

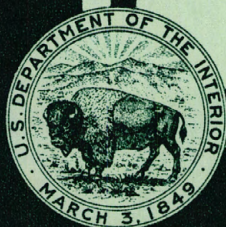
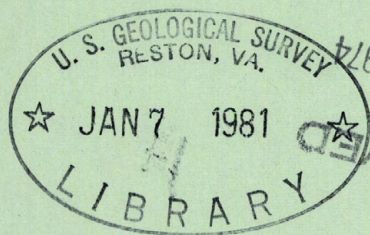
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Water Resources Data for West Virginia

Part 1. Surface Water Records

Part 2. Water Quality Records



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 1972

OCTOBER 1971

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

NOVEMBER 1971

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

DECEMBER 1971

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

JANUARY 1972

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

FEBRUARY 1972

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

MARCH 1972

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

APRIL 1972

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

MAY 1972

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

JUNE 1972

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

JULY 1972

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

AUGUST 1972

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

SEPTEMBER 1972

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

1972

**Water Resources Data
for
West Virginia**

Part 1. Surface Water Records

Part 2. Water Quality Records



**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

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

Prepared in cooperation with
West Virginia Department of Natural Resources,
Division of Water Resources
Clarksburg Water Board
Corps of Engineers, U.S. Army
Morgantown Water Commission

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

1973

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

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WATER RESOURCES DATA FOR WEST VIRGINIA, 1972

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

INTRODUCTION

Water resources data for the 1972 water year for West Virginia including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, and records of water-quality data on the chemical and physical characteristics of surface water, are given in this report. In Part 1, records are included for 126 gaging stations of which 119 are streamflow discharge stations, 1 is stage only streamflow station, and 6 are reservoir or lake stations; also included are records for 7 low-flow partial-record stations, 42 crest-stage partial-record stations, and 12 miscellaneous sites. Locations of gaging stations are shown in Figure 1. 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 30 sampling stations of which 18 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. 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 pages 15 and 20.

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. 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 Department of Highways,
William S. Ritchie, Jr., Commissioner.

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, in collecting records for 80 gaging stations.

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.

Monongahela City Water Plant

West Penn Power Co.

*Trans records
Part 3*

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.

Bed material is the shifting portion of fragmented material of which the streambed is composed.

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.

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

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

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 (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second 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. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)."

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

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).

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

Milligrams per liter (mg/l , MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 5. Concentration of suspended sediment also is expressed in mg/l , and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, page 5.

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.

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 1.000 g/ml and a specific gravity of sediment of 2.65.

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).

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 streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

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

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

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

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from 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 liter) 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 liter by 0.00136.

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

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.

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 stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of 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 stations 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.

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 stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

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, 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 ($^{\circ}\text{F}$). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/l) and water temperatures in degrees Celsius (centigrade, $^{\circ}\text{C}$). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using the table on page 18.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definition of Terms," P. 3.

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 II of this report.

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.

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.

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

HYDROLOGIC CONDITIONS

Streamflow averaged well above median for the year throughout the state. Runoff was slightly above to well above median most months except March and September when runoff was slightly below median.

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U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation. A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

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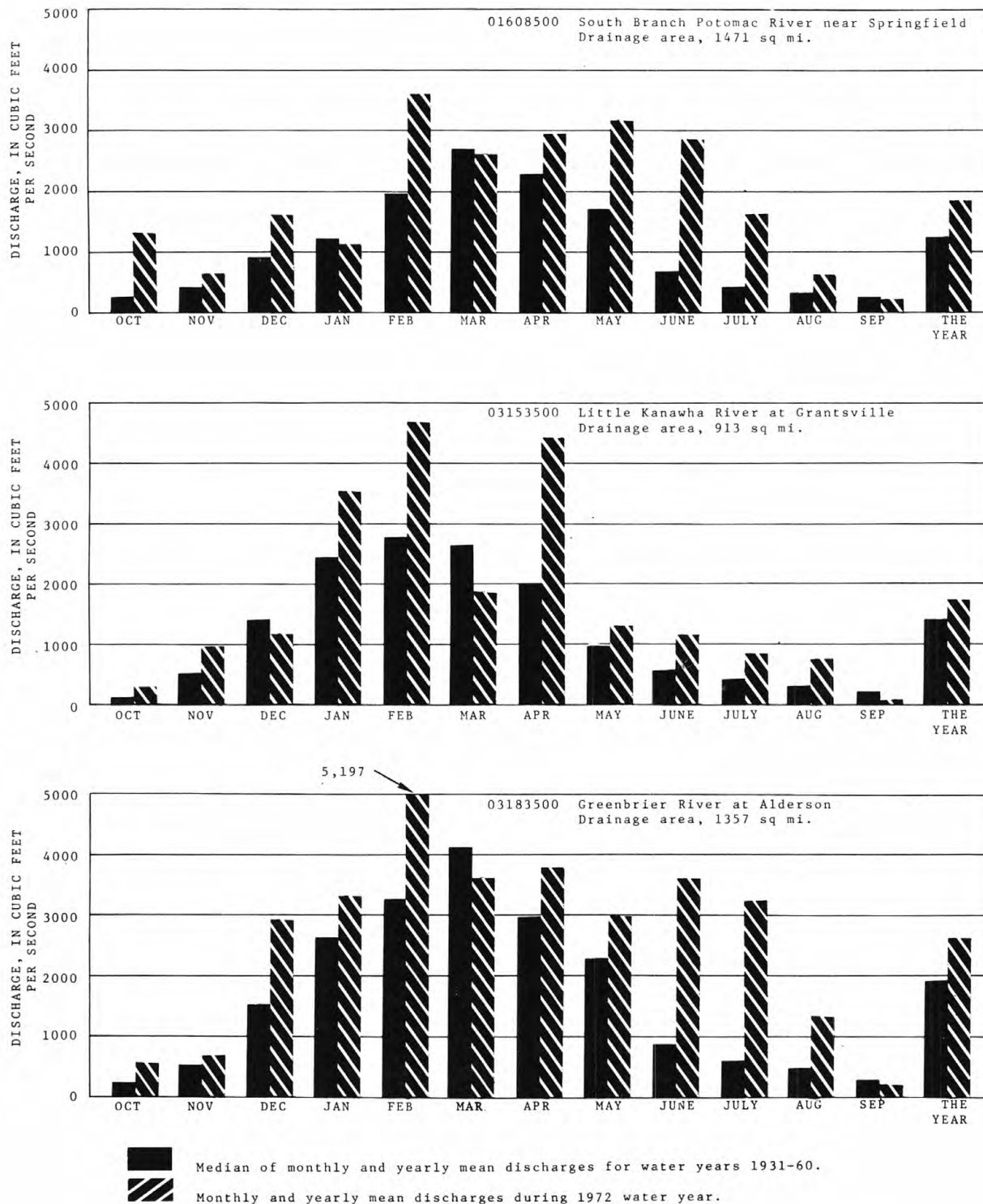


FIGURE 2.--RUNOFF DURING 1972 WATER YEAR COMPARED WITH MEDIAN RUNOFF FOR PERIOD 1931-60 FOR THREE REPRESENTATIVE GAGING STATIONS.

PART 1. SURFACE WATER RECORDS

GAGING STATION RECORDS

NORTH ATLANTIC SLOPE BASINS, NEW YORK TO YORK RIVER

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 mile southeast of Steyer, 0.4 mile downstream from Steyer Run, 2 miles northeast of Gorman, and at mile 81.8.

DRAINAGE AREA.--73.0 sq mi.

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

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

AVERAGE DISCHARGE.--16 years, 165 cfs (30.69 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,390 cfs June 23 (gage height, 6.16 ft); minimum daily, 9.0 cfs Sept. 24.

Period of record: Maximum discharge, 6,240 cfs Mar. 5, 1963 (gage height, 9.13 ft), from rating curve extended above 3,000 cfs; minimum, 2.9 cfs Sept. 10, 1965 (gage height, 2.03 ft).

Flood of Oct. 15, 1954, reached a stage of 13.0 ft, from floodmarks.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	99	45C	92	120	1,530	183	180	70	233	66	22
2	109	160	240	227	114	1,890	194	154	60	167	42	19
3	129	165	160	261	112	1,520	176	505	55	142	46	20
4	102	130	130	205	138	732	628	765	44	148	104	20
5	93	110	110	480	105	506	490	536	39	893	167	18
6	76	92	450	354	105	379	218	354	33	558	78	16
7	66	80	1,300	264	110	334	455	280	32	391	62	14
8	63	70	1,200	211	94	431	465	248	30	256	54	12
9	56	66	900	298	88	312	368	372	29	190	44	11
10	52	62	64C	671	82	263	345	345	44	142	38	11
11	50	56	460	485	82	223	310	268	35	112	29	11
12	43	52	290	448	82	225	260	215	29	94	27	10
13	40	50	200	338	100	974	646	186	28	85	27	10
14	39	46	170	281	98	635	490	173	60	72	25	11
15	37	42	151	219	100	485	547	204	64	54	24	16
16	34	39	133	150	120	523	515	237	63	68	24	13
17	34	35	118	130	110	442	516	218	59	66	36	10
18	30	34	117	135	100	377	406	183	88	51	42	14
19	27	35	127	135	98	306	310	159	112	46	29	11
20	27	43	224	177	84	252	268	174	52	42	42	10
21	25	48	198	268	105	225	222	160	115	39	27	9.4
22	25	44	146	205	180	262	628	133	200	36	24	9.2
23	34	44	128	188	320	256	475	127	1,840	34	23	9.2
24	145	45	117	272	460	218	547	103	1,020	33	26	9.0
25	232	48	106	297	1,120	197	396	89	485	58	34	9.6
26	294	60	100	200	1,640	180	310	77	322	38	76	10
27	167	69	102	160	914	176	244	67	272	54	140	9.2
28	118	110	106	160	713	167	204	62	187	64	56	22
29	94	450	107	150	1,310	186	176	60	558	39	41	28
30	85	900	107	140	-----	244	154	60	288	49	29	32
31	85	-----	109	120	-----	200	-----	113	-----	68	26	-----
TOTAL	2,504	3,283	8,896	7,721	8,804	14,640	11,346	6,807	6,313	4,322	1,508	426.6
MEAN	80.8	109	287	249	304	472	378	220	210	139	48.6	14.2
MAX	294	900	1,300	671	1,640	1,880	646	765	1,840	893	167	32
MIN	25	34	100	92	82	167	154	60	28	33	23	9.0
CFSM	1.11	1.49	3.93	3.41	4.16	6.47	5.18	3.01	2.88	1.90	.67	.19
IN.	1.28	1.67	4.53	3.93	4.49	7.46	5.78	3.47	3.22	2.20	.77	.22

CAL YR 1971 TOTAL 66,794.0 MEAN 183 MAX 1,600 MIN 13 CFSM 2.51 IN 34.04

WTR YR 1972 TOTAL 76,570.6 MEAN 209 MAX 1,880 MIN 9.0 CFSM 2.86 IN 39.02

PEAK DISCHARGE (BASE, 2,200 CFS).--June 23 (0545) 2,390 cfs (6.16 ft).

NOTE.--No gage-height record Nov. 3 to Dec. 14.

POTOMAC RIVER BASIN

27

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

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

DRAINAGE AREA.--48.8 sq mi.

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

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

AVERAGE DISCHARGE.--11 years, 91.2 cfs (25.38 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,860 cfs Mar. 3 (gage height, 8.01 ft), from rating curve extended above 1,000 cfs; minimum daily, 24 cfs June 19.

Period of record: Maximum discharge, 3,120 cfs Mar. 19, 1963, from rating curve extended above 1,000 cfs; maximum gage height, 8.41 ft Mar. 5, 1963 (ice jam); minimum discharge, 1.8 cfs July 13, 1968 (gage height, 1.98 ft).

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

CORRECTIONS.--The month-end contents, for the 1971 water year, in millions of gallons, in Stony River Reservoir have been corrected, as shown in the following table. They supersede figures published in WRD W. Va. 1971:

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1,553	1,184	1,175	1,175	1,564	1,180	1,274	1,553	1,533	994	1,263	1,387

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	195	130	49	93	542	80	69	70	102	56	38
2	95	170	111	102	91	700	84	69	65	91	52	33
3	111	167	106	93	97	2,020	84	173	58	85	56	31
4	93	149	102	85	102	1,200	170	369	55	78	80	29
5	89	133	102	138	95	133	143	333	50	260	100	29
6	84	120	197	118	85	95	128	298	49	242	93	29
7	90	111	542	106	82	91	176	274	47	211	93	29
8	76	102	610	100	82	106	191	256	44	188	87	29
9	72	95	483	133	70	85	191	305	41	155	84	31
10	70	89	409	197	67	84	214	291	46	106	76	31
11	69	85	349	170	63	89	235	246	40	89	67	32
12	63	80	305	179	61	100	239	135	36	82	56	33
13	60	74	270	164	74	409	337	106	33	82	50	36
14	56	70	242	152	74	397	349	115	38	74	44	40
15	52	67	214	140	72	409	333	138	33	69	40	41
16	49	52	185	125	72	385	309	149	35	63	36	38
17	46	50	138	118	69	341	369	135	32	56	40	38
18	41	50	46	111	65	133	298	125	26	53	36	40
19	38	52	44	108	69	102	256	118	24	49	36	41
20	35	55	74	115	87	102	218	146	25	44	35	40
21	33	58	72	138	97	106	185	128	69	41	29	43
22	31	58	60	128	138	149	143	115	95	38	29	44
23	40	56	56	123	128	188	118	125	560	35	31	43
24	288	61	56	135	349	182	164	108	546	32	29	46
25	326	61	53	143	333	173	158	102	457	36	29	46
26	357	60	53	123	515	161	185	74	277	32	36	47
27	298	65	52	111	349	149	161	69	65	50	56	52
28	263	78	53	118	329	143	140	65	56	37	60	53
29	235	211	50	111	488	140	115	61	135	35	56	63
30	221	232	52	104	-----	140	63	61	102	50	50	67
31	204	-----	52	100	-----	84	-----	82	-----	61	44	-----
TOTAL	3,637	2,896	5,268	3,837	4,296	9,138	5,836	4,840	3,209	2,626	1,666	1,192
MEAN	117	96.5	170	124	148	295	195	156	107	84.7	53.7	39.7
MAX	357	232	610	197	515	2,020	369	369	560	260	100	67
MIN	31	50	44	49	61	84	63	61	24	32	29	29
(#)	1,258	1,219	1,170	1,170	1,463	1,180	1,387	1,304	1,375	1,144	924	1,004

CAL YR 1971 TOTAL 42,314 MEAN 116 MAX 695 MIN 11 CFSM 2.38 IN 32.25
WTR YR 1972 TOTAL 48,441 MEAN 132 MAX 2,020 MIN 24 CFSM 2.70 IN 36.92

† 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 mile east of Oakmont, 1.2 miles downstream from Emory Run, 1.8 miles southwest of Elk Garden, and at mile 1.9.

DRAINAGE AREA.--47.3 sq mi.

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

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

AVERAGE DISCHARGE.--16 years, 63.4 cfs (18.20 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,540 cfs July 5 (gage height, 6.95 ft), from rating curve extended as explained below; minimum, 5.9 cfs Sept. 24, 27 (gage height, 2.23 ft).

Period of record: Maximum discharge, 2,120 cfs Mar. 5, 1963 (gage height, 7.78 ft), from rating curve extended above 1,200 cfs on basis of contracted-opening measurement at gage height 9.82 ft; minimum, 0.2 cfs Sept. 13-19, 1959, Sept. 14-18, 1964; minimum gage height, 1.48 ft Sept. 16, 1959.

Flood of Aug. 18, 1955, reached a stage of 9.82 ft, from floodmarks (discharge, 3,830 cfs, from rating curve extended as explained above).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	55	191	41	50	611	65	95	44	85	38	19
2	96	80	139	71	49	626	69	80	37	75	21	17
3	112	90	112	73	50	510	68	216	31	70	19	15
4	78	95	96	64	63	282	110	299	27	75	33	15
5	69	75	83	98	56	216	99	220	24	900	56	15
6	59	65	149	84	55	167	83	160	22	500	25	13
7	54	55	514	72	50	151	145	132	21	240	20	11
8	49	50	459	67	50	148	149	116	18	150	16	10
9	42	45	274	75	45	117	134	178	18	100	14	9.6
10	41	40	200	128	45	105	144	178	22	70	12	8.9
11	37	40	155	113	45	93	134	128	17	55	11	9.3
12	31	35	121	116	43	96	115	109	15	45	11	8.4
13	27	35	102	96	58	471	301	96	15	40	11	8.6
14	26	30	89	85	55	305	213	93	25	30	10	9.0
15	24	30	85	68	58	229	260	102	35	25	9.5	14
16	23	25	75	37	81	266	225	134	35	30	9.5	9.5
17	22	25	69	30	68	211	238	109	30	30	13	7.9
18	21	25	64	40	58	173	163	92	45	20	15	7.5
19	20	25	61	50	52	145	117	81	60	20	17	7.3
20	19	30	82	71	45	122	239	86	30	20	20	6.6
21	18	35	78	88	45	111	210	122	70	15	11	6.5
22	18	30	60	72	50	124	280	95	95	15	9.5	6.7
23	30	30	50	70	50	115	210	93	500	15	11	6.4
24	506	30	51	99	140	102	250	84	160	15	29	6.1
25	486	35	48	98	376	93	200	67	106	20	19	6.5
26	378	40	46	74	602	85	160	59	83	16	94	6.6
27	200	49	46	66	348	82	120	52	77	20	172	7.5
28	100	71	44	70	293	77	100	47	50	26	58	13
29	65	277	41	65	560	74	90	41	120	18	39	22
30	50	361	41	61	-----	79	80	43	100	24	28	21
31	45	-----	38	52	-----	69	-----	62	-----	37	23	-----
TOTAL	2,788	1,898	3,663	2,294	3,540	6,055	4,771	3,469	1,932	2,801	874.5	322.9
MEAN	89.9	63.3	118	74.0	122	195	159	112	64.4	90.4	28.2	10.8
MAX	506	361	514	128	602	626	301	299	500	900	172	22
MIN	18	25	38	30	43	69	65	41	15	15	9.5	6.1
CFSM	1.90	1.34	2.49	1.56	2.58	4.12	3.36	2.37	1.36	1.91	.60	.23
IN.	2.19	1.49	2.88	1.80	2.78	4.76	3.75	2.73	1.52	2.20	.69	.25
CAL YR 1971	TOTAL 31,647.6		MEAN 86.7		MAX 514	MIN 5.0	CFSM 1.83	IN 24.89				
WTR YR 1972	TOTAL 34,408.4		MEAN 94.0		MAX 900	MIN 6.1	CFSM 1.99	IN 27.06				

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-25	1545	5.85	870	3-13	0745	5.62	755
2-29	1900	5.75	820	7- 5	unknown	6.95	1,540

NOTE.--No gage-height record Oct. 27 to Nov. 26, Apr. 21 to May 2, June 14-24, June 28 to July 24.

POTOMAC RIVER BASIN

29

01595500 North Branch Potomac River at Kitzmiller, Md.

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

DRAINAGE AREA.--225 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,572.26 ft above mean sea level. Prior to Oct. 15, 1954, at site 0.3 mile upstream at datum 7.58 ft higher. Oct. 15, 1954, to Nov. 20, 1955, nonrecording gage at bridge 0.5 mile upstream at datum 21.51 ft higher.

AVERAGE DISCHARGE.--23 years, 432 cfs (26.07 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 7,060 cfs Mar. 3 (gage height, 7.74 ft); minimum, 47 cfs Sept. 27 (gage height, 2.57 ft).

Period of record: Maximum discharge, 33,400 cfs Oct. 15, 1954 (gage height, 13.73 ft, from floodmarks, present site and datum); minimum, 4.6 cfs Oct. 3-7, 1953.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	455	1,140	238	340	3,980	446	527	243	865	197	88
2	371	544	821	491	220	4,600	469	467	208	656	140	81
3	445	578	662	609	320	5,150	444	1,150	185	554	140	74
4	379	465	566	470	360	2,990	989	1,800	164	519	223	77
5	345	395	490	903	250	1,390	924	1,520	151	1,710	445	77
6	300	354	941	756	250	342	715	1,150	136	1,410	233	71
7	274	334	3,450	603	317	828	976	953	131	992	205	65
8	258	292	3,280	512	263	994	1,120	843	117	790	181	62
9	223	265	2,000	577	250	759	919	1,180	111	644	159	60
10	221	253	1,500	1,340	220	657	968	1,120	136	505	140	59
11	210	232	1,190	1,050	230	571	923	880	123	410	123	57
12	187	214	975	1,080	220	538	846	708	104	350	114	54
13	172	197	831	963	281	2,580	1,790	574	97	318	105	56
14	163	180	721	753	277	1,890	1,590	567	139	263	97	60
15	154	170	651	610	285	1,570	1,630	672	166	223	86	88
16	142	156	574	403	338	1,660	1,460	731	139	217	84	66
17	136	143	498	360	306	1,440	1,750	675	153	194	99	55
18	128	137	347	370	287	1,050	1,310	572	129	175	148	80
19	119	139	312	370	276	860	1,070	503	208	162	122	62
20	109	171	509	480	236	730	932	600	129	143	150	56
21	101	193	543	705	287	672	798	548	348	129	100	52
22	100	175	396	581	500	745	1,540	473	485	116	81	51
23	125	175	337	549	835	809	1,260	470	3,240	106	79	50
24	1,080	180	330	713	1,200	713	1,420	390	2,280	94	98	49
25	1,390	190	306	750	2,470	652	1,100	341	1,460	134	129	53
26	1,660	229	287	540	3,850	594	952	288	1,060	118	263	55
27	1,040	257	284	450	2,340	572	804	248	666	112	367	51
28	817	413	283	460	1,850	530	693	231	500	165	185	76
29	686	1,290	279	420	3,330	545	608	213	2,020	108	149	105
30	590	2,210	268	400	-----	628	490	205	1,160	125	120	115
31	490	-----	277	340	-----	503	-----	310	-----	200	101	-----
TOTAL	12,731	10,990	25,048	18,746	22,416	42,102	30,956	20,949	16,188	12,557	4,862	2,005
MEAN	411	366	808	605	773	1,358	1,032	676	540	405	157	66.8
MAX	1,560	2,210	3,450	1,340	3,850	5,150	1,790	1,800	3,240	1,710	445	115
MIN	100	137	268	238	220	503	444	205	97	94	78	49

CAL YR 1971 TOTAL 195,004 MEAN 534 MAX 3,450 MIN 37 CFSM 2.37 IN 32.21
WTR YR 1972 TOTAL 219,552 MEAN 600 MAX 5,150 MIN 49 CFSM 2.67 IN 36.30

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2030	7.03	4,570	3- 3	0500	7.74	7,060
2-26	1115	6.96	4,390	6-23	0815	7.07	4,680
2-29	2030	7.24	5,190				

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 mile upstream from Folly Run, and 4.0 miles southwest of Piedmont.

DRAINAGE AREA.--266 sq mi.

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

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

AVERAGE DISCHARGE.--6 years, 499 cfs (25.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,930 cfs Mar. 3 (gage height, 8.09 ft); minimum, 52 cfs Sept. 24 (gage height, 2.27 ft).

Period of record: Maximum discharge, 12,200 cfs Mar. 7, 1967 (gage height, 9.70 ft); minimum, 10 cfs Oct. 2, 3, 1968 (gage height, 1.69 ft).

REMARKS.--Records good. Regulation at low flow by Stony River Reservoir, 39 miles upstream from station (see sta 01595200).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	274	482	1,260	271	390	4,300	480	589	302	1,030	234	97
2	374	588	895	422	370	4,910	496	532	246	714	163	86
3	546	611	715	715	360	5,300	481	1,260	219	622	152	79
4	415	501	615	514	430	3,090	953	1,970	191	587	191	77
5	368	429	526	872	330	1,600	1,030	1,720	175	1,870	512	79
6	324	333	910	850	330	1,050	775	1,270	158	1,740	258	77
7	292	363	3,670	664	360	903	1,010	1,030	150	1,160	219	72
8	280	327	3,650	563	300	1,070	1,250	888	136	917	194	67
9	252	300	2,270	514	290	837	1,000	1,200	129	753	166	64
10	239	270	1,670	1,340	260	722	1,070	1,200	144	594	147	62
11	226	268	1,310	1,120	260	617	1,010	931	144	474	129	59
12	204	248	1,060	1,200	270	629	923	760	122	409	119	59
13	185	229	902	952	322	2,740	2,080	594	108	376	112	56
14	176	211	775	835	319	2,170	1,890	594	129	310	103	62
15	167	193	698	685	317	1,760	1,870	691	193	266	92	86
16	156	196	618	458	383	1,830	1,660	768	152	246	88	77
17	148	170	538	410	353	1,570	1,930	716	172	230	97	59
18	142	163	403	420	328	1,180	1,430	602	134	205	158	85
19	132	164	342	420	322	938	1,150	532	238	188	119	72
20	123	197	495	550	268	784	997	636	147	166	163	61
21	114	222	609	780	298	716	849	608	345	155	112	56
22	112	200	441	660	580	757	1,640	519	580	136	88	55
23	138	200	374	620	917	867	1,430	506	3,430	126	81	53
24	1,350	210	360	800	1,500	760	1,500	420	2,540	114	97	52
25	1,740	220	342	860	2,690	684	1,190	365	1,610	141	136	53
26	1,760	259	320	620	4,120	626	1,010	330	1,190	155	306	56
27	1,140	270	316	520	2,590	606	844	292	749	112	420	58
28	888	446	308	540	2,040	558	730	270	559	198	208	77
29	730	1,540	316	490	3,560	571	650	250	2,570	131	163	117
30	625	2,360	291	450	-----	650	532	246	1,480	131	131	134
31	507	-----	312	390	-----	548	-----	355	-----	230	110	-----
TOTAL	14,127	12,265	27,311	20,505	24,857	45,343	33,860	22,644	18,447	14,486	5,268	2,147
MEAN	456	409	881	661	857	1,463	1,129	730	615	467	170	71.6
MAX	1,760	2,360	3,670	1,340	4,120	5,300	2,080	1,970	3,430	1,870	512	134
MIN	112	163	291	271	260	548	480	246	108	112	81	52

CAL YR 1971 TOTAL 211,466 MEAN 579 MAX 3,670 MIN 40 CFSM 2.18 IN 29.55
WTR YR 1972 TOTAL 241,260 MEAN 659 MAX 5,300 MIN 52 CFSM 2.48 IN 33.72

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2045	7.20	4,860	3-13	1200	7.08	4,650
2-26	1145	7.09	4,670	6-23	0945	7.47	5,440
2-29	2115	7.51	5,520	6-29	0700	6.76	4,070
3- 3	0615	8.09	6,930				

POTOMAC RIVER BASIN

31

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 mile downstream from Savage River, 0.5 mile northwest of Luke, and at mile 53.3.

DRAINAGE AREA.--404 sq mi.

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 above mean sea level, adjustment of 1912. June 27, 1899, to July 15, 1906, nonrecording gage at bridge 1.1 miles downstream at datum about 35 feet lower.

AVERAGE DISCHARGE.--29 years (1899-1905, 1949-1972), 686 cfs (23.06 inches per year), adjusted for storage since 1949.

EXTREMES.--Current year: Maximum discharge, 7,520 cfs Mar. 1 (gage height, 8.46 ft); maximum gage height, 9.97 ft Jan. 17 (backwater from ice); minimum discharge, 116 cfs Sept. 8 (gage height, 1.39 ft).

Period of record: Maximum discharge, 39,400 cfs Oct. 15, 1954 (gage height, 17.15 ft); minimum daily, 6 cfs Sept. 4, 1904.

REMARKS.--Records good. Flow regulated since 1913 by Stony River Reservoir, 45 miles upstream from station (see sta 01595200), and since December 1950, by Savage River Reservoir, 5 miles 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	387	611	2,040	375	509	6,170	578	756	520	1,860	270	142
2	470	705	1,580	503	547	6,770	581	659	400	1,320	206	335
3	670	1,020	1,360	796	484	6,250	573	1,320	350	1,050	190	368
4	545	1,130	1,240	881	551	5,530	759	1,860	310	931	226	130
5	451	757	1,140	1,370	410	4,420	1,180	2,200	280	1,730	518	130
6	445	750	1,350	1,250	410	2,930	889	1,820	250	2,090	307	126
7	408	618	3,980	775	500	1,560	924	1,520	240	1,490	257	120
8	393	444	5,710	680	380	1,510	1,400	1,310	220	1,150	231	124
9	507	409	5,260	643	360	1,190	1,130	1,540	190	960	204	133
10	295	396	3,410	1,620	330	1,040	1,200	2,000	800	800	182	132
11	282	375	1,530	1,660	340	1,160	1,130	1,450	210	660	157	129
12	261	354	1,240	1,600	330	1,320	1,080	1,150	185	560	149	129
13	234	337	1,270	1,080	620	3,220	2,110	1,060	160	520	142	127
14	231	317	1,360	958	860	4,550	2,970	996	170	450	135	130
15	221	303	1,030	760	652	3,140	3,490	1,040	220	370	125	151
16	209	292	756	560	676	2,580	3,330	1,170	230	350	123	152
17	202	273	669	500	565	2,170	3,510	1,140	210	330	144	131
18	194	263	543	920	514	1,560	2,890	1,030	200	300	197	159
19	185	263	460	900	618	1,270	2,140	930	235	280	159	146
20	175	286	552	617	520	1,090	1,680	932	225	250	199	132
21	167	290	730	860	470	1,010	1,250	945	350	190	155	127
22	163	314	757	747	800	1,000	1,770	800	720	180	131	131
23	184	274	485	711	1,300	1,110	1,930	760	3,330	165	123	140
24	1,260	250	472	1,020	1,500	998	2,460	680	3,380	151	151	139
25	1,570	260	456	1,150	3,000	920	2,140	600	2,190	169	194	141
26	2,140	300	430	789	5,100	849	1,380	520	1,620	284	385	144
27	1,830	330	425	799	4,090	792	1,160	450	1,140	374	442	148
28	1,540	528	416	695	3,420	703	1,030	400	875	442	267	164
29	1,070	1,290	422	804	4,440	667	1,240	380	3,320	446	211	202
30	757	2,860	395	605	-----	717	1,070	350	2,850	382	179	204
31	641	-----	415	589	-----	670	-----	540	-----	259	157	-----
TOTAL	18,127	16,599	41,883	27,217	34,656	68,906	48,974	32,388	24,780	20,493	6,516	4,666
MEAN	585	553	1,351	878	1,196	2,223	1,632	1,045	826	661	210	156
MAX	2,140	2,860	5,710	1,660	5,100	6,770	3,510	2,200	3,380	2,090	518	368
MIN	163	250	395	375	330	667	573	350	160	151	123	120

CAL YR 1971 TOTAL 306,726 MEAN 840 MAX 5,710 MIN 100 CFSM 2.08 IN 28.22
WTR YR 1972 TOTAL 345,245 MEAN 943 MAX 6,770 MIN 120 CFSM 2.33 IN 31.77

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 miles downstream from Mill Run, and at mile 32.6.

DRAINAGE AREA.--596 sq mi.

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

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

AVERAGE DISCHARGE.--34 years, 859 cfs (19.57 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 8,700 cfs Mar. 3 (gage height, 10.67 ft); minimum, 133 cfs Sept. 9 (gage height, 1.91 ft).

Period of record: Maximum discharge, 37,000 cfs Oct. 16, 1954 (gage height, 23.23 ft); minimum, 31 cfs Dec. 18, 19, 1943 (gage height, 1.37 ft), result of freezeup.

Flood of Mar. 29, 1924, reached a stage of about 24 ft (discharge, about 55,000 cfs). Flood of Mar. 17, 1936, reached a stage of about 23.5 ft, from floodmarks (discharge, about 50,000 cfs).

REMARKS.--Records good. Some regulation at low flow by Stony River Reservoir, 66 miles 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 SECCND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	425	742	2,490	468	652	7,400	739	969	652	2,680	347	191
2	462	863	1,870	554	700	8,120	742	906	495	1,780	307	303
3	733	1,050	1,580	1,050	645	7,610	723	1,760	442	1,340	268	416
4	660	1,260	1,440	941	700	6,170	837	2,520	388	1,150	280	261
5	556	1,040	1,300	1,420	520	4,970	1,440	2,880	350	1,980	560	170
6	508	822	1,350	1,610	520	3,370	1,050	2,320	321	2,580	438	159
7	452	723	4,010	999	664	1,820	1,090	1,920	303	1,790	335	147
8	433	551	6,760	884	457	1,770	1,770	1,660	275	1,430	307	138
9	496	489	6,050	815	460	1,440	1,480	2,070	246	1,190	261	150
10	428	468	4,340	1,520	429	1,230	1,530	2,650	250	1,010	232	150
11	322	447	2,060	1,840	441	1,250	1,450	2,070	266	830	208	149
12	303	424	1,650	1,930	433	1,580	1,380	1,550	232	703	191	149
13	276	402	1,520	1,360	824	3,940	3,080	1,420	208	640	185	150
14	257	378	1,610	1,210	1,120	5,920	4,000	1,350	214	556	173	148
15	250	358	1,380	1,040	909	3,990	4,460	1,420	287	470	164	163
16	239	347	1,020	680	1,050	3,130	4,300	1,550	295	424	150	183
17	228	328	901	650	983	2,840	4,410	1,480	268	412	167	160
18	221	313	779	1,230	849	2,100	3,500	1,320	257	370	228	192
19	211	307	627	1,200	856	1,690	2,540	1,180	291	345	225	193
20	201	313	660	811	668	1,440	2,090	1,190	284	324	201	160
21	191	350	943	971	601	1,310	1,560	1,220	491	292	214	148
22	182	381	942	953	1,130	1,300	2,250	1,060	977	260	170	146
23	195	338	646	893	1,710	1,400	2,670	974	3,890	232	150	153
24	1,130	304	592	1,050	2,400	1,260	2,850	882	4,060	211	155	158
25	1,970	315	582	1,400	4,160	1,150	2,680	770	2,490	201	201	160
26	2,700	359	547	1,030	6,670	1,070	1,750	674	1,820	303	520	165
27	2,120	388	534	987	5,320	1,010	1,480	572	1,290	407	574	166
28	1,740	568	518	899	4,170	920	1,260	519	979	513	424	194
29	1,390	1,290	513	991	4,900	856	1,450	481	5,620	471	299	250
30	938	3,690	488	813	-----	889	1,330	460	4,900	492	250	277
31	810	-----	498	769	-----	865	-----	679	-----	366	211	-----
TOTAL	21,027	19,608	50,200	32,968	45,065	83,810	61,891	42,476	32,845	25,752	8,395	5,549
MEAN	678	654	1,619	1,063	1,554	2,704	2,063	1,370	1,095	831	271	185
MAX	2,700	3,690	6,760	1,930	6,670	8,120	4,460	2,880	5,620	2,680	574	416
MIN	182	304	488	468	429	856	723	460	208	201	150	138
CAL YR 1971	TOTAL 366,493	MEAN 1,004	MAX 7,320	MIN 115	CFSM 1.68	IN 22.87						
WTR YR 1972	TOTAL 429,586	MEAN 1,174	MAX 8,120	MIN 138	CFSM 1.97	IN 26.81						

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, 2.1 miles downstream from Wills Creek, 2.0 miles south of Cumberland, and at mile 19.6.

DRAINAGE AREA.--875 sq mi.

PERIOD OF RECORD.--May 1929 to current year. Gage-height records collected at various sites about 2 miles upstream from September 1901 to December 1932 and thereafter at present site, are contained in reports of U.S. Weather Bureau.

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

AVERAGE DISCHARGE.--43 years, 1,212 cfs (18.81 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 17,400 cfs June 23 (gage height, 14.55 ft); minimum, 182 cfs Sept. 9 (gage height, 2.34 ft).

Period of record: Maximum discharge, 88,200 cfs Mar. 17, 1936 (gage height, 29.1 ft), from rating curve extended above 21,000 cfs on basis of slope-area measurement of peak flow; minimum (river only), 12 cfs Sept. 22, 1932 (gage height, 2.38 ft); minimum daily (including flow in canal), 38 cfs Sept. 24, 1932.

Flood of June 1, 1889, reached a stage of 29.2 ft (discharge, about 89,000 cfs). Flood of Mar. 29, 1924, reached a stage of 28.4 ft (discharge, about 82,000 cfs).

REMARKS.--Records good. Regulation by Stony River Reservoir, about 79 miles upstream from station (see sta 01595200), and since December 1950, by Savage River Reservoir. Prior to July 1957, small amounts 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	522	919	3,680	634	840	11,800	1,010	1,470	923	4,830	442	253
2	532	1,110	2,570	757	876	13,300	1,000	1,270	744	3,000	411	233
3	756	1,290	2,040	1,270	840	12,600	978	2,270	658	2,050	375	423
4	761	1,570	1,770	1,160	906	9,140	1,030	3,890	588	1,640	450	485
5	656	1,370	1,570	1,670	680	7,260	1,840	4,730	530	2,180	596	224
6	600	914	1,700	2,070	680	5,210	1,600	3,820	487	3,610	590	214
7	536	934	5,350	1,400	859	2,860	1,490	3,040	462	2,340	476	201
8	505	824	10,500	1,200	650	2,680	2,300	2,520	424	1,770	440	191
9	478	662	9,430	1,100	610	2,250	2,210	3,300	382	1,450	364	191
10	600	627	7,000	1,620	578	1,840	2,060	4,500	374	1,230	316	201
11	389	599	3,540	2,290	576	1,670	2,040	3,870	391	1,040	289	196
12	370	564	2,550	2,460	531	2,140	1,910	2,610	358	903	267	201
13	340	533	2,090	1,830	1,220	6,830	4,560	2,250	350	833	257	196
14	316	503	2,130	1,640	1,990	9,810	7,140	2,080	371	745	248	214
15	311	474	1,870	1,400	1,460	6,950	7,700	2,130	405	656	238	214
16	300	458	1,360	979	1,640	5,290	8,860	2,270	447	588	219	229
17	289	437	1,200	880	1,490	4,970	10,400	2,140	444	591	219	224
18	278	414	1,070	1,550	1,270	3,790	6,370	1,950	491	550	278	300
19	267	402	885	1,490	1,230	2,890	4,590	1,730	445	486	316	267
20	257	404	896	1,110	1,070	2,330	3,610	1,650	459	469	262	229
21	248	447	1,130	1,140	850	2,010	2,540	1,700	1,240	442	294	201
22	238	490	1,040	1,170	1,410	1,580	3,070	1,460	5,010	395	243	196
23	243	454	976	1,100	2,200	2,030	4,240	1,290	12,900	356	219	191
24	995	417	794	1,180	2,650	1,800	3,920	1,180	9,850	326	214	205
25	2,460	426	781	1,640	5,540	1,610	4,160	1,040	5,220	305	262	210
26	3,770	477	743	1,270	9,090	1,470	2,640	921	3,370	328	560	210
27	2,840	519	727	1,120	8,150	1,370	2,150	807	2,230	407	616	238
28	2,190	689	700	1,180	6,380	1,260	1,770	731	1,560	545	552	253
29	1,740	1,470	677	1,130	7,570	1,160	1,790	683	6,880	565	389	328
30	1,140	4,930	660	1,130	-----	1,150	1,800	680	8,840	569	322	364
31	994	-----	658	917	-----	1,160	-----	1,000	-----	568	278	-----
TOTAL	25,922	25,367	72,097	41,487	63,886	132,610	101,278	64,982	66,833	35,767	11,002	7,282
MEAN	836	846	2,326	1,338	2,203	4,278	3,376	2,096	2,228	1,154	355	243
MAX	3,770	4,930	10,500	2,460	9,090	13,300	10,400	4,730	12,900	4,830	616	485
MIN	238	402	658	634	576	1,150	978	680	350	305	214	191
CAL YR 1971	TOTAL 540,906	MEAN 1,482	MAX 12,400	MIN 135	CFSM 1.69	IN 22.99						
WTR YR 1972	TOTAL 648,513	MEAN 1,772	MAX 13,300	MIN 191	CFSM 2.02	IN 27.56						

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	0800	10.69	11,000	4-17	0400	11.02	11,500
2-26	1800	10.28	10,400	6-23	1800	14.55	17,400
3- 3	0430	12.70	14,300	6-29	2100	11.38	12,100
3-14	0230	10.54	10,800				

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 downstream from Hazel Run, 1.0 mile downstream from Cabin Run, 4.0 miles northeast of Headsville, 8.0 miles east of Keyser, and at mile 12.5.

DRAINAGE AREA.--219 sq mi.

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

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

AVERAGE DISCHARGE.--34 years, 159 cfs (9.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,090 cfs June 23 (gage height, 9.93 ft); minimum daily, 16 cfs Sept. 23-27.

Period of record: Maximum discharge, 16,000 cfs Aug. 18, 1955 (gage height, 12.20 ft), from rating curve extended above 4,900 cfs on basis of contracted-opening measurement at gage height 11.53 ft; minimum, 1.2 cfs Sept. 10-12, 1965; minimum gage height, 2.02 ft Oct. 2, 1953.

REMARKS.--Records good. The flow from 95.6 sq mi upstream from station is partially controlled, but not diverted, by several floodwater detention reservoirs with a total combined detention capacity of 16,000 acre-ft.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	119	554	79	131	729	125	235	107	711	59	65
2	47	109	408	105	119	620	119	211	97	477	51	49
3	73	91	339	129	127	617	113	960	89	399	47	40
4	89	73	291	125	199	501	117	1,600	83	351	43	34
5	86	63	243	137	180	450	117	1,070	80	617	70	31
6	76	54	255	139	170	396	110	708	69	659	62	29
7	66	48	378	137	160	366	141	561	68	484	49	27
8	55	45	519	127	150	327	270	491	62	390	42	25
9	47	43	402	123	140	285	345	683	59	333	40	23
10	44	41	342	131	130	255	345	760	58	282	32	21
11	42	40	294	143	120	223	309	564	50	238	29	20
12	39	38	249	181	121	203	267	456	48	207	28	19
13	35	36	218	201	438	830	886	393	48	187	27	19
14	32	35	195	197	743	799	799	369	51	169	26	18
15	30	34	177	175	690	680	830	354	54	155	25	21
16	29	33	161	159	757	729	809	357	49	112	25	20
17	29	32	145	145	624	690	753	291	54	89	26	18
18	28	31	129	139	498	550	529	243	48	75	30	18
19	27	30	117	153	447	450	429	209	72	63	27	19
20	25	30	115	127	360	390	375	246	54	55	26	18
21	24	30	115	133	360	348	318	233	165	53	25	17
22	23	29	109	129	638	330	680	209	515	49	23	17
23	24	29	99	125	645	288	694	233	2,110	45	22	16
24	109	30	96	133	687	243	599	201	739	41	30	16
25	390	33	94	143	1,030	213	494	179	438	38	43	16
26	596	33	93	143	2,100	193	420	155	327	36	41	16
27	345	36	91	141	1,400	177	360	139	258	33	79	16
28	249	47	88	143	904	165	312	127	205	40	143	20
29	201	676	83	159	774	153	270	115	1,380	41	131	24
30	171	956	82	137	-----	145	238	110	1,430	41	105	27
31	143	-----	80	127	-----	133	-----	131	-----	4	83	-----
TOTAL	3,221	2,924	6,561	4,365	14,842	12,478	12,173	12,593	8,867	6,519	1,489	719
MEAN	104	97.5	212	141	512	403	406	406	296	210	48.0	24.0
MAX	596	956	554	201	2,100	830	886	1,600	2,110	711	143	65
MIN	23	29	80	79	119	133	110	110	48	33	22	16
CFSM	.47	.45	.97	.64	2.34	1.84	1.85	1.85	1.35	.96	.22	.11
IN.	.55	.50	1.11	.74	2.52	2.12	2.07	2.14	1.51	1.11	.25	.12
CAL YR 1971	TOTAL 71,842.0		MEAN 197	MAX 2,220	MIN 7.2	CFSM .90	IN 12.20					
WTR YR 1972	TOTAL 86,751.0		MEAN 237	MAX 2,110	MIN 16	CFSM 1.08	IN 14.74					

01605600 Friends Run near Franklin, W. Va.

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

DRAINAGE AREA.--4.55 sq mi.

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 (from topographic map).

EXTREMES.--Current year: Maximum daily discharge, 40 cfs June 21; minimum, 0.14 cfs Sept. 26, 27; minimum gage height, 1.18 ft Nov. 24, Sept. 26, 27.

Period of record: Maximum discharge recorded, 58 cfs Dec. 31, 1969 (gage height, 1.87 ft), from rating curve extended above 40 cfs on basis of culvert rating computation; maximum gage height, 2.25 ft Jan. 30, 1971; no flow at times most years.

REMARKS.--Records fair except those for period of no gage height record, which are poor. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	3.2	4.7	1.2	2.0	18	2.7	12	4.0	11	1.4	.34
2	3.8	2.7	4.4	2.2	2.0	19	2.4	13	3.0	6.5	2.2	.32
3	7.0	2.7	3.9	1.8	2.0	18	2.2	13	3.0	5.2	2.2	.34
4	6.5	2.4	3.7	1.6	1.8	14	2.4	32	2.5	4.4	2.4	.44
5	4.6	2.2	3.2	1.8	1.8	13	2.0	30	2.5	15	2.2	.38
6	3.5	2.0	3.7	1.8	2.7	10	2.0	22	2.0	21	1.8	.36
7	2.9	1.8	22	1.8	1.4	8.7	3.9	17	2.0	14	1.6	.32
8	2.5	1.8	26	1.8	1.0	7.8	5.2	15	1.5	3.2	1.6	.30
9	2.1	1.4	14	2.4	1.0	6.5	5.8	14	1.5	2.4	1.2	.30
10	2.0	1.4	10	2.9	1.0	5.8	5.8	12	1.5	2.4	1.0	.28
11	1.7	1.0	7.4	2.4	1.0	4.9	5.5	10	1.5	2.2	.64	.28
12	1.4	.64	6.1	2.4	1.2	4.7	4.7	10	1.0	1.8	.58	.28
13	1.2	.64	4.9	2.7	1.8	4.4	10	8.7	1.5	2.4	.80	.28
14	1.0	.58	4.4	2.7	1.6	4.7	13	8.7	1.5	2.7	.80	.30
15	.88	.52	4.2	2.2	2.0	4.2	14	8.7	2.0	1.8	.64	.34
16	.77	.36	3.9	2.0	2.4	4.4	12	7.4	1.5	1.4	.64	.26
17	.71	.38	3.4	2.2	2.4	4.2	11	6.1	1.5	.80	1.0	.22
18	.63	.36	3.4	1.8	2.2	3.7	9.1	6.1	1.5	1.0	1.2	.22
19	.48	.26	3.2	1.6	2.0	3.2	8.7	6.1	1.5	2.2	.64	.20
20	.38	.30	3.2	1.2	2.0	2.7	7.4	10	1.5	1.4	.64	.18
21	.38	1.0	2.7	1.2	2.0	2.7	5.8	12	40	1.2	.52	.20
22	.38	.32	2.2	1.0	3.4	4.7	9.1	11	30	1.2	.44	.20
23	.87	.20	2.0	1.0	2.9	4.2	11	9.5	19	.80	.58	.16
24	3.2	.44	2.0	1.4	9.5	4.4	7.4	8.5	15	.44	.80	.15
25	6.5	.34	2.0	1.4	19	4.4	4.9	7.5	12	1.6	1.0	.15
26	9.5	.24	2.0	1.4	29	4.2	5.5	6.0	10	1.2	.64	.15
27	7.4	.44	2.0	1.6	18	3.9	11	5.0	14	.80	.40	.20
28	5.2	.80	1.6	2.4	17	3.7	10	4.5	15	.52	.38	.24
29	4.4	3.9	1.4	2.2	16	3.4	11	3.5	18	.58	.38	.36
30	3.9	5.2	1.4	2.4	-----	3.2	12	4.0	15	2.7	.36	.40
31	3.7	-----	1.4	2.2	-----	2.7	-----	4.5	-----	2.2	.34	-----
TOTAL	90.88	39.52	160.4	58.7	152.1	203.4	217.5	337.8	226.5	116.04	31.02	8.15
MEAN	2.93	1.32	5.17	1.89	5.24	6.56	7.25	10.9	7.55	3.74	1.00	.27
MAX	9.5	5.2	26	2.9	29	19	14	32	40	21	2.4	.44
MIN	.38	.20	1.4	1.0	1.0	2.7	2.0	3.5	1.0	.44	.34	.15
CFSM	.64	.29	1.14	.42	1.15	1.44	1.59	2.40	1.66	.82	.22	.06
IN#	.74	.32	1.31	.48	1.24	1.66	1.78	2.76	1.85	.95	.25	.07
IN.##	3.46	1.69	.67	1.93	1.47	-	-	-	-	5.45	2.40	1.99

CAL YR 1971 TOTAL 1,240.06 MEAN 3.40 MAX 26 MIN 0 CFSM .75 IN# 10.14
WTR YR 1972 TOTAL 1,642.01 MEAN 4.49 MAX 40 MIN .15 CFSM .99 IN# 13.42

PEAK DISCHARGE (BASE, 40 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	0700	2.14	49	6-21	unknown	-	unknown

Runoff.

Rainfall.

NOTE.--No gage-height record May 24 to June 22.

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 miles downstream from North Fork South Branch Potomac River, 2.5 miles west of Petersburg, and at mile 72.6.

DRAINAGE AREA.--642 sq mi.

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

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

AVERAGE DISCHARGE.--44 years, 683 cfs (14.45 inches per year).

EXTREMES.--Current year: Maximum discharge, 15,600 cfs Feb. 26 (gage height, 11.28 ft); minimum, 109 cfs Sept. 24, 25, 26, 27 (gage height, 1.32 ft).

Period of record: Maximum discharge, 62,000 cfs June 17, 1949 (gage height, 22.83 ft), from rating curve extended above 17,000 cfs on basis of slope-area measurement of peak flow; minimum, 42 cfs Sept. 28, 29, 1959, Sept. 11, 12, 1966; minimum gage height, 0.94 ft Sept. 28, 29, 1959; minimum daily discharge, 43 cfs Sept. 27-29, 1959, Sept. 11, 12, 1966.

Flood in 1877 reached a stage of 21.2 ft, from floodmarks.

REMARKS.--Records good. Occasional low-flow regulation from power plant 800 ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	374	584	1,300	318	868	5,500	676	881	594	1,170	1,080	171
2	1,030	540	954	343	784	5,890	652	823	512	937	810	163
3	1,100	522	764	561	743	5,980	600	3,380	455	813	678	158
4	873	522	687	535	769	3,550	630	5,030	411	727	633	175
5	749	468	592	686	552	2,440	792	3,880	378	2,850	685	216
6	645	434	559	822	500	1,780	730	2,620	352	4,060	556	190
7	536	406	3,020	783	500	1,460	832	1,950	335	2,500	475	168
8	451	380	4,890	702	450	1,280	2,500	1,600	313	1,710	458	152
9	386	350	2,740	645	400	1,100	2,060	1,750	290	1,280	397	144
10	350	332	1,900	1,010	400	984	1,590	1,690	283	1,000	349	138
11	328	314	1,440	1,200	350	855	1,310	1,450	277	835	311	133
12	292	300	1,130	1,130	402	803	1,120	1,260	254	708	287	132
13	261	288	949	1,020	557	852	2,110	1,120	244	673	274	132
14	243	268	807	935	648	1,010	3,240	1,040	266	571	470	131
15	230	253	715	801	682	1,020	2,600	1,120	447	499	366	138
16	219	246	653	554	1,020	914	2,150	1,190	492	445	306	143
17	216	237	577	544	1,050	971	3,120	1,090	560	449	305	130
18	224	230	525	637	916	909	2,610	1,020	481	432	518	122
19	207	224	452	591	817	819	2,000	958	573	393	415	122
20	192	222	492	544	653	740	1,630	1,890	455	401	395	115
21	181	244	650	618	608	693	1,360	1,920	4,000	495	329	113
22	175	260	579	623	1,460	833	2,560	1,730	7,430	430	277	113
23	188	236	514	607	1,750	1,220	3,230	1,780	5,860	374	256	113
24	797	226	488	1,060	4,960	1,170	2,970	1,480	3,880	324	248	111
25	1,380	236	476	1,360	5,450	1,050	2,460	1,240	2,320	291	266	111
26	2,130	243	445	1,250	11,400	944	1,960	1,030	1,590	268	314	111
27	1,440	256	426	1,100	7,790	865	1,570	871	1,200	250	268	113
28	1,080	331	356	1,270	4,280	810	1,290	761	989	263	235	120
29	849	532	370	1,410	4,130	771	1,110	678	1,250	279	217	141
30	710	1,610	345	1,230	-----	767	984	621	1,470	1,140	200	162
31	633	-----	331	1,030	-----	723	-----	678	-----	1,560	183	-----
TOTAL	18,469	11,294	30,166	25,919	54,889	48,703	52,446	48,531	37,961	28,127	12,561	4,181
MEAN	596	376	973	836	1,893	1,571	1,748	1,566	1,265	907	405	139
MAX	2,130	1,610	4,890	1,410	11,400	5,980	3,240	5,030	7,430	4,060	1,080	216
MIN	175	222	331	318	350	693	600	621	244	250	183	111
CFSM	.93	.59	1.52	1.30	2.95	2.45	2.72	2.44	1.97	1.41	.63	.22
IN.	1.07	.65	1.75	1.50	3.18	2.82	3.04	2.81	2.20	1.63	.73	.24

CAL YR 1971 TOTAL 311,181 MEAN 853 MAX 7,280 MIN 91 CFSM 1.33 IN 18.03
WTR YR 1972 TOTAL 373,247 MEAN 1,020 MAX 11,400 MIN 111 CFSM 1.59 IN 21.63

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2230	7.44	6,790	3- 3	0645	7.42	6,760
2-26	1515	11.28	15,600	6-21	2400	9.25	10,600

POTOMAC RIVER BASIN

37

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 upstream from bridge on U.S. Highway 33, 0.1 mile upstream from Hawes Run, 0.4 mile north of Brandywine, 0.9 mile downstream from Broad Run, and at mile 42.9.

DRAINAGE AREA.--102 sq mi.

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

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

AVERAGE DISCHARGE.--29 years, 95.1 cfs (12.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,170 cfs June 21 (gage height, 8.55 ft), from rating curve extended as explained below; minimum, 14 cfs Sept. 11, 12, 17, 18, 19, 20, 21, 24 (gage height, 1.83 ft).
Period of record: Maximum discharge, 41,200 cfs June 17, 1949 (gage height, 14.6 ft, from floodmarks), from rating curve extended about 5,300 cfs on basis of slope-area measurement of peak flow; minimum, 0.3 cfs Dec. 1, 10, 1958, result of freezeup; minimum gage height observed, 0.95 ft Aug. 10, 14, 15, 1950.

REMARKS.--Records good.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	85	206	30	50	469	60	98	84	203	170	19
2	1,430	73	145	37	54	445	58	90	71	136	124	19
3	824	73	114	42	65	361	55	104	63	109	106	19
4	409	66	95	42	225	254	53	509	58	88	100	20
5	251	57	80	48	158	203	51	417	53	878	96	20
6	175	51	72	49	110	160	48	266	49	675	84	19
7	129	46	501	50	90	140	63	205	47	302	82	18
8	101	43	617	49	75	124	195	168	43	185	80	17
9	82	39	329	47	65	109	142	175	40	134	69	17
10	66	38	227	56	60	98	124	148	38	108	60	16
11	55	37	170	55	55	88	119	130	36	95	53	15
12	48	35	129	55	56	84	109	122	33	80	47	15
13	42	34	110	55	120	80	119	112	32	85	44	16
14	37	32	114	59	189	79	130	111	43	71	43	16
15	34	30	82	53	223	76	128	124	53	63	38	17
16	32	29	74	42	343	74	136	152	40	59	35	17
17	37	27	65	44	276	79	263	136	39	79	38	15
18	35	26	58	47	205	114	228	124	37	60	42	15
19	31	25	52	46	168	87	185	119	35	49	35	15
20	28	25	53	45	129	63	156	218	39	71	43	14
21	27	26	51	45	105	60	132	272	2,910	56	35	15
22	26	25	46	42	143	72	254	228	2,380	46	32	15
23	31	24	40	41	189	90	341	180	665	48	31	15
24	381	24	38	56	216	101	269	146	299	40	30	15
25	1,070	26	37	56	476	98	218	122	208	38	29	16
26	860	25	36	52	1,710	93	180	104	124	35	29	17
27	413	27	36	51	938	85	152	88	100	31	27	19
28	230	32	35	57	461	79	130	79	95	34	26	20
29	155	112	33	57	377	74	117	71	337	85	25	21
30	120	305	33	57	-----	69	108	68	317	389	23	34
31	99	-----	32	54	-----	63	-----	95	-----	309	21	-----
TOTAL	7,366	1,497	3,710	1,519	7,331	4,071	4,323	4,981	8,368	4,641	1,697	526
MEAN	238	49.9	120	49.0	253	131	144	161	279	150	54.7	17.5
MAX	1,430	305	617	59	1,710	469	341	509	2,910	878	170	34
MIN	26	24	32	30	50	60	48	68	32	31	21	14
CFSM	2.33	.49	1.18	.48	2.48	1.28	1.41	1.58	2.74	1.47	.54	.17
IN.	2.69	.55	1.35	.55	2.67	1.48	1.58	1.82	3.05	1.69	.62	.19
CAL YR 1971	TOTAL 51,451.9 MEAN 141 MAX 4,100 MIN 7.4 CFSM 1.38 IN 18.76											
WTR YR 1972	TOTAL 50,030.0 MEAN 137 MAX 2,910 MIN 14 CFSM 1.34 IN 18.25											

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-2	0730	5.71	1,810	2-26	1230	6.22	2,340
10-25	1730	5.80	1,900	6-21	2130	8.55	6,170

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 mile downstream from Stony Creek, 3.5 miles south of Moorefield, and at mile 6.0.

DRAINAGE AREA.--283 sq mi.

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

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

AVERAGE DISCHARGE.--41 years, 208 cfs (9.98 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,740 cfs June 22 (gage height, 7.28 ft); minimum, 20 cfs Sept. 19-27 (gage height, 1.09 ft).

Period of record: Maximum discharge, 39,000 cfs June 18, 1949 (gage height, 16.1 ft), from rating curve extended above 7,000 cfs on basis of slope-area measurement of peak flow; minimum, 4.4 cfs Sept. 10, 11, 1965, Sept. 9-11, 1966 (gage height, 0.92 ft).

REMARKS.--Records good.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	252	580	69	109	1,190	118	248	182	673	404	30
2	937	218	427	76	106	1,130	112	225	156	455	275	30
3	1,520	199	328	79	120	930	106	535	133	332	222	28
4	951	189	275	87	297	701	104	1,620	118	263	199	31
5	610	166	233	90	368	540	95	1,440	106	535	179	31
6	446	146	207	93	305	431	90	870	98	1,480	159	30
7	344	136	233	95	230	350	98	625	90	882	136	28
8	276	120	1,030	93	190	305	248	500	82	570	126	26
9	220	112	792	93	170	267	359	510	74	409	115	25
10	190	106	575	95	150	233	323	505	74	305	98	24
11	162	98	450	104	130	207	305	445	65	248	85	22
12	135	93	359	100	139	185	282	391	61	207	74	22
13	119	90	297	95	166	182	413	337	57	185	69	22
14	105	85	256	100	271	176	635	310	61	182	67	22
15	96	79	222	112	350	172	525	332	61	199	63	25
16	90	74	199	136	590	166	450	450	74	176	59	24
17	85	69	182	71	620	169	530	427	69	218	65	21
18	87	67	166	98	515	169	550	373	67	214	69	22
19	83	63	146	95	431	192	455	332	69	172	71	22
20	79	61	133	93	359	162	395	690	65	152	63	20
21	74	63	133	93	282	139	337	840	780	143	61	20
22	72	63	123	90	332	139	520	701	4,590	120	55	20
23	72	59	109	87	485	152	965	575	3,540	115	52	20
24	595	61	101	90	525	169	828	450	1,770	104	48	20
25	1,340	67	95	101	1,060	169	662	359	965	90	46	20
26	1,830	59	90	101	2,850	166	540	290	510	76	45	20
27	1,000	63	87	98	2,680	159	440	237	359	71	43	21
28	640	71	85	104	1,290	149	368	199	278	67	39	25
29	445	169	79	112	1,010	139	314	176	550	69	36	25
30	341	600	76	112	-----	136	278	159	1,050	185	34	29
31	286	-----	74	112	-----	123	-----	179	-----	600	33	-----
TOTAL	13,423	3,698	8,142	2,974	16,130	9,497	11,445	15,330	16,154	9,497	3,090	725
MEAN	433	123	263	95.9	556	306	382	495	538	306	99.7	24.2
MAX	1,830	600	1,030	136	2,850	1,190	965	1,620	4,590	1,480	404	31
MIN	72	59	74	69	106	123	90	159	57	67	33	20
CFSM	1.53	.43	.93	.34	1.96	1.08	1.35	1.75	1.90	1.08	.35	.09
IN.	1.76	.49	1.07	.39	2.12	1.25	1.50	2.02	2.12	1.25	.41	.10

CAL YR 1971 TOTAL 109,495 MEAN 300 MAX 5,310 MIN 26 CFSM 1.06 IN 14.39
WTR YR 1972 TOTAL 110,105 MEAN 301 MAX 4,590 MIN 20 CFSM 1.06 IN 14.47

PEAK DISCHARGE (BASE, 2,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	2200	6.20	3,900	6-22	1000	7.28	5,740

POTOMAC RIVER BASIN

39

01608050 Fort Run near Moorefield, W. Va.

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

DRAINAGE AREA.--4.92 sq mi.

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 (from topographic map).

EXTREMES.--Current year: Maximum discharge, 888 cfs June 23 (gage height, 8.49 ft, from floodmarks), from rating curve extended as explained below; no flow Sept. 2-6, 8-30.

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

REMARKS.--Records fair except those for period of no gage-height record, which are poor. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	2.6	12	1.1	3.1	24	1.9	3.1	2.5	10	1.3	.01
2	1.1	2.6	7.4	4.1	3.1	18	2.0	3.3	2.5	8.3	.96	0
3	2.8	2.2	5.5	5.5	12	12	1.9	26	2.0	4.5	.80	0
4	3.3	2.2	4.3	4.9	17	7.4	1.7	56	2.0	1.9	.88	0
5	2.6	2.0	3.6	5.2	6.6	5.9	1.7	13	1.5	15	1.3	0
6	2.0	1.7	3.1	5.2	5.9	4.6	1.6	3.6	1.5	20	.88	0
7	1.7	1.9	5.5	4.9	4.5	4.9	4.3	4.3	1.5	13	.80	.01
8	1.6	1.9	11	4.3	4.0	4.3	9.7	3.1	1.5	14	.61	0
9	1.3	1.7	9.2	3.8	3.5	3.6	10	5.2	1.0	9.3	.48	0
10	1.1	1.6	7.0	4.1	3.5	3.1	11	7.0	1.0	5.5	.39	0
11	.96	1.6	5.9	3.8	3.0	2.6	9.7	5.9	1.0	2.7	.33	0
12	.84	1.4	4.6	4.1	3.5	2.4	7.9	5.9	1.0	1.5	.26	0
13	.64	1.3	4.1	4.1	14	5.5	19	4.1	1.0	1.1	.24	0
14	.50	1.1	3.3	4.1	13	7.9	22	3.8	1.0	.88	.20	0
15	.40	.96	3.1	3.6	18	8.3	11	4.9	2.0	8.0	.15	0
16	.35	.96	2.8	3.5	14	8.8	8.3	6.6	1.5	22	.15	0
17	.40	.96	2.4	3.0	13	9.2	7.4	5.9	1.0	12	.24	0
18	.30	.96	2.4	3.1	7.9	7.9	6.6	3.3	1.0	9.9	.29	0
19	.27	.84	2.0	2.8	7.4	6.6	5.9	3.6	1.0	6.9	.26	0
20	.24	.84	2.0	2.6	6.2	5.5	5.2	8.8	1.5	4.5	.24	0
21	.21	.84	2.0	2.4	5.9	4.9	4.3	5.5	25	2.4	.19	0
22	.21	.84	1.7	2.4	12	4.9	24	4.1	100	1.5	.15	0
23	.24	.64	1.4	2.2	13	4.1	25	3.6	450	.96	.13	0
24	13	.57	1.4	3.1	14	3.6	19	4.3	100	.66	.11	0
25	30	.96	1.4	3.1	28	3.1	14	5.0	35	.61	.07	0
26	26	.74	1.4	2.8	62	2.8	9.2	4.0	10	.45	.05	0
27	12	.96	1.4	2.8	15	2.6	7.0	3.5	3.5	.61	.09	0
28	6.6	2.2	1.3	3.6	18	2.6	5.2	3.0	3.5	.56	.17	0
29	4.6	16	1.1	3.3	23	2.4	4.3	2.5	15	.45	.13	0
30	3.6	22	1.1	3.3	-----	2.4	3.8	2.5	13	1.9	.09	0
31	2.8	-----	1.1	3.3	-----	2.0	-----	3.5	-----	1.9	.04	-----
TOTAL	122.40	77.07	116.5	110.1	354.1	187.9	264.6	218.9	784.0	182.98	11.98	.02
MEAN	3.95	2.57	3.76	3.55	12.2	6.06	8.82	7.06	26.1	5.90	.39	.0007
MAX	30	22	12	5.5	62	24	25	56	450	22	1.3	.01
MIN	.21	.57	1.1	1.1	3.0	2.0	1.6	2.5	1.0	.45	.04	0
CFSM	.80	.52	.76	.72	2.48	1.23	1.79	1.44	5.30	1.20	.08	.0001
IN.†	.93	.58	.88	.83	2.68	1.42	2.00	1.66	5.93	1.38	.09	0
IN.††	2.73	-	-	1.93	3.16	1.43	3.38	5.94	5.70	-	-	-

CAL YR 1971 TOTAL 1,737.97 MEAN 4.76 MAX 85 MIN 0 CFSM .97 IN.† 13.14
WTR YR 1972 TOTAL 2,430.55 MEAN 6.64 MAX 450 MIN 0 CFSM 1.35 IN.† 18.38

PEAK DISCHARGE (BASE, 80 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	0830	3.18	137	6-23	a0630	b8.49	888
5-4	0600	2.86	110				

† Runoff.

†† Rainfall.

a About.

b From floodmarks.

NOTE.--No gage-height record May 25 to July 1.

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 upstream from culvert on Secondary State Route 28/1, 0.7 mile upstream from mouth, and 2.5 miles northeast of Romney.

DRAINAGE AREA.--4.37 sq mi.

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 (from topographic map).

EXTREMES.--Current year: Maximum discharge, 438 cfs June 22 (gage height, 7.15 ft), from rating curve extended as explained below; no flow Aug. 16, Aug. 18 to Sept. 30.

Period of record: Maximum discharge, 438 cfs June 22, 1972 (gage height, 7.15 ft), from rating curve extended above 190 cfs on basis of computations of flow through culvert and flow-over-road measurement at gage height 8.00 ft; no flow at times each year.

Flood of July 29, 1969, reached a stage of 8.00 ft, from floodmark (discharge, 550 cfs), from rating curve extended as explained above.

REMARKS.--Records fair. Rainfall records collected at site since August 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	1.2	9.9	.12	.60	13	4.5	4.7	.68	3.6	.02	
2	.18	1.4	5.8	1.7	.52	8.3	4.7	4.7	.68	2.0	.02	
3	.18	1.4	3.8	3.0	1.4	6.6	4.5	24	.29	1.5	.02	
4	.15	1.3	2.3	2.2	9.0	4.9	4.2	33	.29	1.2	.03	
5	.15	1.1	1.4	3.4	5.6	4.2	4.7	22	.60	7.8	.06	
6	.24	.98	2.0	3.0	4.0	3.4	4.7	13	.60	8.3	.15	
7	.29	.78	7.2	2.5	2.5	3.0	7.2	8.3	.44	3.8	.15	
8	.29	.68	12	2.0	1.5	2.9	13	6.4	.24	2.3	.03	
9	.29	.60	8.6	1.5	1.0	2.2	17	12	.18	1.5	.03	
10	.24	.44	6.6	2.5	1.0	1.7	18	23	.12	1.1	.02	
11	.24	.44	4.7	2.5	.80	1.7	18	15	.08	.78	.02	
12	.18	.34	3.2	6.4	.88	1.5	17	9.5	.06	.60	.02	
13	.18	.29	2.3	6.1	36	24	26	6.9	.04	.52	.01	
14	.15	.29	1.4	5.4	26	23	21	5.8	.06	.44	.01	
15	.15	.24	1.2	3.8	16	17	19	6.6	.04	.39	.01	
16	.12	.18	.98	2.0	13	19	19	7.2	.12	.44	0	
17	.12	.18	.78	1.4	9.9	17	14	6.1	.68	.68	.01	
18	.10	.18	.60	1.4	7.8	13	9.9	4.9	.39	.39	0	
19	.08	.15	.44	1.4	7.2	9.9	7.8	3.4	.24	.29	0	
20	.06	.10	.39	1.3	5.4	7.8	6.6	5.6	.18	.21	0	
21	.06	.10	.39	1.2	4.2	7.2	5.4	5.4	31	.15	0	
22	.04	.08	.34	1.1	11	7.5	21	4.5	214	.08	0	
23	.04	.08	.24	.98	10	6.9	21	3.8	232	.04	0	
24	6.1	.06	.21	.98	11	6.4	21	2.9	52	.03	0	
25	11	.06	.18	.98	21	5.8	15	2.0	17	.02	0	
26	13	.06	.18	.88	79	5.4	10	1.1	5.8	.02	0	
27	6.6	.06	.18	.68	29	5.4	7.5	.68	2.9	.02	0	
28	4.2	1.4	.18	.68	18	5.4	6.1	.60	1.8	.02	0	
29	2.9	22	.18	.68	17	4.9	5.4	.52	3.6	.01	0	
30	2.0	20	.15	.60	-----	4.9	4.5	.44	7.2	.01	0	
31	1.4	-----	.15	.60	-----	4.7	-----	.60	-----	.01	0	-----
TOTAL	50.91	56.17	77.97	62.98	350.30	248.6	357.7	244.64	573.31	38.25	.61	0
MEAN	1.64	1.87	2.52	2.03	12.1	8.02	11.9	7.89	19.1	1.23	.020	0
MAX	13	22	12	6.4	79	24	26	33	232	8.3	.15	0
MIN	.04	.06	.15	.12	.52	1.5	4.2	.44	.04	.01	0	0
CFSM	.38	.43	.58	.46	2.77	1.84	2.72	1.81	4.37	.28	.005	0
IN. #	.43	.48	.66	.54	2.98	2.12	3.04	2.08	4.88	.33	.005	0
IN. ##	2.32	1.67	.77	1.51	2.61	1.65	-	-	5.70	-	1.67	.86
CAL YR 1971	TOTAL 1,174.07	MEAN 3.22	MAX 56	MIN 0	CFSM .74	IN# 9.99						
WTR YR 1972	TOTAL 2,061.44	MEAN 5.63	MAX 232	MIN 0	CFSM 1.29	IN# 17.55						

PEAK DISCHARGE (BASE, 40 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	# Runoff.	## Rainfall.
11-29	1600	2.59	58	4-13	1315	2.47	42		
2-13	1430	2.78	84	5-4	1645	2.46	41		
2-26	0130	3.34	139	6-22	0145	7.15	438		
3-13	0915	2.45	40						

POTOMAC RIVER BASIN

41

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 miles east of Springfield, and at mile 13.4.

DRAINAGE AREA.--1,471 sq mi.

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 above mean sea level. June 1894 to February 1896, nonrecording gage at Baltimore & Ohio Railroad bridge 11.2 miles upstream at different datum. June 26, 1899, to Feb. 2, 1902, nonrecording gage at bridge 10.0 miles 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.--48 years (1899-1901, 1903-5, 1928-72), 1,243 cfs (11.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 31,500 cfs June 23 (gage height, 17.87 ft), from rating curve extended as explained below; minimum, 179 cfs Sept. 23, 24, 26, 27 (gage height, 1.48 ft).

Period of record: Maximum discharge, 143,000 cfs Mar. 18, 1936 (gage height, 34.2 ft), from rating curve extended above 18,000 cfs on basis of measurement made about 10 miles upstream from station, adjusted for storage and inflow and slope-area measurement at gage height 29.84 ft; minimum, 29 cfs Jan. 28, 1956 (result of freezeup), July 30, 1966; minimum gage height, 0.39 ft July 30, 1966.

Flood in November 1877 reached a stage of about 34 ft, from floodmarks (discharge, 140,000 cfs).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	703	1,100	3,480	491	1,300	7,810	992	1,650	1,080	3,150	2,140	-273
2	620	1,030	2,410	537	1,150	8,310	947	1,460	921	2,280	1,520	257
3	2,740	912	1,740	742	1,090	8,540	904	5,470	798	1,790	1,150	246
4	2,960	845	1,380	855	1,640	6,730	848	10,800	719	1,440	976	241
5	2,090	809	1,190	865	1,400	4,440	886	10,500	659	1,860	1,010	246
6	1,560	734	1,070	1,020	1,200	3,360	994	6,110	600	7,440	984	268
7	1,200	676	1,200	1,120	1,100	2,680	989	4,220	559	5,510	801	277
8	953	627	6,350	1,060	1,000	2,270	2,120	3,300	520	3,810	692	251
9	786	584	5,730	967	900	1,970	3,730	3,440	479	2,740	646	234
10	681	544	3,810	951	800	1,700	3,050	4,210	445	2,040	579	221
11	605	513	2,880	1,440	700	1,490	2,530	3,420	419	1,590	507	211
12	544	490	2,230	1,700	729	1,320	2,150	2,800	405	1,300	456	207
13	478	465	1,790	1,640	1,340	2,030	2,880	2,350	387	1,120	417	205
14	426	441	1,490	1,480	2,430	2,390	5,890	2,070	378	1,060	395	206
15	390	419	1,270	1,310	2,460	2,240	5,170	1,990	397	1,050	503	210
16	365	401	1,130	1,040	3,000	2,150	4,180	2,310	581	951	495	203
17	352	384	1,020	679	3,160	2,210	3,970	2,210	676	933	424	208
18	337	370	901	814	2,660	2,010	4,450	1,960	692	1,220	439	210
19	339	357	806	960	2,250	1,700	3,540	1,800	671	972	585	199
20	328	340	733	858	1,780	1,500	2,900	2,260	686	784	554	191
21	310	341	753	812	1,450	1,300	2,460	3,880	1,040	725	485	187
22	297	350	876	872	2,000	1,250	2,880	3,390	18,100	760	442	183
23	290	374	790	851	4,160	1,460	6,450	3,280	23,100	697	383	180
24	493	369	720	864	4,180	1,700	5,640	2,870	12,100	627	366	180
25	3,570	371	687	1,510	10,300	1,590	4,840	2,340	5,830	578	350	182
26	5,980	373	668	1,730	14,300	1,460	3,820	1,920	3,660	515	348	181
27	4,260	372	639	1,560	19,500	1,320	3,080	1,560	2,620	468	407	184
28	2,830	416	615	1,420	9,760	1,230	2,520	1,310	2,010	456	442	189
29	2,010	1,100	577	1,730	6,700	1,150	2,120	1,150	1,980	432	358	193
30	1,510	3,500	544	1,750	-----	1,090	1,820	1,030	3,840	468	315	207
31	1,230	-----	513	1,540	-----	1,060	-----	1,020	-----	1,940	292	-----
TOTAL	41,237	19,616	49,992	35,168	104,439	81,460	88,750	98,080	86,352	50,706	19,461	6,430
MEAN	1,330	654	1,613	1,134	3,601	2,628	2,958	3,164	2,878	1,636	628	214
MAX	5,980	3,500	6,350	1,750	19,500	8,540	6,450	10,800	23,100	7,440	2,140	277
MIN	290	341	513	491	700	1,060	848	1,020	378	432	292	180
CFSM	.90	.44	1.10	.77	2.45	1.79	2.01	2.15	1.96	1.11	.43	.15
IN.	1.04	.50	1.26	.89	2.64	2.06	2.24	2.48	2.18	1.28	.49	.16

CAL YR 1971 TOTAL 581,146 MEAN 1,592 MAX 15,300 MIN 156 CFSM 1.08 IN 14.70
WTR YR 1972 TOTAL 681,691 MEAN 1,863 MAX 23,100 MIN 180 CFSM 1.27 IN 17.24

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-27	0730	15.29	23,000	6-23	1600	17.87	31,500
5-4	2130	11.18	13,400				

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 miles northeast of Levels, and at mile 2.0.

DRAINAGE AREA.--108 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 540 ft (from topographic map). Prior to Nov. 8, 1966, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.-- 6 years, 84.5 cfs (10.63 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,500 cfs June 22 (gage height, 12.97 ft), from rating curve extended as explained below; minimum daily, 1.8 cfs Sept. 18.

Period of record: Maximum discharge, 10,500 cfs June 22, 1972 (gage height, 12.97 ft), from rating curve extended above 1,800 cfs on basis of slope-area measurement of gage height 10.24 ft; minimum daily, 0.01 cfs Sept. 1-5, Oct. 2-6, 8, 16-18, 1968; minimum gage height, 1.36 ft Aug. 24, 1968.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	50	285	17	25	464	53	140	37	235	6.9	3.1
2	10	60	174	23	30	336	56	120	28	135	7.9	3.1
3	25	45	116	112	40	264	52	220	22	171	7.9	3.0
4	100	40	83	79	50	181	48	400	26	110	7.4	3.0
5	60	25	62	77	85	151	46	460	48	385	7.6	3.1
6	40	25	67	80	80	116	42	340	26	434	7.6	2.5
7	35	25	164	82	70	80	52	240	21	242	8.2	2.1
8	25	20	299	72	65	95	123	150	16	155	7.1	2.0
9	20	20	227	61	55	74	160	160	13	108	6.1	2.0
10	15	18	174	76	45	68	205	250	11	76	5.6	2.1
11	15	17	135	91	35	62	230	300	9.6	57	5.0	2.1
12	15	17	100	110	20	62	250	270	8.2	44	4.4	2.2
13	15	16	92	123	90	446	280	240	8.6	39	4.2	2.1
14	10	16	65	120	400	572	320	210	11	30	3.6	2.1
15	10	17	56	97	350	444	300	200	13	46	3.6	2.0
16	9.0	22	50	86	280	406	250	432	37	49	3.4	2.2
17	9.0	29	42	79	210	371	200	318	55	52	3.2	2.2
18	9.0	50	37	68	160	282	220	216	32	36	3.2	1.8
19	8.0	62	30	67	130	205	190	158	32	29	3.2	2.0
20	9.0	77	26	55	110	155	160	188	27	18	3.3	2.0
21	9.0	25	26	46	90	133	130	174	707	14	3.1	2.0
22	7.0	100	22	41	100	140	140	153	4,890	12	3.0	2.0
23	7.0	100	20	36	120	131	400	133	4,400	9.6	2.8	2.0
24	9.0	100	18	37	130	104	370	99	1,120	8.4	2.6	2.0
25	9.0	118	19	41	150	91	320	79	437	7.9	2.4	2.0
26	1,300	116	19	33	300	92	280	62	230	6.9	2.8	2.0
27	900	120	17	23	500	76	240	50	149	6.4	3.2	2.0
28	500	146	15	25	540	73	200	41	105	6.3	3.5	2.0
29	200	554	15	25	564	67	180	34	146	6.1	3.6	2.5
30	120	606	15	25	-----	62	160	32	566	6.1	3.6	2.5
31	80	-----	16	25	-----	57	-----	37	-----	6.3	3.3	-----
TOTAL	4,278.0	2,725	2,472	1,931	4,834	5,859	5,667	5,905	13,261.4	2,541.0	143.3	67.7
MEAN	138	80.8	79.7	62.3	167	189	189	191	442	82.0	4.62	2.26
MAX	1,300	604	299	123	564	572	400	460	4,890	434	8.2	3.1
MIN	7.0	16	15	17	25	57	42	32	8.2	6.1	2.4	1.8
CFSM	1.28	.34	.74	.58	1.55	1.75	1.75	1.77	4.09	.76	.04	.02
IN,	1.47	.94	.85	.67	1.67	2.02	1.95	2.03	4.57	.88	.05	.02
CAL YR 1971	TOTAL 40,564.32	MEAN 111	MAX 1,670	MIN .08	CFSM 1.03	IN 13.97						
WTR YR 1972	TOTAL 40,685.40	MEAN 136	MAX 4,890	MIN 1.8	CFSM 1.26	IN 17.11						

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-26	unknown	-	unknown	6-29	2330	6.90	1,720
6-22	0700	12.97	10,500				

NOTE.--No gage-height record Oct. 1 to Nov. 9, Feb. 1-27, Apr. 11 to May 15, Sept. 23-30.

POTOMAC RIVER BASIN

43

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 upstream from bridge on Maryland State Highway 51 at Paw Paw, 3.3 miles downstream from Little Cacapon River, and at mile 277.

DRAINAGE AREA.--3,109 sq mi.

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

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

AVERAGE DISCHARGE.--34 years, 3,091 cfs (13.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 64,500 cfs June 23 (gage height, 28.83 ft); minimum, 405 cfs Sept. 24 (gage height, 3.42 ft).

Period of record: Maximum discharge, 111,000 cfs Oct. 16, 1942 (gage height, 38.36 ft); minimum, 164 cfs Sept. 10, 11, 1966.

Flood of Mar. 18, 1936, reached a stage of 54.0 ft (discharge, 240,000 cfs, from rating curve extended above 85,000 cfs on basis of slope-area measurement of peak flow at site 5 miles upstream at Okonoko, W. Va.).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,470	2,600	9,130	1,450	2,820	21,900	2,880	4,570	2,880	10,700	3,190	697
2	1,300	2,620	6,490	1,650	2,690	23,800	2,740	4,040	2,440	7,100	2,470	634
3	2,410	2,800	5,030	2,680	2,610	24,700	2,650	8,100	2,080	5,460	1,990	709
4	4,130	2,900	4,220	2,890	3,420	19,600	2,540	19,000	1,890	4,530	1,810	836
5	3,320	2,810	3,710	3,100	3,340	14,200	3,210	20,400	1,840	4,640	1,780	664
6	2,680	2,300	3,540	3,780	2,870	10,400	3,480	13,300	1,600	11,400	2,080	553
7	2,210	2,130	5,810	3,560	2,960	7,430	3,230	9,600	1,470	10,100	1,720	573
8	1,860	1,870	16,400	3,070	2,670	6,220	4,350	7,710	1,380	7,140	1,500	545
9	1,630	1,610	17,800	2,830	2,300	5,660	6,890	8,380	1,260	5,570	1,330	506
10	1,610	1,490	12,300	2,830	2,090	4,860	6,480	11,600	1,180	4,480	1,210	480
11	2,310	1,410	8,460	4,180	1,960	4,360	5,970	10,100	1,120	3,730	1,050	471
12	1,180	1,340	6,120	4,780	1,920	4,350	5,360	7,580	1,080	3,130	952	460
13	1,080	1,280	5,040	4,700	4,320	9,300	7,880	6,430	1,020	2,770	877	456
14	976	1,210	4,550	4,190	9,200	16,400	17,400	5,740	1,050	2,500	819	460
15	893	1,150	4,160	3,780	7,140	13,100	15,000	5,880	1,060	2,420	783	499
16	842	1,090	3,530	2,990	6,960	10,000	17,600	6,400	1,380	2,300	950	479
17	797	1,040	3,060	2,120	7,040	9,900	19,000	5,990	1,780	2,050	827	479
18	760	991	2,720	2,800	6,010	8,260	15,100	5,420	1,690	2,180	816	577
19	724	950	2,360	3,300	5,380	6,730	10,800	4,900	1,800	2,140	558	585
20	716	918	2,140	2,940	4,560	5,670	8,490	4,770	1,730	1,720	1,090	513
21	675	924	2,280	2,570	3,780	5,010	6,860	6,630	2,560	1,580	935	462
22	637	963	2,470	2,800	4,250	4,750	7,060	6,130	39,700	1,520	917	434
23	614	1,020	2,420	2,680	7,720	4,840	13,100	5,570	53,400	1,400	791	417
24	847	993	1,980	2,680	7,390	4,850	11,800	5,200	38,800	1,240	719	414
25	4,870	995	1,900	3,430	16,300	4,460	11,300	4,430	16,200	1,130	705	427
26	9,950	993	1,830	3,850	27,800	4,130	8,540	3,830	9,920	1,020	843	431
27	8,690	1,100	1,770	3,360	34,800	3,820	6,970	3,240	7,120	1,050	1,160	433
28	6,150	1,220	1,710	3,320	21,100	3,580	5,860	2,800	5,310	1,150	1,340	501
29	4,780	2,830	1,630	3,270	16,400	3,290	5,150	2,520	7,310	1,230	1,150	532
30	3,660	9,880	1,560	3,660	-----	3,130	4,910	2,310	16,300	1,220	912	670
31	2,970	-----	1,490	3,150	-----	3,070	-----	2,600	-----	1,770	787	-----
TOTAL	75,791	55,417	148,110	98,390	221,800	271,770	242,600	215,170	228,350	110,370	38,461	15,897
MEAN	2,445	1,847	4,778	3,174	7,648	8,767	8,087	6,941	7,612	3,560	1,241	530
MAX	9,950	9,880	17,800	4,780	34,800	24,700	19,000	20,400	53,400	11,400	3,190	836
MIN	614	918	1,490	1,450	1,920	3,070	2,540	2,310	1,020	1,020	705	414

CAL YR 1971 TOTAL 1,422,978 MEAN 3,899 MAX 38,400 MIN 300 CFSM 1.25 IN 17.02
WTR YR 1972 TOTAL 1,722,126 MEAN 4,705 MAX 53,400 MIN 414 CFSM 1.51 IN 20.59

PEAK DISCHARGE (BASE, 20,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	1930	15.69	20,500	4-17	0930	15.53	20,100
2-27	1030	21.34	37,400	5- 5	0300	16.64	23,100
3- 3	1200	17.55	25,700	6-23	2100	28.83	64,500

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 miles upstream from Three Springs Run, and 1.7 miles east of Baker.

DRAINAGE AREA.--155 sq mi. Area at low-flow gage site, 164 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1960-64, 1969, October 1971 to September 1972.

GAGE.--Water-stage recorder. Altitude of gage is 1,260 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 14,600 cfs June 23 (gage height, 11.58 ft, from floodmarks), from rating curve extended above 1,000 cfs on basis of slope-area measurement of peak flow; minimum, 4.8 cfs Sept. 11, 12, 14, 19 (gage height, 1.25 ft).

Period of record: Minimum discharge observed, 2.28 cfs Sept. 12, 1963.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Station operated as part of the Romney-Lost River project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	130	400	35	84	849	46	120	50	450	63	9.1
2	60	120	270	40	77	654	42	150	45	250	50	9.1
3	230	100	190	100	89	486	39	1,630	35	450	35	7.9
4	170	90	150	95	336	344	35	828	30	350	30	9.1
5	140	80	110	90	681	280	35	364	40	300	30	11
6	110	70	170	100	280	217	30	475	30	605	35	9.1
7	90	65	300	85	153	185	45	360	25	362	30	9.1
8	75	60	420	80	120	147	100	500	20	220	30	6.8
9	65	55	300	75	90	96	182	400	15	170	25	6.4
10	55	50	210	75	75	91	213	310	15	130	21	5.6
11	50	45	160	85	60	103	264	250	15	100	19	5.2
12	50	45	130	95	51	14	248	190	15	90	18	5.2
13	45	40	110	90	470	141	213	300	10	75	16	5.6
14	40	40	85	87	480	139	800	600	15	70	16	5.6
15	40	40	75	67	455	156	674	550	15	75	16	5.6
16	35	35	70	54	552	150	400	450	15	80	16	6.4
17	35	35	65	56	415	127	540	348	20	230	18	6.0
18	30	35	60	62	324	108	385	779	15	170	30	5.2
19	30	35	55	69	280	101	276	600	50	110	24	5.6
20	30	30	50	58	203	108	465	450	40	80	29	6.0
21	30	30	45	54	203	133	850	260	800	65	21	5.2
22	25	30	45	48	284	108	700	136	9,000	60	16	6.8
23	30	30	40	45	368	96	450	87	12,000	50	16	7.4
24	1,000	30	40	80	380	91	320	67	7,000	45	14	6.4
25	2,500	30	35	75	1,010	84	250	34	800	40	14	6.0
26	1,300	30	35	60	3,100	80	190	110	650	35	22	6.4
27	600	50	35	60	1,330	71	150	80	500	35	17	7.4
28	400	170	35	65	730	67	110	55	400	33	14	7.4
29	240	900	30	65	758	56	110	35	250	30	13	8.5
30	170	750	30	70	-----	51	100	30	700	72	11	11
31	140	-----	30	77	-----	58	-----	35	-----	97	10	-----
TOTAL	7,855	3,250	3,780	2,197	13,438	5,501	8,262	10,583	32,615	4,929	719	212.1
MEAN	253	108	122	70.9	463	177	275	341	1,087	159	23.2	7.07
MAX	2,500	900	420	100	3,100	849	850	1,630	12,000	605	63	11
MIN	25	30	30	35	51	51	30	30	10	30	10	5.2
CFSM	1.63	.70	.79	.46	2.99	1.14	1.77	2.20	7.01	1.03	.15	.05
IN.	1.89	.78	.91	.53	3.23	1.32	1.98	2.54	7.83	1.18	.17	.05

CAL YR 1971 TOTAL - MEAN - MAX - MIN - CFSM - IN -
WTR YR 1972 TOTAL 93,341.10 MEAN 255 MAX 12,000 MIN 5.2 CFSM 1.65 IN 22.40

PEAK DISCHARGE (BASE, 1,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-25	unknown	-	unknown	5-3	1530	6.44	3,230
2-26	0800	7.04	4,070	6-23	unknown	11.58	14,600

a From floodmarks.

NOTE.--No gage-height record Oct. 1 to Jan. 13, Apr. 4-8, Apr. 21 to May 2, May 7-16, May 26 to July 5, July 9-27, Aug. 2-8.

POTOMAC RIVER BASIN

45

01610300 Cacapon River above Wardensville, W. Va.

LOCATION.--Lat 39°04'44", long 78°37'11", Hardy County, on right bank 0.8 mile upstream from Trout Run, and 1.2 miles west of Wardensville.

DRAINAGE AREA.--181 sq mi.

PERIOD OF RECORD.--October 1971 to September 1972.

GAGE.--Water-stage recorder. Altitude of gage is 1,000 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 16,200 cfs June 23 (gage height, 11.15 ft, from floodmark); minimum, 24 cfs Sept. 19 (gage height, 2.92 ft).

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Station operated as part of the Romnev-Lost River project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	50	160	500	45	84	1,090	95	222	169	600	108	30	
2	90	150	330	80	96	856	98	192	117	385	81	29	
3	300	140	240	130	96	640	91	780	87	290	64	29	
4	230	120	170	130	269	454	83	3,030	68	213	57	28	
5	180	100	130	120	210	363	81	1,520	84	510	66	29	
6	150	95	160	130	190	286	74	804	62	726	70	30	
7	130	85	400	110	150	251	93	546	51	468	57	30	
8	100	75	500	100	126	221	212	415	44	698	51	29	
9	90	70	370	95	110	184	251	614	37	395	47	27	
10	80	65	280	100	100	166	302	764	35	250	41	27	
11	75	60	230	120	98	142	300	600	32	185	40	27	
12	70	60	180	130	102	140	261	462	30	153	37	27	
13	60	55	140	120	541	172	722	360	29	147	35	26	
14	50	55	120	114	812	190	975	320	31	126	35	26	
15	45	50	110	101	618	205	611	405	35	135	35	27	
16	45	50	100	90	693	199	451	719	35	156	35	27	
17	40	45	90	82	536	219	748	534	41	438	35	27	
18	40	45	80	78	406	201	524	400	36	370	41	27	
19	40	45	75	88	347	175	392	534	185	206	44	25	
20	35	40	70	91	238	154	324	1,290	93	153	43	25	
21	35	40	65	83	254	146	269	1,040	3,800	120	41	25	
22	35	40	65	80	376	164	950	712	10,000	96	37	25	
23	45	40	55	76	468	181	1,190	656	13,500	75	35	25	
24	1,400	40	55	89	446	155	844	480	8,000	66	34	25	
25	3,000	40	50	104	1,150	141	627	360	1,000	57	32	25	
26	1,000	40	50	89	3,830	135	476	258	700	53	35	25	
27	700	55	50	82	1,790	128	366	202	500	50	37	25	
28	450	250	50	80	979	125	297	165	350	50	35	30	
29	300	1,100	45	85	931	115	251	141	230	51	33	30	
30	200	900	45	85	-----	110	217	120	700	62	31	30	
31	170	-----	40	85	-----	100	-----	150	-----	156	31	-----	
TOTAL	9,235	4,110	4,845	2,992	16,046	7,808	12,175	18,795	40,081	7,440	1,403	817	
MEAN	298	137	156	96.5	553	252	406	606	1,336	240	45.3	27.2	
MAX	3,000	1,100	500	130	3,830	1,090	1,190	3,030	13,500	726	108	30	
MIN	35	40	40	45	84	100	74	120	29	50	31	25	
CFSM	1.65	.76	.86	.53	3.06	1.39	2.24	3.35	7.38	1.33	.25	.15	
IN.	1.90	.84	1.00	.61	3.30	1.60	2.50	3.86	8.24	1.53	.29	.17	
CAL YR 1971	TOTAL	-	-	MEAN	-	MAX	-	MIN	-	CFSM	-	IN	-
WTR YR 1972	TOTAL	125,747.00	-	MEAN	344	MAX	13,500	MIN	25	CFSM	1.90	IN	25.84

PEAK DISCHARGE (BASE, 2,100 CFS)

a From floodmark.

NOTE.--No gage-height record Oct. 1 to Jan. 13, June 21 to July 1.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
*10-25	unknown	-	unknown	5-4	1100	7.15	4,050
2-26	0915	7.76	5,270	6-23	unknown	all.15	16,200

POTOMAC RIVER BASIN

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 miles southwest of Great Cacapon, and at mile 6.5.

DRAINAGE AREA.--677 sq mi.

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

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

AVERAGE DISCHARGE.--49 years (1923-72), 566 cfs (11.35 inches per year).

EXTREMES.--Current year: Maximum discharge, 45,500 cfs June 22 (gage height, 22.17 ft); minimum, 92 cfs Sept. 23 (gage height, 0.89 ft).

Period of record: Maximum discharge, 87,600 cfs Mar. 18, 1936 (gage height, 30.1 ft), from rating curve extended above 52,000 cfs; minimum, 26 cfs Sept. 11-13, 1966; minimum gage height, 0.35 ft Sept. 21, 22, 1932, Sept. 11-13, 1966.

Flood in May 1889 reached a stage of 24.7 ft, from floodmarks (discharge, 57,500 cfs).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	816	2,650	230	360	3,280	473	875	746	3,000	323	128
2	221	860	1,710	281	339	2,980	461	835	783	1,880	351	121
3	418	765	1,190	719	372	2,510	476	1,920	565	1,630	296	117
4	1,010	698	913	703	583	2,070	449	5,410	474	1,270	261	117
5	757	624	759	639	804	1,630	412	5,940	478	1,150	237	112
6	665	536	656	718	698	1,350	390	3,120	459	2,660	238	112
7	558	475	754	645	650	1,110	384	2,240	398	2,150	263	116
8	449	429	1,380	575	580	1,000	508	1,760	347	1,520	241	113
9	376	392	1,750	511	500	872	835	1,800	314	1,520	219	112
10	337	365	1,420	521	455	759	948	2,530	288	1,090	200	107
11	324	346	1,180	678	436	696	1,050	2,600	264	824	181	103
12	325	331	978	712	413	632	1,010	2,100	244	676	169	101
13	274	316	808	719	1,070	968	1,240	1,680	239	588	161	102
14	236	302	711	681	5,410	1,990	2,790	1,410	247	568	156	104
15	211	286	619	631	2,760	1,900	2,550	1,360	238	698	151	106
16	195	271	567	490	2,210	1,690	2,260	1,610	266	797	145	101
17	183	257	527	328	2,050	1,660	2,010	1,790	296	753	144	101
18	178	245	475	392	1,670	1,520	2,080	1,440	264	1,000	147	103
19	178	236	425	473	1,490	1,240	1,590	1,240	260	1,130	149	100
20	176	228	383	454	1,220	1,030	1,300	1,470	246	703	156	96
21	164	227	372	439	893	887	1,120	2,590	959	529	158	94
22	154	226	365	429	1,100	850	1,210	2,140	26,700	440	151	93
23	149	220	331	398	1,720	800	1,820	3,570	30,500	374	148	93
24	209	220	297	385	1,700	750	3,010	1,660	24,400	325	140	94
25	4,360	224	282	434	1,790	700	2,470	1,300	4,760	291	145	94
26	6,550	216	278	443	6,640	665	1,990	1,050	2,880	264	174	96
27	3,610	218	274	395	8,360	622	1,590	848	2,100	244	152	96
28	2,210	253	270	371	4,010	589	1,290	713	1,600	232	157	102
29	1,530	611	263	377	3,240	560	1,090	621	1,300	233	163	109
30	1,110	3,030	251	387	-----	528	952	555	3,130	238	158	115
31	888	-----	239	396	-----	501	-----	541	-----	250	138	-----
TOTAL	28,240	14,223	23,077	15,554	53,523	38,339	41,508	56,968	105,745	29,027	5,872	3,158
MEAN	911	474	744	502	1,846	1,237	1,384	1,838	3,525	936	189	105
MAX	6,550	3,030	2,650	719	8,360	3,280	3,570	5,940	30,500	3,000	351	128
MIN	149	216	239	230	339	501	384	541	238	232	138	93
CFSM	1.35	.70	1.10	.74	2.73	1.83	2.04	2.71	5.21	1.38	.28	.16
IN.	1.55	.78	1.27	.85	2.94	2.11	2.28	3.13	5.81	1.59	.32	.17
CAL YR 1971	TOTAL 313,321	MEAN 858	MAX 7,380	MIN 81	CFSM 1.27	IN 17.22						
WTR YR 1972	TOTAL 415,234	MEAN 1,135	MAX 30,500	MIN 93	CFSM 1.68	IN 22.82						

PEAK DISCHARGE (BASE, 3,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-26	1200	9.69	8,040	5- 5	0200	9.39	7,500
2-14	0400	9.24	7,230	6-22	2300	22.17	45,500
2-27	0100	11.31	11,200	6-30	1300	7.65	4,660
4-23	1200	7.32	4,200				

01613000 Potomac River at Hancock, Md.

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

DRAINAGE AREA.--4,073 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 383.46 ft 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.--40 years, 3,966 cfs (13.22 inches per year).

EXTREMES.--Current year: Maximum discharge, 112,000 cfs June 23 (gage height, 30.79 ft); minimum, 490 cfs Sept. 25 (gage height, 2.65 ft).

Period of record: Maximum discharge, 340,000 cfs Mar. 18, 1936 (gage height, 47.6 ft), from rating curve extended above 120,000 cfs on basis of slope-area measurement of peak flow; minimum observed, 180 cfs Oct. 4, 1932 (gage height, 2.01 ft).

Maximum stage known prior to 1932, about 40 ft in May 1889 (discharge, about 220,000 cfs).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,000	3,690	13,900	1,770	3,430	24,800	3,600	5,850	3,610	16,300	2,790	897
2	1,850	3,540	9,850	2,080	3,240	27,300	3,380	5,360	3,670	10,400	3,220	810
3	1,700	3,700	7,210	3,200	3,110	27,300	3,280	6,450	2,990	7,830	2,630	741
4	4,320	3,650	5,750	4,050	3,690	24,400	3,160	22,200	2,630	6,410	2,220	864
5	4,770	3,700	4,880	3,840	4,720	17,500	3,170	29,300	2,610	5,590	2,080	951
6	3,780	3,360	4,450	4,370	4,060	13,500	4,000	20,000	2,440	10,500	2,090	727
7	3,170	2,670	5,840	4,700	3,850	10,300	3,820	13,800	2,130	14,000	2,310	660
8	2,640	2,600	14,600	4,050	3,630	7,930	4,080	10,700	1,920	9,710	1,930	675
9	2,260	2,320	21,600	3,690	3,180	7,150	6,790	10,400	1,770	7,790	1,700	643
10	2,030	2,030	16,400	3,500	2,900	6,190	8,000	15,000	1,630	6,150	1,520	595
11	1,950	1,900	12,000	4,180	2,710	5,470	7,560	14,900	1,500	4,970	1,360	573
12	1,650	1,910	9,320	5,410	2,540	4,990	6,910	11,400	1,410	4,130	1,200	567
13	1,490	1,730	6,570	5,930	4,110	7,440	7,890	9,080	1,360	3,570	1,100	542
14	1,330	1,640	5,690	5,290	16,900	18,500	20,200	7,830	1,360	3,220	1,020	545
15	1,200	1,560	5,220	4,860	12,700	17,300	19,000	7,430	1,360	3,160	947	564
16	1,100	1,470	4,660	4,080	10,100	13,600	21,800	8,360	1,470	3,210	917	574
17	1,030	1,390	3,940	3,090	10,200	12,600	22,400	8,810	2,160	2,970	1,080	562
18	976	1,330	3,500	2,780	8,970	11,200	19,900	7,840	2,310	2,950	972	587
19	932	1,260	3,140	3,810	7,820	9,210	14,700	6,900	2,130	3,400	946	648
20	904	1,200	2,760	3,820	6,680	7,600	11,200	6,640	2,210	2,720	1,110	667
21	890	1,170	2,620	3,320	5,420	6,570	9,210	8,650	3,740	2,240	1,200	591
22	838	1,170	2,840	3,210	5,060	6,050	8,200	9,270	71,000	2,050	1,040	546
23	795	1,210	2,810	3,280	7,580	6,050	15,000	7,900	108,000	1,910	1,040	516
24	940	1,270	2,660	3,180	9,770	6,010	16,600	7,450	89,800	1,730	1,080	493
25	5,130	1,300	2,300	3,310	13,100	5,660	14,900	6,330	28,900	1,530	893	490
26	14,800	1,250	2,230	4,360	29,700	5,180	12,300	5,330	15,800	1,390	945	496
27	14,500	1,270	2,170	4,100	44,000	4,790	9,650	4,520	10,900	1,260	1,150	504
28	9,660	1,410	2,100	3,790	31,200	4,470	8,040	3,840	8,010	1,290	1,380	539
29	7,120	2,260	2,040	3,710	21,500	4,160	6,850	3,380	6,380	1,390	1,520	600
30	5,550	10,500	1,930	4,000	-----	3,860	6,290	3,060	16,500	1,460	1,230	644
31	4,260	-----	1,840	3,920	-----	3,720	-----	3,120	-----	1,490	1,010	-----
TOTAL	105,565	69,350	185,920	118,680	285,870	330,800	301,880	291,100	401,700	146,720	45,630	18,811
MEAN	3,405	2,312	5,997	3,828	9,858	10,670	10,060	9,390	13,390	4,733	1,472	627
MAX	14,800	10,500	21,600	5,930	44,000	27,300	22,400	29,300	108,000	16,300	3,220	951
MIN	795	1,170	1,840	1,770	2,540	3,720	3,160	3,060	1,360	1,260	893	490
CFSM	.84	.57	1.47	.94	2.42	2.62	2.47	2.31	3.29	1.16	.36	.15
IN.	.96	.63	1.70	1.08	2.61	3.02	2.76	2.66	3.67	1.34	.42	.17
CAL YR 1971	TOTAL 1,902,119	MEAN 5,211	MAX 49,700	MIN 401	CFSM 1.28	IN 17.37						
WTR YR 1972	TOTAL 2,302,026	MEAN 6,290	MAX 108,000	MIN 490	CFSM 1.54	IN 21.03						

PEAK DISCHARGE (BASE, 23,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-27	1000	18.91	44,900	5- 5	0930	15.52	31,300
3- 1	2345	14.53	27,700	6-23	0800	30.79	112,000
4-17	1700	13.34	23,500				

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 miles southeast of Tomahawk, 3.5 miles northeast of village of Jones Springs, 9.0 miles upstream from Tilhance Creek, and at mile 11.6.

DRAINAGE AREA.--243 sq mi.

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 above mean sea level (Corps of Engineers bench mark). Prior to Sept. 30, 1931, nonrecording gage at highway bridge 5.0 miles 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.--37 years, 192 cfs (10.73 inches per year).

EXTREMES.--Current year: Maximum discharge, 18,700 cfs June 22 (gage height, 23.15 ft), from rating curve extended as explained below; minimum, 17 cfs Sept. 13, 21 (gage height, 1.77 ft).

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

Flood of Mar. 17 or 18, 1936, reached a stage of 25.0 ft, present datum, from floodmarks (discharge, 22,000 cfs, from rating curve extended as explained above).

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	268	909	67	58	1,210	155	265	562	429	58	22
2	73	272	582	140	104	815	173	240	300	296	57	21
3	83	244	426	394	120	638	163	650	195	363	55	23
4	108	225	349	296	694	490	143	1,810	148	275	52	22
5	88	192	286	317	542	408	130	1,470	286	366	50	21
6	82	173	258	328	466	338	120	824	216	610	52	21
7	73	163	422	293	373	289	124	602	150	412	49	21
8	63	145	626	251	307	258	201	478	120	300	46	20
9	57	133	538	222	237	216	234	770	98	228	53	19
10	67	124	450	317	204	192	272	1,170	83	183	45	19
11	140	118	387	324	180	173	282	802	73	153	40	19
12	116	110	317	310	158	163	254	602	66	128	37	18
13	90	104	282	282	1,270	401	734	470	63	116	36	18
14	76	98	237	265	4,500	798	1,410	412	78	114	36	19
15	67	88	213	222	2,300	1,030	977	405	82	126	35	22
16	61	76	201	148	1,400	782	972	433	112	104	35	22
17	55	67	180	163	600	833	896	384	148	100	35	22
18	53	64	160	160	260	674	702	349	96	244	37	21
19	50	61	143	150	280	510	554	335	82	163	37	19
20	48	60	133	148	190	408	454	1,050	72	114	36	19
21	45	60	122	148	180	352	384	1,200	678	94	31	18
22	44	57	108	138	210	377	722	738	11,200	80	31	18
23	42	53	94	128	260	474	1,480	606	9,050	73	29	19
24	405	52	88	135	250	377	950	450	5,250	67	27	20
25	1,450	58	87	145	320	317	710	349	1,290	61	37	20
26	2,370	63	88	124	3,500	286	558	268	726	55	40	19
27	851	69	87	110	2,100	254	447	213	494	52	76	19
28	526	85	83	112	1,700	231	373	178	359	50	88	19
29	377	440	76	112	1,400	204	317	158	307	50	39	24
30	296	1,800	73	114	-----	186	279	140	630	50	29	27
31	251	-----	72	110	-----	170	-----	168	-----	54	25	-----
TOTAL	8,187	5,522	8,077	6,173	24,203	13,854	15,170	17,989	33,014	5,510	1,333	611
MEAN	264	184	261	199	835	447	506	580	1,100	178	43.0	20.4
MAX	2,370	1,800	909	394	4,500	1,210	1,480	1,810	11,200	610	88	27
MIN	42	52	72	67	98	163	120	140	63	50	25	18
CFSM	1.09	.76	1.07	.82	3.44	1.84	2.08	2.39	4.53	.73	.18	.08
IN.	1.25	.85	1.24	.95	3.71	2.12	2.32	2.75	5.05	.84	.20	.09

CAL YR 1971 TOTAL 100,454 MEAN 275 MAX 3,920 MIN 16 CFSM 1.13 IN 15.38
WTR YR 1972 TOTAL 139,643 MEAN 382 MAX 11,200 MIN 18 CFSM 1.57 IN 21.38

PEAK DISCHARGE (BASE, 2,500 CFS)

NOTE.--No gage-height record
Feb. 14-29.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-26	0630	9.84	3,500	2-26	unknown	-	unknown
2-14	0800	12.22	5,300	6-22	1800	23.15	18,700

01616500 Opequon Creek near Martinsburg, W. Va.

LOCATION.--Lat 39°25'25", long 77°56'20", Berkeley County, on right bank 300 ft upstream from Evans Run, 2.3 miles upstream from Tuscarora Creek, 3.0 miles southeast of Martinsburg, and at mile 11.1.

DRAINAGE AREA.--272 sq mi.

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

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

AVERAGE DISCHARGE.--25 years (1947-72), 207 cfs (10.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 19,000 cfs June 22 (gage height, 17.45 ft), from rating curve extended above 7,100 cfs; minimum, 94 cfs Sept. 19 (gage height, 2.26 ft).

Period of record: Maximum discharge, 19,000 cfs June 22, 1972 (gage height, 17.45 ft), from rating curve extended above 7,100 cfs; minimum observed, 25 cfs Oct. 25, 1947; minimum gage height, 1.24 ft Jan. 8, 1956.

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

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	300	608	140	143	985	282	324	445	1,420	218	131
2	150	290	378	186	145	769	292	308	312	778	238	132
3	220	260	290	222	193	1,070	270	358	272	1,150	320	129
4	180	230	250	181	754	784	260	739	252	736	225	128
5	160	210	220	228	385	598	252	709	340	763	223	134
6	150	220	214	240	286	488	242	468	292	949	201	128
7	140	210	382	207	258	450	252	388	258	655	192	126
8	130	200	553	186	211	410	300	348	236	550	468	122
9	120	190	405	184	151	360	320	598	220	485	270	120
10	310	193	340	316	181	343	296	820	212	395	206	119
11	270	186	306	306	174	324	282	555	201	363	185	115
12	220	179	272	270	172	316	266	443	198	335	179	116
13	190	174	254	240	1,050	490	730	385	199	328	174	116
14	170	169	234	226	2,420	733	775	365	226	308	171	118
15	150	165	226	201	718	859	640	375	209	423	167	123
16	150	162	220	164	543	661	578	370	205	333	162	115
17	140	159	209	177	448	841	907	343	240	393	164	111
18	140	155	198	172	400	652	625	338	203	560	167	108
19	140	155	186	174	418	513	478	308	196	358	159	104
20	130	152	186	174	338	440	418	871	193	283	152	102
21	120	152	187	179	340	413	373	742	520	253	146	106
22	120	145	177	172	398	505	805	518	8,890	235	144	108
23	120	140	169	169	453	595	1,270	523	8,410	220	144	108
24	200	143	167	181	443	465	757	418	4,500	270	144	106
25	1,500	159	164	184	468	405	583	360	1,310	240	138	104
26	2,000	155	160	164	1,960	370	488	320	925	233	171	107
27	1,100	152	159	155	1,670	343	425	298	751	223	210	104
28	650	169	155	159	588	328	380	284	633	228	167	104
29	480	562	150	157	1,080	312	350	272	748	223	144	107
30	350	1,450	148	155	-----	302	328	264	4,090	220	140	109
31	280	-----	145	150	-----	288	-----	350	-----	223	134	-----
TOTAL	10,325	7,186	7,712	6,019	17,228	16,412	14,224	13,762	35,686	14,133	5,923	3,460
MEAN	333	240	249	194	554	529	474	444	1,190	456	191	115
MAX	2,000	1,450	608	316	2,420	1,070	1,270	871	8,890	1,420	468	134
MIN	120	140	145	140	143	288	242	264	193	220	134	102
CFSM	1.22	.88	.92	.71	2.18	1.94	1.74	1.63	4.38	1.68	.70	.42
IN.	1.41	.98	1.05	.82	2.36	2.24	1.95	1.88	4.88	1.93	.81	.47
CAL YR 1971	TOTAL 108,265	MEAN 297	MAX 4,150	MIN 95	CFSM 1.09	IN 14.81						
WTR YR 1972	TOTAL 152,070	MEAN 415	MAX 8,890	MIN 102	CFSM 1.53	IN 20.80						

PEAK DISCHARGE (BASE, 1,900 CFS)

NOTE.--No gage-height record Oct. 2 to Nov. 9.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-26	unknown	-	unknown	4-23	0200	8.53	1,910
11-30	0600	8.72	1,990	6-22	1900	17.45	19,000
2-14	0400	10.92	3,520	6-30	1500	12.71	6,280
2-26	2200	9.84	2,600				

POTOMAC RIVER BASIN

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 upstream from culvert on Secondary State Route 10, and at mile 3.7.

DRAINAGE AREA.--11.3 sq mi.

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. Altitude of gage is 450 ft (from topographic map). Prior to Jan. 5, 1949, nonrecording gage and Jan. 5, 1949, to Sept. 30, 1963, water-stage recorder at site 120 ft downstream at datum 5.00 ft higher.

AVERAGE DISCHARGE.--20 years, 10.3 cfs (12.38 inches per year).

EXTREMES.--Current year: Maximum discharge, 450 cfs June 23 (gage height, 11.20 ft), from rating curve extended above 60 cfs as explained below; minimum, 4.9 cfs Oct. 19 (gage height, 7.26 ft).

Period of record: Maximum discharge, 450 cfs June 23, 1972 (gage height, 11.20 ft), from rating curve extended above 60 cfs on basis of slope-area measurement of peak flow; minimum, 0.2 cfs May 27, 1954 (gage height, 0.74 ft, 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	19	22	14	12	47	23	25	35	38	17	12
2	9.1	19	20	24	12	42	23	24	26	36	19	11
3	9.1	18	19	17	19	40	22	34	24	36	18	11
4	8.8	17	18	15	32	37	21	57	24	33	17	11
5	8.8	16	17	17	19	35	20	37	25	53	17	11
6	8.2	16	17	15	18	32	20	32	23	37	16	11
7	7.9	14	26	14	18	32	21	30	22	33	16	11
8	7.6	14	24	14	17	30	21	29	21	32	17	10
9	7.6	14	23	15	16	28	20	50	20	30	17	10
10	11	14	23	19	15	27	19	40	20	28	16	10
11	9.1	14	22	17	15	26	19	34	19	27	16	10
12	8.2	13	20	16	16	26	19	31	19	27	16	10
13	7.9	13	20	16	105	39	42	30	19	26	15	9.6
14	7.9	12	19	15	59	45	30	30	19	34	15	11
15	7.6	12	19	14	40	38	40	31	19	33	15	10
16	7.4	12	18	14	34	40	34	30	19	27	14	8.6
17	7.4	12	18	13	31	42	36	33	19	25	14	7.9
18	7.4	12	17	14	29	35	30	34	18	24	15	7.9
19	7.4	12	17	14	30	33	28	27	17	23	14	7.3
20	7.1	11	17	14	27	31	28	59	17	23	14	7.1
21	7.1	11	17	14	27	31	26	39	48	22	14	7.1
22	7.1	11	16	14	30	33	50	34	262	22	13	7.1
23	7.1	11	16	14	27	30	37	31	317	21	13	6.8
24	23	11	16	14	27	28	34	29	125	21	13	6.8
25	65	11	15	14	29	27	31	27	75	20	13	6.8
26	48	11	15	13	78	26	28	26	59	18	14	6.8
27	27	11	15	13	56	25	27	25	45	19	25	6.8
28	23	13	15	13	54	25	26	24	43	18	16	6.8
29	21	44	14	13	54	24	25	24	52	18	14	7.1
30	20	32	15	13	-----	24	25	23	45	18	13	6.8
31	19	-----	14	12	-----	23	-----	53	-----	18	12	-----
TOTAL	435.6	450	564	458	946	1,001	824	1,032	1,500	840	478	266.3
MEAN	14.1	15.0	18.2	14.8	32.6	32.3	27.5	33.3	50.0	27.1	15.4	8.88
MAX	69	44	26	24	105	47	50	59	317	53	25	12
MIN	7.1	11	14	12	12	23	18	23	17	18	12	6.8
CFSM	1.25	1.33	1.61	1.31	2.89	2.86	2.43	2.95	4.42	2.40	1.36	0.79
IN.†	1.43	1.48	1.86	1.51	3.11	3.30	2.71	3.40	4.94	2.77	1.57	0.88
IN.††	4.05	2.65	.81	2.29	3.86	2.30	4.41	6.61	7.17	2.04	2.83	1.37

CAL YR 1971 TOTAL 5,978.2 MEAN 16.4 MAX 98 MIN 6.2 CFSM 1.45 IN.† 19.68

WTR YR 1972 TOTAL 8,794.9 MEAN 24.0 MAX 317 MIN 6.8 CFSM 2.12 IN.† 28.95

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-25	1800	10.12	263	5-31	2115	9.53	182
11-29	1930	8.99	119	6-23	1015	11.20	450
2-13	1500	9.79	214	7- 5	1200	8.87	107
5-20	0700	8.93	113				

† Runoff.
†† Rainfall.

POTOMAC RIVER BASIN

51

01618000 Potomac River at Shepherdstown, W. Va.

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

DRAINAGE AREA.--5,936 sq mi.

PERIOD OF RECORD.--August 1928 to current year (annual maximum only, October 1954 to June 1964). Gage-height record and estimated discharge October 1953 to June 1964 available in files of Maryland district office.

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

AVERAGE DISCHARGE.--33 years (1928-53, 1964-72), 5,793 cfs (13.25 inches per year).

EXTREMES.--Current year: Maximum discharge, 187,000 cfs June 23 (gage height, 31.58 ft); minimum daily, 950 cfs Sept. 24-28.

Period of record: Maximum discharge, 335,000 cfs Mar. 19, 1936 (gage height, 42.1 ft, from floodmarks), from rating curve extended above 200,000 cfs on basis of slope-area measurements of peak flow at gage heights 32.68 and 42.1 ft; minimum, 170 cfs Aug. 1, 1966; minimum daily, 185 cfs July 31, 1966.

Floods in June 1889 and May 1924 reached stages of 39.2 and 29.8 ft respectively, from floodmarks (discharges, about 290,000 and 168,000 cfs, respectively, from rating curve extended as explained above).

REMARKS.--Records good except those for periods of doubtful or no gage-height record, which are fair. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,620	5,970	22,100	5,120	5,990	35,600	5,650	8,770	7,750	27,400	4,400	1,750
2	2,620	5,770	17,100	5,080	5,650	39,400	5,530	8,270	7,080	17,800	5,500	1,570
3	2,490	6,080	12,600	6,210	5,780	39,000	5,350	8,530	5,840	13,400	4,600	1,410
4	2,450	6,120	9,400	7,260	7,050	36,500	5,110	24,000	5,040	11,400	4,000	1,400
5	5,370	5,730	7,760	7,140	8,660	28,300	4,870	43,000	5,040	9,750	3,800	1,390
6	4,880	5,420	6,750	6,910	8,060	21,600	5,000	35,300	4,930	11,600	3,700	1,520
7	4,050	4,920	8,200	7,260	7,360	16,700	5,620	23,500	4,220	18,800	3,700	1,490
8	3,480	4,380	18,300	7,200	6,500	13,000	5,560	17,600	3,850	15,800	4,100	1,360
9	2,990	4,250	28,600	6,610	6,000	10,900	6,460	15,500	3,370	11,900	3,700	1,180
10	2,840	3,990	26,300	6,620	5,540	9,790	9,700	21,900	3,120	9,950	3,000	1,100
11	2,800	3,760	20,000	6,900	5,450	8,550	9,790	24,000	2,890	8,110	2,600	1,050
12	2,810	3,530	14,500	7,620	5,510	7,760	9,340	19,600	2,710	6,920	2,300	1,000
13	2,490	3,470	11,200	8,670	6,420	7,850	9,280	15,100	2,640	6,080	2,100	1,000
14	2,230	3,390	9,530	8,780	29,500	17,600	22,000	12,700	2,690	5,380	1,900	1,000
15	2,000	3,310	8,440	8,170	27,800	26,000	29,100	11,700	2,730	5,120	1,790	1,050
16	1,800	3,240	7,800	7,470	18,600	21,700	30,600	11,900	2,830	5,150	1,690	1,050
17	1,710	3,130	7,030	6,310	15,900	19,000	33,000	13,100	3,630	5,450	1,700	1,000
18	1,640	2,970	6,410	5,430	14,600	18,300	32,700	12,300	4,270	5,790	1,860	1,000
19	1,530	2,750	6,120	6,110	12,500	15,100	24,800	10,900	4,040	5,920	1,880	1,300
20	1,480	2,620	5,870	6,680	11,000	12,300	18,600	11,200	3,890	5,740	1,780	1,200
21	1,400	2,610	5,570	6,610	8,850	10,500	14,900	15,800	4,600	4,800	1,780	1,100
22	1,440	2,500	5,430	6,350	8,420	9,560	12,700	16,300	6,760	4,300	1,840	1,050
23	1,380	2,100	5,560	6,110	8,550	10,300	18,000	13,700	171,000	3,800	1,730	1,000
24	1,540	2,130	5,600	6,230	12,600	9,900	25,400	11,800	172,000	3,400	1,700	950
25	3,900	2,320	5,330	6,210	12,700	9,230	22,000	10,500	82,000	3,100	1,870	950
26	24,000	2,340	5,390	6,230	27,800	8,430	19,400	8,700	33,500	2,900	1,740	950
27	25,400	2,390	4,980	6,650	53,500	7,770	15,200	7,480	21,600	2,700	1,800	950
28	16,500	2,510	4,760	6,430	49,400	7,220	12,500	6,480	15,600	2,500	2,530	950
29	11,500	3,060	4,940	6,180	34,500	6,750	10,600	5,700	12,100	2,700	2,550	1,100
30	8,810	13,000	4,870	6,110	-----	6,300	9,350	5,210	15,300	2,800	2,280	1,200
31	7,070	-----	5,070	6,310	-----	5,910	-----	5,160	-----	2,900	2,030	-----
TOTAL	157,220	119,760	311,510	206,970	431,450	496,820	438,110	455,700	677,860	243,360	81,950	35,020
MEAN	5,072	3,992	10,050	6,676	14,880	16,030	14,600	14,700	22,600	7,850	2,644	1,167
MAX	25,400	13,000	28,600	8,780	53,500	39,400	33,000	43,000	172,000	27,400	5,500	1,750
MIN	1,380	2,100	4,760	5,080	5,450	5,910	4,870	5,160	2,640	2,500	1,690	950
CFSM	.85	.67	1.65	1.12	2.51	2.70	2.46	2.48	3.81	1.32	.45	.20
IN.	.99	.75	1.95	1.30	2.70	3.11	2.75	2.86	4.25	1.53	.51	.22
CAL YR 1971	TOTAL 2,821,127	MEAN 7,729	MAX 63,000	MIN 800	CFSM 1.30	IN 17.68						
WTR YR 1972	TOTAL 3,655,770	MEAN 9,988	MAX 172,000	MIN 950	CFSM 1.68	IN 22.91						

PEAK DISCHARGE (BASE, 23,000 CFS)

NOTE.--Doubtful or no gage-height record July 21 to Sept. 30.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-26	1830	10.71	31,400	4-18	0315	11.43	34,800
12- 1	1030	8.88	23,200	4-24	0915	9.62	26,400
12- 9	1615	10.55	30,700	5- 5	1700	13.40	44,600
2-14	1945	12.35	39,300	5-11	0100	9.28	25,000
2-27	1700	15.70	57,100	6-23	2330	31.58	187,000
3-15	0545	9.68	26,700	7- 1	0630	10.52	30,500

01636500 Shenandoah River at Millville, W. Va.

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

DRAINAGE AREA.--3,040 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 293.00 ft above mean sea level, adjustment of 1912. Apr. 15, 1895, to Mar. 31, 1909, nonrecording gage at site 0.8 mile downstream at datum 0.32 ft higher.

AVERAGE DISCHARGE.--57 years (1895-1908, 1928-72), 2,615 cfs (11.68 inches per year).

EXTREMES.--Current year: Maximum discharge, 103,000 cfs June 23 (gage height, 21.89 ft); minimum, 710 cfs Jan. 18, Aug. 31, Sept. 5; minimum gage height, 1.65 ft Aug. 31, Sept. 5; minimum daily discharge, 919 cfs Sept. 22.

Period of record: Maximum discharge, 230,000 cfs Oct. 16, 1942 (gage height, 32.4 ft, from floodmarks); minimum, about 59 cfs Oct. 4, 1930 (gage height, 0.39 ft); minimum daily, 194 cfs July 24, 1930.

Flood of 1870 reached practically same stage as flood of Mar. 18, 1936, 26.36 ft (discharge, 151,000 cfs).

REMARKS.--Records good. Regulation by hydroelectric plants, particularly that of Potomac Light and Power Co., 0.5 mile 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,200	3,950	3,880	1,350	1,310	9,800	2,370	3,310	2,690	16,500	6,210	1,320
2	1,200	3,510	4,160	1,360	1,310	8,480	2,330	3,110	2,730	10,400	5,550	1,160
3	3,990	3,170	3,420	1,390	1,370	8,410	2,240	2,980	2,740	8,170	4,290	1,190
4	6,480	2,910	2,920	1,420	1,720	7,820	2,170	3,400	2,470	6,520	3,840	1,280
5	5,340	2,700	2,580	1,460	2,270	6,880	2,070	7,170	2,350	5,590	3,670	1,070
6	3,970	2,560	2,370	1,490	2,890	5,890	2,000	8,910	2,360	5,980	3,080	1,230
7	3,150	2,320	2,490	1,480	2,660	5,080	1,970	6,650	2,130	9,280	3,140	1,370
8	2,520	2,180	3,020	1,460	2,390	4,480	2,050	5,480	2,020	7,600	2,850	1,220
9	2,130	2,050	3,520	1,420	2,160	4,020	2,190	5,150	1,770	6,140	2,490	1,130
10	2,050	1,940	4,620	1,380	2,010	3,640	2,530	5,640	1,700	5,170	2,310	1,130
11	2,150	1,850	4,390	1,600	1,860	3,310	2,950	5,650	1,610	4,460	2,130	1,080
12	2,210	1,660	3,750	1,620	1,790	3,090	2,720	5,000	1,520	3,930	2,000	1,050
13	2,180	1,770	3,280	1,620	3,100	3,060	2,820	4,420	1,430	3,620	2,010	1,070
14	1,880	1,730	2,900	1,600	14,500	2,980	4,220	4,020	1,460	3,950	1,970	1,050
15	1,620	1,690	2,610	1,560	16,200	3,080	4,640	3,770	1,450	5,070	1,910	1,080
16	1,560	1,670	2,410	1,490	9,440	3,060	4,140	3,680	1,400	4,240	1,830	1,020
17	1,490	1,550	2,240	1,380	7,080	3,190	5,590	3,970	1,510	4,260	1,870	1,060
18	1,420	1,430	2,130	1,200	6,190	3,420	5,540	4,000	1,440	4,240	1,690	982
19	1,300	1,540	1,980	1,410	5,800	3,410	4,620	3,880	1,400	4,350	1,740	1,020
20	1,350	1,450	1,910	1,380	5,100	3,150	4,120	4,660	1,490	3,430	1,730	982
21	1,380	1,400	1,870	1,410	4,500	2,880	3,750	7,520	2,330	3,000	1,730	946
22	1,240	1,350	1,750	1,400	4,050	2,720	3,870	7,260	37,600	2,820	1,660	919
23	1,220	1,350	1,720	1,370	4,050	3,060	7,270	6,820	97,300	2,640	1,720	991
24	1,890	1,300	1,710	1,360	4,380	3,210	7,940	6,520	57,200	2,460	1,490	1,010
25	10,600	1,500	1,560	1,420	5,010	3,370	7,340	6,550	22,300	2,370	1,450	946
26	20,300	1,390	1,550	1,400	10,400	3,250	6,310	5,130	13,900	2,310	1,470	1,010
27	17,400	1,400	1,530	1,370	17,600	3,110	5,370	4,150	9,830	2,130	1,430	928
28	10,300	1,470	1,510	1,370	16,600	2,970	4,640	3,520	7,580	2,050	1,690	973
29	7,310	1,730	1,470	1,300	12,200	2,790	4,080	3,070	8,120	1,960	1,480	982
30	5,630	3,210	1,430	1,310	-----	2,630	3,640	2,770	17,500	1,960	1,420	1,050
31	4,600	-----	1,370	1,340	-----	2,510	-----	2,650	-----	2,490	1,280	-----
TOTAL	131,060	59,730	78,050	44,120	169,980	128,750	117,490	150,850	311,330	149,090	73,130	32,249
MEAN	4,228	1,991	2,518	1,423	5,861	4,153	3,916	4,866	10,380	4,809	2,359	1,075
MAX	20,300	3,950	4,620	1,620	17,600	9,800	7,940	8,910	97,300	16,500	6,210	1,370
MIN	1,200	1,300	1,370	1,200	1,310	2,510	1,970	2,650	1,400	1,960	1,280	919
CFSM	1.39	.65	.83	.47	1.93	1.37	1.29	1.60	3.41	1.58	.78	.35
IN.	1.60	.73	.96	.54	2.08	1.58	1.44	1.85	3.81	1.82	.89	.39
CAL YR 1971	TOTAL 1,205,633		MEAN 3,303		MAX 50,700	MIN 719	CFSM 1.09	IN 14.75				
WTR YR 1972	TOTAL 1,445,829		MEAN 3,950		MAX 97,300	MIN 919	CFSM 1.30	IN 17.69				

PEAK DISCHARGE (BASE, 15,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-26	0400	10.12	21,500	6-23	1200	21.89	103,000
2-15	0145	9.89	20,600	6-30	1630	10.13	21,600
2-27	2215	9.53	19,100				

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 mile downstream from Catoctin Creek (Virginia), 6.0 miles upstream from Monocacy River, and at mile 159.5.

DRAINAGE AREA.--9,651 sq mi.

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

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

AVERAGE DISCHARGE.--77 years, 9,167 cfs (12.90 inches per year).

EXTREMES.--Current year: Maximum discharge, 347,000 cfs June 23 (gage height, 37.43 ft); minimum, 2,130 cfs Sept. 26, 28 (gage height, 1.14 ft).

Period of record: Maximum discharge, 480,000 cfs Mar. 19, 1936 (gage height, 41.03 ft), from rating curve extended above 300,000 cfs on 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 cfs Sept. 11, 12, 1966 (gage height 0.27 ft).

Flood of June 2, 1889, reached a stage of 40.2 ft from floodmarks (discharge, about 460,000 cfs, 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,410	11,900	27,600	4,990	7,520	48,900	9,940	14,700	12,400	47,600	8,370	3,520
2	4,270	10,900	25,700	5,350	7,030	52,000	9,890	13,800	12,400	34,700	10,600	3,150
3	5,280	10,700	19,300	6,940	7,330	52,500	9,460	13,500	11,200	25,700	10,300	2,960
4	9,980	10,500	14,900	9,480	9,480	49,200	9,090	23,100	9,700	22,000	9,040	2,990
5	10,800	9,780	12,600	9,790	12,500	41,500	8,650	48,900	9,340	18,900	8,500	2,930
6	10,700	9,330	11,100	9,400	11,700	33,000	8,410	50,000	9,270	19,500	7,400	2,820
7	8,680	8,600	12,700	9,510	10,900	26,500	9,200	35,100	8,370	27,400	7,090	3,100
8	7,250	7,580	21,000	9,530	9,960	21,500	9,360	26,700	7,430	28,000	7,700	3,000
9	6,170	7,040	31,600	8,770	8,760	17,800	9,860	23,700	6,720	21,700	6,990	2,700
10	6,730	6,520	33,200	8,680	7,820	16,100	13,100	27,900	6,110	17,900	6,250	2,500
11	6,290	6,060	23,900	9,030	7,250	14,600	14,700	32,400	5,720	15,700	5,400	2,470
12	6,090	5,470	22,600	9,550	7,140	13,400	14,100	28,400	5,280	15,100	5,010	2,430
13	5,800	5,520	17,300	11,000	12,000	13,100	15,400	22,800	5,070	12,700	4,780	2,460
14	5,110	5,200	14,600	11,500	38,900	18,400	24,400	19,500	5,190	11,300	4,650	2,410
15	4,420	5,020	12,900	10,600	50,000	30,400	36,300	17,900	5,170	12,100	4,400	2,540
16	3,920	4,860	12,000	9,500	32,500	28,700	36,800	17,400	5,180	11,400	4,130	2,410
17	3,700	4,590	11,000	8,000	26,000	25,700	42,200	18,900	5,820	11,500	4,140	2,390
18	3,490	4,340	9,780	6,830	23,500	24,900	42,500	18,700	6,930	10,900	4,060	2,390
19	3,230	4,300	8,850	7,020	21,700	21,900	34,700	17,100	6,790	11,800	4,190	2,370
20	3,100	4,070	8,240	8,180	18,800	18,500	27,300	18,000	6,690	10,300	4,060	2,410
21	3,310	3,970	7,740	8,210	16,100	16,000	22,000	24,300	12,100	9,090	3,970	2,540
22	2,990	3,880	7,260	7,650	14,900	15,200	20,400	26,600	108,000	7,970	3,970	2,410
23	2,890	3,710	7,040	7,270	14,700	15,600	25,300	23,800	296,000	7,410	4,030	2,340
24	3,540	3,780	7,030	7,440	17,700	15,700	35,200	20,700	296,000	6,880	3,720	2,320
25	19,200	4,390	6,700	7,410	19,500	15,100	33,400	19,800	157,000	6,500	3,610	2,270
26	41,900	4,290	6,170	7,220	33,500	14,200	29,400	16,500	60,300	6,090	3,650	2,160
27	48,700	4,750	5,990	7,940	70,200	13,300	24,400	14,800	40,200	5,680	3,640	2,250
28	33,800	4,470	5,870	8,010	73,100	12,500	20,200	12,700	30,600	5,390	4,380	2,160
29	23,400	6,550	5,720	7,480	53,500	11,700	17,400	11,200	26,200	5,170	4,830	2,250
30	17,300	14,500	5,490	7,410	-----	11,100	15,600	10,100	34,900	5,140	4,200	2,340
31	14,100	-----	5,280	7,480	-----	10,400	-----	10,200	-----	5,470	3,910	-----
TOTAL	330,550	196,070	426,160	257,170	643,990	719,500	628,660	679,200	1,212,1M	456,990	170,970	76,990
MEAN	10,660	6,336	13,750	8,296	22,210	23,210	20,960	21,910	40,400	14,740	5,515	2,566
MAX	48,700	14,500	33,200	11,500	73,100	52,500	42,500	50,000	296,000	47,600	10,600	3,520
MIN	2,890	3,710	5,280	4,990	7,030	10,400	8,410	10,100	5,070	5,140	3,610	2,160
CFSM	1.10	.68	1.42	.86	2.30	2.40	2.17	2.27	4.19	1.53	.57	.27
IN.	1.27	.76	1.64	.99	2.48	2.77	2.42	2.62	4.67	1.76	.66	.30
CAL YR 1971	TOTAL 4,365,010	MEAN 11,960	MAX 83,200	MIN 1,810	CFSM 1.24	IN 16.83						
WTR YR 1972	TOTAL 5,798,330	MEAN 15,840	MAX 296,000	MIN 2,160	CFSM 1.64	IN 22.35						

PEAK DISCHARGE (BASE, 35,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-27	0200	11.29	52,400	4-24	1530	8.70	36,700
12-10	0300	8.50	35,500	5- 6	0030	11.84	56,000
2-15	0230	12.36	59,500	6-23	2330	37.43	347,000
2-27	2330	15.06	79,500	7- 1	1130	11.00	50,500
4-18	0230	9.94	44,100				

OHIO RIVER BASIN, EXCEPT CUMBERLAND AND TENNESSEE RIVER BASINS

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 downstream from highway bridge, 1,000 ft upstream from Stalnaker Run, 1.0 mile northeast of Dailey, 2.5 miles south of Beverly, and at mile 95.7.

DRAINAGE AREA.--187 sq mi.

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 above mean sea level, adjustment of 1912. Prior to Sept. 27, 1938, nonrecording gage a few feet upstream at same datum. Sept. 27, 1928, to Dec. 16, 1941, nonrecording gage, at site 50 ft upstream at same datum.

AVERAGE DISCHARGE.--57 years, 345 cfs (25.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,300 cfs Feb. 26 (gage height, 13.07 ft); minimum, 13 cfs Sept. 24, 25, 26; minimum gage height, 0.59 ft Sept. 24, 25.
Period of record: Maximum discharge, 13,100 cfs Feb. 4, 1932 (gage height, 17.2 ft, 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 1971 TO SEPTEMBER 1972

DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	144	1,010	116	368	1,260	365	226	221	640	796	52
2	188	134	572	153	302	1,250	344	209	152	450	390	43
3	167	178	394	391	290	2,640	305	1,690	116	330	285	39
4	147	205	314	380	471	1,340	828	1,850	94	290	939	89
5	193	174	250	1,390	340	744	1,500	1,350	89	1,800	588	106
6	185	149	253	1,360	270	482	792	796	77	2,250	524	69
7	132	140	2,060	768	240	374	720	536	71	840	318	52
8	104	124	2,920	492	223	371	3,190	414	59	471	216	42
9	88	109	1,030	443	223	356	1,300	528	46	312	156	35
10	78	104	648	1,960	213	326	764	832	59	219	118	33
11	73	97	471	1,420	174	272	548	676	62	177	90	30
12	64	89	353	912	167	248	429	496	44	216	74	27
13	55	83	290	660	1,110	228	1,200	387	38	149	66	29
14	50	76	240	532	1,090	600	2,490	327	496	114	69	34
15	46	70	215	384	636	792	1,510	417	660	90	57	57
16	45	66	215	210	604	588	1,140	608	468	83	49	39
17	44	62	183	190	588	524	1,650	532	768	69	55	29
18	44	57	169	210	461	471	1,140	444	438	64	221	24
19	39	56	138	245	377	415	716	417	306	300	186	21
20	33	64	580	263	284	365	544	384	211	224	357	20
21	31	107	1,090	885	263	341	510	345	1,100	118	226	18
22	29	128	620	824	1,470	443	2,020	330	1,920	90	147	16
23	35	111	415	608	1,250	776	2,150	276	6,870	80	110	15
24	76	116	329	1,150	4,740	636	1,870	224	4,740	63	211	13
25	401	149	269	1,120	4,310	510	1,300	191	1,220	64	156	13
26	872	162	225	921	6,930	419	788	159	664	57	237	14
27	499	203	198	628	3,820	422	532	126	500	42	211	15
28	326	329	171	1,920	1,130	405	396	106	450	51	149	17
29	235	812	158	1,680	934	401	318	94	600	62	106	23
30	185	1,930	140	844	-----	443	264	89	500	372	81	57
31	155	-----	134	528	-----	422	-----	253	-----	804	63	-----
TOTAL	4,859	6,228	16,054	23,587	33,278	18,864	31,623	15,312	23,039	10,891	7,651	1,071
MEAN	157	208	518	761	1,148	609	1,054	494	768	351	247	35.7
MAX	872	1,930	2,920	1,960	6,930	2,640	3,190	1,850	6,870	2,250	988	106
MIN	29	56	134	116	167	228	264	89	38	42	49	13
CFSM	.84	1.11	2.77	4.07	6.14	3.26	5.64	2.64	4.11	1.88	1.32	.19
IN.	.97	1.24	3.19	4.69	6.62	3.75	6.29	3.05	4.58	2.17	1.52	.21
CAL YR 1971	TOTAL	144,619	MEAN	396	MAX 5,870	MIN 14	CFSM	2.12	IN 28.77			
WTR YR 1972	TOTAL	192,457	MEAN	526	MAX 6,930	MIN 13	CFSM	2.81	IN 38.29			

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	0200	9.94	4,970	4- 8	1200	9.36	4,360
2-24	2000	11.37	7,190	6-23	2000	12.77	10,400
2-26	1700	13.07	11,300	7- 5	2400	9.01	4,010

MONONGAHELA RIVER BASIN

55

03050500 Tygart Valley River near Elkins, W. Va.

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

DRAINAGE AREA.--272 sq mi.

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 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 upstream at same datum.

AVERAGE DISCHARGE.--28 years, 496 cfs (24.76 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,200 cfs Feb. 27 (gage height, 14.69 ft); minimum, 21 cfs Sept. 24, 25, 27; minimum gage height, 1.37 ft Sept. 24.

Period of record: Maximum discharge, 13,100 cfs Dec. 31, 1969 (gage height, 15.65 ft); minimum daily, 0.1 cfs Sept. 20-29, 1959; minimum gage height, 1.01 ft Sept. 26-28, 1959.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	339	196	1,680	180	533	1,830	522	295	292	844	1,010	82
2	263	195	858	211	439	1,750	487	308	195	656	540	64
3	232	206	593	516	429	3,010	432	2,550	153	436	318	61
4	200	263	464	558	792	2,340	1,100	3,060	133	372	728	82
5	194	235	368	1,810	460	1,170	2,370	2,170	121	2,820	1,200	132
6	258	205	356	2,210	370	720	1,270	1,170	110	4,020	680	134
7	200	191	1,670	1,160	340	565	1,070	748	95	1,300	401	104
8	177	176	4,190	745	250	519	4,010	543	86	684	275	73
9	152	174	1,620	653	218	498	2,180	700	74	415	197	57
10	116	145	958	2,500	275	448	1,080	1,530	70	298	153	47
11	61	137	683	2,430	265	383	748	1,070	80	220	131	42
12	88	128	493	1,500	261	343	584	720	77	233	107	47
13	85	125	412	975	980	329	2,240	533	63	184	88	47
14	70	116	345	829	1,640	1,120	3,300	423	158	145	76	47
15	51	110	305	661	925	1,400	2,380	487	970	113	75	59
16	56	102	292	330	776	925	1,500	776	494	110	64	81
17	59	94	260	300	800	800	2,180	712	915	91	76	61
18	62	88	238	428	656	724	1,670	617	576	76	127	44
19	59	85	207	392	536	629	1,010	644	383	208	243	37
20	60	86	462	478	374	576	728	580	268	310	303	32
21	56	107	1,430	1,290	321	501	720	498	828	143	280	28
22	54	178	877	1,250	1,840	576	2,520	448	2,650	125	180	26
23	53	170	555	903	1,970	1,120	3,520	362	7,760	115	141	23
24	59	167	455	1,600	5,390	975	2,500	295	9,890	97	157	21
25	188	214	375	1,680	8,120	784	1,940	245	2,770	97	193	22
26	1,110	243	312	1,360	7,590	648	1,110	201	976	88	278	23
27	722	295	275	903	8,910	636	732	164	672	76	290	22
28	462	512	243	1,800	2,020	621	533	138	575	57	231	23
29	306	1,150	223	2,630	1,410	602	414	123	800	59	163	33
30	244	3,150	201	1,230	-----	610	343	117	636	159	134	119
31	210	-----	198	764	-----	602	-----	242	-----	860	108	-----
TOTAL	6,246	9,243	21,598	34,276	48,890	27,754	45,193	22,469	32,870	15,411	8,947	1,673
MEAN	201	308	697	1,106	1,686	895	1,506	725	1,096	497	289	55.8
MAX	1,110	3,150	4,190	2,630	8,910	3,010	4,010	3,060	9,890	4,020	1,200	134
MIN	51	85	198	180	218	329	343	117	63	57	64	21
CFSM	.74	1.13	2.56	4.07	6.20	3.29	5.54	2.67	4.03	1.83	1.06	.21
IN.	.85	1.26	2.95	4.69	6.69	3.80	6.18	3.07	4.50	2.11	1.22	.23

CAL YR 1971 TOTAL 205,478.4 MEAN 563 MAX 7,820 MIN 8.4 CFSM 2.07 IN 28.10
WTR YR 1972 TOTAL 274,570.0 MEAN 750 MAX 9,890 MIN 21 CFSM 2.76 IN 37.55

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	1100	10.45	5,100	6-24	0415	14.42	10,800
2-27	0315	14.69	11,200	7- 5	2245	10.38	5,020

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 mile downstream from highway bridge at Belington, and at mile 61.5.

DRAINAGE AREA.--408 sq mi, 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 above mean sea level, adjustment of 1912. Prior to Apr. 25, 1939, nonrecording gage at site 0.2 mile upstream at same datum.

AVERAGE DISCHARGE.--65 years, 797 cfs (26.53 inches per year).

EXTREMES.--Current year: Maximum discharge, 15,800 cfs June 23 (gage height, 17.52 ft); minimum, 34 cfs Sept. 25 (gage height, 2.29 ft).

Period of record: Maximum discharge, 18,400 cfs July 25, 1912 (gage height, 20.3 ft, from floodmarks, site then in use); minimum, 0.1 cfs Sept. 13, 1930 (gage height, 1.56 ft, site then in use).

Flood of July 1888, reached a stage of 21.7 ft, former site, from floodmarks (discharge, 21,200 cfs).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	499	318	2,940	325	910	2,710	885	595	460	1,870	1,420	120
2	391	411	1,510	394	720	2,480	833	565	320	1,360	868	96
3	334	554	986	920	718	3,700	778	3,210	241	879	495	82
4	314	541	775	989	1,570	3,580	1,570	4,370	201	719	620	100
5	262	454	618	2,780	1,110	1,920	3,560	3,430	187	4,240	1,780	130
6	355	381	583	3,610	905	1,240	2,070	2,020	172	5,940	1,090	166
7	294	346	1,750	1,920	750	970	1,750	1,300	151	2,340	637	145
8	242	316	5,060	1,200	600	851	5,240	939	133	1,240	435	113
9	215	288	2,600	1,010	521	793	3,510	1,170	118	758	306	89
10	185	272	1,530	3,740	456	714	1,780	3,230	115	527	237	73
11	127	248	1,120	4,100	400	633	1,280	2,160	118	390	194	62
12	108	232	825	2,580	433	578	1,020	1,350	118	340	169	71
13	119	219	696	1,790	994	610	3,150	962	103	315	145	108
14	114	208	582	1,340	2,450	2,890	5,110	763	108	245	130	89
15	95	196	517	1,060	1,460	3,180	3,510	747	917	211	118	98
16	79	180	487	600	1,360	1,920	2,290	1,050	609	330	113	120
17	79	173	445	450	1,290	1,700	3,100	1,160	906	249	139	110
18	79	164	406	550	1,130	1,490	2,710	1,080	763	187	405	82
19	79	156	363	629	922	1,230	1,730	1,090	510	160	370	65
20	69	173	464	650	686	1,040	1,290	1,010	375	445	225	56
21	68	230	1,780	2,110	500	889	1,310	862	516	283	400	47
22	60	307	1,310	2,130	2,260	909	3,380	747	2,860	197	261	43
23	69	331	875	1,480	3,140	1,660	5,230	626	11,400	187	194	38
24	95	331	695	2,120	7,260	1,600	3,510	500	12,700	169	169	36
25	172	431	591	2,580	9,940	1,310	3,090	410	4,740	178	229	36
26	1,190	474	505	2,160	10,100	1,100	1,900	340	1,810	187	261	38
27	1,030	561	457	1,460	11,000	1,070	1,300	270	1,290	151	315	40
28	685	1,000	418	2,130	3,600	1,080	966	225	1,060	130	301	38
29	485	1,950	397	3,630	2,290	1,000	774	197	1,980	108	218	45
30	369	5,150	367	1,970	-----	1,020	660	187	1,830	163	172	108
31	331	-----	353	1,270	-----	996	-----	301	-----	968	148	-----
TOTAL	8,593	16,595	32,005	53,677	69,475	46,863	69,286	36,866	46,811	25,466	12,664	2,444
MEAN	277	553	1,032	1,732	2,396	1,512	2,310	1,189	1,560	821	409	81.5
MAX	1,190	5,150	5,060	4,100	11,000	3,700	5,240	4,370	12,700	5,940	1,780	166
MIN	60	156	353	325	400	578	660	187	103	108	113	36
CFSM	.68	1.36	2.53	4.25	5.87	3.71	5.66	2.91	3.82	2.01	1.00	.20
IN.	.78	1.51	2.92	4.89	6.33	4.27	6.32	3.36	4.27	2.32	1.15	.22
CAL YR 1971	TOTAL 312,594	MEAN 856	MAX 9,170	MIN 21	CFSM 2.10	IN 28.50						
WTR YR 1972	TOTAL 420,745	MEAN 1,150	MAX 12,700	MIN 36	CFSM 2.82	IN 38.36						

PEAK DISCHARGE (BASE, 6,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-27	0800	15.65	12,700	7- 5	2300	11.71	7,250
6-23	2000	17.52	15,800				

MONONGAHELA RIVER BASIN

57

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 upstream from highway bridge, and at mile 2.7.

DRAINAGE AREA.--149 sq mi.

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

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

AVERAGE DISCHARGE.--30 years, 338 cfs (30.81 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,500 cfs June 23 (gage height, 13.67 ft) from rating curve extended as explained below; minimum, 7.2 cfs Sept. 26 (gage height, 1.60 ft).

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

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	155	1,130	158	464	1,110	428	285	188	1,500	530	28
2	153	232	710	220	392	1,020	416	254	133	922	317	21
3	136	282	528	504	376	1,500	388	1,050	108	635	220	18
4	118	241	428	492	655	1,130	890	1,250	93	520	376	44
5	110	190	348	1,360	532	818	1,540	1,120	89	1,890	440	98
6	140	168	336	1,340	450	610	944	785	84	1,900	344	66
7	106	158	770	842	300	512	830	592	69	1,010	257	39
8	89	145	1,360	592	250	480	1,780	484	62	625	202	26
9	76	129	908	544	250	436	1,130	588	49	424	153	20
10	67	122	660	2,020	200	404	775	1,370	47	296	127	16
11	61	116	560	1,780	200	356	610	1,040	64	205	56	14
12	56	106	468	1,270	200	324	536	730	47	183	75	21
13	44	100	404	890	368	296	1,370	556	37	145	66	28
14	39	93	336	730	532	914	2,100	456	49	110	55	21
15	41	85	296	568	468	1,200	1,300	464	344	89	50	37
16	37	82	282	300	516	902	980	516	178	138	33	96
17	30	76	241	200	512	836	1,310	512	264	104	43	47
18	28	71	220	250	464	785	1,050	548	205	73	143	29
19	25	71	188	300	424	685	755	548	232	62	125	21
20	21	94	254	380	313	580	630	500	180	299	140	16
21	19	143	448	878	250	492	795	436	223	158	125	13
22	17	188	400	872	785	504	1,840	408	690	100	89	12
23	20	165	352	690	896	710	1,830	344	8,120	87	82	9.2
24	33	175	317	830	4,390	655	1,390	278	4,230	106	78	9.2
25	93	292	278	956	3,500	572	1,090	226	1,740	122	84	8.0
26	372	310	244	872	5,630	504	775	183	934	185	82	7.6
27	340	360	223	675	2,710	492	584	148	725	118	87	9.2
28	257	532	202	1,050	1,340	488	464	125	560	85	78	16
29	196	842	196	1,110	1,040	492	380	106	1,690	66	67	14
30	165	1,990	180	790	-----	504	320	96	1,370	93	50	91
31	145	-----	178	588	-----	464	-----	211	-----	232	37	-----
TOTAL	3,222	7,713	13,445	24,051	28,407	20,775	29,230	16,209	22,804	12,482	4,651	895.2
MEAN	104	257	434	776	980	670	974	523	760	403	150	29.8
MAX	372	1,990	1,360	2,020	5,630	1,500	2,100	1,370	8,120	1,900	530	98
MIN	17	71	178	158	200	296	320	96	37	62	33	7.6
CFSM	.70	1.72	2.51	5.21	6.58	4.50	6.54	3.51	5.10	2.70	1.01	.20
IN.	.80	1.93	3.36	6.00	7.09	5.19	7.30	4.05	5.69	3.12	1.16	.22

CAL YR 1971 TOTAL 137,453.12 MEAN 377 MAX 5,840 MIN .87 CFSM 2.53 IN 34.32
 WTR YR 1972 TOTAL 183,884.20 MEAN 502 MAX 8,120 MIN 7.6 CFSM 3.37 IN 45.91

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	1130	10.05	6,650	6-23	1430	13.67	11,500
2-26	1230	10.87	7,860	7- 5	1600	7.14	3,240

MONONGAHELA RIVER BASIN

03052500 Sand Run near Buckhannon, W. Va.

LOCATION.--Lat 38°57'50", long 80°09'10", Upshur County, on right bank 300 ft downstream from Left Fork, 4.5 miles southeast of Buckhannon, and at mile 6.0.

DRAINAGE AREA.--14.5 sq mi.

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

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

AVERAGE DISCHARGE.--26 years, 26.0 cfs (24.35 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,050 cfs June 23 (gage height, 6.07 ft), from rating curve extended above 600 cfs; minimum, 0.20 cfs Sept. 2, 3 (gage height, 0.59 ft).

Period of record: Maximum discharge, 2,000 cfs June 25, 1950, from rating curve extended above 600 cfs; maximum gage height, 6.29 ft Mar. 19, 1963; no flow for several days in 1951-56, 1964-66.

REMARKS.--Records good.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	ALG	SEP
1	9.5	25	57	9.0	25	34	20	15	13	190	4.0	.26
2	7.5	57	37	12	22	30	23	15	9.7	63	2.8	.23
3	6.5	47	27	30	40	93	25	23	7.5	37	2.3	1.1
4	6.0	30	21	30	68	63	89	35	7.2	27	7.5	3.2
5	5.2	19	17	75	48	46	85	45	10	225	8.1	2.2
6	3.9	15	18	65	39	33	49	33	5.8	102	3.6	1.3
7	3.2	13	45	40	30	28	88	27	5.3	45	3.6	.80
8	2.7	9.6	64	35	25	25	143	24	3.6	28	2.6	.60
9	2.4	8.4	46	30	20	18	66	41	3.1	19	2.3	.66
10	2.4	7.9	35	110	15	17	43	107	5.3	13	1.8	.54
11	2.3	6.9	37	90	15	14	34	57	2.9	10	1.5	.60
12	2.1	6.1	32	80	19	14	26	35	2.4	8.5	2.0	1.6
13	1.8	5.6	26	55	75	13	172	27	2.4	7.2	2.1	3.6
14	2.0	5.0	20	51	73	49	155	22	13	5.6	2.0	1.8
15	2.2	4.6	19	38	60	68	73	22	8.1	4.2	1.3	1.7
16	1.8	4.3	16	25	69	60	61	20	7.2	7.8	1.0	1.5
17	1.6	3.8	14	16	58	67	118	29	4.7	4.7	6.1	.96
18	1.4	3.7	12	18	44	61	62	62	3.7	3.9	7.5	.72
19	1.2	5.1	11	22	37	46	39	47	3.4	3.1	3.7	.66
20	1.0	8.1	21	41	30	34	39	36	2.8	2.5	3.1	.48
21	.97	20	26	90	34	26	40	29	8.1	2.3	2.3	.42
22	1.1	19	21	62	113	32	180	30	26	2.1	1.7	.34
23	2.0	16	19	45	92	38	101	23	647	2.8	1.4	.26
24	3.9	25	17	60	395	40	92	18	232	2.9	1.0	.48
25	15	46	15	70	179	37	65	17	80	2.4	.88	.34
26	26	42	14	56	252	33	41	16	42	2.3	.72	.30
27	17	68	13	40	115	33	30	11	36	3.4	.66	.34
28	11	91	12	92	63	30	24	8.8	31	2.5	.54	.30
29	7.6	98	11	70	45	27	19	7.2	82	2.0	.42	1.1
30	6.1	102	10	47	-----	25	17	8.8	200	7.2	.38	5.8
31	5.2	-----	10	33	-----	21	-----	23	-----	5.8	.34	-----
TOTAL	162.57	812.1	743	1,537.0	2,100	1,155	2,019	913.8	1,505.2	842.2	79.54	34.19
MEAN	5.24	27.1	24.0	49.6	72.4	37.3	67.3	29.5	50.2	27.2	2.57	1.14
MAX	26	102	64	110	395	93	180	107	647	225	8.1	5.8
MIN	.97	3.7	10	9.0	15	13	17	7.2	2.4	2.0	.34	.23
CFSM	.36	1.87	1.66	3.42	4.99	2.57	4.64	2.03	3.46	1.88	.18	.08
IN.	.42	2.08	1.91	3.94	5.39	2.96	5.18	2.34	3.86	2.16	.20	.09

CAL YR 1971 TOTAL 8,899.48 MEAN 24.4 MAX 324 MIN .05 CFSM 1.68 IN 22.83
WTR YR 1972 TOTAL 11,903.60 MEAN 32.5 MAX 647 MIN .23 CFSM 2.24 IN 30.54

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	0600	4.69	644	6-23	1000	6.07	1,050

03053500 Buckhannon River at Hall, W. Va.

LOCATION.--Lat 39°03'05", long 80°06'50", Barbour County, on right bank 0.2 mile upstream from highway bridge at Hall, 1.0 mile upstream from Pecks Run, and at mile 7.5.

DRAINAGE AREA.--277 sq mi.

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 above mean sea level (Baltimore & Ohio RR datum). June 1907 to May 25, 1909, nonrecording gage at site 0.2 mile downstream at datum 4.12 ft lower. Apr. 15, 1915, to June 8, 1939, nonrecording gage at site 500 ft downstream at present datum.

AVERAGE DISCHARGE.--57 years, 589 cfs (28.88 inches per year).

EXTREMES.--Current year: Maximum discharge, 12,000 cfs June 24 (gage height, 14.42 ft), from rating curve extended above 9,100 cfs; minimum, 20 cfs Sept. 27 (gage height, 3.89 ft).

Period of record: Maximum discharge, 13,000 cfs Mar. 7, 1967 (gage height, 15.07 ft), from rating curve extended above 9,100 cfs; minimum, 0.2 cfs Oct. 23, 27, 1930 (gage height, 1.30 ft, site then in use).

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365	290	1,950	221	707	1,800	569	472	294	2,590	592	49
2	281	779	1,170	346	589	1,700	580	410	193	1,530	481	43
3	221	870	798	1,050	623	2,300	622	706	146	970	296	38
4	195	652	620	1,020	1,460	2,000	1,010	1,380	123	765	500	55
5	170	454	496	2,360	1,180	1,500	2,420	1,500	143	1,84J	1,050	66
6	209	350	445	3,050	750	950	1,620	1,190	121	2,930	653	72
7	195	303	864	1,670	600	800	1,370	894	103	1,570	425	58
8	155	277	2,240	1,030	500	700	3,060	712	87	894	297	45
9	130	229	1,550	895	400	650	2,200	807	75	597	213	38
10	113	205	1,050	3,140	350	600	1,320	1,900	70	403	159	34
11	104	191	826	3,590	300	550	947	1,860	71	287	127	31
12	93	174	691	2,460	350	450	807	1,200	79	240	102	36
13	84	158	577	1,630	800	500	1,780	835	67	250	97	69
14	76	146	470	1,320	1,600	2,300	3,620	644	72	190	120	55
15	72	133	407	850	1,200	2,400	2,440	567	236	151	98	46
16	72	123	385	600	1,000	1,700	1,660	783	237	214	79	54
17	64	113	355	400	950	1,300	2,260	804	277	205	79	58
18	55	106	309	450	800	1,100	1,990	833	297	147	211	46
19	53	104	274	524	650	900	1,290	758	286	110	367	41
20	48	120	298	600	550	750	969	657	306	112	360	32
21	45	198	591	1,580	400	700	1,090	555	235	157	375	28
22	43	345	586	1,610	1,300	675	2,310	485	410	103	253	24
23	45	312	490	1,160	2,000	1,070	3,530	411	7,300	86	174	22
24	57	299	431	1,290	4,500	1,090	2,310	324	10,700	112	133	22
25	120	538	382	1,670	6,500	973	1,950	263	4,420	84	111	21
26	550	634	335	1,600	7,500	833	1,410	233	1,500	88	113	22
27	700	730	301	1,160	8,000	736	1,020	182	1,250	106	102	21
28	538	1,200	277	1,400	3,000	685	772	146	1,150	93	85	21
29	390	1,310	278	2,010	1,500	640	622	123	1,610	68	76	24
30	299	2,440	262	1,410	-----	669	520	110	2,310	74	68	45
31	241	-----	245	964	-----	632	-----	158	-----	168	57	-----
TOTAL	5,783	13,783	19,953	43,060	50,059	33,653	48,068	21,902	34,166	17,134	7,853	1,220
MEAN	187	459	644	1,389	1,726	1,086	1,602	707	1,139	553	253	40.7
MAX	700	2,440	2,240	3,590	8,000	2,400	3,620	1,900	10,700	2,930	1,050	72
MIN	43	104	245	221	300	450	520	110	67	68	57	21
CFSM	.68	1.66	2.32	5.01	6.23	3.92	5.78	2.55	4.11	2.00	.91	.15
IN.	.78	1.85	2.68	5.78	6.72	4.52	6.46	2.94	4.59	2.30	1.05	.16

CAL YR 1971 TOTAL 218,464 MEAN 599 MAX 6,890 MIN 14 CFSM 2.16 IN 29.34
WTR YR 1972 TOTAL 296,636 MEAN 810 MAX 10,700 MIN 21 CFSM 2.92 IN 39.84

PEAK DISCHARGE (BASE, 4,500 CFS)

NOTE.--No gage-height record
Feb. 8 to Mar. 21.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-27	unknown	-	unknown	6-24	0345	14.42	12,000

MONONGAHELA RIVER BASIN

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 mile downstream from Anglins Run, 5.0 miles downstream from Buckhannon River, and at mile 44.9.

DRAINAGE AREA.--916 sq mi.

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 above mean sea level. Prior to May 23, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 1,812 cfs (26.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 39,500 cfs June 23 (gage height, 24.67 ft); minimum, 72 cfs Sept. 26 (gage height, 1.62 ft).

Period of record: Maximum discharge, 43,000 cfs Mar. 7, 1967 (gage height, 25.93 ft); minimum, 4.9 cfs Oct. 10-12, 21, 1953; minimum gage height, 0.92 ft Sept. 9, 10, 1957.

Flood of July 25, 1912, reached a stage of 27.3 ft, read on U.S. Weather Bureau gage 0.2 mile downstream, or about 26 ft, present site and datum (discharge, about 37,000 cfs).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,290	789	6,980	756	2,360	5,280	2,090	1,380	990	6,280	2,450	217
2	980	1,630	3,920	1,010	1,930	5,020	2,020	1,220	764	4,390	2,020	180
3	789	2,060	2,630	2,540	1,940	7,090	1,990	4,020	557	2,840	1,180	158
4	708	1,790	2,060	2,820	3,960	7,550	3,020	7,020	444	2,270	1,200	155
5	628	1,350	1,670	6,190	3,360	4,640	7,680	6,350	444	6,200	3,240	228
6	684	1,060	1,490	8,870	2,720	3,230	5,220	4,320	400	11,300	2,400	273
7	700	915	2,800	5,160	2,500	2,520	4,380	3,000	345	5,810	1,520	259
8	543	825	8,600	3,260	1,800	2,230	9,850	2,320	296	3,180	1,060	210
9	462	708	5,930	2,630	1,400	2,090	7,830	2,590	263	2,090	748	170
10	405	652	3,660	8,050	1,200	1,860	4,330	6,550	256	1,450	550	143
11	355	592	2,770	10,200	1,000	1,680	3,120	5,710	245	1,030	415	123
12	280	543	2,240	7,030	1,100	1,490	2,580	3,700	249	816	355	121
13	277	501	1,910	4,930	2,040	1,400	5,330	2,640	231	834	304	173
14	263	468	1,600	3,500	5,030	3,950	11,100	2,090	238	644	304	214
15	252	432	1,370	2,500	3,560	6,140	8,080	1,880	1,180	508	273	180
16	228	400	1,280	1,600	3,480	4,610	5,290	2,390	1,240	692	242	210
17	210	380	1,160	1,400	3,290	4,300	6,610	2,600	1,340	708	256	228
18	195	355	1,030	1,810	2,870	3,940	6,380	2,600	1,460	501	578	189
19	189	335	897	1,690	2,450	3,340	4,200	2,580	1,080	375	897	155
20	180	375	933	1,760	1,930	2,760	3,080	2,390	980	708	772	128
21	168	501	2,510	4,420	1,400	2,350	3,260	2,080	789	708	950	108
22	160	816	2,580	5,170	3,970	2,210	6,420	1,870	3,560	426	692	93
23	165	897	2,000	3,770	6,700	3,420	11,100	1,610	27,000	365	487	83
24	195	843	1,630	4,380	15,100	3,640	7,400	1,260	28,300	375	385	79
25	316	1,330	1,440	5,620	19,900	3,130	6,670	1,020	13,200	340	360	76
26	1,780	1,660	1,230	5,100	20,800	2,690	4,500	843	5,050	450	415	74
27	2,400	1,870	1,080	3,710	20,400	2,470	3,130	676	3,540	380	474	78
28	1,800	2,950	990	4,150	8,900	2,440	2,360	543	3,110	330	468	85
29	1,280	4,120	951	7,120	5,150	2,300	1,900	450	5,050	259	375	95
30	960	9,470	879	4,700	-----	2,390	1,560	400	5,860	256	300	119
31	789	-----	834	3,180	-----	2,290	-----	578	-----	990	256	-----
TOTAL	19,631	40,617	71,054	129,026	152,240	104,450	152,480	78,680	108,461	57,505	25,966	4,604
MEAN	633	1,354	2,292	4,162	5,250	3,369	5,083	2,538	3,615	1,855	838	153
MAX	2,400	9,470	8,600	10,200	20,800	7,550	11,100	7,020	28,300	11,300	3,240	273
MIN	160	335	834	756	1,000	1,400	1,560	400	231	256	242	74
CFSM	.69	1.48	2.50	4.54	5.73	3.68	5.55	2.77	3.95	2.03	.91	.17
IN.	.80	1.65	2.89	5.24	6.18	4.24	6.19	3.20	4.40	2.34	1.05	.19
CAL YR 1971	TOTAL 703,933		MEAN 1,929		MAX 18,900		MIN 90		CFSM 2.11		IN 28.59	
WTR YR 1972	TOTAL 944,714		MEAN 2,581		MAX 28,300		MIN 74		CFSM 2.82		IN 38.37	

PEAK DISCHARGE (BASE, 13,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	1800	19.17	24,600	6-23	1900	24.67	39,500

MONONGAHELA RIVER BASIN

61

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 miles upstream from Threefork Creek, and 2.4 miles upstream from Grafton.

DRAINAGE AREA.--1,184 sq mi.

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, 251,100 acre-ft June 25 (elevation, 1,155.22 ft); minimum, 13,650 acre-ft Feb. 21 (elevation, 1,013.60 ft).

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

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

COOPERATION.--Records furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

- Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Change in contents (equivalent in cfs)
Sept. 30.....	1,083.09	93,180	-	-
Oct. 31.....	1,067.06	69,440	-23,740	-386
Nov. 30.....	1,068.54	71,480	+2,040	+34
Dec. 31.....	1,027.89	25,110	-46,370	-754
CAL YR 1971	-	-	-21,870	-30
Jan. 31.....	1,027.88	25,100	-10	0
Feb. 29.....	1,099.86	121,800	+96,700	+1,681
Mar. 31.....	1,042.40	39,240	-82,560	-1,343
Apr. 30.....	1,093.23	109,900	+70,660	+1,187
May 31.....	1,094.98	113,000	+3,100	+50
June 30.....	1,135.73	197,600	+84,600	+1,422
July 31.....	1,094.96	112,900	-84,700	-1,378
Aug. 31.....	1,092.71	109,000	-3,900	-63
Sept. 30.....	1,069.42	72,690	-36,310	-610
WTR YR 1972	-	-	-20,490	-28

MONONGAHELA RIVER BASIN

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 miles upstream from Threefork Creek, and 2.4 miles upstream from Grafton.

DRAINAGE AREA.--1,184 sq mi.

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.--34 years, 2,296 cfs (26.33 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 17,000 cfs Feb. 28; minimum, 275 cfs July 25.
Period of record: Maximum discharge, 20,000 cfs 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,750	715	9,150	840	2,050	10,000	1,070	1,520	650	14,500	950	742
2	2,720	1,410	10,100	850	810	4,680	1,090	1,520	650	14,200	1,500	810
3	2,700	3,000	8,300	390	870	5,930	1,120	1,540	650	13,700	1,500	810
4	2,000	3,540	5,540	1,490	2,630	12,100	1,160	5,120	650	11,500	1,500	803
5	1,320	3,460	4,180	3,950	4,800	15,000	3,450	8,680	650	6,790	1,510	800
6	1,300	3,350	3,970	7,990	4,700	14,100	6,400	8,580	596	6,180	2,280	800
7	1,290	2,680	2,590	7,280	4,450	12,800	6,380	5,360	650	9,940	3,030	793
8	1,280	2,100	2,090	8,700	4,200	10,200	7,960	3,050	650	9,770	3,020	790
9	1,260	1,450	4,410	7,900	3,950	7,800	10,300	3,040	650	7,920	2,250	790
10	1,240	1,080	6,950	7,500	2,920	6,900	10,600	3,080	538	4,080	1,060	783
11	1,220	1,070	6,610	10,600	2,040	5,050	7,880	4,760	425	1,540	610	780
12	962	1,070	6,200	11,500	2,010	3,180	3,240	6,330	378	1,180	610	780
13	716	1,060	4,740	7,400	2,020	964	1,270	6,250	330	820	610	780
14	714	1,060	2,660	5,160	3,170	890	3,180	4,620	330	820	610	773
15	710	1,050	1,320	4,550	5,110	1,070	4,420	2,300	330	820	610	770
16	708	828	730	4,350	5,750	3,180	4,520	1,540	330	820	560	770
17	704	605	745	2,220	5,400	4,930	5,740	1,550	330	820	510	770
18	700	605	930	1,580	4,900	4,980	7,730	2,350	334	813	510	770
19	698	601	1,400	1,590	3,800	4,970	7,660	3,140	932	810	510	763
20	694	600	1,840	2,000	2,990	6,390	5,810	3,140	1,530	602	510	760
21	690	600	1,870	2,530	2,180	7,000	4,510	3,130	1,520	350	510	760
22	686	600	2,540	4,560	2,510	5,440	3,760	3,110	1,530	300	560	760
23	682	604	2,740	5,400	4,090	4,210	5,970	2,320	1,640	300	610	753
24	680	605	2,680	3,920	6,200	4,200	9,660	1,550	5,720	300	610	750
25	675	612	2,200	5,100	11,300	4,190	9,610	1,550	14,600	275	610	743
26	676	844	1,750	5,650	9,570	4,130	9,480	1,540	15,400	300	610	740
27	687	1,640	1,740	5,400	10,500	4,030	7,740	1,100	15,100	300	610	733
28	700	2,260	1,740	5,050	17,000	3,930	4,000	650	13,800	350	610	730
29	708	3,520	1,720	5,040	16,400	3,120	1,520	650	3,340	400	610	723
30	710	6,280	1,700	5,100	-----	1,470	1,520	650	7,820	400	610	720
31	711	-----	1,260	4,260	-----	1,040	-----	650	-----	400	644	-----
TOTAL	33,291	48,899	106,395	150,350	148,320	177,874	158,750	94,370	92,053	111,300	30,844	23,049
MEAN	1,074	1,630	3,432	4,850	5,114	5,738	5,292	3,044	3,068	3,590	995	768
MAX	2,750	6,280	10,100	11,500	17,000	15,000	10,600	8,680	15,400	14,500	3,030	810
MIN	675	600	730	840	810	890	1,070	650	330	275	510	720

CAL YR 1971 TOTAL 910,273 MEAN 2,494 MAX 17,300 MIN 150 MEAN† 2,464 CFSM† 2.08 IN† 28.24
WTR YR 1972 TOTAL 1,175,495 MEAN 3,212 MAX 17,000 MIN 275 MEAN† 3,184 CFSM† 2.69 IN† 36.62
† Adjusted for change in contents in Tygart Lake.

MONONGAHELA RIVER BASIN

63

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 upstream from Guyses Run, and at mile 6.0. Records include flow of Guyses Run.

DRAINAGE AREA.--1,366 sq mi, 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 855.49 ft above mean sea level (Baltimore & Ohio RR datum). Since Jan. 19, 1945, auxiliary water-stage recorder at Fairmont waterworks, 5.7 miles downstream from base gage, at datum 856.99 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 2,583 cfs (25.68 inches per year), unadjusted.

EXTREMES.--Current year: Maximum daily discharge, 18,000 cfs Feb. 28; minimum, 282 cfs July 25 (gage height, 3.56 ft).

Period of record: Maximum discharge, 22,500 cfs Feb. 14, 1948 (gage height, 16.86 ft); maximum gage height, 19.77 ft Mar. 5, 1963 (backwater from West Fork River); minimum discharge, 94 cfs July 3, 1946; minimum daily, 129 cfs 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	2,900	874	9,260	988	3,940	12,700	1,410	1,680	672	15,000	645	725		
2	2,840	1,430	10,300	1,150	995	5,490	1,410	1,690	664	15,000	1,550	829		
3	2,800	3,420	8,870	1,600	1,360	6,790	1,390	1,880	661	15,000	1,560	833		
4	2,440	4,030	6,190	1,720	3,370	11,200	1,830	4,130	662	13,000	1,680	831		
5	1,420	3,830	4,420	4,480	5,590	15,300	3,180	8,200	671	8,000	1,830	827		
6	1,400	3,690	4,330	8,580	5,310	14,000	6,520	8,530	638	7,000	2,030	822		
7	1,380	3,290	4,290	8,500	5,080	12,700	6,480	6,120	666	11,000	3,290	815		
8	1,380	2,390	3,450	9,500	4,680	10,500	8,810	3,160	666	10,000	3,190	814		
9	1,360	1,960	4,170	5,000	4,340	7,620	10,100	3,220	660	8,500	2,720	809		
10	1,350	1,200	7,460	8,500	3,600	6,960	10,300	3,330	650	4,500	1,420	804		
11	1,340	1,190	7,220	10,000	2,350	5,580	8,680	4,250	452	1,800	675	801		
12	1,220	1,180	6,750	11,000	2,270	3,760	4,280	6,230	427	1,200	658	807		
13	750	1,170	5,660	9,000	3,010	1,930	2,330	6,120	342	900	690	801		
14	747	1,160	3,520	7,500	3,750	2,900	3,740	5,190	349	900	653	802		
15	734	1,150	1,940	6,000	5,270	2,950	5,040	2,890	423	900	651	805		
16	727	1,060	1,120	5,500	6,350	3,500	5,340	2,070	411	900	632	808		
17	723	856	815	3,500	5,970	6,030	7,170	2,020	386	900	626	791		
18	717	644	1,140	2,500	5,540	5,590	8,200	2,390	376	900	702	791		
19	711	651	1,320	2,000	4,780	5,280	7,770	3,390	532	900	639	781		
20	707	663	2,100	2,500	3,550	5,990	6,500	3,310	1,570	850	639	775		
21	703	693	1,890	2,820	2,990	6,900	5,000	3,240	1,580	466	598	774		
22	701	731	2,740	4,550	3,030	6,060	4,500	3,200	1,640	374	582	771		
23	720	717	2,960	5,900	4,600	4,570	4,500	2,780	7,680	362	672	765		
24	748	735	2,910	4,660	7,000	4,500	8,500	1,660	7,290	355	663	768		
25	748	803	2,620	5,690	11,300	4,450	9,560	1,640	15,400	336	655	767		
26	773	896	1,930	7,120	13,800	4,340	9,290	1,620	16,200	342	647	764		
27	760	1,740	1,920	6,800	9,500	4,210	8,130	1,430	15,500	348	643	758		
28	752	3,180	1,900	6,370	18,000	4,080	5,080	691	14,700	353	642	752		
29	748	4,590	1,880	6,250	16,700	3,710	1,770	672	5,980	433	638	752		
30	745	7,890	1,850	6,420	-----	2,210	1,710	669	5,000	444	636	744		
31	745	-----	1,660	5,380	-----	1,450	-----	682	-----	463	633	-----		
TOTAL	35,789	57,633	118,635	175,478	168,025	193,450	168,520	98,084	102,846	121,426	33,489	23,686		
MEAN	1,154	1,921	3,827	5,661	5,754	6,240	5,617	3,164	3,428	3,917	1,080	790		
MAX	2,900	7,390	10,300	11,000	18,000	15,300	10,300	8,530	16,200	15,000	3,290	833		
MIN	701	644	815	988	955	1,450	1,390	669	342	336	582	725		
CAL YR 1971	TOTAL	998,083	MEAN	2,734	MAX	18,700	MIN	176	MEAN	2,704	CFSM	1.98	IN	26.88
WTR YR 1972	TOTAL	1,297,063	MEAN	3,544	MAX	18,000	MIN	336	MEAN	3,516	CFSM	2.57	IN	34.98

* Adjusted for change in contents in Tygart Lake.

NOTE.--No gage-height record Feb. 27, 28.

MONONGAHELA RIVER BASIN

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 mile downstream from Skin Creek, 2.5 miles south of Weston, and at mile 71.0.

DRAINAGE AREA.--102 sq mi.

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

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

AVERAGE DISCHARGE.--26 years, 161 cfs (21.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,870 cfs Feb. 24 (gage height, 11.45 ft); minimum daily, 6.6 cfs Sept. 1.

Period of record: Maximum discharge, 6,420 cfs June 25, 1950 (gage height, 17.20 ft), from rating curve extended above 3,400 cfs on basis of slope-area measurement of peak flow; no flow for several days during 1952-54, Sept. 16, 1965.

REMARKS.--Records good prior to May and fair thereafter.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	103	388	52	128	172	123	75	23	1,020	40	6.6
2	45	484	209	237	114	140	169	71	23	303	25	30
3	38	444	137	516	237	820	240	219	13	148	25	40
4	33	216	103	317	824	584	564	268	16	108	290	45
5	29	117	80	1,220	352	317	672	282	15	266	300	40
6	25	80	88	1,040	240	216	338	198	14	626	100	35
7	24	66	420	377	200	166	528	140	13	232	65	35
8	20	52	580	212	160	143	1,320	111	12	110	35	35
9	19	45	293	247	140	111	528	137	11	70	20	35
10	19	38	182	1,240	120	95	275	504	13	51	15	30
11	17	34	134	1,020	102	83	198	408	11	38	14	30
12	19	31	117	723	93	73	159	208	10	32	11	70
13	17	31	98	420	896	68	1,050	137	9.7	30	10	60
14	19	27	80	384	1,000	73	1,510	106	12	25	41	45
15	25	27	73	282	560	143	584	175	16	25	30	40
16	19	27	71	150	676	189	377	179	15	95	18	40
17	15	27	63	117	432	321	316	153	16	70	19	35
18	15	25	56	106	293	236	476	128	18	50	83	40
19	15	25	50	103	256	216	258	99	58	40	95	35
20	10	31	68	349	244	153	202	83	34	30	95	35
21	10	59	117	852	195	120	310	72	21	30	72	30
22	16	106	106	472	936	172	1,350	61	27	25	40	30
23	24	75	83	272	816	363	1,130	52	96.9	25	29	30
24	58	66	75	289	2,490	314	432	42	1,680	20	22	35
25	61	143	68	412	1,940	272	338	36	462	20	17	35
26	120	195	63	345	1,800	212	233	32	156	15	15	30
27	106	272	59	212	1,310	162	219	28	298	15	13	35
28	68	520	59	412	464	131	179	25	161	15	11	35
29	45	572	59	528	258	123	101	21	114	15	9.4	30
30	34	772	59	293	-----	233	85	19	958	20	8.6	62
31	29	-----	56	185	-----	153	-----	22	-----	40	7.5	-----
TOTAL	1,035	4,710	4,094	13,389	17,357	6,624	14,764	4,091	5,203.7	3,609	1,575.5	1,113.6
MEAN	33.4	157	132	432	595	214	492	132	173	116	50.8	37.1
MAX	120	772	580	1,240	2,490	820	1,510	504	1,680	1,020	300	70
MIN	10	25	50	52	93	68	85	19	9.7	15	7.5	6.6
CFSM	.33	1.54	1.29	4.24	5.87	2.10	4.82	1.29	1.70	1.14	.50	.36
IN.	.38	1.72	1.49	4.88	6.33	2.42	5.38	1.49	1.90	1.32	.57	.41

CAL YR 1971 TOTAL 53,961.3 MEAN 148 MAX 2,650 MIN 1.1 CFSM 1.45 IN 19.68
 WTR YR 1972 TOTAL 77,565.8 MEAN 212 MAX 2,490 MIN 6.6 CFSM 2.08 IN 28.29

PEAK DISCHARGE (BASE, 2,200 CFS).--Feb. 24 (1000) 2,870 cfs (11.45 ft).

03058500 West Fork River at Butcherville, W. Va.

LOCATION.--Lat 39°05'25", long 90°28'05", Lewis County, on right bank at Butcherville, 0.5 mile upstream from Freemans Creek, 3,500 ft downstream from abandoned bridge on Weston-Clarksburg interurban electric railway, 3.0 miles north of Weston, and at mile 62.0.

DRAINAGE AREA.--181 sq mi.

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 above mean sea level (Department of Highways bench mark). Prior to Feb. 17, 1937, nonrecording gage at interurban bridge 3,500 ft upstream. Feb. 17, 1937, to Apr. 7, 1939, nonrecording gage at site 2,500 ft upstream. Prior to Oct. 1, 1942, at datum 10.0 ft lower.

AVERAGE DISCHARGE.--57 years, 299 cfs (22.43 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,250 cfs Apr. 13 (gage height, 7.83 ft); minimum, 10 cfs Oct. 21, 22 (gage height, 0.73 ft).

Period of record: Maximum discharge, 18,000 cfs June 25, 1950 (gage height, 16.81 ft), from rating curve extended above 7,500 cfs 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 at site 3,500 ft 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.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	UCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	158	716	80	215	285	218	282	40	1,650	65	14
2	85	763	366	479	192	243	282	285	38	596	44	44
3	70	667	240	800	399	1,310	417	742	35	338	44	64
4	59	356	182	512	1,300	894	964	696	30	251	483	75
5	49	218	141	2,040	638	492	1,040	582	31	508	538	64
6	44	177	182	1,540	388	338	555	444	26	976	192	58
7	38	145	866	600	310	269	905	349	25	448	132	54
8	30	90	1,060	338	260	246	2,160	301	22	234	80	54
9	26	68	525	370	220	192	883	352	21	174	56	57
10	23	61	345	1,720	190	163	467	737	22	138	42	53
11	22	54	251	1,520	170	143	366	681	21	110	35	52
12	19	49	209	1,080	160	130	294	410	19	95	28	114
13	18	45	168	686	1,570	122	2,240	314	16	85	27	103
14	18	41	136	789	1,680	126	2,320	263	18	80	44	75
15	23	37	124	492	916	194	988	359	19	78	48	65
16	22	35	116	279	1,070	356	686	448	23	161	34	65
17	19	32	103	207	711	551	1,560	335	22	114	46	59
18	16	31	88	180	475	459	839	321	30	85	124	67
19	15	33	76	170	463	342	492	251	68	65	168	58
20	13	39	114	508	388	248	421	218	53	53	145	57
21	11	72	184	1,500	298	199	508	189	37	45	124	53
22	12	134	165	763	1,360	291	2,560	156	38	41	67	52
23	28	108	130	487	1,230	624	2,020	132	1,410	38	46	50
24	70	92	118	822	3,260	500	855	114	2,360	33	35	54
25	130	199	105	727	2,850	421	737	85	822	30	33	54
26	254	282	95	582	2,840	335	521	65	276	27	50	52
27	207	417	88	370	2,000	260	459	57	696	25	26	56
28	132	844	93	534	732	212	388	49	314	23	22	61
29	87	1,100	92	727	414	187	335	45	384	22	18	52
30	64	1,390	92	440	-----	425	301	41	1,610	30	16	114
31	52	-----	88	294	-----	276	-----	44	-----	65	15	-----
TOTAL	1,772	7,737	7,258	21,636	26,699	10,833	26,781	9,347	8,526	6,618	2,827	1,850
MEAN	57.2	258	234	698	921	349	893	302	284	213	91.2	61.7
MAX	254	1,390	1,060	2,040	3,260	1,310	2,560	742	2,360	1,650	538	114
MIN	11	31	76	80	160	122	218	41	16	22	15	14
CFSM	.32	1.43	1.29	3.86	5.09	1.93	4.93	1.67	1.57	1.18	.50	.34
IN.	.36	1.59	1.49	4.45	5.49	2.23	5.50	1.92	1.75	1.36	.58	.38

CAL YR 1971 TOTAL 106,727.1 MEAN 292 MAX 5,010 MIN 3.7 CFSM 1.61 IN 21.94
WTR YR 1972 TOTAL 131,884.0 MEAN 360 MAX 3,260 MIN 11 CFSM 1.99 IN 27.11

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	1200	7.54	3,990	4-13	1700	7.83	4,250

MONONGAHELA RIVER BASIN

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 downstream from dam at Clarksburg waterworks, 1.2 miles upstream from Elk Creek, and at mile 32.4.

DRAINAGE AREA.--384 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 921.82 ft above mean sea level. Prior to Oct. 1, 1961, water-stage recorder at several sites 700 ft upstream at datum 10 ft 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.--49 years, 582 cfs (20.58 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 6,870 cfs Feb. 24 (gage height, 11.07 ft); minimum daily, 19 cfs Sept. 2.

Period of record: Maximum discharge, 17,800 cfs Mar. 7, 1967 (gage height, 23.40 ft); 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.).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	274	355	1,700	138	520	911	623	445	41	3,060	258	20
2	179	1,720	1,000	299	460	766	629	445	52	1,630	116	19
3	148	1,770	620	1,830	834	2,680	960	1,300	59	876	77	23
4	130	932	460	1,380	2,890	2,460	1,400	1,610	53	848	802	66
5	111	490	360	2,860	1,840	1,530	2,200	1,170	52	904	1,770	76
6	98	380	450	3,760	1,100	1,070	1,200	848	53	1,670	700	62
7	85	308	1,300	1,940	840	834	1,700	629	53	1,230	465	55
8	74	246	2,400	1,030	660	760	4,300	510	45	645	290	50
9	66	179	1,500	706	560	629	2,200	568	39	435	160	48
10	57	145	827	2,090	480	525	1,100	893	50	290	100	48
11	52	92	662	2,770	430	465	830	1,180	45	234	79	47
12	45	87	541	2,470	390	425	650	754	37	193	66	48
13	41	83	440	1,730	2,070	607	5,620	535	33	154	59	118
14	36	77	335	1,780	3,240	706	5,040	440	59	148	52	130
15	33	71	266	1,640	2,360	834	2,360	465	109	128	35	94
16	31	59	238	940	2,530	1,100	1,510	876	73	425	44	66
17	30	49	218	580	1,930	1,900	3,050	946	59	425	79	59
18	29	47	186	520	1,340	1,600	2,120	834	55	286	157	73
19	27	44	160	480	1,190	1,100	1,270	651	48	189	246	66
20	25	45	143	656	1,040	800	960	490	65	125	238	57
21	24	52	160	2,360	796	656	967	410	98	90	186	50
22	23	69	210	1,700	2,310	623	3,730	350	92	47	128	47
23	34	118	214	1,100	2,720	1,000	4,510	270	1,300	37	74	44
24	128	116	189	1,200	4,920	1,300	1,980	214	4,340	69	56	47
25	234	128	172	1,700	5,600	1,100	1,580	172	2,280	57	45	49
26	525	310	151	1,400	4,770	930	1,210	133	808	47	42	49
27	470	720	138	1,000	4,390	748	869	102	1,160	42	53	50
28	355	1,400	128	830	2,250	623	695	89	995	38	42	53
29	230	2,100	133	1,400	1,240	530	574	81	1,250	41	30	59
30	151	3,000	138	1,000	-----	510	490	74	2,180	38	26	57
31	109	-----	140	720	-----	800	-----	62	-----	81	22	-----
TOTAL	3,854	15,192	15,579	44,009	55,700	30,522	56,327	17,536	15,583	14,482	6,497	1,730
MEAN	124	505	503	1,420	1,921	985	1,878	566	519	467	210	57.7
MAX	525	3,000	2,400	3,760	5,600	2,680	5,620	1,610	4,340	3,060	1,770	130
MIN	23	44	128	138	390	425	490	62	33	37	22	19
MEAN†	132	514	511	1,428	1,929	993	1,886	574	528	476	219	66.8
CFSM†	.34	1.34	1.33	3.72	5.02	2.59	4.91	1.49	1.38	1.24	.57	.17
IN†	.39	1.50	1.53	4.29	5.41	2.99	5.48	1.72	1.54	1.43	.66	.19

CAL YR 1971 TOTAL 211,351.2 MEAN 579 MAX 9,450 MIN 7.1 MEAN† 587 CFSM† 1.53 IN† 20.77
WTR YR 1972 TOTAL 277,011.0 MEAN 757 MAX 5,620 MIN 19 MEAN† 765 CFSM† 1.99 IN† 27.09

PEAK DISCHARGE (BASE, 6,700 CFS).--Feb. 24 (2115) 6,870 cfs (11.07 ft).

† Adjusted for diversion by city of Clarksburg; records furnished by Clarksburg Water Board.

03061000 West Fork River at Enterprise, W. Va.

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

DRAINAGE AREA.--759 sq mi.

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 above mean sea level, adjustment of 1912. June 1907 to Sept. 30, 1918, nonrecording gage at site 150 ft upstream at same datum.

AVERAGE DISCHARGE.--48 years (1907-16, 1933-72), 1,134 cfs (20.29 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,740 cfs June 24 (gage height, 12.10 ft, from floodmark); minimum, 90 cfs Sept. 3, 4 (gage height, 1.44 ft).

Period of record: Maximum discharge, 36,500 cfs Mar. 7, 1967 (gage height, 28.05 ft), from rating curve extended above 21,000 cfs on basis of slope-area measurement at gage height 27.84 ft; minimum, 3.4 cfs July 27, 1934; minimum gage height, 0.6 ft Sept. 10, 14, 25, 1908.

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

REMARKS.--Records good except those for periods of doubtful or 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	551	704	3,620	535	1,080	2,100	1,260	1,150	278	3,540	450	103
2	378	2,530	2,080	694	900	1,580	1,130	1,090	248	2,520	329	95
3	355	3,240	1,320	2,990	1,320	3,900	1,110	1,910	232	1,700	285	90
4	312	1,920	982	2,470	5,180	4,320	1,910	2,930	238	2,140	725	100
5	275	1,100	791	4,360	3,420	2,860	3,860	2,660	254	1,680	2,340	167
6	249	750	903	6,340	2,150	2,160	2,510	2,160	270	2,950	1,220	169
7	229	602	2,540	3,310	1,700	1,740	3,420	1,820	245	2,040	846	147
8	210	492	4,780	1,940	1,300	1,540	8,180	1,580	216	1,320	665	134
9	197	386	3,000	1,440	1,100	1,340	4,360	1,400	198	960	407	125
10	187	329	1,940	3,120	960	1,130	2,450	1,700	198	725	302	120
11	180	319	1,680	4,510	850	1,000	1,800	2,080	226	575	229	115
12	175	275	1,380	3,870	780	919	1,480	1,950	207	470	248	115
13	166	256	1,110	2,900	3,250	1,130	5,030	1,690	184	425	1,080	123
14	161	244	904	2,780	6,780	1,760	7,960	1,430	216	440	356	207
15	163	230	862	2,790	4,080	2,330	4,010	1,250	372	394	281	278
16	160	213	831	1,770	4,210	2,410	2,690	1,820	360	888	223	229
17	153	190	795	1,190	3,450	3,750	4,780	2,040	291	1,200	299	169
18	149	192	727	1,090	2,550	3,120	4,090	1,920	245	990	906	147
19	143	191	639	1,070	2,210	2,280	2,530	1,750	220	480	736	158
20	136	209	580	1,070	1,990	1,720	1,900	1,530	229	340	605	153
21	129	234	612	2,140	1,580	1,400	1,720	1,300	313	278	485	134
22	123	255	713	2,970	2,920	1,370	4,460	1,100	376	248	380	120
23	154	280	700	2,130	4,520	2,000	7,750	930	3,590	175	302	113
24	351	293	641	2,430	6,650	2,340	3,780	730	8,280	216	238	105
25	537	375	598	3,210	8,210	2,080	2,890	585	3,950	213	195	113
26	883	678	553	2,950	6,870	1,810	2,400	485	2,060	187	167	118
27	824	936	517	2,070	6,750	1,540	1,870	412	2,640	175	153	115
28	587	2,610	492	1,620	4,080	1,320	1,590	348	2,200	172	153	115
29	400	3,240	505	1,950	2,720	1,130	1,370	310	2,520	169	142	123
30	303	5,960	525	1,870	-----	1,090	1,230	281	2,670	172	125	134
31	252	-----	536	1,420	-----	1,350	-----	278	-----	195	113	-----
TOTAL	9,072	29,233	37,856	74,999	93,560	60,519	95,520	42,619	33,526	27,977	14,985	4,134
MEAN	293	974	1,221	2,419	3,226	1,952	3,184	1,375	1,118	902	483	138
MAX	883	5,960	4,780	6,340	8,210	4,320	8,180	2,930	8,280	3,540	2,340	278
MIN	123	190	492	535	780	919	1,110	278	184	169	113	90
CFSM	.39	1.28	1.61	3.19	4.25	2.57	4.20	1.81	1.47	1.19	.64	.18
IN.	.44	1.43	1.86	3.68	4.59	2.97	4.68	2.09	1.64	1.37	.73	.20

CAL YR 1971 TOTAL 417,430 MEAN 1,144 MAX 14,700 MIN 68 CFSM 1.51 IN 20.46
WTR YR 1972 TOTAL 524,000 MEAN 1,432 MAX 8,280 MIN 90 CFSM 1.89 IN 25.68

PEAK DISCHARGE (BASE, 12,000 CFS).--No peak above base.

NOTE.--Doubtful or no gage-height record May 24 to June 20, June 23 to July 19.

MONONGAHELA RIVER BASIN

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 upstream from Finchs Run, and at mile 4.0.

DRAINAGE AREA.--115 sq mi.

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 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 higher.

AVERAGE DISCHARGE.--49 years (1907-8, 1915-23, 1932-72), 162 cfs (19.13 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,190 cfs Apr. 13 (gage height, 8.24 ft); minimum, 3.7 cfs Sept. 26 (gage height, 1.91 ft).

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

Flood in July 1912 reached a stage of about 18 ft, present site and datum (discharge, 11,600 cfs).

REMARKS.--Records good.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	40	358	119	90	379	98	111	33	184	19	13
2	49	163	209	286	85	273	98	115	28	119	18	13
3	42	290	151	562	267	904	91	208	27	649	24	10
4	36	148	121	308	916	508	289	286	24	531	57	12
5	31	94	98	907	377	408	429	230	33	385	61	9.8
6	27	70	314	590	230	312	259	179	25	502	40	8.0
7	25	58	1,160	326	160	251	524	153	19	242	44	7.6
8	23	47	942	208	130	217	919	135	16	143	30	7.2
9	20	39	438	212	110	185	420	149	16	103	24	8.2
10	19	36	281	761	100	169	283	175	18	74	21	7.5
11	18	34	217	710	90	142	208	159	16	58	16	7.6
12	17	30	168	463	85	130	168	139	14	48	16	6.4
13	16	28	147	317	967	267	1,150	122	17	72	95	7.9
14	16	26	143	210	986	517	827	110	29	345	54	7.9
15	16	24	118	160	593	543	486	175	22	116	32	9.9
16	16	22	112	127	682	496	470	309	29	164	25	11
17	15	20	91	135	490	627	794	221	39	789	34	8.8
18	14	19	83	134	342	433	437	181	27	325	76	7.6
19	13	20	72	128	250	297	282	153	18	152	65	7.0
20	12	23	83	116	200	220	215	130	16	102	56	6.2
21	11	30	92	140	170	183	170	113	21	74	40	6.0
22	11	37	86	152	356	246	525	96	44	58	28	6.3
23	13	35	75	163	409	379	574	80	808	46	23	7.3
24	35	35	77	356	631	303	364	67	747	37	20	7.4
25	76	47	71	462	737	253	277	55	331	33	27	6.0
26	63	50	68	367	1,270	209	211	44	202	29	29	4.8
27	48	102	72	234	669	178	173	36	167	24	23	6.0
28	44	452	71	186	439	155	146	33	126	28	18	6.6
29	29	776	73	144	492	133	125	29	168	25	18	8.5
30	24	828	85	124	-----	126	110	27	279	21	15	12
31	21	-----	134	100	-----	107	-----	37	-----	22	14	-----
TOTAL	863	3,623	6,210	9,207	12,323	9,550	11,122	4,057	3,359	5,500	1,062	247.5
MEAN	27.8	121	200	297	425	308	371	131	112	177	34.3	8.25
MAX	76	828	1,160	907	1,270	904	1,150	309	808	789	95	13
MIN	11	19	68	100	85	107	91	27	14	21	14	4.8
CFSM	.24	1.05	1.74	2.58	3.70	2.68	3.23	1.14	.97	1.54	.30	.07
IN.	.28	1.17	2.01	2.98	3.99	3.09	3.60	1.31	1.09	1.78	.34	.08

CAL YR 1971 TOTAL 59,359.2 MEAN 163 MAX 2,760 MIN 6.0 CFSM 1.42 IN 19.20
WTR YR 1972 TOTAL 67,123.5 MEAN 183 MAX 1,270 MIN 4.8 CFSM 1.59 IN 21.71

PEAK DISCHARGE (BASE, 3,500 CFS).--No peak above base.

MONONGAHELA RIVER BASIN

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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 upstream from concrete box culvert on Greenbag Road, and at mile 1.4.

DRAINAGE AREA.--10.9 sq mi.

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

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

AVERAGE DISCHARGE.--7 years, 14.8 cfs (18.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,770 cfs June 23 (gage height, 12.80 ft, from floodmark), from rating curve extended as explained below; minimum, 0.01 cfs Sept. 24 (gage height, 0.39 ft).
 Period of record: Maximum discharge, 1,770 cfs June 23, 1972 (gage height, 12.80 ft, from floodmark), from rating curve extended above 800 cfs on basis of culvert rating computation; no flow for many days.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	8.0	40	6.5	9.0	78	33	24	2.7	58	.96	.57
2	4.8	12	26	20	9.0	67	25	28	2.7	34	.74	.14
3	4.6	19	20	29	58	95	23	26	2.4	42	2.2	.08
4	4.0	15	15	26	76	55	66	22	5.8	48	4.0	.17
5	3.4	12	11	85	41	46	57	18	11	41	3.7	.36
6	3.0	9.5	31	56	30	34	44	29	4.3	38	2.4	.17
7	3.0	8.0	78	35	25	29	54	29	3.4	29	16	.09
8	2.7	6.5	65	25	20	29	70	23	2.9	19	1.9	.06
9	2.4	6.0	45	40	16	27	50	18	2.4	12	1.5	.49
10	2.2	5.0	33	83	14	24	34	17	3.0	12	1.9	.36
11	2.1	5.1	29	90	11	22	25	31	2.4	24	.42	.21
12	1.8	4.6	22	51	13	20	25	25	1.9	22	.31	.09
13	1.6	4.3	18	36	72	45	122	22	2.6	22	.49	.08
14	1.7	4.0	15	34	55	87	74	29	6.8	19	.26	.49
15	1.5	3.8	13	24	48	84	77	26	4.8	12	.42	.57
16	1.5	3.5	12	18	45	90	130	21	8.6	34	1.1	.42
17	1.5	3.4	9.7	15	36	93	65	17	6.1	38	2.7	.21
18	1.5	3.4	8.6	14	31	60	39	14	4.6	28	6.5	.11
19	1.0	3.8	7.5	13	31	40	31	12	3.5	19	16	.11
20	1.0	4.8	9.0	16	20	28	25	13	4.3	12	14	.09
21	1.0	5.8	8.3	20	27	28	68	11	4.6	5.0	4.0	.06
22	1.0	5.6	6.8	19	38	28	47	9.0	10	2.0	3.1	.04
23	1.0	5.1	6.1	23	35	28	40	7.5	765	1.5	3.1	.02
24	5.0	5.8	6.5	29	59	26	32	5.8	220	1.2	2.0	.02
25	7.0	8.3	5.8	29	60	24	25	5.1	90	1.1	1.2	.03
26	11	10	6.1	23	129	24	20	4.3	60	.96	1.2	.03
27	16	24	6.1	20	74	26	16	3.5	33	.84	1.5	.07
28	13	33	6.5	15	53	27	13	3.4	20	1.3	1.1	.08
29	7.5	84	6.1	13	71	27	11	3.0	50	.96	.96	.06
30	6.0	86	6.8	11	-----	50	15	2.9	103	.74	.65	.21
31	5.0	-----	7.2	9.5	-----	45	-----	3.0	-----	.84	.42	-----
TOTAL	124.4	409.3	580.1	928.0	1,206.0	1,386	1,356	502.5	1,441.8	579.44	96.73	5.49
MEAN	4.01	13.6	18.7	29.9	41.6	44.7	45.2	16.2	48.1	18.7	3.12	.18
MAX	16	86	78	90	129	95	130	31	765	58	16	.57
MIN	1.0	3.4	5.8	6.5	9.0	20	11	2.9	1.9	.74	.26	.02
CFSM	.37	1.25	1.72	2.74	3.82	4.10	4.15	1.49	4.41	1.72	.29	.02
IN.	.42	1.40	1.98	3.17	4.12	4.73	4.63	1.71	4.92	1.98	.33	.02

GAL YR 1971' TOTAL 6,228.83 MEAN 17.1 MAX 237 MIN 0 CFSM 1.57 IN 21.26
 WTR YR 1972 TOTAL 8,615.76 MEAN 23.5 MAX 765 MIN .02 CFSM 2.16 IN 29.40

PEAK DISCHARGE (BASE, 250 CFS).--June 23 (about 0900) 1,770 cfs (12.80 ft, from floodmark).
 NOTE.--No gage-height record Oct. 15 to Nov. 10, Mar. 9 to Apr. 11, May 14-22, June 23-29.

MONONGAHELA RIVER BASIN

03063600 Horsecamp Run at Harman, W. Va.

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

DRAINAGE AREA.--6.57 sq mi.

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

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

EXTREMES.--Current year: Maximum discharge, 246 cfs Feb. 24 (gage height, 3.72 ft), from rating curve extended as explained below; minimum daily, 0.16 cfs Aug. 12.

Period of record: Maximum discharge, 304 cfs Dec. 22, 1970 (gage height, 4.02 ft), from rating curve extended above 90 cfs on basis of step-backwater method; minimum daily, 0.04 cfs Jan. 3, 1971.

REMARKS.--Records fair. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	3.3	17	2.1	5.6	74	6.3	4.1	3.7	19	2.8	1.7
2	2.4	3.0	12	7.0	4.8	84	6.0	5.6	3.0	13	1.4	1.3
3	3.9	2.6	9.4	9.0	5.1	64	5.3	48	2.4	10	.89	1.6
4	3.5	2.5	7.7	9.4	4.8	32	30	77	2.2	9.3	2.0	2.9
5	3.7	2.1	6.8	30	4.4	21	27	42	2.1	58	4.1	2.3
6	3.5	1.9	30	21	3.1	13	17	23	2.0	42	2.1	1.7
7	2.8	1.8	89	14	2.5	11	31	15	1.9	22	1.7	1.3
8	2.5	1.6	55	10	2.0	15	44	12	1.4	13	1.2	1.1
9	2.0	1.5	27	19	1.5	7.0	23	24	1.2	9.2	.73	1.0
10	1.9	1.5	18	42	1.4	5.3	15	36	2.1	6.8	.34	.88
11	1.8	1.4	13	24	1.2	4.4	11	23	1.4	5.1	.22	.75
12	1.4	1.3	9.7	16	1.8	5.1	8.7	15	1.1	4.0	.16	1.0
13	1.1	1.2	7.7	13	4.1	11	78	11	1.4	3.5	3.9	1.2
14	.97	1.1	5.8	11	3.3	16	74	10	5.1	2.8	6.1	1.6
15	.89	.97	5.3	7.0	3.5	13	40	14	6.5	2.4	2.6	2.2
16	.81	.97	4.6	5.0	3.0	13	30	13	14	2.1	1.9	1.3
17	.73	.97	4.1	4.0	2.5	15	44	11	10	1.9	12	.98
18	.73	.97	3.3	4.5	2.0	11	27	10	10	1.7	11	1.7
19	.65	1.1	2.8	5.5	2.0	9.0	16	14	12	1.4	6.8	1.2
20	.57	1.3	12	8.4	1.5	7.7	12	44	12	1.3	4.9	.99
21	.65	1.9	13	15	1.5	6.5	9.0	29	58	1.2	3.4	.88
22	.65	1.5	9.4	13	1.5	13	60	20	66	1.1	3.8	.81
23	.97	1.5	7.3	12	1.5	16	42	15	135	.96	4.6	.72
24	6.3	1.5	6.5	44	156	13	55	11	48	.89	4.2	.69
25	8.4	1.5	5.6	26	75	10	33	8.7	25	1.2	9.2	.75
26	11	1.5	4.6	14	161	7.0	19	6.8	16	.92	8.2	.71
27	8.7	3.0	4.2	10	57	8.0	11	5.6	10	.87	5.7	.99
28	6.8	5.6	3.9	26	38	8.7	8.0	4.6	13	.94	4.2	1.9
29	5.1	21	3.1	15	64	9.7	6.0	4.1	41	.95	3.2	2.7
30	4.2	36	3.0	10	-----	9.0	4.8	3.7	28	4.8	2.5	7.0
31	3.5	-----	2.5	7.7	-----	7.0	-----	5.8	-----	3.0	1.9	-----
TOTAL	94.22	108.08	403.3	454.6	615.6	539.4	793.1	566.0	535.5	245.33	117.74	45.85
MEAN	3.04	3.60	13.0	14.7	21.2	17.4	26.4	18.3	17.9	7.91	3.80	1.53
MAX	11	36	89	44	161	84	78	77	135	58	12	7.0
MIN	.57	.97	2.5	2.1	1.2	4.4	4.8	3.7	1.1	.87	.16	.69
CFSM	.46	.55	1.98	2.24	3.23	2.65	4.02	2.79	2.72	1.20	.58	.23
IN-#	.53	.61	2.28	2.57	3.49	3.05	4.49	3.20	3.03	1.39	.67	.26
IN-#	1.84	2.14	1.72	5.03	5.11	1.89	5.78	4.84	6.29	4.09	3.14	3.47

CAL YR 1971 TOTAL 2,984.89 MEAN 8.18 MAX 114 MIN .04 CFSM 1.25 IN-# 16.90
WTR YR 1972 TOTAL 4,518.72 MEAN 12.3 MAX 161 MIN .16 CFSM 1.87 IN-# 25.59

PEAK DISCHARGE (BASE, 160 CFS)

Runoff.
Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	0545	3.72	246	4-13	1100	3.37	189
2-26	0745	3.66	236	6-23	0530	3.58	223

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 mile upstream from confluence with Blackwater River.

DRAINAGE AREA.--345 sq mi.

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 above mean sea level, adjustment of 1912. Prior to Dec. 21, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 739 cfs (29.09 inches per year).

EXTREMES.--Current year: Maximum discharge, 16,900 cfs June 23 (gage height, 9.67 ft), from rating curve extended as explained below; minimum, 40 cfs Sept. 24, 25 (gage height, 1.31 ft).

Period of record: Maximum discharge, 47,000 cfs Oct. 15, 1954 (gage height, 15.23 ft), from rating curve extended above 15,000 cfs on basis of slope-area measurement of peak flow; minimum, 5.5 cfs Sept. 10, 11, 1965 (gage height, 0.99 ft).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	319	365	1,720	292	664	5,260	970	557	424	1,280	816	92
2	387	424	1,140	504	578	6,810	918	601	293	918	490	81
3	574	441	841	939	570	6,950	781	4,170	238	756	330	72
4	413	412	732	768	776	3,030	2,220	4,520	204	792	384	108
5	489	355	599	2,080	476	1,850	2,530	3,230	182	4,090	640	211
6	421	322	1,090	1,890	511	1,260	1,690	1,880	161	3,240	390	144
7	333	313	6,060	1,260	483	1,010	1,960	1,310	150	1,710	287	106
8	280	289	5,410	903	378	1,230	3,740	1,010	135	1,060	228	84
9	239	250	2,690	876	310	969	2,220	1,550	117	752	181	75
10	218	242	1,660	3,040	260	823	1,540	2,540	150	540	151	65
11	212	229	1,190	2,680	260	674	1,240	1,740	136	410	121	61
12	200	214	885	1,950	280	692	1,070	1,270	113	325	100	59
13	190	200	712	1,370	403	1,430	3,430	964	95	292	94	134
14	170	186	578	1,100	378	1,740	4,120	820	195	242	162	89
15	160	172	504	824	403	1,520	2,560	965	441	207	155	162
16	140	163	490	450	436	1,340	1,990	963	539	198	121	134
17	140	154	436	370	416	1,480	3,410	852	810	177	455	89
18	130	145	403	350	378	1,220	2,380	793	721	147	688	72
19	120	145	330	450	360	1,070	1,590	758	651	224	360	65
20	110	182	885	578	240	941	1,280	1,390	412	476	276	57
21	100	234	1,430	1,410	240	849	1,180	1,240	1,320	262	207	50
22	110	243	984	1,260	1,090	1,310	3,110	1,030	3,670	194	158	46
23	150	211	744	1,050	1,180	1,640	3,090	1,160	13,000	151	170	43
24	1,600	253	632	1,950	5,780	1,350	3,220	816	5,940	124	238	41
25	1,700	265	548	2,060	5,120	1,120	2,350	634	2,710	124	540	40
26	2,000	302	469	1,540	10,300	945	1,610	499	1,640	124	308	44
27	1,300	363	429	1,130	5,070	874	1,170	400	1,320	94	242	43
28	610	477	423	1,820	2,620	838	893	335	925	100	219	43
29	500	1,260	410	1,600	3,320	977	729	292	2,460	94	174	70
30	413	3,150	354	1,190	-----	1,180	618	263	1,730	233	137	224
31	361	-----	336	858	-----	1,100	-----	470	-----	720	111	-----
TOTAL	14,089	11,961	35,114	38,542	43,280	53,482	59,609	39,022	40,882	20,056	8,933	2,604
MEAN	454	399	1,133	1,243	1,492	1,725	1,987	1,259	1,363	647	288	86.8
MAX	2,000	3,150	6,060	3,040	10,300	6,950	4,120	4,520	13,000	4,090	816	224
MIN	100	145	330	292	240	674	618	263	95	94	94	40
CFSM	1.32	1.16	3.28	3.60	4.32	5.00	5.76	3.65	3.95	1.88	.83	.25
IN.	1.52	1.29	3.79	4.16	4.67	5.77	6.43	4.21	4.41	2.16	.96	.28

CAL YR 1971 TOTAL 289,752 MEAN 794 MAX 7,550 MIN 25 CFSM 2.30 IN 31.24
WTR YR 1972 TOTAL 367,574 MEAN 1,004 MAX 13,000 MIN 40 CFSM 2.91 IN 39.63

PEAK DISCHARGE (BASE, 7,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2130	7.13	8,200	3- 3	0330	7.41	8,950
2-24	1500	7.00	7,860	6-23	1000	9.67	16,900
2-26	1400	8.80	13,300				

MONONGAHELA RIVER BASIN

03066000 Blackwater River at Davis, W. Va.

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

DRAINAGE AREA.--86.2 sq mi.

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

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

AVERAGE DISCHARGE.--51 years, 193 cfs (30.41 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,230 cfs Mar. 3 (gage height, 7.33 ft); minimum, 11 cfs Sept. 23, 25 (gage height, 1.38 ft).

Period of record: Maximum discharge, 7,170 cfs Mar. 29, 1924 (gage height, 13.20 ft, from floodmark); minimum, 1.5 cfs Sept. 11, 12, 1959 (gage height, 0.90 ft), caused by filling of small water supply pool about 1.0 mile upstream.

REMARKS.--Records good except those for ice-affected days in February, which are poor.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	99	537	89	168	1,410	200	172	111	292	159	32
2	124	140	333	288	120	1,810	205	168	77	192	91	28
3	190	156	213	333	128	1,990	210	848	62	177	53	26
4	132	118	178	215	176	1,050	740	1,060	53	191	79	29
5	148	91	154	505	150	579	666	752	46	1,020	253	29
6	114	81	596	415	150	364	376	415	40	970	125	26
7	93	83	1,730	265	120	320	561	283	39	458	68	23
8	87	74	1,830	220	100	424	828	233	34	264	50	22
9	75	68	1,010	300	85	320	540	409	30	192	41	27
10	72	68	533	1,020	75	245	391	448	47	145	38	18
11	74	66	364	700	70	203	340	290	44	121	30	16
12	66	65	270	547	65	228	310	208	30	100	27	16
13	56	60	218	370	100	688	896	170	26	86	25	19
14	50	56	172	290	95	692	880	162	72	72	59	16
15	48	51	158	195	90	505	575	225	87	71	42	18
16	43	48	148	150	85	561	472	243	116	69	35	20
17	43	46	132	110	80	484	812	200	89	65	87	17
18	40	44	118	130	75	385	603	180	59	56	190	16
19	35	47	136	158	70	335	367	168	77	56	127	16
20	31	71	310	218	65	253	308	285	80	70	97	14
21	31	72	388	421	60	240	300	258	140	51	62	13
22	31	65	240	290	60	353	645	185	400	39	44	12
23	46	55	154	215	300	418	673	273	1,720	33	38	11
24	439	60	142	454	1,380	305	652	180	1,680	29	121	12
25	454	55	136	430	1,590	200	505	132	924	44	250	12
26	502	65	124	270	1,860	200	355	109	430	48	102	12
27	273	80	124	205	1,580	213	268	91	288	38	127	14
28	172	103	140	303	1,040	218	213	81	199	50	88	31
29	134	367	132	290	1,150	280	178	72	537	39	65	32
30	114	860	114	213	-----	343	162	68	446	52	48	66
31	99	-----	107	158	-----	255	-----	134	-----	104	37	-----
TOTAL	3,890	3,314	10,941	9,767	11,087	15,871	14,231	8,502	7,983	5,194	2,658	643
MEAN	125	110	353	315	382	512	474	274	266	168	85.7	21.4
MAX	502	860	1,830	1,020	1,860	1,990	896	1,060	1,720	1,020	253	66
MIN	31	44	107	89	60	200	162	68	26	29	25	11
CFSM	1.45	1.28	4.10	3.65	4.43	5.94	5.50	3.18	3.09	1.95	.99	.25
IN.	1.68	1.43	4.72	4.21	4.78	6.85	6.14	3.67	3.45	2.24	1.15	.28

CAL YR 1971 TOTAL 81,542.3 MEAN 223 MAX 2,200 MIN 7.7 CFSM 2.59 IN 35.19
WTR YR 1972 TOTAL 94,081.0 MEAN 257 MAX 1,590 MIN 11 CFSM 2.98 IN 40.60

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-8	0200	7.23	2,160	3-3	0500	7.33	2,230
2-26	1300	7.13	2,090	6-23	1700	6.86	1,920

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 mile upstream from confluence with Black Fork.

DRAINAGE AREA.--214 sq mi.

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 above mean sea level. Prior to Aug. 25, 1923, nonrecording gage on old highway bridge 800 ft downstream and Aug. 25, 1923, to Sept. 30, 1926, nonrecording gage on railroad bridge 760 ft downstream at datum 3.0 ft lower. Oct. 4, 1940, to Apr. 4, 1942, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--48 years, 547 cfs (34.71 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,800 cfs June 23 (gage height, 10.15 ft); minimum, 60 cfs Sept. 24, 25, 26 (gage height, 0.70 ft).

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

Floods of July 10, 1888, and July 17, 1907, reached a stage of approximately 12.5 ft at site and datum of former gage (discharge, 25,000 cfs, from rating curve extended above 8,000 cfs).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	355	292	944	222	351	2,640	672	390	425	730	1,130	120
2	310	344	558	309	352	3,620	620	376	274	672	626	115
3	297	390	411	661	385	6,080	552	2,710	216	485	430	109
4	298	455	354	539	571	2,200	1,300	2,500	183	588	678	153
5	295	352	330	1,690	341	1,260	2,040	1,850	165	3,450	1,000	257
6	322	297	377	1,550	284	888	1,100	1,120	145	2,560	570	185
7	250	276	2,970	845	324	711	1,140	786	133	1,200	400	131
8	214	259	3,980	575	270	744	3,560	633	130	744	327	116
9	192	231	1,850	552	230	779	1,530	896	128	535	285	106
10	176	215	1,240	1,910	200	607	984	2,410	128	405	243	93
11	166	206	933	1,730	200	507	758	1,330	143	327	207	87
12	154	193	707	1,250	219	469	652	872	133	278	174	86
13	134	181	546	911	307	646	1,740	665	128	250	158	139
14	121	169	446	736	320	1,540	2,640	558	216	219	143	117
15	114	157	388	590	267	1,590	1,620	652	1,690	192	158	157
16	109	148	357	350	308	1,120	1,210	1,120	649	232	133	190
17	101	140	325	280	315	1,140	1,720	856	1,050	183	195	124
18	108	131	297	310	286	992	1,350	704	602	153	380	110
19	105	128	257	383	267	786	920	672	471	319	420	94
20	91	138	373	415	180	704	744	665	363	904	303	83
21	83	183	871	1,060	180	639	758	620	1,080	405	295	75
22	78	197	602	994	589	1,210	2,030	535	3,300	315	210	71
23	83	164	452	697	622	1,700	2,210	463	9,620	271	192	66
24	113	173	380	1,170	2,670	1,020	1,840	385	3,050	236	177	62
25	371	212	343	1,230	3,080	786	1,450	327	1,920	216	278	61
26	1,210	209	312	1,040	5,910	665	1,000	281	1,170	198	225	62
27	733	254	285	699	3,380	633	744	246	1,030	158	222	63
28	496	378	273	801	1,590	588	600	219	772	143	201	69
29	390	1,000	268	933	1,680	620	507	198	1,100	198	171	91
30	331	1,700	262	649	-----	758	436	183	793	524	145	234
31	292	-----	243	498	-----	864	-----	239	-----	1,330	123	-----
TOTAL	8,092	9,172	21,934	25,579	25,718	38,506	38,427	25,461	31,207	18,420	10,199	3,426
MEAN	261	306	708	825	887	1,242	1,281	821	1,040	594	329	114
MAX	1,210	1,700	3,980	1,910	5,910	6,080	3,560	2,710	9,620	3,450	1,130	257
MIN	78	128	243	222	180	469	436	183	128	143	123	61
CFSM	1.22	1.43	3.31	3.86	4.14	5.80	5.99	3.84	4.86	2.78	1.54	.53
IN.	1.41	1.59	3.81	4.45	4.47	6.69	6.68	4.43	5.42	3.20	1.77	.60

CAL YR 1971 TOTAL 200,396 MEAN 549 MAX 7,180 MIN 57 CFSM 2.57 IN 34.84
WTR YR 1972 TOTAL 256,141 MEAN 700 MAX 9,620 MIN 61 CFSM 3.27 IN 44.53

PEAK DISCHARGE (BASE, 5,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2145	7.66	7,220	5- 3	1415	6.51	5,320
2-26	1715	8.06	7,910	6-23	1345	10.15	11,800
3- 3	1045	8.59	8,860	7- 5	1745	6.94	6,000
4- 8	0900	6.54	5,460				

MONONGAHELA RIVER BASIN

03069500 Cheat River near Parsons, W. Va.

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

DRAINAGE AREA.--718 sq mi.

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 above mean sea level, adjustment of 1912. Prior to Aug. 17, 1944, nonrecording gage on Moss Bridge about 1,600 ft upstream at datum 1.13 ft higher.

AVERAGE DISCHARGE.--59 years, 1,664 cfs (31.47 inches per year).

EXTREMES.--Current year: Maximum discharge, 33,600 cfs June 23 (gage height, 13.79 ft), from rating curve extended as explained below; minimum observed, 109 cfs Sept. 25 (gage height, 2.08 ft).

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

Flood of July 10, 1888, reached a stage of 20.5 ft (discharge, 51,300 cfs), 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 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	830	807	3,710	723	1,500	10,400	2,060	1,240	1,060	2,830	2,560	248
2	833	1,040	2,490	1,200	1,320	14,200	1,940	1,190	687	2,230	1,530	216
3	1,140	1,190	1,800	2,480	1,320	16,400	1,700	8,300	532	1,770	1,000	197
4	939	1,160	1,520	1,930	1,980	6,700	4,630	8,890	446	2,000	1,250	266
5	1,020	923	1,290	4,890	1,230	4,060	5,870	6,530	398	9,580	2,460	525
6	954	781	2,090	4,610	1,140	2,820	3,570	3,850	356	7,990	1,430	400
7	736	742	11,900	2,930	1,140	2,340	4,100	2,700	325	4,130	940	286
8	625	687	13,000	2,150	872	2,720	8,930	2,130	297	2,660	730	230
9	539	594	6,360	2,000	776	2,400	4,770	2,960	265	1,930	599	203
10	485	556	4,060	6,760	650	1,940	3,290	6,070	296	1,420	491	182
11	470	530	3,040	5,940	650	1,590	2,630	3,810	320	1,080	408	164
12	434	497	2,330	4,480	688	1,580	2,310	2,680	282	874	345	157
13	375	464	1,880	3,300	553	3,220	6,730	2,070	228	753	313	296
14	338	431	1,530	2,650	953	4,470	8,440	1,750	340	633	355	240
15	314	398	1,310	2,080	873	4,030	5,240	2,050	2,380	553	408	340
16	297	375	1,220	1,100	1,030	3,580	4,050	2,640	1,440	628	327	410
17	279	356	1,080	950	1,030	3,620	6,520	2,230	2,260	512	860	270
18	276	347	983	1,000	950	2,990	4,810	1,930	1,530	423	1,680	210
19	267	341	805	1,200	880	2,540	3,260	1,840	1,460	706	1,170	180
20	238	420	1,710	1,450	600	2,210	2,640	2,470	982	1,920	813	160
21	217	518	3,280	3,390	600	1,970	2,550	2,370	2,310	923	680	140
22	210	547	2,320	3,080	2,430	2,980	6,130	1,940	8,050	655	469	130
23	228	487	1,720	2,430	2,670	4,110	6,580	2,040	27,300	529	428	120
24	1,310	531	1,430	4,130	11,300	2,960	6,180	1,540	14,400	448	483	110
25	1,840	604	1,270	4,310	10,300	2,420	4,750	1,180	6,510	454	1,210	110
26	3,270	646	1,100	3,450	20,500	2,050	3,330	947	3,870	444	748	110
27	2,190	783	1,020	2,540	10,600	1,900	2,490	771	3,160	342	639	110
28	1,500	1,130	1,010	3,280	5,690	1,780	1,950	654	2,300	337	569	120
29	1,140	2,860	1,030	3,320	7,020	2,050	1,590	572	4,640	375	453	170
30	934	6,680	895	2,530	-----	2,550	1,350	520	3,670	642	366	320
31	805	-----	836	1,900	-----	2,490	-----	859	-----	2,600	299	-----
TOTAL	25,033	27,425	80,019	88,183	91,685	121,070	124,390	80,723	92,094	52,371	26,013	6,620
MEAN	808	914	2,581	2,845	3,162	3,905	4,146	2,604	3,070	1,689	839	221
MAX	3,270	6,680	13,000	6,760	20,500	16,400	8,930	8,890	27,300	9,580	2,560	525
MIN	210	341	805	723	600	1,580	1,350	520	228	337	299	110
CFSM	1.13	1.27	3.59	3.96	4.40	5.44	5.77	3.63	4.28	2.35	1.17	.31
IN.	1.30	1.42	4.15	4.57	4.75	6.27	6.44	4.18	4.77	2.71	1.35	.34

CAL YR 1971 TOTAL 636,144 MEAN 1,743 MAX 16,400 MIN 123 CFSM 2.43 IN 32.96
WTR YR 1972 TOTAL 815,626 MEAN 2,228 MAX 27,300 MIN 110 CFSM 3.10 IN 42.26

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2200	10.71	19,900	3- 3	0700	10.93	20,800
2-26	1500	11.84	24,800	6-23	1300	13.79	33,600

MONONGAHELA RIVER BASIN

75

03069880 Buffalo Creek near Rowlesburg, W. Va.

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

DRAINAGE AREA.--12.2 sq mi.

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

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

AVERAGE DISCHARGE.--5 years, 30.1 cfs (33.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,520 cfs June 23 (gage height, 4.56 ft); minimum, 0.86 cfs Oct. 21, 22; minimum gage height, 0.84 ft Sept. 21-25.

Period of record: Maximum discharge, 2,690 cfs Sept. 13, 1971 (gage height, 5.66 ft), from rating curve extended above 1,500 cfs on basis of step-backwater method; minimum, 0.06 cfs July 17, 18, 1971 (gage height, 0.77 ft).

REMARKS.--Records good. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	14	80	15	15	236	32	14	6.2	48	15	1.4
2	11	50	43	60	13	193	26	15	5.1	23	5.0	1.3
3	8.5	62	29	90	54	193	23	80	4.4	22	3.0	1.3
4	6.4	32	22	47	103	80	150	102	4.0	66	8.4	1.3
5	5.4	21	18	215	47	44	113	76	4.4	143	15	1.4
6	4.7	16	76	90	30	30	50	42	3.6	71	7.3	1.3
7	4.3	14	221	43	25	26	96	26	3.4	34	9.5	1.3
8	3.7	11	115	25	21	35	170	20	3.0	20	7.3	1.3
9	3.3	9.9	60	52	19	39	64	28	2.8	16	5.1	1.3
10	3.3	9.9	40	173	17	30	36	83	4.2	13	4.0	1.3
11	3.0	8.5	31	92	16	24	26	57	3.2	11	3.4	1.2
12	2.6	7.8	26	76	15	19	21	34	2.7	9.0	3.0	1.3
13	2.0	7.1	21	49	25	38	74	23	2.7	8.0	3.0	1.8
14	2.0	5.7	17	52	27	297	92	18	4.6	7.0	2.7	2.1
15	2.0	5.0	16	41	30	130	60	18	4.2	6.5	2.4	2.8
16	1.5	5.0	14	35	30	125	72	34	3.8	6.5	2.4	2.0
17	1.5	4.7	12	25	32	133	135	31	3.8	5.5	11	1.6
18	1.4	4.7	11	21	28	72	68	25	4.0	4.5	11	1.4
19	1.2	7.1	11	18	24	46	38	20	4.4	4.0	9.5	1.3
20	1.0	13	16	25	20	34	29	16	3.6	11	9.5	1.3
21	1.0	22	21	78	19	26	23	14	5.1	8.5	6.8	1.1
22	.86	23	19	58	103	26	155	15	68	6.5	4.6	.95
23	3.7	21	17	41	72	28	120	13	1,010	5.0	3.8	.95
24	6.4	20	16	47	297	26	82	11	326	4.5	3.4	.95
25	11	20	12	62	178	25	70	8.9	108	4.0	3.0	1.0
26	20	20	11	52	308	24	41	6.8	71	4.5	2.8	1.0
27	19	32	11	35	120	26	28	5.1	38	4.0	2.4	4.2
28	13	98	15	32	92	26	21	4.4	26	3.5	2.4	5.7
29	9.2	251	21	24	248	26	17	4.2	124	3.0	2.1	3.8
30	7.8	260	22	20	-----	46	14	4.4	91	3.5	1.8	10
31	6.4	-----	19	17	-----	46	-----	12	-----	12	1.6	-----
TOTAL	181.16	1,075.4	1,063	1,710	2,028	2,149	1,946	860.8	1,945.2	588.0	172.2	59.65
MEAN	5.84	35.8	34.3	55.2	69.9	69.3	64.9	27.8	64.8	19.0	5.55	1.99
MAX	20	260	221	215	308	297	170	102	1,010	143	15	10
MIN	.86	4.7	11	15	13	19	14	4.2	2.7	3.0	1.6	.95
CFSM	.48	2.93	2.81	4.52	5.73	5.68	5.32	2.28	5.31	1.56	.45	.16
IN.†	.55	3.28	3.24	5.21	6.18	6.55	5.93	2.62	5.93	1.79	.53	.18
IN.††	1.52	4.70	-	-	4.73	4.32	6.55	4.23	7.69	-	2.74	3.32

CAL YR 1971 TOTAL 11,427.50 MEAN 31.3 MAX 642 MIN .06 CFSM 2.57 IN.† 34.84
WTR YR 1972 TOTAL 13,778.41 MEAN 37.6 MAX 1,010 MIN .86 CFSM 3.08 IN.† 42.01

PEAK DISCHARGE (BASE, 500 CFS)

† Runoff.
†† Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	1545	3.05	505	6-23	0545	4.56	1,520

03070000 Cheat River at Rowlesburg, W. Va.

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

DRAINAGE AREA.--972 sq mi, 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 U.S. Weather Bureau. Monthly discharge only for some periods, published in WSP 1305.

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

AVERAGE DISCHARGE.--49 years, 2,227 cfs (31.11 inches per year).

EXTREMES.--Current year: Maximum discharge, 55,000 cfs June 23 (gage height, 13.46 ft), from rating curve extended above 42,000 cfs; minimum observed, 125 cfs Sept. 26, 27 (gage height, 0.70 ft).

Period of record; Maximum discharge, 66,300 cfs Oct. 16, 1954 (gage height, 15.67 ft), from rating curve extended above 42,000 cfs; minimum, 10 cfs Oct. 15, 1930; minimum gage height observed, 0.50 ft Oct. 3, 1968.

Flood of July 6, 1844, reached a stage of 16.7 ft, referred to present gage by relation curve (discharge, 89,000 cfs, from rating curve extended above 45,000 cfs). Flood of July 10, 1888, reached a stage of 16.2 ft, referred to present gage by relation curve (discharge, 84,000 cfs, from rating curve extended above 45,000 cfs).

REMARKS.--Records good except those for period 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: 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,240	981	6,250	1,150	1,970	14,200	2,870	1,660	1,330	3,960	2,540	320
2	1,060	1,450	3,750	1,500	1,750	16,600	2,590	1,510	1,050	3,100	2,030	270
3	1,270	1,990	2,700	3,860	1,790	21,100	2,320	7,490	770	2,340	1,400	250
4	1,270	1,840	2,180	3,100	3,580	10,500	4,680	11,300	640	2,390	1,600	240
5	1,170	1,480	1,820	6,600	2,460	5,880	9,220	9,310	560	8,470	2,400	560
6	1,200	1,200	2,060	7,370	2,080	3,930	5,280	5,530	488	12,100	1,500	500
7	1,020	1,080	11,900	4,370	1,990	3,060	4,680	3,750	430	6,110	1,100	400
8	830	994	17,800	3,020	1,440	3,120	12,200	2,870	390	3,720	850	300
9	726	878	8,910	2,620	1,300	3,280	7,110	2,940	355	2,620	650	250
10	640	794	5,560	8,350	1,100	2,600	4,580	7,020	348	1,960	550	225
11	600	726	4,070	8,790	1,100	2,160	3,450	5,460	376	1,500	450	206
12	570	671	3,120	6,630	1,100	1,970	2,980	3,730	365	1,210	350	201
13	515	630	2,530	4,820	1,320	3,080	6,410	2,830	327	1,010	350	192
14	454	580	2,080	3,750	1,920	7,780	11,700	2,320	369	904	360	334
15	422	533	1,800	2,980	1,510	7,110	7,400	2,280	1,970	751	430	284
16	390	497	1,630	1,700	1,610	5,380	5,630	3,220	1,590	798	350	438
17	369	470	1,470	1,500	1,710	5,580	8,110	3,080	2,260	744	700	376
18	341	446	1,330	1,400	1,580	4,540	7,050	2,680	1,890	599	1,400	272
19	341	454	1,130	1,700	1,450	3,580	4,610	2,550	1,750	501	1,200	225
20	320	506	1,320	1,970	1,100	3,040	3,410	2,640	1,380	1,670	900	196
21	296	682	3,880	3,860	1,000	2,640	3,180	3,020	1,150	1,420	700	178
22	272	830	3,140	4,510	3,930	2,700	6,070	2,500	7,960	839	600	157
23	290	770	2,350	3,450	4,460	5,310	10,200	2,350	40,500	698	500	137
24	414	782	1,960	4,490	12,700	3,930	7,460	2,060	25,500	570	600	137
25	2,140	903	1,720	5,630	15,400	3,200	6,710	1,590	10,000	510	1,200	133
26	3,120	968	1,510	5,020	24,100	2,740	4,680	1,290	5,790	570	950	129
27	2,750	1,190	1,390	3,600	17,600	2,510	3,410	1,050	4,400	493	750	133
28	1,940	2,210	1,320	3,540	8,350	2,410	2,620	878	3,310	411	650	174
29	1,480	4,900	1,470	4,250	9,060	2,480	2,140	759	7,010	393	550	161
30	1,200	11,800	1,360	3,300	-----	3,080	1,820	693	5,740	444	450	266
31	1,030	-----	1,270	2,530	-----	3,450	-----	903	-----	2,110	380	-----
TOTAL	29,680	43,235	104,780	121,360	130,460	162,940	164,570	101,263	130,002	64,915	28,440	7,644
MEAN	957	1,441	3,380	3,915	4,499	5,256	5,486	3,267	4,333	2,094	917	255
MAX	3,120	11,800	17,800	8,790	24,100	21,100	12,200	11,300	40,500	12,100	2,540	560
MIN	272	446	1,130	1,150	1,000	1,970	1,820	693	327	393	350	129
CFSM	.98	1.48	3.48	4.03	4.63	5.41	5.64	3.36	4.46	2.15	.94	.26
IN.	1.14	1.65	4.01	4.64	4.99	6.24	6.30	3.88	4.98	2.48	1.09	.29

CAL YR 1971 TOTAL 871,607 MEAN 2,388 MAX 24,500 MIN 170 CFSM 2.46 IN 33.36
WTR YR 1972 TOTAL 1,089,289 MEAN 2,976 MAX 40,500 MIN 129 CFSM 3.06 IN 41.69

PEAK DISCHARGE (BASE, 20,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	0315	8.88	23,000	3- 3	1345	9.14	24,400
2-26	1845	10.46	32,400	6-23	1445	13.46	55,000

NOTE.--No gage-height record Aug. 3 to Sept. 7.

MONONGAHELA RIVER BASIN

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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.

DRAINAGE AREA.--200 sq mi.

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

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

AVERAGE DISCHARGE.--59 years (1909-17, 1921-72), 417 cfs (28.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 16,200 cfs June 23 (gage height, 15.86 ft), from rating curve extended as explained below; minimum, 5.9 cfs Sept. 12, 23, 24, 26, 27 (gage height, 2.98 ft).

Period of record: Maximum discharge observed, 21,300 cfs July 24, 1912 (gage height, 18.0 ft), from rating curve extended above 10,000 cfs on basis of velocity-area studies; minimum, 0.1 cfs Oct. 21-27, 1953.

Flood of July 10, 1888, reached a stage of about 20 ft (discharge, about 30,000 cfs).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	198	263	1,310	330	260	4,150	336	288	106	715	28	13
2	170	875	791	605	278	4,660	330	268	89	482	25	10
3	157	994	565	966	406	4,190	318	422	80	513	92	8.7
4	138	560	454	674	518	1,810	1,260	542	72	885	232	9.7
5	123	387	366	1,200	354	1,170	1,350	826	103	627	128	11
6	106	300	840	1,020	310	777	854	625	74	747	69	10
7	97	270	2,710	734	260	630	746	510	61	602	198	9.0
8	90	217	2,170	542	220	538	758	426	52	461	125	8.0
9	79	188	1,260	526	190	752	630	620	44	357	83	7.4
10	75	178	861	1,110	170	600	575	931	73	273	55	6.9
11	73	164	692	1,500	160	486	510	704	66	220	41	6.4
12	66	146	530	1,110	180	446	438	555	45	174	33	6.4
13	56	136	450	868	381	3,240	1,960	454	43	148	34	7.4
14	55	123	378	791	570	2,910	1,810	387	91	128	33	12
15	52	112	366	595	514	2,090	1,340	369	127	106	29	31
16	48	106	336	350	610	1,610	1,890	339	101	112	27	32
17	45	98	290	300	570	1,770	3,680	354	194	128	39	20
18	41	94	270	330	522	1,380	1,620	339	116	115	144	13
19	38	100	236	380	478	1,050	994	306	160	92	97	10
20	34	151	280	466	380	770	758	273	164	73	79	8.5
21	32	231	324	740	330	610	580	253	150	59	50	7.4
22	32	240	268	680	746	680	1,620	300	620	49	36	6.7
23	37	202	231	686	777	752	1,560	238	11,900	42	28	6.2
24	60	194	236	854	945	635	1,240	192	5,800	36	26	6.2
25	124	219	219	931	1,090	550	1,050	168	2,330	32	23	6.4
26	186	208	215	770	2,260	510	764	151	1,420	30	29	6.2
27	115	265	236	625	1,660	478	580	122	861	26	26	6.2
28	83	590	268	570	1,380	434	470	106	587	25	21	6.9
29	67	1,670	321	474	2,980	381	384	96	882	25	23	7.7
30	57	2,600	345	402	-----	430	330	90	1,110	24	19	10
31	53	-----	384	293	-----	363	-----	117	-----	26	15	-----
TOTAL	2,587	11,881	18,202	21,422	19,499	41,252	30,735	11,381	27,521	7,332	1,887	310.3
MEAN	83.5	396	587	691	672	1,331	1,025	367	917	237	60.9	10.3
MAX	198	2,600	2,710	1,500	2,980	4,660	3,680	931	11,900	885	232	32
MIN	32	94	215	293	160	363	318	90	43	24	15	6.2
CFSM	.42	1.98	2.94	3.46	3.36	6.66	5.13	1.84	4.59	1.19	.30	.05
IN.	.48	2.21	3.39	3.98	3.63	7.67	5.72	2.12	5.12	1.36	.35	.06

CAL YR 1971 TOTAL 178,502.0 MEAN 489 MAX 6,220 MIN 22 CFSM 2.45 IN 33.20
WTR YR 1972 TOTAL 194,009.3 MEAN 530 MAX 11,900 MIN 6.2 CFSM 2.65 IN 36.09

PEAK DISCHARGE (BASE, 4,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-29	2300	10.65	5,200	4-17	0200	10.57	5,080
3- 3	0300	10.94	5,670	6-23	1400	15.86	16,200
3-13	1200	10.62	5,150				

WHEELING CREEK BASIN

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 downstream from Little Wheeling Creek, and at mile 7.7.

DRAINAGE AREA.--282 sq mi.

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 above mean sea level.

AVERAGE DISCHARGE.--32 years, 316 cfs (15.22 inches per year).

EXTREMES.--Current year: Maximum discharge, 12,300 cfs June 23 (gage height, 9.31 ft); minimum, 1.4 cfs Oct. 21, 22 (gage height, 1.19 ft).

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

REMARKS.--Records good.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	11	408	271	190	915	374	285	65	640	51	13
2	7.7	22	240	346	180	1,300	350	285	54	400	47	33
3	6.9	46	158	550	220	2,530	308	290	47	380	52	39
4	6.1	64	146	473	705	1,340	417	265	40	1,400	76	34
5	5.3	44	128	1,080	443	1,030	624	235	38	1,500	64	27
6	4.6	33	1,270	876	410	752	552	195	35	1,300	45	19
7	4.0	30	1,770	608	350	766	792	178	35	740	48	14
8	4.0	26	1,290	430	266	1,240	1,010	170	31	470	64	12
9	3.4	24	689	383	240	955	860	186	29	360	53	10
10	4.6	22	449	765	220	736	729	186	31	310	36	8.1
11	4.0	20	327	759	220	576	624	150	27	310	28	7.0
12	4.0	19	237	595	259	512	512	135	29	170	32	7.0
13	3.4	20	192	479	1,760	2,710	3,500	123	40	142	37	6.9
14	6.1	19	174	394	1,860	2,050	2,360	123	82	123	30	40
15	4.0	18	221	260	1,350	1,540	3,520	131	109	280	24	14
16	4.0	17	236	135	1,350	2,500	2,930	146	170	1,080	19	9.4
17	2.9	16	214	130	982	2,360	2,120	154	190	824	79	7.4
18	2.9	15	188	150	774	1,520	1,340	178	89	494	113	11
19	2.4	19	156	230	708	1,080	1,020	150	62	329	157	11
20	2.1	23	173	259	515	816	970	135	150	251	205	8.3
21	1.7	31	177	217	439	677	774	127	2,630	209	94	6.5
22	1.4	38	153	184	652	776	1,070	112	1,360	166	54	5.6
23	2.1	39	122	246	623	968	1,240	99	8,300	138	37	4.7
24	19	34	133	286	666	815	960	86	3,660	115	28	6.8
25	38	43	122	376	716	694	792	76	1,680	97	28	7.7
26	43	42	120	390	1,120	600	632	62	1,030	83	23	11
27	27	57	129	342	951	512	512	54	680	78	65	129
28	20	189	153	310	840	431	417	49	452	75	51	100
29	15	327	208	270	987	380	362	44	330	68	34	175
30	12	602	263	270	-----	536	314	47	1,100	59	24	533
31	11	-----	319	200	-----	431	-----	57	-----	53	17	-----
TOTAL	282.2	1,910	10,565	12,264	19,996	34,050	31,985	4,513	22,575	12,644	1,715	1,310.4
MEAN	9.10	63.7	341	396	690	1,098	1,066	146	753	408	55.3	43.7
MAX	43	502	1,770	1,080	1,860	2,710	3,520	290	8,300	1,500	205	533
MIN	1.4	11	120	130	180	380	308	44	27	53	17	4.7
CFSM	.03	.23	1.21	1.40	2.45	3.89	3.78	.52	2.67	1.45	.20	.16
IN.	.04	.25	1.39	1.62	2.64	4.49	4.22	.60	2.98	1.67	.23	.17

CAL YR 1971 TOTAL 105,780.70 MEAN 290 MAX 8,020 MIN .30 CFSM 1.03 IN 13.95
WTR YR 1972 TOTAL 153,809.60 MEAN 420 MAX 8,300 MIN 1.4 CFSM 1.49 IN 20.29

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-15	1345	6.37	6,300	6-23	1400	9.31	12,300

03113700 Little Grave Creek near Glendale, W. Va.

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

DRAINAGE AREA.--4.97 sq mi.

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 (from topographic map).

EXTREMES.--Current year: Maximum discharge, 350 cfs Apr. 15 (gage height, 3.60 ft), from rating curve extended as explained below; minimum, 0.08 cfs Sept. 22-24 (gage height, 1.10 ft).

Period of record: Maximum discharge, 1,380 cfs May 6, 1971 (gage height, 5.88 ft), from rating curve extended above 150 cfs on basis of step-backwater method; minimum, 0.02 cfs Sept. 8, 9-11, 1971 (gage height, 1.09 ft).

REMARKS.--Records fair except those for periods of doubtful or no gage-height record, which are poor. Rainfall records collected at site since December 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.26	3.0	3.0	2.8	23	4.2	3.2	.64	4.2	.81	.33
2	.56	1.7	2.4	18	2.5	61	3.4	3.2	.64	3.0	.72	.33
3	.48	1.2	2.1	12	4.6	19	5.5	3.0	.56	2.8	.90	.56
4	.40	.81	1.7	9.2	6.4	14	10	2.7	.48	2.4	.90	.56
5	.40	.64	1.6	26	8.2	11	8.9	2.4	.33	5.1	.72	.40
6	.33	.56	45	10	4.2	9.2	8.2	2.0	.26	4.9	.56	.33
7	.33	.64	23	7.0	3.7	7.6	16	1.9	.26	3.3	1.6	.26
8	.26	.48	9.4	6.0	3.2	6.4	14	1.9	.21	2.7	1.0	.26
9	.21	.48	5.4	4.5	3.0	5.5	13	2.1	.21	2.3	.72	.26
10	.48	.48	3.9	9.0	2.7	4.6	11	1.9	.40	2.0	.56	.21
11	.40	.48	3.4	7.8	2.5	4.1	9.6	1.7	.21	1.8	.48	.16
12	.26	.48	2.8	6.8	2.5	3.6	8.2	1.6	.21	1.7	.64	.21
13	.26	.48	2.3	6.0	62	16	60	1.6	.33	1.5	.90	.21
14	.40	.40	2.3	4.5	22	13	19	1.6	.72	1.4	.56	.33
15	.40	.40	2.7	3.6	20	12	74	1.7	.81	7.1	.45	.26
16	.33	.40	4.0	3.0	15	63	33	1.8	2.7	6.8	.33	.21
17	.26	.33	3.1	2.7	12	31	16	2.3	2.3	6.8	2.3	.16
18	.26	.33	2.6	3.2	9.5	18	11	2.1	1.8	4.0	1.4	.16
19	.21	.64	2.5	3.8	8.2	15	8.2	1.9	1.4	2.8	5.7	.21
20	.21	.64	2.9	3.3	6.8	10	7.5	1.7	1.7	3.0	1.9	.16
21	.16	.90	2.8	2.9	6.2	9.0	5.7	1.6	16	2.8	1.3	.12
22	.16	.72	2.5	3.2	11	13	8.9	1.4	4.5	2.1	1.0	.12
23	.21	.56	2.3	4.3	12	13	7.5	1.2	35	1.8	.81	.08
24	1.3	.64	2.5	7.0	9.6	10	6.4	1.0	16	1.6	.72	.21
25	.90	.81	2.2	10	9.6	8.9	5.7	.90	7.6	1.5	.64	.26
26	.64	.72	2.1	7.0	13	7.7	4.9	.81	5.5	1.2	.56	.33
27	.48	2.1	2.1	5.5	12	6.5	4.2	.72	3.8	1.3	1.3	1.7
28	.40	3.9	2.2	4.2	11	5.4	3.9	.72	2.8	1.2	.72	1.1
29	.33	5.1	2.4	3.7	11	6.5	3.6	.64	8.9	1.0	.56	2.8
30	.33	5.5	2.9	3.3	-----	8.0	3.3	.72	6.4	.90	.48	4.6
31	.26	-----	3.4	3.0	-----	5.3	-----	.81	-----	.81	.40	-----
TOTAL	12.17	32.78	154.2	203.5	297.2	438.3	395.2	52.82	122.67	85.81	31.64	16.89
MEAN	.39	1.09	4.97	6.56	10.2	14.1	13.2	1.70	4.09	2.77	1.02	.56
MAX	1.3	5.5	45	26	62	63	74	3.2	35	7.1	5.7	4.6
MIN	.16	.26	1.6	2.7	2.5	3.6	3.3	.64	.21	.81	.33	.08
CFSM	.08	.22	1.00	1.32	2.05	2.84	2.66	.34	.82	.56	.21	.11
IN.†	.09	.25	1.15	1.52	2.22	3.28	2.96	.40	.92	.64	.24	.13
IN.††	1.24	-	-	1.47	2.50	-	-	-	-	1.72	-	3.23
CAL YR 1971	TOTAL 1.819.00	MEAN 4.98	MAX 235	MIN .02	CFSM 1.00	IN† 13.62						
WTR YR 1972	TOTAL 1.843.18	MEAN 5.04	MAX 74	MIN .08	CFSM 1.01	IN† 13.80						

PEAK DISCHARGE (BASE, 140 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-13	0730	2.86	167	4-15	0945	3.60	350
3- 1	2315	3.05	212	6-23	unknown	3.29	272
3-16	0300	2.83	161				

† Runoff.

†† Rainfall.

NOTE.--Doubtful or no gage-height record Dec. 6 to Jan. 10, Jan. 20-26, Mar. 6-13, Mar. 27 to Apr. 3, June 18-25.

MIDDLE ISLAND CREEK BASIN

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 mile upstream from Stewarts Run, 5.0 miles west of Middlebourne, and at mile 24.5.

DRAINAGE AREA.--458 sq mi.

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 above mean sea level, adjustment of 1912. Prior to July 11, 1947, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--45 years (1915-16, 1928-72), 615 cfs (18.24 inches per year).

EXTREMES.--Current year: Maximum discharge, 12,600 cfs June 23 (gage height, 15.40 ft); minimum daily, 4.9 cfs Sept. 17-20.

Period of record: Maximum discharge, 25,000 cfs June 26, 1950 (gage height, 28.0 ft, 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.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	288	103	1,880	421	366	855	388	425	78	836	13	17
2	225	571	1,050	1,020	330	804	357	427	78	693	12	12
3	181	1,770	699	2,740	493	4,390	330	1,340	67	1,540	17	11
4	154	1,020	535	1,550	3,420	2,750	707	1,790	61	1,920	28	9.9
5	130	517	427	5,010	1,710	1,660	1,940	1,130	71	2,110	1,270	8.3
6	112	315	2,290	3,940	1,010	1,300	1,150	771	64	2,570	523	7.5
7	99	245	4,310	1,580	800	991	2,370	584	66	1,090	194	7.5
8	87	204	5,120	985	738	928	7,820	477	55	553	151	6.0
9	76	172	2,090	784	650	823	2,230	564	45	350	145	6.0
10	67	148	1,250	2,490	550	662	1,150	1,000	45	245	101	6.0
11	64	130	914	2,470	500	545	831	767	39	181	69	5.2
12	61	119	771	2,130	469	470	652	571	35	145	52	5.2
13	56	112	621	1,330	4,090	457	2,710	456	35	121	49	6.8
14	53	103	475	1,020	6,170	742	6,130	385	36	101	67	6.0
15	55	97	393	855	2,770	783	1,630	711	330	93	73	6.0
16	55	91	371	553	2,770	826	1,120	896	201	732	47	5.2
17	56	85	350	500	1,890	1,780	1,650	1,020	139	433	45	4.9
18	52	80	315	451	1,340	1,650	1,520	996	107	274	204	4.9
19	40	78	270	427	1,340	1,090	969	742	166	204	297	4.9
20	28	80	261	427	1,110	794	741	563	297	130	163	4.9
21	34	85	345	505	816	634	611	427	1,700	93	125	5.2
22	34	95	371	712	1,180	861	3,500	345	751	71	89	5.2
23	35	105	306	673	1,960	1,550	4,980	283	8,300	56	61	6.0
24	45	114	274	894	4,410	1,300	1,650	233	8,080	46	47	7.5
25	233	116	257	1,390	4,260	1,000	1,330	194	1,850	35	36	7.5
26	340	130	241	1,640	3,710	836	1,020	151	842	30	28	9.1
27	297	253	233	998	2,810	680	754	128	738	24	23	9.1
28	233	1,800	233	745	1,540	568	579	109	784	21	27	8.3
29	178	2,210	279	595	1,110	475	468	93	654	19	45	9.1
30	139	3,640	421	481	-----	479	394	83	1,530	17	35	14
31	114	-----	547	382	-----	456	-----	82	-----	16	24	-----
TOTAL	3,621	14,588	27,899	39,698	54,312	33,139	51,681	17,743	27,244	14,749	4,060	226.2
MEAN	117	486	900	1,281	1,873	1,069	1,723	572	908	476	131	7.54
MAX	340	3,640	5,120	5,010	6,170	4,390	7,820	1,790	8,300	2,570	1,270	17
MIN	28	78	233	382	330	456	330	82	35	16	12	4.9
CFSM	.26	1.06	1.97	2.80	4.09	2.33	3.76	1.25	1.98	1.04	.29	.02
IN.	.29	1.18	2.27	3.22	4.41	2.69	4.20	1.44	2.21	1.20	.33	.02

CAL YR 1971 TOTAL 241,745.9 MEAN 662 MAX 15,400 MIN 6.8 CFSM 1.45 IN 19.64
WTR YR 1972 TOTAL 288,960.2 MEAN 790 MAX 8,300 MIN 4.9 CFSM 1.72 IN 23.47

PEAK DISCHARGE (BASE, 9,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-8	0900	12.76	9,410	6-23	2100	15.40	12,600
4-14	0400	12.43	9,020				

03114650 Buffalo Run near Little, W. Va.

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

DRAINAGE AREA.--4.21 sq mi.

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

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

EXTREMES.--Current year: Maximum discharge, 1,020 cfs June 29 (gage height, 7.35 ft), from rating curve extended above 100 cfs on basis of peak discharge at sta 03114550 and sta 03114600; minimum daily, 0.09 cfs Sept. 23.

Period of record: Maximum discharge, 1,400 cfs Apr. 5, 1969 (gage height, 6.17 ft); from rating curve extended above 100 cfs on basis of step-backwater method; maximum gage height, 7.35 ft June 29, 1972; minimum daily discharge, 0.01 cfs Sept. 5-19, 22-30, Oct. 1, 31, 1969.

REMARKS.--Records good 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.--The figures of peak discharge for water year 1971 have been revised as shown in the following table. They supersede figures published in WRD W. Va., 1971.

REVISED PEAK DISCHARGE.--1971: Oct. 30 (2115) 212 cfs (4.46 ft); Dec. 22 (0645) 530 cfs (5.60 ft); Feb. 13 (0430) 252 cfs (4.46 ft); Feb. 22 (0915) 440 cfs (5.24 ft); Aug. 4 (1430) 555 cfs (5.70 ft); Sept. 13 (0915) 688 cfs (6.23 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	2.2	4.2	2.5	1.3	9.0	3.1	3.3	.35	6.6	.22	.22
2	.44	7.3	2.4	26	1.5	20	2.7	5.9	.26	2.4	.24	.22
3	.44	3.1	2.2	4.7	1.9	40	2.4	17	.29	17	.99	.26
4	.45	1.3	1.7	12	10	15	4.2	4.7	.34	6.6	1.9	.39
5	.45	.45	2.0	44	15	10	6.4	5.1	.51	36	.64	.28
6	.45	.72	55	11	9.7	8.0	5.2	3.4	.25	15	.39	.24
7	.44	.76	34	5.1	2.7	6.0	5.3	2.7	.24	4.6	.32	.22
8	.45	.70	21	4.1	2.3	5.2	20	2.3	.10	2.9	.28	.18
9	.45	.50	5.7	12	2.1	4.4	10	11	.14	2.2	.30	.18
10	.54	.50	5.1	26	1.9	3.9	35.9	5.0	.34	1.2	.28	.14
11	.37	.54	3.1	9.0	1.5	3.5	4.2	4.3	.14	.85	.24	.12
12	.54	.72	2.3	5.5	13.0	3.1	3.4	3.1	.12	.60	.24	.14
13	.44	.80	1.7	4.4	65	10	34	2.4	.12	.51	.68	.18
14	.57	.72	1.5	5.1	26	7.4	12	2.0	1.1	.54	.32	.16
15	.74	.66	1.5	3.4	22	6.5	7.6	2.0	.34	4.6	.26	.20
16	.45	.72	1.3	2.2	13	33	7.2	1.8	.88	14	.22	.17
17	.34	.72	1.1	2.5	8.7	27	7.4	1.8	.35	3.1	7.3	.13
18	.30	.20	.40	2.1	7.7	13	5.3	1.6	.24	1.4	3.1	.15
19	.30	1.2	.80	2.7	6.4	9.4	4.1	1.3	.26	.85	.90	.18
20	.28	1.6	1.4	2.3	5.5	6.6	3.6	1.0	15	.64	.65	.15
21	.28	2.3	1.7	2.7	6.4	5.0	3.3	.90	50	.54	.48	.11
22	.30	2.2	1.3	2.4	9.7	7.0	72	.72	4.0	.51	.36	.10
23	.54	1.9	1.1	2.7	6.9	12	15	.57	184	.54	.32	.09
24	1.6	2.3	1.1	3.4	27	8.4	8.3	.48	19	.39	.30	.18
25	1.3	2.4	.95	9.7	29	6.8	6.1	.42	5.6	.32	.28	.21
26	1.3	2.9	1.1	5.7	17	5.5	4.3	.34	2.5	.30	.26	.30
27	.85	7.6	1.2	4.3	2.0	4.9	3.1	.24	1.7	.26	.68	1.2
28	.85	7.5	1.4	3.0	6.0	4.1	2.7	.26	1.0	.26	.42	.70
29	.85	11	1.4	2.4	6.0	3.4	2.2	.24	22	.26	.30	1.1
30	.85	14	3.0	1.9	-----	5.5	2.5	.30	.26	.24	.26	2.0
31	.80	-----	3.4	1.6	-----	4.0	-----	.39	-----	.24	.24	-----
TOTAL	104.42	85.21	191.55	236.9	459.6	302.7	281.0	96.00	342.95	125.45	23.35	9.90
MEAN	.59	2.84	6.18	7.64	15.3	9.76	9.37	3.12	11.4	4.05	.75	.33
MAX	1.6	10	55	44	130	40	72	19	184	36	7.3	2.0
MIN	.28	.54	.80	1.6	1.3	3.1	2.2	.24	.12	.24	.22	.09
CFSM	.14	.57	1.47	1.81	3.75	2.32	2.23	.74	2.71	.96	.18	.08
IN. #	.16	.75	1.69	2.09	4.06	2.67	2.48	.85	3.03	1.11	.21	.09
IN. ##	1.29	2.61	1.91	2.84	-	-	3.98	1.56	7.35	2.68	3.95	2.03

CAL YR 1971 TOTAL 1,523.22 MEAN 4.17 MAX 124 MIN .02 CFSM .99 IN# 13.46
 WTR YR 1972 TOTAL 2,173.03 MEAN 5.94 MAX 184 MIN .09 CFSM 1.41 IN# 19.20

PEAK DISCHARGE (BASE, 200 CFS)

Runoff.

Rainfall.

NOTE.--No gage-height record Feb. 28 to Apr. 10, Sept. 15-30.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-12	2130	5.75	568	6-23	0830	5.15	418
4-22	0845	4.38	236	6-29	1615	7.35	1,020

OHIO RIVER MAIN STEM

03115000 Ohio River at St. Marys, W. Va.

LOCATION.--Lat 39°23'25", long 81°12'30", Pleasants County, on left bank at downstream side of bridge on U.S. Highway 50 (alternate) at St. Marys, 0.9 mile downstream from Middle Island Creek, and at mile 155.0 (measured downstream from Pittsburgh, Pa.).

DRAINAGE AREA.--26,850 sq mi, approximately.

PERIOD OF RECORD.--January 1938 to July 1972 (discontinued), fragmentary prior to November 1939 and since October 1952, no low-flow records. Gage-height records collected at same site since 1904 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 577.30 ft above mean sea level, Sandy Hook datum. Prior to Nov. 29, 1939, nonrecording gage at same site and datum. Auxiliary water-stage recorder 11.0 miles downstream from base gage at same datum. Prior to Feb. 22, 1951, water-stage recorder 12.5 miles downstream from base gage.

EXTREMES.--October 1971 to July 1972: Maximum discharge during period, 382,000 cfs June 25 (gage height, 38.48 ft); minimum daily, not determined; minimum gage height, 7.92 ft Jan. 17.
Period of record: Maximum discharge, 421,000 cfs Jan. 1, 1943 (gage height, 46.67 ft); minimum daily, not determined; minimum gage height recorded, 3.45 ft Jan. 14, 1940 (dam down at lock 17).
Maximum stage since at least 1884, 54.2 ft in March 1913.

REMARKS.--Records good. Discharge less than 20,000 cfs on days for which no discharge is shown. Flow partly regulated by locks, dams, and reservoirs upstream from station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23,600	-	64,200	90,700	39,300	89,400	48,200	31,700	11,300	156,000		
2	18,200	18,200	66,200	84,700	40,100	119,000	37,100	35,600	20,000	152,000		
3	-	22,800	57,900	76,800	33,000	171,000	33,000	39,700	21,600	143,000		
4	-	26,600	45,800	80,100	44,400	212,000	44,900	54,300	21,300	134,000		
5	-	-	28,700	83,600	53,400	186,000	55,200	59,800	15,800	133,000		
6	-	-	39,600	86,300	39,600	158,000	62,200	62,000	13,700	124,000		
7	-	-	72,000	89,700	29,600	146,000	66,700	59,100	14,700	113,000		
8	-	-	110,000	81,300	28,400	143,000	89,100	51,300	11,000	112,000		
9	-	-	133,000	65,800	29,100	150,000	89,400	37,500	12,700	102,000		
10	-	-	124,000	62,100	23,300	142,000	84,000	46,500	14,600	82,600		
11	-	-	105,000	65,200	22,000	122,000	75,000	53,200	11,200	74,700		
12	-	-	89,400	75,400	22,100	104,000	63,300	58,200	14,200	70,000		
13	-	-	72,900	79,500	38,400	94,900	62,000	59,400	12,800	61,100		
14	-	-	61,900	74,800	60,200	133,000	91,300	57,200	22,800	55,600		
15	-	-	57,800	63,500	63,900	154,000	105,000	50,300	26,100	48,500		
16	-	-	59,700	55,200	59,700	145,000	131,000	41,300	24,000	-		
17	-	-	60,600	38,800	57,100	136,000	153,000	50,200	34,700	-		
18	-	-	56,500	27,500	53,800	149,000	168,000	54,000	26,600	-		
19	-	-	47,700	36,700	45,300	145,000	153,000	44,300	26,200	-		
20	-	-	41,600	44,300	43,600	125,000	139,000	42,100	25,200	-		
21	-	-	43,600	44,500	32,800	114,000	142,000	40,400	43,700	-		
22	-	-	44,800	51,100	32,900	113,000	133,000	33,800	55,400	-		
23	-	-	45,000	50,900	40,000	110,000	135,000	30,800	104,000	-		
24	-	-	43,500	51,600	51,900	113,000	133,000	30,200	274,000	-		
25	-	20,100	38,700	59,100	58,000	107,000	123,000	23,800	23,000	-		
26	-	-	37,000	64,000	68,000	92,400	107,000	21,500	331,000	-		
27	-	-	31,800	65,800	90,400	79,400	85,700	16,100	279,000	-		
28	-	22,300	39,100	61,700	99,400	71,200	69,800	16,900	226,000	-		
29	-	30,300	44,700	57,500	85,500	67,400	56,400	12,700	188,000	-		
30	-	46,200	50,400	52,300	-----	63,300	37,200	10,800	176,000	-		
31	-	-----	61,500	42,100	-----	57,200	-----	20,600	-----	-		
TOTAL	-	-	1,874.6M	1,962.6M	1,385.2M	3,812.2M	2,772.5M	1,245.3M	2,429.6M	-	-	-
MEAN	-	-	60,470	63,310	47,770	123,000	92,420	40,170	80,990	-	-	-
MAX	-	-	133,000	90,700	99,400	212,000	168,000	62,000	372,000	-	-	-
MIN	-	-	28,700	27,500	22,000	57,200	33,000	10,800	11,000	-	-	-
CAL YR 1971	TOTAL -	MEAN -	MAX -	192,000	MIN -	CFSM -	IN -					
WTR YR 1972	TOTAL -	MEAN -	MAX -	372,000	MIN -	CFSM -	IN -					

OHIO RIVER MAIN STEM

83

03150800 Ohio River near Marietta, Ohio

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

DRAINAGE AREA.--35,600 sq mi, approximately.

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

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

EXTREMES.--Current year: Maximum gage height, 36.09 ft June 26; minimum, 14.56 ft Aug. 26.
Period of record: Maximum gage height, 36.09 ft June 26, 1972; minimum, 10.83 ft Oct. 6, 1968.

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

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.53	14.96	17.19	19.28	16.14	19.38	17.09	16.41	15.20	24.14	15.08	14.95
2	15.32	15.29	17.41	19.52	16.11	21.15	16.30	16.63	15.42	23.55	15.35	14.78
3	15.19	15.50	16.91	19.00	15.90	25.64	16.07	16.96	15.45	23.08	15.30	14.99
4	15.20	15.35	16.25	19.12	16.70	28.44	16.84	17.52	15.59	22.30	15.48	14.76
5	15.22	15.10	15.35	19.91	17.22	27.56	17.45	18.05	15.13	22.32	15.39	14.67
6	15.27	15.25	15.88	20.21	16.35	25.40	17.90	18.06	15.31	21.96	14.98	14.76
7	15.02	15.20	18.27	20.05	15.82	24.24	18.54	17.82	15.08	21.10	15.26	15.00
8	15.10	15.01	20.56	19.30	15.57	23.68	21.10	17.30	15.14	20.84	15.23	14.99
9	15.16	15.19	22.02	18.23	15.66	24.01	21.33	16.24	15.26	20.31	15.19	14.84
10	15.00	14.97	21.85	18.21	15.40	23.76	20.50	17.17	15.10	19.00	15.11	14.87
11	15.03	14.83	20.32	18.46	15.40	22.30	19.62	18.03	15.02	18.30	15.13	14.99
12	15.29	15.04	19.22	19.04	15.30	20.99	18.53	18.34	15.23	18.24	15.02	14.95
13	14.95	14.92	18.08	19.21	17.00	20.08	19.40	17.98	15.14	17.56	15.02	15.39
14	15.11	14.86	17.32	18.84	18.91	22.12	21.89	17.80	15.44	17.27	15.04	15.38
15	15.01	15.05	17.13	18.05	18.76	24.30	22.35	17.47	15.68	16.90	15.02	15.32
16	14.96	15.05	17.17	17.42	18.49	24.19	23.67	17.05	15.48	16.48	15.15	15.46
17	15.08	15.04	17.56	16.43	18.25	24.00	25.41	17.36	15.83	16.38	15.26	15.43
18	15.06	14.79	17.37	15.83	18.09	24.68	26.23	17.53	15.60	16.63	15.36	15.51
19	15.07	15.02	16.67	16.06	17.58	24.62	25.56	16.92	15.54	16.15	15.37	15.29
20	14.99	15.10	16.12	16.51	17.10	23.25	24.24	16.28	15.59	16.26	15.18	15.26
21	14.82	15.00	16.10	16.52	16.30	22.22	24.53	16.42	16.33	15.84	15.00	15.07
22	14.80	15.05	16.17	17.01	16.25	22.01	25.66	15.92	16.85	15.52	14.88	15.04
23	14.88	14.89	16.38	17.05	16.63	21.99	25.78	15.85	19.09	15.35	14.82	15.16
24	15.10	14.94	16.19	17.11	17.71	22.08	24.86	15.94	28.27	15.33	15.00	15.04
25	15.08	14.98	15.80	17.68	18.27	21.77	23.53	15.25	34.84	15.05	15.03	14.93
26	15.16	14.91	15.77	18.48	18.88	20.65	22.73	15.57	34.91	15.39	14.81	15.25
27	15.11	15.19	15.69	18.04	20.14	19.62	21.18	15.26	32.67	14.98	15.01	15.08
28	15.25	15.28	15.93	17.74	20.70	18.82	19.82	15.33	29.11	15.21	14.77	15.17
29	15.03	15.64	16.21	17.40	19.52	18.40	18.69	15.20	26.08	15.23	15.04	15.46
30	15.10	16.37	16.40	17.13	-----	18.25	17.08	15.08	25.28	14.88	14.71	16.01
31	14.91	-----	17.19	16.44	-----	17.77	-----	15.41	-----	14.98	14.74	-----
MEAN	15.09	15.13	17.31	18.04	17.25	22.50	21.13	16.71	19.02	17.95	15.09	15.13
MAX	15.53	16.37	22.02	20.21	20.70	28.44	26.23	18.34	34.91	24.14	15.48	16.01
MIN	14.80	14.79	15.35	15.83	15.30	17.77	16.07	15.08	15.02	14.88	14.71	14.67

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

LITTLE KANAWHA RIVER BASIN

03151500 Little Kanawha River near Burnsville, W. Va.

LOCATION.--Lat 38°49'25", long 80°35'35", Braxton County, on left bank at downstream side of bridge on State Highway 5, 0.1 mile downstream from Knowl Creek, 4.0 miles southeast of Burnsville, and at mile 126.9.

DRAINAGE AREA.--155 sq mi.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 754.00 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers). Prior to Feb. 26, 1940, nonrecording gage at site 100 ft upstream. Prior to Oct. 29, 1963, at datum 2.09 ft higher.

AVERAGE DISCHARGE.--35 years, 280 cfs (24.53 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,520 cfs June 23 (gage height, 19.77 ft); minimum daily, 8.5 cfs Sept. 26.

Period of record: Maximum discharge, 9,200 cfs Feb. 3, 1939 (gage height, 21.13 ft, present datum); minimum, 0.01 cfs Nov. 15-21, 1953; minimum gage height, 1.25 ft Sept. 1, 1962, present datum.

Flood of March 1918 reached a stage of 21.8 ft, present datum, from floodmark (discharge, about 9,800 cfs).

REMARKS.--Records fair. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	194	869	85	322	515	194	174	83	495	172	17
2	131	450	524	234	262	420	223	158	56	331	116	15
3	108	558	360	588	352	1,240	223	483	45	262	80	14
4	91	396	271	532	838	932	491	987	37	231	535	16
5	88	252	205	1,840	588	652	937	731	34	1,110	576	18
6	83	180	187	1,710	479	481	628	527	33	1,430	294	21
7	69	151	536	780	546	394	851	385	31	632	162	17
8	59	131	905	492	378	345	2,190	299	28	339	108	15
9	52	109	622	426	317	273	977	561	24	209	75	13
10	48	102	440	1,560	258	230	590	1,850	23	142	58	11
11	46	94	372	1,820	206	199	445	1,040	22	106	45	10
12	44	85	286	1,290	187	181	382	551	23	80	34	10
13	39	75	237	778	737	163	1,150	407	20	69	230	13
14	36	70	190	630	1,210	167	1,710	311	21	58	124	13
15	39	65	171	464	799	248	1,010	278	41	49	73	20
16	40	60	162	324	788	297	870	356	48	52	50	19
17	34	59	138	239	687	459	1,100	395	32	59	61	17
18	31	56	126	257	593	544	800	343	35	42	297	14
19	30	54	108	224	558	515	543	298	36	32	730	13
20	27	65	122	326	442	403	479	241	27	62	662	12
21	25	129	158	922	336	317	662	197	34	95	251	10
22	24	183	145	808	1,000	336	3,020	169	50	58	129	9.5
23	26	154	131	574	1,200	511	1,900	137	3,250	46	88	9.0
24	41	156	129	1,030	4,800	518	988	109	4,690	40	64	9.0
25	93	316	124	964	3,840	456	785	90	1,090	29	48	9.0
26	331	351	115	755	5,080	378	565	76	518	29	37	8.5
27	331	504	109	536	3,040	322	413	62	779	28	31	9.0
28	212	748	102	953	1,040	292	305	52	586	21	26	9.5
29	140	860	102	1,040	649	260	237	46	803	19	23	10
30	108	1,430	93	665	-----	267	196	41	858	24	22	25
31	91	-----	93	449	-----	213	-----	59	-----	64	19	-----
TOTAL	2,689	8,037	8,131	23,295	31,572	12,528	24,864	11,353	13,357	6,243	5,220	406.5
MEAN	86.7	268	262	751	1,089	404	829	366	445	201	168	13.6
MAX	331	1,430	905	1,840	5,080	1,240	3,020	1,850	4,690	1,430	730	25
MIN	24	54	93	85	137	163	194	41	20	19	19	8.5
CFSM	.56	1.73	1.69	4.85	7.03	2.61	5.35	2.36	2.87	1.30	1.08	.09
IN.	.65	1.93	1.95	5.59	7.58	3.01	5.97	2.72	3.21	1.50	1.25	.10

CAL YR 1971 TOTAL 110,283.0 MEAN 302 MAX 4,770 MIN 7.9 CFSM 1.95 IN 26.47
WTR YR 1972 TOTAL 147,695.5 MEAN 404 MAX 5,080 MIN 8.5 CFSM 2.61 IN 35.45

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	1600	18.53	6,520	4-22	1700	14.63	3,850
2-26	1600	18.83	6,760	6-23	2300	19.77	7,520

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, 1,000 ft upstream from Sycamore Run, and at mile 103.4.

DRAINAGE AREA.--386 sq mi.

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 above mean sea level, adjustment of 1912. Prior to Dec. 14, 1934, nonrecording gage at bridge 300 ft upstream at same datum. Auxiliary water-stage recorder 2.7 miles downstream from base gage at datum 700.23 ft above mean sea level. Prior to May 25, 1971, auxiliary nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--44 years, 589 cfs (20.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,640 cfs Feb. 25 (gage height, 20.42 ft); maximum gage height, 22.45 ft Apr. 22, backwater; minimum discharge, 11 cfs Sept. 26 (gage height, 1.86 ft).

Period of record: Maximum discharge, 21,500 cfs Mar. 7, 1967 (gage height, 34.50 ft, backwater); no flow at times in 1930-33.

Flood of Nov. 16, 1926, reached a stage of 33.6 ft.

REMARKS.--Records good.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	424	220	1,680	182	627	866	494	357	76	1,820	135	35
2	330	1,340	913	529	543	715	547	323	90	852	238	31
3	261	1,270	602	1,540	671	2,850	639	837	71	607	152	28
4	210	868	475	1,070	2,500	2,130	1,320	1,510	60	535	650	27
5	168	550	383	3,810	1,330	1,360	1,960	1,320	76	847	1,170	28
6	140	406	386	3,840	916	957	1,270	869	57	2,290	574	30
7	126	324	1,230	1,700	1,080	743	1,630	640	50	1,210	354	33
8	109	276	2,310	947	856	648	4,970	520	45	640	210	30
9	96	224	1,260	778	624	547	2,330	744	39	420	127	25
10	87	193	811	2,840	531	460	1,180	2,580	46	285	90	22
11	79	173	635	3,430	457	409	826	1,920	37	205	73	19
12	76	154	528	2,910	422	365	686	996	31	131	61	17
13	72	140	439	1,670	2,180	341	3,740	658	35	120	336	19
14	67	130	372	1,760	4,080	333	4,730	515	35	107	452	24
15	63	121	335	1,220	2,240	379	2,330	547	32	95	159	29
16	59	112	324	683	1,820	475	1,770	808	54	236	88	36
17	57	104	289	508	1,370	922	2,980	792	74	210	92	30
18	54	99	251	499	1,090	915	1,900	642	54	145	608	28
19	48	95	215	475	1,180	831	1,180	548	242	97	1,190	25
20	42	97	241	884	1,000	669	896	457	123	76	2,840	24
21	37	128	355	2,700	720	548	1,300	386	89	103	813	19
22	33	305	338	1,860	2,060	654	5,770	320	99	122	390	16
23	33	297	279	1,210	2,730	1,210	5,600	266	2,870	87	240	13
24	82	256	268	1,640	5,610	1,100	2,100	203	6,600	72	157	13
25	196	424	258	2,160	7,110	909	1,590	159	2,960	65	108	13
26	502	625	239	1,670	6,600	735	1,100	129	932	54	84	12
27	526	847	227	1,080	6,510	601	768	102	1,170	44	69	13
28	383	1,530	215	1,360	2,500	531	577	87	997	44	59	17
29	258	1,640	210	2,010	1,230	478	465	76	1,340	42	51	19
30	173	2,770	200	1,300	-----	778	394	68	3,280	38	45	49
31	130	-----	193	859	-----	602	-----	63	-----	53	40	-----
TOTAL	4,921	15,718	16,462	49,103	60,587	25,061	57,042	19,442	21,664	11,652	11,655	724
MEAN	159	524	531	1,584	2,089	808	1,901	627	722	376	376	24.1
MAX	526	2,770	2,310	3,840	7,110	2,850	5,770	2,580	6,600	2,290	2,840	49
MIN	33	95	193	182	422	333	394	63	31	38	40	12
CFSM	.41	1.36	1.38	4.10	5.41	2.09	4.92	1.62	1.87	.97	.97	.06
IN.	.47	1.51	1.59	4.73	5.84	2.42	5.50	1.87	2.09	1.12	1.12	.07

CAL YR 1971 TOTAL 217,904.0 MEAN 597 MAX 8,500 MIN 9.0 CFSM 1.55 IN 21.00
WTR YR 1972 TOTAL 294,031.0 MEAN 803 MAX 7,110 MIN 12 CFSM 2.09 IN 28.34

PEAK DISCHARGE (BASE, 6,700 CFS)

a Backwater.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-25	0500	20.42	7,640	6-24	1000	18.90	6,890
4-22	1800	22.45	7,460				

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 upstream from culvert on Secondary State Route 66, 0.3 mile upstream from mouth, and 2.6 miles east of Leopold.

DRAINAGE AREA.--2.91 sq mi.

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

GAGE.--Water-stage and rainfall recorders and culvert control. Altitude of gage is 840 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 234 cfs Apr. 22 (gage height, 3.71 ft), from rating curve extended as explained below; minimum, 0.04 cfs Sept. 22-24 (gage-height, 1.06 ft).

Period of record: Maximum discharge, 312 cfs May 8, 1971 (gage height, 4.20 ft), from rating curve extended above 50 cfs on basis of culvert rating computation; minimum daily, 0.01 cfs for many days most years.

REMARKS.--Records good. Rainfall records collected at site since December 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	28	5.6	3.7	2.5	3.4	1.9	1.8	.74	4.5	.38	.51
2	1.3	22	2.7	20	2.7	5.6	1.9	7.7	.62	11	.24	.40
3	1.4	10	2.0	9.6	18	24	1.8	20	.51	20	11	.51
4	1.3	2.9	1.6	12	12	8.2	11	9.3	.92	9.8	20	.51
5	1.4	1.8	1.3	38	6.5	6.8	7.1	4.7	.94	11	7.1	.24
6	1.3	1.3	7.6	9.3	5.3	4.9	4.6	3.0	.51	7.3	2.4	.17
7	1.2	1.2	25	6.2	4.6	4.0	39	2.4	.45	2.8	1.6	.12
8	1.1	.84	9.6	4.0	3.7	4.0	22	2.2	.28	1.7	1.1	.12
9	.95	.73	4.6	8.2	2.7	2.9	7.6	2.5	.23	1.2	.73	.12
10	1.1	.73	3.2	10	2.5	2.7	5.3	2.4	.22	.81	.71	.12
11	.95	.62	2.9	9.3	2.4	2.5	3.7	2.0	.16	.65	.32	.12
12	.84	.51	2.4	7.6	4.3	2.2	2.7	1.8	.12	.49	.28	.30
13	.73	.51	1.9	8.2	45	5.3	74	1.7	.13	.39	.28	.24
14	1.1	.40	1.9	10	18	5.9	16	1.9	.27	.29	.23	.17
15	.95	.30	2.2	6.2	13	6.8	6.5	3.8	.16	.50	.17	.17
16	.84	.30	3.4	4.0	12	18	7.7	11	.33	.86	.16	.17
17	.73	.30	2.7	3.2	7.9	14	14	9.3	.26	.41	13	.08
18	.73	.30	2.2	2.2	6.5	7.6	7.1	5.8	.17	.28	9.0	.08
19	.62	.51	2.0	2.5	6.8	5.3	3.8	4.9	.22	.23	4.0	.08
20	.62	.73	3.7	5.6	5.6	3.7	3.1	4.5	.24	.17	3.4	.08
21	.51	.95	3.7	8.2	5.6	2.9	5.6	3.1	.40	.16	1.5	.08
22	.51	.84	2.5	5.9	24	9.3	83	2.3	.54	2.8	.99	.08
23	1.5	.62	2.2	7.6	11	8.5	19	1.8	.22	1.8	.76	.04
24	4.9	.95	2.4	16	40	6.8	9.5	1.5	6.8	.58	.59	.08
25	4.3	1.9	2.1	15	13	5.6	7.9	1.3	2.2	.33	.72	.08
26	3.2	2.4	2.1	7.1	26	4.0	5.5	1.1	1.4	.22	.61	.08
27	2.0	11	1.9	4.6	9.3	3.2	3.4	.94	1.5	.21	.68	.51
28	1.8	8.5	2.5	5.6	6.5	2.5	2.4	.84	1.0	.17	.69	.30
29	1.5	20	2.7	4.6	4.6	2.5	2.0	.83	1.5	.17	.59	.24
30	1.4	12	3.4	4.0	-----	2.1	1.9	.73	4.3	.21	.51	.40
31	1.4	-----	4.3	2.9	-----	2.0	-----	.85	-----	.75	.51	-----
TOTAL	43.38	133.14	118.3	261.3	322.0	187.2	382.0	118.39	49.12	81.88	84.25	6.20
MEAN	1.40	4.44	3.82	8.43	11.1	6.04	12.7	3.82	1.64	2.64	2.72	.21
MAX	4.9	28	25	38	45	24	83	20	22	20	20	.51
MIN	.51	.30	1.3	2.2	2.4	2.0	1.8	.73	.12	.16	.16	.04
CFSM	.43	1.53	1.31	2.90	3.81	2.08	4.36	1.31	.56	.91	.93	.07
IN.†	.55	1.70	1.51	3.34	4.12	2.39	4.88	1.51	.63	1.05	1.08	.08
IN.††	1.62	3.72	2.04	4.51	4.52	3.35	6.32	3.41	5.16	4.39	5.39	2.91

CAL YR 1971 TOTAL 1,453.53 MEAN 3.93 MAX 104 MIN .01 CFSM 1.37 IN.† 18.58
WTR YR 1972 TOTAL 1,787.16 MEAN 4.89 MAX 83 MIN .04 CFSM 1.68 IN.† 22.85

PEAK DISCHARGE (BASE, 110 CFS)								† Runoff. †† Rainfall.	
DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE		
4-7	1915	2.94	126	4-22	0515	3.71	234		
4-13	0200	3.33	180	8-3	2145	2.97	130		

LITTLE KANAWHA RIVER BASIN

87

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 upstream from Rush Run, 5.5 miles southeast of Grantsville, and at mile 2.2.

DRAINAGE AREA.--166 sq mi.

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 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 mile downstream from base gage at different datum.

AVERAGE DISCHARGE.--35 years, 215 cfs (17.59 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,730 cfs Apr. 22 (gage height, 18.79 ft, backwater from Little Kanawha River); minimum daily, 4.5 cfs Sept. 12.

Period of record: Maximum discharge, 17,400 cfs Mar. 7, 1967 (gage height, 28.78 ft, backwater from Little Kanawha River), from rating curve extended above 11,000 cfs; 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	94	330	55	187	273	238	114	21	378	22	8.9
2	60	454	200	198	176	243	225	113	17	185	21	7.4
3	45	418	148	568	315	1,190	205	315	14	200	19	6.7
4	37	238	123	363	1,060	655	529	380	12	178	260	10
5	30	140	100	1,920	463	475	679	288	34	535	144	12
6	25	100	105	1,070	343	353	398	213	33	550	63	13
7	21	81	592	460	406	295	807	174	20	235	44	8.9
8	18	66	712	285	290	263	2,160	152	15	131	30	6.7
9	15	54	343	343	250	196	670	779	11	86	19	6.0
10	14	48	230	1,840	200	169	388	1,330	9.5	59	14	5.4
11	12	43	180	1,270	158	144	300	514	7.9	44	10	4.7
12	11	38	140	1,010	160	136	255	305	6.7	34	8.4	4.5
13	10	34	122	550	1,780	123	1,330	218	6.0	28	21	6.5
14	10	31	98	688	1,550	120	1,510	176	8.4	23	11	7.0
15	10	28	94	378	881	113	814	185	15	21	7.4	25
16	11	26	92	198	640	125	776	210	13	163	6.9	21
17	10	23	80	180	439	365	1,300	158	13	144	97	15
18	29	21	70	167	365	370	622	129	10	73	643	9.5
19	15	21	59	165	484	285	393	107	11	40	553	7.5
20	11	24	77	472	370	218	406	92	24	25	721	10
21	10	34	134	1,490	288	182	652	81	24	19	180	9.5
22	8.9	52	116	758	1,130	293	4,950	71	31	16	92	7.5
23	10	44	94	466	769	520	1,210	63	619	14	57	8.0
24	92	38	89	744	3,570	451	610	50	682	12	38	8.5
25	131	71	84	818	1,750	365	439	42	174	9.5	28	10
26	208	136	77	568	3,760	285	318	39	94	7.4	24	11
27	105	220	74	355	1,220	233	238	28	64	6.5	19	11
28	63	383	71	634	637	193	185	23	76	5.8	17	19
29	40	460	70	580	373	167	154	19	643	5.6	14	17
30	31	721	63	373	-----	406	131	18	1,310	6.5	12	363
31	25	-----	63	255	-----	308	-----	22	-----	16	10	-----
TOTAL	1,203.9	4,141	4,830	19,221	24,014	9,504	22,892	6,408	4,018.5	3,250.3	3,205.7	660.2
MEAN	38.8	138	156	620	828	307	763	207	134	105	103	22.0
MAX	208	721	712	1,920	3,760	1,190	4,950	1,330	1,310	550	721	363
MIN	8.9	21	59	55	158	113	131	18	6.0	5.6	6.9	4.5
CFSM	.23	.83	.94	3.73	4.99	1.85	4.60	1.25	.81	.63	.62	.13
IN.	.27	.93	1.08	4.31	5.38	2.13	5.13	1.44	.90	.73	.72	.15

CAL YR 1971 TOTAL 76,149.7 MEAN 209 MAX 4,900 MIN 1.7 CFSM 1.26 IN 17.06
 WTR YR 1972 TOTAL 103,348.6 MEAN 282 MAX 4,950 MIN 4.5 CFSM 1.70 IN 23.16

PEAK DISCHARGE (BASE, 3,400 CFS)

a Backwater.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	1200	a15.50	4,420	4- 8	0600	a14.09	3,860
2-26	1400	a17.86	5,320	4-22	1200	a18.79	5,730

LITTLE KANAWHA RIVER BASIN

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 downstream from bridge on State Highway 16 at Grantsville, 1,200 ft downstream from Philip Run, and at mile 80.0.

DRAINAGE AREA.--913 sq mi.

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 above mean sea level, adjustment of 1912. Prior to Nov. 21, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--44 years, 1,321 cfs (19.65 inches per year).

EXTREMES.--Current year: Maximum discharge, 18,800 cfs Apr. 22 (gage height, 30.44 ft); minimum, 34 cfs Sept. 26, 28 (gage height, 6.29 ft).

Period of record: Maximum discharge, 35,100 cfs Mar. 7, 1967 (gage height, 43.9 ft, 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	722	424	3,610	399	1,290	1,920	1,140	760	134	4,250	115	72
2	542	2,050	1,990	839	1,100	1,540	1,070	716	140	2,110	297	64
3	441	3,170	1,270	3,720	1,320	5,470	1,240	1,770	157	1,660	323	57
4	366	1,910	957	2,630	5,530	5,520	2,290	3,110	130	1,670	1,240	55
5	310	1,090	774	7,390	3,560	3,310	4,570	2,580	129	2,000	2,420	59
6	267	740	783	8,550	2,240	2,390	2,980	1,840	179	4,470	1,220	61
7	231	566	2,720	4,120	2,250	1,800	3,280	1,340	141	2,820	663	65
8	203	455	5,820	2,250	2,010	1,540	11,100	1,060	111	1,330	480	60
9	178	382	3,040	1,830	1,470	1,290	6,290	1,660	94	808	334	57
10	156	326	1,870	6,140	1,200	1,050	2,860	5,050	83	562	238	48
11	142	294	1,380	6,960	588	912	1,930	4,010	97	412	176	42
12	125	271	1,160	6,290	910	824	1,520	2,210	84	318	139	38
13	115	247	938	3,950	5,330	758	6,060	1,430	70	255	124	58
14	105	225	774	4,140	10,500	789	11,600	1,070	65	208	515	78
15	96	206	666	3,080	6,060	808	6,200	1,120	72	183	337	71
16	93	190	654	1,690	4,420	933	3,900	1,740	77	285	202	83
17	89	175	619	1,200	3,310	2,570	6,640	1,600	83	533	203	77
18	89	163	542	1,070	2,540	2,510	4,810	1,350	118	395	1,760	67
19	90	155	462	1,010	2,800	1,960	2,750	1,150	98	264	2,220	59
20	82	153	470	1,650	2,500	1,500	2,060	923	293	184	5,550	57
21	71	165	740	6,210	1,790	1,210	2,870	765	228	140	2,100	50
22	64	241	792	4,630	4,070	1,360	13,900	629	187	139	848	44
23	60	379	643	2,900	6,030	2,860	14,700	526	2,090	180	533	37
24	121	338	571	4,040	10,900	2,790	5,600	422	9,160	310	371	35
25	453	360	540	5,190	14,300	2,220	3,700	339	6,600	168	267	35
26	893	813	497	4,120	14,700	1,780	2,680	289	1,830	119	199	34
27	945	1,230	463	2,530	13,400	1,400	1,850	238	1,450	91	157	37
28	734	2,920	437	2,520	6,730	1,190	1,340	195	1,700	75	128	35
29	533	2,890	430	3,780	2,880	1,000	1,040	168	2,800	69	108	42
30	399	5,640	424	2,710	-----	1,420	871	150	6,140	72	93	283
31	319	-----	422	1,830	-----	1,540	-----	140	-----	75	81	-----
TOTAL	9,034	29,068	36,458	109,368	136,128	58,164	132,841	40,350	34,540	26,155	23,441	1,860
MEAN	291	969	1,176	3,528	4,694	1,876	4,428	1,302	1,151	844	756	62.0
MAX	945	5,640	5,820	8,550	14,700	5,520	14,700	5,050	9,160	4,470	5,550	283
MIN	60	153	422	399	910	758	871	140	65	69	81	34
CFSM	.32	1.06	1.29	3.96	5.14	2.05	4.85	1.43	1.26	.92	.83	.07
IN.	.37	1.18	1.49	4.46	5.55	2.37	5.41	1.64	1.41	1.07	.96	.08

CAL YR 1971 TOTAL 472,768 MEAN 1,295 MAX 16,300 MIN 21 CFSM 1.42 IN 19.26
WTR YR 1972 TOTAL 637,407 MEAN 1,742 MAX 14,700 MIN 34 CFSM 1.91 IN 25.97

PEAK DISCHARGE (BASE, 14,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	2200	28.15	16,400	4-22	2300	30.44	18,800

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 downstream from Henry Fork at Rocksedale, 9.0 miles southwest of Grantsville, and at mile 14.1.

DRAINAGE AREA.--205 sq mi.

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 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 upstream at same datum.

AVERAGE DISCHARGE.--38 years, 249 cfs (16.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,120 cfs Apr. 22 (gage height, 23.03 ft); minimum, 5.1 cfs July 29 (gage height, 3.67 ft).

Period of record: Maximum discharge, 20,200 cfs Apr. 16, 1939 (gage height, 30.3 ft, from floodmarks, site then in use), from rating curve extended above 13,000 cfs; 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	101	371	62	229	345	227	168	32	261	28	12
2	63	703	230	332	215	300	223	181	30	169	23	9.0
3	49	519	166	719	365	1,550	199	339	25	209	27	9.0
4	42	293	137	467	958	841	430	373	22	177	275	17
5	36	166	112	2,290	508	608	630	313	23	425	187	23
6	31	113	109	1,190	403	435	415	239	30	530	83	19
7	27	90	646	550	540	365	1,000	199	27	265	47	14
8	22	72	327	369	381	337	2,840	183	21	157	35	11
9	20	57	395	528	313	269	742	844	18	100	27	8.7
10	19	50	276	2,310	243	225	440	1,400	16	67	20	7.1
11	17	46	214	1,570	204	192	359	590	14	49	15	6.1
12	16	41	157	1,170	217	178	331	369	13	40	13	9.0
13	15	37	131	658	2,370	160	1,260	275	13	33	12	38
14	14	34	107	973	2,400	148	1,710	225	26	27	14	33
15	13	31	100	538	1,090	138	820	241	30	24	12	31
16	13	28	106	299	709	139	965	211	29	48	10	36
17	13	26	92	281	500	391	1,300	172	20	73	95	25
18	13	24	78	211	460	460	715	151	15	41	1,090	17
19	27	23	66	213	772	357	452	132	13	30	1,060	23
20	24	24	97	706	520	257	468	112	21	23	1,260	31
21	16	32	173	1,730	381	227	868	95	43	18	283	27
22	15	45	142	934	1,150	399	6,540	81	71	14	139	19
23	14	39	113	560	910	724	1,780	71	399	12	82	14
24	58	35	105	625	3,910	555	962	56	605	11	51	20
25	160	62	98	817	2,560	423	668	47	219	9.5	36	38
26	145	131	90	628	5,560	341	468	53	126	7.7	29	30
27	90	249	85	405	1,880	281	353	43	83	6.4	26	30
28	58	389	80	706	766	239	273	35	84	5.6	23	55
29	44	425	76	658	470	205	225	31	263	5.3	19	43
30	35	736	69	423	-----	333	190	28	417	5.6	16	618
31	30	-----	69	305	-----	263	-----	29	-----	18	14	-----
TOTAL	1,229	4,621	5,517	23,217	30,974	11,685	27,653	7,286	2,748	2,861.1	5,051	1,272.9
MEAN	39.6	154	178	749	1,068	377	922	235	91.6	92.3	163	42.4
MAX	160	736	827	2,310	5,560	1,550	6,540	1,400	605	530	1,260	618
MIN	13	23	66	62	204	138	190	28	13	5.3	10	6.1
CFSM	.19	.75	.87	3.65	5.21	1.84	4.50	1.15	.45	.45	.80	.21
IN.	.22	.84	1.00	4.21	5.62	2.12	5.02	1.32	.50	.52	.92	.23

CAL YR 1971 TOTAL 87,756.5 MEAN 240 MAX 4,290 MIN 2.6 CFSM 1.17 IN 15.92
WTR YR 1972 TOTAL 124,115.0 MEAN 339 MAX 6,540 MIN 5.3 CFSM 1.65 IN 22.52

PEAK DISCHARGE (BASE, 3,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	1445	18.03	5,020	4-8	0500	16.83	4,420
2-26	1500	22.29	7,600	4-22	1300	23.03	8,120

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 upstream from Miletree Run, and 0.8 mile west of Spencer.

DRAINAGE AREA.--2.82 sq mi.

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 (from topographic map).

EXTREMES.--Current year: Maximum discharge, 1,080 cfs Aug. 17 (gage height, 5.96 ft), from rating curve extended as explained below; minimum, 0.02 cfs June 12, 13, July 24, 27; minimum gage height, 1.31 ft June 13.

Period of record: Maximum discharge, 1,080 cfs Aug. 17, 1972 (gage height, 5.96 ft), from rating curve extended above 260 cfs on basis of step-backwater method; no flow at times most years.

REMARKS.--Records good. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.1	3.1	1.2	1.0	3.7	2.1	2.0	.23	1.3	1.0	.08
2	1.2	2.9	2.1	22	1.0	18	2.0	2.9	.20	1.2	.36	.07
3	1.0	2.1	1.5	9.3	6.8	27	1.7	4.2	.15	.72	6.8	1.5
4	.86	1.2	1.3	14	6.2	11	8.1	3.5	.13	.36	11	.86
5	.58	.72	1.0	39	3.5	7.6	5.4	2.9	.15	4.2	2.5	.31
6	.42	.50	1.2	12	2.5	5.4	3.9	2.1	.09	1.5	1.0	.17
7	.36	.50	15	6.5	2.7	4.2	42	1.7	.08	.50	.50	.13
8	.26	.36	5.9	5.1	2.1	4.2	20	2.1	.07	.35	.26	.09
9	.26	.31	3.9	22	1.5	3.1	7.2	27	.06	.20	.50	.08
10	.26	.31	3.1	21	.86	2.9	4.8	13	.11	.20	.23	.07
11	.23	.26	2.3	11	.86	2.3	4.5	5.4	.04	.15	.13	.15
12	.20	.23	2.0	7.6	2.5	2.3	10	3.3	.03	.10	.09	6.8
13	.17	.23	1.7	11	42	2.1	38	2.7	.58	.10	.11	2.0
14	.17	.20	1.3	14	20	2.0	13	4.8	.31	.09	.09	1.3
15	.15	.17	2.0	5.9	10	1.7	8.1	7.2	.11	.07	.42	1.0
16	.15	.17	2.3	3.5	6.5	2.5	12	4.5	1.0	.15	.17	.50
17	.15	.17	2.1	2.0	4.8	3.5	12	3.7	.20	.10	79	.31
18	.15	.17	2.0	1.5	4.5	3.5	6.2	3.5	.15	.09	42	.23
19	.13	.20	1.5	1.3	7.2	2.9	4.2	2.7	.09	.08	36	.26
20	.11	.23	3.9	26	3.9	2.5	11	2.3	.42	.06	13	.20
21	.09	.36	3.7	12	2.5	2.3	61	1.7	2.9	.04	.35	.15
22	.11	.23	2.5	5.1	6.8	7.2	92	1.3	.58	.03	2.0	.11
23	.17	.17	2.3	3.3	7.6	8.9	12	1.0	4.8	.03	1.2	.13
24	2.1	.31	2.0	2.9	46	6.2	9.7	.58	2.5	.02	.58	2.3
25	.72	1.0	1.7	12	30	5.1	7.2	.50	1.0	.03	.42	1.3
26	.42	1.2	1.5	3.9	54	3.7	4.8	.36	.50	.03	.36	.72
27	.26	5.9	1.3	2.5	13	3.3	3.5	.26	.31	.02	.31	1.2
28	.23	3.9	1.3	6.5	6.8	2.9	2.9	.20	14	.03	.26	1.5
29	.20	10	1.2	3.5	4.5	2.7	2.5	.17	5.1	.15	.20	1.2
30	.17	5.9	1.5	2.3	-----	2.5	2.1	.17	2.3	.36	.15	4.5
31	.17	-----	1.5	1.3	-----	2.1	-----	.23	-----	.93	.11	-----
TOTAL	13.15	42.00	79.7	291.2	301.62	159.3	413.9	107.97	38.19	13.19	201.10	29.22
MEAN	.42	1.40	2.57	9.39	10.4	5.14	13.8	3.48	1.27	.43	6.49	.97
MAX	2.1	10	15	39	54	27	92	27	14	4.2	79	6.8
MIN	.09	.17	1.0	1.2	.86	1.7	1.7	.17	.03	.02	.09	.07
CFSM	.15	.50	.91	3.33	3.69	1.82	4.89	1.23	.45	.15	2.30	.34
IN.†	.17	.55	1.05	3.84	3.98	2.10	5.46	1.42	.50	.17	2.65	.39
IN.††	1.00	2.22	1.39	4.63	4.24	2.08	5.76	2.52	5.67	-	5.69	3.77
CAL YR 1971	TOTAL 1,397.19	MEAN 3.83	MAX 115	MIN 0	CFSM 1.36	IN.† 18.43						
WTR YR 1972	TOTAL 1,690.54	MEAN 4.62	MAX 92	MIN .02	CFSM 1.64	IN.† 22.30						

PEAK DISCHARGE (BASE, 180 CFS)

† Runoff.
†† Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-7	1815	3.40	230	6-28	1700	3.42	236
4-12	2330	3.61	293	8-3	2245	3.19	184
4-22	0345	4.43	539	8-17	2045	5.96	1,080

LITTLE KANAWHA RIVER BASIN

91

03154500 Reedy Creek near Reedy, W. Va.

LOCATION.--Lat 38°57'40", long 81°23'25", Wirt County, on left bank 0.2 mile downstream from Roundbottom Run, 1.0 mile north of Lucile, 4.5 miles northeast of Reedy, and at mile 8.5.

DRAINAGE AREA.--79.4 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 650 ft (from topographic map).

AVERAGE DISCHARGE.--21 years, 90.4 cfs (15.46 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,510 cfs Apr. 22 (gage height, 12.89 ft), from rating curve extended above 3,700 cfs; minimum, 1.3 cfs Sept. 12, 13 (gage height, 2.09 ft).
Period of record: Maximum discharge, 5,730 cfs Feb. 10, 1957 (gage height, 14.7 ft), from rating curve extended above 3,700 cfs; no flow at times in 1959, 1960, 1965, 1966.

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

REVISIONS (WATER YEARS).--WSP 1385: 1952-53(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	14	79	31	51	80	41	31	12	31	5.5	4.4
2	30	57	46	519	59	216	36	40	8.3	18	5.0	3.5
3	22	55	34	308	166	997	33	300	5.5	17	5.0	3.8
4	18	39	29	355	254	274	180	144	4.7	15	25	9.6
5	15	23	25	1,310	128	240	152	77	8.3	50	20	11
6	13	17	34	315	114	148	87	50	7.9	61	13	5.8
7	10	15	493	166	144	108	606	39	5.2	25	9.0	3.5
8	8.3	14	280	116	101	107	1,080	34	3.8	14	6.0	2.7
9	7.0	11	114	345	80	79	188	525	3.0	9.2	4.5	2.2
10	6.1	9.6	74	702	63	64	116	400	2.7	6.1	3.5	1.9
11	5.8	9.2	60	330	48	51	94	128	2.2	15	2.5	1.6
12	4.9	8.3	42	226	79	45	96	72	2.7	18	2.5	1.3
13	4.4	7.4	35	144	1,430	40	1,250	53	2.7	13	5.5	66
14	4.4	6.5	29	172	843	35	690	47	9.2	7.0	3.0	17
15	3.8	5.5	29	103	318	32	234	388	13	4.5	2.0	8.7
16	3.5	5.2	46	55	214	37	244	252	6.5	20	2.0	7.9
17	2.9	4.9	40	50	138	96	270	114	6.1	13	25	5.5
18	3.0	4.4	31	43	192	110	146	110	5.8	10	100	3.5
19	2.9	4.4	24	51	338	69	94	71	3.5	8.0	90	3.2
20	2.6	5.2	63	333	152	50	148	54	4.4	6.0	120	8.7
21	2.2	6.5	94	636	105	42	490	41	26	4.5	70	8.3
22	2.1	7.4	55	202	262	200	3,370	34	25	3.5	40	4.4
23	2.4	6.1	40	138	190	274	375	26	82	3.0	25	3.0
24	15	5.8	36	260	1,600	176	254	20	121	2.5	18	3.5
25	31	10	31	546	546	130	194	17	42	2.0	14	34
26	15	24	28	202	1,140	91	119	14	21	2.0	11	20
27	9.6	72	26	114	306	71	80	11	13	2.0	11	19
28	6.5	119	29	182	172	57	58	8.7	25	1.5	11	63
29	5.2	218	31	146	110	48	46	7.0	140	1.5	7.9	34
30	4.1	192	31	96	-----	66	37	7.0	91	1.5	5.8	48
31	3.5	-----	39	66	-----	48	-----	17	-----	4.0	4.9	-----
TOTAL	305.2	976.4	2,047	8,262	9,382	4,081	10,808	3,131.7	703.5	388.8	667.6	409.0
MEAN	9.85	32.5	66.0	267	324	132	360	101	23.5	12.5	21.5	13.6
MAX	41	218	493	1,310	1,600	997	3,370	525	140	61	120	66
MIN	2.1	4.4	24	31	48	32	33	7.0	2.2	1.5	2.0	1.3
CFSM	.12	.41	.83	3.36	4.08	1.66	4.53	1.27	.30	.16	.27	.17
IN.	.14	.46	.96	3.97	4.40	1.91	5.06	1.47	.33	.18	.31	.19
CAL YR 1971	TOTAL 40,285.25	MEAN 110	MAX 1,960	MIN .34	CFSM 1.39	IN 18.87						
WTR YR 1972	TOTAL 41,162.20	MEAN 112	MAX 3,370	MIN 1.3	CFSM 1.41	IN 19.29						

PEAK DISCHARGE (BASE, 2,200 CFS)

NOTE.--No gage-height record
July 12 to Aug. 24.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	1200	9.76	2,470	4-22	0930	12.89	4,510
4-8	0400	9.46	2,300				

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 mile upstream from Tucker Creek, 2.3 miles northeast of Palestine, 2.4 miles upstream from old lock 3, and at mile 27.9.

DRAINAGE AREA.--1,515 sq mi.

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 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 miles upstream from base gage at old lock 4 at datum 596.08 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 2,050 cfs (18.38 inches per year).

EXTREMES.--Current year: Maximum discharge, 30,700 cfs Apr. 23 (gage height, 28.80 ft); minimum, 105 cfs Sept. 12, 13 (gage height, 13.86 ft).

Period of record: Maximum discharge, 50,700 cfs Mar. 7, 1967 (gage height, 39.14 ft, backwater), from rating curve extended above 39,000 cfs; minimum, 0.6 cfs July 14, 1959 (filling pool above old lock 3).

Flood of Apr. 17, 1939, reached a stage of 32.25 ft, from floodmarks at old lock 4 (discharge, about 53,000 cfs).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 953: 1940(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,400	455	6,280	813	2,800	4,120	2,060	1,450	270	6,130	202	198
2	1,070	1,060	3,770	1,310	2,210	3,460	1,640	1,360	246	3,840	258	178
3	876	3,950	2,280	3,990	2,150	8,280	1,570	2,530	234	2,570	274	170
4	723	3,280	1,610	5,050	4,390	9,700	2,260	3,730	238	2,230	1,660	190
5	598	2,050	1,320	8,610	6,870	7,230	5,070	4,150	266	2,240	1,780	190
6	469	1,330	1,170	12,500	4,670	5,090	5,380	3,300	238	3,520	2,210	182
7	396	1,040	2,170	9,270	3,750	3,820	5,110	2,440	222	4,610	1,320	137
8	340	876	6,680	4,980	3,820	3,140	12,300	1,900	254	2,880	939	134
9	310	750	6,190	3,600	3,180	2,720	12,300	2,680	238	1,630	741	140
10	290	633	3,500	6,830	2,460	2,280	6,850	6,720	210	1,120	562	134
11	262	522	2,410	10,500	2,100	1,900	4,120	6,940	190	840	420	115
12	234	448	1,920	9,740	1,870	1,640	3,200	4,670	174	651	330	108
13	218	402	1,580	7,730	6,790	1,500	6,850	2,900	166	476	315	118
14	202	366	1,360	5,750	14,900	1,380	14,000	2,120	182	448	274	174
15	194	335	1,180	5,880	12,700	1,340	11,500	2,370	174	345	298	166
16	182	310	1,110	4,040	7,860	1,370	7,230	2,940	174	302	597	150
17	166	290	1,090	2,530	6,060	1,940	7,490	2,700	170	274	588	154
18	158	274	1,030	2,030	4,810	4,080	8,720	2,390	178	420	4,100	150
19	154	262	939	1,870	5,160	3,520	5,490	1,970	174	476	5,250	170
20	147	254	921	1,880	4,970	2,780	3,710	1,630	182	366	6,920	154
21	158	242	1,100	6,170	3,750	2,210	4,340	1,360	414	294	5,860	144
22	162	242	1,240	8,410	3,820	2,280	20,500	1,150	633	250	2,230	134
23	154	258	1,210	5,930	8,020	3,880	27,400	975	939	214	1,240	124
24	162	396	1,070	5,290	12,800	4,870	14,300	822	5,110	190	903	118
25	218	490	1,000	7,070	20,500	4,080	7,180	714	8,720	234	687	115
26	514	498	939	7,420	21,900	3,240	5,270	579	5,110	294	522	134
27	1,070	1,040	894	5,470	22,600	2,570	3,790	476	2,010	250	408	154
28	1,080	2,410	849	4,010	14,500	2,120	2,820	396	1,740	214	335	162
29	921	3,880	849	4,850	6,960	1,790	2,150	335	2,570	206	286	182
30	741	5,490	831	5,070	-----	1,990	1,690	294	4,500	194	250	186
31	554	-----	831	3,750	-----	2,420	-----	286	-----	190	218	-----
TOTAL	14,113	33,833	59,323	172,343	218,270	102,740	216,290	68,277	35,926	37,898	41,977	4,565
MEAN	455	1,128	1,914	5,559	7,527	3,314	7,210	2,202	1,198	1,223	1,354	152
MAX	1,400	5,490	6,680	12,500	22,600	9,700	27,400	6,940	8,720	6,130	6,920	198
MIN	147	242	831	813	1,870	1,340	1,570	286	166	190	202	108
CFSM	.30	.74	1.26	3.67	4.97	2.19	4.76	1.45	.79	.81	.89	.10
IN.	.35	.83	1.46	4.23	5.36	2.52	5.31	1.68	.88	.93	1.03	.11

CAL YR 1971 TOTAL 749,768 MEAN 2,054 MAX 21,300 MIN 48 CFSM 1.36 IN 18.41
 WTR YR 1972 TOTAL 1,005,555 MEAN 2,747 MAX 27,400 MIN 108 CFSM 1.81 IN 24.69

PEAK DISCHARGE (BASE, 19,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-27	0600	26.00	24,300	4-23	0100	28.80	30,700

LITTLE KANAWHA RIVER BASIN

93

03155500 Hughes River at Cisco, W. Va.

LOCATION.--Lat 39°07'10", long 81°16'40", Ritchie County, on right bank 100 ft downstream from confluence of North and South Forks, 1.0 mile upstream from Cisco, 5.0 miles south of Petroleum, and at mile 14.0.

DRAINAGE AREA.--452 sq mi.

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 above mean sea level, adjustment of 1912. Prior to Sept. 30, 1931, nonrecording gage at site 0.9 mile downstream and Mar. 5, 1939, to Sept. 30, 1945, nonrecording gage at site 1.0 mile downstream, both at datum 2.56 ft lower. Oct. 1, 1945, to June 30, 1946, nonrecording gage at bridge across mouth of North Fork at present datum.

AVERAGE DISCHARGE.--37 years, 566 cfs (17.01 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,200 cfs Apr. 14, 22 (gage height, 18.78 ft); minimum daily, 12 cfs Sept. 12.

Period of record: Maximum discharge, 31,700 cfs June 26, 1950 (gage height, 32.69 ft); 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226	66	1,320	233	300	686	450	330	49	972	13	28
2	176	551	662	780	320	670	390	390	46	527	13	24
3	141	1,140	441	2,530	538	3,160	350	2,010	40	543	24	21
4	120	666	335	1,420	2,630	2,660	428	1,750	34	901	1,770	26
5	94	341	270	2,530	1,360	1,640	1,470	906	30	780	2,470	29
6	79	219	519	2,840	813	1,260	967	593	26	1,670	521	32
7	71	169	2,580	1,380	796	873	1,140	450	25	840	255	30
8	62	142	3,220	791	592	708	6,450	370	22	417	182	24
9	53	120	1,430	725	543	642	2,630	422	21	264	135	20
10	50	99	824	2,490	428	538	1,090	637	23	174	95	18
11	47	88	609	2,980	350	444	697	505	22	117	71	15
12	41	80	516	2,140	325	380	543	375	21	101	53	12
13	36	73	400	1,200	3,100	350	2,790	305	21	101	45	47
14	35	67	305	873	5,660	422	6,240	269	21	86	38	46
15	36	61	255	692	2,810	444	1,570	521	97	73	33	33
16	36	56	278	400	2,510	417	1,070	642	77	68	28	29
17	34	52	291	365	1,530	780	1,670	813	41	90	35	28
18	31	48	242	340	1,050	1,130	1,290	642	31	139	945	23
19	26	46	190	335	1,530	884	780	521	25	84	1,300	21
20	22	46	202	355	1,180	637	631	375	55	68	1,560	18
21	19	48	350	631	741	494	703	300	395	47	670	17
22	19	52	340	697	1,590	549	6,400	233	972	36	300	16
23	18	55	251	598	2,060	1,420	5,220	178	1,800	29	174	15
24	24	57	210	2,010	3,770	1,410	1,730	132	3,020	27	111	15
25	194	57	194	2,520	3,510	1,010	1,500	101	890	27	82	14
26	273	62	170	2,030	3,130	780	1,010	84	406	22	64	15
27	206	128	153	917	2,460	626	686	70	400	19	53	16
28	143	1,350	163	653	1,360	532	521	56	428	19	58	17
29	104	1,600	219	560	868	444	411	47	769	18	56	20
30	81	2,860	242	444	-----	450	340	41	1,670	16	42	22
31	65	-----	260	360	-----	505	-----	47	-----	15	33	-----
TOTAL	2,561	10,399	17,441	36,719	47,944	26,945	51,167	14,115	11,477	8,290	11,229	691
MEAN	82.6	347	563	1,184	1,653	869	1,706	455	383	267	362	23.0
MAX	273	2,860	3,220	2,880	5,660	3,160	6,450	2,010	3,020	1,670	2,470	47
MIN	18	46	153	233	300	350	340	41	21	15	13	12
CFSM	.18	.77	1.25	2.62	3.66	1.92	3.77	1.01	.85	.59	.80	.05
IN.	.21	.86	1.44	3.02	3.95	2.22	4.21	1.16	.94	.68	.92	.06

CAL YR 1971 TOTAL 194,764.4 MEAN 534 MAX 11,700 MIN 6.0 CFSM 1.19 IN 16.03
WTR YR 1972 TOTAL 239,978.0 MEAN 653 MAX 6,450 MIN 12 CFSM 1.44 IN 19.67

PEAK DISCHARGE (BASE, 9,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-14	0130	18.78	10,200	4-22	2000	18.78	10,200

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 mile upstream from Little River, and 5.5 miles upstream from Radford.

DRAINAGE AREA.--2,382 sq mi.

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 is equipped with 9 lift gates 30 ft high by 50 ft 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 (1.5 ft below top of gates) is 230,100 acre-ft of which about 100,000 acre-ft is controlled storage above elevation 1,820.0 ft (minimum pool). Reservoir is used for power.

COOPERATION.--Records furnished by Appalachian Power Co.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)	Change in Contents (equivalent in cfs)
Sept. 30.....	1,844.89	220,800	-	-
Oct. 31.....	1,845.58	223,700	+2,900	+48
Nov. 30.....	1,845.25	222,300	-1,400	-24
Dec. 31.....	1,844.26	218,100	-4,200	-69
CAL YR 1971	-	-	-1,500	-2
Jan. 31.....	1,844.94	221,000	+2,900	+47
Feb. 29.....	1,845.88	225,000	+4,000	+70
Mar. 31.....	1,843.85	216,300	-8,700	-141
Apr. 30.....	1,845.08	221,600	+5,300	+89
May 31.....	1,844.50	219,100	-2,500	-40
June 30.....	1,843.68	215,600	-3,500	-59
July 31.....	1,845.18	222,000	+6,400	+104
Aug. 31.....	1,845.60	223,800	+1,800	+29
Sept. 30.....	1,845.51	223,400	-400	-6
WTR YR 1972	-	-	+2,600	+4

03179000 Bluestone River near Pipestem, W. Va.

LOCATION.--Lat 37°32'45", long 81°00'30", Summers County, on left bank 1.2 miles downstream from Mountain Creek, 2.5 miles west of Pipestem, and at mile 8.0.

DRAINAGE AREA.--363 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,527.35 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--22 years, 440 cfs (16.46 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,800 cfs Feb. 26 (gage height, 12.17 ft); minimum, 46 cfs Oct. 1,2; minimum gage height, 2.15 ft Oct. 1.

Period of record: Maximum discharge, 16,100 cfs Jan. 29, 1957 (gage height, 14.49 ft); minimum, 7.0 cfs Sept. 21-23, 30, 1955 (gage height, 1.60 ft).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	202	478	161	948	1,220	330	343	289	286	1,120	120
2	48	188	333	205	704	971	325	314	239	289	779	111
3	64	333	258	439	651	1,350	297	1,090	207	244	797	110
4	67	619	221	653	677	1,210	286	2,480	188	214	558	127
5	76	495	202	2,830	528	1,030	289	1,920	253	1,680	437	158
6	257	348	184	2,840	513	834	264	1,190	262	1,490	336	190
7	233	273	546	1,500	533	717	280	834	229	895	265	138
8	142	226	832	861	441	680	2,510	754	203	575	223	112
9	102	189	608	691	403	585	2,570	1,380	166	397	193	100
10	92	170	471	1,070	364	511	1,260	1,610	149	300	179	97
11	89	157	400	1,020	342	463	877	1,200	145	240	152	91
12	75	145	350	846	356	435	1,260	862	133	199	136	82
13	67	135	300	724	704	403	2,210	697	121	180	124	76
14	59	127	270	849	1,330	384	5,060	786	117	164	116	73
15	55	117	240	750	1,260	356	5,970	786	111	151	106	72
16	59	111	230	600	1,190	334	3,390	736	116	142	97	75
17	99	105	220	550	1,070	393	2,170	690	179	148	92	70
18	209	100	200	500	903	413	1,440	636	249	139	657	69
19	129	97	180	470	771	385	1,070	874	221	137	2,600	76
20	97	99	350	948	637	360	960	937	213	140	1,530	105
21	80	90	550	5,870	546	341	728	844	1,220	111	750	84
22	75	90	454	4,510	989	402	888	1,550	1,550	104	450	68
23	94	85	352	2,050	1,810	512	1,070	1,750	962	113	395	62
24	571	80	307	1,340	5,660	497	888	1,310	640	137	295	60
25	1,220	80	278	1,090	8,740	460	735	871	496	101	245	59
26	2,090	75	250	998	9,040	430	622	640	384	83	230	59
27	1,110	100	233	882	5,610	404	523	495	297	77	291	119
28	590	161	211	2,650	2,800	387	451	405	244	171	231	350
29	387	293	199	2,340	1,700	372	401	349	246	256	179	336
30	281	542	183	1,890	-----	366	378	316	263	981	153	2,950
31	231	-----	176	1,180	-----	339	-----	320	-----	1,790	134	-----
TOTAL	9,794	5,832	10,066	44,307	51,120	17,544	39,402	28,969	10,092	11,934	13,850	6,199
MEAN	284	194	325	1,429	1,763	566	1,313	934	336	385	447	207
MAX	2,090	619	832	5,870	9,040	1,350	5,970	2,480	1,550	1,790	2,600	2,950
MIN	46	75	176	161	342	334	264	314	111	77	92	59
CFSM	.78	.53	.90	3.94	4.86	1.56	3.62	2.57	.93	1.06	1.23	.57
IN.	.90	.60	1.03	4.54	5.24	1.80	4.04	2.97	1.03	1.22	1.42	.64

CAL YR 1971 TOTAL 180,240 MEAN 494 MAX 5,920 MIN 41 CFSM 1.36 IN 18.47
WTR YR 1972 TOTAL 248,109 MEAN 678 MAX 9,040 MIN 46 CFSM 1.87 IN 25.43

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	2300	10.24	6,430	4-15	0100	10.30	6,560
2-26	0800	12.17	10,800				

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 mile upstream from Greenbrier River, 2.2 miles upstream from Hinton, at New River mile 64.8 and Kanawha River mile 161.8.

DRAINAGE AREA.--4,603 sq mi.

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, 196,100 acre-ft Feb. 28 (elevation, 1,456.51 ft); minimum, 29,160 acre-ft Dec. 8 (elevation, 1,405.03 ft).

Period of record: Maximum contents since storage began, 510,900 acre-ft Apr. 6, 1960 (elevation, 1,505.97 ft), results of holding water for cofferdam construction on Ohio River; minimum since initial filling, 18,060 acre-ft Oct. 4, 1956 (elevation, 1,397.94 ft).

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 wide by 31 ft high and 16 sluice gates 5.67 ft wide by 10 ft high. Total level-pool capacity at elevation 1,520 ft (flood-control pool elevation) is 631,000 acre-ft of which 600,100 acre-ft is controlled above elevation 1,406 ft (minimum-pool elevation) and 10,000 acre-ft is dead storage below elevation 1,391 ft (stilling-basin weir). Figures given herein represent total contents. Reservoir is used for flood control.

COOPERATION.--Records furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)	Change in Contents (equivalent in cfs)
Sept. 30.....	1,410.23	38,780	-	-
Oct. 31.....	1,410.30	38,910	+130	+2
Nov. 30.....	1,407.55	33,800	-5,110	-86
Dec. 31.....	1,406.81	32,440	-1,360	-22
CAL YR 1971	-	-	+620	+1
Jan. 31.....	1,405.68	30,340	-2,100	-34
Feb. 29.....	1,446.00	148,900	+118,560	+2,061
Mar. 31.....	1,409.83	38,030	-110,870	-1,803
Apr. 30.....	1,410.22	38,760	+730	+12
May 31.....	1,410.23	38,780	+20	0
June 30.....	1,410.37	39,040	+260	+4
July 31.....	1,410.19	38,700	-340	-6
Aug. 31.....	1,410.09	38,510	-190	-3
Sept. 30.....	1,410.61	39,480	+970	+16
WTR YR 1972	-	-	+700	+1

KANAWHA RIVER BASIN

03180500 Greenbrier River at Durbin, W. Va.

97

LOCATION.--Lat 38°32'35", long 79°50'00", Pocahontas County, on left bank at Durbin, 500 ft downstream from confluence of East and West Forks, and at mile 150.1.

DRAINAGE AREA.--134 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 2,699.71 ft above mean sea level.

AVERAGE DISCHARGE.--29 years, 247 cfs (25.03 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,090 cfs Feb. 26 (gage height, 6.27 ft); minimum, 12 cfs Sept. 21 (gage height, 0.68 ft).

Period of record: Maximum discharge, 12,200 cfs Mar. 7, 1967 (gage height, 9.15 ft), from rating curve extended above 5,000 cfs; maximum gage height, 9.20 ft Feb. 2, 1956 (ice jam); no flow part of each day Oct. 2, 3, 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	150	334	104	259	1,960	329	174	124	224	300	23
2	120	130	251	215	219	3,080	299	182	105	190	210	22
3	100	210	204	313	202	3,470	253	2,080	90	214	450	23
4	70	227	170	318	155	1,260	385	1,800	79	229	450	79
5	90	206	174	571	134	734	483	1,160	73	1,940	350	57
6	70	192	196	582	120	472	447	709	65	1,310	250	40
7	40	165	2,830	462	103	360	744	478	65	708	160	32
8	55	142	2,050	342	95	364	1,690	370	54	425	130	28
9	50	127	1,020	302	85	302	922	438	48	286	100	26
10	50	121	644	548	85	276	589	485	70	206	80	23
11	45	110	456	721	95	235	433	443	55	159	65	21
12	45	90	334	643	141	225	334	368	42	132	55	20
13	40	72	270	504	159	290	549	301	48	117	100	21
14	35	82	402	402	154	523	1,110	273	439	105	140	22
15	35	76	179	299	151	507	914	372	519	97	95	40
16	35	72	185	194	143	426	732	413	584	80	60	29
17	35	48	158	160	131	428	1,140	378	612	80	76	21
18	35	65	141	130	125	394	826	326	458	75	116	18
19	30	45	130	160	114	341	573	275	324	70	78	17
20	30	71	263	212	117	297	432	289	251	90	91	16
21	25	82	401	320	180	273	337	254	1,250	80	65	14
22	25	72	351	328	334	691	1,050	244	1,470	70	56	13
23	30	68	292	332	268	769	1,140	223	3,570	55	52	14
24	50	61	259	667	1,310	585	982	188	1,730	45	51	14
25	200	60	210	812	1,340	439	756	164	835	40	46	15
26	250	60	189	646	3,680	347	537	141	497	35	50	17
27	200	75	165	490	1,740	304	389	122	349	120	42	18
28	170	95	150	642	964	279	300	108	250	400	41	30
29	150	153	135	544	1,260	275	242	97	235	550	35	32
30	130	435	126	431	-----	340	207	96	209	700	30	85
31	130	-----	119	323	-----	342	-----	181	-----	450	26	-----
TOTAL	2,540	3,670	12,648	12,721	13,960	20,578	19,124	13,132	14,507	9,282	3,850	830
MEAN	81.9	122	408	410	481	664	637	424	484	299	124	27.7
MAX	250	435	2,830	812	3,680	3,470	1,690	2,080	3,570	1,940	450	85
MIN	25	60	119	104	85	225	207	96	42	35	26	13
CFSM	.61	.91	3.04	3.06	3.59	4.96	4.75	3.16	3.61	2.23	.93	.21
IN.	.71	1.02	3.51	3.53	3.99	5.71	5.21	3.65	4.03	2.58	1.07	.23
CAL YR 1971	TOTAL	95,097	MEAN	261	MAX	2,830	MIN	13	CFSM	1.95	IN	26.40
WTP YR 1972	TOTAL	126,842	MEAN	347	MAX	3,680	MIN	13	CFSM	2.59	IN	35.21

PEAK DISCHARGE (BASE, 2,800 CFS)

NOTE: No gage-height record
Oct. 1 to Nov. 3, July 16 to
Aug. 16.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	1500	5.87	4,210	3- 3	0300	6.21	4,960
2-26	1200	6.27	5,090	6-23	1500	6.14	4,810

KANAWHA RIVER BASIN

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 miles northeast of Marlinton.

DRAINAGE AREA.--3.06 sq mi.

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

GAGE.--Water-stage and rainfall recorders and concrete control. Altitude of gage is 2,440 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 266 cfs July 4 (gage height, 5.87 ft), from rating curve extended above 100 cfs on basis of theoretical weir formula; minimum, 0.14 cfs Sept. 20-27 (gage height, 4.05 ft).
Period of record: Maximum discharge, 428 cfs Dec. 30, 1969 (gage height, 5.26 ft), from rating curve extended above 20 cfs on basis of theoretical weir formula; maximum gage height, 5.87 ft July 4, 1972; minimum daily discharge, 0.02 cfs Sept. 30, 1968, Aug. 7, 8, 1970.

REMARKS.--Records good. 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.--The figures of peak discharge for water year 1971 have been revised as shown in the following table. They supersede figures published in WRD W. Va., 1971.

REVISED PEAK DISCHARGE.--1971: Dec. 22 (0945) 119 cfs (5.45 ft); Feb. 13 (1430) 262 cfs (5.86 ft); June 30 (2200) 93 cfs (5.34 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	1.9	6.4	.96	4.1	32	3.2	2.2	1.2	8.0	4.8	.29
2	.35	3.6	4.1	11	3.2	26	2.8	2.6	1.1	5.1	2.6	.28
3	.35	5.7	3.3	11	2.6	30	2.4	34	.87	3.4	1.9	.27
4	.29	4.0	2.5	8.0	2.3	14	3.0	27	.69	37	30	.29
5	.32	2.4	2.8	13	1.9	8.9	3.6	14	.60	141	9.3	.29
6	.29	1.7	8.7	10	1.7	5.8	3.4	8.4	.46	24	4.8	.28
7	.26	1.3	95	6.8	1.5	4.4	13	6.5	.46	10	3.2	.25
8	.26	.95	23	4.1	1.4	4.1	24	5.8	.46	5.8	2.2	.23
9	.23	.75	11	3.8	1.3	3.2	11	8.9	.40	3.4	1.6	.23
10	.26	.66	7.2	9.8	1.1	2.8	7.2	8.4	.46	2.4	1.4	.23
11	.26	.56	5.1	9.3	1.2	2.4	5.8	7.5	.40	1.9	1.2	.23
12	.23	.49	3.4	7.5	1.5	2.4	4.4	7.5	.37	1.5	1.0	.23
13	.20	.42	2.8	6.5	9.3	2.6	13	7.5	.40	1.3	1.1	.23
14	.20	.39	2.2	4.8	7.5	5.1	44	5.8	3.0	1.2	1.3	.22
15	.20	.37	1.9	3.4	6.1	5.8	16	5.5	1.8	.96	1.0	.25
16	.20	.36	1.6	3.0	6.1	7.2	13	5.8	1.2	.96	.85	.20
17	.20	.35	1.4	2.5	6.8	11	17	5.5	1.3	.78	.78	.17
18	.20	.35	1.3	2.2	5.5	7.2	11	5.1	1.1	.69	1.4	.17
19	.17	.35	1.2	2.1	4.4	5.8	7.5	4.8	.87	.60	1.2	.17
20	.17	.36	9.8	11	3.6	4.4	5.8	4.1	.96	.60	1.7	.16
21	.17	.62	11	19	2.8	3.8	4.1	3.6	46	.52	1.1	.14
22	.20	.49	5.8	11	11	38	36	3.2	15	.46	.84	.14
23	.32	.45	3.8	9.8	8.9	17	19	3.0	30	.46	.73	.14
24	1.0	.45	3.2	12	31	10	15	2.6	12	.40	.57	.14
25	15	.40	2.6	12	34	8.0	11	2.1	6.1	.37	.52	.14
26	5.5	.45	2.2	9.3	93	6.1	7.2	1.6	3.4	.35	.47	.14
27	2.8	1.5	1.9	6.8	26	6.1	5.1	1.5	2.6	.60	.45	.86
28	1.7	2.0	1.6	15	23	5.5	3.6	1.3	2.1	1.6	.40	.54
29	1.2	9.1	1.4	13	39	4.8	3.2	1.3	8.0	4.1	.39	2.5
30	.80	13	1.3	8.4	-----	4.1	2.6	1.3	8.0	15	.35	3.2
31	.80	-----	1.2	5.5	-----	3.6	-----	1.3	-----	8.9	.31	-----
TOTAL	34.48	55.42	230.7	252.56	341.8	292.1	317.9	159.7	151.30	283.35	79.46	12.61
MEAN	1.11	1.85	7.44	8.15	11.8	9.42	10.6	6.44	5.04	9.14	2.56	.42
MAX	15	13	95	19	53	38	44	34	46	141	30	3.2
MIN	.17	.35	1.2	.96	1.1	2.4	2.4	1.3	.37	.35	.31	.14
CFSM	.36	.60	2.43	2.66	3.86	3.08	3.46	2.10	1.65	2.99	.84	.14
IN.†	.42	.67	2.80	3.07	4.16	3.55	3.86	2.43	1.84	3.44	.97	.15
IN.††	2.86	2.25	2.50	4.37	4.13	2.80	5.00	3.65	6.44	7.31	-	3.01

CAL YR 1971 TOTAL 1,774.22 MEAN 4.86 MAX 55 MIN .09 CFSM 1.59 IN.† 21.57
WTR YR 1972 TOTAL 2,251.38 MEAN 6.15 MAX 141 MIN .14 CFSM 2.01 IN.† 27.37

PEAK DISCHARGE (BASE, 80 CFS)

† Runoff.
†† Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-7	0745	5.82	244	6-21	0645	5.39	104
2-26	0530	5.71	199	7-4	2200	5.87	266

KANAWHA RIVER BASIN

99

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 upstream from Swago Creek, 3.5 miles downstream from Knapp Creek, and at mile 103.1. Records include flow of Swago Creek.

DRAINAGE AREA.--540 sq mi, 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 above mean sea level. Prior to Feb. 27, 1939, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 848 cfs (21.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 21,900 cfs Feb. 26 (gage height, 13.43 ft); minimum, 35 cfs Sept. 24-26 (gage height, 1.70 ft).

Period of record: Maximum discharge, 41,500 cfs Feb. 5, 1932 (gage height, 17.5 ft, from floodmarks), from rating curve extended above 25,000 cfs; minimum, 3.8 cfs Aug. 13, 1930 (gage height, 1.19 ft).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	350	1,440	331	916	6,180	734	580	372	992	1,090	88
2	314	378	944	660	804	6,370	685	519	290	879	758	80
3	286	520	715	1,720	650	8,390	602	4,060	247	760	558	75
4	254	740	617	1,450	600	4,590	589	6,370	214	882	1,480	74
5	223	639	567	2,120	515	2,630	919	4,270	190	15,400	1,480	92
6	206	535	576	2,290	485	1,660	892	2,500	172	6,910	945	130
7	188	442	10,700	1,690	450	1,230	884	1,650	165	3,020	688	99
8	164	396	8,310	1,200	400	1,050	5,630	1,250	154	1,670	571	83
9	151	242	2,570	965	350	909	3,290	1,490	135	1,080	435	73
10	148	310	2,140	1,530	350	769	2,030	1,600	124	759	351	65
11	145	232	1,470	2,070	350	664	1,440	1,430	116	570	287	60
12	136	262	1,060	1,950	420	602	1,110	1,180	129	459	242	58
13	124	219	863	1,580	888	585	1,210	971	108	393	222	56
14	113	220	697	1,350	1,540	804	5,250	898	159	340	506	55
15	104	201	588	1,030	1,010	1,150	3,510	1,160	892	299	543	56
16	104	185	548	637	565	1,060	2,570	1,710	773	282	373	56
17	101	174	492	500	965	1,290	3,240	1,420	989	259	301	59
18	101	163	435	450	846	1,230	2,730	1,160	905	246	423	52
19	104	158	362	550	699	1,060	1,910	1,010	646	237	432	52
20	94	157	616	678	525	909	1,420	901	502	201	372	47
21	89	126	1,450	1,620	515	811	1,130	823	8,820	262	333	41
22	86	219	1,220	1,570	839	2,470	2,990	735	6,390	251	263	41
23	84	176	839	1,460	1,350	3,310	4,580	831	5,540	200	229	38
24	142	164	812	2,100	2,680	2,260	3,050	698	5,000	167	199	37
25	585	160	710	2,390	6,460	1,600	2,330	569	2,360	139	169	35
26	995	150	600	2,030	15,600	1,250	1,720	485	1,380	118	218	36
27	685	255	541	1,580	8,830	1,030	1,270	397	968	110	166	42
28	530	276	475	1,720	4,030	909	980	346	736	203	142	65
29	425	535	421	2,250	4,110	804	803	315	792	651	125	119
30	350	1,870	379	1,670	-----	769	676	291	1,020	1,740	114	220
31	222	-----	360	1,200	-----	776	-----	294	-----	1,830	99	-----
TOTAL	7,621	10,740	44,557	44,586	58,142	50,121	60,174	41,903	40,788	41,309	14,114	2,094
MEAN	246	359	1,437	1,438	2,005	1,907	2,006	1,352	1,360	1,333	455	69.8
MAX	895	1,870	10,700	2,390	15,600	8,390	5,630	6,370	8,820	15,400	1,480	220
MIN	86	150	360	331	350	585	589	291	108	110	99	35
CFSM	.46	.66	2.66	2.66	3.71	3.53	3.71	2.50	2.52	2.47	.84	.13
IN.	.52	.74	3.07	3.07	4.01	4.07	4.15	2.89	2.81	2.85	.97	.14

CAL YR 1971 TOTAL 339,697 MEAN 931 MAX 10,700 MIN 39 CFSM 1.72 IN 23.40
WTP YR 1972 TOTAL 425,149 MEAN 1,162 MAX 15,600 MIN 35 CFSM 2.15 IN 29.29

PEAK DISCHARGE (BASE, 11,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	1700	12.24	18,000	6-21	1800	11.72	16,400
2-26	1500	13.43	21,900	7- 5	1300	13.39	21,800

KAWAHA RIVER BASIN

03182650 Spring Creek at Spring Creek, W. Va.

LOCATION.--Lat 37°57'24", long 80°21'09", Greenbrier County, on right bank at Spring Creek, 0.3 mile upstream from highway bridge on Secondary State Route 13, and 0.4 mile upstream from mouth.

DRAINAGE AREA.--120 sq mi, including some 60 or more sq mi with sub-surface drainage.

PERIOD OF RECORD.--October 1971 to September 1972.

GAGE.--Water-stage recorder. Altitude of gage is 1,850 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 8,820 cfs Feb. 26 (gage height, 14.52 ft), from rating curve extended above 1,700 cfs; minimum, 9.0 cfs Sept. 21, 22, 24-28 (gage height, 2.87 ft).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	95	340	90	251	1,310	148	134	87	484	392	26
2	85	110	250	180	233	1,160	131	123	73	321	275	23
3	75	150	210	450	210	3,010	118	572	64	272	221	20
4	70	200	180	390	188	1,200	116	1,340	57	248	448	21
5	60	170	150	500	140	576	136	780	53	4,470	432	23
6	55	150	140	600	131	373	136	416	48	2,420	266	22
7	50	130	2,000	500	120	303	138	303	50	572	215	18
8	45	110	1,200	340	100	282	820	266	45	321	191	15
9	40	95	750	250	95	248	440	845	40	224	138	12
10	40	85	550	400	50	224	300	626	43	175	112	11
11	35	75	370	500	96	196	245	404	45	140	89	10
12	35	70	280	420	112	185	218	303	35	118	80	10
13	35	65	230	377	331	180	212	245	31	106	72	10
14	30	60	170	331	424	185	335	248	57	89	67	10
15	30	55	150	263	363	175	349	275	67	76	59	14
16	25	50	140	185	331	167	392	317	53	69	52	16
17	25	45	120	150	352	260	516	300	321	73	53	11
18	25	45	110	120	300	239	420	257	504	72	143	10
19	25	40	100	140	248	207	317	242	440	69	120	10
20	25	40	200	215	196	183	257	224	242	56	110	10
21	25	50	380	740	180	170	215	218	3,540	57	80	9.8
22	25	60	330	554	275	528	1,240	460	2,790	48	64	11
23	25	50	260	524	420	612	1,160	366	1,500	42	50	10
24	40	45	210	988	1,480	408	603	263	1,040	37	50	9.5
25	170	40	180	855	2,780	314	404	202	496	32	66	9.0
26	230	40	160	612	7,130	254	300	157	314	27	87	9.0
27	190	60	150	440	4,330	233	233	127	224	37	60	9.0
28	140	75	130	725	1,560	215	196	110	210	108	49	12
29	120	150	110	745	1,110	202	170	98	612	512	41	41
30	95	400	100	496	-----	188	150	91	356	1,270	35	150
31	85	-----	95	342	-----	162	-----	102	-----	720	30	-----
TOTAL	2,050	2,810	9,745	13,422	23,576	13,949	10,415	10,414	13,437	13,265	4,147	572.3
MEAN	66.1	53.7	314	433	913	450	347	336	448	428	134	19.1
MAX	230	400	2,000	988	7,130	3,010	1,240	1,340	3,540	4,470	448	150
MIN	25	40	95	90	90	162	116	91	31	27	30	9.0
CFSM	.55	.78	2.62	3.61	6.78	3.75	2.89	2.80	3.73	3.57	1.12	.16
IN.	.64	.87	3.02	4.16	7.31	4.32	3.23	3.23	4.17	4.11	1.29	.18
CAL YR 1971	TOTAL	-	MEAN	-	MAX	-	MIN	-	CFSM	-	IN	-
WTR YR 1972	TOTAL	117,802.30	MEAN	322	MAX	7,130	MIN	9.0	CFSM	2.68	IN	36.52

PEAK DISCHARGE (BASE, 2,200 CFS)

NOTE.--No gage-height record
Oct. 1 to Jan. 12.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	unknown	-	unknown	6-21	2100	11.52	5,520
2-26	1800	14.52	8,820	7- 5	1830	12.93	7,020
3- 3	0330	9.52	3,670				

KANAWHA RIVER BASIN

101

03182700 Anthony Creek near Anthony, W. Va.

LOCATION.--Lat 37°54'30", long 80°17'30", Greenbrier County, on right bank 0.3 mile downstream from Big Draft, 1.7 miles downstream from Rocky Run, 2.2 miles northeast of Anthony, and at mile 3.2.

DRAINAGE AREA.--144 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949, 1951-53, 1957, 1960, 1966, 1968-71, October 1971 to September 1972.

GAGE.--Water-stage recorder. Altitude of gage is 1,850 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 13,500 cfs June 21 (gage height, 17.1 ft, from floodmarks), from rating curve extended above 1,100 cfs; minimum, 15 cfs Sept. 28 (gage height, 6.31 ft).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	60	220	70	225	599	108	126	84	307	463	23
2	30	55	190	90	196	463	101	112	73	241	282	22
3	40	90	130	100	201	745	92	289	62	208	194	20
4	35	120	170	140	275	590	87	918	54	168	241	20
5	30	100	85	1,200	210	415	81	617	49	2,280	443	20
6	35	90	80	900	180	300	73	384	44	1,200	258	32
7	35	75	1,900	700	150	243	82	286	43	491	184	35
8	30	65	900	400	132	215	527	269	39	293	146	38
9	30	60	600	300	120	174	410	775	35	201	116	39
10	30	55	400	350	112	150	330	595	34	152	96	39
11	35	50	300	330	112	134	270	394	31	122	78	38
12	35	50	210	300	124	124	220	300	28	103	68	38
13	30	50	170	270	491	116	180	246	27	92	62	38
14	30	45	140	230	563	120	600	238	27	81	62	40
15	25	45	120	200	419	116	750	215	31	74	56	42
16	30	45	400	180	366	126	800	186	31	65	50	41
17	60	40	330	160	342	191	500	174	99	65	50	39
18	60	40	250	150	282	203	350	168	215	56	71	39
19	55	40	170	140	241	182	240	177	120	60	63	39
20	45	40	170	142	191	159	200	210	105	50	58	38
21	40	45	150	258	159	144	170	213	6,650	43	50	37
22	45	45	120	279	206	366	700	249	1,790	40	44	38
23	60	40	110	282	296	540	650	366	617	68	57	37
24	110	35	110	665	1,300	384	500	328	356	54	51	38
25	450	35	100	603	2,530	286	400	249	241	43	43	37
26	250	35	100	475	7,860	233	300	189	179	37	40	31
27	120	40	95	363	1,580	198	228	148	140	38	39	19
28	100	45	95	540	786	177	191	124	126	177	36	16
29	85	80	80	567	594	152	161	108	576	2,710	33	18
30	70	600	80	408	-----	136	138	97	366	3,530	30	44
31	60	-----	75	296	-----	120	-----	96	-----	1,010	26	-----
TOTAL	2,115	2,215	8,060	11,088	20,643	8,101	9,439	8,836	12,272	14,059	3,490	995
MEAN	68.2	73.8	260	358	712	261	315	285	409	454	113	33.2
MAX	450	600	1,900	1,200	7,860	745	800	918	6,650	3,530	463	44
MIN	25	35	75	70	112	116	73	96	27	37	26	16
CFSM	.47	.51	1.81	2.49	4.94	1.81	2.19	1.98	2.84	3.15	.78	.23
IN.	.55	.57	2.09	2.86	5.33	2.09	2.44	2.28	3.17	3.63	.90	.26

CAL YR 1971 TOTAL - MEAN - MAX - MIN - CFSM - IN -
WTR YR 1972 TOTAL 101,313.00 MEAN 277 MAX 7,860 MIN 16 CFSM 1.92 IN 26.17

PEAK DISCHARGE (BASE, 3,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-7	unknown	-	unknown	7-5	1530	12.67	4,440
2-26	1015	16.90	12,900	7-29	2345	14.28	7,000
6-21	a1400	b17.1	13,500				

a About.

b From floodmarks.

NOTE.--No gage-height record
Oct. 1 to Jan. 18, June 21.

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 upstream from highway bridge on U.S. Highway 60, 0.9 mile upstream from mouth, 3.5 miles southeast of Lewisburg, and 5.0 miles southwest of White Sulphur Springs.

DRAINAGE AREA.--84.4 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1960, 1962, 1964-66, 1968-71, October 1971 to September 1972.

GAGE.--Water-stage recorder. Datum of gage is 1,681.01 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 14,000 cfs June 21 (gage height, 18.6 ft, from floodmarks), from rating curve extended above 800 cfs on basis of slope-area measurements of peak flow; minimum daily, 12 cfs Oct. 1, Sept. 20-24.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	30	90	35	125	177	52	65	35	88	342	14
2	17	30	60	50	105	149	47	58	29	58	203	16
3	21	50	50	55	143	404	42	422	25	46	141	17
4	16	65	45	100	253	313	40	1,060	22	39	107	16
5	16	55	40	400	157	210	36	493	21	675	82	17
6	18	45	40	320	120	148	33	253	20	470	59	16
7	17	40	500	210	95	120	46	175	19	235	50	17
8	15	30	350	150	80	104	497	173	18	152	44	16
9	15	30	200	120	70	81	287	569	18	103	40	16
10	18	30	130	150	66	68	184	365	16	72	33	16
11	19	25	100	150	60	59	141	219	15	48	28	15
12	17	25	80	142	60	53	125	160	19	41	26	14
13	15	25	70	126	503	49	116	129	17	38	23	14
14	15	24	60	117	425	53	481	120	16	35	40	13
15	14	23	55	96	286	46	742	106	179	31	31	15
16	15	22	200	77	260	47	812	101	235	29	25	15
17	30	21	150	70	223	61	385	104	100	25	26	14
18	30	20	120	70	173	65	231	103	538	27	42	14
19	25	20	80	66	144	65	169	123	200	32	41	14
20	22	21	85	84	110	62	138	164	100	27	32	12
21	20	23	80	572	87	59	112	183	7,500	25	27	12
22	25	21	45	379	152	210	702	211	640	24	21	12
23	30	19	55	240	257	305	645	286	386	25	19	12
24	100	18	50	173	1,220	198	307	195	244	21	18	13
25	350	18	50	159	1,690	149	199	137	177	20	17	15
26	130	18	50	155	3,630	121	151	95	131	15	27	13
27	80	21	45	147	991	103	120	72	98	14	30	14
28	55	23	45	368	426	91	99	58	72	20	20	16
29	45	40	40	419	246	77	85	52	177	1,200	19	15
30	35	200	40	255	-----	67	74	52	126	1,550	17	34
31	35	-----	35	169	-----	57	-----	42	-----	650	15	-----
TOTAL	1,272	1,032	3,070	5,624	12,157	3,771	7,097	6,345	11,193	5,835	1,645	457
MEAN	41.0	34.4	99.0	181	419	122	237	205	373	188	53.1	15.2
MAX	350	200	500	572	3,630	404	812	1,060	7,500	1,550	342	34
MIN	12	18	35	35	60	46	33	42	15	14	15	12
CFSM	.49	.41	1.17	2.14	4.96	1.45	2.81	2.43	4.42	2.23	.63	.18
IN _a	.56	.45	1.35	2.48	5.36	1.66	3.13	2.80	4.93	2.57	.73	.20
CAL YR 1971 TOTAL	-	-	-	-	-	-	-	-	-	-	-	-
WTR YR 1972 TOTAL	59,498.00	-	-	-	-	-	-	-	-	-	-	-
MEAN	163	-	-	-	-	-	-	-	-	-	-	-
MAX	7,500	-	-	-	-	-	-	-	-	-	-	-
MIN	12	-	-	-	-	-	-	-	-	-	-	-
CFSM	1.93	-	-	-	-	-	-	-	-	-	-	-
IN	26.22	-	-	-	-	-	-	-	-	-	-	-

PEAK DISCHARGE (BASE, 1,200 CFS)

a From floodmarks.

NOTE.--No gage-height record Oct. 1 to Jan. 11, June 19-21.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	0900	13.45	6,740	5-4	0600	7.45	1,320
4-15	2230	7.40	1,290	6-21	unknown	18.6	14,000
4-22	1745	7.43	1,310	7-29	2230	10.90	4,010

KANAWHA RIVER BASIN

103

03183000 Second Creek near Second Creek, W. Va.

LOCATION.--Lat 37°41'05", long 80°27'25", Monroe County, on left bank 100 ft upstream from bridge on U.S. Highway 219, 1.4 miles north of Second Creek, 1.6 miles downstream from Rayburn Draft, and at mile 8.0.

DRAINAGE AREA.--80.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,810.79 ft above mean sea level. Prior to Oct. 18, 1947, nonrecording gage at site 100 ft upstream at datum 1.57 ft higher. Oct. 18, 1947, to Sept. 30, 1960, water-stage recorder at present site at datum 1.57 ft higher. Oct. 1, 1960, to June 26, 1964, water-stage recorder at present site at datum 0.57 ft higher. June 27, 1964, to Jan. 23, 1965, nonrecording gage at site 300 ft upstream at different datum.

AVERAGE DISCHARGE.--27 years, 76.9 cfs (12.92 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,460 cfs June 21 (gage height, 9.41 ft) from rating curve extended as explained below; minimum, 6.1 cfs Oct. 1, Nov. 26 (gage height, 0.85 ft).

Period of record: Maximum discharge, 7,460 cfs June 21, 1972 (gage height, 9.41 ft), from rating curve extended above 2,600 cfs on basis of slope-area measurement at gage height 8.33 ft; minimum, 0.7 cfs Nov. 17, Dec. 24, 1953.

REMARKS.--Records good. Some regulation at low flow caused by gristmills at Gap Mills and Second Creek.

REVISIONS (WATER YEARS).--WSP 1275: 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	28	80	28	126	211	51	72	39	57	91	10
2	12	27	57	40	111	179	47	66	33	50	61	9.9
3	14	47	47	45	150	485	44	500	30	47	47	9.4
4	11	61	42	94	249	309	43	767	27	43	60	9.9
5	11	46	38	406	170	231	42	374	25	510	69	12
6	12	40	36	267	120	177	37	228	24	333	46	17
7	11	35	485	175	100	153	47	175	24	183	38	12
8	10	30	258	124	85	133	366	170	21	126	32	11
9	10	27	153	102	75	105	213	312	19	89	28	11
10	12	26	109	128	70	92	159	234	18	67	27	10
11	13	24	86	122	74	77	131	177	17	53	22	9.4
12	11	22	67	113	72	72	144	142	16	45	21	8.8
13	10	21	58	104	300	66	146	117	16	42	19	8.8
14	9.9	20	48	109	285	66	309	128	19	37	21	9.4
15	9.4	19	46	89	223	58	465	115	17	33	20	12
16	10	18	170	51	201	58	565	100	16	31	18	11
17	22	17	128	66	181	71	329	91	105	31	20	9.4
18	20	16	92	69	157	64	223	84	146	28	57	9.9
19	18	16	69	67	120	58	177	91	63	31	37	9.4
20	15	17	71	107	95	54	150	124	69	25	36	8.8
21	14	18	63	575	85	53	126	117	3,560	22	26	8.3
22	16	16	51	315	155	153	616	135	907	21	22	8.8
23	20	15	44	220	157	168	520	153	382	24	19	8.3
24	71	14	44	172	788	137	285	124	215	19	17	8.3
25	326	14	42	157	1,150	115	208	96	153	18	15	7.8
26	164	15	40	135	2,450	100	166	74	111	15	15	9.9
27	82	20	38	124	879	87	133	58	84	15	18	21
28	57	21	35	255	414	80	109	50	69	21	16	27
29	43	36	32	267	276	71	94	45	80	42	14	24
30	35	117	31	203	-----	66	84	47	61	133	12	192
31	31	-----	30	159	-----	55	-----	45	-----	203	11	-----
TOTAL	1,108.6	843	2,590	4,888	9,358	3,804	6,029	5,011	6,366	2,394	955	524.5
MEAN	35.8	28.1	83.5	158	323	123	201	162	212	77.2	30.8	17.5
MAX	326	117	485	575	2,450	485	616	767	3,560	510	91	192
MIN	8.3	14	30	28	70	53	37	45	16	15	11	7.8
CFSM	.44	.35	1.03	1.96	4.00	1.52	2.49	2.01	2.62	.96	.38	.22
IN.	.51	.39	1.19	2.25	4.31	1.75	2.78	2.31	2.93	1.10	.44	.24
CAL YR 1971	TOTAL 33,311.8	MEAN 91.3	MAX 2,430	MIN 4.7	CFSM 1.13	IN 15.34						
WTR YR 1972	TOTAL 43,871.1	MEAN 120	MAX 3,560	MIN 7.8	CFSM 1.49	IN 20.20						

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	0815	6.46	3,620	6-21	1030	9.41	7,460

KANAWHA RIVER BASIN

03183200 Davis Spring at Fort Spring, W. Va.

LOCATION.--Lat 37°45'20", long 80°32'42", Greenbrier County, on left bank at Fort Spring, 150 ft downstream from source, and 500 ft upstream from mouth.

PERIOD OF RECORD.--October 1971 to September 1972.

GAGE.--Water-stage recorder. Altitude of gage is 1,600 ft (from topographic map).

EXTREMES.--Current year: Maximum daily discharge, 1,000 cfs Feb. 26, June 22, July 6; minimum daily, 11 cfs Oct. 1, Sept. 5-8.

REMARKS.--Records good except those for periods of no gage-height record and periods of indefinite stage-discharge relation, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	30	75	25	147	220	44	67	45	118	297	13
2	15	25	50	38	116	170	43	61	41	90	167	13
3	18	45	40	112	98	500	39	72	37	70	118	12
4	15	55	35	127	103	300	37	306	35	58	92	12
5	15	50	35	392	95	220	35	300	32	800	81	11
6	16	45	30	438	83	180	34	179	30	1,000	65	11
7	15	40	500	273	77	150	33	137	29	210	56	11
8	14	35	250	163	68	130	85	112	27	124	49	11
9	13	35	160	118	59	110	109	279	26	95	43	12
10	15	30	100	124	53	90	89	371	24	76	39	12
11	17	30	80	155	45	75	77	228	24	61	35	12
12	15	25	65	147	49	70	68	161	22	50	33	13
13	14	25	55	127	98	65	66	125	21	45	31	14
14	13	25	45	118	248	65	177	107	22	41	28	15
15	13	20	45	109	250	58	431	100	22	37	26	16
16	15	20	40	94	223	54	329	98	21	35	25	16
17	25	20	40	79	205	56	261	101	50	36	24	16
18	25	19	37	69	183	59	189	92	312	34	30	16
19	20	19	32	63	157	55	151	82	199	30	38	15
20	18	20	32	61	129	50	122	79	118	27	30	15
21	17	20	52	213	106	50	103	82	900	26	25	15
22	19	20	60	309	101	130	201	187	1,000	25	22	16
23	25	18	51	245	155	150	665	267	700	24	23	17
24	100	17	47	215	357	120	368	185	495	23	22	16
25	350	17	44	210	900	90	225	137	267	21	20	16
26	160	17	40	199	1,000	75	163	107	159	20	21	16
27	95	25	38	173	800	65	127	85	118	19	20	17
28	70	25	35	228	500	62	104	69	94	20	20	18
29	50	40	32	406	300	57	87	60	197	55	17	15
30	35	100	29	303	-----	52	77	53	199	860	15	21
31	30	-----	27	195	-----	47	-----	48	-----	610	14	-----
TOTAL	1,273	912	2,201	5,528	6,709	3,575	4,539	4,337	5,266	4,740	1,527	433
MEAN	41.1	30.4	71.0	178	221	115	151	140	176	153	49.3	14.4
MAX	350	100	500	438	1,000	500	665	371	1,000	1,000	297	21
MIN	11	17	27	25	49	47	33	48	21	19	14	11

CAL YR 1971 TOTAL - MEAN - MAX - MIN -
WTR YR 1972 TOTAL 41,040.00 MEAN 112 MAX 1,000 MIN 11

NOTE.--No gage-height record Oct. 1 to Dec. 17, Feb. 26 to Mar. 14, Mar. 21-27. Stage-discharge relation indefinite Feb. 25, June 21-23, July 5, 6.

KANAWHA RIVER BASIN

105

03183500 Greenbrier River at Alderson, W. Va.

LOCATION.--Lat 37°43'30", long 80°38'30", Monroe County, on left bank 400 ft upstream from highway bridge at Alderson, 0.5 mile upstream from Muddy Creek, and at mile 28.4.

DRAINAGE AREA.--1,357 sq mi.

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 above mean sea level. Prior to Oct. 15, 1929, nonrecording gage at bridge 400 ft downstream at same datum.

AVERAGE DISCHARGE.--77 years, 1,969 cfs (19.70 inches per year).

EXTREMES.--Current year: Maximum discharge, 47,200 cfs Feb. 26 (gage height, 17.86 ft), from rating curve extended above 37,000 cfs; minimum, 153 cfs Sept. 26, 27 (gage height, 2.11 ft).

Period of record: Maximum discharge, 77,500 cfs Mar. 14, 1918 (gage height, 22.0 ft, from flood-marks), from rating curve extended above 37,000 cfs; minimum, 24 cfs Aug. 12, Oct. 1, 2, 1930; minimum gage height, 1.63 ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	910	660	2,800	766	2,500	9,170	1,400	1,410	800	2,690	4,580	290
2	700	660	2,300	322	1,960	9,380	1,310	1,260	790	2,640	3,000	267
3	600	798	1,700	2,840	1,700	13,400	1,220	1,990	760	2,260	2,300	247
4	528	1,220	1,200	2,660	1,500	12,100	1,120	11,200	664	1,970	1,990	232
5	494	1,260	1,000	6,050	1,400	6,400	1,090	10,300	602	12,300	4,300	230
6	462	1,110	1,000	6,590	1,260	4,150	1,340	5,980	546	23,400	3,320	232
7	409	942	7,900	4,630	1,140	3,040	1,380	3,940	522	8,510	2,370	223
8	254	834	22,900	3,160	1,090	2,510	4,080	3,020	482	4,680	1,900	256
9	236	744	9,600	2,350	992	2,170	7,700	4,500	443	3,080	1,550	278
10	212	660	5,220	2,420	936	1,860	4,500	4,980	415	2,300	1,230	243
11	206	600	3,510	3,420	812	1,620	3,200	3,820	394	1,790	968	218
12	200	544	2,590	3,700	824	1,440	2,640	3,040	362	1,470	800	204
13	200	510	2,030	3,290	1,500	1,310	2,660	2,510	332	1,290	691	201
14	270	496	1,680	2,860	2,520	1,310	3,800	2,210	362	1,140	628	195
15	250	454	1,400	2,410	3,460	1,520	8,330	2,100	368	1,030	637	206
16	240	430	1,440	1,810	2,890	1,840	6,770	2,420	790	908	1,090	197
17	245	402	1,360	1,260	2,690	2,010	5,280	2,780	1,920	884	836	195
18	240	374	1,200	1,020	2,530	2,510	5,530	2,480	3,960	812	860	184
19	225	354	1,020	1,430	2,150	2,280	4,150	2,240	2,660	750	1,000	179
20	210	343	950	1,440	1,740	1,960	3,200	2,170	1,970	740	1,100	175
21	205	354	1,820	3,280	1,230	1,710	2,600	2,060	20,400	655	850	176
22	215	446	2,810	4,630	1,290	1,970	4,380	2,390	27,400	602	750	162
23	225	510	2,220	2,680	2,320	5,830	11,300	2,600	11,100	655	650	162
24	212	494	1,820	4,180	5,380	4,950	7,220	2,530	10,300	637	600	160
25	959	478	1,610	5,450	17,500	3,560	5,100	2,010	6,380	538	504	160
26	2,290	420	1,430	4,780	33,200	2,800	3,820	1,580	3,740	466	482	156
27	1,870	409	1,250	3,740	32,700	2,320	2,960	1,290	2,680	415	507	165
28	1,330	494	1,120	3,960	12,800	2,030	2,370	1,090	2,080	474	494	132
29	1,000	700	934	5,780	7,790	1,790	1,940	956	2,770	2,350	406	170
30	846	2,780	894	4,650	-----	1,600	1,650	872	2,820	11,500	359	392
31	733	-----	834	3,340	-----	1,470	-----	836	-----	7,460	318	-----
TOTAL	17,465	20,586	90,862	103,348	150,704	112,010	113,630	92,564	108,812	100,396	41,070	6,337
MEAN	563	666	2,931	3,334	5,197	3,613	3,788	2,986	3,627	3,239	1,325	211
MAX	2,290	2,780	22,900	6,590	33,200	13,400	11,300	11,200	27,400	23,400	4,580	392
MIN	205	349	834	766	812	1,310	1,080	936	332	415	318	156
CFSM	.41	.51	2.16	2.46	3.83	2.66	2.79	2.20	2.67	2.39	.98	.16
IN.	.48	.56	2.49	2.93	4.13	3.07	3.11	2.54	2.98	2.75	1.13	.17

CAL YR 1971 TOTAL 752,484 MEAN 2,062 MAX 22,900 MIN 91 CFSM 1.52 IN 20.63
WTR YR 1972 TOTAL 957,784 MEAN 2,617 MAX 33,200 MIN 156 CFSM 1.93 IN 26.26

PEAK DISCHARGE (BASE, 19,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	0500	12.52	28,500	6-21	2000	15.24	38,000
2-26	2000	17.86	47,200	7- 6	0200	13.94	33,500

03184000 Greenbrier River at Hilldale, W. Va.

LOCATION.--Lat 37°38'25", long 80°48'20", Summers County, on left bank 100 ft downstream from highway bridge on State Highway 3 at Hilldale, 0.1 mile upstream from Howard Creek, 0.9 mile upstream from Powley Creek, 5.0 miles southeast of Hinton, and at mile 5.6. Records include flow of Howard Creek.

DRAINAGE AREA.--1,625 sq mi, 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 above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--36 years, 2,150 cfs (17.97 inches per year).

EXTREMES.--Current year: Maximum discharge, 49,700 cfs Feb. 27 (gage height, 20.80 ft); minimum, 157 cfs Sept. 23, 26 (gage height, 0.83 ft).

Period of record: Maximum discharge, 56,400 cfs Mar. 8, 1967 (gage height, 22.66 ft); minimum, 39 cfs Sept. 18-20, 1946, Sept. 16, 1964; minimum gage height, 0.32 ft Sept. 16, 1964.

Flood of Mar. 18, 1936, reached a stage of 21.85 ft (discharge, 60,800 cfs, from data furnished by Corps of Engineers).

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 1435: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	913	754	4,770	890	3,380	9,970	1,730	1,850	934	2,810	5,700	320
2	748	706	3,450	957	2,670	11,000	1,620	1,650	853	2,850	3,610	296
3	454	945	2,440	2,310	2,430	15,900	1,510	2,020	965	2,390	2,670	273
4	577	1,370	1,980	4,310	2,200	15,900	1,410	10,500	737	2,070	2,180	252
5	528	1,800	1,560	7,130	2,000	8,800	1,290	12,700	650	7,360	3,700	252
6	485	1,500	1,410	8,670	1,800	5,830	1,470	7,780	586	27,100	3,710	247
7	434	1,300	2,630	6,250	1,700	4,270	1,660	5,110	541	10,900	2,570	242
8	332	1,080	25,600	4,320	1,500	3,500	3,430	3,850	505	5,690	1,980	236
9	351	926	12,100	3,200	1,400	3,040	9,300	5,420	468	3,600	1,650	273
10	333	807	6,360	3,130	1,280	2,660	5,790	6,690	433	2,560	1,370	273
11	209	715	4,230	4,220	1,160	2,330	4,050	5,140	404	1,960	1,090	242
12	204	650	3,120	4,670	1,170	2,100	2,330	3,990	382	1,570	901	226
13	296	600	2,470	4,160	1,840	1,910	2,950	3,240	353	1,310	770	213
14	292	554	2,020	3,660	4,570	1,840	4,030	2,840	349	1,130	680	217
15	253	513	1,660	3,190	4,860	1,890	10,800	2,660	379	1,030	637	217
16	252	476	1,690	2,500	3,970	2,290	9,610	2,640	407	887	858	217
17	247	441	1,690	1,990	3,560	2,360	6,930	3,320	2,110	850	930	209
18	247	411	1,470	1,470	3,390	2,880	6,600	3,040	5,330	796	870	203
19	234	326	1,250	1,800	3,020	2,700	5,310	2,790	3,530	757	1,010	194
20	221	369	1,150	1,980	2,560	2,360	4,060	2,690	2,600	695	1,180	185
21	210	367	1,470	4,740	1,970	2,080	3,260	2,580	16,100	651	1,020	177
22	211	291	3,040	6,270	1,910	2,090	4,040	2,740	32,500	567	839	181
23	235	564	2,680	5,060	2,970	5,550	12,900	3,250	13,700	544	725	165
24	380	583	2,160	4,940	6,290	6,210	9,590	3,230	11,400	591	615	165
25	654	558	1,380	6,590	20,400	4,500	6,520	2,700	7,970	523	551	161
26	2,350	506	1,690	6,120	32,700	3,480	4,910	2,150	4,710	446	503	165
27	2,510	450	1,490	5,000	41,200	2,890	3,830	1,700	3,260	394	515	222
28	1,820	501	1,320	4,930	17,200	2,510	3,030	1,380	2,500	433	510	222
29	1,360	762	1,170	7,190	9,890	2,250	2,490	1,170	2,560	1,040	459	226
30	1,070	2,590	1,050	6,360	-----	2,020	2,130	1,050	3,240	12,000	404	402
31	873	-----	957	4,600	-----	1,830	-----	984	-----	9,040	357	-----
TOTAL	19,753	23,545	102,847	132,557	184,980	138,930	139,580	112,854	120,357	104,544	44,564	6,872
MEAN	637	786	3,318	4,276	6,379	4,482	4,653	3,640	4,012	3,372	1,438	229
MAX	2,510	2,590	25,600	2,670	41,200	15,900	12,900	12,700	32,500	27,100	5,700	402
MIN	210	367	957	890	1,160	1,830	1,290	984	348	394	357	161
CFSM	.39	.48	2.04	2.63	3.93	2.76	2.86	2.24	2.47	2.08	.88	.14
IN.	.45	.54	2.35	3.03	4.23	3.18	3.20	2.58	2.76	2.39	1.02	.16

CAL YR 1971 TOTAL 980,923 MEAN 2,413 MAX 25,600 MIN 102 CFSM 1.48 IN 20.17
WTR YR 1972 TOTAL 1,131,403 MEAN 3,091 MAX 41,200 MIN 161 CFSM 1.90 IN 25.90

PEAK DISCHARGE (BASE, 24,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-8	1000	14.78	29,400	6-22	0200	17.79	39,300
2-27	0300	20.80	49,700	7-6	0700	16.01	33,300

KANAWHA RIVER BASIN

107

03184200 Big Creek near Bellepoint, W. Va.

LOCATION.--Lat 37°40'28", long 80°48'52", Summers County, on left bank 10 ft downstream from bridge on Secondary State Route 10, 4.0 miles northeast of Bellepoint, and at mile 2.0.

DRAINAGE AREA.--8.27 sq mi.

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 (from topographic map).

EXTREMES.--Current year: Maximum discharge, 1,040 cfs Feb. 26 (gage height, 4.60 ft), from rating curve extended as explained below; minimum, 0.06 cfs Sept. 23-27; minimum gage height, 1.18 ft Sept. 25, 26.
Period of record: Maximum discharge, 1,040 cfs Feb. 26, 1972 (gage height, 4.60 ft), from rating curve extended above 80 cfs on basis of step-backwater method; minimum daily, 0.01 cfs Aug. 6-8, 1970.

REMARKS.--Records good except those for period of no gage-height record, which are poor. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.29	2.3	8.3	2.0	8.9	17	4.7	4.3	2.3	3.2	18	.26
2	.75	2.4	5.7	9.0	7.6	21	4.4	4.6	1.8	2.3	11	.19
3	.47	8.4	4.5	10	8.6	59	4.0	25	1.4	2.1	7.5	.19
4	.35	7.1	3.8	29	7.5	29	4.1	37	1.2	15	9.5	.22
5	.56	4.2	3.3	61	6.5	20	3.6	24	.95	89	15	.61
6	.65	3.1	4.3	28	5.8	12	3.2	14	.85	34	11	.66
7	.41	2.4	5.4	15	5.2	10	21	10	.95	14	7.5	.37
8	.29	1.8	19	9.9	4.5	9.0	64	28	.75	7.6	5.5	.23
9	.24	1.5	11	13	4.5	6.6	26	71	.56	4.6	4.5	.19
10	.47	1.4	7.8	30	4.0	5.6	17	30	.65	3.5	3.7	.18
11	.35	1.2	5.8	19	3.7	4.9	12	17	.47	2.4	3.1	.12
12	.24	1.1	4.6	13	5.6	4.8	17	12	.35	1.9	2.7	.10
13	.19	1.0	3.9	12	4.4	4.5	16	9.5	.29	1.6	2.4	.09
14	.16	.91	3.3	11	30	4.6	74	11	.85	1.3	2.3	.14
15	.13	.78	4.3	9.0	25	4.1	153	9.5	.47	1.3	2.2	.63
16	.13	.75	5.4	7.5	22	4.1	103	8.2	.85	4.6	2.0	.26
17	.13	.75	4.7	6.5	18	4.7	39	6.9	183	2.6	1.9	.16
18	.13	.65	3.9	6.0	14	4.4	23	6.0	87	3.7	3.5	.13
19	.13	.63	3.6	5.5	11	3.8	15	6.0	19	4.5	3.2	.11
20	.09	.71	11	25	9.5	3.3	12	6.6	27	2.7	3.0	.10
21	.09	1.0	11	91	8.0	3.3	9.5	19	150	1.8	2.8	.08
22	.19	.91	7.5	35	28	9.5	60	42	60	1.1	1.9	.07
23	1.6	.80	5.8	23	28	11	38	22	34	2.0	1.7	.07
24	6.3	.75	5.1	16	178	10	24	12	22	1.1	1.2	.06
25	14	.70	4.5	18	137	8.8	15	8.2	14	.90	1.0	.06
26	7.2	.80	4.0	14	375	7.7	11	5.6	8.6	.85	.98	.06
27	5.0	1.8	3.6	12	84	7.6	8.2	4.1	5.3	1.0	.81	.91
28	2.8	4.2	3.2	44	41	6.9	6.9	3.2	4.8	6.0	.72	1.3
29	2.1	14	2.7	30	24	6.4	5.6	2.8	5.0	100	.57	3.2
30	1.6	15	2.4	19	-----	5.7	5.0	2.4	3.7	140	.43	15
31	1.6	-----	2.3	12	-----	4.9	-----	3.0	-----	45	.33	-----
TOTAL	48.64	83.04	224.3	635.4	1,148.9	314.2	799.2	464.9	638.09	501.65	131.94	25.75
MEAN	1.57	2.77	7.24	20.5	39.6	10.1	26.6	15.0	21.3	16.2	4.26	.86
MAX	14	15	54	91	375	59	153	71	183	140	18	15
MIN	.09	.63	2.3	2.0	3.7	3.3	3.2	2.4	.29	.85	.33	.06
CFSM	.19	.33	.88	2.48	4.79	1.22	3.22	1.81	2.58	1.96	.52	.10
IN. †	.22	.37	1.01	2.86	5.17	1.41	3.59	2.09	2.87	2.26	.59	.12
IN. ††	2.81	1.40	1.65	4.43	5.00	1.61	4.22	4.28	7.04	-	-	3.45

CAL YR 1971 TOTAL 3,494.28 MEAN 9.57 MAX 155 MIN .02 CFSM 1.16 IN† 15.72
WTR YR 1972 TOTAL 5,016.01 MEAN 13.7 MAX 375 MIN .06 CFSM 1.66 IN† 22.56

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	2145	3.16	311	6-17	1930	4.49	974
2-26	0415	4.60	1,040	6-21	1215	2.94	237
4-15	1545	3.71	535	7-30	unknown	-	unknown

† Runoff.

†† Rainfall.

NOTE.--No gage-height record
July 19 to Aug. 21.

KANAWHA RIVER BASIN

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 mile upstream from Madam Creek, 1.5 miles downstream from Greenbrier River, at New River mile 62.0 and Kanawha River mile 159.0.

DRAINAGE AREA.--6,257 sq mi.

PERIOD OF RECORD.--June 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,355.18 ft above mean sea level. Prior to June 5, 1949, water-stage recorder at site 400 ft upstream at same datum.

AVERAGE DISCHARGE.--36 years, 7,596 cfs (16.49 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 65,400 cfs June 22 (gage height, 9.03 ft); minimum, 1,320 cfs Sept. 6 (gage height, 1.55 ft); minimum daily, 1,570 cfs Sept. 25.

Period of record: Maximum discharge, 246,000 cfs Aug. 15, 1940 (gage height, 18.97 ft), from rating curve extended above 80,000 cfs on basis of slope-area measurement at station at Bluestone Dam, and gaged inflow from Greenbrier River; minimum, 238 cfs Aug. 21, 1962 (gage height, 1.03 ft); minimum daily, 920 cfs Oct. 22, 1941.

REMARKS.--Records excellent above 4,000 cfs and good below. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,350	5,660	12,900	4,620	12,200	47,600	6,760	6,030	9,140	11,600	18,900	2,660
2	4,140	6,620	10,600	3,480	10,800	44,400	5,200	7,640	8,840	8,960	14,200	2,740
3	3,310	9,020	9,140	4,930	10,200	41,200	5,970	13,400	7,230	6,360	12,000	2,650
4	2,710	14,200	8,900	2,300	12,100	34,300	8,420	27,800	5,700	8,120	10,800	2,400
5	3,180	12,200	6,020	17,700	12,900	21,600	8,300	33,100	3,720	15,200	11,400	2,500
6	2,670	10,500	4,410	20,000	7,290	14,900	6,760	24,900	3,580	44,600	8,060	2,580
7	4,260	8,720	9,980	14,200	7,050	13,900	8,120	15,500	4,930	21,900	5,970	5,130
8	3,210	7,640	28,600	10,900	8,300	12,000	18,300	11,300	4,520	15,300	6,990	4,540
9	3,180	7,110	23,700	8,060	8,000	10,800	25,500	19,800	4,570	10,000	6,990	4,570
10	2,750	6,760	16,600	8,900	8,060	9,800	15,900	19,100	5,040	6,420	6,700	3,030
11	2,100	6,360	12,500	12,700	8,000	9,440	13,900	16,600	3,960	7,580	5,920	1,860
12	2,820	5,310	9,260	13,300	7,580	8,360	15,000	13,900	2,600	8,480	5,810	2,650
13	2,220	5,690	8,240	11,200	6,840	7,880	20,800	12,500	3,390	8,300	3,910	2,830
14	2,720	3,810	7,880	10,100	17,700	8,790	28,200	9,320	5,370	7,410	2,570	2,810
15	4,260	2,790	7,350	10,700	16,800	7,580	41,800	13,900	5,150	6,360	3,140	2,540
16	4,010	3,860	7,940	8,720	15,500	8,780	40,500	15,900	4,260	4,210	4,010	2,270
17	2,930	4,620	8,000	6,360	14,000	9,260	32,600	15,500	6,940	3,720	4,060	1,980
18	2,240	4,310	7,700	6,030	12,800	10,300	20,600	13,300	11,300	5,420	4,060	1,610
19	3,050	5,260	6,080	6,880	12,500	7,880	16,900	12,700	9,800	6,940	8,060	1,930
20	3,140	6,250	4,260	9,600	10,200	5,700	14,300	12,100	14,000	6,880	6,650	2,140
21	3,010	3,440	5,530	22,800	7,250	6,590	13,400	12,500	30,800	6,080	4,780	2,140
22	3,350	2,210	8,180	27,700	7,580	8,540	14,900	13,300	63,200	6,250	4,110	2,020
23	5,750	3,100	8,960	16,800	14,800	15,300	22,900	15,800	59,000	4,260	4,460	2,020
24	15,500	4,930	8,180	12,500	22,900	17,700	18,000	14,900	51,200	2,710	3,950	1,700
25	25,800	5,700	5,310	14,800	41,800	14,100	15,400	13,300	41,700	3,580	3,430	1,570
26	31,300	4,310	4,110	14,700	42,000	11,800	14,600	11,500	22,200	4,060	4,250	1,790
27	27,800	5,040	3,860	12,800	47,600	3,600	11,400	10,200	13,100	4,010	3,190	2,350
28	15,000	3,810	4,720	17,600	45,000	10,400	10,700	4,620	10,200	4,010	2,620	3,400
29	10,800	4,830	5,040	25,000	44,800	9,440	11,700	6,030	10,300	4,620	3,500	5,490
30	5,800	10,500	5,100	21,200	-----	7,700	8,420	7,760	12,900	18,600	3,600	10,300
31	6,650	-----	6,360	13,700	-----	8,120	-----	7,640	-----	21,300	3,030	-----
TOTAL	220,830	185,730	282,420	396,680	494,590	452,750	495,250	431,740	438,540	293,240	191,120	88,350
MEAN	7,124	6,191	9,110	12,800	17,050	14,600	16,510	13,930	14,620	9,459	6,165	2,945
MAX	31,300	14,300	35,600	27,700	47,600	47,600	41,800	33,100	63,200	44,600	18,900	10,300
MIN	2,100	2,210	3,860	3,480	7,050	5,700	5,200	4,620	2,600	2,710	2,570	1,570

CAL YR 1971 TOTAL 3,159,150 MEAN 8,655 MAX 44,700 MIN 1,500 MEAN# 8,654 CFSM# 1.38 IN# 18.73
WTR YR 1972 TOTAL 3,971,240 MEAN 10,850 MAX 63,200 MIN 1,570 MEAN# 10,860 CFSM# 1.74 IN# 23.68

Adjusted for change in contents in Claytor (Virginia) and Bluestone Lakes.

KANAWHA RIVER BASIN

109

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 mile downstream from Whitestick Creek, 0.5 mile upstream from Beaver Creek, 1.5 miles southeast of Beckley, and at mile 12.0.

DRAINAGE AREA.--52.2 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 2,087.24 ft above mean sea level.

AVERAGE DISCHARGE.--21 years, 59.9 cfs (15.58 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,950 cfs Feb. 26 (gage height, 5.39 ft); minimum, 6.5 cfs Oct. 21 (gage height, 1.32 ft).

Period of record: Maximum discharge, 2,870 cfs Mar. 12, 1963 (gage height, 6.49 ft); minimum, 0.2 cfs Sept. 5-18, 21-23, 1964; minimum gage height, 1.07 ft Sept. 9-12, 16, 17, 1964.

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

REVISIONS (WATER YEARS).--WSP 1435: 1955(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	24	66	25	94	127	42	55	30	30	60	25
2	11	22	50	102	79	110	43	45	25	24	44	22
3	12	40	40	167	86	121	40	100	20	23	37	21
4	10	46	34	181	91	110	46	250	20	28	105	21
5	11	43	30	406	75	105	51	210	25	89	86	21
6	11	37	29	362	75	89	51	150	30	75	53	21
7	10	33	181	202	71	86	91	100	25	50	38	18
8	9.0	28	216	124	59	79	350	90	20	36	31	16
9	9.0	24	121	105	55	60	205	130	20	28	42	16
10	10	23	84	188	50	59	135	170	20	23	48	15
11	9.5	21	64	191	48	57	105	140	15	21	34	13
12	8.5	19	51	153	50	55	119	100	15	18	29	21
13	8.5	18	46	127	100	51	141	80	15	18	24	19
14	7.5	17	40	116	144	50	426	85	15	15	21	12
15	7.0	16	37	100	138	46	520	85	15	15	19	11
16	10	15	36	79	135	45	561	80	20	15	18	10
17	11	14	34	70	127	46	268	75	20	15	17	9.0
18	9.0	14	31	66	110	45	158	70	25	15	150	8.5
19	8.0	14	29	60	94	42	119	90	25	15	180	29
20	7.0	14	45	84	79	39	97	100	20	15	275	25
21	7.0	13	59	382	73	39	85	90	120	10	138	13
22	9.5	13	55	354	116	46	95	110	150	10	89	10
23	11	12	48	205	161	51	120	170	120	10	62	9.0
24	46	12	45	147	633	50	110	140	90	15	50	8.0
25	73	11	40	138	893	50	95	100	70	10	51	7.5
26	89	11	37	124	1,500	48	75	75	55	9.0	46	8.0
27	73	15	36	110	715	48	64	60	46	8.0	50	19
28	48	23	33	198	251	46	57	45	37	14	51	40
29	37	36	30	251	170	46	48	40	36	55	40	36
30	29	66	29	177	-----	46	70	35	31	89	33	89
31	25	-----	26	121	-----	42	-----	35	-----	84	28	-----
TOTAL	637.5	694	1,702	5,115	6,272	1,934	4,387	3,105	1,175	882.0	1,949	593.0
MEAN	20.6	23.1	54.9	165	216	62.4	146	100	39.2	28.5	62.9	19.8
MAX	89	66	216	406	1,500	127	561	250	150	89	275	89
MIN	7.0	11	26	25	48	39	40	35	15	8.0	17	7.5
CFSM	.39	.44	1.05	3.16	4.14	1.20	2.80	1.92	.75	.55	1.21	.38
IN.	.45	.49	1.21	3.65	4.47	1.38	3.13	2.21	.84	.63	1.39	.42

CAL YR 1971 TOTAL 21,682.5 MEAN 59.4 MAX 507 MIN 6.0 CFSM 1.14 IN 15.45
WTR YR 1972 TOTAL 28,445.5 MEAN 77.7 MAX 1,500 MIN 7.0 CFSM 1.49 IN 20.27

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	0930	5.39	1,950	4-16	0300	3.58	745

NOTE.--No gage-height record Apr. 21-25, Apr. 30 to June 26, July 14-27.

KANAWHA RIVER BASIN

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 mile downstream from Craig Run, 7.0 miles southwest of Webster Springs, and at mile 2.1.

DRAINAGE AREA.--128 sq mi.

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 above mean sea level, adjustment of 1912. Prior to June 11, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 321 cfs (34.06 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,840 cfs Feb. 26 (gage height, 10.65 ft) from rating curve extended as explained below; minimum, 11 cfs Sept. 24, 25, 26; minimum gage height, 0.93 ft Sept. 26.
Period of record: Maximum discharge, 22,000 cfs July 4, 1932 (gage height, 18.45 ft, from floodmarks), from rating curve extended above 7,000 cfs on basis of slope-area measurements at gage heights 12.33 and 18.45 ft; minimum daily, 0.5 cfs Oct. 13-16, 21, 1953; minimum gage height, 0.44 ft Oct. 5, 6, 1953.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1275: 1930.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	168	450	129	305	2,070	395	188	133	726	610	58
2	177	165	318	372	260	2,860	344	175	97	456	361	50
3	174	258	256	540	245	4,050	291	1,730	79	525	281	44
4	143	241	231	490	223	1,290	941	1,420	66	570	2,200	48
5	145	196	198	1,830	210	762	920	1,000	62	3,170	969	50
6	133	175	234	1,080	150	495	595	625	55	1,660	500	43
7	108	171	4,450	635	173	395	708	447	53	808	333	36
8	91	148	2,220	433	148	515	2,060	358	47	485	249	30
9	82	133	1,060	429	140	407	885	605	39	323	185	27
10	84	126	685	1,230	135	337	590	822	48	226	160	25
11	82	115	506	829	126	274	520	585	58	180	117	22
12	73	106	373	645	119	256	480	433	40	145	97	20
13	61	98	308	490	239	347	640	340	38	123	337	21
14	53	91	252	407	220	920	1,790	309	525	99	337	22
15	50	84	222	312	188	575	1,080	645	375	110	195	36
16	48	90	200	270	185	500	1,140	555	530	84	158	35
17	47	75	176	230	180	744	1,320	451	438	79	165	24
18	46	70	159	210	165	510	815	372	288	75	1,030	19
19	42	71	134	200	150	420	570	424	205	110	822	18
20	39	81	464	350	140	365	460	351	170	93	1,020	17
21	36	124	569	1,480	130	326	485	295	1,680	77	500	15
22	36	113	370	780	400	1,170	1,920	242	1,900	67	326	13
23	43	95	291	620	480	920	1,340	203	4,800	52	284	12
24	119	103	253	756	1,940	605	1,170	168	1,410	43	195	11
25	879	102	223	738	2,220	460	774	140	1,130	35	163	12
26	639	103	196	580	5,860	368	550	119	645	30	223	11
27	396	121	177	447	2,200	337	403	99	438	43	158	29
28	292	137	173	1,050	1,100	309	319	84	316	208	133	112
29	228	213	179	794	1,460	368	260	75	347	383	108	82
30	194	728	159	550	-----	655	217	74	372	1,080	87	485
31	174	-----	146	387	-----	495	-----	193	-----	850	70	-----
TOTAL	4,908	4,491	15,632	19,293	19,535	24,105	23,982	13,567	16,384	12,915	12,373	1,427
MEAN	158	150	504	622	674	778	799	438	546	417	399	47.6
MAX	879	728	4,450	1,830	5,860	4,050	2,060	1,730	4,800	3,170	2,200	485
MIN	36	70	134	129	119	256	217	74	38	30	70	11
CFSM	1.23	1.17	3.94	4.86	5.27	6.08	6.24	3.42	4.27	3.26	3.12	0.37
IN.	1.43	1.31	4.54	5.61	5.68	7.01	6.97	3.64	4.76	3.75	3.60	0.41

CAL YR 1971 TOTAL 124,996.6 MEAN 342 MAX 4,450 MIN 9.6 CFSM 2.67 IN 36.33
WTR YR 1972 TOTAL 168,612.0 MEAN 461 MAX 5,860 MIN 11 CFSM 3.60 IN 49.00

PEAK DISCHARGE (BASE, 4,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	1200	9.84	7,590	6-23	0745	9.21	6,770
2-26	1045	10.65	8,840	7- 5	1230	7.63	4,990
3- 3	0315	10.05	7,880				

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 mile downstream from Coon Creek, 0.9 mile upstream from Strouds Creek, and at mile 69.6.

DRAINAGE AREA.--236 sq mi.

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 U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 2,003.28 ft above mean sea level, adjustment of 1912. July 1908 to Sept. 30, 1916, nonrecording gage at site 1.1 miles downstream at datum 3.08 ft lower. Oct. 20, 1929, to October 29, 1934, nonrecording gage at site 1.1 miles downstream at present datum.

AVERAGE DISCHARGE.--51 years, 577 cfs (33.20 inches per year).

EXTREMES.--Current year: Maximum discharge, 16,200 cfs Feb. 26 (gage height, 17.26 ft); minimum, 21 cfs Sept. 25-27 (gage height, 1.73 ft).

Period of record: Maximum discharge, 42,500 cfs July 4, 1932 (gage height, 27.38 ft, present site and datum, from floodmarks), from rating curve extended above 17,000 cfs on basis of velocity-area studies; minimum, 0.3 cfs Oct. 23-27, 1953; minimum gage height, 0.36 ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	352	280	1,100	223	537	2,740	725	321	282	1,220	1,410	94
2	307	268	670	367	457	3,390	625	286	186	910	780	80
3	293	364	511	1,010	427	4,810	500	1,830	145	1,250	530	70
4	253	403	434	778	554	2,260	1,290	2,120	117	1,280	4,520	70
5	271	340	373	2,800	430	1,430	1,850	1,780	108	4,360	2,270	78
6	280	307	364	2,140	350	940	1,190	1,160	98	3,140	1,110	74
7	235	298	5,290	1,290	300	730	1,050	810	88	1,570	665	62
8	198	268	3,680	833	270	805	3,590	625	78	904	476	52
9	175	241	1,820	683	250	725	1,770	856	65	575	331	45
10	165	229	1,210	2,010	230	595	1,170	1,650	76	388	268	40
11	165	211	904	1,560	210	476	922	1,260	82	296	198	37
12	144	198	650	1,180	200	436	874	886	68	258	158	36
13	128	185	535	881	498	484	970	660	62	207	515	36
14	112	173	441	728	665	1,100	3,320	535	535	168	780	37
15	101	160	392	450	488	916	2,010	994	780	148	377	46
16	99	153	364	330	439	700	2,060	1,160	695	145	286	68
17	101	145	300	310	423	1,020	2,090	856	835	123	268	52
18	93	135	250	320	389	800	1,480	675	520	117	1,580	39
19	86	135	230	350	363	690	1,050	735	380	180	1,630	34
20	81	150	320	450	280	610	800	575	282	183	2,530	32
21	75	229	922	2,470	240	540	850	468	1,490	150	1,180	30
22	75	256	584	1,510	823	1,190	2,830	388	2,720	117	680	27
23	81	214	467	1,120	1,100	1,410	2,630	321	8,940	94	525	24
24	123	226	413	1,150	3,180	1,000	1,980	261	4,770	76	359	23
25	760	238	373	1,140	4,240	785	1,430	213	2,240	60	275	22
26	1,100	235	334	1,030	11,000	645	1,020	180	1,260	52	324	21
27	665	263	304	779	4,290	605	740	150	830	52	251	25
28	487	331	283	1,610	2,010	540	560	126	585	251	210	135
29	385	495	298	1,630	1,920	630	448	110	580	560	173	133
30	331	1,610	268	1,110	-----	1,010	373	106	610	1,660	140	690
31	295	-----	253	752	-----	892	-----	331	-----	1,840	115	-----
TOTAL	8,025	8,745	24,337	32,994	36,583	34,904	42,197	22,428	29,507	22,334	24,914	2,212
MEAN	259	292	785	1,064	1,261	1,126	1,407	723	984	720	804	73.7
MAX	1,100	1,610	5,290	2,800	11,000	4,810	3,590	2,120	8,940	4,360	4,520	690
MIN	75	135	230	223	200	436	373	106	62	52	115	21
CFSM	1.10	1.24	3.33	4.51	5.34	4.77	5.96	3.06	4.17	3.05	3.41	.31
IN.	1.26	1.38	3.84	5.20	5.77	5.50	6.65	3.54	4.65	3.52	3.93	.35
CAL YR 1971	TOTAL 197,406	MEAN 541	MAX 5,290	MIN 26	CFSM 2.29	IN 31.12						
WTR YR 1972	TOTAL 289,180	MEAN 790	MAX 11,000	MIN 21	CFSM 3.35	IN 45.58						

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	1430	13.89	10,800	6-23	1045	15.19	12,900
2-26	1200	17.26	16,200	7- 5	1700	11.22	7,090
3- 3	0930	11.21	7,070	8- 4	1130	11.77	7,800

KANAWHA RIVER BASIN

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 downstream from Cherry River, 1.8 miles downstream from Cranberry River, 2.7 miles south of Craigsville, and at mile 60.0.

DRAINAGE AREA.--528 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,870.00 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 1,357 cfs (34.90 inches per year).

EXTREMES.--Current year: Maximum discharge, 36,100 cfs Feb. 26 (gage height, 21.58 ft); minimum, 43 cfs Sept. 26, 27 (gage height, 9.08 ft).

Period of record: Maximum discharge, 40,700 cfs Mar. 7, 1967 (gage height, 22.73 ft); minimum, 13 cfs Sept. 27, 1967 (gage height, 8.62 ft).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	876	718	2,520	607	1,450	6,590	1,620	768	644	3,940	2,880	230
2	750	694	1,700	993	1,250	8,720	1,410	687	434	2,600	1,690	198
3	750	948	1,330	2,470	1,140	14,200	1,170	4,020	350	2,750	1,220	177
4	649	1,040	1,120	2,170	1,270	5,430	2,640	5,400	278	2,620	10,500	181
5	649	885	966	7,160	1,000	3,380	4,100	4,430	260	9,740	5,130	190
6	663	786	957	5,370	850	2,220	2,670	2,840	235	7,250	2,550	177
7	565	769	13,700	3,210	750	1,710	2,330	1,980	210	3,640	1,580	153
8	481	686	9,620	2,190	650	1,940	7,610	1,550	190	2,150	1,130	126
9	425	621	4,630	1,780	600	1,770	3,980	2,190	161	1,410	831	109
10	411	586	3,140	4,050	600	1,450	2,660	3,900	177	980	687	95
11	432	551	2,350	3,450	550	1,200	2,210	3,020	202	750	517	87
12	397	509	1,740	2,760	550	1,060	2,120	2,150	169	644	422	81
13	336	481	1,430	2,170	1,300	1,150	2,280	1,620	149	524	759	78
14	294	446	1,190	1,850	1,580	2,240	5,750	1,360	660	434	1,170	81
15	264	411	1,040	1,200	1,240	1,940	4,140	1,980	1,470	374	696	119
16	252	384	948	900	1,170	1,470	4,400	2,280	1,180	350	545	137
17	264	366	840	850	1,170	2,240	4,680	1,800	1,580	356	510	119
18	240	342	700	900	1,000	1,820	3,400	1,490	1,100	344	2,800	89
19	216	336	600	950	980	1,590	2,420	1,570	950	503	2,940	75
20	195	372	800	1,320	650	1,440	1,860	1,330	714	573	4,730	65
21	180	628	2,110	4,950	650	1,290	1,830	1,130	4,250	410	2,330	61
22	175	678	1,480	3,330	1,580	2,900	6,000	950	6,650	314	1,410	57
23	200	572	1,200	2,680	2,240	3,520	5,800	804	18,700	250	1,160	50
24	360	600	1,060	3,240	8,250	2,480	4,230	669	10,900	202	840	48
25	1,360	628	975	3,330	10,000	1,910	3,120	559	5,330	165	660	46
26	2,510	614	867	2,870	25,800	1,550	2,260	482	2,980	137	636	43
27	1,670	686	786	2,230	10,500	1,420	1,670	404	1,910	129	596	45
28	1,270	867	742	3,970	4,800	1,300	1,300	344	1,370	489	496	129
29	1,010	1,190	777	3,880	4,000	1,500	1,050	296	1,830	1,530	422	245
30	858	3,460	702	2,730	-----	2,100	885	278	1,940	3,860	350	1,100
31	759	-----	663	1,940	-----	1,970	-----	660	-----	3,940	284	-----
TOTAL	19,461	21,853	62,283	81,500	89,210	85,500	91,595	52,941	66,973	53,358	52,471	4,391
MEAN	628	728	2,009	2,629	3,076	2,758	3,053	1,708	2,232	1,721	1,693	146
MAX	2,510	3,460	13,300	7,160	25,800	14,200	7,610	5,400	18,700	9,740	10,500	1,100
MIN	175	336	600	607	550	1,060	885	278	149	129	284	43
CFSM	1.19	1.38	3.80	4.98	5.83	5.22	5.78	3.23	4.23	3.26	3.21	.28
IN.	1.37	1.54	4.39	5.74	6.29	6.02	6.45	3.73	4.72	3.76	3.70	.31

CAL YR 1971 TOTAL 522,176 MEAN 1,431 MAX 13,300 MIN 57 CFSM 2.71 IN 36.79
WTR YR 1972 TOTAL 681,536 MEAN 1,862 MAX 25,800 MIN 43 CFSM 3.53 IN 48.02

PEAK DISCHARGE (BASE, 12,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	1730	18.17	22,500	6-23	1045	18.73	24,700
2-26	1145	21.58	36,100	7- 5	1500	16.36	15,800
3- 3	0615	17.87	21,300	8- 4	1030	16.58	16,500

KANAWHA RIVER BASIN

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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 miles southwest of Summersville, and at mile 34.5.

DRAINAGE AREA.--803 sq mi.

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, 211,300 acre-ft June 24 (elevation, 1,658.80 ft); minimum, 22,890 acre-ft Nov. 12 (elevation, 1,520.20 ft).

Period of record: Maximum contents since storage began, 421,800 acre-ft Mar. 5, 1966 (elevation, 1,711.7 ft), caused by flood before valves were operational; minimum since initial filling, 6,990 acre-ft Jan. 13, 1967 (elevation, 1,464.5 ft).

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 long. Flow is controlled by three 9-ft and one 2.5-ft diameter Howell-Bunger fixed-cone dispersion valves. Total level-pool capacity at elevation 1,710 ft (flood-control pool elevation) is 413,800 acre-ft of which 390,800 acre-ft is controlled storage above elevation 1,520 ft (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 1971 TO SEPTEMBER 1972

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)	Change in Contents (equivalent in cfs)
Sept. 30.....	1,634.4	147,500	-	-
Oct. 31.....	1,566.20	50,260	-97,240	-1,580
Nov. 30.....	1,531.84	28,090	-22,170	-373
Dec. 31.....	1,530.57	27,470	-620	-10
CAL YR 1971	-	-	+4,660	+6
Jan. 31.....	1,530.53	27,450	-20	0
Feb. 29.....	1,620.78	119,900	+92,450	+1,610
Mar. 31.....	1,608.35	98,750	-21,150	-344
Apr. 30.....	1,652.37	192,600	+93,850	+1,580
May 31.....	1,652.57	193,100	+500	+8
June 30.....	1,652.25	192,200	-900	-15
July 31.....	1,652.59	193,200	+1,000	+16
Aug. 31.....	1,652.20	192,100	-1,100	-18
Sept. 30.....	1,633.97	146,500	-45,600	-766
WTR YR 1972	-	-	-1,000	-1

KANAWHA RIVER BASIN

03189600 Gauley River below Summersville Dam, W. Va.

LOCATION.--Lat 38°13'00", long 80°53'30", Nicholas County, on right bank 0.4 mile downstream from Summersville Dam, 5.0 miles southwest of Summersville, and at mile 34.1.

DRAINAGE AREA.--804 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,350.00 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--6 years, 2,112 cfs (35.67 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 15,700 cfs June 24 (gage height, 18.49 ft); minimum, 6.5 cfs Nov. 11 (gage height, 4.62 ft); minimum daily, 27 cfs Nov. 21.

Period of record: Maximum discharge, 17,800 cfs Mar. 26, 1966 (gage height, 19.30 ft); minimum, 1.9 cfs Feb. 16, 17, 1967 (gage height, 3.67 ft); minimum daily, 2.4 cfs Feb. 10, 13-16, 1967.

REMARKS.--Records good except those below 1,000 cfs, 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,140	2,720	4,570	929	2,440	14,700	143	929	2,030	4,490	5,480	262
2	2,580	3,160	3,010	1,190	2,010	14,800	143	1,130	1,010	3,950	3,850	259
3	2,270	3,360	2,420	2,950	2,010	14,800	143	5,990	272	4,500	2,050	256
4	2,270	3,320	2,060	3,430	2,010	14,100	139	6,530	272	3,600	7,820	307
5	2,270	3,270	1,700	8,740	2,010	8,690	125	6,040	272	10,500	13,800	353
6	2,470	2,930	1,690	8,440	2,010	8,560	124	3,760	615	11,700	5,750	353
7	2,700	2,490	8,090	5,250	1,670	6,970	129	3,010	1,320	5,480	3,120	290
8	2,410	2,360	14,400	3,290	1,060	6,160	1,590	2,670	68	3,530	1,150	188
9	2,270	2,030	9,320	2,690	1,200	5,990	2,900	3,470	44	2,390	957	60
10	2,260	936	4,410	4,960	1,380	5,140	2,390	4,620	62	1,840	1,370	118
11	2,250	610	3,360	5,500	906	4,370	2,170	4,440	124	1,380	1,050	374
12	2,230	874	3,120	3,710	827	3,770	850	3,750	223	943	535	1,810
13	2,200	545	2,500	3,210	1,850	2,540	139	2,200	353	971	535	2,520
14	2,190	570	1,870	3,020	3,050	2,310	778	1,790	454	971	1,580	2,090
15	1,020	434	1,870	2,420	2,640	3,000	4,790	2,870	1,620	505	1,750	1,190
16	943	434	1,400	1,580	2,400	2,380	7,090	4,570	2,700	121	992	784
17	1,480	438	1,140	1,120	2,530	778	5,870	3,040	2,110	307	802	929
18	736	293	1,250	1,610	2,340	139	5,430	2,180	1,790	560	8,410	1,500
19	1,670	71	1,130	1,870	1,790	143	3,010	2,510	1,790	585	4,360	1,660
20	2,330	45	1,400	2,100	1,790	129	2,840	2,750	1,560	1,360	4,710	1,910
21	2,320	27	2,760	6,950	1,370	122	3,290	1,880	3,120	1,290	4,770	2,070
22	2,710	42	2,430	4,790	2,370	124	7,030	1,750	7,510	418	2,140	2,270
23	3,030	585	1,910	3,820	3,800	127	8,560	1,740	12,700	418	1,610	2,000
24	3,120	1,060	1,910	4,130	8,780	129	6,110	1,150	15,600	418	1,630	1,170
25	3,590	1,060	1,570	4,570	14,400	131	4,800	1,150	14,200	342	820	992
26	3,890	1,060	1,360	4,580	3,980	131	3,430	1,150	5,480	265	820	1,320
27	3,890	1,280	1,310	3,440	1,590	133	2,470	826	3,380	269	1,060	1,590
28	4,570	1,800	1,110	4,770	6,490	135	2,200	495	2,220	1,300	1,130	1,510
29	5,210	2,360	1,320	6,140	11,900	137	2,200	307	2,580	4,540	470	1,340
30	5,170	4,790	1,080	4,090	-----	141	1,230	307	2,940	7,270	470	2,570
31	3,420	-----	929	3,140	-----	141	-----	1,200	-----	8,800	339	-----
TOTAL	82,609	44,954	88,399	118,429	92,603	120,920	82,113	80,204	88,419	85,013	85,330	34,045
MEAN	2,665	1,498	2,852	3,820	3,193	3,901	2,737	2,587	2,947	2,742	2,753	1,135
MAX	5,210	4,790	14,400	8,740	14,400	14,800	8,560	6,530	15,600	11,700	13,800	2,570
MIN	736	27	929	929	827	122	124	307	44	121	339	60
CAL YR 1971	TOTAL 775,416	MEAN 2,124	MAX 14,900	MIN 17	MEAN 2,130	CFSM 2.65	IN 35.97					
WTR YR 1972	TOTAL 1,003,038	MEAN 2,741	MAX 15,600	MIN 27	MEAN 2,740	CFSM 3.41	IN 46.41					

† Adjusted for change in contents in Summersville Lake.

KANAWHA RIVER BASIN

115

03189650 Collision Creek near Nallen, W. Va.

LOCATION.--Lat 38°10'35", long 80°52'07", Nicholas County, on right bank 10 ft upstream from culvert on U.S. Highway 19, 80 ft upstream from unnamed tributary, 4.5 miles north of Nallen, and at mile 3.2.

DRAINAGE AREA.--2.78 sq mi.

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 (from topographic map). Prior to Oct. 7, 1966, SR recorder at same site and datum.

AVERAGE DISCHARGE.--6 years, 4.31 cfs (21.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 252 cfs July 30 (gage height, 8.48 ft), from rating curve extended as explained below; minimum, 0.06 cfs Oct. 14, 15, 16, 20, 21 (gage height, 2.65 ft).

Period of record: Maximum discharge, 270 cfs Mar. 7, 1967 (gage height, 8.75 ft), from rating curve extended above 120 cfs 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.82	4.9	.92	5.0	5.9	3.7	3.0	1.1	3.5	24	.94
2	.34	.73	3.4	1.9	4.2	4.7	3.7	3.0	.72	3.5	10	.82
3	.40	1.0	2.7	3.2	4.2	14	3.3	7.0	.56	4.2	6.4	.64
4	.34	.92	2.0	5.0	4.8	10	7.9	16	.40	4.0	35	1.1
5	.34	.73	1.7	30	4.0	7.6	11	13	.48	42	15	.94
6	.28	.64	1.5	16	3.5	5.6	8.5	8.5	.40	18	8.2	.72
7	.22	.64	20	8.8	3.0	4.7	18	6.2	.56	8.2	5.0	.56
8	.14	.55	11	6.2	2.5	4.2	35	5.0	.35	4.2	3.3	.40
9	.14	.64	6.8	6.2	2.5	3.7	14	6.4	.30	2.8	2.1	.40
10	.14	.64	5.6	12	2.0	3.3	9.5	9.5	.35	1.8	1.8	.40
11	.17	.55	4.2	9.4	2.0	2.8	8.2	8.2	.35	2.8	1.5	.30
12	.17	.47	3.2	7.9	1.5	2.6	7.3	6.4	.22	1.9	1.3	.30
13	.08	.47	2.7	6.5	5.3	2.1	7.0	5.0	.48	1.3	2.6	.30
14	.08	.47	2.0	5.6	7.0	2.3	6.2	4.5	1.2	.94	1.5	.56
15	.06	.40	2.0	4.5	7.9	2.1	6.2	4.5	.48	.64	1.5	1.5
16	.08	.40	1.9	3.5	11	2.6	8.5	3.7	.35	.40	1.5	.72
17	.22	.34	1.5	2.5	5.9	3.0	9.9	3.3	.40	1.3	3.0	.48
18	.14	.34	1.3	2.5	7.6	3.7	7.3	3.0	.35	.94	22	.40
19	.09	.28	1.1	2.5	6.5	4.0	5.9	3.0	.30	1.9	12	.35
20	.06	.29	2.0	3.4	5.3	4.0	5.3	3.5	.26	2.6	8.2	.26
21	.09	1.4	2.4	5.0	5.0	3.5	5.3	3.5	1.5	1.5	5.3	.26
22	.14	1.1	2.0	5.6	6.0	3.7	21	3.3	3.3	.94	3.5	.22
23	.22	.92	1.9	6.5	13	4.2	16	2.6	16	.56	2.6	.18
24	1.0	1.0	1.9	11	75	4.2	14	2.1	13	.40	1.9	.18
25	1.7	1.3	1.7	15	48	4.2	11	1.8	7.6	.30	4.7	.18
26	3.2	1.4	1.5	11	108	4.2	8.2	1.5	4.2	.22	2.8	.22
27	2.2	2.0	1.4	7.9	25	4.0	5.9	1.1	3.0	1.1	2.3	.26
28	1.5	4.0	1.3	14	11	4.0	4.7	.82	2.1	44	1.8	.30
29	1.1	5.0	1.1	12	8.2	4.0	4.2	.72	1.8	55	1.6	.56
30	.92	5.6	1.1	8.5	-----	4.0	3.7	.64	2.3	96	1.5	2.3
31	.92	-----	1.1	6.2	-----	4.0	-----	1.9	-----	82	1.2	-----
TOTAL	16.86	35.03	98.8	241.22	402.9	136.9	279.4	142.68	64.41	388.94	195.1	16.75
MEAN	.54	1.17	3.19	7.78	13.9	4.42	9.31	4.60	2.15	12.5	6.29	.56
MAX	3.2	5.6	20	30	108	14	35	16	16	96	35	2.3
MIN	.06	.28	1.1	.92	1.5	2.1	3.3	.64	.22	.22	1.2	.18
CFSM	.19	.42	1.15	2.80	5.00	1.59	3.35	1.65	.77	4.50	2.26	.20
IN. #	.23	.47	1.32	3.23	5.35	1.83	3.74	1.91	.86	5.20	2.61	.22
IN. ##	2.62	2.17	1.94	4.89	6.25	2.83	5.42	4.44	5.03	11.43	3.95	3.45

CAL YR 1971 TOTAL 1,349.08 MEAN 3.70 MAX 100 MIN .06 CFSM 1.33 IN# 18.05
WTR YR 1972 TOTAL 2,018.99 MEAN 5.52 MAX 106 MIN .06 CFSM 1.99 IN# 27.02

PEAK DISCHARGE (BASE, 70 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	0915	6.41	135	7-5	1130	4.97	70
2-26	0600	7.85	214	7-30	2315	8.48	252

Runoff.
Rainfall.

KANAWHA RIVER BASIN

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 upstream from mouth, and 2.5 miles northwest of Mt. Lookout.

DRAINAGE AREA.--365 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,200 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 740 cfs (27.53 inches per year).

EXTREMES.--Current year: Maximum discharge, 17,900 cfs Feb. 26 (gage height, 13.26 ft); minimum, 30 cfs Sept. 25-27; minimum gage height, 2.93 ft Sept. 26, 27.

Period of record: Maximum discharge, 18,500 cfs Mar. 7, 1967 (gage height, 13.44 ft); minimum 14 cfs Sept. 12, 13, 1966 (gage height, 2.51 ft).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	341	1,420	293	1,020	2,640	760	453	346	1,030	2,230	115
2	195	334	1,090	373	784	2,530	679	414	266	886	1,600	98
3	192	353	873	1,670	689	3,450	591	1,080	214	696	1,150	88
4	185	493	689	1,690	703	3,020	765	2,490	179	620	1,870	86
5	211	507	550	3,430	450	2,100	1,240	2,510	163	2,060	1,550	84
6	272	466	496	3,300	410	1,530	1,060	1,930	146	2,960	1,020	85
7	243	425	2,260	2,280	360	1,160	1,030	1,440	142	1,910	741	77
8	198	367	4,370	1,640	330	946	2,550	1,050	131	1,190	570	69
9	170	314	3,010	1,250	300	875	2,040	1,260	116	737	435	65
10	160	289	2,060	1,710	280	754	1,560	1,730	140	524	372	64
11	163	270	1,450	1,810	270	656	1,260	1,640	157	418	304	60
12	153	248	1,030	1,580	260	586	1,080	1,350	139	353	252	52
13	139	228	768	1,330	653	535	1,020	1,020	109	287	222	48
14	119	211	621	1,140	1,150	530	1,590	756	129	242	191	47
15	105	194	539	905	1,070	515	2,330	801	141	202	164	62
16	106	180	483	500	1,100	477	2,820	899	136	172	146	61
17	118	168	436	400	1,140	515	2,420	1,080	307	220	169	67
18	111	157	397	430	1,040	585	1,890	1,060	807	277	1,090	58
19	101	150	355	470	912	583	1,470	1,340	976	616	1,420	49
20	90	154	394	589	540	562	1,110	1,320	919	524	975	43
21	80	278	736	1,130	450	529	927	1,140	1,360	286	711	39
22	76	453	782	1,450	800	604	1,500	980	2,820	208	503	36
23	81	430	671	1,440	1,390	1,010	2,420	911	4,010	164	384	34
24	180	394	583	2,650	4,050	1,120	2,130	763	3,860	132	314	32
25	419	385	525	3,040	6,530	1,020	1,740	641	2,680	110	265	31
26	892	366	471	2,540	14,200	891	1,300	458	1,730	94	256	30
27	928	382	427	1,860	5,620	853	933	385	1,060	169	265	31
28	760	499	393	1,840	5,500	854	717	314	672	2,000	266	33
29	612	653	372	2,010	3,040	860	596	271	1,170	4,390	220	37
30	466	1,560	345	1,700	-----	951	522	244	1,040	5,270	172	92
31	379	-----	321	1,340	-----	872	-----	335	-----	4,020	139	-----
TOTAL	8,121	11,249	28,917	47,780	59,121	34,113	42,050	32,145	26,064	32,767	19,966	1,773
MEAN	262	375	933	1,541	2,039	1,100	1,402	1,037	869	1,057	644	59.1
MAX	928	1,560	4,370	3,430	14,200	3,450	2,820	2,510	4,010	5,270	2,230	115
MIN	76	150	321	293	260	477	522	244	109	94	139	30
CFSM	.72	1.03	2.56	4.22	5.59	3.01	3.84	2.64	2.38	2.90	1.76	.16
IN.	.83	1.15	2.95	4.87	6.03	3.48	4.29	3.28	2.66	3.34	2.03	.18

CAL YR 1971 TOTAL 283,430 MEAN 777 MAX 4,370 MIN 41 CFSM 2.13 IN 28.89
WTR YR 1972 TOTAL 344,066 MEAN 940 MAX 14,200 MIN 30 CFSM 2.58 IN 35.07

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	1200	13.26	17,900	7-30	2300	10.02	8,050

KANAWHA RIVER BASIN

117

03192000 Gauley River above Belva, W. Va.

LOCATION.--Lat 38°14'00", long 81°10'45", Nicholas County, on right bank 0.5 mile upstream from Belva, 1.0 mile upstream from Twentymile Creek, and at mile 6.7.

DRAINAGE AREA.--1,315 sq mi.

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 above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--44 years, 2,643 cfs (27.29 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 38,700 cfs Feb. 26 (gage height, 16.86 ft); minimum, 103 cfs Sept. 11 (gage height, 1.03 ft).

Period of record: Maximum discharge, 105,000 cfs July 5, 1932 (gage height, 28.60 ft), from rating curve extended above 65,000 cfs on basis of velocity-area studies and inflow and storage adjustment to record for Kanawha River at Kanawha Falls; minimum, 3.2 cfs Oct. 21, 1953 (gage height, 0.10 ft).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FFB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,120	3,510	6,820	1,120	3,700	17,100	1,040	1,390	2,030	4,840	9,340	405
2	2,720	3,530	4,590	1,180	2,660	17,200	954	1,350	1,690	5,570	6,030	371
3	2,020	3,620	3,140	3,590	2,550	18,400	348	5,420	618	5,760	4,030	357
4	2,020	3,660	2,800	4,930	2,690	18,000	960	8,860	503	4,930	8,680	360
5	2,040	3,660	2,030	10,800	2,430	11,700	1,730	9,330	511	11,200	17,400	449
6	2,140	3,350	1,950	14,100	2,440	10,300	1,590	6,380	479	17,700	7,820	489
7	2,590	2,770	7,280	8,540	2,440	8,690	1,670	4,440	1,760	8,780	4,220	486
8	2,360	2,380	14,600	5,320	1,510	7,220	5,310	3,930	384	4,880	2,440	328
9	1,980	2,230	14,800	4,110	1,470	6,920	5,580	4,130	229	3,720	1,250	269
10	1,960	1,470	7,230	5,810	1,770	6,200	4,360	6,210	171	2,080	1,570	124
11	1,960	894	4,960	8,380	1,350	5,270	3,490	6,490	200	1,890	1,470	115
12	1,930	1,060	4,380	5,870	1,160	4,540	2,820	5,240	300	1,330	877	827
13	1,880	744	3,370	4,670	2,200	3,810	1,510	3,910	424	1,240	798	2,110
14	1,850	876	2,300	4,400	4,820	2,150	1,710	2,250	611	1,180	1,190	2,050
15	1,550	695	2,150	3,430	4,320	3,290	5,610	3,260	929	1,070	1,800	1,320
16	665	660	1,930	2,400	3,770	3,130	11,500	5,500	2,540	428	1,100	921
17	1,550	648	1,450	1,510	3,800	1,920	8,670	4,480	2,260	342	1,170	705
18	877	635	1,410	1,770	3,750	873	8,390	3,280	2,120	699	10,100	1,220
19	974	437	1,480	2,180	2,740	892	5,110	3,380	2,510	872	6,500	1,310
20	1,990	300	1,290	2,370	2,410	862	3,630	4,070	2,360	1,560	5,800	1,500
21	1,990	292	2,830	7,380	2,070	796	4,330	3,440	2,730	1,840	5,600	1,510
22	2,080	445	3,260	7,440	3,120	924	9,190	2,370	10,600	720	3,500	1,830
23	2,910	559	2,330	5,400	5,760	1,440	12,800	2,810	16,100	621	2,300	1,810
24	2,950	1,280	2,210	7,050	13,900	1,630	9,860	1,880	19,900	587	2,200	1,210
25	3,780	1,320	2,130	8,210	23,600	1,490	7,400	1,720	18,200	561	1,150	885
26	4,820	1,290	1,510	7,920	26,700	1,310	5,130	1,540	7,580	400	1,060	1,060
27	4,950	1,310	1,710	5,990	12,700	1,180	3,700	1,320	5,520	470	1,070	1,210
28	5,170	1,930	1,300	6,180	12,600	1,170	2,770	955	2,630	3,430	1,740	1,380
29	5,590	2,410	1,450	9,010	14,200	1,120	2,590	642	3,100	9,510	779	1,260
30	5,980	5,440	1,390	6,560	-----	1,210	2,120	585	3,940	13,800	695	1,980
31	4,420	-----	1,160	4,830	-----	1,140	-----	889	-----	16,100	647	-----
TOTAL	82,916	53,405	116,240	172,450	168,630	161,877	135,372	111,451	112,929	128,110	114,326	29,850
MEAN	2,675	1,780	3,750	5,563	5,815	5,222	4,512	3,595	3,764	4,133	3,688	995
MAX	5,980	5,440	19,600	14,100	26,700	18,400	12,800	9,330	19,900	17,700	17,400	2,110
MIN	665	292	1,160	1,120	1,160	796	848	585	171	342	647	115
CAL YR 1971	TOTAL 1,063,453	MEAN 2,914	MAX 19,600	MIN 175	MEAN 3,790	CFSM 2.22	IN 30.14					
WTR YR 1972	TOTAL 1,387,556	MEAN 3,791	MAX 26,700	MIN 115	MEAN 3,790	CFSM 2.88	IN 39.20					

† Adjusted for change in contents in Summersville Lake.

KANAWHA RIVER BASIN

03193000 Kanawha River at Kanawha Falls, W. Va.

LOCATION.--Lat 38°08'20", long 81°12'45", Fayette County, on right bank 150 ft downstream from toll bridge, 0.8 mile downstream from village of Kanawha Falls, 2.0 miles downstream from Gauley Bridge, 2.0 miles downstream from confluence of New River and Gauley River, and at mile 94.5.

DRAINAGE AREA.--8,367 sq mi.

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 above mean sea level. Prior to Oct. 27, 1928, nonrecording gages at several sites within 9.0 miles of present site at various datums. Oct. 27, 1928, to Sept. 30, 1964, water-stage recorder at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--95 years, 12,420 cfs (20.16 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 132,000 cfs Feb. 26 (gage height, 20.62 ft); minimum, 1,880 cfs Sept. 12 (gage height, 2.17 ft); minimum daily, 2,460 cfs Sept. 12.
Period of record: Maximum discharge, 320,000 cfs Sept. 14, 1878 (gage height, 37.8 ft, site and datum then in use), from gage-height relation and rating curve extended above 150,000 cfs; minimum, 640 cfs Aug. 15, 1930 (gage height, -0.95 ft, datum then in use); minimum daily, 690 cfs Oct. 29, 1921.

REMARKS.--Records excellent. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,950	9,500	21,400	8,110	18,100	68,400	10,600	9,420	10,200	18,500	34,100	4,180
2	5,760	9,010	18,600	6,000	15,900	69,000	7,830	7,970	10,900	18,300	25,400	3,280
3	7,040	11,500	14,100	9,690	14,600	65,200	7,190	15,200	9,150	14,400	17,900	3,380
4	5,420	16,400	12,300	13,600	14,900	62,100	8,680	33,400	7,050	12,800	22,900	3,380
5	5,420	20,300	11,100	32,100	16,900	40,100	11,900	49,200	6,070	23,300	31,700	3,110
6	6,100	15,000	7,810	40,400	14,800	30,700	10,400	37,300	4,310	61,800	23,700	3,410
7	6,770	12,800	15,200	29,800	10,300	25,900	9,510	27,600	5,910	40,400	12,200	4,150
8	7,240	11,600	53,600	20,000	10,200	23,000	24,600	16,900	5,700	23,900	10,000	5,310
9	6,080	9,560	49,100	15,900	10,900	20,200	36,500	20,700	4,890	18,100	9,440	5,200
10	5,530	9,100	28,300	17,100	10,200	19,100	26,800	31,100	5,280	11,300	9,230	4,940
11	5,030	7,700	21,400	22,600	10,300	16,000	20,700	26,100	5,510	8,540	9,150	2,970
12	4,500	7,540	17,000	23,000	9,650	15,200	18,300	22,000	3,990	10,600	7,260	2,460
13	5,390	6,190	12,900	19,300	11,200	13,100	22,800	19,100	3,190	10,500	7,440	5,230
14	5,540	6,880	11,400	17,600	22,400	11,400	35,000	14,700	4,850	9,520	5,220	5,260
15	6,170	4,220	10,700	14,900	25,400	13,200	51,700	14,900	6,940	8,800	5,590	4,700
16	5,710	3,980	9,850	14,400	23,700	11,700	63,300	22,400	7,300	6,670	5,580	4,000
17	5,640	5,300	10,500	10,100	20,300	12,300	50,100	23,700	7,730	4,900	6,300	3,310
18	4,200	5,670	9,800	8,570	20,200	11,700	36,700	19,000	15,900	5,730	16,500	3,410
19	3,510	5,130	9,660	9,630	16,700	12,200	26,200	17,800	13,800	8,230	14,500	3,290
20	5,710	6,250	7,090	10,800	16,100	8,650	21,500	19,200	15,200	9,290	16,900	3,660
21	5,420	6,700	7,810	24,800	12,700	7,170	20,200	17,600	24,500	8,850	13,800	3,860
22	5,530	3,600	10,700	41,800	11,500	9,640	25,700	17,500	77,200	7,380	9,630	4,300
23	7,070	3,200	11,500	30,500	20,000	13,300	37,400	21,800	82,800	7,400	6,930	3,990
24	12,600	5,070	12,200	25,400	40,600	22,100	33,600	19,000	78,100	4,350	7,560	3,570
25	29,700	7,270	10,400	25,200	79,000	19,600	25,800	17,700	67,900	3,990	6,420	3,010
26	38,400	7,100	6,730	27,400	102,000	15,500	23,300	14,500	41,200	4,870	5,620	2,750
27	38,600	6,090	6,600	23,200	76,300	14,000	18,900	13,300	22,300	5,150	6,410	3,130
28	26,800	7,980	6,060	23,000	64,400	10,700	14,400	9,840	15,700	8,230	5,750	4,230
29	19,000	6,850	7,090	37,600	64,600	13,400	14,900	5,880	14,200	16,700	4,680	5,900
30	17,300	13,300	7,050	35,200	-----	11,300	14,300	7,490	17,400	30,900	5,360	8,600
31	13,500	-----	7,050	24,600	-----	9,740	-----	9,190	-----	46,000	5,110	-----
TOTAL	328,630	250,790	445,000	662,300	783,850	695,600	728,710	601,490	595,170	469,400	368,280	121,970
MEAN	10,600	8,360	14,350	21,360	27,030	22,440	24,290	19,400	19,840	15,140	11,880	4,066
MAX	38,600	20,300	53,600	41,800	102,000	69,000	63,300	49,200	82,800	61,800	34,100	8,600
MIN	3,510	3,200	6,060	6,000	9,650	7,170	7,190	5,880	3,190	3,990	4,680	2,460
CAL YR 1971	TOTAL 4,792,780		MEAN 13,130		MAX 65,000	MIN 1,780	CFSM 1.57	IN 21.30				
WTR YR 1972	TOTAL 6,051,190		MEAN 16,530		MAX 102,000	MIN 2,460	CFSM 1.98	IN 26.90				

03193830 Gilmer Run near Marlinton, W. Va.

LOCATION.--Lat 38°19'12", long 80°05'52", Pocahontas County, on left bank 8.0 ft upstream from culvert on Forest Service Road 251, and 6.8 miles north of Marlinton.

DRAINAGE AREA.--1.80 sq mi.

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 (from topographic map).

EXTREMES.--Current year: Maximum discharge, 169 cfs Dec. 7 (gage height, 6.53 ft), from rating curve extended as explained below; minimum, 0.01 cfs Sept. 20-27 (gage height, 3.58 ft).

Period of record: Maximum discharge, 169 cfs Dec. 7, 1971 (gage height, 6.53 ft), from rating curve extended above 120 cfs on basis of culvert rating computation; minimum daily, 0.01 cfs July 12, Sept. 30, Oct. 1, 1968, July 4, 1969, Aug. 8, 1970, Sept. 21-26, 1972.

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.--The figures of peak discharge for the water years 1969-71 have been revised as shown in the following table. They supersede figures published in WRD W. Va., 1969-71.

REVISED PEAK DISCHARGE.--1969: Dec. 28 (0915) 108 cfs (5.66 ft); Mar. 24 (2100) 84 cfs (5.32 ft); Aug. 20 (0300) 119 cfs (5.82 ft).

1970: Dec. 10 (1930) 80 cfs (5.25 ft); Dec. 30 (2330) 138 cfs (6.09 ft); Apr. 2 (1000) 97 cfs (5.50 ft).

1971: Dec. 22 (0730) 93 cfs (5.44 ft); Feb. 13 (1045) 108 cfs (5.66 ft); June 30 (2030) 168 cfs (6.51 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	2.5	4.8	.50	1.8	33	2.1	.75	.40	4.8	2.6	.04
2	.53	4.5	3.5	12	1.3	40	1.7	7.0	.31	2.8	1.2	.03
3	.45	6.5	2.5	6.5	1.1	33	1.5	34	.23	2.1	1.0	.03
4	.38	3.6	1.9	6.5	1.0	8.5	4.6	19	.19	14	23	.03
5	.46	2.2	1.7	13	.85	4.8	4.3	7.2	.16	65	5.1	.03
6	.34	1.6	14	6.1	.75	3.1	2.9	3.8	.16	13	2.3	.03
7	.26	1.3	75	3.3	.70	2.6	17	2.6	.13	4.8	1.5	.03
8	.22	1.0	21	2.0	.60	3.1	19	3.3	.10	2.6	.83	.02
9	.20	.84	7.8	2.9	.55	2.1	6.1	11	.08	1.5	.62	.02
10	.20	.76	4.8	8.5	.50	1.7	3.8	5.3	.27	.91	.35	.02
11	.20	.68	3.1	6.1	.55	1.5	3.1	3.1	.08	.69	.25	.02
12	.20	.59	2.1	4.6	.65	1.7	2.8	2.1	.06	.50	.15	.02
13	.15	.52	1.7	3.3	2.4	2.1	17	1.7	.23	.45	.20	.02
14	.15	.46	1.3	2.6	1.8	8.9	32	2.6	5.3	.31	.20	.02
15	.15	.42	1.2	1.7	1.6	5.6	11	9.2	1.5	.27	.20	.02
16	.15	.39	1.0	1.5	1.7	10	12	5.8	1.7	.19	.15	.02
17	.15	.35	.83	1.5	1.7	9.7	14	3.6	1.5	.19	.15	.02
18	.15	.32	.76	1.2	1.5	5.3	5.8	4.6	.91	.16	.25	.02
19	.15	.35	.69	1.1	1.0	3.8	3.6	5.3	.62	.19	.20	.02
20	.15	.41	14	13	1.0	2.8	2.8	4.3	1.6	.23	.30	.02
21	.15	.74	7.8	15	1.5	2.4	2.8	3.1	48	.13	.25	.01
22	.20	.64	3.6	7.2	14	42	35	2.3	17	.10	.15	.01
23	.30	.55	2.3	7.5	17	13	11	1.7	33	.08	.15	.01
24	.90	.50	1.8	10	33	6.5	9.7	1.1	10	.06	.10	.01
25	12	.40	1.5	7.8	25	4.3	5.1	.91	4.6	.03	.09	.01
26	6.0	.45	1.2	4.3	68	3.3	3.1	.69	2.4	.03	.08	.01
27	3.0	1.5	1.0	2.8	19	3.1	2.3	.50	2.4	.45	.08	.35
28	2.0	1.8	.91	14	14	3.3	1.7	.40	1.7	1.5	.06	.16
29	1.5	.93	.76	6.1	31	3.6	1.5	.35	4.6	3.3	.06	2.6
30	1.0	11	.69	3.6	-----	3.1	.95	.55	3.6	13	.05	2.0
31	.90	-----	.62	2.1	-----	2.6	-----	.76	-----	6.1	.04	-----
TOTAL	33.09	56.17	185.86	178.30	245.55	270.5	240.25	148.61	142.83	139.47	41.66	5.65
MEAN	1.07	1.87	6.00	5.75	8.47	8.73	8.01	4.79	4.76	4.50	1.34	.19
MAX	12	11	75	15	68	42	35	34	48	65	23	2.6
MIN	.15	.32	.62	.50	.50	1.5	.95	.35	.06	.03	.04	.01
CFSM	.59	1.04	3.33	3.19	4.71	4.85	4.45	2.66	2.64	2.50	.74	.11
IN.#	.68	1.16	3.84	3.68	5.08	5.59	4.97	3.07	2.95	2.88	.86	.12
IN.##	-	1.46	2.40	4.29	4.03	3.61	6.01	4.89	7.17	6.32	-	-

CAL YR 1971 TOTAL 1,529.45 MEAN 4.19 MAX 75 MIN .03 CFSM 2.33 IN# 31.61
WTR YR 1972 TOTAL 1,687.98 MEAN 4.61 MAX 75 MIN .01 CFSM 2.56 IN# 34.88

PEAK DISCHARGE (BASE, 80 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	0715	6.53	169	3-22	0130	5.35	86
2-26	0645	5.71	112	6-21	0545	5.74	114
3- 2	2345	5.43	92	7- 5	0300	5.81	119

Runoff.

Rainfall.

NOTE.--No gage-height record Oct. 9 to Nov. 2, Apr. 29 to May 2, Aug. 10 to Sept. 19.

KANAWHA RIVER BASIN

03194700 Elk River below Webster Springs, W. Va.

LOCATION.--Lat 38°35'50", long 80°29'20", Webster County, on right bank 10 ft upstream from swinging footbridge, 6.5 miles upstream from town of Centralia, 8.9 miles southwest of Salisbury Station, 8.9 miles northwest of Webster Springs, and at mile 122.7.

DRAINAGE AREA.--268 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,020 ft (by barometer).

AVERAGE DISCHARGE.--13 years, 675 cfs (34.20 inches per year).

EXTREMES.--Current year: Maximum discharge, 19,300 cfs Feb. 26 (gage height, 12.79 ft), from rating curve extended above 11,000 cfs; minimum, 47 cfs Sept. 24, 25 (gage height, 3.51 ft).
Period of record: Maximum discharge, 21,400 cfs Mar. 7, 1967 (gage height, 13.35 ft), from rating curve extended above 11,000 cfs; minimum, 6.5 cfs Oct. 1, 1959; minimum gage height, 3.01 ft Oct. 1, 1959, Aug. 18, 1965.

Flood in 1861 (probably in September) reached a stage of 26.34 ft and flood of July 26, 1896, reached a stage of 25.87 ft, present datum, at site 0.2 mile upstream, from levels to floodmarks pointed out by a local resident.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	468	256	1,520	258	680	3,060	846	462	380	1,220	2,460	166
2	360	250	981	278	558	3,460	756	408	274	1,030	1,310	140
3	315	342	704	827	516	5,450	633	1,820	210	1,090	1,010	128
4	260	426	558	783	696	2,660	1,400	2,290	172	1,340	4,200	340
5	228	368	480	2,870	540	1,730	2,180	1,960	169	3,980	2,690	438
6	210	314	462	2,430	460	1,160	1,480	1,370	157	3,330	1,520	282
7	178	299	5,290	1,510	400	891	1,300	972	140	1,810	972	214
8	144	279	4,100	1,020	360	873	3,960	747	128	1,130	664	169
9	129	232	2,070	792	320	837	2,090	1,170	110	756	486	143
10	118	218	1,370	1,950	300	720	1,400	2,670	98	534	375	130
11	113	204	1,030	1,980	270	598	1,090	1,780	101	426	282	115
12	106	189	774	1,450	240	540	990	1,190	90	570	234	101
13	94	174	619	1,110	558	516	1,230	864	86	396	408	106
14	84	161	522	927	500	972	4,910	680	360	300	498	106
15	80	146	462	712	704	1,180	2,720	1,050	909	246	320	125
16	78	138	426	516	656	981	2,320	1,390	747	258	246	120
17	74	128	375	470	640	1,090	2,390	1,080	1,230	218	234	96
18	76	119	340	430	577	1,040	1,880	1,020	819	175	1,510	80
19	65	116	290	400	534	918	1,360	1,080	664	226	1,470	74
20	60	131	438	430	400	819	1,080	828	490	696	2,180	73
21	54	170	1,030	1,600	360	712	1,190	648	1,340	375	1,190	65
22	52	150	765	1,530	1,360	1,130	3,440	546	2,610	274	747	57
23	56	190	591	1,200	1,660	1,640	3,210	456	12,500	218	591	52
24	76	214	510	1,060	4,800	1,200	2,450	375	6,030	172	444	50
25	527	259	450	1,140	5,610	954	1,870	315	2,630	143	408	49
26	1,250	253	396	1,150	12,200	783	1,370	266	1,550	120	516	50
27	793	291	355	936	5,340	720	1,020	226	1,320	123	564	57
28	547	413	325	1,830	2,460	680	783	189	1,080	385	402	135
29	406	552	325	1,970	2,180	720	626	166	1,090	414	310	218
30	330	1,990	295	1,380	-----	963	534	157	1,000	1,780	250	927
31	280	-----	282	945	-----	1,000	-----	320	-----	2,750	200	-----
TOTAL	7,611	8,572	28,135	35,794	46,279	39,997	52,508	28,495	38,474	26,485	28,691	4,806
MEAN	246	299	908	1,155	1,596	1,290	1,750	919	1,282	854	926	160
MAX	1,250	1,990	5,290	2,870	12,200	5,450	4,910	2,670	12,500	3,980	4,200	927
MIN	52	116	282	258	240	516	534	157	86	120	200	49
CFSM	.92	1.12	3.39	4.31	5.56	4.81	6.53	3.43	4.78	3.19	3.46	.60
IN.	1.06	1.25	3.91	4.57	6.42	5.55	7.29	3.96	5.34	3.68	3.98	.67
CAL YR 1971	TOTAL 249,209	MEAN 683	MAX 6,850	MIN 36	CFSM 2.55	IN 34.59						
WTR YR 1972	TOTAL 346,247	MEAN 946	MAX 12,500	MIN 49	CFSM 3.53	IN 48.06						

PEAK DISCHARGE (BASE, 8,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-7	1600	10.21	10,900	3-3	0800	9.54	8,970
2-26	1300	12.79	19,300	6-23	1100	12.25	17,400

KANAWHA RIVER BASIN

121

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 mile upstream from Sutton, and at mile 101.1.

DRAINAGE AREA.--537 sq mi.

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, 99,950 acre-ft June 24 (elevation, 944.84 ft); minimum, 3,570 acre-ft Mar. 19 (elevation, 848.16 ft).

Period of record: Maximum contents, 111,300 acre-ft May 8, 1961 (elevation, 950.16 ft); minimum since initial filling, 734 acre-ft Apr. 1, 1961 (elevation, 832.33 ft).

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 6 taintor gates 40 ft long by 31 ft high and 5 sluice gates 5.67 ft wide by 10 ft high. Total level-pool capacity at elevation 1,000 ft (flood-control pool elevation) is 265,300 acre-ft of which 261,200 acre-ft is controlled storage above elevation 850 ft (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 1971 TO SEPTEMBER 1972

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)	Change in Contents (equivalent in cfs)
Sept. 30.....	925.51	64,920	-	-
Oct. 31.....	890.43	25,310	-39,610	-644
Nov. 30.....	856.70	6,170	-19,140	-322
Dec. 31.....	850.74	4,250	- 1,920	-31
CAL YR 1971	-	-	-670	-1
Jan. 31.....	851.23	4,390	+140	+2
Feb. 29.....	926.10	65,830	+61,440	+1,070
Mar. 31.....	853.59	5,110	-60,720	-988
Apr. 30.....	925.18	64,420	+59,310	+997
May 31.....	925.32	64,630	+210	+3
June 30.....	925.05	64,220	-410	-7
July 31.....	924.99	64,130	-90	-1
Aug. 31.....	925.15	64,370	+240	+4
Sept. 30.....	914.67	49,810	-14,560	-245
WTR YR 1972	-	-	-15,110	-21

KANAWHA RIVER BASIN

03195500 Elk River at Sutton, W. Va.

LOCATION.--Lat 38°39'45", long 80°42'35", Braxton County, on left bank 150 ft upstream from highway bridge at Sutton, 0.5 mile upstream from Granny Creek, 0.9 mile downstream from Sutton Dam, 2.5 miles downstream from Wolf Creek, and at mile 100.1.

DRAINAGE AREA.--543 sq mi.

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 above mean sea level. Prior to Apr. 5, 1940, non-recording gage and Apr. 5, 1940, to Sept. 30, 1960, water-stage recorder at site 150 ft downstream at datum 8.03 ft higher.

AVERAGE DISCHARGE.--34 years, 1,100 cfs (27.51 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 11,600 cfs Mar. 1 (gage height, 23.76 ft); minimum, 40 cfs Feb. 27 (gage height, 10.48 ft).
Period of record: Maximum discharge, 34,200 cfs Jan. 29, 1957 (gage height, 39.30 ft, present datum); minimum, 0.4 cfs Oct. 25, 26, 28, 29, 1953; minimum gage height, 9.87 ft Oct. 25, 1953, present datum.
Flood of Mar. 13, 1918, reached a stage of 45.2 ft, present datum, from floodmarks (discharge, about 49,000 cfs), from rating curve extended above 28,000 cfs.

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 1305: 1942(M), 1948-50(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,050	805	3,390	455	1,190	11,100	559	666	582	1,720	4,320	185
2	2,040	952	2,000	470	1,030	9,590	152	624	263	1,500	1,830	191
3	2,060	937	1,400	364	1,110	8,570	132	2,500	298	1,300	1,390	198
4	2,070	1,100	1,020	1,340	1,270	10,400	155	3,420	307	1,640	5,400	329
5	2,060	1,200	846	3,900	1,290	9,280	158	3,010	379	4,590	6,020	635
6	1,780	1,020	723	5,590	1,220	5,280	158	2,030	347	6,650	2,180	430
7	1,290	922	1,750	2,250	1,190	2,660	182	1,550	243	2,770	1,290	228
8	872	916	3,220	2,600	829	1,490	172	1,200	135	1,630	890	168
9	682	807	4,560	1,330	664	1,240	159	2,330	139	918	630	172
10	679	758	4,260	3,590	688	1,120	155	6,220	142	764	415	175
11	676	673	3,520	4,660	685	939	152	3,550	142	440	343	298
12	671	667	2,410	3,280	678	827	158	1,930	126	883	343	406
13	616	660	1,850	2,150	1,550	757	630	1,480	112	466	696	504
14	502	652	1,250	1,720	2,150	911	7,460	1,260	112	311	764	576
15	366	648	708	1,440	1,660	1,320	7,050	1,640	1,190	311	477	702
16	227	639	664	915	1,600	1,510	3,990	2,780	841	311	307	792
17	370	631	671	606	1,820	1,590	4,670	2,050	1,400	311	642	666
18	434	619	667	850	1,580	1,560	3,410	1,500	925	311	2,690	565
19	496	610	609	1,110	1,230	1,430	2,010	1,560	848	191	3,070	466
20	492	600	519	1,010	957	1,230	1,760	1,320	612	1,260	5,910	338
21	490	770	998	1,830	747	1,090	2,120	1,020	1,280	406	2,080	356
22	489	937	1,170	2,740	2,710	1,010	3,400	939	2,960	430	1,120	471
23	535	905	368	2,190	4,050	2,000	7,480	732	6,710	298	785	554
24	547	775	711	1,990	5,380	2,200	7,140	515	7,900	220	543	488
25	698	927	670	2,010	7,900	1,590	5,750	430	7,930	220	410	415
26	1,510	1,020	669	2,070	2,200	1,360	2,210	379	7,760	129	1,150	415
27	1,840	1,070	661	1,870	818	1,160	1,650	347	6,860	102	757	415
28	1,650	1,520	548	3,300	4,380	1,170	1,200	284	5,390	499	564	466
29	1,350	1,860	455	4,170	7,890	1,160	918	162	2,200	488	406	543
30	1,110	3,480	456	2,470	-----	1,160	757	172	1,650	2,000	356	1,210
31	760	-----	456	1,670	-----	1,200	-----	564	-----	5,110	255	-----
TOTAL	31,512	28,782	43,719	66,230	60,466	88,004	65,902	48,594	59,783	38,179	48,038	13,363
MEAN	1,017	959	1,410	2,136	2,085	2,839	2,197	1,568	1,992	1,232	1,550	445
MAX	2,070	3,480	4,560	5,590	7,890	11,100	7,480	6,220	7,930	6,650	6,020	1,210
MIN	327	600	455	455	678	757	132	162	112	102	255	168

CAL YR 1971 TOTAL 419,334 MEAN 1,149 MAX 7,020 MIN 80 MEAN† 1,148 CFSM† 2.11 IN† 28.64
WTR YR 1972 TOTAL 592,572 MEAN 1,619 MAX 11,100 MIN 102 MEAN† 1,598 CFSM† 2.94 IN† 40.02

† Adjusted for change in contents in Sutton Lake.

03195600 Granny Creek at Sutton, W. Va.

LOCATION.--Lat 38°40'28", long 80°42'57", Braxton County, on right bank 10 ft upstream from culvert on U.S. Highway 19, 0.7 mile upstream from mouth, and 1.0 mile northwest of Sutton.

DRAINAGE AREA.--6.98 sq mi.

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 (from topographic map). Prior to June 23, 1967, SR recorder at same site and datum.

AVERAGE DISCHARGE.--5 years, 9.14 cfs (17.78 inches per year).

EXTREMES.--Current year: Maximum discharge, 744 cfs Apr. 22 (gage height, 8.93 ft), from rating curve extended as explained below; minimum, 0.19 cfs July 26-29 (gage height, 2.73 ft).
Period of record: Maximum discharge, 1,040 cfs Apr. 30, 1966 (gage height, 11.85 ft); from rating curve extended above 320 cfs on basis of culvert rating computation; minimum, 0.02 cfs Oct. 1, 2, 1968 (gage height, 2.64 ft).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	14	14	2.5	7.7	10	8.0	3.7	1.5	11	1.4	.44
2	3.0	20	9.8	6.0	7.4	20	11	4.2	1.1	5.7	.70	.37
3	2.6	12	8.0	19	24	65	10	13	.80	5.7	.80	.70
4	2.9	7.0	7.0	18	25	24	56	5.8	.60	4.5	13	1.2
5	2.1	4.5	5.7	70	17	20	23	7.0	.45	72	2.6	.70
6	1.6	3.7	6.0	60	12	14	13	5.2	.40	20	1.3	.52
7	1.4	3.5	39	35	17	11	100	4.5	.35	8.0	.90	.44
8	1.2	2.7	23	17	14	11	55	5.5	.35	4.5	.80	.37
9	1.2	2.4	14	14	12	7.7	19	72	.30	3.0	1.4	.31
10	1.1	2.2	11	60	10	6.7	12	42	.30	2.1	.70	.37
11	1.0	1.9	12	70	5.4	5.7	11	15	.25	1.6	.44	.31
12	.90	1.9	10	30	13	5.5	9.4	8.7	.25	1.4	.37	.37
13	.80	1.8	8.3	23	70	4.7	50	6.4	.25	1.4	.80	.52
14	.80	1.6	6.7	26	38	5.5	57	5.2	2.7	1.1	.60	1.1
15	.70	1.6	7.0	17	28	5.2	38	11	.70	.90	.37	1.1
16	.80	1.5	6.7	14	23	9.0	57	9.4	.80	1.6	.37	.60
17	.90	1.4	6.0	10	18	15	49	6.4	.44	1.0	12	.44
18	.70	1.4	5.0	8.7	15	14	19	5.5	1.2	.80	7.0	.90
19	.60	1.8	4.0	9.4	17	9.8	11	4.5	1.3	.60	70	.90
20	.52	3.5	7.7	21	13	7.7	11	3.7	.70	.52	30	.52
21	.52	8.0	7.7	41	15	6.4	52	3.0	2.6	.44	12	.44
22	.80	5.2	7.0	23	59	10	212	2.6	5.7	.37	5.0	.52
23	2.1	4.2	6.0	18	28	16	33	2.1	93	.37	2.4	.52
24	6.0	12	5.5	34	217	13	33	1.8	23	.25	1.6	.80
25	13	20	5.0	27	82	11	19	1.6	8.0	.22	1.3	.90
26	9.4	16	4.5	17	244	8.3	11	1.5	4.5	.22	1.0	1.0
27	5.0	25	4.0	12	40	7.0	7.7	1.2	5.5	.19	.90	2.4
28	3.2	19	3.5	45	21	5.7	6.0	1.0	15	.19	.90	1.1
29	2.4	31	3.5	22	14	6.4	5.0	.90	22	.31	.80	5.5
30	1.9	25	3.0	15	-----	8.3	4.5	.75	15	1.6	.60	9.4
31	1.6	-----	3.0	10	-----	6.4	-----	1.1	-----	2.9	.52	-----
TOTAL	74.74	255.8	263.6	794.6	1,110.5	370.0	1,002.6	260.25	209.04	154.48	172.57	34.76
MEAN	2.41	8.53	8.50	25.6	38.3	11.9	33.4	8.40	6.97	4.98	5.57	1.16
MAX	13	31	39	70	244	65	212	72	93	72	70	9.4
MIN	.52	1.4	3.0	2.5	7.4	4.7	4.5	.75	.25	.19	.37	.31
CFSM	.35	1.22	1.22	3.67	5.49	1.70	4.79	1.20	1.00	.71	.80	.17
IN.†	.40	1.36	1.40	4.23	5.52	1.97	5.34	1.39	1.11	.82	.92	.19
IN.††	1.67	3.45	-	-	-	-	7.11	-	-	2.99	-	3.44
CAL YR 1971	TOTAL 3,123.07	MEAN 8.56	MAX 155	MIN .10	CFSM 1.23	IN.† 16.64						
WTR YR 1972	TOTAL 4,702.94	MEAN 12.8	MAX 244	MIN .19	CFSM 1.83	IN.† 25.06						

PEAK DISCHARGE (BASE, 200 CFS)

† Runoff.
†† Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	0300	7.37	510	4-22	0430	8.93	744
2-26	0230	7.79	574	5-9	1300	5.40	215
4-7	1915	7.74	566	8-19	0715	7.57	540

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 miles upstream from Strange Creek, 3.2 miles southwest of Frametown, and at mile 80.7. Records include flow of Birch River.

DRAINAGE AREA.--752 sq mi, includes that of Birch River.

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

GAGE.--Water-stage recorder. Datum of gage is 775.51 ft above mean sea level. Prior to Mar. 25, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--14 years, 1,482 cfs (26.76 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 17,700 cfs Feb. 26 (gage height, 14.08 ft); minimum, 108 cfs July 27, 28 (gage height, 1.92 ft).

Period of record: Maximum discharge, 21,600 cfs Mar. 15, 1967 (gage height, 16.05 ft); minimum, 9.0 cfs Sept. 28, 29, 1959 (gage height, 1.44 ft).

REMARKS.--Records good. Flow regulated since 1960 by Sutton Lake (see sta 03195400).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,260	984	4,740	596	1,670	11,900	1,250	950	970	2,050	6,450	244
2	2,210	1,230	2,640	814	1,300	11,300	564	840	358	1,900	2,740	227
3	2,200	1,510	1,950	1,240	1,490	9,920	494	1,840	363	1,430	1,920	227
4	2,200	1,360	1,420	1,800	2,080	12,200	856	4,590	358	1,960	8,830	280
5	2,180	1,430	1,140	5,430	1,920	11,000	1,050	4,110	429	5,680	9,010	730
6	2,100	1,300	954	7,780	1,710	6,710	816	2,770	402	9,210	3,900	594
7	1,450	1,000	2,380	4,840	1,780	3,560	1,320	2,160	374	4,440	1,930	407
8	1,090	967	4,330	2,430	1,340	2,060	3,130	1,560	203	2,260	1,210	231
9	776	946	5,420	1,970	1,140	1,580	1,240	2,860	167	1,280	920	223
10	763	928	4,900	4,690	966	1,490	848	9,120	164	1,020	594	215
11	760	812	4,260	6,540	932	1,230	732	5,680	160	650	446	235
12	773	793	2,950	4,650	927	1,100	876	3,150	157	784	418	429
13	729	780	2,230	3,080	2,240	1,000	1,050	2,050	142	757	549	535
14	645	770	1,770	2,450	3,760	1,060	9,210	1,840	145	385	1,030	666
15	530	757	1,080	1,990	2,700	1,390	10,200	1,800	850	374	784	766
16	377	745	919	1,470	2,410	1,750	6,940	4,120	920	374	435	920
17	453	735	893	924	2,520	1,920	6,900	3,160	1,470	369	802	840
18	477	722	875	1,010	2,320	1,990	5,460	2,290	1,030	369	4,500	658
19	589	718	839	1,290	1,790	1,870	3,160	2,280	930	336	4,410	642
20	585	717	761	1,390	1,490	1,550	2,520	2,080	784	1,000	9,970	418
21	580	812	992	2,380	1,140	1,440	2,830	1,360	1,030	618	3,580	396
22	584	1,090	1,420	3,620	3,450	1,350	9,450	1,210	2,830	521	1,790	458
23	610	1,040	1,100	2,930	5,690	2,210	10,300	1,060	9,580	402	1,130	602
24	738	983	931	2,560	9,090	2,910	10,300	714	10,900	271	930	594
25	909	1,200	845	2,720	11,300	2,190	9,150	570	9,670	253	602	470
26	1,650	1,330	840	2,670	12,600	1,840	3,400	494	9,190	235	1,200	464
27	2,190	1,480	826	2,500	2,310	1,520	2,680	429	8,160	122	1,040	464
28	2,050	2,000	785	3,540	4,710	1,490	1,660	413	7,110	295	850	464
29	1,530	2,640	624	5,620	7,660	1,500	1,400	253	3,010	650	578	658
30	1,410	4,000	615	3,580	-----	1,620	1,050	215	2,160	1,240	440	1,510
31	901	-----	611	2,230	-----	1,490	-----	407	-----	5,860	413	-----
TOTAL	36,304	35,774	56,040	90,724	94,330	106,130	110,716	66,395	74,016	47,095	73,401	15,567
MEAN	1,171	1,192	1,808	2,927	3,253	3,424	3,691	2,142	2,467	1,519	2,368	519
MAX	2,260	4,000	5,420	7,780	12,600	12,200	10,300	9,120	10,900	9,210	9,970	1,510
MIN	377	717	611	596	922	1,000	494	215	142	122	413	215

CAL YR 1971 TOTAL 547,536 MEAN 1,500 MAX 11,600 MIN 89 MEAN# 1,499 CFMS# 1.99 IN# 27.01
 WTR YR 1972 TOTAL 806,492 MEAN 2,204 MAX 12,600 MIN 122 MEAN# 2,183 CFMS# 2.90 IN# 39.47

Adjusted for change in contents in Sutton Lake.

KANAWHA RIVER BASIN

125

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 mile downstream from Buffalo Creek, 2.1 miles downstream from Lower Two Run Creek, and at mile 52.5.

DRAINAGE AREA.--994 sq mi.

PERIOD OF RECORD.--October 1958 to current year. Gage-height records collected at same site since 1915 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 677.46 ft above mean sea level. Prior to Mar. 27, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--14 years, 1,834 cfs (25.06 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 33,200 cfs Feb. 26 (gage height, 18.57 ft); minimum, 167 cfs June 12, 13; minimum gage height, 0.94 ft June 12, 13, July 28.
Period of record: Maximum discharge, 48,000 cfs Mar. 15, 1967 (gage height, 22.80 ft); minimum, 1.5 cfs Sept. 22, 1959 (gage height, -0.13 ft).
Flood of Mar. 14, 1918, reached a stage of 32.4 ft, from reports of U.S. Weather Bureau.

REMARKS.--Records good. Flow regulated since 1960 by Sutton Lake (see sta 03195400).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,600	984	6,220	674	2,700	12,300	2,070	1,310	817	2,210	7,350	404
2	2,510	1,510	3,830	921	1,940	12,900	1,240	1,120	709	2,200	3,840	282
3	2,460	2,560	2,780	1,690	1,990	11,300	921	1,330	359	1,700	2,820	261
4	2,470	1,850	1,950	2,400	3,240	13,500	1,320	4,920	380	1,970	11,200	310
5	2,440	1,770	1,500	6,610	2,830	12,800	2,150	4,700	412	3,990	10,200	436
6	2,430	1,650	1,250	9,830	2,620	9,400	1,660	3,440	455	9,870	5,480	659
7	1,830	1,300	2,700	7,140	2,770	5,690	1,990	2,740	411	6,250	2,580	492
8	1,370	1,070	5,910	3,970	2,320	3,330	7,200	2,100	342	2,930	1,650	339
9	865	1,010	6,450	2,800	1,700	2,360	3,100	2,810	208	1,910	1,190	239
10	737	998	6,050	5,780	1,450	2,080	1,890	9,210	194	1,260	351	228
11	726	858	5,520	8,460	1,350	1,760	1,480	7,350	177	940	575	222
12	715	776	4,090	6,850	1,310	1,540	1,340	4,390	167	576	457	276
13	693	759	3,040	4,700	2,710	1,370	2,000	2,770	174	1,120	465	442
14	633	748	2,550	3,500	6,250	1,310	7,940	2,420	177	548	928	554
15	525	737	1,530	2,910	4,680	1,550	11,700	2,200	202	403	893	699
16	428	721	1,240	2,330	3,860	2,070	9,370	4,910	1,210	393	540	842
17	370	713	1,080	1,440	3,680	2,470	8,430	4,250	1,140	389	886	862
18	448	697	1,040	1,320	3,520	2,710	7,220	3,170	1,290	380	7,800	693
19	483	689	974	1,640	2,920	2,590	4,560	2,500	1,010	376	6,490	654
20	535	693	936	1,940	2,410	2,220	3,350	3,040	915	434	11,900	527
21	525	753	939	3,320	1,880	2,030	3,610	1,870	751	1,140	5,680	374
22	525	1,060	1,630	5,080	3,970	1,900	14,000	1,600	2,300	474	2,730	372
23	570	1,130	1,480	4,490	7,610	2,540	11,300	1,430	6,790	472	1,810	473
24	788	1,120	1,170	3,740	10,900	4,030	11,900	1,040	11,400	359	1,370	567
25	991	1,350	1,010	3,970	14,700	3,370	10,700	782	9,640	270	900	499
26	1,750	1,670	973	3,930	23,700	2,660	5,260	652	9,040	255	942	427
27	2,680	1,840	958	3,600	6,850	2,260	3,810	559	8,240	246	1,460	427
28	2,490	2,440	933	4,320	5,320	2,070	2,300	493	7,510	193	1,060	424
29	1,950	3,310	783	7,220	7,660	2,040	2,010	443	4,090	506	782	545
30	1,690	4,670	690	5,800	-----	2,760	1,450	292	2,780	739	585	1,270
31	1,170	-----	694	3,490	-----	2,190	-----	278	-----	4,770	483	-----
TOTAL	40,397	41,436	71,900	125,765	138,740	133,090	147,271	80,119	73,280	49,273	95,892	14,839
MEAN	1,303	1,381	2,319	4,057	4,784	4,293	4,909	2,584	2,443	1,589	3,093	495
MAX	2,680	4,670	6,450	9,830	23,700	13,500	14,000	9,210	11,400	9,870	11,900	1,270
MIN	370	689	690	674	1,310	1,310	921	278	167	193	452	222

CAL YR 1971 TOTAL 718,274 MEAN 1,968 MAX 15,800 MIN 108 MEAN# 1,967 CFSM# 1.98 IN# 26.88
WTR YR 1972 TOTAL 1,012,002 MEAN 2,765 MAX 23,700 MIN 167 MEAN# 2,744 CFSM# 2.76 IN# 37.57

Adjusted for change in contents in Sutton Lake.

KANAWHA RIVER BASIN

03197000 Elk River at Queen Shoals, W. Va.

LOCATION.--Lat 38°28'20", long 81°17'10", Kanawha County, on right bank 50 ft upstream from Queen Shoals Creek, 100 ft downstream from highway bridge at Queen Shoals, 4.0 miles upstream from Big Sandy Creek, and at mile 25.8. Records include flow of Queen Shoals Creek.

DRAINAGE AREA.--1,145 sq mi, 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 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 upstream at same datum.

AVERAGE DISCHARGE.--44 years, 1,958 cfs (23.22 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 33,300 cfs Feb. 26 (gage height, 19.68 ft); minimum, 178 cfs June 12, 13 (gage height, 4.35 ft).

Period of record: Maximum discharge, 72,000 cfs July 5, 1932 (gage height, 29.2 ft), from rating curve extended above 40,000 cfs; minimum, 0.3 cfs 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,680	1,120	6,210	771	3,080	10,900	2,350	1,590	475	2,430	7,650	497
2	2,590	1,480	4,540	906	2,330	12,100	1,930	1,420	1,040	2,390	4,900	353
3	2,540	2,700	3,170	1,880	2,090	11,200	1,270	1,400	481	2,200	2,690	270
4	2,510	2,250	2,330	2,390	3,260	12,400	1,440	4,010	404	1,980	11,000	294
5	2,490	1,910	1,820	6,430	3,130	12,300	2,530	4,850	441	3,130	10,800	340
6	2,470	1,840	1,520	10,100	2,870	10,200	2,160	3,980	480	9,420	6,920	734
7	2,130	1,590	2,610	8,130	3,010	6,570	2,360	3,070	469	6,690	3,300	695
8	1,550	1,270	6,450	4,930	2,770	4,110	8,690	2,460	426	3,530	2,060	505
9	1,170	1,200	6,460	3,400	2,140	2,920	4,480	2,430	312	2,330	1,420	320
10	834	1,160	6,400	6,030	1,750	2,350	2,660	7,610	217	1,440	1,100	245
11	817	1,110	5,850	8,840	1,590	2,090	2,020	8,500	207	1,190	729	232
12	798	958	4,500	7,870	1,500	1,800	1,770	5,230	185	830	552	229
13	785	922	3,470	5,610	2,550	1,620	2,160	3,340	181	952	536	353
14	752	995	2,810	4,090	7,090	1,490	6,240	2,670	198	890	758	576
15	654	868	2,050	3,340	5,790	1,590	11,500	2,540	197	478	1,080	802
16	543	850	1,540	2,560	4,520	2,080	10,400	4,690	810	434	866	898
17	426	829	1,320	1,930	4,090	2,670	9,100	5,040	986	423	892	1,050
18	435	808	1,250	1,550	3,920	2,900	8,140	3,800	1,570	411	8,940	959
19	487	794	1,180	1,690	3,440	2,840	5,550	2,950	1,150	400	7,740	1,020
20	565	799	1,170	2,030	2,820	2,570	3,860	3,280	1,030	387	10,600	810
21	570	838	1,140	3,890	2,270	2,270	3,860	2,370	947	998	8,030	515
22	565	1,010	1,480	5,410	3,650	2,210	14,000	1,890	1,480	696	3,880	425
23	605	1,280	1,750	5,160	7,700	2,540	11,900	1,710	4,440	576	2,500	453
24	731	1,240	1,420	4,190	10,400	3,920	11,800	1,420	11,000	442	1,680	643
25	1,060	1,360	1,250	4,270	15,000	3,920	10,900	1,050	9,560	330	1,350	669
26	1,580	1,710	1,140	4,380	26,100	3,090	7,430	837	8,940	256	918	532
27	2,450	1,880	1,120	3,990	11,500	2,640	4,320	656	8,370	268	1,550	502
28	2,560	2,380	1,100	4,500	5,540	2,320	3,110	586	7,610	293	1,270	502
29	2,220	3,110	1,040	7,390	7,410	2,230	2,390	534	5,580	257	1,060	587
30	1,790	4,630	815	6,610	-----	3,120	1,960	423	3,150	912	760	1,670
31	1,550	-----	799	4,160	-----	2,610	-----	316	-----	3,310	554	-----
TOTAL	42,927	44,791	75,864	138,517	153,310	137,540	162,390	86,692	72,340	50,223	108,085	17,680
MEAN	1,385	1,493	2,576	4,468	5,287	4,437	5,413	2,757	2,411	1,620	3,487	589
MAX	2,680	4,630	6,460	10,100	26,100	12,400	14,000	8,500	11,000	9,420	11,000	1,670
MIN	426	794	799	771	1,500	1,490	1,270	316	181	256	536	229

CAL YR 1971 TOTAL 769,985 MEAN 2,110 MAX 17,700 MIN 112 MEAN# 2,109 CFSM# 1.84 IN# 24.98
 WTR YR 1972 TOTAL 1,094,359 MEAN 2,990 MAX 26,100 MIN 181 MEAN# 2,969 CFSM# 2.59 IN# 35.25

Adjusted for change in contents in Sutton Lake.

KANAWHA RIVER BASIN

127

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 mile upstream from Davis Creek, 1.5 miles downstream from Twomile Creek, 2.0 miles downstream from Patrick Street Bridge at Charleston, 3.5 miles downstream from Elk River, and at mile 54.3.

DRAINAGE AREA.--10,419 sq mi.

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 above mean sea level (levels by Corps of Engineers). Auxiliary water-stage recorder 2.3 miles upstream from base gage at datum 547.00 ft above mean sea level (Corps of Engineers bench mark). Prior to Oct. 1, 1955, auxiliary gages at different sites and datum.

AVERAGE DISCHARGE.--33 years, 14,280 cfs (18.61 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 154,000 cfs Feb. 26 (gage height, 36.95 ft); minimum daily, 2,800 cfs Sept. 12; minimum gage height, 17.48 ft Sept. 11.

Period of record: Maximum discharge, 216,000 cfs Aug. 15, 1940; maximum gage height, 39.72 ft Mar. 7, 1955; minimum discharge, less than 1,030 cfs during period Oct. 1-5, 1953; minimum gage height, 17.27 ft July 1, 1963.

Flood of Sept. 29, 1861, reached a stage of about 54.3 ft.

REMARKS.--Records good. Since 1939, flow regulated by increasing number of reservoirs upstream from station.

REVISIONS (WATER YEARS).--WSP 1335: 1943.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,500	10,700	27,200	9,330	22,900	77,800	13,800	12,600	10,300	20,000	42,300	4,840
2	8,640	11,300	23,900	8,050	20,200	84,300	10,900	9,750	10,900	20,800	30,200	3,790
3	9,600	14,100	18,000	12,700	19,100	81,900	9,700	14,200	10,700	16,600	20,500	3,800
4	8,460	18,300	14,500	16,100	20,600	79,900	11,900	33,600	8,400	14,600	36,500	3,860
5	8,240	22,400	14,000	39,400	21,600	63,500	15,700	54,200	6,980	22,700	44,700	3,620
6	8,910	17,100	9,070	56,500	20,800	46,000	15,700	43,000	5,610	63,200	32,000	4,310
7	9,330	15,400	20,000	42,000	16,200	34,800	15,900	31,800	6,450	55,600	16,200	4,990
8	8,670	13,100	57,800	28,200	15,100	29,700	38,100	20,100	6,760	28,100	12,500	5,950
9	6,990	11,900	58,100	20,300	14,400	24,700	44,300	21,600	5,840	20,800	10,800	5,650
10	7,060	10,600	34,700	27,400	13,600	23,100	34,100	37,600	6,790	12,700	9,870	5,310
11	6,920	8,970	27,900	34,400	13,300	18,500	24,500	34,500	6,600	9,460	9,550	3,320
12	6,080	8,550	23,300	34,200	12,700	18,700	21,800	28,300	5,990	11,100	7,400	2,800
13	6,690	7,460	16,500	26,900	16,600	15,200	25,200	23,600	5,030	10,500	8,740	5,680
14	6,350	7,980	15,000	25,300	34,400	14,400	40,200	18,100	5,760	10,400	6,170	5,940
15	6,840	5,310	14,400	19,900	35,700	13,600	63,100	16,600	6,500	8,800	7,030	5,620
16	6,560	5,040	11,300	18,900	30,800	15,600	80,300	25,800	7,530	6,550	6,820	5,020
17	7,050	6,320	13,100	14,200	26,600	16,000	68,300	29,500	8,660	5,890	7,970	4,470
18	5,690	6,660	12,400	11,300	27,300	15,500	50,400	23,500	14,400	6,040	28,700	4,470
19	5,340	6,100	11,500	12,900	24,300	15,800	34,800	21,500	15,200	7,810	25,000	4,700
20	5,780	7,240	10,000	14,500	22,800	12,500	27,100	23,200	13,100	9,320	28,400	4,830
21	6,050	7,750	9,510	31,000	18,200	9,820	25,700	21,100	21,400	8,960	24,300	4,550
22	6,040	4,830	11,900	48,900	17,900	13,900	47,200	19,500	64,100	8,140	13,800	4,860
23	6,870	4,690	13,500	37,200	28,600	16,100	58,300	24,600	81,800	7,370	8,140	4,550
24	9,590	6,520	13,800	31,100	47,300	26,500	49,800	20,500	89,000	6,120	9,190	4,340
25	25,800	8,920	12,300	32,500	97,300	25,100	40,300	18,900	81,400	5,380	7,110	3,890
26	37,400	8,370	8,880	34,300	132,000	20,400	32,900	15,900	59,000	6,430	6,520	3,470
27	40,000	7,880	8,880	28,700	122,000	17,600	25,300	14,200	32,100	6,320	7,560	3,920
28	30,400	11,200	8,530	29,400	78,300	14,100	18,700	11,000	23,600	8,270	7,250	5,020
29	21,500	10,800	8,810	47,000	72,600	16,200	18,100	7,200	20,900	15,500	5,390	6,860
30	18,700	18,200	9,330	43,700	-----	15,900	18,200	8,890	20,000	28,100	7,060	12,200
31	16,300	-----	8,730	30,500	-----	13,400	-----	10,400	-----	49,500	6,100	-----
TOTAL	368,350	303,690	546,840	866,780	1,043,200	890,520	980,300	695,240	660,800	511,060	493,770	146,630
MEAN	11,880	10,120	17,640	27,960	35,970	28,730	32,680	22,430	22,030	16,490	15,930	4,888
MAX	40,000	22,400	58,100	56,500	132,000	84,300	80,300	54,200	89,000	63,200	44,700	12,200
MIN	5,340	4,690	8,530	8,050	12,700	9,820	9,700	7,200	5,030	5,380	5,390	2,800
CAL YR 1971	TOTAL 5,783,350		MEAN 15,840		MAX 67,500		MIN 2,000		CFSM 1.52		IN 20.64	
WTR YR 1972	TOTAL 7,507,180		MEAN 20,510		MAX 132,000		MIN 2,800		CFSM 1.97		IN 26.80	

03198450 Drawdy Creek near Peytona, W. Va.

LOCATION.--Lat 38°07'31", long 81°41'33", Boone County, on right bank 75 ft upstream from bridge at entrance to Drawdy Cemetery, 1.0 mile southwest of Peytona, and at mile 1.3.

DRAINAGE AREA.--7.75 sq mi.

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 (from topographic map). Prior to Sept. 21, 1968, SR recorder 100 ft downstream at same datum.

EXTREMES.--Current year: Maximum discharge, 491 cfs Feb. 26 (gage height, 8.57 ft), from rating curve extended as explained below; minimum, 0.24 cfs July 27 (gage height, 2.77 ft).
Period of record: Maximum discharge, 848 cfs July 18, 1971 (gage height, 10.54 ft), from rating curve extended above 130 cfs on basis of contracted-opening measurements at gage heights 6.50 and 10.54 ft; minimum, 0.07 cfs Aug. 18, 1970 (gage height, 2.74 ft).

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	3.0	7.3	3.0	15	20	9.6	8.1	2.4	2.3	1.5	.74
2	1.7	3.5	6.1	6.5	13	19	8.9	7.6	2.2	1.9	1.0	.66
3	1.6	6.4	5.5	15	16	23	8.3	7.8	2.0	1.8	2.0	.82
4	1.4	5.7	4.9	25	17	21	15	7.1	1.9	1.7	1.1	1.7
5	1.3	4.7	4.1	80	15	20	19	6.1	2.3	2.4	4.0	.90
6	1.1	3.9	3.9	60	15	17	18	5.5	1.9	1.8	2.0	.74
7	1.0	3.5	4.4	30	15	16	45	4.9	1.6	1.6	1.5	.66
8	1.0	2.9	3.0	21	13	15	78	5.5	1.7	1.4	1.0	.51
9	.90	2.6	1.7	18	12	12	38	5.9	1.6	1.2	1.0	1.0
10	.90	2.3	1.3	30	10	11	26	5.3	1.6	1.0	.90	.66
11	.82	2.0	1.2	28	9.3	9.6	21	4.7	1.4	.90	.70	.51
12	.82	1.9	9.6	24	8.9	8.6	19	4.3	1.3	.82	.55	.45
13	.74	1.8	8.3	21	40	8.1	17	4.3	2.9	.74	.70	.51
14	.74	1.7	7.3	18	64	7.8	33	4.3	2.3	.66	2.0	1.1
15	.66	1.6	6.9	14	38	7.1	42	6.1	1.6	.66	1.5	.82
16	1.3	1.4	5.9	12	25	8.3	51	5.7	1.6	.66	1.2	.66
17	1.0	1.3	5.1	10	21	9.3	43	7.6	1.6	.82	2.0	.45
18	.74	1.4	4.5	9.3	21	9.3	30	7.8	2.0	.66	9.3	.51
19	.74	1.6	4.0	8.9	24	9.3	22	7.6	1.6	.51	12	.45
20	.66	1.6	5.5	11	20	8.9	19	7.3	2.4	.45	12	.45
21	.74	1.9	5.0	14	17	8.6	21	6.6	3.0	.45	7.1	.45
22	2.4	1.8	4.5	16	19	15	94	6.1	1.6	.39	4.9	.39
23	1.6	1.6	4.0	17	19	19	56	5.7	1.3	.39	3.6	.45
24	6.9	2.4	4.0	21	139	19	33	4.9	1.1	.28	2.7	.39
25	4.3	3.0	4.0	30	108	17	24	4.3	8.3	.33	2.2	.66
26	3.5	3.0	4.0	27	245	15	18	3.8	5.7	.28	1.8	.51
27	2.9	3.8	4.0	22	73	13	14	3.3	4.1	.82	1.6	2.0
28	2.6	3.6	3.5	40	41	12	12	3.0	3.3	3.0	1.3	1.0
29	2.0	6.4	3.5	35	27	11	11	2.7	2.9	2.5	1.1	6.1
30	1.9	7.8	3.5	26	-----	9.9	9.3	2.7	2.7	2.0	1.0	7.8
31	1.8	-----	3.0	19	-----	8.9	-----	2.6	-----	1.5	.90	-----
TOTAL	51.56	90.1	247.9	711.7	1,100.2	408.7	855.1	169.2	135.1	35.92	96.05	34.05
MEAN	1.66	3.00	8.00	23.0	37.9	13.2	28.5	5.46	4.50	1.16	3.10	1.14
MAX	6.9	7.8	4.4	80	245	23	94	8.1	3.0	3.0	12	7.8
MIN	.66	1.3	3.0	3.0	8.9	7.1	8.3	2.6	1.3	.28	.55	.39
CFSM	.21	.39	1.03	2.97	4.89	1.70	3.68	.70	.58	.15	.40	.15
IN.†	.25	.43	1.19	3.42	5.28	1.96	4.10	.81	.65	.17	.46	.16
IN.††	1.96	2.27	-	-	6.53	2.43	5.41	2.28	5.18	-	-	2.37

CAL YR 1971 TOTAL 3,533.05 MEAN 9.68 MAX 160 MIN .23 CFSM 1.25 IN† 16.96
WTR YR 1972 TOTAL 3,935.58 MEAN 10.8 MAX 245 MIN .28 CFSM 1.39 IN† 18.89

PEAK DISCHARGE (BASE, 150 CFS)

† Runoff.
†† Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-24	2045	6.02	192	2-26	0515	8.57	491

KANAWHA RIVER BASIN

129

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 upstream from Lick Creek, 1.0 mile downstream from Brush Creek, 1.8 miles upstream from Bull Creek, and at mile 29.5.

DRAINAGE AREA.--393 sq mi.

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 above mean sea level. Prior to Aug. 9, 1916, non-recording gage at site 1.0 mile upstream at different datum. May 7, 1930, to Feb. 10, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--50 years, 501 cfs (17.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 20,700 cfs Feb. 26 (gage height, 23.31 ft); minimum, 50 cfs Sept. 24, 25, 26 (gage height, 1.99 ft).

Period of record: Maximum discharge observed, 35,800 cfs Aug. 9, 1916 (gage height, 36.3 ft, from floodmark, site and datum then in use, or 35.66 ft, from floodmark, present site and datum), from rating curve extended above 25,000 cfs; 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 YEARS (FEB. 1 TO SEP. 30) 1972

DAY	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
1	100	300	500	200	400	1,000	500	200	300	200	200	200	102
2	143	200	500	200	700	1,000	500	200	200	200	200	200	95
3	120	300	400	1,000	700	1,100	500	200	200	200	200	200	94
4	120	400	300	1,100	500	1,200	500	200	200	200	200	200	119
5	121	500	300	3,000	700	1,200	1,000	200	200	200	200	200	103
6	141	300	200	3,100	700	1,000	1,100	200	200	1,000	700	93	
7	125	200	1,300	1,000	700	400	1,100	200	170	500	500	86	
8	104	200	2,200	1,100	200	500	4,400	200	100	400	300	86	
9	93	200	1,000	400	500	700	2,000	300	100	200	200	81	
10	81	100	400	1,300	500	500	1,400	300	100	200	200	78	
11	46	100	100	1,000	400	500	1,100	200	100	100	100	71	
12	21	100	100	1,400	400	500	1,000	200	100	100	100	66	
13	74	100	200	1,200	400	500	1,100	200	100	100	100	63	
14	71	100	400	1,100	1,000	500	2,000	200	100	100	100	62	
15	67	100	300	200	1,000	400	4,400	500	100	100	100	75	
16	87	100	300	700	1,000	400	4,000	500	100	100	100	75	
17	204	100	300	500	1,200	400	2,000	500	100	100	100	65	
18	140	100	200	600	1,100	400	700	500	100	100	100	60	
19	147	100	200	500	1,000	400	1,000	700	500	100	100	60	
20	112	100	200	500	400	500	1,000	700	500	100	100	59	
21	99	100	300	600	500	400	400	700	200	93	1,100	61	
22	105	100	400	1,200	500	400	1,000	500	200	41	700	59	
23	123	100	300	1,200	1,200	700	2,000	2,000	400	45	400	53	
24	374	100	300	1,200	3,000	500	1,700	2,100	1,000	70	300	51	
25	703	100	300	1,000	9,100	500	1,400	1,100	800	73	200	51	
26	650	100	200	1,000	10,000	700	1,200	300	600	57	200	53	
27	512	100	200	1,400	7,500	500	400	500	400	56	100	50	
28	350	200	200	1,400	2,000	500	400	400	300	100	100	51	
29	208	500	200	1,000	1,000	500	500	300	200	100	100	144	
30	236	700	200	1,700	-----	500	600	300	200	700	100	486	
31	276	-----	200	1,100	-----	500	-----	200	-----	1,000	100	-----	
TOTAL	6,197	7,028	15,571	39,473	65,042	22,572	40,220	21,223	12,327	7,577	16,720	2,696	
MEAN	200	234	512	1,249	2,043	731	1,307	685	411	240	540	89.9	
MAX	708	722	2,200	3,800	16,000	1,700	4,400	2,100	1,000	1,000	2,000	486	
MIN	67	100	200	200	400	400	500	200	100	60	100	51	
CFSM	51	500	1,300	3,200	5,700	1,000	4,000	1,700	1,000	500	1,300	23	
IN.	5.9	6.7	1.30	3.70	6.10	2.15	4.56	2.01	1.17	0.73	1.58	0.26	

CAL YR 1971 TOTAL 206,300 MEAN 565 MAX 6,640 MIN 39 CFSM 1.44 IN 19.53
WTR YR 1972 TOTAL 265,666 MEAN 726 MAX 16,000 MIN 51 CFSM 1.85 IN 25.15

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	1530	23.31	20,700	4-14	1930	11.87	6,280
4-8	0830	11.22	5,780				

03199000 Little Coal River at Danville, W. Va.

LOCATION.--Lat 38°03'45", long 81°50'15", Boone County, on right bank at upstream side of highway bridge at Danville, 900 ft upstream from Turtle Creek, 2.3 miles downstream from confluence of Pond and Spruce Forks, and at mile 24.7.

DRAINAGE AREA.--270 sq mi.

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 above mean sea level. Prior to Oct. 1, 1941, non-recording gage at site 1.5 miles upstream at datum 6.80 ft higher.

AVERAGE DISCHARGE.--42 years, 340 cfs (17.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 13,400 cfs Feb. 26 (gage height, 21.45 ft); minimum, 38 cfs Sept. 24 (gage height, 1.94 ft).

Period of record: Maximum discharge, 42,800 cfs Feb. 3, 1939 (gage height, 30.2 ft, from floodmarks, present site and datum), from rating curve extended above 12,000 cfs on basis of slope-area measurement of peak flow; no flow at times July to October 1930.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1725: 1951(M), 1955(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	160	306	139	576	1,090	620	343	177	166	250	77
2	120	160	270	328	512	880	735	330	156	136	214	72
3	110	372	253	650	521	1,060	705	357	138	141	138	74
4	102	336	237	850	527	935	920	313	124	146	1,010	82
5	128	288	199	2,980	443	935	1,010	282	179	313	560	78
6	130	248	184	1,770	450	805	1,010	254	136	400	309	74
7	107	224	1,320	1,030	479	710	1,410	238	136	271	211	69
8	95	180	1,290	730	417	745	3,300	254	113	199	166	72
9	91	160	805	650	400	650	1,570	343	107	156	185	77
10	86	152	615	1,030	368	540	1,210	357	111	127	232	72
11	80	137	533	996	347	465	995	339	109	113	161	66
12	79	128	434	803	330	405	1,130	325	94	107	127	61
13	76	120	388	701	923	385	1,300	313	98	102	107	59
14	72	110	344	680	1,650	334	5,320	317	148	93	93	61
15	70	104	320	573	1,130	330	3,450	415	100	88	78	82
16	72	99	296	481	865	361	3,240	595	174	86	85	59
17	95	95	264	478	755	435	2,060	630	257	100	80	51
18	75	91	236	410	670	450	1,630	570	179	88	465	50
19	72	93	200	391	670	410	1,240	515	156	96	1,210	46
20	70	99	260	400	610	370	975	560	156	90	965	46
21	66	101	248	670	560	348	820	505	410	80	540	48
22	94	97	216	781	695	590	1,440	485	895	80	313	48
23	112	85	200	759	880	810	1,310	1,700	725	74	235	42
24	680	94	200	916	4,220	825	990	970	750	70	177	42
25	625	125	188	1,180	4,650	890	815	620	665	67	143	61
26	461	112	180	1,040	9,720	750	665	440	475	66	131	48
27	388	129	178	824	3,170	705	560	339	321	61	113	61
28	320	170	178	1,300	1,970	655	480	275	238	72	102	96
29	240	254	168	1,390	1,400	635	425	238	202	151	93	88
30	180	312	158	974	-----	680	390	211	174	450	85	390
31	160	-----	150	722	-----	630	-----	211	-----	475	82	-----
TOTAL	5,190	4,835	10,818	26,626	39,910	19,723	41,725	13,644	7,703	4,664	8,660	2,252
MEAN	167	161	349	859	1,376	636	1,391	440	257	150	279	75.1
MAX	680	372	1,320	2,980	9,720	1,090	5,320	1,700	895	475	1,210	390
MIN	66	85	150	139	330	330	390	211	94	61	78	42
CFSM	.62	.60	1.29	3.18	5.10	2.36	5.15	1.63	.95	.56	1.03	.28
IN.	.72	.67	1.49	3.67	5.50	2.72	5.75	1.88	1.06	.64	1.19	.31
CAL YR 1971	TOTAL 157,781		MEAN 432	MAX 4,960	MIN 40	CFSM 1.60	IN 21.74					
WTR YR 1972	TOTAL 185,750		MEAN 508	MAX 9,720	MIN 42	CFSM 1.88	IN 25.59					

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	1145	21.45	13,400	4-14	1330	16.68	8,580
4-8	0245	12.93	5,810				

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 mile upstream from Falls Creek and at mile 11.5.

DRAINAGE AREA.--861 sq mi, 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.--Nonrecording gage. Datum of gage is 570.46 ft above mean sea level. Prior to Aug. 1, 1961 at different datum.

AVERAGE DISCHARGE.--16 years (1908-11, 1929-31, 1961-72), 1,206 cfs (19.02 inches per year).

EXTREMES.--Maximum and minimum discharges for the water years 1961-72 are contained in the following table:

Water year	Maximum			Minimum Daily	
	Date	Discharge (cfs)	Gage height (feet)	Date	Discharge (cfs)
1961 ^a	Aug. 2, 1961	al,080	-	Aug. 24, Sept. 30, 1961	130
1962	Feb. 28, 1962	31,000	b29.00	Oct. 2, 1961	40
1963	Mar. 13, 1963	32,700	30.14	Sept. 27, 28, 1963	30
1964	Mar. 9, 1964	16,200	19.33	Sept. 15, 16, 1964	6.2
1965	Mar. 25, 1965	19,900	21.65	Sept. 8-10, 1965	173
1966	May 1, 1966	7,830	14.42	Sept. 12, 1966	138
1967	Mar. 7, 1967	35,500	31.98	Sept. 18, 1967	228
1968	Mar. 13, 1968	19,800	21.59	Oct. 12, 13, 15, 16, 1967	356
1969	Aug. 20, 1969	10,100	15.49	Oct. 2, 1968	367
1970	Dec. 31, 1969	33,800	30.89	Sept. 27, 1970	230
1971	Feb. 5, 1971	15,500	b18.85	Oct. 11, 19, 1970	55
1972	Feb. 27, 1972	25,600	b25.38	Oct. 14, 1971, Sept. 15, 1972	208

^a Period August to September.

^a Maximum daily.

^b From graph based on gage readings.

Period of record: Maximum discharge, 35,500 cfs Mar. 7, 1967 (gage height, 31.98 ft); minimum (estimated), 2.0 cfs Oct. 1-10, 1930.

REMARKS.--Records fair.

COOPERATION.--Gage-height record furnished by U.S. Weather Bureau.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST-SEPTEMBER 1961											
Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	1,010	250	9	520	270	17	200	300	25	400	140
2	1,080	230	10	468	380	18	140	210	26	700	150
3	935	210	11	598	300	19	140	170	27	950	170
4	1,020	200	12	520	240	20	150	150	28	700	200
5	850	190	13	740	210	21	140	170	29	450	150
6	750	180	14	650	190	22	160	180	30	280	130
7	650	230	15	468	170	23	140	160	31	260	
8	560	200	16	320	160	24	130	150			
TOTAL.....										16,079	6,040
MEAN.....										519	201
MAXIMUM.....										1,080	380
MINIMUM.....										130	130
CFSM.....										.60	.23
IN.....										.69	.26

NOTE.--Doubtful or no gage-height record Aug. 16 to Sept. 30.

KANAWHA RIVER BASIN

03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1961 TO SEPTEMBER 1962

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	367	890	1,420	1,830	10,600	1,850	7,260	598	378	695	152
2	40	367	890	1,330	1,890	5,410	1,850	3,450	533	442	637	152
3	73	378	559	1,260	1,830	3,700	1,690	2,450	740	637	429	166
4	665	520	710	1,210	1,930	2,710	1,520	1,930	710	2,730	390	208
5	637	356	585	1,160	1,970	2,700	1,410	1,560	611	4,180	390	220
6	546	559	611	1,350	2,030	3,490	1,350	1,300	665	2,050	367	228
7	390	665	637	4,970	1,850	2,940	3,240	995	559	1,500	403	208
8	298	572	572	4,690	1,670	3,780	6,420	860	770	2,190	468	208
9	218	533	585	2,920	1,630	4,310	4,160	785	710	1,440	378	208
10	180	533	1,710	2,190	3,150	4,900	2,900	920	429	2,430	403	180
11	180	455	1,330	1,520	3,850	5,920	2,730	920	356	1,520	403	159
12	199	442	1,710	1,160	3,050	6,330	3,340	920	468	1,100	378	138
13	138	442	2,820	1,080	2,430	5,720	5,280	740	416	860	378	152
14	190	455	4,200	1,190	2,090	4,100	5,040	740	611	725	344	256
15	199	455	2,820	1,080	1,790	3,000	3,640	665	572	1,330	332	220
16	180	455	2,050	2,370	1,710	2,700	2,920	598	481	6,440	321	256
17	152	442	3,180	2,370	1,910	1,610	2,430	598	390	5,040	378	228
18	159	403	8,420	2,210	1,870	1,560	2,130	585	321	1,650	275	166
19	159	403	9,680	1,990	1,910	1,540	1,870	637	332	1,230	246	145
20	159	403	4,500	1,830	1,930	1,520	1,610	637	637	995	218	173
21	237	403	3,070	1,540	2,030	2,570	1,300	572	1,170	800	256	190
22	815	429	2,410	2,050	2,050	4,950	1,300	481	2,920	890	246	190
23	1,300	367	2,090	5,740	1,710	4,710	1,300	572	2,500	890	390	110
24	1,200	1,170	1,890	8,130	2,070	3,620	965	507	2,190	1,460	275	84
25	900	3,660	1,710	7,160	3,760	2,670	980	442	2,500	1,460	218	138
26	637	1,730	1,520	3,070	5,630	1,630	980	494	875	1,520	208	166
27	520	1,350	1,460	2,840	19,600	2,050	965	572	695	1,320	208	256
28	520	1,200	1,910	2,840	25,900	1,650	905	1,160	637	1,010	218	367
29	416	1,100	2,250	2,510	-----	1,540	920	1,330	520	830	166	367
30	367	980	2,290	1,910	-----	1,410	6,950	2,840	455	815	180	390
31	367	-----	2,010	2,030	-----	2,290	-----	740	-----	935	152	-----
TOTAL	12,103	21,594	71,069	79,120	105,070	107,630	73,945	38,260	25,371	50,797	10,350	6,081
MEAN	390	720	2,293	2,552	3,753	3,472	2,465	1,234	846	1,639	334	203
MAX	1,300	3,660	9,680	8,130	25,900	10,600	6,950	7,260	2,920	6,440	695	390
MIN	40	356	559	1,080	1,630	1,410	905	442	321	378	152	84
CFSM	.45	.84	2.66	2.96	4.36	4.03	2.86	1.43	.98	1.90	.39	.24
IN.	.52	.93	3.07	3.42	4.54	4.65	3.19	1.65	1.10	2.19	.45	.26

WTR YR 1962 TOTAL 601,390 MEAN 1,648 MAX 25,900 MIN 40 CFSM 1.91 IN 25.98

PEAK DISCHARGE, (BASE, 16,000 CFS).--Feb 28 (1100) 31,000 cfs (29.00 ft, from graph based on gage readings).

KANAWHA RIVER BASIN

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03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1962 TO SEPTEMBER 1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	367	815	860	3,360	1,100	1,710	1,320	650	1,730	1,440	367	95
2	310	665	755	3,220	1,280	3,720	1,150	637	1,160	1,480	286	90
3	367	611	710	1,650	6,030	4,650	1,120	572	555	1,020	246	85
4	298	520	572	1,550	6,050	2,250	1,040	520	535	740	190	100
5	275	481	665	1,460	3,260	6,070	980	520	555	533	228	130
6	344	442	980	1,350	2,450	11,300	860	494	920	403	237	110
7	321	442	845	1,240	2,150	10,600	785	468	860	533	246	90
8	344	455	980	1,190	1,890	4,860	875	468	1,260	416	246	75
9	344	520	1,080	1,120	1,560	3,130	860	416	1,850	344	232	65
10	275	4,950	935	1,070	1,390	2,450	860	390	1,320	321	256	60
11	310	6,970	845	1,370	1,570	2,150	815	344	2,520	275	210	50
12	286	3,660	800	2,210	2,650	20,500	830	356	2,690	199	275	45
13	256	1,970	750	5,040	2,190	21,700	650	344	695	180	218	150
14	237	1,300	1,200	2,780	2,470	5,280	710	403	507	228	494	275
15	218	595	1,060	2,290	1,990	3,280	680	468	390	190	208	159
16	237	890	995	2,270	1,700	2,860	680	416	403	150	237	152
17	429	1,010	905	1,560	1,370	5,620	624	416	416	120	208	130
18	356	1,540	1,060	1,480	1,200	10,300	624	4,600	403	110	190	100
19	356	3,660	2,730	1,520	1,610	11,100	600	2,270	344	100	208	80
20	275	4,220	2,150	1,410	2,570	10,600	620	1,560	232	546	190	70
21	246	2,070	7,220	1,390	3,830	6,720	624	1,140	2,030	740	208	55
22	237	6,620	7,240	1,210	3,220	4,750	624	905	1,500	665	785	50
23	218	5,340	5,650	1,100	3,180	3,240	637	830	555	403	481	40
24	442	3,550	3,990	1,000	2,230	2,570	680	655	830	332	403	40
25	286	2,210	2,530	940	1,990	2,470	558	650	559	310	152	35
26	256	1,770	2,430	900	1,870	2,230	611	611	442	208	155	35
27	256	1,390	2,450	920	1,630	2,070	533	572	378	286	166	30
28	173	1,190	2,390	940	1,830	1,870	559	585	321	166	145	30
29	256	1,060	2,350	960	-----	1,620	598	2,510	665	180	124	50
30	286	595	5,540	1,000	-----	1,480	624	2,490	815	298	105	100
31	800	-----	7,220	1,100	-----	1,420	-----	2,470	-----	356	100	-----
TOTAL	9,661	62,311	70,287	50,720	66,260	174,640	22,811	29,770	29,660	13,272	8,140	2,576
MEAN	312	2,077	2,267	1,636	2,366	5,634	760	960	989	428	263	85.9
MAX	800	6,970	7,240	5,040	6,050	21,700	1,320	4,600	2,920	1,480	785	275
MIN	173	442	572	900	1,100	1,420	533	344	321	100	100	30
CFSM	.36	2.41	2.63	1.50	2.75	6.54	.88	1.12	1.15	.50	.31	.10
IN.	.42	2.69	3.04	2.19	2.86	7.55	.95	1.29	1.28	.57	.35	.11

CAL YR 1962 TOTAL 628,883 MEAN 1,750 MAX 25,900 MIN 84 CFSM 2.03 IN 27.60
WTR YR 1963 TOTAL 540,108 MEAN 1,480 MAX 21,700 MIN 30 CFSM 1.72 IN 23.34
PEAK DISCHARGE (BASE, 16,000 CFS)--Mar. 13 (0030) 32,700 cfs (30.14 ft).

KANAWHA RIVER BASIN

03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1963 TO SEPTEMBER 1964

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	99	1,280	250	624	1,350	815	785	300	110	100	94
2	50	105	980	260	585	1,890	860	637	356	100	100	89
3	37	117	740	290	468	5,410	965	680	320	110	110	84
4	35	256	611	330	378	7,220	1,370	546	290	110	120	68
5	32	298	546	400	286	6,180	1,910	520	280	120	140	62
6	30	266	546	468	356	5,230	1,790	500	260	130	200	68
7	28	256	546	1,080	2,760	3,450	1,590	470	250	120	150	62
8	26	286	546	3,700	3,510	3,380	1,770	440	270	110	110	40
9	25	481	468	2,730	2,370	10,400	2,410	410	310	100	90	40
10	24	378	725	5,280	1,870	6,620	2,010	390	290	110	70	33
11	23	321	815	3,240	1,670	4,540	1,750	370	260	120	85	26
12	23	275	585	2,130	1,230	3,380	1,440	350	230	120	110	10
13	22	275	611	1,440	1,140	2,470	1,280	340	210	250	150	10
14	22	173	1,080	860	1,790	1,950	1,190	350	190	400	94	10
15	21	173	572	624	2,610	2,230	1,070	380	170	320	152	6.2
16	21	180	494	520	5,210	4,840	920	470	210	240	138	6.2
17	21	145	430	470	5,280	3,660	815	400	230	170	110	12
18	23	152	370	460	4,670	2,670	770	360	180	130	110	10
19	21	166	330	624	4,520	1,990	1,650	320	150	140	110	17
20	15	166	290	815	4,100	1,630	5,340	310	180	120	110	26
21	15	180	250	1,300	2,900	1,610	5,830	290	160	110	110	50
22	16	199	250	2,490	2,210	1,610	3,280	280	140	180	110	84
23	16	199	270	1,600	1,670	1,570	2,330	260	130	250	124	117
24	19	180	360	1,600	1,540	1,560	1,830	250	120	130	117	110
25	25	166	420	1,600	1,420	1,480	1,480	250	140	140	84	84
26	57	298	400	1,900	1,320	1,410	1,120	280	180	130	62	84
27	78	344	430	1,500	1,230	1,190	1,100	300	160	150	62	84
28	78	416	470	1,160	1,170	1,070	1,100	270	150	140	68	110
29	54	416	400	815	1,300	980	995	260	140	130	84	110
30	78	2,610	340	695	-----	1,040	980	340	120	120	84	173
31	62	-----	290	650	-----	1,010	-----	250	-----	110	94	-----
TOTAL	1,067	9,576	16,445	41,281	60,187	95,020	51,760	12,058	6,376	4,720	3,358	1,779.4
MEAN	34.4	319	530	1,332	2,075	3,065	1,725	389	213	152	103	59.3
MAX	78	2,610	1,280	5,280	5,280	10,400	5,830	785	356	400	200	173
MIN	15	99	250	250	286	980	770	250	120	100	62	6.2
CFSM	.04	.37	.62	1.55	2.41	3.56	2.00	.45	.25	.18	.13	.07
IN.	.05	.41	.71	1.78	2.60	4.11	2.24	.52	.28	.20	.15	.08

CAL YR 1963 TOTAL 424,937.0 MEAN 1,164 MAX 21,700 MIN 15 CFSM 1.35 IN 18.36

WTR YR 1964 TOTAL 303,627.4 MEAN 830 MAX 10,400 MIN 6.2 CFSM .96 IN 13.12

PEAK DISCHARGE (BASE, 16,000 CFS).--Mar. 9 (1300) 16,200 cfs (19.33 ft).

NOTE.--Doubtful or no gage-height record June 3 to Aug. 13.

KANAWHA RIVER BASIN

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03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1964 TO SEPTEMBER 1965

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,510	321	800	1,100	1,100	2,050	2,710	2,070	442	286	390	332
2	1,170	321	755	2,800	1,000	1,830	2,310	1,810	344	585	298	286
3	800	321	740	3,110	900	2,050	2,130	1,610	1,730	455	275	246
4	920	332	3,700	3,360	850	2,250	1,850	1,410	1,060	507	344	228
5	3,680	321	2,570	2,550	750	2,390	1,710	1,280	740	585	332	228
6	1,630	321	2,070	1,990	700	2,270	1,610	1,460	637	1,210	286	218
7	1,010	256	1,650	1,690	1,170	2,070	1,590	1,330	559	875	256	208
8	815	310	1,390	1,460	3,620	1,950	1,650	1,170	546	845	298	173
9	650	286	1,210	1,650	3,240	1,930	1,870	1,570	507	624	286	173
10	416	298	1,060	5,300	2,530	1,890	4,930	1,410	468	650	321	173
11	367	332	995	11,100	2,190	1,830	4,160	1,190	442	290	298	208
12	321	321	2,880	4,860	1,910	1,710	5,100	1,100	598	286	286	310
13	321	310	2,880	3,700	1,600	1,610	3,490	965	546	270	275	695
14	298	321	2,710	2,780	1,400	1,440	2,730	890	429	250	237	481
15	286	275	1,810	2,390	1,190	1,330	3,070	860	429	286	228	403
16	266	286	1,410	2,100	1,100	1,240	3,300	785	390	1,010	228	356
17	321	298	1,260	1,870	1,000	1,080	3,180	755	378	740	199	310
18	266	286	1,170	1,630	1,000	1,630	3,050	725	403	650	199	481
19	378	332	1,080	1,370	950	2,780	3,280	680	403	455	218	442
20	310	403	1,040	1,230	900	2,350	3,180	650	356	455	321	403
21	286	665	995	1,230	850	2,010	2,880	611	298	390	416	332
22	275	520	995	1,170	800	1,850	2,470	830	321	390	442	286
23	275	416	1,060	1,210	750	1,790	2,210	785	356	403	481	286
24	275	416	1,060	1,520	700	2,760	2,110	598	356	378	481	403
25	275	507	1,060	3,130	2,150	5,630	2,050	572	442	344	403	356
26	256	390	1,160	2,840	3,320	16,700	3,130	559	332	332	356	367
27	218	2,350	2,170	2,310	2,690	11,500	5,760	598	310	710	321	367
28	266	1,540	2,670	1,890	2,430	6,510	2,940	546	286	533	298	367
29	286	1,120	1,370	1,710	-----	3,910	3,090	572	286	481	310	356
30	332	1,080	1,300	1,370	-----	3,360	2,470	665	310	356	332	286
31	321	-----	1,200	1,170	-----	2,920	-----	494	-----	455	390	-----
TOTAL	19,800	15,255	48,220	77,590	42,790	96,620	86,010	30,550	14,704	16,086	9,805	9,760
MEAN	639	509	1,555	2,503	1,528	3,117	2,867	985	490	519	316	325
MAX	3,680	2,350	3,700	11,100	3,620	16,700	5,760	2,070	1,730	1,210	481	695
MIN	218	256	740	1,100	700	1,080	1,590	494	286	250	199	173
CFSM	.74	.59	1.81	2.91	1.77	3.62	3.33	1.14	.57	.60	.37	.38
IN.	.86	.66	2.08	3.35	1.85	4.17	3.72	1.32	.64	.70	.42	.42

CAL YR 1964 TOTAL 359,814.4 MEAN 983 MAX 10,400 MIN 6.2 CFSM 1.14 IN 15.55
WTR YR 1965 TOTAL 467,190.0 MEAN 1,280 MAX 16,700 MIN 173 CFSM 1.49 IN 20.19
-PEAK DISCHARGE (BASE, 16,000 CFS).--Mar. 25 (1900) 19,900 cfs (21.65 ft).

KANAWHA RIVER BASIN

03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	356	481	390	350	1,040	950	7,830	481	218	278	266
2	310	344	442	468	360	3,530	905	6,970	481	208	218	246
3	367	321	429	695	380	2,610	950	6,220	481	218	310	237
4	403	332	390	845	410	2,090	980	4,330	481	256	266	237
5	390	332	367	815	460	2,090	1,080	3,050	442	246	275	218
6	332	332	356	845	520	1,830	1,100	2,410	429	218	246	218
7	367	332	378	1,040	585	1,690	1,120	1,830	416	218	256	199
8	403	332	367	1,190	725	1,570	1,120	1,540	416	218	237	190
9	481	332	356	1,010	455	1,230	1,100	1,330	416	218	256	173
10	481	344	356	755	3,720	1,120	1,010	1,230	416	218	286	166
11	481	344	367	755	4,500	1,020	995	1,160	390	218	321	152
12	494	378	367	533	2,300	980	1,170	1,060	356	208	321	138
13	442	378	356	611	2,330	935	5,500	1,060	344	332	468	152
14	356	378	367	507	4,930	905	5,670	1,010	344	332	481	246
15	356	378	378	442	3,110	860	4,440	1,010	344	650	442	1,540
16	356	378	378	378	2,090	845	3,110	1,010	332	546	442	1,170
17	356	378	378	378	2,300	800	2,630	950	321	416	442	755
18	356	367	378	416	2,500	755	2,010	905	321	481	520	637
19	310	378	367	390	2,090	740	1,730	890	321	332	442	637
20	298	356	356	403	1,830	710	1,540	890	321	332	455	494
21	310	378	356	378	1,260	695	1,300	845	321	650	481	559
22	344	367	367	378	1,060	650	1,300	785	321	572	585	598
23	356	367	367	442	875	650	1,190	755	298	416	611	1,120
24	416	367	367	442	840	695	1,190	650	298	378	680	1,040
25	455	378	378	507	820	1,070	1,190	572	286	344	611	725
26	356	378	356	507	780	1,060	1,560	572	266	286	533	665
27	429	442	356	507	760	1,060	1,560	546	246	275	494	611
28	429	442	356	455	875	1,060	2,070	572	228	286	442	585
29	429	442	356	430	-----	980	4,120	572	218	218	356	1,350
30	356	481	378	400	-----	950	4,080	507	228	218	344	1,120
31	360	-----	378	370	-----	950	-----	481	-----	218	298	-----
TOTAL	11,911	11,112	11,629	17,682	43,215	37,170	58,670	53,542	10,563	9,944	12,347	16,444
MEAN	384	370	375	570	1,543	1,199	1,956	1,727	352	321	398	548
MAX	494	481	481	1,190	4,930	3,530	5,670	7,830	481	650	680	1,540
MIN	298	321	356	370	350	650	905	481	218	208	218	138
CFSM	.45	.43	.44	.66	1.79	1.39	2.27	2.01	.41	.37	.46	.64
IN.	.51	.48	.50	.76	1.87	1.61	2.53	2.31	.46	.43	.53	.71

CAL YR 1965 TOTAL 418,567 MEAN 1,147 MAX 16,700 MIN 173 CFSM 1.33 IN 18.08

WTR YR 1966 TOTAL 294,229 MEAN 806 MAX 7,830 MIN 138 CFSM .94 IN 12.71

PEAK DISCHARGE (BASE 16,000 CFS).--No peak-above base.

03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	965	572	2,190	2,650	1,630	3,050	1,320	1,890	1,410	965	637	520
2	1,990	611	2,070	2,290	1,500	2,670	1,300	1,990	2,130	755	695	494
3	1,670	680	1,870	2,010	2,090	2,610	1,240	2,050	2,050	7,410	572	468
4	1,260	2,390	1,730	1,830	2,050	3,010	1,230	1,990	1,480	2,690	665	442
5	960	1,440	1,480	1,630	1,970	4,330	1,190	1,890	1,320	1,690	585	416
6	875	1,170	1,670	1,500	1,950	7,370	1,060	1,770	1,140	1,240	546	390
7	680	1,140	2,800	1,260	1,770	27,400	1,060	4,100	1,040	1,320	507	373
8	572	1,040	3,070	1,320	1,540	22,600	1,070	3,950	920	1,120	367	356
9	585	980	2,450	1,370	1,210	5,630	1,060	3,930	860	1,040	463	390
10	611	980	2,090	1,390	1,390	3,910	1,140	3,800	815	980	455	378
11	598	950	4,640	1,390	1,420	3,150	1,790	3,240	785	860	442	367
12	695	1,420	5,280	1,300	1,690	2,690	1,570	3,970	725	860	442	367
13	559	1,210	3,360	1,240	1,730	2,370	1,370	4,990	680	890	416	344
14	533	1,010	2,530	1,280	1,670	7,200	1,590	5,190	637	905	390	344
15	507	1,120	2,050	1,480	1,630	16,300	1,480	19,400	611	860	356	344
16	546	1,040	1,710	1,420	1,670	13,900	1,440	18,400	598	710	356	310
17	611	965	1,480	1,390	1,690	5,740	1,370	7,580	572	680	356	298
18	665	860	1,350	1,320	1,690	3,890	1,710	4,540	572	665	367	228
19	611	330	1,260	1,080	1,690	2,990	1,730	3,530	695	611	356	275
20	980	785	1,240	1,010	1,670	2,510	1,670	3,010	995	665	344	237
21	935	740	1,100	920	4,140	2,630	1,570	2,450	785	611	468	275
22	905	710	1,080	905	5,720	3,010	2,190	2,270	598	770	507	321
23	785	665	1,060	880	4,040	2,990	3,280	1,910	624	665	455	344
24	800	680	1,040	860	3,110	2,650	3,300	1,670	660	585	442	344
25	740	624	1,040	840	2,230	2,310	2,600	1,480	598	637	650	344
26	725	611	900	810	2,170	2,110	2,030	1,320	559	710	572	332
27	665	624	845	780	2,030	1,870	2,070	1,240	755	624	500	332
28	650	770	905	1,810	2,190	1,690	2,090	1,120	611	585	1,810	403
29	637	2,990	6,310	2,010	-----	1,630	2,090	1,040	611	585	1,170	429
30	637	2,860	3,620	1,910	-----	1,560	1,890	1,330	611	830	800	800
31	598	-----	2,990	1,770	-----	1,330	-----	1,410	-----	740	665	-----
TOTAL	24,570	32,467	67,210	43,655	59,280	167,100	50,500	118,450	26,447	34,258	17,361	11,270
MEAN	793	1,082	2,168	1,408	2,117	5,390	1,683	3,821	882	1,105	560	376
MAX	1,990	2,990	6,310	2,650	5,720	27,400	3,300	19,400	2,130	7,410	1,810	800
MIN	507	572	845	780	1,210	1,330	1,060	1,040	559	585	344	228
CFSM	.92	1.26	2.52	1.64	2.46	6.26	1.95	4.44	1.02	1.28	.65	.44
IN.	1.06	1.40	2.90	1.89	2.56	7.22	2.18	5.12	1.14	1.48	.75	.49

CAL YR 1966 TOTAL 383,824 MEAN 1,052 MAX 7,830 MIN 138 CFSM 1.22 IN 16.58
WTR YR 1967 TOTAL 652,568 MEAN 1,788 MAX 27,400 MIN 228 CFSM 2.08 IN 28.19

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-7	2200	31.98	35,500	5-16	0700	22.84	21,800
3-15	1900	21.39	19,500				

KANAWHA RIVER BASIN

03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	598	494	6,880	1,120	3,320	755	2,390	1,440	4,270	665	875	481
2	507	585	3,320	995	2,710	785	3,660	1,440	3,050	611	845	481
3	429	770	2,730	1,710	2,410	755	3,130	1,330	2,800	680	815	468
4	390	995	3,660	2,370	2,090	695	5,200	1,240	2,190	890	800	403
5	367	905	2,940	4,330	1,830	770	9,050	1,210	1,930	665	611	455
6	367	830	2,150	3,240	1,570	905	5,040	1,080	1,610	624	1,460	455
7	367	755	1,710	2,590	1,570	1,040	3,570	1,010	1,370	572	1,040	481
8	367	800	1,480	1,990	1,570	1,040	2,840	935	1,230	546	1,500	507
9	367	665	1,260	1,700	1,390	1,060	2,450	905	1,120	520	2,000	455
10	390	637	1,140	1,500	1,300	1,300	2,110	860	1,010	481	3,030	637
11	390	611	1,610	1,480	1,200	2,650	1,930	860	965	455	6,860	1,350
12	356	572	2,840	1,450	1,100	12,500	1,770	860	905	455	3,300	935
13	356	533	2,250	1,410	1,000	16,300	1,590	845	1,570	665	1,850	815
14	367	442	1,540	1,830	980	6,290	1,520	815	935	710	1,410	740
15	356	520	1,370	2,190	995	3,910	1,500	965	785	650	2,110	650
16	356	494	1,240	1,930	980	3,090	1,410	1,070	830	585	1,630	585
17	367	507	1,210	1,710	980	3,510	1,320	1,060	1,350	520	1,390	546
18	390	494	1,990	1,570	905	4,670	1,240	920	830	481	1,240	507
19	830	442	2,270	1,750	905	3,640	1,190	1,140	995	546	1,790	481
20	965	481	2,070	2,150	905	2,920	1,140	1,070	905	481	1,330	533
21	845	468	2,470	2,670	890	2,430	1,100	995	755	546	1,060	546
22	755	494	5,980	4,770	890	2,610	1,060	935	725	481	905	533
23	680	680	7,010	6,800	785	3,830	1,010	905	845	598	785	481
24	533	1,670	5,780	6,800	785	4,350	1,040	1,140	875	980	710	468
25	481	1,440	2,710	4,500	830	3,320	980	3,850	1,070	680	611	455
26	546	2,150	2,190	3,570	830	2,780	965	3,200	830	650	611	442
27	800	1,560	1,790	2,470	710	2,370	935	3,470	1,320	1,170	598	416
28	695	1,170	1,560	2,150	755	2,090	1,040	17,300	1,070	980	533	390
29	611	1,060	1,570	2,030	785	1,910	1,060	5,280	875	815	520	390
30	572	1,060	1,320	2,510	-----	1,890	1,020	3,430	755	680	507	390
31	533	-----	1,240	3,550	-----	1,710	-----	4,690	-----	650	481	-----
TOTAL	15,933	24,304	79,280	80,835	36,970	97,875	64,260	66,250	39,770	20,032	43,207	16,476
MEAN	514	810	2,557	2,608	1,275	3,157	2,142	2,137	1,326	646	1,394	549
MAX	965	2,150	7,010	6,800	3,320	16,300	9,050	17,300	4,270	1,170	6,860	1,350
MIN	356	442	1,140	995	710	695	935	815	725	455	481	390
CFSM	.60	.94	2.97	3.03	1.48	3.67	2.49	2.48	1.54	.75	1.62	.64
IN.	.69	1.05	3.43	3.49	1.60	4.23	2.78	2.86	1.72	.87	1.87	.71

CAL YR 1967 TOTAL 647,338 MEAN 1,775 MAX 27,400 MIN 228 CFSM 2.06 IN 27.99
WTR YR 1968 TOTAL 585,192 MEAN 1,599 MAX 17,300 MIN 356 CFSM 1.86 IN 25.28

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-13	0300	21.59	19,800	5-28	0730	20.00	17,300

03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	390	481	785	1,350	1,480	965	1,870	1,610	665	860	585	533
2	367	481	785	1,080	1,690	965	1,870	1,480	637	1,370	572	520
3	416	481	785	935	1,830	950	2,330	1,390	650	1,070	740	740
4	755	468	1,160	980	1,630	875	2,730	1,280	611	890	559	710
5	680	468	2,210	980	1,480	935	2,670	1,210	598	800	680	585
6	546	468	2,150	637	1,420	920	2,570	1,100	598	710	611	680
7	680	481	1,630	980	1,850	905	2,940	1,060	680	770	546	980
8	695	598	1,410	980	1,870	965	2,780	980	611	1,190	546	1,040
9	624	1,240	1,240	875	2,170	965	2,390	1,240	598	965	494	1,300
10	572	1,070	1,200	860	2,780	1,080	2,090	4,180	1,140	2,500	2,010	950
11	533	920	1,100	860	2,800	1,390	1,930	2,800	845	3,620	1,420	800
12	507	860	980	860	2,710	1,410	1,690	2,900	755	4,930	890	710
13	481	995	905	860	2,390	1,350	1,540	2,530	680	4,620	725	637
14	481	1,120	890	860	1,870	1,260	1,420	2,070	665	3,620	637	598
15	481	1,040	905	860	1,750	1,210	1,410	2,270	624	2,210	559	546
16	481	1,100	845	845	1,570	1,170	1,520	2,070	890	1,540	546	533
17	468	1,480	572	860	1,500	1,160	1,950	1,830	905	1,560	533	520
18	468	1,350	800	875	1,420	1,120	1,750	1,610	755	1,260	585	546
19	815	1,970	875	980	1,300	1,120	3,090	1,420	680	1,040	585	533
20	1,080	1,950	980	1,080	1,210	1,160	3,220	1,350	680	920	6,620	546
21	950	1,560	980	2,800	1,060	1,080	2,840	1,240	624	710	3,950	494
22	920	1,300	995	3,570	1,060	1,170	2,470	1,100	585	800	1,930	494
23	665	1,170	1,770	2,730	1,060	1,570	2,330	1,080	585	860	1,300	494
24	598	1,080	2,190	2,290	1,040	2,730	2,450	890	650	1,350	890	481
25	559	1,060	1,930	1,970	1,040	2,390	3,010	965	624	1,460	755	481
26	520	1,020	1,570	1,570	1,040	2,070	2,800	875	5,500	1,040	695	494
27	520	965	1,410	1,350	1,020	2,070	2,550	860	2,330	875	650	507
28	520	995	1,370	1,320	965	2,110	2,190	860	1,440	680	611	481
29	481	875	1,930	1,280	-----	1,750	2,070	725	1,040	740	598	416
30	520	845	1,570	1,260	-----	1,890	1,830	680	995	650	585	416
31	507	-----	1,440	1,190	-----	1,870	-----	680	-----	598	572	-----
TOTAL	18,280	29,891	39,362	39,927	45,005	42,575	68,300	46,335	28,640	46,208	32,979	18,765
MEAN	590	996	1,270	1,288	1,607	1,373	2,277	1,495	955	1,491	1,064	626
MAX	1,080	1,970	2,210	3,570	2,800	2,730	3,220	4,180	5,500	4,930	6,620	1,300
MIN	367	468	572	637	965	875	1,410	680	585	598	494	416
CFSM	.69	1.16	1.48	1.50	1.87	1.59	2.64	1.74	1.11	1.73	1.24	.73
IN.	.79	1.29	1.70	1.73	1.94	1.84	2.95	2.00	1.24	2.00	1.42	.81

CAL YR 1968 TOTAL 553,208 MEAN 1,511 MAX 17,300 MIN 367 CFSM 1.75 IN 23.90

WTR YR 1969 TOTAL 456,267 MEAN 1,250 MAX 6,620 MIN 367 CFSM 1.45 IN 19.71

PEAK DISCHARGE (BASE, 16,000 CFS).--No peak above base.

03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	429	481	665	13,800	2,900	900	2,570	2,610	572	403	344	390
2	442	637	624	4,330	2,490	1,100	4,460	2,110	546	403	344	546
3	455	1,020	598	3,110	2,030	1,350	6,160	1,910	533	494	344	390
4	442	890	598	2,470	2,130	1,170	4,330	1,670	598	598	468	321
5	403	785	572	1,930	2,130	2,370	3,240	1,500	624	1,040	481	494
6	403	710	598	1,730	1,160	2,940	2,610	1,300	546	637	481	740
7	403	680	598	1,440	2,000	2,410	2,410	1,230	598	533	378	585
8	455	598	650	1,300	2,130	2,090	2,110	1,120	559	468	332	481
9	546	611	695	1,170	3,050	1,910	1,910	1,120	533	637	332	468
10	533	598	710	1,080	5,720	1,710	1,810	1,120	520	1,280	481	390
11	481	598	3,260	1,120	5,040	1,710	1,750	965	598	1,080	665	356
12	468	572	3,700	1,260	3,850	2,650	1,610	1,320	546	815	572	356
13	442	572	2,470	1,260	2,650	6,330	1,690	1,870	585	665	494	442
14	429	598	1,970	1,190	2,450	3,780	1,560	1,770	572	585	429	442
15	416	637	1,750	1,190	13,100	2,840	1,610	1,650	665	520	378	390
16	416	725	1,480	1,190	24,600	2,330	1,590	1,390	559	481	367	344
17	416	665	1,210	1,170	8,210	2,050	1,570	1,300	546	455	344	298
18	403	650	1,160	1,140	4,750	1,790	1,570	1,300	546	429	321	266
19	403	680	1,080	1,170	3,990	2,070	1,520	1,230	611	403	310	310
20	390	875	1,080	1,440	3,180	2,150	1,570	1,120	572	390	286	400
21	455	1,230	965	1,440	2,530	2,210	1,650	1,040	533	390	356	390
22	546	1,020	980	1,210	2,270	2,010	1,460	950	507	356	332	370
23	637	860	1,010	1,210	2,050	2,050	1,390	875	494	378	494	340
24	533	740	995	1,480	1,910	1,890	1,970	890	442	367	965	310
25	494	695	980	1,440	1,690	1,870	2,350	800	429	378	980	280
26	533	695	980	1,500	1,170	1,870	2,490	740	442	356	650	260
27	481	695	890	2,130	1,100	1,830	2,550	740	494	321	533	230
28	481	680	920	2,130	1,000	1,690	2,630	740	546	310	468	400
29	481	680	1,460	1,930	-----	1,730	3,220	650	455	298	403	650
30	481	665	12,800	4,200	-----	2,370	3,280	624	416	321	390	500
31	481	-----	32,000	3,600	-----	2,900	-----	600	-----	455	367	-----
TOTAL	14,378	21,542	79,448	66,760	111,280	68,070	70,640	38,254	16,187	16,246	14,089	12,139
MEAN	464	718	2,563	2,154	3,974	2,196	2,355	1,234	540	524	454	405
MAX	637	1,230	32,000	13,800	24,600	6,330	6,160	2,610	665	1,280	980	740
MIN	390	481	572	1,080	1,000	900	1,390	600	416	298	286	230
CFSM	.54	.83	2.98	2.50	4.62	2.55	2.74	1.43	.63	.61	.53	.47
IN.	.62	.93	3.43	2.88	4.81	2.94	3.05	1.65	.70	.70	.61	.52

CAL YR 1969 TOTAL 484,102 MEAN 1,326 MAX 32,000 MIN 390 CFSM 1.54 IN 20.92
WTR YR 1970 TOTAL 529,033 MEAN 1,449 MAX 32,000 MIN 230 CFSM 1.68 IN 22.86

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-31	1300	30.89	33,800	2-16	0845	28.14	29,700

03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	400	1,650	180	640	2,860	1,100	1,020	710	1,890	710	1,730	218
2	320	1,060	170	585	2,550	1,000	995	725	1,140	710	1,170	218
3	250	2,290	160	540	2,100	995	950	845	980	710	1,330	218
4	200	1,810	150	2,000	1,850	1,140	920	980	845	710	1,560	429
5	150	1,070	170	9,320	9,830	1,140	880	845	695	507	1,730	1,190
6	130	900	160	5,410	13,400	1,540	850	1,650	695	455	1,730	725
7	110	800	150	2,900	8,210	3,990	1,010	10,700	572	321	1,350	710
8	90	650	150	1,750	4,120	3,890	1,500	6,730	559	298	980	585
9	75	500	140	1,370	2,960	3,380	1,710	4,330	559	298	845	455
10	60	429	160	1,100	2,960	2,150	1,650	1,850	559	298	725	442
11	55	416	230	980	2,410	1,370	1,560	1,750	468	1,900	585	321
12	100	367	344	875	2,200	1,690	1,400	2,050	455	2,300	585	275
13	120	344	600	815	2,050	1,540	1,280	3,490	572	2,900	710	1,950
14	110	298	560	860	4,080	1,540	1,190	5,520	845	1,700	572	2,550
15	117	298	500	3,070	3,300	1,520	1,100	3,760	1,910	585	455	1,930
16	110	298	480	2,550	2,730	1,400	1,000	2,710	1,350	455	455	1,160
17	84	280	468	1,910	2,350	1,400	900	2,390	1,330	455	321	1,170
18	57	270	370	1,500	2,960	1,400	845	1,890	1,140	1,850	332	1,560
19	55	260	275	1,300	2,730	1,300	830	1,540	845	6,400	321	1,350
20	131	256	256	1,200	2,530	1,320	710	1,160	830	7,260	321	1,370
21	180	290	298	1,000	2,190	1,300	650	980	710	2,760	321	1,190
22	298	340	3,050	905	1,790	1,200	845	845	2,150	2,170	321	875
23	220	310	6,180	1,010	1,750	1,400	695	845	1,140	2,170	321	725
24	180	290	2,760	875	1,570	1,500	710	710	845	1,160	321	710
25	160	270	2,960	1,320	1,400	1,500	660	845	710	875	321	995
26	150	250	1,850	7,200	1,190	1,540	620	845	725	875	300	995
27	130	228	1,190	2,330	1,190	1,500	600	845	624	995	260	1,010
28	166	228	950	1,560	1,100	1,300	585	845	585	1,160	240	710
29	310	218	850	1,400	-----	1,200	660	800	585	1,010	230	710
30	1,330	218	760	1,350	-----	1,000	710	845	725	1,540	218	585
31	1,950	-----	700	3,360	-----	950	-----	2,530	-----	1,930	218	-----
TOTAL	7,798	16,888	27,221	62,985	90,360	49,695	29,035	66,560	27,038	47,467	20,878	27,331
MEAN	252	563	878	2,032	3,227	1,603	968	2,147	901	1,531	673	911
MAX	1,950	2,290	6,180	9,320	13,400	3,990	1,710	10,700	2,150	7,260	1,730	2,550
MIN	55	218	140	540	1,100	950	585	710	455	298	218	218
CFSM	.29	.65	1.02	2.36	3.75	1.86	1.12	2.49	1.05	1.78	.78	1.06
IN.	.34	.73	1.18	2.72	3.90	2.15	1.25	2.88	1.17	2.05	.90	1.18

CAL YR 1970 TOTAL 465,572 MEAN 1,276 MAX 24,600 MIN 55 CFSM 1.48 IN 20.12
 WTR YR 1971 TOTAL 473,256 MEAN 1,297 MAX 13,400 MIN 55 CFSM 1.51 IN 20.45
 PEAK DISCHARGE (BASE, 16,000 CFS).--No peak above base.

KANAWHA RIVER BASIN

03200500 Coal River at Tornado, W. Va.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	572	725	1,170	585	2,130	3,180	1,400	1,160	695	630	2,110	310
2	494	1,190	1,010	725	1,800	2,310	1,500	1,160	572	572	995	310
3	275	1,170	995	965	1,540	2,940	1,400	995	572	455	845	321
4	275	1,170	845	2,350	1,700	2,960	1,900	1,170	559	572	3,340	1,170
5	280	875	845	5,280	1,540	2,760	2,250	1,330	429	572	3,780	310
6	350	860	860	7,450	1,520	2,350	2,550	1,170	572	1,730	2,000	310
7	500	860	1,950	3,360	1,500	2,150	2,050	995	572	1,170	1,160	310
8	420	650	3,000	2,130	1,400	1,850	8,100	995	442	845	845	310
9	350	650	3,700	2,000	1,320	1,850	5,520	1,100	429	710	710	310
10	290	650	2,130	2,940	1,200	1,370	3,380	1,330	442	572	710	310
11	250	585	1,800	3,760	1,170	1,280	2,670	1,320	442	442	845	310
12	218	585	1,600	3,130	1,160	1,070	2,250	1,170	442	442	710	310
13	210	572	1,300	3,130	2,250	1,190	2,730	1,170	442	442	585	218
14	208	572	1,170	2,350	5,190	1,100	4,220	1,010	442	310	442	218
15	218	455	995	2,690	6,440	980	11,100	1,160	442	310	442	208
16	218	442	980	2,200	3,180	875	10,500	1,350	310	310	442	310
17	256	455	920	1,900	2,490	1,210	6,510	1,710	442	310	310	310
18	321	455	880	1,600	2,350	1,280	5,000	1,910	860	310	442	218
19	310	455	820	1,330	1,950	1,100	3,110	1,730	1,350	310	4,620	218
20	310	455	760	1,540	1,910	950	2,530	1,710	1,160	310	3,970	220
21	321	455	900	2,200	1,950	950	2,310	1,800	860	310	2,530	218
22	321	455	1,000	2,920	2,920	950	4,600	1,910	1,730	218	1,540	218
23	310	455	920	2,730	3,700	1,500	4,790	2,330	1,540	310	995	218
24	572	455	860	2,530	9,680	1,710	3,570	3,550	1,730	218	845	310
25	725	481	780	3,570	18,600	1,750	2,710	2,130	1,730	218	710	218
26	1,370	520	720	3,550	20,500	1,600	2,330	1,540	1,330	218	572	218
27	1,190	585	680	2,530	24,100	1,500	1,910	1,160	1,170	218	572	218
28	1,010	585	710	2,710	8,840	1,400	1,540	1,010	860	218	442	218
29	875	875	680	4,620	3,700	1,400	1,520	845	710	442	442	403
30	710	1,350	650	2,920	-----	1,400	1,330	695	710	585	442	1,350
31	585	-----	650	2,710	-----	1,300	-----	710	-----	1,350	310	-----
TOTAL	14,314	20,047	36,280	84,405	137,730	50,215	107,280	43,325	23,986	15,629	38,703	10,100
MEAN	462	668	1,170	2,723	4,749	1,620	3,576	1,398	800	504	1,248	337
MAX	1,370	1,350	3,700	7,450	24,100	3,180	11,100	3,550	1,730	1,730	4,620	1,350
MIN	208	442	650	585	1,160	875	1,330	695	310	218	310	208
CFSM	.54	.78	1.36	3.16	5.52	1.88	4.15	1.62	.93	.59	1.45	.39
IN.	.62	.87	1.57	3.65	5.95	2.17	4.64	1.87	1.04	.68	1.67	.44

CAL YR 1971 TOTAL 491,990 MEAN 1,348 MAX 13,400 MIN 208 CFSM 1.57 IN 21.26

WTR YR 1972 TOTAL 582,014 MEAN 1,590 MAX 24,100 MIN 208 CFSM 1.85 IN 25.15

PEAK DISCHARGE (BASE, 16,000 CFS).--Feb. 27 (1000) 25,600 cfs (25.38 ft, from graph based on gage readings).

KANAWHA RIVER BASIN

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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 mile downstream from Grapevine Creek, 1.8 miles downstream from Pocatalico Creek, and at mile 25.0.

DRAINAGE AREA.--238 sq mi.

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 above mean sea level, adjustment of 1912. Prior to Nov. 5, 1948, nonrecording gage at same site (at datum 0.59 ft lower June 26, 1908, to Sept. 30, 1916).

AVERAGE DISCHARGE.--44 years, 285 cfs (16.26 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,280 cfs Apr. 22 (gage height, 24.51 ft); minimum, 8.1 cfs July 27, 28 (gage height, 2.03 ft).

Period of record: Maximum discharge, 17,000 cfs June 27, 1910, from rating curve extended above 9,100 cfs; maximum gage height, 34.4 ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	90	400	77	275	400	224	184	30	201	77	16
2	74	686	220	555	262	413	199	186	27	117	73	14
3	61	74	150	1,360	374	2,060	175	505	25	75	52	13
4	52	346	120	724	975	1,340	414	494	22	83	1,760	15
5	43	175	100	2,410	500	783	566	343	20	140	535	22
6	37	117	85	2,030	446	604	395	250	19	390	154	24
7	31	93	700	778	571	461	642	202	23	144	86	20
8	26	75	1,200	515	450	430	3,070	184	21	100	56	15
9	22	61	490	595	350	334	1,140	396	14	65	39	14
10	19	53	314	2,340	279	283	530	1,350	16	45	28	12
11	19	48	237	2,070	243	241	405	679	14	34	21	10
12	17	43	170	1,520	237	215	400	376	13	27	17	9.8
13	17	39	143	827	1,970	192	758	272	13	22	16	9.6
14	17	30	121	944	3,350	180	1,030	221	15	19	14	10
15	16	32	109	767	1,370	167	801	260	15	16	15	11
16	15	29	119	341	677	195	1,220	291	15	17	15	12
17	19	26	119	316	470	375	979	216	19	21	15	15
18	18	24	103	266	574	429	583	107	16	23	630	12
19	16	23	87	27	1,090	340	454	150	13	23	2,140	222
20	14	23	100	349	718	266	429	129	14	22	2,240	200
21	15	28	210	1,850	461	224	818	111	77	16	721	67
22	15	30	187	1,430	1,220	337	6,070	97	185	15	189	35
23	15	30	138	704	1,120	998	3,660	98	99	27	111	23
24	72	31	123	505	2,700	608	1,330	77	247	16	77	38
25	113	49	115	761	3,140	462	1,140	63	152	12	56	97
26	84	92	105	837	5,080	366	664	50	79	9.8	60	80
27	56	170	93	485	3,290	302	446	41	52	8.5	49	143
28	41	459	94	723	927	260	324	35	36	31	36	111
29	32	444	88	890	562	222	254	30	167	78	28	123
30	26	780	83	536	-----	358	213	27	414	72	22	884
31	22	-----	84	370	-----	303	-----	33	-----	64	18	-----
TOTAL	1,118	4,916	6,427	20,272	33,789	13,816	20,340	7,524	1,873	1,943.3	9,350	2,277.4
MEAN	36.1	164	207	912	1,165	446	978	243	62.4	64.3	302	75.9
MAX	113	784	1,200	2,410	5,080	2,060	6,070	1,350	414	390	2,240	884
MIN	14	23	83	77	237	167	175	27	13	8.5	14	9.6
CFSM	.15	.69	.87	3.83	4.90	1.87	4.11	1.02	.20	.27	1.27	.32
IN.	.17	.77	1.00	4.42	5.28	2.16	4.59	1.18	.29	.31	1.46	.36

CAL YR 1971 TOTAL 110,211.6 MEAN 302 MAX 5,060 MIN 2.8 CFSM 1.27 IN 17.23
WTR YR 1972 TOTAL 140,695.7 MEAN 384 MAX 6,070 MIN 8.5 CFSM 1.61 IN 21.99

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-14	0430	18.10	3,910	4-22	1430	24.51	7,280
2-26	1200	22.21	5,860				

KANAWHA RIVER BASIN

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 upstream from culvert on Interstate Highway 64 at Winfield interchange.

DRAINAGE AREA.--8.71 sq mi.

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 (from topographic map).

AVERAGE DISCHARGE.--5 years, 9.73 cfs (15.17 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,080 cfs Apr. 7 (gage height, 12.70 ft), from rating curve extended as explained below; minimum daily, 0.45 cfs Sept. 23.

Period of record: Maximum discharge, 1,800 cfs May 27, 1968 (gage height, 15.34 ft), from rating curve extended above 330 cfs on basis of culvert rating computation; minimum daily, 0.02 cfs 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	4.5	8.2	3.1	7.1	11	5.3	6.3	2.7	5.3	1.4	.78
2	2.8	10	4.0	32	7.2	49	5.3	8.9	2.3	3.3	1.2	.78
3	2.3	12	3.6	18	23	64	5.3	13	1.9	3.7	2.3	.96
4	1.8	5.4	3.4	27	21	27	11	4.8	3.3	3.7	12	1.3
5	1.4	3.9	3.1	90	13	20	9.8	7.6	2.1	4.6	3.5	1.1
6	1.1	3.3	2.9	26	10	14	5.0	6.6	2.0	3.9	2.1	.78
7	1.0	3.1	31	15	15	12	234	6.0	2.3	2.9	1.7	.87
8	.90	2.3	13	11	9.4	12	69	7.3	1.8	2.3	1.3	1.3
9	.80	2.1	8.4	41	7.8	8.9	20	14	1.5	1.9	1.2	1.1
10	1.0	2.1	6.4	65	6.3	6.0	14	11	1.5	1.7	.96	.64
11	1.0	1.8	5.2	46	5.8	7.3	11	8.3	1.3	1.5	.87	.57
12	.80	1.6	4.6	27	6.5	6.9	9.8	6.9	1.2	1.7	.71	.57
13	.80	1.6	4.1	19	135	5.6	19	6.3	6.0	1.3	.87	.57
14	.72	1.4	3.7	23	60	5.6	21	6.6	5.3	1.1	.87	.96
15	.72	1.3	3.8	11	23	6.3	55	10	2.9	.96	.78	1.1
16	.80	1.3	3.9	7.0	14	12	44	15	2.1	1.4	.78	.71
17	1.1	1.3	3.3	6.0	12	16	22	11	2.0	1.4	6.3	.57
18	.80	1.3	2.7	6.6	31	12	14	9.8	1.7	1.1	14	.57
19	.72	1.4	2.6	7.3	28	1.4	11	8.0	1.4	.87	14	.64
20	.64	1.6	5.4	29	16	8.0	13	6.9	7.3	.71	7.6	.64
21	.64	2.1	5.1	77	12	7.3	93	6.6	5.0	2.5	4.1	.60
22	1.3	1.4	4.1	28	22	8.5	260	6.3	3.5	1.8	3.1	.50
23	2.1	1.0	3.7	21	17	8.9	34	5.3	3.5	1.1	2.3	.45
24	4.6	2.1	3.6	22	81	8.0	31	4.3	3.3	.71	1.9	.65
25	4.2	3.1	3.4	41	85	7.6	20	3.9	2.9	.57	1.7	.60
26	3.1	2.8	3.3	18	358	6.9	13	3.3	2.3	.57	1.4	.80
27	2.1	3.1	3.2	12	37	5.6	10	2.9	1.9	.64	1.4	.70
28	1.8	3.1	3.7	32	20	6.6	8.5	2.5	3.3	3.3	1.3	.80
29	1.6	9.1	3.2	18	14	6.6	7.3	2.3	4.3	2.9	1.1	2.5
30	1.4	8.4	3.7	13	-----	6.6	6.9	3.3	6.0	2.5	1.2	7.6
31	1.4	-----	3.5	8.9	-----	5.6	-----	4.3	-----	1.9	.96	-----
TOTAL	53.74	99.5	160.8	800.9	1,097.1	396.2	1,090.2	225.0	88.6	63.83	94.90	31.71
MEAN	1.73	3.32	5.19	25.8	37.8	12.8	36.3	7.26	2.95	2.06	3.06	1.06
MAX	9.6	12	31	90	358	64	260	16	7.3	5.3	14	7.6
MIN	.54	1.0	2.6	3.1	5.8	5.6	5.3	2.3	1.2	.57	.71	.45
CFSM	.20	.38	.60	2.96	4.34	1.47	4.17	.83	.34	.24	.35	.12
IN. #	.23	.42	.69	3.42	4.64	1.69	4.66	.96	.38	.27	.41	.14
IN. #	-	1.54	.95	-	-	1.33	5.81	3.09	3.40	2.51	-	-

CAL YR 1971 TOTAL 3,656.78 MEAN 10.0 MAX 414 MIN .16 CFSM 1.15 IN# 15.62
WTR YR 1972 TOTAL 4,202.48 MEAN 11.5 MAX 358 MIN .45 CFSM 1.32 IN# 17.95

PEAK DISCHARGE (BASE, 500 CFS)

Runoff.
Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	0430	12.01	912	4-22	0515	10.86	639
4-7	2030	12.70	1,080				

OHIO RIVER MAIN STEM

145

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 upstream from Kanawha River, and at mile 265.4 (measured downstream from Pittsburgh, Pa.). Records include flow of Kanawha River.

DRAINAGE AREA.--52,760 sq mi, 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 the U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 514.10 ft above mean sea level, Sandy Hook datum. Prior to Oct. 1, 1951, water-stage recorder at site 0.3 mile upstream at same datum. Auxiliary water-stage recorder 13.1 miles downstream from the base gage at datum 505.22 ft above mean sea level, Sandy Hook datum.

EXTREMES.--Current year: Maximum discharge, 385,000 cfs June 26 (gage height, 40.95 ft); minimum gage height, 23.64 ft Aug. 4.

Period of record: Maximum discharge, 522,000 cfs Jan. 1, 1943; maximum gage height, 55.00 ft Apr. 16, 1948; minimum daily discharge, not determined; minimum gage height recorded, 22.52 ft Sept. 10, 1956. Maximum stage since at least 1896, 62.8 ft Mar. 30, 1913. Flood of Jan. 27, 1937, reached a stage of 62.7 ft.

REMARKS.--Records fair. Discharge less than 40,000 cfs 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	94,400	93,600	81,500	190,000	87,300	69,500	-	200,000	62,200	
2	-	-	101,000	111,000	80,700	205,000	72,400	78,300	-	180,000	53,300	
3	-	-	94,700	117,000	63,800	288,000	59,200	82,700	-	174,000	42,500	
4	-	53,600	79,800	116,000	85,300	324,000	76,100	104,000	-	160,000	63,200	
5	-	42,800	56,300	153,000	96,400	332,000	92,400	129,000	-	152,000	75,400	
6	-	-	47,900	201,000	91,700	300,000	102,000	131,000	-	183,000	65,200	
7	-	-	87,900	186,000	68,700	245,000	107,000	115,000	-	211,000	41,100	
8	-	-	159,000	146,000	50,900	207,000	194,000	100,000	-	164,000	36,000	
9	-	-	217,000	118,000	56,200	194,000	217,000	88,100	-	138,000	26,700	
10	-	-	205,000	118,000	53,900	194,000	180,000	103,000	-	118,000	21,600	
11	-	-	161,000	131,000	41,900	176,000	139,000	123,000	-	96,000	29,800	
12	-	-	132,000	138,000	44,700	147,000	121,000	120,000	-	92,100	22,600	
13	-	-	109,000	136,000	83,300	126,000	132,000	111,000	-	91,800	23,300	
14	-	-	94,100	126,000	100,000	130,000	196,000	101,000	-	81,700	19,600	
15	-	-	86,300	115,000	164,000	167,000	241,000	96,500	-	76,800	19,200	
16	-	-	87,400	97,200	135,000	188,000	257,000	97,100	38,700	66,700	24,700	
17	-	-	82,400	80,100	122,000	187,000	261,000	101,000	42,400	65,600	26,100	
18	-	-	91,500	49,000	116,000	192,000	279,000	105,000	51,800	59,300	52,000	
19	-	-	81,100	66,700	112,000	200,000	269,000	97,600	50,500	62,300	76,200	
20	-	-	69,300	69,900	99,700	184,000	236,000	83,800	44,500	54,100	72,300	
21	-	-	59,300	85,900	86,600	154,000	210,000	84,800	73,400	58,500	62,500	
22	-	-	70,000	116,000	73,400	145,000	276,000	71,000	102,000	46,600	40,300	
23	-	-	66,500	119,000	93,100	155,000	317,000	73,700	140,000	40,100	30,700	
24	-	-	76,300	108,000	138,000	165,000	297,000	70,200	246,000	34,600	24,000	
25	-	-	60,600	110,000	218,000	170,000	252,000	63,900	354,000	26,900	25,800	
26	50,700	-	58,800	127,000	255,000	148,000	215,000	47,900	382,000	30,700	21,700	
27	60,000	-	44,700	124,000	295,000	126,000	173,000	40,700	350,000	28,900	29,900	
28	43,500	-	60,200	115,000	280,000	110,000	136,000	34,700	320,000	24,900	24,700	
29	-	56,500	55,900	112,000	240,000	105,000	115,000	28,800	270,000	35,800	26,100	
30	-	65,600	71,200	122,000	-----	104,000	100,000	28,900	220,000	40,400	25,100	
31	-	-----	75,900	107,000	-----	97,000	-----	37,400	-----	56,800	17,600	-----
TOTAL	-	-	2,836.5M	3,614.4M	3,496.8M	5,655.0M	5,429.4M	2,618.6M	-	2,850.6M	1,181.4M	-
MEAN	-	-	91,500	116,600	120,600	182,400	181,000	84,470	-	91,950	38,110	-
MAX	-	-	217,000	201,000	295,000	332,000	317,000	131,000	-	211,000	76,200	-
MIN	-	-	44,700	49,000	41,900	97,000	59,200	28,800	-	24,900	17,600	-
CAL YR 1971	TOTAL -	MEAN -	MAX -	300,000	MIN -	CFSM -	IN -					
WTR YR 1972	TOTAL -	MEAN -	MAX -	382,000	MIN -	CFSM -	IN -					

GUYANDOTTE RIVER BASIN

03202400 Guyandotte River near Baileysville, W. Va.

LOCATION.--Lat 37°36'15", long 81°38'44", Wyoming County, on right bank 75 ft upstream from Doublecamp Branch, and 3.1 miles east of Baileysville.

DRAINAGE AREA.--308 sq mi (corrected).

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

GAGE.--Water-stage recorder. Datum of gage is 1,140.00 ft above mean sea level. Prior to Sept. 10, 1969, at site 25 ft upstream at same datum.

EXTREMES.--Current year: Maximum discharge, 15,400 cfs Feb. 26 (gage height, 17.26 ft), from rating curve extended above 7,300 cfs; minimum, 63 cfs Oct. 15 (gage height, 2.81 ft).

Period of record: Maximum discharge, 16,300 cfs Dec. 31, 1969 (gage height, 16.22 ft), from rating curve extended above 7,300 cfs; maximum gage height, 17.26 ft Feb. 26, 1972; minimum discharge, 21 cfs Oct. 14, 1970 (gage height, 2.44 ft).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	146	299	174	746	991	283	339	276	231	674	195
2	84	138	234	660	640	837	283	329	246	203	674	188
3	84	266	196	1,260	610	914	266	668	234	203	565	178
4	82	350	182	1,130	615	865	273	1,450	220	215	420	185
5	158	287	165	3,690	500	812	294	1,220	301	788	396	180
6	163	228	148	2,350	515	680	301	851	262	704	322	190
7	140	198	1,220	1,180	530	615	332	668	252	495	280	170
8	112	170	1,250	770	425	595	1,570	600	215	364	255	160
9	94	146	641	628	410	520	1,120	692	203	294	294	148
10	99	144	438	1,010	372	485	776	662	198	262	435	144
11	97	134	352	1,060	353	450	620	615	200	237	322	132
12	81	120	288	847	360	430	818	545	175	218	266	140
13	78	112	253	713	914	392	1,170	495	170	213	240	130
14	70	108	223	784	1,350	380	3,250	515	170	195	205	136
15	66	99	212	752	1,180	357	3,410	470	165	183	195	140
16	138	94	226	575	1,040	339	2,700	455	234	183	180	132
17	336	97	251	591	963	346	1,560	475	332	231	175	122
18	203	93	246	530	837	332	1,070	460	495	193	4,250	116
19	148	96	214	451	776	308	837	450	520	188	2,860	122
20	122	95	273	580	668	287	716	575	415	178	2,300	160
21	97	102	403	5,050	580	273	625	570	635	160	1,120	130
22	90	101	387	2,340	812	308	625	540	746	183	722	118
23	106	93	327	1,450	1,320	346	600	812	625	203	545	120
24	290	94	303	1,080	6,170	346	580	668	535	160	425	112
25	384	112	275	1,010	7,820	336	550	540	460	155	368	110
26	405	102	245	907	9,500	322	510	445	388	153	353	101
27	325	101	227	837	3,890	315	455	368	308	173	311	237
28	243	151	217	1,660	1,820	308	410	329	262	198	273	465
29	193	204	207	2,050	1,270	297	384	304	259	329	252	231
30	160	274	187	1,340	-----	297	364	290	228	1,190	234	764
31	144	-----	185	970	-----	276	-----	318	-----	991	213	-----
TOTAL	4,878	4,455	10,274	38,429	46,986	14,359	26,752	17,718	9,729	9,673	20,124	5,456
MEAN	157	149	331	1,240	1,620	463	892	572	324	312	649	182
MAX	405	350	1,250	5,050	9,500	991	3,410	1,450	746	1,190	4,250	764
MIN	66	93	148	174	353	273	266	290	165	153	175	101
CFSM	.51	.48	1.07	4.03	5.26	1.50	2.90	1.86	1.05	1.01	2.11	.59
IN.	.59	.54	1.24	4.64	5.67	1.73	3.23	2.14	1.17	1.17	2.43	.66
CAL YR 1971	TOTAL 141,637	MEAN 388	MAX 4,680	MIN 50	CFSM 1.26	IN 17.10						
WTR YR 1972	TOTAL 208,833	MEAN 571	MAX 9,500	MIN 66	CFSM 1.85	IN 25.22						

PEAK DISCHARGE (BASE, 4,400 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-5	1600	9.01	4,810	4-14	2145	10.21	4,920
1-21	0830	10.61	6,950	8-18	1445	14.92	11,200
2-26	1500	17.26	15,400				

GUYANDOTTE RIVER BASIN

147

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 mile south of Fanrock, and 0.3 mile upstream from mouth.

DRAINAGE AREA.--7.20 sq mi.

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

GAGE.--Water-stage and rainfall recorders and concrete control. Altitude of gage is 1,220 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 806 cfs Aug. 18 (gage height, 6.62 ft), from rating curve extended as explained below; minimum, 0.70 cfs Sept. 12, 13, 14 (gage height, 1.76 ft).

Period of record: Maximum discharge, 806 cfs Aug. 18, 1972 (gage height, 6.62 ft), from rating curve extended above 90 cfs on basis of step-backwater method; minimum daily, 0.06 cfs Oct. 22-31, 1969.

REMARKS.--Records good. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	3.8	5.2	3.2	13	17	3.5	5.2	3.0	2.3	13	2.5
2	1.7	3.5	4.6	55	12	15	3.8	5.5	2.5	2.1	8.1	2.1
3	1.5	4.1	4.6	51	13	19	3.5	13	2.3	2.1	5.8	1.9
4	1.9	3.8	4.4	64	12	19	4.1	36	1.9	2.5	5.8	1.9
5	6.7	3.8	4.1	184	10	18	4.1	28	2.3	7.4	4.6	2.1
6	6.1	3.8	4.4	58	11	14	4.1	17	2.5	6.1	3.8	1.9
7	4.4	3.8	106	26	12	12	11	12	2.5	4.6	3.5	1.7
8	3.0	3.5	39	16	9.5	12	75	13	1.7	3.5	2.7	1.4
9	2.7	3.0	18	17	8.8	9.9	32	19	1.5	2.5	6.7	1.2
10	2.7	3.0	12	32	8.5	9.2	19	20	1.7	2.1	8.1	1.2
11	2.3	2.7	9.2	27	8.1	8.5	14	16	1.5	1.9	5.5	1.0
12	2.1	2.7	7.4	19	8.5	8.1	31	12	1.2	1.5	4.4	1.0
13	1.7	2.5	6.7	17	47	7.4	40	9.9	1.2	1.4	4.9	.85
14	1.5	2.3	5.8	16	58	6.7	157	11	1.2	1.4	3.8	.85
15	1.5	2.1	5.8	21	36	6.1	103	9.9	1.0	1.2	3.0	1.0
16	5.8	2.1	5.2	17	24	6.1	44	9.9	4.6	1.4	2.5	.85
17	13	2.1	4.9	14	20	6.1	27	10	4.4	3.2	2.5	.85
18	8.1	2.1	4.4	12	17	5.2	17	9.5	3.0	1.9	326	1.0
19	6.1	2.1	3.8	9.0	17	4.1	13	9.5	2.7	1.5	160	1.2
20	4.6	2.3	7.1	34	15	3.8	11	10	4.1	1.2	74	1.4
21	3.2	2.5	7.8	215	14	3.8	9.2	10	13	1.0	29	1.2
22	3.2	2.3	7.1	51	25	4.9	10	10	13	4.1	14	1.2
23	4.6	1.9	6.4	31	39	4.9	8.8	12	9.9	3.5	9.5	1.2
24	27	2.7	6.4	21	326	4.6	8.5	9.9	8.1	1.9	6.7	1.2
25	22	3.5	5.8	19	208	4.4	8.1	7.8	6.4	1.4	5.2	1.4
26	17	3.0	5.5	17	278	4.4	7.4	6.1	4.5	1.2	6.1	1.4
27	10	4.1	4.9	17	76	4.4	6.7	4.9	3.5	2.1	5.5	12
28	6.4	5.2	4.9	67	36	4.4	6.1	4.1	3.0	2.5	4.6	6.7
29	4.6	6.7	4.1	51	23	4.6	5.8	3.5	3.5	20	3.8	6.1
30	3.8	6.4	4.1	28	-----	4.4	5.5	3.2	2.5	35	3.0	39
31	3.5	-----	3.8	18	-----	4.1	-----	4.1	-----	27	2.7	-----
TOTAL	184.6	97.4	323.4	1,227.2	1,385.4	256.1	693.2	352.0	114.3	151.5	738.8	99.30
MEAN	5.95	3.25	10.4	39.6	47.8	8.26	23.1	11.4	3.81	4.89	23.8	3.31
MAX	27	6.7	106	215	326	19	157	36	13	35	326	39
MIN	1.5	1.9	3.8	3.2	8.1	3.8	3.5	3.2	1.0	1.0	2.5	.85
CFSM	.83	.45	1.44	5.50	6.64	1.15	3.21	1.58	.53	.68	3.31	.46
IN.†	.95	.50	1.67	6.34	7.16	1.32	3.58	1.82	.59	.78	3.82	.51
IN.††	5.52	1.27	1.04	6.45	6.50	1.60	4.23	3.44	5.32	5.65	6.30	4.47
CAL YR 1971	TOTAL 3,479.42	MEAN 9.53	MAX 161	MIN .37	CFSM 1.32	IN.† 17.98						
WTR YR 1972	TOTAL 5,623.20	MEAN 15.4	MAX 326	MIN .85	CFSM 2.14	IN.† 29.05						

PEAK DISCHARGE (BASE, 150 CFS, REVISED)

† Runoff.
†† Rainfall.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-7	1115	3.82	173	2-24	1130	5.56	510
1-5	1000	4.27	240	4-14	2000	4.14	221
1-21	0400	4.90	360	8-18	1215	6.62	806

GUYANDOTTE RIVER BASIN

03203600 Guyandotte River at Logan, W. Va.

LOCATION.--Lat 37°50'10", long 81°59'50", Logan County, on right bank 200 ft downstream from Middelburg Bridge at Logan, 0.8 mile downstream from Dingess Run, and 1.1 miles upstream from Island Creek.

DRAINAGE AREA.--836 sq mi.

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 U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 640.00 ft above mean sea level. Prior to Oct. 1, 1962, at datum 1.32 ft lower.

AVERAGE DISCHARGE.--10 years, 1,042 cfs (16.93 inches per year).

EXTREMES.--Current year: Maximum discharge, 36,100 cfs Feb. 26 (gage height, 27.28 ft), from rating curve extended as explained below; minimum daily, 170 cfs Sept. 26.

Period of record: Maximum discharge, 55,000 cfs Mar. 12, 1963 (gage height, 34.98 ft), from rating curve extended above 26,000 cfs on basis of slope-area measurements at gage heights 25.6 and 34.98 ft; minimum, 33 cfs Sept. 17, 1964 (gage height, 4.07).

REMARKS.--Records good above 1,000 cfs and fair below.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	274	350	770	355	2,000	2,980	826	850	575	495	2,380	424
2	254	350	682	1,100	1,660	2,550	853	750	481	448	1,560	395
3	230	330	570	4,000	1,550	2,570	808	820	412	412	1,330	370
4	220	740	502	3,640	1,650	2,550	988	1,900	334	375	1,490	346
5	405	820	345	10,200	1,450	2,550	1,550	2,980	637	1,080	1,190	338
6	673	646	294	8,490	1,400	2,230	1,530	2,130	538	2,230	950	326
7	530	554	3,180	3,880	1,460	2,020	2,110	1,620	538	1,470	740	310
8	345	523	5,590	2,420	1,280	1,930	2,680	1,380	412	1,020	619	302
9	306	330	2,540	1,950	1,130	1,780	5,250	1,560	360	740	900	286
10	322	310	1,750	2,910	1,050	1,590	3,000	1,790	375	570	1,390	274
11	262	302	1,360	3,370	903	1,500	2,210	1,690	375	509	1,130	254
12	230	298	1,080	2,640	937	1,440	2,590	1,480	330	467	820	241
13	216	290	920	2,110	2,390	1,390	4,030	1,280	330	418	655	227
14	189	280	780	1,920	5,290	1,320	10,500	1,240	318	370	538	221
15	195	286	700	1,740	3,980	1,260	15,600	1,220	318	350	418	218
16	246	286	655	1,460	3,010	1,200	12,500	1,280	562	360	370	219
17	504	256	619	1,230	2,480	1,200	6,100	1,240	1,210	467	330	217
18	720	258	602	1,240	2,230	1,170	3,660	1,280	2,190	448	6,180	210
19	390	246	562	1,180	2,150	1,100	2,760	1,220	1,970	380	18,200	201
20	330	246	628	1,150	1,980	1,000	2,310	1,290	1,510	350	8,910	192
21	270	246	930	8,490	1,700	910	1,920	1,350	2,260	318	4,200	198
22	230	246	1,120	7,310	1,870	980	1,830	1,310	3,520	360	2,500	209
23	254	227	1,020	3,990	3,180	1,240	1,800	1,930	2,500	400	1,980	192
24	1,920	238	920	2,910	15,100	1,290	1,680	1,910	2,110	300	1,330	183
25	1,900	278	850	2,650	26,800	1,220	1,550	1,470	1,770	302	1,010	178
26	1,450	262	760	2,550	29,100	1,140	1,410	1,140	1,330	278	1,000	170
27	1,140	270	691	2,310	17,700	1,070	1,220	910	1,010	350	860	183
28	870	330	646	4,020	6,180	1,020	1,080	740	760	448	750	1,010
29	646	495	602	6,240	3,940	972	970	637	619	890	610	659
30	530	537	523	3,980	-----	935	930	578	562	5,620	516	1,290
31	370	-----	355	2,630	-----	870	-----	602	-----	4,080	454	-----
TOTAL	16,622	11,006	32,686	104,075	145,620	46,987	102,245	41,577	30,219	26,355	65,310	9,843
MEAN	536	367	1,054	3,357	5,021	1,516	3,408	1,341	1,007	850	2,107	328
MAX	1,920	820	5,590	10,200	29,100	2,980	15,600	2,980	3,520	5,620	18,200	1,290
MIN	189	227	294	355	937	870	808	578	318	278	330	170
CFSM	.64	.44	1.26	4.02	6.01	1.81	4.08	1.60	1.20	1.02	2.52	.39
IN.	.74	.49	1.45	4.63	6.48	2.09	4.55	1.85	1.34	1.17	2.91	.44

CAL YR 1971 TOTAL 425,518 MEAN 1,166 MAX 13,800 MIN 175 CFSM 1.39 IN 18.93
WTP YR 1972 TOTAL 632,545 MEAN 1,728 MAX 29,100 MIN 170 CFSM 2.07 IN 28.15

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 5	2000	15.36	12,600	4-15	2100	18.15	17,500
1-21	1800	15.84	13,300	8-19	0200	25.41	31,900
2-26	2100	27.28	36,100				

GUYANDOTTE RIVER BASIN

149

03203670 Whitman Creek at Whitman, W. Va.

LOCATION.--Lat 37°48'28", long 82°01'42", Logan County, on right bank 75 ft upstream from abandoned bridge off Secondary State Route 9/1, 0.8 mile south of Whitman, and at mile 2.0.

DRAINAGE AREA.--10.9 sq mi.

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 (from topographic map).

EXTREMES.--Current year: Maximum daily discharge, 360 cfs Feb. 24, Aug. 18; no flow for many days.
Period of record: Maximum discharge, 583 cfs Oct. 21, 1970 (gage height, 4.66 ft, caused by mine regulation), from rating curve extended above 100 cfs by step-backwater method; no flow for several days each year.

REMARKS.--Records fair 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.77	5.0	4.5	6.9	20	39	11	13	1.9	1.6	1.5	.20
2	.46	4.5	4.5	130	17	35	11	12	1.8	1.4	1.0	.20
3	.30	5.0	5.1	110	19	32	9.8	12	1.6	1.5	.40	.15
4	1.3	5.0	5.4	160	17	30	20	10	1.6	2.0	.35	.15
5	11	5.0	5.2	200	15	30	35	8.3	7.1	5.0	.30	.20
6	5.1	5.0	5.8	100	16	26	37	7.7	3.3	4.0	.20	.15
7	2.7	4.5	14	45	17	25	91	7.4	2.6	3.2	.20	.15
8	1.4	4.5	80	24	15	25	176	8.6	1.9	2.5	.15	.15
9	.93	4.5	60	30	13	18	80	8.3	1.8	1.8	4.5	.10
10	.60	4.0	45	45	12	12	57	6.7	3.7	1.4	1.5	.10
11	.35	4.0	35	35	12	11	44	5.8	1.9	1.1	.46	.10
12	.16	3.5	30	28	13	9.8	46	4.2	1.7	.99	.05	.10
13	.07	3.5	22	25	60	8.6	51	4.4	1.5	.60	.38	.05
14	.01	3.0	18	24	80	8.0	146	4.6	1.3	.46	0	0
15	0	3.0	16	30	61	6.7	186	6.4	1.2	.23	0	0
16	.07	3.0	14	25	45	7.4	172	5.5	3.5	.31	0	0
17	.01	3.0	12	20	39	6.7	93	5.3	3.0	.23	.16	0
18	0	3.0	11	17	35	6.1	64	5.3	2.3	.23	360	0
19	0	3.5	10	13	35	5.5	50	5.3	1.9	.31	20	0
20	0	3.5	12	50	33	5.1	41	5.3	3.5	0	5.0	0
21	0	3.1	11	240	32	5.8	34	5.1	8.5	.10	3.0	0
22	0	2.8	10	90	31	16	34	6.1	9.0	.35	1.5	0
23	.10	2.5	9.9	50	60	21	30	5.8	7.0	.30	1.0	0
24	35	3.1	9.9	35	360	22	30	5.5	5.5	.10	.70	0
25	30	3.1	10	29	240	22	27	6.1	4.5	.10	.45	0
26	22	2.7	9.9	27	310	20	23	4.6	3.0	.05	.55	0
27	16	2.9	9.6	25	140	19	20	3.5	2.5	.15	.45	0
28	11	2.8	9.2	140	80	17	18	3.1	2.1	.20	.40	0
29	7.0	4.1	8.2	90	45	16	16	2.8	2.4	1.0	.30	1.9
30	5.5	4.3	8.2	50	-----	14	15	2.6	1.7	5.0	.30	2.7
31	4.5	-----	7.5	30	-----	12	-----	2.4	-----	3.0	.25	-----
TOTAL	156.33	111.4	512.9	1,923.9	1,872	531.7	1,667.8	193.7	95.3	39.21	405.05	6.40
MEAN	5.04	3.71	16.5	62.1	64.6	17.2	55.6	6.25	3.18	1.26	13.1	.21
MAX	35	5.0	80	240	360	39	186	13	9.0	5.0	360	2.7
MIN	0	2.5	4.5	6.9	12	5.1	9.8	2.4	1.2	0	0	0
CFSM	.46	.34	1.51	5.70	5.93	1.58	5.10	.57	.29	.12	1.20	.02
IN-#	.53	.38	1.75	6.57	6.39	1.81	5.69	.66	.33	.13	1.38	.02
IN-##	4.60	2.09	2.70	6.66	6.99	2.20	6.79	2.74	-	-	4.52	2.47

CAL YR 1971 TOTAL 4,375.90 MEAN 12.0 MAX 163 MIN 0 CFSM 1.10 IN-# 14.93
WTR YR 1972 TOTAL 7,515.69 MEAN 20.5 MAX 360 MIN 0 CFSM 1.88 IN-# 25.65

Runoff.

Rainfall.

NOTE.--No gage-height record Oct. 22 to Nov. 18, Dec. 8-14, Jan. 2 to Feb. 14, Feb. 23-29, June 12 to July 11, July 21 to Aug. 9, Aug. 18 to Sept. 11.

GUYANDOTTE RIVER BASIN

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. Records include flow of Fourmile Creek.

DRAINAGE AREA.--1,226 sq mi, 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 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 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 miles upstream from base gage at datum 552.90 ft above mean sea level.

AVERAGE DISCHARGE.--45 years (1915-17, 1929-72), 1,568 cfs (17.37 inches per year).

EXTREMES.--Current year: Maximum discharge, 39,600 cfs Feb. 27 (gage height, 40.95 ft); minimum, 210 cfs Sept. 26, 27 (gage height, 3.60 ft).
Period of record: Maximum discharge, 44,500 cfs Mar. 13, 1963 (gage height, 43.83 ft); minimum, 3.6 cfs Oct. 25, 1930 (gage height, 2.66 ft).
Flood, probably in 1907, reached a stage of about 44 ft, from floodmark (discharge, 43,500 cfs).

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

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	582	700	1,100	2,020	3,550	5,980	1,240	1,210	720	720	4,200	570
2	492	740	1,100	3,420	2,800	4,680	1,190	1,120	690	666	2,590	510
3	426	1,200	980	6,550	2,450	5,250	1,180	1,120	600	606	1,790	474
4	380	1,400	900	15,400	2,720	4,930	1,170	1,200	552	588	1,860	466
5	365	1,500	820	18,000	2,520	4,490	1,360	2,200	806	564	1,940	444
6	648	1,300	740	15,000	2,240	4,000	1,820	3,010	750	1,080	1,390	438
7	757	1,100	1,410	10,000	2,330	3,360	2,190	2,260	702	1,960	1,080	426
8	636	860	4,970	4,890	2,190	2,930	7,930	1,760	660	1,530	860	402
9	510	760	5,510	3,520	1,900	2,600	9,520	1,720	564	1,070	726	385
10	426	680	3,300	3,810	1,690	2,260	6,550	1,920	498	813	956	365
11	375	620	2,380	4,690	1,520	1,940	4,540	2,120	534	684	1,250	345
12	350	580	1,800	4,950	1,390	1,790	3,840	2,050	468	624	1,170	327
13	327	560	1,460	4,050	2,500	1,670	4,670	1,760	438	558	868	304
14	295	530	1,230	3,480	4,320	1,560	9,610	1,610	516	498	738	291
15	268	460	1,090	3,000	5,970	1,450	17,600	1,780	456	456	642	291
16	300	450	1,030	2,500	5,350	1,400	22,400	2,380	390	414	540	282
17	360	420	940	2,040	4,340	1,620	15,800	2,410	516	396	480	277
18	820	390	902	1,840	4,070	1,690	7,740	2,080	1,040	426	504	273
19	760	390	842	1,800	4,200	1,620	5,100	1,900	1,950	462	11,700	255
20	550	390	833	1,810	3,780	1,400	3,800	1,740	2,110	444	15,300	234
21	440	390	949	2,240	3,230	1,270	3,060	1,710	1,930	365	8,400	222
22	400	390	1,280	9,360	3,020	1,220	3,880	1,710	2,440	340	4,380	238
23	480	390	1,170	7,220	3,490	1,390	4,240	1,710	3,340	309	3,180	238
24	1,100	390	1,080	5,250	6,450	1,640	3,290	2,130	2,950	360	2,150	226
25	2,700	380	1,020	4,720	17,800	1,810	2,800	2,100	2,480	438	1,450	273
26	2,200	390	942	4,520	30,300	1,840	2,360	1,540	2,000	426	1,120	222
27	1,800	400	871	3,970	38,200	1,720	2,000	1,220	1,490	340	1,120	234
28	1,500	450	812	4,110	24,200	1,600	1,680	980	1,120	322	940	414
29	1,100	660	754	5,360	13,400	1,490	1,450	828	900	498	836	1,190
30	880	940	669	6,190	-----	1,420	1,300	744	771	1,230	714	1,710
31	760	-----	819	4,750	-----	1,330	-----	720	-----	4,260	630	-----
TOTAL	22,987	19,810	43,703	170,460	201,920	73,350	155,310	52,782	34,381	23,447	75,504	12,328
MEAN	742	660	1,410	5,499	6,963	2,366	5,177	1,703	1,146	756	2,436	411
MAX	2,700	1,500	5,510	18,000	38,200	5,980	22,400	3,010	3,340	4,260	15,300	1,710
MIN	268	380	669	1,800	1,390	1,220	1,170	720	390	309	480	222
CFSM	.61	.54	1.15	4.49	5.68	1.93	4.22	1.39	.93	.62	1.99	.34
IN.	.70	.60	1.33	5.17	6.13	2.23	4.71	1.60	1.04	.71	2.29	.37

CAL YR 1971 TOTAL 625,598 MEAN 1,714 MAX 16,200 MIN 179 CFSM 1.40 IN 18.98
WTR YR 1972 TOTAL 885,982 MEAN 2,421 MAX 38,200 MIN 222 CFSM 1.97 IN 26.88

PEAK DISCHARGE (BASE, 13,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-4	1600	23.70	16,300	4-16	2000	30.02	23,200
1-06	unknown	-	unknown	8-19	2200	a27.52	19,700
2-27	2100	40.95	39,600				

a Backwater, occurred Aug. 20.

NOTE.--No gage-height record Oct. 16 to Dec. 6, Jan. 5-7.

GUYANDOTTE RIVER BASIN

151

03204500 Mud River near Milton, W. Va.

LOCATION.--Lat 38°23'15", long 82°06'46", Cabell County, on right bank 75 ft downstream from highway bridge, 700 ft downstream from Little Twomile Creek, 0.9 mile upstream from Charley Creek, 3.4 miles south of Milton, and at mile 25.3.

DRAINAGE AREA.--256 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 572.64 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers). Prior to Nov. 21, 1957, nonrecording gage at site 75 ft upstream at same datum.

AVERAGE DISCHARGE.--34 years, 273 cfs (14.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,380 cfs Feb. 26 (gage height, 21.12 ft); minimum, 3.4 cfs Sept. 18, 23 (gage height, 0.74 ft).

Period of record: Maximum discharge, 15,100 cfs Feb. 27, 1962 (gage height, 28.60 ft); maximum gage height, 29.35 ft Feb. 3, 1939, from floodmarks; minimum discharge, 0.01 cfs Sept. 8, 1957; minimum gage height, 0.06 ft Sept. 21, 23, 1959.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1555: 1953, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	39	216	72	330	492	155	196	47	47	296	13
2	37	368	154	352	282	532	146	190	42	37	170	11
3	34	384	125	1,010	240	2,180	139	428	37	31	104	10
4	31	300	110	560	710	1,370	158	362	34	27	589	9.3
5	29	173	97	2,110	472	859	278	238	31	25	372	20
6	27	127	86	2,010	386	629	276	192	30	26	150	20
7	24	103	497	789	434	480	753	162	32	32	89	15
8	22	82	1,300	494	396	468	3,460	152	30	26	57	11
9	20	67	499	486	316	332	1,700	212	27	21	42	11
10	19	58	306	1,830	258	270	622	244	25	16	34	8.0
11	18	52	223	1,240	230	234	440	198	21	13	28	6.9
12	16	48	178	960	205	212	378	170	18	12	24	6.1
13	16	44	150	662	1,320	194	392	155	19	10	21	5.8
14	15	41	131	763	2,700	183	1,190	154	26	8.8	18	5.0
15	14	39	120	523	1,350	171	1,730	486	40	7.7	16	4.5
16	13	37	115	310	666	183	2,570	979	35	7.3	10	4.5
17	15	35	111	266	468	770	1,360	626	26	7.3	12	3.9
18	13	33	96	240	646	585	710	486	21	6.9	78	3.9
19	12	33	85	225	1,420	406	490	340	18	7.3	232	5.8
20	13	32	103	505	840	318	394	262	20	13	328	3.9
21	11	32	124	2,540	516	276	416	214	45	8.8	320	4.2
22	10	32	113	1,430	607	266	3,270	187	55	6.5	130	3.9
23	15	31	94	736	677	284	2,960	183	42	6.1	83	4.2
24	212	32	86	547	1,790	306	1,200	144	39	11	56	8.8
25	274	39	83	854	3,810	280	868	114	38	9.8	42	6.1
26	139	61	80	880	5,400	252	567	96	35	21	35	8.8
27	90	76	76	536	5,200	228	412	80	24	16	31	7.3
28	64	78	76	646	1,780	212	320	61	24	12	28	8.4
29	50	150	78	866	717	198	262	52	37	16	22	17
30	43	322	76	600	-----	183	221	49	46	89	18	406
31	38	-----	76	432	-----	171	-----	55	-----	92	16	-----
TOTAL	1,375	2,948	5,664	25,524	34,206	13,464	27,837	7,467	969	669.5	3,451	653.3
MEAN	44.4	98.3	183	823	1,180	434	928	241	32.3	21.6	111	21.8
MAX	274	384	1,300	2,540	5,400	2,180	3,460	979	55	92	589	406
MIN	10	31	76	72	205	171	139	49	18	6.1	10	3.9
CFSM	.17	.38	.71	3.21	4.61	1.70	3.63	.94	.13	.08	.43	.09
IN.	.20	.43	.82	3.71	4.97	1.96	4.05	1.09	.14	.10	.50	.09

CAL YR 1971 TOTAL 105,572.0 MEAN 289 MAX 4,510 MIN 10 CFSM 1.13 IN 15.34
WTR YR 1972 TOTAL 124,227.8 MEAN 339 MAX 5,400 MIN 3.9 CFSM 1.32 IN 18.05

PEAK DISCHARGE (BASE, 3,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	2400	21.12	6,380	4-22	2300	16.93	4,270
4- 8	1700	15.85	3,890				

OHIO RIVER MAIN STEM

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 mile upstream from Fourpole Creek, 3.0 miles downstream from Symmes Creek, and at mile 311.6 (measured downstream from Pittsburgh, Pa.).

DRAINAGE AREA.--55,900 sq mi, 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 U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 490.263 ft above mean sea level, Sandy Hook datum. Prior to July 8, 1942, at datum 1.737 ft higher. Auxiliary water-stage recorder 4.7 miles upstream from base gage at datum 490.102 ft above mean sea level, Sandy Hook datum.

EXTREMES.--Current year: Maximum discharge, 375,000 cfs June 27; maximum gage height, 44.81 ft Feb. 27; minimum discharge, not determined; minimum gage height, 24.12 ft Aug. 5.

Period of record: Maximum discharge, 654,000 cfs Jan. 28, 1937; maximum gage height, 69.45 ft Jan. 27, 1937, present datum; minimum daily discharge determined, 3,200 cfs Sept. 6, 13, Nov. 2, 1934, Oct. 3, 1935, Oct. 1, 1937.

REMARKS.--Records good. Discharge less than 40,000 cfs 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	107,000	101,000	84,300	204,000	95,100	78,000	-	207,000	66,200	-
2	-	-	113,000	128,000	81,200	209,000	77,800	84,000	-	191,000	58,000	-
3	-	38,000	99,000	133,000	63,500	261,000	56,300	90,000	-	130,000	46,300	-
4	-	55,800	89,900	135,000	94,900	324,000	76,000	110,000	-	168,000	72,200	-
5	-	45,900	52,200	165,000	109,000	350,000	95,700	141,000	-	159,000	85,500	-
6	-	39,000	43,200	209,000	99,000	303,000	115,000	149,000	-	188,000	69,300	-
7	-	-	102,000	208,000	69,500	261,000	121,000	132,000	-	211,000	47,500	-
8	-	-	177,000	172,000	64,500	215,000	204,000	112,000	-	171,000	39,800	-
9	-	-	219,000	140,000	58,000	198,000	233,000	94,100	-	144,000	-	-
10	-	-	207,000	137,000	55,400	197,000	203,000	114,000	-	131,000	-	-
11	-	-	177,000	151,000	48,000	183,000	165,000	138,000	-	105,000	-	-
12	-	-	150,000	158,000	44,300	155,000	144,000	138,000	-	99,700	-	-
13	-	-	126,000	156,000	104,000	132,000	143,000	126,000	-	101,000	-	-
14	-	-	104,000	146,000	178,000	145,000	210,000	113,000	-	84,200	-	-
15	-	-	91,200	131,000	187,000	181,000	260,000	107,000	-	78,100	-	-
16	-	-	90,600	110,000	160,000	197,000	280,000	116,000	41,000	70,000	-	-
17	-	-	90,900	88,000	144,000	195,000	300,000	126,000	47,500	65,700	-	-
18	-	-	96,400	66,000	137,000	198,000	300,000	119,000	54,500	61,100	60,300	-
19	-	-	84,500	70,000	134,000	205,000	290,000	109,000	49,800	85,300	88,800	-
20	-	-	68,000	77,000	114,000	197,000	260,000	89,000	47,600	57,900	96,000	-
21	-	-	65,600	99,900	95,600	172,000	220,000	88,500	74,800	61,100	72,300	-
22	-	-	68,900	141,000	75,500	162,000	290,000	72,100	112,000	48,800	48,000	-
23	-	-	69,900	136,000	95,200	169,000	340,000	76,600	156,000	41,800	-	-
24	-	-	74,000	120,000	148,000	178,000	320,000	72,900	229,000	38,300	-	-
25	38,800	-	62,800	130,000	217,000	182,000	285,000	71,000	313,000	25,800	-	-
26	48,300	-	57,600	147,000	270,000	166,000	238,000	46,200	362,000	34,600	-	-
27	62,500	-	47,300	132,000	323,000	145,000	195,000	43,600	369,000	28,900	-	-
28	49,000	-	58,700	131,000	312,000	127,000	154,000	37,600	340,000	23,100	-	-
29	43,100	56,400	59,800	133,000	262,000	117,000	131,000	31,300	289,000	37,200	-	-
30	-	70,900	72,000	142,000	-----	115,000	116,000	25,500	230,000	40,800	-	-
31	-	-----	75,700	119,000	-----	106,000	-----	32,100	-----	61,500	-	-----
TOTAL	-	-	3,006.2M	4,117.9M	3,833.0M	5,969.0M	5,917.9M	2,882.5M	-	2,979.9M	-	-
MEAN	-	-	96,970	132,800	132,200	192,500	197,300	92,980	-	96,130	-	-
MAX	-	-	219,000	209,000	323,000	350,000	340,000	149,000	-	211,000	-	-
MIN	-	-	47,300	66,000	44,300	106,000	56,300	25,500	-	23,100	-	-
CAL YR 1971	TOTAL -	MEAN -	MAX	313,000	MIN -	CFSM -	IN -	-	-	-	-	-
WTR YR 1972	TOTAL -	MEAN -	MAX	369,000	MIN -	CFSM -	IN -	-	-	-	-	-

TWELVEPOLE CREEK BASIN

153

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 mile upstream from Maynard Branch, 0.9 mile downstream from McComas Branch, 1.5 miles upstream from Devilstrace Branch, and 7.5 miles east of Dunlow.

DRAINAGE AREA.--38.2 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 710.00 ft above mean sea level. Prior to Dec. 22, 1964, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--8 years, 45.9 cfs (16.32 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,500 cfs Feb. 26 (gage height, 13.00 ft), from rating curve extended above 1,300 cfs; minimum, 0.70 cfs Sept. 23 (gage height, 4.73 ft).
Period of record: Maximum discharge, 2,500 cfs Feb. 26, 1972 (gage height, 13.00 ft), from rating curve extended above 1,300 cfs; minimum, 0.01 cfs July 2-13, 1966, Sept. 18-28, 1967; minimum gage height, 4.44 ft Sept. 26, 27, 1967.

REMARKS.--Records good.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	17	29	15	73	105	32	35	7.9	5.9	39	1.3
2	3.9	31	23	83	62	132	31	33	6.6	4.8	36	1.3
3	3.5	167	20	109	70	313	28	40	5.9	4.1	17	1.3
4	4.1	53	16	157	52	207	45	32	5.0	4.3	42	1.3
5	5.6	32	15	581	70	153	52	27	20	5.9	26	1.3
6	4.5	24	13	288	65	117	55	23	10	5.9	16	1.2
7	4.8	18	243	151	76	101	245	21	10	3.7	11	1.2
8	4.1	12	163	96	60	67	591	25	6.9	2.9	8.1	1.3
9	3.3	11	90	145	55	64	221	44	5.4	2.0	6.6	1.6
10	2.9	4.7	64	298	50	55	138	41	7.6	2.7	6.1	1.7
11	2.4	7.1	49	222	45	48	108	34	7.1	1.6	4.1	1.4
12	1.0	4.4	35	178	43	44	159	24	4.5	6.1	3.3	1.3
13	1.7	7.9	33	139	283	40	156	27	6.1	2.7	3.3	1.2
14	1.7	7.1	28	104	320	42	1,120	28	6.7	6.1	2.7	1.6
15	1.4	8.4	27	72	201	36	747	125	6.1	1.8	2.2	1.2
16	2.4	5.9	27	50	126	100	632	170	3.9	1.7	2.0	1.1
17	4.1	5.4	24	40	112	158	283	112	3.5	1.7	1.7	1.1
18	5.4	4.5	21	51	153	122	152	41	13	1.6	20	1.0
19	3.6	5.4	14	46	204	94	116	61	29	1.6	20	1.0
20	2.0	5.8	25	48	147	81	92	49	32	1.6	15	.93
21	1.0	5.8	25	85	118	69	83	39	43	1.3	9.1	.85
22	2.4	5.4	22	47	136	86	356	32	29	1.2	6.1	.85
23	12	4.8	20	46	126	81	237	25	21	1.1	5.2	.77
24	50	5.2	20	151	792	71	155	20	18	1.3	3.9	.85
25	25	5.7	26	154	906	65	114	17	14	1.3	3.3	2.7
26	13	7.1	20	142	1,770	57	88	14	11	3.1	2.7	6.9
27	9.4	7.6	20	112	483	54	64	11	7.4	1.4	2.2	9.4
28	8.4	9.4	19	219	221	48	57	9.7	6.6	20	1.8	10
29	7.6	19	16	213	138	44	49	8.7	7.6	53	1.7	59
30	6.1	35	17	147	-----	39	42	8.1	7.1	25	1.6	69
31	5.9	-----	17	100	-----	33	-----	11	-----	20	1.4	-----
TOTAL	207.1	488.6	1,187	4,343	6,937	2,751	6,312	1,232.5	365.5	197.4	321.1	185.65
MEAN	6.68	16.3	36.3	140	241	88.7	210	39.8	12.2	6.37	10.4	6.19
MAX	50	107	243	581	1,770	313	1,120	170	43	53	42	69
MIN	1.0	4.5	13	15	43	33	28	6.1	3.5	1.1	1.4	.77
CFSM	.17	.43	1.00	3.66	6.31	2.32	5.56	1.04	.32	.17	.27	.16
IN.	.20	.48	1.16	4.23	6.80	2.68	6.15	1.20	.36	.19	.31	.18

CAL YR 1971 TOTAL 20,825.30 MEAN 57.1 MAX 1,080 MIN 1.0 CFSM 1.49 IN 20.28
WTR YR 1972 TOTAL 24,577.85 MEAN 67.2 MAX 1,770 MIN .77 CFSM 1.76 IN 23.93

PEAK DISCHARGE (BASE, 840 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-26	0830	13.00	2,500	4-14	0800	10.86	1,440
4-7	2030	10.31	1,220				

TWELVEPOLE CREEK BASIN

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 mile upstream from Laurel Creek, 1.5 miles south of East Lynn, and at mile 42.0.

DRAINAGE AREA.--133 sq mi.

PERIOD OF RECORD.--February to September 1972 (monthend contents only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Maximum contents during period, 18,400 acre-ft Sept. 30 (elevation, 663.18 ft); minimum since initial filling, 10,810 acre-ft Apr. 11 (elevation, 654.88 ft).

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. Flow is controlled by one 2.5-ft diameter bypass valve and three 5.67 ft wide by 10.0 ft high gates. Total level-pool capacity at elevation 701.0 ft (spillway crest) is 82,500 acre-ft of which 70,790 acre-ft is controlled storage above elevation 656.0 ft (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 1971 TO SEPTEMBER 1972

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)	(equivalent in cfs)
Sept. 30.....	-	-	-	-
Oct. 31.....	-	-	-	-
Nov. 30.....	-	-	-	-
Dec. 31.....	-	-	-	-
CAL YR 1971	-	-	-	-
Jan. 31.....	-	-	-	-
Feb. 29.....	-	0	-	-
Mar. 31.....	648.02	6,120	+6,120	+100
Apr. 30.....	655.74	11,500	+5,380	+90
May 31.....	662.21	17,400	+5,900	+96
June 30.....	662.07	17,260	-140	-2
July 31.....	662.65	17,850	+590	+10
Aug. 31.....	662.17	17,360	-490	-8
Sept. 30.....	663.18	18,400	+1,040	+17
WTR YR 1972	-	-	+18,400	+25

TWELVEPOLE CREEK BASIN

155

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 downstream from Laurel Creek, 1,700 ft downstream from East Lynn Dam, 1.4 miles south of East Lynn, and at mile 41.7.

DRAINAGE AREA.--138 sq mi.

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 above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1967, water-stage recorder at site 0.7 mile downstream at same datum.

AVERAGE DISCHARGE.--10 years, 143 cfs (14.07 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,280 cfs Feb. 26 (gage height, 25.61 ft); minimum, 1.5 cfs Aug. 8 (gage height, 10.79 ft).

Period of record: Maximum discharge, 4,960 cfs Mar. 12, 1968 (gage height, 31.50 ft, from floodmarks); no flow Sept. 10-27, 1964.

Maximum discharge known since at least 1913, about 13,000 cfs Feb. 3, 1939 (gage height, about 37 ft, from floodmarks), from rating curve based on conveyance-slope study. Flood of Feb. 28, 1962, reached a stage of 36.25 ft, from floodmarks (discharge, about 12,000 cfs).

REMARKS.--Records fair. Flow regulated since March 1972 by East Lynn Lake (see sta 03206780).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	16	86	39	226	894	10	26	13	11	93	7.1
2	9.2	65	68	164	198	2,190	10	28	12	11	112	7.3
3	8.6	164	57	344	201	921	10	42	11	11	111	7.3
4	8.1	146	52	328	265	2,230	17	28	11	11	111	6.8
5	11	91	46	1,340	210	1,470	15	23	12	11	97	6.6
6	10	65	41	869	234	468	14	20	17	11	52	6.4
7	8.6	51	422	401	249	323	65	20	27	11	25	6.0
8	7.2	40	432	273	291	274	441	21	27	11	22	6.0
9	6.4	31	223	313	205	217	743	22	26	11	27	6.0
10	6.0	27	179	894	171	186	627	21	27	7.6	18	6.0
11	5.6	24	142	535	150	160	344	18	27	7.1	12	6.2
12	5.4	21	111	445	144	147	246	16	25	7.1	7.6	6.2
13	4.6	20	96	355	1,000	135	413	16	23	7.1	7.6	6.4
14	4.3	18	81	323	1,060	142	1,040	24	52	6.8	7.6	6.6
15	4.1	17	74	252	557	127	1,420	63	68	6.8	7.6	6.8
16	7.0	15	78	156	360	274	1,720	256	39	7.6	7.6	6.6
17	5.6	14	66	174	315	359	1,746	479	24	7.3	7.6	6.8
18	6.0	13	58	171	465	19	1,330	373	28	6.8	9.3	6.8
19	6.7	11	49	166	729	20	582	172	30	7.3	13	7.1
20	6.4	11	61	252	446	19	262	127	70	6.8	24	7.3
21	5.6	12	73	418	337	18	242	126	141	6.6	48	7.3
22	7.0	12	64	360	362	19	794	124	165	6.6	52	7.3
23	11	11	56	303	339	19	1,040	123	163	6.6	39	7.3
24	100	11	56	276	1,570	17	966	50	115	6.6	43	10
25	99	15	56	458	2,430	16	675	15	87	6.8	35	7.6
26	55	20	53	407	1,490	16	369	16	49	6.6	24	7.3
27	36	18	53	321	654	16	211	15	26	6.6	21	7.6
28	25	22	51	434	1,070	12	133	15	22	11	14	7.8
29	21	43	50	503	622	11	64	16	22	34	6.6	31
30	17	94	44	378	-----	11	39	15	16	58	6.8	129
31	15	-----	44	285	-----	10	-----	12	-----	94	6.8	-----
TOTAL	532.4	1,123	3,022	11,942	16,260	10,740	15,730	2,322	1,379	420.7	1,068.1	354.5
MEAN	17.2	37.4	97.5	385	561	346	524	74.9	46.1	13.6	34.5	11.8
MAX	100	169	432	1,340	2,430	2,230	1,796	479	168	94	112	129
MIN	4.1	11	41	39	144	10	10	12	11	6.6	6.6	6.0

CAL YR 1971 TOTAL 68,426.6 MEAN 187 MAX 2,660 MIN 4.1 MEAN 187 CFSM 1.36 IN 18.44
WTR YR 1972 TOTAL 64,893.7 MEAN 177 MAX 2,430 MIN 4.1 MEAN 202 CFSM 1.46 IN 19.87

* Adjusted for change in contents in East Lynn Lake.

TWELVEPOLE CREEK BASIN

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 miles northeast of Wayne, and at mile 29.2.

DRAINAGE AREA.--300 sq mi.

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 miles upstream from 1924 to March 1949 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 560.00 ft 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 miles upstream at datum 16.53 ft higher. Oct. 1, 1966, to Dec. 15, 1966, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--30 years (1915-17, 1928-31, 1946-54, 1955-72), 322 cfs (14.58 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 7,210 cfs Feb. 26 (gage height, 23.19 ft); minimum, 4.2 cfs Oct. 15 (gage height, 3.34 ft).
Period of record: Maximum discharge, 15,900 cfs Feb. 28, 1962 (gage height, 29.46 ft, site and datum then in use), from rating curve extended above 9,500 cfs 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, former site and datum (discharge, 14,000 cfs) and flood of Feb. 4, 1939, reached a stage of 31.03 ft, former site and datum (discharge, 22,000 cfs), from readings by U.S. Weather Bureau.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	41	180	93	502	1,630	134	221	65	56	161	16
2	24	59	147	351	432	2,710	126	250	58	44	181	14
3	21	158	124	658	414	2,240	119	417	50	38	196	14
4	28	320	110	661	541	2,080	236	314	47	35	224	15
5	18	209	162	2,130	433	2,270	242	242	46	35	176	14
6	20	144	93	2,100	451	1,120	212	202	47	35	125	13
7	18	115	445	1,070	498	744	477	175	67	33	85	12
8	16	94	992	655	426	618	1,610	175	63	31	55	12
9	14	77	558	780	402	497	1,680	239	59	29	48	12
10	13	65	402	1,940	366	417	1,230	224	57	28	48	11
11	82	59	322	1,410	352	368	822	187	52	33	36	11
12	26	54	260	1,080	316	339	610	161	54	26	30	12
13	19	49	213	833	1,800	296	823	148	64	23	25	12
14	16	45	181	730	2,180	305	2,250	150	134	20	24	12
15	5.1	43	161	561	1,450	288	3,750	447	108	20	22	12
16	5.1	40	157	378	913	449	3,790	877	96	20	21	13
17	5.7	38	146	364	654	946	3,080	1,040	55	28	20	13
18	6.0	36	125	355	888	458	2,150	852	50	24	19	13
19	6.4	35	111	357	1,430	375	1,200	498	68	22	36	13
20	7.7	33	125	691	1,050	317	703	353	130	20	73	13
21	9.8	33	154	1,260	752	280	707	315	262	20	94	13
22	23	33	141	868	720	270	2,610	289	257	19	93	13
23	29	33	123	699	710	275	1,990	209	233	20	82	12
24	112	34	116	545	2,290	251	1,650	216	209	19	62	17
25	227	38	115	928	4,190	228	1,240	120	140	18	74	51
26	136	43	114	911	6,270	212	826	99	117	16	47	26
27	90	53	111	708	3,700	198	527	87	69	14	40	22
28	68	59	110	877	1,920	187	397	77	59	15	34	20
29	54	96	109	1,110	1,420	171	317	70	60	258	26	33
30	46	187	103	894	-----	162	253	72	84	261	20	311
31	39	-----	99	655	-----	145	-----	99	-----	172	17	-----
TOTAL	1,204.8	2,334	6,289	26,652	37,512	21,098	35,761	8,940	2,464	1,432	2,194	775
MEAN	38.9	77.8	203	860	1,294	681	1,192	288	95.5	46.2	70.8	25.8
MAX	227	320	992	2,130	6,270	2,880	3,790	1,040	262	261	224	311
MIN	5.1	33	93	93	318	145	119	70	46	14	17	11
CAL YR 1971	TOTAL 144,743.8	MEAN 397	MAX 4,610	MIN 5.1	MEAN 397	CFSM 1.32	IN 17.94					
WTR YR 1972	TOTAL 147,055.8	MEAN 402	MAX 6,270	MIN 5.1	MEAN 427	CFSM 1.42	IN 19.33					

† Adjusted for change in contents in East Lynn Lake.

BIG SANDY RIVER BASIN

157

03213000 Tug Fork at Litwar, W. Va.

LOCATION.--Lat 37°29'05", long 81°50'40", McDowell County, on left bank 200 ft downstream from War Branch, 0.5 mile downstream from Litwar, 2.2 miles northwest of Iaeger, 2.7 miles downstream from Dry Fork, and at mile 105.6.

DRAINAGE AREA.--502 sq mi.

PERIOD OF RECORD.--May 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 936.36 ft above mean sea level. Prior to Oct. 16, 1942, nonrecording gage at highway bridge 0.5 mile upstream at same datum.

AVERAGE DISCHARGE.--42 years, 528 cfs (14.28 inches per year).

EXTREMES.--Current year: Maximum discharge, 17,300 cfs Jan. 21 (gage height, 12.23 ft); minimum, 155 cfs Sept. 23, 24, 26 (gage height, 1.20 ft).

Period of record: Maximum discharge, 35,700 cfs Jan. 29, 1957 (gage height, 21.60 ft); minimum observed, 11 cfs 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	331	254	245	1,290	1,820	375	556	464	326	1,270	328
2	193	315	250	608	1,130	1,530	375	532	421	316	990	298
3	184	756	239	1,400	1,030	1,610	364	1,060	389	307	740	298
4	174	1,290	233	1,480	979	1,500	358	2,620	361	298	556	316
5	184	890	226	5,220	807	1,440	358	2,140	384	793	428	310
6	684	652	219	3,570	767	1,270	342	1,460	439	1,100	325	352
7	596	508	885	1,920	787	1,180	342	1,170	444	752	271	275
8	386	422	1,230	1,260	699	1,110	3,480	1,060	394	560	232	260
9	320	369	874	1,040	657	960	2,180	1,580	346	448	214	255
10	290	336	689	1,250	624	890	1,400	1,880	323	386	214	250
11	259	315	567	1,300	584	820	1,130	1,420	311	338	228	226
12	235	300	465	1,150	561	788	2,560	1,160	300	314	255	194
13	214	280	421	1,020	1,170	756	2,970	997	286	302	228	210
14	193	267	384	1,310	2,270	716	8,280	1,050	276	288	214	206
15	180	251	361	1,380	1,820	668	5,850	982	267	274	193	206
16	177	235	533	1,100	1,430	628	3,640	960	263	264	190	198
17	369	235	672	998	1,270	644	2,730	915	301	262	180	183
18	464	216	593	822	1,150	620	1,970	826	320	255	5,410	176
19	364	208	493	725	1,110	564	1,560	860	392	259	4,450	194
20	305	202	522	1,140	1,020	524	1,320	1,080	371	262	2,680	183
21	271	197	554	11,000	910	482	1,150	1,080	974	252	1,450	169
22	243	192	508	3,700	1,050	488	1,100	1,570	1,320	240	950	173
23	225	186	461	2,400	1,440	500	990	2,200	868	237	724	162
24	1,610	182	441	1,760	6,560	482	890	1,520	649	234	597	162
25	1,610	192	425	1,560	10,400	458	812	1,130	527	228	569	166
26	1,440	200	399	1,380	8,430	440	756	887	449	220	597	162
27	960	209	380	1,290	5,370	434	692	721	383	214	514	316
28	692	220	356	3,490	3,220	416	636	628	338	213	454	520
29	500	230	338	3,510	2,320	416	596	559	321	237	406	340
30	404	245	318	2,260	-----	404	588	508	316	1,190	370	2,730
31	353	-----	306	1,620	-----	392	-----	502	-----	2,460	340	-----
TOTAL	14,286	10,431	14,596	62,958	60,855	24,950	49,794	35,613	13,197	13,829	26,239	9,818
MEAN	461	348	471	2,031	2,098	805	1,660	1,149	440	446	846	327
MAX	1,610	1,290	1,230	11,000	10,400	1,820	8,280	2,620	1,320	2,460	5,410	2,730
MIN	174	182	219	295	561	392	342	502	263	213	180	162
CFSM	.92	.69	.94	4.05	4.18	1.60	3.31	2.29	.88	.89	1.69	.65
IN.	1.06	.77	1.08	4.67	4.51	1.85	3.69	2.64	.98	1.02	1.94	.73
CAL YR 1971	TOTAL 223,097	MEAN 611	MAX 10,700	MIN 100	CFSM 1.22	IN 16.53						
WTR YR 1972	TOTAL 336,566	MEAN 920	MAX 11,000	MIN 162	CFSM 1.83	IN 24.94						

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-5	1600	6.65	6,860	4-14	1700	10.44	13,900
1-21	0800	12.23	17,300	8-18	2000	10.84	14,700
2-25	0600	10.99	15,000				

03213500 Panther Creek near Panther, W. Va.

LOCATION.--Lat 37°26'45", long 81°52'15", McDowell County, on left bank 200 ft downstream from Cub Branch, 2.1 miles upstream from Trace Fork, 3.0 miles southwest of Panther, and at mile 4.1.

DRAINAGE AREA.--30.8 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,050 ft (from topographic map).

AVERAGE DISCHARGE.--26 years, 35.3 cfs (15.56 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,510 cfs Feb. 24 (gage height, 7.43 ft); minimum daily, 1.2 cfs Sept. 25.

Period of record: Maximum discharge, 4,600 cfs Mar. 7, 1967 (gage height, 10.71 ft), from rating curve extended above 2,800 cfs on basis of slope-area measurement at gage height 10.67 ft; no flow at times during August and September 1955.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1505: 1955(P). WSP 1908: 1955(M), 1957(M).

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	16	15	16	56	70	18	15	12	9.9	25	5.9
2	7.5	18	12	151	48	54	18	19	11	7.7	25	5.9
3	5.7	128	12	205	44	63	17	29	9.6	7.2	14	5.9
4	5.1	95	12	223	37	65	20	46	9.1	9.6	9.2	5.9
5	12	49	12	502	33	63	18	40	12	33	8.3	7.1
6	9.5	32	13	253	32	51	20	32	13	21	6.6	5.9
7	8.3	24	233	125	37	49	61	25	14	14	6.6	4.6
8	7.6	17	151	77	37	46	328	30	9.7	10	6.6	7.1
9	7.3	15	77	71	32	36	124	128	8.9	9.0	11	8.3
10	7.3	12	54	142	28	32	73	135	8.6	8.0	8.3	5.9
11	5.5	11	45	122	26	32	54	82	7.9	4.9	6.6	5.9
12	4.7	11	37	86	29	28	267	58	7.4	2.8	9.2	4.6
13	4.6	11	33	76	189	26	210	47	8.0	1.5	9.2	3.7
14	3.8	11	31	107	228	25	847	50	7.0	2.1	8.3	3.3
15	3.7	9.2	31	103	144	22	346	55	6.6	4.1	7.4	3.4
16	13	9.0	37	73	97	20	188	72	10	4.1	7.4	3.8
17	25	8.7	42	68	79	24	121	62	10	8.3	6.6	3.3
18	16	8.7	35	55	63	21	80	50	11	6.6	8.3	3.2
19	11	9.0	31	40	61	16	61	44	9.9	4.9	776	3.6
20	9.0	8.7	41	142	58	12	51	52	17	4.1	350	3.0
21	8.2	8.5	47	738	54	18	40	62	21	4.9	75	2.8
22	8.5	8.3	42	230	85	19	38	62	19	2.8	30	2.6
23	11	8.0	38	128	117	12	32	69	14	1.5	21	2.6
24	140	9.0	35	90	555	11	29	55	11	2.1	15	2.4
25	82	12	30	92	598	10	26	41	10	4.1	13	1.2
26	58	12	27	97	610	11	24	28	8.9	4.1	11	2.9
27	44	13	24	82	313	15	22	20	8.0	6.6	11	14
28	32	14	24	343	158	21	19	17	8.4	8.3	9.5	17
29	24	18	19	240	96	19	18	14	7.4	16	9.5	10
30	19	19	18	125	-----	17	15	13	8.5	18	5.9	80
31	17	-----	18	75	-----	15	-----	18	-----	20	5.9	-----
TOTAL	617.6	625.1	1,276	4,877	4,244	923	3,185	1,470	318.9	261.2	1,516.4	235.8
MEAN	19.9	20.8	41.2	157	146	29.8	106	47.4	10.6	8.43	48.9	7.86
MAX	140	128	233	738	855	70	847	135	21	33	776	80
MIN	3.7	8.0	12	16	26	10	15	13	6.6	1.5	5.9	1.2
CFSM	.65	.68	1.34	5.10	4.74	.97	3.44	1.54	.34	.27	1.59	.26
IN.	.75	.75	1.54	5.89	5.13	1.11	3.85	1.78	.39	.32	1.83	.28

CAL YR 1971 TOTAL 14,159.2 MEAN 38.8 MAX 671 MIN 1.9 CFSM 1.26 IN 17.10
WTR YR 1972 TOTAL 19,550.0 MEAN 53.4 MAX 855 MIN 1.2 CFSM 1.73 IN 23.61

PEAK DISCHARGE (BASE, 700 CFS)

a About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	0215	7.15	1,340	4-14	1315	7.02	1,260
2-24	1200	7.43	1,510	8-19	a0500	6.78	1,130

BIG SANDY RIVER BASIN

159

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 upstream from bridge on U.S. Highway 119, and 0.8 mile downstream from Pond Creek.

DRAINAGE AREA.--932 sq mi.

PERIOD OF RECORD.--October 1967 to current year. Gage-height records collected in this vicinity since 1926 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 620.90 ft above mean sea level, Ohio River datum (levels by Corps of Engineers). Prior to Jan. 21, 1969, at datum 0.92 ft lower.

AVERAGE DISCHARGE.--5 years, 1,017 cfs (14.82 inches per year).

EXTREMES.--Current year: Maximum discharge, 20,600 cfs Feb. 25 (gage height, 29.75 ft); minimum daily, 226 cfs Sept. 25, 26.

Period of record: Maximum discharge observed, 23,300 cfs May 7, 1971 (gage height, 29.97 ft); maximum gage height, 31.54 ft Dec. 31, 1969; minimum discharge, 59 cfs Oct. 18-20, 1969 (gage height, 2.04 ft).

Floods of Jan. 30, 1957, Mar. 12, 1963, and Mar. 7, 1967, reached stages of 43.6, 44.5, and 40.7 ft respectively, from readings by U.S. Weather Bureau.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	346	547	574	492	2,430	3,380	855	1,040	770	632	2,680	381
2	298	526	507	1,260	2,050	2,840	835	995	676	604	1,840	352
3	280	782	455	3,630	1,870	2,730	785	1,090	628	692	1,400	354
4	278	2,020	438	3,240	1,850	2,650	860	2,400	590	608	1,140	346
5	307	1,550	427	8,670	1,560	2,550	1,050	3,090	744	914	500	425
6	646	1,120	402	8,030	1,500	2,290	1,070	2,250	860	1,920	736	414
7	1,090	880	2,360	3,980	1,580	2,060	1,160	1,790	940	1,350	640	436
8	610	718	3,450	2,640	1,460	1,970	5,770	1,600	752	975	572	390
9	413	602	2,010	2,060	1,370	1,760	5,080	2,150	612	752	550	450
10	322	542	1,390	2,660	1,280	1,560	3,200	3,530	565	632	728	414
11	316	502	1,120	2,930	1,180	1,480	2,470	2,790	520	565	540	360
12	292	466	910	2,490	1,140	1,410	3,860	2,190	484	502	397	327
13	280	430	800	2,070	2,360	1,350	6,150	1,820	456	453	329	298
14	245	392	712	2,030	3,880	1,300	5,600	1,770	478	418	354	290
15	232	367	668	2,240	4,070	1,210	14,400	1,760	450	400	343	301
16	248	337	688	1,840	3,130	1,160	8,420	1,830	548	384	340	298
17	367	231	990	1,490	2,570	1,160	5,370	1,790	820	522	324	288
18	638	316	925	1,410	2,370	1,160	3,890	1,600	995	495	760	277
19	462	304	785	1,260	2,390	1,070	3,070	1,480	1,310	408	12,600	259
20	376	304	800	1,260	2,340	995	2,530	1,560	1,120	450	5,540	262
21	322	304	945	12,200	2,030	920	2,160	1,710	1,630	384	2,850	259
22	367	298	935	9,440	2,100	1,220	2,020	1,740	2,700	335	1,830	240
23	402	295	840	4,530	2,660	1,560	1,920	3,000	1,840	329	1,250	242
24	2,680	282	785	3,320	9,450	1,350	1,680	2,690	1,300	366	950	232
25	3,310	349	748	2,890	16,400	1,200	1,530	1,940	1,040	338	765	226
26	2,570	416	656	2,740	13,100	1,080	1,450	1,480	845	285	700	226
27	1,780	420	660	2,500	11,000	1,010	1,320	1,180	712	280	692	350
28	1,250	462	612	4,440	6,290	970	1,210	995	600	296	640	1,750
29	900	522	590	7,020	4,280	935	1,130	890	554	656	540	920
30	708	578	544	4,330	-----	940	1,080	825	565	2,260	512	3,340
31	594	-----	520	3,130	-----	895	-----	785	-----	3,100	470	-----
TOTAL	22,919	16,957	28,281	112,212	109,690	48,155	95,925	55,760	26,104	22,305	43,992	15,207
MEAN	739	565	912	3,620	3,782	1,553	3,198	1,799	870	720	1,419	507
MAX	3,310	2,020	3,450	12,200	16,400	3,380	14,400	3,530	2,700	3,100	12,600	3,340
MIN	232	282	402	492	1,140	895	785	785	450	280	324	226
CFSM	.79	.61	.58	3.88	4.06	1.67	3.43	1.93	.93	.77	1.52	.54
IN.	.91	.68	1.13	4.48	4.38	1.92	3.83	2.23	1.04	.89	1.76	.61

CAL YR 1971 TOTAL 452,759 MEAN 1,240 MAX 19,800 MIN 175 CFSM 1.33 IN 18.07
WTR YR 1972 TOTAL 597,507 MEAN 1,633 MAX 16,400 MIN 226 CFSM 1.75 IN 23.85

PEAK DISCHARGE (BASE, 9,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 5	2330	20.18	11,500	2-27	1230	23.22	14,200
1-21	1700	27.13	18,000	4-15	0430	28.90	19,800
2-25	1530	29.75	20,600	8-19	0800	a26.3	17,200

a. Observed.

NOTE.--No gage-height record
Oct. 1-19, Aug. 9 to Sept. 14.

03214000 Tug Fork near Kermit, W. Va.

LOCATION.--Lat 37°49'05", long 82°23'20", Mingo County, on right bank 2.0 miles upstream from Wolf Creek, 3.0 miles upstream from Kermit, 3.0 miles downstream from Pigeon Creek, and at mile 37.7.

DRAINAGE AREA.--1,185 sq mi.

PERIOD OF RECORD.--July 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 581.82 ft above mean sea level.

AVERAGE DISCHARGE.--38 years, 1,338 cfs (15.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 46,800 cfs Feb. 26 (gage height, 40.25 ft), from rating curve extended as explained below; minimum, 229 cfs Sept. 26 (gage height, 1.84 ft).
 Period of record: Maximum discharge, 69,600 cfs Mar. 13, 1963 (gage height 45.65 ft, from floodmarks), from rating curve extended above 29,000 cfs on basis of slope-area measurement of peak flow; minimum, 23 cfs Sept. 14, 1939 (gage height, 1.13 ft).
 Stage of about 43.3 ft was reached on unknown date prior to 1915.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 953: 1934-41. WSP 1505: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	479	710	779	640	3,080	4,510	1,220	1,210	803	674	3,190	465
2	425	721	736	2,000	2,570	3,730	1,200	1,150	702	670	1,910	442
3	387	986	669	4,800	2,350	3,970	1,150	1,190	639	709	1,520	429
4	365	1,950	629	4,200	2,440	3,880	1,220	1,960	605	686	1,230	424
5	369	1,930	611	12,000	2,180	3,550	1,590	3,160	751	765	999	440
6	509	1,410	585	10,000	1,970	3,190	1,720	2,400	882	1,740	815	423
7	1,020	1,110	2,030	5,000	2,090	2,830	2,050	1,900	983	1,540	676	442
8	763	932	4,990	3,500	2,040	2,630	8,290	1,600	880	1,100	593	396
9	535	793	3,160	2,700	1,870	2,400	7,990	2,200	690	857	601	438
10	432	703	2,170	3,600	1,730	2,120	4,530	3,320	640	696	904	482
11	391	647	1,670	3,800	1,580	1,960	3,340	2,890	577	600	679	399
12	358	598	1,360	3,300	1,480	1,830	3,780	2,250	521	561	530	355
13	322	558	1,160	2,700	2,430	1,740	7,660	1,860	488	488	600	329
14	299	513	1,040	2,700	6,560	1,670	11,300	1,720	545	440	542	314
15	279	476	965	3,000	5,720	1,590	25,000	1,790	500	416	452	304
16	280	444	939	2,500	4,020	1,560	20,700	1,810	600	399	413	299
17	321	424	1,140	2,000	3,220	1,840	9,320	1,820	900	428	380	294
18	677	414	1,190	1,800	2,910	1,830	6,340	1,670	1,200	570	584	292
19	569	402	1,060	1,680	2,990	1,690	3,870	1,500	1,400	432	10,800	278
20	440	404	1,030	1,590	2,990	1,540	3,140	1,540	1,200	438	7,310	263
21	375	402	1,160	9,670	2,630	1,440	2,660	1,670	1,800	416	3,660	270
22	379	388	1,170	15,900	2,530	1,590	2,660	1,680	2,700	368	2,100	253
23	514	383	1,080	6,770	2,920	2,140	2,600	2,670	1,900	380	1,450	242
24	2,220	368	1,000	4,480	10,300	2,090	2,290	2,800	1,500	367	1,120	249
25	3,820	402	950	3,790	34,100	1,860	2,040	2,000	1,200	405	919	239
26	2,760	472	900	3,640	42,700	1,670	1,830	1,530	1,000	340	823	234
27	2,180	507	850	3,330	33,200	1,530	1,620	1,230	822	312	851	335
28	1,510	534	800	4,800	12,500	1,440	1,450	1,020	700	335	758	1,920
29	1,110	605	760	9,360	6,210	1,380	1,330	915	649	615	669	1,130
30	892	722	720	6,070	-----	1,330	1,270	848	618	1,850	582	1,830
31	754	-----	680	4,030	-----	1,280	-----	806	-----	2,950	523	-----
TOTAL	25,734	20,908	37,983	145,350	203,310	67,810	145,160	56,109	28,395	22,547	48,183	14,210
MEAN	830	697	1,225	4,689	7,011	2,187	4,839	1,810	947	727	1,554	474
MAX	3,820	1,950	4,990	15,900	42,700	4,510	25,000	3,320	2,700	2,950	10,800	1,920
MIN	279	368	585	640	1,480	1,280	1,150	806	488	312	380	234
CFSM	.70	.59	1.03	3.96	5.92	1.85	4.08	1.53	.80	.61	1.31	.40
IN.	.81	.66	1.19	4.56	6.38	2.13	4.56	1.76	.89	.71	1.51	.45
CAL YR 1971	TOTAL 584,971		MEAN 1,603		MAX 24,200		MIN 211		CFSM 1.35		IN 18.36	
WTR YR 1972	TOTAL 815,699		MEAN 2,229		MAX 42,700		MIN 234		CFSM 1.88		IN 25.61	

PEAK DISCHARGE (BASE, 10,000 CFS)

NOTE.--No gage-height record
 Dec. 25 to Jan. 18.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1- 5	unknown	-	unknown	4- 8	2200	19.09	10,300
1-22	0300	28.37	20,200	4-15	2200	34.19	29,000
1-29	0900	18.86	10,100	8-19	1500	24.20	15,000
2-26	1700	40.25	46,800				

BIG SANDY RIVER BASIN

161

03215000 Big Sandy River at Louisa, Ky.

LOCATION.--Lat 38°10'16", long 82°38'05", Lawrence County, on left bank 1.6 miles upstream from Blaine Creek, 4.3 miles northwest of Louisa, and at mile 21.2.

DRAINAGE AREA.--3,892 sq mi.

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 above mean sea level. Prior to Nov. 10, 1951, water-stage recorder or nonrecording gages at lock 3, 5.0 miles upstream at datum 3.65 ft higher. Auxiliary water-stage recorder (formerly base gage) at site 5.0 miles upstream; prior to Nov. 10, 1951, auxiliary water-stage recorder or nonrecording gage at mouth of Blaine Creek, 1.6 miles downstream from present base gage.

AVERAGE DISCHARGE.--34 years, 4,238 cfs (14.79 inches per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 71,300 cfs Feb. 27 (gage height, 40.81 ft); minimum daily, 595 cfs Sept. 21.

Period of record: Maximum discharge, 89,400 cfs Mar. 2, 1955; maximum gage height, 46.37 ft May 8, 1958; minimum discharge not determined.

Flood of Apr. 3, 1908, reached a stage of 48.4 ft, former site and datum.

REMARKS.--Records good above 4,000 cfs 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,460	2,380	2,860	2,310	13,500	26,800	4,330	4,030	1,960	2,760	7,590	895
2	2,110	2,280	2,780	2,850	9,200	22,800	4,280	3,920	1,900	3,940	6,830	787
3	1,930	2,740	2,390	6,060	7,460	23,200	3,940	3,890	1,640	3,560	5,790	737
4	1,700	3,860	2,030	12,800	7,150	22,600	3,870	3,820	1,510	3,120	4,480	721
5	1,510	6,750	1,750	20,300	6,950	16,600	4,190	4,600	1,480	2,660	3,940	694
6	1,400	5,740	1,620	34,000	6,410	13,000	4,730	5,650	1,650	3,460	2,990	768
7	2,020	4,500	2,740	33,000	6,080	11,400	5,220	5,300	2,120	4,340	2,300	854
8	4,520	3,750	11,400	22,200	6,230	8,350	14,900	4,710	2,370	3,890	1,710	870
9	3,460	3,180	12,800	11,400	6,100	7,170	23,800	4,560	2,050	2,950	1,330	855
10	2,520	2,550	7,920	11,900	5,600	6,460	16,900	6,100	1,830	2,240	1,350	844
11	1,840	2,340	5,690	14,400	5,170	5,870	9,600	7,170	1,730	1,640	1,620	880
12	1,600	2,210	4,980	14,500	4,790	5,450	8,230	6,200	1,480	1,400	1,340	775
13	1,400	2,070	4,360	12,000	7,950	5,120	20,100	5,280	1,360	1,290	1,170	725
14	1,310	1,990	3,670	9,230	18,200	5,030	36,800	4,800	1,550	1,070	1,290	691
15	1,130	1,950	3,350	7,820	23,100	5,080	50,600	6,500	1,680	992	1,230	697
16	1,030	1,830	3,260	7,660	18,000	5,200	63,300	8,280	1,330	965	1,070	631
17	970	1,630	3,150	6,600	12,100	6,970	53,100	7,670	1,180	896	911	651
18	1,070	1,540	3,980	5,500	10,000	7,830	34,400	6,730	1,630	887	804	634
19	2,190	1,460	3,980	5,180	10,600	7,310	24,800	5,780	2,380	1,000	2,820	696
20	2,140	1,390	3,650	5,280	10,300	6,260	20,200	4,920	2,580	997	10,300	631
21	1,830	1,390	3,470	9,540	9,030	5,590	17,500	4,710	3,020	938	7,470	595
22	1,550	1,420	3,810	32,600	7,780	5,310	21,000	4,790	4,520	912	5,080	767
23	1,490	1,420	3,730	34,800	7,320	6,170	20,800	5,070	5,810	775	4,050	865
24	3,680	1,450	3,500	26,500	14,100	7,280	12,200	6,030	4,410	745	3,000	1,010
25	9,900	1,490	3,240	20,600	43,800	6,740	8,970	5,470	3,320	694	2,090	1,050
26	12,900	1,600	3,120	15,600	64,000	5,890	7,320	4,590	2,800	724	1,570	991
27	8,960	1,840	2,950	11,800	69,300	5,250	6,130	3,930	1,910	656	1,380	963
28	6,050	1,920	2,870	12,200	58,800	4,840	5,200	3,370	1,430	740	1,290	1,800
29	4,470	2,050	2,740	23,400	37,800	4,590	4,760	2,720	1,490	1,390	1,170	4,440
30	3,580	2,460	2,540	26,800	-----	4,530	4,330	2,180	1,850	2,790	1,160	4,000
31	2,920	-----	2,420	22,200	-----	4,500	-----	2,120	-----	5,460	1,030	-----
TOTAL	95,640	73,180	122,750	481,030	506,820	279,190	515,500	154,890	65,970	59,901	90,155	31,521
MEAN	3,085	2,439	3,960	15,520	17,480	9,006	17,180	4,996	2,199	1,932	2,908	1,051
MAX	12,900	6,750	12,800	34,800	69,300	26,800	63,300	8,280	5,810	5,460	10,300	4,440
MIN	970	1,390	1,620	2,310	4,790	4,500	3,870	2,120	1,180	656	804	595

CAL YR 1971 TOTAL 1,979,624 MEAN 5,424 MAX 50,200 MIN 435 MEAN/ 5,413 CFSM/ 1.39 IN./ 18.89
WTR YR 1972 TOTAL 2,476,547 MEAN 6,767 MAX 69,300 MIN 595 MEAN/ 6,771 CFSM/ 1.74 IN./ 23.63

/ Adjusted for change in contents in Fishtrap, North Fork Pound River, John W. Flannagan, and Dewey Lakes.

OHIO RIVER MAIN STEM

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 miles upstream from Grays Branch, 4.7 miles downstream from Little Sandy River, 5.0 miles north of Greenup, and at mile 341.0 (measured downstream from Pittsburgh, Pa.).

DRAINAGE AREA.--62,000 sq mi, approximately.

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

GAGE.--Gate-opening and water-stage recorders. Headwater gage 0.4 mile upstream at datum 503.06 ft above mean sea level, Ohio River datum and 502.51 ft above mean sea level, datum of 1929. Tailwater gage 0.4 mile downstream at datum 30.12 ft lower.

EXTREMES.--Current year: Maximum daily discharge, 419,000 cfs Feb. 27; maximum headwater gage height, 21.24 ft Feb. 28; maximum tailwater gage height, 50.16 ft Feb. 28; minimum daily discharge, 14,200 cfs Sept. 10. Period of record: Maximum daily discharge, 419,000 cfs Feb. 27, 1972; maximum headwater gage height, 21.24 ft Feb. 28, 1972; maximum tailwater gage height, 50.16 ft Feb. 28, 1972; minimum daily discharge, 9,300 cfs Oct. 17, 1968.

REMARKS.--Records good. Daily discharge computed from head, gate 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42,300	26,400	107,000	97,400	112,000	230,000	96,400	74,000	31,100	215,000	77,200	20,500
2	31,600	37,100	113,000	130,000	95,000	229,000	80,000	86,000	42,100	195,000	65,100	16,000
3	24,000	44,100	104,000	134,000	85,000	310,000	69,300	92,000	39,100	181,000	53,800	15,200
4	31,000	54,600	91,000	149,000	95,000	364,000	75,500	119,000	41,100	172,000	74,300	23,300
5	32,500	55,800	65,000	144,000	112,000	381,000	95,700	141,000	35,000	161,000	83,200	19,200
6	24,500	48,100	57,000	224,000	110,000	350,000	112,000	159,000	25,000	195,000	70,200	17,000
7	26,500	42,600	46,400	214,000	90,000	292,000	127,000	144,000	31,200	231,000	42,300	15,500
8	27,400	36,800	194,000	190,000	75,000	243,000	207,000	122,000	30,100	201,000	42,300	20,000
9	27,100	35,100	230,000	155,000	70,000	219,000	250,000	102,000	21,100	161,000	30,100	21,600
10	26,700	31,300	220,000	176,000	70,000	214,000	225,000	114,000	29,600	140,000	25,100	14,200
11	20,500	33,300	190,000	164,000	60,000	202,000	184,000	144,000	24,600	112,000	35,300	21,400
12	19,300	21,900	164,000	172,000	56,000	171,000	155,000	150,000	24,000	99,000	35,700	14,600
13	25,300	27,400	136,000	169,000	110,000	144,000	151,000	138,000	23,700	102,000	35,700	29,700
14	20,900	21,700	113,000	154,000	185,000	143,000	210,000	124,000	37,100	84,000	14,100	33,300
15	14,000	27,400	105,000	144,000	205,000	178,000	305,000	112,000	34,600	79,000	27,100	34,700
16	21,800	23,200	95,000	122,000	185,000	201,000	310,000	124,000	44,700	74,000	22,200	23,300
17	18,700	24,400	95,000	99,000	160,000	208,000	369,000	125,000	49,400	67,000	27,700	40,400
18	17,800	25,900	101,000	80,000	150,000	214,000	394,000	127,000	55,800	65,000	57,900	32,100
19	17,300	21,200	94,000	40,000	145,000	221,000	384,000	119,000	51,400	66,000	90,500	34,900
20	14,500	23,100	74,000	95,000	140,000	209,000	291,000	100,000	51,700	60,000	108,000	31,700
21	22,900	22,300	76,000	116,000	110,000	182,000	250,000	95,000	74,200	62,000	94,100	23,400
22	17,900	29,600	79,000	158,000	85,000	168,000	322,000	33,000	110,000	50,000	56,300	24,200
23	15,600	17,000	77,000	150,000	95,000	172,000	361,000	43,000	154,000	42,000	41,700	22,300
24	26,400	24,400	41,000	140,000	140,000	142,000	415,000	76,100	227,000	38,000	33,200	29,000
25	51,600	34,700	74,000	145,000	210,000	191,000	392,000	71,000	300,000	27,000	33,400	14,400
26	70,200	30,100	63,000	162,000	362,000	176,000	293,000	51,200	350,000	35,000	25,200	17,900
27	77,400	33,800	53,000	155,000	419,000	155,000	200,000	46,800	380,000	28,000	35,400	21,500
28	61,300	40,700	59,000	139,000	395,000	139,000	165,000	41,600	370,000	25,000	21,400	30,000
29	52,700	59,700	64,000	149,000	327,000	125,000	134,000	33,700	320,000	39,000	25,900	31,900
30	34,900	71,600	72,000	167,000	-----	121,000	120,000	30,100	250,000	45,600	26,600	46,700
31	34,900	-----	80,000	143,000	-----	116,000	-----	35,400	-----	67,600	17,300	-----
TOTAL	972,100	1,035,144	3,230,444	4,543,334	4,453,044	6,454,044	6,741,444	3,067,344	3,263,044	3,123,244	1,438,144	747,900
MEAN	31,360	34,500	104,200	146,500	153,600	208,200	224,700	98,950	108,800	100,700	46,390	24,930
MAX	77,400	71,600	230,000	228,000	419,000	341,000	415,000	159,000	380,000	231,000	104,000	46,700
MIN	16,600	17,000	53,000	80,000	56,000	116,000	60,300	30,100	21,100	25,000	17,300	14,200
CAL YR 1971	TOTAL 30,061,100	MEAN 82,360	MAX 330,000	MIN 11,500	CFSM 1.33	IN 18.03						
WTR YR 1972	TOTAL 39,059,300	MEAN 106,700	MAX 419,000	MIN 14,200	CFSM 1.72	IN 23.44						

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 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Monongahela River basin						
03067500	Shavers Fork at Cheat Bridge, W. Va.	Lat 38°36'40", long 79°52'30", Randolph County, at old highway bridge at Cheat Bridge, 0.5 mile upstream from U.S. Highway 250 bridge, and 5.0 miles northwest of Durbin.	57.9	1922-26*, 1964, 1966, 1972	6- 7-72	57
Little Kanawha River basin						
03155400	North Fork Hughes River at Harrisville, W. Va.	Lat 39°13'30", long 81°02'00", Ritchie County, at Harrisville, and 0.2 mile upstream from Cunningham Run.	72.9	1948-49, 1951, 1953-56, 1958, 1961-62, 1964, 1966-69, 1972	10-19-71 7-20-72	3.0 7.7
Kanawha River basin						
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	7-24-72	27
03178200	Brush Creek at Princeton, W. Va.	Lat 37°22'19", long 81°05'01", Mercer County, at bridge on U.S. Highway 219, at Princeton, and 2,000 ft downstream from confluence with Daves Fork.	40.2	1960-61, 1965, 1968, 1972	7-25-72	4.1
03182000	Knapp Creek at Marlinton, W. Va.	Lat 38°12'40", long 80°04'30", Pocahontas County, on right bank 0.2 mile downstream from Spice Run, and 1.0 mile southeast of Marlinton.	108	1945-58*, 1959, 1962, 1972	9-21-72	9.9
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 downstream from Laurel Creek, and at mile 6.4.	150	1929-69*, 1972	9-21-72	17
03189800	Big Clear Creek near Rupert, W. Va.	Lat 37°59'00", long 80°40'10", Greenbrier County, at post office at Kessler, 2.0 miles northeast of Rupert, and at mile 3.0.	47.9	1947-49, 1951-53, 1955, 1966, 1968, 1972	7-25-72	7.7

* Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage 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 1972

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	Unnamed Run on North Fork Mountain near Franklin, W. Va.	Lat 38°41'47", long 79°23'55", Pendleton County, at culvert on U.S. Highway 33, 0.7 mile upstream from mouth, and 5.0 miles northwest of Franklin.	0.45	1965-72	6-22-72	3.40	17
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 upstream from highway bridge at Cabins, 1.8 miles downstream from Jordan Run, 6.0 miles west of Petersburg, and at mile 3.0.	314	1940-61#, 1962-72a	2-26-72	10.75	10,500
01606800	Brushy Run near Petersburg, W. Va.	Lat 38°48'20", long 79°12'50", Grant County, at culvert on State Route 4, 14.0 miles southwest of Petersburg, and at mile 3.2.	1.43	1965-72	6-22-72	4.30	46
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 miles northeast of Moorefield, and at mile 3.8.	0.24	1965-72	6-22-72	5.70	75
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 mile upstream from mouth, and 6.0 miles southwest of Augusta.	2.65	1965-72	6-22-72	4.50	160
Monongahela River basin							
03049950	Back Fork above Huttonsville, W. Va.	Lat 38°39'55", long 79°55'40", Randolph County, at culvert on U.S. Highway 250, 0.8 mile upstream from mouth, and 4.2 miles southeast of Huttonsville.	1.17	1965-72	1972	3.40	38
03049970	Riffle Creek near Huttonsville, W. Va.	Lat 38°40'52", long 79°58'31", Randolph County, 55 ft upstream from bridge on secondary road, 0.1 mile off U.S. Highway 250, 1.4 miles upstream from mouth, and 2.0 miles south of Huttonsville.	10.2	1965-72	1972	3.90	450
03050650	Unnamed Run at Gilman, W. Va.	Lat 38°58'35", long 79°50'16", Randolph County, at culvert on U.S. Highway 219, 0.3 mile northeast of Gilman, 0.4 mile upstream from mouth, and 3.7 miles north of Elkins.	0.38	1964-72	6-23-72	4.25	25
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 miles west of Buckhannon.	2.60	1967-72	6-23-72	9.50	145
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 mile upstream from mouth, and 1.5 miles west of Buckhannon.	2.33	1966-72	6-23-72	6.72	110

See footnotes at end of table, p. 167.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Annual maximum discharge at crest-stage partial-record stations during water year 1972--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							
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 miles southwest of Philippi, and at mile 2.5.	0.60	1965-72	6-23-72	4.90	86
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 mile upstream from mouth, and 3.2 miles east of Philippi.	3.15	1964-72	1972	<2.82	(+)
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 mile upstream from confluence with Wickwire Run, and 4.0 miles northeast of Grafton.	2.33	1965-72	6-23-72	7.50	220
08057500	Skin Creek near Brownsville, W. Va.	Lat 38°58'30", long 80°26'40", Lewis County, 2.6 miles southeast of Brownsville, 4.7 miles southeast of Weston, and at mile 3.0.	25.7	1946-60#, 1961-72a	6-23-72	4.85	900
03058180	Stonecoal Creek near Buckhannon, W. Va.	Lat 39°00'04", long 80°20'58", Upshur County, on right upstream wingwall of culvert at intersection of U.S. Highway 33 and 119 and Secondary Route 119/30, and 6.5 miles west of Buckhannon.	1.99	1967-72	4-22-72	10.00	190
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 mile upstream from mouth, and 1.2 miles southeast of Wymer.	1.08	1965-72	1972	<3.92	(+)
03069650	Right Fork Clover Run near Parsons, W. Va.	Lat 39°09'10", long 79°45'46", Tucker County, on left bank 12 ft upstream from culvert entrance, at intersection of State Route 38 and Secondary Route 15/5, and 6.0 miles northwest of Parsons.	2.21	1967-72	6-23-72	4.50	(+)
03069850	Long Run near Parsons, W. Va.	Lat 39°15'32", long 79°43'18", Tucker County, on left bank 8 ft upstream from entrance to culvert on State Route 72, 0.1 mile southeast of Tucker County line, and 11.0 miles north of Parsons.	0.95	1967-72	6-23-72	7.36	65
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 upstream from culvert on State Secondary Route 6, 1.8 miles southeast of Friendly.	0.88	1967-72	6-29-72	7.60	270
03114600	Little Buffalo Run near Friendly, W. Va.	Lat 39°30'10", long 81°00'59", Tyler County, on left bank 12 ft upstream from culvert on State Secondary Route 6, 2.5 miles southeast of Friendly.	1.22	1967-72	6-29-72	5.90	210
Little Kanawha River basin							
03155150	Indian Creek Tributary near Smithville, W. Va.	Lat 39°08'14", long 81°03'16", Ritchie County, at culvert at intersection of side road and State Route 16, and 5.0 miles northeast of Smithville.	0.44	1965-72	1972	<4.00	(+)
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 miles east of Elizabeth.	3.52	1965-72	4-22-72	5.25	395

See footnotes at end of table, p. 167.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
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 mile upstream from Burnt Run, and 3.8 miles southeast of Ripley.	0.70	1965-72	4-22-72	5.75	125
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 mile upstream from mouth, and 0.9 mile northeast of Durbin.	1.13	1966-68, 1970-72	1972	4.30	46
03180530	Brush Run near Bartow, W. Va.	Lat 38°30'30", long 79°47'03", Pocahontas County, on left bank 12 ft upstream from culvert on State Route 28, 2.3 miles south of Bartow, and at mile 4.2.	1.28	1966-72	1972	4.10	55
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 mile upstream from mouth, and 1.3 miles southeast of Green Bank.	1.52	1965-72	6-21-72	4.25	65
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 mile upstream from mouth, and 3.5 miles northeast of Huntersville.	0.55	1966-72	6-21-72	3.95	13
03183550	Griffith Creek near Alderson, W. Va.	Lat 37°44'15", long 80°42'36", Monroe County, at culvert on State Secondary Route 7/14 at Griffith School, 4.0 miles northwest of Alderson, and at mile 2.0.	3.84	1966-72	2-26-72	10.60	395
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 mile upstream from mouth.	2.71	1966-72	2-26-72	5.75	155
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 mile upstream from mouth, and 1.3 miles north of Shady Spring.	0.62	1966-72	2-26-72	4.80	12
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 mile south of Keslers Cross Lanes, 6.0 miles southeast of Summersville, and at mile 2.4.	4.22	1966-72	2-26-72	7.30	400
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 miles southwest of Summersville, and at mile 1.4.	4.28	1966-72	2-26-72	6.00	230
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 upstream from mouth, and 0.6 mile northeast of Mossy.	0.42	1966-72	2-26-72	4.60	16

See footnotes at end of table, p. 167.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Annual maximum discharge at crest-stage partial-record stations during water year 1972--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							
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 miles east of Left Hand, and at mile 1.0.	2.01	1966-72	4-22-72	6.55	205
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 mile upstream from mouth, and 5.0 miles northeast of Charleston.	0.49	1965-72	2-26-72	3.40	72
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 mile upstream from mouth, and 4.0 miles south of Madison.	1.97	1966-72	2-26-72	5.75	170
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 mile upstream from mouth, and 2.7 miles southwest of Madison.	1.28	1963, 1965-72	2-26-72	17.75	240
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 mile west of St. Albans interchange, 2.5 miles north-west of Nitro, and at mile 1.0.	0.87	1966-68, 1971-72	1972	11.76	105
03201420	Long Branch near Teays, W. Va.	Lat 38°28'43", long 81°55'49", Putnam County, on State Route 34, 1.5 miles north of Winfield interchange on Interstate 64, and 2.0 miles north of Teays.	2.05	1965-72	4- 7-72	8.10	220
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 miles from Mason-Putnam County line, and 3.7 miles northwest of Pliny.	1.04	1965-72	1972	12.00	770
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 mile upstream from mouth, and 2.5 miles southeast of Point Pleasant.	0.70	1965-72	4- 7-72	8.75	270
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 upstream from Buffalo Creek, and 0.7 mile downstream from Huff Creek.	762	1928-62 ^a , 1963-72 ^a	8-18-72	19.40	31,800

(+) 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 (†). Results of discharge measurements for the Buffalo Creek (Logan County) flood of Feb. 26, 1972 are published in Geological Survey Circular 667.

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Potomac River basin						
Part 1B Tuscarora Creek	Potomac River	Lat 39°27'06", long 77°56'44", Berkeley County, 200 ft downstream from Baltimore & Ohio Railroad bridge, 1.0 mile east of Martinsburg, W. Va. and at mile 1.5.	25.0		6-23-72	†900
Monongahela River basin						
Part 3A Red Run	Shavers Fork	Lat 38°37'51", long 79°52'49", Randolph County, at mouth, and 1.4 miles north of Cheat Bridge, W. Va.	3.82		5-30-72 6- 7-72 6-15-72 6-22-72	4.0 *2.6 20 77
Stonecoal Run	Shavers Fork	Lat 38°38'06", long 79°52'56", Randolph County, at mouth, and 1.7 miles north of Cheat Bridge, W. Va.	3.25		5-30-72 6- 7-72 6-15-72 6-22-72	2.0 *1.8 16 60
Whitmeadow Run	Shavers Fork	Lat 38°39'45", long 79°51'52", Randolph County, at mouth, and 3.7 miles north of Cheat Bridge, W. Va.	2.75		5-26-72 6- 7-72 6-15-72 6-22-72	2.7 *1.3 10 26
Glade Run	Shavers Fork	Lat 38°39'49", long 79°50'47", Randolph County, 0.2 mile upstream from mouth, and 4.0 miles northeast of Cheat Bridge, W. Va.	2.09		5-31-72 6- 7-72 6-15-72 6-22-72	4.8 *1.8 11 26
Kanawha River basin						
Part 3A 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	12- 1-71 1- 5-72 4- 5-72 7-13-72	191 347 320 58
Spring Creek	Greenbrier River	Lat 37°58'28", long 80°22'45", Greenbrier County, 1.7 miles southwest of Renick, W. Va., and at mile 3.7.	50.1	1946	3-29-72 4-26-72 5-24-72 6-27-72 7-26-72 8-23-72	24 47 26 7.8 *1.6 *1.6
Dry Creek	Howard Creek	Lat 37°47'38", long 80°17'41", Greenbrier County, at White Sulphur Springs, W. Va., 0.3 mile upstream from U.S. Highway 60, and 0.5 mile upstream from mouth.	23.0		6-21-72	†4,100
Wolf Creek	Greenbrier River	Lat 37°41'50", long 80°40'08", Monroe County, at mouth, and 2.7 miles southwest of Alderson, W. Va.	39.1		11-23-71	7.2
Elk River	Kanawha River	Lat 38°35'05", long 80°55'42", Braxton County, at Duck, and 5.0 miles southwest of Frametown, W. Va.	789	1971	10-12-71	731
Guyandotte River basin						
Part 3A Horsepen Creek	Gilbert Creek	Lat 37°37'18", long 81°53'39", Mingo County, at mouth, and 1.5 miles west of Gilbert, W. Va.	15.6		8-18-72	†3,000
Gilbert Creek	Guyandotte River	Lat 37°37'15", long 80°53'12", Mingo County, 1.8 miles upstream from mouth, and 1.1 miles west of Gilbert, W. Va.	26.5		8-18-72	†4,500

PART 2. WATER QUALITY RECORDS

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 downstream from bridge on U.S. Highway 50, 1.0 mile west of Mount Storm.

DRAINAGE AREA.--48.8 sq mi.

PERIOD OF RECORD.--Water temperatures: December 1961 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 26.0°C Aug. 7; minimum, 2.5°C Feb. 21, Apr. 9.

Period of record:

Water temperatures: Maximum, 27°C July 1, Aug. 22, 23, 1968; minimum, freezing point on many days during winter months most years.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

[illegible]

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LOCATION.--Lat 38°59'34", long 79°10'26", Grant County, at the Potomac Edison powerplant, 1,000 ft upstream from gaging station, and 2.5 miles west of Petersburg.

PERIOD OF RECORD.--Water temperatures: January 1947 to September 1953, November 1954 to June 1965, October 1965 to current year.

Water temperatures: Maximum, 25.5°C July 22, 23; minimum, freezing point Jan. 16, 17, Feb. 5, 8.

Water temperatures: Maximum, 29°C June 27, July 23, 1952, and Aug. 3, 1955; minimum, freezing point on many days during winter months most years.

[illegible]

POTOMAC RIVER BASIN

01606500 SOUTH BRANCH POTOMAC RIVER NEAR PETERSBURG, W. VA.

LOCATION.--Lat 38°59'34", long 79°10'26", Grant County, 1.2 miles downstream from North Fork South Branch Potomac River, 2.5 miles west of Petersburg, and at mile 72.6.

DRAINAGE AREA.--642 sq mi.

PERIOD OF RECORD.--Sediment records: April 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.						
06...	2	1245	18.0	654	4	7.1
NOV.						
16...	2	1630	13.0	242	2	1.3
DEC.						
13...	2	1510	9.0	304	4	3.3
JAN.						
25...	2	0945	7.0	1350	5	18
MAR.						
07...	2	1610	7.5	1400	3	11
APR.						
19...	2	1350	14.0	1970	8	43
JULY						
01...	2	1240	16.5	591	3	4.8
JULY						
31...	2	1330	15.5	1460	25	99

POTOMAC RIVER BASIN

01611500 CACAPON RIVER NEAR GREAT CACAPON, W. VA.

LOCATION.--Lat 39°34'43", long 78°18'34", Morgan County, 3.0 miles southwest of Great Cacapon, and at mile 6.5.

DRAINAGE AREA.--677 sq mi.

PERIOD OF RECORD.--Sediment records: April 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV.						
09...	2	1710	6.0	382	2	2.1
DEC.						
08...	2	0930	5.0	1250	3	10
JAN.						
18...	2	1605	2.5	409	2	2.2
MAR.						
01...	2	1210	7.0	3270	20	177
APR.						
12...	2	1145	12.0	1010	4	11
MAY						
30...	2	1215	20.0	554	2	3.0
JULY						
26...	2	1130	26.0	267	3	2.2
SEPT.						
14...	2	1045	19.0	99	4	1.1

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 miles upstream from gaging station.

DRAINAGE AREA.--268 sq mi upstream from water plant; 272 sq mi upstream from gaging station.

PERIOD OF RECORD.--Water temperatures: January 1947 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 25.5°C July 24, 26; minimum, 0.5°C on several days during February.

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 (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENTS)

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

MONONGAHELA RIVER BASIN

03054500 TYGART VALLEY RIVER AT PHILIPPI, W. VA.

LOCATION.--Lat 39°09'00", long 80°02'25", Barbour County, at Philippi, 0.2 mile downstream from Anglins Run, 5.0 miles downstream from Buckhannon River, and at mile 44.9.

DRAINAGE AREA.--916 sq mi.

PERIOD OF RECORD.--Sediment records: May 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.						
18...	2	1145	17.0	195	1	0.53
NOV.						
30...	2	1145	6.0	10100	56	1530
DEC.						
27...	2	1050	8.0	1090	6	18
FEB.						
07...	2	1310	0.0	2530	8	55
MAR.						
20...	2	1315	7.0	2750	10	74
MAY						
01...	2	1115	15.0	1400	15	57
JUNE						
05...	2	1425	21.0	444	2	2.4
JULY						
13...	2	1045	21.5	861	5	12
AUG.						
11...	2	1230	21.0	432	3	3.45
SEPT.						
12...	2	1215	19.0	115	5	1.6

MONONGAHELA RIVER BASIN

03061000 WEST FORK RIVER AT ENTERPRISE, W. VA.

LOCATION.--Lat 39°25'20", long 80°16'40", Harrison County, 150 ft downstream from highway bridge at Enterprise, 0.8 mile upstream from Bingamon Creek, and at mile 12.1.

DRAINAGE AREA.--759 sq mi.

PERIOD OF RECORD.--Sediment records: May 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV.						
11...	2	1130	7.0	323	26	23
DEC.						
14...	2	1200	10.0	886	86	206
JAN.						
19...	2	1230	3.0	1070	43	124
FEB.						
29...	2	1300	7.0	2660	84	603
APR.						
12...	2	1430	11.0	1480	43	172
SEPT.						
26...	2	1500	20.0	118	6	1.9

MONONGAHELA RIVER BASIN

03070000 CHEAT RIVER AT ROWLESBURG, W. VA.

LOCATION.--Lat 39°20'50", long 79°40'00", Preston County, 50 ft downstream from Baltimore & Ohio Railroad bridge at Rowlesburg, 300 ft upstream from Saltlick Creek, and at mile 44.1.

DRAINAGE AREA.--972 sq mi.

PERIOD OF RECORD.--Sediment records: April 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV.						
11...	2	1500	5.0	715	1	1.9
DEC.						
01...	2	1630	3.5	5400	5	73
JAN.						
11...	2	1515	6.5	8380	2	45
FEB.						
14...	2	1000	1.0	1890	4	20
MAR.						
22...	2	1500	8.0	2640	1	7.1
MAY						
01...	2	1345	13.0	1660	4	18
JUNE						
01...	2	1415	18.0	1300	2	7.0
JUNE						
24...	2	1300	10.0	22500	76	4620
JUNE						
26...	2	1245	12.0	5680	12	184
SEPT.						
07...	2	1800	18.0	376	1	1.0

MONONGAHELA RIVER BASIN

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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 miles upstream from mouth.

DRAINAGE AREA.--1,411 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1948 to September 1957, water years 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 (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENTS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	16.5	5.0	---	1.0	4.5	---	14.5	20.0	---	25.5	25.5
2	---	18.0	5.0	---	1.0	5.5	---	14.5	20.0	---	25.5	---
3	---	16.5	5.0	6.0	2.0	6.5	6.5	13.5	---	20.0	26.0	---
4	21.0	16.0	---	5.5	1.0	---	6.5	14.5	---	---	25.5	---
5	20.5	15.5	---	5.5	---	---	7.0	14.0	22.0	19.0	---	25.0
6	20.0	---	4.5	5.0	---	3.5	7.0	---	21.0	19.0	---	24.5
7	19.5	---	4.5	4.0	0.5	3.5	6.5	---	20.0	19.5	25.0	24.5
8	19.0	14.5	4.5	---	---	3.0	---	15.5	21.0	---	24.5	24.5
9	---	13.5	8.0	---	---	2.5	---	14.0	22.0	---	24.5	---
10	---	13.5	8.0	3.5	---	3.5	8.0	13.5	---	20.5	24.5	---
11	14.5	13.5	---	3.0	0.5	---	6.5	14.5	---	24.5	25.0	24.0
12	18.0	13.0	---	3.5	---	---	7.0	15.5	21.0	24.5	---	24.0
13	18.5	---	9.0	6.0	---	5.5	9.0	---	20.5	24.5	---	24.0
14	18.0	---	8.0	5.5	1.0	4.5	11.0	---	21.0	24.5	25.0	23.5
15	19.0	12.5	9.0	---	1.5	5.5	---	16.5	23.0	---	24.5	24.0
16	---	12.5	8.5	---	1.0	7.0	---	16.0	23.5	---	24.5	---
17	---	12.5	8.0	4.5	1.0	6.0	12.5	15.5	---	25.0	24.5	---
18	18.0	13.0	---	4.5	1.0	---	14.5	16.0	---	25.5	25.0	24.0
19	17.5	12.5	---	4.5	---	---	12.5	16.5	25.5	26.5	---	23.5
20	17.5	---	8.0	4.5	---	6.0	12.0	---	24.5	29.0	---	23.5
21	19.0	---	8.0	4.5	---	7.0	11.0	---	23.5	28.5	25.5	23.5
22	19.0	10.0	7.0	---	1.0	6.5	---	18.0	22.5	---	26.0	23.0
23	---	10.0	6.5	---	1.0	5.5	---	19.0	18.0	---	26.0	---
24	---	9.5	---	2.5	1.0	5.5	12.0	20.0	---	29.0	28.0	---
25	---	---	---	3.5	1.0	---	11.0	20.0	---	28.5	26.5	23.5
26	16.5	8.5	---	3.0	---	---	11.0	19.0	15.5	28.0	---	23.5
27	18.0	---	6.5	5.5	---	6.5	11.0	---	14.5	27.0	---	23.5
28	18.0	---	6.5	5.5	3.5	6.0	10.5	---	19.0	26.5	25.5	23.5
29	17.5	9.0	6.0	---	3.5	6.0	---	---	19.0	---	26.0	23.0
30	---	7.5	6.5	---	---	5.5	---	21.0	19.0	---	25.5	---
31	---	---	---	0.5	---	---	---	21.5	---	25.5	26.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	14.5											

MIDDLE ISLAND CREEK BASIN

03114500 MIDDLE ISLAND CREEK AT LITTLE, W. VA.

LOCATION.--Lat 39°28'30", long 80°59'50", Tyler County, at highway bridge at Little, 0.1 mile upstream from Stewarts Run, 5.0 miles west of Middlebourne, and at mile 24.5.

DRAINAGE AREA.--458 sq mi.

PERIOD OF RECORD.--Sediment records: April 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV. 03...	2	1030	16.0	1970	70	372
DEC. 07...	2	1300	8.0	3500	64	605
JAN. 11...	2	1130	6.0	2140	38	220
FEB. 23...	2	1200	4.0	2150	80	464
APR. 04...	2	1000	7.0	404	9	9.8
MAY 17...	2	1110	16.0	985	30	80
JUNE 13...	2	1030	21.0	31	12	1.0
JULY 12...	2	1030	22.0	148	110	44
SEPT. 13...	2	0830	16.0	6.8	12	0.22

LITTLE KANAWHA RIVER BASIN

03151500 LITTLE KANAWHA RIVER NEAR BURNSVILLE, W. VA.

LOCATION.--Lat 38°49'25", long 80°35'35", Braxton County, temperature recorder at gaging station on left bank at downstream side of bridge on State Highway 5, 0.1 mile downstream from Knawl Creek, 4.0 miles southeast of Burnsville, and at mile 126.9.

DRAINAGE AREA.--155 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1970 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 30.0°C July 24; minimum, freezing point Feb. 4, Mar. 6.

Period of record:

Water temperatures: Maximum, 30.0°C July 24, 1972; minimum, freezing point Jan. 24, Feb. 7, Mar. 25, 1971, Feb. 4, Mar. 6, 1972.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	---	---	16.5	15.5	---	---	9.5	5.5	---	---	10.5	9.0	
2	---	---	17.5	16.5	---	---	9.0	8.0	5.0	3.0	11.5	10.5	
3	---	---	17.5	16.0	---	---	8.5	5.5	6.5	5.0	11.0	3.5	
4	---	---	16.0	11.0	---	---	8.0	7.0	6.5	0.0	4.0	1.5	
5	---	---	11.0	6.5	---	---	10.0	8.0	---	---	5.0	2.0	
6	---	---	9.0	7.5	4.5	1.0	8.0	5.5	---	---	3.0	0.0	
7	---	---	8.5	5.5	8.0	4.5	6.0	4.5	---	---	5.5	2.5	
8	---	---	6.0	3.0	8.5	8.0	7.0	4.5	---	---	6.5	3.5	
9	---	---	4.5	2.5	8.5	8.0	7.5	5.0	---	---	3.5	1.0	
10	---	---	5.5	4.5	10.0	8.5	12.5	7.5	---	---	3.0	0.0	
11	---	---	5.5	2.5	10.5	9.5	13.0	12.5	---	---	---	---	
12	---	---	6.0	3.0	9.5	7.5	13.5	11.5	---	---	6.0	3.5	
13	---	---	8.5	6.0	7.5	7.5	13.0	11.5	5.5	4.0	10.0	6.0	
14	---	---	9.0	8.0	8.0	6.0	13.0	8.5	5.5	4.5	10.5	8.5	
15	---	---	11.5	9.0	8.5	6.0	8.5	3.0	5.5	2.5	8.5	5.5	
16	---	---	10.0	7.5	10.0	8.5	3.0	1.5	6.5	5.5	6.0	5.0	
17	---	---	7.5	6.5	10.0	5.5	4.5	2.0	5.5	3.5	6.0	5.5	
18	---	---	7.5	5.5	5.5	1.5	---	---	5.5	3.0	5.5	4.5	
19	---	---	7.0	6.5	---	---	2.0	1.0	5.5	1.0	6.0	4.0	
20	---	---	6.5	4.5	4.0	1.5	6.0	2.0	---	---	6.0	4.0	
21	---	---	4.5	3.0	6.0	4.0	9.0	6.0	---	---	7.5	5.0	
22	---	---	---	---	6.0	3.0	10.0	9.0	5.0	2.0	8.5	7.5	
23	---	---	---	---	3.5	1.0	11.5	10.0	3.0	1.5	7.5	3.5	
24	---	---	---	---	5.5	3.5	11.5	11.5	6.5	3.0	---	---	
25	---	---	---	---	6.0	5.5	12.5	7.5	8.0	6.5	---	---	
26	---	---	---	---	8.5	6.0	7.5	3.5	8.0	6.5	---	---	
27	14.0	13.0	2.0	0.5	11.0	8.5	3.5	2.5	6.5	3.5	4.5	2.5	
28	14.5	12.5	3.0	2.0	12.5	11.0	5.0	3.0	7.5	6.0	6.5	4.0	
29	14.0	13.0	4.5	2.5	12.0	8.0	5.5	3.0	9.5	7.5	6.5	4.5	
30	15.0	14.0	5.0	4.5	10.5	9.5	5.5	3.5	---	---	7.0	5.5	
31	15.5	14.0	---	---	10.5	9.0	3.5	0.5	---	---	7.0	6.0	
MONTH	---	---	17.5	0.5	12.5	1.0	13.5	0.5	---	---	11.5	0.0	
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	7.0	5.0	16.5	14.0	19.5	16.5	16.5	11.5	20.5	19.0	25.5	21.0	
2	6.5	5.0	16.5	16.0	17.5	15.5	17.0	15.0	21.0	20.5	25.5	21.5	
3	7.0	4.0	16.0	14.0	19.5	16.5	17.5	16.5	22.5	21.0	23.5	22.0	
4	7.5	7.0	14.0	11.5	21.0	18.0	17.5	15.0	22.0	17.5	22.0	21.0	
5	7.0	3.0	11.5	10.0	21.5	19.5	17.0	11.0	18.5	16.5	22.5	18.5	
6	8.5	6.0	13.5	11.0	20.5	19.0	11.0	10.0	20.0	17.0	21.5	17.0	
7	8.5	6.5	15.0	13.0	20.0	17.0	12.5	10.0	20.5	19.5	22.0	17.0	
8	6.5	4.0	15.0	14.0	21.5	17.5	13.0	11.0	21.5	20.5	22.5	18.0	
9	4.0	1.0	14.0	11.0	20.5	18.0	15.0	12.0	23.0	20.5	21.5	20.0	
10	6.0	2.5	11.0	9.0	20.0	18.5	16.0	15.0	20.5	19.0	21.5	18.0	
11	7.5	6.0	10.5	9.5	19.5	15.5	19.5	16.0	21.5	18.5	21.0	17.5	
12	10.5	7.5	12.0	10.0	18.5	15.0	20.0	19.0	23.0	19.5	19.5	18.0	
13	12.0	10.5	12.5	11.5	18.0	17.0	21.5	18.5	21.5	18.5	22.0	18.5	
14	12.0	11.0	14.5	12.0	20.5	17.5	23.5	21.0	23.5	21.5	22.0	19.5	
15	12.5	12.0	14.5	13.5	22.5	19.0	24.5	22.0	24.0	22.0	22.0	19.0	
16	12.0	11.5	14.5	13.0	22.5	21.5	24.0	22.5	24.5	21.5	22.5	18.5	
17	12.5	11.5	13.0	12.5	21.5	20.0	24.5	22.0	23.5	21.0	22.5	18.5	
18	12.0	10.0	13.5	11.5	22.0	20.0	25.0	23.0	21.5	20.0	22.0	20.0	
19	13.5	11.5	14.0	13.0	23.5	20.0	28.5	23.5	21.5	19.5	25.5	20.5	
20	14.0	13.5	14.0	13.0	23.0	20.5	28.0	24.0	21.0	18.0	24.0	21.5	
21	13.0	11.5	15.5	13.5	23.0	21.0	27.5	26.0	22.0	19.5	23.5	20.5	
22	11.5	10.0	16.5	15.5	21.0	17.0	28.5	25.0	22.5	20.5	23.5	21.0	
23	11.5	9.0	17.5	16.5	16.5	8.5	29.0	26.5	24.5	22.5	21.5	19.0	
24	11.5	11.0	18.5	17.0	9.0	8.0	30.0	26.0	26.5	23.5	22.0	21.0	
25	11.0	8.5	19.5	17.5	9.5	8.5	29.5	26.0	27.5	25.0	23.5	21.0	
26	9.0	6.5	20.0	17.5	11.0	9.5	29.0	24.5	28.0	25.0	25.5	22.5	
27	10.0	7.5	19.0	17.0	13.0	11.0	26.0	23.5	26.0	24.5	25.0	24.0	
28	11.0	8.0	19.0	17.0	14.5	12.0	24.5	23.0	25.5	23.5	25.5	23.0	
29	13.0	10.0	20.0	17.5	14.5	12.5	23.5	21.5	26.0	22.0	25.5	23.5	
30	14.5	12.0	21.0	19.5	14.0	12.0	21.5	19.5	26.0	21.5	23.5	18.5	
31	---	---	20.5	19.5	---	---	20.0	19.5	25.5	21.0	---	---	
MONTH	14.5	1.0	21.0	9.0	23.5	8.0	30.0	10.0	28.0	16.5	25.5	17.0	
YEAR	30.0	0.0											

LITTLE KANAWHA RIVER BASIN

177

03153500 LITTLE KANAWHA RIVER AT GRANTSVILLE, W. VA.

LOCATION.--Lat 38°55'20", long 81°05'50", Calhoun County, 1,000 ft downstream from bridge on State Highway 16 at Grantsville, 1,200 ft downstream from Philip Run, and at mile 80.0.

DRAINAGE AREA.--913 sq mi.

PERIOD OF RECORD.--Sediment records: January 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 18...	2	1540	19.0	88	4	0.95
DEC. 16...	2	0740	8.5	662	10	18
JAN. 19...	2	1310	3.0	1010	6	16
FEB. 23...	2	1520	3.0	5480	106	1570
FEB. 25...	2	0735	5.0	15000	296	12000
APR. 03...	2	1040	---	1230	12	40
APR. 19...	2	1420	15.0	2640	38	271
MAY 25...	2	0745	20.0	351	7	6.6
JUNE 20...	2	1500	24.0	339	8	7.3
AUG. 23...	2	1400	24.0	514	47	65

KANAWHA RIVER BASIN

179

03179000 BLUESTONE RIVER NEAR PIPESTEM, W. VA.

LOCATION.--Lat 37°32'45", long 81°00'30", Summers County, 1.2 miles downstream from Mountain Creek, 2.5 miles west of Pipestem, and at mile 8.0.

DRAINAGE AREA.--363 sq mi.

PERIOD OF RECORD.--Sediment records: March 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 21...	2	1010	15.0	82	4	0.89
NOV. 18...	2	1020	7.0	100	4	1.1
DEC. 21...	2	1050	5.0	564	13	20
JAN. 19...	2	1030	0.5	470	12	15
FEB. 23...	2	1000	4.0	1830	78	385
MAR. 28...	2	1130	6.0	388	1	1.0
APR. 25...	2	1010	10.0	740	8	16
MAY 23...	2	1030	14.0	1740	149	700
JULY 12...	2	1035	22.0	202	11	6.0
JULY 25...	2	0935	21.0	103	4	1.1
AUG. 22...	2	1015	19.0	467	51	64

KANAWHA RIVER BASIN

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 mile downstream from Bluestone Dam, 0.7 mile upstream from Greenbrier River, 2.0 miles upstream from Hinton, at New River mile 64.5 and Kanawha River mile 161.5.

DRAINAGE AREA.--4,604 sq mi.

PERIOD OF RECORD.--Water temperatures: May 1953 to September 1967, October 1969 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum recorded, 26.0°C Aug. 27; minimum, 3.0°C Feb. 7-9, 23.

Period of record:

Water temperatures: Maximum, 29.5°C Aug. 26, 1959; minimum, freezing point on several days during winter months most years.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

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

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LOCATION.--Lat 38°12'40", long 80°04'30", Pocahontas County, at city water plant, at Marlinton, 1.0 mile upstream from mouth, and 2.0 miles downstream from discontinued gaging station.

PERIOD OF RECORD.--Water temperatures: October 1946 to current year.

Water temperatures: Maximum, 24.0°C July 24-27; minimum, freezing point on many days during winter months.

Water temperatures: Maximum, 28°C July 24, 1952 and June 2, 1959; minimum, freezing point on many days during winter months.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENTS)

[illegible]

KANAWHA RIVER BASIN

03184000 GREENBRIER RIVER AT HILDALE, W. VA.

LOCATION.--Lat 37°38'25", long 80°48'20", Summers County, 100 ft downstream from highway bridge on State Highway 3 at Hildale, 0.1 mile upstream from Howard Creek, 0.9 mile up-stream from Powley Creek, 5.0 miles south-east of Hinton, and at mile 5.6.

DRAINAGE AREA.--1,625 sq mi.

PERIOD OF RECORD.--Sediment records: March 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT. 27...	2	1515	15.0	2300	19	118
MAR. 28...	2	1515	9.0	2490	78	524
APR. 26...	2	1520	13.0	4780	10	129
MAY 23...	2	1500	16.0	3270	30	265
JULY 26...	2	1530	21.0	441	70	83
AUG. 23...	2	1500	22.0	720	80	156

KANAWHA RIVER BASIN

03189100 GAULEY RIVER NEAR CRAIGSVILLE, W. VA.

LOCATION.--Lat 38°17'30", long 80°38'30", Nicholas County, at highway bridge on W. Va. Route 20, 200 ft downstream from Cherry River, 1.8 miles downstream from Cranberry River, and 2.7 miles south of Craigsville.

DRAINAGE AREA.--528 sq mi.

PERIOD OF RECORD.--Sediment records: April 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV. 01...	2	1500	16.5	718	2	3.9
DEC. 02...	2	1205	2.0	1680	4	18
JAN. 31...	2	1605	1.5	1800	2	9.7
APR. 06...	2	1155	7.0	2670	7	50
MAY 04...	2	1245	10.5	5750	26	404
JULY 12...	2	1115	19.5	644	2	3.5
AUG. 14...	2	1605	20.0	1010	26	71
SEPT. 19...	2	1040	20.5	75	1	0.20

LOCATION. --Lat 38°08'20", Long 81°12'45", Fayette County, temperature recorder at gaging station on right bank 150 feet downstream from toll bridge, 0.8 mile downstream from village of Kanawha Falls, 2.0 miles downstream from Gauley Bridge, 2.0 miles downstream from confluence of New River and Gauley River, and at mile 94.5.

PERIOD OF RECORD.--Water temperatures: December 1957 to September 1966, July 1968 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 28.0°C July 23, 25-27; minimum, 1.5°C Jan. 17, 18, Feb. 8-10.

Period of record:
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.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

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

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 sq mi.

PERIOD OF RECORD.--Water temperatures: October 1950 to current year.

EXTREMES.--Current year:

Water temperatures: Maximum, 30.0°C July 24, 27; minimum, 1.0°C Feb. 10, 11.

Period of record:

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 (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(ONCE-DAILY MEASUREMENTS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	18.0	6.0	---	4.5	7.0	9.0	14.0	20.0	---	20.0	26.0
2	23.0	18.5	5.0	---	4.5	7.0	---	15.5	20.0	---	21.0	---
3	23.0	18.5	4.5	7.5	4.5	7.0	9.0	16.0	19.5	---	21.0	---
4	23.0	17.0	4.5	7.5	4.0	6.5	9.5	16.0	---	---	21.5	---
5	23.5	16.0	4.5	6.5	3.0	7.0	10.0	15.0	23.0	---	---	25.5
6	23.0	15.0	4.5	6.0	---	5.5	10.5	14.5	22.0	17.5	---	25.5
7	22.5	---	6.0	5.0	2.5	6.0	10.5	14.5	22.0	18.0	21.5	25.5
8	21.5	13.0	7.0	5.0	2.0	6.5	10.0	16.0	23.0	---	---	24.0
9	21.0	11.0	8.5	---	1.5	6.0	9.5	15.5	23.0	---	23.0	---
10	---	10.5	9.5	4.5	1.0	6.0	9.0	15.5	23.5	19.0	23.5	---
11	19.5	10.0	9.5	5.0	1.0	6.0	9.0	15.5	23.0	20.0	24.0	24.5
12	19.5	10.5	9.5	5.5	2.0	6.5	9.0	14.5	23.0	21.5	24.0	22.5
13	19.0	10.5	9.0	7.0	2.5	7.0	10.0	14.5	23.5	21.5	---	26.0
14	19.5	10.5	9.0	6.5	4.0	5.5	10.0	14.5	23.5	23.5	24.5	22.5
15	19.5	11.0	9.5	6.0	4.0	7.0	10.0	17.0	24.5	24.5	25.0	25.0
16	19.5	12.0	10.0	4.0	4.5	9.0	---	16.5	24.0	---	25.5	24.5
17	23.0	11.5	10.5	3.0	4.5	9.0	12.0	16.5	---	25.5	25.5	---
18	19.0	12.0	9.5	2.5	4.5	9.5	13.0	19.5	---	26.5	25.0	24.5
19	19.0	11.0	9.5	2.5	4.5	9.5	13.5	17.5	26.0	27.0	25.5	24.5
20	19.5	---	7.5	3.0	3.0	9.5	14.5	16.5	21.5	28.0	23.5	25.0
21	20.0	12.0	7.5	3.5	2.5	11.0	14.5	---	21.0	---	24.5	24.5
22	19.0	10.5	7.5	4.0	2.5	13.0	14.5	16.5	21.0	28.5	23.5	25.0
23	19.0	10.5	6.5	3.5	3.0	11.0	---	18.5	16.5	28.5	23.5	24.5
24	19.0	9.5	6.5	7.0	3.0	9.5	13.5	18.0	15.5	30.0	24.5	24.5
25	19.0	9.0	6.5	8.5	4.5	8.5	12.5	18.5	16.0	28.5	25.5	24.5
26	18.5	6.5	6.5	7.5	---	---	11.0	19.0	16.5	29.5	---	24.0
27	18.0	6.0	6.5	6.0	---	6.5	11.5	---	---	30.0	---	24.5
28	18.5	6.0	9.0	5.5	5.5	6.5	12.0	---	18.5	29.5	26.5	24.5
29	17.5	6.0	9.0	5.5	6.5	7.5	12.5	---	---	---	25.0	24.5
30	18.0	6.0	8.5	5.5	---	7.5	---	20.0	---	---	26.5	24.5
31	17.5	---	8.5	5.0	---	8.5	---	21.0	---	21.0	26.0	---
MONTH	20.0	11.5	7.5	5.5	3.5	8.0	11.0	16.5	21.5	---	24.0	24.5
YEAR	14.5											

KANAWHA RIVER BASIN

03194700 ELK RIVER BELOW WEBSTER SPRINGS, W. VA.

LOCATION.--Lat 38°35'50", long 80°29'20", Webster County, 6.5 miles upstream from town of Centralia, 8.9 miles southwest of Salisbury Station, 8.9 miles northwest of Webster Springs, and at mile 122.7.

DRAINAGE AREA.--268 sq mi.

PERIOD OF RECORD.--Sediment records: April 1968 to current year (partial-record station).

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TYPE	TIME	TEMPERATURE (DEG C)	DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT.						
18...	2	1200	15.0	71	2	0.38
DEC.						
06...	2	1300	4.0	444	4	4.8
JAN.						
31...	2	1300	2.0	927	2	5.0
APR.						
03...	2	1210	8.0	633	2	3.4
MAY						
01...	2	1210	15.5	462	3	3.7
JULY						
11...	2	1340	20.0	390	2	2.1
AUG.						
14...	2	1140	20.0	480	24	31
SEPT.						
18...	2	1335	23.5	80	2	0.43

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

KANAWHA RIVER BASIN

03196600 ELK RIVER NEAR FRAMETOWN, W. VA.

LOCATION.--Lat 38°35'34", long 80°53'06", Braxton County, temperature recorder at gaging station on right bank opposite mouth of Birch River at village of Glendon, 2.2 miles upstream from Strange Creek, 3.2 miles southwest of Frametown, and at mile 80.7.

DRAINAGE AREA.--752 sq mi, includes that of Birch River.

PERIOD OF RECORD.--Water temperatures: November 1960 to September 1966, June to September 1967, October 1971 to September 1972.

EXTREMES.--Current year:
Water temperatures: Maximum, 23.5°C on several days during July and September; minimum, 1.0°C Feb. 8-15.

Period of record:
Water temperatures: Maximum, 28.0°C June 16-19, 1967; minimum, freezing point on many days during winter months most years.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(Continuous ethyl alcohol-actuated thermograph)

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

LOCATION.--Lat 33°28'20", long 81°17'10", Kanawha County, temperature recorder at gaging station on right bank 50 ft upstream from Queen Shoals Creek, 100 ft downstream from highway bridge at Queen Shoals, 4.0 miles upstream from Big Sandy Creek, and at mile 25.8.

PERIOD OF RECORD.--Water temperatures: November 1960 to current year.

Water temperatures: Maximum, 27.0°C July 22-27; minimum, freezing point Jan. 18-20.

Water temperatures: Maximum, 29°C on several days in July 1963, 1964, and 1968; minimum, freezing point on many days during winter months most years.

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

LOCATION.--Lat 37°50'17", long 82°24'35", Mingo County, at city water plant, at Kermit, 0.8 mile downstream from Wolf Creek, and 3.0 miles downstream from gaging station near Kermit.

PERIOD OF RECORD.--Water temperatures: October 1946 to current year.

Water temperatures: Maximum, 29.5°C July 21, 23, 24; minimum, freezing point Jan. 18.

Water temperatures: Maximum, 32°C July 29, 1949; minimum, freezing point on several days in 1947, 1951, and Jan. 18, 1972.

[illegible]

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