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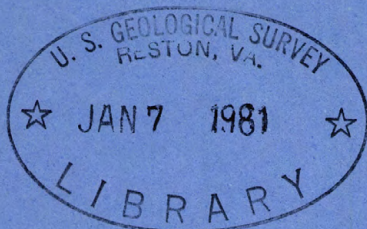
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Water Resources Data for West Virginia

Part 1. Surface Water Records

Part 2. Water Quality Records

Part 3. Ground Water Records



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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the State of West Virginia
and with other agencies

CALENDAR FOR WATER YEAR 1974

1973

OCTOBER

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SEPTEMBER

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DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

Prepared in cooperation with the State of West Virginia
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Prepared in cooperation with

West Virginia Department of Natural Resources,
Division of Water Resources

West Virginia State Department of Highways

West Virginia Geologic and Economic Survey

Clarksburg Water Board

Morgantown Water Commission

Corps of Engineers, U.S. Army

U.S. Soil Conservation Service

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
3303 Federal Building
Charleston, West Virginia 25301

1975

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WATER RESOURCES DATA FOR WEST VIRGINIA, 1974

- Part 1. Surface-Water Records
- Part 2. Water-Quality Records
- Part 3. Ground-Water Records

INTRODUCTION

Water resources data for the 1974 water year for West Virginia including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, records of water-quality data on the chemical and physical characteristics of surface water, and records of ground-water levels at index wells are given in this report. In Part 1, records are included for 131 gaging stations of which 124 are streamflow discharge stations, 1 is stage only streamflow station, and 6 are reservoir or lake stations; also included are records for 12 low-flow partial-record stations, 38 crest-stage partial-record stations and 13 miscellaneous sites. Locations of gaging stations are shown in Figure 1, and location of partial-record stations are shown in Figure 2. In Part 2, data on the quality of surface water (chemical, temperature, and sediment) were collected from designated sampling sites at predetermined intervals, such as once daily, weekly, monthly, or less frequently, and at some sites data were recorded on punched paper tape at 15-, 30-, or 60-minute intervals. Records are given for 42 sampling stations of which 30 are continuous record stations, and 12 are partial-record stations. Locations of water-quality stations are shown in Figure 1. A few pertinent stations (not included above) in bordering States are also included in this report. In Part 3, records are included for 37 observation wells of which 8 are equipped with water-level recorders that give a continuous graph of the fluctuations, 3 are equipped with digital recorders that punch the water level on a tape at hourly intervals, at 26 manual reading are made with a steel tape by observers on the days indicated. Locations of index wells are shown in Figure 2. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of Edwin E. Harris, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in West Virginia.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records beginning with the 1964 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are 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 since then are in a 5-year series. Records of chemical quality, water temperatures, and suspended sediment have been published since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." More information is given under the headings "Publications" on page 24. Records of ground water levels are published in a series of water supply papers entitled, "Ground-water Levels in the United States". Through 1955 these were in an annual series but are now in a 5-year series. More information is given under the heading "Publications" on page 25.

COOPERATION

The U.S. Geological Survey and organizations of the State of West Virginia have had cooperative agreements for the systematic collection of streamflow records since 1895. Periodic measurement of water levels in selected wells in West Virginia began in 1941. Organizations that assisted in collecting data through cooperative agreements with the survey are:

West Virginia Department of Natural Resources,
Ira S. Latimer, Jr., Director, through Division
of Water Resources, E. N. Henry, Chief.

West Virginia State Department of Highways,
William S. Ritchie, Jr., Commissioner.

West Virginia Geological and Economic Survey
Dr. Robert B. Erwin, Director

Clarksburg Water Board, G. S. Pritchard, Secretary
and General Manager.

Morgantown Water Commission, T. E. Urquhart, Manager.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, and U.S. Soil Conservation Service.

Assistance was also furnished by the National Weather Service of the U.S. Department of Commerce.

The following organizations aided in collecting records:

Appalachian Power Company and Monongahela Power Company.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined as follows:

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.

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

Fecal coliform bacteria are bacteria that are present in the intestine of feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours at $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ on M-F medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ 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 shifting portion of fragmented material of which the streambed is composed.

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

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

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water compositions(s) temperatures, period of contact, and other factors.

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.

Continuing Record Station is a specified site which meets one or all conditions listed:

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

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.

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

Cubic foot per second (ft³/s) 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.

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

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

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

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

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage. The elevation of the water surface above mean sea level may be determined by adding the gage height to the datum of the gage.

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

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

Jackson turbidity unit (JTU) is the turbidity of a particular concentration of Formazin suspension is defined as 40 Jackson turbidity units. This suspension may be diluted as required to prepare more dilute turbidity standards.

Land surface datum (lsd) is a precise datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is a permanent point from which the distance to the water surface in a well is measured to obtain the water level.

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

Milligrams per litre (mg/l , MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre represents the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to millequivalents (one thousandth of a gramequivalent weight of a constituent) per litre by multiplying by the factors in table 1, page . Concentration of suspended sediment also is expressed in mg/l , and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentration may be converted to parts per million by using the factors in table 2, page .

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

<u>Ion</u>	<u>Multi- ply by</u>	<u>Ion</u>	<u>Multi- ply by</u>
Aluminum (Al^{+3})*....	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH_4^{+1})... ..	.05544	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*... ..	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{-2}).. ..	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*.. ..	.03640
Carbonate (CO_3^{-2})... ..	.03333	Nickel (Ni^{+2})*.....	.03406
Chloride (Cl^{-1})....	.02821	Nitrate (NO_3^{-1})... ..	.01613
Chromium (Cr^{+6})*.....	.11539	Nitrite (NO_2^{-1})... ..	.02174
Cobalt (Co^{-2})*.....	.03394	Phosphate (PO_4^{-3}).. ..	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1})... ..	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1}).....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*.. ..	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2})....	.02082
Hydroxide (OH^{-1})....	.05880	Zinc (Zn^{+2})*.....	.03060

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

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.00 g/ml and a specific gravity of sediment of 2.65.

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

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

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

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

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

Particle size is the diameter, in 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) (Guy, 1969).

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

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

The particle-size distribution 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 subject to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969).

pH is a measure of the effective hydrogen-ion concentration of a solution. Ph is formally defined as the log of the reciprocal of the hydrogen-ion concentration. Measured on a scale of 0 to 14, values of less than 7 are acidic, values greater than 7 are alkaline, 7 is neutral.

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

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

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

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per millilitre (cells/ml) 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 per 100 ml of sample.

Runoff in inches (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 stream are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

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

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

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

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from 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).

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

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

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

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 water year.

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

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

Turbidity is the reduction of transparency of a sample due to the presence of suspended particulate matter. Such material may consist of clay or silt, finely divided organic matter, plankton, or other microscopic organisms which cause light to be scattered and absorbed rather than transmitted in straight lines through the sample. Turbidity is reported in Jackson turbidity units (JTU).

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 summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

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

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each gaging station, partial-record station, and water-quality 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 gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the 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 03183500, which appears just to the left of the station name includes the 2-digit part number "03" plus the 6-digit downstream order number "183500." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 1 (North Atlantic Slope basin, New York to York River) and Part 3 (Ohio River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

WELL NUMBER

The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The first 6 digits denote the degrees, minutes, and seconds of latitude followed by a letter denoting north or south. Seven digits following the letter denote degrees, minutes, and seconds of longitude. The last digit is a sequential number for wells within a 1-second grid. The system provides the geographic location of the well and a unique number for each well.

The local well-number is a unique number based on the West Virginia county magisterial system. This number is being replaced as a means of well identification by the latitude and longitude number. However, the local number is retained in this report for the sake of brevity and convenience in cross referencing between this report and earlier reports in which the local number is the sole means of well identification.

SURFACE-WATER RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from 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 15-, 30-, or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurements of stream discharge. (See selected references). Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curve 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), 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 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 stream-gaging station 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 the gage-height record and occasional winter discharge measurements, consideration being 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 station there are periods when no gage-height record is obtained or the recorder 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, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the 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." 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. 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. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents) and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year," the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record": the data given are for the period of record given

in PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) correspond 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 at the same time as the maximum discharge (or contents), it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at gaging stations, and availability of Water Quality records, is given under "REMARKS:" for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillways, and purpose and use of the reservoir, is also given under "REMARKS."

Previously published 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 "REVISIONS (WATER YEARS)" 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 were revised, that 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 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" gives the maximum and minimum daily discharge, 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 following "MAX" are the maximum daily discharge for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

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

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subjected 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.

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.

Data collected at partial-record stations and miscellaneous sites are given in three tables at the end of the surface-water records in this report. The first is a table

of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of data

The accuracy of discharge 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 interpretation 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 is 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 and miscellaneous sites.

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.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in West Virginia for the period October 1960 to September 1965 are in Water-Supply Papers 1903, 1907, and 1908, the period October 1965 to September 1970 are in Water-Supply Papers 2103, 2107, and 2108.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of records through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and month-end storage of all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in West Virginia are compiled in Water-Supply Papers 1302, and 1305 through September 1950, and in 1722, and 1725 for October 1950 to September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

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

WATER-QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment discharge in this report.

Descriptive statements are given for water-quality stations located at or near streamflow stations. Given are location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

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

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperature were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per litre (mg/l) and water temperatures in degrees Celsius (centigrade, °C). In water with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per litre can be considered equal. In waters with a density greater than 1.000 g/m., values in parts per million should be multiplied by the density to convert to milligrams per litre. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using the table on page

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per litre instead of milligrams per litre. (see "Definition of Terms," P. and table for converting English Units to SI Units, P.

Solutes

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

The daily chemical-quality data in this report generally represent equal-volume composites for 2- to 30- day periods; the composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

At chemical quality stations where monitors are installed, the records consist of daily maximum, minimum, and mean values for each constituent measured. More detailed records (hourly values) may be obtained from the district office of the U.S. Geological Survey at the address given on page of this report.

Temperature

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

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

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

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

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

Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume

that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples are collected, daily discharge of suspended sediment are estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment discharge for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, 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 periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

Publications

The annual series of water-supply papers that contain information on quality of surface waters in West Virginia are listed below.

<u>Water year</u>	<u>WSP No.</u>	<u>Water year</u>	<u>WSP No.</u>
1941	942	1955	1400
1942	950	1956	1450
1943	970	1957	1520
1944	1022	1958	1571
1945	1030	1959	1641, 1642
1946	1050	1960	1741, 1742
1947	1102	1961	1881, 1882
1948	1132	1962	1941, 1942
1949	1162	1963	1947, 1948
1950	1186	1964	1954, 1955
1951	1197	1965	1961, 1962
1952	1250	1966	1991, 1992
1953	1290	1967	2011, 2012
1954	1350	1968	2092, 2093

GROUND-WATER RECORDS

Collection and Reporting of Data

Water-level measurements in this report are given in feet (ft) and meters (m) with reference to land surface datum (lsd). Unless otherwise indicated, all water levels are below land surface. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The heights of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and at the end of each month (eom). Water levels in all other wells are measured by observers on the dates indicated.

Publications

The numbers of water supply papers containing records of water levels in West Virginia are listed below:

<u>Calendar year</u>	<u>WSP No.</u>	<u>Calendar year</u>	<u>WSP No.</u>
1941	937	1950	1166
1942	945	1951	1192
1943	987	1952	1222
1944	1017	1953	1266
1945	1024	1954	1322
1946	1072	1955	1405
1947	1097	1956-58	1538
1948	1127	1959-63	1803
1949	1157	1964-68	1978

HYDROLOGIC CONDITIONS

Streamflow averaged well above median for the year throughout the state. Runoff was near or well above median most months except February and March when runoff was below median throughout the state.

Ground-water levels were generally below average in the southeastern one third of the state and above average elsewhere. The June and September water levels at the state index well, in Gilmer County near the center of the state, were the maximum monthly highs for the period of record.

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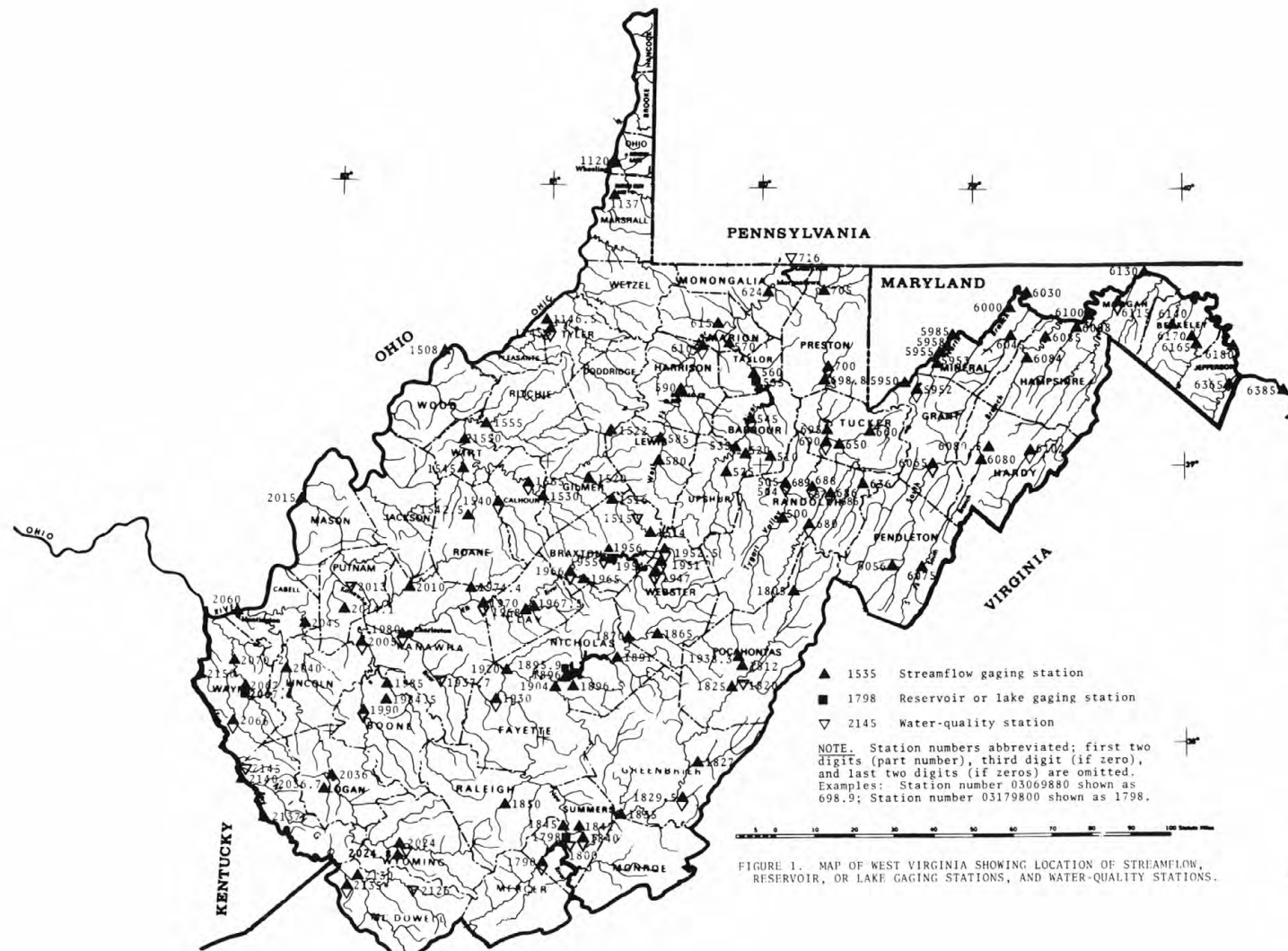
Table 4.--Factors for converting English Units to International System (SI) units

The following factors may be used to convert the English units published herein to the International System of Units (SI). 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
Length		
inches (in)	25.4	millimetres (mm)
feet (ft)	.0254	metres (m)
yards (yd)	.3048	metres (m)
rods	.9144	metres (m)
miles (mi)	5.0292	metres (m)
	1.609	kilometres (km)
Area		
acres	4047	square metres (m ²)
	.4047	*hectares (ha)
	.4047	square hectometre (hm ²)
	.004047	square kilometres (km ²)
square miles (mi ²)	2.590	square kilometres (km ²)
Volume		
gallons (gal)	3.785	**litres (l)
	3.785	cubic decimetres (dm ³)
	3.785x10 ⁻³	cubic metres (m ³)
million gallons (10 ⁶ gal)	3785	cubic metres (m ³)
	3.785x10 ⁻³	cubic hectometres (hm ³)
cubic feet (ft ³)	28.32	cubic decimetres (dm ³)
	.02832	cubic metres (m ³)
cfs-day (ft ³ /s-day)	2447	cubic metres (m ³)
	2.447x10 ⁻³	cubic hectometres (hm ³)
acre-feet (acre-ft)	1233	cubic metres (m ³)
	1.233x10 ⁻³	cubic hectometres (hm ³)
	1.233x10 ⁻⁵	cubic kilometres (km ³)
Flow		
cubic feet per second (ft ³ /s)	28.32	litres per second (l/s)
	28.32	cubic decimetres per second (dm ³ /s)
	.02832	cubic metres per second (m ³ /s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	.06309	cubic decimetres per second (dm ³ /s)
	6.309x10 ⁻⁶	cubic metres per second (m ³ /s)
million gallons per day (mgd)	43.81	cubic decimetres per second (dm ³ /s)
	.04381	cubic metres per second (m ³ /s)
Mass		
ton (short)	.9072	tonne (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 litre is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 15, 1972 edition.



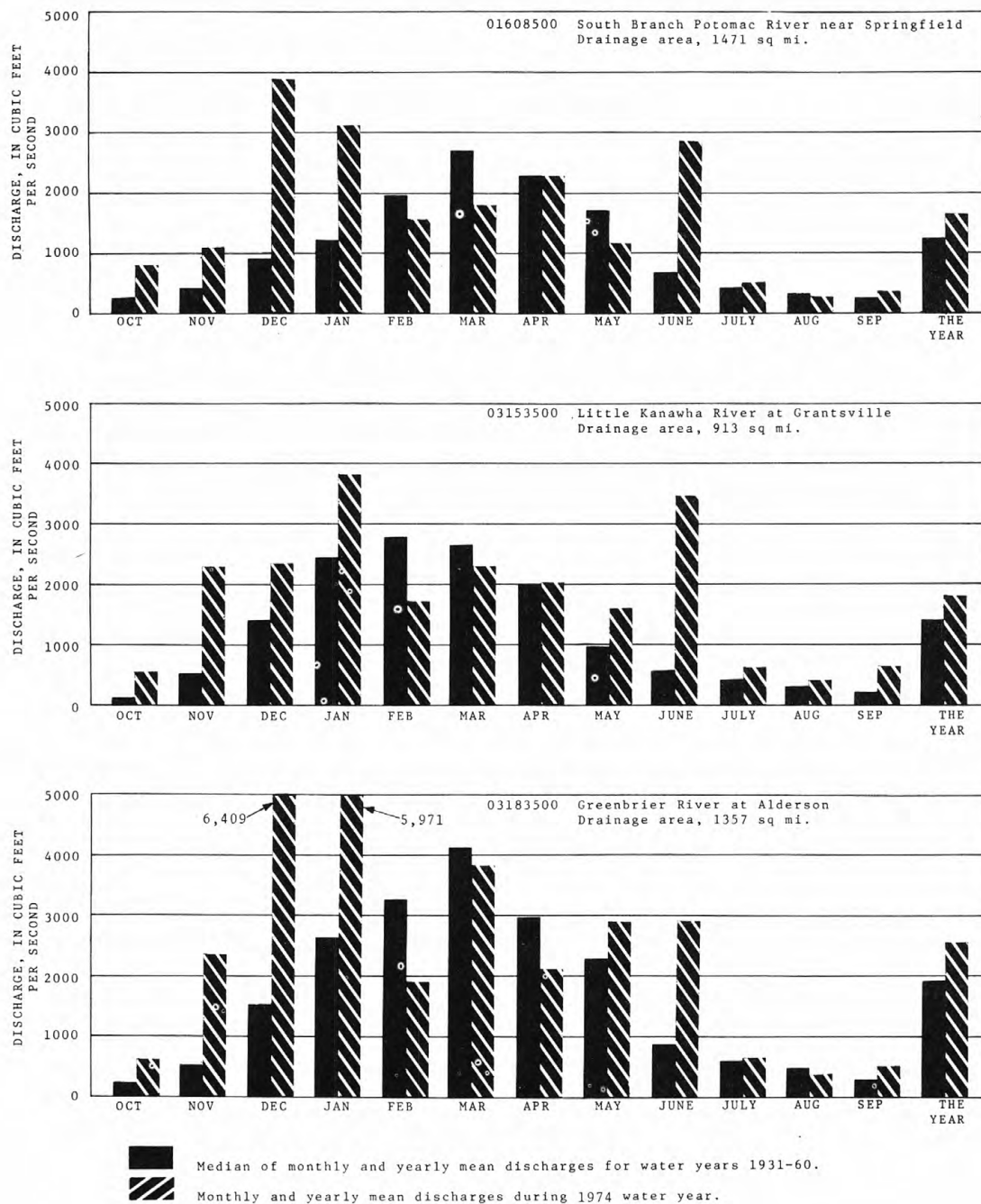


FIGURE 2.--RUNOFF DURING 1974 WATER YEAR COMPARED WITH MEDIAN RUNOFF FOR PERIOD 1931-60 FOR THREE REPRESENTATIVE GAGING STATIONS.

PART 1. SURFACE WATER RECORDS

GAGING STATION RECORDS
NORTH ATLANTIC SLOPE BASINS
POTOMAC RIVER BASIN

01595000 North Branch Potomac River at Steyer, Md.

LOCATION.--Lat 39°18'07", long 79°18'26", Garrett County, on left bank 0.3 mi (0.5 km) southeast of Steyer, 0.4 mi (0.6 km) downstream from Steyer Run, 2.0 mi (3.2 km) northeast of Gorman, and at mile 81.8 (131.6 km).

DRAINAGE AREA.--73.0 mi² (189.1 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,276.01 ft (693.728 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 170 ft³/s (4.814 m³/s), 31.62 in/yr (803 mm/yr).

EXTREMES.--Current year: Maximum discharge, 3,400 ft³/s (96.3 m³/s) Apr. 4, gage height, 7.05 ft (2.149 m); minimum, 13 ft³/s (0.37 m³/s) Aug. 27, 28, gage height, 2.21 ft (0.674 m).
Period of record: Maximum discharge, 6,240 ft³/s (177 m³/s) Mar. 5, 1963, gage height, 9.13 ft (2.783 m), from rating curve extended above 3,000 ft³/s (85.0 m³/s); minimum, 2.9 ft³/s (0.082 m³/s) Sept. 10, 1965, gage height, 2.03 ft (0.619 m).
Flood of Oct. 15, 1954, reached a stage of 13.0 ft (3.96 m), from floodmarks.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	470	242	590	190	301	211	76	1,350	420	25	35
2	120	322	193	480	225	557	377	80	1,650	300	22	45
3	130	237	171	890	195	451	297	145	783	200	22	67
4	105	180	157	770	180	311	1,570	142	457	130	30	84
5	84	164	162	660	160	269	706	114	313	110	31	49
6	75	142	148	570	150	240	435	107	237	130	24	47
7	66	120	125	500	470	276	314	99	185	100	21	191
8	64	120	113	420	343	266	349	89	155	90	21	81
9	64	154	126	1,100	252	222	500	107	145	80	22	57
10	76	125	117	2,600	215	235	354	92	130	70	27	47
11	54	112	107	1,400	189	203	280	80	120	61	19	40
12	47	109	137	660	167	207	230	167	110	54	69	36
13	42	125	143	550	211	179	359	183	100	48	57	35
14	49	123	215	480	449	155	305	131	94	43	28	386
15	42	109	164	420	282	139	268	112	190	38	20	142
16	173	186	151	370	225	148	222	102	155	51	20	88
17	105	164	125	350	192	155	186	89	120	39	72	66
18	78	142	183	330	161	135	167	230	88	34	36	56
19	66	183	170	370	176	211	151	145	64	33	42	50
20	58	162	256	680	349	204	137	120	100	33	30	44
21	55	149	537	550	228	280	120	102	180	25	23	34
22	49	131	330	460	281	280	107	89	540	25	20	44
23	45	117	264	400	266	226	151	137	1,200	32	18	38
24	43	119	226	360	210	194	128	160	840	39	17	33
25	40	118	232	320	201	157	123	125	560	29	16	30
26	43	125	1,830	280	168	145	109	107	420	39	15	29
27	43	187	1,610	260	150	131	99	94	340	49	14	27
28	49	520	711	240	157	114	87	83	290	27	14	25
29	745	370	1,250	210	-----	109	80	297	340	30	29	32
30	401	274	940	195	-----	197	74	586	250	44	46	28
31	331	-----	740	180	-----	244	-----	530	-----	30	59	-----
TOTAL	3,418	5,559	11,875	17,645	6,442	6,941	8,496	4,720	11,506	2,433	909	1,966
MEAN	110	185	383	569	230	224	283	152	384	78.5	29.3	65.5
MAX	745	520	1,830	2,600	470	557	1,570	586	1,650	420	72	386
MIN	40	109	107	180	150	109	74	76	64	25	14	25
CFSM	1.51	2.53	5.25	7.79	3.15	3.07	3.88	2.08	5.26	1.08	.40	.90
IN.	1.74	2.83	6.05	8.99	3.28	3.54	4.33	2.41	5.86	1.24	.46	1.00
CAL YR 1973	TOTAL 65,787	MEAN 180	MAX 1,830	MIN 13	CFSM 2.47	IN 33.52						
WTR YR 1974	TOTAL 81,910	MEAN 224	MAX 2,600	MIN 14	CFSM 3.07	IN 41.74						

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1830	6.80	3,100	4- 4	0945	7.05	3,400
1-10	*	*	*	6- 2	0815	6.11	2,340

* Unknown, discharge probably greater than base.

NOTE: No gage-height record Oct. 1-15, Dec. 29 to Feb. 7, and June 9 to July 15.

POTOMAC RIVER BASIN

35

01595200 Stony River near Mt. Storm, W. Va.

LOCATION.--Lat 39°16'10", long 79°15'45", Grant County, on left bank 100 ft (30 m) downstream from highway bridge on U.S. Highway 50, 1.0 mi (1.6 km) west of Mt. Storm, and at mile 6.4 (10.3 km).

DRAINAGE AREA.--48.8 mi² (126.4 km²).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,554.54 ft (778.624 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 95.6 ft³/s (2.707 m³/s), 26.60 in/yr (676 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,660 ft³/s (75.3 m³/s) Apr. 4, gage height, 7.87 ft (2.399 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s); minimum, 9.2 ft³/s (0.26 m³/s) Aug. 15, 16, gage height, 2.90 ft (0.884 m); minimum daily discharge, 9.5 ft³/s (0.27 m³/s) Aug. 15.
Period of record: Maximum discharge, 3,120 ft³/s (88.4 m³/s) Mar. 19, 1963, from rating curve extended above 1,000 ft³/s (28.3 m³/s); maximum gage height, 8.41 ft (2.563 m) Mar. 5, 1963, ice jam; minimum discharge, 1.8 ft³/s (0.051 m³/s) July 13, 1968, gage height, 1.98 ft (0.604 m).

REMARKS.--Records fair. Flow regulated by Stony River Reservoir, 14.0 mi (22.5 km) upstream from station, capacity, 1,948,000,000 gal (7.373 hm³), of which 1,681,000,000 gal (6.363 hm³) is controlled above minimum pool. Since 1963, minor regulation by Virginia Electric and Power Company dam 4.0 mi (6.4 km) upstream from station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	163	175	86	40	145	139	31	290	310	75	13
2	51	121	152	102	48	230	157	33	556	178	61	17
3	55	100	128	178	64	206	139	50	505	142	31	23
4	40	89	115	400	58	184	661	44	551	120	15	21
5	41	92	115	319	52	181	209	38	432	106	12	15
6	44	86	103	282	52	181	181	37	328	100	11	24
7	48	79	92	250	145	195	167	34	254	98	10	79
8	56	79	84	212	104	188	216	32	199	84	10	24
9	79	86	89	238	90	164	315	33	53	77	11	20
10	94	76	82	600	83	154	270	31	48	67	11	18
11	103	69	74	1,170	79	142	238	28	31	58	10	18
12	106	67	69	192	77	139	209	118	30	50	17	19
13	103	69	69	157	98	125	195	90	28	43	14	21
14	94	69	74	154	167	113	181	64	26	35	11	44
15	86	67	67	164	125	106	164	55	39	28	9.5	27
16	118	84	64	184	118	106	148	49	49	25	37	24
17	92	82	60	274	157	104	133	47	38	22	52	21
18	76	82	58	278	167	96	120	52	30	20	15	20
19	64	92	62	266	170	116	108	47	27	18	14	19
20	58	92	84	250	198	111	100	44	30	17	14	18
21	51	79	167	294	167	120	90	41	70	16	10	17
22	48	51	115	242	184	118	81	38	128	15	10	17
23	45	55	100	202	174	108	90	45	436	16	10	16
24	41	62	92	181	154	102	79	53	396	17	10	16
25	38	67	94	170	145	98	67	43	333	16	10	15
26	35	74	580	157	128	96	37	39	274	18	9.8	16
27	32	89	508	142	120	92	34	36	234	18	9.8	15
28	38	156	366	128	120	86	33	33	220	16	9.8	15
29	322	184	818	50	-----	88	31	106	209	16	11	14
30	142	152	968	43	-----	164	30	139	160	18	15	15
31	121	-----	92	40	-----	164	-----	181	-----	75	14	-----
TOTAL	2,345	2,713	5,716	7,405	3,284	4,222	4,622	1,711	6,004	1,839	559.9	641
MEAN	75.6	90.4	184	239	117	136	154	55.2	200	59.3	18.1	21.4
MAX	322	184	968	1,170	198	230	661	181	556	310	75	79
MIN	24	51	58	40	40	86	30	28	26	15	9.5	13
(/)	1,285	1,202	1,375	1,170	1,186	1,186	1,175	1,450	1,431	1,418	1,469	1,315

CAL YR 1973 TOTAL 38,642.3 MEAN 106 MAX 968 MIN 8.1 CFSM 2.17 IN 29.45

WTR YR 1974 TOTAL 41,061.9 MEAN 112 MAX 1,170 MIN 9.5 CFSM 2.30 IN 31.29

/ Month-end contents, in millions of gallons, in Stony River Reservoir, furnished by West Virginia Pulp and Paper Co.

POTOMAC RIVER BASIN

01595300 Abram Creek at Oakmont, W. Va.

LOCATION.--Lat 39°22'00", long 79°10'45", Mineral County, on downstream side of right wingwall of highway bridge, 0.5 mi (0.8 km) east of Oakmont, 1.2 mi (1.9 km) downstream from Emory Run, 1.8 mi (2.9 km) southwest of Elk Garden, and at mile 1.9 (3.1 km).

DRAINAGE AREA.--47.3 mi² (122.5 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,840 ft (560.8 m), from topographic map.

AVERAGE DISCHARGE.--18 years, 66.2 ft³/s (1.875 m³/s), 19.01 in/yr (483 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,170 ft³/s (33.1 m³/s) Dec. 26, gage height, 6.39 ft (1.948 m); minimum, 9.7 ft³/s (0.27 m³/s) Sept. 27, 28, gage height, 2.43 ft (0.741 m).

Period of record: Maximum discharge, 2,120 ft³/s (60.0 m³/s) Mar. 5, 1963, gage height, 7.78 ft (2.371 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of contracted-opening measurement at gage height 9.82 ft (2.993 m); minimum, 0.2 ft³/s (0.006 m³/s) Sept. 13-19, 1959, Sept. 14-18, 1964; minimum gage height, 1.48 ft (0.451 m) Sept. 16, 1959.
Flood of Aug. 18, 1955, reached a stage of 9.82 ft (2.993 m), from floodmarks, discharge, 3,830 ft³/s (108 m³/s), from rating curve extended as explained above.

REMARKS.--Records good except those for period of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	124	62	171	55	130	101	33	311	228	14	14
2	57	87	54	132	57	250	116	34	631	128	21	21
3	58	68	52	156	66	210	96	55	303	92	30	30
4	32	59	50	224	56	160	535	45	185	76	33	27
5	25	59	52	146	50	130	272	37	136	77	22	18
6	21	56	50	129	47	110	180	35	105	147	16	23
7	19	49	42	114	147	130	139	33	87	132	14	110
8	50	47	40	93	117	120	178	30	77	78	13	47
9	68	57	44	143	91	100	272	31	69	63	15	33
10	40	48	45	526	81	110	164	30	57	53	31	27
11	30	42	40	564	77	54	128	27	48	48	20	23
12	27	40	40	314	75	96	109	82	44	40	46	20
13	24	41	41	195	102	82	162	93	39	34	40	18
14	23	38	48	153	145	73	134	59	35	30	23	40
15	21	36	43	142	104	65	110	51	63	27	17	24
16	66	46	37	122	90	67	90	46	89	27	15	18
17	41	41	34	100	83	72	80	42	55	24	62	16
18	30	35	33	83	74	62	71	55	40	22	33	14
19	27	37	38	102	83	98	67	48	33	20	28	14
20	24	34	63	114	134	91	61	42	41	22	26	13
21	23	34	168	200	96	130	57	37	63	18	19	12
22	22	34	105	153	115	120	54	33	110	16	20	12
23	20	33	90	120	110	100	56	36	439	18	20	12
24	20	34	76	106	92	86	51	45	305	23	16	11
25	18	36	71	102	90	71	50	37	178	18	14	10
26	18	36	611	92	78	66	44	31	127	27	14	10
27	18	48	695	84	73	61	40	28	95	50	12	10
28	29	122	354	80	76	45	37	25	113	21	12	11
29	443	85	242	80	-----	46	34	38	172	18	13	15
30	162	67	229	66	-----	118	32	139	100	32	17	12
31	105	-----	189	60	-----	153	-----	114	-----	18	18	-----
TOTAL	1,582	1,573	3,738	4,866	2,464	3,246	3,520	1,471	4,150	1,627	694	665
MEAN	51.0	52.4	121	157	88.0	105	117	47.5	138	52.5	22.4	22.2
MAX	443	124	695	564	147	250	535	139	631	228	62	110
MIN	18	33	33	60	47	45	32	25	33	16	12	10
CFSM	1.08	1.11	2.56	3.32	1.86	2.22	2.47	1.00	2.92	1.11	.47	.47
IN.	1.24	1.24	2.94	3.83	1.94	2.55	2.77	1.16	3.26	1.28	.55	.52

CAL YR 1973 TOTAL 28,935.2 MEAN 79.3 MAX 695 MIN 6.8 CFSM 1.68 IN 22.76
WTR YR 1974 TOTAL 29,596.0 MEAN 81.1 MAX 695 MIN 10 CFSM 1.71 IN 23.28

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1815	6.39	1,170	6- 2	0700	5.94	915
1-10	1600	5.92	905	6-23	1530	5.92	905
4- 4	0930	6.23	1,080				

NOTE.--No gage-height record Feb. 27 to Mar. 28.

POTOMAC RIVER BASIN

37

01595500 North Branch Potomac River at Kitzmiller, Md.

LOCATION.--Lat 39°23'38", long 79°10'55", Garrett County, on left bank 0.6 mi (1.0 km) downstream from bridge on State Highway 38 in Kitzmiller, 1.5 mi (2.4 km) downstream from Wolfden Run, and at mile 68.9 (110.9 km).

DRAINAGE AREA.--225 mi² (583 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,572.26 ft (479.225 m) above mean sea level. Prior to Oct. 15, 1954, at site 0.3 mi (0.5 km) upstream at datum 7.58 ft (2.310 m) higher. Oct. 15, 1954, to Nov. 20, 1955, nonrecording gage at bridge 0.5 mi (0.8 km) upstream at datum 21.51 ft (6.556 m) higher.

AVERAGE DISCHARGE.--25 years 443 ft³/s (12.55 m³/s), 26.74 in/yr (679 mm/yr), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 7,450 ft³/s (211 m³/s) Jan. 11, gage height, 7.95 ft (2.423 m); minimum, 38 ft³/s (1.08 m³/s) Aug. 28, gage height, 2.50 ft (0.762 m).

Period of record: Maximum discharge, 33,400 ft³/s (946 m³/s) Oct. 15, 1954, gage height, 13.73 ft (4.185 m), from floodmarks, present site and datum; minimum, 4.6 ft³/s (0.13 m³/s) Oct. 3-7, 1953.

REMARKS.--Records good except those for winter months, which are fair. Regulation at low flow by Stony River Reservoir, 30 mi (48.3 km) upstream from station (see sta 01595200).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	976	648	1,040	344	700	615	185	2,530	1,140	148	72
2	355	772	570	840	340	1,050	840	180	3,890	730	129	83
3	370	620	510	1,060	424	1,010	730	311	2,160	536	123	131
4	252	516	456	1,890	359	779	3,570	311	1,570	454	88	152
5	205	480	460	1,280	314	706	1,740	248	1,200	431	81	103
6	185	442	442	1,050	304	670	1,180	233	928	464	62	90
7	170	378	370	880	864	718	920	219	726	436	54	451
8	239	355	336	712	718	694	984	198	602	320	52	205
9	307	428	355	968	560	600	1,510	214	428	272	56	138
10	280	370	351	3,480	480	585	1,130	200	324	243	77	114
11	245	332	314	5,150	438	526	928	175	262	216	62	97
12	230	318	290	2,270	394	526	786	351	236	184	135	87
13	216	329	293	1,410	446	470	1,000	554	209	160	156	83
14	208	332	438	1,070	896	411	952	344	181	141	87	472
15	190	307	374	936	648	378	824	293	204	127	59	222
16	428	403	344	832	543	386	688	261	424	128	50	145
17	336	394	307	772	510	403	600	236	319	112	190	114
18	261	351	311	712	475	351	526	595	213	97	113	98
19	219	390	322	751	490	465	470	386	171	90	93	86
20	195	374	355	840	816	490	420	318	219	90	91	77
21	175	351	1,020	1,170	620	570	370	274	358	76	68	68
22	158	293	700	1,060	694	637	336	242	1,110	70	62	74
23	147	274	605	856	706	521	386	277	2,750	75	62	66
24	138	277	538	744	585	465	347	340	2,270	106	52	58
25	128	293	505	724	565	403	325	290	1,480	83	47	54
26	122	297	3,090	659	480	382	264	233	1,110	89	45	54
27	114	407	3,950	615	442	351	233	208	836	160	42	51
28	122	1,000	2,070	565	442	318	214	185	740	90	40	51
29	1,720	864	1,700	538	-----	307	198	304	854	72	52	62
30	1,000	682	2,240	438	-----	565	187	1,270	610	125	72	55
31	758	-----	1,160	390	-----	832	-----	870	-----	112	119	-----
TOTAL	9,655	13,605	25,424	35,702	14,897	17,269	23,273	10,305	28,914	7,429	2,567	3,613
MEAN	311	454	820	1,152	532	557	776	332	964	240	82.8	120
MAX	1,720	1,000	3,950	5,150	896	1,050	3,570	1,270	3,890	1,140	190	472
MIN	114	274	290	390	304	307	187	175	171	70	40	51

CAL YR 1973 TOTAL 179,885 MEAN 493 MAX 3,950 MIN 36 CFSM 2.19 IN 29.73
WTR YR 1974 TOTAL 192,653 MEAN 528 MAX 5,150 MIN 40 CFSM 2.35 IN 31.84

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1930	7.80	6,750	6- 1	0130	6.86	3,710
1-10	1700	7.83	6,880	6- 2	0945	7.59	5,860
1-11	1100	7.95	7,450	6-23	1800	7.63	6,020
4- 4	1345	7.93	7,350				

POTOMAC RIVER BASIN

01595800 North Branch Potomac River at Barnum, W. Va.

LOCATION.--Lat 39°26'44" long 79°06'39", Garrett County, Md., on left bank at bridge at Barnum, 0.4 mi (0.6 km) upstream from Folly Run, and 4.0 mi (6.4 km) southwest of Piedmont.

DRAINAGE AREA.--266 mi² (689 km²).

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,151.93 ft (351.108 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 531 ft³/s (15.04 m³/s), 27.11 in/yr (689 mm/yr).

EXTREMES.--Current year: Maximum discharge, 6,750 ft³/s (191 m³/s) Apr. 4, gage height, 8.02 ft (2.444 m); minimum, 42 ft³/s (1.19 m³/s) Aug. 28, 29, gage height, 2.32 ft (0.707 m).

Period of record: Maximum discharge, 12,800 ft³/s (362 m³/s) Dec. 8, 1972, gage height, 9.86 ft (3.005 m); minimum, 10 ft³/s (0.28 m³/s) Oct. 2, 3, 1968, gage height, 1.69 ft (0.515 m).

REMARKS.--Records fair. Regulation at low flow by Stony River Reservoir, 39 mi (63 km) upstream from station (see sta 01595200).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	1,050	700	1,100	380	760	660	195	2,700	1,200	155	77
2	380	820	620	900	370	1,100	900	195	4,300	800	135	88
3	400	660	550	1,150	450	1,050	780	330	2,400	570	130	140
4	270	552	470	2,000	390	850	3,500	330	1,700	480	95	160
5	208	512	460	1,400	340	760	1,900	260	1,300	460	86	110
6	178	480	470	1,150	330	720	1,300	250	1,000	490	66	96
7	172	398	382	950	900	760	1,000	230	770	460	58	480
8	246	370	340	770	780	730	1,050	210	640	340	56	220
9	330	462	365	1,050	620	640	1,600	230	450	290	60	145
10	300	394	376	3,620	520	620	1,250	220	350	260	82	120
11	260	342	325	4,800	470	560	1,000	190	280	230	66	105
12	240	323	288	2,500	420	560	850	380	250	200	145	95
13	230	339	297	1,550	480	500	1,050	580	220	170	170	90
14	223	357	474	1,150	950	440	1,000	370	195	150	92	490
15	194	324	404	1,050	700	400	900	320	220	135	63	240
16	462	426	370	900	600	410	750	280	450	140	54	155
17	365	420	330	850	550	430	650	250	340	120	200	115
18	258	350	310	760	520	380	570	620	230	105	125	105
19	216	422	345	800	540	500	500	420	180	95	100	92
20	205	400	355	900	880	530	450	340	230	95	96	82
21	175	370	1,170	1,300	680	610	400	300	380	80	72	74
22	158	320	750	1,150	750	680	360	260	1,200	75	66	78
23	155	291	650	950	770	560	410	290	2,900	80	66	70
24	145	289	580	800	630	500	370	360	2,400	115	56	62
25	135	316	550	780	600	440	350	310	1,600	90	50	58
26	130	319	3,240	720	520	410	290	250	1,200	95	48	58
27	120	453	4,350	660	480	380	250	220	900	170	44	55
28	130	1,100	2,200	620	480	340	230	200	800	95	43	54
29	1,800	950	1,800	580	-----	330	210	330	900	75	56	66
30	1,100	750	2,400	470	-----	620	200	1,350	650	135	76	58
31	800	-----	1,200	420	-----	880	-----	950	-----	120	125	-----
TOTAL	10,185	14,559	27,121	37,800	16,100	18,450	24,730	11,020	31,135	7,920	2,736	3,838
MEAN	329	485	875	1,219	575	595	824	355	1,038	255	88.3	128
MAX	1,800	1,100	4,350	4,800	950	1,100	3,500	1,350	4,300	1,200	200	490
MIN	120	289	288	420	330	330	200	190	180	75	43	54
CAL YR 1973	TOTAL 201,643		MEAN 552	MAX 4,350	MIN 42	CFSM 2.08	IN 28.19					
WTR YR 1974	TOTAL 205,594		MEAN 563	MAX 4,800	MIN 43	CFSM 2.12	IN 28.74					

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2030	7.85	6,320	4- 4	1200	8.02	6,750
1-10	1730	7.87	6,360	6- 2	0945	7.83	6,260
1-11	1115	7.90	6,440				

NOTE: No gage-height record Dec. 2-6, June 17-26 and Sept. 9-30.

POTOMAC RIVER BASIN

39

01598500 North Branch Potomac River at Luke, Md.

LOCATION.--Lat 39°28'45", long 79°03'55", Mineral County, W. Va., on right bank 0.2 mi (0.3 km) downstream from Savage River, 0.5 mi (0.8 km) northwest of Luke, and at mile 53.3 (85.8 km).

DRAINAGE AREA.--404 mi² (1,046 km²).

PERIOD OF RECORD.--June 1899 to July 1906 (published as "at Piedmont, W. Va."), October 1949 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 946.25 ft (288.417 m) above mean sea level, adjustment of 1912. June 27, 1899, to July 15, 1906, nonrecording gage at bridge 1.1 mi (1.8 km) downstream at datum about 35 feet (11 m) lower.

AVERAGE DISCHARGE.--31 years (1899-1905, 1949-1974), 699 ft³/s (19.80 m³/s), 23.50 in/yr (597 mm/yr), adjusted for storage since 1949.

EXTREMES.--Current year: Maximum discharge, 7,910 ft³/s (224 m³/s) Dec. 26, gage height, 8.64 ft (2.633 m); minimum, 103 ft³/s (2.92 m³/s) Aug. 8, gage height, 1.30 ft (0.396 m).
Period of record: Maximum discharge, 39,400 ft³/s (1,120 m³/s) Oct. 15, 1954, gage height, 17.15 ft (5.227 m); minimum daily, 6 ft³/s (0.17 m³/s) Sept. 4, 1904.

REMARKS.--Records good. Flow regulated since 1913 by Stony River Reservoir, 45 mi (72.4 km) upstream from station (see sta 01595200), and since December 1950, by Savage River Reservoir, 5 mi (8.0 km) upstream from station. Some regulation at low flow by West Virginia Pulp and Paper Company at site used 1899-1906.

REVISIONS (WATER YEARS).--WSP 192: 1899-1904. WSP 1432: 1905-6, drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294	1,710	1,320	1,880	675	929	834	253	3,300	1,310	198	616
2	429	1,380	1,200	1,470	603	1,270	1,050	250	4,990	1,000	208	323
3	535	1,040	825	1,270	696	1,400	987	384	3,550	706	192	210
4	392	907	564	2,650	641	1,340	3,740	429	2,350	890	152	223
5	333	868	577	1,890	542	1,400	2,830	342	1,680	1,620	139	178
6	301	700	613	1,600	466	1,130	2,980	320	1,260	924	122	152
7	283	518	526	1,410	1,000	963	1,220	320	985	710	109	515
8	296	486	482	1,210	1,040	1,190	1,220	315	804	789	109	317
9	512	559	514	1,230	794	1,040	1,980	319	623	588	121	212
10	410	522	526	3,780	697	802	1,470	308	464	282	133	174
11	368	466	474	6,350	655	757	1,230	279	383	252	141	154
12	349	446	411	4,520	577	740	1,060	441	332	219	151	144
13	888	458	407	3,960	604	698	1,350	1,110	300	190	269	146
14	1,210	474	676	3,330	1,240	620	1,340	743	262	168	178	490
15	639	442	710	1,970	1,070	685	1,150	626	265	153	132	350
16	491	518	662	1,280	931	573	969	536	585	144	125	236
17	436	564	622	1,260	834	608	835	474	526	142	221	193
18	313	498	490	1,230	693	550	735	1,050	337	123	228	173
19	266	522	466	1,250	692	602	661	867	256	120	173	159
20	494	530	466	1,350	1,090	682	600	749	337	125	177	151
21	642	622	1,250	1,710	907	679	536	646	378	116	156	141
22	375	442	992	2,200	1,140	868	494	558	1,350	111	146	139
23	178	522	825	2,100	1,430	699	532	529	2,810	123	144	139
24	163	618	730	1,530	1,020	634	506	598	4,090	149	135	130
25	156	644	676	1,220	824	552	453	538	2,650	144	237	124
26	152	522	3,530	1,140	640	502	365	421	2,080	133	128	122
27	147	550	6,270	1,080	836	488	320	371	1,410	209	124	120
28	154	1,580	4,750	886	853	445	296	326	1,110	161	121	124
29	2,020	1,960	4,020	807	-----	426	275	345	1,260	130	122	130
30	1,370	1,730	4,210	666	-----	629	259	1,510	901	159	140	128
31	1,310	-----	2,020	704	-----	1,200	-----	963	-----	149	483	-----
TOTAL	15,906	22,798	41,804	58,933	23,190	25,101	32,277	16,920	41,628	12,039	5,214	6,413
MEAN	513	760	1,349	1,901	828	810	1,076	546	1,388	388	168	214
MAX	2,020	1,960	6,270	6,350	1,430	1,400	3,740	1,510	4,990	1,620	483	616
MIN	147	442	407	666	466	426	259	250	256	111	109	120

CAL YR 1973 TOTAL 284,123 MEAN 778 MAX 6,450 MIN 84 CFSM 1.93 IN 26.15
WTR YR 1974 TOTAL 302,223 MEAN 828 MAX 6,350 MIN 109 CFSM 2.05 IN 27.82

POTOMAC RIVER BASIN

01600000 North Branch Potomac River at Pinto, Md.

LOCATION.--Lat 39°33'59", long 78°50'25", Mineral County, W. Va., on right bank at downstream side of Western Maryland Railway bridge at Pinto, 2.8 mi (4.5 km) downstream from Mill Run, and at mile 32.6 (52.4 km).

DRAINAGE AREA.--596 mi² (1,544 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 648.23 ft (197.581 m) above mean sea level, Corps of Engineers bench mark. Prior to Dec. 10, 1938, nonrecording gage at highway bridge 250 ft (76 m) downstream at same datum.

AVERAGE DISCHARGE.--36 years, 874 ft³/s (24.75 m³/s), 19.91 in/yr (506 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 10,800 ft³/s (306 m³/s) Dec. 27, gage height, 12.02 ft (3.664 m); minimum, 118 ft³/s (3.34 m³/s) Sept. 28, gage height, 1.89 ft (0.576 m).

Period of record: Maximum discharge, 37,000 ft³/s (1,050 m³/s) Oct. 16, 1954, gage height, 23.23 ft (7.081 m); minimum 31 ft³/s (0.88 m³/s) Dec. 18, 1943, gage height, 1.37 ft (0.418 m), result of freezeup.

Flood of Mar. 29, 1924, reached a stage of about 24 ft (7.3 m), discharge, about 55,000 ft³/s (1,560 m³/s). Flood of Mar. 17, 1936, reached a stage of about 23.5 ft (7.16 m), from floodmarks, discharge, about 50,000 ft³/s (1,420 m³/s).

REMARKS.--Records good. Some regulation at low flow by Stony River Reservoir, 66 mi (106 km) upstream from station (see sta 01595200), and since December 1950, by Savage River Reservoir.

REVISIONS (WATER YEARS).--WSP 1332: 1943.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	436	1,790	1,460	2,340	982	1,080	1,240	382	3,270	1,340	196	697
2	447	1,670	1,340	1,950	858	1,300	1,300	367	5,450	1,380	228	466
3	747	1,210	1,110	1,520	935	1,780	1,370	483	4,350	943	279	346
4	559	1,060	734	2,770	905	1,510	4,000	603	2,760	786	237	295
5	435	1,020	716	2,230	799	1,620	3,570	497	2,020	1,940	187	249
6	380	958	795	1,900	738	1,480	3,670	449	1,540	1,370	166	203
7	350	682	676	1,710	917	1,200	1,730	435	1,230	1,000	145	617
8	341	617	606	1,480	1,410	1,340	1,550	437	1,030	876	135	505
9	556	652	723	1,390	1,050	1,380	2,590	431	870	943	140	303
10	479	666	834	4,070	926	1,080	2,100	450	655	423	169	218
11	445	584	737	8,450	877	1,020	1,740	380	546	374	178	188
12	409	548	623	5,700	799	992	1,510	510	461	321	189	167
13	677	541	616	4,540	844	968	1,750	1,410	421	283	304	161
14	1,300	561	750	3,650	1,280	866	1,970	1,050	368	249	250	355
15	996	541	914	2,650	1,330	898	1,640	885	352	226	181	495
16	413	563	825	1,700	1,150	792	1,410	765	656	213	152	291
17	608	686	798	1,650	1,080	815	1,230	668	752	206	288	232
18	388	592	665	1,560	921	763	1,090	1,130	499	186	352	198
19	327	585	590	1,520	897	738	984	1,150	370	170	236	182
20	394	626	608	1,720	1,220	907	897	998	445	173	212	173
21	712	689	1,330	2,130	1,190	838	805	873	478	167	203	161
22	602	563	1,340	2,750	1,200	1,150	746	765	1,300	152	187	152
23	229	528	1,100	2,570	1,710	947	732	709	2,250	157	184	155
24	206	699	1,010	2,090	1,390	871	761	766	5,000	198	172	147
25	192	740	921	1,640	1,090	781	672	726	2,970	213	240	138
26	187	690	3,120	1,510	970	723	565	580	2,490	190	212	133
27	182	620	8,890	1,430	1,010	685	494	508	1,740	309	155	130
28	182	1,450	6,010	1,270	1,200	632	455	451	1,380	278	147	133
29	2,400	2,060	4,610	1,170	-----	603	425	424	1,560	194	147	152
30	2,090	1,980	4,860	995	-----	757	404	1,420	1,200	177	155	141
31	1,450	-----	2,490	948	-----	1,600	-----	1,120	-----	217	374	-----
TOTAL	19,119	26,171	51,801	73,003	29,678	32,116	43,400	21,822	48,413	15,654	6,400	7,783
MEAN	617	872	1,671	2,355	1,060	1,036	1,447	704	1,614	505	206	259
MAX	2,400	2,060	8,890	8,450	1,710	1,780	4,000	1,420	5,450	1,940	374	697
MIN	182	528	590	948	738	603	404	367	352	152	135	130
CAL YR 1973	TOTAL 373,415	MEAN 1,023	MAX 9,480	MIN 125	CFSM 1.72	IN 23.30						
WTR YR 1974	TOTAL 375,360	MEAN 1,028	MAX 8,890	MIN 130	CFSM 1.73	IN 23.42						

01603000 North Branch Potomac River near Cumberland, Md.

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

DRAINAGE AREA.-- 875 mi² (2,266 km²).

PERIOD OF RECORD.--May 1929 to current year. Gage-height records collected at various sites about 2.0 mi (3.2 km) upstream from September 1901 to December 1932 and thereafter at present site, are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 585.22 ft (178.375 m) above mean sea level, Corps of Engineers bench mark. Prior to June 18, 1929, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--45 years, 1,231 ft³/s (34.86 m³/s), 19.11 in/yr (483 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 13,900 ft³/s (394 m³/s) Jan. 11, gage height, 12.47 ft (3.801 m); minimum, 166 ft³/s (4.70 m³/s) Sept. 28, gage height, 2.32 ft (0.707 m).
Period of record: Maximum discharge, 88,200 ft³/s (2,500 m³/s) Mar. 17, 1936, gage height, 29.1 ft (8.87 m), from rating curve extended above 33,000 ft³/s (935 m³/s) on basis of slope-area measurement of peak flow; minimum (river only), 12 ft³/s (0.34 m³/s) Sept. 22, 1932, gage height, 2.38 ft (0.725 m); minimum daily (including flow in canal), 38 ft³/s (1.08 m³/s) Sept. 24, 1932.
Flood of June 1, 1889, reached a stage of 29.2 ft (8.90 m), discharge, about 89,000 ft³/s (2,520 m³/s).
Flood of Mar. 29, 1924, reached a stage of 28.4 ft (8.66 m), discharge, about 82,000 ft³/s (2,320 m³/s).

REMARKS.--Records good. Regulation by Stony River Reservoir, about 79 mi (127 km) upstream from station (see sta 01595200), and since December 1950, by Savage River Reservoir. Prior to July 1957, small amount of inflow from industrial wastes and sewage from city of Cumberland from water diverted from Evitts Creek, mouth of which is downstream from station. Diversion to Chesapeake and Ohio Canal prior to 1935.

REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 781: 1932(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	579	2,490	2,150	3,630	1,500	1,460	2,030	522	4,020	2,220	260	734
2	538	2,400	1,850	3,180	1,320	1,690	2,030	506	6,410	2,630	304	774
3	890	1,660	1,600	2,380	1,370	2,400	2,190	597	6,370	1,600	353	639
4	740	1,400	1,070	3,700	1,330	1,980	4,190	770	4,030	1,220	332	414
5	570	1,320	1,070	3,230	1,150	2,180	5,570	670	2,940	2,380	272	339
6	490	1,280	1,280	2,740	1,080	2,070	5,100	579	2,190	2,310	236	290
7	455	940	1,100	2,460	1,060	1,670	2,890	562	1,720	1,490	208	588
8	434	841	1,000	2,080	1,940	1,810	2,340	546	1,410	1,150	186	710
9	597	831	1,480	1,950	1,390	2,050	3,730	546	1,210	1,320	197	396
10	588	869	1,790	4,490	1,210	1,920	3,290	562	951	660	346	297
11	546	770	1,510	11,700	1,160	1,880	2,750	514	810	562	290	248
12	506	715	1,250	9,700	1,070	1,790	2,390	588	682	483	254	224
13	579	696	1,150	6,900	1,110	1,650	2,580	2,190	620	420	360	219
14	1,390	710	1,180	5,360	1,490	1,420	3,070	2,150	549	378	360	248
15	1,260	699	1,350	4,240	1,730	1,310	2,620	1,630	541	346	266	633
16	455	709	1,190	2,910	1,460	1,300	2,290	1,340	871	318	254	378
17	720	850	1,130	2,990	1,370	1,220	1,970	1,140	1,030	290	346	297
18	498	770	978	2,830	1,210	1,140	1,700	1,200	742	272	414	254
19	414	738	898	2,730	1,170	1,090	1,500	2,010	564	248	325	224
20	384	782	932	2,950	1,460	1,220	1,320	1,700	612	236	272	208
21	790	763	1,840	4,080	1,630	1,220	1,160	1,440	645	230	266	202
22	760	811	2,110	5,370	1,620	1,590	1,080	1,260	1,360	208	248	197
23	353	634	1,710	4,460	2,540	1,350	1,030	1,140	2,400	214	242	192
24	278	842	1,550	3,580	2,250	1,260	1,040	1,140	7,060	290	224	192
25	260	907	1,380	2,730	1,770	1,160	920	1,110	4,200	290	202	186
26	248	909	3,380	2,410	1,530	1,080	810	905	3,500	378	325	175
27	236	813	12,500	2,250	1,420	1,030	690	769	2,450	570	192	170
28	297	2,180	9,850	2,020	1,760	962	633	685	1,890	476	186	175
29	4,720	3,350	7,110	1,880	-----	932	579	663	2,080	360	192	202
30	4,300	3,000	6,780	1,580	-----	1,120	554	1,660	1,630	290	202	192
31	2,400	-----	3,840	1,440	-----	2,330	-----	1,520	-----	297	248	-----
TOTAL	27,275	35,679	78,008	113,950	41,100	47,284	64,046	32,614	65,487	24,136	8,362	9,997
MEAN	880	1,189	2,516	3,676	1,468	1,525	2,135	1,052	2,183	779	270	333
MAX	4,720	3,350	12,500	11,700	2,540	2,400	5,570	2,190	7,060	2,630	414	774
MIN	236	634	898	1,440	1,060	932	554	506	541	208	186	170

CAL YR 1973 TOTAL 560,561 MEAN 1,536 MAX 14,200 MIN 170 CFSM 1.76 IN 23.83
WTR YR 1974 TOTAL 547,938 MEAN 1,501 MAX 12,500 MIN 170 CFSM 1.72 IN 23.29

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-27	1200	12.34	13,700	1-11	2230	12.47	13,900

POTOMAC RIVER BASIN

01604500 Patterson Creek near Headsville, W. Va.

LOCATION.--Lat 39°26'35", long 78°49'20", Mineral County, on right bank 100 ft (30 m) downstream from Hazel Run, 1.0 mi (1.6 km) downstream from Cabin Run, 4.0 mi (6.4 km) northeast of Headsville, 8.0 mi (12.9 km) east of Keyser, and at mile 12.5 (20.1 km).

DRAINAGE AREA.--219 mi² (567 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 624.90 ft (190.470 m) above mean sea level, Corps of Engineers bench mark. Prior to Oct. 11, 1946, nonrecording gage on bridge 1.0 mi (1.6 km) upstream at datum 6.14 ft (1.871 m) higher. Oct. 11-23, 1946, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--36 years, 163 ft³/s (4.616 m³/s), 10.11 in/yr (257 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,660 ft³/s (75.3 m³/s) Dec. 26, gage height, 8.96 ft (2.731 m); minimum, 19 ft³/s (0.54 m³/s) Sept. 26, 27, 28, 30; minimum gage height, 2.72 ft (0.829 m) Sept. 27, 28, 30. Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) Aug. 18, 1955, gage height, 12.20 ft (3.719 m), from rating curve extended above 4,900 ft³/s (139 m³/s) on basis of contracted-opening measurement at gage height 11.53 ft (3.514 m); minimum, 1.2 ft³/s (0.034 m³/s) Sept. 10-12, 1965; minimum gage height, 2.02 ft (0.616 m) Oct. 2, 1953.

REMARKS.--Records good. The flow from 110 mi² (285 km²) upstream from station is partially controlled, but not diverted, by several floodwater detention reservoirs with a total combined detention capacity of 18,870 acre-ft (23.3 hm³).

REVISIONS (WATER YEARS).--WSP 951: 1939-40.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	255	143	510	163	149	377	87	125	261	31	37
2	161	207	127	440	155	161	335	86	850	279	26	52
3	211	179	115	416	165	187	282	99	696	223	34	44
4	159	155	109	454	150	192	1,020	99	472	180	39	52
5	117	147	107	402	140	187	808	91	381	205	33	48
6	85	153	104	367	135	180	591	88	314	367	29	45
7	68	143	97	332	139	185	489	81	261	237	25	223
8	61	131	89	282	151	183	461	78	220	200	23	229
9	62	119	139	261	140	172	650	75	185	155	22	172
10	72	109	267	1,150	135	174	580	73	157	119	21	129
11	62	99	300	1,330	130	161	486	69	133	88	30	99
12	55	93	240	958	145	165	426	83	100	69	38	78
13	49	86	209	724	161	163	552	119	78	58	41	64
14	44	83	201	594	174	151	507	106	65	48	37	60
15	50	79	191	538	180	141	419	94	63	44	32	48
16	49	77	181	479	180	139	342	84	157	41	28	42
17	47	75	170	412	178	135	282	75	155	38	34	37
18	45	70	160	356	172	125	240	75	103	34	72	34
19	43	69	150	314	167	122	207	70	75	33	64	32
20	41	66	167	279	174	120	183	65	68	32	56	30
21	40	65	532	454	159	125	161	57	64	29	46	28
22	38	62	494	503	161	133	147	53	66	26	41	26
23	37	61	417	419	178	123	141	54	240	25	40	25
24	36	59	420	356	172	119	131	54	647	28	37	22
25	34	59	384	318	172	112	120	48	430	27	33	21
26	33	59	1,180	282	161	109	111	45	346	25	33	20
27	31	61	1,760	261	151	106	105	41	276	36	31	19
28	33	99	1,110	234	140	103	100	38	232	44	28	19
29	546	169	801	218	-----	103	96	37	291	40	25	23
30	456	159	647	195	-----	163	91	40	243	43	28	20
31	309	-----	573	180	-----	451	-----	47	-----	37	34	-----
TOTAL	3,111	3,248	11,584	14,018	4,428	4,839	10,440	2,211	7,493	3,071	1,091	1,778
MEAN	100	108	374	452	158	156	348	71.3	250	99.1	35.2	59.3
MAX	546	255	1,760	1,330	180	451	1,020	119	850	367	72	229
MIN	31	59	89	180	130	103	91	37	63	25	21	19
CFSM	.46	.49	1.71	2.06	.72	.71	1.59	.33	1.14	.45	.16	.27
IN.	.53	.55	1.97	2.38	.75	.82	1.77	.38	1.27	.52	.19	.30
CAL YR 1973	TOTAL 87,976	MEAN 241	MAX 2,800	MIN 22	CFSM 1.10	IN 14.94						
WTR YR 1974	TOTAL 67,312	MEAN 184	MAX 1,700	MIN 19	CFSM .84	IN 11.43						

POTOMAC RIVER BASIN

43

01605600 Friends Run near Franklin, W. Va.

LOCATION.--38°39'23", long 79°23'31", Pendleton County, on right bank 50 ft (15 m) upstream from culvert on Secondary State Route 5/9, 300 ft (91 m) from intersection with U.S. Highway 33, 3.4 mi (5.5 km) west of Franklin, and at mile 4.5 (7.2 km).

DRAINAGE AREA.--4.55 mi² (11.78 km²).

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

GAGE.--Water-stage and rainfall recorders and culvert control. Concrete dam since June 9, 1970. Altitude of gage is 2,200 ft (671 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 3.87 ft³/s (0.110 m³/s), 11.55 in/yr (293 mm/yr).

EXTREMES.--Current year: Maximum discharge, 148 ft³/s (4.19 m³/s) June 2, gage height, 3.53 ft (1.076 m), from rating curve extended as explained below; minimum, 0.02 ft³/s (0.001 m³/s) Aug. 13, 14; minimum gage height, 1.08 ft (0.329 m) Sept. 30.

Period of record: Maximum discharge recorded, 187 ft³/s (5.30 m³/s) Oct. 5, 1972, gage height, 4.08 ft (1.244 m), from rating curve extended above 40 ft³/s (1.13 m³/s) on basis of culvert rating computation; no flow at times most years.

REMARKS.--Records good. Rainfall records collected at site since May 1969 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	4.6	.52	10	4.9	4.2	5.2	1.0	2.4	1.6	.08	.30
2	2.4	4.2	.52	8.7	4.7	5.5	5.8	1.2	73	.80	.08	.26
3	1.0	3.1	.56	7.8	4.4	4.7	5.2	2.0	34	.80	.08	.34
4	.40	2.2	.58	7.8	3.9	5.2	34	1.4	18	.80	.08	.32
5	.32	2.6	.73	6.5	3.4	5.5	28	1.2	9.5	.80	.08	.26
6	.26	2.1	.64	5.8	3.2	5.5	15	1.2	7.4	.80	.06	.44
7	.24	1.8	.51	5.5	3.2	5.2	10	1.2	5.8	.64	.06	1.0
8	.73	1.5	.49	4.7	2.9	4.7	9.5	1.0	4.9	.52	.04	.48
9	.74	1.4	.51	5.2	2.5	4.2	8.3	1.4	4.4	.48	.10	.34
10	.57	1.2	.52	10	2.2	3.9	7.4	1.2	4.2	.36	.09	.26
11	.45	.76	.52	22	2.1	3.9	6.1	1.0	3.9	.32	.07	.30
12	.37	.64	.51	24	2.4	4.7	5.5	7.4	3.2	.32	.05	.20
13	.34	.59	.49	17	3.2	4.2	5.5	14	2.4	.24	.04	.20
14	.30	.57	.53	13	3.9	4.2	4.7	11	2.1	.20	.38	.24
15	.28	.52	.60	9.5	4.2	4.2	4.4	8.3	2.3	.20	.40	.24
16	.26	.84	.57	7.8	4.7	4.4	3.9	6.1	3.4	.20	.24	.22
17	.26	.61	.54	6.1	4.9	4.4	3.4	5.2	2.3	.15	.28	.20
18	.26	.52	.52	4.9	4.4	4.2	3.2	4.7	1.9	.14	.22	.16
19	.24	.52	.50	4.7	4.2	4.9	2.9	4.2	1.4	.12	.40	.15
20	.22	.48	3.1	4.2	4.2	4.4	2.7	3.7	2.9	.14	.30	.15
21	.22	.48	12	6.5	3.4	5.8	2.4	3.2	1.6	.12	.22	.16
22	.22	.47	9.0	5.5	4.7	5.8	2.2	2.7	1.4	.11	.18	.16
23	.20	.45	5.9	5.8	4.4	5.8	2.4	2.9	2.9	.11	.34	.15
24	.20	.44	4.4	7.0	4.7	5.8	2.2	2.7	3.0	.14	.28	.13
25	.20	.44	3.9	8.7	4.9	4.9	2.0	2.2	2.9	.11	.28	.13
26	.18	.43	35	9.5	4.4	4.2	1.6	2.0	3.0	.11	.36	.12
27	.18	.41	61	10	4.1	3.9	1.6	1.8	2.8	.16	.16	.12
28	.38	.66	40	9.1	3.9	3.7	1.4	1.6	2.9	.11	.38	.11
29	3.0	.68	27	7.8	-----	3.4	1.2	1.6	2.6	.16	.58	.10
30	2.8	.52	19	6.5	-----	5.2	1.2	2.0	2.0	.22	.48	.09
31	3.8	-----	14	5.8	-----	5.2	-----	1.8	-----	.10	.36	-----
TOTAL	21.29	35.73	244.66	267.4	108.0	145.8	188.9	102.9	214.5	11.08	6.75	7.33
MEAN	.69	1.19	7.89	8.63	3.86	4.70	6.30	3.32	7.15	.36	.22	.24
MAX	3.8	4.6	61	24	4.9	5.8	34	14	73	1.6	.58	1.0
MIN	.18	.41	.49	4.2	2.1	3.4	1.2	1.0	1.4	.10	.04	.09
CFSM	.15	.26	1.73	1.90	.85	1.03	1.38	.73	1.57	.08	.05	.05
IN. /	.17	.29	2.00	2.19	.88	1.19	1.54	.84	1.75	.09	.06	.06
IN. / /	6.04	1.63	3.69	2.78	1.06	2.13	2.25	3.20	-	1.65	4.55	-

CAL YR 1973 TOTAL 1,638.28 MEAN 4.49 MAX 61 MIN .17 CFSM .99 IN. / 13.39
WTP YR 1974 TOTAL 1,354.34 MEAN 3.71 MAX 73 MIN .04 CFSM .82 IN. / 11.07

PEAK DISCHARGE (BASE, 40 CFS)

/ Runoff.
/ / Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2045	2.64	86	6-2	1145	3.53	148
4-4	0700	2.13	48				

POTOMAC RIVER BASIN

01606500 South Branch Potomac River near Petersburg, W. Va.

LOCATION.--Lat 38°59'34", long 79°10'26", Grant County, on right bank 1.2 mi (1.9 km) downstream from North Fork South Branch Potomac River, 2.5 mi (4.0 km) west of Petersburg, and at mile 72.6 (116.8 km).

DRAINAGE AREA.--642 mi² (1,663 km²).

PERIOD OF RECORD.--June 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 962.00 ft (293.218 m) above mean sea level, adjustment of 1912. Prior to Dec. 4, 1928, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--46 years, 699 ft³/s (19.80 m³/s), 14.79 in/yr (376 mm/yr).

EXTREMES.--Current year: maximum discharge, 22,500 ft³/s (637 m³/s) June 2, gage height, 13.58 ft (4.139 m), from rating curve extended as explained below; minimum, 113 ft³/s (3.20 m³/s) Sept. 30, gage height, 1.39 ft (0.424 m).

Period of record: Maximum discharge, 62,000 ft³/s (1,760 m³/s) June 17, 1949, gage height, 22.83 ft (6.959 m), from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of slope-area measurement of peak flow; minimum, 42 ft³/s (1.19 m³/s) Sept. 28, 29, 1959, Sept. 11-12 1966; minimum gage height, 0.94 ft (0.287 m) Sept. 28, 29, 1959; minimum daily discharge, 43 ft³/s (1.22 m³/s) Sept. 27-29, 1959, Sept. 11, 12, 1966.

Flood in 1877 reached a stage of 21.2 ft (6.46 m), from floodmarks.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Occasional low-flow regulation from power plant 800 ft (244 m) upstream. Records of water temperatures and instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 951: 1939-41. WSP 1141: 1932, 1933(M), 1936-38.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	1,970	800	2,100	898	793	1,120	348	549	652	174	271
2	758	1,590	678	1,700	835	1,380	1,120	348	11,400	549	165	244
3	828	1,080	600	1,500	842	2,090	1,120	492	8,520	456	180	252
4	473	800	542	1,400	772	1,680	3,800	549	3,760	389	165	297
5	338	758	505	1,450	684	1,390	4,480	498	2,290	373	162	305
6	267	856	646	1,300	632	1,180	2,830	492	1,600	450	160	263
7	226	711	568	1,200	691	1,190	2,010	473	1,240	542	151	724
8	275	620	498	1,100	720	1,360	1,680	427	994	444	146	680
9	438	562	536	1,000	758	1,190	1,820	456	851	357	146	469
10	626	505	523	1,500	678	1,100	1,570	606	757	338	162	368
11	432	432	467	4,700	630	996	1,370	574	762	319	165	334
12	333	389	404	4,000	613	1,120	1,210	863	609	280	165	307
13	280	367	415	2,800	724	1,160	1,120	4,110	520	252	165	256
14	244	352	434	2,200	2,110	1,070	1,040	2,310	456	230	157	240
15	219	338	483	1,640	1,850	1,010	948	1,550	417	219	187	222
16	199	383	463	1,360	1,440	972	835	1,180	538	213	216	197
17	187	517	430	1,150	1,220	980	758	926	630	206	248	181
18	174	467	397	940	996	898	691	793	508	193	256	169
19	165	467	380	842	884	1,000	639	704	426	184	209	159
20	160	461	500	800	891	1,500	594	606	457	180	256	151
21	154	427	5,370	1,060	793	1,460	536	536	462	177	241	146
22	151	410	4,000	1,640	793	1,720	504	473	479	168	196	142
23	148	383	3,000	1,420	1,430	1,460	536	450	1,240	165	193	139
24	143	362	2,200	1,300	1,280	1,280	530	450	2,460	171	199	135
25	140	352	1,700	1,860	1,100	1,070	479	410	1,420	187	187	132
26	138	348	3,500	2,010	964	919	438	367	1,250	187	184	129
27	133	394	16,000	1,880	842	828	410	333	924	193	187	126
28	143	568	10,000	1,580	807	737	388	310	783	190	160	125
29	1,100	1,090	4,400	1,400	-----	684	373	292	960	202	157	121
30	1,320	948	3,100	1,180	-----	807	357	388	788	260	202	116
31	1,520	-----	2,500	1,020	-----	1,360	-----	456	-----	209	252	-----
TOTAL	11,928	18,907	66,039	51,032	26,877	36,384	35,306	22,770	48,050	8,935	5,793	7,400
MEAN	385	630	2,130	1,646	960	1,174	1,177	735	1,602	288	187	247
MAX	1,520	1,970	16,000	4,700	2,110	2,090	4,480	4,110	11,400	652	256	724
MIN	133	338	380	800	613	684	357	292	417	165	146	116
CFSM	.60	.98	3.32	2.56	1.50	1.83	1.83	1.14	2.50	.45	.29	.38
IN.	.69	1.10	3.83	2.96	1.56	2.11	2.05	1.32	2.78	.52	.34	.43

CAL YR 1973 TOTAL 356,648 MEAN 977 MAX 16,000 MIN 95 CFSM 1.52 IN 20.67
WTR YR 1974 TOTAL 339,421 MEAN 930 MAX 16,000 MIN 116 CFSM 1.45 IN 19.67

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	1030	7.58	7,040	4- 4	1915	7.46	6,830
12-27	unknown	at 13.13	21,000	6- 2	1700	13.58	22,500

a From floodmark.

NOTE.--No gage-height record Dec. 22 to Jan. 14.

POTOMAC RIVER BASIN

45

01607500 South Fork South Branch Potomac River at Brandywine, W. Va.

LOCATION.--Lat 38°37'53", long 79°14'38", Pendleton County, on left bank 50 ft (15 m) upstream from bridge on U.S. Highway 33, 0.1 mi (0.2 km) upstream from Hawes Run, 0.4 mi (0.6 km) north of Brandywine, 0.9 mi (1.4 km) downstream from Broad Run, and at mile 42.9 (69.0 km).

DRAINAGE AREA.--102 mi² (264 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,558.35 ft (474.985 m) above mean sea level, adjustment of 1912. Prior to Sept. 24, 1956, nonrecording gage at highway bridge 50 ft (15 m) downstream at same datum.

AVERAGE DISCHARGE.--31 years, 98.6 ft³/s (2.792 m³/s), 13.13 in/yr (334 mm/yr).

EXTREMES.--Current year: Maximum discharge, 8,840 ft³/s (250 m³/s) June 2, gage height, 9.61 ft (2.929 m), from rating curve extended as explained below; minimum, 7.7 ft³/s (0.22 m³/s) Aug. 7, 8; minimum gage height, 1.52 ft (0.463 m) Oct. 26.

Period of record: Maximum discharge, 41,200 ft³/s (1,170 m³/s) June 17, 1949, gage height, 14.6 ft (4.45 m), from floodmarks, from rating curve extended above 5,300 ft³/s (150 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.3 ft³/s (0.008 m³/s) Dec. 1, 10, 1958, result of freezeup; minimum gage height observed, 0.95 ft (0.290 m) Aug. 10, 14, 15, 1950.

REMARKS.--Records good. The flow from 24.0 mi² (62.2 km²) upstream from station is partially controlled, but not diverted, by several floodwater detention reservoirs with a total combined detention capacity of 4,880 acre-ft (6.02 hm³).

REVISIONS (WATER YEARS).--WSP 1141: 1945(M), 1947(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	297	49	185	121	87	267	35	54	24	9.8	12
2	96	223	44	154	110	89	226	35	3,880	21	8.9	11
3	102	145	41	137	105	87	191	41	1,630	20	8.9	12
4	53	98	40	130	96	85	279	38	800	18	8.9	14
5	41	98	89	120	87	83	339	36	381	17	9.4	13
6	34	104	207	115	80	83	248	38	197	18	8.9	15
7	29	92	140	110	78	85	178	36	130	16	8.5	72
8	36	78	102	108	78	81	152	35	100	25	8.1	54
9	78	71	104	100	72	78	142	38	82	21	8.5	36
10	74	61	87	303	67	78	121	41	72	18	13	29
11	49	50	76	544	65	76	102	41	63	17	11	36
12	39	46	68	384	64	89	92	674	54	16	13	33
13	32	41	66	270	68	94	87	950	46	15	21	27
14	29	39	90	207	69	98	81	315	39	14	13	23
15	27	36	112	172	68	106	76	170	35	13	14	21
16	25	36	110	147	66	106	68	110	45	13	13	17
17	24	34	100	123	66	106	62	81	52	12	18	16
18	21	30	88	108	64	98	56	69	39	12	15	15
19	20	29	82	96	68	108	53	61	31	11	14	14
20	20	28	488	92	69	135	52	53	30	12	15	13
21	19	26	2,040	242	62	279	47	48	25	11	12	12
22	19	26	890	318	74	414	44	44	24	10	12	11
23	18	25	411	237	98	276	47	44	38	11	11	11
24	17	24	303	215	110	207	44	41	49	13	11	10
25	17	24	234	428	110	154	44	39	39	13	19	9.8
26	16	23	3,760	387	98	130	41	36	33	12	39	9.4
27	17	25	2,540	300	90	116	40	35	28	15	21	9.4
28	20	34	1,120	228	89	102	39	34	29	15	15	8.9
29	267	55	572	191	-----	96	38	32	35	13	14	8.9
30	285	52	357	157	-----	130	36	41	29	13	13	8.1
31	336	-----	242	135	-----	276	-----	41	-----	11	13	-----
TOTAL	1,875	1,950	14,652	6,443	2,293	4,032	3,292	3,332	8,089	490	419.9	581.5
MEAN	60.5	65.0	473	208	81.9	130	110	107	270	15.8	13.5	19.4
MAX	336	297	3,760	544	121	414	339	950	3,880	36	39	72
MIN	15	23	40	92	62	76	36	32	24	10	8.1	8.1
CFSM	.59	.64	4.64	2.04	.80	1.27	1.08	1.05	2.65	.15	.13	.19
IN.	.68	.71	5.34	2.35	.84	1.47	1.20	1.22	2.95	.18	.15	.21

CAL YR 1973 TOTAL 50,734.0 MEAN 139 MAX 3,760 MIN 10 CFSM 1.36 IN 18.50
WTR YR 1974 TOTAL 47,449.4 MEAN 130 MAX 3,880 MIN 8.1 CFSM 1.27 IN 17.31

POTOMAC RIVER BASIN

01608000 South Fork South Branch Potomac River near Moorefield, W. Va.

LOCATION.--Lat 39°00'44", long 78°57'23", Hardy County, on right bank 0.2 mi (0.3 km) downstream from Stony Creek, 3.5 mi (5.6 km) south of Moorefield, and at mile 6.0 (9.7 km).

DRAINAGE AREA.--283 mi² (733 km²).

PERIOD OF RECORD.--June 1928 to September 1935, August 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 861.51 ft (262.588 m) above mean sea level, Corps of Engineers bench mark. Prior to Mar. 11, 1940, nonrecording gage at Harness Ford Bridge 2.0 mi (3.2 km) upstream at datum about 31 ft (9.45 m) higher.

AVERAGE DISCHARGE.--43 years, 213 ft³/s (6.032 m³/s), 10.22 in/yr (260 mm/yr).

EXTREMES.--Current year: Maximum discharge, 9,820 ft³/s (278 m³/s) Dec. 27, gage height, 9.08 ft (2.768 m), from rating curve extended as explained below; minimum, 22 ft³/s (0.62 m³/s) Sept. 30; minimum gage height, 1.15 ft (0.351 m) Aug. 8-12.

Period of record: Maximum discharge, 39,000 ft³/s (1,100 m³/s) June 18, 1949, gage height, 16.1 ft (4.91 m), from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of slope-area measurement of peak flow; minimum, 4.4 ft³/s (0.12 m³/s) Sept. 10, 11, 1965, Sept. 9-11, 1966, gage height, 0.92 ft (0.280 m).

REMARKS.--Records good. The flow from 75.4 mi² (195.3 km²) upstream from station is partially controlled, but not diverted, by several floodwater detention reservoirs with a total combined detention capacity of 15,870 acre-ft (19.6 hm³).

REVISIONS (WATER YEARS).--WSP 1141: 1933(M), 1940, 1942-43, 1945, 1948(M). WSP 1302: 1931(M), 1935(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	571	93	534	306	177	512	74	101	98	36	50
2	400	490	90	441	275	192	450	71	3,950	87	34	46
3	300	372	90	375	259	247	381	79	4,970	74	34	43
4	190	275	87	348	238	255	761	85	1,840	67	29	43
5	150	240	87	324	213	249	1,010	74	967	63	29	46
6	130	248	120	302	189	237	734	71	564	65	28	48
7	110	237	199	291	180	234	550	71	368	61	26	67
8	130	210	169	270	180	238	450	67	271	61	26	149
9	210	192	166	251	170	229	445	65	218	59	26	120
10	225	176	159	280	159	222	395	67	185	55	26	95
11	199	149	146	804	150	206	346	71	179	50	25	106
12	162	133	133	878	143	212	305	93	146	46	31	120
13	136	120	123	680	156	229	286	1,440	123	43	38	90
14	120	112	126	536	289	225	267	875	109	39	43	79
15	106	104	169	450	325	229	244	540	98	38	39	65
16	98	104	196	386	281	238	218	377	106	38	36	57
17	90	95	190	329	257	240	192	278	115	34	101	50
18	82	90	170	283	229	228	172	233	106	33	93	46
19	76	84	160	248	210	215	159	199	93	33	65	43
20	74	79	820	227	205	225	146	172	87	33	59	39
21	71	74	2,500	268	185	254	133	146	87	31	53	36
22	69	71	2,230	593	172	479	123	126	79	29	50	34
23	67	69	1,120	548	188	491	123	120	104	29	44	31
24	65	67	787	470	202	407	120	115	237	31	41	30
25	63	65	626	564	217	338	112	106	192	29	38	28
26	61	63	2,510	729	200	283	101	95	149	30	36	26
27	61	63	7,660	650	189	250	93	87	120	34	53	25
28	65	67	3,140	547	179	225	87	79	106	30	53	25
29	510	71	1,550	470	-----	207	82	76	120	34	46	24
30	736	90	948	399	-----	221	76	82	115	53	52	22
31	661	-----	693	346	-----	449	-----	82	-----	41	44	-----
TOTAL	5,471	4,781	27,257	13,821	5,946	8,131	9,073	6,116	15,905	1,448	1,334	1,683
MEAN	176	159	879	446	212	262	302	197	530	46.7	43.0	56.1
MAX	736	571	7,660	878	325	491	1,010	1,440	4,970	98	101	149
MIN	54	63	87	227	143	177	76	65	79	29	25	22
CFSM	.62	.56	3.11	1.58	.75	.93	1.07	.70	1.87	.17	.15	.20
IN.	.72	.63	3.58	1.82	.78	1.07	1.19	.80	2.09	.19	.18	.22
CAL YR 1973	TOTAL 110,053	MEAN 302	MAX 7,660	MIN 31	CFSM 1.07	IN 14.47						
WTR YR 1974	TOTAL 100,966	MEAN 277	MAX 7,660	MIN 22	CFSM .98	IN 13.27						

POTOMAC RIVER BASIN

47

01608050 Fort Run near Moorefield, W. Va.

LOCATION.--Lat 39°03'56", long 78°54'49", Hardy County, on right bank 16 ft (5 m) upstream from culvert on Secondary State Route 23/2, 3.0 mi (4.8 km) east of Moorefield, and at mile 4.6 (7.4 km).

DRAINAGE AREA.--4.92 mi² (12.74 km²).

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

GAGE.--Water-stage and rainfall recorders and culvert control. Concrete dam since June 10, 1970. Altitude of gage is 1,050 ft (320 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 5.32 ft³/s (0.151 m³/s), 14.68 in/yr (373 mm/yr).

EXTREMES.--Current year: Maximum discharge, 367 ft³/s (10.4 m³/s) Dec. 26, gage height, 5.88 ft (1.792 m), from rating curve extended as explained below; minimum, 0.01 ft³/s (<0.001 m³/s) July 24-26; minimum gage-height, 1.28 ft (0.390 m) July 25, 26.

Period of record: Maximum discharge, 888 ft³/s (25.1 m³/s) June 23, 1972, gage height, 8.49 ft (2.588 m), from floodmarks, from rating curve extended above 40 ft³/s (1.13 m³/s) on basis of slope-area measurement of peak flow; no flow at times each year.

REMARKS.--Records fair. Rainfall records collected at this site since May 1969 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	2.7	2.2	7.7	3.6	2.0	9.8	1.3	2.6	5.8	.06	.19
2	7.6	2.0	1.7	6.1	3.1	3.1	8.4	1.3	32	3.8	1.8	.16
3	5.8	1.5	1.3	5.1	3.1	3.6	6.7	1.4	20	2.3	1.6	.14
4	3.5	1.2	1.1	4.8	2.8	3.8	34	1.3	10	1.4	.50	.22
5	1.5	1.2	1.0	4.0	2.3	3.8	15	1.3	6.1	1.1	.26	.16
6	.88	1.7	1.0	4.0	1.8	3.6	7.4	1.3	4.3	1.1	.19	1.3
7	.73	1.7	.96	3.8	1.8	4.8	4.3	1.3	3.0	.90	.14	1.8
8	.61	1.3	.88	3.1	1.8	6.7	2.8	1.3	2.3	.50	.10	.70
9	.61	1.0	1.1	3.1	1.7	6.7	3.6	1.1	1.8	.41	.10	.41
10	.52	.96	1.9	6.7	1.6	5.8	4.5	1.1	6.7	.35	.08	.30
11	.45	.80	2.9	14	1.7	4.8	3.1	1.1	6.7	.26	.08	.25
12	.42	.73	2.4	17	1.8	4.8	2.3	4.8	3.0	.19	.08	.21
13	.39	.66	2.2	12	3.1	4.3	2.8	12	1.8	.14	.19	.27
14	.36	.66	2.2	8.7	6.4	4.0	3.7	6.4	1.3	.10	.14	.42
15	.33	.66	2.7	7.0	6.7	3.8	3.2	4.3	1.1	.08	.08	.28
16	.33	.73	2.7	5.8	6.4	3.6	2.5	2.3	3.8	.08	.07	.21
17	.29	.73	2.2	4.8	5.4	3.6	2.0	1.8	3.3	.07	1.3	.17
18	.29	.66	1.9	3.8	4.6	3.3	1.7	1.6	2.3	.05	.35	.14
19	.29	.61	1.7	3.3	4.0	3.0	1.6	1.3	1.6	.04	.41	.12
20	.26	.61	4.1	3.1	3.8	3.0	2.0	1.3	1.3	.03	.35	.11
21	.24	.56	20	7.0	3.1	3.0	1.8	1.1	.90	.03	.19	.10
22	.22	.54	9.8	8.7	3.1	3.3	1.7	.90	1.4	.02	.14	.09
23	.22	.52	6.9	8.0	3.1	3.0	2.0	.90	9.1	.02	.14	.09
24	.20	.50	6.4	7.0	2.6	2.8	1.8	.90	13	.01	.12	.09
25	.20	.52	5.2	7.0	2.3	2.8	1.6	.90	8.7	.01	.08	.08
26	.19	.54	142	7.0	2.1	2.8	1.4	.75	6.4	.01	.07	.07
27	.19	.66	82	7.0	1.9	2.6	1.4	.75	4.6	.14	.07	.06
28	.61	1.1	26	6.4	1.8	2.6	1.4	.60	8.7	.12	.12	.10
29	15	3.2	15	5.8	-----	2.6	1.3	.75	15	.50	.12	.16
30	7.1	2.9	12	4.8	-----	9.1	1.3	3.0	10	.19	.12	.12
31	4.1	-----	8.7	4.0	-----	12	-----	1.8	-----	.10	.16	-----
TOTAL	53.62	33.15	372.14	200.6	87.5	128.7	137.1	61.95	192.80	19.85	9.21	8.52
MEAN	1.73	1.11	12.0	6.47	3.13	4.15	4.57	2.00	6.43	.64	.30	.28
MAX	15	3.2	142	17	6.7	12	34	12	32	5.8	1.8	1.8
MIN	.19	.50	.88	3.1	1.6	2.0	1.3	.60	.90	.01	.06	.06
CFSM	.35	.23	2.44	1.32	.64	.84	.93	.41	1.31	.13	.06	.06
IN. /	.41	.25	2.81	1.52	.66	.97	1.04	.47	1.46	.15	.07	.06
IN. //	4.50	1.06	2.78	1.92	.63	-	1.72	3.42	5.98	2.42	3.54	2.98

CAL YR 1973 TOTAL 1,911.08 MEAN 5.24 MAX 142 MIN 0 CFSM 1.07 IN/ 14.45
WTR YR 1974 TOTAL 1,305.14 MEAN 3.58 MAX 142 MIN .01 CFSM .73 IN/ 9.87

PEAK DISCHARGE (BASE, 80 CFS).--Dec. 26 (1615) 367 cfs (5.88 ft).

/ Runoff.

// Rainfall.

POTOMAC RIVER BASIN

01608400 Buffalo Creek near Romney, W. Va.

LOCATION.--Lat 39°22'18", long 78°43'51", Hampshire County, on right bank 15 ft (5 m) upstream from culvert on Secondary State Route 28/1, 0.7 mi (1.1 km) upstream from mouth, and 2.5 mi (4.0 km) northeast of Romney.

DRAINAGE AREA.--4.37 mi², (11.32 km²).

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

GAGE.--Water-stage and rainfall recorders and culvert control. Concrete dam since Aug. 12, 1970. Altitude of gage is 680 ft (207 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 3.94 ft³/s (0.112 m³/s), 12.24 in/yr (311 mm/yr).

EXTREMES.--Current year: Maximum discharge, 104 ft³/s (2.95 m³/s) Dec. 26, gage height, 3.34 ft (1.018 m); no flow part or all of each day July 19 to Aug. 2.
 Period of record: Maximum discharge, 438 ft³/s (12.4 m³/s) June 22, 1972, gage height, 7.15 ft (2.179 m), from rating curve extended above 190 ft³/s (5.38 m³/s) on basis of computations of flow through culvert and flow-over-road measurement at gage height 8.00 ft (2.438 m); no flow at times each year.
 Flood of July 29, 1969, reached a stage of 8.00 ft (2.438 m), from floodmark, discharge, 550 ft³/s (15.6 m³/s), from rating curve extended as explained above.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Rainfall records collected at site since August 1969 are contained in files of the U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	3.3	.76	7.2	2.1	.90	6.0	.58	3.9	3.3	.01	.07
2	6.2	2.3	.76	6.0	2.0	1.3	4.9	.52	28	1.9	.01	.17
3	5.4	1.7	.70	5.6	2.1	2.0	4.0	.70	16	.70	.09	.13
4	3.3	1.4	.70	6.2	1.8	1.8	18	.64	8.2	.41	.11	.10
5	2.1	1.4	.70	5.6	1.3	1.8	5.6	.52	5.1	.29	.11	.08
6	1.4	1.9	.64	5.0	1.1	1.7	1.8	.46	2.7	.29	.09	.07
7	.98	1.6	.58	4.4	1.1	2.0	.90	.46	1.3	.33	.07	.56
8	.83	1.4	.52	3.7	1.2	2.3	.83	.41	.83	.25	.07	.23
9	.70	1.2	3.6	3.7	1.0	2.3	1.6	.37	.64	.16	.07	.16
10	.64	.90	5.6	31	.96	2.7	1.3	.37	.98	.11	.05	.11
11	.58	.76	4.9	43	.94	2.4	.90	.37	3.7	.10	.03	.09
12	.52	.64	3.7	24	1.1	2.9	.76	3.0	.90	.07	.02	.07
13	.52	.58	3.0	10	1.2	2.7	.98	6.4	.58	.03	.02	.09
14	.46	.58	2.7	9.7	1.2	2.4	1.1	3.9	.41	.03	.03	.16
15	.41	.58	2.4	6.2	1.2	2.3	1.2	2.7	.76	.02	.02	.08
16	.37	.52	2.2	4.9	1.1	2.6	.90	1.3	6.6	.01	.03	.06
17	.33	.58	1.9	3.9	1.2	.76	.83	.83	5.2	.01	.03	.04
18	.29	.52	1.7	3.0	1.1	2.3	.64	.64	2.7	.01	.02	.03
19	.29	.46	1.6	2.7	1.1	2.2	.52	.58	.98	0	.02	.03
20	.25	.46	4.2	2.4	1.2	2.2	.70	.52	.76	0	.02	.02
21	.25	.41	16	6.2	.98	2.4	2.4	.37	.90	.01	.01	.02
22	.25	.41	9.2	6.8	1.1	2.9	2.1	.33	.70	.01	.01	.01
23	.22	.37	7.4	6.4	1.1	2.7	3.3	.33	9.2	0	.02	.01
24	.22	.33	6.8	5.4	.98	2.7	2.1	.46	18	0	.02	.01
25	.22	.33	6.0	4.7	.90	2.3	1.2	.41	10	0	.11	.01
26	.19	.33	38	4.0	.80	2.1	.90	.29	7.0	0	.22	.01
27	.19	.33	51	4.0	.76	2.0	.83	.22	4.9	0	.06	.01
28	.19	.52	31	3.6	.73	1.8	.70	.16	4.0	0	.05	.02
29	17	1.2	14	3.0	-----	1.8	.70	.16	5.8	0	.05	.03
30	8.2	.90	9.5	2.7	-----	4.7	.64	.14	3.6	0	.03	.02
31	5.1	-----	7.9	2.4	-----	7.7	-----	.22	-----	.01	.03	-----
TOTAL	57.76	27.91	239.66	237.4	33.35	76.60	68.26	28.36	154.34	8.05	1.53	2.50
MEAN	1.86	.93	7.73	7.66	1.19	2.47	2.28	.91	5.14	.26	.049	.083
MAX	17	3.3	51	43	2.1	7.7	18	6.4	28	3.3	.227	.56
MIN	.16	.33	.52	2.4	.73	.90	.52	.14	.41	0	.01	.01
CFSM	.43	.21	1.77	1.75	.27	.57	.52	.21	1.18	.06	.01	.02
IN./	.49	.24	2.04	2.02	.28	.65	.58	.24	1.31	.07	.01	.02
IN./	3.76	.79	2.55	1.80	.46	2.50	2.33	3.17	5.95	1.38	4.05	

CAL YR 1973 TOTAL 1,477.62 MEAN 4.05 MAX 57 MIN .01 CFSM .93 IN/ 12.58
 WTR YR 1974 TOTAL 935.72 MEAN 2.56 MAX 51 MIN 0 CFSM .59 IN/ 7.97

PEAK DISCHARGE (BASE, 60 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	0830	2.98	68	12-26	2000	3.34	104

/ Runoff.
 // Rainfall.
 NOTE.--No gage-height record Aug. 31 to Sept. 30.

POTOMAC RIVER BASIN

49

01608500 South Branch Potomac River near Springfield, W. Va.

LOCATION---Lat 39°26'49", long 78°39'16", Hampshire County, on left bank at highway bridge, 2.0 mi (3.2 km) east of Springfield, and at mile 13.4 (21.6 km).

DRAINAGE AREA--1,471 mi² (3,810 km²).

PERIOD OF RECORD--June 1894 to February 1896 (fragmentary), June 1899 to February 1902, August 1903 to July 1906, August 1928 to current year.

GAGE--Water-stage recorder. Datum of gage is 562.02 ft (171.304 m) above mean sea level. June 1894 to February 1896, nonrecording gage at Baltimore & Ohio Railroad bridge 11.2 mi (18.0 km) upstream at different datum. June 26, 1899, to Feb. 2, 1902, nonrecording gage at bridge 10.0 mi (16.1 km) upstream at different datum. Aug. 28, 1903, to July 14, 1906, nonrecording gage at present site at different datum. Aug. 8 to Sept. 24, 1928, nonrecording gage at present site and datum.

AVERAGE DISCHARGE--50 years (1899-1901, 1903-5, 1928-74), 1,271 ft³/s (35.99 m³/s), 11.73 in/yr (298 mm/yr).

EXTREMES--Current year: Maximum discharge, 41,300 ft³/s (1,170 m³/s) Dec. 27, gage height, 20.16 ft (6.145 m), from rating curve extended as explained below; minimum, 182 ft³/s (5.15 m³/s) Sept. 30; minimum gage height, 1.63 ft (0.497 m) Oct. 1.
Period of record: Maximum discharge, 143,000 ft³/s (4,050 m³/s) Mar. 18, 1936, gage height, 34.2 ft (10.42 m), from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of measurement made about 10 mi (16 km) upstream from station, adjusted for storage and inflow and slope-area measurement at gage height 29.84 ft (9.095 m); minimum, 29 ft³/s (0.82 m³/s) Jan. 28, 1956, result of freezeup, July 30, 1966, result of temporary dam; minimum gage height, 0.39 ft (0.119 m) July 30, 1966.
Flood in November 1877 reached a stage of about 34 ft (10.4 m), from floodmarks, discharge, 140,000 ft³/s (3,960 m³/s).

REMARKS--Records good.

REVISIONS (WATER YEARS)--WSP 1552: 1903-6, 1929-30(M), 1932-33(M), 1935(M), 1937-40(M), 1942-43(M), 1945(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	3,030	1,260	3,810	1,750	1,250	2,820	655	902	1,430	343	325
2	594	3,220	1,080	3,220	1,570	1,300	2,400	634	4,820	1,230	333	338
3	2,260	2,420	941	2,750	1,520	2,640	2,240	669	24,800	923	293	321
4	1,430	1,720	847	2,640	1,470	2,830	3,800	816	9,920	768	277	309
5	933	1,350	789	2,650	1,300	2,370	8,930	849	5,280	667	257	330
6	679	1,520	755	2,460	1,160	2,040	5,850	792	3,460	654	242	356
7	538	1,500	906	2,200	1,100	1,820	4,140	760	2,510	734	232	462
8	455	1,250	889	2,000	1,180	1,980	3,240	746	1,920	736	228	1,000
9	688	1,090	921	1,800	1,290	2,010	3,390	697	1,540	657	219	867
10	998	978	1,120	2,720	1,180	1,800	3,300	711	1,400	558	215	641
11	1,010	872	1,140	7,240	1,100	1,680	2,800	849	1,740	502	215	508
12	770	765	971	8,660	1,060	1,590	2,430	912	1,250	478	232	474
13	620	700	835	5,810	1,100	1,820	2,300	3,800	974	428	249	474
14	520	657	808	4,110	1,760	1,760	2,230	4,970	833	394	253	410
15	448	628	854	3,300	3,340	1,660	2,010	3,160	766	368	245	370
16	407	613	962	2,810	2,670	1,610	1,790	2,280	908	349	261	330
17	370	612	920	2,330	2,210	1,580	1,610	1,760	1,150	335	305	305
18	345	726	850	1,940	1,880	1,530	1,450	1,460	1,020	315	370	281
19	326	685	810	1,670	1,610	1,410	1,330	1,260	816	308	410	261
20	310	668	957	1,530	1,500	1,650	1,240	1,100	723	298	348	245
21	300	662	4,760	1,670	1,430	2,030	1,140	957	708	287	330	235
22	290	626	10,100	3,260	1,280	2,260	1,040	840	753	278	356	225
23	282	602	5,560	3,200	1,470	2,540	1,010	784	1,120	276	321	215
24	275	575	4,120	2,760	1,930	2,210	1,010	764	4,680	275	297	206
25	268	552	3,280	2,680	1,780	1,920	975	725	3,350	271	281	201
26	262	537	6,030	3,470	1,600	1,630	885	669	2,300	271	317	198
27	255	536	30,400	3,450	1,420	1,430	816	613	1,810	301	289	195
28	252	614	19,000	3,100	1,290	1,290	760	564	1,430	346	281	195
29	1,590	958	8,570	2,670	-----	1,180	725	536	1,660	296	277	201
30	4,280	1,480	5,740	2,330	-----	1,220	683	546	1,640	305	261	187
31	2,790	-----	4,670	2,000	-----	2,590	-----	647	-----	345	277	-----
TOTAL	24,855	32,146	120,845	96,240	43,950	56,630	68,344	36,525	86,183	15,383	8,814	10,665
MEAN	802	1,072	3,898	3,105	1,570	1,827	2,278	1,178	2,873	496	284	356
MAX	4,280	3,220	30,400	8,660	3,340	2,830	8,930	4,970	24,800	1,430	410	1,000
MIN	252	536	755	1,530	1,060	1,180	683	536	708	271	215	187
CFSM	.55	.73	2.65	2.11	1.07	1.24	1.55	.80	1.95	.34	.19	.24
IN.	.63	.81	3.06	2.43	1.11	1.43	1.73	.92	2.18	.39	.22	.27

CAL YR 1973 TOTAL 661,530 MEAN 1,812 MAX 30,400 MIN 193 CFSM 1.23 IN 16.73
WTR YR 1974 TOTAL 600,580 MEAN 1,645 MAX 30,400 MIN 187 CFSM 1.12 IN 15.19

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	0115	10.97	12,900	4- 5	0715	9.55	10,400
12-27	1945	20.16	41,300	6- 3	1230	18.15	32,600

POTOMAC RIVER BASIN

01609800 Little Cacapon River near Levels, W. Va.

LOCATION.--Lat 39°29'55", long 78°29'20", Hampshire County, on left bank just downstream from bridge on Secondary State Route 2, 3.2 mi (5.1 km) northeast of Levels, and at mile 2.0 (3.2 km).

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 540 ft (165 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 90.6 ft³/s (2.566 m³/s), 11.39 in/yr (289 mm/yr).

EXTREMES.--Current year: Maximum discharge, 3,180 ft³/s (90.1 m³/s) Dec. 26, gage height, 8.48 ft (2.585 m), from rating curve extended as explained below; minimum daily, 0.70 ft³/s (0.020 m³/s) July 26.
Period of record: Maximum discharge, 10,500 ft³/s (297 m³/s) June 22, 1972, gage height, 12.97 ft (3.953 m), from rating curve extended above 1,800 ft³/s (51.0 m³/s) on basis of slope-area measurement at gage height, 10.24 ft (3.121 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) Sept. 1-5, Oct. 2-6, 8, 16-18, 1968; minimum gage height, 1.36 ft (0.415 m) Aug. 24, 1968.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	70	42	150	60	21	190	40	90	36	1.3	2.7
2	142	52	30	120	58	29	150	40	799	33	1.1	9.2
3	155	38	25	100	68	45	120	45	462	18	2.9	6.6
4	90	32	22	92	55	40	910	48	205	11	4.2	6.0
5	60	32	21	84	41	40	400	43	118	8.7	3.2	5.0
6	41	43	20	76	30	38	270	40	73	8.4	2.4	4.7
7	32	36	19	71	30	46	220	37	51	14	1.9	31
8	27	31	18	67	28	52	210	36	38	10	1.6	22
9	23	28	35	92	25	54	300	36	31	7.1	2.1	9.6
10	20	25	185	467	23	60	260	35	54	5.6	1.6	6.9
11	19	22	173	840	24	54	220	32	90	5.0	1.6	5.8
12	18	19	120	526	26	65	200	40	40	4.0	3.2	4.7
13	16	18	94	275	28	58	250	150	26	3.5	3.8	5.8
14	17	17	97	200	30	52	230	90	18	2.8	2.5	8.9
15	16	16	90	169	28	54	190	61	14	2.6	1.7	6.4
16	17	17	81	137	26	60	160	45	41	2.2	1.5	4.7
17	16	19	73	111	28	57	137	37	48	2.8	3.5	3.6
18	15	15	66	87	25	51	110	32	37	1.6	2.0	3.3
19	14	14	61	79	25	50	92	26	21	1.5	2.5	2.8
20	13	12	90	73	28	50	84	28	16	1.4	2.1	2.4
21	12	12	400	195	22	65	75	24	13	1.1	1.9	2.1
22	11	12	220	205	23	113	68	19	13	1.0	1.7	2.0
23	11	11	170	179	25	90	66	23	140	1.0	1.9	1.9
24	10	11	150	151	23	72	60	27	245	.90	2.0	1.7
25	10	11	130	131	20	60	55	23	118	.80	2.0	1.7
26	9.6	12	2,300	120	18	55	52	15	70	.70	11	1.4
27	9.2	13	1,200	113	17	53	48	12	47	.80	5.8	1.3
28	10	23	620	102	16	52	51	10	33	.90	4.8	1.3
29	466	66	290	89	-----	52	46	9.6	65	8.0	3.3	1.4
30	219	60	210	78	-----	120	42	11	46	4.2	2.7	3.0
31	106	-----	170	72	-----	230	-----	12	-----	2.3	2.5	-----
TOTAL	1,632.2	787	7,222	5,251	850	1,938	5,266	1,126.6	3,062	200.90	86.3	169.9
MEAN	52.7	26.2	233	169	30.4	62.5	176	36.3	102	6.48	2.78	5.66
MAX	466	70	2,300	840	68	230	910	150	799	36	11	31
MIN	7.4	11	18	67	16	21	42	9.6	13	.70	1.1	1.3
CFSM	.49	.24	2.16	1.56	.28	.58	1.63	.34	.94	.06	.03	.05
IN.	.56	.27	2.49	1.81	.29	.67	1.81	.39	1.05	.07	.03	.06

CAL YR 1973 TOTAL 42,534.50 MEAN 117 MAX 2,300 MIN 1.3 CFSM 1.08 IN 14.65
WTR YR 1974 TOTAL 27,591.90 MEAN 75.6 MAX 2,300 MIN .70 CFSM .70 IN 9.50

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	unknown	8.48	3,180	4- 4	unknown	7.31	2,080

a From recorder range line.
NOTE.--No gage-height record Dec. 17 to Jan. 9, Feb. 4 to Mar. 21, Mar. 22 to May 22.

POTOMAC RIVER BASIN

51

01610000 Potomac River at Paw Paw, W. Va.

LOCATION.--Lat 39°32'13", long 78°27'28", Allegany County, Md., on left bank 250 ft (76 m) upstream from bridge on Maryland State Highway 51 at Paw Paw, 3.3 mi (5.3 km) downstream from Little Cacapon River, and at mile 277 (446 km).

DRAINAGE AREA.--3,109 mi² (8,052 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 487.88 ft (148.706 m) above mean sea level, Corps of Engineers bench mark. Prior to Mar. 25, 1939, nonrecording gage at bridge 250 ft (76 m) downstream at same datum.

AVERAGE DISCHARGE.--36 years, 3,167 ft³/s (89.69 m³/s), 13.84 in/yr (352 mm/yr).

EXTREMES.--Current year: Maximum discharge, 55,300 ft³/s (1,570 m³/s) Dec. 28, gage height, 26.41 ft (8.050 m); minimum, 420 ft³/s (11.9 m³/s) Sept. 27, 28, gage height, 3.56 ft (1.085 m).

Period of record: Maximum discharge, 111,000 ft³/s (3,140 m³/s) Oct. 16, 1942, gage height, 38.36 ft (11.692 m); minimum, 164 ft³/s (4.64 m³/s) Sept 10, 11, 1966.

Flood of Mar. 18, 1936, reached a stage of 54.0 ft (16.46 m), discharge, 240,000 ft³/s (6,800 m³/s), from rating curve extended above 85,000 ft³/s (2,410 m³/s) on basis of slope-area measurement of peak flow at site 5.0 mi (8.0 km) upstream at Okonoko.

REMARKS.--Records good. Low flow affected by Stony River Reservoir (see sta 01595200), and since December 1950, by Savage River Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	752	5,950	4,260	8,890	4,120	3,440	6,680	1,660	4,910	3,910	762	875
2	1,430	6,100	3,590	7,530	3,790	3,580	5,770	1,570	9,840	5,080	699	1,350
3	3,200	5,030	3,190	6,310	3,670	4,790	5,570	1,640	32,200	3,570	860	1,110
4	3,200	3,970	2,650	6,980	3,670	5,440	9,050	1,940	18,400	2,760	762	942
5	2,240	3,390	2,340	7,260	3,290	5,090	18,300	2,040	9,900	2,900	713	875
6	1,700	3,360	2,590	6,230	2,970	4,780	12,900	1,840	6,830	3,900	596	845
7	1,390	3,270	2,550	5,700	2,830	4,290	9,510	1,750	5,210	3,040	542	1,170
8	1,220	2,760	2,460	5,110	3,450	4,270	6,970	1,700	4,220	2,560	506	2,060
9	1,130	2,480	3,170	4,590	3,480	4,770	8,110	1,660	3,570	2,430	489	2,020
10	1,970	2,360	5,670	7,370	3,090	4,630	8,640	1,640	3,110	1,960	536	1,500
11	1,900	2,180	4,580	21,400	2,970	4,450	7,160	1,720	3,260	1,450	578	1,210
12	1,670	1,960	3,770	24,200	2,800	4,290	6,260	2,080	2,660	1,300	548	1,040
13	1,420	1,800	3,180	16,100	2,790	4,290	6,610	5,350	2,160	1,130	578	1,000
14	1,770	1,730	3,040	11,500	3,130	4,080	7,680	8,360	1,860	996	692	958
15	2,070	1,690	3,140	9,450	5,390	3,760	6,460	5,650	1,660	890	626	1,080
16	1,500	1,660	3,080	7,290	4,850	3,710	5,650	4,380	2,280	815	548	1,070
17	1,110	1,690	3,040	6,570	4,280	3,560	4,940	3,600	3,150	762	646	838
18	1,150	1,820	2,700	6,010	3,890	3,430	4,390	3,310	2,640	713	755	706
19	940	1,750	2,550	5,440	3,470	3,200	3,940	3,970	2,030	652	972	626
20	855	1,720	2,590	5,380	3,460	3,240	3,560	3,460	1,780	633	815	584
21	933	1,720	5,920	6,530	3,790	3,870	3,220	2,990	1,710	596	692	548
22	1,200	1,770	15,200	10,800	3,450	4,470	2,950	2,650	1,800	566	706	518
23	1,050	1,560	9,450	9,710	4,350	4,730	2,810	2,470	3,590	542	678	489
24	694	1,570	7,360	8,070	4,890	4,310	2,750	2,430	12,100	614	640	467
25	649	1,710	6,180	6,640	4,400	3,890	2,600	2,290	9,540	626	572	456
26	628	1,750	9,610	6,700	4,030	3,460	2,360	2,060	6,980	614	620	435
27	601	1,670	44,700	6,660	3,590	3,180	2,130	1,810	5,370	1,080	659	425
28	589	2,250	40,400	6,140	3,640	2,940	1,970	1,630	4,170	1,060	536	420
29	5,240	4,740	19,900	5,570	-----	2,750	1,850	1,520	4,240	1,120	524	440
30	13,000	4,940	14,500	4,980	-----	3,070	1,740	1,680	4,330	792	530	435
31	6,820	-----	11,200	4,410	-----	6,140	-----	2,840	-----	706	524	-----
TOTAL	64,021	80,350	248,560	255,520	103,530	125,900	172,530	83,690	175,500	49,767	19,904	26,492
MEAN	2,065	2,678	8,018	8,243	3,698	4,061	5,751	2,700	5,850	1,605	642	883
MAX	13,000	6,100	44,700	24,200	5,390	6,140	18,300	8,360	32,200	5,080	972	2,060
MIN	589	1,560	2,340	4,410	2,790	2,750	1,740	1,520	1,660	542	489	420
CAL YR 1973	TOTAL 1,564,517 MEAN 4,286 MAX 44,700 MIN 483 CFSM 1.38 IN 18.71											
WTR YR 1974	TOTAL 1,405,764 MEAN 3,851 MAX 44,700 MIN 420 CFSM 1.24 IN 16.82											

PEAK DISCHARGE (BASE, 20,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-28	0015	26.41	55,300	4- 5	0845	15.90	21,000
1-12	0430	18.17	27,500	6- 3	1630	21.49	37,900

POTOMAC RIVER BASIN

01610200 Lost River at McCauley near Baker, W. Va.

LOCATION.--Lat 39°03'18", long 78°43'31", Hardy County, on left bank at McCauley, 1.4 mi (2.3 km) upstream from Three Springs Run, and 1.7 mi (2.7 km) east of Baker.

DRAINAGE AREA.--155 mi² (401 km²).

PERIOD OF RECORD.--October 1971 to current year (revised).

GAGE.--Water-stage recorder. Datum of gage is 1,259.34 ft (383.847 m), above mean sea level. Prior to Sept. 14, 1974, at site 350 ft (107 m) downstream at same datum.

EXTREMES.--Current year: Maximum discharge, 9,680 ft³/s (274 m³/s) Dec. 26, gage height, 9.86 ft (3.005 m), from floodmarks, from rating curve extended as explained below; minimum, 4.9 ft³/s (0.14 m³/s) Sept. 30, gage height, 0.99 ft (0.302 m).
Period of record: Maximum discharge, 14,600 ft³/s (413 m³/s) June 23, 1972, gage height, 11.58 ft (3.530 m), from floodmarks, from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 2.28 ft³/s (0.065 m³/s) Sept. 12, 1963.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Records of chemical analyses and instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	187	54	370	129	86	250	44	84	132	9.0	25
2	399	138	48	280	120	134	223	43	3,350	88	23	21
3	253	110	45	240	125	203	180	61	1,270	64	22	15
4	119	88	45	210	105	200	781	52	491	49	11	18
5	72	108	48	260	90	182	705	43	279	42	9.5	15
6	49	133	52	220	82	159	417	45	182	42	8.4	13
7	38	116	43	190	87	159	293	43	130	51	7.8	107
8	33	103	37	170	85	148	264	38	106	34	7.3	62
9	37	96	62	150	81	132	292	40	88	27	7.8	32
10	45	79	95	300	77	132	263	46	114	23	38	22
11	37	66	96	700	74	120	227	39	136	24	16	36
12	32	59	85	600	77	140	198	332	79	18	12	38
13	27	55	81	400	136	138	193	585	59	15	14	25
14	24	52	113	280	455	132	172	326	49	14	11	40
15	21	49	127	230	387	130	156	226	45	12	9.0	28
16	21	56	123	198	298	136	138	166	62	12	7.8	18
17	18	47	88	159	247	136	123	125	148	11	41	14
18	18	41	65	129	190	118	111	105	84	10	25	12
19	17	40	66	116	166	113	102	90	56	10	16	10
20	16	38	540	108	152	106	90	77	45	9.5	16	8.7
21	15	35	2,250	265	116	118	79	63	41	9.0	14	8.3
22	14	35	838	333	120	130	74	55	52	7.8	11	8.0
23	14	33	507	292	127	111	85	61	156	7.8	11	8.0
24	13	32	399	253	103	110	77	58	364	8.4	23	7.3
25	13	32	333	262	100	98	70	45	215	8.4	16	6.7
26	12	32	7,400	259	84	92	61	38	146	13	14	6.7
27	12	34	2,900	256	80	90	56	34	103	20	11	6.4
28	13	43	1,600	226	77	84	52	31	134	11	9.5	6.1
29	740	71	900	200	-----	84	50	29	294	12	11	6.1
30	405	59	600	168	-----	148	46	106	203	11	14	5.4
31	232	-----	460	148	-----	287	-----	64	-----	13	13	-----
TOTAL	2,783	2,067	20,100	7,972	3,970	4,156	5,828	3,110	8,565	808.9	459.1	628.7
MEAN	89.8	68.9	648	257	142	134	194	100	286	26.1	14.8	21.0
MAX	740	187	7,400	700	455	287	781	585	3,350	132	41	107
MIN	12	32	37	108	74	84	46	29	41	7.8	7.3	5.4
CFSM	.58	.44	4.18	1.66	.92	.86	1.25	.65	1.85	.17	.10	.14
IN.	.67	.50	4.82	1.91	.95	1.00	1.40	.75	2.06	.19	.11	.15
CAL YR 1973	TOTAL	71,879.9	MEAN	197	MAX	7,400	MIN	8.4	CFSM	1.27	IN	17.25
WTR YR 1974	TOTAL	60,447.7	MEAN	166	MAX	7,400	MIN	5.4	CFSM	1.07	IN	14.51

PEAK DISCHARGE (BASE, 1,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0845	6.40	3,120	6- 2	b1230	a8.87	7,440
12-26	unknown	a9.86	9,680				

a From floodmarks.

b About.

NOTE.--No gage-height record Dec. 26 to Jan. 15.

01611500 Cacapon River near Great Cacapon, W. Va.

LOCATION.--Lat 39°34'43", long 78°18'34", Morgan County, on left bank at Rock Ford, 3.0 mi (4.8 km) southwest of Great Cacapon, and at mile 6.5 (10.5 km).

DRAINAGE AREA.--677 mi² (1,753 km²).

PERIOD OF RECORD.--December 1922 to current year.

GAGE.--Water-stage recorder. Datum of gage is 456.78 ft (139.227 m) above mean sea level, Corps of Engineers bench mark. Prior to Nov. 10, 1933, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--51 years (1923-74), 574 ft³/s (16.26 m³/s), 11.51 in/yr (292 mm/yr).

EXTREMES.--Current year: Maximum discharge, 17,700 ft³/s (501 m³/s) Dec. 27, gage height, 14.11 ft (4.301 m); minimum, 62 ft³/s (1.76 m³/s) Sept. 30, gage height, 0.77 ft (0.235 m).
 Period of record: Maximum discharge, 87,600 ft³/s (2,480 m³/s) Mar. 18, 1936, gage height, 30.1 ft (9.17 m), from rating curve extended above 52,000 ft³/s (1,470 m³/s); minimum, 26 ft³/s (0.74 m³/s) Sept. 11-13, 1966; minimum gage height, 0.35 ft (0.107 m) Sept. 21, 22, 1932, Sept. 11-13, 1966.
 Flood in May 1889 reached a stage of 24.7 ft (7.53 m), from floodmarks, discharge, 57,500 ft³/s (1,630 m³/s).

REMARKS.--Records good. Records of instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 800: 1924(M). WSP 921: Drainage area. WSP 951: 1936-37, WSP 1552: 1925-26(M), 1928, 1929(M), 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	851	257	1,630	698	360	1,830	300	364	858	107	93
2	153	622	241	1,370	630	370	1,380	283	667	690	99	103
3	697	509	222	1,120	604	418	1,160	288	5,960	532	98	98
4	886	412	209	1,100	635	607	1,430	298	2,810	401	107	99
5	510	361	208	1,120	563	585	3,560	307	1,580	327	104	104
6	339	349	208	976	488	558	2,600	286	1,030	281	123	103
7	259	408	209	893	454	531	1,830	268	740	256	103	130
8	211	403	213	821	461	529	1,380	259	590	273	95	148
9	183	361	311	724	476	524	1,450	259	498	236	87	203
10	168	331	959	855	442	496	1,600	258	452	206	82	210
11	169	309	905	2,350	406	474	1,330	273	464	183	80	158
12	167	282	721	3,020	418	462	1,150	348	545	164	78	137
13	165	259	574	2,310	411	460	1,190	1,780	413	150	98	152
14	152	247	513	1,670	510	496	1,300	2,060	317	140	99	179
15	141	238	568	1,350	1,010	461	1,150	1,310	276	131	92	168
16	133	235	608	1,180	1,050	447	979	947	281	123	87	158
17	127	228	607	1,030	869	465	843	735	375	116	82	158
18	122	221	449	861	776	488	745	598	460	112	88	131
19	119	218	469	733	674	456	669	523	420	109	80	116
20	116	204	550	666	616	426	608	509	308	104	112	104
21	114	195	2,470	712	587	437	552	476	254	99	104	98
22	116	193	5,010	1,470	510	567	502	397	246	96	109	92
23	122	182	2,590	1,580	476	649	495	369	343	92	109	87
24	123	184	1,960	1,330	504	566	489	407	1,130	98	107	81
25	119	183	1,590	1,160	448	511	459	371	1,530	95	88	78
26	116	180	1,890	1,120	405	472	415	327	1,010	92	109	75
27	116	178	14,500	1,080	377	436	381	285	785	92	101	75
28	117	186	7,320	1,050	344	414	349	259	608	90	92	72
29	923	196	3,650	956	-----	400	331	246	705	106	84	78
30	2,950	216	2,570	871	-----	495	316	245	1,120	142	90	70
31	1,380	-----	2,000	773	-----	1,900	-----	240	-----	118	82	-----
TOTAL	11,118	8,953	54,551	37,881	15,842	16,460	32,473	15,511	26,281	6,512	2,976	3,558
MEAN	359	298	1,760	1,222	566	531	1,082	500	876	210	96.0	119
MAX	2,950	851	14,500	3,020	1,050	1,900	3,560	2,060	5,960	858	123	210
MIN	105	178	208	666	344	360	316	240	246	90	78	70
CFSM	.53	.44	2.60	1.81	.84	.78	1.60	.74	1.29	.31	.14	.18
IN.	.61	.49	3.00	2.08	.87	.90	1.78	.85	1.44	.36	.16	.20
CAL YR 1973	TOTAL 282,729	MEAN 775	MAX 14,500	MIN 104	CFSM 1.14	IN 15.54						
WTR YR 1974	TOTAL 232,116	MEAN 636	MAX 14,500	MIN 70	CFSM .94	IN 12.75						

PEAK DISCHARGE (BASE, 3,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	0300	8.96	6,730	4- 5	1200	7.31	4,180
12-27	1400	14.11	17,700	6- 3	0800	10.22	9,020

POTOMAC RIVER BASIN

01613000 Potomac River at Hancock, Md.

LOCATION.--Lat 39°41'49", long 78°10'39", Washington County, on left bank 0.2 mi (0.3 km) downstream from Little Tonoloway Creek, 0.5 mi (0.8 km) downstream from bridge on U. S. Highway 522 at Hancock, 1.1 mi (1.8 km) upstream from Tonoloway Creek (formerly called Great or Big Tonoloway Creek), and at mile 239 (385 km).

DRAINAGE AREA.--4,073 mi² (10,549 km²).

PERIOD OF RECORD.--October 1932 to current year. Gage-height records collected at same site since June 1925 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 383.46 ft (116.879 m) above mean sea level, adjustment of 1912. Oct. 1, 1932, to Jan. 5, 1935, Mar. 18, 1936, to Jan. 20, 1937, nonrecording gage, on former highway bridge just upstream at same datum.

AVERAGE DISCHARGE.--42 years, 4,039 ft³/s (114.4 m³/s), 13.41 in/yr (342 mm/yr).

EXTREMES.--Current year: Maximum discharge, 65,100 ft³/s (1,840 m³/s) Dec. 28, gage height, 23.19 ft (7.068 m); minimum, 518 ft³/s (14.7 m³/s) Sept. 28, 29, 30, gage height, 2.74 ft (0.835 m).
Period of record: Maximum discharge, 340,000 ft³/s (9,630 m³/s) Mar. 18, 1936, gage height, 47.6 ft (14.508 m), from rating curve extended above 120,000 ft³/s (3,400 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 180 ft³/s (5.10 m³/s) Oct. 4, 1932, gage height, 2.01 ft (0.613 m).
Maximum stage known prior to 1932, about 40 ft (12.2 m) in May 1889, discharge, about 220,000 ft³/s (6,230 m³/s).

REMARKS.--Records good. Slight regulation at low flow from power plants upstream. Low flow affected slightly by Stony River Reservoir (see sta 01595200) and since December 1950, by Savage River Reservoir.

REVISIONS (WATER YEARS).--WSP 781: 1933(M). WSP 801: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	689	7,340	5,230	11,300	5,080	4,160	10,100	2,110	3,590	5,490	840	632
2	1,110	7,050	4,320	9,730	4,770	3,880	8,370	2,010	7,720	6,060	890	1,020
3	2,200	6,680	3,800	8,290	4,410	4,210	7,430	1,970	28,800	5,430	990	1,500
4	4,650	5,180	3,420	7,750	4,400	6,220	9,210	2,070	28,400	3,910	1,200	1,220
5	3,590	4,270	2,860	9,010	4,160	5,880	21,100	2,360	13,700	3,100	920	1,030
6	2,610	3,810	2,710	7,960	3,700	5,600	18,000	2,330	9,200	3,790	860	990
7	2,030	3,860	2,940	7,160	3,440	5,220	13,500	2,130	6,880	4,090	733	1,130
8	1,680	3,600	2,880	6,500	3,400	4,790	9,480	2,050	5,470	3,260	668	1,520
9	1,460	3,140	3,040	5,740	4,200	5,290	8,960	2,030	4,530	2,750	614	2,440
10	1,390	2,870	5,970	5,890	3,770	5,600	11,100	1,990	3,900	2,710	589	2,150
11	2,120	2,750	7,070	19,000	3,490	5,480	9,610	1,970	3,700	2,010	614	1,660
12	2,090	2,510	5,660	29,000	3,350	5,260	8,320	2,380	3,700	1,630	668	1,370
13	1,840	2,280	4,580	21,100	3,230	5,040	8,010	5,070	3,010	1,460	650	1,220
14	1,590	2,130	4,040	14,900	3,390	4,970	10,300	10,400	2,460	1,280	686	1,220
15	1,960	2,050	3,890	11,900	4,900	4,600	9,070	8,340	2,180	1,130	790	1,160
16	2,180	2,030	3,960	9,840	6,360	4,350	7,730	6,180	2,460	1,020	733	1,290
17	1,560	1,980	3,930	8,390	5,390	4,310	6,640	4,910	3,580	940	677	1,220
18	1,200	2,020	3,800	7,750	4,870	4,130	5,790	4,160	3,780	890	733	990
19	1,260	2,110	3,450	6,900	4,360	3,950	5,140	4,270	3,090	840	860	870
20	1,060	2,030	3,330	6,410	4,040	3,720	4,630	4,410	2,430	771	1,040	771
21	962	2,000	4,730	6,830	4,190	4,130	4,170	3,870	2,170	733	920	714
22	1,000	1,980	18,300	12,200	4,210	5,060	3,780	3,370	2,070	695	870	668
23	1,290	2,000	14,800	12,800	4,290	5,720	3,550	3,060	2,730	668	860	623
24	1,120	1,810	10,400	10,600	5,430	5,490	3,410	2,970	8,880	677	820	589
25	807	1,830	8,990	8,810	5,350	4,930	3,300	2,850	13,900	714	752	557
26	752	1,960	9,130	7,970	4,760	4,410	3,050	2,630	9,380	733	686	549
27	728	2,010	46,700	8,130	4,310	3,960	2,790	2,340	7,410	762	742	533
28	704	1,960	57,800	7,750	3,950	3,680	2,540	2,090	5,730	1,220	771	518
29	6,880	2,960	28,500	7,020	-----	3,440	2,370	1,930	5,010	1,180	641	525
30	17,800	4,940	18,400	6,400	-----	3,540	2,240	1,850	5,790	1,290	650	525
31	11,100	-----	15,100	5,630	-----	7,270	-----	2,430	-----	940	623	-----
TOTAL	81,412	93,140	313,730	308,660	121,200	148,290	223,690	102,530	205,650	62,173	24,090	31,204
MEAN	2,626	3,105	10,120	9,957	4,329	4,784	7,456	3,307	6,855	2,006	777	1,040
MAX	17,800	7,340	57,800	29,000	6,360	7,270	21,100	10,400	28,800	6,060	1,200	2,440
MIN	689	1,810	2,710	5,630	3,230	3,440	2,240	1,850	2,070	668	589	518
CFSM	.64	.76	2.48	2.44	1.06	1.17	1.83	.81	1.68	.49	.19	.26
IN.	.74	.85	2.87	2.82	1.11	1.35	2.04	.94	1.88	.57	.22	.28
CAL YR 1973	TOTAL 1,963,626		MEAN 5,380		MAX 57,800		MIN 564		CFSM 1.32		IN 17.93	
WTR YR 1974	TOTAL 1,715,769		MEAN 4,701		MAX 57,800		MIN 518		CFSM 1.15		IN 15.67	

PEAK DISCHARGE (BASE, 23,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-28	0330	23.19	65,100	4- 5	1700	13.85	25,300
1-12	1300	15.38	30,700	6- 3	2330	17.83	40,300

POTOMAC RIVER BASIN

55

01614000 Back Creek near Jones Springs, W. Va.

LOCATION.--Lat 39°30'43", long 78°02'15", Berkeley County, on left bank at downstream side of highway bridge, 1.3 mi (2.1 km) southeast of Tomahawk, 3.5 mi (5.6 km) northeast of village of Jones Springs, 9.0 mi (14.5 km) upstream from Tihlance Creek, and at mile 11.6 (18.7 km).

DRAINAGE AREA.--243 mi² (629 km²).

PERIOD OF RECORD.--July 1928 to September 1931 (published as "near Hedgesville"), August 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 416.42 ft (126.925 m) above mean sea level, Corps of Engineers bench mark. Prior to Sept. 30, 1931, nonrecording gage at highway bridge 5.0 mi (8.0 km) downstream at different datum. Aug. 30, 1938, to Oct. 16, 1956, nonrecording gage, crest-stage gage since March 1940, at present site and datum.

AVERAGE DISCHARGE.--39 years, 195 ft³/s (5.522 m³/s), 10.90 in/yr (277 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,680 ft³/s (132 m³/s) Dec. 27, gage height, 11.48 ft (3.499 m), minimum, 16 ft³/s (0.45 m³/s) Aug. 21; gage height, 1.72 (0.524 m).

Period of record: Maximum discharge, 22,400 ft³/s (634 m³/s) Oct. 15, 1942, gage height, 25.17 ft (7.672 m), from floodmarks, from rating curve extended above 6,200 ft³/s (176 m³/s) on basis of current-meter measurement of 14,500 ft³/s (411 m³/s) made at Hedgesville; minimum observed, 0.9 ft³/s (0.03 m³/s) Aug. 6, 1930.

Flood of Mar. 17 or 18, 1936, reached a stage of 25.0 ft (7.62 m), present datum, from floodmarks, discharge, 22,000 ft³/s (623 m³/s), from rating curve extended as explained above.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 851: 1930(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	172	42	422	191	88	832	75	80	290	21	26
2	37	128	39	345	171	91	570	70	243	240	21	26
3	36	100	37	295	177	113	426	73	726	190	22	26
4	30	82	36	375	166	111	698	78	359	150	23	26
5	29	73	38	403	143	103	1,060	68	218	110	22	26
6	27	83	45	358	129	100	674	62	150	98	24	30
7	26	85	48	314	124	102	482	61	116	90	22	50
8	25	73	45	265	128	108	390	60	97	110	21	85
9	26	67	170	227	125	104	648	60	87	87	21	52
10	27	61	622	450	113	107	633	60	78	77	19	37
11	27	55	342	1,540	110	111	486	67	88	66	19	32
12	26	52	216	1,540	105	107	398	106	72	52	19	28
13	26	49	165	835	114	113	450	730	56	37	21	28
14	25	46	150	556	142	107	637	450	52	31	21	43
15	23	45	132	446	157	98	510	300	78	28	21	62
16	23	45	114	387	140	99	394	217	131	26	19	49
17	23	44	108	321	136	129	314	169	187	24	38	36
18	24	41	104	256	132	129	264	138	143	23	24	29
19	24	40	120	218	123	117	225	121	96	22	21	26
20	23	40	100	198	125	115	192	116	73	22	19	26
21	22	38	891	319	115	132	165	97	63	21	18	25
22	21	37	1,060	751	106	267	150	79	59	21	21	24
23	21	37	538	545	124	253	158	141	100	19	43	23
24	21	34	415	432	113	226	148	166	250	22	40	23
25	23	36	356	381	101	189	124	125	610	23	28	21
26	21	34	855	343	93	160	110	97	470	23	24	19
27	21	34	3,620	330	85	148	100	82	290	22	21	19
28	23	37	1,850	305	85	135	90	70	220	23	19	21
29	1,800	43	1,060	274	-----	126	87	64	260	24	19	23
30	540	46	695	240	-----	326	82	63	400	24	21	22
31	272	-----	504	215	-----	1,310	-----	63	-----	23	23	-----
TOTAL	3,319	1,757	14,517	13,886	3,573	5,424	11,497	4,128	5,852	2,018	715	963
MEAN	107	58.6	468	448	128	175	383	133	195	65.1	23.1	32.1
MAX	1,800	172	3,620	1,540	191	1,310	1,060	730	726	290	43	85
MIN	21	34	36	198	85	88	82	60	52	19	18	19
CFSM	.44	.24	1.93	1.84	.53	.72	1.58	.55	.80	.27	.10	.13
IN.	.51	.27	2.22	2.13	.55	.83	1.76	.63	.90	.31	.11	.15

CAL YR 1973 TOTAL 90,003 MEAN 247 MAX 3,620 MIN 18 CFSM 1.02 IN 13.78

WTP YR 1974 TOTAL 67,649 MEAN 185 MAX 3,620 MIN 18 CFSM .76 IN 10.36

PEAK DISCHARGE (BASE, 2,500 CFS).--Dec. 27 (1030) 4,680 cfs (11.48 ft).

POTOMAC RIVER BASIN

01616500 Opequon Creek near Martinsburg, W.Va.

LOCATION.--Lat 39°25'25", long 77°56'20", Berkeley County, on right bank 300 ft (91 m) upstream from Evans Run, 2.3 mi (3.7 km) upstream from Tuscarora Creek, 3.0 mi (4.8 km) southeast of Martinsburg, and at mile 11.1 (17.9 km).

DRAINAGE AREA.--272 mi² (704 km²).

PERIOD OF RECORD.--May 1905 to July 1906, July 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 354.89 ft (108.170 m) above mean sea level. Prior to July 1906, nonrecording gage at approximately the same site at different datum. July 23, 1947 to July 22, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--27 years (1947-74), 213 ft³/s (6.032 m³/s), 10.63 in/yr (207 mm/yr).

EXTREMES.--Current year: Maximum discharge, 3,610 ft³/s (102 m³/s) Dec. 27, gage height, 11.01 ft (3.356 m), minimum, 61 ft³/s (1.73 m³/s) Sept. 30, gage height, 1.91 ft (0.582 m).

Period of record: Maximum discharge, 19,000 ft³/s (538 m³/s) June 22, 1972, gage height, 17.45 ft (5.319 m), from rating curve extended above 7,100 ft³/s (201 m³/s); minimum observed, 25 ft³/s (0.71 m³/s) Oct. 25, 1947; minimum gage height, 1.24 ft (0.378 m) Jan. 8, 1956.

Flood in March 1936 reached a stage of about 17.5 ft (5.33 m), from information by local residents.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1702: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	253	99	468	291	184	542	171	150	155	81	77
2	114	206	97	425	276	184	418	164	384	138	80	75
3	138	182	95	399	285	202	348	175	753	124	82	80
4	114	166	95	558	270	189	573	167	295	121	82	104
5	102	167	102	515	253	184	778	157	214	119	80	87
6	94	185	112	433	241	178	475	158	179	121	76	82
7	92	169	105	384	241	182	384	155	161	138	77	143
8	90	155	100	341	243	180	351	151	152	117	78	171
9	94	146	320	318	237	173	576	155	147	110	79	114
10	94	138	594	591	225	173	525	167	144	109	78	97
11	92	131	300	1,130	223	167	408	155	293	116	77	92
12	90	126	223	903	219	166	358	216	195	105	74	90
13	88	126	193	553	235	167	389	495	152	99	75	90
14	87	124	191	445	293	160	455	247	141	96	73	136
15	82	122	176	413	287	155	380	195	334	94	69	141
16	82	121	160	404	251	158	325	171	218	92	67	100
17	80	116	158	368	241	173	291	158	189	92	432	88
18	82	112	146	325	229	160	274	148	158	90	133	87
19	82	112	164	309	219	157	258	150	143	88	95	83
20	80	111	171	298	216	158	241	178	138	88	83	79
21	75	112	912	603	202	180	229	155	153	87	82	82
22	74	111	769	986	204	240	221	146	141	85	99	87
23	74	105	475	558	229	207	233	191	171	83	375	77
24	75	107	401	455	200	186	216	197	304	92	129	75
25	77	105	353	458	193	170	204	158	218	90	102	75
26	74	102	1,300	453	185	162	197	141	202	88	92	75
27	74	102	3,050	430	182	159	189	133	197	95	92	69
28	79	107	1,260	389	182	154	184	131	184	94	92	69
29	2,070	111	769	360	-----	153	180	133	187	93	83	69
30	864	104	585	332	-----	588	176	139	171	93	83	62
31	332	-----	490	313	-----	1,280	-----	138	-----	86	80	-----
TOTAL	5,740	4,034	13,965	14,917	6,552	6,929	10,378	5,395	6,468	3,198	3,280	2,756
MEAN	185	134	450	481	234	224	346	174	216	103	106	91.9
MAX	2,070	253	3,050	1,130	293	1,280	778	495	753	155	432	171
MIN	74	102	95	298	182	153	176	131	138	83	67	62
CFSM	.68	.49	1.65	1.77	.86	.82	1.27	.64	.79	.38	.39	.34
IN.	.79	.55	1.91	2.04	.90	.95	1.42	.74	.88	.44	.45	.38

CAL YR 1973 TOTAL 116,802 MEAN 320 MAX 3,050 MIN 74 CFSM 1.18 IN 15.97
WTR YR 1974 TOTAL 83,612 MEAN 229 MAX 3,050 MIN 62 CFSM .84 IN 11.44

PEAK DISCHARGE (BASE, 1,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1800	10.51	3,170	12-27	1100	11.01	3,610

POTOMAC RIVER BASIN

57

01617000 Tuscarora Creek above Martinsburg, W. Va.

LOCATION.--Lat 39°28'10", long 77°58'18", Berkeley County, on left bank at Martinsburg, 20 ft (6 m) upstream from culvert on Secondary State Route 10, and at mile 3.7 (6.0 km).

DRAINAGE AREA.--11.3 mi² (29.3 km²).

PERIOD OF RECORD.--October 1948 to September 1963, October 1967 to current year.

GAGE.--Water-stage and rainfall recorders. Concrete dam and culvert control since Oct. 1, 1967. Datum of gage is 445.74 ft (135.862 m) above mean sea level. Prior to Jan. 5, 1949, nonrecording gage and Jan. 5, 1949, to Sept. 30, 1963, water-stage recorder at site 120 ft (37 m) downstream at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--22 years, 10.7 ft³/s (0.303 m³/s), 12.86 in/yr (327 mm/yr).

EXTREMES.--Current year: Maximum discharge, 334 ft³/s (9.46 m³/s) Oct. 29, gage height, 10.56 ft (3.219 m), from rating curve extended above 60 ft³/s (1.70 m³/s) as explained below; minimum 2.9 ft³/s (0.082 m³/s) Aug. 31, Sept. 10, 11, gage height, 7.21 ft (2.198 m).

Period of record: Maximum discharge, 450 ft³/s (12.7 m³/s) June 23, 1972, gage height, 11.20 ft (3.414 m), from rating curve extended above 60 ft³/s (1.70 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.2 ft³/s (0.006 m³/s) May 27, 1954, gage height, 0.74 ft (0.226 m), site and datum then in use.

REMARKS.--Records good. Rainfall records collected at site since October 1967 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

REVISIONS (WATER YEARS).--WSP 1202: 1949-50(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	13	5.4	21	17	11	25	14	13	9.9	4.3	3.4
2	5.4	12	5.4	19	18	11	22	13	19	10	4.1	3.2
3	5.6	11	5.4	19	18	11	20	14	14	11	4.5	3.6
4	5.1	10	5.4	24	18	11	43	13	11	8.0	4.5	3.8
5	4.9	10	5.8	20	17	10	32	13	9.9	8.8	4.5	3.4
6	4.7	9.2	5.6	19	17	10	27	13	9.2	7.7	4.0	3.4
7	4.7	8.9	5.6	19	17	10	25	12	8.8	7.7	4.1	4.8
8	4.7	8.9	5.4	18	16	10	26	12	8.4	7.3	4.0	4.1
9	4.7	8.3	12	17	15	10	33	12	8.4	7.0	4.0	4.0
10	4.7	8.0	9.5	34	15	10	26	12	9.9	6.7	4.0	3.6
11	4.4	8.0	8.0	48	15	10	25	11	11	6.7	4.0	3.1
12	4.4	8.0	7.4	39	15	9.9	24	21	8.4	6.5	4.0	3.2
13	4.4	7.7	7.4	30	15	9.5	32	20	8.0	6.5	4.0	3.4
14	4.4	7.4	7.4	28	14	9.5	26	16	7.7	6.2	3.8	4.0
15	4.0	7.1	7.1	27	14	9.2	22	15	7.3	6.2	3.8	4.0
16	4.0	6.8	6.8	26	14	9.5	22	14	9.2	5.9	5.1	3.6
17	4.0	6.8	5.6	24	13	9.5	21	13	11	5.6	5.1	3.4
18	4.0	6.8	5.4	23	13	8.8	20	13	8.8	5.1	4.3	3.4
19	4.0	6.8	6.4	23	13	9.2	19	13	8.0	5.1	4.1	3.4
20	4.0	6.5	7.7	22	13	9.2	18	13	7.7	5.1	4.0	3.4
21	3.7	6.5	23	34	12	12	18	12	7.7	5.1	4.0	3.4
22	3.7	6.5	18	25	13	12	18	13	9.9	5.1	4.1	3.4
23	3.7	6.3	15	23	12	11	18	14	24	4.8	4.1	3.4
24	3.7	6.0	14	22	12	11	17	13	15	5.3	4.0	3.2
25	3.7	6.0	13	22	12	10	17	11	13	5.3	3.8	3.1
26	3.7	6.0	50	21	11	10	16	11	11	5.1	4.1	3.1
27	3.7	6.0	66	21	11	10	15	11	11	5.1	3.4	3.1
28	4.0	6.0	36	20	11	10	15	10	10	4.8	3.4	3.1
29	136	5.6	27	20	-----	9.9	15	11	11	4.5	3.4	3.2
30	21	5.4	24	19	-----	40	14	11	9.5	5.1	4.0	3.2
31	15	-----	22	18	-----	33	-----	11	-----	4.8	3.4	-----
TOTAL	292.9	231.5	442.7	745	401	367.2	671	405	320.8	198.0	125.9	104.4
MEAN	9.45	7.72	14.3	24.0	14.3	11.8	22.4	13.1	10.7	6.39	4.06	3.48
MAX	136	13	66	48	18	40	43	21	24	11	5.1	4.8
MIN	3.7	5.4	5.4	17	11	8.8	14	10	7.3	4.5	3.4	3.1
CFSM	.84	.68	1.27	2.12	1.27	1.04	1.98	1.16	.95	.57	.36	.31
IN. /	.96	.76	1.46	2.45	1.32	1.21	2.21	1.33	1.06	.65	.41	.34
IN. /	6.30	.78	3.77	3.08	.31	2.54	2.60	3.70	3.79	-	2.24	5.13

CAL YR 1973 TOTAL 5,785.4 MEAN 15.9 MAX 136 MIN 3.7 CFSM 1.41 IN. / 19.05
WTR YR 1974 TOTAL 4,305.4 MEAN 11.8 MAX 136 MIN 3.1 CFSM 1.04 IN. / 14.17

PEAK DISCHARGE (BASE, 100 CFS)

/ Runoff.
// Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1000	10.56	334	3-30	1845	8.90	110
12-26	2115	9.15	136				

POTOMAC RIVER BASIN

01618000 Potomac River at Shepherdstown, W. Va.

LOCATION.--Lat 39°26'04", long 77°48'07", Jefferson County, on right bank 0.1 mi (0.2 km) downstream from Rumsey Bridge at Shepherdstown, 3.3 mi (5.3 km) upstream from Antietam Creek, and at mile 184 (296 km).

DRAINAGE AREA.--5,936 mi² (15,374 km²).

PERIOD OF RECORD.--August 1928 to September 1953. Annual maximums, water years 1954-64. July 1964 to current year. Gage-height record and estimated discharges October 1953 to June 1964 available in files of Maryland district office.

GAGE.--Water-stage recorder. Datum of gage is 281.00 ft (85.649 m) above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--35 years (1928-53, 1964-74), 5,941 ft³/s (168.2 m³/s), 13.59 in/yr (345 mm/yr).

EXTREMES.--Current year: Maximum discharge, 80,600 ft³/s (2,280 m³/s) Dec. 28, gage height, 19.52 ft (5.950 m); minimum, 793 ft³/s (22.5 m³/s) Sept. 29, gage height, 1.80 ft (0.549 m).

Period of record: Maximum discharge, 335,000 ft³/s (9,490 m³/s) Mar. 19, 1936, gage height, 42.1 ft (12.83 m), from floodmarks, from rating curve extended above 200,000 ft³/s (5,660 m³/s) on basis of slope-area measurement of peak flow; minimum, 170 ft³/s (4.81 m³/s) Aug. 1, 1966; minimum daily, 185 ft³/s (5.24 m³/s) July 31, 1966.

Floods in June 1889 and May 1924 reached stages of 39.2 ft (11.95 m) and 29.8 ft (9.08 m) respectively, from floodmarks, discharges, about 290,000 ft³/s (8,210 m³/s) and 168,000 ft³/s (4,760 m³/s) respectively, from rating curve extended as explained above.

REMARKS.--Records good. Some regulation at low flow by powerplants upstream from station, Stony River Reservoir (see sta 01595200), and since December 1950 by Savage River Reservoir.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 781: 1929(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,240	13,900	6,930	19,000	8,400	5,270	21,300	3,730	4,070	7,550	1,480	942
2	2,570	10,900	6,690	15,600	7,870	5,320	16,600	3,630	6,930	7,580	1,230	1,080
3	4,120	9,000	5,500	13,400	7,510	5,220	13,300	3,720	19,100	7,930	1,200	1,410
4	5,550	7,500	5,000	12,500	7,210	6,060	13,500	3,790	39,300	6,360	1,600	2,010
5	6,240	6,500	4,400	13,200	7,020	7,540	27,200	3,830	21,600	4,890	2,200	1,800
6	4,610	6,000	4,000	13,200	6,500	7,050	30,800	3,950	13,400	4,210	1,560	1,510
7	3,580	5,500	4,200	11,600	5,980	6,710	22,100	3,850	9,670	5,120	1,330	1,520
8	3,110	5,000	4,200	10,600	5,730	6,310	16,600	3,710	7,600	4,890	1,290	1,830
9	2,740	4,800	6,000	9,730	5,330	6,300	14,400	3,720	6,410	4,190	1,090	2,170
10	2,370	4,400	10,900	9,510	5,630	7,500	16,400	3,810	5,570	3,550	955	2,790
11	2,300	4,000	13,600	16,800	5,200	7,540	15,700	3,740	5,160	3,350	963	2,440
12	2,870	3,800	10,300	37,200	4,980	7,080	13,300	4,030	4,990	2,700	986	1,980
13	2,600	3,600	8,510	34,300	4,790	6,660	12,500	9,730	4,580	2,340	1,030	1,850
14	2,400	3,400	7,360	24,000	4,760	6,370	17,100	13,500	3,840	2,140	993	1,850
15	2,200	3,200	6,850	18,200	5,050	6,090	16,300	14,200	3,480	1,970	961	1,710
16	2,400	3,200	6,530	15,500	7,290	5,820	13,600	10,300	3,710	1,810	1,070	1,610
17	2,600	3,000	6,430	13,600	7,420	5,800	11,400	8,000	5,580	1,660	1,220	1,600
18	2,400	3,000	5,840	12,800	6,560	5,650	9,920	6,760	6,510	1,500	1,250	1,590
19	2,000	3,000	5,700	11,500	6,070	5,430	8,810	6,090	5,370	1,470	1,090	1,420
20	1,800	3,200	5,520	10,400	5,560	5,160	7,830	6,360	4,390	1,440	1,160	1,200
21	1,800	3,000	7,880	10,500	5,360	5,100	7,090	6,020	3,670	1,290	1,280	1,170
22	1,700	2,800	21,400	17,900	5,570	7,110	6,570	5,310	3,380	1,250	1,250	1,020
23	1,600	2,800	26,600	21,200	5,540	8,220	6,380	4,970	3,500	1,240	1,270	992
24	1,800	2,800	17,800	17,800	6,320	8,180	6,320	5,070	7,030	1,330	1,270	938
25	1,700	2,600	14,000	14,800	6,990	7,400	5,940	4,820	17,700	1,200	1,170	906
26	1,600	2,600	13,000	12,600	6,510	6,630	5,400	4,440	14,500	1,210	1,100	875
27	1,400	2,800	41,100	12,000	5,930	6,040	4,820	4,080	11,100	1,260	1,070	852
28	1,400	2,800	78,500	11,800	5,430	5,640	4,510	3,700	8,940	1,320	1,030	828
29	5,000	3,400	53,700	11,000	-----	5,360	4,170	3,440	7,280	1,640	1,100	826
30	39,400	4,400	31,800	10,100	-----	5,730	3,920	3,260	7,020	1,830	1,010	828
31	25,300	-----	24,000	9,230	-----	17,200	-----	3,210	-----	2,300	911	-----
TOTAL	143,400	136,900	464,240	471,570	172,510	207,490	373,780	168,770	265,380	92,520	37,119	43,547
MEAN	4,626	4,563	14,980	15,210	6,161	6,693	12,460	5,444	8,846	2,985	1,197	1,452
MAX	39,400	13,900	78,500	37,200	8,400	17,200	30,800	14,200	39,300	7,930	2,200	2,790
MIN	1,400	2,600	4,000	9,230	4,760	5,100	3,920	3,210	3,380	1,200	911	826
CFSM	.78	.77	2.52	2.56	1.04	1.13	2.10	.92	1.49	.50	.20	.24
IN.	.90	.86	2.91	2.96	1.08	1.30	2.34	1.06	1.66	.58	.23	.27
CAL YR 1973	TOTAL 3,085,380		MEAN 8,453		MAX 78,500		MIN 1,100		CFSM 1.42		IN 19.34	
WTR YR 1974	TOTAL 2,577,226		MEAN 7,061		MAX 78,500		MIN 826		CFSM 1.19		IN 16.15	

PEAK DISCHARGE (BASE, 23,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	0700	12.98	42,500	1-12	2100	12.56	40,400
12-23	0300	10.46	30,300	4- 6	0330	11.35	34,500
12-28	1100	19.52	80,600	6- 4	0900	13.08	43,000

01636500 Shenandoah River at Millville, W. Va.

LOCATION.--Lat 39°16'55", long 77°47'22", Jefferson County, on left bank 0.4 mi (0.6 km) downstream from Cattail Run, 1.0 mi (1.6 km) upstream from Millville, 5.0 mi (8.0 km) upstream from Harpers Ferry, and at mile 5.0 (8.0 km).

DRAINAGE AREA.--3,040 mi² (7,874 km²).

PERIOD OF RECORD.--April 1895 to March 1909, August 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 293.00 ft (89.306 m) above mean sea level, adjustment of 1912. Apr. 15, 1895, to Mar. 31, 1909, nonrecording gage at site 0.8 mi (1.3 km) downstream at datum 0.32 ft (0.098 m) higher.

AVERAGE DISCHARGE.--59 years (1895-1908, 1928-74), 2,657 ft³/s (75.25 m³/s), 11.87 in/yr (301 mm/yr).

EXTREMES.--Current year: Maximum discharge, 46,200 ft³/s (1,310 m³/s) Dec. 28, gage height, 14.78 ft (4.505 m); minimum, 614 ft³/s (17.4 m³/s) July 22; minimum gage height, 1.55 ft (0.472 m) Oct. 27; minimum daily discharge, 670 ft³/s (19.0 m³/s) July 22, 23.

Period of record: Maximum discharge, 230,000 ft³/s (6,510 m³/s) Oct. 16, 1942, gage height, 32.4 ft (9.88 m), from floodmarks; minimum, about 59 ft³/s (1.67 m³/s) Oct. 4, 1930, gage height, 0.39 ft (0.119 m); minimum daily, 194 ft³/s (5.49 m³/s) July 24, 1930.

Flood of 1870 reached practically same stage as flood of Mar. 18, 1936, 26.36 ft (8.035 m), discharge, 151,000 ft³/s (4,280 m³/s).

REMARKS.--Records good. Regulation by hydroelectric plants, particularly that of Potomac Light and Power Co., 0.5 mi (0.8 km) upstream from station.

REVISIONS (WATER YEARS).--WSP 951: 1936(M). WSP 1432: Drainage area at former site, 1895-99, 1901-2, 1905, 1907-8, 1932(M), 1935(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	842	3,370	1,120	7,280	4,560	2,330	4,190	1,680	1,500	1,590	902	822
2	960	2,900	1,110	6,330	4,220	2,340	4,070	1,540	4,500	1,560	830	928
3	1,100	2,600	1,080	5,730	3,930	2,390	3,660	1,570	19,500	1,400	798	982
4	2,000	2,440	1,080	5,210	3,700	2,420	3,610	1,650	19,500	1,290	734	946
5	1,700	2,260	1,070	5,050	3,490	2,370	4,810	1,620	10,000	1,110	702	822
6	1,300	2,080	1,070	4,820	3,280	2,280	5,490	1,620	6,690	1,310	814	854
7	1,200	1,900	1,110	4,420	3,090	2,250	5,660	1,690	4,980	1,120	750	1,040
8	1,100	1,870	1,360	4,120	2,980	2,230	5,050	1,310	3,990	1,070	718	1,270
9	1,000	1,760	2,410	3,870	2,800	2,270	4,760	1,480	3,380	1,040	742	1,330
10	1,000	1,700	3,820	3,770	2,700	2,210	4,570	1,530	2,940	1,070	870	2,000
11	1,200	1,570	4,640	4,640	2,690	2,120	4,180	1,550	2,760	1,060	822	1,860
12	1,200	1,620	4,120	6,670	2,590	2,040	3,750	1,720	2,430	982	766	1,530
13	1,100	1,530	3,300	7,260	2,530	2,070	3,520	4,160	2,100	894	798	1,460
14	1,000	1,430	2,840	6,270	2,690	2,110	3,390	10,600	1,890	846	846	1,630
15	920	1,260	2,560	5,460	2,880	2,290	3,250	8,450	1,730	846	782	1,560
16	890	1,310	2,400	4,950	2,760	2,370	3,050	5,840	1,710	814	734	1,230
17	840	1,300	2,300	4,570	2,680	2,360	2,850	4,580	1,680	838	937	1,130
18	810	1,260	2,200	4,160	2,580	2,360	2,720	3,740	1,710	806	1,210	1,080
19	816	1,200	2,100	3,750	2,490	2,330	2,540	3,160	1,610	758	919	987
20	813	1,140	2,100	3,460	2,440	2,320	2,420	3,190	1,590	758	806	941
21	799	1,220	3,740	3,520	2,350	2,330	2,290	2,680	1,480	742	814	926
22	798	1,050	19,600	6,270	2,300	2,590	2,200	2,350	1,440	670	782	905
23	796	1,080	17,500	9,290	2,300	3,300	2,180	2,320	1,510	670	1,070	863
24	791	1,100	9,990	7,130	2,330	4,210	2,180	2,290	1,710	694	946	808
25	794	1,110	7,400	6,320	2,680	3,700	2,040	2,050	1,840	694	766	790
26	816	1,000	6,980	6,370	2,590	3,330	2,020	1,840	1,800	694	782	776
27	740	1,070	25,000	6,590	2,500	3,050	1,940	1,810	1,830	702	774	738
28	788	1,030	40,600	6,410	2,440	2,790	1,770	1,710	1,670	774	766	727
29	2,110	1,080	19,500	6,080	-----	2,650	1,780	1,480	1,570	774	838	760
30	5,190	1,100	12,200	5,520	-----	3,130	1,710	1,550	1,610	814	1,040	732
31	4,150	-----	9,150	5,030	-----	4,370	-----	1,560	-----	1,020	919	-----
TOTAL	39,563	47,340	215,450	170,320	80,570	80,910	97,650	84,320	112,650	29,410	25,977	32,427
MEAN	1,276	1,578	6,950	5,494	2,878	2,610	3,255	2,720	3,755	949	838	1,081
MAX	5,190	3,370	40,600	9,290	4,560	4,370	5,660	10,600	19,500	1,590	1,210	2,000
MIN	740	1,000	1,070	3,460	2,300	2,040	1,710	1,310	1,440	670	702	727
CFSM	.42	.52	2.29	1.81	.95	.86	1.07	.89	1.24	.31	.28	.36
IN.	.48	.58	2.64	2.08	.99	.99	1.19	1.03	1.38	.36	.32	.40

CAL YR 1973 TOTAL 1,385,442 MEAN 3,796 MAX 40,600 MIN 732 CFSM 1.25 IN 16.95
WTR YR 1974 TOTAL 1,016,587 MEAN 2,785 MAX 40,600 MIN 670 CFSM .92 IN 12.44

PEAK DISCHARGE (BASE, 15,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	1830	10.93	25,200	6- 4	0300	11.08	25,900
12-28	0845	14.78	46,200				

POTOMAC RIVER BASIN

01638500 Potomac River at Point of Rocks, Md.

LOCATION.--Lat 39°16'25", long 77°32'35", Frederick County, on left bank at downstream side of bridge on U.S. Highway 15 at Point of Rocks, 0.3 mi (0.5 km) downstream from Catoctin Creek (Virginia), 6.0 mi (9.7 km) upstream from Monocacy River, and at mile 159.5 (256.6 km).

DRAINAGE AREA.--9,651 mi² (24,996 km²).

PERIOD OF RECORD.--February 1895 to current year.

GAGE.--Water-stage recorder. Datum of gage is 200.54 ft (61.125 m) above mean sea level, adjustment of 1912. Prior to October 28, 1929, nonrecording gage at same site. Prior to Sept 2, 1902, at datum about 0.45 ft (0.137 m) higher.

AVERAGE DISCHARGE.--79 years, 9,263 ft³/s (262.3 m³/s), 13.03 in/yr (331 mm/yr).

EXTREMES.--Current year: Maximum discharge, 132,000 ft³/s (3,740 m³/s) Dec. 28, gage height, 21.27 ft (6.483 m); minimum, 1,690 ft³/s (47.9 m³/s) Sept. 30, gage height, 1.03 ft (0.314 m).
Period of record: Maximum discharge, 480,000 ft³/s (13,600 m³/s) Mar. 19, 1936, gage height, 41.03 ft (12.506 m) from rating curve extended above 300,000 ft³/s (8,500 m³/s) on the basis of adjustment of figure of peak flow at station near Washington for inflow and storage, and slope-area measurement of peak flow; minimum, 530 ft³/s (15.0 m³/s) Sept. 11, 12, 1966, gage height, 0.27 ft (0.082 m).
Flood of June 2, 1889, reached a stage of 40.2 ft (12.25 m), from floodmarks, discharge, about 460,000 ft³/s (13,000 m³/s) from rating curve extended as explained above.

REMARKS.--Records good. Low flow affected slightly since 1913 by Stony River Reservoir (see sta 01595200) and since December 1950 by Savage River Reservoir. Low flow affected extensively at times by run-of-the river hydroelectric plants.

REVISIONS (WATER YEARS).--WSP 192: 1895-1905. WSP 1432: 1899, 1901-2, 1904-5, 1912, 1914(M), 1915, 1917(M), 1918, 1919(M), 1920, 1921-23(M), 1924, 1925-28(M), 1930(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,550	19,700	7,240	30,600	13,500	7,960	27,800	6,030	5,340	9,420	3,260	2,090
2	3,290	14,300	7,200	24,700	12,400	8,100	23,400	5,660	8,750	9,420	2,710	2,290
3	3,830	12,700	6,270	20,900	11,700	7,920	19,100	5,630	30,900	9,730	2,420	2,660
4	6,000	11,400	5,660	18,900	11,000	8,290	17,900	5,500	58,700	8,510	2,370	3,370
5	8,030	9,610	5,370	18,600	10,500	10,100	28,600	5,500	36,400	6,710	2,820	3,320
6	6,890	8,360	5,090	18,900	9,920	9,730	37,900	5,660	22,300	5,930	3,090	3,040
7	5,340	7,630	5,060	17,000	9,190	9,420	31,100	5,730	15,700	6,000	2,740	3,090
8	4,500	7,350	5,400	15,300	8,770	9,040	25,000	5,340	12,500	6,470	2,420	3,400
9	3,940	6,960	6,540	14,100	8,620	8,730	21,300	5,180	10,400	5,570	2,420	3,650
10	3,600	6,270	11,300	13,500	9,040	9,300	21,600	5,370	9,040	5,030	2,370	4,720
11	3,400	5,760	18,200	18,100	8,550	9,610	23,100	5,310	8,550	4,750	2,170	4,870
12	3,740	5,530	15,600	37,200	8,140	9,460	18,900	6,150	7,850	4,240	2,020	4,290
13	4,030	5,250	12,200	44,000	7,880	9,190	17,300	11,300	7,200	3,650	2,070	4,060
14	3,830	4,870	10,200	33,500	7,960	8,850	21,000	22,600	6,300	3,340	2,140	4,840
15	3,460	4,630	9,300	26,000	8,250	8,890	21,800	24,600	5,530	3,150	2,050	3,910
16	3,370	4,410	8,810	22,000	9,490	8,660	18,800	18,000	5,500	2,950	2,070	3,480
17	3,650	4,320	8,660	19,400	10,800	8,510	16,100	13,800	6,570	2,820	2,320	3,040
18	3,340	4,240	8,330	17,700	9,730	8,510	14,100	11,400	8,550	2,660	2,980	3,040
19	2,790	4,120	7,560	16,100	9,150	8,180	12,400	9,760	7,670	2,500	2,630	2,900
20	2,690	4,150	7,490	14,600	8,620	7,920	11,400	9,690	6,610	2,350	2,290	2,660
21	2,610	4,060	10,300	15,000	8,140	7,850	10,400	9,340	5,700	2,370	2,320	2,550
22	2,420	4,060	33,500	21,500	8,210	9,190	9,570	8,290	5,280	2,090	2,400	2,420
23	2,370	3,830	47,000	30,200	8,400	11,500	9,190	7,920	5,280	2,070	2,480	2,140
24	2,420	3,910	32,000	27,400	8,620	12,900	9,040	7,700	6,750	2,120	2,770	2,000
25	2,660	3,830	23,800	23,100	9,840	11,800	8,470	7,520	17,100	2,120	2,450	1,910
26	2,500	3,710	22,500	20,300	9,690	10,700	7,990	6,750	18,200	2,090	2,220	1,870
27	2,270	3,770	53,100	19,500	8,920	9,650	7,520	6,300	14,000	2,090	2,220	1,820
28	1,960	3,910	125,000	19,100	8,400	8,890	7,030	5,800	11,600	2,170	2,140	1,740
29	3,320	3,970	89,200	18,000	-----	8,330	6,570	5,310	9,530	2,320	2,170	1,760
30	35,400	4,780	49,800	16,500	-----	10,100	6,330	5,060	8,890	2,740	2,400	1,720
31	32,100	-----	37,100	15,000	-----	20,200	-----	4,900	-----	3,150	2,370	-----
TOTAL	172,300	191,390	694,780	666,700	263,430	297,480	510,710	263,100	382,690	130,530	75,300	88,650
MEAN	5,558	6,380	22,410	21,510	9,408	9,596	17,020	8,487	12,760	4,211	2,429	2,955
MAX	35,400	19,700	125,000	44,000	13,500	20,200	37,900	24,600	58,700	9,730	3,260	4,870
MIN	1,960	3,710	5,060	13,500	7,880	7,850	6,330	4,900	5,280	2,070	2,020	1,720
CFSM	.58	.66	2.32	2.23	.97	.99	1.76	.88	1.32	.44	.25	.31
IN.	.66	.74	2.68	2.57	1.02	1.15	1.97	1.01	1.48	.50	.29	.34
CAL YR 1973	TOTAL 4,847,440		MEAN 13,280		MAX 125,000		MIN 1,960		CFSM 1.38		IN 18.68	
WTR YR 1974	TOTAL 3,737,060		MEAN 10,240		MAX 125,000		MIN 1,720		CFSM 1.06		IN 14.40	

PEAK DISCHARGE (BASE, 35,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1400	10.05	43,100	1-13	0400	10.62	46,700
12-23	0600	11.37	51,600	4- 6	1000	9.55	40,000
12-28	1300	21.27	132,000	6- 4	1400	13.14	64,000

OHIO RIVER BASIN

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MONONGAHELA RIVER BASIN

03050000 Tygart Valley River near Dailey, W. Va.

LOCATION.--Lat 38°48'35", long 79°52'55", Randolph County, on right bank 50 ft (15 m) downstream from highway bridge, 1,000 ft (305 m) upstream from Stalnaker Run, 1.0 mi (1.6 km) northeast of Dailey, 2.5 mi (4.0 km) south of Beverly, and at mile 95.7 (154.0 km).

DRAINAGE AREA.--187 mi² (484 km²).

PERIOD OF RECORD.--April 1915 to current year. Prior to October 1960, published as Tygart River near Dailey.

GAGE.--Water-stage recorder. Datum of gage is 1,940.09 ft (591.339 m) above mean sea level, adjustment of 1912. Prior to Sept. 27, 1928, nonrecording gage a few feet upstream at same datum. Sept. 27, 1928, to Dec. 16, 1941, nonrecording gage, at site 50 ft (15 m) upstream at same datum.

AVERAGE DISCHARGE.--59 years, 348 ft³/s (9.855 m³/s), 25.31 in/yr (643 mm/yr).

EXTREMES.--Current year: Maximum discharge, 13,000 ft³/s (368 m³/s) June 2, gage height, 13.71 ft (4.179 m); minimum, 18 ft³/s (0.51 m³/s) Aug. 15, 16, gage height, 0.67 ft (0.204 m).
Period of record: Maximum discharge, 13,100 ft³/s (371 m³/s) Feb. 4, 1932, gage height, 17.2 ft (5.24 m), from floodmarks; no flow Sept. 12 to Nov. 30, 1930, Sept. 29 to Nov. 5, 1953.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 873: 1932(M). WSP 1053: 1918(M), 1928(M), 1932, 1934-38. WSP 1305: 1924(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	1,290	460	769	257	383	160	144	1,690	335	36	260
2	270	820	360	575	248	1,450	215	142	5,370	230	26	174
3	372	411	300	589	389	1,630	491	344	4,230	158	22	476
4	224	259	254	1,500	360	863	2,280	514	1,050	117	28	710
5	165	345	244	1,090	310	559	2,190	431	528	105	32	320
6	114	511	241	674	270	434	854	344	359	170	29	198
7	82	345	203	470	360	532	518	272	257	786	24	488
8	116	250	183	350	470	1,100	539	213	198	296	22	353
9	291	234	212	434	430	787	1,040	392	353	166	24	210
10	303	206	216	1,940	380	567	742	563	228	117	34	152
11	195	170	190	5,740	320	473	521	413	172	98	43	127
12	124	147	180	3,460	290	872	416	638	140	82	34	112
13	95	138	278	1,130	437	1,150	368	1,460	117	62	28	98
14	89	147	943	470	1,660	791	338	724	98	51	26	140
15	82	149	710	370	1,300	518	365	446	110	50	20	129
16	66	692	511	310	764	437	329	317	525	53	33	89
17	55	756	340	280	511	473	284	233	485	45	138	68
18	49	444	270	251	377	425	239	203	290	38	54	57
19	45	408	240	230	314	908	208	170	195	36	54	47
20	40	411	878	272	470	1,500	180	138	326	50	287	42
21	37	336	4,440	338	476	1,060	154	116	410	45	129	38
22	34	264	1,530	507	485	1,250	142	101	652	33	76	38
23	32	211	804	458	692	823	228	112	1,310	28	54	36
24	29	186	577	398	567	539	272	154	1,690	34	43	31
25	27	170	567	908	450	389	242	136	760	43	34	27
26	25	211	3,120	971	340	308	218	112	491	36	28	24
27	24	381	4,620	688	270	254	198	96	317	46	23	22
28	23	1,560	1,340	491	240	210	178	85	272	33	22	22
29	53	1,140	755	434	-----	185	162	83	917	26	57	21
30	321	652	1,200	359	-----	178	146	625	504	50	521	20
31	1,500	-----	1,010	308	-----	185	-----	881	-----	57	308	-----
TOTAL	4,996	13,244	27,176	26,764	13,437	21,233	14,217	10,802	24,044	3,476	2,289	4,529
MEAN	161	441	877	863	480	685	474	342	801	112	73.8	151
MAX	1,500	1,560	4,620	5,740	1,660	1,630	2,280	1,460	5,370	786	521	710
MIN	23	138	180	230	240	178	142	83	98	26	20	20
CFSM	.86	2.36	4.69	4.62	2.57	3.66	2.53	1.83	4.28	.60	.39	.81
IN.	.99	2.63	5.41	5.32	2.67	4.22	2.83	2.11	4.78	.69	.46	.90

CAL YR 1973 TOTAL 135,929.2 MEAN 372 MAX 4,620 MIN 9.2 CFSM 1.99 IN 27.04
WTR YR 1974 TOTAL 166,007.0 MEAN 455 MAX 5,740 MIN 20 CFSM 2.43 IN 33.02

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0915	10.24	5,350	4- 4	2200	9.90	4,700
12-27	0245	11.24	6,610	6- 2	1900	13.71	13,000
1-11	0400	11.01	6,220				

MONONGAHELA RIVER BASIN

03050500 Tygart Valley River near Elkins, W. Va.

LOCATION.--Lat 38°55'30", long 79°52'45", Randolph County, on left bank 1.4 mi (2.3 km) upstream from Leading Creek, 1.5 mi (2.4 km) west of Elkins, and at mile 78.3 (126.0 km).

DRAINAGE AREA.--272 mi² (704 km²).

PERIOD OF RECORD.--October 1944 to current year. Prior to October 1960, published as Tygart River near Elkins.

GAGE.--Water-stage recorder. Datum of gage is 1,893.95 ft (577.276 m) above mean sea level, adjustment of 1912. Prior to Nov. 16, 1944, nonrecording gage and Nov. 16, 1944, to Sept. 30, 1951, water-stage recorder at site 200 ft (61 m) upstream at same datum.

AVERAGE DISCHARGE.--30 years, 540 ft³/s (15.29 m³/s), 26.96 in/yr (685 mm/yr).

EXTREMES.--Current year: Maximum discharge, 11,100 ft³/s (314 m³/s) June 3, gage height, 14.62 ft (4.456 m); minimum, 8.4 ft³/s (0.24 m³/s) Aug. 4, 5, gage height, 1.25 ft (0.381 m).

Period of record: Maximum discharge, 13,100 ft³/s (371 m³/s) Dec. 31, 1969, gage height, 15.65 ft (4.770 m); minimum daily, 0.1 ft³/s (0.003 m³/s) Sept. 20-29, 1959; minimum gage height, 1.01 ft (0.308 m) Sept. 26-28, 1959.

REMARKS.--Records fair. Slight regulation at times by flood-diversion dam upstream from station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	1,730	571	1,100	343	514	250	182	2,900	501	40	466
2	245	1,170	415	865	338	1,830	282	182	7,540	372	35	344
3	635	525	336	870	613	2,710	628	417	9,470	273	25	609
4	335	318	285	2,360	540	1,300	2,290	804	2,060	208	9.1	1,260
5	256	421	255	1,670	460	876	3,820	620	759	171	13	585
6	172	728	253	978	380	668	1,190	484	464	243	22	331
7	126	462	213	687	711	688	732	371	318	688	23	656
8	127	326	186	486	1,020	1,470	676	286	234	339	28	578
9	346	295	195	528	792	1,140	1,340	333	307	169	26	336
10	335	268	224	2,150	571	940	1,100	705	264	91	22	229
11	273	215	200	7,350	460	840	780	539	191	85	29	180
12	171	184	185	7,430	409	1,030	602	667	147	78	50	140
13	127	167	262	1,970	570	1,440	519	2,030	122	71	50	145
14	113	167	1,400	984	2,670	1,130	481	1,040	107	57	37	462
15	106	175	1,200	677	1,960	788	476	639	94	46	24	326
16	97	639	688	518	1,070	636	433	431	449	37	16	186
17	68	1,030	522	407	740	700	368	316	636	39	90	147
18	46	581	321	334	516	644	314	280	317	15	78	115
19	47	459	270	306	420	868	273	233	220	36	71	72
20	50	487	650	349	605	2,110	237	183	556	46	215	72
21	48	418	5,180	421	692	1,440	201	149	710	45	173	72
22	45	336	3,370	675	647	1,780	180	146	956	39	112	71
23	42	268	1,160	644	844	1,230	243	152	2,070	33	78	64
24	36	231	788	541	757	848	328	233	3,550	21	69	49
25	27	217	773	994	590	588	305	259	1,440	29	48	48
26	28	208	3,500	1,290	490	452	277	190	844	38	24	46
27	28	443	7,870	950	370	378	258	148	564	36	26	42
28	28	2,400	2,810	704	330	315	234	122	398	39	29	37
29	55	1,750	1,060	599	-----	280	210	123	972	37	36	36
30	314	854	1,400	487	-----	268	188	537	764	30	888	36
31	2,170	-----	1,380	410	-----	278	-----	1,080	-----	34	546	-----
TOTAL	6,686	17,472	37,922	39,734	19,908	30,179	19,215	13,881	39,423	3,946	2,932.1	7,740
MEAN	216	582	1,223	1,282	711	974	641	448	1,314	127	94.6	258
MAX	2,170	2,400	7,870	7,430	2,670	2,710	3,820	2,030	9,470	688	888	1,260
MIN	27	167	185	306	330	268	180	122	94	15	9.1	36
CFSM	.79	2.14	4.50	4.71	2.61	3.58	2.36	1.65	4.83	.47	.35	.95
IN.	.91	2.39	5.19	5.43	2.72	4.13	2.63	1.90	5.39	.54	.40	1.06

CAL YR 1973 TOTAL 188,638.4 MEAN 517 MAX 7,870 MIN 8.4 CFSM 1.90 IN 25.80
WTR YR 1974 TOTAL 239,038.1 MEAN 655 MAX 9,470 MIN 9.1 CFSM 2.41 IN 32.69

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	2145	11.53	6,340	4-5	0800	10.67	5,340
12-27	1330	13.15	8,640	6-3	0800	14.62	11,100
1-11	2015	13.46	9,140				

03051000 Tygart Valley River at Belington, W. Va.

LOCATION.--Lat 39°01'45", long 79°56'10", Barbour County, on left bank opposite mouth of Mill Creek, 0.2 mi (0.3 km) downstream from highway bridge at Belington, and mile 61.5 (99.0 km).

DRAINAGE AREA.--408 mi² (1,057 km²), excluding that of Mill Creek.

PERIOD OF RECORD.--June 1907 to current year. Prior to October 1960, published as Tygart River at Belington.

GAGE.--Water-stage recorder. Datum of gage is 1,679.49 ft (511.909 m) above mean sea level, adjustment of 1912. Prior to Apr. 25, 1939, nonrecording gage at site 0.2 mi (0.3 km) upstream at same datum.

AVERAGE DISCHARGE.--67 years, 804 ft³/s (22.77 m³/s), 26.76 in/yr (680 mm/yr).

EXTREMES.--Current year: Maximum discharge, 11,400 ft³/s (323 m³/s) June 3, gage height, 14.80 ft (4.511 m); minimum, 34 ft³/s (0.96 m³/s) Aug. 27, gage height, 2.29 ft (0.698 m).
Period of record: Maximum discharge, 18,400 ft³/s (521 m³/s) July 25, 1912, gage height, 20.3 ft (6.19 m), from floodmarks, site then in use; minimum, 0.1 ft³/s (0.003 m³/s) Sept. 13, 1930, gage height, 1.56 ft (0.475 m), site then in use.
Flood of July 1888, reached a stage of 21.7 ft (6.61 m), former site, from floodmarks, discharge, 21,200 ft³/s (600 m³/s).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 823: Drainage area. WSP 953: 1933(M), 1941(M). WSP 1335: 1912, 1914-15, 1916(M), 1921-22(M), 1925(M), 1928, 1933. WSP 1385: 1909(M), 1913-15(M), 1917-18, 1924(M), 1928(M), 1932, 1934, 1936, 1938-39, 1948-49.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	809	2,990	1,190	2,000	625	883	412	354	5,330	692	80	725
2	555	2,250	860	1,600	574	2,260	437	344	10,600	516	81	595
3	962	1,170	689	1,550	996	4,420	797	688	10,400	385	72	1,090
4	626	717	577	4,000	1,070	2,190	3,620	1,840	4,050	292	72	2,190
5	435	761	523	3,080	860	1,440	5,540	1,310	1,380	270	47	1,120
6	301	1,450	532	1,830	700	1,120	2,210	970	825	306	44	581
7	214	1,060	452	1,280	1,060	1,090	1,360	746	575	614	56	851
8	194	748	396	927	1,890	1,940	1,170	561	424	650	59	968
9	445	660	425	921	1,460	1,780	2,410	567	480	318	76	576
10	554	617	475	3,220	1,050	1,450	2,230	915	474	218	77	385
11	475	517	445	9,050	710	1,440	1,530	862	323	144	59	296
12	292	452	408	9,670	640	1,430	1,200	871	262	145	75	233
13	214	417	555	3,580	954	1,930	1,040	3,030	216	131	113	218
14	184	405	2,430	1,830	4,350	1,650	1,040	1,890	186	118	97	1,700
15	172	413	2,310	1,200	3,420	1,200	1,020	1,150	166	106	73	1,020
16	154	905	1,480	940	1,910	974	900	786	360	96	56	465
17	136	1,910	1,000	742	1,310	1,040	748	576	895	82	140	306
18	98	1,230	760	611	937	976	626	548	530	80	130	233
19	84	955	670	582	764	1,050	535	475	335	62	118	163
20	87	946	1,160	760	1,060	2,650	467	381	592	119	297	133
21	87	834	6,380	849	1,290	2,200	394	310	912	108	181	128
22	80	687	4,970	1,180	1,190	2,790	351	264	1,760	92	125	133
23	76	550	2,040	1,150	1,330	2,000	476	377	3,410	87	100	120
24	71	480	1,420	981	1,260	1,360	595	455	6,250	83	87	98
25	63	464	1,350	1,420	1,000	972	580	654	2,580	72	63	84
26	51	444	5,020	2,050	850	741	518	509	1,350	90	38	78
27	51	818	9,330	1,590	650	616	484	378	890	119	38	71
28	52	3,950	4,650	1,200	570	514	442	294	620	100	39	67
29	105	3,480	1,890	1,040	-----	455	397	266	917	94	51	62
30	500	1,820	2,170	861	-----	430	357	613	1,090	92	962	54
31	3,480	-----	2,360	734	-----	445	-----	1,520	-----	83	1,000	-----
TOTAL	11,607	34,100	58,917	62,428	34,480	45,436	33,886	24,504	58,182	6,364	4,506	14,743
MEAN	374	1,137	1,901	2,014	1,231	1,466	1,130	790	1,939	205	145	491
MAX	3,480	3,950	9,330	9,670	4,350	4,420	5,540	3,030	10,600	692	1,000	2,190
MIN	51	405	396	582	570	430	351	264	166	62	38	54
CFSM	.92	2.79	4.66	4.94	3.02	3.59	2.77	1.94	4.75	.50	.36	1.20
IN.	1.06	3.11	5.37	5.69	3.14	4.14	3.09	2.23	5.30	.58	.41	1.34

CAL YR 1973 TOTAL 314,997 MEAN 863 MAX 9,330 MIN 26 CFSM 2.12 IN 28.72
WTR YR 1974 TOTAL 389,153 MEAN 1,066 MAX 10,600 MIN 38 CFSM 2.61 IN 35.48

PEAK DISCHARGE (BASE, 6,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	2200	11.79	7,360	4- 5	0800	11.15	6,580
12-27	1400	13.49	9,590	6- 3	1300	14.80	11,400
1-11	2300	14.66	11,200	6-24	0400	11.65	7,180

MONONGAHELA RIVER BASIN

03052000 Middle Fork River at Audra, W. Va.

LOCATION.--Lat 39°02'25", long 80°04'10", Barbour County, on right bank at Audra, 600 ft (183 m) upstream from highway bridge, and at mile 2.7 (4.3 km).

DRAINAGE AREA.--149 mi² (386 km²).

PERIOD OF RECORD.--February 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,670 ft (509 m), from topographic map.

AVERAGE DISCHARGE.--32 years, 347 ft³/s (9.827 m³/s), 31.63 in/yr (803 mm/yr).

EXTREMES.--Current year: Maximum discharge, 5,410 ft³/s (153 m³/s) June 2, gage height, 9.01 ft (2.746 m); minimum, 12 ft³/s (0.34 m³/s) Aug. 16, gage height, 1.70 ft (0.518 m).

Period of record: Maximum discharge, 11,500 ft³/s (326 m³/s) June 23, 1972, gage height, 13.67 ft (4.167 m), from rating curve extended above 6,800 ft³/s (193 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.2 ft³/s (0.006 m³/s) Oct. 11-27, 1953; minimum gage height, 1.07 ft (0.326 m) Sept. 9, 1957.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	264	1,510	712	1,020	369	448	226	210	2,570	376	43	530
2	264	1,020	548	832	349	940	241	200	4,550	295	25	432
3	348	671	455	922	548	1,340	344	330	2,440	228	18	808
4	299	485	400	2,300	535	820	1,730	700	1,050	223	21	1,580
5	264	521	376	1,500	440	605	1,730	640	605	341	24	730
6	205	666	368	916	360	490	1,030	560	392	266	23	436
7	158	567	314	670	500	480	730	464	271	204	23	476
8	148	472	289	510	876	675	640	392	202	150	17	412
9	545	454	307	580	726	645	942	388	336	116	21	320
10	412	401	327	2,070	520	560	948	378	214	93	71	260
11	299	352	293	3,920	400	505	853	334	160	84	37	217
12	232	331	274	2,560	360	525	727	371	136	81	33	188
13	190	324	392	1,900	446	560	649	831	110	58	24	170
14	178	333	1,440	1,000	1,760	495	662	688	87	44	26	610
15	182	329	994	620	1,380	424	655	546	66	40	21	555
16	145	722	730	520	904	388	566	439	127	36	32	380
17	127	899	520	412	665	444	483	362	165	36	188	282
18	110	692	390	358	515	40	418	370	114	29	185	220
19	102	618	350	338	440	456	368	337	80	28	120	182
20	93	553	587	392	545	844	326	283	190	110	136	152
21	85	485	2,040	397	560	862	287	244	313	104	127	133
22	78	432	1,250	448	565	1,230	265	219	530	52	84	148
23	71	377	904	443	600	868	334	238	1,750	32	59	129
24	62	349	695	442	555	635	366	326	1,970	36	58	108
25	58	344	665	599	545	456	354	348	923	66	47	94
26	52	325	2,690	697	440	380	338	303	659	59	34	85
27	46	445	3,060	659	360	328	322	265	464	94	29	78
28	46	2,160	1,400	557	320	285	303	228	358	80	33	73
29	67	1,720	892	529	-----	257	264	205	588	46	59	64
30	208	1,000	1,110	463	-----	247	230	577	484	41	892	54
31	1,940	-----	1,080	417	-----	244	-----	778	-----	61	580	-----
TOTAL	7,278	19,557	25,852	28,991	16,583	17,840	17,331	12,554	21,904	3,509	3,090	9,906
MEAN	235	652	834	935	592	575	578	405	730	113	99.7	330
MAX	1,940	2,160	3,060	3,920	1,760	1,340	1,730	831	4,550	376	892	1,580
MIN	46	324	274	338	320	244	226	200	66	28	17	54
CFSM	1.58	4.38	5.60	6.28	3.97	3.86	3.88	2.72	4.90	.76	.67	2.21
IN.	1.82	4.88	6.45	7.24	4.14	4.45	4.33	3.13	5.47	.88	.77	2.47
CAL YR 1973	TOTAL 150,048.6	MEAN 411	MAX 3,260	MIN 4.3	CFSM 2.76	IN 37.46						
WTR YR 1974	TOTAL 184,395.0	MEAN 505	MAX 4,550	MIN 17	CFSM 3.39	IN 46.04						

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2230	8.65	4,940	6- 2	1415	9.01	5,410
1-11	1700	8.27	4,470	6-23	1945	7.62	3,730
4- 4	1700	7.05	3,150				

a From floodmark.

NOTE.--Fragmentary or no gage-height record Dec. 21 to Jan. 17.

MONONGAHELA RIVER BASIN

65

03052500 Sand Run near Buckhannon, W. Va.

LOCATION.--Lat 38°57'50", long 80°09'10", Upshur County, on right bank 300 ft (91 m) downstream from Left Fork, 4.5 mi (7.2 km) southeast of Buckhannon, and at mile 6.0 (9.7 km).

DRAINAGE AREA.--14.5 mi² (37.6 km²).

PERIOD OF RECORD.--October 1946 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,530 ft (466 m), from topographic map.

AVERAGE DISCHARGE.--28 years, 26.4 ft³/s (0.748 m³/s), 24.72 in/yr (628 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,040 ft³/s (29.5 m³/s) June 23, gage height, 6.02 ft (1.835 m), from rating curve extended as explained below; minimum, 0.50 ft³/s (0.014 m³/s) Oct. 26-28; minimum gage height, 0.76 ft (0.232 m) Aug. 3, 16.

Period of record: Maximum discharge, 2,000 ft³/s (56.6 m³/s) June 25, 1950, from rating curve extended above 600 ft³/s (17.0 m³/s); maximum gage height, 6.29 ft (1.917 m) Mar. 19, 1963; no flow for several days in 1951-56, 1964-66.

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

REVISIONS (WATER YEARS).--WSP 1725: 1955(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	38	23	44	19	27	11	13	428	9.0	1.3	35
2	21	21	16	32	17	62	15	12	360	6.6	1.0	30
3	13	13	12	35	37	110	28	28	117	4.7	1.1	50
4	8.9	9.3	11	130	33	54	176	36	45	4.5	6.9	310
5	6.3	21	14	90	25	39	86	30	24	6.6	3.8	37
6	4.3	24	12	56	18	33	46	24	16	90	2.1	21
7	3.2	17	10	37	27	37	32	19	12	22	1.6	26
8	2.8	13	9.7	28	31	39	33	17	9.0	12	1.9	23
9	6.4	18	12	35	25	35	56	20	6.9	8.4	2.8	19
10	4.0	15	12	200	19	33	54	16	5.0	6.4	3.4	14
11	2.8	13	11	400	17	29	45	14	3.8	7.5	2.1	11
12	2.1	11	13	190	16	31	37	35	5.5	4.1	2.1	9.0
13	1.7	10	57	100	42	28	42	40	3.5	3.1	2.0	8.0
14	2.5	8.9	178	54	151	25	51	25	2.5	2.5	1.5	43
15	1.7	8.9	59	35	90	23	66	17	2.4	3.5	1.1	32
16	1.4	33	36	25	56	29	44	12	16	3.2	14	20
17	1.1	27	28	20	37	34	32	11	7.5	2.2	31	13
18	.86	20	22	17	28	27	25	22	4.1	1.8	9.8	9.8
19	.86	17	18	16	22	30	21	14	5.2	13	6.9	7.5
20	.76	13	60	22	25	52	17	12	30	18	4.3	5.8
21	.66	12	174	24	34	58	15	9.0	62	5.8	3.2	7.5
22	.66	10	58	27	32	89	14	9.3	56	3.5	2.4	7.8
23	.66	8.7	36	26	38	56	25	21	481	4.1	2.3	4.7
24	.66	9.1	31	25	34	39	21	24	208	5.2	1.9	3.6
25	.59	9.3	44	32	32	29	19	20	51	3.1	1.7	3.4
26	.50	9.5	140	54	24	22	17	15	25	2.5	1.4	3.1
27	.50	33	95	44	19	18	15	11	16	2.3	1.2	2.8
28	.59	183	42	33	16	15	14	8.1	15	1.9	1.1	2.9
29	2.1	78	31	31	-----	13	13	10	18	1.8	3.0	2.8
30	22	37	48	28	-----	12	11	14	12	3.1	67	2.4
31	71	-----	49	24	-----	13	-----	81	-----	1.8	40	-----
TOTAL	199.60	740.7	1,361.7	1,914	964	1,141	1,081	639.4	2,047.4	264.2	225.9	765.1
MEAN	6.44	24.7	43.9	61.7	34.4	36.8	36.0	20.6	68.2	8.52	7.29	25.5
MAX	71	183	178	400	151	110	176	81	481	90	67	310
MIN	.50	8.7	9.7	16	16	12	11	8.1	2.4	1.8	1.0	2.4
CFSM	.44	1.70	3.03	4.26	2.37	2.54	2.48	1.42	4.70	.59	.50	1.76
IN.	.51	1.90	3.49	4.91	2.47	2.93	2.77	1.64	5.25	.68	.58	1.96
CAL YR 1973	TOTAL	9,266.55	MEAN	25.4	MAX	245	MIN	.02	CFSM	1.75	IN	23.77
WTR YR 1974	TOTAL	11,344.00	MEAN	31.1	MAX	481	MIN	.50	CFSM	2.14	IN	29.10

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-11	unknown	a4.98	715	6-23	1800	6.02	1,040
6-1	1700	5.35	820	9-4	unknown	a4.92	704

a From floodmark.

NOTE.--No gage-height record
Jan. 3 to Feb. 7, Feb. 15
to Mar. 6, Mar. 17 to
Apr. 4, Aug. 28 to Sept. 16.

MONONGAHELA RIVER BASIN

03053500 Buckhannon River at Hall, W. Va.

LOCATION.--Lat 39°03'05", Long 80°06'50", Barbour County, on right bank 0.2 mi (0.3 km) upstream from highway bridge at Hall, 1.0 mi (1.6 km) upstream from Pecks Run, and at mile 7.5 (12.1 km).

DRAINAGE AREA.--277 mi² (717 km²).

PERIOD OF RECORD.--June 1907 to May 1909 (gage heights only), April 1915 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,369.15 ft (417.317 m) above mean sea level, Baltimore & Ohio RR datum. June 1907 to May 25, 1909, nonrecording gage at site 0.2 mi (0.3 km) downstream at datum 4.12 ft (1.256 m) lower. Apr. 15, 1915, to June 8, 1939, nonrecording gage at site 500 ft (152 m) downstream at present datum.

AVERAGE DISCHARGE.--59 years, 594 ft³/s (16.82 m³/s), 29.12 in/yr (740 mm/yr).

EXTREMES.--Current year: Maximum discharge, 8,620 ft³/s (244 m³/s) Jan. 11, gage height, 11.97 ft (3.648 m); minimum, 27 ft³/s (0.76 m³/s) Aug. 28, gage height, 3.93 ft (1.198 m).
Period of record: Maximum discharge, 13,000 ft³/s (368 m³/s) Mar. 7, 1967, gage height, 15.07 ft (4.593 m), from rating curve extended above 9,100 ft³/s (258 m³/s); minimum, 0.2 ft³/s (0.006 m³/s) Oct. 23, 27, 1930, gage height, 1.30 ft (0.396 m), site then in use.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 783: 1918(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	538	1,850	1,050	1,750	513	552	311	177	5,940	452	69	894
2	671	1,460	740	1,380	453	883	325	184	6,640	338	54	744
3	720	894	581	1,350	719	2,550	504	273	3,800	249	42	910
4	574	616	470	3,660	825	1,560	2,630	538	2,200	187	37	2,070
5	586	550	458	2,790	660	1,070	3,510	532	1,120	160	45	1,000
6	409	878	573	1,530	500	899	1,630	460	718	582	45	560
7	288	765	475	1,060	600	861	1,030	385	532	385	41	650
8	218	610	385	779	1,130	1,260	712	308	390	200	37	568
9	291	566	385	760	1,040	1,290	1,090	312	308	160	34	442
10	321	634	420	2,300	740	1,000	1,360	350	277	130	41	340
11	242	526	380	7,350	560	862	1,120	281	209	100	59	277
12	189	430	368	6,820	490	835	910	420	191	115	63	229
13	153	385	696	2,570	713	902	807	1,220	164	106	52	233
14	136	360	3,760	1,340	2,430	829	910	842	138	76	44	998
15	145	355	2,550	950	2,530	713	950	586	115	63	40	926
16	131	652	1,260	728	1,500	654	786	415	170	74	99	580
17	106	1,430	780	574	1,030	875	604	321	317	61	261	400
18	91	1,040	580	469	756	817	466	385	265	58	188	298
19	81	842	500	432	611	768	375	312	181	52	126	229
20	74	828	744	559	669	1,320	312	225	261	115	90	184
21	68	700	3,200	593	814	1,420	257	177	568	135	101	167
22	64	604	2,540	672	773	2,170	217	170	1,040	89	80	188
23	60	502	1,350	653	881	1,610	269	290	2,490	66	62	180
24	56	425	958	636	822	1,100	370	556	4,190	66	50	160
25	53	410	918	821	781	790	321	490	1,750	60	43	140
26	52	395	2,280	1,100	620	610	290	355	887	76	37	132
27	47	628	5,100	1,030	500	499	261	273	647	120	32	113
28	45	3,680	2,540	834	450	409	233	209	423	100	29	97
29	52	3,720	1,340	805	-----	353	205	205	620	63	38	84
30	97	1,770	1,480	708	-----	323	181	634	638	57	772	76
31	1,400	-----	1,720	611	-----	326	-----	1,560	-----	74	1,300	-----
TOTAL	7,958	28,525	40,581	47,614	24,110	30,110	22,946	13,445	37,189	4,569	4,011	13,869
MEAN	257	951	1,309	1,536	861	971	765	434	1,240	147	129	462
MAX	1,400	3,720	5,100	7,350	2,530	2,550	3,510	1,560	6,640	582	1,300	2,070
MIN	45	355	368	432	450	323	181	170	115	52	29	76
CFSM	.93	3.43	4.73	5.55	3.11	3.51	2.76	1.57	4.48	.53	.47	1.67
IN.	1.07	3.83	5.45	6.39	3.24	4.04	3.08	1.81	4.99	.61	.54	1.86
CAL YR 1973	TOTAL 233,838	MEAN 641	MAX 5,220	MIN 19	CFSM 2.31	IN 31.40						
WTR YR 1974	TOTAL 274,927	MEAN 753	MAX 7,350	MIN 29	CFSM 2.72	IN 36.92						

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	2130	9.30	4,880	4- 4	2345	9.12	4,630
12-27	0730	9.87	5,680	6- 1	2215	11.63	8,140
1-11	2245	11.97	8,620	6-24	0130	9.31	4,890

MONONGAHELA RIVER BASIN

67

03054500 Tygart Valley River at Philippi, W. Va.

LOCATION.--Lat 39°09'00", Long 80°02'25", Barbour County, on right bank at Philippi, 0.2 mi (0.3 km) downstream from Anglins Run, 5.0 mi (8.0 km) downstream from Buckhannon River, and at mile 44.9 (72.2 km).

DRAINAGE AREA.--916 mi² (2,372 km²).

PERIOD OF RECORD.--April 1940 to current year. Prior to October 1960, published as Tygart River at Philippi.

GAGE.--Water-stage recorder. Datum of gage is 1,280.55 ft (390.312 m) above mean sea level. Prior to May 23, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 1,844 ft³/s (52.22 m³/s), 27.34 in/yr (694 mm/yr).

EXTREMES.--Current year. Maximum discharge, 24,400 ft³/s (691 m³/s) Jan. 11, gage height, 19.07 ft (5.813 m); minimum, 87 ft³/s (2.46 m³/s) Aug. 28, gage height, 1.70 ft (0.518 m).

Period of record: Maximum discharge, 43,000 ft³/s (1,220 m³/s) Mar. 7, 1967, gage height, 25.93 ft (7.903 m); minimum, 4.9 ft³/s (0.14 m³/s) Oct. 10-12, 21, 1953; minimum gage height, 0.92 ft (0.280 m) Sept. 9, 10, 1957.

Flood of July 25, 1912, reached a stage of 27.3 ft (8.32 m), read on National Weather Service gage 0.2 mi (0.3 km) downstream, or about 26 ft (8 m), present site and datum, discharge, about 37,000 ft³/s (1,050 m³/s).

REMARKS.--Records good. Records of instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,860	6,610	3,230	5,090	1,660	1,970	1,030	813	11,700	1,640	211	2,320
2	1,540	5,080	2,360	4,150	1,450	3,860	1,040	821	23,100	1,210	186	1,940
3	2,000	2,970	1,880	3,770	2,070	8,760	1,600	1,180	18,300	894	161	2,650
4	1,620	1,970	1,570	9,590	2,500	5,210	7,220	2,990	8,440	668	152	5,630
5	1,320	1,670	1,450	8,120	2,100	3,480	11,300	2,720	3,430	857	154	3,820
6	980	2,880	1,610	4,770	1,700	2,830	5,470	2,160	2,150	936	132	2,100
7	708	2,540	1,390	3,290	2,000	2,640	3,370	1,790	1,530	1,070	127	2,010
8	557	1,950	1,150	2,460	3,920	3,760	2,620	1,400	1,110	1,270	131	2,250
9	1,100	1,740	1,170	2,300	3,530	4,020	4,330	1,320	1,100	645	131	1,600
10	1,350	1,730	1,280	6,600	2,300	3,270	4,960	1,640	1,050	451	158	1,140
11	1,040	1,470	1,200	19,900	1,800	3,090	3,820	1,610	735	354	164	868
12	748	1,230	1,110	19,300	1,500	2,900	3,080	1,700	593	317	168	703
13	564	1,100	1,760	8,460	2,080	3,430	2,720	4,970	491	301	188	582
14	468	1,050	8,220	4,420	7,980	3,200	2,820	3,990	405	250	188	2,550
15	456	1,040	6,920	2,980	8,060	2,570	2,790	2,590	344	241	163	3,200
16	410	1,670	4,050	2,380	4,740	2,210	2,490	1,900	450	251	202	1,870
17	340	4,060	2,980	1,930	3,240	2,480	2,050	1,430	1,370	200	834	1,200
18	288	3,100	2,200	1,590	2,410	2,410	1,700	1,430	1,060	182	598	873
19	238	2,430	1,900	1,440	1,970	2,300	1,430	1,310	626	183	425	644
20	220	2,320	2,200	1,820	2,260	4,500	1,230	1,030	804	377	308	477
21	214	2,070	11,100	1,990	2,790	4,570	1,030	804	1,880	389	443	411
22	201	1,780	10,200	2,360	2,650	6,210	897	683	3,390	270	356	431
23	192	1,460	4,990	2,420	2,880	4,920	1,040	824	6,420	222	267	436
24	180	1,240	3,470	2,220	2,780	3,420	1,390	1,320	12,800	231	198	351
25	170	1,200	3,160	2,580	2,600	2,510	1,350	1,700	6,090	204	176	281
26	158	1,150	8,610	3,870	2,100	1,970	1,230	1,370	3,110	186	149	248
27	145	1,690	16,900	3,500	1,800	1,640	1,130	1,040	2,200	290	119	225
28	142	8,910	9,740	2,780	1,700	1,360	1,040	814	1,530	273	99	214
29	168	9,770	4,570	2,530	-----	1,170	934	724	1,860	242	110	200
30	480	5,220	4,690	2,220	-----	1,080	838	1,470	2,360	329	1,560	186
31	5,640	-----	5,480	1,930	-----	1,070	-----	3,240	-----	241	3,340	-----
TOTAL	25,497	83,100	132,540	142,760	78,570	98,810	77,949	52,783	120,428	15,174	11,598	41,410
MEAN	822	2,770	4,275	4,605	2,806	3,187	2,598	1,703	4,014	489	374	1,380
MAX	5,640	9,770	16,900	19,900	8,060	8,760	11,300	4,970	23,100	1,640	3,340	5,630
MIN	142	1,040	1,110	1,440	1,450	1,070	838	683	344	182	99	186
CFSM	.90	3.02	4.67	5.03	3.06	3.48	2.84	1.86	4.38	.53	.41	1.51
IN.	1.04	3.37	5.38	5.80	3.19	4.01	3.17	2.14	4.89	.62	.47	1.68
CAL YR 1973	TOTAL 724,203	MEAN 1,984	MAX 16,900	MIN 65	CFSM 2.17	IN 29.41						
WTR YR 1974	TOTAL 880,619	MEAN 2,413	MAX 23,100	MIN 99	CFSM 2.63	IN 35.76						

PEAK DISCHARGE (BASE, 13,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	1700	13.12	13,100	6- 2	1400	18.96	24,100
12-27	0600	16.01	17,900	6-24	0100	14.12	14,700
1-11	2000	19.07	24,400				

MONONGAHELA RIVER BASIN

03055500 Tygart Lake near Grafton, W. Va.

LOCATION.--Lat 39°18'50", long 80°02'00", Taylor County, at dam on Tygart Valley River, 2.2 mi (3.5 km) upstream from Threefork Creek, and 2.4 mi (3.9 km) upstream from Grafton.

DRAINAGE AREA.--1,184 mi² (3,067 km²).

PERIOD OF RECORD.--April 1938 to current year (monthend contents only). Prior to October 1960, published as "Tygart Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 198,600 acre-ft (245 hm³) June 4, elevation, 1,136.15 ft (346.299 m); minimum, 14,880 acre-ft (18.3 hm³) Mar. 16, elevation, 1,015.31 ft (309.466 m).

Period of record: Maximum contents, 251,100 acre-ft (310 hm³) June 25, 1972, elevation, 1,155.22 ft (352.111 m); minimum since October 1939, 8,330 acre-ft (10.3 hm³) Jan. 25, 1940, elevation, 1,005.15 ft (306.370 m).

REMARKS.--Reservoir is formed by concrete gravity dam completed and accepted February 1938; storage began May 15, 1938. Capacity, 285,000 acre-ft (351 hm³) from sedimentation resurvey made in 1959, between elevations 991.5 ft (302.21 m), sill of valves, and 1,167.0 ft (355.70 m), crest of spillway, above mean sea level. Dead storage, 2,700 acre-ft (3.33 hm³). Figures given herein represent total contents. Conservation pool elevation is 1,010.0 ft (307.85 m) and water below elevation 991.5 ft (302.21 m), cannot be withdrawn. Reservoir is used for flood control, for supplementary supply for navigation of Monongahela River during period of low flow, and for recreation.

COOPERATION.--Records furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	(equivalent in cfs)
Sept. 30.....	1,080.57	89,190	-	-
Oct. 31.....	1,071.62	75,780	-13,410	-218
Nov. 30.....	1,076.95	83,600	+7,820	+131
Dec. 31.....	1,058.94	58,610	-24,990	-406
CAL YR 1973	-	-	+32,110	+44
Jan. 31.....	1,032.35	29,160	-29,450	-479
Feb. 28.....	1,018.92	17,600	-11,560	-208
Mar. 31.....	1,038.07	34,720	+17,120	+278
Apr. 30.....	1,081.13	90,080	+55,360	+930
May 31.....	1,096.58	115,800	+25,720	+418
June 30.....	1,094.47	112,100	-3,700	-62
July 31.....	1,093.19	109,800	-2,300	-37
Aug. 31.....	1,091.52	107,000	-2,800	-46
Sept. 30.....	1,082.83	92,770	-14,230	-239
WTR YR 1974	-	-	+3,580	+5

MONONGAHELA RIVER BASIN

69

03056000 Tygart Valley River at Tygart Dam near Grafton, W. Va.

LOCATION.--Lat 39°18'50", long 80°02'00", Taylor County, at Tygart Dam, 2.2 mi (3.5 km) upstream from Threefork Creek, and 2.4 mi (3.9 km) upstream from Grafton.

DRAINAGE AREA.--1,184 mi² (3,067 km²).

PERIOD OF RECORD.--June 1938 to current year. Prior to October 1960, published as Tygart River at Tygart Dam near Grafton.

GAGE.--Water-stage recorder.

AVERAGE DISCHARGE.--36 years, 2,330 ft³/s (65.99 m³/s), 26.72 in/yr (679 mm/yr), unadjusted.EXTREMES.--Current year: Maximum discharge, 17,600 ft³/s (498 m³/s) June 3; minimum daily, 300 ft³/s (8.50 m³/s) May 1, 2.Period of record: Maximum discharge, 20,000 ft³/s (566 m³/s) Feb. 2, 1939; no flow Aug. 2, 1938.

REMARKS.--Discharge computed from records of flow through gates and valves in dam. Flow regulated by Tygart Lake (see sta 03055500).

COOPERATION.--Records furnished by Corps of Engineers.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,290	2,000	9,540	9,560	3,360	2,630	967	300	2,330	2,110	320	1,000
2	1,300	2,800	9,970	8,980	3,160	2,780	988	300	8,520	1,530	320	1,480
3	1,320	2,840	9,000	7,070	3,010	4,300	1,010	303	15,400	1,180	320	1,500
4	1,320	2,850	7,800	4,230	2,930	5,560	1,080	313	17,500	820	320	2,260
5	1,330	2,830	4,270	5,040	2,860	5,530	3,440	327	16,800	820	320	3,770
6	1,330	2,820	1,700	7,500	2,760	5,330	6,300	337	16,000	820	320	4,480
7	1,330	3,540	1,180	8,280	2,680	5,100	6,250	870	9,910	820	320	4,430
8	1,320	4,210	878	7,640	3,170	4,940	6,150	1,400	3,090	820	320	4,370
9	1,320	4,800	898	7,140	3,870	4,950	6,070	1,400	1,560	784	320	3,580
10	1,320	5,340	918	5,160	3,840	4,810	6,070	1,400	1,560	880	320	2,130
11	1,320	5,180	938	3,090	3,630	4,650	6,050	2,250	1,550	775	320	1,140
12	1,320	4,980	1,440	4,360	3,030	4,500	5,970	3,100	925	600	320	850
13	1,320	3,460	1,930	8,360	2,580	4,350	4,760	3,870	310	600	320	850
14	1,320	2,360	2,200	11,700	3,520	4,200	3,630	4,640	310	600	320	850
15	1,310	2,130	4,730	14,400	5,090	3,930	2,440	4,640	310	460	320	1,150
16	1,300	2,290	7,530	15,200	5,580	2,710	1,250	4,610	310	320	320	1,460
17	1,300	2,320	7,270	13,800	5,390	1,900	1,270	2,640	555	320	320	1,460
18	1,280	2,370	6,840	9,170	4,990	2,050	1,040	1,500	800	320	320	1,460
19	1,280	2,990	6,300	4,330	4,490	2,130	707	960	800	320	320	1,450
20	1,260	3,560	5,850	3,180	4,170	2,250	491	420	800	320	320	1,450
21	1,260	3,510	4,940	4,390	4,040	2,570	360	420	1,180	320	425	1,440
22	1,240	3,450	6,680	5,030	3,280	2,920	360	788	4,390	320	530	1,440
23	1,240	3,370	9,350	4,830	2,740	3,140	363	1,400	6,240	320	530	1,430
24	1,220	3,250	9,420	4,550	2,860	3,210	370	1,400	7,130	320	530	1,090
25	1,210	3,120	8,660	4,310	2,930	3,230	373	4,730	9,040	320	530	760
26	1,200	2,520	7,300	3,380	2,930	3,190	380	1,400	8,050	320	620	760
27	1,190	2,000	5,810	2,660	2,870	3,140	380	1,400	11,000	320	800	760
28	1,180	2,180	8,080	2,770	2,740	3,040	382	1,400	5,890	320	800	760
29	1,180	2,580	11,000	2,970	-----	2,920	390	1,400	3,090	320	800	752
30	1,160	5,150	10,400	3,710	-----	1,890	345	1,400	3,080	320	665	750
31	1,180	-----	9,920	3,540	-----	953	-----	1,400	-----	320	530	-----
TOTAL	39,450	96,800	182,742	200,330	98,500	108,803	69,636	52,718	158,430	18,739	13,160	51,062
MEAN	1,273	3,227	5,895	6,462	3,518	3,510	2,321	1,701	5,281	604	425	1,702
MAX	1,330	5,340	11,000	15,200	5,580	5,560	6,300	4,730	17,500	2,110	800	4,480
MIN	1,160	2,000	878	2,660	2,580	953	345	300	310	320	320	750

CAL YR 1973 TOTAL 899,488 MEAN 2,464 MAX 12,200 MIN 260 MEAN/ 2,508 CFSM/ 2.12 IN/ 28.78
WTR YR 1974 TOTAL 1,090,370 MEAN 2,987 MAX 17,500 MIN 300 MEAN/ 2,992 CFSM/ 2.53 IN/ 34.34

/ Adjusted for change in contents in Tygart Lake.

MONONGAHELA RIVER BASIN

03057000 Tygart Valley River at Colfax, W. Va.

LOCATION.--Lat 39°26'15", long 80°07'55", Marion County, on right bank at highway bridge at Colfax, 300 ft (91 m) upstream from Guyses Run, and at mile 6.0 (9.7 km). Records include flow of Guyses Run.

DRAINAGE AREA.--1,366 mi² (3,538 km²), including that of Guyses Run.

PERIOD OF RECORD.--May 1939 to current year. Prior to October 1960, published as Tygart River at Colfax.

GAGE.--Water-stage recorder. Datum of gage is 856.27 ft (260.991 m) above mean sea level, supplementary adjustment of 1944. Formerly published as 855.49 ft (260.753 m) above mean sea level, Baltimore & Ohio RR datum. Since Jan. 19, 1945, auxiliary water-stage recorder at Fairmont waterworks, 5.7 mi (9.2 km) downstream from base gage, at datum 856.99 ft (261.211 m) above mean sea level.

AVERAGE DISCHARGE.--35 years, 2,618 ft³/s (74.14 m³/s), 26.03 in/yr (661 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 18,500 ft³/s (524 m³/s) June 3, gage height, 14.59 ft (4.447 m), backwater from West Fork River; minimum, 332 ft³/s (9.40 m³/s) Aug. 3, gage height, 3.67 ft (1.119 m); minimum daily, 336 ft³/s (9.52 m³/s) Aug. 3, 7, 11.
Period of record: Maximum discharge, 22,500 ft³/s (637 m³/s) Feb. 14, 1948, gage height, 16.86 ft (5.139 m); maximum gage height, 19.77 ft (6.026 m) Mar. 5, 1963, backwater from West Fork River; minimum discharge, 94 ft³/s (2.66 m³/s) July 3, 1946; minimum daily, 129 ft³/s (3.65 m³/s) May 5-7, 1941.

REMARKS.--Records good. Flow regulated by Tygart Lake (see sta 03055500).

REVISIONS (WATER YEARS).--WSP 1083: 1942(M). WSP 1335: 1941.

CORRECTIONS.--The adjusted mean discharge for water year 1951 is 3,206 cfs; the previous figure published in the yearly discharge table in WSP 1725 was a typographical error.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,490	2,120	9,700	9,840	3,710	3,000	1,090	374	3,810	2,550	347	872
2	1,730	3,110	10,000	9,220	3,490	3,360	1,140	378	7,800	1,600	338	1,570
3	1,610	3,020	10,000	8,540	3,290	4,590	1,190	733	15,800	1,440	336	1,660
4	1,510	2,950	7,900	7,620	3,160	6,120	1,700	1,130	18,200	897	345	2,170
5	1,480	2,920	4,500	5,580	3,090	6,000	3,150	765	17,200	1,090	340	3,590
6	1,450	2,940	2,000	7,650	3,000	5,740	6,850	622	16,200	934	338	4,590
7	1,430	3,210	1,300	8,720	3,060	5,570	6,680	731	11,800	896	336	4,520
8	1,430	4,250	1,000	8,120	3,430	5,650	6,530	1,570	3,810	868	342	4,440
9	1,430	4,560	1,000	7,590	4,180	5,410	6,940	1,580	1,630	820	339	3,970
10	1,420	5,500	1,100	8,540	4,110	5,300	6,850	1,550	1,590	924	337	2,560
11	1,410	5,290	1,200	9,800	3,930	5,100	6,550	1,900	1,570	910	336	1,380
12	1,400	5,080	1,500	6,280	3,500	4,880	6,300	3,740	1,370	646	359	899
13	1,390	4,220	2,000	8,430	2,920	4,600	5,840	4,610	396	625	376	899
14	1,370	2,470	2,400	11,100	3,480	4,450	4,440	4,970	358	619	360	1,140
15	1,360	2,310	5,000	14,100	5,490	4,240	3,560	4,750	358	603	353	1,230
16	1,440	2,520	7,800	15,300	5,830	3,540	1,710	4,600	497	361	340	1,610
17	1,440	2,590	7,600	13,600	5,710	2,270	1,590	3,470	600	365	378	1,570
18	1,380	2,590	7,200	10,200	5,380	2,350	1,470	1,910	934	349	385	1,550
19	1,360	2,920	6,800	5,010	4,970	2,400	954	1,630	900	365	367	1,540
20	1,340	3,780	6,400	3,480	4,700	2,440	820	658	889	395	353	1,520
21	1,320	3,710	5,800	4,290	4,450	2,960	519	581	2,360	352	368	1,520
22	1,310	3,620	6,800	5,490	3,990	3,590	504	591	5,750	342	595	1,500
23	1,290	3,510	9,700	5,220	3,140	3,530	525	1,600	9,890	365	595	1,480
24	1,280	3,410	9,600	4,930	3,170	3,500	520	1,700	8,210	346	592	1,350
25	1,260	3,320	9,400	4,670	3,210	3,420	500	1,620	11,000	370	587	818
26	1,260	3,030	9,000	4,060	3,150	3,340	483	1,570	6,790	351	587	809
27	1,240	2,640	8,100	2,950	3,070	3,260	475	1,540	11,500	343	798	803
28	1,240	5,130	7,610	3,100	2,990	3,160	468	1,510	7,020	340	823	809
29	1,290	3,880	11,400	3,440	-----	3,060	463	1,550	3,180	354	846	801
30	1,490	4,600	10,900	4,210	-----	2,530	453	2,250	3,100	384	947	795
31	1,620	-----	10,300	3,950	-----	1,110	-----	2,060	-----	371	880	-----
TOTAL	43,470	105,200	195,010	225,030	107,600	120,470	80,264	58,243	174,512	21,215	14,623	53,965
MEAN	1,402	3,507	6,291	7,259	3,843	3,886	2,675	1,879	5,817	684	472	1,799
MAX	1,730	5,500	11,400	15,300	5,830	6,120	6,940	4,970	18,200	2,550	947	4,590
MIN	1,240	2,120	1,000	2,950	2,920	1,110	453	374	358	340	336	795

CAL YR 1973 TOTAL 985,178 MEAN 2,699 MAX 11,900 MIN 277 MEAN/ 2,743 CFSM/ 2.01 IN/ 27.28
WTR YR 1974 TOTAL 1,199,602 MEAN 3,287 MAX 18,200 MIN 336 MEAN/ 3,292 CFSM/ 2.41 IN/ 32.71

/ Adjusted for change in contents in Tygart Lake.

MONONGAHELA RIVER BASIN

71

03058000 West Fork River at Brownsville, W. Va.

LOCATION.--Lat 39°00'10", long 80°28'35", Lewis County, on right bank at downstream side of highway bridge at Brownsville, 0.4 mi (0.6 km) downstream from Skin Creek, 2.5 mi (4.0 km) south of Weston, and at mile 71.0 (114.2 km).

DRAINAGE AREA.--102 mi² (264 km²).

PERIOD OF RECORD.--August 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,010.85 ft (308.107 m) above mean sea level, levels by Corps of Engineers. Prior to Aug. 15, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--28 years, 164 ft³/s (4.644 m³/s), 21.83 in/yr (554 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,470 ft³/s (127 m³/s) June 1, gage height, 14.12 ft (4.304 m), from rating curve extended as explained below; minimum, 4.5 ft³/s (0.13 m³/s) Oct. 24, 27; minimum gage height, 5.00 ft (1.524 m) Aug. 16.
Period of record: Maximum discharge, 6,420 ft³/s (182 m³/s) June 25, 1950, gage height, 17.20 ft (5.243 m), from rating curve extended above 3,400 ft³/s (96.3 m³/s) on basis of slope-area measurement of peak flow; no flow for several days during 1952-54, Sept. 16, 1965.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	339	170	574	98	117	66	33	2,490	100	22	182
2	153	183	108	333	83	272	114	33	3,220	50	17	134
3	128	94	86	475	219	628	143	83	1,310	32	15	98
4	95	60	76	1,740	212	306	1,640	134	305	24	15	240
5	128	88	75	746	120	198	1,120	95	150	56	17	146
6	63	178	105	322	95	172	306	75	100	36	15	68
7	33	125	97	222	169	205	166	61	85	26	12	52
8	24	82	79	169	251	492	137	50	58	17	12	52
9	17	110	78	255	170	362	612	75	46	13	12	45
10	15	185	86	1,460	130	226	580	90	35	26	13	36
11	12	123	88	3,360	110	159	310	75	25	49	11	31
12	11	83	93	1,640	110	156	198	540	20	22	11	25
13	6.7	64	471	435	314	169	264	760	16	15	11	29
14	11	52	2,310	233	1,070	143	373	300	14	10	9.4	314
15	6.7	46	903	153	659	117	300	150	12	22	8.0	123
16	6.7	178	312	111	292	156	216	100	100	170	6.7	59
17	6.7	265	189	85	188	331	126	74	62	50	25	36
18	6.1	129	128	68	128	240	88	85	37	19	25	27
19	5.5	97	97	73	106	202	71	110	24	16	16	22
20	5.0	82	189	98	143	289	59	70	61	23	12	17
21	5.0	69	806	103	175	432	47	54	400	13	9.4	16
22	5.0	67	533	120	175	704	43	50	330	11	9.4	20
23	5.0	61	271	114	240	348	54	64	1,000	9.7	8.0	17
24	5.0	59	229	108	188	212	66	110	1,500	11	8.0	15
25	5.0	67	262	175	175	140	56	170	450	9.1	8.0	12
26	5.0	88	941	251	153	106	50	90	170	20	6.7	9.4
27	5.0	359	1,350	195	131	90	46	62	100	71	6.7	8.0
28	11	2,170	463	159	123	80	40	48	94	25	9.4	8.0
29	22	1,260	235	202	-----	73	34	46	460	22	12	9.4
30	43	342	376	169	-----	68	33	100	210	45	236	8.0
31	300	-----	583	128	-----	71	-----	517	-----	27	236	-----
TOTAL	1,267.4	7,105	11,789	14,276	6,027	7,264	7,358	4,304	12,884	1,039.8	834.7	1,858.8
MEAN	40.9	237	380	461	215	234	245	139	429	33.5	26.9	62.0
MAX	300	2,170	2,310	3,360	1,070	704	1,640	760	3,220	170	236	314
MIN	5.0	46	75	68	83	68	33	33	12	9.1	6.7	8.0
CFSM	.40	2.32	3.73	4.52	2.11	2.29	2.40	1.36	4.21	.33	.26	.61
IN.	.46	2.59	4.30	5.21	2.20	2.65	2.68	1.57	4.70	.38	.30	.68

CAL YR 1973 TOTAL 59,539.54 MEAN 163 MAX 2,310 MIN .10 CFSM 1.60 IN 21.71
WTR YR 1974 TOTAL 76,007.70 MEAN 208 MAX 3,360 MIN 5.0 CFSM 2.04 IN 27.72

PEAK DISCHARGE (BASE, 2,200 CFS)

NOTE.--No gage-height record
May 12-30, June 7 to July 26.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	0900	10.92	2,560	4- 4	1300	11.08	2,650
12-14	0700	11.00	2,600	6- 1	2000	14.12	4,470
1-11	1300	13.28	3,970				

MONONGAHELA RIVER BASIN

03058500 West Fork River at Butcherville, W. Va.

LOCATION.--Lat 39°05'25", long 80°28'05", Lewis County, on right bank at Butcherville, 0.5 mi (0.8 km) upstream from Freemans Creek, 3,500 ft (1,067 m) downstream from abandoned bridge on Weston-Clarksburg interurban electric railway, 3.0 mi (4.8 km) north of Weston, and at mile 62.0 (99.8 km).

DRAINAGE AREA.--181 mi² (469 km²).

PERIOD OF RECORD.--April 1915 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 993.0 ft (302.67 m) above mean sea level, Department of Highways bench mark. Prior to Feb. 17, 1937, nonrecording gage at interurban bridge 3,500 ft (1,067 m) upstream. Feb. 17, 1937, to Apr. 7, 1939, nonrecording gage at site 2,500 ft (762 m) upstream. Prior to Oct. 1, 1942, at datum 10.0 ft (3.05 m) lower.

AVERAGE DISCHARGE.--59 years, 301 ft³/s (8.524 m³/s), 22.58 in/yr (574 mm/yr).

EXTREMES.--Current year: Maximum discharge, 8,060 ft³/s (228 m³/s) June 2, gage height, 11.43 ft (3.484 m), from rating curve extended as explained below; minimum 4.9 ft³/s (0.14 m³/s) Aug. 16, gage height, 0.70 ft (0.213 m).

Period of record: Maximum discharge, 18,000 ft³/s (510 m³/s) June 25, 1950, gage height, 16.81 ft (5.124 m), from rating curve extended above 7,500 ft³/s (212 m³/s) on basis of slope-area measurement of peak flow; no flow at times during October 1919, September, October, December 1922, caused by either diversion or pondage at small dam upstream.

Flood of 1888 reached a stage of 17 ft (5.2 m) at site 3,500 ft (1,067 m) upstream, present datum, from information by local residents. The stage on that day may have been affected by backwater from a dam which has since been washed out.

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

REVISIONS (WATER YEARS).--WSP 1053: 1935. WSP 1335: 1918, 1923.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	715	350	980	145	210	116	58	3,940	175	26	295
2	359	375	220	600	122	636	213	64	6,460	88	18	270
3	334	190	180	460	219	970	255	172	2,660	57	14	246
4	201	118	150	3,900	246	519	2,470	258	670	43	19	463
5	225	185	140	1,150	175	387	1,920	190	320	96	22	322
6	130	320	170	527	135	352	690	145	198	63	15	125
7	78	240	150	352	270	439	443	110	140	46	10	77
8	60	160	130	246	344	830	383	90	94	31	12	67
9	51	210	130	355	273	575	1,020	125	80	23	13	58
10	44	303	150	2,290	201	420	990	150	63	42	12	44
11	50	225	160	5,880	180	324	609	116	43	84	10	35
12	32	158	160	2,770	170	285	447	880	35	40	12	27
13	39	118	500	760	407	279	660	1,170	29	26	10	37
14	51	94	4,900	411	1,780	240	730	550	25	18	8.3	799
15	44	82	1,400	276	1,080	198	543	280	22	32	6.6	344
16	20	270	660	195	547	282	439	180	175	292	6.9	162
17	16	415	390	145	379	519	296	130	112	94	50	90
18	15	246	260	114	267	403	225	150	66	33	54	63
19	14	192	190	130	234	344	180	190	43	28	26	48
20	13	158	290	204	348	419	148	120	120	40	15	37
21	12	135	1,400	201	344	740	120	94	670	23	11	43
22	12	130	900	207	383	1,120	108	87	595	18	8.3	51
23	11	114	500	190	435	675	123	110	1,690	16	6.9	37
24	9.0	112	410	172	352	439	135	190	2,790	18	6.9	29
25	8.7	135	440	225	324	299	114	300	860	15	7.2	23
26	8.7	195	1,300	310	268	234	96	150	313	12	6.2	19
27	8.7	730	2,400	261	238	190	78	110	172	90	13	18
28	18	3,820	940	252	219	163	70	82	170	39	44	34
29	51	2,300	460	352	-----	143	64	80	820	30	66	42
30	108	720	620	267	-----	138	57	200	439	94	423	38
31	583	-----	890	198	-----	133	-----	810	-----	44	455	-----
TOTAL	2,861.1	13,165	20,940	24,380	10,085	12,905	13,742	7,341	23,814	1,750	1,407.3	3,943
MEAN	92.3	439	675	786	360	416	458	237	794	56.5	45.4	131
MAX	583	3,820	4,900	5,880	1,780	1,120	2,470	1,170	6,460	292	455	799
MIN	8.7	82	130	114	122	133	57	58	22	12	6.2	18
CFSM	.51	2.43	3.73	4.34	1.99	2.30	2.53	1.31	4.39	.31	.25	.72
IN.	.59	2.71	4.30	5.01	2.07	2.65	2.82	1.51	4.89	.36	.29	.81

CAL YR 1973 TOTAL 111,306.4 MEAN 305 MAX 4,900 MIN 4.3 CFSM 1.69 IN 22.88
WTR YR 1974 TOTAL 136,333.4 MEAN 374 MAX 6,460 MIN 6.2 CFSM 2.07 IN 28.02

PEAK DISCHARGE (BASE, 3,600 CFS)

a From floodmarks.

NOTE.--No gage-height record
Nov. 29 to Jan. 4, May 14-30.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	0900	8.06	4,460	1-11	1500	10.47	6,910
12-14	unknown	a9.47	5,870	4-4	1500	7.55	4,000
1-4	unknown	a8.49	4,560	6-2	0200	11.43	8,060

03059000 West Fork River at Clarksburg, W. Va.

LOCATION.--Lat 39°16'15", long 80°21'20", Harrison County, on downstream side of left abutment of Hartland Bridge on Camden Street at Clarksburg, 700 ft (213 m) downstream from dam at Clarksburg waterworks, 1.2 mi (1.9 km) upstream from Elk Creek, and at mile 32.4 (52.1 km).

DRAINAGE AREA.--384 mi² (995 km²).

PERIOD OF RECORD.--March 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 921.82 ft (280.971 m) above mean sea level. Prior to Oct. 1, 1961, water-stage recorder at several sites 700 ft (213 m) upstream at datum 10 ft (3.0 m) higher. June 11, 1954, to Sept. 30, 1961, present base gage used as the supplementary gage. Since Oct 1, 1961, former base gage used as the supplementary gage.

AVERAGE DISCHARGE.--51 years, 588 ft³/s (16.65 m³/s), 20.79 in/yr (528 mm/yr), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 12,800 ft³/s (362 m³/s) Jan. 11, gage height, 17.71 ft (5.398 m); minimum, 14 ft³/s (0.40 m³/s) July 15, Aug. 27, gage height, 2.71 ft (0.826 m); minimum daily, 15 ft³/s (0.42 m³/s) Aug. 27.

Period of record: Maximum discharge, 17,800 ft³/s (504 m³/s) Mar. 7, 1967, gage height, 23.40 ft (7.132 m); no flow over dam during parts of several years.

REMARKS.--Records good. Records of daily discharge include only flow over dam. Some water diverted for supply of City of Clarksburg. Occasional regulation of low flow by five reservoirs, combined capacity, 635,000,000 gal (2.4 hm³).

REVISIONS (WATER YEARS).--WSP 1113: 1924, 1927, 1929(M), 1930, 1933-35(M), 1936-39, 1940(P), 1944(M), 1945.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	711	1,700	872	2,000	464	478	265	119	6,150	474	105	375
2	851	1,130	575	1,270	388	1,130	276	88	11,400	313	67	321
3	747	550	438	940	424	2,220	438	246	6,770	217	53	313
4	442	339	352	5,690	523	1,350	2,170	478	1,840	160	55	590
5	348	309	313	3,320	442	928	4,190	406	683	200	61	514
6	300	645	292	1,560	366	879	1,640	309	465	228	64	276
7	197	570	296	1,030	672	1,190	921	246	348	165	44	157
8	148	406	254	729	1,030	1,570	729	197	261	128	39	121
9	116	402	254	717	791	1,380	1,560	177	232	96	40	101
10	103	560	334	3,930	585	1,010	2,120	242	190	81	40	90
11	94	510	348	11,900	510	844	1,290	235	108	133	37	70
12	87	375	325	8,620	482	723	893	1,070	85	190	37	62
13	70	284	705	2,290	656	645	1,220	3,070	96	112	35	103
14	67	232	5,810	1,130	2,390	555	1,780	1,180	81	83	32	1,370
15	80	203	3,900	810	2,340	483	1,100	550	78	43	28	956
16	80	420	1,480	615	1,200	537	824	370	469	375	23	433
17	54	700	879	482	798	1,080	590	273	541	352	23	228
18	38	580	600	384	580	963	460	317	288	160	78	140
19	32	478	470	397	496	723	379	379	171	112	85	103
20	30	406	575	640	729	711	321	257	194	537	50	83
21	29	330	2,210	645	785	1,080	269	194	1,510	232	37	81
22	28	292	2,000	635	765	2,190	228	187	2,280	119	28	112
23	29	261	1,150	575	970	1,430	235	239	2,880	103	23	105
24	26	239	886	510	811	886	235	411	5,270	171	19	77
25	25	254	865	492	729	610	224	610	2,490	126	17	47
26	22	366	2,310	595	625	478	194	330	791	85	16	52
27	21	1,310	5,050	605	546	402	168	232	483	64	15	45
28	37	6,650	2,240	610	496	343	151	174	366	105	18	52
29	108	5,070	1,130	1,180	-----	296	136	171	865	92	88	63
30	257	1,860	1,340	837	-----	284	121	300	963	384	309	69
31	1,540	-----	1,600	610	-----	280	-----	630	-----	232	723	-----
TOTAL	6,717	27,431	39,853	55,748	21,593	27,678	25,127	13,687	48,348	5,872	2,289	7,109
MEAN	217	914	1,286	1,798	771	893	838	442	1,612	189	73.8	237
MAX	1,540	6,650	5,810	11,900	2,390	2,220	4,190	3,070	11,400	537	723	1,370
MIN	21	203	254	384	366	280	121	88	78	43	15	45
MEAN/	228	924	1,296	1,808	781	902	848	453	1,623	199	83.9	247
CFSM/	.59	2.41	3.38	4.71	2.03	2.35	2.21	1.18	4.23	.52	.22	.64
IN./	.68	2.69	3.90	5.43	2.11	2.71	2.47	1.36	4.72	.60	.25	.71

CAL YR 1973 TOTAL 236,275.8 MEAN 647 MAX 7,520 MIN 7.1 MEAN/ 656 CFSM/ 1.71 IN/ 23.21
 WTR YR 1974 TOTAL 281,452.0 MEAN 771 MAX 11,900 MIN 15 MEAN/ 781 CFSM/ 2.03 IN/ 27.56

PEAK DISCHARGE (BASE, 6,700 CFS)

/ Adjusted for diversion
 by City of Clarksburg;
 records furnished by
 Clarksburg Water Board.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1815	12.68	8,180	6-2	0830	16.77	12,000
1-11	1515	17.71	12,800				

MONONGAHELA RIVER BASIN

03061000 West Fork River at Enterprise, W. Va.

LOCATION.--Lat 39°25'20", long 80°16'40", Harrison County, on left bank 150 ft (46 m) downstream from highway bridge at Enterprise, 0.8 mi (1.3 km) upstream from Bingamon Creek, and at mile 12.1 (19.5 km).

DRAINAGE AREA.--759 mi² (1,966 km²).

PERIOD OF RECORD.--June 1907 to September 1918 (gage heights only, October 1916 to September 1918), October 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 869.45 ft (265.008 m), above mean sea level, adjustment of 1912. June 1907 to Sept. 30, 1918, nonrecording gage at site 150 ft (46 m) upstream at same datum.

AVERAGE DISCHARGE.--50 years (1907-16, 1933-74), 1,145 ft³/s (32.43 m³/s), 20.49 in/yr (520 mm/yr).

EXTREMES.--Current year: Maximum discharge, 25,500 ft³/s (722 m³/s) Jan. 11, gage height, 22.15 ft (6.751 m), from rating curve extended as explained below; minimum observed, 68 ft³/s (1.93 m³/s) Aug. 27, gage height, 1.32 ft (0.402 m).

Period of record: Maximum discharge, 36,500 ft³/s (1,030 m³/s) Mar. 7, 1967, gage height, 28.05 ft (8.550 m), from rating curve extended above 21,000 ft³/s (595 m³/s) on basis of slope-area measurement at gage height 27.84 ft (8.486 m); minimum, 3.4 ft³/s (0.10 m³/s) July 27, 1934; minimum gage height, 0.6 ft (0.183 m) Sept. 10, 14, 25, 1908.

Flood in 1888 reached a stage of about 33 ft (10 m), present site and datum.

REMARKS.--Records good except those for periods of no gage-height record which are fair. Records of instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 803: 1936. WSP 823: Drainage area. WSP 1113: 1936-38(M), 1939. WSP 1335: 1911-15, 1937. WSP 1625: 1915(M), 1935(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,830	2,510	1,720	2,980	1,200	1,000	535	295	8,570	1,000	310	736
2	1,700	2,070	1,150	2,370	1,000	1,940	555	295	15,500	680	210	480
3	1,640	1,090	875	1,800	1,030	3,720	715	834	10,200	510	169	545
4	1,030	663	719	7,890	1,060	2,530	2,380	1,190	3,330	389	172	1,370
5	743	520	679	6,100	920	1,760	6,430	894	1,570	510	195	978
6	607	892	622	3,080	770	1,620	3,150	670	1,040	545	169	580
7	417	968	563	2,150	1,250	1,970	1,880	550	795	380	147	352
8	315	720	509	1,670	2,190	2,420	1,610	455	634	313	136	284
9	292	689	501	1,420	1,780	2,360	3,510	412	610	257	142	232
10	243	953	684	3,650	1,320	1,820	3,750	450	484	251	134	201
11	224	889	728	21,300	1,130	1,600	2,550	440	375	284	125	184
12	196	687	694	15,600	1,040	1,380	1,830	5,070	268	340	128	164
13	181	547	1,120	5,160	1,200	1,200	2,090	5,500	290	267	136	181
14	168	441	8,190	2,740	2,480	1,000	3,310	2,480	265	213	123	1,210
15	165	363	6,540	2,120	3,420	864	2,440	1,250	258	216	110	1,690
16	182	678	2,780	1,710	2,050	888	1,740	828	1,190	281	98	665
17	159	1,140	1,730	1,350	1,420	1,740	1,300	625	1,690	530	102	394
18	136	1,060	1,230	1,100	1,070	1,760	1,010	1,100	821	317	184	278
19	120	931	997	1,010	918	1,340	828	948	496	368	288	216
20	111	879	1,010	1,850	1,220	1,140	705	655	461	1,040	181	187
21	107	723	3,680	1,510	1,520	1,690	605	495	6,040	620	131	190
22	124	619	3,560	1,850	1,410	3,220	545	435	6,240	306	108	274
23	111	536	2,270	1,600	1,800	2,300	605	700	9,770	284	95	251
24	111	477	1,770	1,370	1,540	1,580	545	774	9,190	460	86	195
25	102	500	1,660	1,200	1,410	1,140	500	1,010	4,430	344	81	164
26	99	658	2,680	1,240	1,220	900	440	655	1,940	238	70	144
27	84	2,410	7,920	1,350	1,070	764	384	480	1,210	198	68	131
28	100	9,490	4,210	1,370	984	665	348	368	876	187	79	144
29	264	8,180	2,360	2,980	-----	595	317	398	1,250	232	102	164
30	427	3,200	2,200	2,200	-----	575	292	966	1,530	816	645	161
31	2,150	-----	2,540	1,590	-----	575	-----	1,170	-----	650	1,320	-----
TOTAL	14,138	45,483	67,882	105,310	39,422	48,056	46,899	32,392	91,323	13,026	6,044	12,745
MEAN	456	1,516	2,190	3,397	1,408	1,550	1,563	1,045	3,044	420	195	425
MAX	2,150	9,490	8,190	21,300	3,420	3,720	6,430	5,500	15,500	1,040	1,320	1,690
MIN	84	363	501	1,010	770	575	292	295	258	187	68	131
CFSM	.60	2.00	2.89	4.48	1.86	2.04	2.06	1.38	4.01	.55	.26	.56
IN.	.69	2.23	3.33	5.16	1.93	2.36	2.30	1.59	4.48	.64	.30	.62

CAL YR 1973 TOTAL 437,850 MEAN 1,200 MAX 12,600 MIN 59 CFSM 1.58 IN 21.46
WTR YR 1974 TOTAL 522,720 MEAN 1,432 MAX 21,300 MIN 68 CFSM 1.89 IN 25.62

PEAK DISCHARGE (BASE, 12,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-4	a1400	a14.40	13,000	6-12	1000	16.45	16,100
1-11	1700	22.15	25,500	6-23	2200	15.62	14,800

a From graph of telemark readings.

NOTE.--No gage-height record Dec. 26 to Jan. 11.

MONONGAHELA RIVER BASIN

75

03061500 Buffalo Creek at Barrackville, W. Va.

LOCATION.--Lat 39°30'15", long 80°10'20", Marion County, near center of span on downstream side of highway bridge at Barrackville, 1,700 ft (518 m) upstream from Finchs Run, and at mile 4.0 (6.4 km).

DRAINAGE AREA.--115 mi² (298 km²).

PERIOD OF RECORD.--June 1907 to December 1908, May 1915 to June 1924, August 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 882.42 ft (268.962 m) above mean sea level, adjustment of 1912. Prior to Dec. 6, 1940, nonrecording gage at same site. Prior to June 4, 1943, at datum 1.98 ft (0.604 m) higher.

AVERAGE DISCHARGE.--51 years (1907-8, 1915-23, 1932-74), 164 ft³/s (4.644 m³/s), 19.37 in/yr (492 mm/yr).

EXTREMES.--Current year: Maximum discharge, 6,670 ft³/s (189 m³/s) June 23, gage height, 13.57 ft (4.136 m); minimum, 3.3 ft³/s (0.093 m³/s) Aug. 26, gage height, 1.87 ft (0.570 m).

Period of record: Maximum discharge observed, 9,490 ft³/s (269 m³/s) Jan. 22, 1917, gage height, 16.2 ft (4.94 m), present datum; no flow during greater part of period September to November 1908.

Flood in July 1912 reached a stage of about 18 ft (5.5 m), present site and datum, discharge, 11,600 ft³/s (329 m³/s).

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

REVISIONS (WATER YEARS).--WSP 783: 1917(M). WSP 1335: 1916(M), 1918-20(M), 1921, 1922(M), 1924(M), 1933(M), 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	470	146	234	190	95	90	54	636	85	44	374
2	68	241	99	194	150	99	103	52	423	76	27	517
3	96	128	75	393	140	130	134	95	233	53	21	1,030
4	75	80	62	1,360	110	140	1,460	128	148	40	26	727
5	64	65	65	519	98	130	907	109	98	72	26	233
6	54	56	54	318	90	130	573	97	74	42	19	118
7	39	45	42	225	100	150	372	82	59	34	15	76
8	45	39	34	150	150	300	400	69	52	27	16	53
9	50	45	40	166	140	250	1,400	63	50	23	14	38
10	36	55	53	1,740	110	260	720	59	39	23	14	31
11	27	52	46	4,640	99	230	450	51	32	38	13	27
12	24	47	42	1,100	92	200	333	3,120	32	28	18	25
13	21	44	164	488	85	180	322	1,310	28	20	14	49
14	19	40	1,070	307	89	150	362	420	23	15	11	1,040
15	18	40	503	243	77	130	332	230	24	16	8.3	282
16	22	416	280	200	68	140	252	161	126	17	8.0	133
17	23	204	196	166	75	290	201	120	150	14	8.2	83
18	23	108	139	133	66	240	164	152	65	13	7.6	60
19	20	89	113	135	71	200	138	117	42	13	8.7	47
20	16	73	164	214	99	170	114	87	51	29	6.9	39
21	16	59	519	243	120	350	97	70	1,920	24	7.0	184
22	14	48	354	268	158	700	87	61	1,460	15	6.9	476
23	13	38	243	236	198	400	121	105	4,910	30	5.1	186
24	13	36	196	210	173	270	114	124	1,400	75	5.5	107
25	12	67	184	188	150	190	96	88	463	38	4.9	75
26	11	234	620	166	130	150	82	67	255	24	4.0	60
27	11	645	962	169	110	125	73	56	172	18	4.9	47
28	16	1,530	449	160	100	109	67	46	122	14	18	50
29	94	529	290	580	-----	99	60	62	113	36	48	53
30	128	236	265	430	-----	107	56	288	85	354	485	60
31	368	-----	248	270	-----	103	-----	220	-----	93	287	-----
TOTAL	1,514	5,759	7,717	15,845	3,238	6,217	9,680	7,763	13,285	1,399	1,202.0	6,280
MEAN	48.8	192	249	511	116	201	323	250	443	45.1	38.8	209
MAX	368	1,530	1,070	4,640	198	700	1,460	3,120	4,910	354	485	1,040
MIN	11	36	34	133	66	95	56	46	23	13	4.0	25
CFSM	.42	1.67	2.17	4.44	1.01	1.75	2.81	2.17	3.85	.39	.34	1.82
IN.	.49	1.86	2.50	5.13	1.05	2.01	3.13	2.51	4.30	.45	.39	2.03

CAL YR 1973	TOTAL	62,579.0	MEAN	171	MAX	1,890	MIN	6.6	CFSM	1.49	IN	20.24
WTR YR 1974	TOTAL	79,899.0	MEAN	219	MAX	4,910	MIN	4.0	CFSM	1.90	IN	25.85

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-11	1345	12.57	5,710	6-23	1345	13.57	6,670
5-12	1745	12.32	5,490				

NOTE.--No gage-height record
Jan. 28 to Feb. 21 and Feb. 26
to Mar. 27.

MONONGAHELA RIVER BASIN

03062400 Cobun Creek at Morgantown, W. Va.

LOCATION.--Lat 39°36'30", long 79°57'20", Monongalia County, on left bank at Morgantown, 30 ft(9 m) upstream from concrete box culvert on Greenbag Road, and at mile 1.4 (2.3 km).

DRAINAGE AREA.--10.9 mi² (28.2 km²).

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

GAGE.--Water-stage recorder and concrete and metal control. Altitude of gage is 890 ft (271.3 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 15.4 ft³/s (0.436 m³/s), 19.19 in/yr (487 mm/yr).

EXTREMES.--Current year: Maximum discharge, 521 ft³/s (14.8 m³/s) Jan. 11, gage height, 6.72 ft (2.048 m); minimum, 0.05 ft³/s (0.001 m³/s) Oct. 14, gage height, 0.40 ft (0.122 m).

Period of record: Maximum discharge, 1,770 ft³/s (50.1 m³/s) June 23, 1972, gage height, 12.80 ft (3.901 m), from floodmark, from rating curve extended above 800 ft³/s (22.7 m³/s) on basis of culvert rating computation; no flow for many days.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	11	18	24	18	13	7.5	6.5	72	17	1.4	19
2	6.5	8.5	14	20	16	17	11	6.5	46	8.5	1.0	22
3	4.0	6.5	12	76	20	18	11	20	29	6.5	.82	44
4	3.0	5.0	11	118	18	17	38	21	19	40	1.7	40
5	2.6	4.5	10	49	15	17	31	17	13	46	1.8	23
6	2.3	4.5	8.5	32	13	17	25	14	9.5	19	1.1	15
7	1.7	3.7	7.5	25	22	20	20	12	7.5	13	.75	11
8	1.5	3.2	6.5	17	20	22	26	10	6.0	9.0	.75	8.5
9	1.4	6.5	9.0	25	17	20	62	9.5	5.0	7.0	.90	6.5
10	1.2	7.0	9.5	186	16	22	43	8.5	4.0	6.5	.82	5.5
11	1.1	5.5	8.0	334	17	21	33	7.5	3.2	6.0	.61	4.5
12	.90	5.0	7.4	98	15	20	27	112	3.0	3.7	1.6	4.0
13	.75	5.0	67	44	14	17	46	80	2.6	3.0	1.6	27
14	.75	4.5	105	30	20	15	71	35	2.0	2.4	.90	41
15	.68	5.5	42	25	17	14	68	23	2.4	4.5	.61	17
16	1.5	16	27	21	13	22	37	17	11	6.5	9.5	12
17	1.2	12	21	17	14	22	26	13	7.0	3.2	17	9.0
18	1.0	9.5	15	15	11	19	21	25	3.7	2.4	14	7.5
19	.75	9.5	12	17	12	18	17	19	3.0	2.1	12	6.5
20	.68	8.5	76	19	21	15	14	14	4.0	2.3	12	5.5
21	.61	8.0	142	23	16	57	12	11	25	1.6	6.5	12
22	.61	7.5	50	23	17	47	12	9.0	42	1.3	4.0	11
23	.61	6.5	32	22	20	30	14	18	241	3.7	3.0	8.5
24	.56	7.0	25	21	18	23	11	16	85	5.0	2.4	7.0
25	.56	8.0	25	18	18	17	9.5	13	47	2.8	2.0	6.5
26	.56	13	94	24	14	14	8.5	11	30	2.0	1.6	5.5
27	.51	28	79	21	12	12	7.5	8.5	20	1.6	1.8	5.0
28	.90	108	39	19	11	11	6.5	7.0	15	1.3	6.0	4.5
29	5.5	48	29	65	-----	10	6.7	13	13	3.5	3.0	5.0
30	6.0	26	27	45	-----	9.0	6.7	21	9.5	4.0	20	4.0
31	7.0	-----	26	28	-----	8.5	-----	43	-----	2.1	15	-----
TOTAL	58.53	401.4	1,054.4	1,501	455	604.5	728.9	641.0	780.4	237.5	146.16	397.5
MEAN	1.89	13.4	34.0	48.4	16.3	19.5	24.3	20.7	26.0	7.66	4.71	13.3
MAX	7.0	108	142	334	22	57	71	112	241	46	20	44
MIN	.51	3.2	6.5	15	11	8.5	6.5	6.5	2.0	1.3	.61	4.0
CFSM	.17	1.23	3.12	4.44	1.50	1.79	2.23	1.90	2.39	.70	.43	1.22
IN.	.20	1.37	3.60	5.12	1.55	2.06	2.49	2.19	2.66	.81	.50	1.36

CAL YR 1973 TOTAL 5,448.50 MEAN 14.9 MAX 193 MIN .15 CFSM 1.37 IN 18.59
WTR YR 1974 TOTAL 7,006.29 MEAN 19.2 MAX 334 MIN .51 CFSM 1.76 IN 23.91

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-11	1000	6.72	521	6-23	0430	5.62	374
5-12	a1800	b4.47	260	7- 4	2230	5.05	315

a About.

b From floodmark.

NOTE.--No gage-height record
May 12, 13.

MONONGAHELA RIVER BASIN

77

03063600 Horsecamp Run at Harman, W. Va.

LOCATION.--Lat 38°54'51", long 79°30'32", Randolph County, on right bank 1.0 mi (1.6 km) southeast of Harman, and at mile 1.1 (1.8 km).

DRAINAGE AREA.--6.57 mi² (17.02 km²).

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

GAGE.--Water-stage and rainfall recorders. Datum of gage is 2,510.93 ft (765.331 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 11.1 ft³/s (0.314 m³/s), 22.96 in/yr (583 mm/yr).

EXTREMES.--Current year: Maximum discharge, 760 ft³/s (21.5 m³/s) Dec. 26, gage height, 5.60 ft (1.707 m), from floodmark, from rating curve extended as explained below; minimum, 0.28 ft³/s (0.008 m³/s) July 22, 23, 26-29; minimum gage height, 1.18 ft (0.360 m) June 10.
Period of record: Maximum discharge, 760 ft³/s (21.5 m³/s) Dec. 26, 1973, gage height, 5.60 ft (1.707 m), from floodmark, from rating curve extended above 90 ft³/s (2.55 m³/s) on basis of step-backwater method; no flow July 31, Aug. 1, 3-6, 9-11, 1973.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Rainfall records collected at site since July 1969 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	40	8.7	30	8.0	19	9.4	2.4	53	8.5	.66	3.5
2	40	21	6.3	20	8.9	55	19	3.1	153	6.1	.93	2.1
3	23	11	5.1	28	15	45	20	8.4	59	4.5	.93	3.0
4	11	6.3	4.2	50	12	26	49	9.0	32	3.7	.66	4.7
5	7.7	14	3.9	30	10	17	27	7.0	18	3.3	.66	2.8
6	5.6	13	3.1	20	8.5	12	15	6.0	11	2.9	.66	4.0
7	4.4	7.7	2.4	15	29	40	9.4	4.6	6.8	2.3	.66	21
8	32	5.8	2.1	13	23	44	11	3.9	4.6	1.8	.66	9.9
9	44	4.8	2.2	20	17	25	35	6.3	3.3	1.3	.66	6.3
10	34	3.5	2.1	66	12	19	26	5.1	2.6	1.0	.66	4.2
11	18	2.6	1.9	140	9.2	15	19	4.4	2.3	.93	.66	3.2
12	11	2.5	1.7	60	7.0	16	14	22	1.8	.79	1.8	2.5
13	7.7	2.8	2.6	32	29	14	12	32	1.4	.60	.66	2.0
14	6.3	3.3	4.0	21	79	11	10	20	1.2	.54	.42	2.5
15	5.3	3.0	3.5	16	45	9.4	9.4	14	3.5	.54	.42	1.8
16	4.4	9.4	3.1	13	28	8.7	7.0	11	7.8	.54	.60	1.3
17	3.7	9.4	2.7	11	19	8.7	6.0	9.0	4.5	.48	1.3	1.1
18	3.0	7.0	2.2	10	13	7.7	5.3	7.9	3.0	.42	.54	.93
19	2.6	6.8	2.0	12	12	24	4.6	6.9	2.4	.37	1.2	.86
20	2.4	6.3	16	16	14	25	4.1	6.0	3.5	.37	.93	.72
21	2.1	5.6	74	23	12	21	3.5	5.2	4.0	.32	.54	.72
22	2.0	4.6	35	20	19	17	3.1	4.6	18	.32	.48	.79
23	1.9	3.9	23	17	22	13	4.6	6.7	99	.32	.48	.66
24	1.7	3.7	17	15	18	9.7	3.7	6.6	55	.48	.48	.54
25	1.6	3.5	14	20	15	7.0	3.1	7.1	26	.37	.42	.54
26	1.4	4.4	150	17	12	6.0	3.0	6.0	18	.32	.42	.54
27	1.4	12	100	15	10	4.8	2.8	5.3	12	.28	.42	.48
28	2.1	31	49	13	9.0	3.9	2.6	4.7	11	.28	.48	.48
29	36	20	29	14	-----	3.5	1.8	8.1	15	1.0	.79	.48
30	30	12	42	11	-----	6.0	2.1	21	11	2.3	5.8	.48
31	42	-----	32	9.4	-----	9.4	-----	18	-----	.79	3.7	-----
TOTAL	396.3	280.9	644.8	797.4	515.6	542.8	342.5	282.3	643.7	47.76	29.68	84.12
MEAN	12.8	9.36	20.8	25.7	18.4	17.5	11.4	9.11	21.5	1.54	.96	2.80
MAX	44	40	150	140	79	55	49	32	153	8.5	5.8	21
MIN	1.4	2.5	1.7	9.4	7.0	3.5	1.8	2.4	1.2	.28	.42	.48
CFSM	1.95	1.42	3.17	3.91	2.80	2.66	1.74	1.39	3.27	.23	.15	.43
IN./	2.24	1.59	3.65	4.51	2.92	3.07	1.94	1.60	3.64	.27	.17	.48
IN./	6.24	-	-	-	-	-	-	5.19	7.17	1.27	4.06	1.87

CAL YR 1973 TOTAL 3,202.29 MEAN 8.77 MAX 150 MIN 0 CFSM 1.33 IN/ 18.13
WTR YR 1974 TOTAL 4,607.86 MEAN 12.6 MAX 153 MIN .28 CFSM 1.92 IN/ 26.09

PEAK DISCHARGE (BASE, 160 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	unknown	a5.60	760	6- 2	0830	3.75	270
1-11	unknown	unknown	unknown	6-23	1545	3.87	274

a From floodmark.

/ Runoff.

// Rainfall.

NOTE.--No gage-height record
Dec. 12 to Jan. 14 and
Jan. 16 to Feb. 12.

MONONGAHELA RIVER BASIN

03065000 Dry Fork at Hendricks, W. Va.

LOCATION.--Lat 39°04'20", long 79°37'20", Tucker County, on right bank at Hendricks, 0.4 mi (0.6 km) upstream from confluence with Blackwater River.

DRAINAGE AREA.--345 mi² (894 km²).

PERIOD OF RECORD.--October 1940 to current year. Published as "Dry Fork River," 1949-52.

GAGE.--Water-stage recorder. Datum of gage is 1,698.76 ft (517.782 m) above mean sea level, adjustment of 1912. Prior to Dec. 21, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 752 ft³/s (21.30 m³/s), 29.60 in/yr (752 mm/yr).

EXTREMES.--Current year: Maximum discharge, 14,600 ft³/s (413 m³/s) June 2, gage height, 9.13 ft (2.783 m); minimum, 55 ft³/s (1.56 m³/s) Aug. 10, 12, 28, gage height, 1.36 ft (0.415 m).
Period of record: Maximum discharge, 47,000 ft³/s (1,330 m³/s) Oct. 15, 1954, gage height, 15.23 ft (4.642 m), from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of slope-area measurement of peak flow; minimum, 5.5 ft³/s (0.17 m³/s) Sept. 10, 11, 1965, gage height, 0.99 ft (0.302 m).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	720	3,680	1,090	1,900	527	1,000	707	361	3,750	520	105	788
2	1,270	2,290	879	1,430	554	3,480	1,170	349	10,600	438	77	671
3	1,370	1,400	753	1,740	940	3,510	1,330	1,060	4,780	335	68	912
4	896	977	658	2,970	825	2,100	3,960	1,420	2,090	272	123	1,170
5	652	1,150	609	1,950	691	1,520	3,170	1,060	1,270	248	98	723
6	452	1,260	580	1,410	580	1,240	1,820	857	873	489	77	493
7	340	980	473	1,080	1,330	1,400	1,290	697	647	358	64	1,710
8	870	810	410	820	1,560	1,830	1,300	557	664	252	60	1,040
9	1,830	752	429	1,020	1,100	1,410	2,080	665	844	195	60	669
10	1,200	615	437	4,120	810	1,390	1,630	788	526	168	61	490
11	741	506	367	7,300	660	1,290	1,310	667	445	151	64	376
12	535	463	335	4,290	560	1,420	1,060	1,080	358	133	114	304
13	420	488	398	2,180	801	1,280	984	2,200	286	115	203	285
14	405	601	685	1,470	4,020	1,070	944	1,400	232	101	121	1,130
15	364	535	609	1,150	2,510	909	882	1,010	215	105	79	555
16	306	1,130	545	960	1,620	886	754	766	990	111	65	348
17	267	1,320	460	785	1,100	970	649	603	826	100	286	257
18	226	1,050	380	655	840	821	561	559	504	85	256	207
19	201	1,180	350	734	720	1,500	499	481	371	76	185	174
20	183	1,060	1,020	1,020	1,140	2,100	450	387	688	78	262	147
21	170	888	4,610	1,160	966	1,780	387	324	964	77	188	134
22	157	768	2,390	1,350	1,270	1,730	353	282	2,070	69	125	134
23	147	644	1,540	1,110	1,800	1,340	517	542	5,340	65	104	134
24	138	595	1,160	999	1,400	1,080	516	560	4,970	83	106	114
25	131	590	969	1,310	1,190	835	482	524	2,510	80	84	97
26	124	569	6,760	1,260	840	712	492	395	1,730	186	69	89
27	118	874	7,480	1,140	720	609	450	324	1,130	320	60	81
28	116	2,190	3,180	957	690	519	415	272	854	153	57	81
29	1,620	1,870	1,890	863	-----	463	382	332	918	133	64	89
30	1,580	1,310	2,710	714	-----	576	348	1,100	661	274	1,030	84
31	3,010	-----	2,140	613	-----	974	-----	990	-----	171	755	-----
TOTAL	20,559	32,545	46,296	50,460	31,764	41,744	30,892	22,612	52,111	5,941	5,070	13,486
MEAN	663	1,085	1,493	1,628	1,134	1,347	1,030	729	1,737	192	164	450
MAX	3,010	3,680	7,480	7,300	4,020	3,510	3,960	2,200	10,600	520	1,030	1,710
MIN	116	463	335	613	527	463	348	272	215	65	57	81
CFSM	1.92	3.14	4.33	4.72	3.29	3.90	2.99	2.11	5.03	.56	.48	1.30
IN.	2.22	3.51	4.99	5.44	3.42	4.50	3.33	2.44	5.62	.64	.55	1.45
CAL YR 1973	TOTAL 300,170		MEAN 822	MAX 7,480	MIN 40	CFSM 2.38	IN 32.37					
WTR YR 1974	TOTAL 353,480		MEAN 968	MAX 10,600	MIN 57	CFSM 2.81	IN 38.11					

PEAK DISCHARGE (BASE, 7,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2100	8.45	12,100	6-2	1300	9.13	14,600
1-11	1330	7.35	8,780	6-23	2000	8.03	10,800

MONONGAHELA RIVER BASIN

79

03066000 Blackwater River at Davis, W. Va.

LOCATION.--Lat 39°07'35", long 79°28'10", Tucker County, on right bank 0.4 mi (0.6 km) southwest of Davis, 0.5 mi (0.8 km) downstream from Beaver Creek, and at mile 10.6 (17.1 km).

DRAINAGE AREA.--86.2 mi² (223.3 km²).

PERIOD OF RECORD.--April 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,058.87 ft (932.344 m) above mean sea level, levels by West Virginia Power and Transmission Co. Prior to Dec. 18, 1952, nonrecording gage at site 60 ft (18 m) downstream at same datum.

AVERAGE DISCHARGE.--53 years, 196 ft³/s (5.551 m³/s), 30.88 in/yr (784 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,790 ft³/s (79.0 m³/s) Dec. 27, gage height, 8.13 ft (2.478 m); minimum, 17 ft³/s (0.48 m³/s) Aug. 28, gage height, 1.47 ft (0.448 m).

Period of record: Maximum discharge, 7,170 ft³/s (203 m³/s) Mar. 29, 1924, gage height, 13.20 ft (4.023 m), from floodmark; minimum, 1.5 ft³/s (0.042 m³/s) Sept. 11, 12, 1959, gage height, 0.90 ft (0.274 m), caused by filling of small water supply pool about 1.0 mi (1.6 km) upstream.

REMARKS.--Records good.

REVISIONS (WATER YEARS)--WSP 583: 1921-23. WSP 803: Drainage area. WSP 1173: 1931-34(M,m). WSP 1305: 1928(M), 1932-37 (M), 1939-41(M), 1944-48(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	724	265	491	136	413	287	63	1,010	270	35	178
2	270	518	205	338	142	724	398	67	1,520	186	25	222
3	344	300	172	473	242	840	327	182	1,410	112	23	241
4	228	215	158	828	209	479	1,160	230	575	87	63	259
5	182	211	166	497	158	356	832	142	262	78	67	167
6	123	217	164	332	140	324	419	110	174	123	39	141
7	92	164	132	255	455	374	313	101	132	128	27	499
8	255	150	100	207	401	395	353	90	112	88	23	295
9	239	190	110	374	258	305	551	98	101	66	24	163
10	205	154	110	1,260	200	284	368	101	87	56	24	117
11	142	126	100	2,200	160	267	272	82	72	49	21	94
12	108	117	86	1,460	130	284	215	178	68	41	35	78
13	92	156	110	624	246	267	226	413	63	35	64	74
14	95	180	172	410	808	219	246	186	53	31	48	241
15	88	154	144	359	572	190	207	126	56	29	29	187
16	142	233	117	321	332	198	174	108	150	38	28	102
17	130	219	100	251	260	224	148	96	170	35	210	76
18	92	172	91	217	215	194	125	95	90	32	167	63
19	72	252	82	230	190	338	110	93	63	32	99	56
20	64	237	258	305	392	383	105	82	115	32	90	49
21	59	178	744	410	297	332	93	69	237	26	62	44
22	53	160	500	398	335	371	85	61	732	22	41	46
23	49	136	377	279	407	267	112	90	1,200	20	34	45
24	47	134	251	260	305	224	121	128	1,640	28	30	41
25	44	146	251	310	260	186	121	100	998	28	25	35
26	41	162	1,670	277	210	172	107	76	458	24	25	33
27	43	239	2,320	249	180	156	90	63	260	67	21	31
28	44	548	1,040	219	170	136	78	54	213	54	20	31
29	784	431	506	228	-----	119	61	90	235	34	30	31
30	736	279	645	194	-----	219	56	356	178	103	210	31
31	584	-----	527	160	-----	398	-----	258	-----	76	257	-----
TOTAL	5,794	7,108	11,673	14,416	7,810	9,638	7,760	3,988	12,434	2,030	1,896	3,670
MEAN	187	237	377	465	279	311	259	129	414	65.5	61.2	122
MAX	784	724	2,320	2,200	808	840	1,160	413	1,640	270	257	499
MIN	41	117	82	160	130	119	56	54	53	20	20	31
CFSM	2.17	2.75	4.37	5.39	3.24	3.61	3.00	1.50	4.80	.76	.71	1.42
IN.	2.50	3.07	5.04	6.22	3.37	4.16	3.35	1.72	5.37	.88	.82	1.58

CAL YR 1973 TOTAL 77,537 MEAN 212 MAX 2,320 MIN 12 CFSM 2.46 IN 33.46
WTR YR 1974 TOTAL 88,217 MEAN 242 MAX 2,320 MIN 20 CFSM 2.81 IN 38.07

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-27	0500	8.13	2,790	6-2	2200	6.65	1,790
1-11	1500	7.54	2,380	6-23	1900	6.88	1,930
4-4	1800	6.21	1,560				

MONONGAHELA RIVER BASIN

03068000 Shavers Fork at Bemis, W. Va.

LOCATION.--Lat 38°48'27", long 79°44'16", Randolph County, on right bank at downstream side of bridge on State Secondary Route 22, at Bemis, 0.6 mi (1.0 km) upstream from Fishing Hawk Creek, and at mile 39.9 (64.2 km).

DRAINAGE AREA.--115 mi² (298 km²).

PERIOD OF RECORD.--February 1922 to December 1925, October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,574.06 ft (784.573 m) above mean sea level. February 17, 1922 to December 31, 1925, nonrecording gage on downstream side of bridge, at present site, at datum 2.18 ft (0.664 m) lower.

EXTREMES.--Current year: Maximum discharge, 14,600 ft³/s (413 m³/s) June 2, gage height, 8.64 ft (2.633 m), from floodmark, from rating curve extended as explained below; minimum daily, 43 ft³/s (1.22 m³/s) Aug. 10. Period of record: Maximum discharge, 14,600 ft³/s (413 m³/s) June 2, 1974, gage height, 8.64 ft (2.633 m), from floodmark, from rating curve extended above 6,100 ft³/s (173 m³/s); minimum, 10 ft³/s (0.28 m³/s) Aug. 31, 1925, gage height, 0.43 ft (0.131 m), present datum. Flood of Mar. 13, 1918, reached a stage of about 13.1 ft (3.99 m), present datum.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Records of chemical analyses, water temperatures, and instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244	2,330	347	800	244	296	210	142	1,900	293	69	470
2	885	868	291	627	245	1,100	330	159	6,400	269	57	309
3	543	538	254	683	361	996	450	401	1,800	206	59	535
4	367	398	234	1,290	291	716	1,500	424	760	166	76	779
5	271	482	262	700	240	547	1,000	317	480	181	71	442
6	204	479	321	531	210	505	560	275	395	301	69	361
7	162	338	231	400	370	595	420	239	321	447	58	864
8	313	289	197	310	430	695	460	208	352	244	52	446
9	296	277	210	400	340	464	770	776	547	167	45	328
10	269	239	180	2,340	240	431	520	578	300	138	43	273
11	224	211	150	3,690	210	410	400	363	271	127	71	224
12	173	183	130	1,580	180	608	384	977	219	111	68	196
13	144	182	160	830	270	553	366	1,200	181	92	56	165
14	160	251	230	560	652	395	373	526	149	80	56	197
15	152	231	190	457	591	347	350	395	185	79	366	166
16	121	815	170	403	414	366	299	333	924	86	160	127
17	105	529	150	350	348	430	262	284	719	75	215	109
18	96	374	140	305	278	330	236	264	384	65	88	95
19	89	515	130	285	276	680	215	245	283	60	271	84
20	83	457	1,180	340	413	920	196	201	448	70	702	78
21	78	353	1,900	505	312	630	176	172	488	67	246	73
22	73	317	1,000	585	888	710	155	153	638	57	151	81
23	70	277	580	394	896	480	244	224	1,230	52	123	78
24	67	251	400	363	475	380	256	314	1,070	67	104	68
25	64	234	334	761	380	310	208	257	598	100	89	63
26	61	240	4,650	570	310	270	229	203	445	69	80	59
27	59	310	3,560	479	260	250	201	171	343	105	73	57
28	58	760	1,180	402	240	220	180	150	300	69	69	56
29	324	547	754	371	-----	200	162	150	619	131	120	55
30	427	390	1,390	322	-----	190	146	760	362	142	688	54
31	1,790	-----	736	279	-----	240	-----	700	-----	115	511	-----
TOTAL	7,972	13,665	21,641	21,912	10,364	15,264	11,258	11,561	23,111	4,231	4,906	6,892
MEAN	257	456	698	707	370	492	375	373	770	136	158	230
MAX	1,790	2,330	4,650	3,690	896	1,100	1,500	1,200	6,400	447	702	864
MIN	58	182	130	279	180	190	146	142	149	52	43	54
CFSM	2.23	3.97	6.07	6.15	3.22	4.28	3.26	3.24	6.70	1.18	1.37	2.00
IN.	2.58	4.42	7.00	7.09	3.35	4.94	3.64	3.74	7.48	1.37	1.59	2.23
WTR YR 1974	TOTAL 152,777		MEAN 419		MAX 6,400		MIN 43		CFSM 3.64		IN 49.42	

PEAK DISCHARGE (BASE, 2,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11- 1	0930	5.39	3,480	4- 4	unknown	a5.70	a4,100
12-20	2245	5.65	4,000	5-12	2130	5.69	4,080
12-26	2115	7.39	9,360	6- 2	unknown	b8.64	14,600
1-10	1815	6.45	6,100				

a Estimated.

b From floodmark.

NOTE.--No gage-height record
Dec. 10-23, Mar. 16 to Apr.
11, May 30 to June 5.

MONONGAHELA RIVER BASIN

81

03068610 Taylor Run at Bowden, W. Va.

LOCATION.--Lat 38°54'27", long 79°41'49", Randolph County, on upstream side of left abutment of bridge on U.S. Highway 33, 450 ft (137 m) upstream from mouth, and 0.7 mi (1.1 km) east of Bowden.

DRAINAGE AREA.--5.06 mi² (13.11 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,240 ft (683 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 382 ft³/s (10.8 m³/s) June 8, gage height, 6.91 ft (2.106 m), from rating curve extended as explained below; minimum, 0.40 ft³/s (0.011 m³/s) Aug. 27, 28, gage height, 3.85 ft (1.173 m).

Period of record: Maximum discharge, 382 ft³/s (10.8 m³/s) June 8, 1974, gage height, 6.91 ft (2.106 m), from rating curve extended above 150 ft³/s (4.25 m³/s); minimum, 0.40 ft³/s (0.011 m³/s) Aug. 27, 28, 1974; minimum gage height, 3.72 ft (1.134 m) Aug. 9, 10, 1973.

REMARKS.--Records good. Records of chemical analyses, water temperatures, and instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	100	21	39	12	25	18	9.5	106	6.3	.60	18
2	34	36	18	31	22	76	31	15	142	5.0	.51	19
3	26	26	16	53	28	56	27	42	62	4.0	.49	32
4	17	20	14	70	23	36	55	37	32	3.3	1.1	28
5	13	31	14	43	18	29	36	26	20	3.0	.88	16
6	9.8	25	11	31	15	24	27	21	14	4.6	.58	18
7	8.3	20	9.9	22	38	44	22	17	9.9	3.2	.51	28
8	15	17	9.0	17	27	36	27	14	45	2.4	.57	17
9	9.9	16	10	28	18	28	34	17	54	2.0	.65	12
10	8.4	13	9.4	78	13	37	28	14	27	1.8	.63	8.8
11	7.2	11	7.8	126	10	30	24	12	18	1.8	.49	7.2
12	6.3	11	6.8	72	9.0	30	20	26	13	1.3	5.6	6.6
13	5.8	13	9.0	42	32	24	20	26	9.2	1.2	2.0	6.7
14	6.8	12	21	30	86	21	18	21	6.6	1.0	.98	26
15	5.4	12	16	24	44	18	16	18	11	1.0	.68	14
16	5.1	35	11	20	31	22	14	15	22	1.1	.85	9.9
17	4.7	27	9.0	17	24	21	12	12	13	.86	2.6	7.3
18	4.3	23	7.0	15	19	19	11	13	8.7	.77	1.1	5.5
19	4.0	34	6.4	27	19	37	9.5	10	8.2	.90	2.3	4.7
20	3.9	29	39	28	27	33	8.2	8.6	16	1.3	1.6	3.9
21	3.6	24	70	30	22	37	7.2	7.5	22	.78	.83	4.0
22	3.3	20	39	26	27	32	6.9	7.8	23	.64	.71	3.9
23	3.2	16	27	23	26	26	14	22	77	.78	.68	3.1
24	3.0	16	20	23	22	22	11	22	62	1.1	.59	2.6
25	3.0	14	23	28	20	18	11	21	36	.80	.53	2.3
26	2.9	14	132	25	17	16	11	17	24	1.5	.50	2.2
27	2.8	23	95	22	14	13	10	14	16	1.5	.42	2.1
28	3.5	43	52	20	12	12	9.5	12	13	.77	.51	2.0
29	24	33	39	18	-----	11	8.5	30	11	1.3	2.3	2.2
30	20	25	52	16	-----	14	7.9	48	8.2	2.1	33	2.2
31	80	-----	40	14	-----	16	-----	40	-----	.87	29	-----
TOTAL	355.2	739	854.3	1,058	675.0	863	554.7	615.4	929.8	58.97	93.79	315.2
MEAN	11.5	24.6	27.6	34.1	24.1	27.8	18.5	19.9	31.0	1.90	3.03	10.5
MAX	80	100	132	126	86	76	55	48	142	6.3	33	32
MIN	2.8	11	6.4	14	9.0	11	6.9	7.5	6.6	.64	.42	2.0
CFSM	2.27	4.86	5.45	6.74	4.76	5.49	3.66	3.93	6.13	.38	.60	2.08
IN.	2.61	5.43	6.28	7.78	4.96	6.34	4.08	4.52	6.84	.43	.69	2.32

WTR YR 1974 TOTAL 7,112.36 MEAN 19.5 MAX 142 MIN .42 CFSM 3.85 IN 52.29

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1530	5.82	187	6- 1	1630	5.95	208
1-11	0930	5.68	165	6- 8	1545	6.91	382

LOCATION.--Lat 38°54'47", long 79°46'14", Randolph County, on upstream side of right pier, on U.S. Highway 33 bridge, 3.0 mi (4.8 km) west of Bowden, and at mile 26.4 (42.5 km).

PERIOD OF RECORD.--August 1973 to current year. Once daily wire-weight gage readings at same site November 1971 to August 1973 are contained in files of U.S. Fish Hatchery.

EXTREMES.--Current year: Maximum discharge, 17,300 ft³/s (490 m³/s) Dec. 26, gage height, 11.47 ft (3.496 m), from floodmark, from rating curve extended as explained below; minimum, 47 ft³/s (1.33 m³/s) July 23, 24, Aug. 10, gage height, 4.01 ft (1.222 m).

Period of record: Maximum discharge, 17,300 ft³/s (490 m³/s) Dec. 26, 1973, gage height, 11.47 ft (3.496 m), from floodmark, from rating curve extended above 4,100 ft³/s (116 m³/s); minimum, 36 ft³/s (1.02 m³/s) Sept. 13, 14, 1973, gage height, 3.84 ft (1.170 m).

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Records of chemical analyses, water temperatures, and instantaneous suspended-sediment discharges for the current year are published in Part 2 of this report.

[illegible]

MONONGAHELA RIVER BASIN

83

03068800 Shavers Fork below Bowden, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	371	2,900	436	979	291	400	283	186	2,380	323	83	558
2	872	1,300	379	800	303	1,360	413	200	7,930	295	63	391
3	723	680	331	832	455	1,480	570	490	2,340	239	53	570
4	450	500	299	1,830	383	961	1,880	606	1,010	197	81	970
5	351	580	287	970	331	709	1,290	436	642	176	79	525
6	259	620	359	674	279	588	723	359	475	307	77	387
7	207	420	291	530	480	695	540	311	371	395	65	907
8	287	360	243	413	552	952	588	267	594	283	53	576
9	339	340	247	460	460	618	988	624	786	197	51	409
10	279	300	225	2,930	310	612	681	681	413	159	51	335
11	259	270	200	6,400	270	582	558	418	339	143	88	283
12	200	230	180	2,260	240	709	470	624	287	128	86	251
13	168	240	210	1,150	310	709	440	1,580	235	105	67	228
14	168	310	299	700	1,080	515	450	636	197	88	59	355
15	176	290	247	546	808	431	413	470	204	79	259	283
16	143	600	228	440	552	440	355	383	952	93	190	211
17	120	695	200	380	440	546	311	327	848	83	307	169
18	105	490	180	351	359	427	279	307	470	69	125	143
19	95	624	170	347	335	808	251	283	339	59	100	125
20	88	600	576	413	510	1,180	228	239	606	67	648	108
21	81	460	3,000	490	422	832	204	204	606	73	259	100
22	77	395	1,500	716	709	907	186	186	808	58	156	108
23	73	351	790	475	1,230	624	263	247	1,710	50	117	103
24	67	323	600	422	636	515	299	383	1,610	50	98	86
25	61	303	436	793	490	413	251	343	808	103	81	73
26	58	307	6,370	688	420	359	267	271	582	75	69	67
27	56	375	5,900	558	350	323	243	228	436	111	61	63
28	53	925	1,710	475	320	287	218	197	363	81	58	59
29	247	744	952	427	-----	259	204	232	582	81	103	58
30	530	515	1,700	371	-----	255	186	979	418	165	786	59
31	2,000	-----	970	327	-----	311	-----	943	-----	140	612	-----
TOTAL	8,963	17,047	29,515	29,147	13,325	19,807	14,032	13,640	29,341	4,472	4,985	8,560
MEAN	289	568	952	940	476	639	468	440	978	144	161	285
MAX	2,000	2,900	6,370	6,400	1,230	1,480	1,880	1,580	7,930	395	786	970
MIN	53	230	170	327	240	255	186	186	197	50	51	58
CFSM	1.91	3.76	6.30	6.23	3.15	4.23	3.10	2.91	6.48	.95	1.07	1.89
IN.	2.21	4.20	7.27	7.18	3.28	4.88	3.46	3.36	7.23	1.10	1.23	2.11

WTR YR 1974 TOTAL 192,834 MEAN 528 MAX 7,930 MIN 50 CFSM 3.50 IN 47.51

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11- 1	a1130	a7.9	a3,800	4- 4	1700	8.15	4,320
12-21	0430	8.30	4,700	5-12	2345	8.07	4,140
12-26	2200	b11.47	17,300	6- 2	1315	11.33	16,500
1-10	a2230	a9.85	a9,580	6-23	1730	7.57	3,140

a Estimated.

b From floodmark.

NOTE.--No gage-height record

Oct. 31 to Nov. 15, Dec.

20-21, 26-27, Jan. 10-11.

MONONGAHELA RIVER BASIN

03069000 Shavers Fork at Parsons, W. Va.

LOCATION.--Lat 39°05'45", long 79°40'40", Tucker County, on right bank at Parsons, 0.7 mi (1.1 km) upstream from confluence with Black Fork.

DRAINAGE AREA.--214 mi² (554 km²).

PERIOD OF RECORD.--October 1910 to September 1926, October 1940 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,634.87 ft (498.308 m) above mean sea level. Prior to Aug. 25, 1923, nonrecording gage on old highway bridge 800 ft (244 m) downstream and Aug. 25, 1923, to Sept. 30, 1926, nonrecording gage on railroad bridge 760 ft (232 m) downstream at datum 3.0 ft (0.9 m) lower. Oct. 4, 1940, to Apr. 4, 1942, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--50 years, 552 ft³/s (15.63 m³/s), 35.03 in/yr (890 mm/yr).

EXTREMES.--Current year: Maximum discharge, 11,900 ft³/s (337 m³/s) June 2, gage height, 10.23 ft (3.118 m), from rating curve extended as explained below; minimum, 37 ft³/s (1.05 m³/s) Aug. 11, gage height, 0.59 ft (0.180 m).

Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) Oct. 16, 1954, gage height, 12.34 ft (3.761 m), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-conveyance study; minimum observed, 1 ft³/s (0.028 m³/s) Oct. 7, 1914, gage height, 2.0 ft (0.61 m), site and datum then in use. Minimum stage and discharge both very doubtful.

Flood of July 10, 1888, and July 17, 1907, reached a stage of approximately 12.5 ft (3.81 m) at site and datum of former gage, discharge, 25,000 ft³/s (708 m³/s), from rating curve extended above 8,000 ft³/s (227 m³/s).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 583: 1922. WSP 923: Drainage area. WSP 1335: 1911-12, 1915-17, 1918(M), 1921-22(M), 1926(M). WSP 1705: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	550	3,010	594	1,240	365	526	348	223	3,450	340	98	693
2	730	1,630	496	1,150	352	1,910	445	226	7,550	300	66	505
3	1,100	930	425	1,140	550	2,280	786	622	3,140	260	61	584
4	580	629	375	2,640	544	1,320	2,610	1,080	1,320	206	61	1,230
5	450	650	356	1,470	435	978	2,060	666	794	181	77	715
6	336	898	415	970	356	778	1,030	478	538	260	66	456
7	272	601	370	714	587	794	698	390	415	328	62	894
8	272	472	312	538	914	1,220	690	332	440	348	55	766
9	538	445	324	562	608	874	1,430	405	946	209	50	483
10	400	405	296	2,660	430	794	1,090	978	466	162	43	377
11	344	340	250	5,860	380	834	794	496	352	142	43	322
12	280	308	220	3,210	340	874	629	594	320	126	77	273
13	233	304	260	1,450	425	986	568	2,090	256	108	77	264
14	216	340	834	962	2,050	714	629	970	206	89	57	1,040
15	223	365	532	730	1,340	556	562	629	181	83	70	516
16	203	890	410	587	850	520	472	478	615	77	286	325
17	170	1,070	300	496	608	666	395	400	1,000	85	306	245
18	152	682	240	425	472	556	344	370	526	76	201	199
19	138	698	226	415	420	682	312	340	360	68	127	167
20	128	858	574	538	643	1,680	280	300	538	68	494	143
21	119	622	3,820	587	698	1,170	248	256	842	68	340	130
22	110	502	1,560	1,010	601	1,350	226	230	1,120	66	196	125
23	104	435	922	690	1,630	930	272	308	2,910	61	138	126
24	98	390	706	556	914	698	344	472	2,600	62	111	112
25	91	365	608	914	714	538	308	478	1,110	55	94	95
26	87	352	4,240	1,030	520	445	300	380	714	98	80	85
27	83	455	5,750	786	430	395	300	308	502	85	69	79
28	81	1,570	2,220	636	400	348	268	260	395	102	67	75
29	200	1,280	1,260	556	-----	320	244	268	502	77	69	73
30	722	810	1,850	484	-----	308	226	826	466	126	712	69
31	2,370	-----	1,380	425	-----	348	-----	1,500	-----	126	742	-----
TOTAL	11,380	22,306	32,125	35,431	18,576	26,392	18,908	7,353	34,574	4,442	4,995	11,166
MEAN	367	744	1,036	1,143	663	851	630	560	1,152	143	161	372
MAX	2,370	3,010	5,750	5,860	2,050	2,280	2,610	2,090	7,550	348	742	1,230
MIN	81	304	220	415	340	308	226	223	181	55	43	69
CFSM	1.72	3.48	4.84	5.34	3.10	3.98	2.94	2.62	5.38	.67	.75	1.74
IN.	1.98	3.88	5.58	6.16	3.23	4.59	3.29	3.02	6.01	.77	.87	1.94

CAL YR 1973 TOTAL 209,592 MEAN 574 MAX 5,750 MIN 34 CFSM 2.68 IN 36.43
WTR YR 1974 TOTAL 237,648 MEAN 651 MAX 7,550 MIN 43 CFSM 3.04 IN 41.31

PEAK DISCHARGE (BASE, 5,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2300	8.43	8,570	6-2	1745	10.23	11,900
1-11	1445	7.28	6,580	6-23	1845	7.13	6,330

03069500 Cheat River near Parsons, W. Va.

LOCATION.--Lat 39°07'20", long 79°40'50", Tucker County, on left bank 2.0 mi (3.2 km) north of Parsons, 3.0 mi (4.8 km) downstream from confluence of Black and Shavers Forks, and at mile 74.8 (120.4 km).

DRAINAGE AREA.--718 mi² (1,860 km²).

PERIOD OF RECORD.--January 1913 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,589.66 ft (484.528 m) above mean sea level, adjustment of 1912. Prior to Aug. 17, 1944, nonrecording gage on Moss Bridge about 1,600 ft (488 m) upstream at datum 1.13 ft (0.344 m) higher.

AVERAGE DISCHARGE.--61 years, 1,680 ft³/s (47.58 m³/s), 31.77 in/yr (807 mm/yr).

EXTREMES.--Current year: Maximum discharge, 29,600 ft³/s (838 m³/s) June 2, gage height, 12.92 ft (3.98 m), from rating curve extended as explained below; minimum, 142 ft³/s (4.02 m³/s) Aug. 11, gage height, 2.20 ft (0.671 m).

Period of record: Maximum discharge, 52,100 ft³/s (1,480 m³/s) Oct. 15, 1954, gage height, 19.08 ft (5.816 m), from rating curve extended above 26,000 ft³/s (736 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 9 ft³/s (0.25 m³/s) Aug. 12, 1930, gage height, 1.28 ft (0.390 m), site and datum then in use.

Flood of July 10, 1888, reached a stage of 20.5 ft (6.25 m), discharge, 51,300 ft³/s (1,450 m³/s), from floodmarks, at site and datum in use prior to Aug. 17, 1944; it was not exceeded until flood of Oct. 15, 1954, which reached a stage 0.3 ft (0.09 m) higher at that site and datum.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 893: Drainage area. WSP 1305: 1917(M). 1924(M). 1932(M). 1936(M). 1938-39(M). WSP 1335: 1916. WSP 1385: 1918-19(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,010	8,300	2,300	4,170	1,160	2,250	1,520	685	9,650	1,420	302	2,070
2	2,510	5,130	1,880	3,420	1,130	6,890	2,340	687	22,500	1,200	215	1,880
3	3,370	3,030	1,560	3,670	1,970	7,730	2,840	1,970	11,300	856	187	2,210
4	2,060	2,130	1,350	7,630	1,830	4,500	8,840	3,270	4,870	668	263	3,400
5	1,540	2,210	1,270	4,540	1,460	3,270	7,210	2,290	2,900	606	320	2,130
6	1,040	2,690	1,270	3,160	1,270	2,720	3,890	1,750	2,010	977	239	1,330
7	769	2,020	1,110	2,440	2,660	2,920	2,770	1,420	1,500	924	194	3,730
8	1,340	1,670	909	1,850	3,380	4,040	2,770	1,130	1,350	829	171	2,770
9	3,190	1,590	940	2,660	2,370	3,020	4,760	1,200	2,420	535	166	1,780
10	2,100	1,340	923	9,510	1,700	2,830	3,680	2,180	1,360	429	151	1,370
11	1,400	1,080	813	18,300	1,300	2,780	2,880	1,480	1,000	376	155	983
12	999	966	688	10,400	1,100	2,910	2,330	1,760	868	332	224	736
13	787	989	904	4,890	1,500	2,870	2,210	5,320	686	288	415	682
14	731	1,270	2,110	3,270	7,730	2,290	2,300	3,000	557	250	287	3,260
15	706	1,190	1,610	2,580	5,060	1,910	2,060	2,050	493	247	204	1,810
16	668	2,350	1,260	2,190	3,240	1,820	1,740	1,570	2,010	268	403	1,030
17	627	3,020	1,040	1,810	2,420	2,150	1,470	1,240	2,600	253	973	721
18	496	2,180	759	1,500	1,840	1,800	1,240	1,170	1,440	230	843	565
19	426	2,520	700	1,520	1,640	2,720	1,080	1,030	952	206	490	477
20	383	2,540	1,700	2,220	2,640	4,620	963	853	1,670	211	953	408
21	356	1,990	10,400	2,460	2,370	3,660	833	702	2,600	201	704	367
22	327	1,670	5,190	3,170	2,560	3,950	746	609	5,580	186	404	368
23	306	1,390	3,260	2,430	4,240	2,900	979	1,020	11,300	174	297	360
24	288	1,240	2,480	2,120	2,950	2,310	1,130	1,370	11,500	195	264	321
25	269	1,230	2,100	2,780	2,490	1,800	1,030	1,300	5,640	189	224	273
26	255	1,190	13,200	2,390	1,800	1,520	1,020	969	3,650	246	189	247
27	241	1,800	18,600	2,470	1,500	1,310	940	767	2,420	577	170	227
28	240	4,990	7,560	2,080	1,400	1,120	835	632	1,830	363	164	219
29	2,610	4,230	4,240	1,510	-----	985	749	698	2,060	283	194	234
30	3,610	2,810	5,860	1,620	-----	1,100	677	2,740	1,680	562	2,170	224
31	6,610	-----	4,660	1,360	-----	1,980	-----	3,150	-----	467	2,280	-----
TOTAL	42,204	70,755	102,646	116,820	66,710	88,675	67,832	50,012	120,396	14,548	14,215	36,182
MEAN	1,363	2,359	3,311	3,768	2,383	2,860	2,261	1,613	4,013	469	459	1,206
MAX	6,610	8,300	18,600	18,300	7,730	7,730	8,840	5,320	22,500	1,420	2,280	3,730
MIN	240	966	688	1,360	1,100	985	677	609	493	174	151	219
CFSM	1.90	3.29	4.61	5.25	3.32	3.98	3.15	2.25	5.59	.65	.64	1.68
IN.	2.19	3.67	5.32	6.05	3.46	4.59	3.51	2.59	6.24	.75	.74	1.87

CAL YR 1973 TOTAL 663,622 MEAN 1,818 MAX 18,600 MIN 95 CFSM 2.53 IN 34.38
WTR YR 1974 TOTAL 791,055 MEAN 2,167 MAX 22,500 MIN 151 CFSM 3.02 IN 40.99

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2200	12.27	26,700	6-2	1700	12.92	29,600
1-11	1400	11.10	21,500	6-23	2000	11.59	23,700

MONONGAHELA RIVER BASIN

03069880 Buffalo Creek near Rowlesburg, W. VA.

LOCATION.--Lat 39°17'19", long 79°42'16", Preston County, on left bank 150 ft (46 m) upstream from secondary highway bridge, 4.5 mi (7.2 km) southwest of Rowlesburg, and at mile 2.8 (4.5 km).

DRAINAGE AREA.--12.2 mi² (31.6 km²).

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

GAGE.--Water-stage and rainfall recorders. Altitude of gage is 1,640 ft (499.9 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 30.9 ft³/s (0.875 m³/s), 34.40 in/yr (874 mm/yr).

EXTREMES.--Current year: Maximum discharge, 870 ft³/s (24.6 m³/s) Apr. 4, gage height, 3.70 ft (1.128 m); minimum, 0.15 ft³/s (0.004 m³/s) Aug. 27, gage height, 0.88 ft (0.268 m).
Period of record: Maximum discharge, 2,690 ft³/s (76.2 m³/s) Sept. 13, 1971, gage height, 5.66 ft (1.725 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of step-backwater method; minimum, 0.06 ft³/s (0.002 m³/s) July 17, 18, 1971, gage height, 0.77 ft (0.235 m).

REMARKS.--Records fair. Rainfall records collected at site since August 1967 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	104	30	73	20	46	8.7	20	110	6.9	.35	5.6
2	29	57	21	50	20	141	48	17	60	4.3	.24	7.3
3	39	35	17	95	22	92	60	25	38	3.6	.24	13
4	23	24	16	190	20	43	336	35	23	18	.58	14
5	18	23	29	57	17	32	106	23	12	104	.85	9.5
6	13	22	36	36	15	31	48	17	8.1	25	.30	7.5
7	10	20	29	25	65	43	31	14	5.8	11	.23	13
8	10	19	22	17	60	81	32	12	4.7	7.5	.23	9.9
9	9.8	35	21	35	34	60	126	11	4.7	5.2	.30	7.1
10	8.7	37	17	354	20	77	84	9.5	3.6	4.3	.23	5.3
11	6.9	30	16	452	13	68	57	8.4	2.9	3.9	.15	4.1
12	5.8	25	15	133	10	42	45	130	2.6	2.6	4.7	3.5
13	5.2	24	50	55	16	25	106	90	2.2	2.2	2.4	3.5
14	5.2	25	130	40	37	17	104	50	2.0	2.0	1.6	16
15	4.7	26	79	29	35	13	51	29	3.6	3.9	.58	11
16	9.3	63	50	24	25	16	32	16	20	3.6	.85	7.6
17	16	58	31	19	16	21	22	16	17	2.2	2.6	5.3
18	11	43	23	16	11	19	17	25	9.8	1.6	1.8	4.2
19	8.7	49	18	19	12	19	14	22	5.8	2.2	2.4	3.7
20	7.5	52	60	25	66	16	10	19	7.5	2.2	1.6	3.1
21	5.8	40	160	52	55	60	8.7	16	120	1.3	.85	3.6
22	4.7	30	82	68	46	90	8.1	15	229	.85	.48	4.1
23	4.3	25	51	47	38	42	32	15	138	2.0	.23	3.5
24	3.9	23	37	41	30	25	31	27	86	2.6	.24	2.6
25	3.6	22	40	40	22	14	30	28	32	1.6	.17	2.2
26	3.6	25	210	40	15	9.8	27	22	16	1.1	.15	1.9
27	3.6	50	150	35	13	8.1	24	17	10	.85	.14	1.7
28	3.3	150	71	31	11	6.4	22	14	8.1	.35	.23	1.8
29	27	100	48	35	-----	5.2	21	20	6.9	.58	1.6	1.7
30	49	47	80	35	-----	6.9	20	34	5.2	2.4	9.8	2.1
31	113	-----	77	28	-----	8.7	-----	50	-----	1.3	9.8	-----
TOTAL	474.6	1,283	1,716	2,196	764	1,178.1	1,561.5	846.9	994.5	231.13	45.92	179.4
MEAN	15.3	42.8	55.4	70.8	27.3	38.0	52.1	27.3	33.2	7.46	1.48	5.98
MAX	113	150	210	452	66	141	336	130	229	104	9.8	16
MIN	3.3	19	15	16	10	5.2	8.1	8.4	2.0	.35	.14	1.7
CFSM	1.25	3.51	4.54	5.80	2.24	3.11	4.27	2.24	2.72	.61	.12	.49
IN./	1.45	3.91	5.23	6.70	2.33	3.59	4.76	2.58	3.03	.70	.14	.55
IN./	-	-	-	4.74	2.44	3.70	4.01	6.18	8.17	3.65	3.01	2.46

CAL YR 1973 TOTAL 10,399.18 MEAN 28.5 MAX 315 MIN .14 CFSM 2.34 IN/ 31.71
WTR YR 1974 TOTAL 11,471.05 MEAN 31.4 MAX 452 MIN .14 CFSM 2.57 IN/ 34.98

PEAK DISCHARGE (BASE, 500 CFS)

/ Runoff.
// Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-10	1700	3.68	858	6-21	2230	3.55	780
4- 4	0815	3.70	870				

MONONGAHELA RIVER BASIN

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03070000 Cheat River at Rowlesburg, W. Va.

LOCATION.--Lat 39°20'50", long 79°40'00", Preston County, on left bank 50 ft (15 m) downstream from Baltimore & Ohio Railroad bridge at Rowlesburg, 300 ft (91 m) upstream from Saltlick Creek, and at mile 44.1 (71.0 km). Records include flow of Saltlick Creek.

DRAINAGE AREA.--972 mi² (2,517 km²), including that of Saltlick Creek.

PERIOD OF RECORD.--July 1912 to September 1923 (gage heights only), October 1923 to current year. Gage-height records collected at practically the same site since 1884 are contained in reports of National Weather Service. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,369.8 ft (417.52 m) above mean sea level, Baltimore & Ohio RR bench mark. Prior to Nov. 18, 1923, nonrecording gages at several sites within 500 ft (152 m) of present site at various datums.

AVERAGE DISCHARGE.--51 years, 2,253 ft³/s (63.80 m³/s), 31.48 in/yr (800 mm/yr).

EXTREMES.--Current year: Maximum discharge, 37,200 ft³/s (1,050 m³/s) June 2, gage height, 11.17 ft (3.405 m); minimum observed, 178 ft³/s (5.04 m³/s) Aug. 11, gage height, 0.83 ft (0.253 m).
Period of record: Maximum discharge, 66,300 ft³/s (1,880 m³/s) Oct. 16, 1954, gage height, 15.67 ft (4.776 m), from rating curve extended above 42,000 ft³/s (1,190 m³/s); minimum, 10 ft³/s (0.28 m³/s) Oct. 15, 1930; minimum gage height observed, 0.50 ft (0.152 m) Oct. 3, 1968.
Flood of July 6, 1844, reached a stage of 16.7 ft (5.09 m), referred to present gage by relation curve, discharge, 89,000 ft³/s (2,520 m³/s), from rating curve extended above 45,000 ft³/s (1,270 m³/s). Flood of July 10, 1888, reached a stage of 16.2 ft (4.94 m), referred to present gage by relation curve, discharge, 84,000 ft³/s (2,380 m³/s), from rating curve extended above 45,000 ft³/s (1,270 m³/s).

REMARKS.--Records good. Records of instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 803: Drainage area. WSP 893: 1936-37. WSP 1173: 1924-34(M,m). WSP 1725: 1924(M), 1930(M), 1932(M), 1936(M), 1938-39(M), 1944(M), 1948-49(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,030	10,100	3,220	5,720	1,740	2,620	2,200	1,050	12,600	1,780	376	2,140
2	2,230	7,450	2,630	4,740	1,540	6,830	2,850	1,080	27,400	1,760	250	2,020
3	4,060	4,190	2,200	4,490	2,060	11,500	4,200	2,060	18,400	1,280	245	2,060
4	2,690	2,870	1,900	11,800	2,390	6,320	11,700	4,800	6,880	1,040	230	3,280
5	2,080	2,390	1,830	7,100	2,030	4,510	11,400	3,600	3,950	1,830	355	2,660
6	1,510	3,190	2,000	4,560	1,710	3,820	5,700	2,790	2,700	1,680	348	1,670
7	1,120	2,620	1,880	3,380	2,960	3,620	4,040	2,200	2,020	1,490	260	2,850
8	946	2,140	1,550	2,580	5,300	4,530	3,560	1,750	1,660	1,250	230	3,350
9	3,120	2,080	1,520	2,530	3,640	4,540	6,250	1,660	3,120	902	210	2,060
10	2,540	1,980	1,450	12,100	2,400	3,860	5,830	2,570	2,130	672	201	1,450
11	1,820	1,670	1,320	28,200	1,900	4,110	4,320	2,140	1,430	555	183	1,150
12	1,340	1,460	1,000	16,800	1,600	3,770	3,560	2,280	1,210	479	240	916
13	1,040	1,380	1,270	7,320	1,890	3,860	3,540	6,870	983	412	369	794
14	877	1,580	4,350	4,610	7,780	3,240	4,090	4,350	793	357	438	2,920
15	853	1,680	3,400	3,480	7,100	2,790	3,450	2,940	686	333	296	2,660
16	977	2,160	2,410	2,890	4,500	2,510	2,920	2,210	1,400	439	230	1,550
17	946	4,020	1,800	2,410	3,280	2,830	2,460	1,750	3,060	372	580	1,030
18	755	3,040	1,400	2,010	2,520	2,660	2,060	1,840	2,090	323	1,300	782
19	616	2,920	1,100	1,830	2,140	2,620	1,770	1,710	1,360	278	782	630
20	530	3,480	2,350	2,560	3,150	5,330	1,580	1,420	1,400	266	590	533
21	478	2,840	13,600	3,010	3,710	4,700	1,390	1,160	2,930	260	1,150	462
22	437	2,340	8,010	4,520	3,190	5,900	1,240	969	9,450	240	650	446
23	399	1,970	4,670	3,610	5,050	4,390	1,290	1,000	11,600	240	422	422
24	372	1,720	3,440	2,940	4,030	3,430	1,690	1,840	18,800	260	314	390
25	348	1,690	2,830	3,100	3,320	2,790	1,610	1,860	7,780	250	284	348
26	325	1,650	14,500	3,780	2,500	2,260	1,500	1,540	4,900	240	240	302
27	309	2,300	26,800	3,290	2,100	1,960	1,470	1,210	3,260	369	210	272
28	300	7,550	10,500	2,820	1,900	1,690	1,320	976	2,390	511	196	260
29	1,470	7,060	5,790	2,610	-----	1,500	1,200	1,020	2,220	381	220	235
30	4,930	4,330	6,850	2,340	-----	1,440	1,100	3,050	2,240	417	682	255
31	6,800	-----	6,480	2,020	-----	2,260	-----	4,250	-----	627	2,960	-----
TOTAL	49,248	95,850	144,050	165,150	87,430	119,090	101,290	69,945	160,842	21,293	15,041	39,897
MEAN	1,589	3,195	4,647	5,327	3,123	3,842	3,376	2,256	5,361	687	485	1,330
MAX	6,800	10,100	26,800	28,200	7,780	11,500	11,700	6,870	27,400	1,830	2,960	3,350
MIN	300	1,380	1,000	1,830	1,540	1,440	1,100	969	686	240	183	235
CFSM	1.63	3.29	4.78	5.48	3.21	3.95	3.47	2.32	5.52	.71	.50	1.37
IN.	1.88	3.67	5.51	6.32	3.35	4.56	3.88	2.68	6.16	.81	.58	1.53

CAL YR 1973 TOTAL 895,395 MEAN 2,453 MAX 26,800 MIN 129 CFSM 2.52 IN 34.27
WTR YR 1974 TOTAL 1,069,126 MEAN 2,929 MAX 28,200 MIN 183 CFSM 3.01 IN 40.92

PEAK DISCHARGE (BASE, 20,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-27	0300	11.12	36,800	6- 2	2215	11.17	37,200
1-11	1715	10.52	32,800	6-24	0100	10.34	31,700

MONONGAHELA RIVER BASIN

03070500 Big Sandy Creek at Rockville, W. Va.

LOCATION.--Lat 39°37'15", long 79°42'20", Preston County, on right bank just downstream from highway bridge at Rockville, and at mile 5.0 (8.0 km).

DRAINAGE AREA.--200 mi² (518 km²).

PERIOD OF RECORD.--May 1909 to March 1918, April 1921 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,310 ft (399 m), from topographic map. Prior to Oct. 4, 1924, nonrecording gages at highway bridge at same datum.

AVERAGE DISCHARGE.--61 years (1909-17, 1921-74), 420 ft³/s (11.89 m³/s), 28.52 in/yr (724 mm/yr).

EXTREMES.--Current year: Maximum discharge, 10,300 ft³/s (292 m³/s) Jan. 11, gage height, 13.31 ft (4.057 m); minimum daily, 17 ft³/s (0.48 m³/s) Aug. 27.
 Period of record: Maximum discharge observed, 21,300 ft³/s (603 m³/s) July 24, 1912, gage height, 18.0 ft (5.49 m), from rating curve extended above 10,000 ft³/s (283 m³/s) on basis of velocity-area studies; minimum, 0.1 ft³/s (0.003 m³/s) Oct. 21-27, 1953.
 Flood of July 10, 1888, reached a stage of about 20 ft (6.1 m), discharge, about 30,000 ft³/s (850 m³/s).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 583: 1912(M), 1922-23. WSP 643: Drainage area. WSP 923: 1939. WSP 1173: 1930-34(M,m). WSP 1335: 1910-18, 1921, 1922-24(M), 1928(M), 1930-43(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	697	683	748	489	521	350	173	1,880	467	45	930
2	444	576	526	605	437	704	544	158	1,210	368	37	610
3	636	421	436	1,040	409	761	604	546	822	256	34	992
4	400	308	370	2,270	331	635	1,290	629	577	194	37	824
5	284	266	357	1,200	250	621	1,120	484	429	195	49	448
6	192	253	338	831	220	635	783	406	325	336	37	279
7	146	205	258	637	363	731	610	334	250	237	28	243
8	133	184	222	480	376	783	554	270	230	167	24	176
9	211	251	343	561	320	656	1,030	279	255	129	25	131
10	147	237	469	2,900	280	950	969	246	172	126	28	109
11	117	203	390	8,060	250	829	850	205	135	178	26	94
12	96	189	350	3,260	220	717	710	1,620	118	112	29	91
13	85	189	577	1,370	278	568	913	1,760	103	82	75	221
14	83	191	1,630	896	311	462	1,130	872	85	68	38	1,740
15	73	185	1,100	720	273	397	1,170	604	77	88	28	748
16	71	1,050	779	594	254	479	830	457	196	105	27	453
17	69	892	560	492	254	598	638	369	215	71	76	312
18	59	615	400	408	224	521	515	2,150	139	55	42	226
19	52	586	310	461	234	525	431	1,050	99	57	53	181
20	48	506	746	592	403	479	354	690	120	85	38	141
21	46	432	2,820	860	399	1,450	293	516	569	56	30	181
22	45	407	1,430	1,020	488	1,590	263	413	829	42	26	231
23	42	341	921	783	594	951	307	624	4,950	59	23	162
24	40	399	687	696	505	705	257	655	3,000	182	21	126
25	38	570	587	590	430	522	229	500	1,740	103	19	109
26	36	652	1,920	513	320	441	200	396	1,270	69	18	104
27	36	1,150	3,280	502	300	374	183	319	762	56	17	96
28	35	2,910	1,670	563	280	317	169	252	539	47	21	110
29	424	1,710	1,050	983	-----	298	158	451	469	44	23	112
30	482	963	1,000	748	-----	283	149	688	367	86	240	135
31	490	-----	840	606	-----	377	-----	643	-----	67	500	-----
TOTAL	5,267	17,538	27,049	35,989	9,492	19,880	17,603	18,759	21,932	4,187	1,714	10,315
MEAN	170	585	873	1,161	339	641	587	605	731	135	55.3	344
MAX	636	2,910	3,280	8,060	594	1,590	1,290	2,150	4,950	467	500	1,740
MIN	35	184	222	408	220	283	149	158	77	42	17	91
CFSM	.85	2.93	4.37	5.81	1.70	3.21	2.94	3.03	3.66	.68	.28	1.72
IN.	.98	3.26	5.03	6.69	1.77	3.70	3.27	3.49	4.08	.78	.32	1.92
CAL YR 1973	TOTAL 157,872.9 MEAN 433 MAX 4,550 MIN 9.9 CFSM 2.17 IN 29.36											
WTR YR 1974	TOTAL 189,725.0 MEAN 520 MAX 8,060 MIN 17 CFSM 2.60 IN 35.29											

PEAK DISCHARGE (BASE, 4,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-11	1300	13.31	10,300	6-23	1400	11.21	6,130

WHEELING CREEK BASIN

89

03112000 Wheeling Creek at Elm Grove, W. Va.

LOCATION.--Lat 40°02'40", long 80°39'40", Ohio County, on right bank at highway bridge at Elm Grove, 500 ft (152 m) downstream from Little Wheeling Creek, and at mile 7.7 (12.4 km).

DRAINAGE AREA.--282 mi² (730 km²).

PERIOD OF RECORD.--October 1940 to current year. Monthly discharge only for October 1940, published in WSP 1907.

GAGE.--Water-stage recorder. Datum of gage is 667.59 ft (203.481 m) above mean sea level.

AVERAGE DISCHARGE.--34 years, 321 ft³/s (9.091 m³/s), 15.46 in/yr (393 mm/yr).

EXTREMES.--Current year: Maximum discharge, 7,580 ft³/s (215 m³/s) Jan. 11, gage height, 7.04 ft (2.146 m); minimum, 4.0 ft³/s (0.113 m³/s) Aug. 22, gage height, 1.20 ft (0.366 m).

Period of record: Maximum discharge, 22,100 ft³/s (626 m³/s) Dec. 30, 1942, gage height, 13.67 ft (4.167 m), from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of slope-area measurements at gage heights 13.2 ft (4.02 m) and 13.67 ft (4.167 m); minimum, 0.1 ft³/s (0.003 m³/s) Oct. 7, 1963, Sept. 26, 27, 1964; minimum gage height, 0.63 ft (0.192 m) Aug. 31, 1953.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1305: 1941(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	480	139	178	410	275	290	235	1,790	3,140	117	2,350
2	150	404	82	120	356	285	1,260	195	696	860	80	2,230
3	162	275	68	135	338	320	1,210	285	417	431	70	1,440
4	170	215	59	738	280	308	3,010	240	285	260	97	1,210
5	112	170	68	520	220	314	1,640	195	215	182	78	592
6	105	131	71	344	200	314	1,120	178	166	139	54	344
7	57	105	59	170	680	308	792	162	139	102	41	260
8	46	92	51	102	504	326	672	146	116	76	49	205
9	40	82	51	215	380	314	1,220	142	112	54	46	162
10	35	76	57	1,400	320	552	1,030	135	89	131	42	142
11	28	68	51	5,890	280	600	783	123	82	656	35	127
12	25	62	46	2,380	260	592	648	2,300	82	205	38	112
13	25	59	59	1,060	270	480	680	2,060	76	105	36	225
14	25	59	850	720	255	380	664	860	59	65	33	1,080
15	21	127	624	632	210	332	560	536	62	150	29	536
16	16	285	314	568	178	520	445	362	109	120	23	296
17	15	332	150	452	190	765	362	290	139	57	20	220
18	15	260	86	374	158	600	314	1,150	79	42	19	174
19	15	225	70	920	178	536	275	536	62	38	15	146
20	12	205	79	1,260	250	438	240	332	146	42	14	200
21	9.6	170	139	960	220	1,090	215	255	792	31	12	1,570
22	8.6	154	102	756	285	1,530	275	210	1,100	24	9.8	1,710
23	8.6	131	91	672	404	930	1,700	302	3,120	27	10	720
24	8.6	131	82	688	338	680	830	285	1,980	42	8.8	424
25	8.6	552	79	584	300	488	552	215	756	40	8.2	314
26	8.6	760	139	504	250	410	417	170	632	27	7.3	240
27	7.7	709	738	520	230	344	338	146	424	21	23	186
28	40	1,020	560	488	220	302	290	120	302	19	114	162
29	127	696	344	738	-----	308	255	275	488	86	112	162
30	314	290	260	640	-----	350	230	368	404	632	1,520	205
31	398	-----	195	528	-----	332	-----	417	-----	214	805	-----
TOTAL	2,223.3	8,325	5,763	25,256	8,164	15,323	22,317	13,225	14,919	8,018	3,566.1	17,744
MEAN	71.7	278	186	815	292	494	744	427	497	259	115	591
MAX	398	1,020	850	5,890	680	1,530	3,010	2,300	3,120	3,140	1,520	2,350
MIN	7.7	59	46	102	158	275	215	120	59	19	7.3	112
CFSM	.25	.99	.66	2.89	1.04	1.75	2.64	1.51	1.76	.92	.41	2.10
IN.	.29	1.10	.76	3.33	1.08	2.02	2.94	1.74	1.97	1.06	.47	2.34

CAL YR 1973 TOTAL 122,983.0 MEAN 337 MAX 4,450 MIN 4.0 CFSM 1.20 IN 16.22
WTR YR 1974 TOTAL 144,843.4 MEAN 397 MAX 5,890 MIN 7.3 CFSM 1.41 IN 19.11

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-11	1230	7.04	7,580	7-1	0930	6.40	6,360

LITTLE GRAVE CREEK BASIN

03113700 Little Grave Creek near Glendale, W. Va.

LOCATION.--Lat 39°57'50", long 80°42'04", Marshall County, on right bank 0.1 mi (0.2 km) downstream from Brandau Hollow, 2.9 mi (4.7 km) northeast of Glendale, and at mile 6.1 (9.8 km).

DRAINAGE AREA.--4.97 mi² (12.87 km²).

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

GAGE.--Water-stage and rainfall recorders. Concrete control since July 23, 1970. Altitude of gage is 840 ft (256 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 6.47 ft³/s (0.183 m³/s), 17.68 in/yr (449 mm/yr).

EXTREMES.--Current year: Maximum discharge, 710 ft³/s (20.1 m³/s) July 1, gage height, 6.43 ft (1.960 m), from floodmark, from rating curve extended above 150 ft³/s (4.25 m³/s) on basis of slope-area measurement of peak flow; no flow Aug. 23-27.

Period of record: Maximum discharge, 1,380 ft³/s (39.1 m³/s) May 6, 1971, gage height, 5.88 ft (1.792 m), from rating curve extended above 150 ft³/s (4.25 m³/s) on basis of step-backwater method; maximum gage height, 6.43 ft (1.960 m) July 1, 1974, from floodmark; no flow July 30, 31, Aug. 3, 4-14, Sept. 4, 5, 8-10, 28, 29, 1973, Aug. 23-27, 1974.

REMARKS.--Records fair except those for period on no gage-height record which are poor. Rainfall records collected at site since December 1969 are contained in files of U.S. Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	8.4	3.4	4.3	7.2	4.3	1.6	1.8	9.3	280	.86	51
2	1.9	3.7	2.9	3.4	6.7	4.7	14	1.8	5.9	41	.77	21
3	2.1	2.7	2.5	5.9	5.5	4.7	28	5.1	3.6	8.0	.95	44
4	1.5	2.1	2.3	8.4	4.7	4.3	41	2.6	2.8	4.2	1.6	20
5	1.4	1.9	3.2	5.9	3.9	4.7	19	2.2	2.0	2.7	1.0	9.7
6	1.2	1.8	2.9	4.6	3.5	4.3	12	1.8	1.6	1.9	.86	5.9
7	1.0	1.5	2.5	3.7	11	4.3	8.8	1.5	1.5	1.4	.68	4.3
8	.90	1.5	2.3	3.0	8.0	3.6	11	1.4	1.3	1.0	1.3	3.3
9	.80	1.5	2.5	9.9	5.6	4.0	25	1.2	1.3	.81	1.1	2.6
10	.67	1.4	2.5	46	4.8	5.5	14	1.0	1.1	20	.95	2.2
11	.58	1.4	1.9	85	4.4	5.9	10	.95	1.0	6.9	.77	2.2
12	.48	1.3	1.9	27	4.0	7.2	8.0	55	1.1	2.5	1.0	2.0
13	.43	1.3	4.0	14	4.3	5.9	8.4	40	.95	1.7	.95	6.3
14	.58	1.2	8.9	11	3.6	5.1	6.7	25	.77	1.4	.52	10
15	.44	2.5	6.9	11	3.0	5.1	5.5	12	1.1	2.8	.37	5.9
16	.40	4.7	5.1	11	2.8	11	4.0	6.2	1.8	1.6	.30	3.6
17	.37	2.9	3.7	8.8	2.6	10	3.3	5.0	1.3	1.2	.24	2.8
18	.30	2.3	3.2	7.6	2.6	8.0	2.8	14	.95	1.0	.24	2.2
19	.27	2.1	2.7	25	3.0	7.6	2.3	5.3	2.2	1.2	.24	2.0
20	.24	1.8	4.0	18	4.3	5.9	2.0	4.2	3.0	1.0	.18	3.0
21	.23	1.6	5.5	16	3.6	27	1.8	3.4	7.6	.90	.12	43
22	.22	1.6	5.9	12	7.2	14	18	3.2	8.0	.86	.06	22
23	.21	1.5	3.7	12	7.6	9.3	17	3.8	42	1.0	.06	12
24	.20	1.8	3.4	11	6.7	6.3	7.6	3.4	18	1.0	0	9.3
25	.18	16	3.7	9.7	5.5	4.3	5.1	2.8	8.8	.86	0	7.6
26	.18	9.9	8.9	9.3	4.5	3.3	4.0	2.4	7.6	.68	0	5.9
27	.17	8.4	14	11	4.0	2.6	3.0	2.0	4.7	.60	.60	4.7
28	1.1	19	8.4	12	3.8	2.2	2.6	1.6	4.0	.95	1.0	4.3
29	3.2	8.9	6.9	13	-----	2.6	2.2	4.7	4.0	5.9	1.4	4.3
30	8.4	5.1	5.5	11	-----	2.3	2.0	4.0	2.8	2.2	39	3.3
31	6.9	-----	5.1	9.3	-----	2.0	-----	10	-----	1.1	27	-----
TOTAL	37.75	121.8	140.3	439.8	138.4	192.0	290.7	229.35	152.07	398.36	84.12	320.4
MEAN	1.22	4.06	4.53	14.2	4.94	6.19	9.69	7.40	5.07	12.9	2.71	10.7
MAX	8.4	19	14	85	11	27	41	55	42	280	39	51
MIN	.17	1.2	1.9	3.0	2.6	2.0	1.6	.95	.77	.60	0	2.0
CFSM	.25	.82	.91	2.86	.99	1.25	1.95	1.49	1.02	2.60	.55	2.15
IN./	.28	.91	1.05	3.29	1.04	1.44	2.18	1.72	1.14	2.98	.63	2.40
IN./	-	-	-	-	-	-	3.16	-	-	-	-	-

CAL YR 1973 TOTAL 2,290.20 MEAN 6.27 MAX 77 MIN 0 CFSM 1.26 IN/ 17.14
WTR YR 1974 TOTAL 2,545.05 MEAN 6.97 MAX 280 MIN 0 CFSM 1.40 IN/ 19.05

PEAK DISCHARGE (BASE, 140 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4- 3	2200	2.88	153	8-30	0745	4.08	309
7- 1	a0130	b6.43	710	9-21	1100	3.12	185

/ Runoff.
// Rainfall.
a About.
b From floodmark.
NOTE.--No gage-height record
July 1-22.

MIDDLE ISLAND CREEK BASIN

91

03114500 Middle Island Creek at Little, W. Va.

LOCATION.--Lat 39°28'30", long 80°59'50", Tyler County, on right bank at downstream side of highway bridge at Little, 0.1 mi (0.2 km) upstream from Stewarts Run, 5.0 mi (8.0 km) west of Middlebourne, and at mile 24.5 (39.4 km).

DRAINAGE AREA.--458 mi² (1,186 km²).

PERIOD OF RECORD.--May 1915 to September 1922 (gage heights only, October 1916 to September 1922), October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 631.32 ft (192.426 m) above mean sea level, adjustment of 1912. Prior to July 11, 1947, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--47 years (1915-16, 1928-74), 622 ft³/s (17.62 m³/s), 18.44 in/yr (468 mm/yr).

EXTREMES.--Current year: Maximum discharge, 19,700 ft³/s (558 m³/s) Jan. 11, gage height, 21.33 ft (6.501 m); minimum, 4.5 ft³/s (0.127 m³/s) Oct. 28, gage height, 2.07 ft (0.631 m).

Period of record: Maximum discharge, 25,000 ft³/s (708 m³/s) June 26, 1950, gage height, 28.0 ft (8.53 m), from floodmarks; no flow during parts of 1922 and Sept. 1 to Nov. 4, Nov. 7-10, 1930. Flood in August 1875 reached a stage of about 33.5 ft (10.21 m).

REMARKS.--Records good. Records of instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	345	1,240	714	899	595	360	300	135	5,770	535	312	800
2	139	894	466	745	452	506	815	149	7,590	380	179	600
3	130	421	341	900	390	1,970	782	316	1,790	286	129	420
4	136	225	274	6,130	350	1,040	5,010	1,380	732	209	104	1,400
5	103	151	261	2,860	300	700	4,220	705	460	173	124	650
6	128	123	258	1,250	276	675	2,130	461	324	625	137	330
7	93	121	215	845	328	886	1,190	352	254	286	97	250
8	66	133	178	500	645	1,190	940	276	237	197	84	210
9	47	130	166	612	540	916	3,840	234	332	137	70	175
10	40	190	218	4,040	440	705	2,750	209	352	126	62	130
11	35	225	323	17,600	392	680	1,330	188	230	1,190	53	110
12	28	184	329	12,300	348	600	880	8,610	176	470	46	100
13	24	136	351	1,570	360	497	815	12,900	135	286	40	260
14	22	114	2,120	832	434	388	1,050	1,130	106	167	35	1,750
15	18	101	2,100	635	492	320	1,000	488	90	116	31	700
16	17	944	1,030	525	429	352	765	286	282	630	28	390
17	14	1,050	663	420	372	988	560	194	710	550	26	210
18	14	630	433	348	316	856	438	515	356	286	38	143
19	13	430	326	336	283	585	364	610	234	170	520	102
20	12	453	265	946	416	470	304	304	173	488	265	78
21	11	383	315	988	585	685	258	191	9,250	685	135	237
22	9.1	304	502	820	530	2,750	230	135	11,500	304	80	206
23	8.3	238	499	705	570	1,230	279	412	11,400	188	60	140
24	7.5	236	441	635	490	754	269	580	13,700	203	47	99
25	6.8	504	458	540	440	530	224	320	1,910	206	40	76
26	6.0	894	1,030	461	410	412	197	212	1,840	167	33	68
27	5.2	2,990	4,570	456	370	352	176	146	892	121	30	84
28	4.9	6,270	2,030	540	350	304	161	104	530	95	40	137
29	13	4,780	1,040	3,010	-----	283	146	272	680	95	160	140
30	128	1,260	821	1,590	-----	324	137	2,280	886	265	900	130
31	1,040	-----	868	862	-----	340	-----	770	-----	635	1,200	-----
TOTAL	2,663.8	25,754	23,605	64,900	11,903	22,648	31,560	34,864	72,921	10,271	5,105	10,125
MEAN	85.9	858	761	2,094	425	731	1,052	1,125	2,431	331	165	338
MAX	1,040	6,270	4,570	17,600	645	2,750	5,010	12,900	13,700	1,190	1,200	1,750
MIN	4.9	101	166	336	276	283	137	104	90	95	26	68
CFSM	.19	1.87	1.66	4.57	.93	1.60	2.30	2.46	5.31	.72	.36	.74
IN.	.22	2.09	1.92	5.27	.97	1.84	2.56	2.83	5.92	.83	.41	.82

CAL YR 1973 TOTAL 223,758.1 MEAN 613 MAX 8,290 MIN 2.8 CFSM 1.34 IN 18.17
WTR YR 1974 TOTAL 316,319.8 MEAN 867 MAX 17,600 MIN 4.9 CFSM 1.89 IN 25.69

PEAK DISCHARGE (BASE, 9,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-11	1800	21.33	19,700	6-24	0400	19.29	17,200
5-13	0400	19.70	17,200				

MIDDLE ISLAND CREEK BASIN

03114650 Buffalo Run near Little, W. Va.

LOCATION.--Lat 39°29'13", long 80°00'27", Tyler County, on left bank 1.0 mi (1.6 km) northwest of Little, and at mile 1.2 (1.9 km).

DRAINAGE AREA.--4.21 mi² (10.90 km²).

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

GAGE.--Water-stage and rainfall recorders. Altitude of gage is 660 ft (201 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 6.09 ft³/s (0.172 m³/s), 19.64 in/yr (499 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,280 ft³/s (64.6 m³/s) June 23, gage height, 12.31 ft (3.752 m), from floodmark, from rating curve extended as explained below; minimum, 0.13 ft³/s (0.004 m³/s) Aug. 16; minimum gage height, 2.11 ft (0.643 m) Oct. 20-27, Aug. 16.

Period of record: Maximum discharge, 2,280 ft³/s (64.6 m³/s) June 23, 1974, gage height, 12.31 ft (3.752 m), from floodmark, from rating curve extended above 150 ft³/s (4.25 m³/s) on basis of computations of flow through culvert and flow-over-road measurement of peak flow; minimum daily discharge, 0.01 ft³/s (<0.001 m³/s) Sept. 5-19, 22-30, Oct. 1-31, 1969.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in the Water Resources Data reports indicated.

Report	Water Year	Date	Discharge (cfs)	Gage height (feet)
WRD W. Va.	1971	Sept. 13, 1971	428	6.23
WRD W. Va.	1972	June 29, 1972	548	7.35
WRD W. Va.	1973	Dec. 8, 1972	251	4.61

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Rainfall records collected at site since January 1969 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

REVISIONS (WATER YEARS).--WRD W. Va., 1972: 1971(P). The figures of peak discharge for water years 1971-73 have been revised as shown below. They supersede figures published in WRD W. Va., 1971-73.

REVISED PEAK DISCHARGE.--1970: Oct. 30 (2115) 203 cfs (4.26 ft); Dec. 22 (0645) 365 cfs (5.60 ft).

1971: Feb. 13 (0430) 232 cfs (4.46 ft); Feb. 22 (0915) 325 cfs (5.24 ft); Aug. 4 (1430) 375 cfs (5.70 ft); Sept. 13 (0915) 428 cfs (6.23 ft).

1972: Feb. 12 (2130) 380 cfs (5.75 ft); Apr. 22 (0845) 220 cfs (4.38 ft); June 23 (0830) 316 cfs (5.15 ft); June 29 (1615) 548 cfs (7.35 ft); Dec. 8 (1315) 251 cfs (4.61 ft).

1973: Mar. 17 (0430) 245 cfs (4.56 ft); Apr. 4 (0845) 216 cfs (4.35 ft); Apr. 8 (0815) 210 cfs (4.31 ft); Apr. 27 (0900) 198 cfs (4.23 ft); May 8 (2015) 206 cfs (4.28 ft).

MIDDLE ISLAND CREEK BASIN

93

03114650 Buffalo Run near Little, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	5.9	2.4	4.8	3.8	1.9	4.8	.57	42	2.7	.32	28
2	1.3	1.5	1.6	3.1	3.8	6.9	59	1.3	8.6	1.6	.24	8.1
3	1.3	.90	1.3	47	3.4	5.9	16	2.4	3.1	1.2	.32	18
4	1.1	.68	1.3	33	2.8	3.8	64	1.1	1.8	.95	.75	8.4
5	.76	.60	2.5	9.4	2.2	5.1	12	.90	1.5	1.2	.36	2.4
6	.60	.54	2.2	5.6	1.9	4.8	6.4	.80	1.2	1.4	.26	1.2
7	.51	.48	1.6	3.4	6.4	5.9	3.8	.60	.90	.90	.20	.90
8	.51	.48	1.3	2.5	4.6	9.0	19	.54	72	.75	.70	.70
9	.48	.76	1.7	19	3.1	5.3	58	.54	24	.61	.42	.57
10	.42	.68	2.2	173	2.5	4.6	13	.42	2.3	1.4	.32	.54
11	.39	.64	1.8	219	2.2	3.4	5.6	.36	1.3	2.3	.24	.48
12	.36	.60	1.6	22	2.0	2.9	3.6	219	1.1	.75	.24	.42
13	.39	.64	10	7.2	2.3	2.2	6.4	26	.85	.51	.22	.51
14	.48	.60	21	4.3	2.2	1.8	4.6	9.7	.64	.42	.18	1.0
15	.42	2.5	6.9	4.1	2.0	1.7	3.1	4.6	.46	.36	.15	.51
16	.36	6.9	3.8	3.6	1.7	8.0	2.0	3.1	12	.39	.14	.39
17	.32	2.2	2.4	2.6	1.6	5.3	1.5	3.1	3.4	.39	.16	.34
18	.28	1.3	1.6	2.3	1.3	3.1	1.3	16	1.6	.36	.70	.30
19	.24	1.1	1.3	6.4	2.4	2.5	1.3	5.6	1.6	.39	.48	.30
20	.22	.85	1.7	7.2	6.4	2.0	1.1	2.9	1.7	.39	.24	.34
21	.20	.76	2.5	6.9	3.6	32	.90	2.0	189	.36	.20	40
22	.20	.76	1.8	5.1	5.6	16	1.1	2.4	17	.34	.16	5.9
23	.18	.72	1.7	5.9	4.3	7.6	1.6	3.8	208	.45	.14	2.0
24	.18	3.8	1.7	5.9	3.1	5.1	1.2	2.5	24	.45	.14	1.0
25	.16	13	2.5	4.3	2.5	3.4	1.0	2.0	17	.28	.15	.75
26	.16	63	30	4.1	2.0	3.1	.85	1.7	15	.22	.18	.61
27	.22	27	24	4.6	1.9	2.8	.76	1.4	5.9	.20	4.0	.75
28	2.2	75	7.2	35	1.8	2.8	.64	1.2	5.5	1.2	24	1.3
29	1.8	10	5.1	24	-----	4.6	.54	91	7.8	9.8	4.3	1.3
30	1.4	4.1	4.1	9.0	-----	7.2	.48	39	3.8	1.8	46	1.2
31	2.6	-----	5.1	5.1	-----	6.4	-----	81	-----	.48	4.5	-----
TOTAL	20.84	227.99	155.9	689.4	83.4	177.1	295.57	527.53	675.05	34.55	90.41	128.21
MEAN	.67	7.60	5.03	22.2	2.98	5.71	9.85	17.0	22.5	1.11	2.92	4.27
MAX	2.6	75	30	219	6.4	32	64	219	208	9.8	46	40
MIN	.16	.48	1.3	2.3	1.3	1.7	.48	.36	.46	.20	.14	.30
CFSM	.16	1.81	1.19	5.27	.71	1.36	2.34	4.04	5.34	.26	.69	1.01
IN./	.18	2.01	1.38	6.09	.74	1.56	2.61	4.66	5.96	.31	.80	1.13
IN./	1.18	-	2.47	-	1.28	2.65	3.58	7.61	7.43	5.23	-	-

CAL YR 1973 TOTAL 1,986.35 MEAN 5.44 MAX 109 MIN .05 CFSM 1.29 IN/ 17.55
WTR YR 1974 TOTAL 3,105.95 MEAN 8.51 MAX 219 MIN .14 CFSM 2.02 IN/ 27.44

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-26	1600	4.92	288	6-21	a0530	a9.60	846
1-11	0515	7.35	548	6-23	a0230	b12.31	2,280
5-12	1045	7.41	555	8-28	1615	5.97	368
5-29	1900	6.97	504	8-30	0900	7.74	598
5-31	1845	5.37	340	9-1	1600	5.02	239
6-8	1900	7.17	526				

/ Runoff.
// Rainfall.
a Estimated from graph.
b From floodmark.
NOTE.--No gage-height record
June 21, 23.

OHIO RIVER MAIN STEM

03150800 Ohio River near Marietta, Ohio

LOCATION.--Lat 39°23'21", long 81°29'03", Washington County, on right bank 1.5 mi (2.4 km) southwest of Marietta, 2.0 mi (3.2 km) downstream from Muskingum River, and at mile 174.3 (280.4 km), measured downstream from Pittsburgh, Pa.

DRAINAGE AREA.--35,600 mi² (92,200 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 567.12 ft (172.858 m) above mean sea level, Sandy Hook datum.

EXTREMES.--Current year: Maximum gage height, 27.47 ft (8.373 m) Jan. 13; minimum, 14.53 ft (4.429 m) July 24.
Period of record: Maximum gage height, 36.09 ft (11.000 m) June 26, 1972; minimum, 10.83 ft (3.301 m) Oct. 6, 1968.

REMARKS.--Records published as a stage control station.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.57	17.16	19.73	20.75	19.74	16.72	18.66	15.80	17.71	16.98	15.05	16.52
2	15.17	17.43	18.63	20.03	18.58	17.03	19.56	16.12	18.81	18.92	14.99	17.65
3	15.27	17.33	18.11	19.34	17.92	18.04	21.33	16.16	19.41	18.72	15.14	17.33
4	15.65	16.96	17.70	19.72	17.64	18.74	22.55	16.49	19.68	17.50	15.39	19.04
5	15.81	15.77	17.47	20.05	17.37	18.71	24.05	16.14	18.42	16.83	15.30	18.54
6	15.33	15.85	16.34	19.52	16.95	19.08	23.64	16.16	17.05	16.33	14.84	17.53
7	15.34	15.96	16.04	18.28	17.15	19.23	22.91	15.99	16.35	16.15	15.07	16.46
8	15.14	15.50	16.03	17.48	17.88	19.19	22.23	15.76	15.86	15.69	15.17	16.00
9	15.30	15.63	15.81	17.07	17.59	19.35	22.63	15.78	15.73	15.77	15.19	15.85
10	15.44	15.43	16.07	17.87	17.24	21.00	22.76	15.68	15.43	15.23	14.99	15.44
11	14.83	15.43	16.10	22.79	16.78	23.57	22.45	15.97	15.07	16.10	15.04	15.46
12	15.42	15.37	16.25	26.52	16.59	23.41	21.76	17.98	15.20	15.29	15.12	15.39
13	15.23	15.56	15.99	26.55	16.53	22.36	21.21	22.92	15.27	15.22	15.00	15.25
14	15.07	15.21	16.74	21.87	16.59	21.37	20.64	25.40	15.07	15.11	15.07	16.46
15	15.12	15.35	18.10	18.52	16.98	20.32	20.15	23.50	15.18	15.15	15.01	16.07
16	15.22	15.66	18.46	18.26	16.94	19.47	19.71	20.56	15.64	15.11	14.98	15.80
17	15.04	15.74	17.51	18.82	16.94	19.20	19.20	19.38	15.35	15.30	15.05	15.20
18	15.21	15.61	16.38	19.59	16.14	19.49	18.82	19.40	15.72	14.94	15.18	15.55
19	14.99	15.88	16.33	19.96	15.70	19.09	18.09	20.18	15.49	15.06	15.21	15.19
20	15.18	15.74	15.98	23.11	16.34	18.67	17.51	19.13	15.34	15.18	14.95	15.58
21	15.18	15.84	16.81	24.48	16.29	18.33	17.02	18.01	17.48	14.95	14.91	15.87
22	15.02	15.58	18.45	22.37	16.55	19.31	16.60	17.36	17.51	15.12	14.97	16.89
23	15.04	15.46	19.37	22.19	16.94	19.84	16.88	16.42	20.48	15.17	15.16	15.84
24	15.21	15.69	18.83	22.70	17.95	18.97	16.69	16.98	22.51	14.70	14.97	15.74
25	15.20	16.11	18.34	22.55	18.27	18.16	16.22	16.83	21.85	15.33	15.10	15.62
26	14.83	17.36	17.98	22.01	17.44	17.38	16.30	16.27	20.09	14.89	15.04	15.43
27	14.84	18.82	19.37	21.53	17.19	17.50	15.54	15.86	18.08	14.88	14.89	15.21
28	15.38	20.01	22.24	21.08	16.44	17.54	15.99	15.76	16.78	15.14	15.29	15.36
29	15.19	21.68	23.51	21.05	-----	16.62	15.70	15.91	16.71	15.19	15.57	15.16
30	16.15	21.48	22.18	21.02	-----	17.40	15.65	16.90	16.02	15.18	16.73	15.36
31	16.57	-----	21.34	20.73	-----	18.36	-----	16.73	-----	15.24	17.12	-----
MEAN	15.29	16.55	18.01	20.90	17.17	19.14	19.42	17.66	17.18	15.69	15.21	16.09
MAX	16.57	21.68	23.51	26.55	19.74	23.57	24.05	25.40	22.51	18.92	17.12	19.04
MIN	14.83	15.21	15.81	17.07	15.70	16.62	15.54	15.68	15.07	14.70	14.84	15.16

NOTE.--Add 567.12 ft to obtain elevation above mean sea level.

LITTLE KANAWHA RIVER BASIN

95

03151400 Little Kanawha River near Wildcat, W. Va.

LOCATION.--Lat 38°44'00", long 80°31'23", Braxton County, on right bank on State Secondary Route 24/1, 200 ft (61 m) upstream from footbridge at Gregory, 3.9 mi (6.2 km) west of Wildcat, and at mile 138.6 (223.1 km).

DRAINAGE AREA.--112 mi² (290 km²).

PERIOD OF RECORD.--December 1973 to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 850.00 ft (259.080 m) above mean sea level.

EXTREMES.--Maximum discharge during period, 4,130 ft³/s (117 m³/s) June 2, gage height, 10.48 ft (3.194 m); minimum, 12 ft³/s (0.34 m³/s) Aug. 27, 28, gage height, 4.05 ft (1.234 m).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				725	168	205	140	83	1,720	187	31	430
2				566	171	1,240	200	78	3,190	123	23	306
3				486	334	890	300	125	1,210	81	19	426
4				1,690	314	514	1,100	184	518	58	20	880
5				1,300	262	378	1,400	187	282	45	30	398
6				750	222	302	700	171	171	39	23	205
7				470	302	330	500	143	125	33	18	236
8				350	442	566	320	120	88	28	17	191
9				500	378	458	950	138	66	24	32	143
10				900	290	358	900	123	51	22	39	110
11				3,000	254	290	650	103	43	37	28	83
12				2,400	226	466	450	191	35	30	24	66
13				1,100	338	522	500	490	30	22	24	53
14			1,710	500	1,310	430	550	346	26	18	22	128
15			855	330	840	330	470	229	23	16	18	133
16			506	240	510	314	350	159	62	130	16	90
17			374	191	358	402	270	120	159	42	21	66
18			270	153	254	370	220	115	88	24	26	51
19			215	140	212	360	170	100	53	20	22	41
20			374	143	247	550	140	71	105	32	22	34
21			1,590	138	233	800	110	78	148	31	20	32
22			840	138	290	1,300	100	69	250	21	20	50
23			518	138	318	900	162	138	790	19	17	37
24			406	156	298	500	156	184	905	24	15	28
25			450	338	290	340	140	191	402	24	14	24
26			1,080	454	233	250	125	148	243	20	13	22
27			1,730	394	201	210	110	113	148	33	12	21
28			745	314	205	180	98	83	159	30	13	20
29			462	282	-----	160	88	69	538	23	27	19
30			618	233	-----	150	78	522	318	105	1,010	18
31		-----	705	201	-----	140	-----	402	-----	53	582	-----
TOTAL				18,720	9,500	14,205	11,447	5,273	11,946	1,394	2,218	4,341
MEAN				604	339	458	382	170	398	45.0	71.5	145
MAX				3,000	1,310	1,300	1,400	522	3,190	187	1,010	880
MIN				138	168	140	78	69	23	16	12	18
CFSM				5.39	3.03	4.09	3.41	1.52	3.55	.40	.64	1.29
IN.				6.22	3.16	4.72	3.80	1.75	3.97	.46	.74	1.44

PEAK DISCHARGE (BASE, 2,200 CFS)

NOTE.--No gage-height record
Jan. 5-16, Mar. 18 to Apr. 22.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-14	unknown	-	unknown	1-11	unknown	-	unknown
12-27	0115	8.95	2,460	6- 2	0915	10.48	4,130
1- 4	1345	8.89	2,400				

LITTLE KANAWHA RIVER BASIN

03151600 Little Kanawha River at Burnsville, W. Va.

LOCATION.--Lat 38°51'55", long 80°40'32", Braxton County, on right bank 70 ft (21 m) upstream from Buffalo Creek, 1.0 mi (1.6 km) northwest of Burnsville, 1.4 mi (2.3 km) downstream from Oil Creek, and at mile 119.5 (192.3 km).

DRAINAGE AREA.--248 mi² (642 km²).

PERIOD OF RECORD.--April to September 1974.

GAGE.--Water-stage recorder. Altitude of gage is 740 ft (226 m), from topographic map.

EXTREMES.--Maximum discharge during period, 6,890 ft³/s (195 m³/s) June 2, gage height, 16.32 ft (4.974 m); minimum, 12 ft³/s (0.34 m³/s) Aug. 28, gage height, 3.19 ft (0.972 m).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								121	3,140	398	61	795
2								124	6,400	235	40	568
3								176	3,430	157	31	526
4								254	1,030	114	30	1,160
5								245	505	97	30	788
6								230	295	185	36	386
7								203	200	84	31	289
8								169	149	61	27	294
9								198	117	48	35	227
10								216	94	44	81	168
11								171	77	71	60	130
12								678	67	69	44	105
13								1,110	56	49	35	88
14								635	46	34	32	190
15								402	42	37	29	219
16								270	108	176	25	157
17								198	176	130	28	110
18							366	181	167	64	27	84
19							242	176	109	43	34	66
20							206	134	201	34	29	54
21							171	111	360	41	26	48
22							158	110	410	42	24	48
23							216	142	2,180	32	23	62
24							251	236	2,150	33	20	49
25							208	233	853	35	18	37
26							181	203	582	41	15	32
27							162	160	310	44	14	29
28							147	126	854	43	17	28
29					-----		132	117	1,860	42	25	27
30					-----		121	780	784	49	1,000	24
31		-----			-----		-----	852	-----	107	1,150	-----
TOTAL								8,961	26,752	2,639	3,077	6,788
MEAN								289	892	85.1	99.3	226
MAX								1,110	6,400	398	1,150	1,160
MIN								110	42	32	14	24
CFSM								1.17	3.60	.34	.40	.91
IN.								1.34	4.01	.40	.46	1.02

LITTLE KANAWHA RIVER BASIN

97

03152000 Little Kanawha River at Glenville, W. Va.

LOCATION.--Lat 38°56'00", long 80°50'20", Gilmer County, on right bank at highway bridge at Glenville, 1000 ft (305 m) upstream from Sycamore Run, and at mile 103.4 (166.4 km).

DRAINAGE AREA.--386 mi² (1,000 km²).

PERIOD OF RECORD.--June 1915 to September 1922 (gage heights only), October 1928 to current year. Monthly discharge only October to December 1928, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 697.79 ft (212.686 m) above mean sea level, adjustment of 1912. Prior to Dec. 14, 1934, nonrecording gage at bridge 300 ft (91 m) upstream at same datum. Auxiliary water-stage recorder 2.7 mi (4.3 km) downstream from base gage at datum 700.23 ft (213.430 m) above mean sea level. Prior to May 25, 1971, auxiliary nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--46 years, 599 ft³/s (16.96 m³/s), 21.07 in/yr (535 mm/yr).

EXTREMES.--Current year: Maximum discharge, 12,800 ft³/s (362 m³/s) Jan. 11, gage height, 27.79 ft (8.470 m); minimum daily, 15 ft³/s (0.42 m³/s) Aug. 27.

Period of record: Maximum discharge, 21,500 ft³/s (609 m³/s) Mar. 7, 1967, gage height, 34.50 ft (10.516 m), backwater; no flow at times in 1930-33.
Flood of Nov. 16, 1926, reached a stage of 33.6 ft (10.24 m).

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 783: Drainage area. WSP 1305: 1930, 1932(M). WSP 1435: 1954. WSP 1555: 1947(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	432	1,700	979	2,170	471	489	293	179	4,570	585	86	978
2	282	1,120	627	1,300	429	2,450	429	181	11,700	350	44	692
3	300	627	468	1,420	537	2,450	621	325	7,230	227	34	709
4	712	390	385	5,700	716	1,400	3,620	456	1,890	156	31	1,380
5	667	368	330	3,280	618	863	4,230	393	692	121	40	1,140
6	381	755	353	1,480	522	765	1,560	360	420	217	30	573
7	210	609	338	975	540	849	926	313	300	149	29	348
8	143	465	268	730	800	1,370	734	259	231	86	27	340
9	713	510	259	804	846	1,200	2,160	255	187	64	129	275
10	504	758	383	3,610	702	870	2,090	303	147	119	124	217
11	239	540	375	11,300	612	684	1,290	249	119	280	76	175
12	156	396	335	9,050	588	888	933	2,180	105	131	54	136
13	118	315	800	2,610	849	1,070	1,130	4,430	89	77	41	124
14	97	253	5,110	1,130	2,800	898	1,300	2,800	75	47	30	1,090
15	91	223	3,340	811	2,820	720	993	926	89	65	25	435
16	86	902	1,360	630	1,440	762	751	585	195	1,460	25	288
17	72	1,090	860	504	919	1,370	573	414	217	288	79	195
18	56	779	615	414	678	968	468	310	205	136	75	149
19	49	552	474	360	564	842	393	315	171	75	41	118
20	44	447	435	365	684	1,300	343	300	293	51	35	94
21	32	380	1,470	368	671	1,880	293	235	528	39	30	86
22	37	353	2,090	368	811	2,900	253	181	755	43	26	90
23	36	313	1,090	358	870	1,670	280	169	4,640	38	23	83
24	38	283	891	348	734	993	355	221	2,710	37	20	84
25	38	330	916	462	730	688	310	322	1,500	35	18	68
26	31	385	3,170	730	642	534	270	318	793	32	16	56
27	30	1,180	5,540	758	561	453	245	275	519	77	15	51
28	32	8,210	2,220	772	516	385	223	223	660	42	27	54
29	197	6,040	1,060	947	-----	350	203	156	3,860	57	57	55
30	1,020	1,940	1,490	692	-----	325	183	591	1,260	268	1,250	49
31	1,380	-----	2,090	540	-----	315	-----	1,090	-----	102	1,690	-----
TOTAL	8,223	32,213	40,121	54,986	23,670	32,701	27,452	19,314	46,150	5,454	4,227	10,132
MEAN	265	1,074	1,294	1,774	845	1,055	915	623	1,538	176	136	338
MAX	1,380	8,210	5,540	11,300	2,820	2,900	4,230	4,430	11,700	1,460	1,690	1,380
MIN	30	223	259	348	429	315	183	156	75	32	15	49
CFSM	.69	2.78	3.35	4.60	2.19	2.73	2.37	1.61	3.98	.46	.35	.88
IN.	.79	3.10	3.87	5.30	2.28	3.15	2.65	1.86	4.45	.53	.41	.98
CAL YR 1973	TOTAL 251,187	MEAN 688	MAX 8,210	MIN 10	CFSM 1.78	IN 24.21						
WTR YR 1974	TOTAL 304,643	MEAN 835	MAX 11,700	MIN 15	CFSM 2.16	IN 29.36						

PEAK DISCHARGE (BASE, 6,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1700	24.28	9,630	6- 2	1130	27.57	12,600
1-11	2030	27.79	12,800				

LITTLE KANAWHA RIVER BASIN

03152200 Buck Run near Leopold, W. Va.

LOCATION.--Lat 39°07'26", long 80°41'26", Doddridge County, on right bank 12 ft (4 m) upstream from culvert on Secondary State Route 66, 0.3 mi (0.5 km) upstream from mouth, and 2.6 mi (4.2 km) east of Leopold.

DRAINAGE AREA.--2.91 mi² (7.54 km²).

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

GAGE.--Water-stage and rainfall recorders and culvert control. Altitude of gage is 840 ft (256 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 4.26 ft³/s (0.121 m³/s), 19.88 in/yr (505 mm/yr).

EXTREMES.--Current year: Maximum discharge, 493 ft³/s (14.0 m³/s) June 1, gage height, 5.24 ft (1.597 m), from rating curve extended as explained below; minimum daily, 0.09 ft³/s (0.003 m³/s) Aug. 2, 7.

Period of record: Maximum discharge, 493 ft³/s (14.0 m³/s) June 1, 1974, gage height, 5.24 ft (1.597 m), from rating curve extended above 50 ft³/s (1.42 m³/s) on basis of culvert rating computation; minimum daily, 0.01 ft³/s (<0.001 m³/s) for many days most years.

REMARKS.--Records good prior to March and poor thereafter.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.48	9.1	4.0	7.5	2.7	2.3	.50	.35	48	1.6	.10	5.5
2	.54	2.3	2.7	5.5	3.4	11	2.3	.50	23	1.0	.09	4.0
3	.54	.90	1.9	37	4.0	7.0	1.4	1.2	6.8	.66	.15	8.5
4	.48	.54	1.6	30	3.4	4.5	24	.75	3.4	.42	.15	2.5
5	.60	2.3	1.4	9.8	2.7	3.3	10	.55	2.1	.30	.25	2.0
6	.54	2.3	1.4	5.9	2.7	3.0	5.0	.45	1.3	.30	.15	2.0
7	.48	1.1	1.3	4.3	11	6.8	2.5	.35	.78	.25	.09	2.0
8	.42	.66	1.1	3.4	7.5	5.0	6.0	.35	.60	.20	1.0	1.5
9	.37	3.2	1.6	4.3	4.3	3.8	10	.85	.42	.20	1.7	.95
10	.32	2.3	2.5	88	3.4	2.7	7.5	.50	.35	.20	.80	.80
11	.23	1.1	2.0	90	3.4	7.0	4.0	.35	.30	.35	.70	.70
12	.23	.66	2.5	15	3.7	9.0	3.0	9.0	.25	.30	.70	.60
13	.23	.54	16	7.2	7.2	7.0	3.8	4.5	.20	.25	.50	.50
14	.23	.48	23	5.2	15	4.3	2.9	2.8	.20	.25	.30	1.3
15	.23	.54	8.8	4.0	7.5	3.0	2.6	1.4	.15	.25	.25	1.0
16	.19	4.0	4.3	3.2	5.2	6.0	2.4	.90	1.1	.30	.40	.70
17	.19	1.9	2.3	2.5	3.4	4.5	2.2	.45	.70	.30	.85	.50
18	.19	1.1	1.4	2.1	2.5	3.9	2.0	1.3	.35	.25	.45	.40
19	.15	.90	1.1	2.7	2.5	12	1.8	.60	.50	.25	.34	.35
20	.15	.78	1.1	4.6	3.4	5.0	1.7	.40	1.4	.25	.40	.30
21	.15	.78	2.5	6.8	3.0	13	1.6	.35	3.6	.20	.35	.70
22	.12	.66	2.0	5.2	4.0	7.0	1.4	.45	1.9	.20	.25	.60
23	.12	.60	2.0	4.0	3.6	4.2	1.9	.95	3.0	.25	.20	.45
24	.12	.54	2.5	2.9	3.3	2.6	1.3	.70	7.0	.40	.15	.35
25	.12	1.0	5.2	2.5	3.7	1.6	.80	.40	17	.25	.15	.30
26	.12	9.8	43	2.5	3.3	1.2	.60	.35	6.5	.25	.15	.30
27	.12	30	17	2.7	2.9	1.0	.50	.65	3.2	.25	.15	.25
28	1.3	60	6.5	16	2.6	.90	.40	.90	1.7	.20	1.2	.25
29	5.5	13	4.9	13	-----	.80	.35	2.0	1.6	.17	7.0	.20
30	6.5	6.8	12	5.9	-----	.65	.35	15	1.6	.20	15	.20
31	8.8	-----	8.1	3.7	-----	.65	-----	12	-----	.20	7.0	-----
TOTAL	29.76	159.88	187.7	397.4	125.3	144.70	104.80	61.30	139.00	10.45	40.97	39.70
MEAN	.96	5.33	6.05	12.8	4.48	4.67	3.49	1.98	4.63	.34	1.32	1.32
MAX	8.8	60	43	90	15	13	24	15	48	1.6	15	8.5
MIN	.12	.48	1.1	2.1	2.5	.65	.35	.35	.15	.17	.09	.20
CFSM	.33	1.83	2.08	4.40	1.54	1.60	1.20	.68	1.59	.12	.45	.45
IN.	.38	2.04	2.40	5.08	1.60	1.85	1.34	.78	1.78	.13	.52	.51

CAL YR 1973 TOTAL 1,616.06 MEAN 4.43 MAX 60 MIN .09 CFSM 1.52 IN 20.66
WTR YR 1974 TOTAL 1,440.96 MEAN 3.95 MAX 90 MIN .09 CFSM 1.36 IN 18.42

PEAK DISCHARGE (BASE, 110 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	0215	3.34	182	1-11	0730	3.81	250
12-26	1515	2.90	120	6- 1	1745	5.24	493
1- 3	1930	2.85	114				

NOTE.--Doubtful or no gage-height record Dec. 11, 22, 23, Feb. 21 to May 31, June 10-24, July 5 to Sept. 30.

LITTLE KANAWHA RIVER BASIN

99

03153000 Steer Creek near Grantsville, W. Va.

LOCATION.--Lat 38°51'45", long 81°02'05", Calhoun County, on right bank at downstream side of highway bridge, 500 ft (152 m) upstream from Rush Run, 5.5 mi (8.8 km) southeast of Grantsville, and at mile 2.2 (3.5 km).

DRAINAGE AREA.--166 mi² (430 km²).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only October 1937 to February 1938, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 678.00 ft (206.654 m) above mean sea level, adjustment of 1912. Prior to Feb. 25, 1940, nonrecording gage at same site and datum. Since Oct. 1, 1962, water-stage recorder for Little Kanawha River at Grantsville (sta 03153500) used as auxiliary gage for this station. June 17, 1941, to Sept. 30, 1962, nonrecording gage about 1.0 mi (1.6 km) downstream from base gage at different datum.

AVERAGE DISCHARGE.--37 years, 220 ft³/s (6.230 m³/s), 18.00 in/yr (457 mm/yr).

EXTREMES.--Current year: Maximum discharge, 7,390 ft³/s (209 m³/s) Nov. 28, backwater from Little Kanawha River; maximum gage height 22.14 ft (6.748 m) June 2, backwater from Little Kanawha River; minimum discharge 1.6 ft³/s (0.045 m³/s) Oct. 27, 28, gage height, 2.18 ft (0.664 m).

Period of record.--Maximum discharge, 17,400 ft³/s (493 m³/s) Mar. 7, 1967, gage height, 28.78 ft (8.772 m), backwater from Little Kanawha River, from rating curve extended above 11,000 ft³/s (312 m³/s); no flow at times during 1954, 1955, 1957, 1959, 1965, 1966.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1113: 1947. WSP 1275: 1938-39. WRD W. Va. 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	709	295	864	197	192	118	44	4,120	234	11	250
2	51	338	211	440	190	1,420	270	44	4,620	135	9.0	190
3	87	174	169	711	343	705	333	116	1,140	87	7.6	234
4	64	109	142	2,230	275	408	2,590	118	410	60	8.3	501
5	52	160	133	921	222	333	1,060	78	224	52	15	218
6	38	288	107	465	195	315	504	67	146	112	19	112
7	27	167	80	348	243	525	353	57	103	61	12	77
8	22	120	64	266	293	579	320	45	77	37	9.7	57
9	19	238	66	373	261	393	958	43	60	30	57	42
10	17	283	93	2,610	224	303	753	42	48	32	70	34
11	13	169	82	5,510	229	250	456	34	34	64	32	33
12	10	123	67	2,150	247	786	335	2,970	28	52	28	26
13	8.4	97	169	891	440	657	418	1,260	27	27	35	24
14	8.9	80	1,670	378	948	418	403	395	21	20	24	250
15	11	73	663	298	603	308	308	231	18	33	17	151
16	11	436	365	238	383	552	236	155	51	66	12	80
17	6.7	253	261	197	290	810	188	111	82	33	129	49
18	6.2	160	185	160	220	492	155	501	43	21	80	35
19	5.1	142	155	144	204	843	131	378	27	17	38	27
20	4.5	118	151	137	303	804	109	201	185	15	27	22
21	4.2	100	215	135	247	1,070	91	133	298	14	23	21
22	3.7	107	213	118	293	1,080	82	100	403	13	34	37
23	3.6	100	201	114	335	543	103	172	1,140	12	18	32
24	3.3	109	259	112	270	363	94	160	1,170	24	14	21
25	2.9	142	350	137	280	250	74	111	438	32	10	15
26	2.5	158	1,590	188	241	206	61	82	624	19	7.9	12
27	1.9	926	1,600	201	215	176	54	63	275	107	6.2	11
28	3.3	5,570	582	234	204	149	48	47	543	51	7.6	13
29	293	1,120	365	395	-----	137	42	64	1,660	25	26	32
30	1,570	486	636	305	-----	142	37	1,870	462	18	678	21
31	1,150	-----	1,000	245	-----	139	-----	1,340	-----	15	378	-----
TOTAL	3,560.2	13,055	12,139	21,515	8,395	15,348	10,684	11,032	18,477	1,518	1,843.3	2,627
MEAN	115	435	392	694	300	495	356	356	616	49.0	59.5	87.6
MAX	1,570	5,570	1,670	5,510	948	1,420	2,590	2,970	4,620	234	678	501
MIN	1.9	73	64	112	190	137	37	34	18	12	6.2	11
CFSM	.69	2.62	2.36	4.18	1.81	2.98	2.14	2.14	3.71	.30	.36	.53
IN.	.80	2.93	2.72	4.82	1.88	3.44	2.39	2.47	4.14	.34	.41	.59

CAL YR 1973 TOTAL 94,237.0 MEAN 258 MAX 5,570 MIN 1.6 CFSM 1.55 IN 21.12
WTR YR 1974 TOTAL 120,193.5 MEAN 329 MAX 5,570 MIN 1.9 CFSM 1.98 IN 26.93

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1200	a21.12	7,390	5-12	1800	a16.59	4,450
1-10	2400	b22.09	6,430	6- 1	2400	c22.14	6,890
4- 4	1730	14.99	4,640				

a Backwater.

b Backwater, occurred Jan. 11.

c Backwater, occurred June 2.

03153500 Little Kanawha River at Grantsville, W. Va.

LOCATION.--Lat 38°55'20", long 81°05'50", Calhoun County, on left bank 1,000 ft (305 m) downstream from bridge on State Highway 16 at Grantsville, 1,200 ft (366 m) downstream from Philip Run, and at mile 80.0 (128.7 km).

DRAINAGE AREA.--913 mi² (2,365 km²).

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only October to December 1928, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 652.83 ft (198.983 m) above mean sea level, adjustment of 1912. Prior to Nov. 21, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--46 years, 1,339 ft³/s (37.92 m³/s), 19.92 in/yr (506 mm/yr).

EXTREMES.--Current year: Maximum discharge, 24,800 ft³/s (702 m³/s) Jan. 11, gage height, 35.70 ft (10.881 m); minimum, 53 ft³/s (1.50 m³/s) Oct. 27, 28, gage height, 6.45 ft (1.966 m).
Period of record: Maximum discharge, 35,100 ft³/s (994 m³/s) Mar. 7, 1967, gage height, 43.9 ft (13.38 m), from floodmarks; no flow Sept. 10 to Nov. 16, 1930.

REMARKS.--Records good. Records of instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1275: 1929(M), 1932-36.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	960	3,310	2,030	4,630	1,030	1,030	592	358	11,800	1,570	391	1,920
2	624	2,480	1,340	2,760	844	3,380	680	361	22,900	896	319	1,390
3	564	1,330	952	2,450	1,140	5,940	1,330	732	17,000	594	250	1,220
4	832	802	768	11,100	1,330	3,170	5,520	1,200	5,100	438	210	2,410
5	1,030	681	673	8,150	1,100	1,980	10,300	908	1,600	353	200	2,070
6	712	1,470	589	3,260	916	1,770	4,240	752	948	589	206	1,090
7	454	1,230	573	2,100	1,230	2,340	2,420	652	656	505	208	670
8	319	863	476	1,600	1,880	3,290	1,860	540	484	305	196	507
9	280	920	424	1,590	1,700	2,760	3,780	478	385	219	240	467
10	892	1,540	527	6,520	1,360	1,910	5,260	490	325	428	564	391
11	466	1,140	688	22,100	1,190	1,470	3,190	484	273	2,510	484	318
12	295	808	609	21,400	1,160	1,970	2,240	7,230	220	1,050	349	262
13	215	622	604	8,490	1,790	2,360	2,250	12,600	194	580	290	220
14	176	503	6,380	2,430	5,300	1,840	3,260	3,150	176	433	258	1,200
15	152	440	7,160	1,720	5,510	1,420	2,280	1,680	156	373	223	1,440
16	144	1,410	2,970	1,340	3,000	1,520	1,760	1,130	200	1,780	196	705
17	132	1,910	1,780	1,020	2,010	3,450	1,340	840	469	1,240	243	476
18	116	1,400	1,240	804	1,490	2,420	1,050	1,100	406	616	370	347
19	98	1,030	924	688	1,200	2,080	880	1,350	349	415	334	266
20	86	822	788	736	1,480	2,860	756	860	517	322	263	213
21	79	692	1,200	828	1,540	3,360	640	640	1,430	280	228	185
22	69	629	2,720	852	1,460	6,460	564	508	2,060	245	206	186
23	62	586	1,930	788	1,920	3,740	560	592	4,070	223	186	193
24	65	550	1,590	720	1,640	2,250	640	864	9,460	225	166	173
25	62	690	1,790	708	1,570	1,540	600	1,280	3,840	238	152	169
26	65	978	5,000	1,020	1,470	1,130	511	832	3,950	238	140	169
27	58	2,740	12,200	1,230	1,250	928	463	648	1,840	255	130	168
28	63	16,800	5,690	1,330	1,110	784	424	511	1,270	355	130	167
29	423	15,600	2,420	2,670	-----	696	388	451	7,100	268	213	167
30	3,650	4,930	2,740	1,930	-----	664	358	2,430	3,970	448	1,920	167
31	3,720	-----	3,710	1,370	-----	652	-----	3,290	-----	672	3,200	-----
TOTAL	16,863	68,906	72,485	118,334	48,620	71,164	60,136	48,941	103,148	18,663	12,465	19,326
MEAN	544	2,297	2,338	3,817	1,736	2,296	2,005	1,579	3,438	602	402	644
MAX	3,720	16,800	12,200	22,100	5,510	6,460	10,300	12,600	22,900	2,510	3,200	2,410
MIN	58	440	424	688	844	652	358	358	156	219	130	167
CFSM	.60	2.52	2.56	4.18	1.90	2.51	2.20	1.73	3.77	.66	.44	.71
IN.	.69	2.81	2.95	4.82	1.98	2.90	2.45	1.99	4.20	.76	.51	.79
CAL YR 1973	TOTAL	523,006	MEAN	1,433	MAX	17,500	MIN	45	CFSM	1.57	IN	21.31
WTR YR 1974	TOTAL	659,051	MEAN	1,806	MAX	22,900	MIN	58	CFSM	1.98	IN	26.85

PEAK DISCHARGE (BASE, 14,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	2100	31.96	20,500	5-13	0200	28.04	16,300
1-11	2400	35.70	24,800	6- 2	1500	34.67	23,600

LITTLE KANAWHA RIVER BASIN

101

03154000 West Fork Little Kanawha River at Rocksedale, W. Va.

LOCATION.--Lat 38°50'48", long 81°13'26", Calhoun County, on right bank on State Route 11, 850 ft (259 m) downstream from Henry Fork at Rocksedale, 9.0 mi (14.5 km) southwest of Grantsville, and at mile 14.1 (22.7 km).

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--October 1928 to September 1931, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 657.85 ft (200.513 m) above mean sea level, adjustment of 1912. Prior to June 16, 1966, nonrecording gage (crest-stage gage Nov. 4, 1946, to June 15, 1966) on bridge 800 ft (244 m) upstream at same datum.

AVERAGE DISCHARGE.--40 years, 256 ft³/s (7.250 m³/s), 16.96 in/yr (431 mm/yr).

EXTREMES.--Current year: Maximum discharge, 10,700 ft³/s (303 m³/s), June 1, gage height, 26.33 ft (8.025 m); minimum 3.4 ft³/s (0.10 m³/s) Oct. 27, 28, gage height, 3.72 ft (1.134 m).
Period of record: Maximum discharge, 20,200 ft³/s (572 m³/s) Apr. 16, 1939, gage height, 30.3 ft (9.24 m), from floodmarks, site then in use, from rating curve extended above 13,000 ft³/s (368 m³/s); no flow at times during 1930, 1931, 1954, 1957, 1959, 1960.

REMARKS.--Records good. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 953: 1929-31, 1938(M), 1939. WSP 1275: 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	1,020	356	1,160	258	216	171	59	6,130	126	8.9	200
2	41	498	252	555	240	845	274	62	6,310	82	7.5	200
3	51	254	200	854	430	568	322	156	1,120	61	6.9	204
4	59	161	170	2,960	338	388	2,410	146	455	46	6.3	420
5	46	180	159	1,000	266	336	1,360	95	262	38	6.3	207
6	34	340	128	570	226	368	655	76	174	40	15	117
7	26	216	95	415	290	608	453	66	134	59	15	74
8	21	161	75	314	340	558	400	58	101	40	13	57
9	19	304	75	508	306	408	1,190	55	80	30	24	44
10	19	380	98	3,330	258	320	917	52	66	25	37	37
11	15	238	87	7,670	256	286	580	48	51	44	25	32
12	11	174	71	2,280	280	1,370	418	3,970	43	51	28	27
13	9.2	137	101	700	465	1,010	540	2,460	38	32	54	23
14	9.2	110	866	475	770	558	513	503	34	22	38	122
15	9.8	93	585	373	588	385	366	280	29	18	25	165
16	10	520	368	300	413	715	284	188	37	60	17	92
17	12	324	276	246	324	1,050	226	138	62	53	146	59
18	7.8	218	200	200	250	620	192	863	47	31	137	42
19	6.1	195	165	186	226	1,110	165	525	36	23	61	32
20	5.7	171	158	177	308	1,000	141	240	143	33	44	25
21	5.0	149	210	176	260	1,460	120	162	408	31	67	23
22	4.6	156	203	174	280	1,340	110	125	440	23	116	36
23	4.4	144	194	161	318	653	125	238	1,290	17	50	41
24	4.6	152	262	156	270	443	117	250	929	22	31	25
25	4.6	207	340	167	304	306	90	164	308	36	22	18
26	4.4	306	1,690	198	268	250	76	123	204	26	15	14
27	4.0	1,450	2,260	228	240	210	68	95	137	17	12	12
28	14	7,830	690	360	228	183	63	73	104	18	17	12
29	347	1,700	438	670	-----	170	57	86	268	23	49	23
30	2,270	588	740	448	-----	185	53	1,740	198	14	620	32
31	1,890	-----	1,260	332	-----	192	-----	1,540	-----	11	340	-----
TOTAL	5,014.4	18,376	12,772	27,343	9,000	18,111	12,456	14,636	19,638	1,152	2,053.9	2,415
MEAN	162	613	412	882	321	584	415	472	655	37.2	66.3	80.5
MAX	2,270	7,830	2,260	7,670	770	1,460	2,410	3,970	6,310	126	620	420
MIN	4.0	93	71	156	226	170	53	48	29	11	6.3	12
CFSM	.79	2.99	2.01	4.30	1.57	2.85	2.02	2.30	3.20	.18	.32	.39
IN.	.91	3.33	2.32	4.96	1.63	3.29	2.26	2.66	3.56	.21	.37	.44

CAL YR 1973 TOTAL 117,755.7 MEAN 323 MAX 7,830 MIN 4.0 CFSM 1.58 IN 21.37
WTR YR 1974 TOTAL 142,967.3 MEAN 392 MAX 7,830 MIN 4.0 CFSM 1.91 IN 25.94

PEAK DISCHARGE (BASE, 3,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1200	25.32	9,860	4- 4	1800	16.47	4,240
12-27	0200	15.85	3,920	5-12	1900	20.06	6,240
1-11	0100	23.52	8,460	6- 1	2300	26.33	10,700

LITTLE KANAWHA RIVER BASIN

03154250 Tanner Run at Spencer, W. Va.

LOCATION.--Lat 38°48'11", long 81°21'58", Roane County, on left bank 300 ft (91 m) upstream from Miletree Run, and 0.8 mi (1.3 km) west of Spencer.

DRAINAGE AREA.--2.82 mi² (7.30 km²).

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

GAGE.--Water-stage and rainfall recorders. Concrete control since May 26, 1970. Altitude of gage is 740 ft (226 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 4.11 ft³/s (0.116 m³/s), 19.79 in/yr (503 mm/yr).

EXTREMES.--Current year: Maximum discharge, 272 ft³/s (7.70 m³/s) May 30, gage height, 4.15 ft (1.265 m), from rating curve extended as explained below; minimum daily, 0.01 ft³/s (<0.001 m³/s) Oct. 25-27.
Period of record: Maximum discharge, 1,080 ft³/s (30.6 m³/s) Aug. 17, 1972, gage height, 5.96 ft (1.817 m), from rating curve extended above 260 ft³/s (7.36 m³/s) on basis of step-backwater method; no flow at times most years.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Rainfall records collected at site since April 1969 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	2.8	2.7	4.5	2.3	2.3	1.8	.60	18	.50	.09	4.0
2	.16	2.3	2.2	4.5	2.6	12	7.0	1.2	15	.36	.08	2.4
3	.09	1.8	1.6	7.0	2.4	6.1	4.1	7.3	5.9	.29	.10	12
4	.12	.95	1.0	11	1.9	3.8	36	2.4	2.6	.22	.13	4.5
5	.07	2.8	1.4	6.7	1.6	4.1	13	1.6	1.4	.22	.11	1.5
6	.05	2.3	1.2	3.8	1.6	11	7.0	1.2	.85	.22	.10	.78
7	.05	1.9	1.0	2.7	1.9	11	4.5	1.0	.64	.22	.10	.64
8	.06	1.5	.80	2.1	1.8	6.1	8.2	.91	.50	.15	1.4	.43
9	.05	3.5	1.5	5.5	1.8	4.1	25	.81	.50	.15	.29	.64
10	.05	2.7	1.4	30	1.8	2.9	10	.70	.29	1.1	.15	.50
11	.03	2.0	1.3	38	1.9	11	6.4	.91	.22	.64	.78	.36
12	.03	1.5	1.2	12	2.9	14	4.3	.63	.15	.22	.43	.29
13	.05	1.2	12	6.4	4.5	6.4	4.3	8.9	.14	.14	.15	1.3
14	.22	1.0	11	4.5	5.3	4.1	3.3	3.8	.13	.13	.13	4.3
15	.07	3.2	4.5	3.6	3.8	2.9	2.6	2.3	.13	.22	.12	1.4
16	.03	8.5	3.2	2.6	2.9	8.9	2.1	1.4	.22	.22	5.9	.78
17	.03	5.0	2.4	2.1	2.3	7.0	1.6	1.1	.13	.14	1.7	.57
18	.03	2.0	1.8	1.8	1.8	4.8	1.3	5.3	.13	.13	.43	.43
19	.02	1.5	1.5	1.8	2.1	6.7	1.2	2.1	.78	.64	.22	.36
20	.02	1.3	2.5	1.8	2.6	5.0	1.0	1.3	1.3	.36	.14	.29
21	.02	1.2	6.5	2.3	2.1	25	.91	1.0	6.7	.15	.13	1.3
22	.02	1.1	4.0	2.3	2.8	9.9	.91	.91	1.9	.13	.12	.71
23	.02	1.1	2.9	2.1	2.3	5.5	.91	3.6	53	.15	.12	.43
24	.02	1.0	3.5	1.6	2.8	3.6	.70	1.9	8.3	.15	.12	.29
25	.01	2.6	4.5	1.6	5.0	2.6	.70	1.2	2.4	.13	.12	.22
26	.01	3.8	46	1.9	3.8	2.1	.60	.91	1.3	.12	.12	.22
27	.01	20	9.5	2.3	3.1	1.8	.49	.70	.78	.12	.12	.22
28	.30	45	4.0	12	2.6	1.6	.39	.49	.78	.11	1.3	.85
29	3.0	23	5.5	8.5	-----	1.4	.36	12	.71	.11	3.4	.50
30	4.0	8.0	9.5	4.5	-----	1.9	.36	35	.57	.10	13	.36
31	3.5	-----	11	3.1	-----	2.1	-----	16	-----	.09	1.7	-----
TOTAL	12.53	156.55	163.10	194.6	74.3	191.7	151.03	181.54	125.45	7.63	32.80	42.57
MEAN	.40	5.22	5.26	6.28	2.65	6.18	5.03	5.86	4.18	.25	1.06	1.42
MAX	4.0	45	46	38	5.3	25	36	63	53	1.1	13	12
MIN	.01	.95	.80	1.6	1.6	1.4	.36	.49	.13	.09	.08	.22
CFSM	.14	1.85	1.87	2.23	.94	2.19	1.78	2.08	1.48	.09	.38	.50
IN.†	.17	2.07	2.15	2.57	.98	2.53	1.99	2.39	1.65	.10	.43	.56
IN.††	4.57	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1973	TOTAL 1,273.72	MEAN 3.49	MAX 63	MIN .01	CFSM 1.24	IN† 16.80						
WTR YR 1974	TOTAL 1,333.80	MEAN 3.65	MAX 63	MIN .01	CFSM 1.29	IN† 17.59						

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	unknown	-	unknown	5-12	0930	3.76	193
12-26	unknown	-	unknown	5-30	0800	4.15	272
1-11	unknown	-	unknown	6-23	1245	3.86	212
4- 4	0415	4.04	248				

† Runoff.

†† Rainfall.

NOTE.--No gage-height record Oct. 16 to Dec. 30, Jan. 7-11.
Fragmentary rainfall record November to September.

LITTLE KANAWHA RIVER BASIN

103

03154500 Reedy Creek near Reedy, W. Va.

LOCATION.--Lat 38°57'40", long 81°23'25", Wirt County, on left bank 0.2 mi (0.3 km) downstream from Round-bottom Run, 1.0 mi (1.6 km) north of Lucile, 4.5 mi (7.2 km) northeast of Reedy, and at mile 8.5 (13.7 km).

DRAINAGE AREA.--79.4 mi² (205.6 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 650 ft (198 m), from topographic map.

AVERAGE DISCHARGE.--23 years, 93.1 ft³/s (2.637 m³/s), 15.92 in/yr (404 mm/yr).

EXTREMES.--Current year: Maximum discharge, 3,660 ft³/s (104 m³/s) May 12, gage height, 12.19 ft (3.715 m); minimum, 0.24 ft³/s (0.007 m³/s) Oct 15, 20-22, 23, 24, 25, gage height, 1.96 ft (0.597 m).
Period of record: Maximum discharge, 5,730 ft³/s (162 m³/s) Feb. 10, 1957, gage height, 14.7 ft (4.48 m), from rating curve extended above 3,700 ft³/s (105 m³/s); no flow at times in 1959, 1960, 1965, 1966.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1385: 1952-53 (P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	212	91	219	65	58	82	11	1,790	23	2.5	75
2	5.5	110	62	122	57	807	352	19	1,960	17	1.7	70
3	5.9	54	49	407	70	246	189	202	232	14	1.7	70
4	5.5	31	41	1,050	57	134	1,130	114	117	12	5.5	150
5	3.7	46	40	254	41	119	359	51	73	8.9	9.3	100
6	2.3	93	31	157	37	250	213	36	50	8.0	5.9	47
7	1.7	50	24	120	204	463	149	26	39	7.0	3.5	27
8	1.1	31	19	88	142	206	135	21	32	5.9	2.6	18
9	.85	40	18	267	91	126	619	20	63	4.8	5.9	14
10	.67	78	19	1,650	69	91	311	19	31	6.2	29	13
11	.58	48	18	3,130	69	79	178	16	20	33	16	11
12	.49	31	14	519	74	549	123	2,330	15	17	30	9.8
13	.49	23	18	186	132	202	106	754	12	8.9	16	10
14	.34	18	117	128	433	116	94	131	11	5.2	11	55
15	.31	15	96	110	174	86	71	72	9.1	15	7.0	65
16	.34	123	69	86	114	182	53	47	10	60	24	24
17	.34	102	52	67	84	236	42	35	13	14	92	14
18	.28	53	36	54	60	144	35	336	12	9.3	25	16
19	.29	44	28	63	58	176	30	145	9.3	6.6	13	8.0
20	.31	48	30	74	105	158	26	68	50	26	8.0	6.6
21	.24	39	51	74	82	783	22	43	350	26	4.8	11
22	.26	38	47	74	89	396	21	58	124	12	3.3	43
23	.27	36	42	62	96	181	22	208	1,070	8.0	2.2	14
24	.26	42	58	49	75	123	19	129	576	7.7	1.7	9.3
25	.25	83	64	41	110	84	16	78	150	7.7	1.3	6.6
26	.35	407	301	40	94	68	14	50	118	5.2	1.0	5.5
27	.64	702	495	54	75	55	13	37	68	3.9	.76	4.8
28	1.1	2,630	171	178	67	46	12	28	44	3.0	5.0	4.4
29	.60	338	113	343	-----	47	11	27	44	2.5	35	4.6
30	450	146	198	144	-----	76	9.8	507	33	3.9	240	6.6
31	363	-----	226	96	-----	91	-----	402	-----	4.1	120	-----
TOTAL	915.36	5,711	2,638	9,906	2,824	6,378	4,456.8	6,020	7,125.4	385.8	724.66	913.2
MEAN	29.5	190	85.1	320	101	206	149	194	238	12.4	23.4	30.4
MAX	450	2,630	495	3,130	433	807	1,130	2,330	1,960	60	240	150
MIN	.24	15	14	40	37	46	9.8	11	9.1	2.5	.76	4.4
CFSM	.37	2.39	1.07	4.03	1.27	2.59	1.88	2.44	3.00	.16	.29	.38
IN.	.43	2.68	1.24	4.64	1.32	2.99	2.09	2.82	3.34	.18	.34	.43
CAL YR 1973	TOTAL	33,282.12	MEAN	91.2	MAX	2,630	MIN	.16	CFSM	1.15	IN	15.59
WTR YR 1974	TOTAL	47,998.22	MEAN	132	MAX	3,130	MIN	.24	CFSM	1.66	IN	22.49

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1030	12.14	3,630	5-12	1900	12.19	3,660
1-10	2300	11.94	3,520	6-1	2300	12.06	3,590

LITTLE KANAWHA RIVER BASIN

03155000 Little Kanawha River at Palestine, W. Va.

LOCATION.--Lat 39°03'35", long 81°23'25", Wirt County, on left bank at end of Washington Street in Elizabeth, 1.0 mi (1.6 km) upstream from Tucker Creek, 2.3 mi (3.7 km) northeast of Palestine, 2.4 mi (3.9 km) upstream from old lock 3, and at mile 27.9 (44.9 km).

DRAINAGE AREA.--1,515 mi² (3,924 km²).

PERIOD OF RECORD.--April 1915 to September 1922 (gage heights only), July to September 1939 (fragmentary), October 1939 to current year. Monthly discharge only October 1939 to September 1941, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 585.51 ft (178.463 m) above mean sea level. Prior to Feb. 17, 1950, water-stage recorders or nonrecording gages at old locks 3 and 4 at various datums. Auxiliary water-stage recorder 3.0 mi (4.8 km) upstream from base gage at old lock 4 at datum 596.08 ft (181.685 m) above mean sea level.

AVERAGE DISCHARGE.--35 years, 2,094 ft³/s (59.30 m³/s), 18.77 in/yr (477 mm/yr).

EXTREMES.--Current year: Maximum discharge, 41,700 ft³/s (1,180 m³/s) Jan. 12, gage height, 33.56 ft (10.229 m); minimum, 92 ft³/s (2.61 m³/s) Oct. 26, 27, 28, gage height, 13.82 ft (4.212 m).

Period of record: Maximum discharge, 50,700 ft³/s (1,440 m³/s) Mar. 7, 1967, gage height, 39.14 ft (11.930 m), backwater, from rating curve extended above 39,000 ft³/s (1,100 m³/s); minimum, 0.6 ft³/s (0.017 m³/s) July 14, 1959 (filled pool above old lock 3).

Flood of Apr. 17, 1959, reached a stage of 32.25 ft (9.830 m), from floodmarks at old lock 4, discharge about 53,000 ft³/s (1,500 m³/s).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 953: 1940(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	253	5,990	5,070	7,510	2,160	1,540	1,270	587	12,900	3,660	620	3,000
2	840	5,160	2,700	5,900	1,630	4,410	1,910	602	33,300	1,840	454	2,060
3	795	3,000	1,830	4,700	1,570	8,130	2,000	1,140	28,400	1,230	336	1,750
4	687	1,630	1,400	12,300	2,810	6,740	5,840	1,720	15,300	960	296	2,590
5	858	1,180	1,190	15,000	1,960	4,080	14,200	1,620	4,770	785	254	2,880
6	1,050	1,300	1,070	8,120	1,600	3,300	10,200	1,270	2,140	692	210	2,100
7	849	1,900	966	4,610	1,920	4,830	5,170	1,080	1,420	894	184	1,410
8	624	1,520	903	3,300	2,720	5,000	3,520	965	1,100	953	187	1,090
9	448	1,240	813	2,960	2,880	4,870	4,920	868	968	747	239	914
10	345	1,610	741	8,450	2,370	3,660	7,980	782	809	536	393	830
11	705	2,030	804	34,500	1,970	2,660	6,570	739	652	876	504	744
12	651	1,480	939	38,200	1,850	3,860	4,450	10,000	554	2,220	605	633
13	427	1,150	906	22,500	2,330	4,830	3,260	25,200	460	1,180	431	536
14	315	966	2,080	7,320	6,350	3,790	3,950	10,600	396	787	330	572
15	262	849	9,970	3,750	8,480	2,780	4,120	3,530	366	564	285	1,240
16	218	1,250	6,810	2,790	5,910	2,420	2,960	2,000	423	626	273	1,470
17	190	2,570	3,410	2,200	3,640	4,890	2,250	1,390	420	1,980	470	1,060
18	174	2,440	2,220	1,580	2,550	5,160	1,730	2,200	533	1,310	401	862
19	166	1,760	1,590	1,380	1,940	3,660	1,420	3,320	743	858	431	685
20	158	1,400	1,310	1,340	1,830	4,870	1,220	1,910	716	681	401	542
21	144	1,190	1,220	1,380	2,190	5,980	1,080	1,250	1,470	509	311	477
22	131	1,060	1,870	1,440	2,120	9,950	1,010	979	2,830	397	258	497
23	118	1,000	3,120	1,420	2,210	7,790	975	1,050	6,010	323	261	310
24	112	984	2,310	1,350	2,500	4,770	957	1,270	12,300	283	231	297
25	102	1,080	2,240	1,250	2,280	3,160	974	1,300	9,110	260	193	279
26	96	2,100	3,380	1,220	2,230	2,260	936	1,420	5,150	251	163	248
27	92	4,590	13,800	1,520	1,970	1,770	843	1,070	4,450	255	141	225
28	102	21,400	12,800	1,960	1,690	1,500	757	878	2,220	249	131	203
29	182	27,800	5,760	4,390	-----	1,360	680	750	3,360	310	141	192
30	3,300	13,900	4,000	4,480	-----	1,370	613	1,860	7,730	394	1,010	183
31	8,900	-----	5,170	3,010	-----	1,320	-----	6,400	-----	346	3,850	-----
TOTAL	23,294	115,529	102,392	211,830	74,860	126,710	97,765	89,750	161,000	26,956	13,994	29,879
MEAN	751	3,851	3,303	6,833	2,674	4,087	3,259	2,895	5,367	870	451	996
MAX	8,900	27,800	13,800	38,200	8,480	9,950	14,200	25,200	33,300	3,660	3,850	3,000
MIN	92	849	741	1,220	1,570	1,320	613	587	366	249	131	183
CFSM	.50	2.54	2.18	4.51	1.77	2.70	2.15	1.91	3.54	.57	.30	.66
IN.	.57	2.84	2.51	5.20	1.84	3.11	2.40	2.20	3.95	.66	.34	.73

CAL YR 1973 TOTAL 850,287 MEAN 2,330 MAX 27,800 MIN 66 CFSM 1.54 IN 20.88
WTR YR 1974 TOTAL 1,073,959 MEAN 2,942 MAX 38,200 MIN 92 CFSM 1.94 IN 26.37

PEAK DISCHARGE (BASE, 19,000 CFS)

a Backwater.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	0200	28.73	30,600	5-13	0700	27.21	27,000
1-12	0100	33.56	41,700	6-2	1500	30.79	35,300

LITTLE KANAWHA RIVER BASIN

105

03155500 Hughes River at Cisco, W. Va.

LOCATION.--Lat 39°07'10", long 81°16'40", Ritchie County, on right bank 100 ft (30 m) downstream from confluence of North and South Forks, 1.0 mi (1.6 km) upstream from Cisco, 5.0 mi (8.0 km) south of Petroleum, and at mile 14.0 (22.5 km).

DRAINAGE AREA.--452 mi² (1,171 km²).

PERIOD OF RECORD.--May 1915 to September 1922 (gage heights only), October 1928 to September 1931, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1965, published as "at Cisco."

GAGE.--Water-stage recorder. Datum of gage is 607.92 ft (185.294 m) above mean sea level, adjustment of 1912. Prior to Sept. 30, 1931, nonrecording gage at site 0.9 mi (1.4 km) downstream and Mar. 5, 1939, to Sept. 30, 1945, nonrecording gage at site 1.0 mi (1.6 km) downstream, both at datum 2.56 ft (0.780 m) lower. Oct. 1, 1945, to June 30, 1946, nonrecording gage at bridge across mouth of North Fork at present datum.

AVERAGE DISCHARGE.--39 years, 572 ft³/s (16.20 m³/s), 17.19 in/yr (437 mm/yr).

EXTREMES.--Current year; Maximum discharge, 17,900 ft³/s (507 m³/s) May 13, gage height, 26.31 ft (8.019 m); minimum, 5.0 ft³/s (0.14 m³/s) Oct. 28, gage height, 2.19 ft (0.668 m).

Period of record: Maximum discharge, 31,700 ft³/s (898 m³/s) June 26, 1950, gage height, 32.69 ft (9.964 m); no flow July 26, Aug. 2-6, Sept. 4 to Dec. 5, 1930.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 893: 1939. WSP 1113: 1947.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	764	552	815	571	385	320	97	4,130	611	173	321
2	89	675	373	629	461	1,140	675	143	6,420	370	97	188
3	68	380	278	915	499	2,170	840	1,100	1,570	247	72	308
4	66	212	226	4,030	450	1,080	2,270	1,660	665	177	152	1,080
5	76	153	203	2,430	370	730	3,200	712	404	136	130	680
6	72	233	185	1,040	310	780	1,950	447	272	226	89	302
7	61	254	152	678	417	1,450	1,190	331	200	152	69	176
8	52	192	120	498	802	2,120	829	244	157	129	56	117
9	43	172	105	438	664	1,410	1,750	204	616	96	51	87
10	74	242	114	2,930	505	851	2,420	181	292	85	48	71
11	76	260	152	15,800	444	686	1,370	151	162	1,030	57	61
12	52	204	166	9,300	417	604	884	8,190	119	509	67	53
13	39	155	176	1,730	593	505	719	16,200	91	238	51	47
14	32	124	915	923	1,430	385	846	1,580	74	137	41	163
15	27	103	1,260	686	1,040	315	807	724	63	138	35	443
16	26	274	656	565	675	417	653	472	314	174	84	281
17	23	495	444	461	538	1,050	488	340	574	189	89	157
18	20	410	306	375	428	774	390	746	248	121	45	104
19	18	300	225	390	375	571	325	829	147	92	61	77
20	17	253	195	945	521	483	273	472	200	88	44	62
21	15	233	229	895	631	1,060	224	320	1,200	65	35	64
22	13	203	277	752	571	2,840	198	242	3,390	52	30	107
23	12	176	255	631	598	1,240	198	315	7,700	46	26	136
24	10	152	272	549	505	763	194	697	10,000	42	22	115
25	9.8	146	349	477	499	549	164	884	2,490	39	20	82
26	8.8	543	895	417	488	428	138	450	4,060	35	19	64
27	8.0	2,680	3,530	406	439	370	124	300	1,370	34	18	53
28	6.1	7,810	1,550	576	411	315	110	224	893	40	18	48
29	21	3,750	744	2,590	-----	291	98	182	3,140	315	30	52
30	809	1,020	672	1,400	-----	350	93	350	1,320	612	126	62
31	1,310	-----	731	796	-----	375	-----	601	-----	378	534	-----
TOTAL	3,219.7	22,568	16,307	55,067	15,652	26,487	23,740	39,388	52,281	6,603	2,389	5,561
MEAN	104	752	526	1,776	559	854	791	1,271	1,743	213	77.1	185
MAX	1,310	7,810	3,530	15,800	1,430	2,840	3,200	16,200	10,000	1,030	534	1,080
MIN	6.1	103	105	375	310	291	93	97	63	34	18	47
CFSM	.23	1.66	1.16	3.93	1.24	1.89	1.75	2.81	3.86	.47	.17	.41
IN.	.26	1.86	1.34	4.53	1.29	2.18	1.95	3.24	4.30	.54	.20	.46
CAL YR 1973	TOTAL 187,023.7	MEAN 512	MAX 7,810	MIN 6.1	CFSM 1.13	IN 15.39						
WTP YR 1974	TOTAL 269,262.7	MEAN 738	MAX 16,200	MIN 6.1	CFSM 1.63	IN 22.16						

PEAK DISCHARGE (BASE, 9,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1500	18.54	9,990	5-13	0430	26.31	17,900
1-11	1930	26.25	17,800	6-24	0330	23.05	14,200

KANAWHA RIVER BASIN

03169000 Claytor Lake near Radford, Va.

LOCATION.--Lat 37°04'28", long 80°35'05", Pulaski County, at Claytor Dam on New River, 0.5 mi (0.8 km) upstream from Little River, and 5.5 mi (8.8 km) upstream from Radford.

DRAINAGE AREA.--2,382 mi² (6,169 km²).

PERIOD OF RECORD.--May 1939 to current year, monthend contents only.

GAGE.--Water-stage recorder. Datum of gage is at approximately mean sea level, levels by Appalachian Power Co. Prior to Sept. 11, 1943, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by gravity overflow concrete dam. Spillway with crest at elevation 1,818.5 ft (554.28 m) is equipped with 9 lift gates 30 ft (9.1 m) high by 50 ft (15.2 m) wide. Dam completed and storage began May 22, 1939; water in reservoir reached minimum pool elevation in January 1940. Total level-pool capacity at elevation 1,847.0 ft (562.97 m), 1.5 ft (0.46 m) below top of gates, is 230,100 acre-ft (284 hm³) of which about 100,000 acre-ft (123 hm³) is controlled storage above elevation 1,820.0 ft (554.74 m), minimum pool. Reservoir is used for power.

COOPERATION.--Records furnished by Appalachian Power Co.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet) (equivalent in cfs)	
Sept. 30.....	1,844.95	221,000	-	-
Oct. 31.....	1,844.37	218,500	-2,500	-40
Nov. 30.....	1,844.57	219,400	+900	+14
Dec. 31.....	1,844.81	220,400	+1,000	+17
CAL YR 1973	-	-	+1,300	+2
Jan. 31.....	1,844.20	217,800	-2,600	-42
Feb. 28.....	1,845.49	223,300	+5,500	+100
Mar. 31.....	1,844.01	217,000	-6,300	-103
Apr. 30.....	1,844.37	218,500	+1,500	+26
May 31.....	1,843.05	212,900	-5,600	-92
June 30.....	1,845.91	225,100	+12,200	+206
July 31.....	1,845.15	221,900	-3,200	-53
Aug. 31.....	1,845.20	222,100	+200	+3
Sept. 30.....	1,845.65	224,000	+1,900	+32
WTR YR 1974	-	-	+3,000	+4

KANAWHA RIVER BASIN

107

03179000 Bluestone River near Pipestem, W. Va.

LOCATION.--Lat 37°32'45", long 81°00'30", Summers County, on left bank 1.2 mi (1.9 km) downstream from Mountain Creek, 2.5 mi (4.0 km) west of Pipestem, and at mile 8.0 (12.9 km).

DRAINAGE AREA.--363 mi² (940 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,527.35 ft (465.536 m) above mean sea level, Corps of Engineers bench mark.

AVERAGE DISCHARGE.--24 years, 457 ft³/s (12.94 m³/s), 17.10 in/yr (434 mm/yr).

EXTREMES.--Current year: Maximum discharge, 7,750 ft³/s (219 m³/s) Jan. 11, gage height, 10.84 ft (3.304 m); minimum, 39 ft³/s (1.10 m³/s) Aug. 28, 29, gage height 2.08 (0.634 m).

Period of record: Maximum discharge, 16,100 ft³/s (456 m³/s) Jan. 29, 1957, gage height, 14.49 ft (4.417 m); minimum, 7.0 ft³/s (0.20 m³/s) Sept. 21-23, 30, 1955, gage height, 1.60 ft (0.488 m).
Maximum stage known since at least 1908, that of Jan. 29, 1957.

REMARKS.--Records good. Records of instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1705: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	474	763	3,000	699	531	774	245	683	345	128	76
2	259	371	552	2,530	642	488	828	265	1,110	255	103	90
3	268	236	438	2,090	814	451	705	445	916	202	99	137
4	163	174	362	2,590	790	415	1,990	503	602	169	102	110
5	116	330	326	2,310	669	386	2,850	457	431	154	124	87
6	90	607	295	1,590	580	479	1,580	531	332	164	102	77
7	77	392	241	1,180	542	1,910	1,040	528	290	222	83	137
8	78	258	208	912	494	1,800	835	468	247	182	80	147
9	152	203	210	1,330	459	1,200	1,100	748	227	152	94	109
10	165	168	200	2,310	398	875	1,110	967	203	134	80	245
11	126	139	200	5,960	374	778	908	746	177	133	76	655
12	96	124	197	4,650	354	4,120	757	1,650	157	123	91	306
13	81	115	217	2,320	397	5,480	666	3,050	143	106	84	178
14	74	109	1,180	1,450	581	2,950	591	1,620	132	93	71	133
15	73	102	1,170	1,080	672	1,660	553	961	124	92	64	111
16	72	139	778	858	629	1,380	471	694	347	223	60	95
17	64	186	615	707	717	1,910	422	555	423	207	56	83
18	59	158	474	591	882	1,550	461	496	224	125	55	73
19	55	145	405	517	1,030	1,270	405	484	163	100	77	65
20	53	133	411	477	1,360	1,880	366	500	136	97	122	60
21	53	122	1,910	462	1,210	3,200	334	434	124	89	100	56
22	52	134	1,740	476	1,150	3,870	313	356	119	85	77	57
23	53	140	1,060	423	1,350	2,220	421	399	165	82	63	61
24	50	138	815	479	1,090	1,420	516	425	160	162	56	56
25	49	144	785	1,370	893	1,010	451	336	139	295	52	49
26	48	163	4,740	1,950	697	799	391	279	128	401	48	45
27	48	1,940	4,470	2,370	579	672	344	250	119	469	45	43
28	48	4,880	2,220	1,610	523	585	310	227	820	262	42	44
29	71	3,190	1,280	1,310	-----	532	284	206	945	181	41	43
30	181	1,310	1,870	1,040	-----	588	260	1,350	576	315	46	43
31	416	-----	2,000	848	-----	680	-----	1,120	-----	198	53	-----
TOTAL	3,346	16,724	32,132	50,790	20,575	47,089	22,036	21,295	10,362	5,817	2,374	3,471
MFAN	108	557	1,037	1,638	735	1,519	735	687	345	188	76.6	116
MAX	416	4,880	4,740	5,960	1,360	5,480	2,850	3,050	1,110	469	128	655
MIN	48	102	197	423	354	386	260	206	119	82	41	43
CFSM	.30	1.53	2.86	4.51	2.02	4.18	2.02	1.89	.95	.52	.21	.32
IN.	.34	1.71	3.29	5.20	2.11	4.83	2.26	2.18	1.06	.60	.24	.36

CAL YR 1973 TOTAL 197,009 MEAN 540 MAX 4,880 MIN 38 CFSM 1.49 IN 20.19
WTR YR 1974 TOTAL 236,011 MEAN 647 MAX 5,960 MIN 41 CFSM 1.78 IN 24.19

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1300	9.70	5,420	1-11	1500	10.84	7,750
12-26	1600	10.55	7,110	3-12	2000	10.68	7,400

KANAWHA RIVER BASIN

03179800 Bluestone Lake near Hinton, W. Va.

LOCATION.--Lat 37°38'25", long 80°53'15", Summers County, at Bluestone Dam on New River, 1.0 mi (1.6 km) upstream from Greenbrier River, 2.2 mi (3.5 km) upstream from Hinton, at New River mile 64.8 (105.3 km) and Kanawha River mile 161.8 (260.3 km).

DRAINAGE AREA.--4,603 mi² (11,922 km²).

PERIOD OF RECORD.--July 1949 to current year, monthend contents only . Prior to October 1960 monthend contents published in WSP 1725.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 168,300 acre-ft (208 hm³) Dec. 28, elevation, 1,450.53 ft (442.122 m); minimum, 28,930 acre-ft (35.7 hm³) Feb. 28, elevation, 1,404.90 ft (428.214 m).

Period of record: Maximum contents since storage began, 510,900 acre-ft (630 hm³) Apr. 6, 1960, elevation, 1,505.97 ft (459.020 m), results of holding water for cofferdam construction on Ohio River; minimum since initial filling, 18,060 acre-ft (22.3 hm³) Oct. 4, 1956, elevation, 1,397.94 ft (426.092 m).

REMARKS.--Reservoir is formed by concrete gravity-type dam completed in 1952; closure of dam was made Dec. 18, 1947, and storage began July 1949. Spillway equipped with 21 lift gates 30 ft (9.1 m) wide by 31 ft (9.4 m) high and 16 sluice gates 5.67 ft (1.728 m) wide by 10 ft (3.0 m) high. Total level-pool capacity at elevation 1,520 ft (463.3 m), flood-control pool elevation, is 631,000 acre-ft (778 hm³) of which 600,100 acre-ft (740 hm³) is controlled above elevation 1,406 ft (428.5 m), minimum-pool elevation, and 10,000 acre-ft (12.5 hm³) is dead storage below elevation 1,391 ft (424.0 m), stilling-basin weir. Figures given herein represent total contents. Reservoir is used for flood control.

COOPERATION.--Records furnished by Corp of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)	Change in Contents (equivalent in cfs)
Sept. 30.....	1,409.98	38,310	-	-
Oct. 31.....	1,410.36	39,020	+710	+12
Nov. 30.....	1,407.86	34,380	-4,640	-78
Dec. 31.....	1,419.80	60,790	+26,410	+430
CAL YR 1973	-	-	+28,280	+39
Jan. 31.....	1,406.13	31,180	-29,610	-482
Feb. 28.....	1,406.05	31,030	-150	-3
Mar. 31.....	1,408.71	35,950	+4,920	+80
Apr. 30.....	1,410.50	39,280	+3,330	+56
May 31.....	1,410.48	39,240	-40	-1
June 30.....	1,409.79	37,950	-1,290	-22
July 31.....	1,410.28	38,870	+920	+15
Aug. 31.....	1,410.87	39,970	+1,100	+18
Sept. 30.....	1,409.64	37,670	-2,300	-39
WTR YR 1974	-	-	-640	-1

KANAWHA RIVER BASIN

109

03180500 Greenbrier River at Durbin, W. Va.

LOCATION.--Lat 38°32'35", long 79°50'00", Pocahontas County, on left bank at Durbin, 500 ft (152 m) downstream from confluence of East and West Forks, and at mile 150.1 (241.5 km).

DRAINAGE AREA.--134 mi² (347 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,699.71 ft (822.872 m) above mean sea level.

AVERAGE DISCHARGE.--31 years, 252 ft³/s (7.137 m³/s), 25.54 in/yr (649 mm/yr).

EXTREMES.--Current year: Maximum discharge, 7,070 ft³/s (200 m³/s) June 2, gage height, 7.17 ft (2.185 m), from rating curve extended above 5,000 ft³/s (142 m³/s); minimum, 12 ft³/s (0.34 m³/s) Aug. 16, gage height, 0.78 ft (0.238 m).

Period of record: Maximum discharge, 12,200 ft³/s (346 m³/s) Mar. 7, 1967, gage height, 9.15 ft (2.789 m), from rating curve extended above 5,000 ft³/s (142 m³/s); maximum gage height, 9.20 ft (2.804 m) Feb. 2, 1956 (ice jam); no flow part of each day Oct. 2, 3, 1968.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	1,060	337	630	225	261	158	123	457	147	19	109
2	206	649	265	495	228	696	250	131	4,650	121	17	77
3	128	384	225	461	261	946	314	300	1,810	93	27	93
4	86	257	198	581	228	708	1,590	310	813	80	41	145
5	63	287	217	535	207	515	1,220	293	470	103	34	101
6	50	264	207	448	213	397	718	268	317	201	26	111
7	40	237	180	361	264	456	480	222	228	237	20	272
8	108	208	168	278	296	560	438	183	265	125	17	189
9	95	191	188	314	272	515	500	631	377	87	22	141
10	86	153	166	1,630	247	443	466	653	254	71	24	109
11	68	130	138	2,840	228	373	397	495	234	62	18	88
12	58	120	121	1,640	219	475	331	1,050	160	52	17	71
13	51	119	154	868	228	466	310	1,440	129	43	20	62
14	48	119	147	565	576	413	272	813	105	37	16	58
15	45	114	127	421	702	353	250	515	97	37	18	49
16	38	282	124	331	570	331	225	361	300	43	16	39
17	33	300	83	264	438	314	198	272	338	32	85	35
18	30	274	76	219	331	286	178	228	265	27	40	31
19	29	321	155	198	296	495	165	183	198	26	87	28
20	28	287	549	192	317	698	149	153	244	35	113	25
21	26	262	1,660	401	250	691	133	131	219	28	53	24
22	24	230	844	510	545	636	127	119	228	22	39	27
23	24	193	536	461	652	530	172	143	457	24	34	22
24	23	176	381	430	608	417	153	133	669	47	36	19
25	22	166	305	652	470	310	149	121	545	31	28	17
26	21	153	3,680	658	345	258	147	101	421	24	24	17
27	21	185	3,620	555	278	219	141	92	314	54	20	16
28	22	444	1,400	443	254	183	135	81	254	32	18	16
29	206	554	843	369	-----	168	129	95	228	35	32	16
30	247	427	1,000	303	-----	186	123	261	168	36	93	14
31	728	-----	801	261	-----	183	-----	240	-----	27	72	-----
TOTAL	2,702	8,546	18,895	18,314	9,748	13,482	10,018	10,141	15,214	2,019	1,126	2,021
MEAN	87.2	285	610	591	348	435	334	327	507	65.1	36.3	67.4
MAX	728	1,060	3,680	2,840	702	946	1,590	1,440	4,650	237	113	272
MIN	21	114	76	192	207	168	123	81	97	22	16	14
CFSM	.65	2.13	4.55	4.41	2.60	3.25	2.49	2.44	3.78	.49	.27	.50
IN.	.75	2.37	5.25	5.08	2.71	3.74	2.78	2.82	4.22	.56	.31	.56
CAL YR 1973	TOTAL	104,308.0	MEAN	286	MAX	3,680	MIN	9.0	CFSM	2.13	IN	28.96
WTP YR 1974	TOTAL	112,226.0	MEAN	307	MAX	4,650	MIN	14	CFSM	2.29	IN	31.16

PEAK DISCHARGE (BASE, 2,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1900	7.02	6,740	6-2	1200	7.17	7,070
1-11	1300	5.38	3,160				

03181200 Indian Draft near Marlinton, W. Va.

LOCATION.--Lat 38°16'48", long 80°04'31", Pocahontas County, on left bank at highway bridge, and 4.2 mi (6.8 km) northeast of Marlinton.

DRAINAGE AREA.--3.06 mi² (7.93 km²).

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

GAGE.--Water-stage and rainfall recorders and concrete control. Altitude of gage is 2,440 ft (744 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 5.53 ft³/s (0.157 m³/s), 24.54 in/yr (623 mm/yr).

EXTREMES.--Current year: Maximum daily discharge, 100 ft³/s (2.83 m³/s) Dec. 26; minimum 0.08 ft³/s (0.002 m³/s) Sept. 25-30, gage height 4.02 ft (1.225 m).

Period of record: Maximum discharge, 428 ft³/s (12.1 m³/s) Dec. 30, 1969, gage height, 5.26 ft (1.603 m), from rating curve extended above 20 ft³/s (0.57 m³/s) on basis of theoretical weir formula; maximum gage height, 5.87 ft (1.789 m) July 4, 1972; minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Sept. 30, 1968, Aug. 7, 8, 1970.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Rainfall records collected at site since June 1968 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

REVISIONS (WATER YEARS).--WRD W. Va. 1972: 1971(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	14	5.5	9.5	4.6	5.5	2.7	1.3	14	3.9	.29	.32
2	10	6.2	4.1	7.0	4.4	5.0	4.0	1.3	88	2.9	.41	.23
3	2.6	3.1	3.1	9.0	3.8	4.7	3.8	4.1	21	1.9	.41	.80
4	1.3	1.9	2.6	13	3.6	4.3	45	4.6	9.8	1.4	.61	1.3
5	.80	5.8	12	11	2.8	4.0	11	3.9	6.2	1.9	.80	.47
6	.61	5.5	11	8.0	2.8	4.5	8.0	3.6	4.4	1.9	.36	.70
7	.47	3.4	7.2	4.5	3.1	12	4.0	2.9	3.4	1.4	.29	3.1
8	1.0	2.2	4.9	3.0	3.4	10	5.5	2.4	2.4	1.1	.29	1.3
9	.80	2.2	6.2	9.0	3.1	7.0	6.0	34	2.0	.90	1.1	.80
10	.70	1.7	5.8	55	2.6	4.0	5.0	13	1.7	.70	1.5	.61
11	.54	1.4	4.0	50	2.6	13	3.5	7.9	1.4	.61	.70	.47
12	.47	1.1	3.0	35	2.4	37	2.6	55	1.1	.54	.54	.47
13	.41	1.1	3.5	13	3.8	23	2.8	23	.90	.41	.41	.61
14	.36	1.3	4.8	9.0	5.4	10	2.5	11	.80	.36	.32	.70
15	.36	1.1	4.4	6.2	5.4	5.5	2.3	7.2	1.5	.47	.36	.41
16	.32	2.0	3.7	4.8	4.4	7.5	2.1	4.9	14	.54	.29	.32
17	.32	2.2	3.2	4.1	3.8	7.0	2.0	3.9	6.9	.36	.29	.26
18	.29	1.7	2.8	3.6	3.1	5.5	1.8	3.4	3.9	.32	.26	.23
19	.29	2.6	2.5	3.4	2.8	20	1.7	2.6	2.6	.29	.70	.20
20	.29	2.9	30	3.1	3.1	11	1.6	2.0	4.6	.32	.47	.17
21	.29	2.4	29	27	2.4	14	1.5	1.7	3.1	.29	.29	.17
22	.29	2.9	21	15	16	11	1.4	1.5	2.6	.26	.26	.17
23	.29	2.6	13	9.4	11	8.0	2.6	1.5	3.1	.32	.23	.14
24	.26	2.4	8.0	12	7.6	5.5	1.9	1.4	3.4	1.5	.23	.11
25	.26	2.2	6.0	29	5.8	4.0	1.9	1.3	2.6	.47	.23	.11
26	.23	1.9	100	16	4.6	3.2	1.7	1.0	2.4	.32	.20	.09
27	.23	6.5	45	14	3.8	2.4	1.5	.90	1.7	.36	.17	.08
28	.26	20	18	11	3.4	1.9	1.3	.80	3.1	.29	.17	.08
29	1.0	13	11	9.4	-----	1.9	1.3	1.4	12	.61	.20	.08
30	4.6	7.6	17	7.6	-----	2.1	1.3	12	5.5	.90	.29	.08
31	8.6	-----	9.0	5.8	-----	2.3	-----	7.6	-----	.36	.23	-----
TOTAL	38.76	124.9	401.3	417.4	125.6	256.8	134.3	223.10	230.10	27.90	12.90	14.58
MEAN	1.25	4.16	12.9	13.5	4.49	8.28	4.48	7.20	7.67	.90	.42	.49
MAX	10	20	100	55	16	37	45	55	88	3.9	1.5	3.1
MIN	.23	1.1	2.5	3.0	2.4	1.9	1.3	.80	.80	.26	.17	.08
CFSM	.41	1.36	4.22	4.41	1.47	2.71	1.46	2.35	2.51	.29	.14	.16
IN.†	.47	1.52	4.88	5.07	1.53	3.12	1.63	2.71	2.80	.34	.16	.18
IN.††	4.54	2.64	-	-	1.35	4.05	2.47	5.32	3.39	2.38	2.25	3.46
CAL YR 1973	TOTAL 2,458.02	MEAN 6.73	MAX 100	MIN .17	CFSM 2.20	IN† 29.88						
WTR YR 1974	TOTAL 2,007.64	MEAN 5.50	MAX 100	MIN .08	CFSM 1.80	IN† 24.41						

PEAK DISCHARGE (BASE, 80 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	unknown	-	unknown	5-12	1330	5.69	192
1-10	unknown	-	unknown	6-2	0715	5.70	195
4-4	unknown	-	unknown				

† Runoff.

†† Rainfall.

NOTE.--No gage-height record Dec. 11 to Jan. 15, Mar. 1 to Apr. 23.

KANAWHA RIVER BASIN

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03182500 Greenbrier River at Buckeye, W. Va.

LOCATION---Lat 38°11'15", long 80°07'50", Pocahontas County, on right bank at upstream side of highway bridge at Buckeye, 1,000 ft (305 m) upstream from Swago Creek, 3.5 mi (5.6 km) downstream from Knapp Creek, and at mile 103.1 (165.9 km). Records include flow of Swago Creek.

DRAINAGE AREA--540 mi² (1,399 km²), includes that of Swago Creek.

PERIOD OF RECORD--September 1929 to current year.

GAGE--Water-stage recorder. Datum of gage is 2,085.89 ft (635.779 m) above mean sea level. Prior to Feb. 27, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE--45 years, 864 ft³/s (24.47 m³/s), 21.73 in/yr (552 mm/yr).

EXTREMES--Current year: Maximum discharge, 32,400 ft³/s (918 m³/s) Dec. 26, gage height, 16.01 ft (4.880 m), from rating curve extended above 25,000 ft³/s (708 m³/s); minimum, 50 ft³/s (1.42 m³/s) Sept. 30, gage height, 1.78 ft (0.543 m).

Period of record: Maximum discharge, 41,500 ft³/s (1,180 m³/s) Feb. 5, 1932, gage height, 17.5 ft (5.33 m), from floodmarks, from rating curve extended above 25,000 ft³/s (708 m³/s); minimum, 3.8 ft³/s (0.11 m³/s) Aug. 13, 1930, gage height, 1.19 ft (0.363 m).

REMARKS--Records good.

REVISIONS (WATER YEARS)--WSP 758: 1933. WSP 953: 1930-32, 1934-35(M), 1936, 1937(M), 1938-39, 1940(M). WSP 1275: 1936.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	2,570	1,220	2,050	940	802	565	307	1,850	575	109	196
2	690	2,020	894	1,700	813	848	560	308	16,300	460	87	206
3	725	1,100	706	1,540	804	1,850	755	453	8,670	359	85	200
4	380	707	595	2,140	730	1,650	4,800	674	3,250	289	142	298
5	256	612	703	2,220	631	1,300	5,250	655	1,760	265	203	331
6	186	884	1,210	1,730	572	1,060	2,670	655	1,130	307	162	252
7	144	705	915	1,330	601	1,050	1,680	587	821	706	119	449
8	150	577	731	995	700	1,510	1,310	503	622	533	99	605
9	181	540	780	1,080	689	1,460	1,430	3,020	653	343	105	428
10	263	489	741	6,670	603	1,260	1,340	3,410	613	256	208	328
11	253	389	595	11,400	588	1,160	1,160	1,910	521	213	193	275
12	184	341	475	6,840	510	4,020	987	4,660	441	179	139	230
13	150	315	472	3,260	585	4,010	879	8,100	352	152	114	204
14	129	300	530	2,040	771	2,450	812	3,270	295	127	98	173
15	114	294	517	1,480	1,320	1,740	733	1,900	268	114	100	150
16	104	330	500	1,160	1,210	1,440	632	1,280	540	112	182	130
17	95	633	495	910	1,030	1,470	559	930	946	110	119	112
18	84	584	435	732	815	1,270	508	747	713	103	146	97
19	79	578	466	628	692	1,580	463	637	513	89	148	87
20	74	619	1,300	582	708	2,820	425	518	486	82	364	80
21	71	552	9,260	1,830	645	2,930	380	435	479	79	286	74
22	68	535	3,950	2,940	1,060	3,270	351	383	479	82	178	71
23	66	480	2,200	1,960	2,570	2,230	421	371	514	83	131	69
24	64	435	1,500	1,670	1,900	1,630	475	392	1,060	106	111	66
25	61	421	1,150	4,750	1,480	1,170	424	342	1,050	157	98	62
26	59	406	17,900	3,650	1,060	906	396	305	918	125	91	56
27	58	502	16,000	2,910	851	764	378	264	707	263	80	53
28	58	2,360	5,390	2,160	771	646	359	237	590	177	71	54
29	98	3,330	2,900	1,770	-----	581	341	224	1,140	171	69	54
30	458	1,820	2,770	1,390	-----	582	322	610	825	178	88	52
31	1,230	-----	2,430	1,140	-----	643	-----	1,160	-----	134	207	-----
TOTAL	6,674	25,428	79,730	76,657	25,649	50,102	31,365	39,247	48,506	6,929	4,332	5,442
MEAN	215	848	2,572	2,473	916	1,616	1,046	1,266	1,617	224	140	181
MAX	1,230	3,330	17,900	11,400	2,570	4,020	5,250	8,100	16,300	706	364	605
MIN	58	294	435	582	510	581	322	224	268	79	69	52
CFSM	.40	1.57	4.76	4.58	1.70	2.99	1.94	2.34	2.99	.41	.26	.34
IN.	.46	1.75	5.49	5.28	1.77	3.45	2.16	2.70	3.34	.48	.30	.37
CAL YR 1973	TOTAL 413,196	MEAN 1,132	MAX 17,900	MIN 35	CFSM 2.10	IN 28.46						
WTR YR 1974	TOTAL 400,061	MEAN 1,096	MAX 17,900	MIN 52	CFSM 2.03	IN 27.56						

PEAK DISCHARGE (BASE, 11,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0700	10.17	11,900	5-12	2300	11.10	14,500
12-26	2000	16.01	32,400	6-2	1600	14.69	26,700
1-10	2000	10.92	14,000				

KANAWHA RIVER BASIN

03182700 Anthony Creek near Anthony, W. Va.

LOCATION.--Lat 37°54'30", long 80°17'30", Greenbrier County, on right bank 0.3 mi (0.5 km) downstream from Big Draft, 1.7 mi (2.7 km) downstream from Rocky Run, 2.2 mi (3.5 km) northeast of Anthony, and at mile 3.2 (5.1 km).

DRAINAGE AREA.-- 144 mi² (373 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949, 1951-53, 1957, 1960, 1966, 1968-71, October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,850 ft (564 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 19,700 ft³/s (558 m³/s) Dec. 26, gage height, 19.3 ft (5.88 m), from floodmark, from rating curve extended above 1,100 ft³/s (31.2 m³/s); minimum, 12 ft³/s (0.34 m³/s) Aug. 26, 28, gage height, 6.31 ft (1.932 m).

Period of record: Maximum discharge, 19,700 ft³/s (558 m³/s) Dec. 26, 1973, gage height, 19.3 ft (5.88 m), from floodmarks, from rating curve extended above 1,100 ft³/s (31.2 m³/s); minimum, 12 ft³/s (0.34 m³/s) Aug. 26, 28, 1974; minimum gage height, 6.26 ft (1.908 m) Sept. 27-30, 1973.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	504	257	750	240	168	129	89	700	44	23	17
2	224	299	191	680	210	151	118	84	1,100	38	21	19
3	141	174	159	560	170	144	115	93	800	33	23	24
4	80	124	138	720	150	138	417	83	550	27	25	26
5	55	144	194	600	140	135	629	71	300	35	27	23
6	42	205	392	480	130	138	403	74	220	110	25	23
7	35	169	286	370	120	239	291	71	180	190	23	49
8	33	136	215	280	120	302	245	66	130	140	22	43
9	33	148	258	380	110	288	254	705	110	85	21	33
10	43	148	252	1,000	110	245	230	770	90	70	20	28
11	52	120	179	2,300	100	224	208	404	78	52	20	26
12	44	106	174	1,500	98	860	188	1,760	71	42	19	24
13	37	96	170	900	103	1,160	175	1,900	63	35	19	22
14	33	86	236	550	106	734	158	549	57	32	19	21
15	29	78	236	400	108	508	147	394	55	31	17	21
16	26	84	225	300	106	456	127	320	170	37	16	21
17	24	78	215	220	108	491	108	260	140	33	15	20
18	23	70	184	170	103	412	101	210	100	29	15	20
19	22	70	161	150	101	374	94	170	55	26	18	20
20	21	66	500	130	113	438	88	130	60	24	18	20
21	21	62	3,310	160	100	1,140	81	110	50	23	22	20
22	19	66	770	200	383	1,120	78	90	44	21	18	20
23	19	63	471	190	572	584	163	100	45	22	15	19
24	19	63	342	350	379	409	170	90	47	28	14	17
25	19	66	292	700	306	294	149	80	40	33	14	16
26	18	71	6,000	680	218	230	133	70	37	45	13	15
27	17	352	3,500	640	178	195	120	65	35	70	15	17
28	18	1,130	850	550	165	168	110	55	50	50	13	21
29	30	755	550	400	-----	151	103	150	58	40	19	19
30	169	380	700	330	-----	156	96	500	50	33	19	19
31	316	-----	600	280	-----	154	-----	380	-----	28	19	-----
TOTAL	1,682	5,913	22,007	16,920	4,847	12,206	5,428	9,893	5,485	1,506	587	683
MEAN	54.3	197	710	546	173	394	181	319	183	48.6	18.9	22.8
MAX	316	1,130	6,000	2,300	572	1,160	629	1,900	1,100	190	27	49
MIN	17	62	138	130	98	135	78	55	35	21	13	15
CFSM	.38	1.37	4.93	3.79	1.20	2.74	1.26	2.22	1.27	.34	.13	.16
IN.	.43	1.53	5.69	4.37	1.25	3.15	1.40	2.56	1.42	.39	.15	.18

CAL YR 1973 TOTAL 95,380 MEAN 261 MAX 6,000 MIN 13 CFSM 1.81 IN 24.64
WTR YR 1974 TOTAL 87,157 MEAN 239 MAX 6,000 MIN 13 CFSM 1.66 IN 22.52

PEAK DISCHARGE (BASE, 3,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0445	12.22	3,810	1-11	unknown	-	unknown
12-26	unknown	19.3	19,700	5-12	b2130	14.87	8,140

a From floodmark.

b About.

NOTE.--No gage-height record Dec. 26 to Jan. 8, Jan. 10 to Feb. 11, May 16 to June 10, June 15 to Aug. 12, Sept. 14-30.

KANAWHA RIVER BASIN

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03182950 Howard Creek at Caldwell, W. Va.

LOCATION.--Lat 37°46'54", long 80°23'15", Greenbrier County, on right bank at Caldwell, 300 ft (91 m) upstream from highway bridge on U.S. Highway 60, 0.9 mi (1.4 km) upstream from mouth, 3.5 mi (5.6 km) southeast of Lewisburg, and 5.0 mi (8.0 km) southwest of White Sulphur Springs.

DRAINAGE AREA.--84.4 mi² (218.6 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1960, 1962, 1964-66, 1968-71, October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,681.01 ft (512.372 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 6,470 ft³/s (183 m³/s) Dec. 26, gage height, 13.07 ft (3.984 m), from rating curve extended as explained below; minimum, 5.8 ft³/s (0.16 m³/s) Sept. 26, gage height, 3.65 ft (1.113 m).
Period of record: Maximum discharge, 14,000 ft³/s (396 m³/s) June 21, 1972, gage height, 18.6 ft (5.67 m), from floodmarks, from rating curve extended above 1,700 ft³/s (48.1 m³/s) on basis of slope-area measurement of peak flow; minimum 5.8 ft³/s (0.16 m³/s) Sept. 26, 1974, gage height, 3.65 ft (1.113 m).

REMARKS.--Records good except those for period of no gage-height record, which are poor. Records of water quality data for 1973-74 water years are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	400	200	434	120	85	75	46	262	31	18	39
2	145	175	140	403	106	78	77	46	792	28	16	46
3	65	96	110	340	100	76	77	49	460	26	16	56
4	38	69	80	422	85	76	378	46	213	22	19	47
5	29	100	120	372	76	76	392	43	122	27	22	38
6	24	145	300	281	71	80	225	46	89	95	20	41
7	22	99	230	223	71	170	155	43	72	127	18	125
8	20	76	130	180	70	205	130	41	59	66	17	83
9	20	68	160	333	65	170	120	361	50	59	16	56
10	18	59	150	595	59	136	97	354	44	42	16	48
11	17	55	110	1,690	57	132	85	192	39	33	14	40
12	16	52	75	712	52	1,120	80	1,560	34	28	14	37
13	15	48	76	319	53	796	78	972	31	24	14	34
14	15	46	208	215	56	378	75	301	39	22	12	31
15	14	43	203	168	56	243	81	178	36	22	10	28
16	11	45	165	132	59	208	76	119	104	26	12	26
17	10	42	148	108	62	202	71	94	76	22	11	24
18	11	40	118	90	59	182	69	79	51	19	10	22
19	10	38	100	80	60	178	64	72	40	18	17	21
20	11	37	351	75	68	249	60	61	42	18	21	19
21	11	36	1,420	100	65	897	53	52	35	16	18	18
22	11	38	422	126	232	645	51	47	32	15	16	18
23	11	36	249	122	322	302	72	52	32	16	14	18
24	11	38	190	163	198	205	71	49	34	24	13	16
25	11	40	200	455	150	142	64	43	30	26	11	14
26	11	45	4,280	426	108	114	60	39	27	31	11	13
27	11	200	1,690	422	90	96	58	36	26	60	10	14
28	13	850	500	274	81	85	53	32	35	37	14	17
29	28	550	312	208	-----	78	50	33	39	28	22	16
30	315	350	438	168	-----	82	48	250	35	25	39	16
31	438	-----	372	140	-----	82	-----	188	-----	21	31	-----
TOTAL	1,405	3,916	13,247	9,776	2,651	7,568	3,045	5,524	2,980	1,054	512	1,021
MEAN	45.3	131	427	315	94.7	244	102	178	99.3	34.0	16.5	34.0
MAX	438	850	4,280	1,690	322	1,120	392	1,560	792	127	39	125
MIN	10	36	75	75	52	76	48	32	26	15	10	13
CFSM	.54	1.55	5.06	3.73	1.12	2.89	1.21	2.11	1.18	.40	.20	.40
IN.	.62	1.73	5.84	4.31	1.17	3.34	1.34	2.43	1.31	.46	.23	.45
CAL YR 1973	TOTAL 50,931.9	MEAN 140	MAX 4,280	MIN 7.3	CFSM 1.66	IN 22.45						
WTR YR 1974	TOTAL 52,699.0	MEAN 144	MAX 4,280	MIN 10	CFSM 1.71	IN 23.23						

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	unknown	-	unknown	3-12	2115	7.48	1,420
12-21	0345	8.37	2,220	3-21	1530	7.90	1,800
12-26	1330	13.07	6,470	5-12	1745	11.17	4,740
1-11	1145	8.92	2,720				

NOTE.--No gage-height record Nov. 11 to Dec. 12.

03183500 Greenbrier River at Alderson, W. Va.

LOCATION.--Lat 37°43'30", long 80°38'30", Monroe County, on left bank 400 ft (122 m) upstream from highway bridge at Alderson, 0.5 mi (0.8 km) upstream from Muddy Creek, and at mile 28.4 (45.7 km).

DRAINAGE AREA.--1,357 mi² (3,515 km²).

PERIOD OF RECORD.--July 1895 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,529.42 ft (466.167 m) above mean sea level. Prior to Oct. 15, 1929, nonrecording gage at bridge 400 ft (122 m) downstream at same datum.

AVERAGE DISCHARGE.--79 years, 1,987 ft³/s (56.27 m³/s), 19.88 in/yr (505 mm/yr).

EXTREMES.--Current year: Maximum discharge, 56,100 ft³/s (1,590 m³/s) Dec. 27, gage height, 20.41 ft (6.221 m), from rating curve extended above 37,000 ft³/s (1,050 m³/s); minimum 153 ft³/s (4.33 m³/s) Sept. 30, gage height, 2.11 ft (0.643 m).
Period of record: Maximum discharge, 77,500 ft³/s (2,190 m³/s) Mar. 14, 1918, gage height, 22.0 ft (6.71 m), from floodmarks, from rating curve extended above 37,000 ft³/s (1,050 m³/s); minimum, 24 ft³/s (0.68 m³/s) Aug. 12, Oct. 1, 2, 1930; minimum gage height, 1.63 ft (0.497 m) Sept. 20, 1964.

REMARKS.--Records good.

REVISIONS (WATER YEARS)--WSP 536: 1907-9. WSP 783: Drainage area. WSP 803: 1918(M). WSP 953: 1930-41. WSP 1275: 1897, 1905, 1910, 1914(M), 1915-16, 1917(M), 1919-20(M), 1924-25(M), 1927(M), 1929, 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	264	5,740	3,610	5,610	2,600	1,670	1,450	770	3,220	1,760	515	247
2	940	6,000	2,640	5,330	2,210	1,620	1,350	735	9,260	1,300	370	498
3	2,580	3,620	2,050	4,570	2,040	1,640	1,310	756	24,500	1,030	362	703
4	1,870	2,360	1,700	5,060	1,860	2,510	2,540	857	8,610	837	337	800
5	1,100	1,910	1,540	6,140	1,650	2,300	11,000	1,110	4,480	684	347	760
6	714	2,290	2,260	4,970	1,440	1,990	6,550	1,150	2,960	810	356	737
7	529	2,330	2,680	3,800	1,360	2,150	4,060	1,140	2,210	958	410	1,100
8	426	1,850	2,100	2,960	1,370	2,610	3,000	1,050	1,740	1,430	372	1,180
9	372	1,570	1,940	2,910	1,420	3,040	2,770	2,650	1,420	1,320	324	1,450
10	361	1,490	2,520	6,560	1,330	2,760	2,780	9,470	1,290	903	300	1,140
11	389	1,350	2,230	25,300	1,220	2,440	2,530	5,110	1,310	670	284	841
12	484	1,130	1,780	21,600	1,150	5,420	2,240	6,290	1,080	544	332	660
13	448	981	1,530	9,840	1,080	13,400	1,990	21,000	989	462	384	574
14	366	882	2,070	5,650	1,200	8,220	1,800	9,120	889	400	312	516
15	312	813	2,440	3,990	1,410	5,240	1,700	4,910	782	367	262	461
16	280	814	2,220	3,140	1,970	3,920	1,500	3,290	1,180	387	238	398
17	249	890	2,070	2,560	1,880	3,750	1,320	2,440	2,180	345	219	350
18	223	1,140	1,780	2,100	1,670	3,540	1,180	2,050	1,950	302	259	316
19	209	1,190	1,470	1,770	1,460	3,080	1,080	1,760	1,470	271	317	282
20	196	1,130	1,520	1,560	1,390	4,600	1,000	1,560	1,160	270	572	250
21	185	1,170	14,300	1,620	1,350	6,800	918	1,300	1,160	252	539	226
22	178	1,120	13,700	5,090	1,560	10,400	848	1,130	1,150	228	638	212
23	173	1,140	6,640	4,820	4,220	6,630	927	1,070	1,070	212	474	197
24	170	1,080	4,360	3,680	4,390	4,510	1,220	1,140	1,210	275	352	184
25	165	1,020	3,470	8,110	3,350	3,240	1,230	1,020	1,760	902	286	175
26	162	1,020	26,000	10,000	2,640	2,510	1,090	931	1,770	556	258	168
27	159	1,960	49,000	8,450	2,030	2,070	1,000	845	1,570	614	227	164
28	160	6,740	18,300	6,260	1,720	1,770	927	765	1,400	573	209	166
29	206	9,940	8,440	4,750	-----	1,550	869	700	1,330	583	311	164
30	690	5,820	6,330	3,790	-----	1,470	821	1,250	2,270	563	298	157
31	4,200	-----	6,000	3,100	-----	1,490	-----	2,460	-----	595	269	-----
TOTAL	18,760	70,490	198,690	185,090	52,970	118,340	63,000	89,829	87,370	20,403	10,733	15,076
MEAN	605	2,350	6,409	5,971	1,892	3,817	2,100	2,898	2,912	658	346	503
MAX	4,200	9,940	49,000	25,300	4,390	13,400	11,000	21,000	24,500	1,760	638	1,450
MIN	159	813	1,470	1,560	1,080	1,470	821	700	782	212	209	157
CFSM	.45	1.73	4.72	4.40	1.39	2.81	1.55	2.14	2.15	.48	.26	.37
IN.	.51	1.93	5.45	5.07	1.45	3.24	1.73	2.46	2.40	.56	.29	.41

CAL YR 1973 TOTAL 937,322 MEAN 2,568 MAX 49,000 MIN 128 CFSM 1.89 IN 25.70
WTR YR 1974 TOTAL 930,751 MEAN 2,550 MAX 49,000 MIN 157 CFSM 1.88 IN 25.52

PEAK DISCHARGE (BASE, 19,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	2100	10.71	22,200	5-13	1100	11.39	24,600
12-27	0600	20.41	56,100	6-13	0700	13.57	32,200
1-11	1600	12.62	28,900				

KANAWHA RIVER BASIN

115

03184000 Greenbrier River at Hilldale, W. Va.

LOCATION.--Lat 37°38'25", long 80°48'20", Summers County, on left bank 100 ft (30 m) downstream from highway bridge on State Highway 3 at Hilldale, 0.1 mi (0.2 km) upstream from Howard Creek, 0.9 m (1.4 km) upstream from Powley Creek, 5.0 mi (8.0 km) southeast of Hinton, and at mile 5.6 (9.0 km). Records include flow of Howard Creek.

DRAINAGE AREA.--1,625 mi² (4,209 km²), includes that of Howard Creek.

PERIOD OF RECORD.--June 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,388.66 ft (423.264 m) above mean sea level, levels by Corps of Engineers.

AVERAGE DISCHARGE.--38 years, 2,210 ft³/s (62.59 m³/s), 18.47 in/yr (469 mm/yr).

EXTREMES.--Current year: Maximum discharge, 58,100 ft³/s (1,650 m³/s) Dec. 27, gage height, 23.13 ft (7.050 m), from floodmark; minimum, 153 ft³/s (4.33 m³/s) Oct. 27, 28, gage height, 0.82 ft (0.250 m).

Period of record: Maximum discharge 58,100 ft³/s (1,650 m³/s) Dec. 27, 1973, gage height, 23.13 ft (7.050 m), from floodmark; minimum, 39 ft³/s (1.10 m³/s) Sept. 18-20, 1946, Sept. 16, 1964; minimum gage height, 0.32 ft (0.098 m) Sept. 16, 1964.

Flood of Mar. 18, 1936, reached a stage of 21.85 ft (6.660 m) discharge, 60,800 ft³/s (1,720 m³/s), from data furnished by Corps of Engineers.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Records of instantaneous suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1435: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	5,630	4,700	7,000	3,300	2,100	1,900	944	4,000	1,920	584	279
2	340	6,560	3,360	6,600	2,900	2,050	1,800	908	9,000	1,430	455	326
3	1,890	4,130	2,650	5,800	2,600	2,040	1,700	914	26,000	1,130	351	776
4	1,920	2,610	2,230	6,400	2,300	2,620	2,460	1,000	12,000	935	433	872
5	1,240	2,090	1,940	7,400	2,000	2,760	11,000	1,220	5,600	792	426	881
6	810	2,340	2,240	6,400	1,800	2,460	8,470	1,380	3,900	792	371	779
7	591	2,370	3,080	4,800	1,700	2,560	5,300	1,370	2,800	1,090	391	1,100
8	471	1,950	2,580	3,800	1,700	3,170	4,000	1,300	2,100	1,150	418	1,330
9	394	1,600	2,520	4,140	1,800	3,650	3,200	1,830	1,700	1,420	384	1,390
10	353	1,470	3,300	6,980	1,700	3,430	3,300	10,500	1,400	971	332	1,390
11	351	1,380	3,080	31,000	1,510	3,030	3,200	6,900	1,420	720	308	1,050
12	406	1,170	2,480	27,000	1,460	6,700	2,700	5,230	1,200	576	296	807
13	465	1,000	2,120	11,000	1,400	16,500	2,300	29,000	1,070	493	384	674
14	396	898	2,680	6,600	1,450	10,900	2,200	12,000	953	418	357	591
15	333	826	3,270	5,000	1,620	6,910	2,100	6,400	881	378	302	528
16	292	817	2,980	4,000	2,220	5,160	1,800	3,800	1,250	426	263	471
17	260	866	2,730	3,200	2,310	4,830	1,650	2,800	2,180	426	247	411
18	232	1,020	2,100	2,600	2,120	4,590	1,490	2,400	2,140	344	222	368
19	213	1,210	1,800	2,200	1,910	3,960	1,360	2,100	1,660	302	320	331
20	203	1,130	3,000	1,900	1,820	5,170	1,250	1,800	1,280	284	478	298
21	192	1,150	18,000	2,000	1,760	8,270	1,140	1,600	1,130	279	736	269
22	182	1,130	17,000	6,200	1,910	13,000	1,050	1,400	1,210	258	616	244
23	176	1,150	8,000	6,000	4,300	8,750	1,070	1,300	1,110	242	600	227
24	170	1,140	5,400	4,600	5,470	5,930	1,510	1,400	1,160	332	433	211
25	165	1,070	4,200	10,000	4,200	4,300	1,550	1,300	1,450	736	344	198
26	161	1,060	25,000	13,000	3,330	3,280	1,430	1,100	1,750	827	290	187
27	154	2,060	51,000	10,000	2,620	2,710	1,270	1,000	1,560	624	263	179
28	158	7,880	30,000	7,200	2,170	2,290	1,160	920	1,510	624	226	181
29	197	12,000	15,000	6,000	-----	2,010	1,080	860	1,400	632	236	177
30	450	7,600	8,000	4,800	-----	1,890	1,010	1,300	1,980	560	344	170
31	3,490	-----	7,400	3,800	-----	1,930	-----	3,000	-----	608	314	-----
TOTAL	16,876	77,307	243,840	227,420	65,380	148,950	75,450	108,976	96,794	21,719	11,724	16,695
MEAN	544	2,577	7,866	7,336	2,335	4,805	2,515	3,515	3,226	701	378	557
MAX	3,490	12,000	51,000	31,000	5,470	16,500	11,000	29,000	26,000	1,920	736	1,390
MIN	154	817	1,800	1,900	1,400	1,890	1,010	860	881	242	222	170
CFSM	.33	1.59	4.84	4.51	1.44	2.96	1.55	2.16	1.99	.43	.23	.34
IN.	.39	1.77	5.58	5.21	1.50	3.41	1.73	2.49	2.22	.50	.27	.38

CAL YR 1973 TOTAL 1,121,466 MEAN 3,073 MAX 51,000 MIN 123 CFSM 1.89 IN 25.67
WTR YR 1974 TOTAL 1,111,131 MEAN 3,044 MAX 51,000 MIN 154 CFSM 1.87 IN 25.44

PEAK DISCHARGE (BASE, 24,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	unknown	-	unknown	5-13	unknown	-	unknown
12-27	al000	b23.13	58,100	6-3	al300	c15.00	30,100
1-11	unknown	-	unknown				

a About.

b From floodmark.

c Observed.

NOTE.--No gage-height record Dec. 18 to Jan. 8, Jan. 11 to Feb. 11, Apr. 11-27, May 13 to June 10.

03184200 Big Creek near Bellepoint, W.Va.

LOCATION.--Lat 37°40'28", long 80°48'52", Summers County, on left bank 10 ft (3 m) downstream from bridge on Secondary State Route 10, 4.0 mi (6.4 km) northeast of Bellepoint, and at mile 2.0 (3.2 km).

DRAINAGE AREA.--8.27 mi² (21.42 km²).

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

GAGE.--Water-stage and rainfall recorders. Concrete control since Aug. 6, 1970. Altitude of gage is 1,670 ft (509 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 12.6 ft³/s (0.357 m³/s), 20.69 in/yr (526 mm/yr).

EXTREMES.--Current year: Maximum discharge, 640 ft³/s (18.1 m³/s) Dec. 26, gage height, 3.88 ft (1.183 m), from rating curve extended as explained below; minimum, 0.06 ft³/s (0.002 m³/s) Aug. 28, gage height, 1.19 ft (0.354 m).

Period of record: Maximum discharge, 3,670 ft³/s (104 m³/s) June 21, 1973, gage height, 6.7 ft (2.04 m), from flood profile, from rating curve extended above 80 ft³/s (2.27 m³/s) on basis of slope area measurement of peak flow; minimum daily, 0.01 ft³/s (<0.001 m³/s) Aug. 6-8, 1970, Sept. 2-5, 1973.

REMARKS.--Records good. Rainfall records collected at site since May 1969 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	7.5	6.0	55	8.9	11	11	3.0	16	1.6	.57	.34
2	3.2	3.2	4.4	37	8.2	9.3	11	4.4	66	1.2	.52	.51
3	1.1	1.9	3.5	46	7.9	8.6	9.3	6.0	28	.92	.80	1.3
4	.53	1.2	3.0	53	6.5	7.8	56	4.7	14	.65	1.3	1.2
5	.32	9.4	3.0	33	5.3	7.2	27	4.7	8.4	2.5	1.2	.50
6	.20	5.4	2.5	23	5.0	9.4	19	5.2	6.2	4.2	.61	1.9
7	.15	3.0	2.0	17	5.1	17	13	4.4	4.9	2.9	.46	3.9
8	.15	2.0	1.7	11	5.0	17	13	4.0	3.7	1.8	.46	1.5
9	.15	1.9	1.0	52	4.6	14	14	62	3.0	1.3	.80	1.0
10	.15	1.4	8.9	89	4.0	12	11	28	2.4	.96	.53	3.6
11	.15	1.1	6.3	177	4.2	18	9.8	17	1.8	.78	.42	4.8
12	.10	.95	5.2	69	4.6	93	8.7	62	1.5	.68	.65	2.2
13	.10	.85	10	31	7.4	62	8.0	47	1.2	.42	.55	1.4
14	.09	.77	36	21	9.4	28	7.3	21	1.1	.28	.41	1.0
15	.09	.77	17	16	8.7	19	6.9	14	1.2	4.0	.38	.87
16	.08	1.2	12	12	8.9	26	5.7	8.9	16	4.9	.21	.66
17	.08	1.2	9.9	8.9	8.9	24	4.9	6.6	4.4	1.6	.13	.53
18	.07	.95	7.2	7.2	8.2	19	4.7	5.4	2.6	1.0	.22	.43
19	.07	.85	6.3	6.3	9.1	22	4.2	4.2	1.7	.75	1.6	.36
20	.07	.85	24	5.7	10	37	3.7	3.7	1.4	.83	.65	.30
21	.07	.95	67	8.9	8.2	67	3.2	3.0	1.2	.62	.34	.22
22	.07	1.7	27	7.9	19	56	3.0	3.0	1.6	.46	.19	.27
23	.07	1.4	17	7.5	19	25	7.8	7.8	1.3	1.5	.10	.22
24	.07	1.4	18	26	15	18	6.0	4.2	1.2	12	.08	.13
25	.07	1.3	22	58	13	12	5.2	2.8	.91	4.4	.07	.09
26	.07	2.5	304	60	8.7	9.8	4.7	2.5	.73	2.9	.07	.08
27	.07	36	91	40	7.5	7.9	4.2	2.2	.83	3.0	.07	.08
28	.10	55	37	25	6.9	6.9	4.0	1.7	4.8	1.8	.07	.08
29	3.7	18	24	19	-----	7.1	3.5	2.4	5.8	1.3	.27	.08
30	9.9	8.9	22	14	-----	10	3.2	46	2.6	1.2	.47	.08
31	6.9	-----	30	12	-----	11	-----	16	-----	.80	.32	-----
TOTAL	29.14	173.54	837.9	1,048.4	237.2	692.0	293.0	407.8	206.47	63.25	14.52	29.63
MEAN	.94	5.78	27.0	33.8	8.47	22.3	9.77	13.2	6.88	2.04	.47	.99
MAX	9.9	55	304	177	19	93	56	62	66	12	1.6	4.8
MIN	.07	.77	1.7	5.7	4.0	6.9	3.0	1.7	.73	.28	.07	.08
CFSM	.11	.70	3.26	4.09	1.02	2.70	1.18	1.60	.83	.25	.06	.12
IN†	.13	.78	3.77	4.72	1.07	3.11	1.32	1.83	.93	.28	.07	.13
IN.††	3.50	3.23	4.52	3.84	1.33	4.25	1.69	5.55	3.67	3.52	2.18	1.71
CAL YR 1973	TOTAL 5,212.80	MEAN 14.3	MAX 600	MIN .01	CFSM 1.73	IN† 23.45						
WTR YR 1974	TOTAL 4,032.85	MEAN 11.0	MAX 304	MIN .07	CFSM 1.33	IN† 18.14						

PEAK DISCHARGE (BASE, 180 CFS)

† Runoff.
†† Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	0545	3.88	640	5-12	1245	2.94	237
1-11	0745	3.08	283				

KANAWHA RIVER BASIN

117

03184500 New River at Hinton, W. Va.

LOCATION.--Lat 37°40'15", long 80°53'40", Summers County, on right bank at Hinton, 0.2 mi (0.3 km) upstream from Madam Creek, 1.5 mi (2.4 km) downstream from Greenbrier River, at New River mile 62.0 (99.8 km) and Kanawha River mile 159.0 (255.8 km).

DRAINAGE AREA.--6,257 mi² (16,206 km²).

PERIOD OF RECORD.--June 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,355.18 ft (413.059 m) above mean sea level. Prior to June 5, 1949, water-stage recorder at site 400 ft (122 m) upstream at same datum.

AVERAGE DISCHARGE.--38 years, 7,769 ft³/s (220.0 m³/s), 16.86 in/yr (428 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 62,700 ft³/s (1,780 m³/s) Dec. 27, gage height, 8.82 ft (2.688 m); minimum, 1,330 ft³/s (37.7 m³/s) Sept. 24; minimum gage height, 1.65 ft (0.503 m) Oct. 21, 22; minimum daily discharge, 1,730 ft³/s (49.0 m³/s) Aug. 19.

Period of record: Maximum discharge, 246,000 ft³/s (6,970 m³/s) Aug. 15, 1940, gage height, 18.97 ft (5.782 m), from rating curve extended above 80,000 ft³/s (2,270 m³/s) on basis of slope-area measurement at station at Bluestone Dam, and gaged inflow from Greenbrier River; minimum, 238 ft³/s (6.74 m³/s) Aug. 21, 1962, gage height, 1.03 ft (0.314 m); minimum daily, 920 ft³/s (26.1 m³/s) Oct. 22, 1941.

REMARKS.--Records good. Flow regulated since 1939 by Claytor Lake (see sta 03169000) and since 1949 by Bluestone Lake (see sta 03179800).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,830	9,440	12,000	34,900	12,500	9,670	9,090	5,960	10,500	13,000	4,890	2,710
2	3,300	10,500	8,240	33,300	10,800	10,400	9,320	5,420	14,000	9,770	3,610	2,100
3	8,600	7,580	5,950	28,900	10,500	10,200	11,800	5,400	35,400	8,210	3,890	2,590
4	8,780	5,250	5,450	27,200	11,600	8,250	15,600	5,930	20,400	5,860	3,320	4,750
5	7,820	4,450	6,860	28,100	11,900	8,790	35,900	6,210	13,200	4,930	3,240	7,340
6	5,200	5,150	10,400	24,600	12,600	8,720	42,100	7,780	9,470	5,970	6,170	5,600
7	2,770	5,650	11,400	17,100	9,440	11,400	34,500	7,240	8,340	7,710	9,000	12,500
8	3,120	4,950	9,080	14,000	9,140	12,500	22,600	6,370	10,000	8,170	4,700	14,400
9	3,300	4,600	8,660	16,200	9,020	12,300	19,000	8,550	9,080	6,190	5,870	5,700
10	3,250	4,550	9,080	22,300	8,480	10,600	16,400	19,200	5,410	5,780	6,220	6,440
11	3,450	4,050	7,760	42,800	7,700	8,600	12,100	15,600	6,890	5,820	4,820	9,200
12	3,450	2,920	8,240	43,500	8,780	20,300	12,100	16,600	7,230	5,400	3,110	11,300
13	3,250	2,880	7,760	29,400	7,160	37,900	11,300	48,900	6,050	5,420	3,610	6,050
14	2,480	4,050	11,300	21,900	7,840	29,200	11,300	33,200	6,230	4,420	5,410	6,620
15	2,030	3,000	11,500	17,800	9,700	19,500	8,700	20,400	6,020	3,180	4,900	6,380
16	2,230	2,920	9,800	13,200	9,800	15,900	8,660	15,200	5,290	3,480	4,380	4,700
17	2,250	3,200	9,800	12,000	10,600	15,700	8,510	12,400	7,070	4,640	3,790	4,850
18	2,230	2,710	8,300	10,400	10,800	14,000	8,110	10,500	7,600	3,840	2,490	4,550
19	2,250	2,590	7,520	9,200	9,700	12,600	7,940	7,430	6,420	2,970	1,730	4,150
20	2,180	2,840	6,860	8,360	12,600	16,000	7,900	5,830	5,720	2,670	2,620	4,200
21	1,830	3,250	26,800	7,040	13,600	23,400	6,330	7,730	5,230	2,660	4,600	4,400
22	1,780	3,850	40,700	14,600	15,600	33,700	5,290	7,060	5,020	2,160	4,600	3,200
23	1,980	3,200	26,100	16,700	23,000	29,000	6,650	6,880	4,090	3,390	4,800	2,620
24	2,100	4,850	15,700	13,300	23,200	20,200	8,040	8,790	4,650	4,780	4,600	2,330
25	2,000	3,950	13,900	19,400	18,800	13,700	7,600	7,410	4,510	4,370	2,450	2,880
26	1,980	3,250	31,600	25,200	14,300	12,300	5,890	5,190	5,780	4,610	2,050	3,400
27	1,980	9,140	58,300	25,200	12,600	11,200	7,520	5,670	6,180	9,140	3,080	2,620
28	2,050	21,800	38,300	23,600	9,860	9,780	6,280	6,870	11,000	6,880	4,150	3,160
29	2,450	24,600	39,600	19,800	-----	9,380	4,060	7,790	14,800	3,790	3,200	3,750
30	3,750	16,600	45,800	15,700	-----	9,400	6,580	8,040	14,700	3,860	3,000	2,770
31	7,700	-----	41,300	15,000	-----	11,100	-----	9,800	-----	5,760	2,770	-----
TOTAL	103,370	187,770	554,060	650,700	331,620	475,690	377,170	345,350	276,280	168,830	127,070	157,260
MEAN	3,335	6,259	17,870	20,990	11,840	15,340	12,570	11,140	9,209	5,446	4,099	5,242
MAX	8,780	24,600	58,300	43,500	23,200	37,900	42,100	48,900	35,400	13,000	9,000	14,400
MIN	1,780	2,590	5,450	7,040	7,160	8,250	4,060	5,190	4,090	2,160	1,730	2,100

CAL YR 1973 TOTAL 3,866,880 MEAN 10,590 MAX 58,300 MIN 1,600 MEAN† 10,630 CFSM† 1.70 IN† 23.08
WTR YR 1974 TOTAL 3,755,170 MEAN 10,290 MAX 58,300 MIN 1,730 MEAN† 10,290 CFSM† 1.64 IN† 22.26

† Adjusted for change in contents in Claytor (Virginia) and Bluestone Lakes.

KANAWHA RIVER BASIN

03185000 Piney Creek at Raleigh, W. Va.

LOCATION.--Lat 37°45'40", long 81°09'50", Raleigh County, on left bank at Raleigh, 0.5 mi (0.8 km) downstream from Whitestick Creek, 0.5 mi (0.8 km) upstream from Beaver Creek, 1.5 mi (2.4 km) southeast of Beckley, and at mile 12.0 (19.3 km).

DRAINAGE AREA.--52.2 mi² (135.2 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,087.24 ft (636.191 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 61.1 ft³/s (1,730 m³/s), 15.90 in/yr (404 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,580 ft³/s (44.7 m³/s) Jan. 11, gage height, 4.92 ft (1.500 m); minimum, 1.7 ft³/s (0.048 m³/s) Oct. 25, 26, gage height, 1.24 ft (0.378 m).
Period of record: Maximum discharge, 2,870 ft³/s (81.3 m³/s) Mar. 12, 1963, gage height, 6.49 ft (1.978 m); minimum, 0.2 ft³/s (0.006 m³/s) Sept. 5-18, 21-23, 1964; minimum gage height, 1.07 ft (0.326 m) Sept. 9-12, 16, 17, 1964.

REMARKS.--Records good.

REVISIONS (WATER YEARS)--WSP 1435: 1955(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	146	109	237	24	66	62	66	150	36	9.7	31
2	14	115	100	247	26	64	62	73	358	29	9.1	14
3	9.8	76	55	237	34	64	62	89	322	24	8.6	18
4	5.9	58	7.2	346	31	60	181	79	164	21	17	20
5	4.2	118	7.6	286	33	57	164	77	110	25	14	10
6	3.6	160	6.7	195	34	62	130	79	79	55	9.7	9.7
7	3.6	103	4.6	139	24	100	100	75	64	77	8.6	13
8	4.6	29	3.8	109	28	121	103	71	66	36	8.6	9.7
9	5.1	28	5.1	163	31	100	167	71	59	28	8.0	8.6
10	4.6	28	5.1	565	39	94	150	75	44	24	8.6	8.0
11	5.1	27	4.2	1,240	53	97	124	75	39	24	9.7	9.7
12	5.1	28	3.6	730	68	334	102	226	34	20	11	8.0
13	5.9	25	9.8	296	75	529	86	334	31	17	8.0	7.5
14	3.8	24	70	177	68	250	77	195	29	14	7.0	7.5
15	2.8	23	70	135	66	150	79	138	28	20	6.4	6.4
16	2.5	58	52	110	64	153	71	108	79	48	5.9	5.9
17	2.5	55	5.0	89	64	180	71	86	50	26	5.9	4.8
18	2.5	47	5.0	77	57	153	71	77	34	19	5.9	4.8
19	2.3	42	5.0	75	57	153	64	68	29	16	16	4.5
20	2.3	36	20	77	60	258	59	62	26	17	9.1	4.2
21	2.3	38	18	82	51	366	55	57	24	14	7.0	4.2
22	2.1	42	16	82	66	350	51	53	28	12	5.3	4.2
23	2.1	39	25	82	82	216	180	77	25	15	4.8	4.2
24	2.1	41	30	48	79	150	177	68	24	28	4.5	3.9
25	1.9	42	35	116	77	116	144	55	23	24	4.2	3.9
26	1.9	72	382	130	66	94	119	50	23	17	4.2	3.9
27	1.9	282	453	127	58	79	97	46	37	14	3.9	3.9
28	4.2	453	184	84	55	68	84	43	105	12	3.6	3.9
29	15	293	103	60	-----	62	77	43	71	14	4.5	3.6
30	72	156	149	43	-----	68	71	147	48	18	4.5	3.3
31	106	-----	174	31	-----	68	-----	198	-----	12	4.2	-----
TOTAL	307.6	2,684	2,117.7	6,415	1,470	4,682	3,040	2,961	2,203	756	237.5	244.3
MEAN	9.92	89.5	68.3	207	52.5	151	101	95.5	73.4	24.4	7.66	8.14
MAX	106	453	453	1,240	82	529	181	334	358	77	17	31
MIN	1.9	23	3.6	31	24	57	51	43	23	12	3.6	3.3
CFSM	.19	1.71	1.31	3.97	1.01	2.89	1.93	1.83	1.41	.47	.15	.16
IN.	.22	1.91	1.51	4.57	1.05	3.34	2.17	2.11	1.57	.54	.17	.17

CAL YR 1973 TOTAL 22,875.2 MEAN 62.7 MAX 665 MIN 1.9 CFSM 1.20 IN 16.30
WTR YR 1974 TOTAL 27,118.1 MEAN 74.3 MAX 1,240 MIN 1.9 CFSM 1.42 IN 19.33

PEAK DISCHARGE (BASE, 700 CFS).--Jan. 11 (1600) 1,580 cfs (4.92 ft).

KANAWHA RIVER BASIN

119

03186500 Williams River at Dyer, W. Va.

LOCATION.--Lat 38°22'45", long 80°29'05", Webster County, on left bank at Dyer, 0.2 mi (0.3 km) downstream from Craig Run, 7.0 mi (11.3 km) southwest of Webster Springs, and at mile 2.1 (3.4 km).

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--September 1929 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 2,193.46 ft (668.567 m) above mean sea level, adjustment of 1912. Prior to June 11, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--45 years, 326 ft³/s (9.232 m³/s), 34.59 in/yr (879 mm/yr).

EXTREMES.--Current year: Maximum discharge, 11,500 ft³/s (326 m³/s) June 2, gage height, 12.23 ft (3.728 m), from rating curve extended as explained below; minimum, 14 ft³/s (0.40 m³/s) Aug. 16, gage height, 1.00 ft (0.305 m).

Period of record: Maximum discharge, 22,000 ft³/s (623 m³/s) July 4, 1932, gage height, 18.45 ft (5.624 m), from floodmarks, from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of slope-area measurements at gage heights 12.33 and 18.45 ft (3.758 and 5.624 m); minimum daily, 0.5 ft³/s (0.014 m³/s) Oct. 13-16, 21, 1953; minimum gage height, 0.44 ft (0.134 m) Oct. 5, 6, 1953.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1275: 1930.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	2,790	435	784	283	450	204	133	2,770	285	35	184
2	1,050	1,150	344	574	267	641	433	129	5,870	245	27	130
3	646	673	287	818	302	706	465	283	1,840	178	27	303
4	327	444	246	1,400	269	536	2,140	334	837	135	37	390
5	231	571	273	821	224	423	1,230	254	491	115	46	232
6	183	532	332	567	218	368	701	247	332	133	37	169
7	137	385	240	420	327	574	478	213	245	427	29	364
8	225	314	204	317	364	579	516	185	307	189	23	242
9	480	290	217	436	296	447	734	672	357	129	24	175
10	428	229	194	3,210	262	372	545	497	215	100	31	145
11	277	190	168	5,400	238	516	458	337	170	92	26	124
12	207	179	155	3,000	217	2,360	379	1,100	132	75	20	100
13	169	183	196	1,200	226	1,530	334	1,080	109	58	25	110
14	160	235	361	700	462	826	300	586	88	48	28	97
15	138	220	289	500	538	562	276	409	83	42	19	87
16	113	707	252	360	419	535	231	308	467	53	16	67
17	96	576	217	304	341	561	202	242	592	44	32	56
18	86	419	190	253	268	434	182	291	270	33	22	48
19	78	582	191	233	248	1,360	162	287	189	30	303	42
20	71	478	1,150	259	377	1,310	144	222	298	32	237	36
21	65	376	2,470	520	304	1,090	128	182	394	31	98	34
22	59	340	975	531	660	972	120	156	513	24	61	43
23	55	282	619	390	708	650	298	230	1,050	23	45	37
24	52	251	462	383	486	481	269	227	998	59	36	30
25	49	232	403	1,150	417	357	231	192	576	70	29	26
26	46	214	5,120	850	315	295	216	162	490	43	25	23
27	44	586	3,420	739	281	247	190	138	323	128	26	22
28	45	1,270	1,340	565	264	210	171	117	280	63	22	21
29	124	865	815	542	-----	186	154	133	625	48	24	20
30	538	566	1,260	422	-----	193	139	1,800	370	59	205	19
31	2,480	-----	790	344	-----	226	-----	1,230	-----	55	180	-----
TOTAL	8,855	16,129	23,615	27,992	9,581	19,997	12,030	12,376	21,281	3,046	1,795	3,376
MEAN	286	538	762	903	342	645	401	399	709	98.3	57.9	113
MAX	2,480	2,790	5,120	5,400	708	2,360	2,140	1,800	5,870	427	303	390
MIN	44	179	155	233	217	186	120	117	83	23	16	19
CFSM	2.23	4.20	5.95	7.05	2.67	5.04	3.13	3.12	5.54	.77	.45	.88
IN.	2.57	4.69	6.86	8.14	2.78	5.81	3.50	3.60	6.18	.89	.52	.98

CAL YR 1973 TOTAL 142,106 MEAN 389 MAX 5,120 MIN 14 CFSM 3.04 IN 41.30
WTR YR 1974 TOTAL 160,073 MEAN 439 MAX 5,870 MIN 16 CFSM 3.43 IN 46.52

PEAK DISCHARGE (BASE, 4,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1845	10.50	8,600	1-11	unknown	-	unknown
1-10	1415	9.56	7,230	6-2	0845	12.23	11,500

KANAWHA RIVER BASIN

03187000 Gauley River at Camden on Gauley, W. Va.

LOCATION.--Lat 38°21'55", long 80°36'05", Webster County, on right bank at Baltimore & Ohio Railroad station at Camden on Gauley, 0.2 mi (0.3 km) downstream from Coon Creek, 0.9 mi (1.4 km) upstream from Strouds Creek, and at mile 69.6 (112.0 km).

DRAINAGE AREA.--236 mi² (611 km²).

PERIOD OF RECORD.--July 1908 to September 1916, October 1929 to current year. Prior to October 1934, published as "at Allingdale". Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected in this vicinity since 1901 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 2,003.28 ft (610.600 m) above mean sea level, adjustment of 1912. July 1908 to Sept. 30, 1916, nonrecording gage at site 1.1 mi (1.8 km) downstream at datum 3.08 ft (0.939 m) lower. Oct. 20, 1929, to Oct. 29, 1934, nonrecording gage at site 1.1 mi (1.8 km) downstream at present datum.

AVERAGE DISCHARGE.--53 years, 583 ft³/s (16.51 m³/s), 33.55 in/yr (852 mm/yr).

EXTREMES.--Current year: Maximum discharge, 20,100 ft³/s (569 m³/s) June 2, gage height, 19.54 ft (5.956 m), from rating curve extended as explained below; minimum, 36 ft³/s (1.02 m³/s) Aug. 16, gage height, 1.82 ft (0.555 m).

Period of record: Maximum discharge, 42,500 ft³/s (1,200 m³/s) July 4, 1932, gage height, 27.38 ft (8.345 m), present site and datum, from floodmarks, from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of velocity-area studies; minimum, 0.3 ft³/s (0.008 m³/s) Oct. 23-27, 1953; minimum gage height, 0.36 ft (0.110 m) Sept. 9, 1964.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1275: 1908-16, 1931(M), 1934.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	465	4,060	875	1,340	531	771	329	231	4,100	473	68	341
2	1,080	2,060	675	1,150	470	1,030	692	225	12,000	432	51	266
3	1,040	1,180	546	1,100	510	1,210	1,030	373	3,680	306	43	480
4	580	810	460	2,560	492	959	3,460	578	1,650	231	46	908
5	383	875	429	1,830	415	774	2,530	452	966	190	64	526
6	295	1,020	550	1,350	386	661	1,400	430	636	241	62	341
7	218	750	399	945	509	838	948	377	449	489	50	579
8	203	595	339	690	719	1,040	910	317	342	299	47	478
9	645	560	363	655	610	839	1,550	684	577	202	49	333
10	645	451	347	3,820	523	696	1,220	779	329	159	64	271
11	429	375	295	8,340	473	739	992	532	251	148	76	228
12	307	335	274	4,110	418	3,750	809	1,020	202	135	54	191
13	245	327	379	1,880	444	2,880	685	1,910	170	103	44	177
14	218	407	1,210	1,200	905	1,590	599	1,060	141	83	53	167
15	206	411	880	910	1,170	1,080	568	749	128	73	49	159
16	173	1,390	665	720	919	943	464	552	507	76	38	132
17	148	1,380	555	545	732	1,120	399	417	779	89	47	109
18	133	960	546	459	554	891	350	481	390	66	52	94
19	120	1,070	469	402	483	1,930	307	562	261	54	329	81
20	111	990	795	430	678	2,540	270	425	369	55	563	73
21	102	790	4,210	575	638	1,990	237	332	544	56	220	67
22	96	670	1,980	829	839	2,000	219	276	948	50	136	73
23	87	541	1,250	618	1,220	1,320	493	359	1,580	43	106	81
24	83	465	945	562	887	964	584	455	1,980	48	82	66
25	79	429	870	1,580	794	703	482	372	1,140	106	68	56
26	76	395	6,810	1,440	613	560	422	322	920	99	57	50
27	74	1,100	6,660	1,280	533	456	365	269	607	204	51	46
28	76	2,790	2,510	1,000	498	377	318	224	498	130	48	44
29	138	1,780	1,460	978	-----	326	282	219	865	82	47	42
30	715	1,140	1,920	787	-----	319	251	3,020	645	93	264	40
31	3,930	-----	1,420	643	-----	369	-----	2,450	-----	91	394	-----
TOTAL	13,100	30,106	41,086	44,728	17,963	35,665	23,165	20,452	37,654	4,906	3,322	6,499
MEAN	423	1,004	1,325	1,443	642	1,150	772	660	1,255	158	107	217
MAX	3,930	4,060	6,810	8,340	1,220	3,750	3,460	3,020	12,000	489	563	908
MIN	74	327	274	402	386	319	219	219	128	43	38	40
CFSM	1.79	4.25	5.61	6.11	2.72	4.87	3.27	2.80	5.32	.67	.45	.92
IN.	2.06	4.75	6.48	7.05	2.83	5.62	3.65	3.22	5.94	.77	.52	1.02

CAL YR 1973 TOTAL 242,240 MEAN 664 MAX 6,810 MIN 31 CFSM 2.81 IN 38.18
WTR YR 1974 TOTAL 278,646 MEAN 763 MAX 12,000 MIN 38 CFSM 3.23 IN 43.92

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2130	15.47	13,400	1-11	1800	13.26	9,890
1-10	1900	13.78	10,700	6-12	1100	19.54	20,100

KANAWHA RIVER BASIN

121

03189100 Gauley River near Craigsville, W. Va.

LOCATION.--Lat 38°17'30", long 80°38'30", Nicholas County, on right bank at downstream side of highway bridge on W. Va. Route 20, 200 ft (61 m) downstream from Cherry River, 1.8 mi (2.9 km) downstream from Cranberry River, 2.7 mi (4.3 km) south of Craigsville, and at mile 60.0 (96.5 km).

DRAINAGE AREA.--528 mi² (1,368 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,870.00 ft (569.976 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 1,438 ft³/s (40.72 m³/s), 36.98 in/yr (939 mm/yr).

EXTREMES.--Current year: Maximum discharge, 34,600 ft³/s (980 m³/s) June 2, gage height, 21.19 ft (6.459 m); minimum, 94 ft³/s (2.66 m³/s) Sept. 30, gage height, 9.22 ft (2.810 m).

Period of record: Maximum discharge, 40,700 ft³/s (1,150 m³/s) Mar. 7, 1967, gage height, 22.73 ft (6.928 m); minimum, 13 ft³/s (0.37 m³/s) Sept. 27, 1967, gage height, 8.62 ft (2.627 m).

Remarks.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	920	10,700	2,130	3,200	1,390	1,590	950	662	10,500	1,000	236	742
2	2,070	5,330	1,680	2,700	1,280	2,140	1,720	630	22,900	890	176	638
3	2,190	3,110	1,390	2,820	1,410	2,560	2,280	900	8,450	697	145	1,250
4	1,260	2,130	1,190	5,950	1,320	2,100	8,270	1,260	3,820	542	149	1,990
5	870	2,200	1,160	4,060	1,160	1,760	5,830	1,060	2,330	438	172	1,240
6	688	2,480	1,400	2,850	1,080	1,580	3,270	1,040	1,590	510	164	860
7	526	1,850	1,080	2,170	1,240	2,160	2,300	940	1,170	900	141	1,390
8	470	1,470	930	1,640	1,590	2,850	2,200	823	920	662	141	1,190
9	1,050	1,370	970	1,610	1,400	2,230	3,500	1,550	1,110	446	164	870
10	1,160	1,130	910	9,680	1,240	1,910	2,870	1,880	823	341	172	715
11	850	940	805	21,200	1,160	1,970	2,380	1,330	646	302	176	598
12	654	850	706	10,400	1,030	9,020	1,950	2,850	526	280	152	494
13	534	841	880	4,630	1,130	7,520	1,650	4,950	423	227	137	470
14	470	1,050	2,730	3,020	1,910	3,960	1,450	2,730	347	188	133	486
15	446	1,070	2,130	2,280	2,550	2,700	1,330	1,940	315	168	160	470
16	374	2,620	1,670	1,840	2,070	2,380	1,120	1,460	1,240	164	149	374
17	315	2,850	1,410	1,500	1,710	2,720	980	1,140	2,020	172	122	302
18	280	2,080	1,130	1,250	1,370	2,170	870	1,470	1,060	149	119	260
19	255	2,190	1,060	1,110	1,200	4,730	787	1,540	733	122	558	223
20	241	2,080	1,920	1,120	1,580	6,200	697	1,290	930	115	1,320	196
21	227	1,690	9,590	1,580	1,510	4,930	622	1,040	1,190	126	598	184
22	209	1,540	4,600	2,160	1,970	4,700	582	860	1,840	112	347	188
23	200	1,290	2,970	1,640	2,840	3,150	1,330	1,230	3,060	98	255	188
24	188	1,160	2,250	1,560	2,100	2,360	1,540	1,400	4,080	534	200	168
25	180	1,090	2,040	4,160	1,900	1,760	1,290	1,110	2,550	374	172	145
26	172	1,020	17,000	3,820	1,500	1,410	1,130	940	1,910	250	145	126
27	164	2,630	16,100	3,420	1,290	1,180	990	787	1,350	486	122	119
28	168	6,470	6,230	2,700	1,250	1,010	880	662	1,130	347	112	108
29	367	4,200	3,580	2,510	-----	890	787	662	1,600	285	145	105
30	1,900	2,790	4,530	2,020	-----	890	706	6,500	1,330	502	334	98
31	9,830	-----	3,380	1,680	-----	1,010	-----	5,630	-----	347	697	-----
TOTAL	29,228	72,221	99,551	112,280	43,180	87,540	56,261	52,266	81,893	11,774	7,813	16,187
MEAN	943	2,407	3,211	3,622	1,542	2,824	1,875	1,686	2,730	380	252	540
MAX	9,830	10,700	17,000	21,200	2,840	9,020	8,270	6,500	22,900	1,000	1,320	1,990
MIN	164	841	706	1,110	1,030	890	582	630	315	98	112	98
CFSM	1.79	4.56	6.08	6.86	2.92	5.35	3.55	3.19	5.17	.72	.48	1.02
IN.	2.06	5.09	7.01	7.91	3.04	6.17	3.96	3.68	5.77	.83	.55	1.14

CAL YR 1973 TOTAL 577,119 MEAN 1,581 MAX 17,000 MIN 84 CFSM 2.99 IN 48.66
WTR YR 1974 TOTAL 670,194 MEAN 1,836 MAX 22,900 MIN 98 CFSM 3.48 IN 47.22

PEAK DISCHARGE (BASE, 12,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11- 1	0900	15.56	13,000	4- 4	1500	15.94	14,300
12-26	1830	20.33	31,100	6- 2	1100	21.19	34,600
1-11	1530	18.92	25,500				

KANAWHA RIVER BASIN

03189590 Summersville Lake near Summersville, W. Va.

LOCATION.--Lat 38°13'20", long 80°53'35", Nicholas County, at Summersville Dam on Gauley River, 4.6 mi (7.4 km) southwest of Summersville, and at mile 34.5 (55.5 km).

DRAINAGE AREA.--803 mi² (2,080 km²).

PERIOD OF RECORD.--May 1965 to current year, monthend contents only.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 236,500 acre-ft (292 hm³) June 3, elevation, 1,666.77 ft (508.031 m); minimum, 24,560 ft (30.5 hm³) Dec. 5, elevation, 1,524.17 ft (464.567 m).

Period of record: Maximum contents since storage began, 421,800 acre-ft (520 hm³) Mar. 5, 1966 elevation, 1,711.7 ft (521.73 m), caused by flood before valves were operational; minimum since initial filling 6,990 acre-ft (8.62 hm³) Jan. 13, 1967, elevation, 1,464.5 ft (446.38 m).

REMARKS.--Reservoir is formed by rockfill dam with impervious core, completed in 1971; closure of dam was made and storage began in May 1965. Spillway is uncontrolled saddle spillway 1,250 ft (381.0 m) long. Flow is controlled by three 9-ft (2.7 m) and one 2.5-ft (0.76 m) diameter Howell-Bunger fixed-cone dispersion valves. Total level-pool capacity at elevation 1,710 ft (521.2 m), flood-control pool elevation, is 413,800 acre-ft (510 hm³) of which 390,800 acre-ft (482 hm³) is controlled storage above elevation 1,520 ft (463.3 m), minimum-pool elevation. Reservoir is used for flood control.

COOPERATION.--Records furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)	(equivalent in cfs)
Sept. 30.....	1,635.18	149,200	-	-
Oct. 31.....	1,617.74	114,400	-34,800	-566
Nov. 30.....	1,540.07	32,390	-82,010	-1,380
Dec. 31.....	1,589.76	73,380	+40,990	+667
CAL YR 1973	-	-	+45,790	+63
Jan. 31.....	1,536.39	30,390	-42,990	-699
Feb. 28.....	1,536.08	30,230	-160	-3
Mar. 31.....	1,537.84	31,170	+940	+15
Apr. 30.....	1,646.50	176,700	+145,500	+2,450
May 31.....	1,652.41	192,700	+16,000	+260
June 30.....	1,652.32	192,400	-300	-5
July 31.....	1,652.94	194,200	+1,800	+29
Aug. 31.....	1,652.80	193,800	-400	-7
Sept. 30.....	1,649.50	184,700	-9,100	-153
WTR YR 1974	-	-	+35,500	+49

KANAWHA RIVER BASIN

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03189600 Gauley River below Summersville Dam, W. Va.

LOCATION.--Lat 38°13'00", long 80°53'30", Nicholas County, on right bank 0.4 mi (0.6 km) downstream from Summersville Dam, 5.0 mi (8.0 km) southwest of Summersville, and at mile 34.1 (54.9 km).

DRAINAGE AREA.--804 mi² (2,082 km²).

PERIOD OF RECORD.--March 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,350.00 ft (411.480 m) above mean sea level, levels by Corps of Engineers.

AVERAGE DISCHARGE.--8 years, 2,220 ft³/s (62.87 m³/s), 37.50 in/yr (952 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 15,800 ft³/s (447 m³/s) Jan. 18, gage height, 18.54 ft (5.651 m); minimum, 108 ft³/s (3.06 m³/s) Dec. 26, 27; minimum gage height, 6.04 ft (1.841 m) Apr. 1; minimum daily discharge, 112 ft³/s (3.17 m³/s) Dec. 27.
Period of record: Maximum discharge, 17,800 ft³/s (504 m³/s) Mar. 26, 1966, gage height, 19.30 ft (5.883 m); minimum, 1.9 ft³/s (0.054 m³/s) Feb. 16, 17, 1967, gage height, 3.67 ft (1.119 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Feb. 10, 13-16, 1967.

REMARKS.--Records good except those below 1,000 ft³/s (28.3 m³/s), which are fair. Flow regulated by Summersville Lake (see sta 03189590).

REVISIONS (WATER YEARS) --WRD W. Va. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,460	125	5,390	9,990	2,180	1,980	624	168	10,600	1,540	388	1,520
2	3,080	1,400	1,920	10,200	1,610	2,520	145	168	14,600	1,040	392	1,320
3	4,260	4,530	2,200	9,970	2,270	3,230	147	168	14,800	1,040	392	930
4	3,630	6,290	3,850	9,970	1,580	3,040	154	168	14,700	596	392	2,190
5	2,160	8,390	2,360	8,890	1,130	2,430	154	168	13,000	324	298	2,860
6	1,790	9,950	846	5,500	1,780	2,170	154	170	4,010	328	159	1,550
7	1,840	10,000	504	3,390	1,740	2,590	156	1,020	1,510	756	159	1,480
8	2,230	9,970	685	2,550	2,100	4,250	159	1,000	905	950	159	1,480
9	2,500	8,170	1,020	2,320	2,160	3,600	161	173	900	955	159	1,180
10	2,080	3,390	1,490	4,080	1,960	2,650	161	1,330	900	696	159	620
11	2,620	3,800	1,430	118	1,510	2,360	161	2,000	905	324	159	620
12	3,350	4,780	882	120	1,520	8,400	161	2,330	905	324	159	624
13	3,140	4,710	1,260	120	1,510	14,000	161	6,550	905	324	159	624
14	2,200	4,890	4,660	5,170	2,440	7,660	161	4,950	716	213	159	865
15	1,440	4,960	4,840	15,100	3,910	3,970	163	1,850	373	152	159	995
16	1,580	4,320	3,390	14,900	3,430	3,320	165	1,900	370	149	156	684
17	1,790	4,380	2,410	14,700	2,620	3,980	165	1,550	2,040	149	156	508
18	1,790	3,960	1,980	15,200	1,310	3,520	165	1,980	2,060	149	156	428
19	1,790	3,660	1,660	11,300	1,480	4,810	165	2,410	1,240	149	156	256
20	1,480	4,390	1,870	2,210	2,660	8,620	168	2,360	488	149	990	416
21	900	4,350	9,010	1,220	2,180	7,140	165	1,120	572	149	1,530	2,190
22	1,360	3,160	9,530	2,820	2,000	8,260	168	342	2,910	268	1,180	1,410
23	1,790	3,030	4,420	2,350	3,630	5,370	168	2,050	3,990	408	428	145
24	1,190	2,700	3,720	1,910	3,110	3,460	168	2,600	4,220	416	321	145
25	1,580	2,380	3,210	4,120	2,580	2,580	168	1,570	2,840	408	156	145
26	1,790	2,360	6,850	5,370	2,020	1,900	168	935	2,840	408	156	145
27	1,530	4,800	112	5,010	1,730	1,900	168	935	2,730	688	156	145
28	1,130	7,060	3,830	3,530	1,730	1,570	168	935	3,050	875	156	145
29	1,520	9,690	9,970	3,400	-----	1,110	168	935	1,950	616	154	145
30	1,390	11,200	9,810	2,880	-----	825	168	7,870	1,950	159	338	145
31	124	-----	9,890	2,180	-----	1,040	-----	10,700	-----	321	900	-----
TOTAL	62,514	156,795	114,999	180,588	59,880	124,655	5,327	62,405	112,979	15,023	10,541	25,910
MEAN	2,017	5,227	3,710	5,825	2,139	4,021	178	2,013	3,766	485	340	864
MAX	4,260	11,200	9,970	15,100	3,910	14,400	624	10,700	14,800	1,540	1,530	2,860
MIN	124	125	112	118	1,130	825	145	168	370	149	154	145

CAL YR 1973 TOTAL 853,840 MEAN 2,339 MAX 12,800 MIN 101 MEAN† 2,399 CFSM† 2.98 IN† 40.45
WTR YR 1974 TOTAL 931,616 MEAN 2,552 MAX 15,200 MIN 112 MEAN† 2,601 CFSM† 3.24 IN† 43.98

† Adjusted for change in contents in Summersville Lake.

KANAWHA RIVER BASIN

03189650 Collision Creek near Nallen, W. Va.

LOCATION.--Lat 38°10'35", long 80°52'07", Nicholas County, on right bank 10 ft (3 m) upstream from culvert on U.S. Highway 19, 80 ft (24 m) upstream from unnamed tributary, 4.5 mi (7.2 km) north of Nallen, and at mile 3.2 (5.1 km).

DRAINAGE AREA.--2.78 mi² (7.20 km²).

PERIOD OF RECORD.--May 1965 to September 1966 (annual maximum only), October 1966 to current year.

GAGE.--Water-stage and rainfall recorders and culvert control. Metal weir since Oct. 7, 1966. Altitude of gage is 1,830 ft (558 m), from topographic map. Prior to Oct. 7, 1966, SR recorder at same site and datum.

AVERAGE DISCHARGE.--8 years, 4.64 ft³/s (0.131 m³/s), 22.67 in/yr (576 mm/yr).

EXTREMES.--Current year: Maximum discharge, 342 ft³/s (9.69 m³/s) June 2, gage height, 9.81 ft (2.990 m), from rating curve extended as explained below; minimum daily, 0.05 ft³/s (0.001 m³/s) Oct. 6, 7, 13, 21-27, Sept. 12-17; minimum gage height, 2.69 ft (0.820 m) Oct. 26.
Period of record: Maximum discharge, 342 ft³/s (9.69 m³/s) June 2, 1974, gage height, 9.81 ft (2.990 m), from rating curve extended above 120 ft³/s (3.40 m³/s) on basis of culvert rating computation; no flow Sept. 15-27, 1967.

REMARKS.--Records good. Rainfall records collected at site since October 1966 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	17	7.9	9.3	4.5	2.8	4.1	1.8	26	2.2	.48	.38
2	.15	8.2	5.8	8.7	4.3	2.8	6.2	1.7	110	1.8	.38	.26
3	.08	4.7	4.4	11	4.0	2.8	6.9	2.0	22	1.4	.26	1.4
4	.06	3.4	3.6	30	3.7	2.8	52	1.9	10	1.1	.32	2.3
5	.06	6.1	3.4	15	3.4	2.6	20	1.6	5.5	.75	.32	.95
6	.05	7.0	2.8	10	3.2	3.0	12	1.7	3.4	.65	.26	.58
7	.05	5.0	2.3	7.6	3.4	4.5	8.4	1.5	2.3	.55	.26	1.3
8	.06	3.6	2.1	5.8	3.5	4.7	9.6	1.4	1.6	.44	.38	.80
9	.06	4.1	2.3	5.8	3.3	4.4	16	1.8	1.3	.38	.58	.38
10	.06	4.1	2.3	72	3.1	3.9	13	1.6	1.0	.38	.48	.15
11	.06	3.8	2.1	100	3.2	4.4	10	1.5	.95	.41	.32	.06
12	.06	3.4	2.1	30	3.2	37	8.2	6.0	.69	.41	.32	.05
13	.05	3.4	4.7	14	4.8	30	6.7	9.2	.58	.38	.32	.05
14	.06	3.4	25	9.6	11	14	5.2	6.3	.38	.32	.26	.05
15	.06	3.0	13	7.3	10	9.1	4.3	4.4	.38	.60	.20	.05
16	.06	5.0	9.3	5.8	8.0	10	3.5	3.3	1.9	.68	.15	.05
17	.06	6.1	7.3	4.7	6.2	12	2.9	2.6	1.1	.38	.15	.05
18	.06	5.3	5.5	3.6	4.8	9.8	2.5	2.7	.69	.35	.20	.06
19	.06	5.0	4.4	3.4	4.1	15	2.2	2.2	.48	.45	.69	.06
20	.06	4.4	5.8	3.2	4.2	19	2.0	1.8	.95	.95	.58	.06
21	.05	3.8	18	3.0	3.6	24	1.7	1.5	.80	.51	.95	.08
22	.05	3.6	12	3.0	4.2	20	1.7	1.4	.80	.43	.48	.10
23	.05	3.4	9.0	2.8	4.0	12	4.8	2.5	3.0	.36	.38	.10
24	.05	3.4	7.9	3.4	3.7	8.4	4.1	2.4	3.6	1.2	.26	.20
25	.05	3.4	10	8.9	3.7	5.8	3.7	1.9	3.4	.85	.20	.26
26	.05	3.4	35	12	3.2	4.8	3.3	1.5	5.8	.65	.20	.32
27	.05	64	23	13	2.9	4.1	2.9	1.4	3.2	.60	.15	.26
28	.06	43	12	10	2.8	3.6	2.6	1.0	3.2	.46	.15	.06
29	1.6	17	8.7	8.9	-----	3.2	2.3	1.0	3.1	.41	.26	.38
30	39	11	9.9	7.3	-----	3.2	1.9	18	2.8	.37	.48	.38
31	39	-----	9.3	6.0	-----	3.6	-----	12	-----	.32	.58	-----
TOTAL	81.43	262.0	270.9	435.1	124.0	287.3	224.7	101.6	220.90	20.74	11.00	11.18
MEAN	2.63	8.73	8.74	14.0	4.43	9.27	7.49	3.28	7.36	.67	.35	.37
MAX	39	64	35	100	11	37	52	18	110	2.2	.95	2.3
MIN	.05	3.0	2.1	2.8	2.8	2.6	1.7	1.0	.38	.32	.15	.05
CFSM	.95	3.14	3.14	5.04	1.59	3.33	2.69	1.18	2.65	.24	.13	.13
IN.†	1.09	3.51	3.62	5.82	1.66	3.84	3.01	1.36	2.96	.28	.15	.15
IN.††	5.69	5.15	4.37	6.09	1.89	5.35	3.95	5.77	6.51	2.71	4.79	2.98

CAL YR 1973 TOTAL 1,909.93 MEAN 5.23 MAX 64 MIN .05 CFSM 1.88 IN† 25.56
WTR YR 1974 TOTAL 2,050.85 MEAN 5.62 MAX 110 MIN .05 CFSM 2.02 IN† 27.44

PEAK DISCHARGE (BASE, 70 CFS)				† Runoff. †† Rainfall			
DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	2045	5.71	96	3-12	1645	5.62	93
11-27	1615	7.73	207	4- 4	0745	6.43	132
1-10	1300	7.89	216	6- 2	0500	9.81	342
1-11	1115	6.96	161				

KANAWHA RIVER BASIN

125

03190400 Meadow River near Mt. Lookout, W. Va.

LOCATION.--Lat 38°11'25", long 80°56'55", Nicholas County, on right bank 1,000 ft (305 m) upstream from mouth, and 2.5 mi (4.0 km) northwest of Mt. Lookout.

DRAINAGE AREA.--365 mi² (945 km²).

PERIOD OF RECORD.--September 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,200 ft (366 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 781 ft³/s (22.12 m³/s), 29.06 in/yr (738 mm/yr).

EXTREMES.--Current year: Maximum discharge, 12,200 ft³/s (346 m³/s) Jan. 11, gage height, 11.55 ft (3.520 m); minimum, 33 ft³/s (0.93 m³/s) Oct. 27, gage height, 2.99 ft (0.911 m).

Period of record: Maximum discharge, 18,500 ft³/s (524 m³/s) Mar. 7, 1967, gage height, 13.44 ft (4.097 m); minimum 14 ft³/s (0.40 m³/s) Sept. 12, 13, 1966, gage height, 2.51 ft (0.765 m).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	4,030	1,810	1,710	863	580	645	330	2,480	385	173	151
2	86	3,340	1,350	1,590	736	597	736	307	5,790	346	130	216
3	172	2,250	1,020	1,610	790	592	839	334	3,730	261	108	320
4	225	1,580	769	2,640	751	556	2,960	414	2,400	198	102	575
5	151	1,330	661	2,380	682	518	3,010	418	1,610	163	104	465
6	118	1,550	617	1,870	615	505	2,030	397	1,070	151	94	343
7	97	1,180	529	1,480	603	713	1,520	379	690	316	80	494
8	86	910	458	1,130	620	1,000	1,300	345	475	317	74	626
9	81	809	455	998	590	1,020	1,820	350	385	228	92	502
10	112	708	474	3,670	521	915	1,570	606	311	159	116	393
11	96	590	477	9,890	512	798	1,310	694	256	134	106	301
12	80	508	428	7,450	466	2,040	1,080	1,070	215	118	84	240
13	69	466	511	4,150	557	3,740	906	2,870	182	97	76	202
14	65	465	1,490	2,340	973	3,000	761	2,320	155	81	75	241
15	61	465	1,440	1,640	1,180	2,090	663	1,660	139	81	69	218
16	59	654	1,180	1,220	1,010	1,690	516	1,130	266	151	129	182
17	56	914	900	927	833	1,860	485	775	584	253	88	147
18	49	807	650	745	678	1,580	430	683	402	195	72	123
19	43	717	580	618	597	1,670	387	640	275	163	80	106
20	41	623	646	546	631	2,610	349	605	214	121	183	93
21	39	540	2,150	543	634	2,720	312	534	220	97	503	84
22	39	529	2,220	985	637	3,190	286	431	195	81	456	88
23	38	551	1,770	1,030	870	2,450	527	571	292	69	305	81
24	37	540	1,490	965	927	1,830	840	760	403	132	193	72
25	35	525	1,410	2,200	890	1,320	754	617	375	536	131	64
26	35	530	5,850	2,750	746	948	640	480	302	345	101	56
27	34	1,890	8,780	2,820	623	706	530	392	245	1,020	86	52
28	36	4,230	5,700	2,250	607	593	450	328	337	658	74	49
29	40	3,350	2,980	1,850	-----	517	397	291	409	448	97	48
30	969	2,450	2,180	1,460	-----	504	357	1,550	466	350	111	46
31	3,170	-----	1,910	1,140	-----	585	-----	2,200	-----	225	108	-----
TOTAL	6,335	39,031	52,885	66,597	20,142	43,437	28,410	24,481	24,873	7,879	4,200	6,578
MEAN	204	1,301	1,706	2,148	719	1,401	947	790	829	254	135	219
MAX	3,170	4,230	8,780	9,890	1,180	3,740	3,010	2,870	5,790	1,020	503	626
MIN	34	465	428	543	466	504	286	291	139	69	69	46
CFSM	.56	3.56	4.67	5.88	1.97	3.84	2.59	2.16	2.27	.70	.37	.60
IN.	.65	3.94	5.39	6.79	2.05	4.43	2.90	2.50	2.54	.80	.43	.67

CAL YR 1973 TOTAL 325,047.00 MEAN 891 MAX 8,780 MIN 33 CFSM 2.44 IN 33.13
 WTR YR 1974 TOTAL 324,848.00 MEAN 890 MAX 9,890 MIN 34 CFSM 2.44 IN 33.11

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2100	11.12	10,900	6-2	0800	9.82	7,620
1-11	1600	11.55	12,200				

KANAWHA RIVER BASIN

03192000 Gauley River above Belva, W. Va.

LOCATION.--Lat 38°14'00", long 81°10'45", Nicholas County, on right bank 0.5 mi (0.8 km) upstream from Belva, 1.0 mi (1.6 km) upstream from Twentymile Creek, and at mile 6.7 (10.8 km).

DRAINAGE AREA.--1,315 mi² (3,406 km²).

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 669.00 ft (203.911 m) above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--46 years, 2,683 ft³/s (75.98 m³/s), 27.71 in/yr (704 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 34,900 ft³/s (988 m³/s) June 2, gage height, 15.69 ft (4.782 m); minimum, 184 ft³/s (5.21 m³/s) Sept. 30, gage height, 1.31 ft (0.399 m).

Period of record: Maximum discharge, 105,000 ft³/s (2,970 m³/s) July 5, 1932, gage height, 28.60 ft (8.717 m), from rating curve extended above 65,000 ft³/s (1,840 m³/s) on basis of velocity-area studies and inflow and storage adjustment to record for Kanawha River at Kanawha Falls; minimum, 3.2 ft³/s (0.091 m³/s) Oct. 21, 1953, gage height, 0.10 ft (0.030 m).

REMARKS.--Records good. Flow regulated since 1965 by Summersville Lake (see sta 03189590).

REVISIONS (WATER YEARS).--WSP 783: Drainage area. WSP 873: 1938. WSP 1275: 1929-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,640	4,800	9,240	11,900	3,180	2,400	1,740	562	12,200	2,300	586	1,690
2	2,260	4,470	3,700	11,800	2,700	3,160	1,040	539	26,800	1,420	559	1,670
3	4,090	6,210	3,090	11,800	2,640	3,630	1,300	560	19,300	1,300	535	1,250
4	4,020	7,180	3,790	14,000	3,190	4,110	4,860	599	16,900	1,120	570	2,120
5	2,230	8,660	4,000	12,600	1,690	2,810	4,730	635	15,600	579	556	3,970
6	1,560	11,200	1,840	8,190	2,280	3,040	2,970	620	6,220	542	378	1,950
7	1,610	10,800	1,080	5,390	2,530	3,170	2,140	1,170	2,610	684	260	1,920
8	1,800	10,600	994	3,700	2,610	5,140	1,830	1,310	1,450	1,210	253	2,120
9	2,300	9,760	1,320	3,430	2,830	5,290	3,220	763	1,320	1,130	291	1,950
10	1,830	4,610	1,580	10,400	2,730	3,920	2,580	1,100	1,220	1,090	314	1,110
11	1,930	3,580	1,980	16,100	2,090	3,370	2,020	2,770	1,150	591	308	945
12	3,030	5,080	1,470	10,600	2,850	9,980	1,670	3,160	1,080	514	317	868
13	2,800	4,940	1,440	5,720	2,300	20,100	1,400	8,630	1,040	482	280	831
14	2,640	5,000	5,620	4,530	3,670	13,100	1,190	8,890	1,000	461	256	952
15	1,230	5,160	6,900	15,900	5,590	6,860	1,050	3,510	664	285	245	1,420
16	1,220	5,050	5,300	15,600	4,970	5,340	902	3,430	639	314	257	918
17	1,500	4,920	3,690	15,100	3,940	5,990	792	2,140	1,790	362	284	821
18	1,500	5,040	2,690	15,100	2,650	5,970	714	2,620	2,690	364	255	610
19	1,490	3,920	2,380	13,400	1,800	5,460	655	2,810	1,740	323	247	576
20	1,480	4,830	2,100	4,730	3,250	12,300	603	3,070	871	306	326	317
21	860	4,690	7,920	1,350	3,060	10,800	554	2,120	739	260	1,850	1,490
22	863	3,920	13,400	3,310	2,470	12,600	521	731	2,230	227	1,930	2,110
23	1,700	3,100	6,580	3,540	4,210	8,840	680	1,910	3,840	412	880	432
24	1,040	3,240	5,250	3,020	4,470	6,050	1,100	3,560	5,530	683	665	230
25	1,110	2,660	4,630	5,100	3,590	4,370	1,070	2,410	3,270	874	409	217
26	1,480	2,660	12,700	8,480	3,110	3,040	949	1,410	3,180	834	279	206
27	1,470	10,400	12,400	8,110	2,430	2,720	821	1,290	3,120	1,210	253	198
28	1,000	15,500	8,590	6,570	2,370	2,390	719	1,200	4,440	1,620	245	196
29	1,090	13,100	13,400	5,410	-----	1,900	648	1,190	2,800	1,280	316	191
30	3,560	13,900	12,200	4,890	-----	1,410	596	6,290	2,580	615	379	186
31	5,020	-----	11,900	3,510	-----	1,510	-----	14,700	-----	444	663	-----
TOTAL	63,353	198,980	173,174	263,280	84,400	180,770	45,064	85,699	148,013	23,836	14,946	33,464
MEAN	2,044	6,633	5,586	8,493	3,014	5,831	1,502	2,764	4,934	769	482	1,115
MAX	5,020	15,500	13,400	16,100	5,590	20,100	4,860	14,700	26,800	2,300	1,930	3,970
MIN	860	2,660	994	1,350	1,690	1,410	521	539	639	227	245	186

CAL YR 1973 TOTAL 1,179,334 MEAN 3,231 MAX 20,800 MIN 202 MEAN† 3,294 CFSM† 2.50 IN† 33.94
WTR YR 1974 TOTAL 1,314,979 MEAN 3,603 MAX 26,800 MIN 186 MEAN† 3,652 CFSM† 2.78 IN† 37.74

† Adjusted for change in contents in Summersville Lake.

KANAWHA RIVER BASIN

127

03193000 Kanawha River at Kanawha Falls, W. Va.

LOCATION.--Lat 38°08'20", long 81°12'45", Fayette County, on right bank 150 ft (46 m) downstream from toll bridge, 0.8 mi (1.3 km) downstream from village of Kanawha Falls, 2.0 mi (3.2 km) downstream from Gauley Bridge, 2.0 mi (3.2 km) downstream from confluence of New River and Gauley River, and at mile 94.5 (152.1 km).

DRAINAGE AREA.--8,367 mi² (21,671 km²).

PERIOD OF RECORD.--March 1877 to current year. October 1916 to September 1918 and October 1927 to October 1928, published as "at Lock 2, Montgomery".

GAGE.--Water-stage recorder. Datum of gage is 621.20 ft (189.342 m) above mean sea level. Prior to Oct. 27, 1928, nonrecording gages at several sites within 9.0 mi (14.5 km) of present site of various datums. Oct. 27, 1928, to Sept. 30, 1964, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--97 years, 12,500 ft³/s (354.0 m³/s), 20.29 in/yr (515 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 98,200 ft³/s (2,780 m³/s) Jan. 11, gage height, 17.08 ft (5.206 m); minimum 1,860 ft³/s (52.7 m³/s) Aug. 27, gage height, 2.15 ft (0.655 m); minimum daily 2,340 ft³/s (66.3 m³/s) Aug. 27.

Period of record: Maximum discharge, 320,000 ft³/s (9,060 m³/s) Sept. 14, 1878, gage height, 37.8 ft (11.52 m), site and datum then in use, from gage-height relation and rating curve extended above 150,000 ft³/s (4,250 m³/s), minimum, 640 ft³/s (18.1 m³/s) Aug. 15, 1930, gage height, -0.95 ft (-0.290 m), datum then in use; minimum daily, 690 ft³/s (19.5 m³/s) Oct. 29, 1921.

REMARKS.--Records good. Flow regulated since 1939 by Claytor Lake (see sta 03169000), since 1949 by Bluestone Lake (see sta 03179800), and since 1965 by Summersville Lake (see sta 03189590). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 783: Drainage area. WSP 923: 1878, 1886, 1897, 1899, 1901-3. WSP 1305: 1902(M), 1940. WSP 1335: 1931.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,320	16,400	26,200	53,200	19,300	13,100	14,600	9,140	24,300	15,900	5,830	4,630
2	4,550	16,800	17,000	51,400	16,400	14,600	10,300	6,140	50,000	12,600	4,100	4,860
3	8,960	17,600	11,500	47,600	14,700	15,500	14,300	7,730	54,200	10,100	4,290	3,920
4	14,900	14,200	10,300	49,100	16,300	15,000	22,500	6,840	46,200	8,510	4,360	5,620
5	10,700	14,200	11,500	47,900	14,600	12,000	39,200	7,650	32,700	5,940	4,210	9,780
6	9,590	17,300	10,900	40,500	16,900	13,500	50,300	8,500	20,400	6,710	4,710	8,180
7	6,600	17,200	14,400	29,600	15,000	14,000	42,200	9,690	12,500	8,080	6,580	5,510
8	5,110	17,400	11,600	21,800	13,000	20,800	30,800	8,470	10,100	9,320	6,700	15,800
9	5,800	16,200	11,700	21,500	13,600	20,000	27,100	9,670	12,600	8,690	5,140	12,900
10	6,100	10,700	11,400	42,600	12,800	17,900	24,100	14,900	9,300	7,150	5,730	5,620
11	5,680	8,820	11,200	77,100	11,600	14,800	18,200	20,600	7,000	6,910	5,320	8,340
12	7,100	9,760	10,700	73,100	10,600	27,400	15,700	19,500	9,270	6,300	4,810	11,100
13	6,820	8,240	10,400	47,300	12,200	66,800	15,600	49,700	8,040	5,910	3,300	8,920
14	6,640	9,200	15,800	33,800	12,400	54,000	13,700	52,800	7,380	5,820	4,550	7,570
15	4,040	9,520	23,900	39,700	16,400	33,400	13,500	28,600	7,320	4,740	4,900	7,870
16	3,740	9,130	19,000	35,100	17,400	26,300	10,900	21,400	6,840	5,200	4,610	7,020
17	3,940	9,060	14,600	30,900	15,700	25,800	12,100	16,800	7,820	4,880	4,180	5,920
18	4,090	9,550	14,600	29,500	15,300	25,900	10,400	14,700	11,000	5,440	3,570	5,290
19	4,080	7,430	11,200	27,300	13,600	21,700	9,660	13,000	8,950	4,140	3,160	5,280
20	4,070	8,150	11,000	17,000	15,100	31,500	9,490	10,200	7,170	3,530	2,420	4,350
21	3,740	8,520	19,500	11,900	18,100	37,100	9,070	9,260	7,050	3,070	5,010	5,400
22	2,960	8,370	58,600	13,800	18,500	52,300	7,100	9,620	7,440	3,290	6,370	5,890
23	3,460	7,670	42,600	23,700	25,900	47,500	7,780	8,610	8,910	2,820	5,380	4,380
24	3,240	7,490	27,600	21,000	31,500	34,100	10,500	11,700	10,400	5,280	5,670	3,140
25	3,370	8,860	20,700	24,300	26,500	24,300	10,800	11,900	8,850	5,260	4,390	2,860
26	3,830	7,000	41,600	39,700	21,300	18,100	9,200	8,010	8,260	6,020	2,810	3,450
27	3,690	19,500	82,100	39,600	17,000	16,400	8,300	7,160	9,920	8,040	2,340	3,130
28	3,410	42,900	58,200	35,900	15,200	14,700	9,030	8,270	12,100	9,390	4,570	2,610
29	3,480	43,100	56,800	30,300	-----	12,700	7,280	8,690	17,000	6,990	3,890	3,240
30	7,520	37,800	63,200	25,500	-----	12,300	5,920	16,100	17,100	3,980	3,890	3,610
31	13,400	-----	62,000	21,100	-----	12,900	-----	28,200	-----	5,280	3,670	-----
TOTAL	180,930	438,070	811,800	1,102,8M	466,900	766,400	489,630	463,550	480,120	205,290	140,460	186,190
MEAN	5,836	14,600	26,190	35,570	16,680	24,720	16,320	14,950	15,340	6,622	4,531	6,206
MAX	14,900	43,100	82,100	77,100	31,500	66,800	50,300	52,800	54,200	15,900	6,700	15,800
MIN	2,960	7,000	10,300	11,900	10,600	12,000	5,920	6,140	6,840	2,820	2,340	2,610

CAL YR 1973 TOTAL 5,663,360 MEAN 15,520 MAX 82,100 MIN 2,160 CFSM 1.85 IN 25.17
WTR YR 1974 TOTAL 5,712,140 MEAN 15,650 MAX 82,100 MIN 2,340 CFSM 1.87 IN 25.39

KANAWHA RIVER BASIN

03193830 Gilmer Run near Marlinton, W. Va.

LOCATION.--Lat 38°19'12", long 80°05'52", Pocahontas County, on left bank 8.0 ft (2.4 m) upstream from culvert on Forest Service Road 251, and 6.8 mi (10.9 km) north of Marlinton.

DRAINAGE AREA.--1.80 mi² (4.66 km²).

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

GAGE.--Water-stage and rainfall recorders and concrete dam and culvert control. Altitude of gage is 3,120 ft (951 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 4.10 ft³/s (0.116 m³/s), 30.93 in/yr (786 mm/yr).

EXTREMES.--Current year: Maximum discharge, 190 ft³/s (5.38 m³/s) Jan. 10, gage height, 6.91 ft (2.106 m), from rating curve extended as explained below; minimum, 0.03 ft³/s (0.001 m³/s) July 22, 23, Sept. 30, gage height, 3.63 ft (1.106 m).

Period of record: Maximum discharge, 190 ft³/s (5.38 m³/s) Jan. 10, 1974, gage height, 6.91 ft (2.106 m), from rating curve extended above 120 ft³/s (3.40 m³/s) on basis of culvert rating computation; minimum daily, 0.01 ft³/s (<0.001 m³/s) July 12, Sept. 30, Oct. 1, 1968, July 4, 1969, Aug. 8, 1970, Sept. 21-26, 1972.

REMARKS.--Records good. Rainfall records collected at site from June 1968 to July 1974 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

REVISIONS (WATER YEARS).--WRD W. Va. 1972: 1969-71(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	19	2.9	5.8	2.3	4.7	1.7	.47	14	2.3	.10	.59
2	19	5.5	2.3	4.0	1.7	4.5	2.7	2.6	53	1.4	.06	.37
3	5.5	2.7	1.9	6.2	1.8	3.8	2.6	2.7	11	1.0	.42	1.5
4	2.0	1.7	1.4	8.1	2.1	2.7	31	1.9	4.0	.81	.74	2.9
5	1.2	6.8	14	5.0	2.0	2.3	8.4	2.0	2.2	.96	.74	1.3
6	.66	4.3	7.4	3.6	1.6	2.6	4.0	1.6	1.6	.96	.34	.83
7	.47	2.4	3.8	2.6	1.4	8.4	2.6	1.3	1.2	.89	.14	5.2
8	.81	1.9	2.6	1.7	2.0	5.5	4.0	24	.97	.57	.22	2.1
9	.81	1.7	2.4	7.4	1.9	3.3	4.5	10	.82	.38	.62	1.2
10	.74	1.2	2.1	44	1.8	2.4	2.8	3.8	.69	.28	.47	.88
11	.57	1.0	1.7	39	1.7	11	2.1	26	.54	.24	.26	.62
12	.42	.96	1.5	12	1.6	28	1.7	19	.39	.16	.21	1.3
13	.33	1.1	1.9	7.8	1.3	12	1.7	5.0	.30	.10	.13	1.1
14	.28	1.2	2.7	6.2	1.7	5.2	1.6	2.6	.34	.08	1.5	.69
15	.19	1.2	2.3	2.4	2.8	3.3	1.4	1.3	1.0	.47	.60	.49
16	.16	2.9	2.1	2.1	5.0	4.0	1.3	1.2	10	.38	.31	.34
17	.16	2.4	1.9	1.7	3.6	4.0	1.1	1.1	4.5	.13	.31	.24
18	.16	1.9	1.5	1.6	2.6	3.3	.96	1.1	2.0	.10	1.4	.18
19	.13	3.3	1.3	1.4	1.8	16	.89	1.0	1.3	.06	2.4	.12
20	.13	2.7	28	1.3	1.7	8.1	.74	.95	1.6	.08	.96	.10
21	.13	2.4	27	13	1.8	10	.61	.90	1.3	.06	.45	.11
22	.13	2.7	16	12	14	6.5	.61	.85	1.2	.04	.29	.12
23	.13	2.3	7.4	5.0	7.8	3.8	1.3	1.0	5.2	.19	.19	.07
24	.10	2.0	3.6	3.3	4.3	2.6	1.0	.95	2.9	1.4	.13	.06
25	.10	2.0	3.1	18	3.3	1.8	.89	.85	1.9	.33	.10	.06
26	.10	2.3	84	12	2.7	1.4	.74	.80	1.3	.28	.08	.06
27	.10	10	27	9.2	2.1	1.3	.61	.75	.96	.38	.05	.04
28	.24	19	9.2	5.5	1.7	1.1	.57	.70	3.8	.16	.24	.04
29	2.0	8.1	6.5	5.8	-----	1.1	.57	1.0	11	.38	.61	.04
30	14	4.5	12	4.0	-----	1.4	.52	13	3.1	.89	.43	.04
31	16	-----	5.8	2.7	-----	1.6	-----	8.3	-----	.24	.32	-----
TOTAL	67.95	121.16	287.3	254.4	80.1	167.7	85.21	138.72	144.11	15.70	14.82	22.69
MEAN	2.19	4.04	9.27	8.21	2.86	5.41	2.84	4.47	4.80	.51	.48	.76
MAX	19	19	84	44	14	28	31	26	53	2.3	2.4	5.2
MIN	.10	.96	1.3	1.3	1.3	1.1	.52	.47	.30	.04	.05	.04
CFSM	1.22	2.24	5.15	4.56	1.59	3.01	1.58	2.48	2.67	.28	.27	.42
IN.†	1.40	2.50	5.94	5.26	1.66	3.47	1.76	2.87	2.98	.32	.31	.47
IN.††	5.21	2.97	5.24	5.87	1.15	4.38	2.60	-	-	3.25	-	-

CAL YR 1973 TOTAL 1,727.87 MEAN 4.73 MAX 84 MIN .02 CFSM 2.63 IN† 35.71
WTR YR 1974 TOTAL 1,399.86 MEAN 3.84 MAX 84 MIN .04 CFSM 2.13 IN† 28.93

PEAK DISCHARGE (BASE, 80 CFS)

† Runoff.
†† Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1415	6.55	164	5-11	2000	6.10	133
1-10	1130	6.91	190	6-2	0400	5.86	116
4-4	0645	5.89	118				

KANAWHA RIVER BASIN

129

03194700 Elk River below Webster Springs, W. Va.

LOCATION.--Lat 38°35'50", long 80°29'20", Webster County, on right bank 10 ft (3 m) upstream from swinging footbridge, 6.5 mi (10.5 km) upstream from town of Centralia, 8.9 mi (14.3 km) southwest of Salisbury Station, 8.9 mi (14.3 km) northwest of Webster Springs, and at mile 122.7 (197.4 km).

DRAINAGE AREA.--268 mi² (694 km²).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,020 ft (311 m), by barometer.

AVERAGE DISCHARGE.--15 years, 703 ft³/s (19.91 m³/s), 35.62 in/yr (905 mm/yr).

EXTREMES.--Current year: Maximum discharge, 23,900 ft³/s (677 m³/s) June 2, gage height, 13.97 ft (4.258 m), from rating curve extended above 11,000 ft³/s (312 m³/s); minimum, 50 ft³/s (1.42 m³/s) Oct. 28; minimum gage height 3.28 ft (1.000 m) Sept. 30.

Period of record: Maximum discharge, 23,900 ft³/s (677 m³/s) June 2, 1974, gage height, 13.97 ft (4.258 m), from rating curve extended above 11,000 ft³/s (312 m³/s); minimum, 6.5 ft³/s (0.18 m³/s) Oct. 1, 1959; minimum gage height, 3.01 ft (0.917 m) Oct. 1, 1959, Aug. 18, 1965.

Flood in 1861, probably in September, reached a stage of 26.34 ft (8.028 m) and flood of July 26, 1896, reached a stage of 25.87 ft (7.885 m), present datum, at site 0.2 mi (0.3 km) upstream, from levels to floodmarks pointed out by a local resident.

REMARKS.--Records good. Records of water temperatures, instantaneous suspended-sediment discharge, and turbidity for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	579	3,290	1,090	1,480	534	764	380	328	3,320	625	119	569
2	814	2,140	838	1,200	484	1,230	618	341	13,200	527	85	472
3	1,170	1,300	692	1,280	668	1,510	1,230	496	4,280	400	70	1,060
4	729	847	583	2,810	639	1,260	3,370	874	2,030	314	69	1,490
5	493	782	541	1,980	569	982	2,940	764	1,210	262	89	883
6	347	1,060	590	1,360	496	847	1,720	660	804	562	97	569
7	256	829	520	982	639	1,050	1,140	555	604	514	82	724
8	228	660	448	732	919	1,510	1,010	460	490	436	70	684
9	342	646	472	708	804	1,170	1,760	748	1,040	310	83	520
10	454	562	436	3,920	660	946	1,570	1,040	527	241	134	418
11	416	460	390	8,100	597	856	1,230	708	380	223	126	341
12	316	406	365	4,340	514	2,350	964	856	297	195	108	277
13	237	385	740	2,210	576	2,620	812	2,090	251	148	95	234
14	206	412	1,660	1,480	1,570	1,690	732	1,250	206	117	99	277
15	211	430	1,100	1,090	1,760	1,160	716	865	177	102	83	301
16	168	1,520	847	847	1,270	973	625	639	478	162	93	244
17	137	1,680	724	618	946	1,180	541	496	772	189	131	199
18	116	1,180	583	508	716	946	472	460	508	124	145	165
19	102	1,430	527	454	604	2,200	418	406	350	95	136	136
20	93	1,440	1,740	555	820	2,870	370	332	337	95	618	122
21	86	1,100	4,360	625	847	2,210	323	285	514	110	406	112
22	79	847	2,240	1,060	928	2,310	297	255	1,430	85	293	117
23	71	676	1,500	429	1,500	1,600	576	355	2,030	72	192	114
24	65	569	1,140	716	1,120	1,130	764	508	2,400	76	136	95
25	62	508	1,050	1,560	973	812	653	472	1,370	131	108	82
26	57	472	7,230	1,610	756	639	555	400	982	131	91	72
27	53	829	5,700	1,310	618	527	484	332	668	117	82	67
28	53	2,920	2,610	1,020	590	448	418	281	541	117	80	62
29	81	2,260	1,680	419	-----	390	370	273	1,020	102	82	60
30	306	1,490	2,170	756	-----	365	332	3,290	829	124	424	55
31	3,170	-----	1,720	639	-----	400	-----	2,720	-----	180	700	-----
TOTAL	11,497	33,136	46,286	47,698	23,117	39,045	27,390	23,539	43,045	6,886	5,126	10,521
MEAN	371	1,105	1,493	1,539	826	1,260	913	759	1,435	222	165	351
MAX	3,170	3,290	7,230	8,100	1,760	2,870	3,370	3,290	13,200	625	700	1,490
MIN	53	385	365	454	484	365	297	255	177	72	69	55
CFSM	1.38	4.12	5.57	5.74	3.08	4.70	3.41	2.83	5.35	.83	.62	1.31
IN.	1.60	4.60	6.42	6.62	3.21	5.42	3.80	3.27	5.97	.96	.71	1.46

CAL YR 1973 TOTAL 283,413 MEAN 776 MAX 7,230 MIN 41 CFSM 2.90 IN 39.34
WTR YR 1974 TOTAL 317,286 MEAN 869 MAX 13,200 MIN 53 CFSM 3.24 IN 44.04

PEAK DISCHARGE (BASE, 8,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1900	10.58	12,000	6-2	1100	13.97	23,900
1-11	1500	9.89	10,000				

KANAWHA RIVER BASIN

03195100 Right Fork Holly River at Guardian, W. Va.

LOCATION.--Lat 38°38'08", long 80°27'58", Webster County, on right bank at Guardian, 50 ft (15 m) upstream from Bear Run, and at mile 8.1 (13.0 km).

DRAINAGE AREA.--51.1 mi² (132.3 km²).

PERIOD OF RECORD.--March to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 1,078.00 ft (328.574 m) above mean sea level.

EXTREMES.--Maximum discharge during period, 4,500 ft³/s (127 m³/s) June 2, gage height, 12.55 ft (3.825 m), from rating curve extended above 2,600 ft³/s (73.6 m³/s); minimum, 5.4 ft³/s (0.15 m³/s) July 22, Aug. 7, 8, gage height, 2.92 ft (0.890 m).

REMARKS.--Records good. Records of water temperatures and turbidity for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						110	46	52	575	96	9.0	120
2						200	66	46	2,260	64	6.9	88
3						300	111	69	605	42	6.5	242
4						240	578	73	288	31	7.3	378
5						190	443	79	160	25	8.6	174
6						128	260	76	94	23	7.3	94
7						192	170	64	64	19	5.9	102
8						288	172	53	44	16	6.0	85
9						223	313	68	34	13	31	64
10						170	313	53	27	11	36	50
11						158	245	47	25	16	16	38
12						437	196	166	20	12	16	31
13						434	158	355	17	8.6	18	28
14						295	128	223	14	7.3	13	78
15						190	113	138	13	8.0	9.3	86
16						176	94	89	29	14	14	62
17						213	83	65	25	9.3	85	44
18						194	73	61	16	6.4	34	33
19						368	64	48	12	5.8	46	26
20						464	52	39	20	6.6	58	20
21						415	44	35	115	6.9	44	20
22						467	42	41	192	5.6	27	23
23						308	115	116	318	5.6	20	16
24						198	134	146	338	8.0	15	12
25						130	116	146	184	8.6	12	11
26						97	96	115	113	14	9.3	6.9
27						78	79	82	71	47	8.3	6.6
28						64	66	59	100	17	8.3	6.6
29					-----	57	56	62	243	11	12	6.6
30					-----	56	47	1,020	156	20	240	6.5
31		-----			-----	54	-----	536	-----	14	164	-----
TOTAL						6,894	4,473	4,222	6,172	591.7	993.7	1,958.2
MEAN						222	149	136	206	19.1	32.1	65.3
MAX						467	578	1,020	2,260	96	240	378
MIN						54	42	35	12	5.6	5.9	6.5
CFSM						4.34	2.92	2.66	4.03	.37	.63	1.28
IN.						5.02	3.26	3.07	4.49	.43	.72	1.43

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4- 4	1130	6.92	918	6- 2	0830	12.55	4,500
5-30	1315	8.32	1,560				

KANAWHA RIVER BASIN

131

03195250 Left Fork Holly River near Replete, W. Va.

LOCATION.--Lat 38°41'19", long 80°26'01", Webster County, on left bank at Poling, 100 ft (30 m) downstream from Potts Run, 1.8 mi (2.9 km) southeast of Replete, and at mile 8.4 (13.5 km).

DRAINAGE AREA.--48.1 mi² (124.6 km²).

PERIOD OF RECORD.--March to September 1974.

GAGE.--Water-stage recorder. Altitude of gage is 1,190 ft (363 m), from topographic map.

EXTREMES.--Maximum discharge during period, 2,390 ft³/s (67.7 m³/s) June 2, gage height, 10.74 ft (3.274 m); minimum, 6.4 ft³/s (0.18 m³/s) July 23, gage height, 4.61 ft (1.405 m).

REMARKS.--Records good. Records of water temperatures and turbidity for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						130	54	63	640	90	12	228
2						190	79	56	1,610	75	9.8	171
3						350	95	84	620	55	8.6	422
4						260	431	102	270	42	11	520
5						177	407	114	133	30	12	248
6						153	250	116	73	25	9.2	142
7						250	173	100	47	22	7.4	136
8						338	183	88	32	19	9.2	110
9						242	347	100	29	17	27	86
10						187	335	91	27	14	35	68
11						161	265	84	24	19	19	55
12						243	209	159	22	16	15	46
13						347	173	329	20	12	17	40
14						260	140	235	19	9.0	13	215
15						183	123	165	17	10	10	203
16						175	103	117	33	16	24	128
17						201	90	90	29	12	161	86
18						183	78	93	22	8.9	54	58
19						296	68	75	16	8.1	54	42
20						422	57	50	44	12	60	32
21						401	49	50	56	10	46	32
22						444	46	63	114	7.6	33	37
23						299	74	116	203	8.1	26	24
24						199	68	187	296	16	19	20
25						134	66	181	181	12	15	17
26						106	62	153	114	16	13	16
27						85	57	122	73	29	11	14
28						70	52	90	61	15	12	13
29					-----	62	47	84	146	12	17	12
30					-----	62	44	410	120	35	380	12
31		-----			-----	61	-----	410	-----	18	296	-----
TOTAL						6,671	4,225	4,177	5,091	690.7	1,436.2	3,233
MEAN						215	141	135	170	22.3	46.3	108
MAX						444	431	410	1,610	90	380	520
MIN						61	44	50	16	7.6	7.4	12
CFSM						4.47	2.93	2.81	3.53	.46	.96	2.25
IN.						5.16	3.27	3.23	3.94	.53	1.11	2.50

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-2	0915	10.74	2,390	9-3	2330	8.06	704

KANAWHA RIVER BASIN

03195400 Sutton Lake at Sutton, W. Va.

LOCATION.--Lat 38°39'40", long 80°41'40", Braxton County, at Sutton Dam on Elk River, 1.0 mi (1.6 km) upstream from Sutton, and at mile 101.1 (162.7 km).

DRAINAGE AREA.--537 mi² (1,391 km²).

PERIOD OF RECORD.--October 1960 to current year, monthend contents only.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 111,400 acre-ft (137 hm³) June 3, elevation, 950.19 ft (289.618 m); minimum, 4,090 acre-ft (5.04 hm³) Mar. 29, elevation 850.16 ft (259.129 m).
Period of record: Maximum contents, 111,400 acre-ft (137 hm³) June 3, 1974, elevation, 950.19 ft (289.618 m); minimum since initial filling, 734 acre-ft (0.905 hm³) Apr. 1, 1961, elevation, 832.33 ft (253.694 m).

REMARKS.--Reservoir is formed by concrete gravity-type dam completed in 1961; closure of dam was made in April 1959 and storage above minimum-pool elevation began Feb. 26, 1961. Spillway equipped with a 6 tainter gates 40 ft (12.2 m) long by 31 ft (9.4 m) high and 5 sluice gates 5.67 ft (1.728 m) wide by 10 ft (3.0 m) high. Total level-pool capacity at elevation 1,000 ft (304.8 m), flood-control pool elevation, is 265,300 acre-ft (327 hm³) of which 261,200 acre-ft (322 hm³) is controlled storage above elevation 850 ft (259.1 m), minimum-pool elevation. Reservoir is used for flood control.

COOPERATION.--Records furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)	Change in Contents (equivalent in cfs)
Sept. 30.....	914.73	49,890	-	-
Oct. 31.....	896.11	30,120	-19,770	-322
Nov. 30.....	880.80	18,340	-11,780	-198
Dec. 31.....	873.95	14,110	-4,230	-69
CAL YR 1973	-	-	+9,880	+14
Jan. 31.....	856.47	6,090	-8,020	-130
Feb. 28.....	850.58	4,210	-1,880	-34
Mar. 31.....	851.27	4,400	+190	+3
Apr. 30.....	922.54	60,480	+56,080	+942
May 31.....	925.11	64,310	+3,830	+62
June 30.....	925.20	64,450	+140	+2
July 31.....	925.45	64,830	+380	+6
Aug. 31.....	925.14	64,350	-480	-8
Sept. 30.....	924.56	63,480	-870	-15
WTR YR 1974	-	-	+13,590	+19

KANAWHA RIVER BASIN

133

03195500 Elk River at Sutton, W. Va.

LOCATION.--Lat 38°39'45", long 80°42'35", Braxton County, on left bank 150 ft (46 m) upstream from highway bridge at Sutton, 0.5 mi (0.8 km) upstream from Granny Creek, 0.9 mi (1.4 km) downstream from Sutton Dam, 2.5 mi (4.0 km) downstream from Wolf Creek, and at mile 100.1 (161.1 km).

DRAINAGE AREA.--543 mi² (1,406 km²).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only October 1938 to February 1939, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft (243.840 m) above mean sea level. Prior to Apr. 5, 1940, nonrecording gage and Apr. 5, 1940, to Sept. 30, 1960, water-stage recorder at site 150 ft (46 m) downstream at datum 8.03 ft (2.448 m) higher.

AVERAGE DISCHARGE.--36 years, 1,124 ft³/s (31.83 m³/s), 28.11 in/yr (714 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 9,760 ft³/s (276 m³/s) Jan. 15, gage height, 21.76 ft (6.632 m); minimum, 65 ft³/s (1.84 m³/s) July 21, gage height, 10.63 ft (3.240 m).

Period of record: Maximum discharge, 34,200 ft³/s (969 m³/s) Jan. 29, 1957, gage height, 39.30 ft (11.979 m), present datum; minimum, 0.4 ft³/s (0.011 m³/s) Oct. 25, 26, 28, 29, 1953; minimum gage height, 9.87 ft (3.008 m) Oct. 25, 1953, present datum.

Flood of Mar. 13, 1918, reached a stage of 45.2 ft (13.78 m), present datum, from floodmarks, discharge, about 49,000 ft³/s (1,390 m³/s), from rating curve extended above 28,000 ft³/s (793 m³/s).

REMARKS.--Records good. Flow regulated since 1960 by Sutton Lake (see sta 03195400). Records of water temperatures and turbidity for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1305: 1942(M), 1948-50(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	803	4,140	4,480	4,500	1,340	1,010	613	87	5,060	1,130	200	1,080
2	859	4,100	3,280	4,030	1,250	1,630	662	88	3,400	1,010	202	1,020
3	1,290	3,830	2,160	3,400	1,290	2,580	1,070	168	6,710	567	173	1,200
4	1,410	2,320	1,740	3,900	1,320	2,500	2,420	491	8,580	556	114	3,120
5	1,410	1,590	1,330	4,280	1,320	2,130	5,770	775	8,360	401	97	1,600
6	1,390	1,570	1,090	4,010	1,230	1,700	3,820	961	6,180	364	98	836
7	1,020	1,570	922	2,960	1,130	1,570	1,920	961	3,670	591	100	1,240
8	761	1,550	712	908	1,370	1,750	666	767	2,590	702	121	1,130
9	845	1,550	726	1,370	1,650	2,020	188	853	1,740	497	131	882
10	982	1,340	719	2,790	1,570	1,990	181	1,120	1,500	357	326	628
11	974	1,180	614	2,890	1,240	1,930	128	1,190	729	350	338	522
12	974	1,170	558	129	1,050	3,080	96	1,200	308	265	97	367
13	880	1,140	998	118	1,280	4,470	99	3,600	198	123	97	371
14	789	998	3,860	2,490	2,840	4,180	93	2,040	198	90	112	548
15	782	782	3,630	9,480	3,920	2,760	88	1,390	199	93	122	976
16	740	1,690	2,740	9,070	3,110	1,960	87	977	430	155	125	448
17	649	2,880	1,690	7,860	1,860	1,840	87	813	1,270	218	333	457
18	607	2,820	1,310	5,180	1,330	1,860	87	852	556	235	406	302
19	528	2,710	803	3,060	1,090	2,440	87	759	416	246	329	242
20	474	2,510	831	2,140	1,110	4,260	87	470	454	241	670	255
21	468	2,300	3,830	1,450	1,250	4,440	87	416	775	132	385	201
22	468	1,950	4,960	1,100	1,450	4,470	89	293	2,100	82	627	195
23	468	1,580	4,120	1,130	1,640	4,200	98	775	2,750	85	139	198
24	462	1,250	2,920	1,130	1,680	2,990	93	1,100	4,030	84	141	200
25	462	1,120	2,300	1,450	1,730	1,640	92	976	2,200	84	144	230
26	456	1,130	3,510	2,090	1,710	848	92	976	2,190	84	149	235
27	456	1,220	5,360	2,310	1,610	1,120	204	561	1,310	85	156	226
28	456	1,810	5,560	2,230	1,340	941	210	347	1,150	97	171	216
29	486	4,600	5,330	1,020	-----	723	89	678	2,340	138	217	206
30	733	5,290	5,080	1,420	-----	597	87	5,450	1,660	166	1,430	202
31	3,560	-----	4,850	1,390	-----	608	-----	6,450	-----	188	1,470	-----
TOTAL	26,642	63,690	82,013	91,285	44,710	70,237	19,390	37,584	73,053	9,416	9,220	14,333
MEAN	859	2,123	2,646	2,945	1,597	2,266	646	1,212	2,435	304	297	644
MAX	3,560	5,290	5,560	9,480	3,920	4,470	5,770	6,450	8,580	1,130	1,470	3,120
MIN	456	782	558	118	1,050	597	87	87	198	82	97	195

CAL YR 1973 TOTAL 495,058 MEAN 1,356 MAX 6,900 MIN 94
WTR YR 1974 TOTAL 546,573 MEAN 1,497 MAX 9,480 MIN 82
MEAN† 1,370 CFSM† 2.52 IN† 34.21
MEAN† 1,516 CFSM† 2.79 IN† 37.87

† Adjusted for change in contents in Sutton Lake.

KANAWHA RIVER BASIN

03195600 Granny Creek at Sutton, W. Va.

LOCATION.--Lat 38°40'36", long 80°42'47" (corrected), Braxton County, on right bank 10 ft (3 m) upstream from culvert on U.S. Highway 19, 0.7 mi (1.1 km) upstream from mouth, and 1.0 mi (1.6 km) northwest of Sutton.

DRAINAGE AREA.--6.98 mi² (18.08 km²).

PERIOD OF RECORD.--June 1965 to May 1967 (annual maximum only), June 1967 to current year.

GAGE.--Water-stage and rainfall recorders and concrete dam and culvert control. Altitude of gage is 840 ft (256 m), from topographic map. Prior to June 23, 1967, SR recorder at same site and datum.

AVERAGE DISCHARGE.--7 years, 10.2 ft³/s (0.289 m³/s), 19.84 in/yr (504 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,190 ft³/s (33.7 m³/s) June 1, gage height, 11.88 ft (3.621 m), from rating curve extended as explained below; minimum 0.12 ft³/s (0.003 m³/s) Aug. 2, gage height, 2.73 ft (0.832 m).

Period of record: Maximum discharge, 1,190 ft³/s (33.7 m³/s) June 1, 1974, gage height, 11.88 ft (3.621 m), from rating curve extended above 320 ft³/s (9.06 m³/s) on basis of culvert rating computation; minimum, 0.02 ft³/s (0.001 m³/s) Oct. 1, 2, 1968, gage height, 2.64 ft (0.805 m).

REMARKS.--Records good. Rainfall records collected at site since June 1967 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	23	9.2	23	5.2	6.3	3.7	1.9	230	5.7	.15	11
2	2.1	9.5	6.6	14	15	42	11	2.4	130	3.7	.12	8.4
3	1.6	5.7	5.4	62	17	22	6.6	7.2	22	2.4	.30	20
4	3.4	4.0	4.7	65	11	12	122	4.0	9.5	1.8	1.9	15
5	8.3	18	6.3	21	7.8	9.9	22	2.8	5.7	1.5	.62	5.7
6	2.9	10	5.2	14	7.2	9.9	13	2.4	3.7	1.3	1.5	3.7
7	2.2	6.3	4.0	11	13	25	8.8	2.0	2.6	1.1	1.3	4.0
8	2.0	4.9	3.5	8.8	12	17	23	1.8	2.0	.87	1.9	2.6
9	1.7	23	6.0	19	9.9	11	44	4.2	1.8	.70	3.7	1.9
10	1.5	11	6.0	135	9.2	8.8	21	2.4	1.4	1.1	1.5	1.8
11	1.3	7.2	5.4	139	9.9	21	13	1.9	1.1	1.8	1.3	1.5
12	1.2	5.4	5.2	32	15	35	9.9	44	1.1	.87	1.4	1.2
13	1.2	4.2	70	19	32	24	13	15	.87	.62	.87	.96
14	1.6	3.7	59	14	74	14	9.9	6.9	.78	.55	.55	3.5
15	1.1	7.2	20	12	25	9.9	7.5	4.2	.70	.62	.42	1.8
16	.98	53	13	9.9	13	22	6.0	3.0	6.3	.62	.78	1.3
17	.90	13	9.5	8.4	12	19	4.9	2.4	2.8	.48	1.6	1.1
18	.86	8.4	7.2	6.9	9.2	13	4.2	7.2	1.3	.36	.62	.87
19	.80	7.8	6.3	6.0	8.1	60	3.7	3.5	1.6	.36	.62	.78
20	.78	6.0	11	5.4	12	24	3.2	2.2	4.9	.36	.78	.70
21	.70	5.7	22	6.0	9.2	61	2.8	1.8	13	.30	.70	1.6
22	.61	5.2	14	5.2	15	27	2.6	2.0	6.3	.25	.42	1.4
23	.60	4.4	12	4.9	13	15	8.8	5.7	58	.48	.30	.87
24	.60	4.4	15	7.2	10	11	4.7	3.5	17	.96	.25	.70
25	.60	4.7	19	18	13	7.5	3.7	2.0	41	.42	.20	.62
26	.58	6.3	106	14	11	6.3	3.0	1.6	32	.42	.20	.55
27	.52	87	30	11	8.4	5.2	2.6	1.4	9.2	.55	.20	.55
28	4.0	156	14	10	7.2	4.7	2.2	1.1	60	.36	1.3	.48
29	26	31	18	9.2	-----	4.4	1.9	8.4	34	.25	21	.42
30	39	15	30	7.5	-----	4.2	1.8	66	11	.30	47	.36
31	29	-----	39	6.3	-----	4.4	-----	32	-----	.25	15	-----
TOTAL	140.63	551.0	582.5	724.7	404.3	556.5	384.5	246.9	711.65	31.35	108.50	95.36
MEAN	4.54	18.4	18.8	23.4	14.4	18.0	12.8	7.96	23.7	1.01	3.50	3.18
MAX	39	156	106	139	74	61	122	66	230	5.7	47	20
MIN	.52	3.7	3.5	4.9	5.2	4.2	1.8	1.1	.70	.25	.12	.36
CFSM	.65	2.64	2.69	3.35	2.06	2.58	1.83	1.14	3.40	.14	.50	.46
IN.†	.75	2.94	3.10	3.86	2.15	2.97	2.05	1.32	3.79	.17	.58	.51
IN.††	4.50	6.48	5.16	4.69	-	3.96	4.05	6.20	-	2.21	-	-
CAL YR 1973	TOTAL	4,640.45	MEAN	12.7	MAX	217	MIN	.22	CFSM	1.82	IN†	24.73
WTR YR 1974	TOTAL	4,537.89	MEAN	12.4	MAX	230	MIN	.12	CFSM	1.78	IN†	24.18

PEAK DISCHARGE (BASE, 300 CFS, REVISED)

† Runoff.
†† Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	0030	7.86	584	6-1	1245	11.88	1,190
1-10	1030	6.67	406	6-25	2130	6.84	431
4-4	0545	7.82	578	6-28	1845	6.21	336

KANAWHA RIVER BASIN

135

03196500 Birch River at Herold, W. Va.

LOCATION.--Lat 38°34'29", long 80°48'04", Braxton County, on left bank at downstream side of County Route 40 highway bridge, 100 ft (30 m) downstream from Long Run, 0.8 mi (1.3 km) northeast of Herold, and at mile 11.3 (18.2 km).

DRAINAGE AREA.--124 mi² (321 km²).

PERIOD OF RECORD.--October 1929 to December 1931 (gage height only), occasional low-flow measurements, water years 1930-31, 1939, 1941, 1960-61, 1964, 1967, January to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 934.46 ft (284.823 m) above mean sea level.

EXTREMES.--Maximum discharge during period, 8,900 ft³/s (252 m³/s) June 2, gage height, 12.80 ft (3.901 m); minimum daily, 14 ft³/s (0.40 m³/s) Aug. 15, 16.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					189	238	118	92	968	243	17	100
2					199	320	186	91	4,780	209	15	89
3					256	328	286	107	1,290	136	16	91
4					229	278	1,870	99	520	100	17	189
5					206	240	1,060	90	283	83	19	114
6					191	223	552	91	185	73	18	77
7					207	264	377	87	138	75	16	104
8					238	335	413	78	107	57	16	97
9					240	305	870	99	92	45	18	77
10					223	246	700	89	74	40	17	64
11					220	368	504	81	64	63	17	48
12					220	1,790	407	280	52	41	18	36
13					383	1,310	330	483	43	29	16	34
14					835	660	268	313	33	24	15	73
15					672	419	256	212	29	27	14	76
16					455	392	223	158	83	26	14	60
17					328	452	200	129	86	24	61	45
18					243	419	177	151	47	22	23	33
19					211	710	156	152	31	22	21	21
20					237	885	135	129	84	26	26	18
21					230	935	119	105	194	23	28	22
22					272	1,040	111	89	232	21	19	35
23					283	592	157	172	359	20	18	23
24					270	389	149	203	524	21	17	20
25					278	262	143	189	323	20	17	18
26					232	211	130	151	243	23	16	17
27					207	179	119	123	178	38	16	16
28					200	156	108	97	524	20	17	18
29					-----	141	100	100	720	19	19	18
30				224	-----	135	95	1,050	389	18	214	17
31		-----		221	-----	136	-----	693	-----	18	114	-----
TOTAL					7,954	14,358	10,319	5,983	12,675	1,606	889	1,650
MEAN					284	463	344	193	423	51.8	28.7	55.0
MAX					835	1,790	1,870	1,050	4,780	243	214	189
MIN					189	135	95	78	29	18	14	16
CFSM					2.29	3.73	2.77	1.56	3.41	.42	.23	.44
IN.					2.39	4.31	3.10	1.79	3.80	.48	.27	.50

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-4	1230	8.88	3,070	6-2	0945	12.80	8,900

KANAWHA RIVER BASIN

03196600 Elk River near Frametown, W. Va.

LOCATION.--Lat 38°35'34", long 80°53'06", Braxton County, on right bank opposite mouth of Birch River, at village of Glendon, 2.2 mi (3.5 km) upstream from Strange Creek, 3.2 mi (5.1 km) southwest of Frametown, and at mile 80.7 (129.8 km). Records include flow of Birch River.

DRAINAGE AREA.--752 mi² (1,948 km²), includes that of Birch River.

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

GAGE.--Water-stage recorder. Datum of gage is 775.51 ft (236.375 m) above mean sea level. Prior to Mar. 25, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 1,555 ft³/s (44.04 m³/s), 28.08 in/yr (713 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 19,400 ft³/s (549 m³/s) June 2, gage height, 14.93 ft (4.551 m); minimum, 103 ft³/s (2.92 m³/s) July 22, 23, gage height, 1.90 ft (0.579 m).
Period of record: Maximum discharge, 21,600 ft³/s (612 m³/s) Mar. 15, 1967, gage height, 16.05 ft (4.892 m); minimum, 9.0 ft³/s (0.25 m³/s) Sept. 28, 29, 1959, gage height, 1.44 ft (0.439 m).

REMARKS.--Records good. Flow regulated since 1960 by Sutton Lake (see sta 03195400). Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	899	5,480	5,310	5,680	1,580	1,340	756	194	7,770	1,580	225	1,270
2	866	4,920	4,020	4,950	1,600	1,960	921	188	12,200	1,230	270	1,300
3	1,210	4,480	2,670	4,660	1,830	3,070	1,320	234	6,510	837	220	1,100
4	1,460	3,100	2,170	6,630	1,690	3,070	5,080	446	9,470	646	177	3,560
5	1,460	2,000	1,650	5,650	1,620	2,710	7,460	748	8,850	562	139	2,150
6	1,420	2,000	1,300	4,890	1,540	2,190	5,130	1,020	7,510	439	119	1,190
7	1,200	1,880	1,130	3,920	1,430	2,110	2,870	1,020	3,940	527	114	1,140
8	816	1,790	883	1,790	1,580	2,290	1,620	918	3,120	696	123	1,110
9	786	2,130	836	1,670	2,040	2,550	1,780	865	1,880	659	151	1,170
10	969	1,890	931	5,640	1,960	2,460	1,240	1,080	1,700	396	213	700
11	986	1,460	791	10,200	1,700	2,530	882	1,290	961	439	419	660
12	980	1,370	705	2,670	1,390	5,210	643	2,050	478	393	248	433
13	947	1,300	1,420	1,100	1,870	6,560	561	3,950	253	210	127	418
14	801	1,230	5,960	1,480	3,620	5,440	496	3,050	232	144	119	468
15	785	923	5,170	9,320	5,050	3,910	459	1,900	228	126	137	1,090
16	777	2,350	3,630	9,750	4,250	2,730	393	1,210	304	143	142	577
17	662	3,890	2,430	8,670	2,620	2,680	351	1,000	1,190	201	189	494
18	643	3,530	1,760	5,990	1,830	2,610	317	1,010	836	262	588	434
19	561	3,340	1,220	3,630	1,390	3,410	289	1,110	405	277	249	263
20	487	3,120	1,040	2,490	1,440	5,470	261	641	524	265	643	251
21	476	2,790	3,860	1,920	1,510	6,120	236	581	864	256	858	240
22	476	2,500	5,880	1,230	1,830	6,260	225	428	2,340	126	521	218
23	472	1,930	5,040	1,260	2,120	5,350	350	665	2,990	111	334	199
24	470	1,570	3,750	1,270	2,120	4,090	318	1,300	5,160	130	160	187
25	467	1,280	3,060	1,660	2,220	2,370	283	1,170	2,910	115	155	187
26	464	1,340	5,680	2,500	2,150	1,330	260	1,110	2,650	167	155	222
27	464	3,100	7,640	2,880	2,010	1,280	254	902	1,760	355	155	221
28	485	7,980	6,590	2,770	1,820	1,190	397	446	1,780	159	158	222
29	816	6,330	6,030	1,940	-----	971	262	484	3,710	143	213	217
30	1,970	6,270	6,550	1,450	-----	773	197	5,670	2,470	180	1,800	214
31	4,260	-----	6,350	1,690	-----	773	-----	8,610	-----	201	1,940	-----
TOTAL	29,535	87,273	105,456	121,350	57,810	94,807	35,611	45,290	94,995	11,975	11,011	21,905
MEAN	953	2,909	3,402	3,915	2,065	3,058	1,187	1,461	3,167	386	355	730
MAX	4,260	7,980	7,640	10,200	5,050	6,560	7,460	8,610	12,200	1,580	1,940	3,560
MIN	464	923	705	1,100	1,390	773	197	188	228	111	114	187
CAL YR 1973	TOTAL 676,094	MEAN 1,852	MAX 11,200	MIN 122	MEAN† 1,866	CFSM† 2.48	IN† 33.66					
WTR YR 1974	TOTAL 717,018	MEAN 1,964	MAX 12,200	MIN 111	MEAN† 1,983	CFSM† 2.64	IN† 35.84					

† Adjusted for change in contents in Sutton Lake.

KANAWHA RIVER BASIN

137

03196750 Buffalo Creek at Clay, W. Va.

LOCATION.--Lat 38°27'16", long 81°04'01", Clay County, on right bank at downstream side of highway bridge, 0.7 mi (1.1 km) upstream from mouth, and 1.0 mi (1.6 km) southeast of Clay.

DRAINAGE AREA.--114 mi² (295 km²).

PERIOD OF RECORD.--February to September 1974.

GAGE.--Water-stage recorder. Altitude of gage is 710 ft (216 m), from topographic map.

EXTREMES.--Maximum discharge during period, 7,110 ft³/s (201 m³/s) June 2, gage height, 10.09 ft (3.075 m), from rating curve extended above 800 ft³/s (22.7 m³/s); minimum, 9.0 ft³/s (0.25 m³/s) Aug. 15, gage height, 0.38 ft (0.116 m).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						221	91	68	783	155	13	163
2						254	136	67	4,000	103	12	137
3						249	193	78	1,140	69	13	103
4						217	1,310	71	476	52	16	195
5						193	946	62	273	53	21	182
6						180	535	62	173	43	16	112
7						249	382	59	117	42	13	90
8						377	406	53	86	34	14	77
9						316	946	62	67	30	19	67
10						248	706	58	54	29	16	60
11						295	500	52	46	30	15	53
12						510	378	525	41	26	20	43
13						520	306	700	36	21	17	40
14						525	262	367	31	19	13	70
15						418	238	231	29	20	11	85
16						366	190	156	58	30	11	65
17						386	155	117	63	21	13	45
18						346	136	117	39	17	14	30
19						366	120	97	30	17	14	23
20						485	101	76	31	29	17	19
21					140	760	85	63	73	21	245	22
22					186	890	82	55	92	17	85	40
23					215	535	130	119	178	16	44	31
24					217	362	124	115	244	19	29	25
25					244	256	117	91	138	18	22	22
26					218	208	106	74	103	23	19	18
27					196	165	92	63	82	59	16	15
28					178	136	82	53	418	25	15	18
29					-----	120	74	100	450	18	31	17
30					-----	114	70	1,710	277	18	179	17
31		-----			-----	112	-----	750	-----	15	220	-----
TOTAL						10,379	8,999	6,271	9,628	1,089	1,203	1,884
MEAN						335	300	202	321	35.1	38.8	62.8
MAX						890	1,310	1,710	4,000	155	245	195
MIN						112	70	52	29	15	11	15
CFSM						2.94	2.63	1.77	2.82	.31	.34	.55
IN.						3.39	2.94	2.05	3.14	.36	.39	.61

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4- 4	1000	5.45	2,310	6- 2	0830	10.09	7,110
5-30	0200	5.80	2,620				

KANAWHA RIVER BASIN

03196800 Elk River at Clay, W. Va.

LOCATION.--Lat 38°27'36", long 81°05'15", Clay County, on right bank at downstream side of pier of highway bridge at Clay, 0.9 mi (1.4 km) downstream from Buffalo Creek, 2.1 mi (3.4 km) downstream from Lower Two Run Creek, and at mile 52.5 (84.5 km).

DRAINAGE AREA.--994 mi² (2,574 km²).

PERIOD OF RECORD.--October 1958 to current year. Gage-height records collected at same site since 1915 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 677.46 ft (206.490 m) above mean sea level. Prior to Mar. 27, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 1,938 ft³/s (54.88 m³/s), 26.48 in/yr (673 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 26,300 ft³/s (745 m³/s) June 2, gage height, 16.54 ft (5.041 m); minimum, 144 ft³/s (4.08 m³/s) July 25, 26, gage height, 0.82 ft (0.250 m).
Period of record: Maximum discharge, 48,000 ft³/s (1,360 m³/s) Mar. 15, 1967, gage height, 22.80 ft (6.949 m); minimum, 1.5 ft³/s (0.042 m³/s) Sept. 22, 1959, gage height, -0.13 ft (-0.040 m).
Flood of Mar. 14, 1918, reached a stage of 32.4 ft (9.88 m), from reports of National Weather Service.

REMARKS.--Records good. Flow regulated since 1960 by Sutton Lake (see sta 03195400).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	951	6,370	6,240	7,340	2,180	2,520	1,400	328	8,930	2,400	205	1,760
2	923	5,350	4,830	6,040	2,200	2,590	1,700	314	20,100	1,700	222	1,650
3	1,060	4,630	3,370	5,960	2,700	3,850	2,150	345	7,880	1,160	222	1,460
4	1,480	3,800	2,660	9,890	2,470	4,070	8,170	396	10,500	698	240	3,230
5	1,510	2,370	2,080	7,430	2,360	3,790	9,090	665	9,630	665	221	3,130
6	1,460	2,440	1,740	6,040	2,260	3,310	6,620	972	8,800	540	165	1,960
7	1,400	2,210	1,480	5,060	2,180	3,160	4,220	1,090	4,580	468	153	1,180
8	1,020	2,080	1,230	3,210	2,240	3,400	2,560	1,070	3,720	615	151	1,330
9	830	2,590	1,090	1,940	2,710	3,600	3,480	867	2,280	680	163	1,370
10	930	2,620	1,260	7,850	2,750	3,470	2,800	1,060	1,920	512	169	972
11	1,020	1,990	1,160	17,300	2,640	3,880	1,930	1,350	1,450	444	262	824
12	1,030	1,790	1,040	6,690	2,260	9,110	1,460	3,810	830	420	420	752
13	1,040	1,670	1,310	2,620	2,710	9,790	1,150	4,740	492	352	244	610
14	908	1,580	6,800	1,800	4,320	7,360	1,010	4,460	341	212	160	640
15	830	1,320	6,950	8,370	6,180	5,600	888	2,550	332	177	153	758
16	818	2,490	4,770	10,700	5,550	4,000	734	1,720	425	254	160	972
17	758	4,390	3,420	9,640	3,940	4,010	640	1,360	800	180	307	544
18	698	4,090	2,500	7,160	2,870	3,780	580	1,200	1,320	222	371	524
19	650	3,850	1,970	4,630	2,300	4,290	528	1,460	610	268	484	440
20	576	3,620	1,560	3,150	2,260	6,430	484	1,030	568	317	476	339
21	528	3,210	3,070	2,590	2,210	7,920	432	722	888	275	1,470	337
22	520	3,070	6,370	1,840	2,550	8,580	412	625	2,120	247	585	377
23	520	2,460	5,880	1,680	3,010	6,890	476	645	3,100	154	615	358
24	516	2,110	4,760	1,720	3,040	5,570	552	1,320	5,500	151	293	214
25	512	1,710	4,040	2,060	3,240	3,580	468	1,510	3,780	151	211	201
26	504	1,720	7,430	2,980	3,440	2,440	432	1,320	2,870	144	201	202
27	500	8,130	10,400	3,650	3,040	1,750	400	1,260	2,500	384	203	233
28	516	16,300	7,940	3,520	2,840	1,880	424	770	2,210	278	197	240
29	1,020	8,420	6,950	3,300	-----	1,650	476	650	4,360	177	315	240
30	4,260	7,140	8,300	1,810	-----	1,440	352	5,290	3,640	160	2,700	230
31	5,120	-----	8,310	2,290	-----	1,410	-----	10,500	-----	194	2,450	-----
TOTAL	34,408	115,520	130,910	160,260	82,450	135,120	56,018	55,399	116,476	14,599	14,188	27,077
MEAN	1,110	3,851	4,223	5,170	2,945	4,359	1,867	1,787	3,883	471	458	903
MAX	5,120	16,300	10,400	17,300	6,180	9,790	9,090	10,500	20,100	2,400	2,700	3,230
MIN	500	1,320	1,040	1,680	2,180	1,410	352	314	332	144	151	201

CAL YR 1973 TOTAL 881,664 MEAN 2,416 MAX 16,300 MIN 132 MEAN† 2,430 CFSM† 2.44 IN† 33.12
WTR YR 1974 TOTAL 942,425 MEAN 2,582 MAX 20,100 MIN 144 MEAN† 2,601 CFSM† 2.62 IN† 35.56

†Adjusted for change in contents in Sutton Lake.

KANAWHA RIVER BASIN

139

03197000 Elk River at Queen Shoals, W. Va.

LOCATION.--Lat 38°28'20", long 81°17'10", Kanawha County, on right bank 50 ft (15 m) upstream from Queen Shoals Creek, 100 ft (30 m) downstream from highway bridge at Queen Shoals, 4.0 mi (6.4 km) upstream from Big Sandy Creek, and at mile 25.8 (41.5 km). Records include flow of Queen Shoals Creek.

DRAINAGE AREA.--1,145 mi² (2,966 km²), includes that of Queen Shoals Creek.

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only October, November 1928, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 604.09 ft (184.127 m) above mean sea level. Prior to June 19, 1932, nonrecording gage and June 19, 1932, to Sept. 30, 1946, water-stage recorder, at bridge 100 ft (30 m) upstream at same datum.

AVERAGE DISCHARGE.--46 years, 2,003 ft³/s (56.72 m³/s), 23.76 in/yr (604 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 25,700 ft³/s (728 m³/s) Nov. 28, gage height, 16.49 ft (5.026 m); minimum, 149 ft³/s (4.22 m³/s) Aug. 16, gage height, 4.16 ft (1.268 m).
Period of record: Maximum discharge, 72,000 ft³/s (2,040 m³/s) July 5, 1932, gage height, 29.2 ft (8.90 m), from rating curve extended above 40,000 ft³/s (1,130 m³/s); minimum, 0.3 ft³/s (0.008 m³/s) Nov. 4, 5, 1953.

REMARKS.--Records good. Flow regulated since 1960 by Sutton Lake (see sta 03195400). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 783: Drainage area. WSP 1335: 1929-32, 1935(M), 1936, 1939, 1943(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,230	7,100	7,050	8,390	2,420	2,710	1,350	464	9,090	2,820	225	2,640
2	1,170	6,300	5,820	6,920	2,310	2,470	1,560	440	19,800	1,970	240	2,140
3	1,100	5,470	4,380	6,700	2,820	3,780	2,080	464	10,300	1,600	260	1,990
4	1,530	4,740	3,270	10,300	2,650	4,440	8,040	488	10,100	1,060	296	3,090
5	1,700	3,120	2,640	8,390	2,460	4,160	9,500	634	9,500	870	320	4,320
6	1,670	2,940	2,120	6,920	2,330	3,620	8,040	1,110	8,900	900	245	2,460
7	1,660	2,620	1,730	5,970	2,300	3,460	5,820	1,360	6,170	634	179	1,600
8	1,360	2,420	1,490	4,360	2,300	3,980	3,780	1,350	4,590	650	161	1,660
9	964	2,920	1,260	2,380	2,640	3,960	4,650	1,230	3,140	830	179	1,590
10	930	3,440	1,310	6,960	2,870	3,900	4,320	1,230	2,280	850	206	1,230
11	1,120	2,620	1,320	18,300	2,800	4,120	2,980	1,480	1,920	668	210	952
12	1,120	2,120	1,140	11,200	2,440	9,860	2,200	5,450	1,140	594	470	870
13	1,110	1,940	1,190	4,240	2,830	10,800	1,740	6,610	677	507	464	650
14	1,060	1,800	5,910	2,580	4,480	8,240	1,490	6,110	434	398	260	668
15	900	1,630	7,820	5,820	6,460	6,610	1,360	3,640	362	650	179	731
16	880	2,640	5,890	9,910	6,240	5,010	1,170	2,460	446	1,120	161	1,410
17	860	5,050	4,440	9,190	4,810	4,830	976	1,770	556	446	374	800
18	731	4,940	3,100	7,730	3,320	4,400	860	1,550	1,500	314	434	642
19	704	4,540	2,340	5,670	2,540	4,480	760	1,620	976	350	618	594
20	634	4,240	1,760	3,900	2,280	6,740	677	1,450	578	392	434	416
21	556	3,840	2,250	3,070	2,220	8,040	602	920	920	398	1,590	368
22	542	3,620	6,350	2,220	2,420	9,380	549	820	1,940	344	1,320	380
23	535	3,030	6,460	1,750	3,090	7,760	610	770	3,840	278	659	344
24	535	2,520	5,580	1,760	3,160	6,550	750	1,250	5,950	206	586	290
25	528	2,090	4,850	1,950	3,370	4,650	704	1,760	5,160	192	290	255
26	521	2,040	6,810	2,940	3,340	3,090	634	1,520	3,460	183	220	240
27	521	5,560	11,300	3,900	3,140	1,990	586	1,420	3,120	296	206	245
28	549	20,100	8,460	3,940	2,920	2,080	549	1,130	2,410	535	230	302
29	810	9,670	7,450	3,800	-----	1,830	659	740	4,260	308	302	290
30	4,940	7,760	8,480	2,220	-----	1,590	563	5,380	4,460	215	3,300	272
31	6,570	-----	8,720	2,540	-----	1,410	-----	10,400	-----	192	3,390	-----
TOTAL	39,040	132,820	142,690	175,920	86,960	149,940	69,559	67,020	127,979	20,770	18,008	33,439
MEAN	1,259	4,427	4,603	5,675	3,106	4,837	2,319	2,162	4,266	670	581	1,115
MAX	6,570	20,100	11,300	18,300	6,460	10,800	9,500	10,400	19,800	2,820	3,390	4,320
MIN	521	1,630	1,140	1,750	2,220	1,410	549	440	362	183	161	240

CAL YR 1973 TOTAL 975,990 MEAN 2,674 MAX 20,100 MIN 149 MEAN† 2,688 CFSM† 2.35 IN† 31.90
WTR YR 1974 TOTAL 1,064,145 MEAN 2,915 MAX 20,100 MIN 161 MEAN† 2,934 CFSM† 2.56 IN† 34.75

† Adjusted for change in contents in Sutton Lake.

KANAWHA RIVER BASIN

03197440 Left Hand Creek near Clendenin, W. Va.

LOCATION.--Lat 38°32'18", long 81°20'43", Kanawha County, on right bank 0.4 mi (0.6 km) downstream from Gabes Creek, 0.7 mi (1.1 km) upstream from Lick Branch, 3.4 mi (5.5 km) north of Clendenin, and at mile 1.3 (2.1 km).

DRAINAGE AREA.--27.8 mi² (72.0 km²).

PERIOD OF RECORD.--January to September 1974.

GAGE.--Water-stage recorder. Altitude of gage is 620 ft (189 m), from topographic map.

EXTREMES.--Maximum discharge during period, 295 ft³/s (8.35 m³/s) June 1; maximum gage height, 15.74 ft (4.798 m) July 15; minimum discharge, 0.91 ft³/s (0.026 m³/s) Aug. 2, 3, 7, 8, 27, gage height, 7.17 ft (2.185 m).

REMARKS.--Record fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					33	41	22	8.4	182	4.9	1.0	14
2					54	41	36	9.2	176	4.9	.91	13
3					63	39	32	12	92	3.9	.99	30
4					47	35	159	9.3	58	3.0	5.4	25
5					38	39	95	7.9	37	2.7	2.9	12
6					35	49	68	7.5	26	45	1.2	8.6
7					37	84	51	6.8	21	9.7	.96	7.5
8					36	77	54	6.2	18	6.4	2.7	5.7
9					33	55	96	6.2	17	4.7	6.3	5.3
10					30	42	71	5.6	14	5.3	5.8	5.8
11					30	101	54	5.7	12	7.0	6.6	4.5
12					34	170	45	202	11	4.0	9.1	6.1
13					45	115	47	98	8.8	2.8	4.5	8.4
14					51	77	43	53	7.8	2.2	2.6	17
15					41	58	37	38	9.2	72	1.7	9.9
16					37	95	30	28	15	57	5.7	7.0
17					32	84	24	32	8.6	20	49	5.6
18					27	61	21	82	7.2	12	20	4.4
19					27	60	19	50	6.8	9.8	10	3.5
20					27	53	16	34	12	10	5.2	2.6
21					22	93	15	25	23	6.5	4.7	5.8
22					32	85	14	26	15	4.6	2.9	5.1
23					33	62	16	109	72	4.0	2.1	2.7
24				23	31	48	13	65	23	4.0	1.6	2.0
25				28	36	36	12	37	12	2.9	1.3	1.7
26				31	32	31	11	28	10	3.8	1.1	1.6
27				33	30	26	9.6	22	7.6	3.8	1.0	1.6
28				53	28	23	9.0	18	7.0	2.3	5.3	5.5
29				66	-----	22	8.2	31	7.1	1.8	13	4.2
30				49	-----	23	7.9	97	5.8	1.6	77	2.4
31		-----		40	-----	25	-----	73	-----	1.2	19	-----
TOTAL					1,001	1,850	1,135.7	1,232.8	921.9	323.8	271.56	228.5
MEAN					35.8	59.7	37.9	39.8	30.7	10.4	8.76	7.62
MAX					63	170	159	202	182	72	77	30
MIN					22	22	7.9	5.6	5.8	1.2	.91	1.6
CFSM					1.29	2.15	1.36	1.43	1.10	.37	.32	.27
IN.					1.34	2.47	1.52	1.65	1.23	.43	.36	.31

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-11	2130	15.20	284	6- 1	1400	15.57	295
4- 4	0615	15.40	290	7-15	1800	15.74	272
5-12	1245	15.19	284				

KANAWHA RIVER BASIN

141

03198000 Kanawha River at Charleston, W. Va.

LOCATION.--Lat 38°22'10", long 81°42'05", Kanawha County, on left bank at old lock 6, 1.0 mi (1.6 km) upstream from Davis Creek, 1.5 mi (2.4 km) downstream from Twomile Creek, 2.0 mi (3.2 km) downstream from Patrick Street Bridge at Charleston, 3.5 mi (5.6 km) downstream from Elk River, and at mile 54.3 (87.4 km).

DRAINAGE AREA.--10,419 mi² (26,985 km²).

PERIOD OF RECORD.--June 1939 to current year. Monthly discharge only September 1939 to February 1940, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 548.00 ft (167.030 m) above mean sea level, levels by Corps of Engineers. Auxiliary water-stage recorder 2.3 mi (3.7 km) upstream from base gage at datum 547.00 ft (166.726 m) above mean sea level, Corps of Engineers bench mark. Prior to Oct. 1, 1955, auxiliary gages at different sites and datum.

AVERAGE DISCHARGE.--35 years, 14,630 ft³/s (414.3 m³/s), 19.07 in/yr (484 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 127,000 ft³/s (3,600 m³/s) Jan. 11; maximum gage height, 34.06 ft (10.381 m) Jan. 12; minimum daily discharge, 2,650 ft³/s (75.0 m³/s) Aug. 27; minimum gage height, 17.49 ft (5.331 m) Oct. 2.

Period of record: Maximum discharge, 216,000 ft³/s (6,120 m³/s) Aug. 15, 1940; maximum gage height, 39.72 ft (12.107 m) Mar. 7, 1955; minimum discharge, less than 1,030 ft³/s (29.2 m³/s) during period Oct. 1-5, 1953; minimum gage height, 17.27 ft (5.264 m) July 1, 1963.

Flood of Sept. 29, 1861, reached a stage of about 54.3 ft (16.55 m).

REMARKS.--Records good. Since 1939, flow regulated by increasing number of reservoirs upstream from station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).WSP 1335: 1943.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,890	26,000	35,900	67,400	23,400	16,700	18,000	9,620	36,800	18,000	6,080	7,950
2	6,040	24,700	24,200	60,800	20,200	18,200	13,900	7,080	93,800	15,300	4,330	7,740
3	9,920	23,800	17,200	58,400	18,900	19,200	17,100	8,820	71,200	11,600	4,560	6,760
4	16,600	19,400	13,700	69,800	20,400	20,500	35,400	8,010	59,800	10,000	4,800	10,000
5	12,500	17,800	15,300	60,400	18,400	17,200	52,700	8,100	43,400	6,880	4,820	14,800
6	11,400	21,000	13,400	51,000	19,700	18,700	62,300	9,330	30,000	8,130	5,110	11,200
7	7,400	20,400	15,800	37,400	19,400	20,000	52,000	10,700	18,400	9,020	6,810	7,540
8	6,750	20,300	13,800	27,400	16,200	26,400	38,100	9,440	14,300	10,400	6,950	17,900
9	7,390	19,900	13,400	24,600	17,100	25,500	34,900	11,300	15,700	9,090	5,520	14,800
10	7,600	15,500	13,600	51,600	17,000	23,500	32,400	16,500	12,000	8,260	6,280	7,140
11	6,990	11,900	13,000	110,000	15,800	20,200	24,200	22,000	9,110	7,790	5,880	9,580
12	8,140	12,100	12,300	106,000	15,600	39,500	19,400	24,500	10,300	7,370	6,240	12,300
13	7,750	10,400	12,900	63,100	16,600	86,700	19,300	54,600	9,080	6,970	4,430	9,940
14	7,890	11,000	20,500	39,300	18,700	68,500	17,000	68,500	8,560	6,210	5,170	8,980
15	5,020	11,400	33,400	44,000	23,000	42,600	17,200	36,300	7,720	5,550	5,300	9,290
16	4,690	12,800	26,400	45,800	26,000	33,300	13,300	25,700	8,440	7,770	4,900	8,960
17	4,860	13,000	21,300	40,300	23,100	33,100	13,400	19,000	8,730	5,870	4,890	7,110
18	4,880	14,400	18,300	37,300	20,600	31,400	12,800	16,800	12,800	5,940	4,320	6,230
19	4,840	12,300	15,000	33,300	17,300	27,300	11,300	15,400	10,400	4,600	3,990	6,120
20	4,760	11,600	13,200	19,100	17,900	39,600	10,400	13,200	8,470	4,100	3,050	4,970
21	4,350	12,400	20,900	15,600	21,300	51,600	10,200	10,300	8,750	3,600	6,760	5,970
22	3,560	11,700	65,100	16,100	21,600	68,300	8,240	10,200	10,100	3,720	7,810	6,510
23	4,050	10,700	50,500	25,600	28,400	59,500	9,810	11,200	14,400	3,160	6,120	4,920
24	3,860	9,590	34,400	22,500	34,600	42,400	12,500	13,100	18,300	5,580	6,340	3,600
25	4,040	11,500	26,400	25,100	31,300	29,200	12,300	13,800	13,900	5,540	4,740	3,260
26	4,490	10,100	46,400	41,600	25,800	22,200	10,600	10,600	11,800	6,260	3,090	3,820
27	4,360	35,100	99,300	43,600	21,200	18,600	9,660	9,090	13,600	8,300	2,650	3,500
28	4,140	85,900	71,300	41,600	20,200	17,500	10,400	9,910	14,100	10,200	4,910	3,050
29	5,200	66,300	67,200	35,900	-----	15,100	8,870	10,000	22,400	7,980	4,390	3,660
30	17,000	51,000	75,900	30,700	-----	14,900	7,280	20,100	21,300	4,340	8,130	4,000
31	25,100	-----	77,900	24,400	-----	15,700	-----	39,700	-----	5,520	7,790	-----
TOTAL	233,460	633,990	997,900	1,369,5M	589,700	983,100	614,960	552,900	637,660	233,050	166,160	231,600
MEAN	7,531	21,130	32,190	44,180	21,060	31,710	20,500	17,840	21,260	7,518	5,360	7,720
MAX	25,100	85,900	99,300	110,000	34,600	86,700	62,300	68,500	93,800	18,000	8,130	17,900
MIN	3,560	9,590	12,300	15,600	15,600	14,900	7,280	7,080	7,720	3,160	2,650	3,050

CAL YR 1973 TOTAL 7,013,330 MEAN 19,210 MAX 111,000 MIN 2,360 CFSM 1.84 IN 25.03
WTR YR 1974 TOTAL 7,243,980 MEAN 19,850 MAX 110,000 MIN 2,650 CFSM 1.91 IN 25.86

KANAWHA RIVER BASIN

03198450 Drawdy Creek near Peytona, W. Va.

LOCATION.--Lat 38°07'29", long 81°41'33", Boone County, on right bank 75 ft (23 m) upstream from bridge at entrance to Drawdy Cemetery, 1.0 mi (1.6 km) southwest of Peytona, and at mile 1.3 (2.1 km).

DRAINAGE AREA.--7.75 mi² (20.07 km²).

PERIOD OF RECORD.--October 1964 to September 1968 (annual maximum only), October 1968 to current year.

GAGE.--Water-stage and rainfall recorders. Altitude of gage is 770 ft (235 m), from topographic map. Prior to Sept. 21, 1968, SR recorder 100 ft (30 m) downstream at same datum.

AVERAGE DISCHARGE.--6 years, 10.4 ft³/s (0.295 m³/s), 18.22 in/yr (463 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,400 ft³/s (39.6 m³/s) Nov. 27, gage height, 12.93 ft (3.941 m); minimum, 0.60 ft³/s (0.017 m³/s) Oct. 16-18, 22-26, gage height, 2.88 ft (0.878 m).

Period of record: Maximum discharge, 1,400 ft³/s (39.6 m³/s) Nov. 27, 1973; gage height, 12.93 ft (3.941 m); minimum, 0.07 ft³/s (0.002 m³/s) Aug. 18, 1970, gage height, 2.74 ft (0.835 m).

REMARKS.--Records good. Rainfall records collected at site since September 1968 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

REVISIONS (WATER YEARS).--WRD W. Va. 1969: 1965-68(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	12	17	48	14	8.8	11	5.4	33	8.4	2.1	8.9
2	3.1	7.5	13	31	15	8.8	15	5.9	125	6.5	2.0	8.1
3	2.6	4.9	10	43	14	8.5	15	6.1	40	5.0	3.1	14
4	2.1	3.5	8.8	75	13	8.2	87	5.2	21	4.0	7.0	12
5	2.6	4.3	7.8	40	11	8.8	45	4.5	14	3.4	4.5	7.2
6	1.7	3.1	6.3	28	11	14	30	4.3	9.5	15	3.4	5.5
7	1.7	2.7	5.4	21	9.8	26	22	3.9	7.8	11	2.9	4.4
8	1.7	2.6	4.9	17	9.5	28	26	3.5	6.3	5.9	4.6	3.4
9	1.4	6.3	4.9	17	9.0	23	39	3.3	5.4	4.0	4.8	2.8
10	1.2	5.4	4.7	141	8.2	20	33	3.1	4.5	3.2	5.6	2.6
11	1.2	4.7	4.1	147	8.2	23	26	2.9	3.7	3.0	7.4	2.3
12	1.0	3.9	3.7	59	9.0	89	21	51	3.1	2.4	8.2	7.5
13	1.0	3.3	5.2	33	12	69	17	36	2.6	2.1	6.2	9.6
14	1.0	2.6	6.8	23	16	38	16	20	2.4	1.8	4.5	24
15	.90	3.3	7.3	20	16	28	13	13	4.9	15	3.2	13
16	.70	4.5	7.8	16	15	42	11	9.3	13	11	2.6	8.5
17	.60	3.7	7.8	14	12	43	9.2	7.5	5.6	5.5	2.0	6.0
18	.60	3.5	7.0	12	11	33	8.2	9.3	4.1	3.7	1.8	4.5
19	.70	3.1	6.5	11	11	38	7.5	6.8	3.3	3.4	1.9	3.3
20	.70	2.6	7.0	9.8	10	43	6.8	5.9	2.6	5.0	1.5	2.5
21	.70	3.7	9.5	12	8.8	78	6.1	4.9	5.6	3.0	1.4	3.4
22	.60	3.3	9.0	11	10	56	6.8	5.2	6.1	2.4	1.2	2.5
23	.60	5.9	9.3	11	9.5	37	11	21	15	3.6	1.1	1.9
24	.60	7.5	9.8	11	9.5	28	9.0	14	13	5.2	.89	1.7
25	.60	8.3	11	14	9.5	21	8.5	9.3	9.2	3.1	.86	1.6
26	.60	21	52	18	8.8	17	8.0	7.3	6.7	2.5	1.3	1.3
27	.80	237	49	20	8.8	15	7.3	6.1	8.9	2.1	.78	1.6
28	3.3	166	28	22	9.0	13	6.8	5.2	15	1.8	2.2	1.6
29	7.0	45	27	21	-----	12	6.1	5.2	12	5.5	2.8	1.1
30	28	25	49	19	-----	13	5.4	17	8.9	4.5	8.2	1.0
31	19	-----	60	17	-----	12	-----	16	-----	2.7	10	-----
TOTAL	91.80	610.2	459.6	981.8	308.6	902.1	533.7	318.1	412.2	155.7	110.03	167.8
MEAN	2.96	20.3	14.8	31.7	11.0	29.1	17.8	10.3	13.7	5.02	3.55	5.59
MAX	28	237	60	147	16	89	87	51	125	15	10	24
MIN	.60	2.6	3.7	9.8	8.2	8.2	5.4	2.9	2.4	1.8	.78	1.0
CFSM	.38	2.62	1.91	4.09	1.42	3.75	2.30	1.33	1.77	.65	.46	.72
IN.†	.44	2.93	2.21	4.71	1.48	4.33	2.56	1.53	1.98	.75	.53	.81
IN.††	4.38	8.31	4.01	5.84	1.35	6.08	3.72	5.81	6.54	-	6.38	3.36

CAL YR 1973 TOTAL 4,016.73 MEAN 11.0 MAX 237 MIN .45 CFSM 1.42 IN†19.28
WTD YR 1974 TOTAL 5,051.63 MEAN 13.8 MAX 237 MIN .60 CFSM 1.78 IN†24.25

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-27	1330	12.93	1,400	4-4	0530	5.54	152
1-10	1115	7.49	341	6-2	0345	6.32	219
3-12	1445	5.58	155				

† Runoff.
†† Rainfall.

KANAWHA RIVER BASIN

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03198500 Big Coal River at Ashford, W. Va.

LOCATION.--Lat 38°10'45", long 81°42'40", Boone County, on left bank at downstream side of highway bridge at Ashford, 300 ft (91 m) upstream from Lick Creek, 1.0 mi (1.6 km) downstream from Brush Creek, 1.8 mi (2.9 km) upstream from Bull Creek, and at mile 29.5 (47.5 km).

DRAINAGE AREA.--393 mi² (1,018 km²).

PERIOD OF RECORD.--June 1908 to September 1916, May 1930 to current year. Published as Coal River at Brushton, June 1908 to September 1916 and as Coal River at Ashford, May 1930 to September 1960.

GAGE.--Water-stage recorder. Datum of gage is 622.46 ft (189.726 m) above mean sea level. Prior to Aug. 9, 1916, nonrecording gage at site 1.0 mi (1.6 km) upstream at different datum. May 7, 1930, to Feb. 10, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--52 years, 509 ft³/s (14.41 m³/s), 17.59 in/yr (447 mm/yr).

EXTREMES.--Current year: Maximum discharge, 19,400 ft³/s (549 m³/s) Jan. 11, gage height, 22.45 ft (6.843 m); minimum, 27 ft³/s (0.76 m³/s) Oct. 18, gage height, 1.68 ft (0.512 m).

Period of record: Maximum discharge observed, 35,800 ft³/s (1,010 m³/s) Aug. 9, 1916, gage height, 36.3 ft (11.06 m), from floodmark, site and datum then in use, or 35.66 ft (10.869 m), from floodmark, present site and datum, from rating curve extended above 25,000 ft³/s (708 m³/s); no flow Sept. 18-21, 24, Oct. 6-12, 1930.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 783: Drainage area. WSP 1305: 1913-14(M). WSP 1335: 1912, 1916(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	587	860	1,790	891	619	550	315	1,170	436	110	363
2	85	498	644	1,450	815	597	646	301	8,470	348	96	403
3	76	260	506	1,420	838	575	717	360	3,280	235	105	458
4	65	170	422	3,130	794	549	3,110	343	1,450	175	209	631
5	62	162	362	2,630	702	520	3,080	296	932	145	298	464
6	55	263	345	1,600	636	506	1,640	295	656	447	183	289
7	51	232	277	1,200	611	653	1,160	276	518	599	132	252
8	57	173	238	959	586	900	1,060	242	421	370	139	261
9	56	209	243	903	562	959	1,590	239	421	228	178	213
10	54	217	276	6,320	504	974	1,760	240	326	182	283	174
11	55	186	263	17,800	488	955	1,430	213	263	202	298	176
12	48	160	229	9,140	492	2,270	1,140	1,930	218	166	697	199
13	45	139	249	2,690	597	5,640	965	2,600	184	132	470	230
14	44	122	1,090	1,700	781	2,290	837	1,330	155	114	280	488
15	41	115	1,230	1,300	888	1,410	728	887	148	218	184	447
16	38	146	915	1,050	908	1,320	624	638	426	769	136	324
17	36	180	734	897	888	1,640	533	505	311	409	151	243
18	32	176	577	766	818	1,440	483	440	196	225	125	187
19	33	162	461	671	736	1,340	444	364	151	163	128	151
20	33	141	416	620	687	1,950	401	308	131	194	138	127
21	32	134	531	599	653	4,030	356	253	146	147	123	122
22	33	154	697	583	613	4,640	320	221	181	119	97	133
23	34	163	738	545	637	2,160	524	479	386	112	83	107
24	57	242	725	529	686	1,480	771	457	467	175	75	94
25	98	304	760	783	727	1,080	671	319	333	175	69	84
26	97	411	1,890	1,290	735	891	555	248	237	162	66	79
27	98	7,550	4,560	1,900	704	753	481	209	250	141	63	75
28	120	8,850	1,890	1,540	658	644	427	177	661	143	64	81
29	232	2,560	1,250	1,400	-----	574	377	178	1,040	137	99	74
30	545	1,250	1,640	1,230	-----	575	334	758	698	203	266	66
31	804	-----	1,830	1,040	-----	606	-----	841	-----	137	255	-----
TOTAL	3,226	25,916	26,848	69,475	19,635	44,540	27,714	16,262	24,226	7,408	5,600	6,995
MEAN	104	864	866	2,241	701	1,437	924	525	808	239	181	233
MAX	804	8,850	4,560	17,800	908	5,640	3,110	2,600	8,470	769	697	631
MIN	32	115	229	529	488	506	320	177	131	112	63	66
CFSM	.26	2.20	2.20	5.70	1.78	3.66	2.35	1.34	2.06	.61	.46	.59
IN.	.31	2.45	2.54	6.58	1.86	4.22	2.62	1.54	2.29	.70	.53	.66

CAL YR 1973 TOTAL 221,499 MEAN 607 MAX 10,400 MIN 32 CFSM 1.54 IN 20.97
WTR YR 1974 TOTAL 277,845 MEAN 761 MAX 17,800 MIN 32 CFSM 1.94 IN 26.30

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-27	1630	20.42	16,400	3-13	0130	13.75	7,880
12-27	0230	11.60	6,060	3-21	2200	13.39	7,550
1-11	2000	22.45	19,400	6-2	1230	18.01	13,000

03199000 Little Coal River at Danville, W. Va.

LOCATION.--Lat 38°04'47", long 81°50'12" (corrected), Boone County, on right bank at upstream side of highway bridge at Danville, 900 ft (274 m) upstream from Turtle Creek, 2.3 mi (3.7 km) downstream from confluence of Pond and Spruce Forks, and at mile 24.7 (39.7 km).

DRAINAGE AREA.--270 mi² (699 km²).

PERIOD OF RECORD.--May 1930 to current year. Prior to October 1941, published as "at Madison."

GAGE.--Water-stage recorder. Datum of gage is 661.09 ft (201.500 m) above mean sea level. Prior to Oct. 1, 1941, nonrecording gage at site 1.5 mi (2.4 km) upstream at datum 6.80 ft (2.073 m) higher.

AVERAGE DISCHARGE.--44 years, 348 ft³/s (9.855 m³/s), 17.50 in/yr (444 mm/yr).

EXTREMES.--Current year: Maximum discharge, 14,600 ft³/s (413 m³/s) June 2, gage height, 21.69 ft (6.611 m), from rating curve extended as explained below: minimum, 23 ft³/s (0.65 m³/s) Oct. 26, gage height, 1.86 ft (0.567 m).

Period of record: Maximum discharge, 42,800 ft³/s (1,210 m³/s) Feb. 3, 1939, gage height, 30.2 ft (9.20 m), from floodmarks, present site and datum, from rating curve extended above 12,000 ft³/s (340 m³/s) on basis of slope-area measurement of peak flow; no flow at times July to October 1930.

REMARKS.--Records good. Records of specific conductance, water temperatures and suspended-sediment discharge for 1973 and 1974 water years are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1725: 1951(M), 1955(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	412	576	1,600	621	400	436	269	2,010	324	75	227
2	98	258	423	1,200	648	384	540	269	8,910	228	71	211
3	75	150	344	1,160	572	352	599	292	2,450	178	72	187
4	70	111	292	2,020	480	332	2,960	228	1,260	147	87	386
5	70	143	256	1,840	436	344	2,180	207	800	129	102	245
6	58	173	213	1,200	400	424	1,320	210	594	123	172	159
7	56	145	176	860	370	707	900	190	484	164	94	134
8	96	119	159	671	350	775	875	176	392	115	77	123
9	89	140	166	680	330	684	1,580	173	436	103	79	105
10	70	138	166	5,180	312	608	1,420	166	300	98	94	97
11	60	117	157	10,100	320	568	1,070	154	252	123	83	128
12	52	105	138	3,860	336	1,770	845	1,770	210	100	77	122
13	50	98	166	1,850	496	3,420	702	1,920	184	89	131	134
14	49	92	492	1,380	805	1,660	603	935	161	84	106	370
15	47	96	536	975	752	1,080	522	612	157	87	82	270
16	37	143	468	748	630	1,180	456	468	428	480	70	185
17	34	127	403	612	554	1,500	412	380	213	176	66	145
18	41	121	328	522	472	1,120	376	324	169	121	72	120
19	39	117	272	468	427	1,040	336	272	150	105	103	105
20	34	107	265	440	452	1,580	304	246	147	134	84	94
21	29	109	368	432	360	3,200	268	219	171	103	72	101
22	29	154	376	408	388	2,990	260	198	178	87	66	116
23	29	152	396	400	448	1,690	545	830	388	82	60	85
24	33	316	412	388	448	1,220	496	581	536	119	56	75
25	29	328	428	464	468	815	456	396	403	100	51	72
26	25	356	1,180	644	436	662	416	296	276	81	49	66
27	25	3,890	2,170	1,120	404	568	380	195	376	84	48	66
28	49	5,230	1,180	1,040	392	500	344	188	1,060	83	48	72
29	164	1,810	820	995	-----	456	308	190	975	83	87	64
30	433	885	1,490	870	-----	468	276	4,220	500	82	235	60
31	532	-----	1,560	738	-----	472	-----	2,050	-----	102	157	-----
TOTAL	2,609	16,142	16,376	44,865	13,107	32,969	22,185	18,624	24,570	4,114	2,726	4,324
MEAN	84.2	538	528	1,447	468	1,064	740	601	819	133	87.9	144
MAX	532	5,230	2,170	10,100	805	3,420	2,960	4,220	8,910	480	235	386
MIN	25	92	138	388	312	332	260	154	147	81	48	60
CFSM	.31	1.99	1.96	5.36	1.73	3.94	2.74	2.23	3.03	.49	.33	.53
IN.	.36	2.22	2.26	6.18	1.81	4.54	3.06	2.57	3.39	.57	.38	.60

CAL YR 1973 TOTAL 155,301 MEAN 425 MAX 5,910 MIN 25 CFSM 1.57 IN 21.40
WTR YR 1974 TOTAL 202,611 MEAN 555 MAX 10,100 MIN 25 CFSM 2.06 IN 27.92

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	0415	15.58	7,860	3-21	1900	13.15	5,920
1-10	2015	20.14	12,600	5-30	1515	16.76	8,880
3-12	2315	12.18	5,230	6-2	1015	21.69	14,600

KANAWHA RIVER BASIN

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03200500 Coal River at Tornado, W. Va.

LOCATION.--Lat 38°20'20", long 81°50'30", Kanawha County, on downstream side of highway bridge at Tornado, 0.2 mi (0.3 km) upstream from Falls Creek and at mile 11.5 (18.5 km).

DRAINAGE AREA.--861 mi² (2,230 km²), includes that of Falls Creek.

PERIOD OF RECORD.--June 1908 to June 1912 (gage heights only, October 1911 to June 1912), November 1928 to September 1931, August 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 570.46 ft (173.876 m) above mean sea level. Aug. 1, 1971 to Jan. 9, 1973, nonrecording gage at same site and datum. Prior to Aug. 1, 1961, nonrecording gage at same site at different datum.

AVERAGE DISCHARGE.--18 years (1908-11, 1929-31, 1961-74), 1,241 ft³/s (35.15 m³/s), 19.57 in/yr (497 mm/yr).

EXTREMES.--Current year: Maximum discharge, 29,700 ft³/s (841 m³/s) Jan. 12, gage height, 27.03 ft (8.239 m); minimum, 68 ft³/s (1.93 m³/s) Oct. 18, 22-24, 25, gage height, 10.34 ft (3.152 m).

Period of record: Maximum discharge, 35,500 ft³/s (1,010 m³/s) Mar. 7, 1967, gage height, 31.98 ft (9.748 m); minimum (estimated), 2.0 ft³/s (0.057 m³/s) Oct. 1-10, 1930.

REMARKS.--Records good. Rainfall records collected at site since February 1973 are contained in files of U.S. Geological Survey with only monthly totals published in this report. Records of specific conductance, water temperatures, and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	428	1,250	1,890	4,350	1,880	1,100	1,320	734	4,470	1,220	366	474
2	309	1,060	1,360	3,200	1,660	1,120	1,680	695	15,000	914	305	590
3	266	709	1,080	3,180	1,730	1,040	2,030	806	10,700	695	280	650
4	205	493	949	6,660	1,570	1,000	8,390	788	3,890	560	310	788
5	177	428	856	5,390	1,400	968	6,050	665	2,380	474	378	896
6	169	467	800	3,400	1,280	1,080	3,810	650	1,660	516	460	770
7	177	532	709	2,470	1,240	1,880	2,700	620	1,310	878	446	516
8	255	493	653	1,870	1,180	2,060	2,610	575	1,040	806	355	474
9	205	520	625	1,630	1,160	2,170	4,030	545	1,060	545	390	444
10	205	585	667	7,650	1,020	2,100	3,980	545	842	446	432	404
11	169	558	571	26,900	986	1,840	3,180	502	680	432	488	366
12	143	467	545	21,800	1,000	3,540	2,540	3,300	590	460	590	381
13	120	416	532	6,290	1,240	12,100	2,140	6,210	516	390	710	404
14	113	368	1,110	3,920	1,810	5,610	1,970	3,540	446	318	734	474
15	107	332	1,830	2,970	2,120	3,610	1,640	2,140	404	290	575	665
16	95	441	1,460	2,340	1,880	3,230	1,420	1,530	716	474	432	752
17	89	532	1,210	1,920	1,660	4,140	1,220	1,150	788	824	355	695
18	78	507	1,010	1,640	1,420	3,610	1,120	1,060	516	650	344	560
19	78	480	856	1,420	1,260	3,140	1,020	842	418	460	336	444
20	78	441	785	1,320	1,240	4,070	932	732	373	432	340	377
21	73	404	905	1,300	1,140	8,220	832	635	404	446	337	337
22	73	480	1,080	1,300	1,060	10,900	770	575	474	390	309	337
23	68	545	1,150	1,220	1,320	5,210	1,020	932	950	349	260	339
24	68	738	1,180	1,180	1,400	3,650	1,460	1,590	1,270	368	226	299
25	143	920	1,210	1,380	1,460	2,630	1,360	1,020	1,070	460	207	261
26	186	1,060	2,280	2,210	1,340	2,080	1,180	770	842	460	187	213
27	177	7,820	8,520	3,280	1,200	1,750	1,040	635	620	432	157	200
28	235	24,000	3,860	3,260	1,140	1,510	932	545	1,680	390	152	209
29	493	7,700	2,530	3,110	-----	1,360	860	488	3,180	355	176	224
30	1,160	3,050	3,670	2,730	-----	1,340	770	2,990	2,030	340	236	198
31	1,790	-----	4,620	2,280	-----	1,380	-----	4,990	-----	390	371	-----
TOTAL	7,932	57,796	50,503	133,570	38,796	99,438	64,006	42,799	60,319	16,164	11,244	13,741
MEAN	256	1,927	1,629	4,309	1,386	3,208	2,134	1,381	2,011	521	363	458
MAX	1,790	24,000	8,520	26,900	2,120	12,100	8,390	6,210	15,000	1,220	734	896
MIN	68	332	532	1,180	986	968	770	488	373	290	152	198
CFSM	.30	2.24	1.89	5.00	1.61	3.73	2.48	1.60	2.34	.61	.42	.53
IN.†	.34	2.50	2.18	5.77	1.68	4.30	2.77	1.85	2.61	.70	.49	.59
IN.††	4.89	5.30	3.37	-	-	4.14	2.78	5.55	6.42	3.71	4.85	2.27
CAL YR 1973	TOTAL	452,713	MEAN	1,240	MAX	24,000	MIN	68	CFSM	1.44	INT	19.56
WTR YR 1974	TOTAL	596,308	MEAN	1,634	MAX	26,900	MIN	68	CFSM	1.90	INT	25.76

PEAK DISCHARGE (BASE, 16,000 CFS)

† Runoff.
†† Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	0500	25.81	27,500	6- 2	2100	22.69	22,100
1-12	0300	27.03	29,700				

KANAWHA RIVER BASIN

03201000 Pocatalico River at Sissonville, W. Va.

LOCATION.--Lat 38°31'35", long 81°37'50", Kanawha County, on right bank at downstream side of bridge on U.S. Highway 21 at Sissonville, 0.3 mi (0.5 km) downstream from Grapevine Creek, 1.8 mi (2.9 km) downstream from Pocatalico Creek, and at mile 25.0 (40.2 km).

DRAINAGE AREA.-- 238 mi² (616 km²).

PERIOD OF RECORD.--June 1908 to September 1916, May 1930 to September 1931, February 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 594.56 ft (181.222 m) above mean sea level, adjustment of 1912. Prior to Nov. 5, 1948, nonrecording gage at same site, at datum 0.59 ft (0.180 m) lower June 26, 1908, to Sept. 30, 1916.

AVERAGE DISCHARGE.--46 years, 293 ft³/s (8.300 m³/s), 16.72 in/yr (425 mm/yr).

EXTREMES.--Current year: Maximum discharge, 9,750 ft³/s (276 m³/s) Nov. 28, gage height, 27.94 ft (8.516 m); minimum, 4.3 ft³/s (0.12 m³/s) Oct. 26, 27, 28, gage height 1.92 ft (0.585 m).

Period of record: Maximum discharge, 17,000 ft³/s (481 m³/s) June 27, 1910, from rating curve extended above 9,100 ft³/s (258 m³/s); maximum gage height, 34.4 ft (10.49 m) Apr. 16, 1939, from floodmarks; no flow Sept. 25-29, 1959, July 9, Aug. 4, 6-8, 20, 21, Sept. 11, 12, 17, 18, 1966.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1335: 1908-10, 1912-13, 1915-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	1,170	435	1,600	354	381	354	53	6,070	61	13	126
2	78	627	276	679	392	363	574	57	8,700	47	12	122
3	74	255	208	962	937	415	605	90	3,080	43	11	146
4	51	152	173	3,200	599	354	1,710	140	551	40	12	289
5	35	156	154	1,710	405	332	1,810	99	275	32	13	162
6	23	319	131	728	322	540	824	75	176	555	14	85
7	48	210	103	510	359	1,190	533	63	162	171	12	57
8	251	142	86	378	456	866	472	55	125	72	33	44
9	76	356	77	636	389	550	1,680	52	130	46	60	37
10	44	488	76	3,880	310	399	1,420	49	83	59	44	33
11	29	251	76	8,640	302	655	731	46	66	98	37	31
12	21	166	67	5,110	326	4,150	490	3,240	55	40	50	28
13	17	128	74	1,060	495	2,630	420	4,350	47	29	67	31
14	15	107	334	600	628	1,030	519	713	41	26	42	41
15	14	95	484	473	565	595	376	282	37	24	28	44
16	12	508	305	374	420	719	273	178	35	401	22	52
17	10	497	231	298	341	1,300	212	131	34	113	145	36
18	8.9	255	170	246	269	766	175	301	32	55	149	27
19	8.1	214	134	228	241	710	150	293	31	38	64	22
20	7.8	197	131	224	260	1,340	131	150	30	56	41	18
21	7.0	170	173	269	237	1,710	113	106	351	55	29	25
22	6.3	182	174	318	236	2,180	104	91	325	40	23	41
23	5.6	173	154	283	305	912	110	582	792	29	27	34
24	5.3	168	205	253	267	580	100	646	923	24	22	30
25	5.0	194	280	242	338	399	84	258	295	22	17	22
26	4.3	350	1,240	258	348	311	74	160	208	19	15	17
27	4.6	1,820	2,520	301	295	264	68	115	117	18	13	15
28	11	8,540	934	528	273	226	63	89	84	25	15	15
29	418	5,230	482	1,370	-----	210	57	84	95	19	41	16
30	2,730	884	827	801	-----	250	53	771	81	16	407	17
31	2,860	-----	1,340	498	-----	387	-----	1,200	-----	14	267	-----
TOTAL	6,921.9	24,004	12,054	36,657	10,669	26,714	14,285	14,519	23,031	2,287	1,745	1,663
MEAN	223	800	389	1,182	381	862	476	468	768	73.8	56.3	55.4
MAX	2,860	8,540	2,520	8,640	937	4,150	1,810	4,350	8,700	555	407	289
MIN	4.3	95	67	224	236	210	53	46	30	14	11	15
CFSM	.94	3.36	1.63	4.97	1.60	3.62	2.00	1.97	3.23	.31	.24	.23
IN.	1.08	3.75	1.88	5.73	1.67	4.18	2.23	2.27	3.60	.36	.27	.26
CAL YR 1973	TOTAL 142,229.2	MEAN 390	MAX 8,540	MIN 4.3	CFSM 1.64	IN 22.23						
WTR YR 1974	TOTAL 174,549.9	MEAN 478	MAX 8,700	MIN 4.3	CFSM 2.01	IN 27.28						

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1100	27.94	9,750	5-12	2030	21.45	5,820
1-11	1330	27.76	9,610	6-2	0730	27.64	9,510
3-12	0430	17.98	4,290				

03201410 Poplar Fork at Teays, W. Va.

LOCATION.--Lat 38°27'23", long 81°55'54", Putnam County, on left bank at Teays, and 50 ft (15 m) upstream from culvert on Interstate Highway 64 at Winfield interchange.

DRAINAGE AREA.--8.71 mi² (22.56 km²).

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

GAGE.--Water-stage and rainfall recorders and concrete dam and culvert control. Altitude of gage is 640 ft (195 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 11.4 ft³/s (0.323 m³/s), 17.77 in/yr (451 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,600 ft³/s (45.3 m³/s) June 28, gage height, 14.67 ft (4.471 m), from rating curve extended as explained below; minimum, 0.43 ft³/s (0.012 m³/s) Aug. 27, gage height, 6.97 ft (2.124 m).

Period of record: Maximum discharge, 1,800 ft³/s (51.0 m³/s) May 27, 1968, gage height, 15.34 ft (4.676 m), from rating curve extended above 330 ft³/s (9.35 m³/s) on basis of culvert rating computation; minimum daily, 0.02 ft³/s (0.001 m³/s) July 7, 9, 10, 18, 21, 24, 1968.

REMARKS.--Records good. Rainfall records collected at site since January 1967 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.91	14	9.4	23	7.7	21	11	2.0	111	9.0	.81	6.5
2	1.0	6.5	6.5	14	11	14	30	2.5	158	4.5	.61	5.8
3	.81	4.2	6.1	106	10	11	16	3.8	21	3.1	1.0	11
4	.61	3.4	6.1	112	8.3	8.9	33	2.7	10	2.5	3.1	8.9
5	.61	6.9	5.4	27	6.5	8.3	19	2.3	6.5	5.0	1.2	7.8
6	.49	5.4	3.8	18	7.7	33	15	2.0	5.0	2.5	.91	6.5
7	.49	4.2	3.4	14	11	30	12	1.6	4.6	2.3	.71	5.5
8	1.8	3.6	3.4	10	10	18	21	1.5	3.4	1.6	10	4.5
9	1.0	16	3.4	18	8.9	12	34	1.6	2.9	1.4	18	3.9
10	.81	7.3	3.1	531	7.7	8.9	20	1.5	2.3	1.6	13	3.4
11	.61	5.0	2.9	416	8.9	134	14	2.5	1.5	2.7	5.4	3.1
12	.55	4.2	2.7	50	11	173	11	284	1.5	1.3	4.2	24
13	.49	3.6	3.6	24	16	41	11	26	1.3	1.0	3.1	14
14	.49	3.4	5.4	18	17	21	8.9	13	1.2	.91	2.0	8.3
15	.49	4.2	4.6	13	12	14	7.3	6.5	1.1	5.0	1.5	5.8
16	.49	10	4.6	11	11	27	6.1	4.6	2.5	3.1	1.3	4.6
17	.55	5.8	3.8	7.7	8.3	20	5.4	4.6	1.6	1.4	1.3	3.6
18	.81	4.6	2.9	6.9	6.9	14	5.0	6.5	1.2	1.1	1.4	2.9
19	1.2	5.0	2.9	6.5	6.9	19	4.6	4.2	.91	3.6	1.5	2.3
20	1.8	3.8	3.8	6.1	6.5	19	4.2	3.4	.81	5.0	1.0	1.8
21	.61	5.0	9.4	6.1	5.4	178	3.8	2.9	5.0	1.6	.81	12
22	.55	6.1	6.5	5.8	6.1	37	3.6	2.7	7.7	1.2	.71	6.9
23	.55	7.7	6.1	5.4	5.8	21	3.8	26	39	3.6	.71	4.2
24	.55	10	6.5	5.0	6.1	14	3.6	8.3	13	5.0	.61	3.4
25	.61	9.4	7.7	5.0	9.4	10	3.1	5.0	6.5	1.8	.55	2.9
26	.61	26	93	5.4	6.9	8.9	3.1	3.6	4.2	1.5	.61	2.3
27	.61	227	32	6.1	6.1	7.3	2.9	3.1	3.6	2.3	.49	2.0
28	2.7	487	15	22	6.5	6.9	2.7	2.5	414	1.2	2.3	2.9
29	10	18	14	22	-----	6.9	2.3	5.0	36	1.3	94	2.3
30	34	15	21	14	-----	9.4	2.0	50	20	2.3	40	1.8
31	16	-----	40	11	-----	15	-----	29	-----	1.0	8.9	-----
TOTAL	82.80	942.3	339.0	1,540.0	245.6	961.5	319.4	514.9	887.32	81.41	221.73	174.9
MEAN	2.67	31.4	10.9	49.7	8.77	31.0	10.6	16.6	29.6	2.63	7.15	5.83
MAX	34	487	93	531	17	178	34	284	414	9.0	94	24
MIN	.49	3.4	2.7	5.0	5.4	6.9	2.0	1.5	.81	.91	.49	1.8
CFSM	.31	3.61	1.25	5.71	1.01	3.56	1.22	1.91	3.40	.30	.82	.67
IN.†	.35	4.02	1.45	6.58	1.05	4.11	1.36	2.20	3.79	.35	.95	.75
IN.††	3.41	5.22	2.41	4.56	1.58	4.07	1.78	5.40	-	-	-	-
CAL YR 1973	TOTAL	4,484.53	MEAN	12.3	MAX	487	MIN	.21	CFSM	1.41	IN†	19.15
WTR YR 1974	TOTAL	6,310.86	MEAN	17.3	MAX	531	MIN	.49	CFSM	1.99	IN†	26.95

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	0245	14.27	1,480	5-12	1215	11.32	747
1-10	1215	13.75	1,340	6-28	1315	14.67	1,600
3-11	2130	10.92	652	8-29	2200	10.88	644
3-21	1115	10.60	582				

† Runoff.
†† Rainfall.

OHIO RIVER MAIN STEM

03201500 Ohio River at Point Pleasant, W. Va.

LOCATION.--Lat 38°50'25", long 82°08'30", Mason County, on left bank at Point Pleasant, 1,200 ft (366 m) upstream from Kanawha River, and at mile 265.4 (427.0 km) measured downstream from Pittsburgh, Pa. Records include flow of Kanawha River.

DRAINAGE AREA.--52,760 mi² (136,650 km²), approximately, includes that of Kanawha River.

PERIOD OF RECORD.--March 1940 to current year (since October 1952, no low-flow records). Records of gage heights collected in this vicinity since 1889 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 514.10 ft (156.698 m) above mean sea level, Sandy Hook datum. Prior to Oct. 1, 1951, water-stage recorder at site 0.3 mi (0.5 km) upstream at same datum. Auxiliary water-stage recorder 13.1 mi (21.1 km) downstream from the base gage at datum 505.22 ft (153.991 m) above mean sea level, Sandy Hook datum.

EXTREMES.--Current year: Maximum daily discharge, 440,000 ft³/s (12,500 m³/s) Jan. 12; minimum gage height, 23.80 ft (7.254 m) Sept. 27.

Period of record: Maximum discharge, 522,000 ft³/s (14,800 m³/s) Jan. 1, 1943; maximum gage height, 55.00 ft (16.764 m) Apr. 16, 1948; minimum daily discharge, not determined; minimum gage height recorded, 22.52 ft (6.864 m) Sept. 10, 1956.

Maximum stage since at least 1896, 62.8 ft (19.14 m) Mar. 30, 1913. Flood of Jan. 27, 1937, reached a stage of 62.7 ft (19.11 m).

REMARKS.--Records poor. Discharge less than 50,000 ft³/s (1,420 m³/s) on days for which no discharge is shown. Flow partly regulated by locks, dams, and reservoirs upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		95,900	220,000	180,000	150,000	74,000	111,000	45,000	135,000	65,000		72,700
2		103,000	160,000	170,000	133,000	82,000	122,000	51,400	205,000	80,000		88,300
3		98,200	130,000	165,000	117,000	96,000	147,000	60,700	234,000	85,000		87,100
4		88,000	110,000	170,000	103,000	110,000	192,000	65,900	202,000	70,000		108,000
5		62,000	95,000	180,000	97,100	112,000	251,000	70,500	155,000	52,000		115,000
6		52,000	80,000	170,000	93,400	114,000	256,000	54,900	109,000			95,200
7		63,100	65,000	150,000	93,600	130,000	239,000	59,300	81,300			72,400
8			50,000	130,000	94,000	135,000	199,000	49,300	57,500			62,500
9			52,000	120,000	99,400	140,000	193,000	49,700	57,200			64,500
10			60,000	130,000	87,600	140,000	209,000	55,300	42,600			44,500
11			60,000	250,000	80,900	150,000	188,000	63,400	32,900			36,000
12			62,000	440,000	80,600	210,000	163,000	98,600	28,100			36,900
13			58,000	410,000	76,000	250,000	150,000	227,000	32,100			44,900
14			65,000	300,000	78,000	255,000	139,000	274,000	26,500			54,000
15			100,000	180,000	85,000	230,000	130,000	259,000	25,600			68,100
16		52,000	115,000	150,000	95,000	180,000	119,000	170,000	49,900			47,100
17		50,000	110,000	140,000	90,000	165,000	113,000	120,000	39,000			
18		51,000	80,000	140,000	80,000	160,000	105,000	117,000	43,200			
19		52,000	70,000	150,000	65,000	155,000	99,000	132,000	51,000			
20		50,000	64,900	155,000	68,000	152,000	88,900	122,000	33,000			
21		52,000	69,800	165,000	72,000	180,000	80,700	96,700	68,700			
22		53,000	123,000	165,000	74,000	210,000	69,000	84,900	96,400			72,800
23			159,000	163,000	79,000	240,000	64,500	80,600	138,000			51,600
24			139,000	167,000	89,000	210,000	77,700	77,200	207,000			
25		58,000	118,000	168,000	105,000	160,000	74,200	87,300	176,000			
26		90,000	115,000	173,000	99,000	120,000	59,200	69,300	145,000			
27		170,000	186,000	187,000	89,000	105,000	58,800	49,400	108,000			
28		260,000	220,000	180,000	75,000	95,000	51,800	54,500	81,400			
29		265,000	215,000	178,000	-----	85,000	53,700	46,500	80,000			
30	60,900	270,000	205,000	180,000	-----	90,000	49,300	85,000	76,000		65,400	
31	94,700	-----	190,000	165,000	-----	102,000	-----	110,000	-----		88,600	-----
TOTAL			3,546.7M	5,771.0M	2,548.6M	4,637.0M	3,852.8M	2,986.4M	2,816.4M			
MEAN			114,400	186,200	91,020	149,600	128,400	96,340	93,880			
MAX			220,000	440,000	150,000	255,000	256,000	274,000	234,000			
MIN			50,000	120,000	65,000	74,000	49,300	45,000	25,600			

CAL YR 1973 TOTAL - MEAN - MAX 368,000 MIN - CFSM - IN -
WTR YR 1974 TOTAL - MEAN - MAX 440,000 MIN - CFSM - IN -

03202400 Guyandotte River near Baileysville, W. Va.

LOCATION.--Lat 37°36'15", long 81°38'44", Wyoming County, on right bank 75 ft (23 m) upstream from Doublecamp Branch, and 3.1 mi (5.0 km) east of Baileysville.

DRAINAGE AREA.--308 mi² (798 km²).

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

GAGE.-- Water-stage recorder. Datum of gage is 1,140.00 ft (347.472 m) above mean sea level. Prior to Sept. 10, 1969, at site 25 ft (8 m) upstream at same datum.

AVERAGE DISCHARGE.--6 years, 438 ft³/s (12.40 m³/s), 19.31 in/yr (490 mm/yr).

EXTREMES.--Current year: Maximum discharge, 18,600 ft³/s (527 m³/s) Jan. 11, gage height, 17.31 ft (5.276 m), from rating curve extended above 7,300 ft³/s (207 m³/s); minimum, 59 ft³/s (1.67 m³/s) Oct. 16, 24, 25, 26, 27, 28, gage height, 2.78 ft (0.847 m).

Period of record: Maximum discharge, 18,600 ft³/s (527 m³/s) Jan. 11, 1974, gage height, 17.31 ft (5.276 m), from rating curve extended above 7,300 ft³/s (207 m³/s); minimum, 21 ft³/s (0.59 m³/s) Oct. 14, 1970, gage height, 2.44 ft (0.744 m).

REMARKS.--Records good. Records of specific conductance and suspended-sediment discharge for 1973 and 1974 water years and records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	378	455	1,990	782	440	525	340	1,340	364	139	103
2	101	273	332	1,790	734	410	550	356	3,850	308	130	100
3	110	180	273	1,620	837	405	525	424	2,610	242	125	112
4	86	138	243	2,600	746	410	1,140	416	1,360	218	130	122
5	72	412	240	2,070	662	420	1,620	396	859	214	136	108
6	66	562	228	1,370	600	428	1,050	416	620	214	122	95
7	67	288	195	1,080	575	680	761	384	510	242	120	110
8	97	200	183	872	530	943	674	352	432	204	118	108
9	104	167	200	1,280	485	845	1,660	372	412	181	122	98
10	82	143	210	4,450	405	686	1,610	388	364	178	122	112
11	70	126	198	13,400	392	602	1,110	376	320	204	115	136
12	67	111	175	5,650	372	3,020	859	1,410	284	181	122	122
13	65	97	213	2,300	396	5,270	716	2,560	264	160	112	112
14	71	96	734	1,550	505	2,110	626	1,230	257	148	108	108
15	68	97	764	1,220	545	1,350	662	789	242	151	103	98
16	61	120	550	1,030	545	1,260	550	584	505	211	100	98
17	67	166	420	893	650	1,600	490	470	360	175	100	88
18	63	146	332	746	625	1,330	470	452	268	154	98	91
19	63	132	283	645	600	1,200	432	408	228	148	172	81
20	63	121	276	570	610	2,040	408	432	211	148	130	75
21	66	117	625	530	505	3,460	376	376	208	136	110	81
22	64	129	824	480	565	3,200	360	340	260	128	95	79
23	62	124	630	425	662	1,790	936	475	288	130	86	77
24	61	160	520	470	640	1,270	978	510	242	211	88	77
25	62	197	545	1,270	625	929	704	408	225	225	81	77
26	61	278	4,440	1,790	530	754	550	348	222	163	77	75
27	63	2,340	3,570	1,980	455	638	470	312	211	201	75	73
28	68	3,830	1,510	1,390	430	555	412	280	590	187	91	77
29	99	1,590	1,080	1,230	-----	515	380	264	775	157	91	73
30	193	704	1,120	1,080	-----	535	352	2,250	525	181	93	77
31	388	-----	1,240	935	-----	540	-----	1,960	-----	169	98	-----
TOTAL	2,750	13,422	22,608	58,706	16,008	39,635	21,956	20,078	18,842	5,933	3,409	2,843
MEAN	88.7	447	729	1,894	572	1,279	732	648	628	191	110	94.8
MAX	388	3,830	4,440	13,400	837	5,270	1,660	2,560	3,850	364	172	136
MIN	61	96	175	425	372	405	352	264	208	128	75	73
CFSM	.29	1.45	2.37	6.15	1.86	4.15	2.38	2.10	2.04	.62	.36	.31
IN.	.33	1.62	2.73	7.09	1.93	4.79	2.65	2.43	2.28	.72	.41	.34

CAL YR 1973 TOTAL 174,503 MEAN 478 MAX 7,360 MIN 58 CFSM 1.55 IN 21.08
WTR YR 1974 TOTAL 226,190 MEAN 620 MAX 13,400 MIN 61 CFSM 2.01 IN 27.32

PEAK DISCHARGE (BASE, 4,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1230	8.73	4,480	3-21	1900	9.47	5,410
12-26	1900	11.18	7,770	5-30	1630	8.84	4,610
1-11	1600	17.31	18,600	6- 2	1530	9.42	5,350
3-12	2400	11.94	8,910				

GUYANDOTTE RIVER BASIN

03202480 Briar Creek at Fanrock, W. Va.

LOCATION.--Lat 37°33'50", long 81°39'16", Wyoming County, on right bank on Secondary State Route 14, 0.3 mi (0.5 km) south of Fanrock, and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--7.20 mi² (18.65 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,220 ft (372 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 11.3 ft³/s (0.320 m³/s), 21.31 in/yr (541 mm/yr).

EXTREMES.--Current year: Maximum discharge, 505 ft³/s (14.3 m³/s) Jan. 10, gage height, 5.52 ft (1.682 m), from rating curve extended as explained below; minimum 0.19 ft³/s (0.005 m³/s) Aug. 24, 25, gage height, 1.69 ft (0.515 m).

Period of record: Maximum discharge, 806 ft³/s (22.8 m³/s) Aug. 18, 1972, gage height, 6.62 ft (2.018 m), from rating curve extended above 180 ft³/s (5.10 m³/s) on basis of step-backwater method; minimum daily, 0.06 ft³/s (0.002 m³/s) Oct. 22-31, 1969.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	12	9.3	60	12	7.4	15	4.6	24	5.5	.44	.70
2	1.9	6.0	7.0	38	12	6.3	15	6.0	114	4.1	.37	.70
3	1.1	3.8	6.0	40	16	6.0	12	8.2	43	2.4	.44	.80
4	.80	2.4	5.5	68	15	5.7	31	8.2	19	1.7	.91	.70
5	.70	33	5.5	46	12	5.5	34	7.8	10	1.5	.70	.44
6	.30	14	4.3	27	11	9.3	22	7.8	7.0	1.3	.44	.70
7	.30	6.3	3.5	18	9.6	19	14	6.7	5.5	1.1	.37	1.1
8	2.4	4.6	3.2	12	8.2	27	16	5.7	4.3	.80	.37	.60
9	.91	3.8	4.3	45	7.4	21	52	5.7	3.5	.70	.37	.80
10	.60	2.7	4.9	400	6.7	15	39	4.9	3.2	.60	.30	2.7
11	.52	1.9	4.3	90	6.3	14	24	4.1	2.4	.60	.80	2.4
12	.52	1.7	4.1	35	6.7	207	17	29	1.9	.52	.91	1.1
13	.44	1.7	9.3	25	7.4	125	13	36	1.7	.44	.52	.70
14	.60	1.5	27	18	9.6	38	11	17	1.5	.37	.44	.52
15	.60	1.5	20	15	10	23	10	9.6	.91	.37	.37	.44
16	.60	3.5	14	12	11	32	8.2	7.0	13	1.9	.30	.37
17	.52	2.7	10	9.6	11	43	7.4	5.7	3.8	.60	.30	.37
18	.52	2.7	7.8	7.8	9.6	28	7.0	7.0	2.2	.52	.30	.37
19	.37	2.4	6.3	7.0	10	29	6.7	4.3	1.3	.52	.44	.44
20	.26	2.2	6.7	6.7	10	46	6.0	3.5	.91	1.9	.52	.44
21	.30	2.7	14	6.7	7.8	139	5.2	2.7	1.1	.70	.37	.52
22	.30	3.2	16	6.0	10	70	5.2	2.4	4.6	.52	.30	.60
23	.30	4.6	14	5.7	11	31	43	15	3.2	1.3	.26	.60
24	.52	7.4	12	8.9	11	20	31	12	2.2	2.7	.26	.44
25	.80	8.2	12	44	11	13	17	7.4	1.5	1.1	.26	.44
26	.91	31	187	63	8.9	10	12	5.5	1.1	.70	.22	.44
27	.91	143	85	54	7.8	8.9	8.9	4.6	2.9	.60	.22	.44
28	2.2	113	29	32	7.0	7.8	6.3	3.5	20	.52	.26	.52
29	5.5	34	21	31	-----	7.4	5.7	3.2	30	.44	.80	.52
30	14	15	24	25	-----	9.6	5.2	21	10	.70	.52	.52
31	12	-----	34	17	-----	12	-----	17	-----	.52	.44	-----
TOTAL	53.90	472.5	611.0	1,271.4	276.0	1,035.9	499.8	283.1	339.72	37.24	13.52	21.43
MEAN	1.74	15.8	19.7	41.0	9.86	33.4	16.7	9.13	11.3	1.20	.44	.71
MAX	14	143	187	400	16	207	52	36	114	5.5	.91	2.7
MIN	.26	1.5	3.2	5.7	6.3	5.5	5.2	2.4	.91	.37	.22	.37
CFSM	.24	2.19	2.74	5.69	1.37	4.64	2.32	1.27	1.57	.17	.06	.10
IN.	.28	2.44	3.16	6.57	1.43	5.35	2.58	1.46	1.76	.19	.07	.11

CAL YR 1973 TOTAL 4,043.25 MEAN 11.1 MAX 243 MIN .26 CFSM 1.54 IN 20.89
WTR YR 1974 TOTAL 4,915.51 MEAN 13.5 MAX 400 MIN .22 CFSM 1.88 IN 25.40

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-27	1500	4.24	211	3-12	1645	4.84	363
12-26	1445	4.60	315	3-21	1345	4.11	226
1-10	1000	5.52	505	6- 2	1015	3.55	152

GUYANDOTTE RIVER BASIN

151

03203600 Guyandotte River at Logan, W. Va.

LOCATION.--Lat 37°50'10", long 81°59'50", Logan County, on right bank 200 ft (61 m) downstream from Middelburg Bridge at Logan, 0.8 mi (1.3 km) downstream from Dingess Run, and 1.1 mi (1.8 km) upstream from Island Creek.

DRAINAGE AREA.--836 mi² (2,165 km²).

PERIOD OF RECORD.--October 1960 to September 1962 (annual maximum only), October 1962 to current year. Gage-height records collected in this vicinity since November 1915 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 640.00 ft (195.072 m) above mean sea level. Prior to Oct. 1, 1962, at datum 1.32 ft (0.402 m) lower.

AVERAGE DISCHARGE.--12 years, 1,138 ft³/s (32.23 m³/s), 18.49 in/yr (470 mm/yr).

EXTREMES.--Current year: Maximum discharge, 44,400 ft³/s (1,260 m³/s) Jan. 11, gage height, 30.76 ft (9.376 m), from rating curve extended as explained below: minimum daily, 80 ft³/s (2.27 m³/s) Oct. 25-27.

Period of record: Maximum discharge, 55,000 ft³/s (1,560 m³/s) Mar. 12, 1963, gage height, 34.98 ft (10.662 m), from rating curve extended above 26,000 ft³/s (736 m³/s) on basis of slope-area measurements at gage heights 25.6 ft (7.80 m) and 34.98 ft (10.662 m): minimum 33 ft³/s (0.93 m³/s) Sept. 17, 1964, gage height, 4.07 ft (1.241 m).

REMARKS.--Records good above 1,000 ft³/s (28.3 m³/s) and fair below.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	1,400	1,740	3,810	1,970	1,110	1,580	891	4,080	1,180	309	326
2	245	1,140	1,320	4,050	1,760	1,110	1,680	893	13,500	1,030	256	442
3	254	690	1,040	3,900	2,000	1,060	1,600	1,120	8,420	764	253	552
4	220	522	880	7,230	1,890	1,020	5,110	1,150	3,750	591	332	559
5	190	753	800	6,310	1,710	980	5,740	1,080	2,320	558	503	474
6	170	1,660	753	3,830	1,530	1,030	3,450	1,080	1,730	631	363	345
7	150	1,060	642	2,670	1,440	1,500	2,360	1,020	1,400	502	287	298
8	150	674	554	2,060	1,370	2,320	2,000	912	1,170	474	240	291
9	175	540	554	2,560	1,270	2,250	3,110	859	1,460	417	242	280
10	184	504	618	14,700	1,120	1,850	4,250	861	1,060	365	241	273
11	181	462	626	39,500	1,050	1,610	3,090	817	871	401	242	481
12	160	420	568	21,600	1,040	5,800	2,330	3,530	727	402	288	514
13	140	385	642	6,460	1,170	15,700	1,970	6,540	629	347	277	415
14	120	350	1,670	3,840	1,450	6,060	1,710	3,420	573	297	260	444
15	110	320	2,350	2,790	1,600	3,330	1,730	2,070	540	293	234	415
16	100	311	1,820	2,270	1,540	2,780	1,580	1,570	908	700	213	355
17	100	325	1,470	1,930	1,490	3,680	1,390	1,270	1,200	483	199	298
18	100	350	1,170	1,650	1,430	3,350	1,250	1,220	799	391	190	254
19	90	365	950	1,480	1,360	3,170	1,150	1,070	616	312	188	218
20	85	365	870	1,340	1,370	6,050	1,050	980	548	333	205	197
21	85	355	1,050	1,270	1,270	11,400	963	913	505	316	287	193
22	85	365	1,670	1,210	1,260	11,100	896	818	559	274	222	190
23	85	370	1,620	1,110	1,550	5,070	2,000	1,590	984	256	195	174
24	85	561	1,450	1,150	1,590	3,230	3,020	1,850	873	400	179	158
25	80	860	1,370	2,510	1,560	2,340	2,110	1,330	692	539	167	146
26	80	1,340	7,360	5,620	1,430	1,930	1,650	1,020	587	471	158	141
27	80	10,500	13,200	6,700	1,260	1,680	1,390	842	521	372	149	144
28	100	14,600	4,550	4,230	1,150	1,490	1,200	715	1,430	332	142	148
29	254	6,170	2,710	3,650	-----	1,360	1,050	653	2,730	345	258	139
30	642	2,580	2,670	3,000	-----	1,380	948	6,320	1,860	330	353	137
31	1,210	-----	2,980	2,390	-----	1,520	-----	7,120	-----	297	305	-----
TOTAL	5,870	50,297	61,667	166,820	40,630	108,260	63,357	55,524	57,042	14,403	7,737	9,001
MEAN	189	1,677	1,989	5,381	1,451	3,492	2,112	1,791	1,901	465	250	300
MAX	1,210	14,600	13,200	39,500	2,000	15,700	5,740	7,120	13,500	1,180	503	559
MIN	80	311	554	1,110	1,040	980	896	653	505	256	142	137
CFSM	.23	2.01	2.38	6.44	1.74	4.18	2.53	2.14	2.27	.56	.30	.36
IN.	.26	2.24	2.74	7.42	1.81	4.82	2.82	2.47	2.54	.64	.34	.40

CAL YR 1973 TOTAL 494,612 MEAN 1,355 MAX 24,000 MIN 80 CFSM 1.62 IN 22.01
WTR YR 1974 TOTAL 640,608 MEAN 1,755 MAX 39,500 MIN 80 CFSM 2.10 IN 28.51

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	0600	17.86	16,900	3-21	1700	17.74	16,700
12-27	0200	19.45	19,800	5-30	2400	14.39	11,100
1-11	1800	30.76	44,400	6-2	0900	18.07	17,300
3-13	0700	19.64	20,200				

GUYANDOTTE RIVER BASIN

03203670 Whitman Creek at Whitman, W. Va.

LOCATION.--Lat 37°48'28", long 82°01'42", Logan County, on right bank 75 ft (23 m) upstream from abandoned bridge off Secondary State Route 9/1, 0.8 mi (1.3 km) south of Whitman, and at mile 2.0 (3.2 km).

DRAINAGE AREA.--10.9 mi² (28.2 km²).

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

GAGE.--Water-stage and rainfall recorders. Concrete control since Sept. 11, 1969. Altitude of gage is 760 ft (232 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 14.3 ft³/s (0.405 m³/s), 17.82 in/yr (453 mm/yr).

EXTREMES.--Current year: Maximum daily discharge, 200 ft³/s (5.66 m³/s) Jan. 10; no flow for many days.
Period of record: Maximum discharge, 583 ft³/s (16.5 m³/s) Oct. 21, 1970, gage height, 4.66 ft (1.420 m), caused by mine regulation, from rating curve extended above 100 ft³/s (2.83 m³/s) by step-backwater method; no flow for several days each year.

REMARKS.--Records fair except those for periods of doubtful or no gage-height record, which are poor. Rainfall records collected at site since April 1969 are contained in files of U.S. Geological Survey with only monthly totals published in this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	3.8	20	50	24	11	8.0	9.2	43	9.6	.33	3.8
2	0	1.6	15	40	19	10	11	9.9	193	7.3	.33	4.0
3	0	.25	12	35	22	9.5	10	10	80	6.1	1.3	9.6
4	0	.02	9.5	52	21	9.0	99	9.6	48	4.9	2.3	8.8
5	0	2.3	8.0	40	19	8.5	63	8.8	32	4.4	1.6	5.2
6	0	.44	6.0	32	17	15	43	8.8	23	3.8	1.1	4.0
7	0	.21	5.5	25	15	20	31	8.4	19	3.2	.74	3.4
8	0	.14	5.0	20	13	16	28	7.6	13	2.6	.44	2.5
9	0	.10	6.0	60	12	14	40	6.7	10	2.3	.40	1.9
10	0	.08	7.5	200	11	12	46	6.7	7.5	2.3	.36	5.5
11	0	.06	7.0	100	10	12	40	7.0	6.4	3.4	.36	7.0
12	0	.05	6.5	75	10	82	31	31	7.0	2.0	.40	9.2
13	0	.03	16	55	11	112	26	46	5.2	1.5	.21	11
14	0	.02	28	35	13	56	21	31	4.0	1.1	.08	12
15	0	.01	24	28	14	37	20	23	5.5	1.6	.07	9.9
16	0	.04	19	20	15	34	18	18	7.6	4.0	.07	8.4
17	0	.03	15	16	15	35	17	13	4.2	1.6	.10	6.7
18	0	.02	13	14	14	34	16	11	3.4	1.1	.10	4.9
19	0	.02	10	13	14	43	13	7.3	2.8	1.1	.09	4.0
20	0	.02	12	12	14	78	11	10	2.8	1.9	.08	3.8
21	0	.02	18	11	12	139	8.4	12	2.5	1.1	.07	4.6
22	0	.03	23	10	13	85	8.4	9.3	11	.82	.06	4.0
23	0	.04	20	9.5	15	51	21	18	11	1.1	.06	3.0
24	0	.09	18	16	16	34	19	19	10	1.3	.06	2.6
25	0	.10	17	25	14	23	19	17	9.6	.90	.05	2.3
26	0	2.0	100	50	12	17	17	14	8.0	.74	.04	1.9
27	0	190	70	45	11	13	15	12	7.6	.67	.06	2.5
28	0	80	50	38	10	12	12	9.0	11	.59	.17	2.6
29	0	40	35	34	-----	10	9.9	10	14	1.1	2.6	1.6
30	4.4	30	37	30	-----	10	8.8	38	12	2.2	1.8	1.5
31	3.6	-----	40	28	-----	9.9	-----	40	-----	.67	3.4	-----
TOTAL	8.0	351.52	673.0	1,218.5	406	1,051.9	730.5	481.3	614.1	76.99	18.83	152.2
MEAN	.26	11.7	21.7	39.3	14.5	33.9	24.4	15.5	20.5	2.48	.61	5.07
MAX	4.4	190	100	200	24	139	99	46	193	9.6	3.4	12
MIN	0	.01	5.0	9.5	10	8.5	8.0	6.7	2.5	.59	.04	1.5
CFSM	.02	1.07	1.99	3.61	1.33	3.11	2.24	1.42	1.88	.23	.06	.47
IN.†	.03	1.20	2.30	4.16	1.39	3.59	2.49	1.64	2.10	.26	.06	.52
IN.††	3.67	5.91	4.02	7.05	1.41	6.74	4.40	7.39	6.20	3.19	2.79	-

CAL YR 1973 TOTAL 4,776.95 MEAN 13.1 MAX 190 MIN 0 CFSM 1.20 IN† 16.30
WTR YR 1974 TOTAL 5,782.84 MEAN 15.8 MAX 200 MIN 0 CFSM 1.45 IN† 19.74

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-27	unknown	3.86	350	3-21	1345	3.27	224
12-26	unknown	-	unknown	4- 4	1015	2.90	152
1-10	unknown	-	unknown	6- 2	0430	3.61	292
3-12	1945	3.10	190				

† Runoff.

†† Rainfall.

a From floodmark.

NOTE.--Doubtful or no gage-height record Nov. 10 to Mar. 7, Aug. 14-16, 18-27.

GUYANDOTTE RIVER BASIN

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03204000 Guyandotte River at Branchland, W. Va.

LOCATION.--Lat 38°13'15", long 82°12'10", Lincoln County, on right bank at upstream side of highway bridge at Branchland, opposite mouth of Fourmile Creek, and at mile 34.4 (55.3 km). Records include flow of Fourmile Creek.

DRAINAGE AREA.--1,226 mi² (3,175 km²), includes that of Fourmile Creek.

PERIOD OF RECORD.--July 1915 to September 1922 (1918-22, gage heights only), December 1928 to current year. Prior to October 1959, published as Guyandot River at Branchland. Monthly discharge only for July to September 1916, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 547.91 ft (167.003 m) above mean sea level, adjustment of 1912. Prior to June 20, 1932, nonrecording gage and June 20, 1932, to Oct. 24, 1968, water-stage recorder at site 20 ft (6 m) downstream at same datum. Oct. 1, 1942, to Jan. 23, 1969, auxiliary nonrecording gage and since Jan. 24, 1969, auxiliary water-stage recorder 4.0 mi (6.4 km) upstream from base gage at datum 552.90 ft (168.524 m) above mean sea level.

AVERAGE DISCHARGE.--47 years (1915-17, 1929-74), 1,601 ft³/s (45.34 m³/s), 17.73 in/yr (450 mm/yr).

EXTREMES.--Current year: Maximum discharge, 40,100 ft³/s (1,140 m³/s) Jan. 13, gage height, 41.59 ft (12.677 m), backwater; minimum, 97 ft³/s (2.75 m³/s) Oct. 27, gage height, 3.18 (0.969 m).
Period of record: Maximum discharge, 44,500 ft³/s (1,260 m³/s) Mar. 13, 1963, gage height, 43.83 ft (13.359 m); minimum, 3.6 ft³/s (0.10 m³/s) Oct. 25, 1930, gage height, 2.66 ft (0.811 m).
Flood, probably in 1907, reached a stage of about 44 ft (13.4 m), from floodmark, discharge, 43,500 ft³/s (1,230 m³/s).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 803: Drainage area. WSP 853: 1918(M). WSP 1335: 1916-17, 1929-30, 1932-35.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	1,380	3,360	6,520	3,350	1,380	2,200	1,130	8,880	2,480	428	602
2	235	1,430	2,190	6,060	2,780	1,360	2,790	1,060	15,300	1,730	416	679
3	360	1,010	1,590	5,710	2,720	1,310	2,860	1,180	17,600	1,510	392	936
4	280	665	1,280	7,910	2,790	1,250	6,520	1,320	8,750	1,150	470	1,160
5	235	512	1,100	10,400	2,480	1,200	9,540	1,270	4,790	952	665	880
6	207	1,110	984	7,110	2,160	1,650	7,010	1,210	3,340	1,210	672	693
7	174	1,540	896	4,850	1,970	2,810	4,690	1,180	2,660	936	500	554
8	181	880	763	3,600	1,810	3,140	3,800	1,070	2,150	756	512	482
9	203	700	679	2,970	1,700	3,640	4,790	984	2,070	700	452	476
10	271	567	665	6,840	1,510	3,120	6,180	936	1,980	623	404	476
11	253	470	707	21,000	1,370	2,660	5,590	928	1,600	707	416	554
12	207	398	686	34,700	1,330	4,710	4,310	2,510	1,370	651	512	812
13	171	350	651	26,300	1,440	16,500	3,430	7,350	1,180	588	476	756
14	151	315	856	9,700	1,790	14,400	2,850	6,420	1,060	506	422	848
15	139	285	1,790	5,860	2,170	7,310	2,460	3,790	968	464	370	840
16	130	310	2,210	4,280	2,180	5,190	2,350	2,530	1,100	944	325	728
17	124	452	1,930	3,370	2,030	5,590	1,980	1,830	1,600	984	295	602
18	124	554	1,500	2,690	1,890	5,710	1,750	1,510	1,500	686	285	512
19	113	554	1,170	2,240	1,750	4,800	1,560	1,420	1,060	560	276	434
20	105	488	992	1,950	1,720	6,500	1,390	1,240	888	536	280	370
21	108	434	1,110	1,840	1,630	10,100	1,240	1,310	904	536	300	355
22	105	500	1,370	1,850	1,470	17,700	1,130	1,140	856	476	360	370
23	105	548	1,910	1,740	1,750	11,200	1,600	2,110	1,370	464	276	335
24	102	735	1,780	1,600	1,990	6,610	3,740	3,500	1,780	1,130	244	290
25	105	896	1,620	1,950	2,020	4,560	3,580	2,550	1,490	777	223	267
26	102	1,080	3,600	4,740	1,870	3,410	2,630	1,700	1,190	791	207	244
27	100	5,340	9,330	8,490	1,620	2,750	2,040	1,270	992	651	203	231
28	119	21,300	8,750	7,230	1,430	2,330	1,680	1,030	1,160	536	192	249
29	235	15,500	5,330	5,980	-----	2,010	1,420	880	3,000	506	258	280
30	470	6,760	5,310	5,230	-----	1,930	1,230	11,900	3,510	530	616	231
31	1,000	-----	6,040	4,260	-----	2,070	-----	15,900	-----	506	588	-----
TOTAL	6,385	67,063	72,149	218,970	54,720	158,900	98,340	84,158	96,098	25,576	12,035	16,246
MEAN	206	2,235	2,327	7,064	1,954	5,126	3,278	2,715	3,203	825	388	542
MAX	1,000	21,300	9,330	34,700	3,350	17,700	9,540	15,900	17,600	2,480	672	1,160
MIN	100	285	651	1,600	1,330	1,200	1,130	880	856	464	192	231
CFSM	.17	1.82	1.90	5.76	1.59	4.18	2.67	2.21	2.61	.67	.32	.44
IN.	.19	2.03	2.19	6.64	1.66	4.82	2.98	2.55	2.92	.78	.37	.49

CAL YR 1973 TOTAL 672,629 MEAN 1,843 MAX 22,700 MIN 100 CFSM 1.50 IN 20.41
WTR YR 1974 TOTAL 910,640 MEAN 2,495 MAX 34,700 MIN 100 CFSM 2.04 IN 27.63

PEAK DISCHARGE (BASE, 13,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1100	a30.76	21,900	3-22	1200	a27.63	18,800
12-27	1900	a25.36	15,300	5-30	1500	a26.55	18,100
1-13	0100	a41.59	40,100	6-2	2100	c28.83	20,300
3-13	2100	b28.05	19,300				

a Backwater.
b Backwater, occurred Mar. 14.
c Backwater, occurred June 3.

03204500 Mud River near Milton, W. Va.

LOCATION.--Lat 38°23'15", long 82°06'46", Cabell County, on right bank 75 ft (23 m) downstream from highway bridge, 700 ft (213 m) downstream from Little Twomile Creek, 0.9 mi (1.4 km) upstream from Charley Creek, 3.4 mi (5.5 km) south of Milton, and at mile 25.3 (40.7 km).

DRAINAGE AREA.--256 mi² (663 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 572.64 ft (174.541 m) above mean sea level, adjustment of 1912, levels by Corps of Engineers. Prior to Nov. 21, 1957, nonrecording gage at site 75 ft (23 m) upstream at same datum.

AVERAGE DISCHARGE.--36 years, 280 ft³/s (7.930 m³/s), 14.85 in/yr (377 mm/yr).

EXTREMES.--Current year: Maximum discharge, 9,390 ft³/s (266 m³/s) Nov. 28, gage height, 24.88 ft (7.583 m); minimum, 2.1 ft³/s (0.059 m³/s) Oct. 23, 24, gage height, 0.64 ft (0.195 m).
Period of record: Maximum discharge, 15,100 ft³/s (428 m³/s) Feb. 27, 1962, gage height, 28.60 ft (8.717 m); maximum gage height, 29.35 ft (8.946 m) Feb. 3, 1939, from floodmarks; minimum discharge, 0.01 ft³/s (<0.001 m³/s) Sept. 8, 1957; minimum gage height, 0.06 ft (0.018 m) Sept. 21, 23, 1959.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1555: 1953, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	346	436	2,600	328	215	304	69	2,500	312	60	279
2	35	222	308	996	284	219	610	66	3,930	196	42	488
3	21	120	226	1,150	372	210	762	84	3,670	132	38	384
4	17	72	183	3,330	336	194	1,450	108	953	94	43	739
5	16	59	159	2,190	271	183	2,370	91	371	119	62	337
6	13	79	135	806	235	376	928	73	247	782	49	193
7	11	66	108	531	257	1,520	573	66	218	400	38	133
8	14	49	89	394	258	883	524	57	177	158	41	101
9	29	93	78	380	239	540	1,740	51	156	93	166	83
10	18	183	70	2,480	212	392	1,160	49	163	92	249	113
11	13	102	64	7,340	213	422	707	46	101	399	132	117
12	11	68	57	5,770	244	2,450	509	1,380	68	192	469	91
13	9.2	50	55	1,740	306	3,010	410	1,890	50	95	285	84
14	7.8	42	75	678	334	1,590	342	546	40	58	157	96
15	6.6	37	130	496	282	702	302	296	34	57	95	198
16	5.5	61	122	390	244	641	266	212	31	320	62	142
17	4.4	138	114	312	222	1,150	224	163	35	144	254	98
18	4.1	85	98	258	194	755	197	132	38	71	142	74
19	3.2	60	81	226	177	625	176	105	27	47	73	58
20	2.9	47	85	204	181	1,050	158	88	22	56	54	47
21	2.9	41	239	199	165	1,820	141	72	19	71	41	52
22	2.7	60	266	276	152	2,700	128	60	26	46	34	72
23	2.4	105	208	255	170	1,200	128	192	284	37	29	55
24	2.4	228	215	237	170	663	133	340	317	684	25	42
25	2.4	230	233	240	206	454	117	203	340	431	22	35
26	2.4	239	933	312	203	354	105	140	211	178	20	31
27	4.1	1,420	2,450	412	179	294	96	103	128	120	17	28
28	6.6	6,250	1,030	490	170	255	89	81	129	82	17	29
29	45	6,660	507	904	-----	239	82	82	629	86	284	30
30	312	1,370	1,570	614	-----	246	74	952	699	180	508	32
31	555	-----	1,780	432	-----	290	-----	2,000	-----	96	275	-----
TOTAL	1,206.6	18,582	12,104	36,642	6,604	25,642	14,805	9,797	15,613	5,828	3,783	4,261
MEAN	38.9	619	390	1,182	236	827	494	316	520	188	122	142
MAX	555	6,660	2,450	7,340	372	3,010	2,370	2,000	3,930	782	508	739
MIN	2.4	37	55	199	152	183	74	46	19	37	17	28
CFSM	.15	2.42	1.52	4.62	.92	3.23	1.93	1.23	2.03	.73	.48	.55
IN.	.18	2.70	1.76	5.32	.96	3.73	2.15	1.42	2.27	.85	.55	.62

CAL YR 1973 TOTAL 114,356.80 MEAN 313 MAX 6,660 MIN 0 CFSM 1.22 IN 16.62
WTR YR 1974 TOTAL 154,867.60 MEAN 424 MAX 7,340 MIN 2.4 CFSM 1.66 IN 22.50

PEAK DISCHARGE (BASE, 3,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	2400	24.88	9,390	6- 3	0200	17.32	4,440
1-11	1600	23.40	8,120				

OHIO RIVER MAIN STEM

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03206000 Ohio River at Huntington, W. Va.

LOCATION.--Lat 38°24'48", long 82°30'02", Lawrence County, Ohio, on right bank at lock 28 at Sybene, Ohio, 0.1 mi (0.2 km) upstream from Fourpole Creek, 3.0 mi (4.8 km) downstream from Symmes Creek, and at mile 311.6 (501.4 km), measured downstream from Pittsburgh, Pa.

DRAINAGE AREA.--55,900 mi² (144,800 km²), approximately.

PERIOD OF RECORD.--August 1934 to current year (since October 1968, no low-flow records). Gage-height records collected at same site since 1913 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 490.263 ft (149.432 m) above mean sea level, Sandy Hook datum. Prior to July 8, 1942, at datum 1.737 ft (0.529 m) higher. Auxiliary water-stage recorder 4.7 mi (7.6 km) upstream from base gage at datum 490.102 ft (149.383 m) above mean sea level, Sandy Hook datum.

EXTREMES.--Current year: Maximum daily discharge, 460,000 ft³/s (13,000 m³/s) Jan. 12; minimum discharge, not determined; minimum gage height 24.13 ft (7.355 m) Oct. 3.
Period of record: Maximum discharge, 654,000 ft³/s (18,500 m³/s) Jan. 28, 1937; maximum gage height, 69.45 ft (21.168 m) Jan. 27, 1937, present datum; minimum daily discharge determined, 3,200 ft³/s (90.6 m³/s) Sept. 6, 13, Nov. 2, 1934, Oct. 3, 1935, Oct. 1, 1937.

REMARKS.--Records poor. Discharge less than 50,000 ft³/s (1,420 m³/s) on days for which no discharge is shown. Flow partly regulated by locks, dams, and reservoirs upstream.

REVISIONS (WATER YEARS).--WSP 853: 1934, 1936. WSP 893: Drainage area. WSP 1305: 1935(M), 1939(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		106,000	230,000	184,000	150,000	78,000	125,000	50,000	170,000	70,000		80,000
2		118,000	165,000	177,000	139,000	85,000	140,000	53,000	220,000	88,000		90,000
3		105,000	130,000	168,000	120,000	100,000	170,000	62,000	250,000	95,000		100,000
4		96,600	115,000	183,000	110,000	115,000	210,000	68,000	240,000	88,000		115,000
5		65,600	95,000	192,000	105,000	120,000	250,000	75,000	168,000	58,000		130,000
6		49,800	80,000	179,000	95,000	122,000	265,000	70,000	140,000			110,000
7		65,600	65,000	158,000	95,000	140,000	250,000	62,000	100,000			80,000
8		51,400	52,000	138,000	105,000	145,000	220,000	54,000	65,000			64,000
9		59,700	52,000	127,000	110,000	150,000	210,000	55,000	60,000			66,000
10			60,000	134,000	100,000	144,000	220,000	60,000	55,000			50,000
11			60,000	250,000	85,000	155,000	210,000	68,000				
12			62,000	460,000	82,000	210,000	190,000	110,000				
13			60,000	420,000	80,000	260,000	170,000	240,000				
14			69,000	330,000	82,000	265,000	155,000	280,000				55,000
15			105,000	204,000	90,000	235,000	144,000	260,000				70,000
16		57,500	120,000	156,000	100,000	185,000	139,000	185,000				
17		51,300	115,000	145,000	95,000	170,000	125,000	141,000				
18		51,800	82,000	147,000	85,000	165,000	118,000	135,000				
19		54,400	70,000	152,000	70,000	160,000	110,000	141,000				
20		50,000	62,600	154,000	72,000	155,000	95,000	141,000				
21		52,000	65,600	170,000	76,000	190,000	85,000	124,000	69,000			
22		52,000	122,000	170,000	79,000	245,000	72,000	98,000	100,000			70,000
23			149,000	165,000	87,000	255,000	63,000	92,000	140,000			60,000
24			145,000	170,000	105,000	215,000	80,000	90,000	210,000			
25		60,000	132,000	175,000	120,000	170,000	82,000	97,800	190,000			
26		85,000	126,000	180,000	115,000	135,000	80,000	86,500	155,000			
27		195,000	180,000	185,000	98,000	110,000	63,000	62,000	130,000			
28		270,000	240,000	185,000	85,000	100,000	54,000	54,000	90,000			
29		300,000	225,000	180,000	-----	92,000	55,000	48,000	82,000			
30	73,800	305,000	220,000	180,000	-----	98,000	52,000	85,000	85,000			
31	111,000	-----	230,000	170,000	-----	110,000	-----	114,000	-----	67,600	70,000	-----
TOTAL			3,684.2M	5,988.0M	2,735.0M	4,879.0M	4,202.0M	3,261.3M				
MEAN			118,800	193,200	97,680	157,400	140,100	105,200				
MAX			240,000	460,000	150,000	265,000	265,000	280,000				
MIN			52,000	127,000	70,000	78,000	52,000	48,000				

CAL YR 1973 TOTAL - MEAN - MAX 370,000 MIN - CFSM - IN -
WTR YR 1974 TOTAL - MEAN - MAX 460,000 MIN - CFSM - IN -

TWELVEPOLE CREEK BASIN

03206600 East Fork Twelvepole Creek near Dunlow, W. Va.

LOCATION.--Lat 38°01'02", long 82°17'46", Wayne County, on left bank 0.2 mi (0.3 km) upstream from Maynard Branch, 0.9 mi (1.4 km) downstream from McComas Branch, 1.5 mi (2.4 km) upstream from Devilstrace Branch, and 7.5 mi (12.1 km) east of Dunlow.

DRAINAGE AREA.--38.2 mi² (98.9 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 710.00 ft (216.408 m) above mean sea level. Prior to Dec. 22, 1964, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--10 years, 50.7 ft³/s (1.436 m³/s), 18.02 in/yr (458 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,660 ft³/s (75.3 m³/s) Nov. 27, gage height, 13.26 ft (4.042 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s); minimum, 0.48 ft³/s (0.014 m³/s) Oct. 22-28, gage height, 4.74 ft (1.445 m).

Period of record: Maximum discharge, 2,660 ft³/s (75.3 m³/s) Nov. 27, 1973, gage height, 13.26 ft (4.042 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s); minimum, 0.01 ft³/s (<0.001 m³/s) July 2-13, 1966, Sept. 18-28, 1967, Sept. 8, 9, 1973; minimum gage height, 4.44 ft (1.353 m) Sept. 26, 27, 1967.

REMARKS.--Records good. Records of specific conductance and water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	11	54	328	83	32	99	32	363	14	4.1	19
2	.93	7.4	37	162	86	29	185	32	1,010	12	3.5	15
3	.93	4.8	28	227	80	28	159	33	278	9.7	5.4	25
4	.85	3.3	24	537	69	28	702	26	120	7.9	12	25
5	.85	4.5	22	252	58	29	345	25	66	7.1	10	14
6	.77	5.8	18	153	57	187	191	25	44	6.1	6.4	10
7	1.0	4.8	16	110	53	239	134	22	37	5.2	4.8	9.1
8	1.7	3.5	14	78	49	155	170	21	26	4.8	12	7.6
9	1.3	4.1	14	89	43	116	292	20	20	4.5	10	7.1
10	1.2	4.3	14	1,380	38	90	211	18	16	4.1	7.1	8.7
11	1.1	3.6	13	1,570	39	87	156	17	13	5.2	6.9	12
12	1.0	3.1	12	492	38	403	123	160	12	4.3	6.6	9.1
13	.93	2.6	14	203	46	632	100	127	10	3.5	5.4	9.4
14	.93	2.4	18	138	48	231	80	86	8.7	2.9	4.3	13
15	.85	2.2	16	105	45	149	65	58	8.4	2.7	3.5	11
16	.77	5.0	16	78	45	172	53	42	20	20	3.1	9.4
17	.70	6.4	14	61	41	170	46	34	9.7	6.4	4.5	12
18	.64	4.8	11	50	36	138	41	34	7.9	3.9	3.6	6.9
19	.58	4.1	11	45	36	132	35	25	6.9	4.3	3.5	6.1
20	.58	3.6	16	41	34	172	31	24	6.9	10	2.9	5.4
21	.53	4.5	50	54	28	627	28	18	8.7	16	2.7	5.4
22	.53	12	25	55	32	415	26	18	32	6.9	2.2	7.1
23	.48	9.1	30	57	32	207	131	86	28	6.1	1.8	5.0
24	.48	22	39	53	31	141	114	59	30	6.6	1.7	3.6
25	.48	13	39	78	32	104	84	41	21	5.2	1.6	3.3
26	.48	25	348	105	25	84	65	31	14	12	1.4	2.4
27	.48	1,370	348	123	23	69	53	25	12	12	1.4	2.4
28	1.8	1,100	153	141	28	59	45	21	21	5.6	1.4	5.2
29	13	203	123	165	-----	53	38	19	25	6.1	8.1	5.0
30	19	94	330	138	-----	76	32	702	19	11	15	3.5
31	13	-----	600	110	-----	95	-----	344	-----	6.1	14	-----
TOTAL	68.72	2,943.9	2,467	7,178	1,255	5,149	3,834	2,225	2,294.2	232.2	170.9	277.7
MEAN	2.22	98.1	79.6	232	44.8	166	128	71.8	76.5	7.49	5.51	9.26
MAX	19	1,370	600	1,570	86	632	702	702	1,010	20	15	25
MIN	.48	2.2	11	41	23	28	26	17	6.9	2.7	1.4	2.4
CFSM	.06	2.57	2.08	6.07	1.17	4.35	3.35	1.88	2.00	.20	.14	.24
IN.	.07	2.87	2.40	6.99	1.22	5.01	3.73	2.17	2.23	.23	.17	.27
CAL YR 1973	TOTAL 19,739.51	MEAN 54.1	MAX 1,370	MIN .02	CFSM 1.42	IN 19.22						
WTR YR 1974	TOTAL 28,095.62	MEAN 77.0	MAX 1,570	MIN .48	CFSM 2.02	IN 27.36						

PEAK DISCHARGE (BASE, 840 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-27	1530	13.26	2,660	3-21	1530	9.63	970
12-31	1330	9.36	888	4- 4	1300	9.60	960
1-10	1800	12.72	2,330	5-30	1200	10.21	1,180
3-12	2300	9.78	1,020	6- 2	0630	10.73	1,390

TWELVEPOLE CREEK BASIN

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03206780 East Lynn Lake near East Lynn, W. Va.

LOCATION.--Lat 38°08'43", long 82°22'58", Wayne County, at East Lynn Dam on East Fork Twelvepole Creek, 0.1 mi (0.2 km) upstream from Laurel Creek, 1.5 mi (2.4 km) south of East Lynn, and at mile 42.0 (67.6 km).

DRAINAGE AREA.--133 mi² (344 km²).

PERIOD OF RECORD.--March 1972 to current year, monthend contents only.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, levels by Corps of Engineers.

EXTREMES.--Current year: Maximum contents, 33,030 acre-ft (40.7 hm³) Jan. 14, elevation, 674.95 ft (205.725 m); minimum, 10,050 acre-ft (12.4 hm³) Feb. 25, elevation, 653.90 ft (199.309 m).

Period of record: Maximum contents, 33,030 acre-ft (40.7 hm³) Jan. 14, 1974, elevation, 674.95 ft (205.725 m); minimum since first filling, 10,050 acre-ft (12.4 hm³) Feb. 25, 1974, elevation, 653.90 ft (199.309 m).

REMARKS.--Reservoir is formed by rockfill dam with impervious core, completed in 1972; closure of dam was made and storage began in March 1972. Spillway is uncontrolled saddle spillway, crest elevation, 701.0 ft (213.66 m). Flow is controlled by one 2.5-ft (0.76 m) diameter bypass valve and three 5.67 ft (1.727 m) wide by 10.0 ft (3.05 m) high gates. Total level-pool capacity at elevation 701.0 ft (213.66 m), spillway crest, is 82,500 acre-ft (102 hm³) of which 70,790 acre-ft (87.3 hm³) is controlled storage above elevation 656.0 ft (199.95 m), minimum-pool elevation. Reservoir is used for flood control, recreation, and low-flow augmentation.

COOPERATION.--Records furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)	Change in Contents (equivalent in cfs)
Sept. 30.....	660.76	15,970	-	-
Oct. 31.....	660.77	15,980	+10	0
Nov. 30.....	664.41	19,710	+3,730	+63
Dec. 31.....	659.17	14,470	-5,240	-85
CAL YR 1973	-	-	+360	0
Jan. 31.....	656.12	11,810	-2,660	-43
Feb. 28.....	654.05	10,160	-1,650	-30
Mar. 31.....	654.60	10,590	+430	+7
Apr. 30.....	657.55	13,020	+2,430	+41
May 31.....	670.00	26,280	+13,260	+216
June 30.....	662.80	18,000	-8,280	-139
July 31.....	662.80	18,000	0	0
Aug. 31.....	662.59	17,790	-210	-3
Sept. 30.....	662.31	17,500	-290	-5
WTR YR 1974			+1,530	+2

03206790 East Fork Twelvepole Creek below East Lynn Dam, W. Va.

LOCATION.--Lat 38°08'52", long 82°23'00", Wayne County, on left bank 800 ft (244 m) downstream from Laurel Creek, 1,700 ft (518 m) downstream from East Lynn Dam, 1.4 mi (2.3 km) south of East Lynn, and at mile 41.7 (67.1 km).

DRAINAGE AREA.--138 mi² (357 km²).

PERIOD OF RECORD.--June 1962 to current year. Prior to October 1967 published as "near East Lynn."

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) above mean sea level, levels by Corps of Engineers. Prior to Oct. 1, 1967, water-stage recorder at site 0.7 mi (1.1 km) downstream at same datum.

AVERAGE DISCHARGE.--12 years, 158 ft³/s (4.475 m³/s), 15.55 in/yr (395 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,510 ft³/s (71.1 m³/s) Jan. 15, gage height, 22.53 ft (6.867 m); minimum, 3.7 ft³/s (0.10 m³/s) Nov. 12, gage height, 10.98 ft (3.347 m).
 Period of record: Maximum discharge, 4,960 ft³/s (140 m³/s) Mar. 12, 1968, gage height, 31.50 ft (9.601 m), from floodmarks; no flow Sept. 10-27, 1964.
 Maximum discharge known since at least 1913, about 13,000 ft³/s (368 m³/s) Feb. 3, 1939, gage height, about 37 ft (11.3 m), from floodmarks, from rating curve based on conveyance-slope study. Flood of Feb. 28, 1962, reached a stage of 36.25 ft (11.049 m), from floodmarks, discharge, about 12,000 ft³/s (340 m³/s).

REMARKS.--Records good. Flow regulated since March 1972 by East Lynn Lake (see sta 03206780).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	16	2,310	834	188	64	231	6.1	1,370	216	23	65
2	9.0	14	1,670	814	107	78	636	6.4	973	111	16	72
3	9.0	13	655	1,040	131	108	816	6.8	1,970	34	19	97
4	9.3	13	111	1,120	168	56	1,100	6.1	1,990	15	22	155
5	9.3	13	56	1,050	212	52	1,320	5.9	1,920	15	34	91
6	9.3	13	40	865	229	134	884	5.9	1,820	35	40	56
7	9.3	32	39	581	187	677	514	5.7	906	16	40	51
8	9.7	81	39	258	144	673	673	5.7	214	14	45	49
9	9.3	124	39	206	208	504	903	8.0	65	14	59	58
10	9.7	124	27	572	174	388	776	8.4	39	14	64	57
11	9.7	113	19	142	59	262	440	7.4	26	14	51	50
12	9.7	83	19	48	43	903	253	57	19	13	46	43
13	10	79	19	36	85	1,450	196	19	12	13	45	27
14	10	69	19	809	147	1,530	196	11	10	13	43	28
15	10	69	19	2,360	253	530	195	8.4	10	13	31	21
16	10	72	19	2,420	370	693	105	11	12	17	21	30
17	10	78	19	2,380	384	741	20	27	11	13	18	32
18	11	78	19	2,300	89	364	21	43	11	13	18	36
19	11	90	19	1,380	89	244	20	55	11	13	16	39
20	11	103	20	386	88	436	19	91	11	13	14	38
21	11	101	82	233	88	956	19	108	11	12	12	39
22	11	103	148	201	88	1,230	14	107	66	12	12	36
23	11	107	168	161	92	1,180	8.0	187	126	19	13	24
24	11	107	168	140	153	796	5.9	233	125	34	13	20
25	11	106	168	140	73	233	5.7	256	86	29	13	19
26	12	127	476	144	64	90	5.5	196	48	28	13	19
27	12	719	987	147	58	100	5.3	98	33	27	13	19
28	14	1,130	903	247	61	216	5.5	53	120	27	13	19
29	14	1,940	603	488	-----	222	5.5	32	204	27	14	19
30	17	2,400	750	572	-----	200	5.7	520	280	32	17	19
31	14	-----	886	452	-----	201	-----	664	-----	31	26	-----
TOTAL	333.3	8,117	10,516	22,526	4,032	15,311	9,397.1	2,848.8	12,499	897	824	1,328
MEAN	10.8	271	339	727	144	494	313	91.9	417	28.9	26.6	44.3
MAX	17	2,400	2,310	2,420	384	1,530	1,320	664	1,990	216	64	155
MIN	9.0	13	19	36	43	52	5.3	5.7	10	12	12	19

CAL YR 1973 TOTAL 66,561.6 MEAN 182 MAX 2,400 MIN 5.6 MEAN† 182 CFSM† 1.32 IN† 17.92

WTR YR 1974 TOTAL 88,629.2 MEAN 243 MAX 2,420 MIN 5.3 MEAN† 245 CFSM† 1.78 IN† 24.16

† Adjusted for change in contents in East Lynn Lake.

TWELVEPOLE CREEK BASIN

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03207020 Twelvepole Creek below Wayne, W. Va.

LOCATION.--Lat 38°14'56", long 82°26'06", Wayne County, on left bank just downstream from highway bridge on Secondary State Route 52/43, 1.9 mi (3.1 km) northeast of Wayne, and at mile 29.2 (47.0 km).

DRAINAGE AREA.--300 mi² (777 km²).

PERIOD OF RECORD.--July 1915 to September 1922 (gage heights only, October 1917 to September 1922), October 1928 to September 1931, August 1946 to September 1954, October 1955 to current year. Prior to October 1966 published as "at Wayne." Gage-height records collected at site 2.0 mi (3.2 km) upstream from 1924 to March 1949 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 560.00 ft (170.688 m) above mean sea level. Prior to Aug. 29, 1957, nonrecording gage, and Aug. 29, 1957, to Sept. 30, 1966, water-stage recorder at site 2.0 mi (3.2 km) upstream at datum 16.53 ft (5.038 m) higher. Oct. 1, 1966, to Dec. 15, 1966, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--32 years (1915-17, 1928-31, 1946-54, 1955-74), 332 ft³/s (9.402 m³/s), 15.03 in/yr (382 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 6,200 ft³/s (176 m³/s) May 30, gage height, 20.59 ft (6.276 m); minimum, 6.5 ft³/s (0.18 m³/s) Oct. 4, gage height, 3.51 ft (1.070 m).
Period of record: Maximum discharge, 15,900 ft³/s (450 m³/s) Feb. 28, 1962, gage height, 29.46 ft (8.979 m), site and datum then in use, from rating curve extended above 9,500 ft³/s (269 m³/s) on basis of slope-area measurement of peak flow; no flow Oct. 21-27, Nov. 2, 1953, Nov. 4, 1959.
Flood of June 30, 1928, reached a stage of 28.3 ft (8.63 m), former site and datum, discharge, 14,000 ft³/s (396 m³/s) and flood of Feb. 4, 1939, reached a stage of 31.03 ft (9.458 m), former site and datum, discharge, 22,000 ft³/s (623 m³/s), from readings by National Weather Service.

REMARKS.--Records good. Flow regulated since March 1972 by East Lynn Lake (see sta 03206780).

REVISIONS--(WATER YEARS).--WSP 1335: 1916-17, 1930.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	91	2,460	2,140	577	176	514	95	2,760	328	64	236
2	8.0	60	2,080	1,510	362	185	971	91	3,560	224	47	188
3	7.5	40	1,070	2,080	378	222	1,430	103	3,750	125	46	212
4	7.0	29	278	2,800	360	198	1,820	99	2,610	78	64	308
5	8.0	28	183	2,160	400	144	2,710	81	2,220	78	74	228
6	7.0	26	128	1,540	409	580	1,860	73	2,050	250	78	138
7	8.0	22	111	1,140	445	1,360	1,010	72	1,490	99	70	112
8	12	67	99	646	310	1,280	1,140	65	478	67	84	96
9	9.5	149	91	475	372	992	1,810	68	181	56	102	114
10	8.5	158	84	2,730	360	712	1,660	65	148	50	100	186
11	8.0	144	64	5,360	260	634	1,080	58	105	45	92	172
12	8.0	132	58	3,420	226	2,140	741	613	88	42	93	136
13	8.0	100	58	1,150	240	2,840	535	490	73	39	78	111
14	9.0	91	61	808	322	2,890	469	308	64	36	70	138
15	8.5	89	65	2,390	320	1,370	424	226	58	33	62	120
16	7.5	95	66	2,600	523	1,160	365	167	59	84	50	98
17	8.0	102	64	2,490	625	1,350	224	133	66	70	47	92
18	8.5	100	59	2,420	285	979	186	136	58	55	39	79
19	10	106	54	2,020	238	634	167	141	50	47	40	77
20	11	128	61	688	234	908	148	158	44	45	32	72
21	11	133	174	460	224	2,220	133	190	41	38	28	84
22	12	128	236	392	220	2,780	122	194	91	45	24	85
23	12	144	260	370	228	2,110	114	541	302	50	22	68
24	14	186	265	330	255	1,500	272	511	262	138	22	54
25	15	183	262	330	234	763	234	445	186	71	21	50
26	16	226	898	368	185	392	186	368	170	56	20	45
27	17	1,130	1,940	463	188	368	152	248	112	60	19	44
28	27	4,620	1,700	622	163	392	132	167	183	59	21	47
29	42	4,010	1,110	952	-----	448	114	119	673	51	35	45
30	72	2,730	1,440	1,030	-----	481	100	4,000	433	75	70	44
31	86	-----	2,030	877	-----	499	-----	2,130	-----	77	89	-----
TOTAL	495.5	15,247	17,509	46,761	8,943	32,707	20,823	12,155	22,365	2,571	1,703	3,479
MEAN	16.0	508	565	1,508	319	1,055	694	392	746	82.9	54.9	116
MAX	86	4,620	2,460	5,360	625	2,890	2,710	4,000	3,750	328	102	308
MIN	7.0	22	54	330	163	144	100	58	41	33	19	44

CAL YR 1973 TOTAL 132,951.5 MEAN 364 MAX 4,620 MIN 6.5 MEAN† 364 CFSM† 1.21 IN† 16.42
WTR YR 1974 TOTAL 184,758.5 MEAN 506 MAX 5,360 MIN 7.0 MEAN† 508 CFSM† 1.69 IN† 22.94

† Adjusted for change in contents in East Lynn Lake.

BIG SANDY RIVER BASIN

03213000 Tug Fork at Litwar, W. Va.

LOCATION---Lat 37°29'05", long 81°50'40", McDowell County, on left bank 200 ft (61 m) downstream from War Branch, 0.5 mi (0.8 km) downstream from Litwar, 2.2 mi (3.5 km) northwest of Iaeger, 2.7 mi (4.3 km) downstream from Dry Fork, and at mile 105.6 (169.9 km).

DRAINAGE AREA--- 502 mi² (1,300 km²).

PERIOD OF RECORD---May 1930 to current year.

GAGE---Water-stage recorder. Datum of gage is 936.36 ft (285.403 m) above mean sea level. Prior to Oct. 16, 1942, nonrecording gage at highway bridge 0.5 mi (0.8 km) upstream at same datum.

AVERAGE DISCHARGE---44 years, 541 ft³/s (15.32 m³/s), 14.64 in/yr (372 mm/yr).

EXTREMES---Current year: Maximum discharge, 18,600 ft³/s (527 m³/s) Jan. 11, gage height, 12.87 ft (3.923 m); minimum, 46 ft³/s (1.30 m³/s) Sept. 30; minimum gage height, 0.82 ft (0.250 m), Oct. 25, 26-28.
Period of record: Maximum discharge, 35,700 ft³/s (1,010 m³/s) Jan. 29, 1957, gage height, 21.60 ft (6.584 m); minimum observed, 11 ft³/s (0.31 m³/s) Oct. 3, 4, 7, 1930.

REMARKS---Records good.

REVISIONS (WATER YEARS)--- WSP 728: 1931. WSP 1335: 1930, 1931-35(M), 1937, 1943-46, 1947(M), 1948, 1949(P), 1950, 1952-53.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	401	770	3,680	1,180	806	1,230	548	772	359	136	79
2	149	315	574	2,770	1,180	734	1,240	588	2,010	280	124	79
3	136	245	468	2,490	1,530	689	1,100	716	1,890	235	117	77
4	105	193	421	3,300	1,450	635	2,630	748	1,190	205	114	81
5	95	414	408	2,790	1,260	608	3,210	724	843	215	114	79
6	83	599	369	2,050	1,130	743	2,010	852	660	240	111	72
7	77	339	309	1,640	1,040	1,980	1,540	825	556	230	105	75
8	143	261	273	1,350	968	2,040	1,370	748	484	205	99	79
9	279	225	309	1,640	887	1,590	2,020	789	468	192	96	79
10	177	193	333	3,130	788	1,300	2,070	915	428	184	90	105
11	133	162	309	12,200	752	1,330	1,690	798	366	180	88	220
12	111	143	285	5,750	716	4,230	1,460	1,360	310	172	88	220
13	98	133	333	2,870	743	6,330	1,300	2,570	298	164	86	205
14	100	122	1,040	2,120	869	2,950	1,150	1,620	280	156	81	188
15	98	119	1,020	1,720	923	2,010	1,070	1,220	250	152	79	172
16	88	165	806	1,430	1,050	1,900	924	978	516	366	75	152
17	83	230	671	1,270	2,400	2,350	843	843	516	225	70	128
18	81	201	526	1,120	1,740	1,920	780	834	280	200	72	111
19	77	185	447	1,020	1,440	1,740	732	780	240	188	72	96
20	73	169	440	959	1,270	3,000	676	756	230	180	99	88
21	75	165	1,110	914	1,060	5,540	636	660	215	176	86	81
22	81	185	1,340	824	1,150	4,450	604	596	268	164	72	75
23	79	201	1,080	770	1,290	2,610	1,280	684	317	156	64	70
24	77	261	932	824	1,180	1,960	1,090	700	262	152	59	64
25	69	285	950	1,570	1,100	1,540	879	564	240	156	54	57
26	67	339	4,740	2,170	968	1,330	772	508	215	148	50	54
27	65	2,920	4,110	2,580	878	1,160	708	468	210	164	49	50
28	77	5,130	2,060	1,920	824	1,050	644	404	780	205	47	49
29	162	1,960	1,490	1,780	-----	978	604	366	1,210	184	50	47
30	291	1,090	1,730	1,540	-----	1,040	564	684	564	164	57	46
31	447	-----	1,940	1,340	-----	1,130	-----	798	-----	152	70	-----
TOTAL	3,831	17,350	31,593	71,531	31,766	61,673	36,826	25,644	16,868	6,149	2,574	2,978
MEAN	124	578	1,019	2,307	1,135	1,989	1,228	827	562	198	83.0	99.3
MAX	447	5,130	4,740	12,200	2,400	6,330	3,210	2,570	2,010	366	136	220
MIN	65	119	273	770	716	608	564	366	210	148	47	46
CFSM	.25	1.15	2.03	4.60	2.26	3.96	2.45	1.65	1.12	.39	.17	.20
IN.	.28	1.29	2.34	5.30	2.35	4.57	2.73	1.90	1.25	.46	.19	.22

CAL YR 1973 TOTAL 243,023 MEAN 666 MAX 12,000 MIN 65 CFSM 1.33 IN 18.01
WTR YR 1974 TOTAL 308,783 MEAN 846 MAX 12,200 MIN 46 CFSM 1.69 IN 22.88

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1300	6.47	7,010	3-13	0500	7.78	8,880
12-26	1800	7.99	9,280	3-21	1900	8.14	9,570
1-11	1600	12.87	18,600				

BIG SANDY RIVER BASIN

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03213500 Panther Creek near Panther, W. Va.

LOCATION.--Lat 37°26'45", long 81°52'15", McDowell County, on left bank 200 ft (61 m) downstream from Cub Branch, 2.1 mi (3.4 km) upstream from Trace Fork, 3.0 mi (4.8 km) southwest of Panther, and at mile 4.1 (6.6 km).

DRAINAGE AREA.--30.8 mi² (79.8 km²).

PERIOD OF RECORD.--July 1946 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,050 ft (320 m), from topographic map.

AVERAGE DISCHARGE.--28 years, 36.2 ft³/s (1.025 m³/s), 15.96 in/yr (405 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,790 ft³/s (50.7 m³/s) Jan. 11, gage height, 7.80 ft (2.377 m); minimum, 0.54 ft³/s (0.015 m³/s) Oct. 25, gage height, 1.65 ft (0.503 m).

Period of record: Maximum discharge, 4,600 ft³/s (130 m³/s) Mar. 7, 1967, gage height, 10.71 ft (3.264 m), from rating curve extended above 2,800 ft³/s (79.3 m³/s) on basis of slope-area measurement at gage height 10.67 ft (3.252 m); no flow at times during August and September 1955.

REMARKS.-- Records good. Records of water temperatures for 1973 and 1974 water years are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1505: 1955(P). WSP 1908: 1955(M), 1957(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	26	37	310	51	34	70	25	35	18	4.8	5.9
2	9.2	18	29	149	60	31	90	32	434	12	4.4	7.6
3	5.6	12	23	161	133	29	80	56	181	8.8	4.4	6.8
4	3.5	8.7	22	290	103	28	248	64	71	8.2	4.3	7.4
5	3.2	49	23	173	71	26	215	58	37	8.8	4.7	5.7
6	2.7	35	17	97	55		115	54	26	8.8	3.5	6.0
7	2.4	20	14	69	46	147	73	45	19	6.4	2.4	9.0
8	8.2	13	13	52	39	132	67	34	20	6.2	2.5	7.0
9	7.4	11	14	104	32	93	139	30	22	5.3	2.7	6.8
10	5.8	8.2	15	293	27	70	145	26	15	5.4	3.7	11
11	4.5	6.6	14	1,060	26	96	101	22	12	5.6	5.7	15
12	4.1	6.2	12	325	29	606	74	165	9.4	4.7	8.2	9.2
13	2.3	6.2	20	132	33	451	58	161	9.4	5.0	6.0	9.0
14	2.8	5.8	35	88	61	191	49	77	10	4.1	4.8	8.2
15	2.7	5.6	39	66	69	111	49	47	9.0	4.5	4.5	6.2
16	2.2	23	35	50	68	140	43	30	18	25	5.1	5.4
17	1.3	19	31	41	84	199	37	28	9.6	8.2	6.0	5.9
18	1.3	15	25	34	79	126	32	63	8.4	6.2	5.3	4.8
19	1.9	12	22	30	68	112	31	48	6.8	6.0	5.7	3.5
20	2.2	9.9	24	28	54	252	28	40	6.2	6.0	11	2.9
21	1.6	12	53	28	40	562	25	30	6.0	6.0	6.2	3.4
22	2.1	19	61	24	50	265	26	24	12	6.0	5.0	3.8
23	2.1	21	54	24	54	118	97	37	9.8	6.0	4.5	3.0
24	1.3	31	51	36	54	65	100	35	8.6	11	4.8	2.7
25	1.3	28	56	195	50	42	70	30	6.8	8.2	4.3	2.5
26	2.0	46	490	243	42	32	52	22	6.6	6.8	4.2	2.3
27	1.5	457	255	215	37	27	41	18	8.6	6.8	4.1	2.3
28	1.3	409	102	123	35	24	34	15	57	5.6	4.3	2.5
29	13	112	71	115	-----	21	30	14	72	5.4	6.4	2.5
30	34	54	82	92	-----	28	27	40	32	6.0	6.8	2.3
31	31	-----	151	68	-----	41	-----	35	-----	5.0	7.8	-----
TOTAL	183.5	1,499.2	1,890	4,715	1,550	4,142	2,246	1,405	1,178.2	236.0	158.1	170.6
MEAN	5.92	50.0	61.0	152	55.4	134	74.9	45.3	39.3	7.61	5.10	5.69
MAX	34	457	490	1,060	133	606	248	165	434	25	11	15
MIN	1.3	5.6	12	24	26	21	25	14	6.0	4.1	2.4	2.3
CFSM	.19	1.62	1.98	4.94	1.80	4.35	2.43	1.47	1.28	.25	.17	.18
IN.	.22	1.81	2.28	5.69	1.87	5.00	2.71	1.70	1.42	.29	.19	.21

CAL YR 1973 TOTAL 13,881.7 MEAN 38.0 MAX 490 MIN 1.2 CFSM 1.23 IN 16.77
WTR YR 1974 TOTAL 19,373.6 MEAN 53.1 MAX 1,060 MIN 1.3 CFSM 1.72 IN 23.40

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-27	1745	6.03	762	3-12	1530	6.29	885
12-26	1315	6.06	774	3-21	1300	6.64	1,060
1-11	0815	7.80	1,790				

03213700 Tug Fork at Williamson, W. Va.

LOCATION.--Lat 37°40'21", long 82°16'50", Pike County, Ky., on left bank at Williamson, 100 ft (30 m) upstream from bridge on U.S. Highway 119, and 0.8 mi (1.3 km) downstream from Pond Creek.

DRAINAGE AREA.--932 mi² (2,414 km²).

PERIOD OF RECORD.--October 1967 to current year. Gage-height records collected in this vicinity since 1926 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 620.90 ft (189.250 m) above mean sea level, Ohio River datum, levels by Corps of Engineers. Prior to Jan. 21, 1969, at datum 0.92 ft (0.280 m) lower.

AVERAGE DISCHARGE.--7 years, 1,174 ft³/s (33.25 m³/s), 17.11 in/yr (435 mm/yr).

EXTREMES.--Current year: Maximum discharge, 29,200 ft³/s (827 m³/s) Jan. 12, gage height, 37.37 ft (11.390 m), from rating curve extended above 18,000 ft³/s (510 m³/s); minimum, 94 ft³/s (2.66 m³/s) Oct. 27, gage height, 2.24 ft (0.683 m).

Period of record: Maximum discharge, 29,200 ft³/s (827 m³/s) Jan. 12, 1974, gage height, 37.37 ft (11.390 m), from rating curve extended above 18,000 ft³/s (510 m³/s); minimum, 59 ft³/s (1.67 m³/s) Oct. 18-20, 1969, gage height, 2.04 ft (0.622 m).

Floods of Jan. 30, 1957, Mar. 12, 1963, and Mar. 7, 1967, reached stages of 43.6 ft (13.29 m), 44.5 ft (13.56 m), and 40.7 ft (12.41 m) respectively, from reading by National Weather Service.

REMARKS.--Records fair except those for period of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	850	1,630	5,080	2,140	1,210	2,430	980	1,640	1,100	290	340
2	402	720	1,160	4,730	1,930	1,140	2,520	980	8,080	1,010	292	387
3	305	580	964	4,010	2,630	1,060	2,200	1,260	5,200	795	320	518
4	245	480	837	6,110	2,830	988	4,120	1,300	2,870	620	434	465
5	190	410	781	5,700	2,310	940	6,480	1,250	1,820	588	592	387
6	152	1,200	722	3,960	1,910	1,020	4,120	1,270	1,310	571	355	328
7	144	900	644	2,940	1,660	2,640	3,060	1,280	1,130	546	278	298
8	150	650	564	2,340	1,600	4,020	2,560	1,180	1,030	471	265	318
9	295	420	522	2,500	1,380	3,040	3,560	1,100	936	453	375	310
10	369	350	540	8,000	1,220	2,290	4,270	1,210	865	408	378	428
11	282	300	560	18,000	1,160	1,900	3,450	1,150	781	396	290	596
12	230	270	532	21,100	1,160	7,500	2,820	2,920	686	399	310	543
13	185	250	512	6,890	1,270	13,400	2,430	5,800	641	352	330	543
14	150	230	778	4,090	1,530	6,560	2,080	3,590	616	328	270	568
15	150	220	1,290	3,040	1,750	4,060	2,060	2,510	592	310	232	432
16	130	250	1,170	2,530	1,650	3,400	1,780	1,910	540	486	212	345
17	130	340	1,150	2,080	2,490	4,310	1,540	1,540	616	599	198	290
18	126	440	882	1,800	2,790	3,820	1,390	1,810	680	408	202	260
19	118	360	764	1,820	2,290	3,410	1,280	1,650	602	340	230	232
20	113	350	722	1,350	2,060	5,650	1,200	1,470	557	381	210	202
21	115	340	872	1,320	1,660	9,820	1,110	1,310	543	414	248	198
22	108	550	1,580	1,230	1,540	11,900	1,060	1,160	700	352	210	198
23	111	700	1,500	1,160	2,020	5,600	2,120	2,890	848	320	183	198
24	113	1,000	1,160	1,160	1,970	3,920	2,870	2,260	722	396	180	176
25	101	1,100	1,180	2,570	1,810	3,030	2,070	1,400	634	447	174	160
26	98	950	4,930	4,600	1,540	2,450	1,610	1,100	574	384	167	148
27	94	10,000	8,260	6,130	1,340	2,090	1,380	956	543	381	154	148
28	104	16,000	4,300	4,140	1,250	1,810	1,230	851	1,230	358	158	178
29	250	9,000	2,730	3,740	-----	1,650	1,120	784	3,710	360	348	164
30	592	3,000	2,690	3,540	-----	1,690	1,020	970	1,920	378	342	154
31	916	-----	2,940	2,610	-----	2,040	-----	1,420	-----	322	330	-----
TOTAL	6,673	52,210	48,866	139,970	50,790	118,358	70,940	51,261	42,616	14,673	8,557	9,512
MEAN	215	1,740	1,576	4,515	1,814	3,818	2,365	1,654	1,421	473	276	317
MAX	916	16,000	8,260	21,100	2,830	13,400	6,480	5,800	8,080	1,100	592	596
MIN	94	220	512	1,160	1,160	940	1,020	784	540	310	154	148
CFSM	.23	1.87	1.69	4.84	1.95	4.10	2.54	1.77	1.52	.51	.30	.34
IN.	.27	2.08	1.95	5.59	2.03	4.72	2.83	2.05	1.70	.59	.34	.38
CAL YR 1973	TOTAL 451,615	MEAN 1,237	MAX 21,800	MIN 94	CFSM 1.33	IN 18.03						
WTR YR 1974	TOTAL 614,426	MEAN 1,683	MAX 21,100	MIN 94	CFSM 1.81	IN 24.52						

PEAK DISCHARGE (BASE, 9,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	unknown		unknown	3-13	0230	23.67	14,600
12-26	2230	19.90	11,200	3-22	0200	25.24	16,100
1-12	0100	37.37	29,200	6-2	1130	20.45	11,700

NOTE.--No gage-height record Nov. 1-30.

BIG SANDY RIVER BASIN

163

03214000 Tug Fork near Kermit, W. Va.

LOCATION.--Lat 37°49'05", long 82°23'20", Mingo County, on right bank 2.0 mi (3.2 km) upstream from Wolf Creek, 3.0 mi (4.8 km) upstream from Kermit, 3.0 mi (4.8 km) downstream from Pigeon Creek, and at mile 37.7 (60.7 km).

DRAINAGE AREA.--1,185 mi² (3,069 km²).

PERIOD OF RECORD.--July 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 581.82 ft (177.339 m) above mean sea level.

AVERAGE DISCHARGE.--40 years, 1,375 ft³/s (38.94 m³/s), 15.76 in/yr (400 mm/yr).

EXTREMES.--Current year: Maximum discharge, 53,000 ft³/s (1,500 m³/s) Jan. 11, gage height, 41.85 ft (12.756 m), from rating curve extended as explained below; minimum, 132 ft³/s (3.74 m³/s) Oct. 27, 28, gage height, 1.54 ft (0.469 m).

Period of record: Maximum discharge, 69,600 ft³/s (1,970 m³/s) Mar. 13, 1963, gage height, 45.65 ft (13.914 m), from floodmarks, from rating curve extended above 29,000 ft³/s (821 m³/s) on basis of slope-area measurement of peak flow; minimum, 23 ft³/s (0.65 m³/s) Sept. 14, 1939, gage height, 1.13 ft (0.344 m). Stage of about 43.3 ft (13.20 m) was reached on unknown date prior to 1915.

REMARKS.--Records good.

REVISION (WATER YEARS)--WSP 953: 1934-41. WSP 1505: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	1,080	2,430	5,910	2,860	1,500	2,770	1,210	2,370	1,490	320	754
2	341	921	1,690	6,570	2,470	1,420	2,970	1,180	11,600	1,310	300	657
3	379	646	1,290	5,100	2,950	1,290	2,700	1,420	9,280	1,070	1,070	1,200
4	287	493	1,070	8,960	3,380	1,210	6,160	1,520	4,120	790	722	1,260
5	241	462	958	8,240	2,910	1,160	8,790	1,480	2,530	675	993	773
6	195	1,460	867	5,210	2,460	1,220	6,500	1,450	1,800	695	627	543
7	174	1,080	750	3,700	2,220	2,620	4,500	1,480	1,450	642	450	444
8	172	713	634	2,930	2,010	4,780	3,000	1,350	1,240	597	400	391
9	236	527	573	2,940	1,860	3,970	4,000	1,240	1,090	536	468	381
10	379	430	568	13,800	1,650	3,040	5,500	1,260	998	500	624	479
11	357	373	585	43,600	1,530	2,490	4,000	1,290	867	460	450	1,230
12	279	330	539	47,000	1,530	6,620	3,500	2,350	776	427	433	909
13	231	293	540	15,000	1,670	18,700	3,000	6,400	691	409	456	873
14	192	273	742	6,500	1,990	11,100	2,600	4,110	643	378	388	957
15	174	259	1,370	4,090	2,230	5,280	2,500	2,680	583	360	326	805
16	169	309	1,460	3,270	2,150	4,100	2,200	2,000	880	576	300	607
17	170	452	1,260	2,680	2,450	4,950	1,900	1,620	1,130	679	288	480
18	159	501	1,100	2,290	3,220	4,710	1,600	1,660	888	488	282	411
19	151	438	921	2,020	2,630	4,030	1,500	1,820	646	384	320	365
20	149	394	844	1,840	2,400	6,990	1,400	1,540	562	452	289	324
21	146	382	939	1,790	2,050	11,900	1,300	1,450	541	474	292	323
22	142	551	1,610	1,760	1,870	19,200	1,200	1,230	652	414	285	324
23	138	674	1,870	1,630	2,250	9,190	2,720	2,990	1,080	371	244	292
24	139	1,110	1,670	1,600	2,370	4,990	3,880	3,310	910	469	222	268
25	144	1,200	1,570	2,540	2,210	3,650	2,850	2,060	752	518	206	254
26	140	1,030	4,800	4,940	1,980	2,910	2,240	1,480	649	485	196	239
27	135	8,560	15,000	7,530	1,720	2,500	1,880	1,200	587	463	184	237
28	170	24,900	6,910	5,530	1,570	2,190	1,630	1,030	1,180	391	192	298
29	325	14,700	3,630	5,060	-----	1,990	1,420	919	3,660	418	525	259
30	567	4,350	3,870	4,390	-----	1,990	1,270	1,390	2,680	495	663	224
31	1,150	-----	4,590	3,530	-----	2,350	-----	2,010	-----	382	490	-----
TOTAL	7,851	68,891	66,650	231,950	62,590	154,040	91,480	58,129	56,835	17,798	13,005	16,561
MEAN	253	2,296	2,150	7,482	2,235	4,969	3,049	1,875	1,895	574	420	552
MAX	1,150	24,900	15,000	47,000	3,380	19,200	8,790	6,400	11,600	1,490	1,070	1,260
MIN	135	259	539	1,600	1,530	1,160	1,200	919	541	360	184	224
CFSM	.21	1.94	1.81	6.31	1.89	4.19	2.57	1.58	1.60	.48	.35	.47
IN.	.25	2.16	2.09	7.28	1.96	4.84	2.87	1.82	1.78	.56	.41	.52
CAL YR 1973	TOTAL	592,232	MEAN	1,623	MAX	26,600	MIN	135	CFSM	1.37	IN	18.59
WTR YR 1974	TOTAL	845,780	MEAN	2,317	MAX	47,000	MIN	135	CFSM	1.96	IN	26.55

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-28	1100	33.17	27,200	3-13	1300	28.05	19,800
12-27	1000	25.86	16,900	3-22	0700	29.36	21,600
1-11	2400	41.85	53,000	6-2	1700	24.95	15,800

BIG SANDY RIVER BASIN

03215000 Big Sandy River at Louisa, Ky.

LOCATION.--Lat 38°10'16", long 82°38'05", Lawrence County, on left bank 1.6 mi (2.6 km) upstream from Blaine Creek, 4.3 mi (6.9 km) northwest of Louisa, and at mile 21.2 (34.1 km).

DRAINAGE AREA.--3,892 mi² (10,080 km²).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for October, November 1938, October 1947 to September 1948, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 512.81 ft (156.304 m) above mean sea level. Prior to Nov. 10, 1951, water-stage recorder or nonrecording gages at lock 3, 5.0 mi (8.0 km) upstream at datum 3.65 ft (1.113 m) higher. Auxiliary water-stage recorder, formerly base gage, at site 5.0 mi (8.0 km) upstream; prior to Nov. 10, 1951, auxiliary water-stage recorder or nonrecording gage at mouth of Blaine Creek, 1.6 mi (2.6 km) downstream from present base gage.

AVERAGE DISCHARGE.--36 years, 4,372 ft³/s (123.8 m³/s), 15.25 in/yr (387 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 71,400 ft³/s (2,020 m³/s) Jan. 12; maximum gage height, 42.41 ft (12.927 m) Jan. 12; minimum daily discharge, 523 ft³/s (14.8 m³/s) Oct. 25.
Period of record: Maximum discharge, 89,400 ft³/s (2,530 m³/s) Mar. 2, 1955; maximum gage height, 46.37 ft (14.134 m) May 8, 1958; minimum discharge not determined.
Flood of Apr. 3, 1908, reached a stage of 48.4 ft (14.75 m), former site and datum.

REMARKS.--Records good above 4,000 ft³/s (113 m³/s) and poor below. Flow regulated since October 1968 by Fishtrap Lake, since July 1966 by North Fork Pound River Lake, since March 1965 by John W. Flannagan Lake, and since May 1950 by Dewey Lake.

COOPERATION.--Gage height records furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1505: 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	821	3,540	28,000	19,400	9,950	4,500	8,100	3,610	6,600	6,940	970	3,190
2	968	3,910	21,000	19,100	7,990	4,280	9,680	3,460	23,600	4,780	850	3,050
3	980	3,440	17,000	19,000	7,550	4,040	10,300	3,600	35,300	3,820	893	3,150
4	1,160	2,700	13,000	25,300	10,000	3,790	15,000	4,090	26,000	3,430	1,800	5,470
5	1,170	2,170	5,000	30,600	10,300	4,150	26,200	4,690	15,400	2,350	2,070	4,720
6	1,130	2,230	3,300	24,900	8,470	4,520	21,400	4,990	9,850	3,650	2,590	3,210
7	1,040	3,880	2,700	15,400	7,140	10,900	12,500	4,960	5,950	2,150	2,150	2,160
8	976	3,560	3,250	10,000	6,350	14,700	9,180	4,760	4,730	1,880	1,600	1,620
9	959	2,760	3,700	8,260	5,810	13,500	10,900	4,240	4,100	1,520	1,400	1,490
10	1,070	1,970	3,450	20,100	5,390	9,950	13,900	3,670	3,600	1,350	1,620	1,670
11	1,580	1,560	3,100	55,200	4,890	7,680	13,200	3,520	3,320	1,240	2,050	2,860
12	1,480	1,340	2,350	68,900	4,670	10,900	10,800	4,720	2,990	1,170	1,710	4,250
13	1,310	1,210	2,000	66,300	4,660	33,900	8,990	10,200	2,460	1,110	1,570	3,500
14	1,150	1,050	2,600	41,900	4,870	40,000	7,790	16,100	2,060	1,070	1,430	3,100
15	1,080	995	3,300	17,800	5,160	29,400	7,010	10,600	1,810	1,010	1,290	2,880
16	1,020	1,080	3,600	12,600	5,430	16,800	6,700	6,440	1,860	1,080	1,060	2,280
17	916	1,220	3,500	8,340	5,380	13,600	5,880	5,190	2,320	1,330	964	1,660
18	743	1,410	3,100	15,100	7,080	14,600	5,490	4,340	2,670	1,180	862	1,350
19	705	1,370	2,800	18,900	8,020	13,300	5,390	4,730	2,510	988	796	1,260
20	683	1,280	2,550	18,800	6,630	16,100	4,770	5,120	1,880	922	856	1,160
21	688	1,200	2,650	15,600	5,810	28,000	4,330	4,550	1,530	1,000	880	1,110
22	678	1,260	3,250	10,300	4,870	42,200	3,860	4,030	1,900	1,070	874	1,140
23	645	1,710	4,600	6,320	4,740	42,400	4,680	4,920	8,000	946	886	1,060
24	568	3,430	5,100	5,410	5,850	30,700	8,670	10,200	12,500	964	820	824
25	523	4,470	5,400	5,620	6,420	21,100	8,250	8,410	7,430	1,330	760	760
26	639	4,040	13,000	9,240	6,090	15,400	6,590	5,270	4,440	1,210	683	691
27	688	20,000	35,000	16,800	6,080	10,500	5,740	4,130	3,790	1,280	595	658
28	733	60,000	28,000	20,000	5,560	7,550	4,800	3,240	3,100	2,050	600	646
29	1,170	50,000	20,000	18,400	-----	6,860	4,350	2,820	5,310	1,450	1,260	813
30	2,020	45,000	17,000	17,300	-----	6,920	3,900	5,740	9,350	1,190	4,430	779
31	2,690	-----	18,000	13,500	-----	7,470	-----	5,460	-----	1,130	4,270	-----
TOTAL	31,983	233,785	281,300	654,390	181,160	489,710	268,350	171,800	216,360	56,590	44,549	62,511
MEAN	1,032	7,793	9,074	21,110	6,470	15,800	8,945	5,542	7,212	1,825	1,438	2,044
MAX	2,690	60,000	35,000	68,900	10,300	42,400	26,200	16,100	35,300	6,940	4,430	5,470
MIN	523	995	2,000	5,410	4,660	3,790	3,860	2,820	1,530	922	595	646

CAL YR 1973 TOTAL 1,981,569 MEAN 5,429 MAX 60,000 MIN 404 MEAN† 5,425 CFSM† 1.39 IN† 18.93
WTR YR 1974 TOTAL 2,692,528 MEAN 7,377 MAX 68,900 MIN 523 MEAN† 7,400 CFSM† 1.90 IN† 25.82

† Adjusted for change in contents in Fishtrap, North Fork Pound River, John W. Flannagan and Dewey Lakes.

OHIO RIVER MAIN STEM

165

03216600 Ohio River at Greenup Dam, Ky.

LOCATION.--Lat 38°38'48", long 82°51'38", Greenup County, at left end of Greenup Dam on Ohio River, 1.1 mi (1.8 km) upstream from Grays Branch, 4.7 mi (7.6 km) downstream from Little Sandy River, 5.0 mi (8.0 km) north of Greenup, and at mile 341.0 (548.7 km), measured downstream from Pittsburgh, Pa.

DRAINAGE AREA.--62,000 mi² (161,000 km²), approximately.

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

GAGE.--Gate-opening and water-stage recorders. Headwater gage 0.4 mi (0.6 km) upstream at datum 503.06 ft (153.333 m) above mean sea level, Ohio River datum and 502.51 ft (153.165 m) above mean sea level, datum of 1929. Tailwater gage 0.4 mi (0.6 km) downstream at datum 30.12 ft (9.181 m) lower.

AVERAGE DISCHARGE.--6 years, 92,050 ft³/s (2,607 m³/s), 20.16 in/yr (512 mm/yr).

EXTREMES.--Current year: Maximum daily discharge, 540,000 ft³/s (15,300 m³/s) Jan. 12; maximum headwater gage height, not determined; maximum tailwater gage height, 55.11 ft (16.798 m) Jan. 13; minimum daily discharge, 11,200 ft³/s (317 m³/s) Aug. 27.

Period of record: Maximum daily discharge, 540,000 ft³/s (15,300 m³/s) Jan. 12, 1974; maximum headwater gage height, not determined; maximum tailwater gage height, 55.11 ft (16.798 m) Jan. 13, 1974; minimum daily discharge, 8,100 ft³/s (229 m³/s) Sept. 3, 1973.

REMARKS.--Records poor. Daily discharge computed from head, gage openings, and lockages. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32,500	105,000	268,000	250,000	170,000	82,100	131,000	49,000	185,000	73,400	31,400	86,100
2	45,000	114,000	168,000	235,000	145,000	90,200	151,000	54,200	242,000	92,000	17,000	93,000
3	27,400	106,000	135,000	220,000	130,000	108,000	181,000	65,800	260,000	100,000	16,800	107,000
4	41,400	100,000	116,000	260,000	120,000	124,000	228,000	71,000	270,000	84,600	26,600	125,000
5	41,200	78,000	99,500	290,000	115,000	124,000	270,000	76,300	199,000	63,200	27,900	140,000
6	40,600	58,000	83,800	250,000	105,000	126,000	280,000	72,000	150,000	53,600	25,600	117,000
7	40,000	70,000	64,400	190,000	100,000	162,000	270,000	67,000	109,000	41,000	16,400	85,900
8	29,200	61,500	55,200	140,000	110,000	166,000	242,000	58,000	72,200	40,100	36,500	65,600
9	30,000	60,000	59,900	120,000	115,000	166,000	231,000	58,000	63,300	33,900	27,200	68,700
10	27,400	49,300	63,600	180,000	110,000	161,000	251,000	62,000	51,600	32,600	38,800	53,500
11	29,000	49,300	63,100	400,000	90,000	187,000	240,000	69,000	41,900	39,200	24,300	38,200
12	27,200	39,200	64,400	540,000	88,000	262,000	207,000	110,000	31,700	33,800	25,500	39,600
13	28,300	40,300	60,300	520,000	83,200	270,000	183,000	240,000	38,100	21,000	30,100	47,000
14	21,700	39,700	69,400	430,000	85,800	280,000	169,000	285,000	30,900	18,200	26,200	55,900
15	22,400	33,800	111,000	330,000	95,100	249,000	156,000	265,000	25,400	18,400	21,600	73,800
16	14,900	55,200	129,000	190,000	110,000	199,000	144,000	197,000	51,200	23,500	16,900	46,800
17	23,300	53,700	117,000	165,000	103,000	180,000	132,000	149,000	40,300	22,300	22,200	46,800
18	18,700	54,100	89,500	165,000	93,000	175,000	122,000	133,000	45,500	22,800	23,500	38,600
19	20,100	53,000	68,700	175,000	73,900	171,000	113,000	145,000	52,800	12,300	22,600	31,700
20	15,200	50,800	65,800	190,000	77,800	163,000	99,100	147,000	42,700	18,600	19,300	31,000
21	17,600	55,300	65,800	225,000	82,000	190,000	89,100	121,000	57,900	12,600	19,100	40,100
22	16,600	54,000	123,000	215,000	82,200	258,000	74,300	98,800	106,000	12,500	18,000	72,100
23	13,300	43,600	170,000	190,000	93,100	299,000	64,700	93,000	139,000	16,100	19,400	64,100
24	15,000	45,500	159,000	185,000	115,000	237,000	83,300	92,700	214,000	11,900	18,100	39,900
25	14,000	58,700	134,000	190,000	131,000	178,000	87,300	104,000	201,000	17,300	15,800	39,200
26	17,000	86,400	130,000	200,000	125,000	139,000	73,100	87,400	174,000	16,600	16,900	31,400
27	18,000	155,000	231,000	215,000	106,000	115,000	67,500	64,400	139,000	24,800	11,200	34,300
28	17,000	290,000	287,000	225,000	92,400	107,000	55,000	56,600	91,400	22,200	17,900	28,700
29	30,000	312,000	232,000	235,000	-----	98,500	59,000	49,500	84,800	35,100	44,600	28,200
30	75,000	317,000	229,000	215,000	-----	103,000	51,400	98,200	86,800	33,900	67,900	23,900
31	115,000	-----	250,000	190,000	-----	120,000	-----	140,000	-----	13,700	104,000	-----
TOTAL	924,000	2,688.4M	3,962.4M	7,525.0M	2,946.5M	5,289.8M	4,504.8M	3,378.9M	3,296.5M	1,061.2M	849,300	1,793.1M
MEAN	29,810	89,610	127,800	242,700	105,200	170,600	150,200	109,000	109,900	34,230	27,400	59,770
MAX	115,000	317,000	287,000	540,000	170,000	299,000	280,000	285,000	270,000	100,000	104,000	140,000
MIN	13,300	33,800	55,200	120,000	73,900	82,100	51,400	49,000	25,400	11,900	11,200	23,900
CAL YR 1973	TOTAL 34,683,500		MEAN 95,020		MAX 380,000		MIN 8,100		CFSM 1.53	IN 20.80		
WTR YR 1974	TOTAL 38,219,900		MEAN 104,700		MAX 540,000		MIN 11,200		CFSM 1.69	IN 22.93		

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 time of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements at low-flow partial-record stations during water year 1974

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Little Kanawha River basin						
03152600	Cedar Creek below Cedarville, W. Va.	Lat 38°51'42", long 80°50'24", Gilmer County, 0.1 mile (0.2 km) downstream from Leatherbark Run, and 3.1 mi (5.0 km) downstream from Cedarville.	57.6	1961-62, 1964, 1966-71, 1974	8-28-74	1.4
03152800	Tanner Creek at Tanner, W. Va.	Lat 38°59'16", long 80°56'40", Gilmer County, 0.5 mi (0.8 km) upstream from highway bridge at Tanner.	16.1	1947-51, 1955-57, 1964, 1966, 1968, 1970, 1974	8-28-74	.16
Kanawha River basin						
03176400 (corrected)	Rich Creek at Peterstown, W.Va.	Lat 37°24'00", long 80°48'20", Monroe County, at Peterstown, 1000 ft (305 m) downstream from Brush Creek and at mile 2.8 (4.5 km).	50.6	1941-51, 1953, 1956-57, 1968, 1974	10-24-73	4.1
03177500	Indian Creek at Indian Mills, W. Va.	Lat 37°31'55", long 80°49'10", Summers County, at Indian Mills.	189	1941-50†, 1953, 1956-57, 1964-65, 1972, 1974	10-24-73	8.0
03180700	Deer Creek below Green Bank, W. Va.	Lat 38°25'00", long 79°51'42", Pocahontas County, at steel bridge on road toward Cass, and 1.7 mi (2.7 km) south of Green Bank.	60.0	1960-61, 1964, 1974	10-23-73	5.4
03182000	Knapp Creek at Marlinton, W. Va.	Lat 38°12'40", long 80°04'30" Pocahontas County, on right bank 0.2 mi (0.3 km) downstream from Spice Run, and 1.0 mi (1.6 km) southeast of Marlinton.	108	1945-58†, 1959, 1962, 1972, 1974	10-24-73	14
03186200	Mill Creek at Ansted, W. Va.	Lat 38°07'55", long 81°05'40", Fayette County, 0.3 mi (0.5 km) downstream from Shade Creek, and at mile 1.4 (2.3 km).	24.7	1944, 1947-48, 1951-59, 1970, 1974	10-23-73	.22
03189000	Cherry River at Fenwick, W. Va.	Lat 38°13'45", long 80°35'00", Nicholas County, at downstream side of highway bridge at Fenwick, 1,000 ft (305 m) downstream from Laurel Creek, and at mile 6.4 (10.3 km).	150	1929-69†, 1972, 1974	10-23-73	56

† Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements at low-flow partial-record stations during water year 1974.--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Kanawha River basin.--Continued						
03189800	Big Clear Creek near Rupert, W. Va.	Lat 37°59'00", long 18°40'10", Greenbrier County, at post office at Kessler, 2.0 mi (3.2 km) northeast of Rupert, and at mile 3.0 (4.8 km).	47.9	1947-49, 1951-53, 1955, 1966, 1968, 1972, 1974	10-23-73	13
03189900	Little Sewell Creek at East Rainelle, W. Va.	Lat 37°57'55", long 80°45'15", Greenbrier County, 0.7 mi (1.1 km) downstream from Boggs Creek, 0.7 mi (1.1 km) upstream from Sewell Creek, and 0.7 mi (1.1 km) southeast of East Rainelle.	16.1	1949-53, 1955, 1957, 1970, 1974	10-23-73	.32
03194200	Back Fork at Webster Springs, W. Va.	Lat 38°28'45", long 80°24'15", Webster County, at Webster Springs, and 0.5 mi (0.8 km) upstream from mouth.	70.4	1947-49, 1951, 1953, 1955, 1957, 1959, 1965, 1974	10-25-73	29
Guyandotte River basin						
03202300	Guyandotte River at Pineville, W. Va.	Lat 37°34'53", long 81°32'13", Wyoming County, at concrete arch bridge at Pineville, 250 ft (76 m) upstream from Rockcastle Creek, and 0.9 mi (1.4 km) downstream from Pinnacle Creek.	261	1948-51, 1953, 1955, 1960, 1963-65, 1974	10-24-73	67

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage 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, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1974

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Potomac River basin							
01605700	Reeds Creek Tributary near Franklin, W. Va. (Formerly published as Unnamed Run on Nork Fork Mountain near Franklin)	Lat 38°41'47", long 79°23'55", Pendleton County, at culvert on U.S. Highway 33, 0.7 mi (1.1 km) upstream from mouth, and 5.0 mi (8.0 km) northwest of Franklin.	0.45	1965-74	6-2-74	4.37	43
01606000	North Fork South Branch Potomac River at Cabins, W. Va.	Lat 38°59'05", long 79°14'10", Grant County, on left bank 380 ft (116 m) upstream from highway bridge at Cabins, 1.8 mi (2.9 km) downstream from Jordan Run, 6.0 mi (9.7 km) west of Petersburg, and at mile 3.0 (4.8 km).	314	1940-61†, 1962-74a	6-2-74	11.78	13,900
01606800	Brushy Run near Petersburg, W. Va.	Lat 38°48'20", long 79°12'50", Pendleton County, at culvert on State Route 4, 14.0 mi (22.5 km) southwest of Petersburg, and at mile 3.2 (5.1 km).	1.43	1965-74	6-2-74	5.72	103
01608100	Williams Hollow near Moorefield, W. Va.	Lat 39°05'20", long 78°53'55", Hardy County, at culvert on State Route 55, 4.0 mi (6.4 km) northeast of Moorefield, and at mile 3.8 (6.1 km).	0.24	1965-74	6-2-74	5.05	49
01611150	Tearcoat Creek Tributary near Augusta, W. Va.	Lat 39°12'40", long 78°41'07", Hampshire County, at culvert at intersection of State Routes 7 and 7/9, 0.1 mi (0.2 km) upstream from mouth, and 6.0 mi (9.7 km) southwest of Augusta.	2.65	1965-74	12-26-73	3.98	121
Monongahela River basin							
03050650	Leading Creek Tributary at Gilman, W. Va. (Formerly published as Unnamed Run at Gilman)	Lat 38°58'35", long 79°50'16", Randolph County, at culvert on U.S. Highway 219, 0.3 mi (0.5 km) northeast of Gilman, 0.4 mi (0.6 km) upstream from mouth, and 3.7 mi (6.0 km) north of Elkins.	0.38	1964-74	6-1-74	4.89	34
03052300	Bridge Run near Buckhannon, W. Va.	Lat 39°00'41", long 80°17'25", Upshur County, on right upstream wingwall of culvert on U.S. Highway 33 and 119, and 3.3 mi (5.3 km) west of Buckhannon.	2.60	1967-74	1974	10.12	196
03052340	Mud Lick Run near Buckhannon, W. Va.	Lat 39°00'17", long 80°15'23", Upshur County, on left upstream wingwall of culvert on U.S. Highway 33 and 119, 0.2 mi (0.3 km) upstream from mouth, and 1.5 mi (2.4 km) west of Buckhannon.	2.33	1966-74	1974	7.13	145
03055020	Bonica Run on U.S. Highway 250 near Philippi, W. Va.	Lat 39°07'29", long 79°59'50", Barbour County, at culvert on U.S. Highway 250, 2.0 mi (3.2 km) southwest of Philippi, and at mile 2.5 (4.0 km).	0.60	1965-74	6-1-74	5.20	101
03055040	Bonica Run on State Route 38 near Philippi, W. Va.	Lat 39°09'11", long 79°58'44", Barbour County, at culvert on State Route 38, 0.5 mi (0.8 km) upstream from mouth, and 3.2 mi (5.1 km) east of Philippi.	3.15	1964-74	6-1-74	4.65	265

See footnotes at end of table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Annual maximum discharge at crest-stage partial-record stations during water year 1974--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Monongahela River basin--Continued							
03056600	Right Fork Wickwire Run on U.S. Highway 119 near Grafton, W. Va.	Lat 39°22'44", long 79°57'48", Taylor County, at culvert at intersection of U.S. Highway 119 and Wickwire Road, 0.7 mi (1.1 km) upstream from confluence with Wickwire Run, and 4.0 mi (6.4 km) northeast of Grafton.	2.33	1965-74	6-1-74	8.98	365
03057500	Skin Creek near Brownsville, W. Va.	Lat 38°58'30", long 80°26'40", Lewis County, 2.6 mi (4.2 km) southeast of Brownsville, 4.7 mi (7.6 km) southeast of Weston, and at mile 3.0 (4.8 km).	25.7	1946-60†, 1961-74a	6-1-74	6.79	1,400
03063950	Job Run near Wymer, W. Va.	Lat 38°52'55", long 79°35'45", Randolph County, at culvert on U.S. Highway 33, 0.1 mi (0.2 km) upstream from mouth, and 1.2 mi (1.9 km) southeast of Wymer.	1.08	1965-74	6-1-74	3.80	75
03069650	Right Fork Clover Run near Parsons, W. Va.	Lat 39°09'10", long 79°45'46", Tucker County, on left bank 12 ft (4 m) upstream from culvert entrance, at intersection of State Route 38 and Secondary Route 15/5, and 6.0 mi (9.7 km) northwest of Parsons.	2.21	1967-74	6-1-74	5.31	(+)
03069850	Long Run near Parsons, W. Va.	Lat 39°15'32", long 79°43'18", Tucker County, on left bank 8 ft (2 m) upstream from entrance to culvert on State Route 72, 0.1 mi (0.2 km) southeast of Tucker County line, and 11.0 mi (17.7 km) north of Parsons.	0.95	1967-74	6-1-74	8.01	90
Middle Island Creek basin							
03114550	Buffalo Run near Friendly, W. Va.	Lat 39°30'23", long 81°01'41", Tyler County, on right bank 10 ft (3 m) upstream from culvert on State Secondary Route 6, 1.8 mi (2.9 km) southeast of Friendly.	0.88	1967-74	6-23-74	12.13	585
03114600	Little Buffalo Run near Friendly, W. Va.	Lat 39°30'10", long 81°00'59", Tyler County, on left bank 12 ft (4 m) upstream from culvert on State Secondary Route 6, 2.5 mi (4.0 km) southeast of Friendly.	1.22	1967-74	6-23-74	11.35	635
Little Kanawha River basin							
03155450	Big Island Run near Elizabeth, W. Va.	Lat 39°05'00", long 81°15'40", Ritchie-Wirt County line, at culvert on State Route 53, and 7.5 mi (12.1 km) east of Elizabeth.	3.52	1965-74	1974	6.13	590
Mill Creek basin							
03159700	Grasslick Run near Ripley, W. Va.	Lat 38°45'53", long 81°40'40", Jackson County, at culvert on U.S. Highway 21, 1.0 mi (1.6 km) upstream from Burnt Run, and 3.8 mi (6.1 km) southeast of Ripley.	0.70	1965-74	1974	4.82	72
Kanawha River basin							
03180350	West Fork Greenbrier River Tributary at Durbin, W. Va.	Lat 38°33'30", long 79°49'52", Pocahontas County, at culvert on U.S. Highway 250, 0.2 mi (0.3 km) upstream from mouth, and 0.9 mi (1.4 km) northeast of Durbin.	1.13	1966-68, 1970-74	6-1-74	4.47	53

See footnotes at end of table.

Annual maximum discharge at crest-stage partial-record stations during water year 1974--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Kanawha River basin--Continued							
03180530	Brush Run near Bartow, W. Va.	Lat 38°30'30", long 79°47'03", Pocahontas County, on left bank 12 ft (4 m) upstream from culvert on State Route 28, 2.3 mi (3.7 km) south of Bartow, and at mile 4.2 (6.8 km).	1.28	1966-74	6- 1-74	5.00	108
03180680	Cooper Run near Green Bank, W. Va.	Lat 38°24'32", long 79°48'43", Pocahontas County, at culvert on Secondary Route 6, 0.4 mi (0.6 km) up-stream from mouth, and 1.3 mi (2.1 km) southeast of Green Bank.	1.52	1965-74	6- 1-74	5.32	125
03181900	Moody Moore Hollow near Huntersville, W. Va.	Lat 38°13'55", long 79°58'44", Pocahontas County, at culvert on Secondary Route 11, 0.1 mi (0.2 km) upstream from mouth, and 3.5 mi (5.6 km) northeast of Huntersville.	0.55	1966-74	6- 1-74	3.80	10
03183550	Griffith Creek near Alderson, W. Va.	Lat 37°44'15", long 80°42'36", Summers County, at culvert on State Secondary Route 7/14 at Griffith School, 4.0 mi (6.4 km) northwest of Alderson, and at mile 2.0 (3.2 km).	3.84	1966-74	12-26-73	8.57	222
03183570	Buggar Lick at Pence Springs, W. Va.	Lat 37°41'03", long 80°43'00", Summers County, at culvert on State Route 3, at Pence Springs, and 0.3 mi (0.5 km) upstream from mouth.	2.71	1966-74	12-26-73	4.10	44
03185020	Little Beaver Creek Tributary near Shady Spring, W. Va.	Lat 37°43'30", long 81°06'02", Raleigh County, at culvert on U.S. Highways 19 and 21 and State Highway 3, 0.3 mi (0.5 km) upstream from mouth, and 1.3 mi (2.1 km) north of Shady Spring.	0.62	1966-74	12-26-73	5.80	33
03190500	Meadow Creek near Summersville, W. Va.	Lat 38°13'31", long 80°55'37", Nicholas County, at culvert on Secondary Route 23, 0.7 mi (1.1 km) south of Keslers Cross Lanes, 6.0 mi (9.7 km) southeast of Summersville, and at mile 2.4 (3.9 km).	4.22	1966-74	6- 2-74	7.60	436
03191400	Laurel Creek near Summersville, W. Va.	Lat 38°15'28", long 80°59'24", Nicholas County, at culvert on Secondary Route 22, at intersection of Secondary Routes 11 and 22, at Tipton, 7.8 mi (12.6 km) southwest of Summersville, and at mile 1.4 (2.3 km).	4.28	1966-74	6- 2-74	11.12	530
03193725	Little Fork at Mossy, W. Va.	Lat 37°58'52", long 81°16'25", Fayette County, at culvert on State Route 15, 100 ft (30 m) upstream from mouth, and 0.6 mi (1.0 km) northeast of Mossy.	0.42	1966-74	6- 2-74	5.82	48
03197150	Ashleycamp Run near Left Hand, W. Va.	Lat 38°37'34", long 81°14'02", Roane County, at culvert on State Route 36, 1.2 mi (1.9 km) east of Left Hand, and at mile 1.0 (1.6 km).	2.01	1966-74	1974	4.69	63
See footnotes at end of table.							

See footnotes at end of table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Annual maximum discharge at crest-stage partial-record stations during water year 1974--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Kanawha River basin--Continued							
03197900	Elk Twomile Creek Tributary near Charleston, W. Va.	Lat 38°21'13", long 81°31'22", Kanawha County, at culvert on Elk Twomile Road, 0.1 mi (0.2 km) upstream from mouth, and 5.0 mi (8.0 km) northeast of Charleston.	0.49	1965-74	1974	<2.74	(+)
03198780	Hunters Branch near Madison, W. Va.	Lat 38°00'20", long 81°48'55", Boone County, at culvert on U.S. Highway 119, 0.1 mi (0.2 km) upstream from mouth, and 4.0 mi (6.4 km) south of Madison.	1.97	1966-74	4- 4-74	14.06	1,050
03198800	Low Gap Creek near Madison, W. Va.	Lat 38°01'41", long 81°50'03", Boone County, at culvert at entrance to Low Gap Memory Garden, 0.2 mi (0.3 km) upstream from mouth, and 2.7 mi (4.3 km) southwest of Madison.	1.28	1963, 1965-74	4- 4-74	3.90	143
03200600	Little Scary Creek near Nitro, W. Va.	Lat 38°27'04", long 81°51'14", Putnam County, at culvert on Interstate Highway 64, 0.2 mi (0.3 km) west of St. Albans interchange, 2.5 mi (4.0 km) northwest of Nitro, and at mile 1.0 (1.6 km).	0.87	1966-68, 1971-74	1974	11.40	84
03201420	Long Branch near Teays, W. Va.	Lat 38°28'43", long 81°55'49", Putnam County, on State Route 34, 1.5 mi (2.4 km) north of Winfield interchange on Interstate 64, and 2.0 mi (3.2 km) north of Teays.	2.05	1965-74	6-28-74	5.11	80
03201440	Sixteenmile Creek near Pliny, W. Va.	Lat 38°28'39", long 82°02'53", Putnam County, at culvert on Pliny to Apple Grove Road, 2.0 mi (3.2 km) from Mason-Putnam County line, and 3.7 mi (6.0 km) northwest of Pliny.	1.04	1965-74	6- 2-74	8.00	348
03201480	Threemile Creek Tributary near Point Pleasant, W. Va.	Lat 38°50'15", long 82°05'42", Mason County, at culvert on State Route 2, at intersection of U.S. Highway 35 and State Route 2, 0.2 mi (0.3 km) upstream from mouth, and 2.5 mi (4.0 km) southeast of Point Pleasant.	0.70	1965-74	6- 2-74	5.05	38
Guyandotte River basin							
03203000	Guyandotte River at Man, W. Va.	Lat 37°44'30", long 81°52'45", Logan County, on right bank at downstream side of highway bridge at Man, 500 ft (152 m) upstream from Buffalo Creek, and 0.7 mi (1.1 km) downstream from Huff Creek.	762	1928-62†, 1963-74a	1-11-74	20.22	34,400

(+) Not determined.

† Operated as a continuous-record gaging station.

a Recorder chart on file in district office.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1974

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 1 B		Potomac River basin				
Reeds Creek	South Branch Potomac River	Lat 38°45'00", long 79°20'21", Pendleton County, 0.8 mi (1.3 km) upstream from Dry Run, and 4.2 mi (6.8 km) southwest of Upper Tract, W. Va.	11.7		8-1-74	*3.2
Unnamed Tributary	Reeds Creek	Lat 38°45'06", long 79°20'04", Pendleton County, 800 ft (244 m) upstream from mouth, and 3.9 mi (6.3 km) southwest of Upper Tract, W. Va.	0.29		8-1-74	*.002
Dry Run	Reeds Creek	Lat 38°45'29", long 79°20'13", Pendleton County, 0.3 mi (0.5 km) upstream from mouth, and 3.7 mi (6.0 km) southwest of Upper Tract, W. Va.	1.73		8-1-74	*.004
Reeds Creek	South Branch Potomac River	Lat 38°45'29", long 79°19'52", Pendleton County, 10 ft (3 m) downstream from Dry Run, and 3.5 mi (5.6 km) southwest of Upper Tract, W. Va.	14.2		8-1-74	*2.9
Reeds Creek	South Branch Potomac River	Lat 38°45'36", long 79°19'48", Pendleton County, 900 ft (274 m) downstream from Dry Run, and 3.3 mi (5.3 km) southwest of Upper Tract, W. Va.	14.3		8-1-74	*2.6
Reeds Creek	South Branch Potomac River	Lat 38°45'45", long 79°19'36", Pendleton County, 2,500 ft (762 m) downstream from Dry Run, and 3.1 mi (5.0 km) southwest of Upper Tract, W. Va.	14.4		8-1-74	*2.7
Reeds Creek	South Branch Potomac River	Lat 38°45'52", long 79°19'12", Pendleton County, 0.9 mi (1.4 km) downstream from Dry Run, and 2.7 mi (4.3 km) southwest of Upper Tract, W. Va.	16.9		8-1-74	*2.3
Reeds Creek	South Branch Potomac River	Lat 38°47'05", long 79°17'08", Pendleton County, 200 ft (61 m) upstream from U.S. 220 bridge, 0.3 mi (0.5 km), southwest of Upper Tract, and 1.4 mi (2.3 km) upstream from mouth.	19.9		8-1-74	*.20
Part 3 A		Kanawha River basin				
West Fork Greenbrier River	Greenbrier River	Lat 38°32'37", long 79°49'55", Pocahontas County, at mouth and at Durbin, W. Va.	63.3	1947, 1972-73	10-24-73	*7.6
Jericho Draft	Howard Creek	Lat 37°49'38", long 80°16'57", Greenbrier County, at bridge on Montigue Road, 0.9 mi (1.4 km), upstream from mouth, and 2.5 mi (4.0 km) northeast of White Sulphur Springs, W. Va.	6.84	1973	11-27-73 1-22-74 3-25-74 4-17-74 6-24-74 7-30-74 8-26-74 9-23-74	39 14 6.4 *3.1 *1.4 0 0 0

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at miscellaneous sites during water year 1974.--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 3 A		Kanawha River basin.--Continued				
Wades Creek	Howard Creek	Lat 37°47'56", long 80°17'57", Greenbrier County, at Ingleside Avenue bridge at White Sulphur Springs, W. Va., 200 ft (61 m) upstream from mouth, and 0.3 mi (0.5 km) northwest of U.S. Highway 60.	7.48	1973	11-27-73 1-22-74 3-25-74 4-17-74 7-30-74 8-26-74 9-23-74	30 28 19 *9.0 *4.3 *2.7 *2.8
Dry Creek	Howard Creek	Lat 37°47'38", long 80°17'41", Greenbrier County, at White Sulphur Springs, W. Va., 0.3 mi (0.5 km) upstream from U.S. Highway 60, and 0.5 mi (0.8 km) upstream from mouth.	23.0	1972-73	11-27-73 1-22-74 3-25-74 4-17-74 7-30-74 8-26-74 9-23-74	72 20 38 *21 *5.8 *1.0 *1.6
Harts Run	Howard Creek	Lat 37°46'01", long 80°21'22", Greenbrier County, at bridge 200 ft (61 m) upstream from railroad underpass, 0.5 mi (0.8 km) upstream from mouth, and 3.6 mi (5.8 km) southwest of White Sulphur Springs, W. Va.	11.7		3- 5-74 3-25-74 4-17-74 6-24-74 7-30-74 8-26-74 9-23-74	8.9 16 10 *2.5 *1.8 *.76 *.73

PART 2. WATER-QUALITY RECORDS

POTOMAC RIVER BASIN

01595200 STONY RIVER NEAR MOUNT STORM, W. VA.

LOCATION.--Lat 39°16'10", long 79°15'45", Grant County, temperature recorder at gaging station on left bank 100 ft (30 m) downstream from bridge on U.S. Highway 50, 1.0 mi (1.6 km) west of Mount Storm.

DRAINAGE AREA.--48.8 mi² (126.4 km²).

PERIOD OF RECORD.--Water temperatures: December 1961 to September 1973, water year 1974 (partial record).

EXTREMES, - - 1961-73:

Water temperatures: Maximum, 27°C July 1, Aug. 22, 23, 1968; minimum, freezing point on many days during winter months most years.

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

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

[illegible]

POTOMAC RIVER BASIN

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01606500 SOUTH BRANCH POTOMAC RIVER NEAR PETERSBURG, W. VA.

LOCATION.--Lat 38°59'34", long 79°10'26", Grant County, 1.2 mi (1.9 km) downstream from North Fork South Branch Potomac River, 2.5 mi (4.0 km) west of Petersburg, and at mile 72.6 (116.8 km).

DRAINAGE AREA.--642 mi² (1,663 km²).

PERIOD OF RECORD.--Sediment records: April 1968 to July 1974, partial-record station, discontinued.

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

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 05...	2	1140	19.0	338	7	6.4
NOV. 07...	2	1120	4.0	704	1	1.9
FEB. 28...	2	1610	4.5	793	5	11
MAR. 26...	2	1545	4.5	905	4	9.8
MAY 29...	2	1100	15.0	288	8	6.2
JUNE 25...	2	1245	15.0	1,360	11	40
JULY 25...	2	1535	22.0	190	10	5.1

01610200 LOST RIVER AT MCCAULEY NEAR BAKER, W. VA.

LOCATION.--Lat 39°03'18", long 78°43'31", Hardy County, on left bank at McCauley, 1.4 mi (2.3 km) upstream from Three Springs Run, and 1.7 mi (2.7 km) east of Baker.

DRAINAGE AREA.--155 mi² (401 km²).

PERIOD OF RECORD.--Water quality data: February to September 1974, partial-record station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	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)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)
FEB.										
27...	46	--	--	--	--	--	--	--	--	--
27...	--	4.5	--	0	--	150	--	40	13	2.9
MAR.										
27...	91	4.2	--	400	--	70	--	10	12	2.6
APR.										
18...	113	3.9	--	0	--	100	--	40	12	2.6
MAY										
24...	66	--	--	--	--	--	--	--	--	--
24...	--	--	0	--	350	--	70	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	4.5	--	200	--	170	--	60	15	3.3
JUNE										
26...	146	--	--	--	--	--	--	--	--	--
26...	--	.1	--	10	--	60	--	220	10	3.0
JULY										
24...	1.6	--	--	--	--	--	--	--	--	--
24...	--	9.0	--	20	--	150	--	50	27	5.0
AUG.										
28...	3.2	3.2	--	30	--	100	--	50	26	4.8

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)	ALKA-LINITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
FEB.										
27...	--	--	--	--	--	--	--	--	--	--
27...	3.0	1.7	41	0	34	41	4.0	.2	.61	--
MAR.										
27...	3.2	1.3	37	0	30	10	9.5	--	--	.40
APR.										
18...	3.1	1.4	37	0	30	9.8	2.0	--	--	.38
MAY										
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	4.8	1.8	46	0	38	9.5	15	--	--	.00
JUNE										
26...	--	--	--	--	--	--	--	--	--	--
26...	3.2	2.0	34	0	28	10	2.8	--	--	.53
JULY										
24...	--	--	--	--	--	--	--	--	--	--
24...	6.5	2.2	90	0	74	14	8.3	--	--	.18
AUG.										
28...	4.0	2.4	90	0	74	10	4.6	--	--	--

DATE	DIS-SOLVED NITRATE (NO ₃) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO ₂) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER DAY)
FEB.										
27...	--	--	--	--	--	--	--	--	--	--
27...	--	.00	--	--	.61	--	.00	--	91	--
MAR.										
27...	1.8	--	.01	.03	--	.41	--	.00	63	15.2
APR.										
18...	1.7	--	.02	.07	--	.40	--	.00	55	16.8
MAY										
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	.00	--	.22	.72	--	.01	--	.01	77	--
JUNE										
26...	--	--	--	--	--	--	--	--	--	--
26...	2.3	--	.01	.03	--	.54	--	.00	51	--
JULY										
24...	--	--	--	--	--	--	--	--	--	--
24...	.80	--	.01	.03	--	.19	--	.59	119	--
AUG.										
28...	--	--	.00	.00	--	--	--	.01	100	--

01610200 LOST RIVER AT MCCAULEY NEAR BAKER, W. VA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED SOLIDS (TONS PER AC-FT)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)
FEB.										
27...	--	--	--	--	--	--	--	--	--	--
27...	.12	44	11	12	.2	114	7.6	2.0	0	--
MAR.										
27...	.09	41	10	14	.2	110	7.0	7.5	2	--
APR.										
18...	.07	41	10	14	.2	86	7.6	13.0	2	--
MAY										
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	145	7.2	21.0	--	--
24...	--	--	--	--	--	145	7.2	21.0	--	--
24...	.10	51	13	16	.3	145		21.0	3	--
JUNE										
26...	--	--	--	--	--	--	--	--	--	--
26...	.07	37	9	15	.2	110	7.1	17.0	3	--
JULY										
24...	--	--	--	--	--	--	--	--	--	--
24...	.16	88	14	13	.3	205	8.3	24.0	5	2.2
AUG.										
28...	.14	85	11	9	.2	215	7.5	23.0	5	7.5

DATE	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
FEB.										
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
MAR.										
27...	--	--	--	--	--	--	--	--	--	--
APR.										
18...	--	--	--	--	--	--	--	--	--	--
MAY										
24...	--	--	--	--	--	--	--	--	--	--
24...	0	--	<10	--	1	--	<.5	--	20	--
24...	--	1	--	0	--	0	--	<.5	--	10
24...	--	--	--	--	--	--	--	--	--	--
JUNE										
26...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
JULY										
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
AUG.										
28...	--	--	--	--	--	--	--	--	--	--

INSTANTANEOUS SUPSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SUSPENDED SEDIMENT (MG/L)	INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE (T/DAY)
FEB.		
27...	3	.37
MAR.		
27...	2	.49
APR.		
18...	13	4.0
MAY		
24...	3	.53
MAY		
30...	94	28
JUNE		
26...	3	1.2
JULY		
24...	2	.01
AUG.		
28...	14	.12
SEPT.		
5...	18	.73

POTOMAC RIVER BASIN

01611500 CACAPON RIVER NEAR GREAT CACAPON, W. VA.

LOCATION.--Lat 39°34'43", long 78°18'34", Morgan County, 3.0 mi (4.8 km) southwest of Great Cacapon, and at mile 6.5 (10.5 km).

DRAINAGE AREA.--677 mi² (1,753 km²).

PERIOD OF RECORD.--Sediment records: April 1968 to July 1974, partial-record station, discontinued.

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

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
Oct. 10...	2	1330	19.0	166	3	1.3
NOV. 01...	2	1120	11.0	864	30	70
DEC. 06...	2	1145	8.5	208	2	1.1
JAN. 09...	2	1330	2.0	720	5	9.8
FEB. 14...	2	1200	3.5	493	14	19
MAR. 20...	2	1130	7.0	424	3	3.4
APR. 17...	2	1205	12.0	840	0	0
MAY 21...	2	1800	21.0	448	12	15
JUNE 18...	2	1230	21.0	424	18	21
JULY 24...	2	0950	22.0	99	19	5.1

MONONGAHELA RIVER BASIN

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03050400 TYGART VALLEY RIVER AT ELKINS, W. VA.

LOCATION.--Lat 38°55'00", long 79°50'43", Randolph County, at city water plant, at Elkins, 2.5 mi (4.0 km) upstream from gaging station.

DRAINAGE AREA.--268 mi² (694 km²) upstream from water plant: 272 mi² (704 km²) upstream from gaging station.

PERIOD OF RECORD.--Water temperatures: January 1947 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 24.0°C July 7-9, 18; minimum, 0.5°C Dec. 14, 15.

Period of record:

Water temperatures: Maximum, 33°C July 22, 1952; minimum, freezing point on many days during winter months most years.

REMARKS.--No appreciable inflow between water plant and gaging station except during periods of heavy local rains. During flood periods part of the flow is diverted around the water plant in a flood by-pass channel.

TEMPERATURE (DEG. C) OF WATER • WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

MONONGAHELA RIVER BASIN

03054500 TYGART VALLEY RIVER AT PHILIPPI, W. VA.

LOCATION.--39°09'00", long 80°02'25", Barbour County, at Philippi, 0.2 mi (0.3 km) downstream from Anglins Run, 5.0 mi (8.0 km) downstream from Buckhannon River, and at mile 44.9 (72.2 km).

DRAINAGE AREA.--916 mi² (2,372 km²).

PERIOD OF RECORD.--Sediment records: May 1968 to June 1974, partial-record station, discontinued.

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

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 23...	2	1545	15.0	189	7	3.6
DEC. 19...	2	0945	3.0	1820	12	59
JAN. 11...	2	1315	5.5	21500	146	8480
MAR. 13...	2	1210	6.0	3470	15	141
JUNE 04...	2	1245	14.0	7720	41	855

MONONGAHELA RIVER BASIN

03061000 WEST FORK RIVER AT ENTERPRISE, W. VA.

LOCATION.--Lat 39°25'20", long 80°16'40", Harrison County, 150 ft (46 m) downstream from highway bridge at Enterprise, 0.8 mi (1.3 km) upstream from Bingamon Creek, and at mile 12.1 (19.5 km).

DRAINAGE AREA.--759 mi² (1,966 km²).

PERIOD OF RECORD.--Sediment records: May 1968 to July 1974, partial-record station, discontinued.

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

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 24...	2	1355	13.5	118	11	3.5
NOV. 27...	2	1600	10.5	2550	294	2020
NOV. 28...	2	1035	12.0	10700	1530	44200
NOV. 28...	2	1315	12.0	11600	1280	40100
DEC. 26...	2	0935	7.0	2450	112	741
JAN. 11...	2	1600	5.0	25400	652	44700
JAN. 23...	2	1035	9.0	1520	38	156
MAR. 28...	2	1430	11.0	650	30	53
APR. 05...	2	1800	12.0	5690	539	8280
APR. 29...	2	1450	20.0	317	15	13
JUNE 02...	2	1155	17.0	16100	505	22000
JUNE 02...	2	1835	17.5	15400	445	18500
JULY 03...	2	1500	24.0	495	23	31

03068000 SHAVERS FORK AT BEMIS, W. VA.

LOCATION.--Lat 38°48'27", long 79°44'16", Randolph County, on right bank at downstream side of bridge on State Secondary Route 22, at Bemis, 0.6 mi (1.0 km) upstream from Fishing Hawk Creek, and at mile 39.9 (64.2 km).

DRAINAGE AREA.--115 mi² (298 km²).

PERIOD OF RECORD.--Chemical analysis: August 1973 to current year, partial-record station.

Water temperatures: August 1973 to current year, partial-record station.

Sediment records: August 1973 to current year, partial-record station.

PERIODIC DETERMINATION OF PH (UNITS), SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), AND TEMPERATURE (DEG. C) OF WATER, FOR PERIOD AUGUST 1973 TO SEPTEMBER 1974

DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE	DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE
Aug. 14, 1973	6.5	33	20.0	Jan. 11, 1974	4.8	29	5.0
Aug. 22.....	6.4	32	16.5	Jan. 18.....	5.9	28	5.0
Aug. 29.....	6.4	<50	22.5	Jan. 26.....	6.1	31	7.0
Aug. 31.....	6.6	29	24.0	Feb. 1.....	6.1	28	5.0
Sept. 7.....	6.6	28	21.0	Feb. 8.....	6.1	29	1.0
Sept. 14.....	6.7	32	18.0	Feb. 15.....	6.0	31	3.0
Sept. 18.....	7.8	<50	14.0	Feb. 22.....	6.1	32	5.0
Sept. 21.....	6.3	33	15.0	Mar. 1.....	6.2	29	3.0
Sept. 29.....	6.4	35	18.0	Mar. 8.....	6.1	30	10.0
Oct. 2.....	6.0	36	16.0	Mar. 14.....	6.1	30	5.5
Oct. 6.....	6.1	31	17.0	Mar. 16.....	-	29	5.0
Oct. 13.....	6.2	29	16.0	Mar. 22.....	-	31	3.0
Oct. 19.....	6.3	29	9.0	Mar. 26.....	-	40	-
Oct. 26.....	6.4	31	11.0	Mar. 29.....	-	29	8.0
Oct. 31.....	5.0	37	8.0	Apr. 4.....	-	31	10.0
Nov. 2.....	5.4	32	10.0	Apr. 5.....	-	29	8.0
Nov. 9.....	5.8	29	4.0	Apr. 12.....	-	28	11.0
Nov. 16.....	5.6	32	7.0	Apr. 19.....	-	32	9.0
Nov. 23.....	6.2	32	3.0	Apr. 26.....	-	30	10.0
Nov. 28.....	6.5	32	10.0	May 3.....	-	30	10.0
Nov. 29.....	6.3	30	4.5	May 6.....	-	33	9.0
Nov. 30.....	6.2	32	5.0	May 11.....	-	41	10.5
Dec. 7.....	6.2	31	4.0	June 11.....	-	24	18.0
Dec. 14.....	6.3	32	1.0	July 10.....	6.8	32	24.0
Dec. 21.....	4.9	35	1.0	Aug. 13.....	6.6	33	19.5
Dec. 26.....	5.2	33	5.0	Aug. 20.....	6.2	31	15.0
Dec. 27.....	5.4	30	5.0	Aug. 30.....	5.0	30	18.0
Dec. 28.....	5.2	30	4.5	Sept. 5.....	6.0	29	15.0
Jan. 4, 1974	5.4	29	4.0	Sept. 10.....	6.0	29	18.5
Jan. 10.....	5.3	28	5.0				

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, FOR PERIOD APRIL 1973 TO SEPTEMBER 1974

DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
1973					1974				
AUG. 14	1400	240	8	5.2	JAN. 4	1500	1150	9	28
AUG. 22	1300	260	4	2.8	JAN. 10	1300	1460	18	71
AUG. 29	1020	64	8	1.4	JAN. 11	0900	3760	37	376
AUG. 31	1400	50	5	.68	JAN. 18	1400	291	9	7.1
SEPT. 7	1400	69	5	.93	JAN. 26	1400	547	6	8.9
SEPT. 14	1400	98	10	2.6	FEB. 1	1500	201	5	2.7
SEPT. 18	1700	59	5	.80	FEB. 8	1500	164	7	3.1
SEPT. 21	1400	47	4	.51	FEB. 15	1300	577	9	14
SEPT. 29	1400	49	10	1.3	FEB. 22	1900	2220	77	462
OCT. 2	1500	1580	136	580	MAR. 1	1400	330	7	6.2
OCT. 6	1500	184	2	.99	MAR. 8	1400	716	80	155
OCT. 13	1400	138	2	.75	MAR. 14	1015	453	2	2.4
OCT. 19	1300	87	1	.23	MAR. 16	1300	370	4	4.0
OCT. 26	1400	61	3	.49	MAR. 22	1300	660	13	23
OCT. 31	1300	2140	47	272	MAR. 26	1015	204	5	2.8
NOV. 2	1400	800	5	11	MAR. 29	1400	180	6	2.9
NOV. 9	1300	283	1	.76	APR. 4	1400	4420	278	3320
NOV. 16	1400	1250	26	88	APR. 5	1300	920	13	32
NOV. 23	1300	275	2	1.5	APR. 12	1500	348	3	2.8
NOV. 28	1230	744	7	14	APR. 19	1400	197	2	1.1
NOV. 28	1400	751	23	47	APR. 26	1200	223	4	2.4
NOV. 29	1000	541	9	13	MAY 3	1055	431	24	28
NOV. 30	1600	370	5	5.0	MAY 6	1715	262	6	4.2
DEC. 7	1200	234	3	1.9	MAY 11	1835	343	13	12
DEC. 14	1200	208	3	1.7	JUNE 11	1500	291	3	2.4
DEC. 21	1100	1800	49	238	JULY 10	1510	133	3	1.1
DEC. 26	1200	5650	223	3400	AUG. 13	1145	57	3	.46
DEC. 27	1000	4850	53	694	AUG. 20	0945	667	28	50
DEC. 27	1300	2900	34	266	AUG. 30	1230	786	36	76
DEC. 28	1200	1160	17	53	SEPT. 5	1620	415	7	7.8
DEC. 28	1230	1160	138	432	SEPT. 10	1505	267	3	2.2

MONONGAHELA RIVER BASIN

03068600 SHAVERS FORK ABOVE BOWDEN, W. VA.

LOCATION.--Lat 38°54'10", long 79°41'41", Randolph County, at cableway, 0.5 mi (0.8 km) upstream from Taylor Run, 0.9 mi (1.4 km) southeast of Bowden, and at mile 31.5 (50.7 km).

DRAINAGE AREA.--138 mi² (357 km²).

PERIOD OF RECORD.--Chemical analysis: August 1973 to current year, partial-record station.

Water temperatures: August 1973 to current year, partial-record station.

Sediment records: August 1973 to current year, partial-record station.

PERIODIC DETERMINATION OF PH (UNITS), SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C),
AND TEMPERATURE (DEG. C) OF WATER, FOR PERIOD AUGUST 1973 TO SEPTEMBER 1974

DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE	DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE
Aug. 21, 1973	7.0	30	18.0	May 3.....	6.5	36	11.0
Aug. 22.....	6.5	32	18.0	May 13.....	6.0	34	11.5
Aug. 31.....	6.4	<50	22.5	May 24.....	6.1	32	11.0
Sept. 18.....	7.8	60	14.0	May 29.....	6.4	39	15.0
Oct. 3.....	6.6	40	-	May 31.....	6.2	34	15.5
Oct. 25.....	7.2	36	-	June 1.....	6.1	32	14.0
Nov. 27.....	6.5	30	10.0	June 2.....	5.6	30	12.5
Nov. 28.....	6.6	30	10.0	June 3.....	6.0	34	12.5
Nov. 29.....	6.5	32	3.0	June 12.....	6.5	29	17.5
Dec. 27.....	6.0	30	5.0	June 24.....	6.0	29	14.5
Dec. 28.....	6.0	29	8.0	July 8.....	6.5	32	22.0
Jan. 10, 1974	7.0	30	10.0	Aug. 12.....	7.0	35	19.0
Feb. 13.....	6.3	30	6.5	Aug. 19.....	6.4	35	18.0
Mar. 26.....	6.9	55	5.0	Aug. 20.....	6.2	32	16.0
Apr. 4.....	-	28	-	Aug. 30.....	5.0	31	18.0
Apr. 8.....	7.3	28	6.5	Sept. 4.....	6.2	31	14.0

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, FOR PERIOD AUGUST 1973 TO SEPTEMBER 1974

DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
1973					1974				
AUG. 21	1445	230	68	42	JUNE 1	0400	1140	17	52
AUG. 22	1540	348	19	18	JUNE 1	0720	1050	17	48
AUG. 31	1200	85	2	.46	JUNE 1	1115	1130	13	40
SEPT. 18	1400	85	2	.46	JUNE 1	1500	2170	182	1070
OCT. 3	1300	616	11	18	JUNE 1	1830	4710	126	1600
OCT. 25	1335	64	2	.35	JUNE 1	2145	3800	54	554
NOV. 27	1725	347	8	7.5	JUNE 2	1515	12300	231	7670
NOV. 28	1530	899	7	17	JUNE 2	2000	5400	86	1250
NOV. 29	1155	651	3	5.3	JUNE 2	2315	4160	58	651
DEC. 27	1200	4320	78	910	JUNE 3	0415	2950	28	223
DEC. 28	1410	1370	16	59	JUNE 3	1030	2110	18	103
1974					JUNE 12	1320	254	4	2.7
JAN. 10	1645	4110	90	999	JUNE 24	1425	1200	15	49
FEB. 13	0945	289	0	0	JULY 8	1330	254	4	2.7
MAR. 26	0940	326	3	2.6	AUG. 12	1400	91	3	.74
APR. 4	1415	1740	144	677	AUG. 19	0900	86	2	.46
APR. 8	1530	546	121	178	AUG. 20	1130	643	36	62
MAY 3	1330	538	29	42	AUG. 20	1515	521	21	30
MAY 13	1500	1000	15	40	AUG. 30	0945	1140	80	246
MAY 24	1000	367	8	7.9	AUG. 30	1645	975	34	90
MAY 29	1305	195	9	4.7	AUG. 30	1930	846	32	73
MAY 31	2045	758	17	35	SEPT. 4	1115	921	17	42
MAY 31	2315	828	101	226	SEPT. 4	1605	798	17	37
JUNE 1	0150	1090	34	100					

03068610 TAYLOR RUN AT BOWDEN, W. VA.

LOCATION.--Lat 38°54'27", long 79°41'49", Randolph County, on upstream side of left abutment of bridge on U.S. Highway 33, 450 ft (137 m) upstream from mouth, and 0.7 mi (1.1 km) east of Bowden.

DRAINAGE AREA.--5.06 mi² (13.11 km²).

PERIOD OF RECORD.--Chemical analysis: July 1973 to current year, partial-record station.

Water temperatures: July 1973 to current year, partial-record station.

Sediment records: July 1973 to current year, partial-record station.

PERIODIC DETERMINATION OF PH (UNITS), SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), AND TEMPERATURE (DEG. C) OF WATER, FOR PERIOD JULY 1973 TO SEPTEMBER 1974

DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE	DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE
July 2, 1973	7.2	90	16.0	Jan. 23, 1974	6.7	52	9.0
July 12.....	6.8	120	19.5	Jan. 24.....	6.6	55	6.5
July 24.....	6.8	109	16.0	Jan. 29.....	6.7	51	8.0
Aug. 21.....	7.7	57	16.0	Jan. 31.....	6.7	54	8.0
Aug. 22.....	7.1	58	16.0	Feb. 13.....	6.8	67	5.0
Aug. 23.....	7.3	59	17.0	Feb. 18.....	-	50	5.0
Aug. 24.....	7.3	65	16.5	Mar. 2.....	-	141	7.0
Aug. 27.....	7.0	75	19.5	Mar. 12.....	6.6	51	5.0
Aug. 28.....	7.3	72	19.5	Mar. 13.....	-	61	5.0
Aug. 30.....	7.4	85	19.5	Mar. 14.....	-	38	5.5
Aug. 31.....	7.5	93	20.0	Mar. 19.....	-	64	7.0
Sept. 4.....	7.6	102	20.0	Mar. 22.....	-	53	7.0
Sept. 5.....	7.6	113	19.5	Mar. 26.....	6.3	53	4.5
Sept. 7.....	7.7	99	18.0	Mar. 30.....	-	71	8.0
Sept. 10.....	7.7	103	16.5	Apr. 1.....	-	77	11.0
Sept. 11.....	7.7	109	16.0	Apr. 4.....	-	52	12.0
Sept. 12.....	7.8	114	17.0	Apr. 5.....	-	47	7.5
Sept. 14.....	7.7	82	16.0	Apr. 10.....	-	54	8.0
Sept. 17.....	7.5	105	16.0	Apr. 24.....	-	71	6.0
Sept. 18.....	7.9	100	11.5	Apr. 29.....	-	57	15.0
Sept. 19.....	7.5	101	14.5	May 1.....	-	59	15.0
Sept. 21.....	7.5	106	15.0	May 3.....	6.8	58	10.5
Sept. 24.....	7.2	82	16.5	May 7.....	6.5	50	7.0
Sept. 25.....	7.2	87	17.0	May 8.....	-	50	12.5
Sept. 26.....	7.2	92	16.5	May 9.....	-	57	17.0
Sept. 27.....	7.3	96	17.0	May 11.....	-	57	17.0
Sept. 28.....	7.4	99	18.0	May 13.....	6.7	49	11.5
Sept. 29.....	7.5	97	17.0	May 24.....	6.7	61	13.0
Sept. 30.....	7.1	68	15.5	May 28.....	-	56	13.0
Oct. 1.....	6.9	65	14.5	May 29.....	6.9	58	13.0
Oct. 2.....	6.9	60	16.0	May 30.....	-	51	13.0
Oct. 9.....	7.0	69	16.0	May 31.....	6.6	62	15.0
Oct. 11.....	7.1	69	16.0	June 1.....	6.6	52	13.0
Oct. 12.....	7.1	72	15.5	June 2.....	6.5	44	12.5
Oct. 15.....	7.2	76	14.5	June 3.....	6.4	45	13.0
Oct. 17.....	7.2	81	9.0	June 5.....	-	52	16.0
Oct. 18.....	7.3	81	10.0	June 6.....	-	55	16.0
Oct. 19.....	7.3	81	11.0	June 12.....	6.8	58	16.0
Oct. 23.....	7.3	84	12.0	June 13.....	-	57	16.0
Oct. 24.....	7.3	87	12.0	June 17.....	-	56	13.5
Oct. 25.....	7.3	86	12.0	June 18.....	-	62	14.5
Oct. 26.....	7.2	87	12.0	June 24.....	6.7	42	14.0
Oct. 31.....	7.2	63	10.0	July 8.....	7.0	80	17.5
Nov. 1.....	7.1	51	9.0	July 26.....	-	138	18.0
Nov. 5.....	7.0	58	7.0	July 27.....	-	120	16.0
Nov. 7.....	6.7	49	6.5	July 30.....	-	97	20.0
Nov. 8.....	6.9	51	7.5	Aug. 1.....	-	-	18.0
Nov. 13.....	7.0	57	8.5	Aug. 2.....	-	62	18.5
Nov. 14.....	7.0	58	9.0	Aug. 6.....	-	116	17.0
Nov. 27.....	6.8	55	10.0	Aug. 12.....	7.0	84	15.0
Nov. 28.....	6.9	55	10.0	Aug. 15.....	-	118	19.0
Nov. 29.....	6.8	52	4.5	Aug. 16.....	-	133	18.5
Dec. 5.....	6.8	59	11.0	Aug. 19.....	7.0	96	-
Dec. 10.....	7.0	70	3.5	Aug. 20.....	7.0	92	16.0
Dec. 12.....	7.0	71	1.5	Aug. 21.....	-	116	17.5
Dec. 13.....	7.0	93	3.5	Aug. 22.....	-	121	18.0
Dec. 14.....	7.1	82	3.5	Aug. 23.....	-	125	19.0
Dec. 20.....	7.2	144	5.0	Aug. 28.....	-	142	19.0
Dec. 27.....	6.7	44	5.5	Aug. 29.....	-	129	18.5
Dec. 28.....	6.6	45	5.0	Aug. 30.....	7.0	58	17.0
Jan. 8, 1974	6.7	50	4.5	Sept. 1.....	-	61	17.0
Jan. 9.....	6.9	70	5.0	Sept. 4.....	6.9	50	13.5
Jan. 10.....	6.8	48	8.0	Sept. 5.....	-	52	14.5
Jan. 11.....	6.6	39	6.0	Sept. 9.....	6.8	55	15.0
Jan. 12.....	6.6	40	3.0	Sept. 10.....	-	-	17.0
Jan. 14.....	6.7	46	5.0	Sept. 12.....	-	100	17.0
Jan. 15.....	6.9	53	7.0	Sept. 18.....	-	66	16.5
Jan. 16.....	6.9	46	8.0	Sept. 19.....	-	70	-
Jan. 17.....	6.6	57	8.0	Sept. 25.....	-	80	12.0
Jan. 21.....	7.3	110	9.5	Sept. 26.....	-	82	14.0

MONONGAHELA RIVER BASIN

03068610 TAYLOR RUN AT BOWDEN, W. VA.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, FOR PERIOD JULY 1973 TO SEPTEMBER 1974

DATE 1973	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (MG/L)	DATE 1974	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (MG/L)
JULY 2	1530	5.4	10	0.15	MAR. 14	1620	22	3	0.18
JULY 12	1730	2.1	10	.06	MAR. 19	1700	46	14	1.7
JULY 24	1110	1.3	26	.09	MAR. 22	1415	30	5	.40
AUG. 21	1300	25	59	4.0	MAR. 26	0930	16	3	.13
AUG. 22	1612	15	20	.81	MAR. 30	1720	15	7	.28
AUG. 23	1810	10	11	.30	APR. 1	1800	24	17	1.1
AUG. 24	1830	8.8	9	.21	APR. 4	1455	60	31	5.0
AUG. 27	1815	4.9	10	.13	APR. 4	1735	54	29	4.2
AUG. 28	1850	3.9	7	.07	APR. 5	1710	32	12	1.0
AUG. 30	1940	2.6	7	.05	APR. 10	1755	28	7	.53
AUG. 31	1210	2.4	7	.05	APR. 24	1630	12	6	.19
AUG. 31	1905	2.1	12	.07	APR. 29	1800	8.2	6	.13
SEPT. 4	1908	1.1	13	.04	MAY 1	1800	8.5	10	.23
SEPT. 5	1750	9.2	196	4.9	MAY 3	1350	63	100	17
SEPT. 7	1755	1.9	7	.04	MAY 3	1400	63	81	14
SEPT. 10	1850	1.0	3	.01	MAY 7	1150	16	6	.26
SEPT. 11	1835	.84	2	0	MAY 8	1810	13	5	.18
SEPT. 12	1815	.70	2	0	MAY 9	1745	16	8	.35
SEPT. 14	1830	8.8	13	.31	MAY 11	1710	11	5	.15
SEPT. 17	1730	1.3	2	.01	MAY 13	1445	25	9	.61
SEPT. 18	1330	3.9	13	.14	MAY 24	1015	25	36	2.4
SEPT. 19	1800	1.6	3	.01	MAY 28	1740	11	7	.21
SEPT. 21	1635	1.0	1	0	MAY 29	1325	23	25	1.6
SEPT. 24	1905	4.6	6	.07	MAY 29	1650	20	15	.81
SEPT. 25	1845	2.8	3	.02	MAY 30	1645	41	19	2.1
SEPT. 26	1755	2.3	2	.01	MAY 31	2145	88	347	82
SEPT. 27	1805	1.9	1	.01	MAY 31	2330	70	81	15
SEPT. 28	1640	1.6	2	.01	JUNE 1	0430	57	28	4.3
SEPT. 29	1800	3.4	6	.06	JUNE 1	0815	53	27	3.9
SEPT. 30	1330	19	20	1.0	JUNE 1	1215	90	132	32
OCT. 1	1830	10	13	.35	JUNE 1	1405	134	49	18
OCT. 2	1710	42	243	28	JUNE 1	1600	202	1540	840
OCT. 9	1747	9.5	7	.18	JUNE 1	1930	156	259	109
OCT. 11	1710	6.9	5	.09	JUNE 1	2245	128	144	50
OCT. 12	1805	6.2	3	.05	JUNE 2	1115	164	135	60
OCT. 15	1800	5.1	3	.04	JUNE 2	2035	101	43	12
OCT. 17	1800	4.6	1	.01	JUNE 2	2400	89	44	11
OCT. 18	1810	4.1	2	.02	JUNE 3	0545	76	29	6.0
OCT. 19	1625	3.9	1	.01	JUNE 3	1145	62	25	4.2
OCT. 23	1735	3.0	2	.02	JUNE 3	1705	51	18	2.5
OCT. 24	1750	3.0	0	0	JUNE 5	1640	17	9	.41
OCT. 25	1440	3.0	18	.15	JUNE 6	1730	12	6	.19
OCT. 25	1825	3.0	1	.01	JUNE 12	1435	12	7	.23
OCT. 26	1700	2.8	1	.01	JUNE 12	1650	11	3	.09
OCT. 31	1630	47	27	3.4	JUNE 13	1740	7.6	4	.08
NOV. 1	1730	47	13	1.6	JUNE 17	1815	11	3	.09
NOV. 5	1630	33	8	.71	JUNE 18	1620	7.9	3	.06
NOV. 7	1645	20	7	.38	JUNE 24	1505	55	31	4.6
NOV. 8	1715	16	16	.69	JULY 8	1545	2.4	4	.03
NOV. 13	1645	14	8	.30	JULY 22	1705	.65	2	0
NOV. 14	1645	12	6	.19	JULY 23	1750	1.0	5	.01
NOV. 27	1750	32	17	1.5	JULY 30	1725	1.3	2	.01
NOV. 28	1545	41	12	1.3	AUG. 1	1710	.56	8	.01
NOV. 28	1645	41	26	2.9	AUG. 2	1635	.48	5	.01
NOV. 29	1205	32	5	.43	AUG. 6	1755	.52	3	0
NOV. 29	1530	31	10	.84	AUG. 12	1435	4.8	23	.30
DEC. 5	1640	14	12	.45	AUG. 12	1740	4.2	14	.16
DEC. 10	1645	9.2	2	.05	AUG. 15	1640	.60	4	.01
DEC. 12	1650	8.8	3	.07	AUG. 16	1715	.56	2	0
DEC. 13	1645	15	13	.53	AUG. 19	0915	2.6	15	.11
DEC. 14	1300	20	5	.27	AUG. 20	1145	1.4	5	.02
DEC. 20	1520	61	141	23	AUG. 20	1455	1.3	7	.02
DEC. 27	1215	88	32	7.6	AUG. 21	1715	.77	3	.01
DEC. 28	1350	49	10	1.3	AUG. 22	1750	.77	4	.01
1974									
JAN. 8	1745	18	3	.15	AUG. 23	1800	.65	2	0
JAN. 9	1620	36	7	.68	AUG. 28	1735	.48	2	0
JAN. 10	1655	105	41	12	AUG. 29	1800	.77	2	0
JAN. 10	1735	103	38	11	AUG. 30	0950	28	33	2.5
JAN. 11	1640	130	49	17	AUG. 30	1400	17	43	2.0
JAN. 12	1735	61	10	1.6	AUG. 30	1653	16	16	.69
JAN. 14	1840	28	6	.45	AUG. 30	1940	14	14	.53
JAN. 15	1810	24	8	.52	SEPT. 3	1745	50	63	8.5
JAN. 16	1805	20	7	.38	SEPT. 4	1130	28	13	.98
JAN. 17	1805	16	4	.17	SEPT. 4	1615	25	12	.81
JAN. 21	1620	32	8	.69	SEPT. 5	1700	14	7	.26
JAN. 23	1640	22	4	.24	SEPT. 6	1740	20	24	1.3
JAN. 24	1700	24	5	.32	SEPT. 9	1155	12	34	1.1
JAN. 29	1805	17	4	.18	SEPT. 10	1710	7.6	7	.14
JAN. 31	1700	14	3	.11	SEPT. 12	1725	7.2	6	.12
FEB. 13	1130	16	14	.60	SEPT. 18	1730	5.0	3	.04
FEB. 18	1845	19	4	.21	SEPT. 19	1830	4.2	3	.03
MAR. 2	1350	112	79	24	SEPT. 25	1750	2.4	1	.01
MAR. 12	1315	29	5	.39	SEPT. 26	1750	2.2	1	.01
MAR. 13	1805	24	80	5.2					

MONONGAHELA RIVER BASIN

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03068700 SHAVERS FORK AT BOWDEN, W. VA.

LOCATION.--Lat 38°54'43", long 79°42'21", Randolph County, at bridge on State Secondary Highway 5/12, at Bowden, 0.5 mi (0.8 km) downstream from Taylor Run, and at mile 30.6 (49.2 km).

DRAINAGE AREA.--143 mi² (370 km²).

PERIOD OF RECORD.--Chemical analysis: April 1973 to May 1974, partial-record station, discontinued.

Water temperatures: April 1973 to May 1974, partial-record station, discontinued.

Sediment records: April 1973 to May 1974, partial-record station, discontinued.

PERIODIC DETERMINATION OF PH (UNITS), SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), AND TEMPERATURE (DEG. C) OF WATER, FOR PERIOD APRIL 1973 TO MAY 1974.

DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE	DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE
Apr. 2, 1973	-	32	-	Nov. 27.....	6.7	32	10.0
Apr. 18.....	6.8	30	7.5	Nov. 28.....	6.7	31	10.0
Apr. 28.....	6.3	29	7.0	Nov. 29.....	6.5	39	4.0
May 3.....	6.5	29	10.5	Dec. 27.....	6.0	30	5.0
May 9.....	6.4	30	9.5	Dec. 28.....	5.6	29	5.0
June 4.....	7.5	65	-	Jan. 10, 1974	6.8	38	10.0
July 2.....	7.0	50	20.0	Feb. 13.....	6.6	33	6.5
July 24.....	6.6	<50	20.0	Mar. 26.....	6.8	30	5.0
Aug. 21.....	7.6	34	18.0	Apr. 4.....	-	28	-
Aug. 22.....	6.5	33	18.5	Apr. 8.....	7.3	29	7.0
Aug. 31.....	7.1	<50	23.0	May 3.....	6.8	39	10.5
Sept. 18.....	7.8	60	15.0	May 24.....	6.7	37	17.0
Oct. 25.....	7.8	37	11.5	May 29.....	7.0	41	15.0

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, FOR PERIOD APRIL 1973 TO MAY 1974

DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
1973					1973				
APR. 2	1455	1460	25	99	NOV. 27	1705	329	16	14
APR. 18	1130	1390	23	86	NOV. 28	1545	980	11	29
APR. 28	1545	1520	13	53	NOV. 29	1305	683	4	7.4
MAY 3	1515	625	10	17	DEC. 27	1145	4260	70	805
MAY 9	1345	930	18	45	DEC. 28	1425	1440	19	74
1974					1974				
JUNE 4	2015	654	49	87	JAN. 10	1630	2870	110	852
JULY 2	-	240	8	5.2	FEB. 13	1145	269	1	.73
JULY 24	1130	304	13	11	MAR. 26	0915	338	6	5.5
AUG. 21	1455	330	15	13	APR. 4	1445	3340	165	1490
AUG. 22	1550	465	20	25	APR. 8	1435	526	6	8.5
AUG. 31	1215	87	7	1.6	MAY 3	1415	536	54	78
SEPT. 18	1220	84	18	4.1	MAY 24	1035	355	32	31
OCT. 25	1330	56	3	.45	MAY 29	1345	195	14	7.4

MONONGAHELA RIVER BASIN

03068800 SHAVERS FORK BELOW BOWDEN, W. VA.

LOCATION.--Lat 38°54'47", long 79°46'14", Randolph County, on upstream side of right pier, on U.S. Highway 33 bridge, 3.0 mi (4.8 km) west of Bowden, and at mile 26.4 (42.5 km).

DRAINAGE AREA.--151 mi² (391 km²).

PERIOD OF RECORD.--Chemical analysis: April 1973 to current year, partial-record station.

Water temperatures: April 1973 to current year, partial-record station.

Sediment records: April 1973 to current year, partial-record station.

PERIODIC DETERMINATION OF PH (UNITS), SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), AND TEMPERATURE (DEG. C) OF WATER, FOR PERIOD APRIL 1973 TO SEPTEMBER 1974

DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE	DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE
Apr. 2, 1973	-	36	-	Jan. 17, 1974	6.6	40	8.0
Apr. 18.....	6.8	34	7.5	Jan. 21.....	6.6	40	9.0
Apr. 28.....	6.4	35	7.0	Jan. 23.....	6.6	38	8.0
May 3.....	6.9	36	10.5	Jan. 24.....	7.0	69	6.5
May 4.....	-	36	-	Jan. 29.....	6.6	38	8.5
May 9.....	7.5	85	9.5	Jan. 31.....	6.6	38	7.0
June 4.....	7.7	115	16.5	Feb. 13.....	-	418	6.5
July 2.....	7.1	50	23.0	Feb. 18.....	-	-	5.0
July 24.....	6.7	-	20.5	Mar. 2.....	-	51	6.5
Aug. 21.....	7.4	55	18.0	Mar. 13.....	-	38	5.0
Aug. 22.....	6.6	41	18.0	Mar. 14.....	-	47	5.0
Aug. 23.....	7.3	42	19.5	Mar. 19.....	-	40	6.5
Aug. 24.....	7.2	44	19.5	Mar. 22.....	-	36	6.0
Aug. 27.....	7.2	46	24.0	Mar. 26.....	6.8	34	5.0
Aug. 28.....	7.2	48	24.0	Mar. 30.....	-	39	8.5
Aug. 30.....	7.3	54	25.0	Apr. 1.....	-	46	10.0
Aug. 31.....	7.1	46	25.0	Apr. 4.....	-	34	8.0
Sept. 4.....	7.2	49	24.0	Apr. 5.....	-	37	7.5
Sept. 5.....	7.3	47	22.0	Apr. 8.....	7.0	44	6.5
Sept. 7.....	7.2	52	23.5	Apr. 10.....	-	37	8.5
Sept. 10.....	7.3	54	20.0	Apr. 24.....	-	52	7.0
Sept. 11.....	6.8	62	19.5	Apr. 29.....	-	37	19.0
Sept. 12.....	7.1	64	20.5	May 1.....	-	42	18.0
Sept. 14.....	7.5	93	18.0	May 3.....	6.8	48	11.0
Sept. 17.....	7.2	53	19.5	May 7.....	7.0	49	10.5
Sept. 18.....	7.8	60	15.0	May 8.....	-	44	11.5
Sept. 19.....	7.5	67	17.0	May 9.....	-	41	13.0
Sept. 21.....	7.2	52	17.0	May 11.....	-	44	19.0
Sept. 24.....	6.6	40	18.5	May 13.....	6.3	42	12.0
Sept. 25.....	6.8	47	18.5	May 24.....	7.0	46	18.0
Sept. 26.....	7.0	46	18.5	May 28.....	-	44	17.5
Sept. 27.....	7.0	52	19.0	May 29.....	7.0	49	15.0
Sept. 28.....	7.0	50	20.0	May 30.....	-	45	14.0
Sept. 29.....	7.0	50	19.0	May 31.....	7.0	59	15.5
Sept. 30.....	6.8	41	17.0	June 1.....	6.6	50	14.0
Oct. 1.....	6.9	41	15.5	June 2.....	5.9	37	13.0
Oct. 2.....	6.6	37	16.5	June 3.....	6.0	38	14.0
Oct. 9.....	6.6	38	17.0	June 5.....	-	37	17.5
Oct. 11.....	6.8	43	17.0	June 6.....	-	44	18.5
Oct. 12.....	6.9	44	16.5	June 12.....	6.8	46	16.0
Oct. 15.....	7.0	40	15.0	June 13.....	-	40	18.0
Oct. 17.....	7.0	48	10.5	June 17.....	-	34	15.5
Oct. 18.....	7.1	46	9.0	June 18.....	-	42	18.0
Oct. 19.....	7.2	50	11.0	June 24.....	6.7	36	14.5
Oct. 23.....	7.2	50	12.0	July 8.....	6.5	32	19.5
Oct. 24.....	6.8	50	12.0	July 22.....	-	54	22.5
Oct. 25.....	7.1	55	12.0	July 23.....	-	62	18.0
Oct. 26.....	6.9	49	12.5	July 30.....	-	48	24.0
Oct. 31.....	6.4	40	8.0	Aug. 1.....	-	58	25.0
Nov. 1.....	6.1	36	8.5	Aug. 2.....	-	98	23.0
Nov. 5.....	6.4	39	6.5	Aug. 6.....	-	54	21.0
Nov. 6.....	-	36	-	Aug. 12.....	7.2	82	20.0
Nov. 7.....	6.6	-	4.5	Aug. 15.....	-	43	23.5
Nov. 8.....	6.6	36	6.0	Aug. 16.....	-	52	21.0
Nov. 13.....	6.7	42	8.0	Aug. 19.....	7.0	58	18.0
Nov. 14.....	6.8	40	8.5	Aug. 20.....	6.4	36	17.0
Nov. 27.....	6.7	43	10.0	Aug. 21.....	-	44	21.0
Nov. 28.....	6.7	41	10.0	Aug. 22.....	-	48	22.5
Nov. 29.....	6.7	36	5.0	Aug. 23.....	6.8	58	21.0
Dec. 5.....	6.8	44	10.0	Aug. 28.....	-	56	24.5
Dec. 10.....	6.8	42	2.5	Aug. 29.....	-	62	22.5
Dec. 12.....	6.9	46	1.0	Aug. 30.....	6.5	41	18.0
Dec. 13.....	7.0	50	2.5	Sept. 3.....	-	58	18.0
Dec. 14.....	7.1	56	2.0	Sept. 4.....	6.6	45	14.0
Dec. 20.....	7.3	88	3.5	Sept. 5.....	-	-	16.0
Dec. 27.....	6.4	35	5.0	Sept. 6.....	-	-	15.0
Dec. 28.....	6.4	36	5.0	Sept. 9.....	6.7	39	17.0
Jan. 8, 1974	6.6	38	3.0	Sept. 10.....	-	-	19.5
Jan. 9.....	6.8	46	3.5	Sept. 12.....	-	-	20.0
Jan. 10.....	6.6	39	8.0	Sept. 18.....	-	55	19.0
Jan. 11.....	6.4	30	6.0	Sept. 19.....	-	66	-
Jan. 12.....	6.4	30	3.0	Sept. 25.....	-	54	14.5
Jan. 14.....	6.6	32	4.0	Sept. 26.....	-	58	15.5
Jan. 15.....	6.5	33	6.5				
Jan. 16.....	6.7	36	7.5				

MONONGAHELA RIVER BASIN

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03068800 SHAVERS FORK BELOW BOWDEN, W. VA.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, FOR PERIOD APRIL 1973 TO SEPTEMBER 1974

DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
1973					1973				
APR. 2	1455	1540	25	104	OCT. 23	1720	71	4	.77
APR. 18	1230	1460	16	63	OCT. 24	1735	63	4	.68
APR. 28	1530	1600	18	78	OCT. 25	1315	63	37	6.3
MAY 3	1530	658	8	14	OCT. 25	1805	61	4	.66
MAY 4	0920	736	10	20	OCT. 26	1645	61	1	.16
MAY 9	1315	910	11	27	OCT. 31	1615	4600	97	1200
JUNE 4	2030	688	1510	2800	NOV. 1	1715	4520	52	635
JULY 2	1625	217	15	8.8	NOV. 5	1615	695	10	19
JULY 24	1145	306	18	15	NOV. 7	1620	440	1	1.2
AUG. 21	1515	346	45	42	NOV. 8	1650	367	8	7.9
AUG. 22	1640	490	26	34	NOV. 13	1615	243	18	12
AUG. 23	1820	320	6	5.2	NOV. 14	1630	319	14	12
AUG. 24	1855	256	3	2.1	NOV. 27	1630	371	18	18
AUG. 27	1755	177	8	3.8	NOV. 28	1400	1060	21	60
AUG. 28	1840	134	2	.72	NOV. 28	1630	1020	21	58
AUG. 30	1910	112	1	.30	NOV. 29	1350	709	4	7.7
AUG. 31	1255	91	6	1.5	NOV. 29	1630	681	8	15
AUG. 31	1840	86	3	.70	DEC. 5	1630	287	6	4.6
SEPT. 4	1835	79	3	.64	DEC. 10	1630	232	4	2.5
SEPT. 5	1740	73	3	.59	DEC. 12	1620	180	14	6.8
SEPT. 7	1635	120	32	10	DEC. 13	1625	210	32	18
SEPT. 10	1810	56	2	.30	DEC. 14	1340	303	19	16
SEPT. 11	1815	48	4	.52	DEC. 20	1550	408	152	167
SEPT. 12	1800	44	2	.24	DEC. 27	1130	3340	91	821
SEPT. 14	1810	71	68	13	DEC. 28	1515	1460	16	63
SEPT. 17	1715	98	4	1.1	1974				
SEPT. 18	1145	88	12	2.9	JAN. 8	1620	395	7	7.5
SEPT. 19	1745	88	32	7.6	JAN. 9	1650	515	8	11
SEPT. 21	1715	67	2	.36	JAN. 10	1615	2510	96	651
SEPT. 24	1845	816	36	79	JAN. 10	1725	3340	118	1060
SEPT. 25	1825	172	16	7.4	JAN. 11	1625	5620	65	986
SEPT. 26	1740	111	5	1.5	JAN. 12	1715	1730	13	61
SEPT. 27	1745	86	4	.93	JAN. 14	1820	630	6	10
SEPT. 28	1720	75	4	.81	JAN. 15	1750	510	7	9.6
SEPT. 29	1535	71	4	.77	JAN. 16	1745	440	4	4.8
SEPT. 30	1330	880	182	432	JAN. 17	1725	380	0	0
OCT. 1	1805	311	42	35	JAN. 21	1515	445	0	0
OCT. 2	1655	1870	269	1360	JAN. 23	1625	450	0	0
OCT. 9	1730	327	8	7.1	JAN. 24	1645	418	6	6.8
OCT. 11	1735	232	6	3.8	JAN. 29	1750	418	0	0
OCT. 12	1740	204	6	3.3	JAN. 31	1535	319	0	0
OCT. 15	1750	168	6	2.7	FEB. 18	1820	335	4	3.6
OCT. 17	1740	114	5	1.5	MAR. 2	1300	1770	87	416
OCT. 18	1745	103	4	1.1	MAR. 13	1750	642	6	10
OCT. 19	1640	93	6	1.5	MAR. 14	1640	490	4	5.3
					MAR. 19	1645	961	14	36

MONONGAHELA RIVER BASIN

03068800 SHAVERS FORK BELOW BOWDEN, W. VA.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, FOR PERIOD APRIL 1973 TO SEPTEMBER 1974

DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
1974					1974				
MAR. 22	1400	840	6	14	JUNE 6	1715	445	3	3.6
MAR. 26	0900	363	5	4.9	JUNE 12	1515	271	41	30
MAR. 30	1785	243	78	51	JUNE 12	1630	263	38	27
APR. 1	1750	283	64	49	JUNE 13	1725	224	3	1.8
APR. 4	1430	3360	140	1270	JUNE 17	1645	779	9	19
APR. 4	1600	3980	189	2030	JUNE 18	1640	426	8	9.2
APR. 4	1820	3980	193	2070	JUNE 24	1535	1360	21	77
APR. 5	1615	1050	13	37	JULY 8	1130	279	8	6.0
APR. 8	1500	594	108	173	JULY 22	1645	55	2	.30
APR. 10	1730	630	4	6.8	JULY 23	1720	48	2	.26
APR. 24	1700	287	14	11	JULY 30	1700	137	6	2.2
APR. 29	1745	207	8	4.5	AUG. 1	1645	79	5	1.1
MAY 1	1745	186	34	17	AUG. 2	1615	61	56	9.2
MAY 3	1535	654	60	106	AUG. 6	1710	79	4	.85
MAY 3	1550	630	81	138	AUG. 12	1440	95	335	86
MAY 7	1530	299	10	8.1	AUG. 12	1705	88	100	24
MAY 8	1755	251	47	32	AUG. 15	1615	460	116	144
MAY 9	1735	1790	202	976	AUG. 16	1810	150	70	28
MAY 11	1655	391	5	5.3	AUG. 19	0935	95	23	5.9
MAY 13	1515	1100	36	107	AUG. 19	1615	98	29	7.7
MAY 24	1100	391	31	33	AUG. 20	1200	648	54	94
MAY 24	1330	383	23	24	AUG. 20	1440	552	38	57
MAY 24	1600	367	31	31	AUG. 21	1655	221	8	4.8
MAY 28	1725	190	8	4.1	AUG. 22	1730	143	6	2.3
MAY 29	1355	232	18	11	AUG. 23	0815	120	2	.65
MAY 29	1625	224	7	4.2	AUG. 23	1725	111	9	2.7
MAY 30	1630	1360	96	353	AUG. 28	1705	55	42	6.2
MAY 31	1230	800	25	54	AUG. 29	1740	108	38	11
MAY 31	2130	786	401	851	AUG. 30	1000	1260	319	1090
MAY 31	2350	970	78	204	AUG. 30	1415	1010	63	172
JUNE 1	0230	1260	92	313	AUG. 30	1710	1060	60	172
JUNE 1	0500	1230	36	120	AUG. 30	2000	898	44	107
JUNE 1	0800	1140	35	108	SEPT. 3	1720	576	102	159
JUNE 1	1200	1320	152	542	SEPT. 4	1145	979	24	63
JUNE 1	1545	3140	1060	8990	SEPT. 4	1635	840	38	86
JUNE 1	1930	4950	300	4010	SEPT. 5	1635	475	10	13
JUNE 1	2245	4200	130	1470	SEPT. 6	1715	367	14	14
JUNE 2	1115	14600	749	29500	SEPT. 9	1515	395	8	8.5
JUNE 2	1645	10800	363	10600	SEPT. 10	1650	323	6	5.2
JUNE 2	2115	5580	154	2320	SEPT. 12	1710	263	16	11
JUNE 2	2400	4700	102	1290	SEPT. 18	1705	137	7	2.6
JUNE 3	0545	3080	53	441	SEPT. 19	1610	122	9	3.0
JUNE 3	1015	2350	58	368	SEPT. 25	1730	71	6	1.2
JUNE 3	1640	1800	19	92	SEPT. 26	1725	67	6	1.1
JUNE 5	1615	606	7	11					

MONONGAHELA RIVER BASIN

191

03068900 SHAVERS FORK NEAR ELKINS, W. VA.

LOCATION.--Lat 38°57'58", long 79°46'02", Randolph County, at highway bridge, 0.6 mi (1.0 km) downstream from Johns Run, 5.2 mi (8.4 km) northeast of Elkins, and at mile 19.3 (31.1 km).

DRAINAGE AREA.--161 mi² (417 km²).

PERIOD OF RECORD.--Chemical analysis: April 1973 to September 1974, partial-record station.

Water temperatures: April 1973 to September 1974, partial-record station.

Sediment records: April 1973 to September 1974, partial-record station.

PERIODIC DETERMINATION OF PH (UNITS), SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), AND TEMPERATURE (DEG. C) OF WATER, FOR PERIOD APRIL 1973 TO SEPTEMBER 1974

DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE	DATE	PH (UNITS)	SPECIFIC CONDUCTANCE	TEMPERATURE
Apr. 2, 1973	-	36	-	Apr. 8, 1974	7.0	38	6.5
Apr. 18.....	6.8	34	7.5	May 3.....	6.8	68	11.0
Apr. 28.....	6.3	34	7.0	May 13.....	6.3	41	13.0
June 4.....	6.9	50	-	May 24.....	6.8	44	18.0
July 2.....	6.9	55	25.0	May 29.....	7.0	47	15.5
July 24.....	6.8	37	20.0	May 31.....	6.7	48	16.0
Aug. 21.....	7.7	46	18.0	June 1.....	6.6	45	14.5
Aug. 22.....	6.5	32	18.0	June 2.....	5.8	34	13.0
Aug. 29.....	6.5	50	28.0	June 3.....	6.2	37	13.0
Aug. 31.....	7.4	<50	24.5	June 12.....	6.7	42	17.5
Sept. 18.....	7.8	60	14.5	June 24.....	6.5	36	15.5
Oct. 3.....	6.8	42	-	July 8.....	6.8	37	24.5
Nov. 27.....	6.8	44	10.0	Aug. 12.....	7.0	47	20.0
Nov. 28.....	6.7	44	10.0	Aug. 19.....	7.0	49	18.0
Nov. 29.....	6.4	41	4.0	Aug. 20.....	6.3	38	19.0
Dec. 27.....	6.0	33	5.5	Aug. 30.....	6.7	51	18.5
Dec. 28.....	6.0	34	5.0	Sept. 4.....	6.5	40	15.0
Feb. 13, 1974	6.9	48	6.5				
Mar. 26.....	6.9	360	5.0				
Apr. 4.....	-	36	-				

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, FOR PERIOD APRIL 1973 TO SEPTEMBER 1974

DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	DATE	TIME	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
1973					1974				
APR. 2	1535	1600	40	173	MAY 24	1200	398	26	28
APR. 18	1330	1460	22	87	MAY 29	1430	240	16	10
APR. 28	1615	1730	21	98	MAY 31	2200	865	31	72
MAY 3	1550	684	13	24	JUNE 1	0300	1330	86	309
MAY 9	1250	946	30	77	JUNE 1	0815	1190	48	154
JUNE 4	2115	716	42	81	JUNE 1	1600	3980	443	4760
JULY 2	1700	262	17	12	JUNE 1	2330	4240	143	1640
JULY 24	1100	318	29	25	JUNE 2	1245	16300	717	31600
AUG. 21	1545	361	21	20	JUNE 2	2235	5150	130	1810
AUG. 22	1720	510	169	233	JUNE 3	1115	2360	46	293
AUG. 31	1235	95	6	1.5	JUNE 12	1130	303	29	24
SEPT. 18	0930	92	6	1.5	JUNE 24	1330	1510	26	106
OCT. 3	1520	661	29	52	JULY 8	1610	261	8	5.6
NOV. 27	1700	390	35	37	AUG. 12	1320	104	4	1.1
NOV. 28	1445	1080	38	111	AUG. 19	1015	99	6	1.6
NOV. 29	1325	752	7	14	AUG. 20	1035	730	81	160
DEC. 27	1030	5110	98	1350	AUG. 20	1400	589	63	100
DEC. 28	1540	1540	20	83	AUG. 30	1030	1310	474	1680
1974					AUG. 30	1540	915	142	351
FEB. 13	1630	322	7	6.1	AUG. 30	1735	1100	69	205
MAR. 26	0830	378	5	5.1	AUG. 30	2030	915	59	146
APR. 4	1415	3410	489	4500	SEPT. 4	1205	962	26	68
APR. 8	1530	620	37	62	SEPT. 4	1700	857	25	58
MAY 3	1610	701	92	174					
MAY 13	1550	1110	56	168					

MONONGAHELA RIVER BASIN

03069000 SHAVERS FORK AT PARSONS, W. VA.

LOCATION.--Lat 39°05'45", long 79°40'40", Tucker County, at intake to industrial water supply system, Armour Leather Company plant at Parsons, and 0.4 mi (0.6 km) downstream from gaging station.

DRAINAGE AREA.--214 mi² (554 km²) at gaging station.

PERIOD OF RECORD.--Water temperatures: October 1964 to December 1948, April to September 1949, January to September 1950, October 1952 to September 1964, October 1973 to current year (partial-record).

EXTREMES.--1946-50, 1952-64:

Water Temperatures: Maximum, 30.5°C Aug. 26, 1959; minimum, freezing point on many days during winter months.

REMARKS.--Records furnished by Armour Leather Company. Water temperature records collected at site January 1966 to September 1972 are contained in files of U.S. Geological Survey.

TEMPERATURE (DEG. C) OF WATER • WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	9.0	9.0	---	6.5	---	6.5	16.5	18.0	17.0	20.5	---
2	18.0	8.0	---	6.5	6.5	6.5	8.0	17.0	---	18.0	20.5	---
3	---	---	8.0	6.5	---	---	8.5	18.0	---	18.0	20.5	20.5
4	18.0	---	8.0	6.5	---	7.0	10.5	18.0	---	18.0	---	20.0
5	18.0	7.5	8.0	6.5	6.5	7.0	12.0	---	---	18.0	20.5	20.0
6	18.0	6.5	8.0	---	6.5	7.0	---	18.0	---	18.0	21.0	20.0
7	---	6.5	8.0	6.5	6.5	7.0	---	---	---	---	---	20.0
8	18.0	6.5	8.0	6.5	6.5	---	13.5	18.0	---	19.0	21.0	---
9	17.5	6.5	---	---	6.5	7.0	13.5	18.0	---	19.0	21.0	20.0
10	14.5	---	6.5	6.5	---	---	13.5	18.0	---	19.0	21.0	20.0
11	14.5	---	6.5	6.5	6.5	6.5	---	18.0	18.0	19.0	---	20.0
12	13.5	7.0	6.5	---	6.5	5.5	13.5	---	18.0	---	21.0	---
13	---	8.5	6.5	---	---	5.5	13.5	18.0	18.0	20.0	21.0	20.0
14	---	9.0	6.5	6.5	6.5	5.5	---	18.0	18.0	---	21.0	20.0
15	---	9.0	6.5	6.5	6.5	5.5	13.5	---	---	20.5	---	---
16	---	9.0	---	6.5	6.5	---	13.5	18.0	---	21.0	21.0	18.5
17	---	9.0	6.5	---	---	---	13.5	18.0	18.0	21.0	21.0	16.5
18	---	---	6.5	6.5	6.5	---	13.5	18.0	---	21.0	---	15.5
19	---	---	6.5	6.5	6.5	5.5	---	---	18.0	21.0	21.0	14.5
20	---	---	6.5	---	6.5	5.5	13.5	18.0	18.0	---	21.0	11.0
21	---	9.0	6.5	6.5	---	5.5	---	---	18.0	---	21.0	---
22	12.0	9.0	---	6.5	6.5	5.5	11.5	18.0	18.0	20.5	21.0	---
23	12.0	9.0	---	6.5	6.5	5.5	13.0	18.0	---	20.0	---	11.0
24	12.0	9.0	6.5	6.5	---	---	13.0	---	19.0	20.0	21.0	11.0
25	12.0	---	---	6.5	6.5	5.5	15.0	18.0	19.0	20.0	---	11.0
26	12.0	9.0	6.5	---	6.5	---	15.5	---	---	20.0	21.0	---
27	---	9.0	6.5	---	6.5	5.5	16.5	18.0	19.0	20.0	21.0	11.0
28	---	---	6.5	---	6.5	5.5	---	18.0	19.0	---	21.0	11.0
29	11.5	9.0	6.5	6.5	---	5.5	---	18.0	19.0	20.0	21.0	---
30	10.0	9.0	---	6.5	---	5.5	16.5	18.0	---	---	21.0	10.0
31	9.5	---	6.5	6.5	---	---	---	18.0	---	20.0	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	21.0	MIN	5.5	MEAN	13.0						

MONONGAHELA RIVER BASIN

193

03070000 CHEAT RIVER AT ROWLESBURG, W. VA.

LOCATION.--Lat 39°20'50", long 79°40'00", Preston County, 50 ft (15 m) downstream from Baltimore & Ohio Railroad bridge at Rowlesburg, 300 ft (91 m) upstream from Saltlick Creek, and at mile 44.1 (71.0 km).

DRAINAGE AREA.--972 mi² (2,517 km²).

PERIOD OF RECORD.--Sediment records: April 1968 to July 1974, partial-record station, discontinued.

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

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 04...	2	1245	17.0	2600	5	35
NOV. 02...	2	1210	9.5	7140	34	655
DEC. 05...	2	1250	8.0	1770	6	29
DEC. 27...	2	1030	6.5	29600	198	15800
DEC. 27...	2	1225	7.0	27100	168	12300
JAN. 04...	2	1135	5.0	13300	44	1580
FEB. 27...	2	0840	4.0	2160	6	35
MAR. 24...	2	1250	2.5	2750	3	22
APR. 24...	2	1445	9.0	1820	5	25
APR. 25...	2	1315	12.0	1670	3	14
JUNE 03...	2	1655	19.0	12500	39	1320
JULY 01...	2	1330	20.0	1720	20	93
JULY 26...	2	1200	23.0	230	24	15

MONONGAHELA RIVER BASIN

03071600 CHEAT RIVER AT LAKE LYNN, PA.

LOCATION.--Lat 39°43'15", long 79°51'20", Fayette County, at the Lake Lynn hydroelectric plant of the West Penn Power Company at Lake Lynn, 3.0 mi (4.8 km) upstream from mouth.

DRAINAGE AREA.--1,411 mi² (3,654 km²).

PERIOD OF RECORD.--Water temperatures: October 1948 to September 1957, October 1958 to current year (partial-record).

EXTREMES.--1948-57:

Water temperatures: Maximum, 29.5°C July 30, 1949, July 28, 1952, and Aug 6, 1955; minimum, 0.5°C several days during 1951, 1952, 1954, 1955, 1957.

REMARKS.--Records furnished by the West Penn Power Company.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

MIDDLE ISLAND CREEK BASIN

03114500 MIDDLE ISLAND CREEK AT LITTLE, W. VA.

LOCATION.--39°28'30", long 80°59'50", Tyler County, at highway bridge at Little, 0.1 mi (0.2 km) upstream from Stewarts Run, 5.0 mi (8.0 km) west of Middlebourne, and at mile 24.5 (39.4 km).

DRAINAGE AREA.--458 mi² (1,186 km²).

PERIOD OF RECORD.--Sediment records: April 1968 to May 1974, partial-record station, discontinued.

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

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.						
03...	2	1045	19.0	116	37	12
FEB.						
05...	2	1130	-	324	10	8.7
MAR.						
05...	2	1230	6.0	685	30	55
APR.						
29...	2	1800	11.5	143	17	6.6
MAY						
29...	2	1010	12.0	90	22	5.3

LOCATION.--Lat 38°49'25", long 80°35'35", Braxton County, temperature recorder at discontinued gaging station on left bank at downstream side of bridge on State Highway 5, 0.1 mi (0.2 km) downstream from Krawl Creek, 4.0 mi (6.4 km) southeast of Burnsville, and at mile 126.9 (204.2 km).

PERIOD OF RECORD.--Water temperatures: October 1970 to September 1972, October 1972 to September 1974, partial-record, discontinued.

Water temperatures: Maximum 30.0°C July 24, 1972; minimum, freezing point Jan. 24, Feb. 7, Mar. 25, 1971, Feb. 4, Mar. 6, 1972.

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	21.0	14.5	14.0	9.5	9.0	---	---	---	---	---	---
2	21.0	21.0	14.5	14.0	9.0	8.0	---	---	---	---	---	---
3	21.0	20.5	15.0	14.0	8.0	7.5	---	---	---	---	---	---
4	21.0	20.5	15.0	14.0	8.5	8.0	---	---	---	---	---	---
5	21.5	21.0	14.0	13.0	10.5	8.5	---	---	---	---	---	---
6	21.0	19.5	13.0	11.5	10.0	9.5	---	---	---	---	---	---
7	20.0	19.5	11.5	10.0	9.5	8.0	---	---	---	---	---	---
8	20.5	20.0	10.0	9.5	8.0	6.0	---	---	---	---	---	---
9	21.0	20.0	10.5	10.0	6.0	4.5	---	---	---	---	---	---
10	21.0	20.5	11.0	9.5	4.5	4.0	---	---	---	---	---	---
11	21.0	21.0	9.5	9.0	4.0	2.5	---	---	---	---	---	---
12	21.0	20.5	9.5	9.0	2.5	1.5	---	---	---	---	---	---
13	21.0	20.5	11.0	9.5	3.0	1.5	---	---	---	---	---	---
14	21.5	21.0	12.5	11.0	4.5	3.0	---	---	---	---	---	---
15	21.0	20.0	14.5	12.5	4.0	4.0	---	---	---	---	---	---
16	20.5	19.5	15.0	14.5	4.0	3.0	---	---	---	---	---	---
17	19.5	17.0	14.5	12.5	3.0	1.0	---	---	---	---	---	---
18	17.0	16.0	12.5	11.5	---	---	---	---	---	---	---	---
19	16.5	15.5	12.5	11.5	---	---	---	---	---	---	---	---
20	16.5	15.5	13.0	12.5	3.0	0.5	---	---	---	---	---	---
21	17.0	15.5	13.0	13.0	---	---	---	---	---	---	---	---
22	17.0	15.5	13.0	12.5	---	---	---	---	---	---	---	---
23	17.0	16.0	12.5	12.0	---	---	---	---	---	---	---	---
24	17.0	16.0	13.5	12.0	---	---	---	---	---	---	---	---
25	17.0	16.0	14.5	13.0	---	---	---	---	---	---	---	---
26	16.5	15.5	14.0	14.0	---	---	---	---	---	---	---	---
27	17.0	15.5	14.5	14.0	---	---	---	---	---	---	---	---
28	17.0	16.0	14.5	14.0	---	---	---	---	---	---	---	---
29	16.0	15.0	14.0	11.0	---	---	---	---	---	---	---	---
30	15.0	14.0	11.0	9.5	---	---	---	---	---	---	---	---
31	14.5	14.0	---	---	---	---	---	---	---	---	---	---
MONTH	22.0	14.0	15.0	9.0	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	20.0	17.5	23.5	21.5	19.0	18.0
2	---	---	---	---	---	---	21.0	19.5	23.5	22.0	20.0	18.5
3	---	---	---	---	---	---	23.0	21.0	24.0	22.0	20.0	17.5
4	---	---	---	---	---	---	25.0	22.0	23.5	22.0	17.5	15.5
5	---	---	---	---	---	---	25.0	23.5	23.5	21.5	16.0	14.5
6	---	---	---	---	---	---	24.5	23.0	23.0	21.0	16.0	15.0
7	---	---	---	---	---	---	26.0	24.0	22.0	20.0	16.5	15.0
8	---	---	---	---	20.0	19.5	26.5	24.5	23.5	20.5	17.5	16.5
9	---	---	---	---	22.5	19.5	27.0	24.5	22.5	21.0	18.0	17.5
10	---	---	---	---	24.5	22.0	26.0					

03153500 LITTLE KANAWHA RIVER AT GRANTSVILLE, W. VA.

LOCATION.--Lat 38°55'20", long 81°05'50", Calhoun County, 1,000 ft (305 m) downstream from bridge on State Highway 16 at Grantsville, 1,200 ft (366 m) downstream from Philip Run, and at mile 80.0 (128.7 km).

DRAINAGE AREA.--913 Mi² (2,365 km²).

PERIOD OF RECORD.--Sediment records: January 1968 to June 1974, partial-record station, discontinued.

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

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
Oct 17...	2	1245	14.5	132	31	11
Nov. 20...	2	1330	8.0	816	17	37
Mar. 19...	2	1300	7.0	1840	25	124
Apr. 24...	2	1030	14.0	644	9	16
May 29...	2	1100	19.0	322	14	12
June 25...	2	1300	-	3020	105	856

LITTLE KANAWHA RIVER BASIN

03154000 WEST FORK LITTLE KANAWHA RIVER AT ROCKSDALE, W. VA.

LOCATION.--Lat 38°50'48", long 81°13'26", Calhoun County, temperature recorder at gaging station on right bank on State Route 11, 850 ft (259 m) downstream from Henry Fork at Rocksedale, 9.0 mi (14.5 km) southwest of Grantsville, and at mile 14.1 (22.7 km).

DRAINAGE AREA.-- 205 mi² (531 km²).

PERIOD OF RECORD.--Water Temperatures: October 1970 to January 1974, partial-record, discontinued.

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

[illegible]

KANAWHA RIVER BASIN

197

03179000 BLUESTONE RIVER NEAR PIPESTEM, W. VA.

LOCATION.--Lat 37°32'45", long 81°00'30", Summers County, 1.2 mi (1.9 km) downstream from Mountain Creek, 2.5 mi (4.0 km) west of Pipestem, and at mile 8.0 (12.9 km).

DRAINAGE AREA.--363 mi² (940 km²).

PERIOD OF RECORD.--Sediment records: March 1968 to May 1974, partial-record station, discontinued.

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

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 25...	2	1020	10.0	50	1	0.14
DEC. 12...	2	1130	-	194	3	1.6
FEB. 26...	2	1035	2.0	693	15	28
MAR. 27...	2	1050	20.0	681	39	72
APR. 15...	2	0945	13	572	14	22
MAY 29...	2	1210	-	200	15	8.1

03180000 NEW RIVER AT BLUESTONE DAM, W. VA.

LOCATION.--Lat 37°38'35", long 80°53'00", Summers County, temperature recorder at discontinued gaging station on right bank 0.3 mi (0.5 km) downstream from Bluestone Dam, 0.7 mi (1.1 km) upstream from Greenbrier River, 2.0 mi (3.2 km) upstream from Hinton, at New River mile 64.5 (103.8 km) and Kanawha River mile 161.5 (259.9 km).

DRAINAGE AREA.--4,604 mi² (11,924 km²).

PERIOD OF RECORD.--Water temperatures: May 1953 to September 1967, October 1969 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 26.5°C Aug. 28, 29; minimum, 2.0°C Dec. 19-21.

Period of record:

Water temperatures: Maximum, 29.5°C Aug. 26, 1959; minimum, freezing point on several days during winter months most years.

TEMPERATURE (DEG. C) OF WATER • WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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

KANAWHA RIVER BASIN

199

03182000 KNAPP CREEK AT MARLINTON, W. VA.

LOCATION.--Lat 38°12'40", long 80°04'30", Pocahontas County, at city water plant, at Marlinton, 1.0 mi (1.6 km) upstream from mouth, and 2.0 mi (3.2 km) downstream from discontinued gaging station.

DRAINAGE AREA.--108 mi² (280 km²) at discontinued gaging station.

PERIOD OF RECORD.--Water temperatures: October 1946 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 23.5°C July 15; minimum, 0.5°C Nov. 17, Dec. 20, Feb. 6, 11, 21, Mar. 24, 25.

Period of record:

Water temperatures: Maximum, 28°C July 24, 1952 and June 2, 1959; minimum, freezing point on many days during winter months.

REMARKS.--Records furnished by Marlinton city water plant.

TEMPERATURE (DFG. C) OF WATER + WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

KANAWHA RIVER BASIN

03182950 HOWARD CREEK AT CALDWELL, W. VA.

LOCATION.--Lat 37°46'54", long 80°23'15", Greenbrier County, on right bank at Caldwell, 300 ft (91 m) upstream from highway bridge on U.S. Highway 60, 0.9 mi (1.4 km) upstream from mouth, 3.5 mi (5.6 km) southeast of Lewisburg, and 5.0 (8.0 km) southwest of White Sulphur Springs.

DRAINAGE AREA.--84.4 mi² (218.6 km²).

PERIOD OF RECORD.--Water quality data: October 1972 to current year, partial-record station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT. 02...	22	7.5	--	240	0	54	12	9.0	2.4	115	0	94
JAN. 22...	56	4.2	--	--	--	24	5.3	4.3	1.0	52	0	43

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORTHO. PHOSPHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)
OCT. 02...	90	10	.2	.80	3.5	--	--	--	--	--	180
JAN. 22...	39	4.6	.1	.40	1.8	--	--	--	--	--	82

DATE	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ml)	STREPTOCOCCI (COLONIES PER 100 ml)
OCT. 02...	90	9	.3	392	8.1	11.0	--	--	--	--	--
JAN. 22...	39	10	.2	192	7.3	4.5	--	--	--	--	--

03182950 HOWARD CREEK AT CALDWELL, W. VA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	ALKA- LITY AS CAC03 (MG/L)
MAR. 13...	834	5.8	0	40	20	6.0	2.2	2.0	1.2	14	0	11
APR. 18...	69	4.9	300	250	120	19	4.4	4.5	1.7	44	0	36
MAY 15...	170	6.7	0	40	30	11	3.1	3.3	6.5	29	0	24
JUNE 12...	36	3.7	40	240	50	27	6.8	6.5	2.8	--	0	--
JULY 16...	27	6.1	10	40	0	40	9.1	7.8	2.4	90	0	74
AUG. 14...	9.5	6.9	20	60	30	53	12	15	2.5	122	--	100
SEP. 06...	41	6.3	20	320	30	49	11	10	2.3	98	0	80

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (N03) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)
MAR. 13...	12	2.3	.2	.32	1.4	.00	.32	--	.00	40	24
APR. 18...	28	4.7	--	.28	1.2	.01	.29	.06	.04	91	66
MAY 15...	18	8.0	--	.38	1.7	.02	.40	.02	.01	73	40
JUNE 12...	41	7.7	--	.35	1.6	.01	.36	.06	.05	--	95
JULY 16...	64	11	--	.45	2.0	.03	.48	.17	.18	188	140
AUG. 14...	90	16	--	.47	2.1	.00	.47	.30	.24	258	180
SEP. 06...	93	12	--	.52	2.3	.01	.53	--	.15	235	170

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	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)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
MAR. 13...	13	15	.2	64	7.0	6.0	25	11.2	1.1	960	--
APR. 18...	29	13	.2	140	7.4	16.0	3	11.0	.0	160	20
MAY 15...	16	13	.2	160	7.5	13.0	3	--	--	720	250
JUNE 12...	95	13	.3	235	7.6	17.0	--	9.2	3.4	130	210
JULY 16...	64	11	.3	160	7.5	21.0	1	11.4	.0	120	420
AUG. 14...	82	15	.5	--	--	--	1	--	.5	100	0
SEP. 06...	87	11	.3	360	7.4	24.0	3	8.0	.1	2500	400

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

DATE	SUSPENDED SEDIMENT (MG/L)	INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE (T/DAY)
MAR. 13...	34	77
APR. 18...	4	.75
MAY 15...	13	6.0
JUNE 12...	7	.68
JULY 18...	2	.15
AUG. 14	8	.21

KANAWHA RIVER BASIN

03184000 GREENBRIER RIVER AT HILLDALE, W. VA.

LOCATION.--Lat 37°38'25", long 80°48'20", Summers County, 100 ft (30 m) downstream from highway bridge on State Highway 3 at Hilldale, 0.1 mi (0.2 km) upstream from Howard Creek, 0.9 mi (1.4 km) upstream from Powley Creek, 5.0 mi (8.0 km) southeast of Hinton, and at mile 5.6 (9.0 km).

DRAINAGE AREA.--1,625 mi² (4,209 km²), includes that of Howard Creek.

PERIOD OF RECORD.--Sediment records: March 1968 to June 1974, partial-record station, discontinued.

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

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 09...	2	1345	19.0	391	6	6.3
NOV. 08...	2	1610	5.5	1870	10	50
DEC. 11...	2	1425	3.0	2820	6	46
MAR. 11...	2	1340	13.0	2960	8	64
APR. 16...	2	1800	11.5	1800	20	97
MAY 13...	2	1600	-	25600	209	14400
JUNE 10...	2	1930	-	1280	20	69

LOCATION.--Lat 38°08'20", long 81°12'45", Fayette County, temperature recorder at gaging station on right bank 150 ft (46 m) downstream from toll bridge, 0.8 mi (1.3 km) downstream from village of Kanawha Falls, 2.0 mi (3.2 km) downstream from Gauley Bridge, 2.0 mi (3.2 km) downstream from confluence of New River and Gauley River, and at mile 94.5 (152.1 km).

PERIOD OF RECORD.--Water temperatures: December 1957 to September 1966, July 1968 to current year.

Water temperatures: Maximum, 25.0°C Aug. 26-31, minimum, 2.5° C Dec. 21-25.

Water temperatures: Maximum, 28.5°C Aug. 20, 1959, June 29, July 28, 29, 1964; minimum, freezing point on several days during 1958-60, 1963, 1971.

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	21.5	11.0	11.0	10.0	9.5	6.5	6.0	7.0	6.5	4.5	4.0
2	21.5	21.5	11.0	10.5	9.5	8.5	6.0	6.0	7.0	6.5	5.5	4.5
3	21.5	21.5	11.0	10.5	8.5	7.5	6.0	6.0	7.0	7.0	6.5	5.5
4	21.5	21.5	11.0	11.0	7.5	7.0	6.0	5.5	7.0	6.0	6.5	6.5
5	21.5	21.5	11.0	10.5	8.5	7.5	5.5	5.5	6.5	5.5	8.0	6.5
6	21.5	21.0	10.5	10.5	8.5	8.5	5.5	5.5	6.5	5.0	8.5	8.0
7	21.5	20.0	10.5	10.0	8.5	8.0	5.5	5.0	5.0	5.0	9.5	8.5
8	20.5	20.5	10.5	10.5	8.0	8.0	5.0	5.0	5.0	4.0	10.0	9.5
9	20.5	20.5	10.5	10.5	8.0	7.5	5.0	5.0	4.0	3.5	10.0	9.5
10	21.0	20.5	10.5	9.0	7.5	7.0	6.5	5.0	3.5	3.5	11.5	10.0
11	21.0	21.0	9.0	8.0	7.0	5.5	7.0	6.5	4.0	3.5	11.5	11.5
12	21.0	20.5	8.5	8.0	5.5	4.0	7.0	6.0	4.0	3.5	11.5	9.5
13	20.5	20.0	9.0	8.5	4.5	4.0	6.0	4.0	3.5	3.5	9.5	8.0
14	20.5	20.5	9.0	9.0	5.0	4.5	4.0	4.0	4.0	3.5	8.0	7.0
15	20.5	20.0	10.0	9.0	5.0	5.0	5.0	3.5	4.0	4.0	7.0	6.0
16	20.0	19.5	10.0	9.5	5.0	5.0	5.5	5.0	4.0	4.0	6.5	6.0
17	19.5	18.5	9.5	9.5	5.0	3.5	5.5	5.5	4.5	4.0	6.5	6.0
18	18.5	17.5	9.5	9.0	3.5	3.0	5.5	5.5	5.0	4.5	6.0	5.5
19	17.5	16.5	9.5	9.0	3.5	3.0	5.5	5.5	5.5	5.0	6.5	6.0
20	17.0	16.5	9.0	9.0	3.5	3.0	7.5	7.5	6.0	5.5	6.5	6.0
21	16.5	16.5	9.0	9.0	3.0	2.5	8.0	6.0	5.5	5.0	7.0	6.5
22	16.5	16.0	9.5	9.0	2.5	2.5	8.0	7.0	7.0	5.5	7.0	6.5
23	16.5	16.0	9.5	9.0	2.5	2.5	7.0	7.0	7.0	6.0	7.0	6.5
24	16.5	16.5	9.5	9.0	2.5	2.5	7.0	7.0	6.0	6.0	7.0	7.0
25	16.5	16.5	10.0	9.5	3.5	2.5	7.0	6.5	6.0	5.0	7.0	6.0
26	16.5	16.5	10.5	10.0	5.0	3.5	6.5	6.5	5.0	4.5	7.0	6.5
27	16.5	16.5	11.5	10.5	7.0	4.0	7.5	6.5	4.5	4.0	7.5	7.0
28	16.5	16.5	11.5	11.5	7.0	6.5	7.5	7.0	4.0	4.0	8.0	7.5
29	16.5	15.5	11.5	10.5	6.5	6.0	7.0	7.0	---	---	8.5	8.0
30	15.5	13.5	10.5	10.0	6.5	6.5	7.0	7.0	---	---	9.0	8.5
31	13.5	11.0	---	---	6.5	6.5	7.0	7.0	---	---	9.0	9.0
MONTH	22.5	11.0	11.5	8.0	10.0	2.5	8.0	3.5	7.0	3.5	11.5	4.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.5	15.5	14.5	17.0	14.0	---	---	24.5	23.5	24.5	23.5
2	11.0	9.0	17.5	15.5	14.0	14.0	---	---	24.5	23.5	23.5	22.0
3	12.0	11.0	17.0	16.5	15.5	14.0	---					

KANAWHA RIVER BASIN

03193770 KANAWHA RIVER AT CABIN CREEK, W. VA.

LOCATION.--Lat 38°11'58", long 81°28'41", Kanawha County, at the Appalachian Electric Power Company, Cabin Creek steam electric cooling water intakes, at Cabin Creek.

DRAINAGE AREA.--8,661 mi² (22,432 km²).

PERIOD OF RECORD.--Water temperatures: October 1950 to September 1972, October 1972 to current year. (partial-record).

EXTREMES.--1950-72:

Water temperatures: Maximum, 33°C on several days in August 1955 and 1959; minimum, freezing point Feb. 10, 1951, Feb. 14-16, 1958, Jan. 16, 1964, and Feb. 2, 3, 1971.

REMARKS.--Records furnished by the Appalachian Electric Power Company.

TEMPERATURE (DEG. C) OF WATER . WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	14.5	10.0	6.5	9.0	4.5	11.5	18.5	16.5	---	---	---
2	24.0	11.5	---	5.5	9.0	5.5	11.5	19.0	---	21.0	---	---
3	23.5	11.5	8.5	5.0	9.0	---	13.0	19.5	16.5	22.0	---	---
4	20.5	10.0	8.5	6.0	8.5	8.0	14.0	19.0	17.0	22.0	---	---
5	22.5	11.5	8.5	5.5	7.0	9.0	14.0	---	16.5	23.5	---	---
6	22.5	16.0	9.0	6.0	5.5	9.5	13.5	18.0	18.0	24.5	26.0	---
7	---	10.0	9.0	6.0	6.0	10.0	10.0	17.0	19.0	25.5	26.0	---
8	21.5	9.5	8.5	6.0	6.0	10.5	10.5	16.0	19.5	---	26.0	---
9	21.0	9.5	---	6.0	5.0	12.0	10.5	16.5	19.5	---	25.5	---
10	21.5	9.5	8.0	6.0	---	12.0	9.5	16.5	22.0	26.5	25.5	21.5
11	21.5	9.0	8.5	8.0	6.0	13.5	10.0	---	24.0	26.0	25.5	---
12	21.5	8.5	5.5	8.5	4.0	13.0	---	---	24.0	25.5	25.5	22.0
13	21.5	8.0	5.5	6.0	5.0	10.5	---	---	23.0	26.0	26.0	23.5
14	---	9.0	4.5	6.0	4.5	8.5	---	15.5	23.5	---	25.5	---
15	21.5	9.5	5.0	5.5	4.5	8.0	13.0	15.0	24.0	26.5	25.5	---
16	22.0	10.0	5.0	6.0	5.5	8.0	14.0	16.5	---	25.5	26.5	---
17	20.0	10.0	5.0	---	---	---	14.0	18.0	23.0	---	---	---
18	20.0	---	---	---	---	7.0	13.0	19.0	---	26.0	---	---
19	20.0	9.5	3.5	---	---	9.0	14.5	---	21.5	---	26.5	---
20	19.0	10.0	4.0	---	7.0	8.0	14.0	19.5	22.0	26.5	26.5	23.0
21	---	10.5	3.5	---	6.5	8.5	---	20.5	23.0	---	28.0	---
22	18.5	---	3.5	---	6.5	9.0	15.0	21.0	22.5	27.0	27.0	---
23	19.0	---	---	---	8.0	8.5	16.0	21.5	---	---	27.0	21.5
24	19.0	10.5	3.0	---	6.5	8.5	15.5	22.0	21.5	27.0	26.0	20.5
25	18.5	---	---	8.5	6.5	8.0	14.5	21.0	19.5	---	25.5	20.5
26	18.5	10.5	4.0	---	6.0	8.0	14.0	---	19.0	26.5	26.0	20.0
27	18.5	11.5	6.0	---	5.0	8.5	14.0	---	20.5	---	27.0	---
28	---	12.0	8.0	9.0	4.5	8.5	---	20.0	20.5	---	28.0	---
29	18.5	12.0	7.0	9.0	---	9.5	18.0	20.0	20.0	25.5	27.0	---
30	16.5	10.5	---	---	---	10.0	18.0	20.0	---	25.5	27.0	---
31	15.0	---	7.0	9.5	---	---	---	20.0	---	25.5	---	---
MONTH	20.5	10.5	6.5	---	6.5	9.0	13.5	---	20.5	---	---	---
YEAR	MAX	28.0	MIN	3.0	MEAN	15.0						

LOCATION.--Lat 38°35'50", long 80°29'20", Webster County, temperature and turbidity recorders 6.5 mi (10.5 km) upstream from town of Centralia, 8.9 mi (14.3 km) southwest of Salisburg Station, 8.9 mi (14.3 km) northwest of Webster Springs, and at mile 122.7 (197.4 km).

TEMPERATURE (DEG. C) OF WATER • WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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

KANAWHA RIVER BASIN

03194700 ELK RIVER BELOW WEBSTER SPRINGS, W. VA.--Continued

PERIOD OF RECORD.--Water temperatures: February to September 1974.

Sediment records: April 1968 to September 1974, partial-record station, discontinued.

Turbidity: January to September 1974.

EXTREMES.--Current year:

Water temperatures, February to September: Maximum, 28.0°C July 24; minimum, 4.0°C Mar. 18.

Turbidity, January to September: Maximum, 700 JTU June 2; minimum, 1 JTU on many days.

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

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 18...	2	1800	13.0	113	1	.31
NOV. 26...	2	1545	12.0	460	1	1.2
DEC. 04...	2	1600	-	569	1	1.5
JAN. 23...	2	1350	8.5	812	4	8.8
FEB. 27...	2	1500	3.0	583	9	14
MAR. 07...	2	1455	10.0	910	21	52
MAR. 19...	2	1245	7.0	1330	21	75
APR. 04...	2	1330	11.5	6160	855	14200
APR. 17...	2	1500	11.0	527	18	26
MAY 21...	2	1420	21.5	277	56	42
MAY 30...	2	1105	15.0	3870	320	3340
JUNE 20...	2	2020	21.5	400	6	6.5
JULY 08...	2	1545	-	395	29	31
JULY 18...	2	2000	25.0	112	7	2.1
SEPT. 11...	2	1310	19.0	336	9	8.2

TURBIDITY (JTU) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	25	1	45	2
2	---	---	---	---	---	---	---	---	30	1	25	10
3	---	---	---	---	---	---	---	---	35	1	30	10
4	---	---	---	---	---	---	---	---	15	1	10	5
5	---	---	---	---	---	---	---	---	10	2	7	3
6	---	---	---	---	---	---	---	---	4	1	9	3
7	---	---	---	---	---	---	---	---	9	2	65	3
8	---	---	---	---	---	---	---	---	10	3	55	10
9	---	---	---	---	---	---	---	---	5	2	15	4
10	---	---	---	---	---	---	---	---	3	2	5	2
11	---	---	---	---	---	---	---	---	2	2	4	3
12	---	---	---	---	---	---	---	---	5	2	60	2
13	---	---	---	---	---	---	---	---	15	6	95	7
14	---	---	---	---	---	---	---	---	45	7	100	3
15	---	---	---	---	---	---	---	---	30	4	10	3
16	---	---	---	---	---	---	---	---	20	2	8	3
17	---	---	---	---	---	---	---	---	80	2	10	3
18	---	---	---	---	---	---	4	2	100	65	2	2
19	---	---	---	---	---	---	4	3	95	2	110	1
20	---	---	---	---	---	---	7	3	15	1	95	10
21	---	---	---	---	---	---	8	3	10	1	120	1
22	---	---	---	---	---	---	40	3	10	1	20	4
23	---	---	---	---	---	---	15	1	20	1	75	1
24	---	---	---	---	---	---	40	1	30	1	90	1
25	---	---	---	---	---	---	40	4	20	1	90	1
26	---	---	---	---	---	---	15	3	30	4	45	1
27	---	---	---	---	---	---	30	2	20	1	20	1
28	---	---	---	---	---	---	60	1	20	1	15	2
29	---	---	---	---	---	---	65	2	---	---	5	4
30	---	---	---	---	---	---	85	3	---	---	9	4
31	---	---	---	---	---	---	6	1	---	---	5	4
MONTH	---	---	---	---	---	---	---	---	100	1	120	1
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5	3	3	2	80	20	35	2	8	8	20	15
2	35	4	3	2	700	60	20	4	8	2	20	10
3	70	10	8	2	120	10	4	3	4	2	65	15
4	380	80	15	8	30	15	5	3	20	2	80	15
5	45	15	8	4	45	8	5	3	2	2	20	7
6	15	6	4	3	9	5	5	5	2	2	9	6
7	6	3	3	2	6	4	6	5	2	2	15	6
8	8	3	3	2	15	3	6	2	10	2	9	7
9	25	10	20	2	500	10	6	3	150	2	8	5
10	30	6	60	10	30	15	6	3	15	4	5	4
11	35	10	10	6	15	7	8	2	4	3	8	3
12	9	5	6	5	7	5	8	3	8	3	5	3
13	10	5	9	4	5	4	8	2	6	3	4	3
14	9	6	5	3	4	3	8	2	3	2	9	3
15	15	1	4	2	3	3	9	3	4	2	15	4
16	15	6	4	2	20	3	8	3	35	2	6	3
17	7	2	2	2	25	15	8	3	6	3	3	2
18	7	2	5	4	15	9	8	6	3	3	2	2
19	7	2	2	2	10	5	9	4	25	4	2	2
20	7	1	3	2	6	4	80	3	40	7	2	2
21	4	1	35	1	30	4	4	3	55	15	4	2
22	3	1	6	1	120	20	5	3	15	9	2	2
23	20	2	6	2	75	25	4	3	9	5	2	2
24	25	5	15	6	35	4	15	3	5	4	2	2
25	8	4	8	4	20	3	4	3	20	3	3	2
26	6	3	7	3	20	2	8	2	3	2	2	2
27	5	2	3	2	6	2	8	8	3	2	4	3
28	5	2	2	1	10	4	8	8	3	2	3	2
29	3	1	20	1	25	6	8	8	95	2	3	2
30	2	1	190	15	15	7	8	8	110	8	4	2
31	---	---	50	20	---	---	8	8	100	25	---	---
MONTH	380	1	190	1	700	2	80	2	150	2	80	2
YEAR	700	1										

03195100 RIGHT FORK HOLLY RIVER AT GUARDIAN, W. VA.

LOCATION.--Lat 38°38'08", long 80°27'58", Webster County, temperature and turbidity recorders at gaging station on right bank at Guardian, 50 ft (15 m) upstream from Bear Run, and at mile 8.1 (13.0 km).

DRAINAGE AREA.--51.1 mi² (132.3 km²).

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

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

PERIOD OF RECORD.--Water temperatures: February to September 1974.
Turbidity: January to September 1974.

Water temperatures, February to September: Maximum, 26.0°C July 18; minimum, 0.5°C Feb. 26, 27.
Turbidity, January to September: Maximum, 550 JTU Aug. 17; minimum, 1 JTU on many days.

TURBIDITY (JTU) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	3	2	8	3
2	---	---	---	---	---	---	---	---	45	2	15	4
3	---	---	---	---	---	---	---	---	20	3	7	4
4	---	---	---	---	---	---	---	---	6	1	15	4
5	---	---	---	---	---	---	---	---	4	2	8	4
6	---	---	---	---	---	---	---	---	3	1	9	3
7	---	---	---	---	---	---	---	---	7	1	10	5
8	---	---	---	---	---	---	---	---	5	2	5	3
9	---	---	---	---	---	---	---	---	4	1	5	5
10	---	---	---	---	---	---	---	---	1	1	5	5
11	---	---	---	---	---	---	---	---	2	1	5	5
12	---	---	---	---	---	---	---	---	3	1	5	5
13	---	---	---	---	---	---	---	---	15	1	15	5
14	---	---	---	---	---	---	---	---	35	1	9	5
15	---	---	---	---	---	---	---	---	15	1	9	5
16	---	---	---	---	---	---	---	---	6	2	15	4
17	---	---	---	---	---	---	---	---	2	1	15	4
18	---	---	---	---	---	---	---	---	---	---	55	4
19	---	---	---	---	---	---	---	---	---	---	20	5
20	---	---	---	---	---	---	---	---	5	1	20	10
21	---	---	---	---	---	---	---	---	160	1	40	10
22	---	---	---	---	---	---	---	---	10	3	20	9
23	---	---	---	---	---	---	---	---	9	2	15	7
24	---	---	---	---	---	---	---	---	50	1	35	6
25	---	---	---	---	---	---	---	---	8	2	8	5
26	---	---	---	---	---	---	---	---	15	1	6	4
27	---	---	---	---	---	---	---	---	6	1	5	4
28	---	---	---	---	---	---	---	---	3	1	5	4
29	---	---	---	---	---	---	---	---	---	---	5	4
30	---	---	---	---	---	---	---	---	---	---	9	4
31	---	---	---	---	---	---	3	2	---	---	5	4
MONTH	---	---	---	---	---	---	---	---	160	1	55	3
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	5	3	4	1	65	15	45	2	30	5	20	6
2	30	4	4	2	300	30	4	2	5	2	15	7
3	10	6	8	3	30	15	2	2	6	2	130	8
4	220	8	4	3	15	8	2	2	15	2	80	15
5	35	15	4	2	9	5	4	2	10	2	10	7
6	15	10	3	1	20	4	2	2	10	2	25	5
7	10	7	3	1	4	2	2	2	4	2	10	6
8	30	7	5	1	7	2	2	2	9	2	6	4
9	25	15	5	2	25	2	2	2	70	2	4	2
10	20	8	3	1	5	2	2	2	80	15	8	3
11	15	8	2	1	2	2	2	2	25	9	8	3
12	10	7	70	1	2	2	2	2	10	4	8	2
13	8	6	40	15	40	2	3	2	6	3	8	1
14	20	6	20	5	2	2	3	2	10	3	6	3
15	20	8	15	3	---	---	10	2	7	2	8	4
16	15	3	4	1	---	---	2	2	150	2	8	3
17	6	2	3	1	---	---	2	2	550	25	6	---
18	---	---	5	2	---	---	4	2	25	10	4	2
19	---	---	3	1	---	---	30	2	20	9	95	2
20	---	---	2	1	3	3	6	2	25	8	3	2
21	---	---	15	1	170	3	4	2	20	2	5	2
22	---	---	70	6	130	15	2	2	20	5	2	2
23	25	10	55	7	95	35	8	2	15	4	4	2
24	10	4	30	15	35	15	3	2	55	2	3	2
25	5	3	25	8	15	6	6	2	15	2	6	2
26	4	2	8	5	10	5	35	2	20	4	2	2
27	3	2	5	3	7	4	100	35	6	2	2	2
28	3	1	4	2	65	4	75	10	10	3	2	2
29	2	1	2	2	35	9	55	2	55	4	2	2
30	2	1	200	25	10	5	10	4	280	20	2	2
31	---	---	45	15	---	---	45	15	40	15	---	---
MONTH	220	1	200	1	300	2	100	2	550	2	130	1
YEAR	550	1										

PERIOD OF RECORD.--Water temperatures: February to September 1974.
Turbidity: March to September 1974.

Water temperatures, February to September: Maximum, 26.0°C July 8; minimum, freezing point, Feb. 26, 27.
Turbidity, March to September: Maximum, 500 JTU Aug. 16; minimum, 1 JTU on several days.

[illegible][illegible]

03195500 ELK RIVER AT SUTTON, W. VA.

LOCATION.--Lat 38°39'45", long 80°42'35", Braxton County, temperature and turbidity recorders at gaging station on left bank 150 ft (46 m) upstream from highway bridge at Sutton, 0.5 mi (0.8 km) upstream from Granny Creek, 0.9 mi (1.4 km) downstream from Sutton Dam, 2.5 mi (4.0 km) downstream from Wolf Creek, and at mile 100.1 (161.1 km).

DRAINAGE AREA.--543 mi² (1,406 km²).

PERIOD OF RECORD.--Water temperatures: March 1960 to current year.
Turbidity: January to September 1974.

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

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

EXTREMES.--Current year:

Turbidity, January to September: Maximum, 340 JTU Apr. 4; minimum, 2 JTU July 26, 27.

Period of record:

Water temperatures: Maximum, 29.0°C Aug. 30 and Sept. 1, 1960; minimum, freezing point Feb. 25, 26, 1963, many days during December 1968, January 1969, January 1970, and Dec. 19, 20, 1972.

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	15	15	9	7
2	---	---	---	---	---	---	---	---	35	10	20	7
3	---	---	---	---	---	---	---	---	15	10	35	15
4	---	---	---	---	---	---	---	---	30	15	20	10
5	---	---	---	---	---	---	---	---	20	10	15	10
6	---	---	---	---	---	---	---	---	15	7	15	10
7	---	---	---	---	---	---	---	---	10	6	25	15
8	---	---	---	---	---	---	---	---	15	7	35	20
9	---	---	---	---	---	---	---	---	10	8	30	25
10	---	---	---	---	---	---	---	---	10	6	25	15
11	---	---	---	---	---	---	---	---	9	6	30	10
12	---	---	---	---	---	---	---	---	10	7	30	20
13	---	---	---	---	---	---	---	---	20	8	35	15
14	---	---	---	---	---	---	50	45	40	10	30	15
15	---	---	---	---	---	---	50	40	40	20	15	9
16	---	---	---	---	---	---	40	30	20	15	15	9
17	---	---	---	---	---	---	35	20	15	10	15	10
18	---	---	---	---	---	---	20	10	15	10	20	15
19	---	---	---	---	---	---	15	10	10	10	120	10
20	---	---	---	---	---	---	15	10	10	9	60	25
21	---	---	---	---	---	---	20	15	15	9	40	20
22	---	---	---	---	---	---	20	15	20	15	25	20
23	---	---	---	---	---	---	20	15	20	15	25	10
24	---	---	---	---	---	---	20	15	25	15	15	15
25	---	---	---	---	---	---	20	15	30	15	20	15
26	---	---	---	---	---	---	25	10	15	9	15	9
27	---	---	---	---	---	---	25	15	10	7	10	9
28	---	---	---	---	---	---	15	15	70	5	10	8
29	---	---	---	---	---	---	15	15	---	---	10	7
30	---	---	---	---	---	---	15	15	---	---	10	3
31	---	---	---	---	---	---	15	10	---	---	15	10
MONTH	---	---	---	---	---	---	---	---	70	5	120	3
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20	15	20	9	70	7	20	15	7	5	55	7
2	25	15	15	9	70	25	20	15	7	5	10	8
3	15	15	15	9	150	20	20	15	8	5	25	8
4	340	15	10	9	190	150	15	10	15	6	15	9
5	120	65	10	9	160	100	15	15	6	5	20	15
6	110	30	10	9	100	80	15	10	6	5	35	15
7	35	25	15	9	85	55	10	10	8	5	35	25
8	85	20	20	10	55	45	10	9	9	5	25	20
9	50	15	20	10	50	40	10	8	30	7	20	20
10	15	10	15	10	40	30	60	8	10	7	20	15
11	15	9	10	9	30	25	35	7	8	7	20	15
12	15	9	95	8	30	25	10	6	10	8	15	10
13	20	10	10	6	25	25	7	6	10	9	10	10
14	25	10	6	6								

LOCATION.--Lat 38°28'20", long 81°17'10", Kanawha County, temperature recorder at gaging station on right bank 50 ft (15 m) upstream from Queen Shoals Creek, 100 ft (30 m) downstream from highway bridge at Queen Shoals, 4.0 mi (6.4 m) upstream from Big Sandy Creek, and at mile 25.8:(41.5 km).

PERIOD OF RECORD.--Water temperatures: November 1960 to current year.

Water temperatures: Maximum, 26.0°C July 10-12; minimum, 2.5°C Dec. 20, 21, 24-26.

Period of record:

Water temperatures: Maximum, 29.0°C on several days in July 1963, 1964, and 1968; minimum, freezing point on many days during winter months most years.

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

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

KANAWHA RIVER BASIN

03198000 KANAWHA RIVER AT CHARLESTON, W. VA.

LOCATION.--Lat 38°22'10", long 81°42'05", Kanawha County, temperature recorder at gaging station on left bank at old lock 6, 1.0 mi (1.6 km) upstream from Davis Creek, 1.5 mi (2.4 km) downstream from Twomile Creek, 3.5 mi (5.6 km) downstream from Elk River, and at mile 54.3 (87.4 km).

DRAINAGE AREA.--10,419 mi² (26,985 km²).

PERIOD OF RECORD.--Water temperatures: March 1953 to August 1970, October 1971 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 31.5°C Aug. 25-27; minimum, 3.5°C Dec. 22.

Period of record:

Water temperatures: Maximum, 35.0°C Aug. 25, 26, 1959; minimum, 0.5°C Dec. 28, 29, 1969.

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

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	22.0	15.0	14.0	11.0	10.5	7.5	6.5	10.0	10.0	7.0	6.5
2	22.5	21.5	14.0	12.5	10.5	10.0	6.5	6.5	10.0	9.5	7.5	7.0
3	22.0	21.0	13.5	12.5	10.5	10.0	6.5	6.5	10.0	9.5	8.0	7.5
4	22.0	21.5	13.0	12.5	10.5	9.5	7.0	6.5	9.5	9.0	9.5	8.0
5	21.5	21.0	13.0	12.5	10.5	10.0	6.5	6.5	9.0	8.5	10.5	9.5
6	21.0	20.5	12.5	11.5	10.5	10.0	7.0	6.5	8.5	7.5	11.5	9.5
7	21.0	20.5	11.5	11.0	10.0	10.0	7.5	7.0	8.0	7.5	12.0	11.5
8	21.5	21.0	11.0	11.0	10.0	10.0	7.5	7.5	7.5	7.0	12.5	12.0
9	21.5	21.0	11.0	10.5	10.0	9.5	7.5	7.5	7.0	6.5	13.5	12.5
10	22.0	21.0	11.0	10.5	9.5	9.0	7.5	7.0	6.5	6.0	13.5	12.5
11	21.5	21.0	11.0	10.5	9.5	9.0	8.0	7.0	6.0	5.5	13.0	12.5
12	21.5	21.0	10.5	10.0	9.5	8.5	8.5	8.0	7.0	6.0	13.0	10.5
13	22.5	21.5	10.5	9.5	8.5	7.5	8.0	7.5	7.0	6.5	10.5	9.0
14	22.0	21.5	10.5	9.5	8.0	6.5	7.5	7.0	7.0	6.0	10.0	8.5
15	22.0	20.5	11.0	10.0	6.5	6.5	7.0	6.5	7.0	6.5	8.5	8.5
16	21.5	19.5	11.0	11.0	6.5	6.5	7.0	6.5	7.0	6.5	8.5	8.5
17	20.0	19.0	11.0	11.0	6.5	6.0	7.5	7.0	7.5	7.0	8.5	8.0
18	19.5	18.0	11.0	11.0	6.0	6.0	8.0	7.5	7.5	7.0	8.0	8.0
19	20.0	18.0	11.5	11.0	6.0	5.0	8.5	8.0	8.0	7.5	8.5	8.0
20	20.0	18.0	11.0	11.0	6.0	5.5	9.0	8.5	8.5	7.5	9.0	8.5
21	20.0	18.5	12.0	11.0	6.0	4.5	9.5	9.0	8.5	8.0	9.0	9.0
22	20.0	18.0	11.5	11.5	4.5	3.5	10.5	10.0	8.0	7.5	9.0	9.0
23	21.0	18.0	11.5	11.0	4.5	4.0	11.0	10.5	8.5	8.0	9.5	9.0
24	20.0	18.0	11.0	10.5	5.0	4.5	11.0	10.0	8.5	8.0	9.5	9.5
25	19.5	18.5	11.5	10.5	5.5	5.0	10.0	9.5	8.0	7.5	9.5	9.5
26	20.0	18.0	11.5	11.5	6.0	5.0	9.5	9.0	7.5	6.5	9.5	9.0
27	19.0	18.0	12.5	11.5	7.5	6.0	10.0	9.0	6.5	6.5	10.0	9.5
28	19.5	17.5	12.5	11.0	8.0	7.5	10.0	10.0	6.5	6.0	10.5	10.0
29	19.0	16.5	11.0	10.5	8.0	7.5	10.5	10.0	---	---	11.0	10.5
30	17.0	14.0	11.5	10.5	7.5	7.5	10.5	10.5	---	---	11.5	11.0
31	15.0	14.0	---	---	7.5	7.5	10.5	10.0	---	---	11.5	11.5
MONTH	22.5	14.0	15.0	9.5	11.0	3.5	11.0	6.5	10.0	5.5	13.5	6.5
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.5	19.5	18.5	19.0	17.5	22.5	22.0	29.5	27.5	28.5	27.5
2	13.0	11.5	19.5	18.5	18.0	16.5	23.5	22.5	30.0	28.0	28.5	27.5
3	13.5	13.0	19.5	18.5	17.0	16.5	24.0	23.0	29.0	27.5	28.0	27.0
4	14.0	13.5	20.0	18.5	18.0	17.0	25.0	24.0	29.0	27.5	27.0	25.5
5	14.0	13.5	20.0	19.0	18.0	17.5	26.5	25.0	29.0	27.5	26.0	25.0
6	13.5	12.5	19.5	18.0	19.0	17.5	27.0	25.5	28.5	27.0	25.5	24.0
7	12.5	11.5	18.0	17.0	20.0	18.0	27.5	26.0	28.5	27.5	24.5	23.5
8	11.5	11.5	19.5	17.5	21.0	20.0	27.5	27.0	29.0	27.5	23.5	23.5
9	11.5	10.5	18.0	17.5	22.5	21.0	29.0	27.5	28.5	27.0	24.0	23.5
10	10.5	10.5	18.0	17.5	24.0	22.5	28.5	27.5	28.0	27.0	24.5	23.5
11	11.5	10.5	18.5	17.0	23.5	22.5	29.0	27.0	28.5	27.5	24.5	23.5
12	11.5	11.0	18.5	17.5	24.5	23.5	28.0	27.0	27.5	26.5	25.5	24.5
13	12.5	11.5	17.5	16.0	24.5	23.5	28.5	27.5	29.0	26.5	25.5	24.5
14	13.5	12.0	16.0	15.5	25.0	23.5	29.5	27.5	28.5	26.5	26.0	25.0
15	13.5	13.0	16.0	15.5	25.0	24.0	28.5	27.5	29.5	27.5	25.5	25.0
16	15.0	13.5	18.0	16.0	24.5	23.5	27.5	25.0	30.0	28.0	25.0	24.5
17	15.0	14.5	19.0	18.0	24.0	23.0	28.5	26.5	30.0	28.0	25.5	24.0
18	15.0	14.5	20.0	19.0	23.5	22.5	29.0	27.0	29.0	27.5	26.0	25.0
19	15.0	14.5	21.0	20.0	24.0	23.0	29.0	27.5	29.5	27.5	26.5	25.0
20	15.5	15.0	21.5	21.0	25.0	23.5	29.0	26.5	30.5	27.5	27.0	25.0
21	15.5	15.0	22.0	21.0	25.0	24.0	30.0	27.5	30.0	28.5	26.5	25.5
22	16.0	15.5	23.0	22.0	25.0	24.0	30.0	27.0	30.0	29.5	26.0	24.5
23	16.0	15.5	22.5	22.0	24.5	23.5	29.5	28.0	30.5	29.5	25.0	24.0
24	15.5	15.0	23.0	22.0	23.5	22.0	29.5	28.5	30.5	29.0	25.0	24.0
25	15.5	15.0	23.0	22.5	22.0	21.0	29.5	28.0	31.5	29.0	25.0	23.0
26	15.5	15.0	23.0	21.5	22.0	21.0	29.5	28.0	31.5	29.0	25.5	23.0
27	16.0	15.0	21.5	21.0	21.5	21.0	29.5	28.0	31.5	28.5	25.0	23.0
28	15.5	15.0	21.5	20.5	22.0	21.5	28.5	28.0	31.0	28.5	26.0	23.5
29	17.5	15.0	22.0	20.5	22.0	21.5	28.5	28.0	31.0	29.0	25.5	23.0
30	19.5	16.5	21.5	20.5	22.0	21.5	29.5	27.0	30.0	27.5	24.0	23.0
31	---	---	---	---	---	---	29.0	27.5	28.5	27.5	---	---
MONTH	19.5	10.5	23.0	15.5	25.0	16.5	30.0	22.0	31.5	26.5	28.5	23.0
YEAR	31.5	3.5										

KANAWHA RIVER BASIN

217

03199000 LITTLE COAL RIVER AT DANVILLE, W. VA.

LOCATION.--Lat 38°04'47", long 81°50'12", Boone County, temperature recorder at gaging station on right bank at upstream side of highway bridge at Danville, 900 ft (274 m) upstream from Turtle Creek, 2.3 mi (3.7 km) downstream from confluence of Pond and Spruce Forks, and at mile 24.7 (39.7 km).

DRAINAGE AREA.--270 mi² (699 km²).

PERIOD OF RECORD.--Chemical analysis: December 1972 to July 1973, partial-record station, August 1973 to current year.

Water temperatures: July 1973 to current year.

Sediment records: August 1973 to current year.

EXTREMES.--Water year 1973:

Specific conductance, August to September: Maximum, 1,370 micromhos Sept. 29; minimum, 762 micromhos Aug. 22. Water temperatures, July to September: Maximum, 31.0°C Aug. 8, 11, 31, Sept. 1, 3; minimum, 14.0°C Sept. 20.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) + WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	440	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	1160
3	---	---	---	---	---	---	---	---	---	---	---	1220
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	1090
8	---	---	---	---	---	---	---	360	---	---	---	1280
9	---	---	142	---	---	---	---	360	---	---	---	1230
10	---	---	184	---	---	---	---	---	---	---	---	1260
11	---	---	251	479	---	---	---	---	---	---	---	936
12	---	---	---	---	---	---	---	---	536	---	---	956
13	---	---	---	303	---	379	---	---	---	---	---	1130
14	---	---	---	---	---	---	---	---	---	---	---	1040
15	---	---	---	---	---	---	---	---	---	---	---	1110
16	---	---	---	---	---	---	---	---	---	---	---	1000
17	---	---	---	---	---	---	---	---	---	---	860	1020
18	---	---	---	---	---	---	370	---	---	---	---	1070
19	---	---	---	---	---	---	---	---	---	748	1020	942
20	---	---	---	---	---	277	---	---	---	---	1060	996
21	---	---	---	---	---	---	---	---	---	---	964	993
22	---	---	---	---	---	---	---	---	---	---	762	955
23	---	---	---	---	---	---	---	---	---	---	783	1030
24	---	---	---	---	---	---	---	---	---	---	855	935
25	---	---	---	---	---	---	---	---	---	---	927	---
26	---	---	---	---	---	---	---	---	---	---	946	1020
27	---	---	---	---	412	---	---	---	---	---	1040	1070
28	---	---	---	---	---	---	---	---	---	---	1060	1110
29	---	---	312	---	---	---	---	---	935	---	1080	1370
30	---	---	---	---	---	---	---	---	---	---	1120	1200
31	---	---	---	---	---	---	---	---	---	---	1170	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	1080
YEAR	MAX	1370	MIN	142	MEAN	859						

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) + WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	722	362	300	198	337	421	395	428	195	331	816	501
2	784	341	268	213	352	438	401	452	152	406	888	514
3	977	381	373	243	369	437	324	461	123	469	916	501
4	1040	435	410	161	381	452	179	454	257	552	882	406
5	1290	546	453	181	398	441	165	484	322	553	780	419
6	1340	718	479	---	434	---	214	503	390	567	684	514
7	1330	511	504	267	457	338	256	506	455	656	745	553
8	1470	778	553	315	456	278	294	---	490	505	832	609
9	1180	669	607	348	450	273	247	---	501	646	782	611
10	969	546	606	---	474	292	212	---	453	669	780	666
11	1230	535	668	---	487	321	243	---	505	723	884	688
12	1300	530	306	---	484	183	286	---	583	663	820	---
13	1430	489	674	---	429	138	298	---	623	659	736	608
14	1540	509	509	---	307	195	336	---	665	777	748	523
15	1590	642	323	359	272	248	338	---	696	793	828	354
16	---	668	320	402	292	274	395	---	498	496	904	396
17	1550	616	---	414	316	233	301	---	489	366	903	483
18	1690	555	397	---	350	244	421	---	496	570	908	523
19	1200	599	445	450	389	265	448	---	613	693	856	573
20	1170	625	444	457	399	238	490	---	695	748	766	645
21	1120	683	366	455	421	169	496	---	642	730	838	681
22	1100	662	396	450	437	---	504	---	621	733	906	726
23	---	310	330	458	354	235	461	---	558	809	871	669
24	1220	350	345	---	344	---	346	---	405	775	831	719
25	1250	375	337	458	364	---	374	---	373	778	964	---
26	1180	380	253	---	377	362	366	---	431	765	943	---
27	1180	370	152	243	408	409	383	---	474	827	940	---
28	1170	204	221	252	415	405	408	---	247	899	973	---
29	1080	380	262	268	---	434	401	---	212	935	940	---
30	488	415	221	281	---	423	429	---	273	834	674	---
31	330	---	203	302	---	411	---	---	---	860	468	---
MONTH	1170	506	391	---	391	317	347	---	448	671	832	---
YEAR	MAX	1690	MIN	123	MEAN	548						

03199000 LITTLE COAL RIVER AT DANVILLE, W. VA.--Continued

EXTREMES.--Water year 1973:--Continued

Sediment concentrations, August to September: Maximum daily, 350 mg/l Aug. 22; minimum daily, 8 mg/l Sept. 1.

Sediment discharge, August to September: Maximum daily, 95 tons (86 tonnes) Aug. 22; minimum daily, 0.86 tons (0.78 tonnes) Sept. 1.

Water year 1974:

Specific conductance: Maximum, 1,690 micromhos Oct. 18; minimum, 123 micromhos June 3.

Water temperatures: Maximum, 31.0°C Aug. 15; minimum, 1.5°C Dec. 18, 19.

Sediment concentrations: Maximum daily, 4,230 mg/l Nov. 27; minimum daily, 2 mg/l Sept. 26, 29, 30.

Sediment discharge: Maximum daily, 44,400 tons (40,300 tonnes) Nov. 27; minimum daily, 0.20 tons (0.18 tonnes) Oct. 26.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	25.0	23.5	31.0	23.0
2	---	---	---	---	---	---	---	---	24.5	23.5	30.5	23.0
3	---	---	---	---	---	---	---	---	26.5	22.5	31.0	23.5
4	---	---	---	---	---	---	---	---	27.5	22.0	28.0	23.0
5	---	---	---	---	---	---	---	---	28.5	22.5	27.0	22.5
6	---	---	---	---	---	---	---	---	29.0	23.5	24.0	22.0
7	---	---	---	---	---	---	---	---	30.0	24.0	28.0	21.5
8	---	---	---	---	---	---	---	---	31.0	24.5	25.5	19.5
9	---	---	---	---	---	---	---	---	30.5	24.0	20.0	19.5
10	---	---	---	---	---	---	---	---	27.5	24.0	23.0	18.5
11	---	---	---	---	---	---	---	---	31.0	24.0	22.0	17.5
12	---	---	---	---	---	---	---	---	27.5	24.0	24.5	18.5
13	---	---	---	---	---	---	---	---	25.5	24.0	22.5	17.0
14	---	---	---	---	---	---	---	---	25.5	23.0	20.0	18.5
15	---	---	---	---	---	---	---	---	24.0	22.0	21.5	18.0
16	---	---	---	---	---	---	---	---	25.0	22.0	22.5	17.0
17	---	---	---	---	---	---	---	---	26.5	22.5	22.5	17.0
18	---	---	---	---	---	---	---	---	27.0	23.0	20.0	16.5
19	---	---	---	---	---	---	---	---	26.5	22.5	20.0	14.5
20	---	---	---	---	---	---	---	---	24.5	22.5	20.5	14.0
21	---	---	---	---	---	---	---	---	23.0	20.5	21.0	16.5
22	---	---	---	---	---	---	---	---	20.5	19.5	22.0	16.5
23	---	---	---	---	---	---	---	---	23.5	18.0	23.5	18.0
24	---	---	---	---	---	---	---	---	23.0	19.5	23.5	18.0
25	---	---	---	---	---	---	---	---	27.0	20.5	24.5	18.5
26	---	---	---	---	---	---	---	---	24.0	21.5	24.0	17.5
27	---	---	---	---	---	---	---	---	24.0	22.5	24.0	17.0
28	---	---	---	---	---	---	---	---	29.0	23.5	22.0	18.0
29	---	---	---	---	---	---	---	---	24.5	24.0	23.0	19.0
30	---	---	---	---	---	---	---	---	30.5	24.5	20.5	19.0
31	---	---	---	---	---	---	26.0	23.5	31.0	24.0	---	---
MONTH	---	---	---	---	---	---	---	---	31.0	18.0	31.0	14.0
YEAR	31.0	14.0										

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

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

KANAWHA RIVER BASIN

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03199000 LITTLE COAL RIVER AT DANVILLE, W. VA.--Continued

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

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

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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	91	--	--	85	--	--	40	8	.86
2	89	--	--	89	--	--	37	12	1.2
3	159	--	--	77	--	--	37	15	1.5
4	147	--	--	66	--	--	37	12	1.2
5	166	--	--	63	--	--	50	10	1.4
6	115	--	--	60	--	--	40	10	1.1
7	94	--	--	55	--	--	33	12	1.1
8	82	--	--	57	--	--	30	14	1.1
9	74	--	--	60	--	--	37	31	3.1
10	71	--	--	68	--	--	87	95	22
11	111	--	--	63	--	--	50	55	7.4
12	84	--	--	63	--	--	44	23	2.7
13	71	--	--	87	--	--	42	20	2.3
14	69	--	--	79	--	--	73	152	30
15	294	--	--	81	--	--	66	56	10
16	188	--	--	77	--	--	49	32	4.2
17	127	--	--	63	10	1.7	44	32	3.8
18	96	--	--	55	12	1.8	68	66	12
19	101	--	--	50	17	2.3	60	55	8.9
20	123	--	--	65	25	4.4	50	32	4.3
21	98	--	--	101	58	16	43	26	3.0
22	238	--	--	101	350	95	36	32	3.1
23	178	--	--	79	50	11	43	46	5.3
24	210	--	--	65	20	3.5	44	64	7.6
25	576	--	--	57	16	2.5	36	21	2.0
26	332	--	--	52	15	2.1	32	15	1.3
27	195	--	--	50	15	2.0	33	17	1.5
28	134	--	--	48	17	2.2	44	17	2.0
29	111	--	--	49	40	5.3	74	60	12
30	94	--	--	48	36	4.7	159	183	79
31	85	--	--	44	13	1.5	--	--	--
TOTAL	4603	--	--	2057	--	156.0	1518	--	236.96

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

172906

392.96

KANAWHA RIVER BASIN

03199000 LITTLE COAL RIVER AT DANVILLE, W. VA.--Continued

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

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	107	242	70	412	272	303	576	317	493
2	98	111	29	258	115	80	423	158	180
3	75	77	16	150	60	24	344	89	83
4	70	40	7.6	111	20	6.0	292	64	50
5	70	44	8.3	143	68	26	256	106	73
6	58	37	5.8	173	103	48	213	50	29
7	56	26	3.9	145	93	36	176	24	11
8	96	61	16	119	27	8.7	159	37	16
9	89	111	27	140	30	11	166	48	22
10	70	53	10	138	45	17	166	27	12
11	60	45	7.3	117	20	6.3	157	32	14
12	52	27	3.8	105	15	4.3	138	30	11
13	50	20	2.7	98	5	1.3	166	121	54
14	49	17	2.2	92	7	1.7	492	680	903
15	47	18	2.3	96	12	3.1	536	470	680
16	37	10	1.0	143	88	34	468	180	227
17	34	10	.92	127	84	29	403	78	85
18	41	20	2.2	121	57	19	328	85	75
19	39	13	1.4	117	38	12	272	94	69
20	34	18	1.7	107	17	4.9	265	63	45
21	29	5	.39	109	35	10	368	892	886
22	29	5	.39	154	62	26	376	310	315
23	29	5	.39	152	54	22	396	295	315
24	33	5	.45	316	235	201	412	187	208
25	29	4	.31	328	252	223	428	235	272
26	25	3	.20	356	454	436	1180	1730	5510
27	25	6	.41	3890	4230	44400	2170	2710	15900
28	49	6	.79	5230	1640	23200	1180	1000	3190
29	164	11	4.9	1810	728	3560	820	850	1880
30	433	650	760	885	512	1220	1490	1820	7320
31	532	564	810	--	--	--	1560	2300	9690
TOTAL	2609	--	1797.35	16142	--	73973.3	16376	--	48618

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

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	1600	2520	10900	621	330	553	400	35	38
2	1200	2180	7060	648	890	1560	384	41	43
3	1160	1500	4700	572	360	556	352	37	35
4	2020	1600	8730	480	400	518	332	57	51
5	1840	1400	6960	436	220	259	344	94	87
6	1200	1200	3890	400	70	76	424	245	280
7	860	1300	3020	370	117	117	707	221	422
8	671	720	1300	350	260	246	775	187	391
9	680	220	404	330	305	272	684	194	358
10	5180	1880	26300	312	178	150	608	251	412
11	10100	1330	36300	320	86	74	568	75	115
12	3860	400	4170	336	140	127	1770	1080	5160
13	1850	340	1700	496	269	360	3420	882	8140
14	1380	230	857	805	296	643	1660	650	2910
15	975	280	737	752	325	660	1080	400	1170
16	748	410	828	630	427	726	1180	280	892
17	612	520	859	554	378	565	1500	352	1430
18	522	400	564	472	255	325	1120	310	937
19	468	400	505	427	68	78	1040	301	845
20	440	490	582	452	64	78	1580	420	1790
21	432	510	595	360	50	49	3200	967	8350
22	408	450	496	388	73	76	2990	1620	13100
23	400	350	378	448	75	91	1690	1420	6480
24	388	350	367	448	72	87	1220	960	3160
25	464	565	708	468	77	97	815	550	1210
26	644	1490	2590	436	59	69	662	240	429
27	1120	2160	6530	404	70	76	568	112	172
28	1040	1350	3790	392	60	64	500	200	270
29	995	760	2040	--	--	--	456	97	119
30	870	700	1640	--	--	--	468	70	88
31	738	400	797	--	--	--	472	67	85
TOTAL	44865	--	140297	13107	--	8552	32969	--	58969

03199000 LITTLE COAL RIVER AT DANVILLE, W. VA.--Continued

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

DAY	APRIL			MAY			JUNE		
	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	436	62	73	269	13	9.4	2010	1030	5590
2	540	158	230	269	13	9.4	8910	1760	42300
3	599	250	404	292	17	13	2450	1530	10100
4	2960	1500	12000	228	15	9.2	1260	450	1530
5	2180	510	3000	207	31	17	800	316	683
6	1320	370	1320	210	12	6.8	594	192	308
7	900	342	831	190	10	5.1	484	63	82
8	875	243	574	176	6	2.9	392	59	62
9	1580	440	1880	173	5	2.3	436	124	146
10	1420	440	1690	166	6	2.7	300	46	37
11	1070	265	766	154	12	5.0	252	52	35
12	845	295	673	1770	517	2470	210	25	14
13	702	118	224	1920	395	2050	184	16	7.9
14	603	66	107	935	254	641	161	15	6.5
15	522	68	96	612	105	174	157	28	12
16	456	75	92	468	89	112	428	894	1030
17	412	54	60	380	17	17	213	86	49
18	376	112	114	324	23	20	169	16	7.3
19	336	40	36	272	11	8.1	150	15	6.1
20	304	28	23	246	15	10	147	37	15
21	268	16	12	219	15	8.9	171	164	76
22	260	65	46	198	26	14	178	195	94
23	545	207	305	830	348	780	388	323	338
24	496	121	162	581	114	179	536	166	240
25	456	57	70	396	45	48	403	52	57
26	416	62	70	296	17	14	276	30	22
27	380	45	46	195	11	5.8	376	58	59
28	344	35	33	188	9	4.6	1060	1220	3490
29	308	13	11	190	7	3.6	975	505	1330
30	276	12	8.9	4220	1500	17100	500	162	219
31	--	--	--	2050	420	2320	--	--	--
TOTAL	22185	--	24956.9	18624	--	26062.8	24570	--	67945.8

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

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	324	30	26	75	15	3.0	227	302	185
2	228	23	14	71	23	4.4	211	167	95
3	178	27	13	72	57	11	187	282	142
4	147	17	6.7	87	79	19	386	323	337
5	129	8	2.8	102	80	22	245	68	45
6	123	17	5.6	172	35	16	159	45	19
7	164	42	19	94	20	5.1	134	39	14
8	115	43	13	77	25	5.2	123	30	10
9	103	16	4.4	79	57	12	105	25	7.1
10	98	14	3.7	94	26	6.6	97	25	6.5
11	123	24	8.0	83	44	9.9	128	78	27
12	100	20	5.4	77	120	25	122	163	54
13	89	10	2.4	131	27	9.5	134	113	41
14	84	10	2.3	106	12	3.4	370	244	244
15	87	1140	268	82	8	1.8	270	144	105
16	480	3300	4280	70	7	1.3	185	53	26
17	176	360	171	66	15	2.7	145	41	16
18	121	82	27	72	16	3.1	120	26	8.4
19	105	83	24	103	57	16	105	14	4.0
20	134	118	43	84	36	8.2	94	11	2.8
21	103	84	23	72	16	3.1	101	20	5.5
22	87	33	7.8	66	8	1.4	116	23	7.2
23	82	37	8.2	60	11	1.8	85	10	2.3
24	119	60	19	56	10	1.5	75	5	1.0
25	100	34	9.2	51	5	.69	72	3	.58
26	81	23	5.0	49	4	.53	66	2	.36
27	84	22	5.0	48	5	.65	66	6	1.1
28	83	25	5.6	48	6	.78	72	15	2.9
29	83	24	5.4	87	70	16	64	2	.35
30	82	48	11	235	287	182	60	2	.32
31	102	24	6.6	157	283	120	--	--	--
TOTAL	4114	--	5045.1	2726	--	513.65	4324	--	1410.41

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

202611

458141.31

KANAWHA RIVER BASIN

03200500 COAL RIVER AT TORNADO, W. VA.

LOCATION.--Lat 38°20'20", long 81°50'30", Kanawha County, temperature recorder at gaging station on downstream side of highway bridge at Tornado, 0.2 mi (0.3 km) upstream from Falls Creek and at mile 11.5 (18.5 km).

DRAINAGE AREA.--861 mi² (2,230 km²), includes that of Falls Creek.

PERIOD OF RECORD.--Chemical analysis: December 1972 to September 1973, partial-record station, October 1973 to September 1974.

Water temperatures: November 1972 to current year, partial-record station.

Sediment records: December 1972 to current year.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	194	274	280	273	251	206	220	---	387	---
2	---	---	---	283	---	242	264	238	---	---	427	---
3	---	---	---	297	242	---	270	251	---	485	516	---
4	---	---	---	294	228	255	278	220	282	---	549	---
5	---	---	---	304	209	261	278	205	312	523	---	694
6	---	---	190	296	212	257	273	218	351	---	558	758
7	---	---	176	290	208	264	254	238	289	---	---	828
8	---	---	170	290	217	---	207	258	308	---	---	802
9	---	---	119	299	212	247	200	170	---	---	---	861
10	---	---	122	---	201	243	178	---	---	561	---	820
11	---	---	125	---	197	248	173	218	366	---	---	602
12	---	---	157	---	204	247	184	---	382	---	---	749
13	---	---	191	---	217	255	199	---	374	644	---	820
14	---	---	216	---	234	258	219	---	268	---	---	794
15	---	---	228	---	218	264	241	279	260	---	---	750
16	---	---	---	---	207	251	255	310	---	593	---	669
17	---	---	---	---	194	137	288	333	---	---	---	727
18	---	---	---	---	---	139	279	---	348	---	---	664
19	---	---	212	355	209	172	274	---	192	415	---	690
20	---	---	227	362	225	199	257	---	---	425	---	662
21	---	---	245	369	244	201	246	360	---	---	---	700
22	---	---	204	354	268	198	259	373	---	464	567	696
23	---	---	127	344	283	192	268	---	---	428	641	740
24	---	---	156	337	292	192	276	357	---	526	559	735
25	---	---	194	331	297	196	267	185	---	308	529	740
26	---	---	217	331	313	---	219	176	372	274	534	652
27	---	---	224	336	309	183	156	196	---	229	540	678
28	---	---	223	327	335	186	114	---	442	---	544	754
29	---	---	241	324	---	208	131	226	472	---	574	699
30	---	---	252	311	---	219	182	203	---	336	---	686
31	---	---	262	296	---	232	---	216	---	374	517	---
MONTH	---	---	---	---	241	222	231	---	---	---	---	730
YEAR	MAX	861	MIN	114	MEAN	335						

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	463	287	212	159	231	287	296	317	151	201	423	312
2	---	292	235	173	248	293	275	330	106	226	468	315
3	547	310	254	168	254	295	257	334	122	249	466	---
4	568	302	272	154	263	305	168	---	158	286	483	326
5	608	316	291	146	266	303	125	336	197	318	465	295
6	548	316	310	173	273	304	159	343	243	338	459	289
7	642	389	330	185	284	267	181	348	271	249	457	292
8	747	381	343	229	301	224	203	355	268	253	412	---
9	640	420	354	245	313	196	199	361	336	335	399	336
10	577	391	363	139	320	202	173	371	346	323	362	367
11	899	355	383	101	330	212	175	382	317	358	316	360
12	893	345	388	136	338	185	193	214	339	406	287	419
13	784	340	370	107	328	123	213	145	359	401	325	---
14	753	347	386	189	298	139	234	147	411	445	321	311
15	786	359	272	261	236	170	240	175	395	425	325	314
16	812	321	218	287	231	186	255	205	428	410	345	292
17	859	364	232	295	238	188	282	236	369	348	359	278
18	889	385	240	312	259	185	286	263	353	319	397	310
19	923	410	283	329	264	191	287	290	384	330	437	315
20	955	---	267	324	283	188	308	309	389	338	468	351
21	993	391	284	354	297	153	320	331	383	370	499	---
22	975	376	305	339	304	122	328	346	440	391	502	---
23	1020	418	284	340	305	154	336	349	332	473	499	---
24	1020	381	260	344	282	192	307	276	353	475	511	---
25	977	337	253	330	268	221	264	258	274	370	540	---
26	793	296	224	315	262	248	255	280	276	398	565	---
27	672	131	144	242	266	270	269	311	288	437	580	---
28	719	109	142	182	278	284	280	328	298	435	595	---
29	475	150	186	189	---	286	286	347	171	444	592	---
30	372	179	181	201	---	303	297	192	183	512	568	---
31	295	---	155	219	---	299	---	146	---	423	547	---
MONTH	740	324	272	231	279	225	248	288	298	364	451	---
YEAR	MAX	1020	MIN	101	MEAN	337						

EXTREMES. -- Current year:

Specific conductance: Maximum 1,020 micromhos Oct. 23, 24; minimum, 101 micromhos Jan. 11.
 Sediment concentrations: Maximum daily, 2,220 mg/l Nov. 27; minimum daily, 1 mg/l on several days.
 Sediment discharge: Maximum daily, 106,000 tons (96,200 tonnes) Jan. 11; minimum daily, 1.4 tons (1.3 tonnes) Oct. 21.
 Period of record:
 Sediment concentrations: Maximum daily, 4,000 mg/l Mar. 17, 1973; minimum daily, 1 mg/l on several days
 Sediment discharge: Maximum daily, 106,000 tons (96,200 tonnes) Jan. 11, 1974; minimum daily, 0.99 tons
 (0.90 tonnes) Sept. 3, 1973.

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

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

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

[illegible]

03200500 COAL RIVER AT TORNADO, W. VA.--Continued

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

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	428	208	240	1250	117	395	1890	110	561
2	309	107	89	1060	70	200	1360	57	209
3	266	33	24	709	44	84	1080	21	61
4	205	20	11	493	25	33	949	10	26
5	177	16	7.6	428	18	21	856	5	12
6	169	18	8.2	467	14	18	800	5	11
7	177	26	12	532	15	22	709	3	5.7
8	255	23	16	493	22	29	653	2	3.5
9	205	33	18	520	15	21	625	1	1.7
10	205	34	19	585	13	21	667	2	3.6
11	169	19	8.7	558	9	14	571	6	9.3
12	143	11	4.2	467	6	7.6	545	12	18
13	120	10	3.2	416	7	7.9	532	7	10
14	113	12	3.7	368	11	11	1110	167	500
15	107	10	2.9	332	11	9.9	1830	241	1190
16	95	9	2.3	441	27	32	1460	69	272
17	89	7	1.7	532	17	24	1210	31	101
18	78	8	1.7	507	16	22	1010	17	46
19	78	10	2.1	480	15	19	856	14	32
20	78	9	1.9	441	10	12	785	21	45
21	73	7	1.4	404	9	9.8	905	43	105
22	73	8	1.6	480	10	13	1080	87	254
23	68	12	2.2	545	15	22	1150	59	183
24	68	11	2.0	738	23	46	1180	28	89
25	143	10	3.9	920	43	107	1210	38	124
26	186	11	5.5	1060	92	263	2280	223	1370
27	177	15	7.2	7820	2220	46900	8520	1300	29900
28	235	22	14	24000	1340	86800	3860	181	1890
29	493	15	20	7700	610	12700	2530	128	874
30	1160	107	335	3050	217	1790	3670	275	2720
31	1790	317	1530	--	--	--	4620	400	4990
TOTAL	7932	--	2400.0	57796	--	149654.2	50503	--	45616.8

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

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	4350	230	2700	1880	40	203	1100	9	27
2	3200	100	864	1660	44	197	1120	7	21
3	3180	120	1030	1730	62	290	1040	7	20
4	6660	415	7460	1570	59	250	1000	3	8.1
5	5390	296	4310	1400	32	121	968	2	5.2
6	3400	95	872	1280	20	69	1080	20	58
7	2470	64	427	1240	23	77	1880	102	518
8	1870	50	252	1180	34	108	2060	153	851
9	1630	100	440	1160	27	85	2170	74	434
10	7650	1360	28100	1020	17	47	2100	32	181
11	26900	1460	106000	986	12	32	1840	15	75
12	21800	652	38400	1000	17	46	3540	209	2000
13	6290	580	9850	1240	60	201	12100	1330	43500
14	3920	221	2340	1810	77	376	5610	330	5000
15	2970	135	1080	2120	81	464	3610	132	1290
16	2340	95	600	1880	41	208	3230	128	1120
17	1920	63	327	1660	30	134	4140	153	1710
18	1640	55	244	1420	20	77	3610	77	751
19	1420	37	142	1260	14	48	3140	68	577
20	1320	50	178	1240	19	64	4070	150	1650
21	1300	40	140	1140	20	62	8220	522	11600
22	1300	50	176	1060	19	54	10900	1030	30300
23	1220	60	198	1320	40	143	5210	245	3450
24	1180	36	115	1400	78	295	3650	250	2460
25	1380	85	317	1460	45	177	2630	45	320
26	2210	287	1710	1340	28	101	2080	31	174
27	3280	368	3260	1200	19	62	1750	26	123
28	3260	155	1360	1140	12	37	1510	16	65
29	3110	126	1060	--	--	--	1360	20	73
30	2730	90	663	--	--	--	1340	17	62
31	2280	52	320	--	--	--	1380	22	82
TOTAL	133570	--	214935	38796	--	4028	99438	--	108505.3

03200500 COAL RIVER AT TORNADO, W. VA.--Continued

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

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	1320	28	100	734	2	4.0	4470	520	6280
2	1680	35	159	695	1	1.9	15000	1450	58700
3	2030	73	400	806	1	2.2	10700	536	15500
4	8390	825	18700	788	1	2.1	3890	165	1730
5	6050	580	9470	665	1	1.8	2380	70	450
6	3810	175	1800	650	1	1.8	1660	29	130
7	2700	64	467	620	1	1.7	1310	54	191
8	2610	48	338	575	1	1.6	1040	105	295
9	4030	156	1700	545	1	1.5	1060	24	69
10	3980	165	1770	545	1	1.5	842	24	55
11	3180	71	610	502	9	12	680	14	26
12	2540	40	274	3300	490	4370	590	9	14
13	2140	39	225	6210	140	2350	516	11	15
14	1970	25	133	3540	48	459	446	10	12
15	1640	26	115	2140	14	81	404	8	8.7
16	1420	14	54	1530	7	29	716	87	168
17	1220	12	40	1150	15	47	788	140	298
18	1120	9	27	1060	11	31	516	75	104
19	1020	9	25	842	3	6.8	418	30	34
20	932	5	13	732	11	22	373	20	20
21	832	4	9.0	635	40	69	404	23	25
22	770	4	8.3	575	136	211	474	28	36
23	1020	9	25	932	135	340	950	110	282
24	1460	35	138	1590	27	116	1270	145	497
25	1360	18	66	1020	9	25	1070	73	211
26	1180	5	16	770	3	6.2	842	33	75
27	1040	1	2.8	635	2	3.4	620	35	59
28	932	1	2.5	545	5	7.4	1680	168	762
29	860	1	2.3	488	1860	2450	3180	390	3350
30	770	1	2.1	2990	1070	8640	2030	173	948
31	--	--	--	4990	--	--	--	--	--
TOTAL	64006	--	36692.0	42799	--	19295.9	60319	--	90344.7

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

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	1220	35	115	366	33	33	474	132	169
2	914	18	44	305	17	14	590	161	256
3	695	41	77	280	10	7.6	650	161	283
4	560	20	30	310	12	10	788	84	179
5	474	14	18	378	25	26	896	96	232
6	516	7	9.8	460	25	31	770	39	81
7	878	155	367	446	25	30	516	33	46
8	806	75	163	355	25	24	474	30	38
9	545	44	65	390	26	27	444	30	36
10	446	25	30	432	35	41	404	34	37
11	432	20	23	488	69	91	366	33	33
12	460	19	24	590	115	183	381	26	27
13	390	15	16	710	73	140	404	51	56
14	318	10	8.6	734	45	89	474	66	84
15	290	8	6.3	575	23	36	665	91	163
16	474	116	148	432	15	17	752	77	156
17	824	318	707	355	15	14	695	32	60
18	650	129	226	344	14	13	560	21	32
19	460	78	97	336	9	8.2	444	18	22
20	432	51	59	340	8	7.3	377	15	15
21	446	50	60	337	9	8.2	337	19	17
22	390	38	40	309	6	5.0	337	25	23
23	349	25	24	260	6	4.2	339	16	15
24	368	34	34	226	14	8.5	299	10	8.1
25	460	90	112	207	7	3.9	261	10	7.0
26	460	40	50	187	8	4.0	213	10	5.8
27	432	30	35	157	8	3.4	200	9	4.9
28	390	21	22	152	10	4.1	209	10	5.6
29	355	17	16	176	23	11	224	12	7.3
30	340	21	19	236	18	11	198	7	3.7
31	390	46	48	371	32	32	--	--	--
TOTAL	16164	--	2693.7	11244	--	937.4	13741	--	2102.4

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

596308
 677205.4

KANAWHA RIVER BASIN

03201300 KANAWHA RIVER AT WINFIELD DAM, AT WINFIELD, W. VA.

LOCATION.--Lat 38°31'32", long 81°54'40", Putnam County, on left bank at intake line to Ohio River Valley Water Sanitation Commission, ORSANCO, monitor at Kanawha Valley Power Company raw water intake at Winfield Dam, 1.0 mi (1.6 km) downstream from Winfield Toll Bridge.

DRAINAGE AREA.--11,809 mi² (30,585 km²).

PERIOD OF RECORD.--Chemical analysis: October 1956 to September 1970, January to September 1974.

Water temperatures: October 1956 to September 1970, January to September 1974.

Biological analysis: April to September 1974, partial-record station.

EXTREMES.--January to September 1974:

Specific conductance: Maximum daily, 391 micromhos July 26; minimum daily, 79 micromhos June 5.

Water temperatures: Maximum, 29.0°C Aug. 28-31; minimum, 4.5°C Feb. 12.

Period of record:

Specific conductance: Maximum daily, 2,700 micromhos Apr. 21, 1961; minimum daily, 77 micromhos Jan. 31, 1957.

Water temperatures: Maximum, 33.0°C July 24, 1964; minimum freezing point Feb. 14, 1958, Mar. 12, 1960.

REMARKS.--Records of specific conductance and water temperatures furnished by ORSANCO. No discharge records available.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	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)
FEB. 15...	28000	5.1	1000	100	100	30	70	17	5.5	12	1.7	37
APR. 23...	10700	5.3	--	--	--	--	--	19	5.8	17	2.7	58
MAY 17...	212000	--	--	--	--	--	--	--	--	--	--	--
17...	--	5.5	--	--	--	--	--	12	3.5	8.7	1.5	30
JULY 01...	20300	5.0	1100	30	100	40	60	12	4.1	11	2.0	30
AUG. 19...	3480	5.6	--	--	--	--	--	22	7.0	33	3.0	66
SEP. 11...	101000	--	--	--	--	--	--	--	--	--	--	--
11...	--	5.6	--	--	--	--	--	19	5.4	17	3.8	55

DATE	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
FEB. 15...	0	30	38	15	.2	.86	.43	--	--	.04	--	117
APR. 23...	0	48	36	20	.2	.73	1.1	1.8	8.1	.06	150	135
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	0	25	23	8.5	.2	.57	.66	1.2	5.4	.06	91	78
JULY 01...	0	25	30	11	.2	.63	1.0	1.6	7.2	.07	101	90
AUG. 19...	0	54	68	30	.1	.99	1.9	2.9	13	.12	239	201
SEP. 11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	0	45	34	17	.2	1.1	3.1	4.2	19	.14	145	129

DATE	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)
FEB. 15...	.16	8850	65	35	28	.6	200	6.5	5.5	5	12.1	--
APR. 23...	.20	4330	71	24	33	.9	260	7.3	15.0	5	9.3	1100
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	.12	--	44	20	29	.6	155	7.5	21.0	30	8.8	580
JULY 01...	.14	5540	47	22	33	.7	140	7.0	24.0	30	--	530
AUG. 19...	.33	2250	84	30	45	1.6	255	7.2	27.5	10	4.4	4500
SEP. 11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	.20	--	70	25	33	.9	235	7.0	23.0	40	7.2	1400

KANAWHA RIVER BASIN

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03201300 KANAWHA RIVER AT WINFIELD DAM, AT WINFIELD, W. VA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCHI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)
FEB. 15...	140000	7	3.0	1	--	2	1	0	1	0	0	0
APR. 23...	44	1000	--	--	--	--	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	600	12	--	--	--	--	--	--	--	--	--	--
JULY 01...	314	42	1.8	<1	<1	0	6	0	6	10	10	0
AUG. 19...	90	0	--	--	--	--	--	--	--	--	--	--
SEP. 11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	560	40	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDE LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)
FEB. 15...	2	2	--	--	10	20	--	5	<.5	--	<.5	1
APR. 23...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
JULY 01...	--	0	40	10	30	60	55	5	<.5	<.0	<.5	1
AUG. 19...	--	--	--	--	--	--	--	--	--	--	--	--
SEP. 11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	SUS- PENDE SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	SUS- PENDE SEDI- MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
FEB. 15...	--	1	90	0	90	20	89
APR. 23...	--	--	--	--	--	12	96
MAY 17...	--	--	--	--	--	50	75
JULY 01...	0	1	310	70	240	53	85
AUG. 19...	--	--	--	--	--	32	68
SEP. 11...	--	--	--	--	--	26	96

KANAWHA RIVER BASIN

03201300 KANAWHA RIVER AT WINFIELD DAM, AT WINFIELD, W. VA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) * WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	88	125	154	187	228	115	319	270	---
2	---	---	---	97	132	---	191	240	97	190	306	264
3	---	---	---	107	138	---	210	253	80	178	315	248
4	---	---	---	103	144	161	---	258	90	189	329	272
5	---	---	---	94	145	154	---	267	79	197	329	271
6	---	---	---	---	150	164	---	269	81	205	330	238
7	---	---	---	105	149	163	---	269	96	230	349	201
8	---	---	---	113	161	164	130	264	114	234	331	208
9	---	---	---	119	169	150	142	223	132	227	334	188
10	---	---	---	---	177	141	132	235	143	221	300	177
11	---	---	---	---	172	141	132	200	162	223	287	196
12	---	---	---	---	168	144	142	180	175	232	296	240
13	---	---	---	---	192	111	155	125	195	232	292	245
14	---	---	---	---	197	93	165	100	199	228	283	225
15	---	---	---	122	189	99	173	95	208	245	298	221
16	---	---	---	112	163	114	172	108	223	270	322	254
17	---	---	---	104	152	124	185	121	234	263	332	248
18	---	---	---	103	156	130	191	129	252	274	339	232
19	---	---	---	104	164	130	195	136	234	261	331	229
20	---	---	---	110	174	133	203	144	214	252	331	248
21	---	---	---	123	180	123	216	154	208	283	338	248
22	---	---	---	142	171	109	220	170	210	299	348	260
23	---	---	---	152	159	104	220	176	213	324	347	317
24	---	---	---	154	153	109	244	183	204	354	336	295
25	---	---	---	149	140	119	244	185	178	368	274	279
26	---	---	---	143	139	129	230	183	170	391	---	274
27	---	---	---	117	141	140	226	179	161	377	275	280
28	---	---	---	110	145	151	228	189	168	335	285	289
29	---	---	---	108	---	159	234	204	168	293	327	327
30	---	---	---	112	---	168	---	220	153	256	350	356
31	---	---	---	124	---	174	---	157	---	252	382	---
MONTH	---	---	---	117	159	136	191	189	165	265	319	253
YEAR	MAX	391	MIN	79	MEAN	201						

TEMPERATURE (DEG. C) OF WATER * WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	5.5	10.0	5.5	12.0	18.0	18.5	21.0	28.0	---
2	---	---	---	5.5	9.5	---	12.5	18.0	17.5	22.0	27.5	28.0
3	---	---	---	5.0	9.0	---	13.5	19.0	---	23.0	27.5	27.0
4	---	---	---	5.0	9.0	8.0	---	19.0	18.0	24.5	27.5	26.5
5	---	---	---	5.0	8.0	8.5	14.0	19.0	17.5	25.0	28.0	25.5
6	---	---	---	---	7.5	9.5	13.5	19.0	17.5	25.0	27.5	25.0
7	---	---	---	5.5	7.0	10.5	12.0	19.0	18.5	25.5	28.0	24.5
8	---	---	---	5.5	6.5	11.5	11.5	19.0	19.5	26.0	27.5	24.0
9	---	---	---	5.5	6.0	12.5	11.5	18.0	20.5	26.5	28.0	23.5
10	---	---	---	---	5.5	13.5	---	18.0	22.0	27.0	27.5	23.5
11	---	---	---	---	5.0	13.5	---	18.0	22.5	27.0	27.5	23.5
12	---	---	---	---	4.5	12.5	11.5	18.0	23.5	27.5	27.5	24.0
13	---	---	---	---	5.0	10.5	12.5	16.5	23.5	27.5	27.5	25.0
14	---	---	---	---	5.5	9.0	13.5	16.0	24.0	27.0	28.0	24.5
15	---	---	---	5.5	5.5	8.0	14.0	15.5	24.0	27.0	27.5	24.0
16	---	---	---	6.0	5.5	8.0	14.5	16.0	24.5	27.0	27.5	24.0
17	---	---	---	7.0	6.0	8.0	14.5	18.0	24.5	27.5	27.5	24.5
18	---	---	---	7.5	6.0	8.0	15.5	19.0	24.5	28.0	27.5	24.5
19	---	---	---	8.0	6.5	8.0	16.0	20.0	24.0	27.0	28.0	25.0
20	---	---	---	8.5	7.0	8.5	16.0	21.0	24.5	26.0	28.5	24.5
21	---	---	---	9.0	7.5	9.0	16.5	22.0	24.5	27.0	28.5	24.0
22	---	---	---	9.5	8.0	8.5	16.5	22.0	24.5	27.0	29.0	24.0
23	---	---	---	10.0	7.5	8.5	16.5	22.5	24.0	27.5	29.0	23.5
24	---	---	---	10.5	7.5	9.0	16.0	22.5	23.5	27.0	29.0	23.5
25	---	---	---	10.0	7.0	8.5	15.5	22.5	22.5	27.5	29.0	23.0
26	---	---	---	9.5	6.5	8.5	16.0	22.0	22.0	27.5	---	22.5
27	---	---	---	9.0	6.0	9.0	16.0	22.0	21.0	28.0	28.5	22.5
28	---	---	---	10.0	5.5	10.0	16.5	22.0	21.0	28.5	29.0	22.5
29	---	---	---	10.0	---	10.5	16.5	21.5	20.5	28.5	29.0	22.5
30	---	---	---	10.0	---	11.0	---	21.0	20.5	28.5	29.0	22.0
31	---	---	---	10.0	---	11.5	---	20.0	---	28.0	29.0	---
MONTH	---	---	---	7.5	7.0	9.5	14.5	19.5	22.0	26.5	28.0	24.0
YEAR	MAX	29.0	MIN	4.5	MEAN	18.0						

KANAWHA RIVER BASIN

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03201300 KANAWHA RIVER AT WINFIELD DAM, AT WINFIELD, W. VA.--Continued

TAXA AND NUMBERS OF PHYTOPLANKTON, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	Total cells/ml	Percent of total	Total cells/lm	Percent of total	Total cells/lm	Percent of total	Total cells/lm	Percent of total	Total cells/lm	Percent of total
Date of sample collection	4-23-74		5-17-74		7-1-74		8-19-74		9-11-74	
Time of collection (hours)	1000		1000		1300		1400		1130	
PHYTOPLANKTON										
CHLOROPHYTA										
Chlorophyceae (green algae)										
Ankistrodesmus sp.			12	2			45	1	28	2
Cosmarium sp.					16	3				
Cyclotella sp.	34	3			148	28	180	4	364	26
Oocystis sp.									28	2
Scenedesmus sp.							135	3		
CHRYSOPHYTA										
Bacillariophyceae (diatoms)										
Achnanthes sp.	56	5							84	6
Cocconeis sp.					16	3			112	8
Cymbella sp.	34	3	17	3					56	4
Epithemia sp.			6	1						
Gomphonema sp.									84	6
Melosira sp.			46	8	217	41	90	2	392	28
Navicula sp.	56	5	93	16	101	19	45	1	28	2
Nitzschia sp.			46	8			45	1	168	12
Pinnularia sp.									28	2
Synedra sp.	34	3	23	4	32	6	90	2	28	2
CYANOPHYTA										
Myxophyceae (blue-green algae)										
Agmenellum sp.							2160	48		
Anacystis sp.										
Lyngbya sp.	907	81	336	58			1710	38		
TOTAL	1120		580		530		4500		1400	

GUYANDOTTE RIVER BASIN

03202400 GUYANDOTTE RIVER NEAR BAILEYSVILLE, W. VA.

LOCATION.--Lat 37°36'15", long 81°38'44", Wyoming County, temperature recorder at gaging station on right bank 75 ft (23 m) upstream from Doublecamp Branch, and 3.1 mi (5.0 km) east of Baileysville.

DRAINAGE AREA.--308 mi² (798 km²).

PERIOD OF RECORD.--Chemical analysis: July 1973 to current year.

Water temperatures: October 1973 to September 1974, partial-record station.

Sediment records: July 1973 to current year.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	540	597
2	---	---	---	---	---	---	---	---	---	---	509	618
3	---	---	---	---	---	---	---	---	---	---	466	643
4	---	---	---	---	---	---	---	---	---	---	458	646
5	---	---	---	---	---	---	---	---	---	---	502	674
6	---	---	---	---	---	---	---	---	---	---	547	681
7	---	---	---	---	---	---	---	---	---	---	424	683
8	---	---	---	---	---	---	---	---	---	---	536	687
9	---	---	---	---	---	---	---	---	---	---	538	661
10	---	---	---	---	---	---	---	---	---	---	512	670
11	---	---	---	---	---	---	---	---	---	---	518	653
12	---	---	---	---	---	---	---	---	---	---	574	625
13	---	---	---	---	---	---	---	---	---	---	580	635
14	---	---	---	---	---	---	---	---	---	---	492	593
15	---	---	---	---	---	---	---	---	---	---	450	633
16	---	---	---	---	---	---	---	---	---	---	450	647
17	---	---	---	---	---	---	---	---	---	---	460	640
18	---	---	---	---	---	---	---	---	---	---	504	635
19	---	---	---	---	---	---	---	---	---	---	351	630
20	---	---	---	---	---	---	---	---	---	---	400	641
21	---	---	---	---	---	---	---	---	---	---	454	656
22	---	---	---	---	---	---	---	---	---	---	451	---
23	---	---	---	---	---	---	---	---	---	---	440	709
24	---	---	---	---	---	---	---	---	---	---	408	707
25	---	---	---	---	---	---	---	---	---	427	396	741
26	---	---	---	---	---	---	---	---	---	416	439	749
27	---	---	---	---	---	---	---	---	---	398	494	727
28	---	---	---	---	---	---	---	---	---	384	524	737
29	---	---	---	---	---	---	---	---	---	429	547	702
30	---	---	---	---	---	---	---	---	---	484	576	694
31	---	---	---	---	---	---	---	---	---	502	583	---
MONTH	---	---	---	---	---	---	---	---	---	---	488	666
YEAR	MAX	749	MIN	351	MEAN	559						

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	644	260	216	180	284	350	346	356	174	257	419	661
2	649	275	270	162	298	353	339	360	132	299	465	620
3	549	287	286	188	292	359	318	341	126	355	516	630
4	555	338	304	156	287	359	306	328	187	401	557	618
5	548	308	328	156	302	365	141	293	256	404	581	614
6	558	217	362	208	316	367	191	317	295	427	593	573
7	588	203	361	241	325	350	228	325	336	439	575	---
8	563	262	384	272	341	240	263	340	362	399	591	562
9	572	298	410	258	367	212	193	336	373	464	600	599
10	597	325	407	132	385	236	157	313	390	495	621	525
11	593	374	---	91	402	265	194	---	420	490	618	542
12	606	413	400	164	408	225	246	260	440	506	600	549
13	588	452	407	228	403	110	273	124	468	497	601	531
14	610	491	304	270	367	164	298	174	479	507	617	---
15	---	496	156	320	328	216	311	221	499	522	621	493
16	687	466	190	341	314	249	309	263	408	523	627	527
17	656	488	226	352	317	206	335	298	339	527	627	561
18	661	---	242	374	286	210	347	328	361	429	634	591
19	640	382	276	400	285	240	366	344	439	523	618	588
20	693	386	300	390	305	202	361	371	480	533	658	597
21	720	323	289	412	308	143	383	349	505	555	480	604
22	764	---	199	410	316	137	376	383	483	561	508	617
23	---	---	200	408	292	201	300	375	444	551	618	620
24	738	---	218	432	276	247	192	294	424	508	639	637
25	738	348	239	282	282	276	224	312	461	496	678	647
26	750	---	138	175	291	320	270	342	468	445	679	655
27	740	154	123	155	326	342	303	378	501	413	675	644
28	711	110	174	186	342	356	322	404	418	445	691	652
29	675	138	224	216	---	378	338	428	228	378	673	662
30	547	179	250	240	---	378	349	240	207	413	673	693
31	412	---	216	251	---	360	---	132	---	476	650	---
MONTH	633	319	270	260	323	271	286	311	370	459	603	600
YEAR	MAX	764	MIN	91	MEAN	392						

EXTREMES.--Water year 1973:

Specific conductance, July to September: Maximum, 749 micromhos Sept. 26; minimum, 351 micromhos Aug. 19.

Sediment concentrations, July to September: Maximum daily, 142 mg/l July 25; minimum daily, 13 mg/l

Aug 29, Sept. 7, 23, 28.

Sediment discharge, July to September: Maximum daily, 85 tons (77 tonnes) July 26; minimum daily, 2.0 tons (1.8 tonnes) Sept. 28.

Water year 1974:

Specific conductances: Maximum, 764 micromhos Oct. 22; minimum, 91 micromhos Jan. 11.

Sediment concentrations: Maximum daily, 2,180 mg/l May 13, minimum daily, 2 mg/l Dec. 8.

Sediment discharge: Maximum daily, 21,600 tons (19,600 tonnes) Jan. 11; minimum daily, 0.99 tons (0.90 tonnes) Dec. 8.

[illegible]

GUYANDOTTE RIVER BASIN

03202400 GUYANDOTTE RIVER NEAR BAILEYSVILLE, W. VA.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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	173	--	--	175	33	16	80	29	6.3
2	211	--	--	181	52	25	84	17	3.9
3	183	--	--	155	49	21	80	47	10
4	304	--	--	133	27	9.7	77	62	13
5	306	--	--	123	30	10	76	30	6.2
6	231	--	--	160	34	15	78	18	3.8
7	185	--	--	140	23	8.7	77	13	2.7
8	160	--	--	136	22	8.1	76	15	3.1
9	157	--	--	132	20	7.1	82	42	9.3
10	160	--	--	116	23	7.2	100	50	14
11	289	--	--	108	23	6.7	89	30	7.2
12	212	--	--	103	20	5.6	79	15	3.2
13	163	--	--	101	15	4.1	69	29	5.4
14	142	--	--	143	67	26	75	23	4.7
15	213	--	--	205	92	51	91	33	8.1
16	267	--	--	143	62	24	85	32	7.3
17	206	--	--	147	65	26	73	40	7.9
18	175	--	--	186	65	33	76	46	9.4
19	166	--	--	135	80	29	76	45	9.2
20	194	--	--	121	63	21	71	38	7.3
21	185	--	--	162	62	27	66	35	6.2
22	168	--	--	168	112	51	64	17	2.9
23	163	--	--	167	87	39	66	13	2.3
24	210	--	--	141	51	19	66	11	2.0
25	215	142	82	124	43	14	63	15	2.6
26	266	118	85	113	35	11	63	25	4.3
27	211	82	47	102	22	6.1	59	15	2.4
28	173	57	27	94	19	4.8	58	13	2.0
29	148	48	19	90	13	3.2	60	24	3.9
30	131	40	14	84	37	8.4	88	32	7.6
31	126	25	8.5	80	22	4.8	--	--	--
TOTAL	6093	--	282.5	4168	--	542.5	2247	--	178.2
TOTAL DISCHARGE FOR YEAR (CFS-DAYS)									199573
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)									1003.2

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

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	120	22	7.1	378	92	94	455	33	41
2	101	30	8.2	273	49	36	332	25	22
3	110	33	9.8	180	30	15	273	15	11
4	86	24	5.6	138	20	7.5	243	11	7.2
5	72	21	4.1	412	164	182	240	15	9.7
6	66	18	3.2	562	215	326	228	11	6.8
7	67	15	2.7	288	50	39	195	6	3.2
8	97	78	20	200	17	4.2	183	2	3.9
9	104	55	15	167	13	5.9	200	10	5.4
10	82	42	9.3	143	8	3.1	210	14	7.9
11	70	38	7.2	126	4	1.4	198	8	4.3
12	67	25	4.5	111	5	1.5	175	5	2.4
13	65	20	3.5	97	5	1.3	213	31	18
14	71	24	4.6	96	10	2.6	734	113	224
15	68	23	4.2	97	10	2.6	764	55	113
16	61	20	3.3	120	26	8.4	550	17	25
17	67	24	4.3	166	46	21	420	7	7.9
18	63	28	4.8	146	28	11	332	3	2.7
19	63	19	3.2	132	15	5.3	283	3	2.3
20	63	15	2.6	121	12	3.9	276	6	4.5
21	66	13	2.3	117	30	9.5	625	26	44
22	64	15	2.6	129	46	16	824	23	51
23	62	17	2.8	124	52	17	630	12	20
24	61	10	1.6	160	68	29	520	8	11
25	62	15	2.5	197	92	49	545	16	24
26	61	15	2.5	278	175	131	4440	1090	13100
27	63	17	2.9	2340	1060	6700	3570	501	4830
28	68	23	4.2	3430	880	9100	1510	105	428
29	99	36	9.6	1590	230	987	1080	47	137
30	193	64	33	704	60	114	1120	67	203
31	388	115	120	--	--	--	1240	67	224
TOTAL	2750	--	311.2	13422	--	17929.2	22608	--	19591.29

03202400 GUYANDOTTE RIVER NEAR BAILEYSVILLE, W. VA.--Continued

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

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	1990	194	1040	782	17	36	440	3	3.6
2	1790	118	570	734	36	71	410	3	3.3
3	1620	112	490	837	73	165	405	3	3.3
4	2600	300	2110	746	18	36	410	5	5.5
5	2070	150	838	662	20	36	420	5	5.1
6	1370	57	211	600	12	19	428	8	9.2
7	1080	33	96	575	11	17	680	25	46
8	872	30	71	530	10	14	943	45	115
9	1280	122	422	485	10	13	845	15	34
10	4450	861	10300	405	8	8.7	686	7	13
11	13400	596	21600	392	8	8.5	602	30	49
12	5650	725	11100	372	8	8.0	3020	734	5990
13	2300	238	1480	396	10	11	5270	953	13600
14	1550	95	398	505	10	14	2110	218	1240
15	1220	55	181	545	10	15	1350	100	365
16	1030	45	125	545	8	12	1260	58	197
17	893	35	84	650	13	23	1600	147	635
18	746	22	44	625	8	14	1330	46	165
19	645	21	37	600	5	8.1	1200	70	227
20	570	19	29	610	5	8.2	2040	243	1340
21	530	18	26	505	5	6.8	3460	519	4850
22	480	51	66	565	9	14	3200	362	3130
23	425	27	31	662	23	41	1790	108	522
24	470	45	57	640	16	28	1270	34	117
25	1270	173	593	625	5	8.4	929	16	40
26	1790	185	894	530	4	5.7	754	15	31
27	1980	153	818	455	5	6.1	638	12	21
28	1390	76	285	430	3	3.5	555	8	12
29	1230	77	256	--	--	--	515	11	15
30	1080	31	90	--	--	--	535	12	17
31	935	20	50	--	--	--	540	12	17
TOTAL	58706	--	54392	16008	--	651.0	39635	--	32818.6
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	525	6	8.5	340	3	2.8	1340	130	470
2	550	5	7.4	356	7	6.7	3850	800	8320
3	525	10	14	424	10	11	2610	215	1520
4	1140	71	219	416	7	7.9	1360	67	246
5	1620	110	481	396	7	7.5	859	35	81
6	1050	35	99	416	8	9.0	620	18	30
7	761	7	14	384	4	4.1	510	13	18
8	674	7	13	352	3	2.9	432	10	12
9	1660	154	690	372	8	8.0	412	85	95
10	1610	73	317	388	5	5.2	364	30	29
11	1110	23	69	376	12	12	320	7	6.0
12	859	16	37	1410	748	2850	284	4	3.1
13	716	8	15	2560	2180	15100	264	7	5.0
14	626	8	14	1230	36	120	257	7	4.4
15	662	20	36	789	23	49	242	7	4.6
16	550	13	19	584	10	16	505	158	215
17	490	5	9.3	470	5	6.3	360	117	114
18	470	5	6.3	452	12	15	268	23	17
19	432	5	5.8	408	9	9.9	228	12	7.4
20	408	3	3.3	432	12	14	211	10	5.7
21	376	4	4.1	376	7	7.1	209	8	4.5
22	360	7	6.8	340	7	6.4	260	34	24
23	936	87	220	475	48	62	288	55	43
24	978	47	124	510	84	116	242	38	25
25	704	21	40	408	18	20	225	20	12
26	550	8	12	348	10	9.4	222	21	13
27	470	5	6.3	312	6	5.1	211	29	17
28	412	5	5.6	280	5	3.8	590	131	209
29	380	5	5.1	264	11	7.8	775	137	287
30	352	3	2.9	2250	1050	6380	525	77	104
31	--	--	--	1960	242	1280	--	--	--
TOTAL	21956	--	2504.4	20078	--	26154.9	18842	--	11947.2

GUYANDOTTE RIVER BASIN

03202400 GUYANDOTTE RIVER NEAR BAILEYSVILLE, W. VA.--Continued

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

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	364	38	37	139	87	33	103	20	5.6
2	308	27	22	130	53	19	100	22	5.9
3	242	20	13	125	38	13	112	27	8.2
4	218	18	11	130	35	12	122	24	7.9
5	214	16	9.2	136	27	9.9	108	29	8.5
6	214	19	11	122	17	5.6	95	34	8.7
7	242	34	22	120	8	2.6	110	35	10
8	204	22	12	118	17	5.4	108	26	7.6
9	181	78	38	122	17	5.6	98	23	6.1
10	178	83	40	122	15	4.9	112	49	15
11	204	45	25	115	14	4.3	136	51	19
12	181	49	24	122	18	5.9	122	25	8.2
13	160	38	16	112	18	5.4	112	31	9.4
14	148	28	11	108	16	4.7	108	40	12
15	151	35	14	103	15	4.2	98	25	6.6
16	211	82	47	100	13	3.5	98	23	6.1
17	175	53	25	100	17	4.6	88	16	3.6
18	154	73	30	98	18	4.8	91	18	4.4
19	148	49	20	172	49	23	81	17	3.7
20	148	42	17	130	43	15	75	17	3.4
21	136	33	12	110	120	36	81	15	3.3
22	128	26	9.0	95	97	25	79	15	3.2
23	130	29	10	86	56	13	77	12	2.5
24	211	84	48	88	34	8.1	77	12	2.5
25	225	72	44	81	22	4.8	77	12	2.5
26	163	49	22	77	22	4.6	75	10	2.0
27	201	86	47	75	22	4.5	73	12	2.4
28	187	108	55	91	15	3.7	77	13	2.7
29	157	134	57	91	17	4.2	73	10	2.0
30	181	87	43	93	16	4.0	77	10	2.1
31	169	73	33	98	20	5.3	--	--	--
TOTAL	5933	--	824.2	3409	--	299.6	2843	--	185.3

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

226190

167608.89

LOCATION.--Lat 38°01'02", long 82°17'46", Wayne County, temperature and conductance recorder at gaging station on left bank 0.2 mi (0.3 km) upstream from Maynard Branch, 0.9 mi (1.4 km) downstream from McComas Branch, 1.5 mi (2.4 km) upstream from Deviltrace Branch, and 7.5 mi (12.1 km) east of Dunlow.

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

[illegible]

TWELVEPOLE CREEK BASIN

03206600 EAST FORK TWELVEPOLE CREEK NEAR DUNLOW, W. VA.--Continued

PERIOD OF RECORD.--Chemical analysis: March to September 1974.
Water temperatures: March to September 1974.

EXTREMES, March to September.--Specific Conductance: Maximum, 135 mg/l Aug. 14; minimum, 14 mg/l Aug. 16.
Water temperatures: Maximum, 24.5 °C Aug. 25-28; minimum, 5.5°C Mar. 25.

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

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

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

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

BIG SANDY RIVER BASIN

03213500 PANTHER CREEK NEAR PANTHER, W. VA.

LOCATION.--Lat 37°26'45", long 81°52'15", McDowell County, temperature recorder at gaging station on left bank 200 ft (61 m) downstream from Cub Branch, 2.1 mi (3.4 km) upstream from Trace Fork, 3.0 mi (4.8 km) southwest of Panther, and at mile 4.1 (6.6 km).

DRAINAGE AREA.--30.8 mi² (79.8 km²).

PERIOD OF RECORD.--May 1973 to current year, partial record.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

[illegible]

BIG SANDY RIVER BASIN

237

03212600 TUG FORK AT WELCH, W. VA.

LOCATION.--Lat 37°24'56", long 81°35'25", McDowell County, at city water plant, at Welch.

DRAINAGE AREA.--85.8 mi² (222.2 km²).

PERIOD OF RECORD.--Water temperatures: October 1972 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 22.0°C July 10; minimum; 1.0°C Dec. 18.

Period of record:

Water temperatures: Maximum, 23.0°C Sept. 1, 1973; minimum, freezing point Feb. 17, 18, 1973.

REMARKS.--Records furnished by West Virginia Water Service Company. Water temperature records collected at site October 1960 to September 1972 are contained in files of U.S. Geological Survey.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

BIG SANDY RIVER BASIN

03214500 TUG FORK AT KERMIT, W. VA.

LOCATION.--Lat 37°50'17", long 82°24'35", Mingo County, at city water plant, at Kermit, 0.8 mi (1.3 km) downstream from Wolf Creek, and 3.0 mi (4.8 km) downstream from gaging station near Kermit.

DRAINAGE AREA.--1,274 mi² (3,300 km²) at water plant; 1,185 mi² (3,069 km²) at gaging station.

PERIOD OF RECORD.--Water temperatures: October 1946 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 28.0°C July 10, 29; minimum 3.5°C Feb. 11.

Period of record:

Water temperatures: Maximum, 32.0°C July 29, 1949; minimum, freezing point on several days in 1947, 1951, and Jan. 18, 1972.

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	13.5	11.0	9.0	11.5	8.5	14.5	21.0	19.5	25.0	25.5	24.5
2	19.0	12.0	10.0	9.5	9.5	10.0	12.0	19.5	19.0	25.5	26.0	24.5
3	20.0	13.5	10.5	9.0	10.0	15.5	15.5	18.5	20.0	25.5	27.0	24.0
4	21.0	14.0	11.0	9.5	10.5	13.0	16.0	17.0	20.0	25.0	25.0	20.5
5	21.5	15.0	11.5	9.5	9.0	14.5	13.5	18.0	21.0	25.5	23.5	19.0
6	21.0	11.5	12.0	9.0	9.0	14.0	14.0	15.5	21.5	26.0	22.0	21.0
7	21.0	12.0	12.0	9.5	10.5	14.5	12.0	15.0	23.0	25.5	24.5	21.5
8	21.0	9.5	9.0	9.0	8.5	14.0	12.0	13.5	23.5	26.0	25.5	23.0
9	20.0	10.5	10.0	9.5	4.5	15.0	6.5	14.5	25.5	26.5	26.5	21.5
10	20.0	10.0	9.0	9.5	7.0	16.0	9.5	16.5	24.0	28.0	27.0	23.0
11	21.0	10.0	8.5	9.0	3.5	13.5	12.0	13.0	24.0	27.0	25.0	21.0
12	21.5	10.0	7.0	9.5	6.5	14.0	13.0	19.0	21.0	26.5	24.5	21.0
13	21.0	11.5	8.0	8.5	8.0	8.5	14.0	18.0	21.5	22.0	26.5	23.0
14	21.0	10.0	9.0	9.5	9.0	12.0	13.5	19.0	22.0	23.5	26.5	21.5
15	20.0	11.0	9.0	9.5	9.5	13.5	16.5	11.5	21.0	23.0	26.5	20.0
16	18.5	10.5	8.5	11.0	9.5	11.0	15.0	13.0	19.5	25.5	27.0	19.5
17	15.5	11.5	6.5	9.0	10.0	10.0	12.0	20.5	18.5	25.0	27.0	19.5
18	14.5	10.0	6.5	11.0	9.0	11.0	14.5	16.5	20.0	26.0	27.0	20.0
19	13.0	13.5	6.5	11.5	9.5	11.0	15.0	22.0	20.5	26.5	24.5	19.5
20	14.5	11.0	8.5	15.0	10.0	12.0	15.0	21.0	21.5	26.5	25.5	19.5
21	10.0	14.0	6.5	15.0	9.5	12.0	15.5	23.0	24.0	26.5	25.0	20.0
22	10.5	11.0	4.5	14.0	10.0	9.5	19.0	23.0	24.0	25.5	26.0	13.5
23	15.0	13.0	5.5	11.5	9.5	10.5	16.0	19.5	21.5	25.5	26.5	15.0
24	15.5	13.0	10.0	11.5	10.5	12.0	15.0	20.0	20.5	24.5	25.0	15.5
25	15.5	13.5	6.5	11.0	9.0	9.5	14.0	12.0	20.0	24.0	25.5	17.0
26	16.0	14.5	9.0	14.0	8.5	11.5	14.0	19.5	19.5	25.0	26.5	19.5
27	19.5	15.0	11.5	14.0	7.0	11.5	15.0	18.5	21.5	25.5	26.0	19.5
28	20.5	14.0	10.5	14.5	8.0	11.5	17.0	18.5	20.5	26.5	26.5	9.5
29	18.0	9.0	10.5	13.0	---	12.0	18.5	20.5	21.5	28.0	23.5	17.0
30	15.5	11.5	10.0	13.0	---	13.0	20.0	20.0	18.5	25.0	23.5	14.0
31	14.5	---	9.0	11.5	---	13.5	---	20.5	---	23.5	24.5	---
MONTH	18.0	12.0	9.0	11.0	9.0	12.0	14.5	18.0	21.5	25.5	25.5	19.5
YEAR	MAX	28.0	MIN	3.5	MEAN	16.5						

PART 3. GROUND-WATER RECORDS

GROUND WATER RECORDS

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

BARBOUR COUNTY

390220NO800349.1. Local number 14-8-1. West Virginia Dept. of Natural Resources, Audra State Park. Drilled unused water-table well in Allegheny and Pottsville Groups of Middle and Lower Pennsylvanian age, diam 8 in (20 cm), depth 200 ft (61.0 m), cased with steel to 20 ft (6.1 m). Lsd is about 1,830 ft (558 m) above msl. MP top of casing 0.65 ft (20 cm) below lsd. Highest water level 71.59 ft (21.821 m), Apr. 30, 1973; lowest water level 95.38 ft (29.072 m), Sept. 6, 1971. Records available: 1971-74.

Date	Water level
Jan. 2, 1974	80.18
7	79.97
14	79.68
21	79.70
28	79.95

BERKELEY COUNTY

392725NO775824.1. Local number 20-5-7. Martinsburg Mills, Inc. Plant grounds, Martinsburg. Drilled unused well in Beekmantown Limestone of Lower Ordovician age, diam 8 in (20 cm), depth 250 ft (76.2 m), cased with steel to 10 ft (3.0 m). Lsd is about 445 ft (136 m) above msl. MP top edge of recorder shelter base 3.3 ft (1.01 m) above lsd. Highest water level 23.00 ft (7.010 m), June 24, 1972; lowest water level 68.45 ft (20.864 m), Dec. 7, 1969. Records available: 1956-74.

Water level at noon, from digital punch tape, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	45.35	40.81	47.12	38.81	37.38	40.03	37.57	40.58	42.13	42.01	46.84	50.01
10	46.30	42.52	45.91	38.60	37.70	40.59	37.57	41.27	43.18	42.99	47.79	49.38
15	47.40	43.73	46.62	35.91	38.19	41.39	37.38	40.65	42.66	43.84	48.66	49.77
20	48.42	44.85	47.25	37.14	38.69	42.04	38.38	41.78	42.79	44.75	...	51.02
25	49.50	45.76	43.66	36.22	39.16	41.97	39.18	41.75	40.55	45.54	...	51.81
Eom	38.11	46.38	38.74	36.84	39.62	38.51	39.93	42.91	41.21	46.14	49.78	52.81

e Estimated.

BRAXTON COUNTY

384003NO804626.1. Local number 34-2-15. Claude Cunningham, Gassaway. Drilled unused water-table well in Conemaugh Group of Upper Pennsylvanian age, diam 6 in (15 cm), depth 100 ft (30.5 m), cased with steel. Lsd is about 1,100 ft (335 m) above msl. MP top of casing 1.92 ft (58 cm) above lsd. Highest water level 72.28 ft (22.031 m), Mar. 7, 1973; lowest water level 74.88 ft (22.823 m), Aug. 11, 1971. Records available: 1971-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 3, 1973	73.79	Jan. 2, 1974	72.84	Apr. 3, 1974	72.85	July 3, 1974	73.44
10	73.80	9	72.64	10	72.83	10	73.53
17	73.81	16	72.76	17	72.88	17	73.61
24	73.85	23	72.85	24	73.68	24	73.68
31	73.70	30	72.88	May 1	73.42	31	73.75
Nov. 7	73.66	Feb. 6	73.00	8	73.50	Aug. 7	73.79
14	73.46	13	73.11	15	73.63	14	73.81
21	73.50	20	72.89	22	73.66	21	73.83
28	73.28	27	72.93	29	73.38	28	73.83
Dec. 5	73.22	Mar. 6	72.58	June 5	73.25	Sept. 4	73.79
12	73.16	13	72.88	12	73.40	11	73.75
19	73.10	20	72.88	19	73.57	18	73.75
26	73.00	27	72.88	26	73.43	25	73.78

CLAY COUNTY

243

382648NO810552.1. Local number 35-2-1. Clay County School, Clay. Drilled unused water-table well in Pottsville Group of Lower Pennsylvanian age, diam 6 in (15 cm), depth 76 ft (23.2 m), cased with steel. Lsd is about 700 ft (213 m) above msl. MP top of casing 3.5 ft (1.07 m) below lsd. Highest water level 13.47 ft (4.106 m), Feb. 26, 1972; lowest water level 27.74 ft (8.445 m), Aug. 15, 1974. Records available: 1972-74.

Water level at noon, from recorder graph, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	25.46	24.75	25.03	21.67	25.04	24.03	20.95	26.50	...	26.30	...	...
10	26.16	24.44	25.88	21.50	24.75	24.18	24.10	25.94	...	26.65	27.63	...
15	e26.40	25.76	21.98	...	...	22.75	26.16	24.55	...	27.54	27.74	26.75
20	e26.70	...	25.94	...	...	22.21	26.89	26.05	...	...	...	27.29
25	26.85	25.32	24.61	...	e24.55	23.97	26.89	25.58	...	...	...	27.53
Hom	23.16	21.80	21.25	24.95	24.76	25.99	27.11	23.06	...	...	...	27.49

e Estimated.

GILMER COUNTY

385604NO804959.1. Local number 33-3-1. Glenville State College, Glenville. Dug unused water-table well in upper part of Conemaugh Formation of Upper Pennsylvanian age, diam 3 ft (91 cm), depth 25 ft (7.6 m), cased with concrete tile. Lsd is about 820 ft (250 m) above msl. MP top of concrete cover at lsd. Highest water level 13.58 ft (4.139 m), Jan. 26, 1958; lowest water level 18.75 ft (5.715 m), Nov. 30, 1953. Records available: 1953-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 1, 1973	17.52	Jan. 4, 1974	15.13	Apr. 1, 1974	16.39	July 1, 1974	15.10
8	17.46	14	15.14	8	16.42	8	15.96
15	17.53	21	15.96	15	15.74	15	16.21
22	17.70	28	16.38	22	16.21	22	16.56
29	17.74	Feb. 4	16.44	29	16.67	29	16.83
Nov. 5	17.41	11	16.37	May 6	16.90	Aug. 5	16.77
12	17.27	18	15.94	13	16.57	12	16.87
19	17.19	21	16.07	20	16.65	20	16.90
26	17.21	25	16.21	24	16.72	26	17.00
Dec. 3	16.45	Mar. 4	16.22	June 3	15.60	Sept. 3	16.20
10	16.73	11	16.35	10	16.12	9	16.29
17	16.69	18	16.28	17	16.59	16	16.18
21	16.72	22	16.13	21	16.59	23	16.41
31	16.10	25	16.14			30	16.76

GREENBRIER COUNTY

374804NO801740.1. Local number 45-8-2. U.S. Fish and Wildlife Service, Fish Culture Station, White Sulphur Springs. Drilled unused water-table well in Marcellus Formation and Hamilton Formation of Middle Devonian age, diam 6 in (15 cm), depth 61 ft (18.6 m), cased with steel. Lsd is about 1,875 ft (572 m) above msl. MP top of casing 0.9 ft (27 cm) above lsd. Highest water level 2.80 ft (85.3 cm), Mar. 16, 1955; lowest water level 7.77 ft (2.368 m), Sept. 28, Oct. 5, 1968. Records available: 1953-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 6, 1973	5.38	Jan. 5, 1974	4.95	Apr. 6, 1974	5.00	July 6, 1974	5.60
13	5.83	12	4.95	13	5.22	13	5.05
20	5.90	19	5.25	20	5.35	20	5.15
27	6.00	26	4.88	27	5.30	27	5.20
Nov. 3	5.10	Feb. 2	5.20	May 4	5.30	Aug. 3	5.90
10	5.22	9	5.38	11	5.00	10	6.00
17	5.30	16	5.34	18	4.87	24	6.76
24	5.30	23	4.95	25	5.03	31	6.26
Dec. 1	5.10	Mar. 2	5.30	June 1	4.58	Sept. 7	5.90
8	5.13	9	5.10	8	4.88	14	6.70
15	4.94	16	5.00	15	5.05	21	6.55
22	4.80	23	5.00	22	5.10	28	6.93
29	4.97	30	5.23	29	5.00		

GREENBRIER COUNTY (Continued)

374809NO801739.1. Local number 45-8-4. West Virginia Dept. of Natural Resources, Greenbrier State Park. Drilled unused artesian well in Marcellus Formation of Middle Devonian age, diam 6 in (15 cm), depth 44 ft (13.4 m), cased with steel. Lsd is about 1,875 ft (572 m) above msl. MP top of breather pipe, in sanitary seal, 1.48 ft (45.1 cm) above lsd. Highest water level 3.22 ft (98.1 cm), May 25, Dec. 21, 1972; lowest water level 11.46 ft (3.493 m), Oct. 18, 1973. Records available: 1970-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 4, 1973	10.77	Jan. 10, 1974	4.32	Apr. 4, 1974	4.83	July 3, 1974	8.52
11	11.05	17	4.72	11	5.27	11	8.87
18	11.46	24	5.92	18	5.07	18	9.72
Nov. 2	9.82	Feb. 7	5.92	25	6.32	Aug. 8	10.32
9	9.72	14	6.32	May 2	6.12	15	10.57
15	9.92	21	7.52	9	6.42	22	10.72
21	10.02	Mar. 7	7.42	16	6.57	Sept. 5	10.50
		14	6.22	23	6.82	12	10.23
		21	4.82	June 6	7.32	19	9.92
				13	7.82		
				21	8.12		

HAMPSHIRE COUNTY

391257NO784046.1. Local number 23-6-46. Loring Hott, Augusta. Drilled unused artesian well in Hampshire Formation of Upper Devonian age, diam 6 in (15 cm), depth 37 ft (11.3 m), cased with tile. Lsd is about 1,400 ft (427 m) above msl. MP top of casing at lsd. Highest water level 0.38 ft (11.6 cm), Apr. 10, Oct. 30, 1973; lowest water level e16.69 ft (5.087 m), July 15, 1973. Records available: 1972-74.

Water level at noon, from recorder graph, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	...	12.35	...	2.30	...	12.61	...	13.20	...	...	14.35	14.89
10	...	...	...	0.76	...	12.41	...	13.35	...	...	14.57	...
15	...	...	1.08	0.90	...	11.98	...	12.17	...	...	14.70	...
20	...	...	4.33	7.76	...	11.80	11.10	13.23	...	...	14.76	...
25	...	...	0.65	0.76	...	12.74	12.34	...	e0.80	14.18	14.86	e14.50
Eom	1.04	...	0.74	6.40	12.06	e0.45	12.93	13.50	5.90	14.31	14.74	14.23

e Estimated.

HARDY COUNTY

390431NO784159.1. Local number 25-2-42. Potomac Valley Soil Conservation District, Baker. Drilled unused water-table well in Tonoloway Formation of Upper Silurian age, diam 6 in (15 cm), depth 58 ft (17.7 m), cased with tin pipe to 1 ft (30 cm). Lsd is about 1,863 ft (568 m) above msl. MP top of tin casing 0.3 ft (9 cm) above lsd. Highest water level e18.00 ft (5.486 m), June 25, 1972; lowest water level was below 44.30 ft (13.503 m), Aug. 19 - Sept. 25, 1974. Records available: 1972-74.

Water level at noon, from recorder graph, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	...	e34.20	...	...	29.12	30.04	27.84	...	...	30.03	39.62	...
10	...	34.25	...	...	29.42	30.50	28.85	...	...	31.27	e41.28	...
15	...	34.09	...	26.05	27.48	30.92	29.44	...	...	32.46	e42.97	...
20	...	31.61	...	28.31	29.07	30.09	30.86	...	...	34.28	...	...
25	...	30.30	...	26.80	29.93	31.27	31.64	...	e27.83	35.78	...	e44.30
Eom	...	e29.20	...	27.27	30.50	29.79	e37.34	39.28	27.19	37.99	...	43.28

e Estimated.

HARDY COUNTY (Continued)

245

385714N0784413.1. Local number 25-4-5. U.S. Forest Service, Trout Pond Recreation Area. Drilled unused water-table well in Helderberg Group of Early Devonian age and Tonoloway Formation of Late Silurian age, diam 6 in (15 cm), depth 460 ft (140.2 m), cased with steel to 190 ft (57.9 m). Lsd is about 1,920 ft (585 m) above msl. MP top of well casing 0.9 ft (27 cm) above lsd. Highest water level 263.00 ft (80.162 m), July 15, 1972; lowest water level 274.15 ft (83.561 m), Nov. 6, 1970. Records available: 1968-74.

Water level at noon, from recorder graph, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	...	...	271.70	270.84	270.20	270.14	269.71	269.12	268.72	268.28	268.71	...
10	...	271.65	271.56	271.57	269.88	270.20	269.89	269.11	268.43	268.28	268.90	...
15	...	271.35	271.77	270.25	270.24	270.13	269.46	269.08	268.39	268.37	269.08	269.81
20	...	271.57	271.93	270.30	270.31	270.16	269.31	269.00	268.34	268.47	269.21	269.96
25	...	271.45	271.93	270.27	270.09	270.23	269.23	...	268.31	268.54	269.25	270.10
Eom	...	271.54	271.00	269.93	270.10	269.98	269.03	268.69	268.33	268.65	269.33	270.21

e Estimated.

KANAWHA COUNTY

382055N0813753.1. Local number 40-5-14. A. W. Cox Department Store, (formerly Coyle and Richardson Department Store) Dickinson and Lee Sts., Charleston. Drilled unused artesian well in Pottsville Formation of Lower Pennsylvanian age, diam 8 in (20 cm), depth 208 ft (63.4 m), cased to 42 ft (12.8 m). Lsd is about 575 ft (175 m) above msl. MP top of casing 12 ft (3.66 m) below lsd. Highest water level 26.71 ft (8.141 m), Jan. 12, 1974; lowest water level 43.44 ft (13.241 m), Sept. 6, 1945. Records available: 1941-74.

Water level at noon, from recorder graph, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	28.96	28.98	28.49	27.37	27.88	27.95	27.54	27.65	27.40	28.18	28.51	28.67
10	28.99	29.00	28.68	27.75	27.94	27.95	27.43	27.57	27.75	28.25	28.53	28.59
15	28.97	28.97	28.73	27.15	27.99	27.25	27.54	28.27	28.00	28.26	28.58	28.65
20	29.00	28.97	28.66	27.44	27.92	27.50	27.88	28.00	28.14	28.36	28.62	28.69
25	29.04	28.81	28.43	27.80	27.88	27.35	27.71	28.08	28.10	28.45	28.62	28.67
Eom	28.91	28.38	27.43	27.56	27.88	27.57	27.72	28.03	28.15	28.49	28.60	28.74

LEWIS COUNTY

390553N0802808.1. Local number 16-1-8. West Virginia University. Jackson's Mill. Drilled unused water-table well in Conemaugh and Allegheny Formations of Upper and Middle Pennsylvanian age, diam 12 in (30 cm), depth 92 ft (28.04 m), cased. Lsd is about 1,020 ft (311 m) above msl. MP hole in concrete pump platform at lsd. Highest water level 9.40 ft (2.865 m), Dec. 30, 1969; lowest water level 23.85 ft (7.269 m), Oct. 14, 1963. Records available: 1961-74.

Date	Water level	Date	Water level	Date	Water level
Oct. 1, 1973	21.30	Jan. 7, 1974	18.31	Apr. 1, 1974	21.50
8	21.40	14	16.76	8	19.72
15	22.02	21	20.55	15	19.10
22	22.10	28	20.55	Aug. 2	22.67
Nov. 5	21.00	Feb. 4	20.58	9	22.73
12	21.02	11	20.75	16	22.59
19	20.89	18	19.20	23	22.64
26	21.31	25	20.30	30	22.97
Dec. 3	20.40	Mar. 4	19.19	Sept. 6	21.40
10	21.48	11	20.00	13	21.05
16	21.12	18	20.30	20	22.42
24	19.37				

LEWIS COUNTY (Continued)

390553N0802808.2. Local number 16-1-9. West Virginia University. Jackson's Mill. Drilled unused water-table well in Conemaugh and Allegheny Formations of Upper and Middle Pennsylvanian age, diam 12 in (30 cm), depth 122 ft (37.2 m), cased. Lsd is about 1,020 ft (311 m) above msl. MP drilled hole in steel plate covering casing, at lsd. Highest water level 8.88 ft (2.706 m), Dec. 30, 1969; lowest water level 23.95 ft (7.300 m), Sept. 18, 1961. Records available: 1961-74.

Date	Water level	Date	Water level	Date	Water level
Oct. 1, 1973	21.18	Jan. 7, 1974	18.21	Apr. 1, 1974	21.40
8	21.26	14	16.54	8	19.56
15	21.94	21	20.38	15	18.97
22	21.98	28	20.38	Aug. 2	22.52
Nov. 5	20.87	Feb. 4	20.41	9	22.67
12	20.85	11	20.66	16	22.49
19	20.72	18	19.11	23	22.77
26	21.17	25	20.19	30	22.92
Dec. 3	20.24	Mar. 4	19.00	Sept. 6	21.62
10	21.40	11	19.85	13	21.25
16	21.02	18	20.20	20	22.35
24	19.50				

MARSHALL COUNTY

395608N0804523.1. Local number 4-3-8. Triangle Conduit and Cable Co. U.S. Highway 250, Glendale. Drilled unused water-table well in gravel, diam 10 in (25 cm), depth 100 ft (30.5 m), cased. Lsd is about 650 ft (198 m) above msl. MP top edge of recorder shelter base 4 ft (1.22 m) below lsd. Highest water level 54.68 ft (16.666 m), Jan. 31, 1952; lowest water level 73.80 ft (22.494 m), Nov. 8, Nov. 22, 1957. Records available: 1950-65, 1967-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 2, 1973	70.70	Jan. 7, 1974	68.98	Apr. 1, 1974	67.75	July 1, 1974	68.55
8	70.91	14	68.35	8	67.24	8	68.80
15	71.23	21	68.02	15	66.79	15	68.48
22	71.68	28	67.10	22	67.55	22	68.65
29	71.39	Feb. 4	67.40	29	67.26	29	68.95
Nov. 5	71.25	11	67.85	May 6	68.25	Aug. 5	68.83
12	71.46	18	68.15	13	68.45	12	68.91
20	71.51	25	68.40	20	67.37	20	69.02
26	71.46	Mar. 4	68.50	29	67.89	26	69.16
Dec. 3	70.67	11	68.35	June 3	68.17	Sept. 3	68.55
10	70.99	18	67.25	10	68.52	9	68.49
17	71.55	25	67.58	17	68.81	16	68.47
26	70.10			24	68.53	23	68.41
31	69.25					30	68.83

MASON COUNTY

385450N0820646.1. Local number 38-3-53. West Virginia University. Ohio Valley Agricultural Experiment Station. State Highway 2, 4 mi (6.4 km) N of Pt. Pleasant. Drilled water-table irrigation well in alluvial sand and gravel, diam 12 in (30 cm), depth 73 ft (22.3 m), cased with steel to 61 ft (18.6 m), screened 61-73 ft (18.6 m - 22.3 m). Lsd is about 600 ft (183 m) above msl. MP edge of pump housing above hole on east side of pump 1.4 ft (43 cm) above lsd. Highest water level 36.72 ft (11.192 m), May 27, 1963; lowest water level 42.54 ft (12.966 m), Jan. 16, 1970. Records available: 1958-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 5, 1973	38.09	Jan. 4, 1974	39.03	Apr. 5, 1974	38.35	July 5, 1974	37.65
12	39.11	11	39.10	12	38.27	12	37.58
19	38.20	18	38.98	19	38.20	19	37.55
26	38.30	25	38.84	26	38.15	26	37.52
Nov. 2	38.45	Feb. 1	38.73	May 3	38.05	Aug. 2	37.60
9	38.50	8	38.60	10	38.04	9	37.65
16	38.59	15	38.55	17	38.00	16	37.75
23	38.65	22	38.48	24	37.94	23	37.80
30	38.75	Mar. 1	38.51	31	37.87	30	37.66
Dec. 7	38.83	8	38.50	June 7	37.85	Sept. 6	37.54
14	38.88	15	38.47	14	37.80	13	37.76
21	38.93	22	38.46	21	37.78	20	38.03
28	38.96	29	38.36	28	37.74	27	38.09

385451N0820620.1. Local number 38-3-54. West Virginia University. Ohio Valley Agricultural Experiment Station, Pt. Pleasant. Drilled unused artesian well in Conemaugh Formation of Upper Pennsylvanian age, diam 6 in (15 cm), depth 131 ft (39.9 m), cased with steel to 60 ft (18.3 m). Lsd is approximately 615 ft (187 m) above msl. MP top of casing 3 ft (91 cm) above lsd. Highest water level 23.98 ft (7.309 m), May 28, May 29, 1973; lowest water level 26.20 ft (7.986 m), Jan. 1, 1966. Records available: Nov. 13, 1959 to 1974.

Water level at noon, from recorder graph, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	24.85	24.86	24.83	e24.72	...	...	...	...	...	24.10	24.39	24.44
10	24.86	24.89	24.86	e24.66	...	...	...	...	...	24.14	24.40	24.49
15	24.90	24.92	24.85	e24.60	...	...	...	...	...	24.20	24.46	24.53
20	24.95	24.93	24.87	e24.54	...	...	...	...	24.24	24.25	24.46	24.59
25	24.99	24.93	e24.82	e24.51	...	...	...	...	24.07	24.29	24.55	24.63
Eom	24.85	24.83	e24.76	...	24.37	...	...	...	24.07	24.35	24.50	24.66

e Estimated.

MERCER COUNTY

372623N0810711.1. Local number 48-2-4. Spanishburg High School, Princeton. Drilled water-table well in Mauch Chunk Group of Upper Mississippian age, diam 8 in (20 cm), reported depth 200+ ft (61+ m), cased with steel. Lsd is about 2,070 ft (631 m) above msl. MP top of sanitary seal on casing 2.05 ft (62 cm) above lsd. Highest water level 13.55 ft (4.130 m), Sept. 13, 1973; lowest water level 25.55 ft (7.788 m), Mar. 14, 1974. Records available: 1971-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 4, 1973	22.15	Jan. 3, 1974	21.15	Apr. 4, 1974	23.15	Aug. 8, 1974	21.05
11	20.75	10	19.75	11	22.75	15	20.75
18	21.35	17	21.75	18	24.15	22	19.15
25	22.75	24	18.15	24	23.75	27	21.75
Nov. 1	20.55	31	24.05	May 2	21.15	Sept. 5	20.75
8	16.45	7	23.75	9	22.55	12	22.15
15	18.05	14	22.55	16	24.15	19	20.35
22	19.75	20	24.35	22	21.75	26	21.35
30	18.15	Mar. 1	22.15	23	20.45		
Dec. 6	21.05	7	24.35	30	21.75		
13	19.55	14	25.55	June 6	18.15		
20	17.05	21	24.15	12	22.75		
28	20.55	28	24.65				

372149N0810550.1. Local number 48-5-1. West Virginia Service Company. Company No. 1 well, Princeton. Drilled unused artesian well in sandstone and shale of Hinton Group of Upper Mississippian age, diam 6 in (15 cm), depth 249 ft (75.9 m), cased. Lsd is about 2,387 ft (728 m) above msl. MP top of well at lsd. Highest water level 0.0 ft (0.0 cm); lowest water level 90.58 ft (27.609 m), Dec. 10, 1969 (water level affected by local pumpage). Records available: 1960-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 3, 1973	flowing	Jan. 2, 1974	flowing	Apr. 3, 1974	flowing	July 3, 1974	flowing
10	flowing	9	flowing	10	flowing	10	flowing
17	flowing	16	flowing	17	flowing	17	flowing
24	flowing	23	flowing	24	flowing	24	flowing
31	flowing	30	flowing	May 1	flowing	31	flowing
Nov. 7	flowing	Feb. 6	flowing	8	flowing	Aug. 7	flowing
14	flowing	13	flowing	15	flowing	14	flowing
21	flowing	20	flowing	22	flowing	21	flowing
28	flowing	27	flowing	29	flowing	28	flowing
Dec. 5	flowing	Mar. 6	flowing	June 5	flowing	Sept. 4	flowing
12	flowing	13	flowing	12	flowing	11	flowing
19	flowing	20	flowing	19	flowing	18	flowing
26	flowing	27	flowing	26	flowing	25	flowing

MINERAL COUNTY

393018NO784553.1. Local number 22-1-32. Mineral County School, Fort Ashby. Drilled unused water-table well in Mahantango Formation of Middle Devonian age, diam 10 in (25 cm), depth 96 ft (29.3 m), cased with steel. Lsd is about 600 ft (183 m) above msl. MP top of casing 1.5 ft (46 cm) below lsd. Highest water level 8.96 ft (2.731 m), Apr. 11, 1973; lowest water level 13.57 ft (4.136 m), Sept. 20, 1972. Records available: 1971-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 3, 1973	10.62	Jan. 2, 1974	10.31	Apr. 3, 1974	10.11	July 3, 1974	10.59
10	10.86	9	9.83	10	9.64	10	11.35
17	11.41	16	9.59	17	9.46	17	12.08
19	10.69	23	9.69	24	10.39	24	12.41
26	11.96	30	9.86	May 1	10.72	31	12.36
31	10.33	Feb. 6	10.09	8	11.28	Aug. 7	12.44
Nov. 7	10.60	13	10.04	15	11.46	14	12.52
14	10.78	20	10.46	22	11.38	21	12.86
21	11.44	27	10.53	29	11.51	28	12.81
28	10.97	Mar. 6	10.44	June 5	10.66	Sept. 4	12.94
Dec. 5	10.83	13	10.19	12	11.17	11	12.53
12	10.41	20	9.98	19	11.32	18	12.51
19	10.62	27	10.57	26	10.18	25	12.66
26	9.56						

392114NO790811.1. Local number 22-5-23. Gerald Whisner. Near Elk Garden. Drilled unused artesian well in Conemaugh Formation of Late Pennsylvanian age, diam 6 in (15 cm), depth 37 ft (11.3 m), cased with steel. Lsd is about 2,480 ft (756 m) above msl. MP top of casing 0.7 ft (21 cm) above lsd. Highest water level +0.69 ft (0.210 m), 1968-73; lowest water level 10.81 ft (3.295 m), Oct. 29, 1968 (water level affected by recent pumpage). Records available: 1968-74. Water level above and below lsd.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 5, 1973	-3.70	Jan. 4, 1974	+0.60	Apr. 5, 1974	+0.68	July 5, 1974	-0.95
12	3.68	11	0.60	12	0.68	12	1.02
19	3.74	18	0.60	19	0.68	19	1.50
26	3.76	25	0.60	26	0.60	26	1.50
Nov. 2	3.74	Feb. 1	0.68	May 3	+0.52	26	1.62
9	3.54	8	0.68	10	-0.90	Aug. 2	1.70
16	3.48	15	0.68	17	0.98	9	1.76
23	3.38	22	0.68	24	2.10	16	1.86
Dec. 7	2.10	Mar. 1	0.68	31	0.90	23	2.50
14	0.70	8	0.68	June 7	0.70	30	3.00
21	-0.60	15	0.68	14	1.00	Sept. 6	3.10
28	+0.05	22	0.68	21	0.90	13	2.90
		29	0.68	28	0.90	20	2.95
						27	1.50
						27	1.70

MONONGALIA COUNTY

394006NO801948.1. Local number 9-1-47. Mrs. Wilma Shriver, Wadestown. Drilled unused water-table well in Dunkard Group of Permian age, diam 6 in (15 cm), depth 65 ft (19.8 m), cased with steel. Lsd is about 1,060 ft (323 m) above msl. MP top of casing 1.2 ft (37 cm) above lsd. Highest water level 5.87 ft (1.789 m), Apr. 28, 1973; lowest water level 11.35 ft (3.459 m), Aug. 6, 1971. Records available: 1971-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 6, 1973	7.28	Jan. 5, 1974	6.42	Apr. 6, 1974	6.82	July 6, 1974	7.46
13	7.55	12	6.39	13	6.85	13	7.51
20	7.63	19	6.61	20	6.96	20	7.58
27	7.55	27	6.69	May 3	7.42	Aug. 2	7.62
Nov. 3	7.34	Feb. 3	6.83	10	7.41	9	7.68
10	7.26	10	6.95	17	7.09	16	7.80
17	7.22	18	7.14	23	7.16	23	8.08
23	7.27	Mar. 2	6.90	June 1	7.37	27	7.98
30	6.92	9	6.83	8	7.40	Sept. 3	7.85
Dec. 7	6.91	16	6.99	15	7.40	10	6.96
14	6.84	23	6.89	22	7.39	17	6.88
21	7.59	30	6.94	29	6.76	24	6.63
29	6.49						

MONONGALIA COUNTY (Continued)

249

392923N0795718.1. Local number 9-7-33. Paul H. Price. Halleck. Drilled unused water-table well in Buffalo-Mahoning Sandstone of Conemaugh Formation of Upper Pennsylvanian age, diam 6 in (15 cm), depth 141 ft (43.0 m), cased with steel to 21 ft (6.4 m). Lsd is about 1,850 ft (564 m) above msl. MP 0.35 ft (11 cm) above lsd. Highest water level 40.95 ft (12.482 m), Jan. 4, 1960; lowest water level 80.57 ft (24.558 m), Oct. 25, 1973. Records available: 1953-74.

Date	Water level	Date	Water level	Date	Water level
Oct. 25, 1973	80.57	Feb. 22, 1974	58.72	June 25, 1974	60.29
Nov. 29	62.98	Mar. 26	59.94	July 26	61.79
Dec. 28	58.06	Apr. 24	62.45	Aug. 28	75.95
Jan. 24, 1974	59.05	May 29	64.35	Sept. 20	74.01

MONROE COUNTY

373435N0803231.1. Local number 47-3-3. Robert K. Riner, Union. Drilled water-table well in Greenbrier Group of Middle Mississippian age, diam 6 in (15 cm), depth 133 ft (40.5 m), cased with steel to 12 ft (3.7 m). Lsd is about 2,050 ft (625 m) above msl. MP top of sanitary seal on top of casing 0.6 ft (18 cm) above lsd. Highest water level 49.60 ft (15.118 m), Mar. 1, 1972; lowest water level 53.36 ft (16.264 m), Oct. 20, 1971. Records available: 1971-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 3, 1973	52.10	Jan. 2, 1974	51.40	Apr. 3, 1974	51.30	July 3, 1974	51.70
10	52.30	9	51.70	10	51.00	10	51.60
17	52.20	16	52.10	17	51.30	17	51.50
24	52.10	23	51.90	24	51.50	24	51.70
31	52.30	30	52.10	May 1	51.60	31	51.80
Nov. 7	52.00	Feb. 6	51.90	8	51.30	Aug. 7	52.00
14	51.90	13	51.40	15	51.40	14	51.80
21	52.00	20	51.00	22	51.50	21	51.90
28	52.10	27	51.10	29	51.40	28	51.90
Dec. 5	52.00	Mar. 6	50.80	June 5	51.20	Sept. 4	52.00
12	51.80	13	51.00	12	51.50	11	51.90
19	51.40	20	50.90	19	51.60	18	51.80
26	51.30	27	51.10	26	51.80	25	52.00

NICHOLAS COUNTY

381301N0805622.1. Local number 37-5-1. West Virginia Dept. of Natural Resources, Carnifax Ferry State Park. Drilled unused water-table well in Pottsville Group of Lower Pennsylvanian age, diam 6 in (15 cm), depth 106 ft (32.3 m), cased with steel. Lsd is about 1,620 ft (494 m) above msl. MP top of concrete slab at lsd. Highest water level 52.30 ft (15.941 m), Dec. 23, 1970; lowest water level 59.44 ft (18.117 m), July 21, 1971. Records available: 1970-74.

CORRECTIONS.--Corrected figures of water level for water year 1973, superseding those published in WRD W. Va. 1973, are given herein.

Water year October 1972 to September 1973

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 4, 1972	58.95	Jan. 3, 1973	55.48	Apr. 4, 1973	56.25	July 4, 1973	57.85
11	59.09	10	55.29	12	56.79	11	58.16
25	57.90	17	57.42	18	56.03	18	58.31
Nov. 1	57.35	24	57.80	26	56.02	25	58.36
8	57.01	31	56.27	May 3	55.72	Aug. 1	58.09
15	56.96	Feb. 8	56.30	10	55.54	8	58.61
22	56.57	14	56.10	17	57.00	16	58.45
Dec. 6	56.66	22	56.30	23	57.04	22	57.93
13	55.41	28	56.20	30	57.12	30	58.42
20	55.61	Mar. 7	56.86	June 6	57.02	Sept. 5	58.29
27	55.69	15	57.09	13	56.89	12	58.52
		21	56.60	20	57.40	20	58.91
		28	56.25	27	57.55	27	59.20

Water year October 1973 to September 1974

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 5, 1973	59.04	Jan. 2, 1974	56.39	Apr. 3, 1974	56.52	July 3, 1974	57.56
10	59.15	9	55.27	10	56.13	10	57.58
17	59.10	16	55.51	18	56.78	17	58.70
24	59.35	23	56.49	24	56.60	24	58.38
Nov. 1	57.83	30	56.36	May 1	57.43	31	58.64
8	58.30	Feb. 6	56.28	8	57.65	Aug. 8	58.52
14	57.80	13	56.22	16	57.76	15	58.87
22	57.80	20	56.60	22	57.90	22	58.81
29	56.94	28	56.98	29	57.66	28	58.92
Dec. 6	57.51	Mar. 7	56.62	June 5	56.96	Sept. 4	58.87
13	57.13	13	56.49	12	57.42	11	58.38
20	57.53	20	55.76	19	57.99	18	58.22
26	57.83	27	55.99	26	57.55	25	58.25

POCAHONTAS COUNTY

380634N0801648.1. Local number 44-4-1. West Virginia Dept. of Natural Resources, Droop Mountain State Park. Drilled unused water-table well in Mauch Chunk Group of Upper Mississippian age, diam 6 in (15 cm), depth 153 ft (46.6 m), cased with steel to 20 ft (6.1 m). Lsd is about 2,700 ft (823 m) above msl. MP top of casing at lsd. Highest water level 66.20 ft (20.178 m), Dec. 7, 1971; lowest water level 79.23 ft (24.149 m), Oct. 1, 1970. Records available: 1970-74. Water level affected by local pumpage.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 2, 1973	69.10	Jan. 1, 1974	68.15	Apr. 2, 1974	68.78	July 2, 1974	69.45
9	69.15	8	68.60	9	68.65	9	69.20
16	69.70	15	67.60	16	69.05	16	69.60
23	69.75	22	67.90	23	69.10	23	69.70
30	69.30	29	68.00	30	69.30	30	69.60
Nov. 6	68.75	Feb. 5	68.85	May 7	69.30	Aug. 6	69.78
13	69.30	12	69.10	14	68.75	13	69.80
20	69.40	19	68.80	21	69.13	20	69.75
27	68.55	26	68.85	28	69.33	27	69.95
Dec. 4	68.80	Mar. 5	69.20	June 4	68.77	Sept. 3	69.78
11	69.10	12	68.40	11	69.25	10	69.74
18	69.40	19	68.55	18	68.80	17	69.80
25	68.85	26	68.60	25	69.25	24	69.90

380708NO801022.1. Local number 44-4-9. West Virginia Dept. of Natural Resources, Watoga State Park. Drilled unused water-table well in Hampshire Formation of Upper Devonian age, diam 8 in (20 cm), depth 53 ft (16.2 m), cased with steel. Lsd is about 2,100 ft (640 m) above msl. MP top of seal on casing 0.55 ft (17 cm) above lsd. Highest water level 4.28 ft (1.305 m), Feb. 23, 1971; lowest water level 12.03 ft (3.667 m), Apr. 13, 1971. Records available: 1970-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 2, 1973	12.01	Jan. 1, 1974	8.45	Apr. 2, 1974	9.83	July 2, 1974	10.07
9	11.15	8	8.99	9	9.07	9	10.10
16	11.31	15	8.01	16	9.71	16	10.15
23	11.63	22	9.45	23	10.13	23	11.42
30	11.25	29	8.03	30	10.17	30	10.99
Nov. 6	10.33	Feb. 5	8.65	May 7	9.99	Aug. 6	11.01
13	10.63	12	10.01	14	6.62	13	10.10
20	10.37	19	9.81	21	9.85	20	10.90
27	10.53	26	9.17	28	10.49	27	11.42
Dec. 4	10.03	Mar. 5	9.15	June 4	4.99	Sept. 3	10.94
11	10.01	12	9.09	11	10.25	10	10.55
18	10.27	19	9.05	18	9.98	17	11.05
25	7.90	26	8.85	25	10.05	24	11.25

380630NO800744.1. Local number 44-4-10. West Virginia Dept. of Natural Resources, Watoga State Park. Drilled unused water-table well in Hampshire Formation of Upper Devonian age, diam 6 in (15 cm), reported depth 285 ft (86.9 m), cased with steel. Lsd is about 3,050 ft (930 m) above msl. MP top of casing 0.85 ft (26 cm) above lsd. Highest water level 15.35 ft (4.679 m), July 27, 1971; lowest water level 22.87 ft (6.971 m), Oct. 30, 1973. Records available: 1970-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 2, 1973	20.32	Jan. 1, 1974	18.77	Apr. 2, 1974	19.03	July 2, 1974	19.55
9	20.17	8	18.89	9	18.69	9	19.67
16	20.19	15	18.29	16	18.99	16	19.58
23	20.29	22	18.85	23	19.21	23	19.81
30	22.87	29	18.19	30	19.39	30	19.77
Nov. 6	19.94	Feb. 5	19.22	May 7	19.07	Aug. 6	19.86
13	19.97	12	19.31	14	18.87	13	20.12
20	19.92	19	18.20	21	19.25	20	19.82
27	19.97	26	19.11	28	19.35	27	20.04
Dec. 4	19.29	Mar. 5	19.27	June 3	18.17	Sept. 3	19.81
11	19.15	12	19.32	11	18.85	10	20.06
18	19.21	19	19.25	18	19.01	17	20.11
25	18.55	26	19.10	25	19.31	24	20.19

PRESTON COUNTY

393306NO794745.1. Local number 11-3-8. G. E. Lemmons, East Depot St., Masontown. Drilled domestic artesian well in sandstone of Pottsville Formation of Lower Pennsylvanian age, diam 8 in (20 cm), depth 785 ft (239.3 m), cased to 350 ft (106.7 m), perforated at or near Upper Freeport Coal. Lsd is about 1,770 ft (539 m) above msl. MP, N edge, top of casing 3.0 ft (91 cm) below lsd. Highest water level 7.15 ft (2.179 m), Jan. 20, 1947; lowest water level 108+ ft (32.918 m), Feb. 3, 1959. Records available: 1942-74.

Date	Water level	Date	Water level	Date	Water level
Oct. 25, 1973	66.40	Feb. 22, 1974	64.72	June 25, 1974	65.29
Nov. 29	65.48	Mar. 25	65.53	July 26	67.46
Dec. 28	65.19	Apr. 24	65.82	29	66.57
Jan. 24, 1974	64.43	May 29	65.68	Aug. 28	70.80
				Sept. 20	65.55

PRESTON COUNTY (Continued)

392053N0794004.1. Local number 11-7-14. U.S. Army, Corps of Engineers, Rowlesburg. Drilled unused water-table well in Chemung Formation of Upper Devonian age, diam 8 in (20 cm), depth 104 ft (31.7 m), cased with steel. Lsd is about 1,400 ft (427 m) above msl. MP top of casing 1.6 ft (49 cm) above lsd. Highest water level 4.64 ft (1.414 m), Dec. 9, 1972; lowest water level 11.89 ft (3.624 m), Aug. 28, 29, 1974. Records available: 1971-74.

Water level at noon, from digital punch tape, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	10.43	9.64	10.10	8.02	10.26	9.22	7.92	9.97	8.95	10.35	11.71	10.68
10	10.45	10.42	10.42	8.84	9.82	9.65	9.12	10.49	10.10	10.86	11.83	10.89
15	10.98	10.50	9.75	8.43	9.02	9.98	9.60	9.92	10.97	11.29	11.77	10.66
20	11.14	10.07	9.98	9.50	10.10	9.75	10.51	10.72	10.85	11.51	11.54	11.41
25	11.36	10.42	9.62	9.42	9.79	10.01	10.72	10.70	8.09	11.60	11.76	11.61
Eom	9.68	9.44	8.41	9.92	10.21	10.49	10.87	10.02	10.09	11.53	11.08	11.85

RALEIGH COUNTY

374607N0811222.1. Local number 43-3-8. Raleigh Bottling and Ice Co., Mabscott. Drilled unused artesian well in New River Series of Lower Pennsylvanian age, diam 8 in (20 cm), depth 475 ft (144.8 m). Lsd is approximately 2,285 ft (696 m) above msl. MP top of casing 1 ft (30 cm) above lsd. Highest water level 13.03 ft (3.972 m), Dec. 27, 1972; lowest water level 37.13 ft (11.317 m), Dec. 15, 1965. Records available: 1959-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 3, 1973	21.53	Jan. 2, 1974	15.78	Apr. 3, 1974	14.29	July 3, 1974	16.34
10	21.70	9	15.20	10	14.41	10	16.63
17	21.88	16	13.49	17	14.54	17	16.88
24	22.91	23	15.04	24	17.00	24	17.33
31	22.78	30	14.67	May 1	16.82	31	17.82
Nov. 7	21.48	Feb. 6	15.03	8	15.90	Aug. 7	18.09
14	20.20	13	15.33	15	14.96	14	18.44
21	19.65	20	15.76	22	15.50	21	19.26
28	20.27	27	15.72	29	14.76	28	19.66
Dec. 5	17.43	Mar. 6	15.03	June 5	15.06	Sept. 4	18.28
12	17.30	13	14.31	12	15.21	11	18.63
19	17.55	20	13.67	19	15.39	18	19.00
26	16.07	27	14.31	26	16.05	25	19.62

RANDOLPH COUNTY

385341N0795754.1. Local number 18-3-110. Presbyterian Church, Coalton. Drilled exploratory water-table well in Homewood Sandstone of Pottsville Group of Early Pennsylvanian age, diam 6 in (15 cm), depth 155 ft (47.2 m), cased. Lsd is 2,173 ft (662 m) above msl. MP floor of shelterbox 2.45 ft (75 cm) above lsd. Highest water level 10.85 ft (3.307 m), Dec. 12, 1966; lowest water level 23.35 ft (7.117 m), Oct. 28, 1971. Records available: 1966-74. Water level affected by local pumpage.

Water level at noon, from recorder graph, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	14.03	14.94	14.57	14.55	...	...	...	...	13.19	13.61	...	...
10	14.94	14.71	14.15	14.35	...	...	...	...	17.60	14.67	...	...
15	14.77	14.39	14.07	...	16.39	...	...	...	15.97	17.46	...	...
20	13.80	14.21	13.95	...	...	...	...	...	13.63	17.46	...	...
25	14.67	14.48	14.20	...	...	...	...	...	15.15	...	...	...
Eom	13.93	14.21	14.01	...	...	...	...	...	16.56	...	14.03	...

RITCHIE COUNTY

253

391226N0810249.1. Local number 28-3-3. Harrisville. Drilled unused artesian public-supply well in Dunkard Formation of Pennsylvanian or Permian age, diam 6 in (15 cm), depth 118 ft (36.0 m), cased with steel. Lsd is about 840 ft (256 m) above msl. MP top of casing about 1.2 ft (37 cm) above lsd. Highest water level 17.92 ft (5.462 m), Apr. 2, 1970; lowest water level 21.80 ft (6.645 m), Sept. 7, 1966. Records available: 1966-74.

Water level at noon, from digital punch tape, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	19.90	19.11	18.78	18.49	19.32	18.95	18.92	19.19	19.08	19.15	19.20	19.33
10	19.66	...	19.08	18.69	19.04	19.05	18.88	19.56	18.95	19.45	19.28	19.41
15	19.60	...	19.02	18.53	19.17	19.15	18.92	18.84	19.32	19.22	19.56	19.27
20	19.82	...	18.96	18.71	19.34	19.23	19.55	19.02	19.21	19.52	19.73	19.43
25	19.90	18.92	19.06	19.05	19.26	19.38	19.75	19.09	18.38	19.69	19.80	19.06
Eom	19.22	18.69	18.72	18.69	19.08	19.35	19.66	19.16	18.41	19.18	19.50	19.08

TUCKER COUNTY

390135N0792756.1. Local number 15-6-17. West Virginia Dept. of Natural Resources, Canaan Valley State Park. Drilled unused artesian well in Pocono Formation of Lower Mississippian age, diam 8 in (20 cm), depth 281 ft (85.6 m), cased with steel. Lsd is about 3,275 ft (998 m) above msl. MP top of casing 1.55 ft (47 cm) above lsd. Highest water level 8.05 ft (2.454 m), Dec. 11, 1972; lowest water level 11.54 ft (3.517 m), July 19, 1971. Records available: 1971-74.

Date	Water level	Date	Water level	Date	Water level
Oct. 1, 1973	9.51	Jan. 2, 1974	8.99	June 3, 1974	8.07
9	9.16	7	8.91	10	9.87
15	10.14	17	9.49	17	10.21
22	10.25	21	9.43	24	8.20
26	9.89	28	9.61	July 1	9.52
Nov. 5	9.43	Feb. 4	9.45	8	9.90
13	9.83	May 1	10.67	15	10.05
19	9.50	6	10.43	22	10.20
Dec. 3	9.60	13	9.98	29	10.22
10	10.02	20	10.44	Aug. 5	10.09
17	9.53	28	10.45	12	10.11
26	8.32			19	9.84
				26	9.91

WAYNE COUNTY

375827N0822115.1. Local number 50-6-5. West Virginia Dept. of Natural Resources, Cabwaylingo State Forest. Drilled unused water-table well in Pottsville Group of Lower Pennsylvanian age, diam 6 in (15 cm), depth 119 ft (36.3 m), cased with steel. Lsd is about 740 ft (226 m) above msl. MP top of casing 1.30 ft (40 cm) above lsd. Highest water level 27.70 ft (8.443 m), Jan. 5, Mar. 1, 1972; lowest water level 30.62 ft (9.333 m), June 16, 1971. Records available: 1971-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 3, 1973	29.90	Jan. 2, 1974	29.35	Apr. 3, 1974	28.80	July 3, 1974	29.20
10	29.90	9	29.30	10	29.00	10	29.20
17	29.20	16	29.30	17	29.10	17	29.60
24	29.85	23	29.10	24	29.10	22	29.70
31	29.60	30	29.10	May 1	28.90	31	29.70
Nov. 7	29.60	Feb. 6	29.10	8	29.30	Aug. 7	29.70
14	29.50	13	29.10	15	29.30	14	29.70
21	29.50	20	29.10	22	28.80	21	29.80
28	29.45	27	29.10	29	28.80	28	29.70
Dec. 5	29.45	Mar. 6	29.00	June 5	28.90	Sept. 4	29.70
12	29.45	13	28.90	12	29.20	11	29.70
19	29.40	20	28.70	19	29.80	18	29.60
26	29.35	27	28.80	25	29.50	23	29.60
				26	29.10		

WEBSTER COUNTY

382254N0802715.1. Local number 36-3-12. Glen Dodrill, Cowen. Drilled unused artesian well in Mauch Chunk Group of Upper Mississippian age, diam 6 in (15 cm), depth 40 ft (12.2 m), cased with steel. Lsd is about 2,230 ft (680 m) above msl. MP top of casing 1.5 ft (46 cm) above lsd. Highest water level 4.70 ft (1.433 m), July 5, 1972; lowest water level 7.50 ft (2.286 m), July 24, 1974. Records available: 1971-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 3, 1973	6.90	Jan. 2, 1974	5.80	Apr. 3, 1974	6.30	July 3, 1974	6.90
10	6.70	9	4.95	10	5.80	10	7.00
17	6.90	16	6.40	17	6.70	17	7.40
24	7.05	23	6.10	24	6.50	24	7.50
31	6.10	30	6.20	May 1	7.00	31	7.10
Nov. 7	6.10	Feb. 6	6.10	8	6.50	Aug. 7	7.40
14	6.40	13	6.00	15	6.40	14	7.10
21	6.20	20	6.40	22	6.40	21	6.90
28	6.05	27	5.90	29	7.00	28	6.90
Dec. 5	6.45	Mar. 6	6.40	June 5	6.00	Sept. 4	6.30
12	5.70	13	5.80	12	7.10	11	6.60
19	6.00	20	5.90	19	6.40	18	6.65
26	5.50	27	6.50	26	6.80	25	7.05

WETZEL COUNTY

392858N0803734.1. Local number 6-6-8. West Virginia Dept. of Natural Resources, Lewis Wetzel Public Hunting Area. Jacksonburg. Drilled unused water-table well in Dunkard Group of Permian age, diam 6 in (15 cm), depth 76 ft (23.2 m), cased with steel. Lsd is about 890 ft (271 m) above msl. MP top of casing 1.1 ft (34 cm) above lsd. Highest water level 6.10 ft (1.859 m), Nov. 28, 1973; lowest water level 19.90 ft (6.066 m), July 3, 1974. Records available: 1971-74.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 3, 1973	13.50	Jan. 2, 1974	12.10	Apr. 3, 1974	11.10	July 3, 1974	19.90
10	12.20	9	16.50	10	13.30	10	19.80
17	13.40	16	8.00	17	10.10	17	18.90
24	13.20	23	10.10	24	13.30	31	18.10
31	12.70	30	15.40	May 1	14.70	Aug. 7	12.00
Nov. 7	14.10	Feb. 6	14.80	8	16.50	14	10.80
14	17.00	13	14.40	15	12.80	21	14.50
21	14.10	20	16.00	22	12.10	28	13.10
28	6.10	27	14.50	29	14.70	Sept. 4	11.30
Dec. 5	10.90	Mar. 6	10.50	June 5	11.30	11	8.80
12	10.40	13	14.40	12	9.10	18	12.30
19	12.60	20	14.60	19	16.70	25	13.80
26	13.40	27	13.30	26	18.70		

WOOD COUNTY

391712N0813332.1. Local number 27-3-22. City of Parkersburg. Drilled unused water-table well in gravel, diam 5 in (13 cm), depth 55 ft (16.8 m), cased with steel to 55 ft (16.8 m). Lsd is about 601 ft (183 m) above msl. MP top of casing 2.94 ft (90 cm) above lsd. Highest water level e16.06 ft (4.895 m), Feb. 23, 1971; lowest water level 37.75 ft (11.506 m), Feb. 12, 1948. Records available: 1943-44, 1946-74.

Water level at noon, from recorder graph, water year October 1973 to September 1974

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	26.13	27.01	25.12	25.39	25.41	26.39	24.27	25.27	...	e25.04	25.81	24.76
10	26.14	e26.86	25.65	25.76	25.73	26.11	23.78	25.70	...	25.49	25.84	24.93
15	26.38	e26.87	25.78	24.12	26.05	25.33	23.77	24.23	...	25.76	25.79	25.01
20	26.56	e26.60	25.93	24.35	26.58	25.77	24.33	...	...	26.04	25.67	25.16
25	26.56	26.18	26.56	23.99	26.46	25.25	24.77	...	24.66	e25.61	25.65	25.06
Eom	26.74	25.03	25.60	24.34	26.53	25.44	25.18	...	25.05	25.73	25.25	25.34

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