGUINET CREEK TRIBUTARY NO. 2 NEAR ENOLA, PA--Continued

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

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.5	300	20	.44	17	.05	3.2	71	2.1
2	1.6	15	.07	.45	6	.01	1.9	10	.05
3	1.2	7	.02	.32	5	.01	.78	8	.02
4	1.1	6	.02	.29	5	0	.60	5	.01
5	.85	5	.01	.26	4	0	.50	4	.02
6	.72	5	.01	.23	4	0	.45	4	0
7	.66	5	.01	.23	3	0	.40	3	0
8	.60	4	.01	.29	3	0	.32	3	0
9	.55	4	.01	.29	3	0	.29	3	0
10	.50	4	.01	.32	3	0	.26	3	0
11	.50	4	.01	.40	5	.01	.23	3	0
12	.45	4	0	.45	3	0	.20	3	0
13	.40	3	0	.40	3	0	.17	3	0
14	.40	3	0	.40	3	0	.20	5	0
15	.40	3	0	.36	3	0	.23	5	0
16	.36	3	0	.57	29	.10	.23	4	0
17	.32	3	0	.98	41	.15	.26	4	0
18	.32	2	0	.76	22	.12	.17	4	0
19	.32	2	0	.45	7	.01	.40	16	.06
20	.29	2	0	.36	6	.01	1.1	39	.41
21	.29	2	0	.36	5	0	.85	16	.09
22	.26	2	0	.29	4	0	.55	5	.01
23	.23	2	0	.26	4	0	.36	4	0
24	.23	2	0	.26	3	0	.26	4	0
25	.45	22	.07	.28	5	.01	.20	4	0
26	.55	5	.01	.73	27	.10	.17	3	0
27	.32	3	0	.50	5	.01	.14	3	0
28	.29	3	0	.36	4	0	.24	14	.07
29	.26	3	0	.45	11	.02	.32	6	.01
30	.23	3	0	3.0	67	.84	.17	3	0
31	---	---	---	1.0	10	.02	---	---	---
TOTAL	23.15	---	20.26	15.74	---	1.47	15.15	---	2.85
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.14	3	0	.11	3	0	.02	3	0
2	.11	3	0	.04	3	0	.02	3	0
3	3.7	90	6.5	.04	3	0	.02	3	0
4	.40	10	.01	.04	3	0	.02	3	0
5	.23	5	0	.04	3	0	.02	3	0
6	.17	3	0	.14	14	.01	.02	2	0
7	10	320	44	.23	4	0	.02	2	0
8	2.1	34	.28	.80	20	.15	.02	2	0
9	.66	10	.02	.26	5	0	.02	2	0
10	.45	5	.01	.30	5	.01	.54	39	.15
11	.98	25	.20	.17	4	0	.17	5	0
12	.55	5	.01	.14	4	0	.14	4	0
13	.36	4	0	3.5	64	4.0	.08	4	0
14	.32	3	0	1.9	60	.59	.04	4	0
15	1.3	35	1.5	5.1	70	4.2	.03	4	0
16	1.3	15	.07	1.4	18	.08	2.0	41	.33
17	.45	5	.01	.55	8	.01	.90	6	.03
18	.32	4	0	.40	4	0	.50	4	.01
19	.26	4	0	.32	4	0	.29	4	0
20	.20	4	0	.26	4	0	.26	4	0
21	.64	30	.15	.20	4	0	.20	4	0
22	.45	5	.01	.17	3	0	.17	4	0
23	1.5	53	.50	.11	3	0	.11	3	0
24	1.0	12	.04	.08	3	0	.08	3	0
25	.50	5	.01	.04	3	0	.06	3	0
26	.32	4	0	.04	3	0	.29	6	.01
27	.29	4	0	.02	3	0	.32	3	0
28	.26	3	0	.02	3	0	.26	3	0
29	.27	10	.01	.02	3	0	.17	3	0
30	.26	4	0	.02	3	0	.44	15	.01
31	.20	3	0	.02	3	0	---	---	---
TOTAL	29.69	---	53.33	16.48	---	9.05	7.23	---	.54
YEAR	332.85		167.95						

## CONODOGUINET CREEK BASIN

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01570230 CONODOGUINET CREEK TRIBUTARY NO. 2A NEAR ENOLA, PA

LOCATION.--Lat 40°17'44", long 76°57'55", Cumberland County, Hydrologic Unit 02050305, on left bank 120 ft (37 m) downstream from bridge on Valley Street, 2.6 mi (4.2 km) upstream from mouth, and 1.6 mi (2.6 km) west of Enola.

DRAINAGE AREA.--0.70 mi<sup>2</sup> (1.81 km<sup>2</sup>).

PERIOD OF RECORD.--October 1969 to September 1972, May 1973 to September 1976 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1972 to September 1976 (discontinued).

REMARKS.--Unpublished sediment records from April 1969 to September 1972 available at the district office in Harrisburg.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum, 1,410 mg/l Sept. 1, 1974; minimum, 1 mg/l on several days each year.

SEDIMENT LOADS: Maximum, 120 tons (109 t) Sept. 26, 1975; minimum, 0 tons (0 t) on many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum, 330 mg/l June 1; minimum, 1 mg/l Oct. 7, 8, 16.

SEDIMENT LOADS: Maximum, 22 tons (20 t) Jan. 26; minimum, 0 tons (0 t) on many days.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	HARDNESS (CA, MG)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)
MAY 07...	1300	.34	267	7.9	18.5	3	9.2	100	12	32	5.1

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
MAY 07...	9.4	.4	2.3	108	0	89	2.2	15	15	.1	148

DATE	TOTAL NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE PLUS NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)
MAY 07...	5	.24	.02	.26	.28	.52	.02	10	1	0	<10

DATE	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	OIL AND GREASE (MG/L)
MAY 07...	0	0	20	6	30	<.5	0	0	0	0

01570230 CONODOGUINET CREEK TRIBUTARY NO. 2A NEAR ENOLA, PA--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.67	3	.01	.15	4	0	.30	5	0
2	.62	3	.01	.15	4	0	.27	4	0
3	.50	2	0	.15	4	0	.27	4	0
4	.42	2	0	.15	4	0	.25	3	0
5	.36	2	0	.13	4	0	.23	3	0
6	.30	2	0	.10	4	0	.21	3	0
7	.27	1	0	.13	4	0	.17	2	0
8	.27	1	0	.19	10	.01	.17	2	0
9	.33	2	0	.13	4	0	.86	82	.24
10	.33	2	0	.34	22	.04	.76	11	.03
11	.36	6	.01	.20	4	0	.39	4	0
12	.27	3	0	3.9	62	1.4	.33	4	0
13	.25	2	0	3.4	37	.48	.27	4	0
14	.23	2	0	1.1	4	.01	.25	4	0
15	.19	2	0	.72	4	.01	.25	4	0
16	.17	1	0	.56	4	.01	.25	4	0
17	1.1	60	.80	.48	4	.01	.25	3	0
18	5.5	90	3.3	.42	4	0	.23	3	0
19	.89	5	.01	.39	4	0	.19	3	0
20	.67	4	.01	.36	4	0	.19	2	0
21	.50	3	0	.71	33	.11	.17	3	0
22	.39	3	0	.36	4	0	.19	2	0
23	.30	3	0	.27	4	0	.15	2	0
24	.27	4	0	.25	4	0	.15	2	0
25	.27	3	0	.85	19	.07	.15	2	0
26	.27	2	0	.33	7	.01	2.8	50	.60
27	.25	2	0	.36	6	.01	1.1	12	.04
28	.23	2	0	.27	4	0	1.0	6	.02
29	.19	2	0	.27	4	0	.83	5	.01
30	.15	3	0	.27	4	0	1.4	15	.10
31	.15	4	0	---	---	---	3.0	15	.36
TOTAL	16.67	---	4.15	17.09	---	2.17	17.03	---	1.40
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.8	10	.25	3.9	46	.75	.50	3	0
2	1.8	4	.02	3.4	23	.22	.50	3	0
3	2.2	8	.05	1.1	6	.02	.50	3	0
4	1.5	5	.02	1.2	22	.14	.71	12	.03
5	1.0	4	.01	.89	5	.01	.58	5	.01
6	.85	4	.01	.77	4	.01	.50	3	0
7	.77	4	.01	.67	4	.01	.44	3	0
8	.70	4	.01	.58	3	0	.44	3	0
9	.60	4	.01	.50	3	0	.46	3	0
10	.50	4	.01	.85	14	.04	.53	6	.01
11	.54	4	.01	1.1	23	.10	1.0	12	.03
12	.54	4	.01	.72	5	.01	.89	8	.02
13	.58	5	.01	.72	5	.01	1.4	15	.07
14	1.0	10	.05	.72	4	.01	.86	4	.01
15	.67	5	.01	.58	4	.01	.72	4	.01
16	.54	4	.01	1.1	33	.27	.77	8	.02
17	.46	4	0	3.0	54	.75	.72	4	.01
18	.33	4	0	2.5	59	.47	.62	4	.01
19	.39	4	0	1.9	11	.07	.58	3	0
20	.36	3	0	1.2	5	.02	.58	3	0
21	.39	3	0	1.0	5	.01	.85	3	.01
22	.39	3	0	1.1	6	.02	.89	3	.01
23	.39	3	0	.72	4	.01	.77	3	.01
24	.33	3	0	.67	4	.01	.67	3	.01
25	.30	3	0	.62	3	.01	.46	3	0
26	12	290	22	.62	3	.01	.42	3	0
27	13	110	4.0	.62	3	.01	.82	50	.21
28	4.4	15	.18	.58	3	0	.89	15	0
29	2.9	10	.08	.58	3	0	.54	4	0
30	2.0	5	.03	---	---	---	.50	3	0
31	1.3	5	.02	---	---	---	2.0	120	1.6
TOTAL	57.53	---	26.81	33.91	---	3.00	22.11	---	2.08

01570230 CONODOGUINET CREEK TRIBUTARY NO. 2A NEAR ENOLA, PA--Continued

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

APRIL					MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	9.0	210	5.0	.42	21	.04	2.2	330	7.5	
2	2.0	18	.10	.36	7	.01	2.1	25	.23	
3	1.5	5	.02	.25	3	0	.83	18	.04	
4	1.4	5	.02	.21	3	0	.33	10	.01	
5	1.1	3	.01	.19	3	0	.27	9	.01	
6	.89	3	.01	.19	3	0	.25	9	.01	
7	.77	3	.01	.19	3	0	.23	9	.01	
8	.67	3	.01	.17	2	0	.21	8	0	
9	.58	2	0	.17	2	0	.15	8	0	
10	.54	2	0	.15	2	0	.13	8	0	
11	.54	2	0	.18	10	.01	.11	7	0	
12	.46	2	0	.19	4	0	.10	7	0	
13	.46	2	0	.15	3	0	.10	7	0	
14	.54	3	0	.15	3	0	.11	6	0	
15	.39	3	0	.15	3	0	.10	6	0	
16	.39	3	0	.29	21	.02	.10	6	0	
17	.39	3	0	.46	17	.05	.13	5	0	
18	.36	3	0	.35	15	.02	.10	5	0	
19	.36	3	0	.19	5	0	.29	65	.40	
20	.33	3	0	.15	5	0	.78	200	1.3	
21	.30	3	0	.21	7	.01	.36	35	.12	
22	.33	3	0	.13	6	0	.25	20	.02	
23	.54	3	0	1.1	6	.02	.17	6	0	
24	.54	3	0	1.9	5	.03	.15	6	0	
25	.67	20	.04	1.0	7	.02	.11	6	0	
26	.70	3	.01	.54	61	.12	.09	5	0	
27	.30	2	0	.21	15	.01	.08	5	0	
28	.25	2	0	.15	4	0	.11	70	.20	
29	.23	2	0	.20	28	.03	.15	40	.04	
30	.21	2	0	2.6	160	2.0	.05	8	0	
31	---	---	---	.58	18	.04	---	---	---	
TOTAL	26.74	---	5.23	13.18	---	2.43	10.14	---	9.89	
JULY					AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	.07	3	0	.11	3	0	.10	3	0	
2	.06	3	0	.10	3	0	.10	3	0	
3	.75	90	.70	.10	3	0	.10	3	0	
4	.15	18	.01	.10	3	0	.11	3	0	
5	.10	3	0	.11	3	0	.11	3	0	
6	.07	3	0	.18	15	.02	.08	2	0	
7	5.7	200	11	.17	5	0	.08	2	0	
8	1.7	70	.70	.75	60	.70	.11	3	0	
9	.39	15	.02	.27	8	.01	.10	3	0	
10	.25	4	0	.33	7	.01	.48	67	.24	
11	.93	70	1.0	.23	3	0	.11	5	0	
12	.33	5	0	.19	3	0	.09	3	0	
13	.21	3	0	2.0	80	2.6	.08	3	0	
14	.15	3	0	1.0	90	.57	.08	2	0	
15	1.2	110	5.3	4.6	70	4.5	.08	2	0	
16	1.4	220	4.5	1.2	12	.05	1.6	70	.43	
17	.33	15	.01	.45	5	.01	.58	30	.08	
18	.23	10	.01	.35	5	0	.27	8	.01	
19	.19	5	0	.26	5	0	.19	6	0	
20	.17	5	0	.20	4	0	.17	4	0	
21	.50	75	.26	.18	4	0	.15	3	0	
22	.25	10	.01	.18	4	0	.13	3	0	
23	1.5	85	.49	.15	4	0	.10	3	0	
24	1.0	45	.22	.15	4	0	.10	3	0	
25	.58	5	.01	.14	3	0	.08	3	0	
26	.58	5	.01	.14	3	0	.22	69	.10	
27	.58	5	.01	.12	3	0	.19	5	0	
28	.62	4	.01	.12	3	0	.15	3	0	
29	.68	13	.03	.12	3	0	.13	3	0	
30	.77	16	.03	.11	3	0	.28	20	.01	
31	.27	5	0	.11	3	0	---	---	---	
TOTAL	21.71	---	24.33	14.22	---	8.47	6.15	---	.87	
YEAR	256.48		90.83							



## CONODOGUINET CREEK BASIN

01570260 CONODOGUINET CREEK TRIBUTARY NO. 2B NEAR ENOLA, PA

LOCATION.--Lat 40°17'47", long 76°57'51", Cumberland County, Hydrologic Unit 02050305, on right bank 20 ft (6 m) upstream from bridge on Valley Street, 2.6 mi (4.2 km) upstream from mouth, and 1.6 mi (2.6 km) west of Enola.

DRAINAGE AREA.--0.65 mi<sup>2</sup> (1.68 km<sup>2</sup>).

PERIOD OF RECORD.--October 1969 to September 1972, May 1973 to September 1976 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1972 to September 1976 (discontinued).

REMARKS.--Unpublished sediment records from April 1969 to September 1972 available at the district office in Harrisburg.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum, 2,370 mg/l Sept. 14, 1973; minimum, 1 mg/l April 24, 1976.

SEDIMENT LOADS: Maximum, 125 tons (113 t) Sept. 14, 1973; minimum, 0 tons (0 t) on many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum, 830 mg/l July 7; minimum, 1 mg/l April 24.

SEDIMENT LOADS: Maximum, 39 tons (35 t) July 7; minimum, 0 tons (0 t) on many days.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (MG/L)	DISSOLVED MAGNESIUM (MG/L)
MAY 07...	1115	.35	309	7.9	20.5	5	8.8	100	14	32	4.8

DATE	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
MAY 07...	19	.8	3.1	104	0	85	2.1	18	29	.1	169

DATE	TOTAL NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)
MAY 07...	14	.19	.05	.45	.50	.69	.04	40	2	0	<10

DATE	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	OIL AND GREASE (MG/L)
MAY 07...	0	0	30	2	70	<.5	0	0	10	0

01570260 CONODOGUINET CREEK TRIBUTARY NO. 2B NEAR ENOLA, PA--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.65	12	.02	.44	8	.01	.32	7	.01
2	.58	10	.02	.26	7	0	.29	7	.01
3	.48	10	.01	.14	7	0	.26	7	0
4	.48	10	.01	.23	7	0	.26	7	0
5	.48	10	.01	.29	7	.01	.26	7	0
6	.48	10	.01	.44	10	.01	.29	6	0
7	.44	10	.01	.40	8	.01	.26	6	0
8	.48	10	.01	.32	7	.01	.26	6	0
9	.53	10	.01	.21	6	0	1.4	63	.35
10	.48	10	.01	.46	25	.04	1.2	10	.05
11	.44	8	.01	.29	10	.01	.48	8	.01
12	.36	8	.01	4.4	270	3.7	.40	6	.01
13	.32	8	.01	3.3	61	.84	.40	6	.01
14	.29	8	.01	1.1	8	.02	.40	6	.01
15	.29	8	.01	.80	6	.01	.36	6	.01
16	.29	8	.01	.65	5	.01	.36	7	.01
17	1.3	43	.22	.58	5	.01	.35	7	.01
18	5.1	95	2.0	.48	5	.01	.32	8	.01
19	.80	12	.03	.44	5	.01	.29	8	.01
20	.53	8	.01	.44	5	.01	.29	7	.01
21	.40	8	.01	.91	35	.12	.29	7	.01
22	.36	8	.01	.53	5	.01	.26	7	0
23	.32	7	.01	.48	5	.01	.21	6	0
24	.32	7	.01	.48	5	.01	.21	6	0
25	.36	7	.01	.48	5	.01	.36	6	.01
26	.36	8	.01	.48	4	.01	4.2	230	3.6
27	.40	8	.01	.48	4	.01	1.9	25	.16
28	.40	8	.01	.44	5	.01	1.2	10	.03
29	.40	8	.01	.44	6	.01	1.1	10	.03
30	.40	8	.01	.40	6	.01	1.3	56	.40
31	.40	8	.01	---	---	---	3.0	46	.50
TOTAL	18.92	---	2.55	20.79	---	4.93	22.48	---	5.26
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.3	95	1.9	3.7	58	.84	.53	6	.01
2	1.7	11	.05	3.2	28	.40	.53	6	.01
3	2.2	25	.18	1.2	8	.03	.53	6	.01
4	1.2	7	.02	1.1	18	.06	.97	15	.06
5	.80	6	.02	.88	10	.02	.65	6	.01
6	.65	5	.01	.80	8	.02	.58	6	.01
7	.58	4	.01	.72	8	.02	.58	5	.01
8	.58	4	.01	.65	6	.01	.58	5	.01
9	.50	4	.01	.58	6	.01	.58	5	.01
10	.45	4	0	.73	26	.08	.97	10	.03
11	.40	4	0	1.0	29	.12	1.1	10	.03
12	.40	4	0	.80	8	.02	.88	8	.02
13	.48	15	.03	.97	6	.02	1.4	8	.03
14	.88	21	.08	.80	6	.01	.80	7	.02
15	.48	8	.01	.72	6	.01	.72	7	.01
16	.44	7	.01	1.1	56	.28	.88	5	.01
17	.40	6	.01	2.4	86	.69	.80	5	.01
18	.40	6	.01	2.0	59	.35	.65	4	.01
19	.40	6	.01	1.5	36	.15	.65	4	.01
20	.36	6	.01	1.3	15	.05	.58	4	.01
21	.36	6	.01	1.1	12	.04	.65	3	.01
22	.36	6	.01	1.3	12	.04	.48	3	0
23	.40	6	.01	.88	10	.02	.44	3	0
24	.36	6	.01	.80	10	.02	.44	3	0
25	.36	6	.01	.72	10	.02	.48	3	0
26	11	420	23	.72	8	.02	.44	3	0
27	9.3	310	8.4	.65	8	.01	.94	48	.20
28	3.1	25	.25	.58	8	.01	.80	21	.08
29	2.0	18	.10	.53	8	.01	.48	8	.01
30	1.3	15	.05	---	---	---	.44	6	.01
31	.88	10	.02	---	---	---	2.5	160	1.7
TOTAL	48.02	---	34.25	33.43	---	3.38	23.05	---	2.34

## CONODOGUINET CREEK BASIN

01570260 CONODOGUINET CREEK TRIBUTARY NO. 2B NEAR ENOLA, PA--Continued

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

APRIL					MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	8.6	220	8.2	.55	57	.19	2.3	130	3.0	
2	1.9	20	0	.48	8	.01	1.3	45	.20	
3	1.3	9	0	.40	3	0	.53	12	0	
4	1.3	7	0	.35	3	0	.40	16	0	
5	1.1	7	0	.26	3	0	.40	3	0	
6	.88	7	0	.26	3	0	.40	3	0	
7	.72	7	0	.23	2	0	.36	3	0	
8	.58	7	0	.18	2	0	.29	3	0	
9	.53	6	0	.16	3	0	.29	4	0	
10	.48	6	0	.14	2	0	.32	3	0	
11	.44	6	0	.16	14	.09	.40	15	0	
12	.44	5	0	.18	11	.08	.40	5	0	
13	.44	5	0	.16	6	0	.44	3	0	
14	.42	5	0	.16	3	0	.40	3	0	
15	.42	5	0	.16	3	0	.40	10	0	
16	.40	5	.01	.27	18	.02	.40	3	0	
17	.40	4	0	.48	50	.50	.36	3	0	
18	.35	3	0	.36	30	.07	.40	2	0	
19	.32	3	0	.23	3	0	.51	80	.17	
20	.35	2	0	.18	3	0	1.2	90	.52	
21	.29	2	0	.23	18	.01	.58	69	.11	
22	.29	2	0	.16	3	0	.44	19	.03	
23	.29	2	0	.14	3	0	.40	4	0	
24	.29	1	0	.10	2	0	.40	6	0	
25	.53	22	.07	.16	62	.02	.29	5	0	
26	.65	10	.02	.80	150	.40	.21	3	0	
27	.40	4	0	.32	15	.01	.18	3	0	
28	.29	3	0	.18	6	0	.24	100	.14	
29	.26	3	0	.39	60	.40	.41	81	.11	
30	.26	3	0	.43	170	5.0	.21	12	.01	
31	---	---	---	.65	12	.02	---	---	---	
TOTAL	24.92	---	8.30	12.78	---	6.82	14.86	---	4.29	
JULY					AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	.18	10	0	.04	3	0	.09	3	0	
2	.11	3	0	.03	2	0	.09	5	0	
3	.53	120	.55	.09	11	0	.09	3	0	
4	.40	6	.01	.10	6	0	.08	3	0	
5	.21	3	0	.09	4	0	.07	2	0	
6	.18	20	.01	.20	47	.05	.07	4	0	
7	6.9	830	.39	.16	12	.01	.07	2	0	
8	1.2	86	.41	.90	82	.46	.07	2	0	
9	.26	20	.01	.20	32	.02	.07	3	0	
10	.21	15	.01	.35	58	.09	.65	120	.48	
11	1.2	120	.64	.14	5	0	.18	11	0	
12	.32	10	.01	.14	6	0	.14	7	0	
13	.21	4	0	2.0	250	14	.12	3	0	
14	.20	3	0	.90	50	.25	.10	3	0	
15	3.5	250	.26	1.9	140	4.4	.12	5	0	
16	2.6	130	1.6	.72	15	.06	2.5	150	2.0	
17	.40	4	0	.46	6	0	.72	54	.20	
18	.29	3	0	.44	4	0	.65	10	.03	
19	.23	3	0	.36	3	0	.55	8	.01	
20	.18	4	0	.32	4	0	.32	8	.01	
21	.70	48	.31	.26	3	0	.40	6	.01	
22	.23	9	.01	.23	2	0	.23	3	0	
23	2.1	78	.67	.18	2	0	.23	5	0	
24	1.2	19	.06	.14	2	0	.23	3	0	
25	.32	6	.01	.14	2	0	.26	3	0	
26	.26	3	0	.12	2	0	.40	16	.03	
27	.23	3	0	.11	2	0	.58	5	.01	
28	.21	2	0	.11	2	0	.21	3	0	
29	.25	54	.06	.09	4	0	.16	3	0	
30	.18	4	0	.09	3	0	.48	64	.12	
31	.16	3	0	.09	5	0	---	---	---	
TOTAL	25.15	---	69.37	11.10	---	19.34	9.93	---	2.90	
YEAR	265.43		163.73							

## CONODOGUINET CREEK BASIN

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01570280 CONODOGUINET CREEK AT ENOLA, PA

LOCATION.--Lat 40°16'38", long 76°57'00", Cumberland County, Hydrologic Unit 02050305, at bridge on Oyster Mill Road, 1.0 mi (1.6 km) west of Enola and 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA.MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)
OCT 23...	0955	9813	180	7.7	14.5	12	8.7	194	0	0	40	18
NOV 17...	1500	9813	190	8.2	9.0	<1	12.7	120	--	0	42	3.5
DEC 23...	1540	9813	230	8.6	1.5	2	--	204	--	0	55	16
JAN 15...	1545	9813	250	8.1	2.0	7	12.1	141	0	0	52	2.0
FEB 16...	0930	9813	190	8.0	7.0	10	10.3	114	0	0	42	2.0
MAR 25...	1420	9813	250	9.1	12.0	2	12.7	186	--	0	40	21
APR 13...	1415	9813	230	8.3	13.0	2	15.1	150	0	0	47	8.0
MAY 06...	1030	9813	400	8.3	18.0	2	--	402	0	0	58	64
JUN 22...	1600	9813	310	7.3	26.0	50	7.3	110	0	0	42	1.0
AUG 17...	0945	9813	400	7.5	19.5	45	7.7	162	--	0	52	8.0

DATE	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 23...	102	16	10	240	--	2.5	.04	.09	.05	340	8.0	--
NOV 17...	110	14	10	176	--	2.8	.06	.03	.08	100	2.0	--
DEC 23...	154	28	15	--	--	3.2	.09	.05	.13	70	--	.00
JAN 15...	130	20	16	238	--	3.0	.05	.10	.15	50	--	--
FEB 16...	116	20	15	208	24	2.2	.05	.08	.11	320	--	--
MAR 25...	108	16	17	186	--	1.6	.07	.10	.12	60	--	--
APR 13...	110	24	13	--	--	2.7	.03	.07	.13	160	--	--
MAY 06...	158	18	18	--	--	2.6	.04	.01	.15	100	--	--
JUN 22...	102	14	16	202	--	2.5	.06	.23	.32	1490	--	--
AUG 17...	134	10	20	292	--	2.6	.04	--	.26	2090	--	--

## 01570300 CONODOGUINET CREEK TRIBUTARY NO. 3 AT ENOLA, PA

LOCATION.--Lat 40°18'05", long 76°56'57", Cumberland County, Hydrologic Unit 02050305, on right bank at upstream side of culvert on Valley Road, 1 mi (1.6 km) northwest of Enola, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--0.38 mi<sup>2</sup> (0.98 km<sup>2</sup>).

PERIOD OF RECORD.--October 1969 to September 1971 (partial-record station), May 1972 to September 1976 (discontinued).

## PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: April 1969 to September 1976 (discontinued).

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum, 1,600 mg/l Sept. 14, 1973; minimum, 0 mg/l July 23, 28, 1971.

SEDIMENT LOADS: Maximum, 98 tons (89 t) Aug. 10, 1973; minimum, 0 tons (0 t) on many days each year.

## EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum, 280 mg/l Nov. 12; minimum, 1 mg/l on many days.

SEDIMENT LOADS: Maximum, 15 tons (14 t) July 7; minimum, 0 tons (0 t) on many days.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)
MAY 07...	1000	.10	315	8.1	15.5	2	10.4	120	22	41	5.4

DATE	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	CARRON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
MAY 07...	13	.5	2.1	125	0	103	1.4	14	19	.1	165

DATE	TOTAL NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)
MAY 07...	2	.30	.02	.28	.30	.60	.01	30	0	0	<10

DATE	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)	OIL AND GREASE (MG/L)
MAY 07...	0	0	70	190	70	<.5	0	0	10	0



01570300 CONODOGUINET CREEK TRIBUTARY NO. 3 AT ENOLA, PA--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.39	3	0	.24	3	0	.22	3	0
2	.34	3	0	.22	3	0	.19	3	0
3	.28	3	0	.21	3	0	.19	3	0
4	.25	3	0	.20	2	0	.19	2	0
5	.22	2	0	.19	2	0	.16	2	0
6	.22	2	0	.19	2	0	.19	3	0
7	.16	2	0	.19	3	0	.16	3	0
8	.13	2	0	.22	3	0	.16	3	0
9	.16	3	0	.18	3	0	1.4	43	.17
10	.19	3	0	.56	16	.04	.64	6	.02
11	.22	4	0	.28	5	0	.34	3	0
12	.19	3	0	3.6	280	4.5	.28	3	0
13	.16	2	0	3.0	18	.24	.25	3	0
14	.16	2	0	1.1	5	.01	.25	4	0
15	.19	3	0	.80	4	.01	.25	3	0
16	.22	3	0	.62	3	.01	.25	3	0
17	1.3	35	.18	.57	3	0	.22	3	0
18	4.0	39	.79	.45	3	0	.22	3	0
19	.51	5	.01	.34	2	0	.19	2	0
20	.34	3	0	.28	2	0	.22	2	0
21	.28	3	0	.70	29	.08	.19	2	0
22	.22	3	0	.31	5	0	.19	2	0
23	.19	3	0	.28	3	0	.18	2	0
24	.19	3	0	.25	3	0	.18	2	0
25	.25	5	0	.22	3	0	.18	1	0
26	.22	4	0	.22	3	0	2.8	60	.70
27	.19	3	0	.25	4	0	1.4	5	.02
28	.19	3	0	.19	3	0	.91	4	.01
29	.19	3	0	.19	3	0	.62	4	.01
30	.19	2	0	.19	3	0	1.2	47	.27
31	.18	3	0	---	---	---	2.4	48	.33
TOTAL	11.92	---	.98	16.24	---	4.89	16.22	---	1.53
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.6	35	.50	2.4	70	.70	.34	2	0
2	1.3	10	.04	1.8	20	.15	.34	2	0
3	1.8	15	.10	.95	5	.01	.31	2	0
4	1.1	4	.01	.85	25	.12	.62	15	.03
5	.68	4	.01	.68	5	.01	.39	3	0
6	.62	4	.01	.62	5	.01	.28	3	0
7	.57	4	.01	.85	5	.01	.25	3	0
8	.62	4	.01	.51	3	0	.22	2	0
9	.51	5	.01	.39	3	0	.24	8	.01
10	.45	5	.01	.49	14	.02	.39	15	.03
11	.57	4	.01	.57	6	.01	.76	20	.06
12	.51	4	.01	.45	5	.01	.49	11	.01
13	.39	5	.01	.51	3	0	1.0	18	.04
14	.62	7	.01	.51	3	0	.51	6	.01
15	.39	4	0	.39	3	0	.39	5	.01
16	.31	3	0	.78	33	.15	.39	5	.01
17	.28	4	0	1.9	50	.46	.39	4	.01
18	.28	6	0	1.5	33	.23	.39	3	0
19	.25	3	0	1.4	14	.06	.34	3	0
20	.22	3	0	.74	6	.01	.32	3	0
21	.22	3	0	.68	5	.01	.37	4	0
22	.20	2	0	.80	5	.01	.35	3	0
23	.18	2	0	.62	3	.01	.34	3	0
24	.18	2	0	.51	3	0	.33	3	0
25	.17	2	0	.39	3	0	.32	2	0
26	8.0	190	9.1	.39	2	0	.31	2	0
27	9.5	170	4.5	.34	2	0	.57	110	.50
28	2.7	10	.07	.34	2	0	.45	6	.01
29	1.5	10	.04	.34	2	0	.28	4	0
30	1.2	8	.03	---	---	---	.28	3	0
31	.90	8	.02	---	---	---	1.8	87	.61
TOTAL	39.82	---	14.51	22.70	---	1.99	13.76	---	1.34



01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA  
(National Stream-Quality Accounting Network and radiochemical station)

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 mi<sup>2</sup> (62,400 km<sup>2</sup>), 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) above mean sea level. 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 months, which are fair.

AVERAGE DISCHARGE.--86 years, 34,250 ft<sup>3</sup>/s (970 m<sup>3</sup>/s), 19.30 in/yr (490 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020,000 ft<sup>3</sup>/s (28,900 m<sup>3</sup>/s) June 24, 1972, gage height, 32.57 ft (9.927 m), from floodmark; minimum, 1,600 ft<sup>3</sup>/s (45.3 m<sup>3</sup>/s) Nov. 29, 1930, result of freezeup. Minimum daily discharge since construction of sanitary dam and not affected by freezeup, 1,700 ft<sup>3</sup>/s (48.1 m<sup>3</sup>/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 ft<sup>3</sup>/s (18,500 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180,000 ft<sup>3</sup>/s (5,100 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 28	0900	185,000 5,240	12.11 3.691	Feb. 19	1800	*239,000 6,770	*14.30 4.359

Minimum discharge, 7,420 ft<sup>3</sup>/s (210 m<sup>3</sup>/s) Sept. 10, 14, 15, gage height, 3.42 ft (1.042 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122000	28800	30500	49100	76400	75000	49800	33900	34500	27700	14100	11100
2	98400	26200	29800	52400	60000	68400	67400	33600	35500	29500	15000	10400
3	77700	24400	28900	49100	55000	63100	82200	32500	37100	32900	16100	10800
4	58400	22800	29000	46100	45000	69300	81500	31000	36300	32100	14200	10500
5	49000	21600	29000	40200	39000	106000	73500	31900	33100	29000	15300	9320
6	43200	20500	28200	36300	34000	114000	63800	30600	29800	25400	13700	8510
7	37400	19900	26800	29400	35000	107000	54900	29400	25800	22700	12300	8100
8	32300	19500	25500	23000	35000	92400	48500	25900	23800	22100	13000	7950
9	28500	19400	25700	20000	30500	80500	43300	23300	24700	21800	17400	7680
10	27800	19300	29100	18000	31000	68800	37700	22900	24500	22300	30500	7940
11	28900	20500	35700	17000	29900	58300	34200	21500	25500	20700	44000	8180
12	28900	23900	38200	17000	38900	53200	31300	20800	23700	20500	35400	8190
13	29200	41400	39800	18000	42600	50600	28900	19500	20600	18200	27700	7890
14	26300	69800	37300	23000	48300	50100	27000	19300	18000	20800	24500	7540
15	23700	73800	34400	25000	52400	49000	25200	21300	16300	35400	22900	7470
16	22300	69000	32600	26000	53900	46000	24000	22100	15400	32900	23300	8990
17	21700	58400	34200	25000	69100	43900	22400	21500	18000	29800	23000	10900
18	51400	50500	44100	21000	150000	41400	21200	28000	17600	27000	22900	12100
19	119000	45000	44400	19000	233000	38200	20100	33100	18600	22500	23800	13700
20	134000	40400	38200	17000	230000	35600	29800	38700	20400	19600	21400	13500
21	135000	37500	33400	17000	212000	34100	31200	38800	23500	18000	18000	15500
22	122000	36800	29700	18000	180000	36500	25600	43500	88300	16700	15400	13800
23	103000	37300	28000	15000	159000	42700	22900	50800	117000	16000	13500	12800
24	83200	36100	23800	14000	153000	47600	21300	48300	87300	16300	12300	11400
25	67300	36500	21800	15000	137000	49900	20400	41800	60100	15700	11300	10000
26	54700	34800	26600	22000	114000	46900	20600	37700	48200	15000	10500	9380
27	47600	32000	33200	95000	97000	43000	21900	33500	39000	13800	10200	9910
28	42300	30200	39700	140000	85100	42400	24300	32200	33800	12400	10700	11400
29	37900	30500	45100	154000	78600	43100	36700	29200	26900	12100	9940	12900
30	34800	30700	42900	118000	---	43500	37200	28800	27800	13200	10400	13600
31	31800	---	43300	97000	---	43400	---	33400	---	13900	9990	---
TOTAL	1819700	1057500	1028900	1276600	2604700	1783900	1128800	958800	1051100	676000	562730	311450
MEAN	58700	35250	33190	41180	89820	57550	37630	30930	35040	21810	18150	10380
MAX	135000	73800	45100	154000	233000	114000	82200	50800	117000	35400	44000	15500
MIN	21700	19300	21800	14000	29900	34100	20100	19300	15400	12100	9940	7470
CFSM	2.44	1.46	1.38	1.71	3.73	2.39	1.56	1.28	1.45	.90	.75	.43
IN.	2.81	1.63	1.59	1.97	4.02	2.75	1.74	1.48	1.62	1.04	.87	.48

CAL YR 1975	TOTAL	16725660	MEAN	45820	MAX	514000	MIN	6040	CFSM	1.90	IN	25.82
WTR YR 1976	TOTAL	14260180	MEAN	38960	MAX	233000	MIN	7470	CFSM	1.62	IN	22.01

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.--Composite samples taken as part of the USGS-EPA surveillance network.

COOPERATION.--Seven water-quality analyses for the 1976 water year were furnished by the Pennsylvania Department of Environmental Resources.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 356 micromhos Sept. 2, 1975; minimum, 77 micromhos Sept. 27, 1975.

pH: Maximum, 10.4 Aug. 27, 1975; minimum, 6.5 Dec. 10, 1974.

WATER TEMPERATURES: Maximum, 32.0°C Aug. 2, 3, 1975; minimum, 0.5°C on several days during January and February 1976.

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 June 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 t) June 24, 1972; minimum daily, 0 tons (0 t) on many days during August and September 1964.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 291 micromhos, Sept. 15, 30; minimum, 95 micromhos Feb. 20, 21.

pH: Maximum, 9.3 May 9; minimum, 6.6 June 22, 23.

WATER TEMPERATURES: Maximum, 29.0 Aug. 24; minimum, 0.5°C on several days during January and February.

DISSOLVED OXYGEN: Maximum, 15.2 mg/l Jan. 23, 24; minimum, 5.8 mg/l June 17, 19, 20.

SEDIMENT CONCENTRATIONS: Maximum daily, 385 mg/l Feb. 19; minimum daily, 3 mg/l during November, January, and April.

SEDIMENT DISCHARGES: Maximum daily, 242,000 tons (219,540 t) Feb. 19; minimum daily, 101 tons (92 t) Sept. 15.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
OCT.										
08...	1535	31100	220	7.1	17.0	4	10.2	8	1.0	1930
22...	1745	121000	180	7.3	13.5	35	9.8	15	1.5	1500
NOV.										
05...	0915	21800	330	7.8	14.0	1	10.6	6	.8	920
17...	1345	57400	200	7.1	9.0	4	11.6	10	1.2	550
DEC.										
01...	1355	30500	240	8.5	6.5	3	12.4	6	2.0	370
15...	1420	34100	220	7.8	5.0	2	14.0	6	.8	112
FEB.										
17...	1350	69300	240	7.3	5.0	25	13.0	11	2.4	830
MAR.										
02...	1350	67700	185	7.3	7.5	5	12.0	--	1.2	680
15...	1345	49000	240	7.3	7.0	4	12.8	9	.6	310
29...	1345	43100	220	7.9	11.0	10	11.2	16	9.0	1000
APR.										
12...	1350	30900	220	7.9	8.5	3	11.2	4	1.2	205
27...	1315	21900	260	7.6	10.0	3	11.4	13	2.6	150
MAY										
10...	1400	22700	280	8.7	19.0	3	12.0	12	2.3	185
24...	1330	47200	190	7.7	18.0	15	9.6	14	1.6	2500
JUNE										
07...	1315	25200	225	7.8	21.0	10	12.0	16	3.3	1100
21...	1400	22500	250	8.8	25.5	3	9.9	21	3.9	230
JULY										
06...	1400	25000	240	8.3	26.0	15	9.2	18	1.8	1200
19...	1430	22100	270	8.0	25.0	15	9.2	16	1.5	1930
AUG.										
02...	1430	15000	305	8.4	24.5	5	9.4	16	4.8	--
16...	1430	23700	195	8.1	23.5	10	10.2	18	2.0	96
30...	1415	10500	300	8.7	22.0	1	9.8	17	3.2	80
SEP.										
13...	1500	7750	390	8.6	24.0	4	10.2	14	2.3	6900
27...	1430	10000	305	8.3	18.5	2	10.2	14	2.6	250

## SUSQUEHANNA RIVER BASIN

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01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	STREP- TOCOCI (COL- ONIES PER 100 ML)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	SUS- PENDE SOLIDS (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
OCT.									
08...	--	173	22	1.4	.04	.31	.35	1.8	.08
22...	1500	105	95	.70	.02	.37	.39	1.1	.15
NOV.									
05...	--	234	38	1.2	.04	.23	.27	1.5	.04
17...	180	119	17	.95	.03	.21	.24	1.2	.05
DEC.									
01...	--	142	6	.97	.04	.21	.25	1.2	.09
15...	440	127	4	1.0	.04	.15	.19	1.2	.04
FEB.									
17...	1400	120	75	1.2	.14	.43	.57	1.8	.11
MAR.									
02...	220	94	21	.88	.05	.23	.28	1.2	.06
15...	--	113	20	1.1	.02	.06	.08	1.2	.07
29...	--	104	31	.92	.04	.86	.90	1.8	.07
APR.									
12...	115	128	7	.97	.04	.26	.30	1.3	.05
27...	--	141	15	.78	.04	.49	.53	1.3	.07
MAY									
10...	E56	100	8	.39	.06	.27	.33	.72	.04
24...	--	133	58	.62	.05	.45	.50	1.1	.11
JUNE									
07...	350	109	32	.72	.11	.42	.53	1.3	.12
21...	--	150	62	.17	.25	.45	.70	.87	.09
JULY									
06...	130	144	37	.89	.06	.34	.40	1.3	.09
19...	--	148	54	.86	.05	.40	.45	1.3	.10
AUG.									
02...	--	165	18	.64	.09	.49	.58	1.2	.10
16...	--	143	48	.70	.04	.56	.60	1.3	.11
30...	--	192	9	.44	.07	.23	.30	.74	.10
SEP.									
13...	390	198	5	.74	--	--	.40	1.1	.09
27...	--	161	8	.68	.01	.32	.33	1.0	.03

DATE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL SILVER (AG) (UG/L)
OCT.									
08...	300	2	1	0	0	680	9	280	4
22...	2000	1	1	0	10	3800	12	280	0
NOV.									
05...	140	1	0	<10	0	570	1	190	0
17...	340	1	1	10	0	830	8	180	0
DEC.									
01...	220	0	1	0	0	640	6	200	0
15...	200	0	0	<10	0	500	3	170	2
FEB.									
17...	640	1	1	<10	10	1300	5	270	0
MAR.									
02...	350	1	1	<10	0	900	3	160	1
15...	460	2	1	<10	0	1100	5	210	0
29...	660	0	0	0	10	1800	7	230	0
APR.									
12...	160	0	0	10	10	560	0	190	0
27...	110	38	0	10	0	480	3	120	0
MAY									
10...	170	0	0	<10	0	1100	4	180	0
24...	660	2	0	<10	0	1600	7	240	0
JUNE									
07...	210	0	0	30	10	480	6	100	0
21...	310	0	1	<10	10	540	18	230	0
JULY									
06...	--	--	--	--	--	--	--	--	--
19...	580	1	1	<10	0	1600	12	160	0
AUG.									
02...	250	0	1	10	10	400	3	110	0
16...	480	1	0	<10	10	1200	12	180	0
30...	120	7	0	<10	30	250	4	90	0
SEP.									
13...	90	3	0	10	10	220	8	60	0
27...	140	1	0	10	7	300	14	70	0



## SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.									
08...	20	2.2	0	--	.000	.000	--	--	--
22...	40	3.2	1	1000	--	--	95	31000	96
NOV.									
05...	20	2.1	7	--	.000	.000	--	--	--
17...	20	2.9	0	1800	.200	.000	17	2640	96
DEC.									
01...	0	2.0	0	--	.000	.000	--	--	--
15...	20	2.0	3	2000	8.20	.000	4	368	98
FEB.									
17...	20	4.7	0	1300	3.00	.000	75	14000	95
MAR.									
02...	20	2.6	0	900	3.70	.000	21	3840	94
15...	20	2.0	0	--	3.30	.100	--	--	--
29...	20	3.1	0	--	20.0	.000	--	--	--
APR.									
12...	10	1.3	1	1900	.000	.000	7	584	98
27...	10	1.7	0	--	38.8	.000	--	--	--
MAY									
10...	20	2.7	0	23000	15.2	.000	8	490	98
24...	20	7.4	0	--	20.0	.000	--	--	--
JUNE									
07...	20	4.1	0	29000	16.4	.000	32	2180	98
21...	20	6.6	0	--	55.4	4.37	62	3770	90
JULY									
06...	--	7.1	0	13000	9.46	.000	37	2500	99
19...	20	17	0	--	.000	.000	54	3220	97
AUG.									
02...	20	5.0	0	73000	17.9	1.61	18	729	89
16...	30	5.7	2	--	9.74	1.19	--	--	--
30...	10	4.4	0	--	10.7	4.04	--	--	--
SEP.									
13...	10	3.6	1	45000	12.2	.000	5	105	100
27...	60	3.2	0	--	11.2	3.43	8	216	87

DATE	TIME	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDE GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	SUS- PENDE GROSS BETA AS CS-137 (PC/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDE GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L)	DIS- SOLVED URANIUM (U) (UG/L)
NOV.											
05...	0915	130	6	<1.1	<.4	2.1	<.4	1.7	<.4	.05	.06
FEB.											
19...	0900	78	240	<.8	23	3.0	12	2.4	9.4	.04	.01

## SUSQUEHANNA RIVER BASIN

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01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
DEC. 15...	1420	87	37	24	6.5	5.6	1.4	60	0	49	1.5
MAR. 02...	1350	68	31	19	5.1	4.6	1.4	46	0	38	3.7
JUNE 07...	1315	84	30	23	6.4	4.6	1.5	66	0	54	1.7
SEP. 13...	1500	140	64	37	12	10	2.1	95	0	78	.4

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)
DEC. 15...	37	8.2	.2	3.8	60	0	1	<10	2	3
MAR. 02...	29	8.8	.1	4.1	40	1	0	<10	2	1
JUNE 07...	33	8.1	.1	3.0	40	0	0	10	2	0
SEP. 13...	61	15	.1	.6	50	0	1	<10	18	0

DATE	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 15...	0	140	5	160	<.5	<.5	1	1	0	20
MAR. 02...	0	110	1	130	<.5	<.5	0	0	0	10
JUNE 07...	0	0	0	0	<.5	<.5	0	0	0	0
SEP. 13...	0	30	2	10	<.5	<.5	0	0	0	0

## SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ATRA- ZINE (UG/L)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)
NOV. 17...	1345	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB. 17...	1350	ND	--	ND	ND	--	ND	--	ND	--	ND
MAY 10...	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)
NOV. 17...	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND
FEB. 17...	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 10...	ND	ND	ND	ND	3.0	ND	ND	ND	ND	ND	ND

DATE	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	METHOX- YCHLOR IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)
NOV. 17...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB. 17...	ND	--	ND	--	ND	--	ND	--	ND	--	ND
MAY 10...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 17...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB. 17...	--	ND	--	ND	--	ND	--	ND	ND	ND
MAY 10...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Material specifically analyzed for but not detected.

## SUSQUEHANNA RIVER BASIN

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01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA.MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
JAN 14...	0800	9813	77300	220	7.6	.5	4	--	93	--	0	35
FEB 19...	1105	9813	235000	90	6.6	5.0	75	12.0	53	0	0	12
MAR 25...	1330	9813	50200	150	7.6	10.0	2	13.7	73	--	0	17
APR 13...	1330	9813	28800	130	8.8	11.0	2	16.5	100	0	0	18
MAY 13...	1030	9813	19500	200	8.2	16.0	1	10.0	82	0	0	19
JUN 24...	1415	9813	85100	140	6.5	22.5	40	7.3	58	0	0	19
AUG 19...	1530	9813	23700	200	9.0	25.0	7	8.8	77	--	0	21

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	PHENOLS (UG/L)
JAN 14...	1.2	88	24	11	--	2.2	.07	.07	.10	70	<10	<10
FEB 19...	5.0	28	20	7.0	78	1.3	.04	.15	.22	7070	490	<1
MAR 25...	7.2	30	36	7.0	106	1.0	.03	.04	.03	260	--	<10
APR 13...	13	36	36	6.0	--	.98	.04	.03	.06	120	--	<10
MAY 13...	8.5	24	36	9.0	--	.80	.04	.08	.17	130	60	--
JUN 24...	3.0	34	30	7.0	114	1.2	.02	.09	.18	2140	--	<10
AUG 19...	5.7	36	34	11	164	.86	.03	.06	.07	540	130	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
FEB 19...	1105	9813	5850	<3	<10	10	<50	<10	30
MAY 13...	1030	9813	80	<3	<10	<10	<50	<10	<10

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

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct 22	1245	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Achnanthes	71	7	
		....Cymbella	100	10	
		....Fragilaria	170	17	
		....Navicula	320	32	
		....Nitzschia	100	10	
		....Surirella	71	7	
		.Chrysophyceae			
		....Dinobryon	71	7	
		OTHER	97	10	
		TOTAL	1,000		
Nov 17	1345	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Achnanthes	140	8	
		....Asterionella	120	7	
		....Gomphonema	120	7	
		....Navicula	330	18	
		....Nitzschia	640	35	
		.Chrysophyceae			
		....Dinobryon	200	11	
		OTHER	250	14	
		TOTAL	1,800		
Dec 15	1420	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Diatoma	510	25	
		....Gomphonema	140	7	
		....Navicula	790	40	
		....Nitzschia	92	5	
		....Synedra	320	16	
		OTHER	148	7	
		TOTAL	2,000		
Feb 17	1350	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Cymbella	59	5	
		....Gomphonema	79	6	
		....Melosira	260	20	
		....Navicula	430	33	
		....Nitzschia	240	18	
		....Synedra	79	6	
		OTHER	153	12	
		TOTAL	1,300		
Mar 2	1350	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Achnanthes	47	5	
		....Cocconeis	47	5	
		....Diatoma	47	5	
		....Gomphonema	94	11	
		....Navicula	570	63	
		....Nitzschia	94	11	
		TOTAL	900		



## SUSQUEHANNA RIVER BASIN

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01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

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

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
April 12	1350	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Cyclotella	260	14	
		....Gomphonema	120	6	
		....Navicula	560	30	
		....Nitzschia	180	10	
		....Synedra	120	6	
		CYANOPHYTA			
		.Myxophyceae			
		....Anacystis	350	18	
		OTHER	310	16	
		TOTAL	1,900		
May 10	1400	CHRYSOPHYTA			Depth integrated sampler
		.Bacillariophyceae			
		....Achnanthes	360	2	
		....Cyclotella	15,000	65	
		....Nitzschia	810	3	
		CYANOPHYTA			
		.Myxophyceae			
		....Oscillatoria	4,500	20	
		OTHER	2,330	10	
		TOTAL	23,000		
June 7	1315	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Scenedesmus	3,000	10	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Cyclotella	15,000	52	
		....Navicula	1,000	3	
		....Nitzschia	6,600	23	
		CYANOPHYTA			
		.Myxophyceae			
		....Anacystis	2,000	7	
		OTHER	1,400	5	
		TOTAL	29,000		
July 6	1400	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Ankistrodesmus	380	3	
		....Coelastrum	3,000	23	
		....Dictyosphaerium	1,500	11	
		....Scenedesmus	1,900	15	
		....Tetrastrum	380	3	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Cyclotella	4,300	33	
		....Nitzschia	1,100	9	
		OTHER	440	3	
		TOTAL	13,000		

## SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

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

## PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Aug 2	1430	CHLOROPHYTA			Depth integrated sampler
		.Chlorophyceae			
		....Dictyosphaerium	4,400	6	
		....Kirchneriella	2,100	3	
		....Scenedesmus	3,900	5	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Nitzschia	5,100	7	
		CYANOPHYTA			
		.Myxophyceae			
Sept 13	1500	....Oscillatoria	46,000	63	Depth integrated sampler
		OTHER	11,500	16	
		TOTAL	73,000		
		CHLOROPHYTA			
		.Chlorophyta			
		....Ankistrodesmus	1,500	3	
		....Coelastrum	2,900	6	
		....Crucigenia	730	2	
		....Elakatothrix	730	2	
		....Kirchneriella	5,600	12	
		....Oocystis	2,000	4	Depth integrated sampler
		....Scenedesmus	11,000	25	
		....Selenastrum	730	2	
		CHRYSOPHYTA			
		.Bacillariophyceae			
		....Cyclotella	5,500	12	
		....Melosira	4,700	11	
		CYANOPHYTA			
		.Myxophyceae			
		....Agmenellum	2,900	6	
		....Anacystis	4,900	11	Depth integrated sampler
		OTHER	1,810	4	
		TOTAL	45,000		

## PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m <sup>2</sup> )		Chlorophyll	Chlorophyll	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight	a (mg/m <sup>2</sup> )	b (mg/m <sup>2</sup> )		
Dec 30	30	1.0	0.8	0.3	0.0	450	Polyethylene strip
April 8	28	18.0	6.9	9.9	0.0	1,100	
Aug 24	23	23.4	12.9	14.9	0.700	710	

## SUSQUEHANNA RIVER BASIN

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01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	171	162	166	---	---	---	---	---	---
2	---	---	---	176	166	171	---	---	---	---	---	---
3	---	---	---	184	174	178	---	---	---	---	---	---
4	---	---	---	188	179	184	---	---	---	---	---	---
5	---	---	---	191	184	187	---	---	---	---	---	---
6	---	---	---	190	185	188	---	---	---	---	---	---
7	---	---	---	193	187	190	---	---	---	---	---	---
8	---	---	---	195	186	193	---	---	---	---	---	---
9	---	---	---	199	193	196	187	178	183	163	154	159
10	---	---	---	205	197	200	179	173	177	172	160	166
11	---	---	---	206	196	201	176	162	171	190	158	170
12	---	---	---	205	191	196	166	147	155	179	163	169
13	---	---	---	196	172	184	158	150	154	180	169	176
14	---	---	---	179	130	154	158	155	156	176	159	168
15	239	223	232	131	122	126	163	155	159	175	162	171
16	225	211	219	137	124	130	161	156	159	173	166	170
17	214	199	211	145	134	140	159	155	157	184	169	177
18	202	103	180	142	136	139	158	150	155	188	173	182
19	166	97	134	139	133	137	155	129	143	190	184	187
20	145	102	126	142	134	138	130	120	124	190	183	187
21	129	113	121	146	138	142	130	120	123	---	---	---
22	116	110	112	151	142	146	131	120	124	210	190	202
23	119	110	113	158	149	154	128	120	121	221	207	217
24	129	116	123	158	150	154	133	120	124	230	211	220
25	137	126	131	164	154	159	130	121	125	---	---	---
26	145	135	139	---	---	---	---	---	---	---	---	---
27	149	141	145	---	---	---	---	---	---	---	---	---
28	155	146	150	---	---	---	---	---	---	---	---	---
29	158	151	155	---	---	---	153	141	150	---	---	---
30	167	155	157	---	---	---	152	120	138	---	---	---
31	165	156	160	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	206	122	166	---	---	---	---	---	---
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	148	141	145	167	153	161	205	166	183
2	---	---	---	148	140	145	164	149	157	169	161	165
3	---	---	---	142	135	138	148	133	139	172	161	166
4	---	---	---	148	137	142	143	137	140	173	167	170
5	---	---	---	148	123	143	144	137	141	172	164	171
6	180	153	165	127	116	123	141	135	137	174	166	170
7	176	166	171	129	119	123	140	135	138	179	170	175
8	180	167	173	129	124	126	144	136	140	180	172	177
9	180	169	174	130	126	128	148	140	145	180	172	176
10	182	165	174	134	127	131	156	146	152	184	174	180
11	178	166	172	141	132	136	161	152	157	189	181	185
12	178	161	169	150	138	142	167	158	163	194	184	190
13	163	148	156	154	148	151	173	164	168	202	191	195
14	167	160	163	156	151	154	177	168	172	204	195	200
15	170	163	167	159	152	156	180	172	176	209	200	205
16	188	168	174	162	154	158	182	175	179	212	202	209
17	185	172	178	164	158	160	187	178	182	209	201	205
18	173	115	145	170	160	165	189	183	186	210	198	204
19	117	98	105	171	167	169	192	186	189	202	170	188
20	100	95	97	172	167	169	254	188	209	182	166	176
21	101	95	98	174	168	170	---	---	---	---	---	---
22	105	98	101	175	169	172	---	---	---	170	149	157
23	106	98	102	178	170	175	---	---	---	177	157	166
24	111	102	106	178	168	170	---	---	---	170	162	166
25	114	109	111	180	168	175	196	187	190	166	156	161
26	115	108	111	171	158	166	205	193	199	164	154	159
27	125	112	118	161	151	156	---	---	---	---	---	---
28	133	122	128	156	149	153	208	200	204	157	140	150
29	145	131	138	161	153	156	214	205	209	153	144	149
30	---	---	---	162	148	155	215	210	212	152	145	148
31	---	---	---	165	158	162	227	209	218	153	146	150
MONTH	188	95	142	180	116	152	215	207	210	160	148	155
							---	---	---	157	140	146

## SUSQUEHANNA RIVER BASIN

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	155	140	149	159	146	154	216	200	209	252	236	244
2	142	133	138	173	151	158	218	202	211	267	252	262
3	136	119	127	183	169	177	243	203	220	267	263	265
4	121	113	116	195	181	191	---	---	---	265	260	262
5	124	115	118	193	185	188	---	---	---	266	264	265
6	130	120	125	191	179	186	---	---	---	269	259	265
7	---	---	---	183	168	178	240	234	237	261	251	257
8	---	---	---	190	170	181	234	221	226	252	245	250
9	---	---	---	194	186	190	227	218	224	256	246	251
10	---	---	---	193	181	188	218	198	209	261	244	255
11	---	---	---	183	168	174	228	198	213	264	259	261
12	179	170	174	182	166	175	218	194	204	266	258	262
13	184	176	179	188	173	182	214	201	209	275	266	272
14	181	166	173	205	171	186	202	186	193	288	273	281
15	171	163	168	224	182	200	188	181	184	291	287	289
16	171	162	166	221	191	203	188	181	184	289	265	274
17	180	167	173	204	175	193	191	184	188	276	266	270
18	187	161	172	214	169	189	197	189	194	268	261	265
19	174	163	170	212	199	206	198	193	195	277	256	265
20	169	145	154	204	196	201	205	197	202	280	266	272
21	188	152	173	201	179	188	202	193	197	268	256	261
22	189	113	151	184	177	181	201	194	198	260	256	258
23	121	105	116	183	174	180	208	199	204	281	259	271
24	116	105	110	189	179	183	213	207	209	281	274	278
25	121	113	116	188	181	185	225	212	216	275	271	273
26	122	113	118	194	182	188	226	220	222	279	272	276
27	129	121	126	190	184	187	230	223	226	285	279	281
28	137	126	133	198	185	191	232	219	226	287	276	284
29	144	135	139	201	182	195	227	220	223	288	274	280
30	157	140	148	201	186	195	231	220	225	291	281	289
31	---	---	---	203	178	189	236	224	229	---	---	---
MONTH	189	105	145	224	146	186	243	181	210	291	236	268

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

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

## 01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

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

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.4	7.3	7.3	7.7	7.3	7.5	7.9	7.5	7.6
2	---	---	---	7.4	7.4	7.4	7.5	7.2	7.4	7.8	7.4	7.6
3	---	---	---	7.4	7.3	7.4	7.2	7.1	7.2	8.0	7.5	7.7
4	---	---	---	7.4	7.4	7.4	7.3	7.2	7.3	8.4	7.6	8.0
5	---	---	---	7.4	7.4	7.4	7.3	7.3	7.3	8.7	7.7	8.2
6	7.3	7.2	7.2	7.4	7.3	7.4	7.3	7.3	7.3	8.8	8.0	8.4
7	7.3	7.2	7.2	7.3	7.3	7.3	7.5	7.3	7.4	8.7	7.9	8.3
8	7.3	7.2	7.3	7.4	7.3	7.4	7.6	7.3	7.4	9.1	7.8	8.5
9	7.4	7.3	7.3	7.4	7.4	7.4	7.7	7.3	7.5	9.3	8.7	9.1
10	7.4	7.3	7.3	7.4	7.4	7.4	7.9	7.4	7.6	9.2	8.9	9.1
11	7.4	7.3	7.4	7.4	7.4	7.4	7.7	7.5	7.6	9.2	8.8	9.0
12	7.4	7.4	7.4	7.4	7.4	7.4	8.0	7.5	7.7	9.2	8.6	8.9
13	7.4	7.2	7.3	7.5	7.4	7.4	8.4	7.7	8.0	9.2	8.8	9.0
14	7.2	7.2	7.2	7.5	7.4	7.4	8.6	7.8	8.2	9.1	8.8	9.0
15	7.3	7.2	7.2	7.4	7.4	7.4	8.7	7.8	8.3	9.2	8.8	9.0
16	7.3	7.1	7.2	7.4	7.3	7.3	8.7	8.0	8.5	9.1	8.2	8.8
17	7.1	7.0	7.1	7.4	7.3	7.3	8.9	8.1	8.6	8.5	7.8	8.1
18	7.1	6.9	7.0	7.4	7.3	7.4	9.0	8.2	8.7	8.4	7.6	7.9
19	7.0	6.9	6.9	7.4	7.3	7.3	9.1	8.2	8.8	7.6	7.3	7.5
20	7.0	6.9	7.0	7.4	7.3	7.3	9.1	8.5	8.8	7.8	7.3	7.5
21	7.0	6.9	7.0	7.4	7.2	7.3	---	---	---	7.9	7.3	7.6
22	7.0	6.9	7.0	7.4	7.3	7.4	---	---	---	7.6	7.2	7.3
23	7.0	6.9	7.0	7.5	7.4	7.4	---	---	---	7.4	7.2	7.3
24	7.1	7.0	7.0	7.5	7.4	7.4	8.8	7.6	8.3	7.3	7.3	7.3
25	7.2	7.1	7.2	7.5	7.5	7.5	8.5	7.5	7.9	7.4	7.3	7.3
26	7.1	7.1	7.1	7.5	7.4	7.5	8.6	7.3	7.9	7.4	7.3	7.3
27	7.2	7.1	7.1	7.5	7.4	7.4	8.8	7.5	8.3	7.8	7.3	7.5
28	7.2	7.2	7.2	7.6	7.4	7.5	8.9	7.9	8.5	7.9	7.4	7.6
29	7.3	7.2	7.3	7.7	7.4	7.5	8.7	8.0	8.4	7.7	7.4	7.5
30	---	---	---	7.6	7.4	7.5	8.5	7.9	8.2	7.7	7.4	7.5
31	---	---	---	7.5	7.4	7.4	---	---	---	7.8	7.3	7.5
MONTH	7.4	6.9	7.2	7.7	7.2	7.4	9.1	7.1	7.9	9.3	7.2	8.0
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.1	7.4	7.6	8.8	7.4	8.2	8.9	8.3	8.6	9.0	8.3	8.7
2	7.4	7.2	7.3	9.0	7.7	8.5	8.8	8.2	8.6	8.8	8.3	8.6
3	7.6	7.3	7.4	8.9	7.9	8.5	9.1	8.0	8.6	9.0	8.1	8.6
4	7.6	7.3	7.5	8.8	7.7	8.3	---	---	---	9.1	8.4	8.8
5	8.0	7.3	7.6	8.7	7.8	8.3	---	---	---	9.0	8.6	8.9
6	8.4	7.4	7.8	8.3	7.7	8.0	---	---	---	9.0	8.6	8.9
7	---	---	---	8.1	7.5	7.8	8.9	8.3	8.6	9.0	8.6	8.8
8	---	---	---	8.4	7.5	7.8	8.4	7.7	8.0	9.0	8.4	8.7
9	---	---	---	8.8	7.6	8.2	8.3	7.5	7.9	9.0	8.5	8.8
10	---	---	---	8.7	7.9	8.4	7.7	7.2	7.4	8.9	8.2	8.6
11	---	---	---	8.3	7.4	7.7	7.7	7.1	7.4	8.7	8.3	8.5
12	9.1	8.1	8.7	8.7	7.4	7.9	8.0	7.3	7.6	8.7	8.1	8.4
13	9.0	8.3	8.7	8.7	7.6	8.2	7.7	7.4	7.5	9.0	8.2	8.6
14	8.9	8.1	8.6	9.1	7.6	8.4	7.7	7.3	7.5	9.2	8.6	8.9
15	8.8	7.8	8.4	8.8	7.6	8.2	7.9	7.3	7.5	9.0	8.7	8.9
16	8.3	7.5	7.9	8.6	7.6	8.1	8.6	7.3	7.9	8.8	8.1	8.5
17	8.3	7.3	7.8	8.3	7.3	7.7	9.0	7.5	8.3	8.8	7.8	8.3
18	8.1	7.3	7.5	7.3	7.2	7.3	9.0	7.9	8.6	8.7	7.8	8.3
19	7.4	7.0	7.2	8.3	7.2	7.7	9.0	8.0	8.6	8.8	7.7	8.3
20	7.3	7.0	7.1	8.8	7.5	8.1	9.0	8.2	8.7	8.6	8.0	8.4
21	7.5	6.9	7.2	8.7	7.8	8.4	8.8	8.1	8.6	8.5	7.6	8.0
22	7.5	6.6	6.9	8.8	7.7	8.2	8.7	7.8	8.3	8.4	7.7	8.1
23	6.9	6.6	6.8	8.4	7.7	8.1	8.9	8.0	8.5	8.6	7.7	8.1
24	6.9	6.7	6.8	8.7	7.5	8.1	8.9	8.0	8.5	8.6	7.8	8.3
25	7.0	6.9	6.9	8.8	7.9	8.4	8.9	7.9	8.5	8.8	8.0	8.5
26	7.1	6.9	7.0	9.0	8.2	8.7	8.8	7.9	8.4	8.6	7.9	8.3
27	7.3	7.0	7.1	8.9	8.2	8.7	8.7	7.8	8.3	8.4	7.6	7.9
28	7.8	7.1	7.4	9.1	8.0	8.6	8.7	7.7	8.2	8.4	7.6	7.9
29	8.1	7.1	7.5	9.0	8.3	8.8	8.7	7.7	8.2	8.3	7.6	7.9
30	8.4	7.3	7.8	9.1	7.8	8.6	8.9	7.9	8.4	7.9	7.5	7.6
31	---	---	---	9.1	8.0	8.7	8.9	8.1	8.6	---	---	---
MONTH	9.1	6.6	7.5	9.1	7.2	8.2	9.1	7.1	8.2	9.2	7.5	8.4



01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

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

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

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

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

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

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	11.4	11.0	11.2	---	---	---	---	---	---
2	---	---	---	11.4	11.0	11.2	---	---	---	---	---	---
3	---	---	---	11.4	10.9	11.1	---	---	---	---	---	---
4	---	---	---	11.1	10.7	10.9	---	---	---	---	---	---
5	---	---	---	11.3	10.4	10.8	---	---	---	---	---	---
6	---	---	---	11.7	10.7	11.2	---	---	---	---	---	---
7	---	---	---	11.7	10.7	11.1	---	---	---	---	---	---
8	---	---	---	11.6	10.2	10.9	---	---	---	---	---	---
9	---	---	---	11.9	10.1	11.0	14.1	13.6	13.9	14.9	14.4	14.7
10	---	---	---	10.8	9.9	10.1	14.1	13.3	13.7	14.9	14.7	14.8
11	---	---	---	12.0	9.8	10.9	14.1	13.4	13.7	15.0	14.6	14.8
12	---	---	---	11.2	10.5	10.8	13.7	13.3	13.5	14.7	14.3	14.5
13	---	---	---	11.1	10.2	10.5	13.4	13.1	13.2	14.6	14.3	14.5
14	---	---	---	11.0	10.4	10.7	13.6	13.0	13.3	14.6	13.7	13.9
15	9.9	9.5	9.7	11.6	11.0	11.3	13.4	12.8	13.1	14.5	13.7	14.0
16	10.1	9.2	9.7	11.8	11.5	11.6	13.4	12.4	12.9	14.4	14.0	14.2
17	10.2	9.5	9.7	11.9	11.6	11.8	13.7	12.7	13.2	14.7	13.9	14.2
18	10.3	9.3	9.7	12.2	11.7	11.9	13.3	12.7	13.0	15.1	14.6	14.9
19	9.5	9.2	9.3	12.3	11.8	12.1	13.3	12.8	13.1	15.1	14.7	14.8
20	9.7	9.4	9.5	12.3	11.7	12.0	13.6	13.3	13.4	15.0	14.5	14.7
21	9.8	9.7	9.8	12.0	11.4	11.6	14.0	13.6	13.8	14.6	14.2	14.4
22	9.9	9.8	9.9	12.2	11.4	11.8	14.4	13.4	13.9	14.8	14.1	14.4
23	10.0	9.8	9.9	12.8	12.1	12.4	---	---	---	15.2	14.7	14.9
24	9.9	9.9	9.9	13.0	12.4	12.7	14.6	14.4	14.5	15.2	14.6	14.9
25	9.9	9.7	9.8	13.0	12.6	12.7	14.7	14.4	14.5	14.8	14.5	14.7
26	9.8	9.6	9.7	---	---	---	14.5	14.0	14.3	14.8	14.1	14.5
27	10.0	9.8	9.9	---	---	---	14.4	13.9	14.1	14.2	13.2	13.7
28	10.1	9.9	10.0	---	---	---	14.7	14.3	14.4	---	---	---
29	9.9	9.8	9.9	---	---	---	14.7	14.4	14.5	---	---	---
30	10.6	9.9	10.2	---	---	---	---	---	---	---	---	---
31	11.2	10.6	11.0	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	13.0	9.8	11.4	---	---	---	---	---	---

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

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

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	12.3	12.2	12.2	11.7	10.9	11.3	10.3	9.7	9.9
2	---	---	---	12.3	12.1	12.2	11.3	10.8	11.0	10.6	9.7	10.1
3	---	---	---	12.4	12.3	12.4	11.2	10.9	11.1	10.7	9.8	10.2
4	---	---	---	12.6	12.4	12.5	11.2	11.0	11.1	11.5	10.0	10.8
5	---	---	---	12.5	12.3	12.4	11.6	11.2	11.4	11.7	10.3	11.0
6	14.2	14.0	14.1	12.3	12.2	12.3	11.7	11.4	11.5	11.7	10.0	10.7
7	14.2	14.1	14.1	12.2	12.0	12.1	12.0	11.4	11.7	11.2	9.4	10.3
8	14.1	14.0	14.0	12.2	12.0	12.1	12.0	11.3	11.7	12.3	9.6	10.9
9	14.1	14.0	14.0	12.6	12.2	12.4	12.2	11.5	11.8	12.3	10.1	11.2
10	14.0	13.8	14.0	12.8	12.6	12.8	12.2	11.6	11.9	11.9	9.8	10.9
11	13.8	13.6	13.7	13.0	12.8	12.9	11.8	11.1	11.4	11.0	9.2	10.1
12	13.9	13.2	13.8	13.2	12.9	13.0	12.5	11.4	12.0	10.7	8.5	9.7
13	13.7	13.2	13.4	13.1	12.7	12.9	12.5	11.7	12.1	10.7	8.8	9.8
14	13.9	13.3	13.7	13.0	12.7	12.8	12.3	11.5	11.9	---	---	---
15	13.9	13.7	13.8	12.8	12.6	12.7	12.0	11.0	11.5	---	---	---
16	13.8	13.7	13.8	12.5	12.4	12.4	11.7	10.7	11.2	---	---	---
17	13.7	13.3	13.5	13.1	12.5	12.8	11.5	10.4	11.0	---	---	---
18	---	---	---	13.4	13.1	13.2	11.1	9.9	10.5	---	---	---
19	12.9	12.8	12.8	13.2	12.8	13.0	10.8	9.0	10.0	---	---	---
20	12.9	12.8	12.8	12.8	12.2	12.5	10.8	8.8	9.8	10.2	9.0	9.5
21	12.9	12.8	12.9	12.2	11.2	11.6	---	---	---	10.0	8.8	9.4
22	12.8	12.7	12.8	12.0	11.3	11.7	---	---	---	9.4	8.7	8.9
23	12.8	12.7	12.8	12.0	11.7	11.9	---	---	---	9.2	8.6	8.9
24	13.0	12.8	12.9	11.8	11.5	11.7	10.7	8.2	9.4	---	---	---
25	13.1	13.0	13.1	11.5	11.2	11.3	9.3	8.2	8.8	---	---	---
26	13.1	12.9	13.1	11.7	11.3	11.5	10.7	8.2	9.5	---	---	---
27	12.9	12.6	12.8	11.5	10.9	11.1	11.9	9.7	10.9	10.3	9.4	9.8
28	12.6	12.3	12.5	11.5	10.8	11.1	12.3	10.4	11.4	10.0	9.1	9.6
29	12.4	12.2	12.3	11.6	10.9	11.3	12.3	10.5	11.4	9.5	8.9	9.2
30	---	---	---	11.4	10.9	11.2	12.1	10.2	11.1	9.5	8.7	9.1
31	---	---	---	11.1	10.9	11.0	---	---	---	9.5	8.6	9.0
MONTH	14.2	12.2	13.3	13.4	10.8	12.2	12.5	8.2	11.1	---	---	---
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.6	8.8	9.2	---	---	---	8.7	6.8	7.9	9.7	7.2	8.5
2	9.0	8.4	8.7	---	---	---	9.4	7.1	8.3	9.2	7.0	8.1
3	9.6	8.8	9.2	9.6	7.5	8.4	10.3	7.5	9.0	10.6	7.6	9.1
4	9.5	8.8	9.0	9.7	7.5	8.6	---	---	---	10.8	8.1	9.5
5	9.8	8.6	9.2	9.4	7.5	8.5	---	---	---	9.5	7.7	8.8
6	9.9	8.6	9.2	8.3	7.2	7.8	---	---	---	9.8	7.5	8.7
7	---	---	---	8.2	7.0	7.6	9.0	6.8	7.8	10.1	7.9	9.0
8	---	---	---	8.1	7.2	7.7	9.3	7.2	8.2	9.9	7.6	8.8
9	---	---	---	9.3	6.8	8.0	9.3	7.4	8.2	10.1	7.3	8.8
10	---	---	---	9.0	7.5	8.3	8.4	7.6	8.0	8.9	6.9	7.9
11	---	---	---	8.2	7.2	7.6	8.9	7.7	8.2	9.7	7.6	8.7
12	10.2	7.2	8.8	8.7	7.0	7.8	9.1	7.5	8.2	10.1	8.0	9.1
13	9.8	7.1	8.5	9.4	7.6	8.5	8.4	7.3	7.8	10.8	7.9	9.4
14	9.9	7.5	8.6	10.5	7.9	9.0	8.5	7.2	7.7	11.2	7.7	9.5
15	9.5	7.3	8.3	10.0	7.7	8.7	8.7	7.2	7.9	---	---	---
16	8.4	6.3	7.4	9.2	7.4	8.1	9.8	7.5	8.6	---	---	---
17	8.9	5.8	7.4	8.0	7.0	7.5	10.6	7.7	9.1	---	---	---
18	7.9	6.1	7.1	7.5	7.0	7.2	10.6	7.8	9.2	10.1	7.4	8.7
19	7.9	5.8	6.8	8.9	7.4	8.0	10.5	7.7	9.0	10.9	7.6	9.1
20	8.0	5.8	6.7	9.4	7.3	8.3	10.1	7.6	8.8	9.9	7.7	8.8
21	8.7	6.0	7.3	9.1	7.2	8.1	9.2	7.2	8.3	9.8	7.4	8.5
22	7.0	6.2	6.5	9.4	7.0	8.1	8.7	6.7	7.8	9.8	8.1	9.0
23	7.8	7.0	7.5	8.7	7.3	7.9	8.7	6.3	7.5	10.4	8.5	9.4
24	8.0	7.5	7.8	9.3	7.4	8.5	8.8	6.1	7.4	10.8	8.5	9.6
25	7.8	7.6	7.8	9.0	7.4	8.3	8.8	6.1	7.4	11.3	8.6	9.9
26	7.7	7.5	7.6	9.5	7.4	8.5	8.9	6.2	7.5	9.7	8.4	9.0
27	7.9	7.4	7.6	9.4	7.4	8.4	8.5	5.9	7.1	10.1	8.1	8.9
28	8.3	7.2	7.7	9.7	7.3	8.5	8.9	6.3	7.5	10.1	8.3	9.2
29	8.3	6.9	7.6	9.1	6.9	8.0	8.5	6.3	7.5	10.2	8.5	9.4
30	8.4	7.0	7.7	9.3	6.6	7.9	9.5	6.5	6.8	9.3	8.6	8.9
31	---	---	---	9.9	6.9	8.5	9.8	7.3	8.6	---	---	---
MONTH	10.2	5.8	8.0	10.5	6.6	8.1	10.6	5.9	8.0	11.3	6.9	9.0

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA--Continued

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

DAY	OCTOBER				NOVEMBER			DECEMBER	
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	122000	60	19800	28800	9	700	30500	6	494
2	98400	47	12500	26200	8	566	29800	6	483
3	77700	35	7340	24400	7	461	28900	5	390
4	58400	32	5050	22800	6	369	29000	5	391
5	49000	30	3970	21600	5	292	29000	5	391
6	43200	27	3150	20500	5	277	28200	4	305
7	37400	25	2520	19900	4	215	26800	4	289
8	32300	23	2010	19500	4	211	25500	4	275
9	28500	18	1390	19400	3	157	25700	4	278
10	27800	15	1130	19300	3	156	29100	4	314
11	28900	12	936	20500	8	443	35700	4	386
12	28900	10	780	23900	10	645	38200	5	516
13	29200	10	788	41400	30	3700	39800	6	645
14	26300	9	639	69800	60	11300	37300	5	504
15	23700	9	576	73800	45	8970	34400	4	372
16	22300	8	482	69000	25	4660	32600	4	352
17	21700	7	410	58400	17	2680	34200	6	554
18	51400	192	34000	50500	15	2050	44100	15	1790
19	119000	320	103000	45000	13	1580	44400	12	1440
20	134000	210	76000	40400	12	1310	38200	10	1030
21	135000	185	67400	37500	11	1110	33400	8	721
22	122000	92	30300	36800	9	894	29700	8	642
23	103000	78	21700	37300	8	806	28000	7	529
24	83200	58	13000	36100	7	682	23800	6	386
25	67300	40	7270	36500	6	591	21800	5	294
26	54700	28	4140	34800	6	564	26600	7	503
27	47600	20	2570	32000	6	518	33200	10	896
28	42300	15	1710	30200	6	489	39700	10	1070
29	37900	12	1230	30500	6	494	45100	10	1220
30	34800	11	1030	30700	6	497	42900	8	927
31	31800	10	859	---	---	---	43300	8	935
TOTAL	1819700	---	427680	1057500	---	47387	1028900	---	19322
DAY	JANUARY				FEBRUARY			MARCH	
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	49100	6	795	76400	65	13400	75000	28	5670
2	52400	6	849	60000	50	8100	68400	22	4060
3	49100	6	795	55000	40	5940	63100	15	2560
4	46100	5	622	45000	30	3650	69300	25	4900
5	40200	5	543	39000	20	2110	106000	81	23400
6	36300	5	490	34000	20	1840	114000	105	32300
7	29400	5	397	35000	20	1890	107000	95	27400
8	23000	4	248	35000	19	1800	92400	75	18700
9	20000	4	216	30500	17	1400	80500	50	10900
10	18000	4	194	31000	17	1420	68800	28	5200
11	17000	10	459	29900	15	1210	58300	21	3310
12	17000	18	826	38900	35	3680	53200	17	2440
13	18000	14	680	42600	40	4600	50600	15	2050
14	23000	11	683	48300	45	5870	50100	19	2570
15	25000	7	472	52400	30	4240	49000	20	2650
16	26000	4	281	53900	20	2910	46000	18	2240
17	25000	4	270	69100	82	16700	43900	17	2020
18	21000	3	170	150000	150	63800	41400	14	1560
19	19000	3	154	233000	385	242000	38200	11	1130
20	17000	3	138	230000	320	199000	35600	10	961
21	17000	3	138	212000	80	45800	34100	10	921
22	18000	3	146	180000	100	48600	36500	12	1180
23	15000	5	202	159000	92	39500	42700	15	1730
24	14000	7	265	153000	70	28900	47600	17	2180
25	15000	15	607	137000	55	20300	49900	22	2960
26	22000	30	1780	114000	50	15400	46900	19	2410
27	95000	100	25700	97000	45	11800	43000	17	1970
28	140000	200	75600	85100	40	9190	42400	22	2520
29	154000	150	62400	78600	35	7430	43100	31	3610
30	118000	120	38200	---	---	---	43500	25	2940
31	97000	80	21000	---	---	---	43400	18	2110
TOTAL	1276600	---	235320	2604700	---	812480	1783900	---	180552



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

DAY	APRIL				MAY				JUNE			
	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)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	49800	25	3360	33900	18	1650	34500	30	2790			
2	67400	60	10900	33600	20	1810	35500	30	2880			
3	82200	77	17100	32500	23	2020	37100	30	3010			
4	81500	52	11400	31000	16	1340	36300	31	3040			
5	73500	44	8730	31900	12	1030	33100	32	2860			
6	63800	17	2930	30600	11	909	29800	32	2570			
7	54900	14	2080	29400	10	794	25800	32	2230			
8	48500	12	1570	25900	10	699	23800	30	1930			
9	43300	8	935	23300	9	566	24700	28	1870			
10	37700	8	814	22900	8	495	24500	26	1720			
11	34200	7	646	21500	8	464	25500	22	1510			
12	31300	7	592	20800	8	449	23700	15	960			
13	28900	5	390	19500	8	421	20600	12	667			
14	27000	3	219	19300	9	469	18000	10	486			
15	25200	3	204	21300	10	575	16300	9	396			
16	24000	3	194	22100	10	597	15400	8	333			
17	22400	3	181	21500	12	697	18000	18	875			
18	21200	3	172	28000	57	4600	17600	15	713			
19	20100	3	163	33100	75	6700	18600	20	1000			
20	29800	33	2660	38700	62	6480	20400	35	1930			
21	31200	25	2110	38800	45	4710	23500	53	3560			
22	25600	16	1110	43500	43	5050	88300	110	29100			
23	22900	10	618	50800	60	8230	117000	220	67900			
24	21300	10	575	48300	58	7560	87300	340	78700			
25	20400	9	496	41800	40	4510	60100	145	23500			
26	20600	11	612	37700	30	3050	48200	75	9760			
27	21900	16	946	33500	28	2530	39000	50	5260			
28	24300	16	1050	32200	26	2260	33800	42	3830			
29	36700	14	1390	29200	22	1730	26900	33	2400			
30	37200	16	1610	28800	20	1560	27800	25	1880			
31	---	---	---	33400	23	2070	---	---	---			
TOTAL	1128800	---	75757	958800	---	76025	1051100	---	259660			
DAY	JULY				AUGUST				SEPTEMBER			
	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)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	27700	20	1500	14100	16	609	11100	8	240			
2	29500	23	1830	15000	18	729	10400	7	197			
3	32900	45	4000	16100	17	739	10800	6	175			
4	32100	40	3470	14200	16	613	10500	6	170			
5	29000	39	3050	15300	15	620	9320	6	151			
6	25400	38	2610	13700	15	555	8510	5	115			
7	22700	27	1650	12300	14	465	8100	5	109			
8	22100	18	1070	13000	12	421	7950	5	107			
9	21800	18	1060	17400	20	1000	7680	5	104			
10	22300	18	1080	30500	65	5500	7940	5	107			
11	20700	18	1010	44000	83	9900	8180	5	110			
12	20500	18	996	35400	55	5260	8190	5	111			
13	18200	17	835	27700	43	3220	7890	5	107			
14	20800	16	899	24500	40	2650	7540	5	102			
15	35400	85	8120	22900	45	2780	7470	5	101			
16	32900	70	6220	23300	48	3020	8990	10	243			
17	29800	55	4430	23000	45	2790	10900	11	324			
18	27000	55	4010	22900	50	3090	12100	13	425			
19	22500	54	3280	23800	55	3530	13700	15	555			
20	19600	36	1910	21400	53	3060	13500	17	620			
21	18000	20	972	18000	33	1600	15500	20	837			
22	16700	12	541	15400	12	499	13800	17	633			
23	16000	11	475	13500	7	255	12800	15	518			
24	16300	10	440	12300	7	232	11400	13	400			
25	15700	9	382	11300	7	214	10000	10	270			
26	15000	9	364	10500	6	170	9380	9	228			
27	13800	9	335	10200	6	165	9910	8	214			
28	12400	9	301	10700	7	202	11400	9	277			
29	12100	8	261	9940	8	215	12900	10	348			
30	13200	12	428	10400	9	253	13600	12	441			
31	13900	14	525	9990	8	216	---	---	---			
TOTAL	676000	---	58054	562730	---	54572	311450	---	8339			
YEAR 14260180				2255148								



## 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 mi<sup>2</sup> (559 km<sup>2</sup>).

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) above mean sea level. March 1909 to December 1919, nonrecording gage at site 50 ft (15 m) upstream at same datum.

REMARKS.--Records 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 ft<sup>3</sup>/s (0.031 m<sup>3</sup>/s)

AVERAGE DISCHARGE.--32 years (1909-1919, 1954-1976), 288 ft<sup>3</sup>/s (8.16 m<sup>3</sup>/s), 18.11 in/yr (460 mm/year).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft<sup>3</sup>/s (547 m<sup>3</sup>/s) Sept. 26, 1975, gage height, 18.77 ft (5.721 m), from floodmarks; minimum 23 ft<sup>3</sup>/s (0.651 m<sup>3</sup>/s) Sept. 12, 1966, gage height, 0.17 ft (0.052 m); minimum daily, 67 ft<sup>3</sup>/s (1.90 m<sup>3</sup>/s) Sept. 13, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 22, 1953 reached a stage of 9.4 ft (2.87 m), from floodmarks, discharge, 3,940 ft<sup>3</sup>/s (112 m<sup>3</sup>/s), from rating curve extended above 2,500 ft<sup>3</sup>/s (70.8 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,250 ft<sup>3</sup>/s (35.4 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 19	0230	1,270 36.0	4.69 1.430	Apr. 1	0815	1,320 37.4	4.79 1.460
Jan. 27	Unk.	*1,370 38.8	*4.92 1.500				

Minimum discharge, 60 ft<sup>3</sup>/s (1.699 m<sup>3</sup>/s) Nov. 8, gage height, 0.74 ft (0.226 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	378	321	964	633	342	944	255	499	195	156	133
2	598	369	315	654	824	334	636	300	566	193	154	135
3	523	364	308	573	490	328	502	265	430	182	152	135
4	475	358	300	563	463	353	475	245	383	190	152	135
5	451	350	297	463	442	342	466	236	350	224	152	133
6	433	342	295	415	415	323	418	231	328	190	184	132
7	406	334	297	409	383	313	395	229	318	169	217	130
8	389	311	290	421	378	305	375	217	305	173	241	128
9	403	344	315	380	364	308	361	210	290	188	206	128
10	508	350	409	347	355	323	347	210	280	178	188	184
11	436	406	353	364	375	328	342	210	282	173	171	169
12	406	552	318	364	378	347	328	224	262	176	161	144
13	366	964	305	350	358	406	321	222	257	190	165	137
14	347	612	300	457	366	442	313	208	255	195	159	137
15	334	502	300	400	342	380	308	206	260	178	171	135
16	323	460	300	261	344	366	302	219	255	169	182	275
17	328	436	292	240	472	400	295	342	257	188	165	277
18	976	412	287	230	460	364	285	295	253	190	155	208
19	1080	400	275	240	478	355	280	290	275	167	150	171
20	784	389	272	270	427	344	275	245	260	161	148	155
21	710	418	277	315	398	347	272	226	400	157	146	152
22	619	421	277	315	430	347	267	213	364	238	144	144
23	563	378	272	280	415	326	257	208	326	217	142	139
24	517	355	265	260	378	318	253	208	238	176	141	139
25	490	350	260	280	369	318	262	206	213	167	139	139
26	478	342	490	900	366	315	358	270	206	165	139	139
27	454	342	542	2700	361	313	292	292	195	165	139	142
28	436	342	395	1300	353	353	262	233	186	201	141	144
29	418	326	355	741	344	328	255	215	190	171	139	144
30	406	318	344	636	---	318	248	511	197	167	135	144
31	289	---	418	535	---	331	---	724	---	163	133	---
TOTAL	15596	12225	10044	16627	12161	10617	10694	8165	8880	5656	4967	4607
MEAN	503	408	324	536	419	342	356	263	296	182	160	154
MAX	1080	964	542	2700	824	442	944	724	566	238	241	277
MIN	289	311	260	230	342	305	248	206	186	157	133	128
CFSM	2.33	1.89	1.50	2.48	1.94	1.58	1.65	1.22	1.37	.84	.74	.71
IN.	2.69	2.11	1.73	2.86	2.09	1.83	1.84	1.41	1.53	.97	.86	.79

CAL YR 1975	TOTAL	166393	MEAN 456	MAX 11000	MIN 146	CFSM 2.11	IN 28.66
WTR YR 1976	TOTAL	120239	MEAN 329	MAX 2700	MIN 128	CFSM 1.52	IN 20.71

## 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 mi<sup>2</sup> (873 km<sup>2</sup>).

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) above mean sea level. Prior to July 16, 1931, nonrecording gage at same site and datum.

REMARKS.--Records good except those for periods of no gage-height record, which are fair.

AVERAGE DISCHARGE.--57 years, 567 ft<sup>3</sup>/s (16.06 m<sup>3</sup>/s), 22.85 in/yr (580 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 66,700 ft<sup>3</sup>/s (1,890 m<sup>3</sup>/s) June 23, 1972, gage height, 23.72 ft (7.230 m), from floodmark in gage shelter, from rating curve extended above 25,000 ft<sup>3</sup>/s (708 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum 6.0 ft<sup>3</sup>/s (0.17 m<sup>3</sup>/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 ft<sup>3</sup>/s (2,490 m<sup>3</sup>/s), from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,800 ft<sup>3</sup>/s (136 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Nov. 13	Unknown	6,430 182	8.40 2.560	Jan. 27	0400	*12,800 362	*12.57 3.831

Minimum discharge, 106 ft<sup>3</sup>/s (3.00 m<sup>3</sup>/s) Sept. 9, 10, gage height, 0.25 ft (0.076 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1370	386	440	2040	1700	555	3500	269	438	3220	505	136
2	1150	366	430	1270	3550	520	2800	763	769	1040	380	138
3	930	346	390	1130	1260	540	1900	451	510	703	308	146
4	781	327	340	1090	1080	807	1520	372	372	550	262	142
5	680	307	330	726	932	692	1250	324	308	460	233	136
6	620	290	320	670	753	600	1040	301	272	376	218	127
7	549	280	290	620	580	530	900	286	283	380	356	116
8	492	400	320	601	520	490	780	262	246	600	813	111
9	465	440	307	423	480	470	660	240	218	411	681	108
10	465	430	406	374	460	490	580	230	196	305	730	161
11	496	990	362	431	450	545	520	218	180	555	560	230
12	558	1220	304	415	460	595	480	269	168	648	407	142
13	415	5600	278	415	470	956	440	240	157	376	372	119
14	362	3100	271	1300	480	1050	420	207	152	316	1290	111
15	327	1900	267	680	460	868	400	196	154	280	1180	106
16	304	1300	274	427	500	791	365	204	152	615	1830	429
17	311	1000	254	354	1670	807	350	1150	256	447	919	1660
18	2270	910	250	330	1360	626	320	807	198	286	664	974
19	1890	790	201	398	1400	610	305	692	152	240	505	525
20	1630	700	200	358	1200	575	295	555	213	207	416	356
21	1340	870	190	346	974	550	347	550	316	193	351	312
22	1070	1140	190	334	1210	590	290	505	1200	198	308	256
23	897	800	180	281	1140	475	256	398	2700	294	269	210
24	770	680	180	278	868	438	233	347	1110	1390	240	191
25	705	630	221	281	813	424	246	316	714	510	218	173
26	655	580	1570	4330	758	416	545	324	520	320	210	183
27	577	570	1820	11800	714	407	385	290	394	266	196	610
28	518	560	942	5420	642	708	286	266	339	240	193	714
29	483	470	715	2090	585	520	252	236	637	434	183	438
30	465	440	650	1470	---	447	236	515	1400	1930	159	355
31	415	---	1090	1120	---	420	---	429	---	736	140	---
TOTAL	23960	27822	13982	41802	27469	18512	21901	12212	14724	18526	15096	9415
MEAN	773	927	451	1348	947	597	730	394	491	598	487	314
MAX	2270	5600	1820	11800	3550	1050	3500	1150	2700	3220	1830	1660
MIN	304	280	180	278	450	407	233	196	152	193	140	106
CFSM	2.29	2.75	1.34	4.00	2.81	1.77	2.17	1.17	1.46	1.77	1.45	.93
IN.	2.64	3.07	1.54	4.61	3.03	2.04	2.42	1.35	1.63	2.04	1.67	1.04

CAL YR 1975 TOTAL 310610 MEAN 851 MAX 19100 MIN 50 CFSM 2.53 IN 34.29  
WTR YR 1976 TOTAL 245421 MEAN 671 MAX 11800 MIN 106 CFSM 1.99 IN 27.09

## SWATARA CREEK BASIN

293

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 mi<sup>2</sup> (20.38 km<sup>2</sup>).

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) above mean sea level.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--13 years, 7.91 ft<sup>3</sup>/s (0.224 m<sup>3</sup>/s), 13.65 in/yr (347 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,150 ft<sup>3</sup>/s (146 m<sup>3</sup>/s) June 22, 1972, gage height, 11.53 ft (3.514 m), from rating curve extended above 100 ft<sup>3</sup>/s (2.83 m<sup>3</sup>/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 ft<sup>3</sup>/s (2.27 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 26	2045	*362 10.3	*6.37 1.942	July 29	1815	311 8.81	6.21 1.893

Minimum daily discharge, 5.2 ft<sup>3</sup>/s (0.147 m<sup>3</sup>/s) Sept. 29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	12	12	21	30	9.8	18	8.4	7.3	7.3	13	9.4
2	22	12	11	12	14	9.8	12	9.1	11	6.5	12	9.4
3	20	11	11	14	14	9.6	11	8.0	8.0	7.3	11	9.4
4	19	11	11	13	12	9.8	11	7.6	7.3	7.3	11	9.4
5	18	11	11	11	12	9.6	10	7.3	7.1	6.5	10	9.4
6	17	11	10	11	11	9.6	10	7.6	6.9	6.3	9.8	9.4
7	16	11	10	11	11	9.1	9.8	7.8	6.9	6.3	17	8.9
8	16	11	10	11	11	9.1	9.8	7.8	6.9	6.9	22	8.7
9	15	11	10	9.8	11	8.9	9.6	7.8	6.7	7.3	16	8.7
10	15	13	10	9.4	12	9.1	9.6	7.8	6.5	6.3	18	9.4
11	15	12	9.8	9.1	11	9.1	9.6	7.3	6.5	7.3	14	9.4
12	15	22	9.6	9.4	10	9.4	9.4	8.4	6.3	6.7	13	8.9
13	14	37	9.4	9.6	10	12	9.4	7.8	6.1	6.3	14	8.7
14	14	22	9.4	22	9.6	11	9.4	7.8	6.3	6.1	24	8.4
15	13	18	9.4	11	9.6	10	9.4	7.8	6.5	6.1	17	8.4
16	13	17	9.4	10	13	10	9.1	7.6	6.5	6.0	16	12
17	13	16	9.1	9.8	12	11	8.9	7.8	8.7	6.0	14	13
18	28	15	9.1	8.9	12	9.6	8.9	8.4	6.9	5.8	13	9.1
19	19	14	8.4	8.9	11	9.6	8.9	8.4	6.7	5.8	12	7.8
20	17	14	8.7	8.9	11	9.4	8.9	7.8	6.7	5.6	12	7.6
21	16	16	8.7	8.9	10	9.4	8.7	7.6	6.7	5.6	11	7.1
22	14	14	8.7	8.9	13	9.4	8.9	7.3	7.6	5.8	11	6.9
23	14	13	8.7	8.0	12	8.9	8.9	7.1	7.3	6.1	11	6.3
24	13	13	8.2	8.2	11	8.7	8.7	6.7	6.9	7.6	11	6.1
25	13	13	8.0	8.2	11	8.7	8.7	6.9	6.5	6.5	11	6.0
26	13	12	16	143	11	8.7	8.9	6.7	6.3	6.1	10	5.8
27	12	13	11	62	11	8.7	8.4	6.9	6.1	6.1	10	5.8
28	12	12	10	27	10	9.4	8.2	6.5	6.3	6.1	10	5.6
29	12	12	9.6	16	10	8.7	8.2	6.3	6.3	48	10	5.2
30	12	11	9.6	14	---	8.4	8.2	9.6	8.9	42	9.6	5.4
31	12	---	11	18	---	8.7	---	7.1	---	16	9.4	---
TOTAL	486	430	307.8	553.0	346.2	293.2	288.5	237.0	210.7	285.6	402.8	245.6
MEAN	15.7	14.3	9.93	17.8	11.9	9.46	9.62	7.65	7.02	9.21	13.0	8.19
MAX	28	37	16	143	30	12	18	9.6	11	48	24	13
MIN	12	11	8.0	8.0	9.6	8.4	8.2	6.3	6.1	5.6	9.4	5.2
CFSM	1.99	1.82	1.26	2.26	1.51	1.20	1.22	.97	.89	1.17	1.65	1.04
IN.	2.30	2.03	1.45	2.61	1.64	1.39	1.36	1.12	1.00	1.35	1.90	1.16

CAL YR 1975	TOTAL	4625.2	MEAN 12.7	MAX 268	MIN 4.7	CFSM 1.61	IN 21.86
WTR YR 1976	TOTAL	4086.4	MEAN 11.2	MAX 143	MIN 5.2	CFSM 1.42	IN 19.31

01573205 QUITTAPAHILLA CREEK NEAR PALMYRA, PA

LOCATION.--Lat 40°21'02", long 76°36'52", Lebanon County, Hydrologic Unit 02050305, at bridge on Legislative Route 38003, 600 ft (183 m) upstream from mouth, and 3.1 mi (5.0 km) northwest of Palmyra.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA, MG) (MG/L)
OCT									
21...	1100	9813	380	7.2	13.0	18	8.0	--	264
DEC									
22...	1045	9813	410	--	5.0	4	--	--	288
JAN									
12...	1630	9813	340	7.2	6.0	20	10.7	--	186
FEB									
10...	1200	9813	290	8.0	7.0	8	--	2.8	198
MAR									
25...	1615	9813	470	8.0	12.0	3	10.0	--	275
APR									
15...	0800	9813	370	8.2	11.0	25	9.0	--	240
MAY									
10...	1000	9813	500	7.7	14.0	6	8.1	--	188
JUN									
16...	1145	9813	460	7.5	21.0	25	5.0	--	170
AUG									
18...	1200	9813	600	7.5	16.0	15	7.5	--	235

DATE	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL RESI- DUAL CHLO- RINE (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)
OCT									
21...	0	0	60	18	188	62	.00	19	428
DEC									
22...	--	0	78	23	184	60	--	20	384
JAN									
12...	--	0	69	3.0	182	66	--	22	--
FEB									
10...	0	0	--	--	180	56	--	22	328
MAR									
25...	--	0	77	20	182	60	--	23	368
APR									
15...	0	0	65	18	166	46	--	20	394
MAY									
10...	0	0	72	2.0	178	42	--	22	--
JUN									
16...	0	0	51	10	112	28	--	21	304
AUG									
18...	--	0	78	9.7	178	54	--	24	400

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
21...	--	--	5.8	.28	.53	.27	--	1080	2.0
DEC									
22...	--	--	6.0	.22	.68	.45	--	350	--
JAN									
12...	--	--	6.0	.16	.72	.43	--	740	--
FEB									
10...	26	354	7.1	.14	1.0	.42	.42	490	--
MAR									
25...	--	--	5.2	.28	1.5	.43	--	300	--
APR									
15...	--	--	6.1	.26	.67	.39	--	660	--
MAY									
10...	--	--	6.8	.00	.46	.40	--	390	--
JUN									
16...	--	--	3.9	.48	.40	.51	--	1500	--
AUG									
18...	--	--	3.5	.17	.32	.22	--	590	--



## SWATARA CREEK BASIN

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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 mi<sup>2</sup> (1,250 km<sup>2</sup>).

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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,000 ft<sup>3</sup>/s (396 m<sup>3</sup>/s) Jan. 27, 1976, gage height, 9.44 ft (2.877 m); minimum, 156 ft<sup>3</sup>/s (4.42 m<sup>3</sup>/s) Sept. 15, 1976, gage height, 1.61 ft (0.491 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,000 ft<sup>3</sup>/s (396 m<sup>3</sup>/s) Jan. 27, gage height, 9.44 ft (2.877 m); minimum, 156 ft<sup>3</sup>/s (4.42 m<sup>3</sup>/s) Sept. 15, gage height, 1.61 ft (0.491 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1940	548	618	2790	2040	703	4250	318	493	3540	703	219
2	1580	526	618	1910	4500	654	3480	821	884	1220	548	219
3	1320	493	559	1620	1680	654	2340	559	666	820	440	226
4	1120	460	515	1580	1420	1060	1850	450	471	654	380	233
5	960	440	493	1100	1300	937	1550	390	400	537	343	226
6	880	420	471	1420	1050	794	1260	360	352	440	343	205
7	780	400	460	1230	820	690	1090	352	352	440	617	194
8	700	559	420	911	690	630	937	334	326	690	1120	188
9	660	630	440	642	650	606	807	300	284	526	1060	188
10	670	612	559	460	630	630	703	284	268	410	950	272
11	720	1410	526	570	630	703	678	275	254	512	807	326
12	790	1750	430	582	690	794	618	318	240	844	618	233
13	580	6060	400	526	650	1130	570	309	233	450	632	178
14	520	3620	390	1530	650	1340	537	261	219	370	1650	166
15	470	2420	390	1030	630	1120	515	254	212	334	1400	156
16	430	1840	390	630	678	1020	471	247	205	556	1970	525
17	450	1500	370	526	1960	1020	450	1080	284	564	1230	1800
18	3100	1290	352	292	1820	807	410	911	300	343	859	1210
19	2680	1130	292	343	1800	768	390	768	212	292	666	666
20	2320	992	280	390	1550	729	360	606	268	261	570	460
21	1940	1200	270	390	1270	690	400	570	420	247	493	400
22	1500	1640	260	360	1440	716	380	559	1160	268	440	343
23	1230	1100	260	318	1480	606	334	450	3060	344	390	292
24	1060	964	247	318	1120	559	318	390	1470	1340	352	254
25	1020	898	254	318	1020	537	318	352	898	606	326	240
26	950	833	1290	4080	964	526	597	380	654	380	318	233
27	820	807	2650	12900	898	515	515	380	526	326	309	538
28	742	794	1400	8040	833	820	370	326	430	318	309	794
29	678	678	1050	2860	755	660	326	292	594	593	292	548
30	654	630	911	2040	---	548	309	679	1140	2710	261	420
31	594	---	1440	1600	---	559	---	582	---	1040	233	---
TOTAL	33858	36644	19005	53306	35618	23525	27133	14157	17275	21975	20629	11952
MEAN	1092	1221	613	1720	1228	759	904	457	576	709	665	398
MAX	3100	6060	2650	12900	4500	1340	4250	1080	3060	3540	1970	1800
MIN	430	400	247	292	630	515	309	247	205	247	233	156
CFSM	2.26	2.53	1.27	3.56	2.54	1.57	1.87	.95	1.19	1.47	1.38	.82
IN.	2.61	2.82	1.46	4.11	2.74	1.81	2.09	1.09	1.33	1.69	1.59	.92

WTR YR 1976 TOTAL 315077 MEAN 861 MAX 12900 MIN 156 CFSM 1.78 IN 24.27



## SWATARA CREEK BASIN

01573610 SWATARA CREEK AT MIDDLETOWN, PA

LOCATION.--Lat 40°11'28", long 76°43'52", Dauphin County, Hydrologic Unit 02050305, at bridge on State Route 441 at Middletown and 2300 ft (701 m) upstream from mouth.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)
OCT 21...	1430	9813	160	7.3	13.0	21	10.0	78	0
JAN 15...	0920	9813	150	6.8	.0	74	13.2	68	0
FEB 25...	0930	9813	330	7.1	4.0	10	11.5	90	0
MAR 16...	1020	9813	190	7.6	6.0	6	11.5	60	0
APR 13...	1245	9813	175	8.5	10.0	2	12.7	126	0
MAY 10...	1200	9813	260	8.0	16.0	4	8.5	112	0
JUN 16...	1030	9813	370	8.3	23.0	4	8.7	124	0

DATE	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL RESI- DUAL CHLO- RINE (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT 21...	0	21	6.0	54	30	.00	10	160	--
JAN 15...	0	18	5.5	42	20	--	21	252	--
FEB 25...	0	23	8.0	54	22	--	13	132	12
MAR 16...	0	23	.5	54	26	--	15	228	--
APR 13...	0	28	14	58	34	--	11	164	--
MAY 10...	0	33	7.0	82	26	--	14	--	--
JUN 16...	0	41	5.0	92	50	--	19	238	--

## SWATARA CREEK BASIN

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01573610 SWATARA CREEK AT MIDDLETOWN, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 21...	2.3	.06	.08	.12	1080	--	4.0	--
JAN 15...	2.2	.11	.60	.43	3220	280	--	--
FEB 25...	1.9	.10	.23	.12	410	70	--	.00
MAR 16...	2.8	.06	.08	.55	250	80	--	.00
APR 13...	2.3	.04	.07	.12	130	--	--	.00
MAY 10...	2.8	.09	.13	.18	260	--	--	--
JUN 16...	2.8	.05	.12	.26	210	100	--	.00

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JAN 15...	0920	9813	<3	10	40	<50	<20	40
JUN 16...	1030	9813	--	--	--	--	50	20

## 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. Water-quality sampling site at bridge 500 ft (150 m) downstream.

DRAINAGE AREA.--510 mi<sup>2</sup> (1,321 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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 263.86 ft (80.425 m) above mean sea level.

REMARKS.--Records good. Occasional regulation by Conewago Lake (capacity, 3,570 acre-ft or 4.40 hm<sup>3</sup>) since October 1959.

AVERAGE DISCHARGE.--48 years, 583 ft<sup>3</sup>/s (16.5 m<sup>3</sup>/s), 15.52 in/yr (394 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96,200 ft<sup>3</sup>/s (2,720 m<sup>3</sup>/s) Sept. 26, 1975, gage height, 32.11 ft (9.787 m), from floodmarks, from rating curve extended above 45,000 ft<sup>3</sup>/s (1,270 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 30.26 ft (9.223 m); minimum, 1.9 ft<sup>3</sup>/s (0.054 m<sup>3</sup>/s) Oct. 13, 1941; minimum gage height, 1.03 ft (0.314 m) Aug. 9, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,800 ft<sup>3</sup>/s (306 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Nov. 13	0700	14,800 419	13.45 4.100	Jan. 27	0700	*15,900 450	*13.87 4.228

Minimum discharge, 27 ft<sup>3</sup>/s (0.765 m<sup>3</sup>/s) Sept. 7, 8, gage height, 2.25 ft (0.686 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1100	388	392	5550	1260	525	4700	231	1030	200	118	40
2	955	365	388	2740	4190	498	3100	360	1400	172	98	34
3	838	360	360	1630	1350	477	1510	431	997	163	74	31
4	742	347	334	1810	1110	482	1240	292	682	135	61	31
5	670	325	300	1060	1030	509	1430	235	436	111	59	31
6	622	317	280	844	784	493	1050	207	360	100	59	29
7	616	304	280	790	646	441	850	200	317	91	106	27
8	604	338	272	754	610	388	748	185	288	104	300	29
9	599	431	276	564	576	379	664	169	253	115	509	32
10	1410	451	664	446	559	417	599	158	217	104	342	36
11	927	1480	682	462	622	503	553	149	197	109	217	52
12	934	2510	436	509	760	899	509	172	175	120	152	59
13	712	11100	369	462	616	1380	472	185	158	178	113	80
14	581	2750	338	1170	664	1760	436	197	144	175	115	52
15	503	1420	321	1070	634	1000	412	158	135	120	87	39
16	426	1090	342	652	581	826	392	149	141	214	100	118
17	402	906	342	493	1070	1050	379	217	178	374	106	329
18	3170	796	304	379	1350	913	360	431	181	221	98	338
19	2340	706	253	272	1520	730	334	421	178	135	78	217
20	1250	652	221	292	1270	682	321	308	155	100	61	138
21	1160	682	214	300	927	628	304	231	383	83	51	100
22	826	1010	221	268	1170	640	288	185	456	87	44	80
23	730	718	197	217	1410	553	268	155	688	118	41	67
24	658	581	188	217	857	477	246	138	329	402	39	58
25	616	542	188	246	754	456	231	125	224	280	38	48
26	610	498	1020	2050	712	451	292	163	178	169	40	46
27	570	472	2660	13900	670	436	446	308	152	125	41	48
28	520	488	1100	8010	628	514	312	369	135	93	39	61
29	477	446	766	1970	570	581	253	235	113	83	41	64
30	451	402	634	1370	---	446	228	983	120	146	69	91
31	431	---	1270	1070	---	441	---	2050	---	221	49	---
TOTAL	26450	32875	15612	51567	28900	19975	22927	9797	10400	4848	3345	2405
MEAN	853	1096	504	1663	997	644	764	316	347	156	108	80.2
MAX	3170	11100	2660	13900	4190	1760	4700	2050	1400	402	509	338
MIN	402	304	188	217	559	379	228	125	113	83	38	27
CFSM	1.67	2.15	.99	3.26	1.95	1.26	1.50	.62	.68	.31	.21	.16
IN.	1.93	2.40	1.14	3.76	2.11	1.46	1.67	.71	.76	.35	.24	.18

CAL YR 1975	TOTAL	422729	MEAN	1158	MAX	64000	MIN	59	CFSM	2.27	IN	30.83
WTR YR 1976	TOTAL	229101	MEAN	626	MAX	13900	MIN	27	CFSM	1.23	IN	16.71

## WEST CONEWAGO CREEK BASIN

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01574000 WEST CONEWAGO CREEK NEAR MANCHESTER, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY C02 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 21...	0930	9813	1190	150	6.8	13.0	15	8.3	71	0	0	20
FEB 24...	1400	9813	826	140	7.2	5.0	13	12.5	100	0	0	16
MAY 10...	1400	9813	155	210	8.5	18.0	4	10.5	89	0	0	24
AUG 12...	1150	9813	149	250	8.3	21.0	25	10.1	91	0	0	24
19...	1045	9813	78	260	8.7	22.0	25	7.7	85	--	0	27

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 21...	4.5	54	26	8.0	146	--	1.9	.03	.04	.12	280	8.0
FEB 24...	14	46	20	11	130	18	2.0	.03	.06	.13	340	--
MAY 10...	7.0	76	20	12	--	--	1.1	.04	.04	.13	190	--
AUG 12...	7.0	78	22	17	--	--	.80	.03	.06	.31	1040	--
19...	4.2	78	22	16	146	--	.44	.02	.05	.21	1100	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PR) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG 19...	1045	9813	370	<3	<10	10	<50	190	<10	<10

## 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 mi<sup>2</sup> (195.5 km<sup>2</sup>). Area of site used prior to Nov. 1, 1965, 74.3 mi<sup>2</sup> (192.4 km<sup>2</sup>).

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) above mean sea level. 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 period of no gage-height record, which are fair. Daily discharges include water diverted around station by waste treatment plant of P. H. Glatfelter Company. Flow regulated by Lake Marburg about 20 miles (32 km) upstream (see p. 304).

COOPERATION.--Records of change in lake contents and daily diversion furnished by P. H. Glatfelter Company.

AVERAGE DISCHARGE.--45 years (1929-64, 1966-76), 78.6 ft<sup>3</sup>/s (2.23 m<sup>3</sup>/s), 14.13 in/yr (359 mm/yr), adjusted for diversion since March 1961 and, for storage, since 1966.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 19,400 ft<sup>3</sup>/s (549 m<sup>3</sup>/s) June 22, 1972, gage height, 15.57 ft (4.746 m), from floodmark in gage shelter, from rating curve extended above 1,300 ft<sup>3</sup>/s (36.8 m<sup>3</sup>/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 ft<sup>3</sup>/s (0.017 m<sup>3</sup>/s) Sept. 4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,340 ft<sup>3</sup>/s (37.9 m<sup>3</sup>/s) Jan. 26, gage height, 6.12 ft (1.865 m); minimum daily, 26 ft<sup>3</sup>/s (0.74 m<sup>3</sup>/s) Aug. 11, 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	292	129	49	609	344	91	482	63	98	60	57	55
2	258	129	53	369	421	95	172	63	137	45	51	56
3	228	128	46	289	217	89	125	51	84	39	50	54
4	196	129	70	300	224	78	137	46	69	30	51	52
5	172	132	65	210	199	78	123	39	59	28	50	47
6	181	122	69	189	201	76	118	41	57	35	55	48
7	172	125	70	179	188	70	121	41	54	47	71	51
8	157	129	66	188	180	65	116	41	53	60	104	62
9	137	123	77	157	160	88	112	39	52	58	99	49
10	170	143	105	154	96	98	103	39	51	69	76	66
11	190	99	78	148	110	106	108	41	49	66	46	56
12	140	337	71	143	97	120	98	61	50	56	55	77
13	73	415	68	128	99	174	89	41	54	51	53	91
14	67	197	72	309	99	166	80	39	56	49	55	93
15	63	156	70	172	92	135	70	39	56	120	62	97
16	59	137	74	137	99	125	64	49	51	68	62	152
17	100	126	70	148	124	139	54	48	67	57	51	116
18	491	120	68	126	134	112	64	67	47	45	57	103
19	223	116	67	111	154	111	64	76	50	57	48	99
20	187	113	70	110	127	110	58	63	73	60	50	97
21	171	136	73	108	118	108	57	59	93	62	49	99
22	158	122	72	107	148	102	60	57	72	62	51	97
23	144	107	66	92	125	95	54	54	48	87	48	95
24	147	106	66	91	122	91	45	54	49	61	51	94
25	148	100	118	95	110	77	48	55	54	54	55	94
26	145	95	328	719	68	72	79	72	52	56	54	96
27	145	93	179	1020	65	74	62	59	47	55	167	99
28	141	82	143	729	70	93	51	55	48	51	57	108
29	138	71	107	359	91	71	46	56	52	54	51	93
30	137	68	115	218	---	71	42	190	258	54	51	103
31	130	---	170	203	---	82	---	83	---	46	56	---
TOTAL	5160	4085	2815	7917	4282	3062	2902	1781	2040	1741	1890	2499
MEAN	166	136	90.8	255	148	98.8	96.7	57.5	68.0	56.2	61.0	83.3
MAX	491	415	328	1020	421	174	482	190	258	120	167	152
MIN	59	68	46	91	65	65	42	39	47	28	46	47
MEAN#	138	114	104	270	148	115	102	51.0	59.1	30.3	35.5	22.3
CFSM#	1.83	1.51	1.38	3.58	1.96	1.52	1.35	.68	.78	.40	.47	.30
IN.#	2.11	1.68	1.59	4.13	2.11	1.75	1.51	.78	.87	.46	.54	.34

CAL YR 1975 TOTAL 50363 MEAN 138 MAX 4880 MIN 38 MEAN# 143 CFSM# 1.89 IN.# 25.64  
WTR YR 1976 TOTAL 40174 MEAN 110 MAX 1020 MIN 28 MEAN# 99.1 CFSM# 1.3 IN.# 17.88

# Adjusted for change in contents of Lake Marburg.



## 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 mi<sup>2</sup> (303 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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) above mean sea level, adjustment of 1907. 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, 2,500,000,000 gal (9.462 hm<sup>3</sup>). Diversion above station for municipal supply of city of York.

AVERAGE DISCHARGE.--49 years, 134 ft<sup>3</sup>/s (3.79 m<sup>3</sup>/s), 15.50 in/yr (394 mm/yr), adjusted for diversion and, since October 1966, for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft<sup>3</sup>/s (756 m<sup>3</sup>/s) June 22, 1972, gage height, 22.62 ft (6.895 m), from floodmarks, from rating curve extended above 600 ft<sup>3</sup>/s (17.0 m<sup>3</sup>/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 of peak flow; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,620 ft<sup>3</sup>/s (103 m<sup>3</sup>/s) Jan. 26, gage height, 6.31 ft (1.923 m), from rating curve extended as explained above; minimum, 5.0 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s) Sept. 9, gage height, 0.64 ft (0.195 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1870	180	128	1070	369	126	600	113	107	49	24	11
2	402	158	115	405	679	117	236	206	149	25	17	12
3	267	119	104	373	271	119	191	84	90	17	15	12
4	253	117	117	346	287	117	203	76	71	25	18	9.6
5	220	122	94	233	268	122	165	76	60	32	17	6.5
6	197	131	108	207	220	119	147	71	61	20	25	5.8
7	188	122	113	214	201	111	131	74	63	21	63	12
8	191	119	96	237	192	106	133	67	55	34	144	7.3
9	180	117	113	172	180	113	120	67	53	40	88	5.8
10	202	119	136	163	163	124	101	67	46	23	86	15
11	156	161	98	161	220	138	115	63	47	50	49	12
12	138	279	100	150	177	150	99	124	47	46	34	9.6
13	136	423	98	148	166	230	105	66	46	31	25	9.6
14	131	287	98	485	161	186	94	60	42	26	23	7.9
15	129	210	92	189	153	158	95	61	39	42	29	9.6
16	121	177	104	163	155	148	92	63	33	97	32	99
17	131	155	90	166	186	174	86	81	67	38	18	92
18	964	145	88	138	192	126	86	76	46	29	17	41
19	307	143	70	117	195	136	84	72	42	25	12	31
20	230	148	82	128	161	131	77	60	94	22	9.6	25
21	220	186	92	131	150	131	77	57	103	20	10	19
22	163	169	77	124	192	115	74	51	94	27	9.6	12
23	186	145	80	120	158	111	71	55	53	49	12	9.6
24	153	131	75	120	140	111	61	53	44	86	9.0	7.3
25	189	140	75	117	143	111	74	50	40	40	9.6	11
26	148	124	545	1900	136	111	115	76	44	29	8.4	19
27	133	140	207	1930	136	111	76	72	35	24	99	17
28	100	133	145	1040	131	148	86	54	32	22	38	27
29	189	113	115	425	124	111	79	46	28	21	16	16
30	145	124	131	351	---	104	76	162	37	47	12	25
31	177	---	207	291	---	108	---	92	---	29	9.6	---
TOTAL	8216	4837	3793	11814	5906	4023	3749	2395	1768	1086	978.8	596.6
MEAN	265	161	122	381	204	130	125	77.3	58.9	35.0	31.6	19.9
MAX	1870	423	545	1930	679	230	600	206	149	97	144	99
MIN	100	113	70	117	124	104	61	46	28	17	8.4	5.8
(/)	27.1	26.9	25.8	26.2	27.2	28.1	29.6	28.2	29.8	31.7	30.2	28.9
MEAN#	292	188	148	407	231	158	155	106	88.7	66.7	61.8	48.8
CFSM#	2.50	1.61	1.26	3.48	1.97	1.35	1.32	.91	.76	.57	.53	.42
IN.#	2.88	1.80	1.45	4.01	2.12	1.56	1.47	1.05	.85	.66	.61	.47
CAL YR 1975	TOTAL	92317.0	MEAN 253	MAX	12000	MIN	24	MEAN# 282	CFSM#	2.41	IN.# 32.71	
WTR YR 1976	TOTAL	49162.4	MEAN 134	MAX	1930	MIN	5.8	MEAN# 163	CFSM#	1.39	IN.# 18.93	

/ Diversion for municipal supply of city of York and change in contents in reservoirs of York Water Co., equivalent in cubic feet per second; furnished by York Water Co.

# Adjusted for diversion and change in reservoir contents.

## CODORUS CREEK BASIN

01575000 SOUTH BRANCH CODORUS CREEK NEAR YORK, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
OCT 21...	1105	9813	275	110	7.0	14.0	16	9.6	56	0	0	14
FEB 24...	0900	9813	164	110	7.5	3.0	6	12.5	102	0	0	13
MAY 12...	1045	9813	124	150	8.0	14.0	630	9.2	56	0	0	15
AUG 19...	1400	9813	19	200	7.5	21.0	5	7.7	64	--	0	18

DATE	TIME	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 21...	5.0	36	18	10	128	--	3.7	.08	.07	.09	.09	620	4.0
FEB 24...	17	28	8.0	12	112	8	4.1	.04	.05	.09	.09	170	--
MAY 12...	4.5	42	18	13	--	--	3.8	.08	.40	.76	.76	14300	--
AUG 19...	4.5	48	12	16	728	--	2.4	.08	.09	.09	.09	630	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
AUG 19...	1400	9813	1080	<3	<1	10	<50	180	<10	<10

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 mi<sup>2</sup> (575 km<sup>2</sup>).

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) above mean sea level (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 for winter periods, which are fair. Regulation at low flow by mills and pumping plant above station. Diversion above station for municipal supply of city of York. Flood flows regulated by Indian Rock Reservoir 2.1 mi (3.4 km) upstream (see p.304) and by three reservoirs (combined capacity, 21,385 mil gal (80.94 hm<sup>3</sup>).

AVERAGE DISCHARGE.--36 years, 245 ft<sup>3</sup>/s (6.94 m<sup>3</sup>/s), 14.99 in/yr (381 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft<sup>3</sup>/s (850 m<sup>3</sup>/s) June 22, 1972, gage height, 26.36 ft (8.035 m), from floodmark in gage shelter, from rating curve extended above 6,000 ft<sup>3</sup>/s (170 m<sup>3</sup>/s) on basis of slope-area measurement at gage height 20.11 ft (6.130 m); minimum 3.0 ft<sup>3</sup>/s (0.085 m<sup>3</sup>/s) Oct. 25, 1966, gage height, 1.40 ft (0.427 m), result of upstream shutoff.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,830 ft<sup>3</sup>/s (108 m<sup>3</sup>/s) Jan. 26, gage height, 9.20 ft (2.804 m); minimum, 23 ft<sup>3</sup>/s (0.65 m<sup>3</sup>/s) Aug. 4, gage height, 1.66 ft (0.506 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3390	390	145	1720	700	239	1140	184	242	349	88	74
2	1490	320	160	896	1100	233	688	367	343	105	83	77
3	688	260	140	752	750	230	466	163	222	88	83	77
4	624	260	150	772	650	219	452	154	165	88	79	71
5	540	280	140	536	590	222	414	142	137	90	68	65
6	522	290	145	477	620	222	364	135	129	69	96	65
7	484	270	150	463	580	196	343	133	129	66	165	71
8	442	260	135	505	550	186	340	125	137	96	322	72
9	445	250	170	407	450	199	310	121	118	123	222	77
10	477	280	250	364	300	228	274	123	108	105	214	87
11	512	350	180	364	330	253	295	125	110	142	127	87
12	466	800	155	349	300	304	268	242	103	135	105	87
13	322	1300	155	301	307	445	262	142	96	103	95	103
14	292	1000	155	792	307	417	236	127	98	88	91	107
15	268	530	150	421	283	325	217	129	103	154	100	110
16	256	410	160	337	292	304	209	131	95	214	110	292
17	268	350	155	349	364	355	199	182	159	107	90	286
18	1510	320	150	271	385	265	196	168	116	91	88	168
19	688	313	140	250	421	265	191	165	110	83	79	139
20	522	316	150	247	355	256	182	139	186	90	74	127
21	484	367	160	242	319	253	179	123	214	91	75	119
22	410	373	155	239	388	236	170	112	222	98	71	114
23	414	301	145	194	349	217	168	114	127	135	77	108
24	367	280	180	190	304	212	148	110	114	199	74	105
25	407	275	300	206	298	214	157	108	114	107	74	108
26	364	265	930	1870	253	212	247	159	114	93	68	119
27	382	260	470	2800	233	206	174	161	98	90	301	121
28	349	240	360	1900	219	283	163	119	93	88	152	146
29	400	205	250	980	233	212	152	110	95	90	80	119
30	320	200	200	660	---	201	142	382	170	114	74	125
31	380	---	417	570	---	209	---	239	---	91	69	---
TOTAL	18483	11315	6702	20424	12230	7818	8746	4934	4267	3582	3494	3426
MEAN	596	377	216	659	422	252	292	159	142	116	113	114
MAX	3390	1300	930	2800	1100	445	1140	382	343	349	322	292
MIN	256	200	135	190	219	186	142	108	93	66	68	65
(/)	27.1	26.9	25.8	26.2	27.2	28.1	29.6	28.2	29.8	31.7	31.0	28.9
MEAN#	470	382	256	702	447	296	326	181	169	116	118	83.4
CFSM#	2.12	1.72	1.15	3.16	2.01	1.33	1.47	.82	.76	.52	.53	.38
IN.#	2.44	1.92	1.33	3.64	2.17	1.53	1.64	.94	.85	.60	.61	.42
CAL YR 1975 TOTAL	156508		MEAN 429	MAX 10400	MIN 90	MEAN# 462	CFSM# 2.08	IN.# 28.29				
WTR YR 1976 TOTAL	105421		MEAN 288	MAX 3390	MIN 65	MEAN# 295	CFSM# 1.33	IN.# 18.11				

/ Diversion for municipal supply of city of York and change in contents in reservoirs, equivalent in cubic feet per second. Records of diversion and change in contents in four reservoirs furnished by P. H. Glatfelter Co., York Water 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 mi<sup>2</sup> (60.1 km<sup>2</sup>). 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 at mean sea level.

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 hm<sup>3</sup>), at elevation 623.0 ft or 189.89 m (normal pool) is 47,680 acre-ft (58.8 hm<sup>3</sup>), and at elevation 616.0 ft or 187.76 m (crest of spillway) is 39,430 acre-ft (48.6 hm<sup>3</sup>). Lake is used for water supply and recreation. An average of about 3,376 acre-ft (4.16 hm<sup>3</sup>) 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 hm<sup>3</sup>) many times (elevation, 623.0 ft or 189.89 m); minimum, 39,960 acre-ft (49.3 hm<sup>3</sup>) Sept. 30, 1976 (elevation, 616.50 ft or 187.909 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 47,680 acre-ft (58.8 hm<sup>3</sup>) Apr. 8-28 (elevation, 623.00 ft or 189.89 m); minimum, 39,960 acre-ft (49.3 hm<sup>3</sup>) Sept. 30 (elevation, 616.50 ft or 187.909 m).

01574700 INDIAN ROCK RESERVOIR.--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 mi<sup>2</sup> (242.7 km<sup>2</sup>). 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 at mean sea level (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 hm<sup>3</sup>). 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 hm<sup>3</sup>) June 23, 1972 (elevation, 436.44 ft or 133.027 m); minimum, no storage many times.

EXTREMES FOR CURRENT YEAR: Maximum contents, 7,750 acre-ft (9.56 hm<sup>3</sup>) Oct. 1 (elevation, 410.40 ft or 125.090 m); minimum, 31 acre-ft (38,200 m<sup>3</sup>) Oct. 17 (elevation, 374.10 ft or 114.026 m).

## MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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 RESERVOIR	
Sept. 30 .....	623.00	47,680	-	410.40	7,750	-
Oct. 31 .....	621.70	45,950	-28.1	375.00	44.1	-125
Nov. 30 .....	620.70	44,630	-22.2	376.54	70.8	+4
Dec. 31 .....	621.30	45,430	+13.0	379.97	149	+1.3
CAL YR 1975	-	-	+4.6	-	-	+2
Jan. 31 .....	622.00	46,350	+15.0	382.93	247	+1.6
Feb. 29 .....	622.00	46,350	0	378.66	113	-2.3
Mar. 31 .....	622.75	47,350	+16.3	378.88	118	+1
Apr. 30 .....	623.00	47,680	+5.5	376.93	78.6	-.7
May 31 .....	622.70	47,280	-6.5	378.30	106	+4
June 30 .....	622.30	46,750	-8.9	385.95	446	+5.7
July 31 .....	621.10	45,160	-25.9	376.84	76.8	-6.0
Aug. 31 .....	619.90	43,590	-25.5	377.28	85.6	+1
Sept. 30 .....	616.50	39,960	-61.0	380.85	176	+1.5
WTR YR 1976 .....	-	-	-10.7	-	-	-10.4



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. Water-quality sampling site at bridge 2.0 mi (3.2 km) downstream.

DRAINAGE AREA.--25,990 mi<sup>2</sup> (67,310 km<sup>2</sup>), approximately, includes that of Chickies Creek.

## WATER-DISCHARGE RECORDS

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) above mean sea level.

REMARKS.--Records excellent except those for periods of no gage-height record, which are good. Discharge below 8,000 ft<sup>3</sup>/s (227 m<sup>3</sup>/s) regulated by Metropolitan Edison Co., plant at York Haven. Accuracy of records for entire period has been verified independently by Pennsylvania Power and Light Co., and Safe Harbor Water Power Corp. by comparison with records obtained at Safe Harbor, Holtwood, and Conowingo powerplants below station.

COOPERATION.--Gage-height record furnished by Safe Harbor Water Power Corp.

AVERAGE DISCHARGE.--45 years, 36,460 ft<sup>3</sup>/s (1,030 m<sup>3</sup>/s), 19.05 in/yr (484 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080,000 ft<sup>3</sup>/s (30,600 m<sup>3</sup>/s) June 23, 1972, gage height, 64.54 ft (19.672 m), from floodmarks; minimum, 618 ft<sup>3</sup>/s (17.5 m<sup>3</sup>/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 ft<sup>3</sup>/s (39.1 m<sup>3</sup>/s) Sept. 26, 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1931, 58.2 ft (17.8 m) June 2, 1889, from floodmark, discharge, about 630,000 ft<sup>3</sup>/s (18,000 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 260,000 ft<sup>3</sup>/s (7,360 m<sup>3</sup>/s) Feb. 19, gage height, 47.56 ft (14.496 m); minimum, 7,770 ft<sup>3</sup>/s (220 m<sup>3</sup>/s) Sept. 15, gage height, 33.29 ft (10.147 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145000	34000	33800	64000	92800	83100	64700	37700	38000	31800	16700	11800
2	114000	31200	32800	64900	70000	77800	78300	37500	39000	31700	16400	12800
3	92300	28800	31000	60200	58000	70800	90300	36500	40000	32900	17900	11800
4	72000	27100	30200	57400	49000	71900	93200	33900	40900	34900	17600	12300
5	59200	25500	31800	48400	42000	104000	85400	33800	38000	31600	16500	11800
6	53100	24300	31400	40000	37000	125000	75600	33500	34800	28800	16900	10500
7	46600	23200	30600	34000	39000	119000	65300	32000	31100	25300	17300	9920
8	40600	22800	29100	27000	39000	103000	57400	30300	27500	25000	16700	9310
9	35000	22600	28200	23000	34000	90600	51100	25800	26200	24200	18300	9090
10	32800	22600	29400	20000	35000	79600	44600	26000	26600	24100	25600	9300
11	32800	24000	35600	19000	34000	68600	39600	24300	27100	24000	38800	9650
12	32900	26000	40200	19000	44000	62300	35900	23800	27100	23000	37000	9690
13	33200	47000	42700	20000	49000	60100	33000	22600	24800	23500	31500	9850
14	31900	79000	42300	25000	55000	59400	30800	21600	22000	19400	28500	9230
15	28700	83000	39000	28000	59000	57800	29000	22400	19800	29500	26300	8730
16	26600	76000	36500	29000	60600	54000	27600	24100	18400	34500	26100	10100
17	25200	63000	35300	28000	70100	51500	26100	24900	18200	31900	26000	13900
18	37700	56000	42200	24000	139000	48500	24700	27300	20600	30000	25200	15200
19	118000	50000	49400	21000	240000	44800	23500	34600	19700	26200	25200	16000
20	145000	46000	44900	19000	253000	41300	26500	40400	20900	23000	24700	16100
21	150000	44200	39400	19000	237000	38800	35800	40500	23800	20800	22000	16200
22	137000	43100	34500	20000	206000	39100	30200	44000	39900	19700	19100	17300
23	116000	42600	29400	17000	178000	45000	26300	51500	122000	18700	16800	15700
24	94900	41500	27200	16000	169000	51200	24400	52400	108000	20900	15200	14100
25	79000	41000	24100	17000	156000	55500	23200	46700	76400	19700	13700	12200
26	65000	38000	24700	25000	130000	54000	23300	42000	58400	17900	12400	11400
27	56400	35000	33700	90700	109000	49700	24100	37700	48200	16600	12000	11400
28	50600	34000	41300	182000	94900	47700	25000	35000	39600	15600	12000	12500
29	45300	34000	48600	176000	87100	48200	33600	32600	34300	14100	12100	14400
30	40800	34000	50600	142000	---	48400	41000	32100	29700	17500	11600	15000
31	37300	---	49200	114000	---	48500	---	37300	---	17500	11800	---
TOTAL	2074900	1199500	1119100	1489600	2866500	1999200	1289500	1044800	1141000	754300	627900	367270
MEAN	66930	39980	36100	48050	98840	64490	42980	33700	38030	24330	20250	12240
MAX	150000	83000	50600	182000	253000	125000	93200	52400	122000	34900	38800	17300
MIN	25200	22600	24100	16000	34000	38800	23200	21600	18200	14100	11600	8730
CFSM	2.58	1.54	1.39	1.85	3.80	2.48	1.65	1.30	1.46	.94	.78	.47
IN.	2.97	1.72	1.60	2.13	4.10	2.86	1.85	1.50	1.63	1.08	.90	.53

CAL YR 1975 TOTAL 18659270 MEAN 51120 MAX 545000 MIN 7270 CFSM 1.97 IN 26.71  
WTR YR 1976 TOTAL 15973570 MEAN 43640 MAX 253000 MIN 8730 CFSM 1.68 IN 22.86



## SUSQUEHANNA RIVER BASIN

01576000 SUSQUEHANNA RIVER AT MARIETTA, PA--Continued

## WATER-QUALITY RECORDS

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, FEBRUARY 1976 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)
FEB 26...	1230	9813	130000	60	6.8	4.0	50	12.7
MAY 11...	1100	9813	24200	210	8.5	19.0	--	9.5
AUG 19...	1335	9813	25200	250	8.1	23.5	20	9.2

DATE	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
FEB 26...	--	49	--	0	16	2.2	292	30	9.0
MAY 11...	4.7	82	0	0	23	6.0	52	42	7.0
AUG 19...	--	90	--	0	27	5.5	40	36	14

DATE	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
FEB 26...	104	98	.78	.08	5.8	.19	2500	220
MAY 11...	130	14	.76	.04	.05	.11	270	--
AUG 19...	--	--	1.7	.04	.06	.10	1400	--

## 01576500 CONESTOGA RIVER AT LANCASTER, PA

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 mi<sup>2</sup> (839 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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(P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 245.63 ft (74.868 m) above mean sea level. Prior to May 1, 1933, at site 600 ft (183 m) upstream at different datum, excluding small tributary.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Regulation at low flow by waterworks and mill above station. Diversion above station for municipal supply of city of Lancaster.

AVERAGE DISCHARGE.--46 years, (1928-31, 1933-76), 394 ft<sup>3</sup>/s (11.2 m<sup>3</sup>/s), 16.51 in/yr (419 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88,300 ft<sup>3</sup>/s (2,500 m<sup>3</sup>/s) June 23, 1972, gage height, 27.80 ft (8.473 m), from floodmark, from rating curve extended above 4,000 ft<sup>3</sup>/s (113 m<sup>3</sup>/s) on basis of slope-area measurement at gage height, 17.52 ft (5.340 m) and contracted-opening measurement of peak flow; probably no flow at times: minimum daily discharge, 7 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s) Aug. 11, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft<sup>3</sup>/s (79.3 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	1930	6,510 184	9.34 2.847	Jan. 27	0700	*12,600 357	*12.84 3.914
Nov. 13	0330	3,530 100	7.21 2.198	June 30	0300	3,390 96	7.10 2.164
Jan. 2	1300	2,850 80.7	6.65 2.027	July 30	0730	5,630 159	8.75 2.667
Jan. 14	0815	2,850 80.7	6.65 2.027	Sept. 16	2145	3,740 106	7.37 2.246

Minimum discharge, 19 ft<sup>3</sup>/s (0.538 m<sup>3</sup>/s) June 14, Gage height, 2.43 ft (0.741 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	908	500	431	577	900	451	1210	254	260	549	421	180
2	870	480	490	1700	2260	433	853	669	817	264	354	164
3	772	460	420	1040	1060	426	596	351	391	249	295	176
4	682	444	395	780	885	421	536	274	259	276	266	198
5	646	427	375	1080	885	425	523	248	224	243	258	173
6	603	415	366	648	765	421	462	236	214	218	279	143
7	576	404	366	608	675	383	429	227	221	223	825	181
8	517	427	366	559	639	361	403	217	208	244	610	131
9	486	427	345	716	603	353	388	210	191	388	559	155
10	444	450	344	582	549	381	369	205	181	244	661	162
11	456	818	355	460	536	397	353	203	172	903	442	165
12	549	653	330	440	549	477	354	259	165	628	333	161
13	892	2570	316	420	603	725	326	237	163	347	295	150
14	498	1250	306	1660	590	660	317	207	137	262	1090	134
15	438	924	301	763	536	474	310	201	118	188	594	153
16	399	802	304	546	523	441	298	203	167	240	431	1200
17	399	728	320	479	690	507	293	355	398	210	351	1850
18	3750	675	308	368	885	417	285	333	246	195	311	599
19	2810	639	289	393	964	404	275	323	182	247	279	387
20	1540	603	258	371	825	374	263	240	179	180	261	320
21	1070	633	270	364	617	364	262	236	284	176	251	275
22	892	784	262	362	603	373	258	236	700	137	242	285
23	795	590	264	357	570	339	252	202	452	232	236	230
24	765	543	250	352	583	327	239	192	294	467	223	225
25	728	515	241	373	560	323	240	185	238	268	212	217
26	690	486	243	982	538	319	279	187	211	185	204	227
27	639	466	722	11100	516	317	257	192	193	189	310	297
28	620	476	829	5160	488	381	233	182	186	151	341	275
29	580	438	459	1500	465	339	227	172	189	477	239	214
30	550	420	376	1220	---	309	220	264	1230	3310	210	222
31	520	---	348	1110	---	303	---	241	---	702	188	---
TOTAL	26084	19447	11249	37070	20862	12625	11310	7741	8870	12592	11571	9249
MEAN	841	648	363	1196	719	407	377	250	296	406	373	308
MAX	3750	2570	829	11100	2260	725	1210	669	1230	3310	1090	1850
MIN	399	404	241	352	465	303	220	172	118	137	188	131
(f)	8.1	4.6	0	6.3	4.8	5.3	0	0	5.1	4.0	7.4	8.0
MEAN#	849	653	363	1202	724	412	377	250	301	410	380	316
CFSM#	2.62	2.02	1.12	3.71	2.23	1.27	1.16	.77	.93	1.27	1.17	.98
IN.#	3.02	2.25	1.29	4.28	2.40	1.46	1.29	.89	1.04	1.46	1.35	1.09
CAL YR 1975	TOTAL	255494	MEAN 700	MAX 5100	MIN 161	MEAN# 707	CFSM# 2.18	IN.# 29.62				
WTR YR 1976	TOTAL	188670	MEAN 515	MAX 11100	MIN 118	MEAN# 520	CFSM# 1.60	IN.# 21.82				

NOTE.--No gage-height record Jan. 22 to Feb. 23.

/ Diversion above station for municipal supply, equivalent in cubic feet per second, furnished by the city of Lancaster.

# Adjusted for diversion.

## CONESTOGA RIVER BASIN

01576500 CONESTOGA RIVER AT LANCASTER, PA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1947 to September 1950, October 1958 to September 1972, April 1974 to current year.

COOPERATION.--Water-quality data for the 1976 water year were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT									
22...	1400	9813	885	280	7.6	15.0	18	9.7	--
DEC									
11...	1000	9813	352	270	7.8	5.0	4	11.5	--
FEB									
03...	1230	9813	940	240	7.5	1.0	28	14.0	.0
23...	1100	9813	570	240	7.7	5.1	47	12.1	--
MAR									
29...	1045	9813	338	310	7.9	11.0	3	11.8	--
APR									
12...	1245	9813	362	320	7.8	8.2	--	14.5	.7
MAY									
11...	0930	9813	216	440	8.0	17.0	16	7.8	2.0
JUN									
29...	1100	9813	199	460	7.8	25.7	27	8.0	--
JUL									
21...	1250	9813	184	450	8.7	24.1	25	8.8	--

DATE	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL RESI- DUAL CHLO- RINE (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT									
22...	168	0	0	40	16	152	32	.00	14
DEC									
11...	168	--	0	58	5.5	152	42	--	18
FEB									
03...	132	0	0	42	6.5	108	30	--	19
23...	204	0	0	40	26	104	30	--	22
MAR									
29...	228	--	0	48	27	130	32	--	18
APR									
12...	186	0	0	50	15	126	38	--	19
MAY									
11...	288	0	0	53	38	152	24	--	24
JUN									
29...	216	0	0	52	21	146	32	--	22
JUL									
21...	200	--	0	62	11	150	24	--	25

DATE	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
22...	308	--	--	7.1	.04	.09	.14	830	3.0
DEC									
11...	286	--	--	6.5	.06	.09	.10	200	--
FEB									
03...	--	--	--	4.6	.04	.20	.55	1180	--
23...	244	70	--	4.1	.04	.24	.24	1250	--
MAR									
29...	232	18	--	4.5	.09	.04	.16	160	--
APR									
12...	264	--	264	4.4	.06	.07	.13	140	--
MAY									
11...	--	--	--	6.0	.14	.15	.23	530	--
JUN									
29...	--	--	--	5.4	.05	.06	.25	1030	--
JUL									
21...	--	--	--	6.1	.06	.08	.25	1120	--

CONESTOGA RIVER BASIN

309

01576515 MILL CREEK NEAR LEOLA, PA

LOCATION.--Lat 40°03'46", long 76°09'25", Lancaster County, Hydrologic Unit 02050306, at bridge on State Route 772, 1.3 mi (2.1 km) upstream from Muddy Run and 2.3 mi (3.7 km) southeast of Leola.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA, MG)
OCT									
22...	1315	9813	320	7.6	16.0	21	10.0	--	174
DEC									
11...	1115	9813	310	7.7	5.0	6	11.5	--	180
FEB									
03...	1130	9813	290	7.6	.5	22	13.3	--	168
23...	1300	9813	290	8.0	3.7	24	12.5	--	336
MAR									
29...	0900	9813	330	7.7	7.7	3	11.0	--	188
APR									
12...	1015	9813	310	6.8	4.5	--	14.5	--	156
MAY									
11...	1130	9813	500	7.7	17.0	12	9.2	1.1	192
JUN									
29...	1015	9813	550	7.6	23.5	12	8.3	--	204
JUL									
21...	1130	9813	600	8.7	24.1	6	10.5	--	198

DATE	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL RESI- DUAL CHLO- RINE (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)
OCT									
22...	0	0	49	7.5	190	38	.00	25	404
DEC									
11...	--	0	48	15	170	36	--	21	286
FEB									
03...	0	0	40	16	148	28	--	17	--
23...	0	0	38	60	158	28	--	15	286
MAR									
29...	--	0	40	21	154	28	--	14	284
APR									
12...	0	0	40	13	150	20	--	14	256
MAY									
11...	0	0	37	24	172	20	--	33	--
JUN									
29...	0	0	43	24	156	40	--	43	--
JUL									
21...	--	0	45	21	176	34	--	52	--

## CONESTOGA RIVER BASIN

01576515 MILL CREEK NEAR LEOLA, PA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 22...	--	7.4	.11	.28	.33	1460	--	4.0
DEC 11...	--	7.0	.20	.66	.61	230	30	--
FEB 03...	--	5.2	.05	.36	.88	550	--	--
23...	40	7.6	.08	.30	.40	580	--	--
MAR 29...	--	4.4	.14	.22	.65	380	--	--
APR 12...	12	4.0	.10	.16	.40	350	80	--
MAY 11...	--	7.1	.31	.32	1.7	430	--	--
JUN 29...	--	7.0	.22	.11	2.5	720	--	--
JUL 21...	--	7.2	.79	.39	1.2	470	--	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC 11...	1115	9813	<3	30	<10	<50	<10	20



CONESTOGA RIVER BASIN

311

01576600 CONESTOGA RIVER NEAR MILLERSVILLE, PA

LOCATION.--Lat 39°57'41", long 76°21'58", Lancaster County, Hydrologic Unit 02050306, at bridge on Township Route 561, adjacent to mouth of Skehman Run, and 2.6 mi (4.2 km) south of Millersville.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT 22...	1030	9813	270	7.6	13.0	29	10.0	--	209
DEC 11...	1245	9813	310	8.0	4.7	3	11.5	--	180
FEB 03...	1515	9813	230	7.5	.5	46	14.0	.4	126
23...	1000	9813	270	7.8	5.7	26	12.0	--	186
MAR 29...	1415	9813	370	--	11.3	1	11.0	1.7	270
APR 12...	1430	9813	600	8.2	9.0	--	12.5	.4	180
MAY 11...	1330	9813	500	7.5	18.0	8	8.2	1.5	320
JUN 29...	1300	9813	500	7.6	26.5	30	7.1	--	264
JUL 21...	1400	9813	500	8.5	25.7	23	7.8	--	185
AUG 12...	1200	9813	430	7.1	22.0	35	7.3	--	150

DATE	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL RESI- DUAL CHLO- RINE (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)
OCT 22...	0	0	59	15	154	38	.00	18	336
DEC 11...	--	0	64	4.5	166	44	--	26	292
FEB 03...	0	0	42	5.0	102	40	--	20	--
23...	0	0	49	15	130	34	--	23	278
MAR 29...	--	0	56	32	148	40	--	26	298
APR 12...	0	0	53	11	144	40	--	24	278
MAY 11...	0	0	59	43	170	26	--	29	--
JUN 29...	0	0	56	30	148	38	--	34	--
JUL 21...	--	0	61	7.7	160	38	--	39	--
AUG 12...	0	0	48	7.5	134	30	--	30	346

## CONESTOGA RIVER BASIN

01576600 CONESTOGA RIVER NEAR MILLERSVILLE, PA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 22...	--	--	6.0	.07	.09	.26	1710	--	5.0
DEC 11...	--	--	6.2	.14	.52	.32	60	10	--
FEB 03...	--	--	4.7	.05	.47	.88	1900	--	--
23...	30	--	5.0	.07	.28	.26	470	--	--
MAR 29...	--	--	5.3	.13	.33	.33	150	--	--
APR 12...	--	284	4.0	.10	.30	.27	150	50	--
MAY 11...	--	--	6.1	.28	.71	.60	320	--	--
JUN 29...	--	--	5.4	.24	.32	.40	1590	--	--
JUL 21...	--	--	6.5	.30	.42	.69	990	--	--
AUG 12...	--	--	2.8	.17	.28	.41	2000	140	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DEC 11...	1245	9813	<3	>0	30	<50	<10	30
AUG 12...	1200	9813	<3	<10	<10	<50	30	20

## OCTORARO CREEK BASIN

313

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 mi<sup>2</sup> (15.49 km<sup>2</sup>).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 468.08 ft (142.671 m) above mean sea level.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 7.55 ft<sup>3</sup>/s (0.214 m<sup>3</sup>/s), 17.15 in/yr (436 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,220 ft<sup>3</sup>/s (62.9 m<sup>3</sup>/s) July 3, 1964, gage height, 7.7 ft (2.35 m), from floodmark, from rating curve extended above 150 ft<sup>3</sup>/s (4.25 m<sup>3</sup>/s) on basis of slope-area measurement at peak flow; minimum, 1.0 ft<sup>3</sup>/s (0.028 m<sup>3</sup>/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 ft<sup>3</sup>/s (5.66 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 19	0400	376 10.6	5.20 1.585	July 29	2145	318 9.01	5.02 1.530
Jan. 14	0045	245 6.94	4.76 1.451	Aug. 8	0945	552 15.6	5.65 1.722
Jan. 26	1200	552 15.6	5.65 1.722	Aug. 27	0630	460 13.0	5.43 1.655
July 11	0845	*566 16.0	*5.68 1.731	Sept. 16	1200	205 5.81	4.78 1.457

Minimum discharge, 3.3 ft<sup>3</sup>/s (0.093 m<sup>3</sup>/s) July 28, 29, gage height, 2.76 ft (0.841 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	7.0	5.2	4.5	2.2	6.1	3.2	1.0	6.4	4.3	4.6	5.9
2	8.2	6.7	5.2	1.2	2.1	5.8	1.1	7.0	1.3	3.9	3.3	5.9
3	7.4	6.7	5.2	2.0	9.8	6.0	9.5	5.9	5.7	3.7	3.9	5.7
4	7.4	6.7	5.2	1.1	9.3	7.6	1.0	5.4	4.8	3.9	3.9	5.7
5	7.0	6.4	5.2	7.8	8.7	6.8	8.8	5.2	4.6	3.7	3.9	5.4
6	7.0	6.4	4.9	7.1	8.3	6.3	8.5	5.0	4.6	3.7	3.9	5.4
7	6.7	6.4	4.8	9.0	7.4	5.7	7.9	5.0	4.3	5.4	5.2	5.2
8	6.4	1.0	4.8	1.3	7.2	5.4	7.6	5.0	4.3	5.4	6.5	5.2
9	7.0	6.7	4.7	6.7	7.0	5.8	7.3	4.8	4.1	4.3	2.0	5.4
10	7.4	1.2	4.7	6.1	9.3	6.7	7.3	5.0	4.1	3.9	2.1	6.1
11	1.1	8.6	4.7	6.1	2.1	9.5	7.3	5.7	3.9	6.6	1.3	5.4
12	7.4	2.6	4.6	6.4	8.7	7.6	6.7	5.9	3.9	5.2	1.2	5.2
13	6.7	2.3	4.5	1.3	9.2	1.6	6.7	5.4	3.9	4.3	1.2	5.0
14	6.7	1.2	4.4	4.7	8.3	7.8	6.7	4.8	3.9	4.3	1.2	5.0
15	6.4	9.0	4.4	9.0	7.6	7.1	6.7	4.6	3.9	4.1	1.2	5.0
16	6.4	8.6	4.3	7.8	9.2	8.2	6.4	8.2	3.9	4.1	1.1	3.7
17	9.4	7.8	4.3	7.0	1.1	7.8	6.1	5.9	5.4	3.9	1.1	1.0
18	1.5	7.4	4.2	5.8	1.2	7.1	5.9	5.9	4.1	3.7	1.1	6.7
19	4.9	7.0	3.9	5.5	1.0	7.1	5.9	5.9	3.9	3.6	1.0	5.7
20	1.9	6.7	4.0	5.8	7.6	7.1	5.7	5.2	4.1	3.6	1.0	5.2
21	1.0	9.0	4.0	6.1	7.1	7.4	5.9	5.4	5.4	5.4	1.0	4.8
22	9.0	7.0	4.0	5.8	1.4	7.4	5.7	5.0	6.4	4.1	1.0	4.3
23	8.2	6.4	3.8	5.8	8.1	6.7	5.4	4.8	4.3	4.1	9.9	4.3
24	8.2	6.4	3.6	5.5	7.3	7.1	5.4	5.0	4.3	8.2	9.9	4.3
25	8.6	6.1	3.6	5.5	7.1	7.1	5.7	5.0	4.1	3.7	9.5	4.3
26	8.2	5.8	3.6	1.89	6.7	7.1	5.7	5.4	3.9	3.6	9.5	4.8
27	7.8	6.1	8.2	1.05	6.6	7.1	5.4	5.2	3.9	3.6	5.3	5.0
28	7.4	5.5	5.8	2.6	6.3	1.0	5.4	4.8	3.9	3.4	7.3	4.8
29	7.1	7.4	5.2	1.4	6.1	7.3	5.2	5.2	4.3	4.5	6.4	4.3
30	7.0	5.5	7.1	1.1	---	7.0	5.2	9.1	5.7	1.1	5.9	5.7
31	7.0	---	2.1	9.7	---	7.9	---	5.4	---	5.4	5.7	---
TOTAL	298.6	256.3	195.5	634.5	283.9	229.6	229.0	176.1	143.0	242.5	385.8	192.7
MEAN	9.63	8.54	6.31	20.5	9.79	7.41	7.63	5.68	4.77	7.82	12.4	6.42
MAX	4.9	2.6	3.6	1.89	2.2	1.6	3.2	1.0	1.3	6.6	6.5	3.7
MIN	6.4	5.5	3.6	5.5	6.1	5.4	5.2	4.6	3.9	3.4	3.3	4.3
CFSM	1.61	1.43	1.06	3.43	1.64	1.24	1.28	.95	.80	1.31	2.07	1.07
IN.	1.86	1.59	1.22	3.95	1.77	1.43	1.42	1.10	.89	1.51	2.40	1.20

CAL YR 1975 TOTAL 4593.4 MEAN 12.6 MAX 219 MIN 3.6 CFSM 2.11 IN 28.57  
WTR YR 1976 TOTAL 3267.5 MEAN 8.93 MAX 189 MIN 3.3 CFSM 1.49 IN 20.32

## EVITTS CREEK 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 mi<sup>2</sup> (78.2 km<sup>2</sup>).

PERIOD OF RECORD.--September 1932 to current year. Prior to October 1952, published as "near Bedford Valley".

REVISED RECORDS.--WSP 781: 1933(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,027.59 ft (313.209 m) above mean sea level (city of Cumberland bench mark).

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

AVERAGE DISCHARGE.--44 years, 31.5 ft<sup>3</sup>/s (0.892 m<sup>3</sup>/s), 14.16 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,240 ft<sup>3</sup>/s (148 m<sup>3</sup>/s) Mar. 17, 1936, gage height, 7.13 ft (2.173 m), from rating curve extended above 400 ft<sup>3</sup>/s (11.3 m<sup>3</sup>/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 ft<sup>3</sup>/s (0.020 m<sup>3</sup>/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 ft<sup>3</sup>/s (11 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	0100	*1,410 39.9	*3.93 1.198	July 29	0400	490 13.9	2.93 0.892

Minimum discharge, 4.9 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s) Sept. 9, 10, 13-15, gage height, 1.20 ft (0.366 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	29	19	179	37	32	49	15	15	13	25	6.8
2	46	28	18	81	36	30	42	16	17	12	21	7.8
3	38	27	17	73	34	29	40	15	15	11	18	7.6
4	34	25	17	60	38	31	78	14	14	10	16	7.0
5	30	24	17	50	36	28	62	13	13	9.4	15	6.4
6	28	23	17	46	34	26	55	13	13	8.7	14	6.0
7	25	22	16	44	28	24	51	13	13	8.5	35	5.5
8	24	22	16	42	24	24	47	13	12	8.9	50	5.2
9	44	21	19	38	24	24	44	12	11	9.1	30	5.0
10	37	25	27	34	26	26	41	12	10	8.0	23	13
11	36	24	19	32	165	38	38	12	10	53	20	7.4
12	28	86	17	28	73	37	36	12	10	43	18	5.7
13	25	98	19	28	84	63	34	11	9.1	14	18	5.2
14	24	54	19	32	92	44	31	11	9.0	11	19	4.9
15	24	47	18	28	72	39	29	13	8.3	11	22	5.2
16	24	42	19	26	110	38	27	33	8.6	11	18	20
17	55	38	17	22	129	36	28	37	9.4	9.4	15	33
18	332	35	16	20	116	34	25	23	7.9	7.8	14	16
19	121	33	16	18	97	35	22	23	8.7	7.2	13	9.7
20	147	31	16	34	76	32	21	18	54	6.6	12	8.0
21	96	32	16	30	65	40	20	17	89	7.6	11	7.5
22	78	29	15	26	62	36	21	15	54	107	10	6.5
23	67	26	14	22	52	30	20	14	36	31	9.8	5.9
24	57	25	14	24	47	29	18	14	28	21	9.1	5.5
25	52	24	14	26	44	30	19	14	25	16	8.7	5.5
26	49	23	29	28	41	29	20	15	21	13	8.9	5.7
27	44	24	37	120	39	31	18	13	18	12	13	14
28	40	22	27	60	36	34	16	12	16	38	10	20
29	37	21	24	50	33	28	15	13	15	190	8.9	9.5
30	34	20	28	43	---	32	14	23	14	37	7.4	13
31	31	---	82	39	---	32	---	18	---	29	6.9	---
TOTAL	1760	980	659	1383	1750	1021	981	497	584.0	774.2	519.7	278.5
MEAN	56.8	32.7	21.3	44.6	60.3	32.9	32.7	16.0	19.5	25.0	16.8	9.28
MAX	332	98	82	179	165	63	78	37	89	190	50	33
MIN	24	20	14	18	24	24	14	11	7.9	6.6	6.9	4.9
CFSM	1.88	1.08	.71	1.48	2.00	1.09	1.08	.53	.65	.83	.56	.31
IN.	2.17	1.21	.81	1.70	2.16	1.26	1.21	.61	.72	.95	.64	.34

CAL YR 1975	TOTAL	18634.2	MEAN	51.1	MAX	766	MIN	4.6	CFSM	1.69	IN	22.95
WTR YR 1976	TOTAL	11187.4	MEAN	30.6	MAX	332	MIN	4.9	CFSM	1.01	IN	13.78

TONOLOWAY CREEK BASIN

315

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 mi<sup>2</sup> (27.7 km<sup>2</sup>).

PERIOD OF RECORD.--Occasional discharge measurements and annual maximums, water years 1963-65. October 1965 to current year.

REVISED RECORDS.--WDR PA-69: 1966-68(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 688.94 ft (209.989 m) above mean sea level. Prior to Sept. 2, 1965, crest-stage gage at same site at datum 2.0 ft (0.610 m) higher.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--11 years, 12.4 ft<sup>3</sup>/s (0.35 m<sup>3</sup>/s), 15.76 in/yr (400 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,300 ft<sup>3</sup>/s (36.8 m<sup>3</sup>/s) June 22, 1972, 9.17 ft (2.795 m), from rating curve extended above 550 ft<sup>3</sup>/s (15.6 m<sup>3</sup>/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 ft<sup>3</sup>/s (4.25 m<sup>3</sup>/s) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Oct. 18	1315	158 4.47	4.63 1.411
Sept. 30	2300	*312 8.84	*5.48 1.670

Minimum discharge, 0.04 ft<sup>3</sup>/s (0.001 m<sup>3</sup>/s) Sept. 9, 10, gage height, 2.60 ft (0.792 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.0	4.5	60	14	10	49	4.2	3.9	3.7	1.1	.30
2	8.7	5.6	4.2	50	15	9.2	56	4.5	3.7	3.2	.78	.53
3	6.8	5.2	3.9	42	12	8.7	44	4.5	3.7	2.7	.61	.61
4	5.2	5.2	3.7	35	12	8.2	38	4.2	3.4	2.5	.47	.41
5	4.5	4.9	3.7	30	13	8.2	37	3.9	2.9	2.3	.35	.26
6	3.9	4.5	3.4	27	10	7.7	34	3.7	2.7	2.1	.41	.12
7	3.7	4.2	3.4	23	9.0	6.8	30	3.7	2.7	1.9	6.0	.07
8	3.2	3.9	3.2	16	8.4	6.4	25	3.4	2.5	1.7	21	.06
9	6.8	3.9	3.2	11	8.0	6.8	21	3.4	2.3	1.6	8.7	.05
10	12	3.9	4.9	8.2	7.5	7.2	17	3.2	2.1	1.5	5.6	1.5
11	13	5.2	5.2	10	19	9.7	15	3.2	2.0	3.5	3.9	.61
12	15	6.0	4.5	9.0	23	17	13	3.4	1.8	10	3.2	.19
13	14	12	4.2	8.0	17	21	11	3.2	1.6	6.0	2.5	.09
14	12	38	3.9	6.8	22	19	10	2.9	1.5	3.0	2.3	.07
15	10	42	3.9	6.2	17	18	9.2	2.9	1.5	1.4	3.2	.30
16	8.7	30	3.9	5.6	25	13	8.2	2.9	1.4	1.6	2.3	3.7
17	12	18	3.9	5.2	56	11	7.7	3.2	1.6	1.5	1.6	3.4
18	129	14	3.9	4.9	42	11	7.2	4.2	1.6	1.1	1.4	2.0
19	81	11	4.9	4.7	36	11	6.4	4.9	1.6	.98	1.2	1.5
20	51	9.8	7.2	4.5	29	11	6.0	4.5	6.4	.87	1.1	1.4
21	39	8.8	5.6	6.0	22	11	6.0	4.2	19	1.1	.87	1.2
22	32	8.0	4.2	5.2	20	10	5.6	3.7	34	1.8	.78	.78
23	26	8.2	4.9	4.8	18	9.7	5.6	3.4	27	1.8	.69	.61
24	20	8.4	5.2	4.4	16	8.7	4.9	3.2	17	1.5	.53	.53
25	17	6.8	6.0	5.0	14	8.7	4.9	3.2	12	.98	.41	.53
26	14	6.0	8.7	8.0	13	8.7	6.4	2.9	9.2	.69	.47	.87
27	12	5.6	17	50	12	10	6.0	2.9	6.8	.61	3.4	2.5
28	10	5.2	14	54	11	23	5.2	2.7	5.6	1.8	1.5	1.5
29	8.7	4.9	11	30	11	24	4.9	2.5	4.5	3.9	1.1	1.1
30	7.7	4.5	11	21	---	28	4.5	2.9	3.9	1.6	.53	57
31	6.8	---	20	17	---	32	---	3.7	---	1.4	.30	---
TOTAL	604.7	299.7	191.2	572.5	531.9	394.7	498.7	109.3	189.9	70.33	78.30	83.79
MEAN	19.5	9.99	6.17	18.5	18.3	12.7	16.6	3.53	6.33	2.27	2.53	2.79
MAX	129	42	20	60	56	32	56	4.9	34	10	21	57
MIN	3.2	3.9	3.2	4.4	7.5	6.4	4.5	2.5	1.4	.61	.30	.05
CFSM	1.82	.93	.58	1.73	1.71	1.19	1.55	.33	.59	.21	.24	.26
IN.	2.10	1.04	.66	1.99	1.85	1.37	1.73	.38	.66	.24	.27	.29

CAL YR 1975 TOTAL 5085.43 MEAN 13.9 MAX 178 MIN .06 CFSM 1.30 IN 17.68  
WTR YR 1976 TOTAL 3625.02 MEAN 9.90 MAX 129 MIN .05 CFSM .93 IN 12.60



## 01614090 CONOCOCHEAGUE 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 mi<sup>2</sup> (13.08 km<sup>2</sup>).

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) above mean sea level.

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

AVERAGE DISCHARGE.--16 years, 7.02 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s), 18.88 in/yr (480 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 392 ft<sup>3</sup>/s (11.1 m<sup>3</sup>/s) June 22, 1972, gage height 3.45 ft (1.052 m), from rating curve extended above 160 ft<sup>3</sup>/s (4.53 m<sup>3</sup>/s) on basis of contracted opening and flow-over-road measurement of peak flow; minimum, 0.1 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) on many days; minimum gage height, 0.67 ft (0.204 m) Sept. 3, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 91 ft<sup>3</sup>/s (2.58 m<sup>3</sup>/s) Oct. 18, gage height, 2.63 ft (0.802 m); minimum, 0.57 ft<sup>3</sup>/s (0.016 m<sup>3</sup>/s) Sept. 9, 10, gage height, 1.06 ft (0.323 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	10	6.9	20	14	8.9	29	7.5	15	6.7	2.8	1.2
2	20	9.7	6.5	14	15	8.5	19	7.5	14	5.7	2.6	1.3
3	17	9.2	6.2	16	11	8.5	18	5.7	13	5.3	2.5	1.4
4	15	8.5	5.9	14	11	9.2	20	5.3	11	5.1	2.5	1.3
5	13	8.1	5.6	12	10	8.1	17	5.2	10	4.8	2.4	1.2
6	12	7.7	5.6	9.7	9.7	7.7	15	5.0	10	4.5	2.8	.98
7	11	7.3	5.6	9.0	8.9	7.3	14	4.9	9.4	4.6	3.3	.93
8	10	8.1	5.3	9.3	8.5	6.9	13	4.7	8.4	4.6	11	.83
9	25	6.9	8.1	8.4	8.1	6.9	13	4.6	7.6	4.4	4.1	.74
10	15	12	9.2	7.8	7.7	6.9	12	4.5	6.9	4.0	3.4	4.5
11	15	10	6.2	7.3	9.2	6.9	12	5.0	6.5	11	2.9	1.5
12	12	17	5.6	7.0	8.5	6.9	11	7.5	6.1	9.0	2.6	1.1
13	11	20	5.3	7.3	8.9	11	10	4.9	5.7	4.6	2.4	.94
14	11	15	5.1	9.7	8.9	9.7	9.9	4.7	5.7	4.0	2.4	.83
15	11	14	5.1	7.3	7.7	8.9	9.4	4.5	5.3	11	2.9	.88
16	11	13	5.3	6.9	9.7	10	9.1	5.9	4.9	12	2.8	11
17	14	12	4.8	6.6	14	9.7	8.6	5.7	5.4	5.9	2.2	13
18	54	11	4.8	5.3	13	8.5	8.1	8.5	4.5	4.8	2.0	3.5
19	33	11	4.3	5.2	14	9.7	7.8	7.4	4.4	4.3	1.9	2.4
20	29	11	4.3	4.8	12	9.7	7.5	5.4	17	3.9	1.8	2.1
21	24	12	4.6	4.5	12	10	7.2	5.2	27	4.2	1.7	2.1
22	21	11	4.3	4.3	14	8.9	6.9	4.9	16	4.6	1.6	1.7
23	19	9.2	4.3	4.2	12	8.5	6.5	4.9	11	6.1	1.5	1.5
24	17	8.9	3.9	4.1	11	8.1	6.2	4.8	9.5	4.8	1.4	1.5
25	17	8.5	3.9	4.0	11	8.3	8.1	5.0	9.1	3.7	1.5	1.5
26	16	8.1	9.7	8.9	11	8.0	11	10	8.0	3.4	1.5	1.6
27	14	8.1	7.3	22	10	9.4	6.9	7.2	7.2	3.4	1.9	2.3
28	13	7.7	5.3	17	9.7	11	6.1	5.4	6.8	3.3	1.9	2.4
29	12	6.9	5.1	15	9.2	8.3	5.8	6.0	11	3.3	1.6	1.7
30	11	6.9	6.2	14	---	9.4	5.5	26	8.7	3.3	1.3	2.4
31	11	---	11	13	---	12	---	17	---	3.1	1.2	---
TOTAL	538	308.8	181.3	298.6	309.7	271.8	333.6	210.8	285.1	163.4	78.4	70.33
MEAN	17.4	10.3	5.85	9.63	10.7	8.77	11.1	6.80	9.50	5.27	2.53	2.34
MAX	54	20	11	22	15	12	29	26	27	12	11	13
MIN	10	6.9	3.9	4.0	7.7	6.9	5.5	4.5	4.4	3.1	1.2	.74
CFSM	3.45	2.04	1.16	1.91	2.12	1.74	2.20	1.35	1.88	1.04	.50	.46
IN.	3.96	2.27	1.34	2.20	2.28	2.00	2.46	1.55	2.10	1.20	.58	.52

CAL YR 1975 TOTAL 4865.20 MEAN 13.3 MAX 348 MIN 1.4 CFSM 2.63 IN 35.83  
WTR YR 1976 TOTAL 3049.83 MEAN 8.33 MAX 54 MIN .74 CFSM 1.65 IN 22.46

01614175 CONOCOCHIEAGUE CREEK AT WORLEYTOWN, PA

LOCATION.--Lat 39°44'31", long 77°47'41", Franklin County, Hydrologic Unit 02070004, 1.0 mi (1.6 km) southwest of Worleytown, 2.4 mi (3.9 km) downstream from West Branch, and 2.7 mi (4.3 km) upstream from PA-MD border.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- RID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	CHFM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
DEC 17...	1100	9813	280	8.0	4.5	2	13.5	--	.6
JAN 12...	1220	9813	210	7.6	2.5	5	14.5	--	.5
FEB 09...	1415	9813	190	7.7	2.5	3	13.5	12	.4
MAR 03...	1130	9813	230	7.8	7.5	2	11.5	--	.0
APR 07...	1020	9813	200	7.3	10.5	7	10.6	--	--
MAY 05...	1030	9813	330	8.0	12.0	1	12.0	--	--
JUN 01...	1300	9813	270	7.6	19.0	18	9.1	--	1.1
JUL 14...	1300	9813	290	8.2	21.0	9	--	--	.5

DATE	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL RESI- DUAL CHLO- RINE (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
DEC 17...	126	0	0	47	2.0	226	--	.00	9.0
JAN 12...	156	0	0	47	9.5	120	20	.00	9.0
FEB 09...	114	0	0	42	2.0	20	20	.00	12
MAR 03...	138	0	0	49	3.5	120	16	.00	10
APR 07...	93	0	0	35	6.5	98	20	.00	9.0
MAY 05...	150	0	0	51	5.5	146	16	.00	12
JUN 01...	114	--	--	35	6.5	96	16	--	10
JUL 14...	120	0	0	42	3.5	118	10	.20	12

DATE	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
DEC 17...	240	--	--	2.7	.04	.03	.15	--	160
JAN 12...	204	--	--	2.8	.04	.05	.09	--	10
FEB 09...	174	4	178	3.5	.05	.08	.08	.07	120
MAR 03...	170	4	174	2.0	.07	.04	.11	.11	110
APR 07...	112	24	--	1.7	.04	.07	.11	--	400
MAY 05...	188	6	--	2.3	--	.05	.12	--	120
JUN 01...	186	28	214	2.1	.08	.08	.20	.13	370
JUL 14...	226	2	228	1.9	.04	.05	.22	.15	480

01618950 EAST BRANCH ANTIETAM CREEK NEAR WAYNESBORO, PA

LOCATION.--Lat 39°43'34", long 77°35'38", Franklin County, Hydrologic Unit 02070004, at bridge on Township Route 393, 0.9 mi (1.5 km) upstream from mouth, and 1.7 mi (2.7 km) southwest of Waynesboro.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	CHFM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
DEC 17...	1220	9813	190	7.8	5.5	1	13.2	--	1.0
JAN 12...	1400	9813	130	7.3	3.0	4	13.1	--	.7
FEB 09...	1310	9813	140	7.5	4.0	1	14.6	12	.4
MAR 03...	1255	9813	180	8.0	7.5	2	12.6	--	.0
APR 07...	1145	9813	150	7.2	11.0	3	10.3	--	--
MAY 05...	1145	9813	260	8.1	12.0	1	12.5	--	--
JUN 01...	1200	9813	200	7.3	18.0	5	9.6	--	1.1
JUL 14...	1100	9813	330	8.1	18.0	4	--	--	.5

DATE	HARD- NESS (CA,MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL RESI- DUAL CHLO- RINE (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
DEC 17...	96	0	0	27	7.0	244	12	.00	9.0
JAN 12...	132	0	0	25	17	74	14	.00	8.0
FEB 09...	72	0	0	23	3.5	78	16	.00	9.0
MAR 03...	102	0	0	24	10	82	10	.00	12
APR 07...	76	0	0	19	7.0	66	14	.00	8.0
MAY 05...	87	0	0	28	4.0	98	10	.00	18
JUN 01...	82	0	0	19	8.5	66	12	--	8.0
JUL 14...	128	0	0	32	12	112	8.0	.10	26

DATE	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
DEC 17...	186	--	--	2.2	.05	.53	.20	--	130
JAN 12...	152	--	--	2.2	.04	.34	.20	--	20
FEB 09...	108	8	116	2.5	.06	.45	.32	.25	80
MAR 03...	118	8	126	1.3	.07	.43	.36	.36	130
APR 07...	76	14	--	1.7	.04	.29	.26	--	160
MAY 05...	150	6	--	2.0	.04	.87	.68	--	150
JUN 01...	134	12	146	1.4	--	.09	.63	.61	340
JUL 14...	224	0	224	2.1	.05	1.2	.97	.87	280

## MONOCACY RIVER BASIN

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01638890 ROCK CREEK NEAR GETTYSBURG, PA

LOCATION.--Lat 39°48'17", long 77°12'42", Adams County, Hydrologic Unit 02070009, at bridge on U.S. Route 140, 2.1 mi (3.4 km) southeast of Gettysburg, and 2.3 mi (3.7 km) upstream from White Run.

DRAINAGE AREA.--not available.

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

COOPERATION.--Water-quality data were furnished by the Pennsylvania Department of Environmental Resources.

## WATER QUALITY DATA, DECEMBER 1975 TO SEPTEMBER 1976

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
DEC 17...	1415	9813	250	7.5	5.0	3	12.3	--	3.1
JAN 12...	1500	9813	280	7.1	1.0	10	13.0	--	9.5
FEB 09...	1140	9813	280	7.3	.5	3	15.3	28	.4
MAR 03...	1500	9813	280	7.3	7.0	4	11.5	--	2.8
APR 07...	1345	9813	230	7.4	13.0	6	10.5	--	--
MAY 05...	1415	9813	500	7.2	16.5	3	8.2	--	--
JUN 01...	0930	9813	300	7.2	18.0	10	7.7	--	2.7
JUL 14...	0845	9813	490	7.2	22.0	8	--	--	7.0

DATE	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	TOTAL RESI- DUAL CHLO- RINE (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
DEC 17...	120	0	0	28	12	90	46	.00	19
JAN 12...	138	0	0	36	11	104	56	.00	38
FEB 09...	165	0	0	39	17	110	62	.00	39
MAR 03...	143	0	0	32	18	96	46	.00	22
APR 07...	92	0	0	27	6.0	78	36	.00	16
MAY 05...	234	0	0	43	31	132	66	.00	44
JUN 01...	78	0	0	31	<.0	66	36	--	18
JUL 14...	146	0	0	37	13	112	46	.20	40

DATE	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)
DEC 17...	236	--	--	1.7	.11	.88	.76	--	250
JAN 12...	318	--	--	2.4	.12	3.5	1.8	--	200
FEB 09...	298	4	302	2.1	.11	3.6	1.8	1.3	210
MAR 03...	210	10	220	1.6	.13	2.5	.92	.90	230
APR 07...	146	22	--	1.5	.11	.72	.20	--	230
MAY 05...	318	8	--	2.6	--	.39	2.5	--	400
JUN 01...	248	8	256	3.2	.22	.44	.43	.34	370
JUL 14...	346	0	346	3.2	.41	1.5	2.3	.17	320

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 1976

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	1970-76	10-28-75 4-19-76	149 89
01530850	Bentley Creek at Ridgebury, Pa.	Lat 41°58'25", long 76°43'12", Bradford County, at bridge on L.R. 08063, at Ridgebury and 300 ft downstream from Three Falls Glen.	47.2	1970-76	10-28-75 4-19-76	31 12
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	1970-76	10-28-75 4-19-76	52 21
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	11- 3-75 4-20-76	90 67
01533960	South Branch Tunkhannock Creek near East Benton, Pa.	Lat 41°34'23", long 75°40'00", Lackawanna County, at bridge on county road, 0.4 mile south of East Benton and 0.6 mile upstream from Cordner Pond tributary.	29.3	1970-74 1976	11- 3-75 4-20-76	21 15
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	11- 4-75 4-20-76	17 12
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	11- 3-75 4-19-76	12 9.7
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 Frances Slocum State Park dam and 3 miles east of Dallas.	2.79	1970-74 1976	11- 3-75 4-20-76	2.8 1.6



Discharge measurements made at low-flow partial-record stations during water year 1976--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
SUSQUEHANNA RIVER BASIN-Continued						
Little Wapwallopen Creek basin						
01537900	Little Wapwallopen Creek near 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	11- 5-75 4-19-76	25 20
Nescopeck Creek basin						
01538520	Little Nescopeck Creek at Sybertsville, 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	11- 5-75 4-19-76	1.2 .92
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	1970-76	4-19-76	111
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 1970-76	4-19-76	158
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	1970-76	4-15-76	92
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	1968-76	4-15-76	5.6
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	1970-76	4-21-76 9- 1-76	2.3 .37
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	4-21-76 9- 1-76	30 6.9
01543700	First Fork Sinnemahoning Creek at Wharton, Pa.	Lat 41°31'08", long 78°01'40", Potter County, at bridge on State Highway 872, 0.3 mile southwest of Wharton and 1 mile downstream from East Fork Sinnemahoning.	182	1970-76	4-21-76 9- 1-76	116 49
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	1970-76	4-20-76 9- 2-76	26 11
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	1970-76	4-21-76 9- 2-76	31 12
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 1970-76	4-30-76 9- 1-76	.47 .01
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 1970-76	4-30-76 9- 2-76	1.8 1.3
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	1970-76	10-29-75 4-19-76	164 89

Discharge measurements made at low-flow partial-record stations during water year 1976--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
SUSQUEHANNA RIVER BASIN-Continued						
West Branch Susquehanna River basin-Continued						
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	1970-76	10-29-75 4-19-76	114 62
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	1970-76	10-28-75 4-19-76	239 110
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	1970-76	10-29-75 4-20-76	111 61
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	1970-76	10-29-75 4-20-76	204 106
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 1970-76	4-19-76	209
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 1970-76	4-19-76	104
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	1970-76	4-15-76	40
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 1970-76	4-16-76	21
01559756	Shawnee Branch at Schellsburg, 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 Schellsburg.	18.6	1968-76	4-16-76	14
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	1970-76	4-19-76	37
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 1970-76	4-19-76	42
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	1970-76	4-20-76 9- 3-76	8.6 .04
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	1970-76	4-20-76 9- 3-76	18 4.6

Discharge measurements made at low-flow partial-record stations during water year 1976--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	1970-76	4-20-76 9- 3-76	50 7.3
Swatara Creek basin						
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	1970-76	4-20-76	9.4
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	1968-76	4-20-76 9- 8-76	5.2 .03
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	1970-76	4-16-76	5.8
*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	1970-76	3-29-76 4-16-76	7.5 5.1
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	1970-76	4-16-76	23
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	1970-76	4-19-76 9- 9-76	5.6 .26
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	1968-76	4-19-76 9- 9-76	21 2.2
Licking Creek basin						
01613450	Licking Creek near 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	1970-76	4-19-76 9- 9-76	12 1.1
Back Creek basin						
01614140	Back Creek near Chambersburg, Pa.	Lat 39°53'36", long 77°44'30", Franklin County, bridge on L.R. 28052, 1.2 miles west of Turkey Foot and 5 miles southwest of Chambersburg	63.0	1968-76	4-19-76 9- 8-76	36 5.8
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 in 414.65 ft above mean sea level.	12.4	1961-76	4-20-76 9- 2-76	1.6 .10

\*Also a crest-stage partial-record station.

## Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

## Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual maximum Gage height (feet)	Dis-charge (ft <sup>3</sup> /s)
SUSQUEHANNA RIVER BASIN							
Chemung River basin							
01516800	Manns Creek near Mansfield, Pa.	Lat 41°49'19", long 77°05'50", Tioga County, at bridge on gravel road, 0.5 mile above mouth, and 1.8 miles northwest of Mansfield.	3.01	1960-76	5-16-76	4.71	183
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 <sup>#</sup> 1969-76	1-26-76	5.19	445
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	1963-76	2-17-76	5.39	617
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	1963-76	10-18-75	6.03	759
Fishing Creek basin							
01538800	Huntingdon 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	1960-76	10-18-75	9.94	1,250
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	1962-76	2-17-76	2.72	206
0154450	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	1964-76	1-27-76	2.67	111
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	1975-76 <sup>#</sup>	2-18-76	15.91	44,500

<sup>#</sup> Operated as a continuous-record station.

## Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual maximum Gage height (feet)	Dis-charge (ft <sup>3</sup> /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	1963-76	1-27-76	7.21	156
01552100	Mill Creek near Warrensville, Pa.	Lat 41°20'10", long 76°57'45", Lycoming County, at bridge on L.R. 41044, 1.2 miles northwest of Warrensville, and 6 miles above mouth.	11.9	1961-76	1-26-76	2.44	308
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 above mean sea level.	18.2	1961-76	1-27-76	5.98	161
Juniata River basin							
01555800	McDonald Run near East Freedom, Pa.	Lat 40°22'35", long 78°25'55", Blair County, at concrete culvert on U.S. Highway 220, 0.4 mile above mouth, and 1.5 miles north of East Freedom. Datum of gage is 1,014.18 ft above mean sea level.	1.54	1959-76	8- 7-76	3.29	96
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	1962-76	2-17-76	4.19	194
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 above mean sea level.	93.7	1946-62 <sup>a</sup> 1963-76	6- 6-73 4- 4-74 9-26-75 2-17-76	7.09 a3,090 5.34 a1,520 6.83 a2,830 6.78 2,780	
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 above mean sea level.	1.68	1958-62 <sup>a</sup> 1963-76	2-18-76	2.28	89
01563800	Elders Branch near Hustontown, Pa.	Lat 40°05'20", long 78°02'55", Fulton County, at timber bridge on gravel road, 2.2 miles above mouth, and 5 miles northeast of Hustontown.	3.46	1960-76	10-18-75	6.45	190
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	1962-76	10-18-75	7.71	495
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	1964-76	10-18-75	4.86	214
Paxton Creek basin							
01571000	Paxton Creek near Penbrook, Pa.	Lat 40°18'30", long 76°51'00", on right bank, 93 ft upstream from culvert on North Progress Ave. and 2 miles north of Penbrook, Dauphin County.	11.2	1940-50 1974-76	1-26-76	5.97	1,040

<sup>a</sup>Operated as a continuous-record station.  
a 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 <sup>2</sup> )	Period of record	Annual maximum Gage height charge (feet) (ft <sup>3</sup> /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 above mean sea level.	8.63	1962-76	1-26-76	6.22	928
Conestoga River basin							
01576320	Stony Run at Reamstown, Pa.	Lat 40°12'44", long 76°07'30", Lancaster County, at double-arch bridge, 0.1 mile southeast of U.S. Highway 222, 0.1 mile northwest of Reamstown, and 0.7 mile above mouth.	3.55	1964-76	7-29-76	5.99	728
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	1963-76	1-26-76	6.21	523
POTOMAC RIVER BASIN							
Wills Creek basin							
*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. Datum of gage is 1,264.2 ft above mean sea level.	10.2	1961-76	2-16-76	7.22	145
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	1961-76	9-26-75 11-12-75	all.96 8.82	4,330 1,550

\* Also low-flow partial-record station  
a Revised.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at miscellaneous sites during water year 1976

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements Date	Discharge (ft <sup>3</sup> /s)
SUSQUEHANNA RIVER BASIN						
Chemung River basin						
Tioga River	Chemung River	Lat 41°39'32", long 77°02'53", Tioga County, at bridge on Gulick Street, 0.4 mi upstream from Morris Run and 1 mi southeast of Blossburg.	57.5	1975	10- 6-75 11-10-75 12- 9-75 3- 8-76 4- 5-76 5- 5-76 6- 1-76 7-12-76 8-10-76 9- 7-76	75 50 63 190 136 70 66 44 206 13
Morris Run	Tioga River	Lat 41°39'47", long 77°02'23", Tioga County, 0.7 mi upstream from mouth, 1 mile southeast of Blossburg and 1.5 mi southwest of the village of Morris Run.	7.13	1975	10- 6-75 11-10-75 12- 9-75 1- 6-76 2- 4-76 3- 8-76 4- 5-76 5- 5-76 6- 1-76 7-12-76 8-10-76 9- 7-76	8.9 6.6 6.4 a5.6 8.4 16 11 a5.9 7.1 6.2 12 a3.1
Coal Creek	Tioga River	Lat 41°40'17", long 77°03'41", Tioga County, at bridge on Main Street, at Blossburg.	1.81	1975	10- 6-75 11-10-75 12- 9-75 1- 6-76 2- 4-76 3- 8-76 4- 5-76 5- 5-76 6- 1-76 7-12-76 8-10-76 9- 7-76	6.1 a3.9 a5.0 6.0 8.0 15 9.0 a4.5 a5.4 a5.3 7.4 a2.5
Bear Creek	Tioga River	Lat 41°41'00", long 77°03'53", Tioga County, at bridge on Main Street, at Blossburg.	.73	1975	10- 6-75 11-10-75 12- 9-75 1- 6-76 2- 4-76 3- 8-76 4- 5-76 5- 5-76 6- 1-76 7-12-76 8-10-76 9- 7-76	a.92 a.41 a.68 a.87 a1.3 3.2 1.8 a.59 a.72 a.67 a1.41 a.21
Tioga River	Chemung River	Lat 41°41'31", long 77°04'09", Tioga County, at Blossburg, at bridge on secondary road 500 ft northwest of U.S. Highway 15 and 0.6 mi downstream from Bear Creek.	87.6	1975	10- 6-75 11-10-75 12- 9-75 2- 4-76 3- 8-76 4- 5-76 5- 5-76 6- 1-76 7-12-76 8-10-76 9- 7-76	122 114 111 184 302 216 101 118 a72 218 a28
Tioga River	Chemung River	Lat 41°47'34", long 77°04'44", Tioga County, 0.6 mi downstream from Slate Creek and 1 mi south of Mansfield.	153	1975	10- 7-75 11-10-75 12-10-75 1- 7-76 2- 4-76 3- 8-76 4- 5-76	156 242 699 112 269 417 306

a Base flow.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1976--Continued

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements Date	Discharge (ft <sup>3</sup> /s)
SUSQUEHANNA RIVER BASIN--CONTINUED						
Chemung River basin--Continued						
Tioga River	Chemung River	Lat 41°50'29", long 77°06'13", Tioga County at bridge on Legislative Route 58044, 500 ft upstream from Lambs Creek, and 2.7 mi northwest of Mansfield.	186	1973-75	10- 7-75 11-11-75 12-10-75 1- 7-76 2- 4-76 3- 8-76 4- 5-76 5- 5-76 6- 1-76 7-12-76 8-10-76 9- 7-76	167 261 755 132 301 450 350 147 200 106 312 a36
Mill Creek	Tioga River	Lat 41°52'50", long 77°07'05", Tioga County, 0.3 mi upstream from mouth and 2.5 mi south of Tioga.	76.8	1938-40 <sup>†</sup> 1973-75	10- 7-75 11-11-75 12-10-75 3- 9-76 4- 6-76 5- 6-76 6- 1-76 7-12-76 8-10-76 9- 7-76	45 49 228 104 92 45 43 a24 80 a6.5
Crooked Creek	Tioga River	Lat 41°50'35", long 77°16'30", Tioga County, at bridge at Middlebury Center, 0.15 mi downstream from Catlin Hollow.	-	1973-74	5- 6-76 6- 1-76 7-13-76 8-11-76 9- 7-76	a32 157 a20 a20 a4.3
Crooked Creek	Tioga River	Lat 41°54'55", long 77°08'42", Tioga County, at Tioga, at bridge on secondary road 500 ft north of State Highway 287 and 1.3 mi upstream from mouth.	131	1975	10- 7-75 11-11-75 12-10-75 1- 7-76 2- 5-76 3- 9-76 4- 6-76 5- 6-76 6- 2-76 7-13-76 8-11-76 9- 8-76	75 209 260 88 111 181 159 a62 214 a36 a42 a9.1
Cowanesque River	Tioga River	Lat 41°58'25", long 77°14'25", Tioga County, at bridge at Nelson and 0.75 mile upstream from Cummings Creek.	266	1938-41 <sup>†</sup> 1973-74	5- 6-76 6- 2-76 7-13-76 8-11-76 9- 8-76	139 389 a77 a80 a16
West Branch Susquehanna River basin						
Anderson Creek	West Branch Susquehanna River	Lat 40°58'31", long 78°31'50", Clearfield County, at bridge on Meadow Street in Curwensville and 0.7 mi upstream from mouth.	76.5	1975	10-23-75 11-20-75 4- 7-76 7- 1-76	164 100 106 a39
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 Mans Run, 170 ft downstream from Hubler Run, and 2.2 mi northwest of Kylertown.	-	1975	10-24-75 11-11-75 4- 5-76 7- 2-76 7-29-76	13 8.0 15 a3.2 a1.0
Moshannon Creek	West Branch Susquehanna River	Lat 41°02'12", long 78°03'28", Centre County, at bridge on State Highway No. 53, 3.0 mi west of Moshannon and 5.0 mi upstream from mouth.	263	1945 1949 1975	10-21-75 11-20-75 1-14-76 2-25-76 3-31-76 8-18-76	682 396 380 1,200 497 a119
Mosquito Creek	West Branch Susquehanna River	Lat 40°07'03", long 78°06'35", Clearfield County, at mouth, at Karthaus.	71.2	1940-75	1-15-76 8-17-76	136 112

<sup>†</sup> Operated as a continuous record gaging station.  
a Base flow.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at miscellaneous sites during water year 1976--Continued

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Date	Discharge (ft <sup>3</sup> /s)
SUSQUEHANNA RIVER BASIN-CONTINUED						
West Branch Susquehanna River basin--Continued						
Bennett Branch	Driftwood 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	10-22-75 11-19-75 9-14-76	890 524 a54
*First Fork Sinnemahoning 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 1974-75	4-21-76	116
Unnamed Tributary	Blockhouse Creek	Lat 41°34'04", long 77°06'06", Tioga County, on gravel road, 100 ft upstream from mouth at Liberty.	1.08	1973-75	10-20-75 11-25-75 1-27-76 2-24-76 4- 6-76 4-13-76 5-11-76 6-21-76 7-26-76 8-31-76	6.8 a.87 21 2.9 a1.9 a.97 a.33 12 a.38 a.26
Blockhouse Creek	Little Pine Creek	Lat 41°29'43", long 77°09'02", Lycoming County, 100 ft upstream from confluence with Steam Valley Run, at Buttonwood.	-	1973-75	10-20-75 11-25-75 1-29-76 2-24-76 4- 6-76 5-11-76 7- 1-76 7-26-76 8-31-76	133 18 75 71 40 a8.3 29 a7.4 a5.3
Steam Valley Run	Blockhouse Creek	Lat 41°29'39", long 77°09'03", Lycoming County, at bridge on State Highway 284, 500 ft upstream from mouth at Buttonwood.	5.33	1973-75	10- 8-75 10-20-75 11-25-75 1-27-76 2-24-76 4- 6-76 4-13-76 5-11-76 5-17-76 5-19-76 7- 1-76 7-26-76 8-31-76	a5.8 32 a5.6 52 30 15 a6.4 a3.8 113 37 9.0 a2.4 a1.4
Mahanoy 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	1975	2- 4-76 4-23-76 6-30-76 8-25-76	416 176 183 a136
Juniata River basin						
Bloody Run	Raystown Branch Juniata River	Lat 40°00'55", long 78°22'26", Bedford County, at bridge on Third Street, Everett, and 0.4 mile upstream from mouth.	-	1969-75	10-17-75 3-29-76 7-26-76	a.79 a.91 a.56
Three Springs Creek	Aughwick Creek	Lat 40°12'48", long 75°55'34", Huntingdon County, at mouth and 3.5 mi northeast of village of Three Springs.	31.4	1940-75b	2-17-76	420
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	1975	12- 2-75 1-27-76 4-20-76	94 800 60

\* Also low-flow partial-record station

a Base flow

b Most years during period.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1976--Continued

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /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.	5.63	1970-75	12- 9-75	7.3
					7-12-76	6.1
					9- 2-76	5.4
South Branch Conewago Creek	Conewago Creek	Lat 39°44'08", long 76°57'36", York County, at Sheppard-Meyers Reservoir, 4.7 miles south of Hanover, Pa.	-	1970-75	12- 8-75	6.3
					7-12-76	4.3
					9- 2-76	3.5
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.	-	1970-75	12- 8-75	21
					7-12-76	39
					9- 1-76	44
Octoraro Creek basin						
Octoraro Creek	Susquehanna River	Lat 39°47'49", long 76°02'35", Chester County, at Octoraro Reservoir, 3.4 miles west of Oxford, Pa.	-	1970-75	12- 9-75	124
					4-21-76	120
					9- 1-76	40



## East Branch Octoraro Creek seepage study - Christiana, Pa.

One series of discharge measurements was made during the 1974 water year, on Nov. 14, 1973, on East Branch Octoraro Creek in Pennsylvania, to study channel gains and losses. The reach is 1.01 miles (1.63 km) in length and extends from U.S. Highway 372 at Christiana to Creek Road near Christiana. The measurements were made during a period of constant base flow of the stream; for several weeks before the investigation very little precipitation had fallen. Indicated gains or losses may be substantially in error as affected by small inaccuracies in open-channel measurements. River miles measured upstream from confluence with West Branch Octoraro Creek.

Octoraro Creek Mile	Stream	Location	Meas. disch. (ft <sup>3</sup> /s)	Gain or loss (ft <sup>3</sup> /s)	Water temp. (°C)
Nov. 14, 1973					
16.53	E. Br. Octoraro Cr.	40 ft downstream from U.S. Highway 372 bridge at Christiana	6.01	----	8.5
16.31	E. Br. Octoraro Cr.	100 ft upstream from Penn Central RR bridge near Christiana	6.38	+0.37	9.0
15.52	E. Br. Octoraro Cr.	100 ft downstream from Creek Road bridge near Christiana	16.52	+10.14	10.0
TOTAL:				+10.5	

## Buck Run seepage investigation - Pomeroy, Pa.

One series of discharge measurements was made during the 1974 water year, on Nov. 14, 1973, on Buck Run and a tributary in Pennsylvania, to study channel gains and losses. The reach is 0.72 miles (1.16 km) in length and extends from a wooden bridge upstream from the Penn Central railroad culvert at Pomeroy to the mouth of an unnamed tributary to Buck Run at Pomeroy. The measurements were made during a period of constant base flow of the stream; for several weeks before the investigation very little precipitation had fallen. Tributary flow was considered a contribution and not a gain. Indicated gains or losses may be substantially in error as affected by small inaccuracies in open-channel measurements. River miles measured upstream from mouth.

Buck Run Mile	Stream	Location	Meas. disch. (ft <sup>3</sup> /s)	Gain or loss (ft <sup>3</sup> /s)	Water temp. (°C)
Nov. 14, 1973					
12.38	Buck Run	60 ft upstream from wooden bridge, upstream from railroad culvert, at Pomeroy	3.53	----	8.5
12.29	Buck Run	20 ft downstream from downstream face of Penn Central railroad bridge culvert, in concrete channel, at Pomeroy	3.56	+0.03	9.0
12.22	Buck Run	300 ft downstream from Penn Central railroad bridge culvert at Pomeroy	3.62	+0.06	10.0
11.85	Buck Run	5 ft upstream from U.S. Highway 372 bridge near Parkesburg	4.82	+1.20	11.0
11.66	Buck Run	800 ft downstream from U.S. Highway 372 bridge, 80 ft upstream from mouth of unnamed tributary at Pomeroy	4.19	-0.63	12.0
-----	Unnamed tributary	800 ft downstream from U.S. Highway 372 bridge, 50 ft upstream from mouth, at Pomeroy	2.33	----	13.5
TOTAL:				+0.66	

## 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.

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
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## Chemung River basin

01516300 - TIOGA RIVER AT COVINGTON, PA. (LAT 41 44 42 LONG 077 04 49)

OCT , 1975									
28...	1000	--	149	250	4.6	10.0	21	10.4	--

01530850 - BENTLEY CREEK AT RIDGEBURY, PA. (LAT 41 58 25 LONG 076 43 12)

OCT , 1975									
28...	1215	--	31	130	6.1	13.0	70	10.0	--

01531210 - CHEMUNG RIVER AT ATHENS, PA. (LAT 41 56 56 LONG 076 31 03)

FEB , 1976									
17...	1435	9813	--	90	7.0	2.0	40	13.1	--
MAY									
25...	1045	9813	--	230	7.6	--	6	--	--
AUG									
24...	1515	9813	--	130	7.0	20.0	<1	11.0	--

## Towanda Creek basin

01532005 - TOWANDA CREEK AT MONROETON, PA. (LAT 41 42 45 LONG 076 28 15)

OCT , 1975									
29...	1145	9813	--	90	--	--	<5	8.5	--
FEB , 1976									
17...	1400	9813	--	70	6.7	4.0	90	12.7	--
MAY									
25...	1000	9813	--	100	7.7	--	2	--	--
AUG									
24...	1515	9813	--	120	6.8	22.0	<1	11.0	--

## Sugar Run Creek Basin

01533100 - SUGAR RUN CREEK AT SUGAR RUN, PA. (LAT 41 38 31 LONG 076 13 55)

OCT , 1975									
28...	1415	--	52	100	7.6	13.5	21	10.0	.5

## Susquehanna River basin

01533205 - SUSQUEHANNA RIVER AT LACEYVILLE, PA (LAT 41 38 34 LONG 076 09 40)

OCT , 1975									
29...	1015	9813	--	150	--	--	<5	9.5	--
FEB , 1976									
17...	1515	9813	--	100	6.5	3.5	80	13.1	--
MAY									
25...	0900	9813	--	170	7.1	--	6	--	--
AUG									
23...	1515	9813	--	280	7.1	24.0	5	10.0	--

## Tunkhannock Creek basin

01533840 - TUNKHANNOCK CREEK AT GLENWOOD, PA. (LAT 41 39 03 LONG 075 43 15)

NOV , 1975									
03...	1610	--	90	90	7.4	11.5	<5	11.2	.9

01533960 - SOUTH BR TUNKHANNOCK CR NR EAST BENTON, PA. (LAT 41 34 23 LONG 075 40 00)

NOV , 1975									
03...	1510	--	21	110	7.0	11.5	<5	12.0	.5

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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DATE	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)
Chemung River basin									
01516300 - TIOGA RIVER AT COVINGTON, PA. (LAT 41 44 42 LONG 077 04 49)									
OCT , 1975 28...	126	--	--	16	22	6	104	5.0	204
01530850 - BENTLEY CREEK AT RIDGEBURY, PA. (LAT 41 58 25 LONG 076 43 12)									
OCT , 1975 28...	64	--	--	19	4.0	54	12	6.0	88
01531210 - CHEMUNG RIVER AT ATHENS, PA. (LAT 41 56 56 LONG 076 31 03)									
FEB , 1976 17...	35	0	0	12	1.0	32	16	8.0	--
MAY 25...	84	--	0	19	9.0	64	20	11	--
AUG 24...	46	--	0	14	2.5	34	16	8.0	--
Towanda Creek basin									
01532005 - TOWANDA CREEK AT MONROETON, PA. (LAT 41 42 45 LONG 076 28 15)									
OCT , 1975 29...	40	0	0	11	3.0	26	29	5.0	--
FEB , 1976 17...	29	0	0	9.5	1.0	22	12	6.0	--
MAY 25...	36	--	0	11	2.0	28	10	4.0	--
AUG 24...	47	--	0	13	3.2	30	14	9.0	--
Sugar Run Creek basin									
01533100 - SUGAR RUN CREEK AT SUGAR RUN, PA. (LAT 41 38 31 LONG 076 13 55)									
OCT , 1975 28...	42	--	--	14	1.5	36	10	5.0	70
Susquehanna River basin									
01533205 - SUSQUEHANNA RIVER AT LACEYVILLE, PA (LAT 41 38 34 LONG 076 09 40)									
OCT , 1975 29...	54	0	0	23	9.0	62	30	9.0	--
FEB , 1976 17...	42	0	0	13	2.0	36	16	10	--
MAY 25...	63	--	0	18	4.0	56	12	7.0	--
AUG 23...	84	--	0	30	2.0	82	20	21	--
Tunkhannock Creek basin									
01533840 - TUNKHANNOCK CREEK AT GLENWOOD, PA. (LAT 41 39 03 LONG 075 43 15)									
NOV , 1975 03...	39	--	--	13	1.5	34	12	6.0	72
01533960 - SOUTH BR TUNKHANNOCK CR NR EAST BENTON, PA. (LAT 41 34 23 LONG 075 40 00)									
NOV , 1975 03...	50	--	--	18	1.0	42	16	11	86

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
Chemung River basin									
01516300 - TIOGA RIVER AT COVINGTON, PA. (LAT 41 44 42 LONG 077 04 49)									
OCT , 1975 28...	.68	.05	.07	.07	.14	--	3800	--	--
01530850 - BENTLEY CREEK AT RIDGEBURY, PA. (LAT 41 58 25 LONG 076 43 12)									
OCT , 1975 28...	.41	.05	.09	.24	.33	--	5500	--	--
01531210 - CHEMUNG RIVER AT ATHENS, PA. (LAT 41 56 56 LONG 076 31 03)									
FEB , 1976 17...	11	.06	.12	--	--	1.0	34300	--	--
MAY 25...	.97	.05	.35	--	--	.10	450	--	--
AUG 24...	.60	.01	.04	--	--	.06	30	--	--
Towanda Creek basin									
01532005 - TOWANDA CREEK AT MONROETON, PA. (LAT 41 42 45 LONG 076 28 15)									
OCT , 1975 29...	.72	.06	.03	--	--	.03	80	--	1.0
FEB , 1976 17...	1.3	.54	.14	--	--	1.0	9350	--	--
MAY 25...	.62	.02	.20	--	--	.06	70	--	--
AUG 24...	.70	.02	.03	--	--	.07	650	--	--
Sugar Run Creek basin									
01533100 - SUGAR RUN CREEK AT SUGAR RUN, PA. (LAT 41 38 31 LONG 076 13 55)									
OCT , 1975 28...	.66	.04	.03	.17	.20	--	1400	--	--
Susquehanna River basin									
01533205 - SUSQUEHANNA RIVER AT LACEYVILLE, PA (LAT 41 38 34 LONG 076 09 40)									
OCT , 1975 29...	3.5	.05	.06	--	--	.07	610	--	4.0
FEB , 1976 17...	1.2	.07	.18	--	--	.88	14420	--	--
MAY 25...	.95	.05	.25	--	--	.08	460	--	--
AUG 23...	.92	.05	1.0	--	--	.10	350	--	--
Tunkhannock Creek basin									
01533840 - TUNKHANNOCK CREEK AT GLENWOOD, PA. (LAT 41 39 03 LONG 075 43 15)									
NOV , 1975 03...	.80	.05	.07	.13	.20	--	<20	--	--
01533960 - SOUTH BR TUNKHANNOCK CR NR EAST BENTON, PA. (LAT 41 34 23 LONG 075 40 00)									
NOV , 1975 03...	.86	.06	.08	.13	.21	--	140	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
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## Tunkhannock Creek basin-Continued

01533992 - SOUTH BR TUNKHANNOCK CREEK NEAR TUNKHANNOCK, PA (LAT 41 33 48 LONG 075 52 30)

OCT , 1975									
29...	0730	9813	--	120	--	--	4	9.7	--
FEB , 1976									
17...	1100	9813	--	70	6.5	4.0	30	13.3	--
MAY									
25...	0715	9813	--	170	7.5	--	3	--	--
AUG									
30...	1515	9813	--	140	7.2	22.0	1	11.0	--

## Bowman Creek basin

01534055 - BOWMAN CREEK NEAR TUNKHANNOCK, PA (LAT 41 30 53 LONG 075 57 41)

OCT , 1975									
29...	0830	9813	--	150	--	--	3	11.5	--
FEB , 1976									
17...	1130	9813	--	45	6.5	4.5	30	11.3	--
MAY									
25...	0800	9813	--	70	7.2	--	1	--	--
AUG									
30...	1515	9813	--	130	7.1	22.0	2	11.0	--

## Susquehanna River basin

01534090 - SUSQUEHANNA R AT FALLS, PA. (LAT 41 27 42 LONG 075 51 15)

OCT , 1975									
29...	0630	9813	--	140	--	--	5	7.7	--
FEB , 1976									
17...	0955	9813	--	110	6.6	4.0	50	13.3	--
MAY									
25...	0630	9813	--	150	7.5	--	7	--	--
AUG									
05...	1515	9813	--	180	7.7	22.0	15	11.0	--

01534135 - SUSQUEHANNA RIVER NEAR PITTSTON, PA (LAT 41 21 00 LONG 075 48 05)

FEB , 1976									
19...	1120	9813	--	90	5.3	2.5	120	13.0	--
MAR									
08...	1340	9813	--	110	--	5.0	15	11.1	--
APR									
19...	1345	9813	--	140	6.8	17.0	9	9.7	--
MAY									
17...	1000	9813	--	190	8.0	17.0	2	9.3	--
JUN									
22...	1515	9813	--	180	7.1	20.0	60	10.0	--
AUG									
03...	1515	9813	--	180	7.3	22.0	15	10.0	--

## Lackawanna River basin

01534170 - E. BR. LACKAWANNA R. AT UNIONDALE, PA. (LAT 41 43 08 LONG 075 28 49)

NOV , 1975									
04...	1145	--	17	50	6.9	12.5	<5	11.0	.7

01534850 - LEGETTS CREEK AT SCRANTON, PA (LAT 41 26 41 LONG 075 38 40)

JAN , 1976									
21...	1515	9813	--	340	8.2	.1	1	12.0	--
FEB									
19...	1020	9813	--	200	5.3	4.5	7	11.3	--
MAY									
06...	1245	9813	--	300	7.8	16.0	3	9.5	--
AUG									
06...	1550	9813	--	70	7.0	25.0	4	10.0	--



## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	HARD- NESS (CA,MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)
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## Tunkhannock Creek basin-Continued

01533992 - SOUTH BR TUNKHANNOCK CREEK NEAR TUNKHANNOCK, PA (LAT 41 33 48 LONG 075 52 30)

OCT , 1975									
29...	37	0	0	14	.0	34	22	11	--
FEB , 1976									
17...	25	0	0	8.0	1.0	18	10	9.0	--
MAY									
25...	52	--	0	16	2.5	40	14	14	--
AUG									
30...	54	--	0	17	2.5	36	10	11	--

## Bowman Creek basin

01534055 - BOWMAN CREEK NEAR TUNKHANNOCK, PA (LAT 41 30 53 LONG 075 57 41)

OCT , 1975									
29...	25	0	0	7.1	1.5	16	16	5.0	--
FEB , 1976									
17...	21	0	0	5.5	1.5	12	10	5.0	--
MAY									
25...	24	--	0	7.1	1.5	18	10	4.0	--
AUG									
30...	52	--	0	16	2.5	40	8.0	11	--

## Susquehanna River basin

01534090 - SUSQUEHANNA R AT FALLS, PA. (LAT 41 27 42 LONG 075 51 15)

OCT , 1975									
29...	62	0	0	22	1.5	52	22	8.0	--
FEB , 1976									
17...	40	0	0	15	.5	38	12	11	--
MAY									
25...	55	--	0	16	3.2	48	10	6.0	--
AUG									
05...	63	--	--	20	2.7	56	12	11	--

01534135 - SUSQUEHANNA RIVER NEAR PITTSBURGH, PA (LAT 41 21 00 LONG 075 48 05)

FEB , 1976									
19...	58	0	0	12	7.0	32	18	8.0	--
MAR									
08...	126	0	0	15	22	36	14	7.0	--
APR									
19...	--	0	0	--	--	48	--	7.0	--
MAY									
17...	72	--	0	21	5.5	54	18	10	--
JUN									
22...	73	0	0	23	3.5	60	24	8.0	--
AUG									
03...	66	0	0	23	2.0	56	10	12	--

## Lackawanna River basin

01534170 - E. BR. LACKAWANNA R. AT UNIONDALE, PA. (LAT 41 43 08 LONG 075 28 49)

NOV , 1975									
04...	26	--	--	8.0	1.5	24	10	4.0	56

01534850 - LEGETTS CREEK AT SCRANTON, PA (LAT 41 26 41 LONG 075 38 40)

JAN , 1976									
21...	100	0	0	32	4.5	40	36	66	--
FEB									
19...	54	0	0	15	4.0	24	24	48	--
MAY									
06...	84	0	0	19	9.0	34	20	48	--
AUG									
06...	31	0	0	9.5	1.5	40	12	6.0	--

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
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## Tunkhannock Creek basin-Continued

01533992 - SOUTH BR TUNKHANNOCK CREEK NEAR TUNKHANNOCK, PA (LAT 41 33 48 LONG 075 52 30)

OCT , 1975									
29...	.86	.02	.05	--	--	.05	30	--	6.0
FEB , 1976									
17...	1.0	.05	.20	--	--	.25	2700	--	--
MAY									
25...	.74	.04	.27	--	--	.07	200	--	--
AUG									
30...	.64	.04	.03	--	--	.06	150	--	--

## Bowman Creek basin

01534055 - BOWMAN CREEK NEAR TUNKHANNOCK, PA (LAT 41 30 53 LONG 075 57 41)

OCT , 1975									
29...	.85	.07	.05	--	--	.03	<20	--	3.0
FEB , 1976									
17...	.92	.04	.18	--	--	.14	1460	--	--
MAY									
25...	.77	.04	.16	--	--	.08	20	--	--
AUG									
30...	.68	.02	.04	--	--	.07	320	--	--

## Susquehanna River basin

01534090 - SUSQUEHANNA R AT FALLS, PA. (LAT 41 27 42 LONG 075 51 15)

OCT , 1975									
29...	1.0	.07	.06	--	--	.04	250	--	4.0
FEB , 1976									
17...	1.1	.06	.17	--	--	.32	4080	--	--
MAY									
25...	.97	.05	.20	--	--	.10	720	--	--
AUG									
05...	.92	.02	.03	--	--	.07	920	50	--

01534135 - SUSQUEHANNA RIVER NEAR PITTSBURGH, PA (LAT 41 21 00 LONG 075 48 05)

FEB , 1976									
19...	1.2	.06	.10	--	--	.23	5340	--	--
MAR									
08...	1.3	.08	.05	--	--	.06	1340	--	--
APR									
19...	1.0	.03	--	--	--	.09	540	--	--
MAY									
17...	.92	.05	.06	--	--	.12	240	--	--
JUN									
22...	1.1	.03	.11	--	--	.23	4400	--	--
AUG									
03...	1.0	.02	.05	--	--	.08	1140	60	--

## Lackawanna River basin

01534170 - E. BR. LACKAWANNA R. AT UNIONDALE, PA. (LAT 41 43 08 LONG 075 28 49)

NOV , 1975									
04...	.53	.03	.04	.13	.17	--	30	--	--

01534850 - LEGETTS CREEK AT SCRANTON, PA (LAT 41 26 41 LONG 075 38 40)

JAN , 1976									
21...	3.5	.10	.28	--	--	1.1	20	--	--
FEB									
19...	1.3	.05	.14	--	--	.16	470	--	--
MAY									
06...	1.6	.10	.59	--	--	.64	110	--	--
AUG									
06...	.58	.03	.04	--	--	--	730	--	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
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Lackawanna River Basin--Continued  
01535060 - ROARING BROOK AT SCRANTON, PA. (LAT 41 24 11 LONG 073 39 52)

JAN , 1976									
21...	1515	9813	--	110	7.2	.0	30	10.0	--
FEB									
19...	1035	9813	--	85	5.2	3.0	35	12.5	--
MAY									
06...	1330	9813	--	140	7.3	15.0	4	10.3	--
AUG									
06...	1515	9813	--	440	6.7	25.0	1	11.0	--

01535540 - SPRING BROOK NR SPRING BROOK, PA. (LAT 41 17 07 LONG 075 35 33)

NOV , 1975									
03...	1155	--	12	60	6.8	11.0	<5	10.6	1.1

01536103 - LACKAWANNA RIVER AT PITTSBURGH, PA. (LAT 41 20 38 LONG 075 47 13)

FEB , 1976									
19...	1115	9813	--	180	5.0	5.0	25	12.0	--
MAY									
17...	0930	9813	--	500	6.5	16.0	45	9.0	--
AUG									
06...	1515	9813	--	260	5.8	22.0	15	9.0	--

Abrahams Creek Basin

01536200 - ABRAHAMS CREEK NEAR DALLAS, PA. (LAT 41 20 41 LONG 075 54 00)

NOV , 1975									
03...	0815	--	2.8	90	6.9	9.0	<5	9.8	1.1

Solomon Creek Basin

01537510 - SOLOMON CREEK AT BUTTONTOWN, PA (LAT 41 13 28 LONG 075 56 59)

NOV , 1975									
13...	1515	9813	--	--	5.7	22.0	20	--	--
FEB , 1976									
26...	1330	9813	--	800	5.0	13.5	86	4.8	--
MAY									
18...	0930	9813	--	1000	6.0	15.5	170	8.7	--
AUG									
23...	1515	9813	--	240	5.8	24.0	30	9.0	--

Harvey Creek Basin

01537650 - HARVEY CREEK AT WEST NANTICOKE, PA (LAT 41 13 16 LONG 076 00 56)

DEC , 1975									
17...	1515	9813	--	80	7.7	3.0	1	12.0	--
FEB , 1976									
19...	1230	9813	--	70	6.5	3.5	30	11.0	--
MAY									
17...	1115	9813	--	90	7.5	15.0	7	9.6	--
AUG									
06...	1515	9813	--	70	7.2	26.0	4	10.0	--

Wapwallopen Creek Basin

01537900 - LITTLE WAPWALLOPEN CREEK NR WAPWALLOPEN, PA. (LAT 41 05 43 LONG 076 07 18)

NOV , 1975									
05...	0930	--	25	60	6.8	11.5	<5	11.0	.7

Nescopeck Creek Basin

01538520 - LITTLE NESCOPECK CREEK AT SYBERTSVILLE, PA. (LAT 41 00 12 LONG 076 04 25)

NOV , 1975									
05...	0830	--	1.2	90	6.6	11.0	<5	10.0	--

DATE	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)
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## Lackawanna River Basin--Continued

01535060 - ROARING BROOK AT SCRANTON, PA. (LAT 41 24 11 LONG 073 39 52)

JAN , 1976									
21...	--	0	0	--	--	18	--	12	--
FEB									
19...	39	0	0	7.1	5.0	12	20	15	--
MAY									
06...	54	0	0	11	6.5	24	14	17	--
AUG									
06...	162	0	0	31	21	66	28	83	--

01535540 - SPRING BROOK NR SPRING BROOK, PA. (LAT 41 17 07 LONG 075 35 33)

NOV , 1975									
03...	28	--	--	8.8	1.5	20	16	8.0	54

01536103 - LACKAWANNA RIVER AT PITTSBURGH, PA. (LAT 41 20 38 LONG 075 47 13)

FEB , 1976									
19...	100	0	0	16	15	18	78	16	--
MAY									
17...	212	0	2	39	28	16	184	17	--
AUG									
06...	80	0	0	20	7.5	14	260	15	--

## Abrahams Creek Basin

01536200 - ABRAHAMS CREEK NEAR DALLAS, PA. (LAT 41 20 41 LONG 075 54 00)

NOV , 1975									
03...	40	--	--	12	2.5	20	22	10	80

## Solomon Creek Basin

01537510 - SOLOMON CREEK AT BUTTONTOWN, PA (LAT 41 13 28 LONG 075 56 59)

NOV , 1975									
13...	468	--	100	84	64	24	660	44	--
FEB , 1976									
26...	737	0	194	156	65	4	1040	22	--
MAY									
18...	426	0	108	68	64	10	374	47	--
AUG									
23...	950	122	260	198	114	0	1180	37	--

## Harvey Creek Basin

01537650 - HARVEY CREEK AT WEST NANTICOKE, PA (LAT 41 13 16 LONG 076 00 56)

DEC , 1975									
17...	37	--	0	7.1	4.7	10	12	9.0	--
FEB , 1976									
19...	37	0	0	6.3	5.0	14	40	90	--
MAY									
17...	27	0	0	8.0	--	16	14	8.0	--
AUG									
06...	31	0	0	8.7	2.0	36	8.0	5.0	--

## Wapwallopen Creek Basin

01537900 - LITTLE WAPWALLOPEN CREEK NR WAPWALLOPEN, PA. (LAT 41 05 43 LONG 076 07 18)

NOV , 1975									
05...	22	--	--	5.6	2.0	18	14	7.0	60

## Nescopeck Creek Basin

01538520 - LITTLE NESCOPECK CREEK AT SYBERTSVILLE, PA. (LAT 41 00 12 LONG 076 04 25)

NOV , 1975									
05...	39	--	--	13	1.8	24	22	8.0	86

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
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## Lackawanna River Basin--Continued

01535060 - ROARING BROOK AT SCRANTON, PA. (LAT 41 24 11 LONG 073 39 52)

JAN , 1976									
21...	.98	.06	--	--	--	.09	6020	--	--
FEB									
19...	1.2	.05	.07	--	--	.08	1090	--	--
MAY									
06...	.50	.01	.08	--	--	.12	140	--	--
AUG									
06...	5.0	.26	.10	--	--	--	130	--	--

01535540 - SPRING BROOK NR SPRING BROOK, PA. (LAT 41 17 07 LONG 075 35 33)

NOV , 1975									
03...	.74	.11	.04	.09	.13	--	60	--	--

01536103 - LACKAWANNA RIVER AT PITTSBURGH, PA. (LAT 41 20 38 LONG 075 47 13)

FEB , 1976									
19...	1.0	.03	.15	--	--	.10	3500	--	--
MAY									
17...	11	.08	.43	--	--	.51	11200	--	--
AUG									
06...	1.7	.04	.30	--	--	.51	1800	330	--

## Abrahams Creek Basin

01536200 - ABRAHAMS CREEK NEAR DALLAS, PA. (LAT 41 20 41 LONG 075 54 00)

NOV , 1975									
03...	1.2	.12	.04	.29	.33	--	160	--	--

## Solomon Creek Basin

01537510 - SOLOMON CREEK AT BUTTONTOWN, PA (LAT 41 13 28 LONG 075 56 59)

NOV , 1975									
13...	.76	.07	.93	--	--	.11	--	--	4.0
FEB , 1976									
26...	.64	.07	1.3	--	--	.10	--	--	--
MAY									
18...	.76	.04	.77	--	--	.50	--	--	--
AUG									
23...	.42	.01	2.8	--	--	.22	--	--	--

## Harvey Creek Basin

01537650 - HARVEY CREEK AT WEST NANTICOKE, PA (LAT 41 13 16 LONG 076 00 56)

DEC , 1975									
17...	1.8	.04	.02	--	--	.11	120	--	--
FEB , 1976									
19...	.90	.04	.03	--	--	.05	290	--	--
MAY									
17...	.76	.04	.06	--	--	.16	660	--	--
AUG									
06...	.46	.02	.04	--	--	.04	740	--	--

## Wapwallopen Creek Basin

01537900 - LITTLE WAPWALLOPEN CREEK NR WAPWALLOPEN, PA. (LAT 41 05 43 LONG 076 07 18)

NOV , 1975									
05...	.74	.04	.05	.06	.11	--	80	--	--

## Nescopeck Creek Basin

01538520 - LITTLE NESCOPECK CREEK AT SYBERTSVILLE, PA. (LAT 41 00 12 LONG 076 04 25)

NOV , 1975									
05...	2.0	.05	.26	.23	.49	--	140	--	--



## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

341

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA, MG) (MG/L)
Nescopeck Creek basin										
01538590 - BLACK CREEK NEAR NESCOPECK, PA (LAT 41 00 27 LONG 076 10 00)										
FEB , 1976										
19...	1430	9813	--	90	4.6	8.0	15	11.1	--	50
MAY										
17...	1300	9813	--	150	6.6	16.5	65	9.3	--	30
01538600 - NESCOPECK CREEK AT NESCOPECK, PA. (LAT 41 02 49 LONG 076 13 17)										
DEC , 1975										
17...	1515	9813	--	80	7.7	3.0	1	12.0	--	38
JAN , 1976										
21...	1515	9813	--	70	6.5	.0	<1	12.0	--	22
FEB										
19...	1350	9813	--	160	4.2	6.5	15	11.7	--	77
MAY										
17...	1215	9813	--	280	4.7	16.0	70	9.0	--	87
JUL										
21...	1515	9813	--	70	6.8	26.0	5	10.0	--	77
Fishing Creek basin										
01540002 - FISHING CREEK AT BLOOMSBURG, PA (LAT 40 59 42 LONG 076 28 25)										
NOV , 1975										
25...	1100	9813	--	60	7.5	--	1	9.0	--	39
FEB , 1976										
03...	1430	9813	--	700	7.3	--	2	10.0	--	26
AUG										
16...	1515	9813	--	90	8.5	20.5	2	--	--	24
Catawissa Creek basin										
01540348 - CATAWISSA CREEK AT CATAWISSA, PA. (LAT 40 56 50 LONG 076 27 21)										
NOV , 1975										
27...	1300	9813	--	100	4.6	--	4	8.5	--	78
FEB , 1976										
03...	1300	9813	--	900	5.7	--	3	9.0	--	36
West Branch Susquehanna River basin										
01541248 - ANDERSON CREEK AT CURWENSVILLE, PA (LAT 40 58 31 LONG 078 31 50)										
MAY , 1976										
13...	1115	9813	--	150	4.2	12.0	1	10.3	--	42
AUG										
05...	1500	9813	--	250	5.0	25.0	1	8.0	--	92
01541510 - CLEARFIELD CREEK AT MOUNT HOPE, PA. (LAT 40 59 09 LONG 078 24 22)										
DEC , 1975										
03...	1515	9813	--	300	5.5	3.0	12	11.0	--	120
MAY , 1976										
13...	1030	9813	--	410	4.0	12.0	1	10.0	--	148
AUG										
04...	1530	9813	--	480	4.8	24.0	0	8.0	--	206
01541800 - ALDER RUN NR KYLERTOWN, PA. (LAT 41 00 50 LONG 078 11 59)										
MAY , 1976										
12...	1400	9813	--	950	3.0	13.5	20	9.5	--	238
AUG										
04...	1300	9813	--	1150	4.7	17.0	4	9.0	--	290

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FLUO- RIDE (F) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
Nescopeck Creek basin										
01538590 - BLACK CREEK NEAR NESCOPECK, PA (LAT 41 00 27 LONG 076 10 00)										
FEB , 1976										
19...	0	8	7.1	8.0	8	38	11	--	--	--
MAY										
17...	--	0	4.7	4.5	8	22	19	--	--	--
01538600 - NESCOPECK CREEK AT NESCOPECK, PA. (LAT 41 02 49 LONG 076 13 17)										
DEC , 1975										
17...	--	0	7.1	5.0	--	1.0	8.0	--	--	--
JAN , 1976										
21...	0	0	5.5	2.0	10	16	11	--	--	--
FEB										
19...	0	0	8.7	13	6	70	12	--	--	--
MAY										
17...	0	24	11	15	6	76	19	--	--	--
JUL										
21...	0	0	9.5	13	40	14	6.0	--	--	--
Fishing Creek basin										
01540002 - FISHING CREEK AT BLOOMSBURG, PA (LAT 40 59 42 LONG 076 28 25)										
NOV , 1975										
25...	0	0	8.0	4.5	58	12	6.0	--	--	--
FEB , 1976										
03...	0	0	7.1	2.0	18	14	8.0	--	--	--
AUG										
16...	0	0	8.0	1.0	14	8.0	6.0	--	--	--
Catawissa Creek basin										
01540348 - CATAWISSA CREEK AT CATAWISSA, PA. (LAT 40 56 50 LONG 076 27 21)										
NOV , 1975										
27...	--	6	7.1	--	4	24	6.0	--	--	--
FEB , 1976										
03...	0	4	6.3	5.0	8	32	8.0	<.1	--	--
West Branch Susquehanna River basin										
01541248 - ANDERSON CREEK AT CURWENSVILLE, PA (LAT 40 58 31 LONG 078 31 50)										
MAY , 1976										
13...	--	13	8.7	4.8	--	54	7.0	--	112	12
AUG										
05...	--	--	21	9.2	2	68	10	--	180	4
01541510 - CLEARFIELD CREEK AT MOUNT HOPE, PA. (LAT 40 59 09 LONG 078 24 22)										
DEC , 1975										
03...	--	--	29	10	1	133	4.0	--	260	--
MAY , 1976										
13...	4	22	37	13	--	180	5.0	--	340	12
AUG										
04...	--	17	46	22	--	174	7.0	--	386	2
01541800 - ALDER RUN NR KYLERTOWN, PA. (LAT 41 00 50 LONG 078 11 59)										
MAY , 1976										
12...	73	172	40	33	--	360	13	--	768	8
AUG										
04...	--	--	--	--	84	420	87	--	922	2

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)
Nescopeck Creek basin									
01538590 - BLACK CREEK NEAR NESCOPECK, PA (LAT 41 00 27 LONG 076 10 00)									
FEB , 1976									
19...	.84	.04	.45	--	--	.10	--	--	--
MAY									
17...	.78	.07	.98	--	--	1.0	--	--	--
01538600 - NESCOPECK CREEK AT NESCOPECK, PA. (LAT 41 02 49 LONG 076 13 17)									
DEC , 1975									
17...	1.6	.04	.02	--	--	.09	--	--	--
JAN , 1976									
21...	.70	.11	.10	--	--	.05	--	--	--
FEB									
19...	1.2	.04	.23	--	--	.06	--	--	--
MAY									
17...	.98	.06	.69	--	--	.93	--	--	--
JUL									
21...	.64	.03	.04	--	--	.05	--	--	--
Fishing Creek basin									
01540002 - FISHING CREEK AT BLOOMSBURG, PA (LAT 40 59 42 LONG 076 28 25)									
NOV , 1975									
25...	1.4	.05	.02	--	--	.08	10	--	<3
FEB , 1976									
03...	1.7	.03	.05	--	--	.77	--	--	--
AUG									
16...	1.0	.01	.04	--	--	.02	--	--	--
Catawissa Creek basin									
01540348 - CATAWISSA CREEK AT CATAWISSA, PA. (LAT 40 56 50 LONG 076 27 21)									
NOV , 1975									
27...	1.2	.05	.03	--	--	.04	940	--	<10
FEB , 1976									
03...	1.0	.04	.05	--	--	2.1	--	--	--
West Branch Susquehanna River basin									
01541248 - ANDERSON CREEK AT CURWENSVILLE, PA (LAT 40 58 31 LONG 078 31 50)									
MAY , 1976									
13...	.58	.02	.10	--	--	.01	--	--	--
AUG									
05...	.33	.02	.29	--	--	.29	2200	--	<3
01541510 - CLEARFIELD CREEK AT MOUNT HOPE, PA. (LAT 40 59 09 LONG 078 24 22)									
DEC , 1975									
03...	.58	.01	.08	--	--	.02	--	--	--
MAY , 1976									
13...	.78	.03	.14	--	--	.02	--	--	--
AUG									
04...	.52	.02	.21	--	--	.04	2000	--	<3
01541800 - ALDER RUN NR KYLERTOWN, PA. (LAT 41 00 50 LONG 078 11 59)									
MAY , 1976									
12...	1.3	.02	.19	--	--	.01	--	--	--
AUG									
04...	.45	.02	.27	--	--	.04	18880	--	<3

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
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## Nescopeck Creek basin

01538590 - BLACK CREEK NEAR NESCOPECK, PA (LAT 41 00 27 LONG 076 10 00)

FEB , 1976

19...	--	--	780	--	--	--	--	--	--
-------	----	----	-----	----	----	----	----	----	----

MAY

17...	--	--	3080	--	--	--	--	--	--
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01538600 - NESCOPECK CREEK AT NESCOPECK, PA. (LAT 41 02 49 LONG 076 13 17)

DEC , 1975

17...	--	--	260	--	--	--	--	--	--
-------	----	----	-----	----	----	----	----	----	----

JAN , 1976

21...	--	--	90	--	--	--	--	--	--
-------	----	----	----	----	----	----	----	----	----

FEB

19...	--	--	1550	--	--	--	--	--	--
-------	----	----	------	----	----	----	----	----	----

MAY

17...	--	--	5350	--	--	--	--	--	--
-------	----	----	------	----	----	----	----	----	----

JUL

21...	--	--	740	--	--	--	--	--	--
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## Fishing Creek basin

01540002 - FISHING CREEK AT BLOOMSBURG, PA (LAT 40 59 42 LONG 076 28 25)

NOV , 1975

25...	10	10	180	<50	<10	--	60	<10	--
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FEB , 1976

03...	--	--	180	--	--	--	--	--	--
-------	----	----	-----	----	----	----	----	----	----

AUG

16...	--	--	130	--	--	--	--	--	--
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## Catawissa Creek basin

01540348 - CATAWISSA CREEK AT CATAWISSA, PA. (LAT 40 56 50 LONG 076 27 21)

NOV , 1975

27...	10	30	220	<50	360	--	30	120	--
-------	----	----	-----	-----	-----	----	----	-----	----

FEB , 1976

03...	--	--	150	--	--	--	--	--	--
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## West Branch Susquehanna River basin

01541248 - ANDERSON CREEK AT CURWENSVILLE, PA (LAT 40 58 31 LONG 078 31 50)

MAY , 1976

13...	--	--	150	--	860	--	--	--	--
-------	----	----	-----	----	-----	----	----	----	----

AUG

05...	<20	<20	290	<50	2000	<2.0	80	110	--
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01541510 - CLEARFIELD CREEK AT MOUNT HOPE, PA. (LAT 40 59 09 LONG 078 24 22)

DEC , 1975

03...	--	--	2630	--	--	--	--	--	--
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MAY , 1976

13...	--	--	400	--	--	--	--	--	--
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AUG

04...	<20	--	500	<50	1170	<2.0	80	180	--
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01541800 - ALDER RUN NR KYLERTOWN, PA. (LAT 41 00 50 LONG 078 11 59)

MAY , 1976

12...	--	--	8550	--	--	--	--	--	--
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AUG

04...	<20	<20	14560	<50	--	<2.0	460	840	--
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DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)
West Branch Susquehanna River basin--Continued										
01542310 - MOSHANNON CR NR MOSHANNON, PA. (LAT 41 02 12 LONG 078 03 28)										
MAY , 1976										
19...	1030	9813	--	700	4.0	14.0	1	8.0	--	312
01542790 - BENNETT BR SINNEMAHOING CR AT DRIFTWOOD, PA. (LAT 41 20 02 LONG 078 08 10)										
AUG , 1976										
25...	0900	9813	--	210	5.0	19.0	0	9.1	--	68
01543400 - DRIFTWOOD BR SINNEMAHOING CR AT DRIFTWOOD, PA (LAT 41 20 17 LONG 078 08 09)										
OCT , 1975										
06...	1230	9813	--	70	--	--	1	--	--	24
DEC										
03...	1230	9813	--	59	--	--	0	--	--	26
MAY , 1976										
11...	1100	9813	--	70	7.0	14.0	1	10.0	--	28
AUG										
24...	1600	9813	--	85	7.0	27.0	1	8.1	--	30
01544100 - FIRST FORK SINNEMAHOING CR AT SINNEMAHOING, PA (LAT 41 19 12 LONG 078 04 51)										
OCT , 1975										
06...	1330	9813	--	60	--	--	2	--	--	36
DEC										
01...	1200	9813	--	60	7.3	4.0	1	13.0	--	20
MAY , 1976										
11...	1130	9813	--	85	6.7	15.0	1	9.5	--	30
AUG										
24...	1500	9813	--	60	6.7	--	4	9.0	--	20
01545010 - KETTLE CREEK NEAR WESTPORT, PA. (LAT 41 19 10 LONG 077 52 25)										
MAY , 1976										
25...	1130	9813	--	60	5.7	18.0	2	9.0	--	10
01547980 - BEECH CR AT BEECH CREEK, PA. (LAT 41 04 29 LONG 077 35 32)										
MAY , 1976										
06...	1230	9813	--	230	--	17.0	<1	10.0	--	102
18...	1045	9813	--	190	6.8	17.0	1	8.0	--	60
AUG										
04...	1400	9813	--	230	4.0	--	<1	--	--	75
01548075 - FISHING CR NR CEDAR SPRINGS, PA. (LAT 41 04 31 LONG 077 28 40)										
MAY , 1976										
06...	1315	9813	--	250	--	16.0	2	11.5	--	130
18...	1000	9813	--	180	6.7	18.0	7	8.0	--	72
01549550 - LITTLE PINE CREEK NEAR ENGLISH CENTER, PA. (LAT 41 24 26 LONG 077 19 19)										
OCT , 1975										
29...	1300	--	164	60	7.2	11.0	<5	11.2	.0	26
01549790 - LARRYS CREEK AT LARRYS CREEK, PA. (LAT 41 13 10 LONG 077 13 12)										
OCT , 1975										
29...	1145	--	114	50	7.5	11.0	<5	11.2	.1	20



## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FLUO- RIDE (F) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
West Branch Susquehanna River basin--Continued										
01542310 - MOSHANNON CR NR MOSHANNON, PA. (LAT 41 02 12 LONG 078 03 28)										
MAY , 1976										
19...	40	112	51	46	0	220	8.0	--	--	--
01542790 - BENNETT BR SINNEMAHONING CR AT DRIFTWOOD, PA. (LAT 41 20 02 LONG 078 08 10)										
AUG , 1976										
25...	--	12	16	6.7	0	70	7.0	--	150	2
01543400 - DRIFTWOOD BR SINNEMAHONING CR AT DRIFTWOOD, PA (LAT 41 20 17 LONG 078 08 09)										
OCT , 1975										
06...	--	--	6.3	2.0	9	24	4.0	--	60	--
DEC										
03...	--	--	4.7	3.3	8	13	3.0	--	68	--
MAY , 1976										
11...	--	--	5.5	3.3	11	12	2.0	--	54	2
AUG										
24...	--	0	8.0	2.3	13	13	6.0	--	38	10
01544100 - FIRST FORK SINNEMAHONING CR AT SINNEMAHONING, PA (LAT 41 19 12 LONG 078 04 51)										
OCT , 1975										
06...	--	--	5.5	5.3	10	18	3.0	--	48	--
DEC										
01...	--	--	5.5	1.5	12	10	2.0	--	52	--
MAY , 1976										
11...	--	--	7.1	2.8	8	12	2.0	--	78	2
AUG										
24...	--	0	5.5	1.5	12	10	7.0	--	36	6
01545010 - KETTLE CREEK NEAR WESTPORT, PA. (LAT 41 19 10 LONG 077 52 25)										
MAY , 1976										
25...	--	0	5.5	.0	34	10	2.0	--	--	--
01547980 - BEECH CR AT BEECH CREEK, PA. (LAT 41 04 29 LONG 077 35 32)										
MAY , 1976										
06...	0	24	14	16	3	64	4.0	--	--	--
18...	0	14	12	7.0	4	60	5.0	--	--	--
AUG										
04...	0	32	15	9.0	4	72	5.0	--	--	--
01548075 - FISHING CR NR CEDAR SPRINGS, PA. (LAT 41 04 31 LONG 077 28 40)										
MAY , 1976										
06...	0	0	32	12	100	18	6.0	--	--	--
18...	0	0	20	5.0	62	12	6.0	--	--	--
01549550 - LITTLE PINE CREEK NEAR ENGLISH CENTER, PA. (LAT 41 24 26 LONG 077 19 19)										
OCT , 1975										
29...	--	--	8.0	1.5	16	.0	4.0	--	62	--
01549790 - LARRYS CREEK AT LARRYS CREEK, PA. (LAT 41 13 10 LONG 077 13 12)										
OCT , 1975										
29...	--	--	6.4	1.0	18	6.0	4.0	--	54	--

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)
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West Branch Susquehanna River basin--Continued  
01542310 - MOSHANNON CR NR MOSHANNON, PA. (LAT 41 02 12 LONG 078 03 28)

MAY , 1976									
19...	.60	.03	.15	--	--	.07	--	--	--

01542790 - BENNETT BR SINNEMAHOING CR AT DRIFTWOOD, PA. (LAT 41 20 02 LONG 078 08 10)

AUG , 1976									
25...	.23	.01	.21	--	--	.05	610	--	<3

01543400 - DRIFTWOOD BR SINNEMAHOING CR AT DRIFTWOOD, PA (LAT 41 20 17 LONG 078 08 09)

OCT , 1975									
06...	.16	.01	.10	--	--	.02	--	--	--
DEC									
03...	.33	.02	.05	--	--	<.02	--	--	--
MAY , 1976									
11...	.18	.00	.20	--	--	.01	--	--	--
AUG									
24...	.10	.00	.29	--	--	.07	70	--	<3

01544100 - FIRST FORK SINNEMAHOING CR AT SINNEMAHOING, PA (LAT 41 19 12 LONG 078 04 51)

OCT , 1975									
06...	.35	.04	.10	--	--	.03	--	--	--
DEC									
01...	.38	.01	.04	--	--	.02	--	--	--
MAY , 1976									
11...	.19	.00	.15	--	--	.01	--	--	--
AUG									
24...	.10	.01	.29	--	--	.09	80	--	<3

01545010 - KETTLE CREEK NEAR WESTPORT, PA. (LAT 41 19 10 LONG 077 52 25)

MAY , 1976									
25...	.81	.03	.23	--	--	.06	140	--	<3

01547980 - BEECH CR AT BEECH CREEK, PA. (LAT 41 04 29 LONG 077 35 32)

MAY , 1976									
06...	.50	.01	.11	--	--	.04	--	--	--
18...	.84	.04	.07	--	--	.18	--	--	--
AUG									
04...	.54	.02	.05	--	--	.04	2140	--	<3

01548075 - FISHING CR NR CEDAR SPRINGS, PA. (LAT 41 04 31 LONG 077 28 40)

MAY , 1976									
06...	1.4	.01	.09	--	--	.04	--	--	--
18...	1.4	.05	.05	--	--	.11	--	--	--

01549550 - LITTLE PINE CREEK NEAR ENGLISH CENTER, PA. (LAT 41 24 26 LONG 077 19 19)

OCT , 1975									
29...	.74	.02	.02	.12	.14	--	--	--	--

01549790 - LARRYS CREEK AT LARRYS CREEK, PA. (LAT 41 13 10 LONG 077 13 12)

OCT , 1975									
29...	.59	.05	.02	.00	.02	--	--	--	--

DATE	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
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West Branch Susquehanna River basin--Continued  
01542310 - MOSHANNON CR NR MOSHANNON, PA. (LAT 41 02 12 LONG 078 03 28)

MAY, 1976									
19...	--	--	4600	--	--	--	--	--	--

01542790 - BENNETT BR SINNEMAHOING CR AT DRIFTWOOD, PA. (LAT 41 20 02 LONG 078 08 10)

AUG, 1976									
25...	<20	10	110	<50	1030	<2.0	50	90	--

01543400 - DRIFTWOOD BR SINNEMAHOING CR AT DRIFTWOOD, PA (LAT 41 20 17 LONG 078 08 09)

OCT, 1975									
06...	--	--	130	--	--	--	--	--	--
DEC 03...	--	--	120	--	--	--	--	--	--
MAY, 1976									
11...	--	--	130	--	--	--	--	--	--
AUG 24...	30	20	130	<50	20	<2.0	30	40	--

01544100 - FIRST FORK SINNEMAHOING CR AT SINNEMAHOING, PA (LAT 41 19 12 LONG 078 04 51)

OCT, 1975									
06...	--	--	250	--	--	--	--	--	--
DEC 01...	--	--	150	--	--	--	--	--	--
MAY, 1976									
11...	--	--	130	--	--	--	--	--	--
AUG 24...	20	10	170	50	20	<2.0	20	30	--

01545010 - KETTLE CREEK NEAR WESTPORT, PA. (LAT 41 19 10 LONG 077 52 25)

MAY, 1976									
25...	<10	<10	90	<50	90	--	<10	<10	--

01547980 - BEECH CR AT BEECH CREEK, PA. (LAT 41 04 29 LONG 077 35 32)

MAY, 1976									
06...	--	--	110	--	--	--	--	--	--
18...	--	--	110	--	--	--	--	--	--
AUG 04...	<10	<10	130	<50	2080	--	110	120	--

01548075 - FISHING CR NR CEDAR SPRINGS, PA. (LAT 41 04 31 LONG 077 28 40)

MAY, 1976									
06...	--	--	120	--	--	--	--	--	--
18...	--	--	210	--	--	--	--	--	--

01549550 - LITTLE PINE CREEK NEAR ENGLISH CENTER, PA. (LAT 41 24 26 LONG 077 19 19)

OCT, 1975									
29...	--	--	30	--	--	--	--	--	--

01549790 - LARRYS CREEK AT LARRYS CREEK, PA. (LAT 41 13 10 LONG 077 13 12)

OCT, 1975									
29...	--	--	<20	--	--	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

349

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH  (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA,MG) (MG/L)
West Branch Susquehanna River basin--Continued										
01551830 - LOYALSOCK CREEK NEAR FORKSVILLE, PA. (LAT 41 28 10 LONG 076 35 05)										
OCT , 1975										
28...	1600	--	239	40	7.5	12.0	<5	9.6	.3	14
01551835 - LOYALSOCK CREEK AT FORKSVILLE, PA (LAT 41 27 22 LONG 076 41 24)										
OCT , 1975										
30...	1200	9813	--	60	--	--	3	10.0	--	40
FEB , 1976										
18...	1330	9813	--	45	7.7	2.5	10	10.7	--	18
MAY										
27...	1200	9813	--	70	--	--	1	--	--	20
AUG										
24...	1515	9813	--	190	7.3	22.0	<1	11.0	--	66
01553110 - WHITE DEER HOLE CREEK AT ALLENWOOD, PA. (LAT 41 06 14 LONG 076 53 54)										
OCT , 1975										
29...	1000	--	111	100	7.6	11.5	<5	10.4	.0	55
01553150 - WHITE DEER CR AT WHITE DEER, PA. (LAT 41 04 29 LONG 076 52 21)										
NOV , 1975										
05...	1415	9813	--	32	6.8	14.0	2	12.0	--	20
FEB , 1976										
24...	1235	9813	--	33	6.6	3.5	1	13.0	--	21
MAY										
12...	1315	9813	--	40	6.7	16.0	1	--	--	<10
AUG										
17...	1315	9813	--	50	8.6	20.5	1	--	--	17
01553480 - BUFFALO CREEK AT LEWISBURG, PA. (LAT 40 58 19 LONG 076 53 30)										
OCT , 1975										
29...	0850	--	204	170	7.3	12.0	5	9.4	.5	87
NOV										
05...	1340	9813	--	150	7.2	15.0	3	14.0	--	97
FEB , 1976										
24...	1155	9813	--	90	6.6	3.0	4	13.0	--	60
MAY										
12...	1245	9813	--	185	6.5	20.0	4	--	--	99
AUG										
17...	0800	9813	--	220	--	19.0	3	--	--	85
01553700 - CHILLISQUAUA CR NR WASHINGTONVILLE, PA. (LAT 41 03 40 LONG 076 40 50)										
OCT , 1975										
24...	1035	9813	--	170	6.2	--	6	9.0	--	92
NOV										
24...	1415	9813	--	230	--	--	4	--	--	128
JAN , 1976										
19...	1400	9813	--	210	6.8	--	1	9.0	--	84
FEB										
25...	1030	9813	--	210	--	--	7	--	--	100
MAR										
11...	1030	9813	--	250	6.5	--	5	10.0	--	126
APR										
19...	1115	9813	--	--	7.0	--	--	11.0	--	--
19...	1130	9813	--	230	7.0	--	6	11.0	--	118

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)	ACIDITY CO2 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FLUO- RIDE (F) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
West Branch Susquehanna River basin--Continued										
01551830 - LOYALSOCK CREEK NEAR FORKSVILLE, PA. (LAT 41 28 10 LONG 076 35 05)										
OCT , 1975 28...	--	--	4.0	1.0	8	6.0	3.0	--	28	--
01551835 - LOYALSOCK CREEK AT FORKSVILLE, PA (LAT 41 27 22 LONG 076 41 24)										
OCT , 1975 30...	0	0	8.0	.0	6	8.0	4.0	--	--	--
FEB , 1976 18...	0	0	4.0	2.0	12	16	5.0	--	--	--
MAY 27...	0	0	5.5	1.5	12	10	4.0	--	--	--
AUG 24...	--	0	22	2.5	60	14	15	--	--	--
01553110 - WHITE DEER HOLE CREEK AT ALLENWOOD, PA. (LAT 41 06 14 LONG 076 53 54)										
OCT , 1975 29...	--	--	15	4.3	46	16	4.0	--	90	--
01553150 - WHITE DEER CR AT WHITE DEER, PA. (LAT 41 04 29 LONG 076 52 21)										
NOV , 1975 05...	0	0	4.0	2.5	16	8.0	4.0	--	--	--
FEB , 1976 24...	0	0	2.3	3.5	12	4.0	5.0	--	--	--
MAY 12...	0	0	2.3	--	18	14	4.0	--	--	--
AUG 17...	--	0	5.5	.8	18	4.0	4.0	--	--	--
01553480 - BUFFALO CREEK AT LEWISBURG, PA. (LAT 40 58 19 LONG 076 53 30)										
OCT , 1975 29...	--	--	26	5.3	76	12	6.0	--	120	--
NOV 05...	0	0	28	6.0	8	16	6.0	--	--	--
FEB , 1976 24...	0	0	12	7.0	42	8.0	4.0	--	--	--
MAY 12...	0	0	23	10	78	20	5.0	--	--	--
AUG 17...	--	0	28	3.7	76	8.0	7.0	--	--	--
01553700 - CHILLISQUAQUA CR NR WASHINGTONVILLE, PA. (LAT 41 03 40 LONG 076 40 50)										
OCT , 1975 24...	0	0	30	4.0	50	32	8.0	--	--	--
NOV 24...	0	0	48	1.5	70	114	10	--	--	--
JAN , 1976 19...	0	0	26	4.5	36	70	12	--	--	--
FEB 25...	0	0	36	2.5	44	60	8.0	--	--	--
MAR 11...	0	0	35	9.5	36	78	14	--	--	--
APR 19...	--	--	--	--	--	--	--	--	--	--
19...	0	0	38	5.5	30	90	9.0	--	--	--



## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)
West Branch Susquehanna River basin--Continued									
01551830 - LOYALSOCK CREEK NEAR FORKSVILLE, PA. (LAT 41 28 10 LONG 076 35 05)									
OCT , 1975									
28...	.56	.04	<.02	--	.08	--	--	--	--
01551835 - LOYALSOCK CREEK AT FORKSVILLE, PA (LAT 41 27 22 LONG 076 41 24)									
OCT , 1975									
30...	.63	.03	<.02	--	--	.03	--	--	--
FEB , 1976									
18...	1.3	.04	.07	--	--	.08	--	--	--
MAY									
27...	.82	.04	.03	--	--	.04	--	--	--
AUG									
24...	.76	.02	.03	--	--	.08	--	--	--
01553110 - WHITE DEER HOLE CREEK AT ALLENWOOD, PA. (LAT 41 06 14 LONG 076 53 54)									
OCT , 1975									
29...	1.0	.02	.02	.11	.13	--	--	--	--
01553150 - WHITE DEER CR AT WHITE DEER, PA. (LAT 41 04 29 LONG 076 52 21)									
NOV , 1975									
05...	.50	.10	.02	--	--	.03	--	--	--
FEB , 1976									
24...	.46	.02	<.02	--	--	.06	--	--	--
MAY									
12...	.46	.03	.03	--	--	.07	--	--	--
AUG									
17...	.50	.02	.03	--	--	.02	--	--	--
01553480 - BUFFALO CREEK AT LEWISBURG, PA. (LAT 40 58 19 LONG 076 53 30)									
OCT , 1975									
29...	1.8	.06	.02	.09	.11	--	--	--	--
NOV									
05...	1.8	.08	.03	--	--	.05	--	--	--
FEB , 1976									
24...	1.2	.03	.02	--	--	.07	--	--	--
MAY									
12...	1.3	.03	.04	--	--	.14	--	--	--
AUG									
17...	1.2	.02	.10	--	--	.08	--	--	--
01553700 - CHILLISQUAQUA CR NR WASHINGTONVILLE, PA. (LAT 41 03 40 LONG 076 40 50)									
OCT , 1975									
24...	1.8	.04	.02	--	--	.04	--	--	--
NOV									
24...	1.7	.07	.40	--	--	.09	--	--	--
JAN , 1976									
19...	1.8	.05	.63	--	--	.52	--	--	--
FEB									
25...	2.0	.06	.36	--	--	.06	--	77	--
MAR									
11...	1.7	.04	.41	--	--	.09	--	--	--
APR									
19...	--	--	--	--	--	--	460	--	<3
19...	1.6	.16	.21	--	--	.10	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
West Branch Susquehanna River basin--Continued									
01551830 - LOYALSOCK CREEK NEAR FORKSVILLE, PA. (LAT 41 28 10 LONG 076 35 05)									
OCT , 1975									
28...	--	--	80	--	--	--	--	--	--
01551835 - LOYALSOCK CREEK AT FORKSVILLE, PA (LAT 41 27 22 LONG 076 41 24)									
OCT , 1975									
30...	--	--	240	--	--	--	--	--	--
FEB , 1976									
18...	--	--	300	--	--	--	--	--	--
MAY									
27...	--	--	--	--	--	--	--	--	--
AUG									
24...	--	--	40	--	--	--	--	--	--
01553110 - WHITE DEER HOLE CREEK AT ALLENWOOD, PA. (LAT 41 06 14 LONG 076 53 54)									
OCT , 1975									
29...	--	--	140	--	--	--	--	--	--
01553150 - WHITE DEER CR AT WHITE DEER, PA. (LAT 41 04 29 LONG 076 52 21)									
NOV , 1975									
05...	--	--	100	--	--	--	--	--	4.0
FEB , 1976									
24...	--	--	<10	--	--	--	--	--	--
MAY									
12...	--	--	50	--	--	--	--	--	--
AUG									
17...	--	--	60	--	--	--	--	--	--
01553480 - BUFFALO CREEK AT LEWISBURG, PA. (LAT 40 58 19 LONG 076 53 30)									
OCT , 1975									
29...	--	--	190	--	--	--	--	--	--
NOV									
05...	--	--	150	--	--	--	--	--	5.0
FEB , 1976									
24...	--	--	100	--	--	--	--	--	--
MAY									
12...	--	--	110	--	--	--	--	--	--
AUG									
17...	--	--	180	--	--	--	--	--	--
01553700 - CHILLISQUAQUA CR NR WASHINGTONVILLE, PA. (LAT 41 03 40 LONG 076 40 50)									
OCT , 1975									
24...	--	--	190	--	--	--	--	--	3.0
NOV									
24...	--	--	290	--	--	--	--	--	--
JAN , 1976									
19...	--	--	160	--	--	--	--	--	--
FEB									
25...	--	--	440	--	--	--	--	--	--
MAR									
11...	--	--	300	--	--	--	--	--	--
APR									
19...	<10	30	410	<50	50	--	30	10	--
19...	--	--	400	--	--	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA, MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)
Penns Creek basin											
01555100 - PENNS CREEK AT SELINSGROVE, PA (LAT 40 48 50 LONG 076 51 20)											
NOV , 1975											
05...	1300	9813	--	130	7.3	15.5	2	14.0	--	87	0
FEB , 1976											
18...	1255	9813	--	100	6.8	4.5	75	14.0	--	46	0
MAY											
13...	1350	9813	--	190	9.0	18.1	2	7.5	--	85	--
AUG											
17...	1132	9813	--	230	8.5	21.0	3	--	--	91	--
01555205 - MIDDLE CR AT MIDDLEBURG, PA. (LAT 40 47 19 LONG 077 00 42)											
NOV , 1975											
05...	1130	9813	--	110	6.7	14.5	3	11.0	--	64	0
FEB , 1976											
18...	1145	9813	--	70	6.5	4.0	20	13.0	--	35	0
MAY											
13...	1250	9813	--	180	7.5	17.5	3	6.7	--	72	--
AUG											
17...	0915	9813	--	190	8.0	19.0	7	--	--	74	--
01555210 - MIDDLE CREEK NEAR SELINSGROVE, PA (LAT 40 46 29 LONG 076 52 11)											
NOV , 1975											
05...	1225	9813	--	120	7.0	15.0	9	12.0	--	77	0
FEB , 1976											
18...	1330	9813	--	80	6.6	4.5	30	14.0	--	37	0
MAY											
13...	1320	9813	--	190	7.0	17.5	9	8.0	--	76	--
AUG											
17...	1038	9813	--	210	7.7	21.0	25	--	--	80	--
Mahanoy Creek basin											
01555251 - MAHANAY CR NR HERNDON, PA. (LAT 40 43 28 LONG 076 48 57)											
NOV , 1975											
25...	1100	9813	--	430	6.0	7.0	35	12.0	--	366	0
FEB , 1976											
18...	1030	9813	--	180	6.1	4.0	40	11.0	--	228	0
Wiconisco Creek basin											
01555600 - WICONISCO CREEK AT MILLERSBURG, PA (LAT 40 32 14 LONG 076 57 39)											
OCT , 1975											
21...	1315	9813	--	110	6.8	13.0	12	10.1	--	49	0
FEB , 1976											
29...	1040	9813	--	120	6.7	8.0	4	11.7	--	50	--
MAY											
10...	1100	9813	--	140	7.5	15.0	5	8.8	--	60	0
AUG											
11...	1300	9813	--	160	7.6	22.0	15	9.3	--	54	--
Juniata River basin											
01559920 - BOBS CR AT REYNOLDS DALE, PA. (LAT 40 08 50 LONG 078 33 21)											
NOV , 1975											
25...	1515	9813	--	130	7.5	3.0	1	15.0	--	83	0
FEB , 1976											
26...	1045	9813	--	100	6.7	5.5	3	12.1	--	67	0
MAY											
19...	1300	9813	--	160	6.8	9.5	4	11.7	--	78	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)
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## Penns Creek basin

01555100 - PENNS CREEK AT SELINGROVE, PA (LAT 40 48 50 LONG 076 51 20)

NOV , 1975											
05...	0	28	3.5	78	14	5.0	--	--	1.0	.06	.02
FEB , 1976											
18...	0	15	2.0	44	16	6.0	--	--	1.3	.05	.13
MAY											
13...	0	27	4.0	72	8.0	5.0	--	--	.88	.04	.04
AUG											
17...	0	31	3.2	84	8.0	7.0	--	--	1.0	.03	.05

01555205 - MIDDLE CR AT MIDDLEBURG, PA. (LAT 40 47 19 LONG 077 00 42)

NOV , 1975											
05...	0	17	5.0	52	18	5.0	--	--	1.0	.02	.03
FEB , 1976											
18...	0	8.7	3.0	28	18	5.0	--	--	1.0	.05	.07
MAY											
13...	0	20	5.0	60	10	7.0	--	--	1.0	.04	.05
AUG											
17...	0	23	4.0	64	8.0	7.0	--	--	1.0	.02	.07

01555210 - MIDDLE CREEK NEAR SELINGROVE, PA (LAT 40 46 29 LONG 076 52 11)

NOV , 1975											
05...	0	20	6.0	60	16	6.0	--	--	1.2	.06	.05
FEB , 1976											
18...	0	11	2.0	30	20	7.0	--	--	1.3	.07	.11
MAY											
13...	0	20	4.0	66	10	6.0	--	--	.92	.04	.07
AUG											
17...	0	23	5.5	66	8.0	8.0	--	--	1.2	.03	.16

## Mahanoy Creek basin

01555251 - MAHANAY CR NR HERNDON, PA. (LAT 40 43 28 LONG 076 48 57)

NOV , 1975											
25...	0	86	37	16	440	9.0	--	--	1.1	.02	.32
FEB , 1976											
18...	0	48	27	18	180	13	--	--	1.6	.04	.26

## Wiconisco Creek basin

01555600 - WICONISCO CREEK AT MILLERSBURG, PA (LAT 40 32 14 LONG 076 57 39)

OCT , 1975											
21...	0	9.5	6.0	14	32	7.0	108	--	2.5	.03	.07
FEB , 1976											
29...	0	11	5.5	4	40	6.0	94	--	1.3	.07	.09
MAY											
10...	0	12	7.0	22	36	5.0	--	--	.88	.04	.05
AUG											
11...	0	13	5.0	28	36	12	140	--	1.4	.03	.04

## Juniata River basin

01559920 - BOBS CR AT REYNOLDS DALE, PA. (LAT 40 08 50 LONG 078 33 21)

NOV , 1975											
25...	0	17	9.0	60	18	6.0	--	--	1.3	.03	.04
FEB , 1976											
26...	0	14	7.5	36	12	5.0	--	--	1.9	.05	.05
MAY											
19...	0	17	8.5	42	22	6.0	--	--	1.5	.03	.05

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
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## Penns Creek basin

01555100 - PENNS CREEK AT SELINGROVE, PA (LAT 40 48 50 LONG 076 51 20)

NOV , 1975											
05...	.03	--	--	--	--	100	--	--	--	--	3.0
FEB , 1976											
18...	.21	--	--	--	--	1650	--	--	--	--	--
MAY											
13...	.07	--	--	--	--	150	--	--	--	--	--
AUG											
17...	.02	--	--	--	--	160	--	--	--	--	--

01555205 - MIDDLE CR AT MIDDLEBURG, PA. (LAT 40 47 19 LONG 077 00 42)

NOV , 1975											
05...	.02	--	--	--	--	130	--	--	--	--	2.0
FEB , 1976											
18...	.10	--	--	--	--	440	--	--	--	--	--
MAY											
13...	.09	--	--	--	--	210	--	--	--	--	--
AUG											
17...	.09	--	--	--	--	460	--	--	--	--	--

01555210 - MIDDLE CREEK NEAR SELINGROVE, PA (LAT 40 46 29 LONG 076 52 11)

NOV , 1975											
05...	.06	--	--	--	--	780	--	--	--	--	2.0
FEB , 1976											
18...	.11	--	--	--	--	400	--	--	--	--	--
MAY											
13...	.11	--	--	--	--	620	--	--	--	--	--
AUG											
17...	.15	--	--	--	--	1280	--	--	--	--	--

## Mahanoy Creek basin

01555251 - MAHANAY CR NR HERNDON, PA. (LAT 40 43 28 LONG 076 48 57)

NOV , 1975											
25...	.09	--	--	--	--	6100	--	--	--	--	--
FEB , 1976											
18...	.13	--	--	--	--	5260	--	--	--	--	--

## Wiconisco Creek basin

01555600 - WICONISCO CREEK AT MILLERSBURG, PA (LAT 40 32 14 LONG 076 57 39)

OCT , 1975											
21...	.07	--	--	--	--	580	--	--	--	--	2.0
FEB , 1976											
29...	.07	170	<3	<10	<10	520	<50	270	40	40	--
MAY											
10...	.08	130	<3	<10	<10	340	<50	140	<10	10	--
AUG											
11...	.06	280	<3	<10	20	740	<50	100	<10	<10	--

## Juniata River basin

01559920 - BOBS CR AT REYNOLDS DALE, PA. (LAT 40 08 50 LONG 078 33 21)

NOV , 1975											
25...	.05	--	--	--	--	190	--	--	--	--	--
FEB , 1976											
26...	.05	--	--	--	--	110	--	--	--	--	--
MAY											
19...	.08	--	--	--	--	200	--	--	--	--	--



## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)
Juniata River basin--Continued											
01560510 - DUNNING CREEK NEAR BEDFORD, PA. (LAT 40 01 26 LONG 078 28 39)											
NOV , 1975											
25...	1515	9813	--	120	7.5	3.0	2	15.5	--	67	0
FEB , 1976											
26...	1135	9813	--	120	6.7	7.0	6	11.7	--	69	0
MAY											
19...	1205	9813	--	190	6.7	10.5	6	10.7	--	106	--
01564515 - AUGHWICK CR AT AUGHWICK MILLS, PA. (LAT 40 20 05 LONG 077 51 36)											
NOV , 1975											
17...	1100	9813	--	70	6.5	7.0	2	13.0	--	43	0
FEB , 1976											
17...	1415	9813	--	70	6.5	6.0	75	13.0	--	30	0
MAY											
26...	1400	9813	--	130	7.1	15.5	42	9.0	--	54	0
AUG											
23...	1230	9813	--	--	8.2	25.0	--	8.6	--	--	--
01564995 - HONEY CR AT REEDSVILLE, PA. (LAT 40 39 44 LONG 077 35 40)											
NOV , 1975											
18...	1200	9813	--	90	7.2	9.5	<1	14.0	--	58	--
FEB , 1976											
18...	1255	9813	--	70	6.7	4.0	30	12.0	--	34	0
MAY											
20...	1305	9813	--	100	--	--	4	--	--	51	0
AUG											
19...	0815	9813	--	210	8.0	14.0	7	8.5	--	80	--
01565000 - KISHACOQUILLAS CREEK AT REEDSVILLE, PA. (LAT 40 39 17 LONG 077 35 00)											
NOV , 1975											
18...	1135	9813	--	140	7.5	9.0	<1	14.0	--	83	--
FEB , 1976											
18...	1230	9813	--	110	6.5	5.0	50	12.0	--	53	0
MAY											
20...	1335	9813	--	200	--	--	8	--	--	77	0
AUG											
19...	1400	9813	--	340	8.7	19.0	4	11.5	--	160	--
01565300 - KISHACOQUILLAS CREEK AT BURNHAM, PA. (LAT 40 37 52 LONG 077 34 01)											
NOV , 1975											
18...	1030	9813	--	150	7.3	9.0	4	14.0	--	86	--
FEB , 1976											
18...	1315	9813	--	110	7.0	5.0	55	11.0	--	55	0
MAY											
20...	1305	9813	--	300	--	--	8	--	--	142	0
AUG											
19...	1315	9813	--	350	8.5	20.0	5	10.0	--	150	--
01565515 - JACKS CR AT LEWISTOWN, PA. (LAT 40 35 07 LONG 077 33 27)											
NOV , 1975											
18...	0930	9813	--	110	7.0	7.0	<1	12.0	--	58	--
FEB , 1976											
19...	1010	9813	--	90	6.7	5.0	15	11.0	--	52	0
MAY											
27...	1425	9813	--	200	7.5	16.0	7	12.0	--	83	0
AUG											
19...	1150	9813	--	280	8.0	17.0	5	8.5	--	100	--

DATE	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)
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## Juniata River basin--Continued

01560510 - DUNNING CREEK NEAR BEDFORD, PA (LAT 40 01 26 LONG 078 28 39)

NOV , 1975											
25...	0	17	5.5	46	14	6.0	--	--	1.5	.02	.04
FEB , 1976											
26...	0	17	6.0	44	16	6.0	--	--	2.0	.06	.06
MAY											
19...	0	21	13	54	26	6.0	--	--	1.1	.04	.08

01564515 - AUGHWICK CR AT AUGHWICK MILLS, PA. (LAT 40 20 05 LONG 077 51 36)

NOV , 1975											
17...	0	9.5	4.0	30	6.0	6.0	--	--	1.0	.08	.02
FEB , 1976											
17...	0	8.0	2.5	22	12	7.0	--	--	1.1	.06	.10
MAY											
26...	0	14	4.5	42	14	6.0	--	--	.64	.04	.08
AUG											
23...	--	--	--	--	--	--	--	--	--	--	--

01564995 - HONEY CR AT REEDSVILLE, PA. (LAT 40 39 44 LONG 077 35 40)

NOV , 1975											
18...	0	16	4.5	42	6.0	3.0	--	--	.82	.04	.02
FEB , 1976											
18...	0	10	2.0	26	12	5.0	--	--	.84	.04	.04
MAY											
20...	0	11	5.5	28	4.0	5.0	--	--	.66	.02	.04
AUG											
19...	0	29	1.5	78	10	5.0	--	--	1.0	.03	.07

01565000 - KISHACOQUILLAS CREEK AT REEDSVILLE, PA. (LAT 40 39 17 LONG 077 35 00)

NOV , 1975											
18...	0	25	4.7	74	8.0	6.0	--	--	1.9	.06	.02
FEB , 1976											
18...	0	16	3.0	46	14	6.0	--	--	1.5	.06	.10
MAY											
20...	0	23	4.5	62	10	6.0	--	--	2.0	.03	.05
AUG											
19...	0	43	13	120	12	10	--	--	2.6	.03	.08

01565300 - KISHACOQUILLAS CREEK AT BURNHAM, PA. (LAT 40 37 52 LONG 077 34 01)

NOV , 1975											
18...	0	23	7.0	72	8.0	5.0	--	--	1.9	.05	.02
FEB , 1976											
18...	0	16	3.0	48	12	6.0	--	--	1.5	.04	.10
MAY											
20...	0	34	14	80	36	7.0	--	--	1.9	.03	.06
AUG											
19...	0	44	9.5	124	14	11	--	--	2.6	.04	.09

01565515 - JACKS CR AT LEWISTOWN, PA. (LAT 40 35 07 LONG 077 33 27)

NOV , 1975											
18...	0	17	3.5	46	10	4.0	--	--	1.9	.05	<.02
FEB , 1976											
19...	--	12	5.0	30	20	6.0	--	--	1.2	.04	.09
MAY											
27...	0	23	6.0	70	18	5.0	--	--	1.0	.04	.03
AUG											
19...	0	34	3.5	132	16	8.0	--	--	1.2	.03	.09

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	TOTAL PHOS- PHOS (P) (MG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
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## Juniata River basin--Continued

01560510 - DUNNING CREEK NEAR BEDFORD, PA (LAT 40 01 26 LONG 078 28 39)

NOV , 1975											
25...	.06	--	--	--	--	80	--	--	--	--	--
FEB , 1976											
26...	.06	--	--	--	--	150	--	--	--	--	--
MAY											
19...	.11	--	--	--	--	300	--	--	--	--	--

01564515 - AUGHWICK CR AT AUGHWICK MILLS, PA. (LAT 40 20 05 LONG 077 51 36)

NOV , 1975											
17...	.11	--	--	--	--	300	--	--	--	--	2.0
FEB , 1976											
17...	.30	--	--	--	--	4050	--	--	--	--	--
MAY											
26...	.07	--	--	--	--	1760	--	--	--	--	--
AUG											
23...	--	190	<3	<10	10	430	<50	20	<10	<10	--

01564995 - HONEY CR AT REEDSVILLE, PA. (LAT 40 39 44 LONG 077 35 40)

NOV , 1975											
18...	.05	--	--	--	--	140	--	--	--	--	2.0
FEB , 1976											
18...	.11	--	--	--	--	1120	--	--	--	--	--
MAY											
20...	.07	--	--	--	--	--	--	--	--	--	--
AUG											
19...	.06	--	--	--	--	240	--	--	--	--	--

01565000 - KISHACOQUILLAS CREEK AT REEDSVILLE, PA. (LAT 40 39 17 LONG 077 35 00)

NOV , 1975											
18...	.13	--	--	--	--	130	--	--	--	--	7.0
FEB , 1976											
18...	.23	--	--	--	--	1660	--	--	--	--	--
MAY											
20...	.17	--	--	--	--	570	--	40	--	--	--
AUG											
19...	.18	--	--	--	--	80	--	--	--	--	--

01565300 - KISHACOQUILLAS CREEK AT BURNHAM, PA. (LAT 40 37 52 LONG 077 34 01)

NOV , 1975											
18...	.12	--	--	--	--	200	--	--	--	--	4.0
FEB , 1976											
18...	.19	--	--	--	--	1600	--	--	--	--	--
MAY											
20...	.10	--	--	--	--	500	--	--	--	--	--
AUG											
19...	.15	--	--	--	--	210	--	--	--	--	--

01565515 - JACKS CR AT LEWISTOWN, PA. (LAT 40 35 07 LONG 077 33 27)

NOV , 1975											
18...	.04	--	--	--	--	150	--	--	--	--	3.0
FEB , 1976											
19...	.07	--	--	--	--	560	--	--	--	--	--
MAY											
27...	.05	--	--	--	--	270	--	--	--	--	--
AUG											
19...	.97	--	--	--	--	270	--	--	--	--	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA.MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)
Juniata River basin--Continued											
01566010 - TUSCARORA CR AT PORT ROYAL, PA. (LAT 40 31 41 LONG 077 23 32)											
NOV , 1975											
19...	1200	9813	--	100	7.0	10.0	<1	14.0	--	65	0
FEB , 1976											
18...	1430	9813	--	70	6.6	5.0	25	10.0	--	35	0
* MAY											
25...	1230	9813	--	150	--	--	2	--	--	63	--
AUG											
19...	1030	9813	--	250	8.1	19.0	5	8.7	--	95	--
01567350 - LITTLE JUNIATA CREEK AT DUNCANNON, PA. (LAT 40 23 20 LONG 077 01 56)											
OCT , 1975											
20...	1215	9813	--	75	6.9	13.0	19	10.0	--	33	0
NOV											
17...	1330	9813	--	80	7.5	8.5	<1	11.5	--	37	--
DEC											
11...	1030	9813	--	80	7.1	3.5	5	13.2	--	35	0
FEB , 1976											
18...	0915	9813	--	90	6.5	3.5	15	12.5	--	108	0
MAY											
04...	1140	9813	--	160	7.7	10.5	2	11.7	--	78	0
AUG											
11...	1400	9813	--	180	8.5	24.0	5	9.5	--	73	--
Sherman Creek basin											
01568200 - SHERMAN CREEK NEAR DUNCANNON, PA (LAT 40 22 49 LONG 077 04 56)											
OCT , 1975											
20...	1250	9813	--	85	6.6	13.0	16	10.0	--	42	0
NOV											
17...	1230	9813	--	90	7.5	8.0	<1	11.5	--	53	--
DEC											
11...	1115	9813	--	90	7.2	2.5	10	13.0	--	52	0
FEB , 1976											
18...	1010	9813	--	80	7.0	4.0	40	12.5	--	47	0
MAY											
04...	1220	9813	--	120	7.8	11.0	2	11.3	--	67	0
AUG											
11...	1500	9813	--	160	8.2	25.0	4	9.0	--	68	--
Conodoguinet Creek basin											
01569320 - MIDDLE SPRING CREEK NEAR SHIPPENSBURG, PA. (LAT 40 05 07 LONG 077 32 35)											
OCT , 1975											
23...	1145	9813	--	190	7.2	15.0	6	9.6	--	120	0
FEB , 1976											
18...	1100	9813	--	220	7.5	6.0	8	11.5	--	132	0
MAY											
26...	0950	9813	--	290	7.5	11.5	11	9.7	--	146	0
AUG											
17...	1330	9813	--	410	8.1	17.0	3	10.0	--	178	--
Yellow Breeches Creek basin											
01571197 - MOUNTAIN CREEK AT MOUNT HOLLY SPRINGS, PA. (LAT 40 08 41 LONG 077 10 43)											
OCT , 1975											
23...	1320	9813	--	50	6.6	15.5	4	9.2	--	17	0
NOV											
20...	1430	9813	--	50	7.1	10.0	1	11.1	--	24	0
DEC											
23...	1410	9813	--	60	7.7	2.0	1	--	--	33	--
FEB , 1976											
18...	1215	9813	--	60	6.8	6.0	5	12.1	--	27	0
MAY											
13...	1200	9813	--	80	7.5	12.5	2	13.0	--	38	0
AUG											
17...	1215	9813	--	190	7.5	19.0	2	8.0	--	49	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	ACIDITY CO2 AS CAC03 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)
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## Juniata River basin--Continued

01566010 - TUSCARORA CR AT PORT ROYAL, PA. (LAT 40 31 41 LONG 077 23 32)

NOV , 1975											
19...	0	16	6.0	54	14	4.0	--	--	1.2	.03	.03
FEB , 1976											
18...	0	9.5	2.5	28	20	5.0	--	--	1.5	.04	.09
MAY											
25...	0	16	5.0	56	10	4.0	--	--	.93	.03	.24
AUG											
19...	0	30	4.7	168	10	7.0	--	--	1.2	.03	.11

01567350 - LITTLE JUNIATA CREEK AT DUNCANNON, PA. (LAT 40 23 20 LONG 077 01 56)

OCT , 1975											
20...	0	10	1.5	32	16	5.0	70	--	1.4	.02	.04
NOV											
17...	0	11	2.2	26	6.0	5.0	70	--	1.4	.04	.02
DEC											
11...	0	4.7	5.5	26	14	8.0	100	--	1.8	.04	.03
FEB , 1976											
18...	0	8.7	21	24	24	11	70	4	1.5	.07	.11
MAY											
04...	0	21	6.0	62	14	11	82	2	1.3	.03	.11
AUG											
11...	0	24	2.7	70	12	15	138	--	1.0	.03	.05

## Sherman Creek basin

01568200 - SHERMAN CREEK NEAR DUNCANNON, PA (LAT 40 22 49 LONG 077 04 56)

OCT , 1975											
20...	0	12	2.5	34	14	4.0	84	--	1.4	.02	.03
NOV											
17...	0	14	4.2	34	8.0	5.0	90	--	1.3	.06	.02
DEC											
11...	0	12	5.5	40	16	7.0	108	--	1.6	.04	.05
FEB , 1976											
18...	0	11	4.5	34	18	7.0	82	32	1.6	.05	.14
MAY											
04...	0	16	6.0	50	14	5.0	52	14	1.1	.03	.08
AUG											
11...	0	24	1.5	68	12	7.0	138	--	.88	.02	.03

## Conodoguinet Creek basin

01569320 - MIDDLE SPRING CREEK NEAR SHIPPENSBURG, PA. (LAT 40 05 07 LONG 077 32 35)

OCT , 1975											
23...	0	44	2.0	116	14	8.0	226	--	2.7	.05	.13
FEB , 1976											
18...	0	23	18	120	22	14	202	--	8.8	.07	.31
MAY											
26...	0	43	9.5	112	20	10	214	14	3.2	1.1	.26
AUG											
17...	0	52	12	156	10	15	254	--	3.5	.09	.06

## Yellow Breeches Creek basin

01571197 - MOUNTAIN CREEK AT MOUNT HOLLY SPRINGS, PA. (LAT 40 08 41 LONG 077 10 43)

OCT , 1975											
23...	0	4.7	1.0	14	8.0	4.0	80	--	.86	.03	.07
NOV											
20...	0	4.7	3.0	24	10	4.0	58	--	.72	.02	.09
DEC											
23...	0	1.5	7.2	34	10	5.0	--	--	.95	.07	.13
FEB , 1976											
18...	0	6.3	2.5	26	16	6.0	74	--	1.0	.04	.09
MAY											
13...	0	5.5	6.0	48	12	5.0	--	--	.70	.04	.10
AUG											
17...	0	12	4.7	42	22	6.0	200	--	.78	.06	.16



DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
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## Juniata River basin--Continued

01566010 - TUSCARORA CR AT PORT ROYAL, PA. (LAT 40 31 41 LONG 077 23 32)

NOV , 1975											
19...	.04	--	--	--	--	70	--	--	--	--	--
FEB , 1976											
18...	.07	--	--	--	--	560	--	--	--	--	--
MAY											
25...	.07	--	--	--	--	160	--	--	--	--	--
AUG											
19...	.07	--	--	--	--	300	--	--	--	--	--

01567350 - LITTLE JUNIATA CREEK AT DUNCANNON, PA. (LAT 40 23 20 LONG 077 01 56)

OCT , 1975											
20...	.07	--	--	--	--	740	--	--	--	--	6.0
NOV											
17...	.05	--	--	--	--	120	--	--	--	--	5.0
DEC											
11...	.04	--	--	--	--	160	--	--	--	--	--
FEB , 1976											
18...	.10	--	--	--	--	360	--	--	--	--	--
MAY											
04...	.11	--	--	--	--	230	--	--	--	--	--
AUG											
11...	.09	120	<3	<10	10	230	<50	10	<10	<10	--

## Sherman Creek basin

01568200 - SHERMAN CREEK NEAR DUNCANNON, PA (LAT 40 22 49 LONG 077 04 56)

OCT , 1975											
20...	.05	--	--	--	--	280	--	--	--	--	4.0
NOV											
17...	.04	--	--	--	--	210	--	--	--	--	4.0
DEC											
11...	.05	--	--	--	--	310	--	--	--	--	--
FEB , 1976											
18...	.12	--	--	--	--	1500	--	--	--	--	--
MAY											
04...	.08	--	--	--	--	180	--	--	--	--	--
AUG											
11...	.03	100	<3	10	20	120	<50	10	<10	<10	--

## Conodoguinet Creek basin

01569320 - MIDDLE SPRING CREEK NEAR SHIPPENSBURG, PA. (LAT 40 05 07 LONG 077 32 35)

OCT , 1975											
23...	.13	--	--	--	--	150	--	--	--	--	5.0
FEB , 1976											
18...	.27	420	<3	<10	<10	390	<50	10	<10	<10	--
MAY											
26...	.26	--	--	--	--	370	--	--	--	--	--
AUG											
17...	.40	100	<3	<10	10	80	<50	40	10	20	--

## Yellow Breeches Creek basin

01571197 - MOUNTAIN CREEK AT MOUNT HOLLY SPRINGS, PA. (LAT 40 08 41 LONG 077 10 43)

OCT , 1975											
23...	.06	--	--	--	--	170	--	--	--	--	4.0
NOV											
20...	.06	--	--	--	--	200	--	--	--	--	--
DEC											
23...	.13	--	--	--	--	40	--	--	--	--	--
FEB , 1976											
18...	.08	130	<3	<10	<10	120	<50	20	10	<10	--
MAY											
13...	.12	110	<3	30	<10	280	<50	30	50	<10	--
AUG											
17...	.07	250	<3	<10	10	250	<50	40	20	<10	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CAC03 (MG/L)
Yellow Breeches Creek basin--Continued											
01571505 - YELLOW BREECHES CR AT NEW CUMBERLAND, PA (LAT 40 13 27 LONG 076 51 38)											
NOV , 1975											
20...	1145	9813	--	150	8.0	11.0	2	10.5	--	100	0
FEB , 1976											
25...	1130	9813	--	180	7.6	7.0	5	12.0	--	192	0
MAR											
25...	1505	9813	--	220	8.0	11.0	6	13.5	--	210	0
MAY											
06...	1430	9813	--	270	8.1	18.0	4	--	--	104	0
AUG											
12...	1315	9813	--	290	7.7	19.0	15	9.1	--	126	0
19...	0945	9813	--	330	8.0	19.0	--	8.5	--	124	--
Swatara Creek basin											
01571824 - SWATARA CREEK AT RAVINE, PA (LAT 40 34 30 LONG 076 24 10)											
FEB , 1976											
10...	1110	9813	--	180	6.2	3.0	9	12.0	--	76	--
MAY											
13...	1145	9813	--	250	5.7	11.0	6	9.0	--	93	0
Codorus Creek basin											
01574520 - WEST BR CODORUS CREEK AT STOVERSTOWN, PA (LAT 39 58 14 LONG 076 50 09)											
OCT , 1975											
21...	1040	9813	--	333	7.0	14.0	12	8.8	--	99	0
FEB , 1976											
24...	1000	9813	--	350	7.3	9.0	11	10.5	--	132	0
MAY											
12...	1130	9813	--	700	7.0	20.0	16	7.6	3.0	146	0
01575680 - CODORUS CR NR NEW HOLLAND, PA. (LAT 40 00 37 LONG 076 42 37)											
OCT , 1975											
21...	0955	9813	--	240	7.0	12.5	16	7.7	--	95	0
FEB , 1976											
24...	1200	9813	--	250	7.5	6.0	13	11.3	--	132	0
MAY											
12...	0845	9813	--	490	--	--	8	--	5.5	120	0
JUN											
17...	1245	9813	--	500	7.0	24.0	40	6.5	--	118	0
Chickies Creek basin											
01575990 - CHICKIES CREEK AT MARIETTA, PA (LAT 40 03 19 LONG 076 31 33)											
OCT , 1975											
22...	0945	9813	--	240	7.5	12.0	14	9.3	--	138	0
DEC											
17...	1000	9813	--	320	8.1	5.0	5	--	--	198	--
FEB , 1976											
26...	1445	9813	--	330	8.7	8.7	9	13.5	--	126	--
MAY											
11...	1330	9813	--	460	8.2	15.5	6	8.8	--	196	0
AUG											
18...	1400	9813	--	430	8.0	20.0	20	8.7	--	192	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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DATE	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)
Yellow Breeches Creek basin--Continued											
01571505 - YELLOW BREECHES CR AT NEW CUMBERLAND, PA (LAT 40 13 27 LONG 076 51 38)											
NOV , 1975											
20...	0	32	5.0	98	16	8.0	158	--	2.0	.02	.02
FEB , 1976											
25...	0	30	29	88	12	10	154	4	1.3	.07	.05
MAR											
25...	0	28	34	102	18	10	--	--	1.9	.04	.03
MAY											
06...	0	33	5.0	108	16	10	--	--	2.0	.03	.07
AUG											
12...	0	38	7.5	116	20	14	--	--	2.0	.08	.07
19...	0	40	5.5	120	6.0	15	204	--	2.0	.03	.08
Swatara Creek basin											
01571824 - SWATARA CREEK AT RAVINE, PA (LAT 40 34 30 LONG 076 24 10)											
FEB , 1976											
10...	8	3.1	17	8	76	8.0	--	--	.52	.02	.09
MAY											
13...	8	16	13	20	78	9.0	210	--	.46	.03	.09
Codorus Creek basin											
01574520 - WEST BR CODORUS CREEK AT STOVERSTOWN, PA (LAT 39 58 14 LONG 076 50 09)											
OCT , 1975											
21...	0	35	2.5	78	40	67	314	--	2.3	.09	.33
FEB , 1976											
24...	0	48	3.0	80	36	70	376	18	1.7	.04	.05
MAY											
12...	0	50	5.0	94	18	132	--	--	2.1	.13	.53
01575680 - CODORUS CR NR NEW HOLLAND, PA. (LAT 40 00 37 LONG 076 42 37)											
OCT , 1975											
21...	0	32	18	74	30	33	234	--	3.0	.08	.29
FEB , 1976											
24...	0	33	12	72	26	44	230	16	3.8	.05	.41
MAY											
12...	0	41	4.0	86	28	64	--	--	3.4	.13	.40
JUN											
17...	0	43	2.5	88	20	74	--	--	2.1	.06	.35
Chickies Creek basin											
01575990 - CHICKIES CREEK AT MARIETTA, PA (LAT 40 03 19 LONG 076 31 33)											
OCT , 1975											
22...	0	55	.0	138	28	17	310	--	7.7	.04	.06
DEC											
17...	0	68	7.0	196	36	19	310	--	8.3	.06	.08
FEB , 1976											
26...	0	49	1.0	120	24	19	--	--	5.0	.06	--
MAY											
11...	0	56	13	154	16	20	378	20	7.0	.11	.13
AUG											
18...	0	49	17	126	16	22	282	--	7.0	.06	.14

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
Yellow Breeches Creek basin--Continued											
01571505 - YELLOW BREECHES CR AT NEW CUMBERLAND, PA (LAT 40 13 27 LONG 076 51 38)											
NOV , 1975											
20...	.05	--	--	--	--	310	--	--	--	--	--
FEB , 1976											
25...	.06	--	--	--	--	170	--	--	--	--	--
MAR											
25...	.16	--	--	--	--	110	--	--	--	--	--
MAY											
06...	.07	--	--	--	--	210	--	--	--	--	--
AUG											
12...	.12	--	--	--	--	800	--	--	--	--	--
19...	.07	770	<3	<10	<10	500	<50	50	10	<10	--
Swatara Creek basin											
01571824 - SWATARA CREEK AT RAVINE, PA (LAT 40 34 30 LONG 076 24 10)											
FEB , 1976											
10...	.07	--	--	--	--	1860	--	--	--	--	--
MAY											
13...	.07	--	--	--	--	1380	--	1320	--	--	--
Codorus Creek basin											
01574520 - WEST BR CODORUS CREEK AT STOVERSTOWN, PA (LAT 39 58 14 LONG 076 50 09)											
OCT , 1975											
21...	.08	--	--	--	--	460	--	--	--	--	3.0
FEB , 1976											
24...	.13	--	--	--	--	340	--	--	--	--	--
MAY											
12...	.20	--	--	--	--	740	--	--	--	--	--
01575680 - CODORUS CR NR NEW HOLLAND, PA. (LAT 40 00 37 LONG 076 42 37)											
OCT , 1975											
21...	.15	--	--	--	--	580	--	--	--	--	7.0
FEB , 1976											
24...	.16	--	--	--	--	420	--	--	--	--	--
MAY											
12...	.45	--	--	--	--	2000	--	--	--	--	--
JUN											
17...	.39	--	--	--	--	2440	--	--	--	--	--
Chickies Creek basin											
01575990 - CHICKIES CREEK AT MARIETTA, PA (LAT 40 03 19 LONG 076 31 33)											
OCT , 1975											
22...	1.0	--	--	--	--	340	--	--	--	--	.0
DEC											
17...	.08	80	<3	20	<10	210	<50	10	120	<10	--
FEB , 1976											
26...	.13	--	--	--	--	200	--	--	--	--	--
MAY											
11...	.20	--	--	--	--	160	--	--	--	--	--
AUG											
18...	.12	--	--	--	--	780	--	--	--	--	--

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
Pequea Creek basin												
01576789 - PEQUEA CREEK NEAR MARTIC FORGE, PA (LAT 39 53 39 LONG 076 21 34)												
OCT , 1975												
22...	1115	9813	230	7.6	15.0	32	9.7	138	0	0	46	5.5
DEC												
11...	1400	9813	250	8.5	4.5	3	13.1	168	--	0	42	15
FEB , 1976												
26...	1115	9813	340	7.6	8.1	5	13.0	126	--	0	46	2.5
MAY												
11...	0930	9813	350	7.1	16.0	8	9.5	158	0	--	44	11
AUG												
12...	1030	9813	370	7.6	21.0	20	8.6	154	0	0	44	11
23...	1515	9813	430	7.7	23.5	20	8.5	200	--	0	61	11

## Susquehanna River basin

01576990 - SUSQUEHANNA R AT HOLTWOOD, PA. (LAT 39 49 01 LONG 076 19 24)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
DEC , 1975												
29...	0900	9813	160	7.1	.5	10	13.5	82	--	0	21	7.0

## Octoraro Creek basin

01578340 - OCTORARO CR NR ATGLEN, PA. (LAT 39 56 52 LONG 075 59 29)

NOV , 1975												
12...	0900	220	6.8	9.0	11.2	78	44	17	8.7	6.4	3.1	42

01578343 - VALLEY CREEK NR ATGLEN, PA. (LAT 39 56 17 LONG 075 59 06)

NOV , 1975												
12...	1000	240	7.2	9.5	11.5	92	44	23	8.4	6.7	3.1	58

01578345 - OCTORARO CR NR ATGLEN, PA. (LAT 39 54 44 LONG 075 59 44)

NOV , 1975												
12...	1100	230	7.3	10.0	11.3	92	46	24	7.8	6.5	3.1	56

DATE	TIME	CODE FOR AGENCY COL- LECTING SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	HARD- NESS (CA,MG) (MG/L)	MINERAL ACIDITY (METHYL ORANGE) AS CACO3 (MG/L)	ACIDITY CO2 AS CACO3 (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
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## Deer Creek basin

01579800 - DEER CREEK NEAR STEWARTSTOWN, PA (LAT 39 43 23 LONG 076 36 46)

OCT , 1975												
21...	1235	9813	110	7.3	13.0	21	10.2	46	0	0	10	
NOV												
07...	1345	9813	100	8.0	14.5	2	11.0	48	--	0	7.1	

01579850 - EBAUGHS CR NR STEWARTSTOWN, PA. (LAT 39 44 44 LONG 076 36 20)

OCT , 1975												
21...	1215	9813	110	6.8	12.5	5	8.8	42	0	0	10	
NOV												
07...	1230	9813	120	7.7	15.0	2	10.2	47	--	0	9.5	
FEB , 1976												
15...	1000	9813	90	7.0	8.0	5	10.5	72	0	0	8.0	
MAY												
12...	1345	9813	120	7.3	17.0	2	10.0	45	0	0	8.7	
AUG												
19...	1600	9813	140	7.1	20.0	2	8.2	42	--	0	9.5	



DATE	ALKA-LINITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ALUM-INUM (AL) (UG/L)
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## Pequea Creek basin

01576789 - PEQUEA CREEK NEAR MARTIC FORGE, PA. (LAT 39 53 39 LONG 076 21 34)

OCT , 1975											
22...	134	28	13	--	278	--	5.8	.04	.06	.19	--
DEC											
11...	138	30	13	--	172	--	6.1	.50	.03	.17	50
FEB , 1976											
26...	114	24	13	--	244	12	4.5	.04	.07	.12	--
MAY											
11...	130	22	12	--	242	18	5.6	.10	.12	.15	--
AUG											
12...	338	20	21	--	296	--	5.2	.07	.06	.26	6860
23...	152	22	22	--	--	--	2.4	.06	.03	.27	--

## Susquehanna River basin

01576990 - SUSQUEHANNA R AT HOLTWOOD, PA. (LAT 39 49 01 LONG 076 19 24)

DEC , 1975											
29...	78	44	12	--	--	--	1.6	.07	--	.06	160

DATE	CAR-BONATE (C03) (MG/L)	ALKA-LINITY AS CAC03 (MG/L)	CARBON DIOXIDE (C02) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)
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## Octoraro Creek basin

01578340 - OCTORARO CR NR ATGLEN, PA. (LAT 39 56 52 LONG 075 59 29)

NOV , 1975												
12...	0	34	11	25	14	14	149	109	7.2	.00	.72	.72

01578343 - VALLEY CREEK NR ATGLEN, PA. (LAT 39 56 17 LONG 075 59 06)

NOV , 1975												
12...	0	48	5.9	24	15	12	157	121	6.6	.01	.63	.64

01578345 - OCTORARO CR NR ATGLEN, PA. (LAT 39 54 44 LONG 075 59 44)

NOV , 1975												
12...	0	46	4.5	22	14	11	142	116	5.3	.02	.72	.74

DATE	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	ALKA-LINITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
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## Deer Creek basin

01579800 - DEER CREEK NEAR STEWARTSTOWN, PA (LAT 39 43 23 LONG 076 36 46)

OCT , 1975											
21...	5.0	28	10	13	116	--	4.3	.05	.06	.08	
NOV											
07...	--	36	4.0	15	152	--	4.4	.03	.03	.02	

01579850 - EBAUGHS CR NR STEWARTSTOWN, PA. (LAT 39 44 44 LONG 076 36 20)

OCT , 1975											
21...	4.0	24	8.0	13	118	--	4.6	.04	.07	.07	
NOV											
07...	5.7	30	18	13	144	--	4.6	.04	.03	.03	
FEB , 1976											
15...	13	24	14	13	60	16	3.8	.05	.07	.09	
MAY											
12...	5.5	28	16	12	--	--	4.9	.04	.08	.08	
AUG											
19...	4.5	20	4.0	13	116	--	4.3	.03	.04	.06	

DATE	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
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## Pequea Creek basin

01576789 - PEQUEA CREEK NEAR MARTIC FORGE, PA. (LAT 39 53 39 LONG 076 21 34)

OCT , 1975											
22...	--	--	--	--	2800	--	--	--	--	--	3.0
DEC											
11...	--	<3	20	<10	30	<50	60	--	<10	<10	--
FEB , 1976											
26...	--	--	--	--	140	--	--	--	--	--	--
MAY											
11...	--	--	--	--	350	--	--	--	--	--	--
AUG											
12...	--	<3	<10	<10	1670	<50	70	--	20	10	--
23...	--	--	--	--	500	--	--	--	--	--	--

## Susquehanna River basin

01576990 - SUSQUEHANNA R AT HOLTWOOD, PA. (LAT 39 49 01 LONG 076 19 24)

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC , 1975											
29...	--	<3	<10	<10	670	<50	210	--	30	10	--

## Octoraro Creek basin

01578340 - OCTORARO CR NR ATGLEN, PA. (LAT 39 56 52 LONG 075 59 29)

NOV , 1975											
12...	.06	.02	1	0	1	0	30	4	40	1	20

01578343 - VALLEY CREEK NR ATGLEN, PA. (LAT 39 56 17 LONG 075 59 06)

NOV , 1975											
12...	.10	.07	1	0	1	10	60	4	70	1	20

01578345 - OCTORARO CR NR ATGLEN, PA. (LAT 39 54 44 LONG 075 59 44)

NOV , 1975											
12...	.11	.08	1	0	0	0	50	5	40	2	10

DATE	TOTAL ALUM- INIUM (AL) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
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## Deer Creek basin

01579800 - DEER CREEK NEAR STEWARTSTOWN, PA (LAT 39 43 23 LONG 076 36 46)

OCT , 1975										
21...	--	--	--	--	620	--	--	--	--	4.0
NOV										
07...	--	--	--	--	130	--	--	--	--	2.0

01579850 - EBAUGHS CR NR STEWARTSTOWN, PA. (LAT 39 44 44 LONG 076 36 20)

OCT , 1975										
21...	--	--	--	--	110	--	--	--	--	3.0
NOV										
07...	--	--	--	--	160	--	--	--	--	4.0
FEB , 1976										
15...	--	--	--	--	370	--	--	--	--	--
MAY										
12...	--	--	--	--	100	--	--	--	--	--
AUG										
19...	220	<3	<10	10	160	<50	20	<10	<10	--

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

DATE	TIME	TOTAL NITRITE PLUS NITRATE IN BOT. MAT. (MG/KG)	TOTAL AMMONIA NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL KJEL. NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL ALUMI- NUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)
Susquehanna River Basin												
01502759 - SUSQUEHANNA R AT HALLSTEAD, PA. (LAT 41 57 46 LONG 075 44 21)												
NOV , 1975	12... 1145	3.5	33	374	3700	11	3	5	8	11	5900	27
01516020 - SUSQUEHANNA R AT ATHENS, PA. (LAT 41 57 26 LONG 076 30 55)												
MAY , 1976	12... 1430	22	70	780	8700	6	1	230	16	27	21000	91
Chemung River Basin												
01526070 - CANISTEO RIVER AT ERWINS NY (LAT 42 06 21 LONG 077 09 19)												
MAY , 1976	26... 1020	7.1	23	610	5700	11	1	6	18	13	12000	15
01529930 - CONOCTON RIVER AT PAINTED POST NY (LAT 42 09 18 LONG 077 05 55)												
MAY , 1976	26... 0915	23	250	1900	5200	7	1	8	11	11	13000	26
Lackawanna River Basin												
01536102 - LACKAWANNA RIVER AT UPPER PITTSSTON, PA (LAT 41 20 46 LONG 075 46 54)												
APR , 1976	28... 1030	6.9	19	1200	1200	25	0	5	9	32	10000	89
Susquehanna River Basin												
01540505 - SUSQUEHANNA R NR RIVERSIDE, PA. (LAT 40 57 48 LONG 076 38 37)												
MAY , 1976	05... 1230	28	63	3200	6000	21	1	2	24	23	18000	37
West Branch Susquehanna River Basin												
01541550 - CLEARFIELD CR AT CLEARFIELD, PA. (LAT 41 01 04 LONG 078 24 28)												
APR , 1976	21... 0900	14	24	1000	6600	8	1	10	19	30	48000	48
01545580 - WEST BR SUSQUEHANNA R AT NORTH BEND, PA. (LAT 41 20 40 LONG 077 41 51)												
APR , 1976	20... 1530	24	45	980	6000	12	1	6	13	21	29000	81
01551505 - WEST BR SUSQUEHANNA R NR MONTICOURSVILLE, PA. (LAT 41 14 16 LONG 076 56 51)												
MAY , 1976	13... 1000	13	39	850	5500	17	0	110	26	17	8500	23
Juniata River Basin												
01565512 - KISHACOQUILLAS CR AT LEWISTOWN, PA. (LAT 40 35 40 LONG 077 34 30)												
MAR , 1976	08... 1245	.0	.0	520	3700	0	0	11	140	34	9800	1900

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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DATE	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL SILVER IN BOTTOM MA- TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	ORGANIC CARBON IN BOT- TOM MA- TERIAL (C) (G/KG)	IN- ORGANIC CARBON IN BOT- TOM MA- TERIAL (G/KG)	TOTAL CYANIDE IN BOTTOM MA- TERIAL (UG/G)	PCB IN BOTTOM MA- TERIAL (UG/KG)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)
Susquehanna River Basin												
01502759 - SUSQUEHANNA R AT HALLSTEAD, PA. (LAT 41 57 46 LONG 075 44 21)												
NOV , 1975 12...	480	.0	13	0	1	44	9.1	6.3	2	48	.0	0
01516020 - SUSQUEHANNA R AT ATHENS, PA. (LAT 41 57 26 LONG 076 30 55)												
MAY , 1976 12...	480	.2	29	1	4	95	13	1.4	0	10	.0	0
Chemung River Basin												
01526070 - CANISTEO RIVER AT ERWINS NY (LAT 42 06 21 LONG 077 09 19)												
MAY , 1976 26...	430	.1	30	0	0	150	6.6	1.1	0	0	.0	0
01529930 - CONOCTON RIVER AT PAINTED POST NY (LAT 42 09 18 LONG 077 05 55)												
MAY , 1976 26...	550	.0	19	1	0	61	20	2.5	0	0	.0	0
Lackawanna River Basin												
01536102 - LACKAWANNA RIVER AT UPPER PITTSBURGH, PA (LAT 41 20 46 LONG 075 46 54)												
APR , 1976 28...	140	.2	13	11	0	54	97	.2	0	22	.0	9
Susquehanna River Basin												
01540505 - SUSQUEHANNA R NR RIVERSIDE, PA. (LAT 40 57 48 LONG 076 38 37)												
MAY , 1976 05...	900	.1	29	3	0	97	170	.3	0	75	.0	4
West Branch Susquehanna River Basin												
01541550 - CLEARFIELD CR AT CLEARFIELD, PA. (LAT 41 01 04 LONG 078 24 28)												
APR , 1976 21...	530	.1	28	3	0	72	35	.0	0	140	.0	2
01545580 - WEST BR SUSQUEHANNA R AT NORTH BEND, PA. (LAT 41 20 40 LONG 077 41 51)												
APR , 1976 20...	330	.0	23	2	0	71	16	.0	0	60	.0	<1
01551505 - WEST BR SUSQUEHANNA R NR MONTICELLO, PA. (LAT 41 14 16 LONG 076 56 51)												
MAY , 1976 13...	190	.1	29	1	0	120	18	.1	0	17	.0	0
Juniata River Basin												
01565512 - KISHACOQUILLAS CR AT LEWISTOWN, PA. (LAT 40 35 40 LONG 077 34 30)												
MAR , 1976 08...	430	.2	340	0	0	130	26	4.0	0	380	.0	9

DATE	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	BED MAT. FALL DIAM. % FINER THAN .004 MM	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM
Susquehanna River Basin												
01502759 - SUSQUEHANNA R AT HALLSTEAD, PA. (LAT 41 57 46 LONG 075 44 21)												
NOV , 1975 12...	.0	.0	5.7	.0	.0	.0	.0	.0	0	2	36	100
01516020 - SUSQUEHANNA R AT ATHENS, PA. (LAT 41 57 26 LONG 076 30 55)												
MAY , 1976 12...	1.2	.0	1.9	.8	.0	.0	.0	.0	0	1	20	100
Chemung River Basin												
01526070 - CANISTEO RIVER AT ERWINS NY (LAT 42 06 21 LONG 077 09 19)												
MAY , 1976 26...	.0	.0	.0	.0	.0	.0	.0	.0	0	20	19	100
01529930 - COHOCTON RIVER AT PAINTED POST NY (LAT 42 09 18 LONG 077 05 55)												
MAY , 1976 26...	3.8	3.0	5.3	.0	.0	.0	.0	.0	0	2	27	100
Lackawanna River Basin												
01536102 - LACKAWANNA RIVER AT UPPER PITTSBURGH, PA (LAT 41 20 46 LONG 075 46 54)												
APR , 1976 28...	1.7	.0	3.6	1.9	.0	.0	.0	.0	0	0	7	100
Susquehanna River Basin												
01540505 - SUSQUEHANNA R NR RIVERSIDE, PA. (LAT 40 57 48 LONG 076 38 37)												
MAY , 1976 05...	1.7	1.1	1.7	1.4	.0	.0	.0	.0	0	1	22	100
West Branch Susquehanna River Basin												
01541550 - CLEARFIELD CR AT CLEARFIELD, PA. (LAT 41 01 04 LONG 078 24 28)												
APR , 1976 21...	.0	15	7.2	.0	.0	.0	.0	.0	0	1	17	100
01545580 - WEST BR SUSQUEHANNA R AT NORTH BEND, PA. (LAT 41 20 40 LONG 077 41 51)												
APR , 1976 20...	.0	1.4	7.0	.0	.0	.0	.0	.0	0	0	9	100
01551505 - WEST BR SUSQUEHANNA R NR MONTICELLO, PA. (LAT 41 14 16 LONG 076 56 51)												
MAY , 1976 13...	.0	1.7	.0	3.1	.0	.0	.0	.0	0	0	13	100
Juniata River Basin												
01565512 - KISHACOQUILLAS CR AT LEWISTOWN, PA. (LAT 40 35 40 LONG 077 34 30)												
MAR , 1976 08...	1.7	.0	3.3	.0	.0	.0	.0	.0	0	2	12	100



## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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DATE	TIME	TOTAL NITRITE PLUS NITRATE IN ROT. MAT. (MG/KG)	TOTAL AMMONIA NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL KJEL. NITRO- GEN IN BOTTOM MAT. (MG/KG)	TOTAL ALUMI- NUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)
Susquehanna River basin												
01571105 - SUSQUEHANNA R AT STEELTON, PA. (LAT 40 14 12 LONG 076 51 16)												
APR , 1976												
23...	1530	35	36	36	7200	35	2	49	52	130	28000	74
01571509 - SUSQUEHANNA R NR NEW CUMBERLAND, PA. (LAT 40 12 54 LONG 076 50 00)												
APR , 1976												
23...	1415	28	160	440	13000	10	2	15	22	35	15000	140
Conewago Creek basin												
01573825 - CONEWAGO CR AT EAST BERLIN, PA. (LAT 39 55 26 LONG 076 59 28)												
FEB , 1976												
10...	1135	50	9.3	140	2900	3	0	14	210	8	9900	300
Codorus Creek basin												
01575510 - CODORUS CR AT NORTH YORK, PA. (LAT 39 59 03 LONG 076 43 26)												
FEB , 1976												
13...	0855	37	32	538	3700	2	40	18	330	28	8300	3200
Susquehanna River basin												
01576003 - SUSQUEHANNA R AT COLUMBIA, PA. (LAT 40 59 03 LONG 076 43 26)												
APR , 1976												
23...	1040	21	120	1500	6500	27	2	12	43	44	14000	50
01576010 - SUSQUEHANNA R NR WRIGHTSVILLE, PA. (LAT 40 00 03 LONG 076 30 04)												
APR , 1976												
23...	0930	42	39	870	8900	34	1	10	17	16	20000	36
Conestoga River basin												
01576520 - CONESTOGA R NR LANCASTER, PA. (LAT 40 01 18 LONG 076 18 14)												
FEB , 1976												
13...	1220	24	38	533	5000	2	20	19	220	61	9600	2800

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

DATE	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL SELE- NIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL SILVER IN BOTTOM MA- TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)	ORGANIC CARBON IN BOT- TOM MA- TERIAL (C) (G/KG)	IN- ORGANIC CAPRON IN BOT- TOM MA- TERIAL (G/KG)	TOTAL CYANIDE IN BOTTOM MA- TERIAL (UG/G)	PCB IN BOTTOM MA- TERIAL (UG/KG)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)
Susquehanna River basin												
01571105 - SUSQUEHANNA R AT STEELTON, PA. (LAT 40 14 12 LONG 076 51 16)												
APR , 1976 23...	3300	.1	100	0	0	180	25	1.3	0	57	.0	3
01571509 - SUSQUEHANNA R NR NEW CUMBERLAND, PA. (LAT 40 12 54 LONG 076 50 00)												
APR , 1976 23...	600	.0	33	0	0	170	79	.0	0	290	.0	18
Conewago Creek basin												
01573825 - CONEWAGO CR AT EAST BERLIN, PA. (LAT 39 55 26 LONG 076 59 28)												
FEB , 1976 10...	330	.1	210	0	0	45	1.8	.3	0	1	.0	0
Codorus Creek basin												
01575510 - CODORUS CR AT NORTH YORK, PA. (LAT 39 59 03 LONG 076 43 26)												
FEB , 1976 13...	570	.2	440	0	0	130	35	5.4	0	140	.0	31
Susquehanna River basin												
01576003 - SUSQUEHANNA R AT COLUMBIA, PA. (LAT 40 59 03 LONG 076 43 26)												
APR , 1976 23...	1600	.1	48	3	0	240	110	.0	0	100	.0	10
01576010 - SUSQUEHANNA R NR WRIGHTSVILLE, PA. (LAT 40 00 03 LONG 076 30 04)												
APR , 1976 23...	500	.1	20	0	0	55	9.1	1.2	0	0	.0	0
Conestoga River basin												
01576520 - CONESTOGA R NR LANCASTER, PA. (LAT 40 01 18 LONG 076 18 14)												
FEB , 1976 13...	490	.5	320	0	10	96	23	4.7	0	4	.0	6

## ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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DATE	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	BED MAT. FALL DIAM. % FINER THAN .004 MM	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM
Susquehanna River basin												
01571105 - SUSQUEHANNA R AT STEELTON, PA. (LAT 40 14 12 LONG 076 51 16)												
APR , 1976 23...	.9	.0	.0	.4	.0	.0	.0	.0	0	0	1	100
01571509 - SUSQUEHANNA R NR NEW CUMBERLAND, PA. (LAT 40 12 54 LONG 076 50 00)												
APR , 1976 23...	4.4	3.2	8.5	2.2	.8	.0	.0	.0	0	1	12	100
Conewago Creek basin												
01573825 - CONEWAGO CR AT EAST BERLIN, PA. (LAT 39 55 26 LONG 076 59 28)												
FEB , 1976 10...	.0	.2	.0	.2	.4	.0	.0	.0	0	1	2	100
Codorus Creek basin												
01575510 - CODORUS CR AT NORTH YORK, PA. (LAT 39 59 03 LONG 076 43 26)												
FEB , 1976 13...	13	.0	20	1.7	.3	.0	.0	.0	0	3	24	100
Susquehanna River basin												
01576003 - SUSQUEHANNA R AT COLUMBIA, PA. (LAT 40 59 03 LONG 076 43 26)												
APR , 1976 23...	4.5	2.2	11	2.3	.0	.0	.0	.0	0	1	16	100
01576010 - SUSQUEHANNA R NR WRIGHTSVILLE, PA. (LAT 40 00 03 LONG 076 30 04)												
APR , 1976 23...	.0	.0	.0	.0	.0	.0	.0	.0	0	10	54	100
Conestoga River basin												
01576520 - CONESTOGA R NR LANCASTER, PA. (LAT 40 01 18 LONG 076 18 14)												
FEB , 1976 13...	1.3	.0	.0	2.1	.0	.0	.0	.0	0	7	42	100

## GROUND-WATER LEVELS

## 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, 13.36 ft (4.072 m) below land-surface datum, September 24, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.74	11.74	11.73	11.48	11.72	11.49	11.28	12.19	11.72	12.75	12.39	12.91
10	11.36	11.58	11.32	11.94	12.03	11.69	11.73	12.47	12.24	12.36	11.63	12.84
15	11.61	11.11	11.55	11.53	11.70	11.31	12.04	12.55	12.48	11.75	12.07	12.75
20	11.15	11.41	11.88	12.05	11.31	11.42	12.18	12.24	12.35	12.31	12.39	12.23
25	11.36	11.41	12.01	12.37	11.31	11.68	12.24	12.54	12.37	12.10	12.62	12.51
EOM	11.58	11.55	11.08	11.58	11.50	11.67	12.26	11.26	12.43	11.92	12.76	12.36

WTR YEAR 1976 MAX 10.63 NOV 13, 1975 MIN 13.02 SEPT 8, 1976

## 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, 3.93 ft (1.198 m) below land-surface datum, April 30, 1975; lowest, 41.42 ft (12.625 m) below land-surface datum, Feb. 13, 14, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.03	---	---	9.73	12.46	8.38	5.72	12.00	16.24	15.77	18.51	---
10	13.24	---	---	9.94	12.70	8.39	5.39	13.18	16.79	16.62	18.05	---
15	13.25	---	---	10.52	11.47	6.57	6.88	14.22	17.56	15.62	18.16	---
20	10.99	---	---	11.29	7.95	6.72	8.40	14.43	18.15	16.40	18.84	---
25	9.02	11.08	14.09	12.30	7.41	7.71	9.49	14.61	14.33	17.10	19.38	21.22
EOM	---	11.98	12.63	11.75	7.70	8.53	10.88	15.33	14.67	17.76	---	21.23

WTR YEAR 1976 MAX 4.91 APRIL 7, 1976 MIN 21.36 SEPT 28, 1976

## BEDFORD COUNTY

375

400225078280801. Local number, BD 154.

LOCATION.--Lat 40°02'08", long 78°28'25", Hydrologic Unit 02050303, at Bedford.

Owner: U.S. Geological Survey.

AQUIFER.--Ridgeley Sandstone of Lower Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 183 ft (55.78 m), cased to 163 ft (49.68 m), perforated 163 ft (49.68 m) to 183 ft (55.78 m), open end.

DATUM.--Altitude of land-surface datum is 1,150 ft (351 m). Measuring point: Top of casing, 3.67 ft (1.12 m) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--June 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.61 ft (6.892 m) below land-surface datum, July 5, 1972; lowest, 40.12 ft (12.229 m) below land-surface datum, Sept. 30, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.24	35.10	35.22	35.73	36.04	36.38	36.53	36.80	37.57	38.33	38.98	39.59
10	35.23	35.10	35.29	35.77	36.13	36.44	36.56	36.90	37.71	38.48	39.08	39.71
15	35.22	35.10	35.38	35.80	36.22	36.47	36.59	37.01	37.87	38.59	39.17	39.83
20	35.21	35.11	35.48	35.83	36.29	36.49	36.62	37.13	38.01	38.67	39.25	39.94
25	35.19	35.12	35.56	35.88	36.31	36.52	36.66	37.25	38.08	38.76	39.36	40.01
EOM	35.13	35.16	35.67	35.96	36.35	36.50	36.72	37.42	38.22	38.87	39.48	40.12

WTR YFAR 1976 MAX 35.08 NOV 9, 11, 1975 MIN 40.12 SEPT 30, 1976

## 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, 11.01 ft (3.356 m) below land-surface datum, April 15, 1974; 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.33	12.55	12.83	11.96	12.40	---	11.35	---	13.58	---	14.00	14.30
10	12.14	12.73	12.52	12.28	12.44	---	11.65	---	13.92	---	13.26	14.48
15	11.99	12.23	12.09	12.31	11.58	11.31	12.16	---	14.21	---	13.10	14.76
20	11.35	12.24	12.19	12.33	11.27	11.39	12.40	---	13.91	13.46	13.33	13.07
25	11.54	12.58	12.66	12.77	11.49	11.45	---	13.72	---	13.23	13.77	13.08
EOM	12.36	12.67	11.97	12.12	---	11.66	---	13.70	---	13.54	13.89	12.56

WTR YEAR 1976 MAX 11.02 FEB 18, 1976 MIN 14.81 SEPT 14, 1976



## 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, 1.54 ft (47 cm) below land-surface datum, Sept. 27, 1975; lowest, 11.05 ft (3.368 m) below land-surface datum, Aug. 29, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.26	6.69	7.80	6.45	5.51	2.42	5.11	8.53	9.54	9.06	9.24	---
10	5.66	7.52	7.80	9.00	6.43	3.66	6.05	8.96	9.55	9.19	6.88	---
15	6.56	6.41	7.10	9.00	5.44	4.89	7.08	9.22	9.79	9.42	7.76	---
20	2.98	6.86	7.29	8.05	2.55	5.80	7.87	9.20	9.80	9.69	8.55	10.20
25	3.71	7.45	7.78	8.47	3.29	6.38	8.34	9.26	9.61	9.96	---	10.36
EOM	5.52	7.58	5.99	4.66	4.16	6.38	8.33	9.49	9.75	9.99	---	10.45

WTR YEAR 1976 MAX 2.42 MARCH 5, 1976

MIN 10.45 SEPT 30, 1976

## 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	23.55	23.54	23.44	23.35	23.00	23.16	23.40	23.73	23.34	23.68	23.86
10	---	23.53	23.19	23.38	23.34	23.06	23.28	23.44	23.43	23.31	23.41	23.74
15	23.31	23.44	23.15	23.24	23.63	23.33	23.35	23.59	23.42	23.14	23.29	23.89
20	23.32	23.41	23.15	23.30	20.35	23.34	23.36	23.38	23.39	23.40	23.63	23.67
25	23.44	23.60	23.27	23.38	22.71	23.26	23.26	23.39	23.12	23.41	23.50	23.89
EOM	23.67	23.50	23.07	23.15	23.03	23.19	23.50	23.46	23.09	23.33	23.66	23.66

WTR YEAR 1976 MAX 20.35 FEB 20, 1976

MIN 23.97 Sept 13, 1976

## CENTRE COUNTY

377

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, 54.90 ft (16.734 m) below land-surface datum, Sept. 24, 1973; lowest, 80.14 ft (24.427 m) below land-surface datum, March 16, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	62.10	62.10	62.25	62.56	62.67	62.33	61.90	61.52	61.29	60.92	60.78	60.91
10	62.10	62.00	62.26	62.59	62.67	62.27	61.88	61.45	61.22	60.88	60.78	60.94
15	62.10	62.10	62.33	62.59	62.71	62.19	61.78	61.39	61.21	60.81	60.78	61.03
20	62.10	62.10	62.38	62.64	62.55	62.11	61.70	61.34	61.19	60.81	60.82	61.05
25	62.10	62.16	62.43	62.67	62.45	62.07	61.61	61.30	61.01	60.78	60.82	61.17
EOM	62.10	62.22	62.47	62.64	62.38	61.99	61.56	61.27	60.94	60.75	60.88	61.21

WTR YEAR 1976 MAX 60.75 JULY 30, 31, AUG 1, 8, 14, 1976 MIN 62.71 FEB 14, 15, 1976

## 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, 16.78 ft (5.115 m) below land-surface datum, June 25, 1972; 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 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 5	18.50	DEC 7	19.88	FEB 1	18.73	APR 4	18.83	JUN 6	20.19	AUG 1	20.24
12	18.07	14	19.40	8	19.33	11	19.32	13	20.24	8	20.01
19	18.39	21	18.95	15	18.46	18	19.64	20	20.04	15	19.49
26	18.68	28	19.15	22	17.32	25	19.79	27	19.87	22	19.64
NOV 2	19.43	JAN 4	18.10	29	18.65	MAY 2	19.82	JUL 4	20.01	28	20.01
9	19.77	11	18.89	MAR 7	18.06	9	19.92	11	20.14	SEP 5	20.15
16	19.01	18	18.80	14	18.59	16	20.02	18	20.06	12	20.25
23	19.47	25	19.37	21	18.98	23	20.07	25	20.18	19	20.17
30	19.79	--	-----	28	19.20	30	20.20	--	-----	26	20.09

WTR YEAR 1976 MAX 17.32 FEB 22, 1976 MIN 20.25 SEPT 12, 1976

## 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.

AQUIFER.--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, 57.00 ft (17.374 m) below land-surface datum, Dec. 8, 1952.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	47.82	48.19	48.10	47.90	46.61	46.79	48.55	49.11	48.14	48.92	---
10	---	48.08	48.20	48.10	48.18	46.57	46.86	48.90	48.89	48.09	48.95	---
15	---	47.89	48.26	48.20	48.02	46.73	47.08	49.20	48.97	48.10	48.94	49.13
20	---	47.90	48.14	48.20	47.48	46.86	47.40	49.29	48.90	48.35	49.00	49.16
25	47.10	47.98	48.10	48.30	46.95	46.92	47.69	49.34	48.19	48.53	---	49.37
EOM	47.51	48.08	48.10	48.18	46.70	47.02	48.17	49.31	47.98	48.71	---	49.40

WTR YEAR 1976 MAX 46.54 MARCH 7, 1976 MIN 49.68 MAY 16, 1976

## COLUMBIA COUNTY

410010076275001. Local number, CO 1.

LOCATION.--Lat 41°00'10", long 76°27'50", Hydrologic Unit 02050107, at Fernville.

Owner: Fred E. Walters.

AQUIFER.--Alluvium of Holocene age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in (91 cm), depth 19 ft (5.8 m), casing information not available.

DATUM.--Altitude of land-surface datum is 490 ft (149 m). Measuring point: Top of concrete cover, 2.4 ft (73 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--November 1931 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.75 ft (1.448 m) below land-surface datum, Sept. 2, 1933; lowest measured, 14.30 ft (4.359 m) below land-surface datum, Nov. 28, 1931.

## WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 6	10.20	DEC 8	10.60	FEB 2	9.90	APR 5	10.70	JUN 7	10.90	AUG 2	10.90
13	10.50	15	10.50	9	10.10	12	10.60	14	10.90	9	10.90
20	10.20	22	10.50	16	9.90	19	11.00	21	11.00	16	10.70
27	10.40	29	10.60	23	10.10	26	10.60	28	10.90	23	11.40
NOV 3	10.40	JAN 5	10.30	MAR 1	10.40	MAY 3	10.40	JUL 5	11.10	30	11.50
10	10.70	12	10.10	8	10.80	10	10.90	12	10.90	SEP 6	11.90
17	10.70	19	10.20	15	10.70	17	10.90	19	11.10	13	11.70
24	10.70	26	10.20	22	10.60	24	10.70	26	11.10	20	11.50
30	10.60	--	-----	29	10.60	31	10.70	--	-----	27	10.60

WTR YEAR 1976 MAX 9.90 FEB 2, 16, 1976 MIN 11.90 SEPT 6, 1976

## COLUMBIA COUNTY

379

410033076264901. Local number, CO 45.

LOCATION.--Lat 41°00'33", long 76°26'49", Hydrologic Unit 02050107, at Bloomsburg.

Owner: U.S. Geological Survey

AQUIFER.--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, 78.00 ft (23.774 m) below land-surface datum, Feb. 25, 1975; lowest, 88.78 ft (27.060 m) below land-surface datum, Oct. 21, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	84.05	84.05	84.11	83.91	83.73	82.97	84.27	---	84.80	85.22	86.12
10	---	84.20	84.12	84.40	84.20	83.96	---	84.53	84.35	84.87	84.84	86.25
15	---	83.52	84.34	84.19	84.14	83.81	---	84.59	84.78	---	85.03	86.13
20	82.32	83.79	84.69	86.07	83.40	83.83	84.05	83.95	85.08	85.27	85.30	85.06
25	83.23	83.78	84.96	---	83.49	83.79	84.35	83.88	84.27	84.95	85.66	85.60
EOM	83.73	83.85	83.70	---	83.70	---	---	---	84.56	84.96	85.99	84.56

WTR YEAR 1976 MAX 79.91 OCT 18, 1975 MIN 86.31 SEPT 7, 9, 1976

## 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, Apr. 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.07	15.46	15.56	15.29	14.18	14.42	13.74	17.03	17.72	20.09	23.28	25.84
10	19.52	15.69	15.84	14.91	14.24	14.88	13.72	17.58	17.55	20.62	23.74	26.27
15	18.83	14.95	16.07	15.03	14.76	14.81	14.18	---	18.07	21.20	24.11	26.58
20	17.23	14.65	16.47	15.30	14.37	14.50	14.72	---	18.77	21.70	24.53	26.74
25	16.02	14.76	16.91	15.77	14.01	14.61	15.48	18.87	19.07	22.16	24.93	---
EOM	15.49	15.07	16.59	14.54	14.08	14.92	16.37	18.20	19.52	22.75	25.43	27.07

WTR YEAR 1976 MAX 13.62 APRIL 7, 1976 MIN 27.07 SEPT 30, 1976

## 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.40	4.68	4.67	4.34	4.39	4.22	3.99	4.83	4.66	5.26	5.11	5.49
10	4.48	4.62	4.42	4.66	4.68	4.46	4.45	5.13	5.09	5.06	4.51	5.52
15	4.62	3.87	4.57	4.74	4.70	4.16	4.75	5.25	5.28	5.04	4.20	5.57
20	3.90	4.21	4.86	4.85	4.14	4.32	4.90	4.93	5.31	5.30	4.84	4.96
25	4.22	4.26	5.01	5.14	4.16	4.56	5.01	5.20	4.56	4.99	5.15	5.30
EOM	4.43	4.46	4.06	4.37	4.39	4.44	5.00	3.99	4.97	4.61	5.35	5.23

WTR YEAR 1976 MAX 3.53 NOV 13, 1975 MIN 5.58 SEPT 8, 9, 1976

## 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, 10.26 ft (3.127 m) below land-surface datum, May 12, 1968; 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.96	35.90	44.14	23.81	32.15	42.46	24.44	46.51	45.70	47.92	48.80	49.13
10	25.64	39.96	38.54	27.62	37.59	45.41	26.98	47.12	47.00	48.44	46.97	49.15
15	26.38	27.28	43.03	32.58	37.58	32.44	34.18	47.44	47.86	47.93	48.51	48.95
20	20.00	30.55	45.58	38.25	29.36	33.65	40.60	46.21	42.15	48.56	48.86	44.40
25	22.43	34.13	46.77	43.55	33.30	37.22	45.26	47.39	46.58	47.43	49.01	47.70
EOM	29.18	39.68	30.65	30.31	37.95	35.82	46.21	36.39	47.39	48.60	49.06	47.84

WTR YEAR 1976 MAX 18.95 OCT 1, 1975 MIN 49.16 SEPT 8, 9, 1976



## FRANKLIN COUNTY

381

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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.86	25.44	28.48	25.78	24.98	30.28	27.89	31.00	32.45	33.00	34.16	36.60
10	21.90	26.47	29.05	24.70	26.03	29.96	28.18	31.51	33.12	33.14	34.23	36.37
15	23.56	24.83	29.60	25.59	27.80	30.34	28.85	31.75	33.17	33.44	35.10	35.90
20	19.45	25.71	29.90	24.92	29.00	30.25	29.64	31.98	33.35	34.12	35.76	35.02
25	21.76	26.86	29.85	24.98	30.05	30.67	30.21	32.36	33.64	34.42	35.91	35.14
EOM	24.14	27.77	28.33	24.97	30.19	30.95	30.63	31.91	33.54	34.19	36.54	33.63

WTR YEAR 1976 MAX 16.67 OCT 1, 1975

MIN 36.68 SEPT 6, 1976

## 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, 1.76 ft (54 cm) below land-surface datum, April 2, 1970; 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-0.77	-0.46	-0.69	.75	.43	.47	1.23	-0.62	-0.78	-0.52	-1.57	-2.13
10	---	-0.62	-0.45	.33	.09	.22	.85	-0.82	-1.10	-0.99	-1.31	-2.22
15	---	.64	-0.12	.01	.78	.82	.30	-0.97	-1.29	-0.76	-1.39	-2.32
20	---	.24	-0.47	-0.17	1.34	.74	.04	-0.52	-0.60	-1.13	-1.67	-1.90
25	.57	-0.13	-0.69	-0.55	.95	.72	-0.18	-0.80	.89	-0.95	-1.86	-2.17
EOM	-0.15	-0.39	.24	.80	.64	.64	-0.48	-0.69	.09	-1.24	-2.02	-2.09

WTR YEAR 1976 MAX 1.44 FEB 18, 19, 1976

MIN -2.33 SEPT 14, 1976

## 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, 55.56 ft (16.935 m) below land-surface datum, Nov. 9, 1974.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	54.08	54.16	54.45	53.37	53.85	53.50	53.29	54.34	53.60	54.15	54.78	54.87
10	53.98	54.21	54.20	53.65	53.97	53.65	53.52	54.50	53.88	54.44	54.54	54.92
15	53.82	53.58	53.98	53.79	53.51	53.41	53.86	54.59	54.21	54.19	54.43	55.02
20	53.12	53.78	54.16	53.68	52.61	53.43	53.98	54.25	54.30	54.50	54.46	54.64
25	53.33	54.05	54.16	53.92	53.11	53.66	54.06	54.43	53.30	54.44	54.65	54.88
EOM	53.91	54.17	53.67	53.44	53.43	53.74	54.32	54.04	53.72	54.57	54.82	54.68

WTR YEAR 1976 MAX 52.40 FEB 19, 1976 MIN 55.08 SEPT 13, 1976

## 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, 11.67 ft (3.557 m) below land-surface datum, Feb. 23, 1971; lowest, 15.36 ft (4.682 m) below land-surface datum, Sept. 21, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.89	13.67	13.65	13.09	13.46	13.07	12.93	13.49	13.26	14.18	15.05	15.01
10	13.25	13.62	13.08	13.41	13.53	13.25	13.24	13.64	13.63	---	14.72	15.08
15	13.52	12.68	13.24	13.58	13.00	12.87	13.45	13.79	14.16	---	14.31	15.11
20	12.52	13.30	13.51	13.64	12.49	13.07	13.43	13.46	14.10	---	14.01	13.60
25	13.24	13.39	13.57	13.77	13.10	13.13	13.49	13.95	13.37	14.74	14.57	14.14
EOM	13.58	13.53	12.99	13.24	13.29	13.28	13.54	13.34	13.83	14.96	14.88	13.53

WTR YEAR 1976 MAX 11.96 NOV 12, 1975 MIN 15.13 SEPT 14, 1976

## LANCASTER COUNTY

383

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, 18.36 ft (5.596 m) below land-surface datum, July 15, 1975; lowest, 34.68 ft (10.570 m) below land-surface datum, Dec. 1, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	31.00	---	29.98	27.55	32.30	31.57	32.97	32.98	32.93	33.06	33.15
10	---	31.94	---	30.71	29.09	32.71	32.18	33.03	33.07	33.11	32.80	33.22
15	28.83	28.46	---	30.84	30.45	32.28	32.62	33.04	33.13	33.00	33.04	33.20
20	27.53	29.05	32.97	31.70	30.65	32.47	33.00	33.07	33.13	33.11	33.11	33.03
25	28.18	30.28	33.04	32.30	30.87	32.80	32.96	33.14	32.82	32.96	33.11	33.17
EOM	29.91	31.47	32.72	28.03	31.55	32.90	33.02	32.95	33.01	32.98	33.14	33.17

WTR YEAR 1976 MAX 27.07 FEB 2, 1976 MIN 33.22 SEPT 9, 10, 1976

## 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.24	52.10	52.09	51.93	51.06	50.63	50.87	52.78	53.07	53.22	53.90	54.88
10	51.88	52.59	52.31	52.12	51.62	51.14	51.36	52.95	53.33	52.97	53.67	54.40
15	52.44	51.40	52.60	52.42	52.15	51.66	52.10	53.22	53.65	53.01	53.42	54.54
20	50.68	51.27	52.83	52.43	50.42	51.99	52.72	52.86	54.28	53.48	53.16	54.06
25	50.25	51.54	53.10	52.72	49.56	51.89	52.98	52.09	53.58	53.99	53.65	54.20
EOM	51.36	51.86	51.97	50.74	50.02	51.92	52.97	52.84	53.33	53.94	54.02	53.72

WTR YEAR 1976 MAX 49.45 FEB 24, 1976 MIN 55.10 SEPT 6, 1976

## LUZERNE COUNTY

411757075505801. Local number, LU 309.

LOCATION.--Lat 41°17'57", long 75°50'58", Hydrologic Unit 02050107, at Pittston.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Glacial Outwash of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (15 cm), depth 40 ft (12.2m), cased to 35 ft (10.6 m), open end.

DATUM.--Altitude of land-surface datum is 540 ft (165 m). Measuring point: Top of casing, 2.60 ft (75 cm) above land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--January 1967 to December 18, 1975 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.64 ft (2.023 m) below land-surface datum, June 30, 1972; lowest, 21.44 ft (6.534 m) below land-surface datum, Oct. 26, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO DECEMBER 1975  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.84	---	15.72									
10	---	---	16.08									
15	---	---	15.99									
20	---	15.16	---									
25	11.51	15.23	---									
EOM	---	15.55	---									

WTR YEAR 1976 MAX 9.77 OCT 1, 1975 MIN 16.10 DEC 11, 1975

## 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	88.56	88.24	---	---	87.52	85.60	89.96	89.18	88.08	---	91.24
10	---	89.04	88.19	88.35	---	86.88	87.13	90.32	89.57	87.39	---	91.48
15	---	86.76	86.63	88.56	---	87.44	88.18	90.65	90.05	87.61	---	91.68
20	---	87.10	87.40	88.68	---	87.54	88.78	89.90	89.60	88.46	---	91.50
25	86.43	88.02	88.10	89.27	86.21	87.61	89.19	89.47	86.21	88.92	90.65	91.73
EOM	87.85	88.34	86.83	---	87.18	87.53	89.67	89.73	87.38	---	90.99	91.35

WTR YEAR 1976 MAX 85.17 OCT 1, 1975 MIN 91.76 SEPT 26, 1976

MIFFLIN COUNTY

385

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, October 30, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 6	17.95	DEC 1	19.94	FEB 4	17.95	APR 5	18.95	JUN 1	14.95	AUG 2	20.96
13	19.96	8	20.92	9	18.00	13	19.98	7	18.00	9	20.93
20	16.97	16	20.92	17	16.92	19	19.99	14	19.99	18	22.99
28	18.91	22	19.94	24	16.95	27	20.91	22	16.98	23	23.98
NOV 3	19.96	29	18.93	MAR 1	18.98	MAY 3	20.92	28	18.98	31	24.00
11	17.98	JAN 5	17.99	8	19.92	10	20.92	JUL 6	19.98	SEP 7	24.92
17	16.97	12	18.93	16	19.97	17	19.92	14	18.97	13	24.00
25	19.00	19	20.00	22	19.95	26	19.99	20	20.00	22	23.93
--	-----	28	14.98	29	19.95	--	-----	26	20.97	27	22.91

WTR YEAR 1976 MAX 14.95 JUNE 1, 1976 MIN 24.92 SEPT 7, 1976

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, 12.64 ft (3.85 m) below land-surface datum, April 2, 3, 1976; 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.49	16.14	15.55	14.36	14.38	14.03	13.19	13.99	14.33	14.73	14.57	14.92
10	17.36	16.15	15.14	---	14.41	13.95	13.50	14.00	14.44	14.98	14.62	14.91
15	16.84	15.21	14.84	---	14.49	13.40	14.31	15.73	15.14	14.41	14.98	15.01
20	15.62	15.48	15.43	---	13.65	13.53	13.59	14.60	14.40	14.70	14.59	14.14
25	15.84	15.45	15.34	15.04	13.85	13.57	13.66	14.90	14.01	14.48	14.80	14.53
EOM	16.36	15.53	14.31	14.21	13.93	13.08	13.88	14.23	14.54	14.25	14.95	14.02

WTR YEAR 1976 MAX 12.64 APRIL 2, 3, 1976 MIN 17.50 OCT 4, 1975



## 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, 29.80 ft (9.083 m) below land-surface datum, Oct. 18, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.73	21.67	17.54	20.83	18.98	---	---	18.97	19.97	22.38	26.24	27.35
10	21.24	21.92	17.42	21.72	20.26	---	---	20.20	21.60	23.14	19.41	27.73
15	22.13	15.92	18.22	21.12	17.85	---	---	21.39	23.21	22.94	21.43	28.16
20	14.70	18.92	16.35	---	12.10	---	---	21.22	18.80	21.95	23.67	26.57
25	17.87	20.45	19.44	22.38	14.10	19.78	21.80	19.81	17.00	23.44	25.84	27.89
EOM	20.53	21.09	19.49	16.33	14.73	21.11	18.19	20.12	20.10	24.32	26.67	26.94

WTR YEAR 1976 MAX 11.45 FEB 19, 1976 MIN 28.16 SEPT 15, 16, 1976

## SCHUYLKILL COUNTY

403223076224201. Local number, SC 1.

LOCATION.--Lat 40°32'23", long 76°22'42", Hydrologic Unit 02050305, at Pine Grove.

Owner: Nick C. Donofrio.

AQUIFER.--Shale of Mahantango Formation of Middle Devonian age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 52 in (132 cm), depth 33 ft (10.1 m), cased with stone.

DATUM.--Altitude of land-surface datum is 560 ft (171 m). Measuring point: Top of wooden cover at land-surface datum.

REMARKS.--None.

PERIOD OF RECORD.--October 1931, January 1932 to December 1942, September 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.56 ft (1.085 m) below land-surface datum, Aug. 31, 1940; lowest measured, 31.78 ft (9.687 m) below land-surface datum, Nov. 5, 1944.

## WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	15.50	DEC 6	15.68	FEB 7	13.33	APR 3	15.20	JUN 5	15.70	AUG 7	13.70
11	18.80	13	17.30	14	13.27	10	15.30	12	18.09	14	14.32
18	12.00	20	18.00	28	14.80	17	16.17	19	18.30	21	14.27
25	15.80	27	12.50	MAR 6	15.10	24	16.60	28	15.20	28	15.30
NOV 1	15.50	JAN 3	14.57	13	14.70	MAY 1	15.30	JUL 3	14.50	SEP 4	18.50
8	14.80	10	14.60	20	16.10	8	15.70	10	15.18	11	19.70
15	13.90	17	14.39	27	16.80	15	14.00	17	14.70	18	16.58
22	14.50	24	9.30	--	-----	22	15.30	24	14.49	25	15.60
27	15.20	28	9.86	--	-----	29	17.00	31	14.20	--	-----
--	-----	30	12.16	--	-----	--	-----	--	-----	--	-----

WTR YEAR 1976 MAX 9.30 JAN 24, 1976 MIN 19.70 SEPT 11, 1976

## SNYDER COUNTY

387

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, 19.42 ft (5.919 m) below land-surface datum, Nov. 5, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.88	19.00	19.08	18.60	18.96	19.02	18.63	19.16	19.10	19.17	19.04	19.18
10	19.00	19.04	18.69	18.94	19.11	19.06	18.96	19.22	19.22	19.14	19.13	19.19
15	19.05	18.17	18.69	18.90	19.00	18.44	19.11	19.27	19.29	19.09	18.11	19.25
20	17.74	18.75	18.97	19.10	18.41	18.85	19.15	19.27	19.30	19.20	18.84	18.66
25	18.55	18.74	19.10	19.18	18.74	19.01	19.19	19.30	18.97	19.24	19.05	19.06
EOM	18.91	18.95	18.18	18.81	18.93	19.04	19.08	19.16	19.01	18.67	19.15	18.43

WTR YEAR 1976 MAX 15.50 OCT 18, 1976 MIN 19.32 MAY 27, JUNE 17, 18, 19, 1976

## 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.03	26.62	25.75	25.58	25.30	22.29	23.94	27.39	26.66	---	29.04	29.54
10	26.11	26.84	26.13	26.30	26.05	24.32	25.94	27.81	---	---	28.33	29.64
15	26.53	22.15	24.94	25.97	24.76	25.31	26.76	28.04	---	---	28.72	29.55
20	19.79	24.96	25.95	26.23	19.96	25.81	27.30	27.25	26.87	---	29.11	28.66
25	24.30	25.70	26.79	26.86	23.37	25.03	27.70	27.07	---	28.71	29.29	29.31
EOM	25.97	25.54	23.90	23.55	25.02	24.80	27.64	26.30	---	28.82	29.43	28.84

WTR YEAR 1976 MAX 17.15 OCT 19, 1975 MIN 29.64 SEPT 9, 10, 1976

## 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, 21.59 ft (6.581 m) below land-surface datum, Feb. 24, 1976; 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.13	30.96	30.07	31.16	27.07	26.51	27.27	29.89	32.23	30.96	---	33.13
10	30.66	31.72	30.62	31.72	28.62	27.29	29.02	30.00	32.25	31.56	---	33.48
15	31.64	30.36	31.20	32.09	30.15	29.17	30.43	31.09	32.41	32.22	---	33.91
20	28.05	29.03	31.53	31.82	24.63	30.09	31.54	31.35	33.02	32.74	30.40	33.84
25	27.00	29.00	32.02	32.17	22.26	29.45	32.11	30.09	33.44	---	31.53	34.00
EOM	29.49	29.79	30.74	25.73	24.90	30.06	31.36	31.36	33.31	---	32.60	33.84

WTR YEAR 1976 MAX 21.59 FEB 24, 1976 MIN 34.01 SEPT 26, 1976

## TIOGA COUNTY

414510077333301. 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 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	10.09	DEC 6	17.40	FEB 7	17.25	APR 3	15.30	JUN 5	15.90	AUG 7	16.25
11	14.99	13	17.45	14	15.40	10	15.80	12	15.00	14	15.90
18	17.25	20	13.99	21	5.30	17	17.10	19	4.67	21	17.50
25	15.15	27	16.70	28	9.30	24	17.65	26	7.00	28	18.30
NOV 1	16.80	JAN 3	17.85	MAR 6	6.60	MAY 1	17.65	JUL 3	12.00	SEP 4	18.55
8	17.90	10	17.85	13	11.31	8	17.98	10	15.68	11	18.79
15	16.85	17	17.85	20	14.70	15	18.17	17	16.35	18	18.50
22	16.68	24	17.25	27	15.05	22	16.35	24	16.75	25	18.50
30	17.35	31	17.25	--	-----	29	15.73	31	14.95	--	-----

WTR YEAR 1976 MAX 4.67 JUNE 19, 1976 MIN 18.79 SEPT 11, 1976

## TIOGA COUNTY

389

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, 31.25 ft (9.525 m) below land-surface datum, June 25, 1976; 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.57	32.59	32.69	32.75	32.58	31.52	31.96	32.66	32.58	31.89	32.08	32.63
10	32.25	32.64	32.34	32.73	32.54	31.58	32.17	32.75	32.26	32.06	32.12	32.68
15	32.51	32.25	32.24	32.71	32.38	31.89	32.29	32.83	32.17	32.16	32.17	32.74
20	32.18	32.30	32.17	32.56	31.70	32.10	32.46	32.51	31.63	32.35	32.41	32.63
25	32.23	32.40	32.40	32.81	31.74	31.95	32.36	32.46	31.25	32.28	33.09	32.83
EOM	32.52	32.58	32.34	32.19	31.79	31.99	32.65	32.40	31.43	32.02	32.57	32.76

WTR YEAR 1976 MAX 31.25 JUNE 25, 1976 MIN 33.09 AUG 25, 1976

## 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, 25.46 ft (7.760 m) below land-surface datum, June 30, 1972; 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 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.80	36.58	37.41	37.65	38.82	---	37.35	38.80	36.79	---	39.77	40.70
10	36.32	37.25	---	37.69	38.77	---	36.93	39.10	35.61	---	39.94	40.80
15	36.88	37.41	---	37.82	38.75	---	36.94	39.35	36.22	---	40.09	40.90
20	37.21	36.80	37.84	38.08	38.22	---	37.45	39.34	37.06	---	40.23	40.93
25	36.85	36.32	37.67	38.54	---	---	37.93	39.17	37.63	39.38	40.44	41.02
EOM	36.07	36.75	37.55	38.65	---	37.55	38.43	38.47	---	39.61	40.58	41.07

WTR YEAR 1976 MAX 35.61 JUNE 10, 1976 MIN 41.07 SEPT 30, 1976

## 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, 20.41 ft (6.221 m) below land-surface datum, April 23, 1973; lowest, 33.07 ft (10.08 m) below land-surface datum, Oct. 17, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.90	24.07	23.63	23.33	23.55	23.98	22.38	25.43	26.56	26.88	28.07	29.52
10	23.84	24.56	24.12	23.07	23.82	24.48	22.23	26.04	26.45	27.40	28.08	29.77
15	24.30	23.02	24.56	23.13	24.44	23.90	22.69	26.55	26.64	27.60	28.00	29.87
20	23.90	22.52	25.20	23.49	24.23	23.29	23.40	26.71	26.76	27.98	28.35	29.34
25	23.55	22.35	25.68	24.30	23.95	23.23	24.13	27.05	26.59	28.00	28.80	29.43
EOM	23.64	22.81	24.60	23.41	23.84	23.60	25.04	26.92	26.78	27.64	29.23	---

WTR YEAR 1976 MAX 22.23 APRIL 10, 1976 MIN 29.94 SEPT 13, 1976

## YORK COUNTY

395855076401701. Local number, YO 241.

LOCATION.--Lat 39°58'55", long 76°40'17", Hydrologic Unit 02050306, at York.

Owner: Caterpillar Tractor Company.

AQUIFER.--Limestone of Conestoga Formation of Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (20 cm), depth 411 ft (125.3 m), cased to 28 ft (8.53 m), open hole.

DATUM.--Altitude of land-surface datum is 430 ft (131 m). Measuring point: Top of well pit cover 1.50 ft (46 cm) above land-surface datum.

REMARKS.--None.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.60 ft (3.231 m) below land-surface datum, June 23, 1972; lowest, 30.76 ft (9.376 m) below land-surface datum, August 19, 20, 1973.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.93	19.55	19.67	---	17.16	19.69	18.12	19.84	19.94	20.12	20.70	20.75
10	16.97	19.65	19.66	---	18.52	19.78	19.36	20.13	20.38	20.34	17.45	20.92
15	18.10	16.67	19.85	---	19.22	19.06	19.70	20.21	20.61	20.57	18.96	20.92
20	16.92	18.42	19.94	---	18.93	19.50	19.80	19.93	20.09	20.73	19.90	19.58
25	18.25	18.97	20.14	19.66	18.89	19.71	19.99	20.29	19.76	19.60	20.25	20.27
EOM	19.16	19.48	18.93	16.62	19.49	19.77	20.07	19.54	20.20	20.42	20.67	20.24

WTR YEAR 1976 MAX 14.58 OCT 1, 1975 MIN 20.92 SEPT 10, 15, 1976



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

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

Multiply English units	By	To obtain SI units
<i>Length</i>		
inches (in)	$2.54 \times 10^1$	millimeters (mm)
	$2.54 \times 10^{-2}$	meters (m)
feet (ft)	$3.048 \times 10^{-1}$	meters (m)
miles (mi)	$1.609 \times 10^0$	kilometers (km)
<i>Area</i>		
acres	$4.047 \times 10^3$	square meters (m <sup>2</sup> )
	$4.047 \times 10^{-1}$	*hectares (ha)
	$4.047 \times 10^{-1}$	square hectometers (hm <sup>2</sup> )
	$4.047 \times 10^{-3}$	square kilometers (km <sup>2</sup> )
square miles (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometers (km <sup>2</sup> )
<i>Volume</i>		
gallons (gal)	$3.785 \times 10^0$	**liters (l)
	$3.785 \times 10^0$	cubic decimeters (dm <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic meters (m <sup>3</sup> )
million gallons (10 <sup>6</sup> gal)	$3.785 \times 10^3$	cubic meters (m <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
cubic feet (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeters (dm <sup>3</sup> )
	$2.832 \times 10^{-2}$	cubic meters (m <sup>3</sup> )
cfs-days [(ft <sup>3</sup> /s) · d]	$2.447 \times 10^3$	cubic meters (m <sup>3</sup> )
	$2.447 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
acre-feet (acre-ft)	$1.233 \times 10^3$	cubic meters (m <sup>3</sup> )
	$1.233 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
	$1.233 \times 10^{-6}$	cubic kilometers (km <sup>3</sup> )
<i>Flow</i>		
cubic feet per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liters per second (l/s)
	$2.832 \times 10^1$	cubic decimeters per second (dm <sup>3</sup> /s)
	$2.832 \times 10^{-2}$	cubic meters per second (m <sup>3</sup> /s)
gallons per minute (gal/min)	$6.309 \times 10^{-2}$	liters per second (l/s)
	$6.309 \times 10^{-2}$	cubic decimeters per second (dm <sup>3</sup> /s)
	$6.309 \times 10^{-5}$	cubic meters per second (m <sup>3</sup> /s)
million gallons per day (mgal/d)	$4.381 \times 10^1$	cubic decimeters per second (dm <sup>3</sup> /s)
	$4.381 \times 10^{-2}$	cubic meters per second (m <sup>3</sup> /s)
<i>Mass</i>		
tons (short)	$9.072 \times 10^{-1}$	tonnes (t)

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

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



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