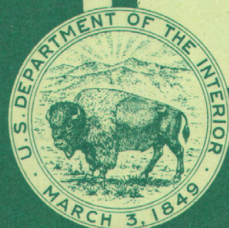
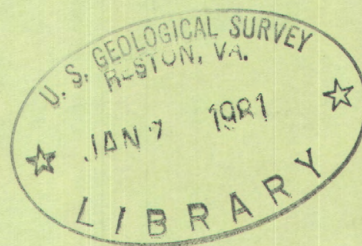


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Water Resources Data for Pennsylvania

Part 1. Surface Water Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

CALENDAR FOR WATER YEAR 1972

OCTOBER 1971

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31						

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AUGUST 1972

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SEPTEMBER 1972

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1972

**Water Resources Data
for
Pennsylvania**

Part 1. Surface Water Records



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

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

II

Prepared in cooperation with

Pennsylvania Department of Environmental Resources
Pennsylvania Department of Transportation
Chester County Water Resources Authority
Pennsylvania State University
City of Bethlehem
City of Easton
City of Harrisburg
City of Philadelphia
Corps of Engineers, U.S. Army

Water resources records, 1972, for Pennsylvania are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Pennsylvania
Part 1: Surface Water Records
2. Water Resources Data for Pennsylvania
Part 2: Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
Federal Building
P. O. Box 1107
Harrisburg, Pennsylvania 17108

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Figure 1.--Governor's Mansion, Harrisburg, Pa.
Flood of June 1972
Photograph by Pennsylvania National Guard

GAGING STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

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WATER RESOURCES DATA FOR PENNSYLVANIA, 1972

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Surface-water records for the 1972 water year for Pennsylvania, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report and their locations shown in figures 3, 4, and 5. Records for a few pertinent gaging stations in bordering States are also included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of Norman H. Beamer, district chief and David Barton, district coordinator. 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 Pennsylvania.

Through September 30, 1960, the records of discharge and stage of streams and canals and contents and stage of lakes or reservoirs were published in an annual series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Since 1951 there have been 20 volumes in the series; each volume covered an area whose boundaries coincided with those of certain natural drainage areas. The records in Pennsylvania were contained in Parts 1B, 3A and 4 of that series.

Beginning with the 1961 water year, surface-water records have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. The discharge and reservoir storage records for 1961-65 for the Delaware, Susquehanna, and Ohio River basins in Pennsylvania are published in Geological Survey water-supply papers 1902, 1903, and 1907. Similar data for the period 1966-70 is now being compiled and will be published in Geological Survey water-supply papers as part of the series entitled "Surface Water Supply of the United States, 1966-70."

COOPERATION

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

State Department of Environmental Resources,
M. K. Goddard, secretary, through the following:
Office of Engineering and Construction,
C. H. McConnell, deputy secretary. State
Soil and Water Conservation Commission,
W. N. Peechatka, director. Office of
Environmental Protection and Regulation,
W. E. Gilbertson, deputy secretary.

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

Chester County Water Resources Authority,
R. G. Struble, executive director.

Pennsylvania State University, College of Earth
and Mineral Sciences, through Professor E. R.
Parizek.

City of Bethlehem, H. G. Payrow, Jr., mayor.

City of Easton, F. L. Ashton, Jr., mayor.

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

City of Philadelphia, Water Department, S. S. Baxter
succeeded by C. F. Guarino, water commissioner.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 111 gaging stations published in this report.

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

The following organizations aided in collecting records:

Allegheny Power Service Corp.; Greater Johnstown Water Authority; Latrobe Municipal Authority; Manufacturers Water Co.; Municipal Authority of Westmoreland County; Municipality of Lancaster; P. H. Glatfelter Co.; Palmer Water Co.; Panther Valley Water Co.; Pennsylvania Electric Co.; Pennsylvania Power and Light Co.; Philadelphia Electric Co.; Philadelphia Suburban Water Co.; Safe Harbor Water Power Corp.; and York Water Co.

DEFINITION OF TERMS

Definition of terms related to streamflow 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 325,851 gallons.

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, 1.9835 acre-feet, or 646,317 gallons, and represents a runoff of 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 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.

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 more general term "stage," although gage height is more appropriate when used with a reading on a gage.

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

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

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.

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

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.

SPECIAL NETWORKS AND PROGRAMS

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

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

DOWNSTREAM ORDER AND STATION NUMBERS

Records 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 list of gaging 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 and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record 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. Gaps are left in the 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 01570500, includes the part number "01" and a 6-digit station number. The complete number 01570500 appears just to the left of the station name. In this report, the records are listed in downstream order by parts. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF SURFACE-WATER DATA

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 a water-stage recorder that gives a continuous graph of the fluctuations (for digital recorders, a tape punched at 5-, 15-, 30-, or 60-minute intervals) or from direct readings on a nonrecording gage. 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 measurement of stream discharge. (See also 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 a stream-gaging station rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, 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 application of the daily mean gage heights to the rating table gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. 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 determined 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 determining discharge. Information required for determining 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 determining 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. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements.

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 surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, 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 basic data. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the 1972 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, and general remarks. 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 the 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 the 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) corresponds 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 the gaging station, 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 spillway, 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 records. 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, 1933 stands for the water year October 1, 1932 to September 30, 1933. 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.

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

Skeleton capacity tables are published for all reservoirs for which records of contents are published on a daily basis.

The daily tables for stream-gaging stations give the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. For digital recorders, the daily mean discharge is always the average of the discharges at each punched reading. For stations equipped with nonrecording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily readings; but for periods of rapidly changing stage the discharge is determined from a gage-height graph based on gage readings.

The daily tables for reservoir stations give the contents corresponding to the water-surface elevation at a given time, usually at 2400 each day. For some reservoirs the elevation at a given time is given in the daily table.

The monthly summary is given below the daily table. For stream-gaging stations the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN.") or in acre-feet (line headed "AC-FT"). Figures of 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 rainfall on the drainage basin is usually less than 20 inches.

For reservoir stations the monthly summary gives the elevation (or gage height) at the end of the month and the change in contents during the month. If elevation or gage height is given in the daily table, the monthly summary gives the contents at the end of the month, rather than the elevation or gage height. For some reservoirs a tabulation of monthly evaporation from the water surface is included.

In the yearly summary below the monthly summary, the figures following MAX are the maximum daily discharges for the calendar and water years; likewise, those following MIN are the minimum daily discharges.

For reservoir stations the yearly summary gives the change in contents for the calendar year and for the water year. For some reservoirs the yearly evaporation also is included.

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 subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330.

In a general footnote, introduced by the word "NOTE" certain periods are indicated 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 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. Footnotes to reservoir tables may be used to explain the use of new capacity tables or for other special conditions.

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, consumptive use, regulation, evaporation, or other factors. For such stations, discharge in cubic feet per second per square mile and runoff in inches are not published unless satisfactory adjustments can be made for such effects. 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 unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

Publications

Each volume of the 1961-65 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area. A new series of water-supply papers containing surface-water records for the 5-year period October 1, 1965 to September 30, 1970, will also include lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Papers 1302 (1B), 1305 (3A), and 1307 (4); records for October 1950 to September 1960 have been compiled and published in Water-Supply Papers 1722 (1B), 1725 (3A), and 1727 (4); and records for October 1960 to September 1965 have been compiled and published in Water-Supply Papers 1902 (1B), 1903 (1B), 1907 (3A), and 1912 (4). These reports contain summaries of monthly and annual discharge and monthend storage for 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.

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

Data collected at partial-record stations and at 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.

More detailed information 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. Many gaging-station records in Pennsylvania through 1970 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

At or near some gaging stations, water quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, and on the sediment. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES
OTHER THAN THE GEOLOGICAL SURVEY

There were no records of discharge collected in Pennsylvania during the year by agencies other than the Geological Survey.

HYDROLOGIC CONDITIONS

Prior to June 20 runoff throughout the state was slightly above average. However, heavy rainfall during the period June 20-24, brought on by Hurricane Agnes, resulted in unprecedented floods, particularly in the Susquehanna and Schuylkill River basins. In the area near Gratz, about 25 miles northeast of Harrisburg, total rainfall of 18.4 inches was measured with a total of 12.2 inches in a 24-hour period. At Harrisburg rainfall totalled 15.15 inches with 10.14 inches being measured in a 24-hour period. In Pennsylvania alone damage has been estimated at more than \$1.5 billion and 50 people lost their lives.

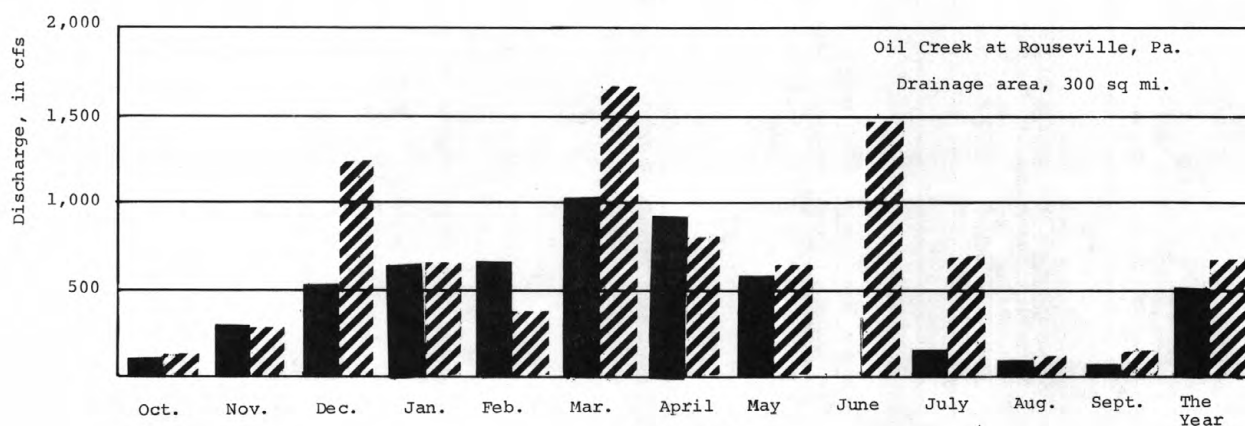
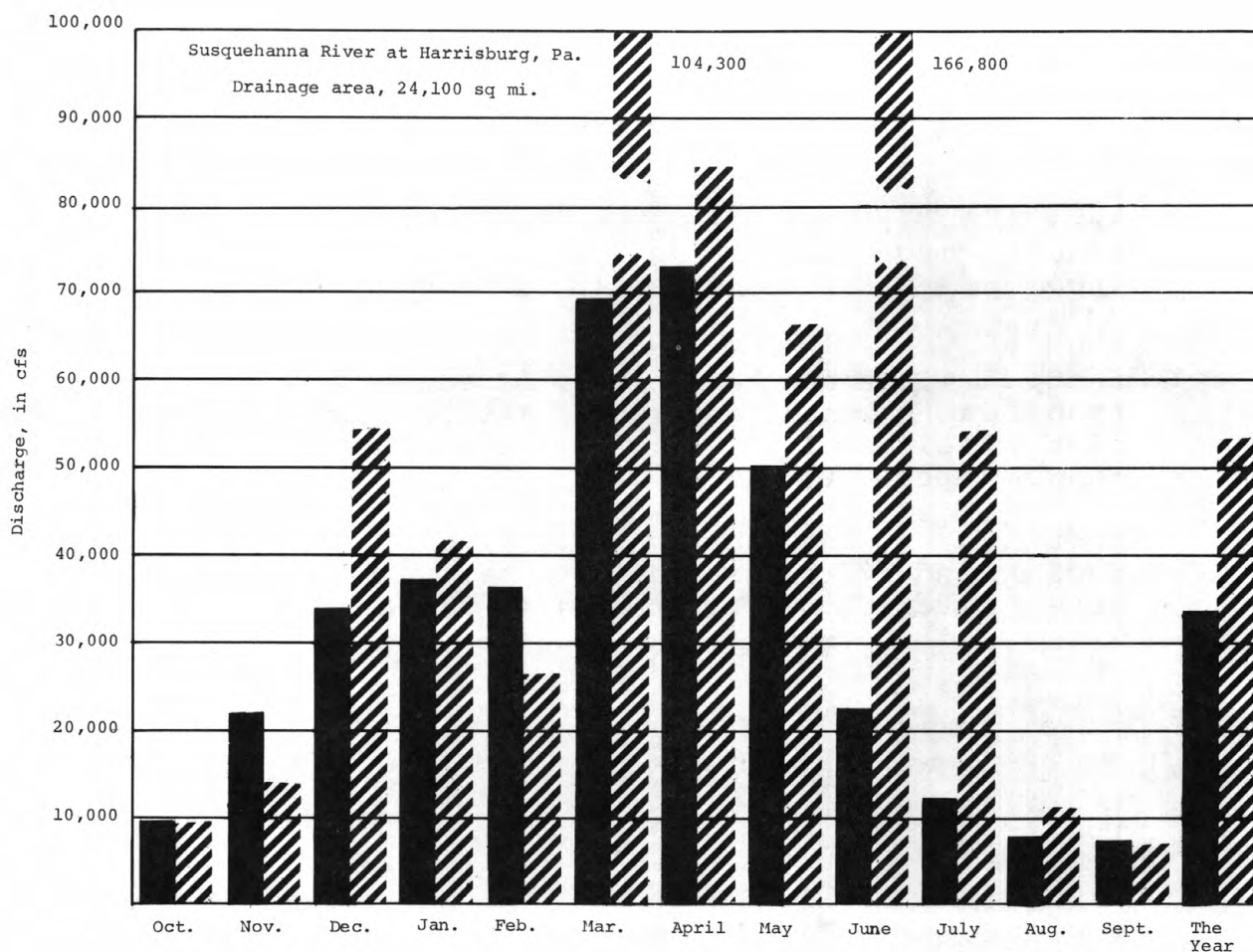
Peak stages and discharges were the highest for periods of record at 107 currently-operated gaging stations. On the Susquehanna River at Harrisburg (DA=24,100 sq mi) the peak discharge of 1,020,000 cfs was the highest in at least 185 years. On the Susquehanna River at Towanda (DA=7,797 sq mi) the peak discharge of 320,000 cfs was the highest in over 100 years of record and on the Susquehanna River at Wilkes-Barre (DA=9,960 sq mi) the peak discharge of 345,000 cfs was the highest in at least 108 years. Analysis has shown that peak flows in the Susquehanna River basin were up to 7 times that of the expected 100-year flood. Mainstem stations in the Susquehanna River basin experienced peak flows generally from 1.2 to 2.0 times the 100-year flood. Runoff of greater than 780 cfs was reported at Conodoguinet Creek tributary No. 1 at Enola.

At Harrisburg the mean monthly discharge of the Susquehanna River was 166,800 cfs - the highest in 82 years of record. The mean discharge for June 24 was 954,000 cfs - the highest daily discharge ever reported for this station and exceeding the previous high by about 38 percent. The monthly mean discharge for June, 53,040 cfs, was 58% greater than the median June flow.

Figure 2 on page 18, for which records of the long-term gaging stations were used, shows a comparison of the monthly and yearly mean discharge for the 1972 water year with the median discharge for the period 1931-60.

SELECTED REFERENCES

- Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.
- Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.
- Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.



Explanation

- Median of monthly and yearly mean discharge for period 1931-60.
- ▨ Monthly and yearly mean discharge for 1972 water year.

Figure 2.--Comparison of discharge at two long-term representative gaging stations during 1972 water year with median discharge for period 1931-60.

GAGING-STATION RECORDS

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DELAWARE RIVER BASIN

01427650 North Branch Calkins Creek near Damascus, Pa.

LOCATION.--Lat 41°41'57", long 75°09'58", Wayne County, on right bank 24 ft downstream from bridge on State Highway 371, 4 miles west of Damascus, and 4.8 miles upstream from Sunny Brook.

DRAINAGE AREA.--7.02 sq mi.

PERIOD OF RECORD.--Annual maximum and occasional discharge measurements, water years 1962-64. October 1964 to current year.

GAGE.--Water-stage recorder and wooden control. Altitude of gage is 740 ft (from topographic map). July 25, 1961 to Sept. 17, 1964, crest-stage at same site and datum.

AVERAGE DISCHARGE.--8 years, 12.1 cfs (23.41 inches per year).

EXTREMES.--Current year: Maximum discharge, 518 cfs June 30 (gage height, 8.06 ft), from rating curve extended above 300 cfs; minimum, 0.46 cfs Sept. 10, 11, 12, 13 (gage height, 2.26 ft).
Period of record: Maximum discharge, 550 cfs Mar. 10, 1964; maximum gage height, 8.06 ft June 30, 1972; no flow on many days.

REMARKS.--Records fair except 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	1.6	1.6	27	24	3.8	15	33	5.8	51	121	.37	1.4
2	1.4	10	15	21	3.7	84	34	10	23	32	.41	1.3
3	1.3	6.7	10	17	3.5	181	26	26	19	20	1.6	1.5
4	1.3	3.6	8.0	14	13	80	20	118	15	17	1.6	1.2
5	1.2	3.1	9.0	15	6.0	75	22	46	14	11	.95	.85
6	1.5	5.5	28	12	3.3	72	21	27	9.0	9.7	.76	.67
7	2.0	5.5	158	8.3	2.8	63	20	21	7.4	7.0	2.0	.67
8	1.4	4.2	176	7.2	2.3	21	17	19	6.6	6.2	5.0	.59
9	1.2	2.9	69	6.6	2.0	18	22	21	7.0	7.2	1.2	.59
10	8.9	2.9	84	10	1.8	12	17	30	12	6.8	.46	.52
11	8.6	3.2	160	21	1.6	9.3	21	18	5.6	5.8	.33	.46
12	3.2	2.9	67	19	1.6	15	24	13	4.0	4.2	.29	.46
13	2.2	2.8	42	26	5.0	37	121	10	3.8	3.4	.26	.76
14	1.7	2.5	30	49	25	33	60	8.7	8.7	3.2	.29	1.2
15	1.6	3.4	34	15	38	20	37	13	3.6	2.8	6.6	.95
16	1.4	4.2	57	8.8	26	17	83	23	3.6	2.2	2.2	.67
17	1.3	3.4	40	6.2	14	197	105	29	4.0	2.5	.95	.85
18	1.2	2.9	28	7.0	6.2	99	40	18	3.1	2.2	.67	5.8
19	1.2	2.9	24	8.9	5.2	50	31	9.5	5.0	1.7	.46	3.6
20	1.1	2.9	19	7.0	4.6	38	56	15	3.8	1.5	.33	2.6
21	1.1	3.4	18	6.4	4.2	44	46	24	20	1.4	.29	2.2
22	1.1	4.5	19	6.8	3.9	107	38	12	113	.85	.26	5.4
23	1.1	3.1	8.7	9.3	3.7	69	46	8.1	278	.76	.23	2.3
24	2.8	2.6	11	27	3.6	28	30	6.2	97	.59	.23	1.7
25	3.8	9.1	15	28	3.5	22	23	5.0	62	.46	.67	2.0
26	4.0	8.3	10	22	3.4	19	19	3.8	34	.95	1.5	2.0
27	2.8	5.2	16	6.2	3.3	17	15	3.2	22	1.1	77	9.7
28	2.2	5.7	17	5.4	3.1	15	13	2.8	14	.76	7.0	3.2
29	1.9	9.4	14	4.5	4.0	23	9.3	2.6	9.9	.59	3.8	2.3
30	3.6	37	37	4.0	-----	24	5.8	2.2	195	.41	2.3	2.6
31	2.3	-----	47	3.9	-----	28	-----	86	-----	.33	1.7	-----
TOTAL	72.0	165.4	1,297.7	426.5	202.1	1,528.3	1,055.1	636.9	1,054.1	275.60	121.71	60.04
MEAN	2.32	5.51	41.9	13.8	6.97	49.3	35.2	20.5	35.1	8.89	3.93	2.00
MAX	8.9	37	176	49	38	197	121	118	278	121	77	9.7
MIN	1.1	1.6	8.0	3.9	1.6	9.3	5.8	2.2	3.1	.33	.23	.46
CFSM	.33	.78	5.97	1.97	.99	7.02	5.01	2.92	5.00	1.27	.56	.28
IN.	.38	.88	6.88	2.26	1.07	8.10	5.59	3.38	5.59	1.46	.64	.32

CAL YR 1971 TOTAL 5,831.02 MEAN 16.0 MAX 181 MIN .17 CFSM 2.28 IN 30.90
WTR YR 1972 TOTAL 6,895.45 MEAN 18.8 MAX 278 MIN .23 CFSM 2.68 IN 36.54

PEAK DISCHARGE (BASE, 130 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2215	7.19	313	4-16	2300	7.04	284
12-11	1530	6.51	192	5- 4	1500	6.99	274
3- 2	1815	6.87	252	5-31	1230	6.28	162
3-17	1430	6.89	255	6-22	2345	7.79	448
3-22	1930	6.69	220	6-30	2245	8.06	518
4-13	1515	6.92	261	8-27	0300	6.93	263

DELAWARE RIVER BASIN

01428500 Delaware River Above Lackawaxen River near Barryville, N. Y.

LOCATION.--Lat 41°30'32", long 74°59'13", Sullivan County, on left bank 1.6 miles upstream from Lackawaxen River and 4.6 miles northwest of Barryville.

DRAINAGE AREA.--2,023 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 33,900 cfs Mar. 3 (gage height, 11.91 ft); minimum, 410 cfs Oct. 3 (gage height 1.85 ft); minimum daily, 439 cfs Oct. 3.
Period of record: Maximum discharge, 130,000 cfs Aug. 19, 1955 (gage height, 26.40 ft, from floodmarks in gage house), from rating curve extended above 55,000 cfs on basis of slope-area measurement at gage height, 23.19 ft; minimum, 122 cfs Sept. 5, 1953 (gage height, 1.11 ft); minimum daily, 126 cfs Sept. 4, 1956.

REMARKS.--Records good except those for winter period, which are poor. Subsequent to September 1954, entire flow from 371 sq mi of drainage area controlled by Pepacton Reservoir (see New York Annual Report) and, subsequent to October 1963, entire flow from 454 sq mi of drainage area controlled by Cannonsville Reservoir (see New York Annual Report). Part of flow of these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Water-quality records for the current year are published in Part 2 of the New York Annual Report.

COOPERATION.--Seven discharge measurements supplied by the Board of Water Supply, City of New York.

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	864	1,370	3,710	3,880	1,400	1,200	5,430	5,200	10,800	13,500	848	1,730
2	572	1,210	2,400	3,500	1,300	3,000	6,760	4,920	9,400	11,400	848	1,730
3	439	1,120	2,000	3,400	1,300	14,000	6,850	5,050	7,690	9,100	916	1,750
4	1,020	1,330	1,700	2,800	1,300	6,000	6,050	10,000	6,210	7,860	1,060	1,750
5	925	1,110	1,500	2,300	1,300	4,800	5,210	18,200	5,690	6,660	1,280	1,730
6	961	953	1,400	1,900	1,200	4,000	4,730	14,300	4,810	5,730	970	1,750
7	1,020	963	5,000	1,700	1,300	3,400	4,600	11,300	4,270	4,750	744	1,760
8	1,110	1,050	17,600	1,600	1,300	2,800	4,140	9,130	4,240	4,190	1,000	1,760
9	1,060	1,200	12,400	1,500	1,200	2,400	3,770	8,830	3,630	4,400	970	1,610
10	1,060	1,060	9,520	1,500	1,200	2,200	3,640	10,900	4,100	3,710	925	1,210
11	1,490	1,020	13,100	2,330	1,100	2,200	3,600	10,400	3,390	3,290	685	1,230
12	1,500	1,160	14,200	2,710	1,000	2,200	3,920	8,980	2,840	2,850	638	1,250
13	1,150	1,330	9,600	2,540	1,000	2,400	6,010	7,600	2,490	2,470	1,020	2,130
14	907	1,470	6,830	4,460	1,500	2,400	12,700	6,490	2,200	2,220	898	1,990
15	768	1,360	5,540	2,300	3,140	2,300	12,100	5,950	1,940	2,100	880	2,120
16	685	1,590	6,120	1,700	2,000	2,600	11,600	5,810	1,730	1,920	1,020	1,900
17	614	1,310	6,600	1,500	1,500	8,920	20,200	5,930	2,100	1,970	752	2,050
18	572	1,360	5,850	2,230	1,400	14,400	21,000	5,460	1,900	1,600	620	2,060
19	536	1,430	4,620	2,400	1,200	10,200	18,800	5,020	1,950	1,510	1,080	2,160
20	514	1,510	3,950	2,000	1,100	7,420	19,900	4,580	1,950	1,480	1,450	1,710
21	492	1,370	3,500	1,900	1,100	6,100	25,800	4,790	1,990	1,340	1,390	1,840
22	475	1,630	3,130	1,800	1,100	8,640	19,800	4,230	5,100	1,170	1,370	1,950
23	508	1,730	2,450	1,800	1,100	19,100	18,700	3,650	18,800	1,030	1,490	1,980
24	566	1,230	2,100	1,800	1,100	13,900	16,100	3,130	23,600	903	1,660	1,920
25	632	1,250	2,100	2,000	1,100	9,930	13,500	2,760	17,600	803	1,760	1,810
26	602	1,300	2,300	2,000	1,100	7,750	11,100	2,430	14,600	744	1,770	1,720
27	584	1,400	2,600	1,800	1,100	6,340	9,330	2,170	11,600	664	1,790	1,890
28	767	1,400	2,850	1,600	1,100	5,270	7,800	1,970	9,170	626	1,810	1,930
29	1,120	1,380	3,230	1,500	1,100	4,690	6,670	1,810	7,320	970	1,770	1,860
30	1,120	2,530	3,290	1,500	-----	5,200	5,830	1,650	7,910	1,410	1,600	1,820
31	1,460	-----	4,880	1,400	-----	5,150	-----	5,010	-----	1,020	1,680	-----
TOTAL	26,093	40,126	166,070	67,350	37,640	190,910	315,640	197,650	201,020	103,390	36,694	54,100
MEAN	842	1,338	5,357	2,173	1,298	6,158	10,520	6,376	6,701	3,335	1,184	1,803
MAX	1,500	2,530	17,600	4,460	3,140	19,100	25,800	18,200	23,600	13,500	1,810	2,160
MIN	439	953	1,400	1,400	1,000	1,200	3,600	1,650	1,730	626	620	1,210
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL	993,844	MEAN	2,723	MAX	17,600	MIN	360	CFSM	-	IN.	-
WTR YR 1972	TOTAL	1,436,683	MEAN	3,925	MAX	25,800	MIN	439	CFSM	-	IN.	-

DELAWARE RIVER BASIN

21

01429000 West Branch Lackawaxen River at Prompton, Pa.

LOCATION.--Lat 41°35'14", long 75°19'38", Wayne County, on right bank 500 ft downstream from Prompton Lake, 1,500 ft upstream from bridge on U.S. Highway 6 at Prompton, and 2,000 ft upstream from Van Auken Creek.

DRAINAGE AREA.--59.7 sq mi.

PERIOD OF RECORD.--August 1944 to current year. Prior to October 1952, published as Lackawaxen River at Prompton.

GAGE.--Water-stage recorder. Datum of gage is 1,083.78 ft above mean sea level.

AVERAGE DISCHARGE.--28 years, 104 cfs (23.66 inches per year), adjusted for storage since January 1961.

EXTREMES.--Current year: Maximum discharge, 1,520 cfs June 23 (gage height, 4.39 ft, from peak-stage indicator); minimum daily, 12 cfs Sept. 12.

Period of record: Maximum discharge, 5,860 cfs Aug. 18, 1955 (gage height, 9.24 ft), from rating curve extended above 3,600 cfs; no flow July 26 to Aug. 25, 1960, result of construction work upstream.

Flood of May 23, 1942, reached a stage of 16.7 ft, from floodmark.

REMARKS.--Records poor. Flow regulated by Prompton Lake 500 ft upstream (see p. 87).

REVISIONS (WATER YEARS).--WSP 1432: 1948-49. WRD Penna. 1971: 1970(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	26	22	170	199	55	48	190	92	520	900	27	16
2	25	30	120	173	54	134	230	100	400	500	30	15
3	23	46	83	167	52	636	210	120	300	300	40	14
4	22	46	74	147	57	510	180	350	210	190	44	14
5	21	41	68	131	54	363	150	580	220	150	35	13
6	21	36	94	107	49	248	160	350	190	130	24	13
7	24	41	430	97	49	180	170	250	164	110	28	13
8	24	49	820	93	46	156	150	190	131	120	72	13
9	22	46	640	81	42	134	140	180	116	150	50	13
10	35	43	560	85	40	113	130	250	134	120	38	14
11	80	42	740	97	39	97	120	200	113	100	24	13
12	60	40	660	126	37	91	140	160	97	84	21	12
13	45	39	500	121	37	107	280	130	83	74	21	14
14	42	36	330	183	63	126	520	120	73	82	25	19
15	37	36	290	173	87	121	380	120	64	74	80	19
16	34	40	360	126	100	109	400	150	76	66	52	18
17	31	40	360	97	91	393	840	180	80	60	40	18
18	27	37	280	91	77	702	580	130	68	54	34	24
19	25	36	200	95	72	500	380	120	92	50	30	26
20	24	35	180	93	63	350	350	110	82	45	26	23
21	22	35	160	87	57	283	430	170	100	41	22	21
22	20	39	140	77	55	388	320	140	400	38	19	22
23	19	37	130	75	54	685	370	110	1,000	35	17	22
24	21	35	121	102	51	479	310	90	1,000	32	16	22
25	23	58	123	123	49	322	250	78	600	29	18	22
26	28	120	116	123	48	237	200	68	430	37	19	22
27	31	96	123	95	48	180	160	60	300	30	25	28
28	30	64	123	81	45	130	140	54	190	27	27	33
29	28	64	123	72	44	140	120	56	150	24	24	31
30	26	140	123	65	-----	150	100	54	400	21	20	31
31	23	-----	205	60	-----	170	-----	520	-----	24	18	-----
TOTAL	919	1,469	8,446	3,442	1,615	8,282	8,100	5,282	7,783	3,697	966	578
MEAN	29.6	49.0	272	111	55.7	267	270	170	259	119	31.2	19.3
MAX	80	140	820	199	100	702	840	580	1,000	900	80	33
MIN	19	22	68	60	37	48	100	54	64	21	16	12
MEAN [≠]	29.1	53.2	285	106	54.8	272	267	173	262	107	30.7	20.0
CFSM [≠]	.49	.89	4.77	1.78	.92	4.56	4.47	2.90	4.39	1.79	.51	.34
IN. [≠]	.56	.99	5.50	2.05	.99	5.26	4.99	3.34	4.90	2.06	.59	.38
CAL YR 1971	TOTAL 37,788.8 MEAN 104 MAX 820 MIN 2.7 MEAN [≠] 104 CFSM [≠] 1.74 IN. [≠] 23.83											
WTR YR 1972	TOTAL 50,579.0 MEAN 138 MAX 1,000 MIN 12 MEAN [≠] 138 CFSM [≠] 2.31 IN. [≠] 31.61											

NOTE.--No gage-height record Nov, 24 to Dec, 23, Mar, 27 to June 6, June 15 to Sept. 11.

[≠] Adjusted for change in contents in Prompton Lake.

DELAWARE RIVER BASIN

01429500 Dyberry Creek near Honesdale, Pa.

LOCATION.--Lat 41°36'26", long 75°16'03", Wayne County, on right bank, 180 ft upstream from unnamed tributary, 1,700 ft below General Edgar Jadwin Lake, 2.1 miles north of Honesdale, and 2.6 miles upstream from mouth.

DRAINAGE AREA.--64.6 sq mi.

PERIOD OF RECORD.--October 1943 to current year. Published as "at Dyberry" October 1943 to September 1959 and as "near Dyberry" October 1959 to September 1961.

GAGE.--Water-stage recorder. Datum of gage is 970.70 ft above mean sea level. Prior to Oct. 1, 1957, nonrecording gage at site 1.9 miles upstream at datum 13.70 ft higher.

AVERAGE DISCHARGE.--29 years, 107 cfs (22.49 inches per year), adjusted for storage since October 1959.

EXTREMES.--Current year: Maximum discharge, 1,580 cfs June 23 (gage height, 5.75 ft); minimum daily, 8.8 cfs Sept. 11.

Period of record: Maximum discharge, 15,500 cfs July 10, 1952 (gage height, 14.6 ft, site and datum then in use), from rating curve extended above 2,500 cfs on basis of slope-area measurement at gage height, 13.78 ft, site and datum then in use; no flow Oct. 2, 3, 1968 (result of shutoff at General Edgar Jadwin Lake). Flood of May 23, 1942, reached a stage of 15.86 ft, site and datum then in use, from floodmarks.

REMARKS.--Records fair. Some regulation at high flow by General Edgar Jadwin Lake, 1,700 ft upstream (see p. 87).

REVISIONS (WATER YEARS).--WSP 1382: 1947(M), 1950(M), 1951-53.

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	16	16	110	200	54	69	251	106	583	1,320	31	15
2	15	42	76	180	54	297	317	118	305	474	34	13
3	14	59	78	160	54	921	276	147	180	245	44	12
4	13	51	60	140	58	440	219	508	166	206	45	12
5	13	39	66	129	58	260	179	763	196	156	30	11
6	13	31	110	97	52	169	181	371	137	137	24	10
7	14	39	560	90	49	136	196	233	110	114	29	9.9
8	13	45	1,100	86	46	127	166	197	85	122	84	9.6
9	13	46	540	82	44	109	150	195	92	164	40	9.6
10	25	39	500	103	42	97	152	271	155	118	27	9.3
11	56	39	940	129	40	84	150	220	87	99	22	8.8
12	40	39	580	152	38	88	184	159	72	82	19	9.1
13	30	34	370	138	38	116	440	136	66	74	19	12
14	24	29	290	294	130	141	772	127	62	81	23	21
15	21	38	260	150	162	109	458	139	54	71	130	19
16	19	47	370	96	150	97	393	174	66	58	55	19
17	17	39	340	88	103	625	1,120	196	70	54	37	19
18	17	39	190	84	82	930	661	147	58	49	33	27
19	17	42	180	88	65	413	380	125	68	47	29	28
20	17	37	140	84	60	265	354	131	61	42	25	25
21	15	37	110	69	56	254	422	194	103	38	20	22
22	14	43	96	62	52	465	294	144	434	37	18	22
23	14	38	88	69	50	835	394	117	1,460	33	17	23
24	14	28	90	122	50	376	294	99	1,400	29	16	23
25	20	47	92	157	49	232	224	83	783	27	22	23
26	25	53	84	118	49	184	183	70	425	39	23	23
27	23	47	90	84	47	157	157	63	273	30	43	28
28	21	56	92	74	46	141	138	58	191	25	41	33
29	18	68	90	66	47	147	125	65	152	23	29	32
30	17	150	110	60	-----	206	112	61	830	21	22	31
31	16	-----	210	56	-----	204	-----	284	-----	23	17	-----
TOTAL	604	1,357	8,012	3,507	1,825	8,694	9,342	5,701	8,724	4,038	1,048	559.3
MEAN	19.5	45.2	258	113	62.9	280	311	184	291	130	33.8	18.6
MAX	56	150	1,100	294	162	930	1,120	763	1,460	1,320	130	33
MIN	13	16	60	56	38	69	112	58	54	21	16	8.8
MEAN [≠]	19.5	45.2	258	113	62.8	280	311	186	302	118	33.8	18.6
CFSM [≠]	.30	.70	3.99	1.75	.97	4.33	4.81	2.88	4.67	1.83	.52	.29
IN. [≠]	.35	.78	4.60	2.02	1.05	4.99	5.37	3.32	5.21	2.11	.60	.32

CAL YR 1971 TOTAL 46,092.5 MEAN 126 MAX 1,330 MIN 5.4 MEAN[≠] 126 CFSM[≠] 1.95 IN.[≠] 26.52
WTR YR 1972 TOTAL 53,411.3 MEAN 146 MAX 1,460 MIN 8.8 MEAN[≠] 146 CFSM[≠] 2.26 IN.[≠] 30.72

[≠] Adjusted for change in contents in General Edgar Jadwin Lake.

01431500 Lackawaxen River at Hawley, Pa.

LOCATION.--Lat 41°28'34", long 75°10'21", Wayne County, on left bank at Church Street Bridge in Hawley, 700 ft upstream from Wallenpaupack Creek, and 3,000 ft downstream from Middle Creek.

DRAINAGE AREA.--290 sq mi.

PERIOD OF RECORD.--July 1908 to September 1917, August 1938 to current year. Monthly discharge only for some periods, published in WSP 1302. October 1917 to December 1919 (gage heights and discharge measurements only) in reports of Water Supply Commission of Pennsylvania.

GAGE.--Nonrecording gage, water-stage recorder, and crest-stage gage. Datum of gage is 869.00 ft above mean sea level. Prior to 1938, nonrecording gage at same site and datum. Aug. 10, 1938 to Aug. 19, 1955, water-stage recorder, and Aug. 20, 1955 to Feb. 13, 1956, nonrecording gage at site 1,000 ft downstream at same datum.

AVERAGE DISCHARGE.--43 years (1908-17, 1938-72), 468 cfs (21.92 inches per year), adjusted for storage since October 1959.

EXTREMES.--Current year: Maximum discharge, about 9,500 cfs June 23; maximum gage height, 10.67 ft June 23, backwater from Wallenpaupack Creek; minimum discharge observed, 59 cfs Sept. 12, 13; minimum gage height observed, 1.47 ft Oct. 9.

Period of record: Maximum discharge, 51,900 cfs Aug 19, 1955 (gage height, 24.8 ft, at present site, 20.6 ft at former site, from floodmark), from rating curve extended above 12,000 cfs on basis of slope-area measurement at gage height, 24.2 ft, at present site, 20.1 ft at former site; minimum daily, 8 cfs Sept. 8, 1909.

Flood in March 1936 reached a stage of 19.1 ft, at present site, 13.9 ft, at former site, from floodmarks (discharge, 27,600 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Regulation by Prompton Lake and, at high flow, by General Edgar Jadwin Lake located 14.9 and 13.0 miles upstream, respectively (see p. 87). Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 951: 1938-41. WSP 1302: 1909-17. WSP 1432: 1942. WSP 1502: 1956.

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	109	122	855	918	270	260	894	457	2,600	3,700	116	76
2	101	196	720	795	260	1,910	1,080	472	1,930	2,060	121	71
3	94	313	585	902	250	4,010	1,050	563	1,230	1,280	183	69
4	89	267	442	728	270	2,430	902	1,730	964	1,020	199	68
5	85	229	366	637	260	1,560	743	2,900	1,040	812	163	65
6	83	200	476	502	240	998	706	1,730	767	728	133	62
7	89	214	2,170	500	230	773	840	1,180	667	595	125	61
8	89	248	4,500	420	220	720	743	925	501	506	344	61
9	83	233	3,260	400	210	637	664	873	506	590	242	65
10	157	218	2,720	420	190	514	650	1,200	1,660	595	175	64
11	371	214	3,880	573	190	431	631	1,060	902	526	133	61
12	287	210	3,440	728	180	474	706	800	584	413	116	59
13	229	189	2,250	657	180	735	1,470	654	482	355	106	69
14	189	176	1,620	1,190	300	818	2,600	577	426	340	99	91
15	166	172	1,430	840	410	618	1,870	594	371	314	352	85
16	147	236	1,790	520	480	573	1,880	734	367	394	245	76
17	135	225	1,780	450	420	3,400	4,510	887	396	396	183	70
18	122	210	1,300	420	370	4,090	2,840	662	344	286	156	101
19	111	200	910	442	340	2,370	1,850	552	501	257	144	117
20	106	196	832	431	300	1,580	1,700	547	435	230	131	98
21	101	193	750	400	280	1,360	1,990	853	489	204	106	83
22	97	207	678	371	270	2,010	1,520	689	1,980	188	96	83
23	89	203	519	357	260	3,190	1,760	546	8,000	168	88	88
24	99	186	491	555	250	2,060	1,480	451	6,400	148	82	80
25	138	307	561	671	230	1,330	1,180	382	3,200	138	86	80
26	207	637	519	540	230	990	954	328	2,000	140	91	82
27	203	485	561	440	230	825	818	298	1,520	136	121	89
28	179	317	555	370	210	692	657	266	1,100	127	131	110
29	160	317	549	330	220	650	575	245	880	116	110	98
30	144	744	674	310	-----	803	503	254	2,000	106	96	94
31	133	-----	1,330	290	-----	825	-----	2,590	-----	104	84	-----
TOTAL	4,392	7,864	42,513	17,107	7,750	43,636	39,766	25,999	44,242	16,972	4,557	2,376
MEAN	142	262	1,371	552	267	1,408	1,326	839	1,475	547	147	79.2
MAX	371	744	4,500	1,190	480	4,090	4,510	2,900	8,000	3,700	352	117
MIN	83	122	366	290	180	260	503	245	344	104	82	59
MEAN [≠]	142	266	1,374	547	266	1,414	1,323	844	1,489	523	146	79.9
CFSM [≠]	.49	.92	4.74	1.89	.92	4.88	4.56	2.91	5.13	1.80	.50	.28
IN. [≠]	.56	1.03	5.46	2.18	.99	5.63	5.09	3.36	5.72	2.08	.58	.31
CAL YR 1971	TOTAL 190,826	MEAN 523	MAX 4,500	MIN 34	MEAN [≠] 524	CFSM [≠] 703	IN. [≠] 2.42	24.49				
WTR YR 1972	TOTAL 257,174	MEAN 703	MAX 8,000	MIN 59	MEAN [≠] 703	CFSM [≠] 703	IN. [≠] 32.99					

NOTE.--Backwater from Wallenpaupack Creek May 31 to June 2, June 23, 26, 30, July 1.

[≠] Adjusted for change in contents in Prompton and General Edgar Jadwin Lakes.

DELAWARE RIVER BASIN

01432000 Wallenpaupack Creek at Wilsonville, Pa.

LOCATION.--At hydroelectric plant of Pennsylvania Power and Light Co., at lower end of penstock, at Kimble, 3 miles east of dam which is at lat 41°27'33", long 75°11'08", Pike County, at Wilsonville, 1.2 miles south of Hawley.

DRAINAGE AREA.--228 sq mi.

PERIOD OF RECORD.--October 1909 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Daily discharge determined from flow through turbines, computed from records of generator output, and flow over roller gates, computed on basis of head on gates. Prior to Nov. 3, 1925, nonrecording gage at site 1,000 ft downstream from dam at datum 1,146.78 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--63 years, 356 cfs (unadjusted).

EXTREMES.--Period of record: Maximum daily discharge, 4,840 cfs Mar. 29, 1914; no flow at times each year subsequent to Nov. 3, 1925.

REMARKS.--Records good. No flow over spillway during year. Flow regulated by Lake Wallenpaupack (see p. 87).

COOPERATION.--Records of generator load, operation of powerplant, net operating head, and water-surface elevations in lake furnished by Pennsylvania Power and Light Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1302: 1918, 1923-24. WSP 1432: 1920-21.

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	791	517	33	0	660	590	0	233	2,710	1,670	803	0
2	789	512	13	0	624	595	0	347	1,820	227	798	0
3	0	542	85	683	698	676	424	337	1,820	780	785	0
4	493	527	0	660	1,040	0	489	1,080	1,820	0	807	0
5	526	531	0	607	208	0	476	1,770	1,820	1,180	0	0
6	497	505	18	648	0	872	438	373	1,820	1,510	0	0
7	628	517	0	612	567	609	479	0	1,340	790	785	0
8	661	229	23	0	693	596	0	787	787	12	786	0
9	631	118	0	0	642	712	0	811	1,110	0	801	0
10	543	42	1.6	645	680	785	539	806	215	803	805	0
11	677	34	1.6	631	554	0	594	461	0	779	805	1.6
12	803	0	0	675	0	1.6	554	460	807	1,130	0	0
13	793	0	0	771	0	781	579	0	700	1,510	0	550
14	789	8.0	714	843	582	826	578	0	339	851	801	615
15	787	230	752	23	610	810	0	470	338	14	0	32
16	785	15	4.9	0	573	801	0	605	351	3.1	0	0
17	783	0	241	995	558	805	833	790	0	856	0	0
18	793	0	0	728	594	777	1,600	1,130	190	952	700	1.6
19	791	0	4.8	740	0	0	1,590	834	1,330	948	0	0
20	789	1.9	177	804	0	1,010	1,580	0	1,720	960	0	0
21	787	0	53	724	559	1,610	1,610	0	1,790	955	399	0
22	781	466	0	0	510	1,640	1.6	430	1,820	3.2	205	0
23	460	427	246	0	618	1,630	0	444	2,810	24	574	0
24	0	398	0	570	576	1,640	837	473	4,350	821	606	0
25	253	0	0	570	570	1,610	907	826	3,780	824	936	0
26	561	0	0	585	0	1,380	1,140	226	2,360	812	180	494
27	519	0	0	599	0	1,650	1,180	0	1,820	797	0	285
28	577	0	450	562	535	1,640	976	0	1,820	812	0	0
29	516	32	675	0	610	735	0	0	2,990	0	26	0
30	0	12	622	0	-----	772	0	0	2,600	0	0	0
31	0	-----	633	772	-----	0	-----	1,430	-----	844	0	-----
TOTAL	17,803	5,663.9	4,747.9	14,447	13,261	25,553.6	17,404.6	15,123	47,177	20,867.3	11,602	1,979.2
MEAN	574	189	153	466	457	824	580	488	1,573	673	374	66.0
MAX	803	542	752	995	1,040	1,650	1,610	1,770	4,350	1,670	936	615
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-

CAL YR 1971 TOTAL 138,140.60 MEAN 378 MAX 1,810 MIN 0 CFSM - IN. -
WTR YR 1972 TOTAL 195,629.50 MEAN 535 MAX 4,350 MIN 0 CFSM - IN. -

01434000 Delaware River at Port Jervis, N. Y.

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, Pa., on right bank 250 ft downstream from bridge on U. S. Highways 6 and 209 at Port Jervis, 1.2 miles upstream from Neversink River, and 6.5 miles downstream from Mongaup River.

DRAINAGE AREA.--3,076 sq mi.

PERIOD OF RECORD.--October 1904 to current year.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft above mean sea level. Prior to June 20, 1914, nonrecording gage at highway bridge 250 ft upstream at same datum operated by U. S. Weather Bureau. June 20, 1914 to Aug. 13, 1928, nonrecording gages at highway bridge 250 ft upstream at present datum.

EXTREMES.--Current year: Maximum discharge, 46,100 cfs June 24 (gage height, 10.46 ft); minimum, 701 cfs Oct. 4 (gage height, 1.68 ft); minimum daily, 1,150 cfs Aug. 18.

Period of record: Maximum discharge, 233,000 cfs Aug. 19, 1955 (gage height, 23.91 ft, from floodmarks in gage house), from rating curve extended above 89,000 cfs on basis of slope-area measurement of peak flow; minimum observed, 175 cfs Sept. 23, 1908 (gage height, 0.6 ft).

Maximum discharge previously known, 205,000 cfs Oct. 10, 1903 (gage height, 23.1 ft, reported by U. S. Weather Bureau), from rating curve extended above 70,000 cfs by velocity-area studies; maximum stage known, 25.5 ft Mar. 8, 1904 (ice jam).

REMARKS.--Records good except for those for winter periods, which are fair. Flow regulated by Lake Wallenpaupack (see p. 87) and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (see New York Annual Report) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 sq mi of drainage area controlled by Pepacton Reservoir (see New York Annual Report) and, subsequent to October 1963, entire flow from 454 sq mi of drainage area controlled by Cannonsville Reservoir (see New York Annual Report). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master. Records of water quality for the current year are published in Part 2 of the New York Annual Report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1013: 1905-36. WRD New York 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	2,110	1,980	5,800	6,950	3,300	3,160	7,410	7,300	23,300	22,700	2,170	1,860
2	1,990	2,400	4,850	5,800	3,100	5,520	8,550	7,060	18,000	17,400	2,310	1,840
3	1,720	2,500	4,020	6,270	2,800	23,600	9,330	6,990	13,900	13,700	2,330	1,960
4	1,300	2,460	3,370	6,270	3,000	16,600	8,760	11,400	11,700	11,500	2,520	1,960
5	2,150	2,310	3,030	5,620	3,300	11,000	7,850	23,900	11,100	10,300	2,680	1,880
6	2,110	2,010	2,860	4,850	3,000	9,110	7,220	18,300	9,780	10,200	1,960	2,010
7	2,330	2,050	7,450	4,510	2,700	7,610	7,260	13,900	8,720	8,140	1,770	1,990
8	2,350	2,230	22,900	3,900	2,800	6,870	6,640	11,800	7,450	6,830	2,610	1,990
9	2,070	2,090	18,900	3,210	3,000	6,190	5,800	11,200	6,760	6,640	2,840	2,010
10	2,270	2,030	14,600	3,260	3,000	5,730	5,760	13,600	8,810	6,300	2,630	1,700
11	3,560	1,670	18,000	4,630	2,600	4,410	6,010	13,700	6,800	6,160	2,290	2,090
12	3,670	1,740	21,400	5,520	2,300	3,760	6,270	11,700	5,830	5,550	2,170	2,110
13	3,180	1,790	15,700	5,480	2,000	5,210	7,570	9,690	5,380	5,830	1,680	2,380
14	2,770	1,860	12,200	7,610	2,500	6,640	16,400	8,470	4,920	4,170	1,770	2,960
15	2,660	2,090	10,500	7,500	3,500	5,730	15,300	8,220	4,110	3,560	2,550	2,570
16	2,150	2,400	10,500	5,500	6,270	5,250	14,200	8,380	3,760	3,030	1,920	2,090
17	1,980	2,130	11,000	4,700	5,210	12,100	25,600	8,720	3,450	3,960	1,470	2,070
18	2,150	1,860	10,100	4,500	4,260	22,700	27,500	8,380	3,560	3,930	1,150	2,290
19	1,980	2,050	8,140	4,600	3,300	16,000	23,800	8,220	5,280	3,790	1,680	2,330
20	2,090	1,960	6,910	4,800	2,600	12,100	23,900	6,190	6,380	3,670	1,670	2,010
21	1,960	1,920	6,190	4,000	2,600	11,100	32,200	6,530	6,300	3,510	1,700	1,900
22	1,750	2,130	5,550	3,200	2,800	13,400	24,800	6,530	10,900	2,630	1,940	2,130
23	1,420	2,630	4,600	2,900	3,000	26,700	22,600	5,940	31,500	2,030	1,860	2,110
24	1,500	2,190	4,080	3,300	3,100	21,200	20,400	5,250	42,600	1,960	2,420	2,030
25	1,310	2,130	4,290	4,200	3,160	15,700	17,300	4,730	31,600	2,400	2,770	2,130
26	1,650	1,980	4,480	5,200	2,840	12,500	15,100	4,380	25,000	2,250	2,960	2,110
27	1,840	2,400	4,480	4,000	2,460	10,700	13,000	3,400	18,800	1,990	2,420	2,720
28	1,900	2,380	4,760	3,000	2,500	9,470	11,100	2,720	15,200	1,770	2,270	2,440
29	2,150	2,290	5,800	2,800	2,910	7,930	9,110	2,460	13,400	1,770	2,190	2,070
30	1,980	4,110	5,800	2,700	-----	7,930	7,810	2,460	15,200	1,840	1,960	2,030
31	1,920	-----	8,380	2,900	-----	7,730	-----	9,200	-----	2,030	1,810	-----
TOTAL	65,970	65,770	270,640	143,680	89,910	333,650	414,550	270,720	379,490	181,540	66,470	63,770
MEAN	2,128	2,192	8,730	4,635	3,100	10,760	13,820	8,733	12,650	5,856	2,144	2,126
MAX	3,670	4,110	22,900	7,610	6,270	26,700	32,200	23,900	42,600	22,700	2,960	2,960
MIN	1,300	1,670	2,860	2,700	2,000	3,160	5,760	2,460	3,450	1,770	1,150	1,700
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL	1,685,880	MEAN	4,619	MAX	22,900	MIN	1,040	CFSM	-	IN.	-
WTR YR 1972	TOTAL	2,346,160	MEAN	6,410	MAX	42,600	MIN	1,150	CFSM	-	IN.	-

DELAWARE RIVER BASIN

01438500 Delaware River at Montague, N. J.

LOCATION.--Lat 41°18'30", long 74°47'50", Sussex County, on right bank 0.4 mile upstream from toll bridge at Montague, 0.8 mile downstream from Saw Kill, and at mile 246.3 upstream from Atlantic Ocean.

DRAINAGE AREA.--3,480 sq mi.

PERIOD OF RECORD.--March 1936 to September 1939 (gage heights only, published as "at Milford, Pa."), October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 369.93 ft above mean sea level. Prior to Feb. 9, 1940, non-recording gage on upstream side of left span of subsequently dismantled bridge at present site at datum 70 ft lower.

AVERAGE DISCHARGE.--33 years, 5,747 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 53,000 cfs June 24 (gage height, 16.28 ft); minimum, 974 cfs Oct. 4 (gage height, 4.47 ft).

Period of record: Maximum discharge, 250,000 cfs Aug. 19, 1955 (gage height, 35.15 ft), from rating curve extended above 90,000 cfs on basis of flood-routing study; minimum, 382 cfs Aug. 24, 1954 (gage height, 3.83 ft); minimum daily, 412 cfs Aug. 23, 1954.

Maximum stage known during period 1903-72, 35.5 ft Oct. 10, 1903 (present datum), from floodmark. Gage height of 28.45 ft (present datum) was observed Mar. 18, 1936 (discharge, 164,500 cfs, from present rating curve extended above 90,000 cfs).

REMARKS.--Records excellent except those for January through May, which are good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack (see p. 87) and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see New Jersey Annual Report) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see New Jersey Annual Report). Records of water quality for the current year are published in Part 2 of the New Jersey Annual 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	2,470	2,220	7,110	8,310	3,900	3,670	8,580	8,400	28,100	26,600	2,670	2,140
2	2,290	2,670	6,030	6,900	3,500	6,090	9,550	8,200	22,000	21,100	2,630	2,090
3	2,130	3,060	4,920	7,250	3,440	23,400	10,600	8,000	16,700	16,300	2,750	2,180
4	1,400	2,860	4,100	7,370	3,900	20,000	10,000	10,000	14,100	14,000	2,880	2,230
5	2,440	2,820	3,730	6,730	4,000	12,900	9,120	24,300	13,600	12,100	3,190	2,120
6	2,370	2,450	3,380	5,810	3,300	10,500	8,350	21,000	11,900	12,100	2,390	2,250
7	2,490	2,380	7,730	5,230	3,100	8,900	8,380	16,400	10,500	9,670	2,050	2,250
8	2,550	2,590	24,000	4,710	3,300	8,130	7,890	14,200	9,060	8,380	2,880	2,210
9	2,400	2,500	21,400	3,800	3,600	7,220	7,010	13,100	8,130	7,910	3,310	2,270
10	2,560	2,480	16,300	3,850	3,500	6,440	6,870	14,600	10,800	7,350	3,040	1,890
11	4,570	2,060	19,300	5,480	3,300	5,390	7,040	15,300	8,720	7,230	2,730	2,340
12	4,500	2,040	23,600	6,460	2,900	4,680	7,280	13,500	7,260	6,510	2,600	2,360
13	3,890	2,120	17,800	6,490	2,500	5,930	8,200	11,900	6,780	6,840	1,910	2,500
14	3,320	2,170	13,800	8,430	5,000	7,670	17,000	9,400	6,130	5,080	2,030	3,160
15	3,110	2,280	11,900	9,160	7,200	6,750	16,700	8,600	5,220	4,660	2,900	2,980
16	2,620	2,740	11,800	6,380	7,000	6,300	15,600	9,000	4,770	3,910	2,340	2,410
17	2,360	2,540	12,300	5,200	6,000	12,400	25,700	9,400	4,460	5,600	1,790	2,270
18	2,400	2,180	11,400	5,300	4,900	26,300	31,000	9,400	4,530	5,050	1,450	2,560
19	2,320	2,400	9,260	5,700	4,300	19,000	28,000	9,200	6,690	4,820	1,890	2,600
20	2,280	2,160	8,220	5,800	3,400	14,100	25,400	7,400	8,070	4,530	1,860	2,340
21	2,300	2,340	7,480	5,400	3,100	12,900	33,900	7,800	7,720	4,380	1,960	2,070
22	2,000	2,260	6,720	4,600	3,700	15,000	28,000	7,600	13,700	3,720	2,190	2,340
23	1,830	2,910	5,710	3,800	3,500	29,400	26,000	7,200	37,700	2,750	2,100	2,340
24	1,660	2,670	5,110	4,600	3,500	24,600	24,200	6,400	49,600	2,370	2,580	2,270
25	1,730	2,490	5,190	6,200	3,500	18,600	21,200	5,740	36,600	2,940	2,920	2,270
26	2,050	2,210	5,430	6,170	3,400	15,100	18,600	5,330	29,600	2,800	3,330	2,340
27	2,270	2,800	5,350	5,350	2,800	12,500	16,000	4,310	22,700	2,600	2,670	2,880
28	2,170	2,760	5,600	4,450	2,880	11,100	13,000	3,500	18,200	2,230	2,630	2,770
29	2,400	2,840	6,620	3,920	3,390	9,320	11,000	3,100	15,500	2,190	2,480	2,300
30	2,420	5,350	6,720	3,410	-----	9,160	9,200	2,990	17,200	2,180	2,270	2,270
31	2,110	-----	9,340	3,560	-----	9,120	-----	9,510	-----	2,280	2,030	-----
TOTAL	77,410	77,350	307,350	175,820	111,810	382,570	469,370	304,780	456,040	220,180	76,450	71,000
MEAN	2,497	2,578	9,915	5,672	3,856	12,340	15,650	9,832	15,200	7,103	2,466	2,367
MAX	4,570	5,350	24,000	9,160	7,200	29,400	33,900	24,300	49,600	26,600	3,330	3,160
MIN	1,400	2,040	3,380	3,410	2,500	3,670	6,870	2,990	4,460	2,180	1,450	1,890
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL	1,935,470	MEAN	5,303	MAX	24,000	MIN	1,310	CFSM	-	IN.	-
WTR YR 1972	TOTAL	2,730,130	MEAN	7,459	MAX	49,600	MIN	1,400	CFSM	-	IN.	-

DELAWARE RIVER BASIN

27

01439500 Bush Kill at Shoemakers, Pa.

LOCATION.--Lat 41°05'17", long 75°02'17", Monroe County, on right bank 30 ft downstream from highway bridge, 0.1 mile downstream from Saw Creek, 0.7 mile northwest of Shoemakers, and 2 miles southwest of Bushkill.

DRAINAGE AREA.--117 sq mi.

PERIOD OF RECORD.--October 1908 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1928, published as Bushkill Creek near Shoemakers; October 1928 to September 1952, published as Bushkill Creek at Shoemakers.

GAGE.--Water-stage recorder. Datum of gage is 421.13 ft above mean sea level, unadjusted. Sept. 19, 1908 to Aug. 12, 1938, nonrecording gage, and Aug. 13, 1938 to June 20, 1956, water-stage recorder at site 50 ft upstream at same datum.

AVERAGE DISCHARGE.--64 years, 230 cfs (26.70 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,360 cfs June 23 (gage height, 5.59 ft); minimum, 12 cfs Sept. 11, 12, 29, 30 (gage height, 0.99 ft).

Period of record: Maximum discharge, 23,400 cfs Aug. 19, 1955 (gage height, 13.95 ft from floodmarks), from rating curve extended above 2,600 cfs on basis of slope-area measurement of peak flow; minimum, 2.6 cfs Sept. 25, 26, 27, 1964 (gage height, 0.72 ft).

REMARKS.--Records good except those for winter periods, which are fair. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1202: 1921, 1932(M), 1933, 1935-36, 1938(M), 1939-40, 1942, 1945, 1946(M), 1948(M). WSP 1302: 1909-15, 1920(M), 1922-29.

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	169	179	472	287	150	289	332	281	1,730	1,090	93	24
2	158	240	386	314	159	464	316	286	1,270	823	86	23
3	139	269	337	361	168	901	295	291	985	667	86	23
4	129	240	309	328	319	708	275	440	776	571	84	21
5	123	213	278	290	246	623	260	521	908	506	70	19
6	117	197	300	260	230	520	252	416	766	477	62	18
7	112	213	559	250	220	459	257	363	653	415	62	16
8	101	213	715	240	210	441	242	344	518	408	84	15
9	93	197	670	230	200	396	225	360	429	412	75	14
10	228	194	700	314	190	350	212	407	500	360	64	13
11	366	190	858	337	180	313	203	371	438	324	57	13
12	278	183	866	348	180	341	192	332	361	291	51	13
13	228	176	754	327	340	418	234	302	320	332	48	15
14	209	165	641	464	646	412	305	287	293	336	45	17
15	190	165	585	424	488	376	280	318	274	281	57	16
16	176	172	579	326	420	368	340	356	265	251	64	15
17	162	165	527	310	330	864	717	333	267	356	53	14
18	151	158	466	290	286	1,080	590	480	246	341	48	16
19	142	155	391	270	260	884	509	407	696	304	44	24
20	136	155	366	260	240	736	606	428	711	272	41	22
21	132	151	347	260	230	641	719	476	866	236	31	19
22	126	145	323	252	220	861	604	425	1,560	205	31	19
23	123	132	274	248	200	1,200	633	366	2,840	186	29	18
24	158	126	274	291	200	899	574	331	2,640	169	29	16
25	224	145	283	314	195	713	510	298	1,950	151	29	16
26	205	162	261	279	190	607	434	271	1,570	132	35	15
27	186	169	249	230	190	530	382	248	1,250	120	29	15
28	172	190	240	190	191	463	349	230	961	112	38	15
29	158	274	228	170	216	416	325	213	762	101	38	13
30	148	606	253	160	-----	391	296	200	764	91	31	14
31	145	-----	342	155	-----	362	-----	781	-----	88	27	-----
TOTAL	5,184	5,939	13,833	8,779	7,294	18,026	11,468	11,162	27,569	10,408	1,621	511
MEAN	167	198	446	283	252	581	382	360	919	336	52.3	17.0
MAX	366	606	866	464	646	1,200	719	781	2,840	1,090	93	24
MIN	93	126	228	155	150	289	192	200	246	88	27	13
CFSM	1.43	1.69	3.81	2.42	2.15	4.97	3.27	3.08	7.85	2.87	.45	.15
IN.	1.65	1.89	4.40	2.79	2.32	5.73	3.65	3.55	8.77	3.31	.52	.16

CAL YR 1971 TOTAL 91,447 MEAN 251 MAX 986 MIN 15 CFSM 2.15 IN 29.08
WTR YR 1972 TOTAL 121,794 MEAN 333 MAX 2,840 MIN 13 CFSM 2.85 IN 38.72

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-17	2330	3.38	1,190	6-23	2000	5.59	3,360
3-23	0230	3.55	1,330	7- 1	0530	3.42	1,230
6- 1	0530	4.24	1,940				

DELAWARE RIVER BASIN

01440200 Delaware River below Tocks Island damsite near Delaware Water Gap, Pa.

LOCATION.--Lat 41°00'42", long 75°05'09", Warren County, N. J., on left bank 40 ft streamward from River Road, 1.0 mile downstream from Tocks Island, 3.7 miles northeast of Delaware Water Gap, Pa., 4.0 miles upstream from bridge on Interstate Highway 80, and at mile 216.1 upstream from Atlantic Ocean.

DRAINAGE AREA.--3,850 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 293.64 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 5,421 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 64,200 cfs June 24 (gage height, 17.31 ft); minimum, 1,310 cfs July 30, Aug. 14; minimum daily, 1,690 cfs Aug. 19.

Period of record: Maximum discharge, 64,200 cfs June 24, 1972 (gage height, 17.31 ft); maximum gage height, 18.85 ft Feb. 4, 1970 (ice jam); minimum daily discharge, 580 cfs July 7, 8, 1965.

REMARKS.--Records good. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack (see p. 87) and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake and Neversink Reservoirs (see New Jersey Annual Report) and smaller reservoirs. Diversion from Pepacton, Cannonsville and Neversink Reservoirs (see New Jersey Annual Report). Records of water quality for the current year are published in Part 2 of the New Jersey Annual 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	2,800	2,520	7,920	9,520	4,600	3,930	8,920	9,280	34,800	28,300	3,020	2,390
2	2,800	2,900	7,520	7,240	4,230	5,440	9,400	9,040	30,400	24,500	2,930	2,360
3	2,700	3,540	5,720	7,520	3,810	22,000	10,600	8,760	20,300	18,600	3,170	2,150
4	2,300	3,450	5,060	7,880	4,200	28,300	10,400	10,500	16,000	16,000	3,410	2,150
5	2,700	3,300	4,320	7,240	5,760	15,800	9,520	25,400	15,800	13,500	3,500	2,010
6	2,700	2,950	3,600	6,320	4,500	11,000	8,560	25,200	13,800	13,600	2,930	1,850
7	2,800	2,720	6,160	5,840	3,930	9,000	8,400	17,400	12,200	11,300	2,420	2,120
8	2,800	2,920	22,800	5,360	3,840	8,100	8,360	14,200	10,600	9,940	2,900	2,100
9	2,750	2,980	28,400	4,110	3,630	7,200	7,000	13,100	9,440	8,980	3,650	2,100
10	3,200	2,820	19,200	4,080	3,870	6,600	6,480	14,200	11,500	8,380	3,470	1,930
11	5,500	2,680	20,000	5,400	3,780	5,800	6,840	15,600	10,400	8,460	3,140	1,870
12	5,700	2,350	28,600	6,680	3,420	5,000	6,880	13,900	8,360	8,060	2,690	2,240
13	4,900	2,400	22,000	7,240	2,980	6,400	7,680	12,200	8,040	7,700	2,150	2,330
14	4,300	2,380	15,600	8,000	4,850	8,560	15,500	10,400	7,120	6,400	2,020	3,230
15	3,420	2,420	13,500	10,700	8,160	8,200	17,700	9,560	6,240	5,800	2,930	3,170
16	3,150	2,880	12,900	7,920	7,600	7,360	15,900	10,000	5,760	4,900	3,050	2,540
17	2,720	2,920	13,300	5,240	6,200	10,600	25,400	10,400	5,320	6,200	2,540	2,210
18	2,620	2,600	12,700	6,160	5,300	31,800	33,600	11,200	5,480	6,200	1,900	2,420
19	2,650	2,480	10,600	6,360	5,020	24,700	30,500	10,600	7,560	5,800	1,690	2,750
20	2,380	2,520	8,960	6,760	4,050	16,200	28,400	9,560	10,100	6,500	1,870	2,600
21	2,620	2,580	8,000	6,360	3,750	14,400	36,800	9,680	9,680	5,400	1,990	1,980
22	2,320	2,320	7,120	5,720	4,600	15,000	33,400	9,440	15,200	3,500	2,480	2,090
23	2,220	2,880	6,160	4,170	4,470	31,600	29,800	8,880	41,600	3,500	2,420	2,330
24	1,930	3,020	5,200	4,540	3,780	30,800	28,000	7,800	60,000	3,000	2,570	2,330
25	2,350	2,780	4,850	6,560	4,350	21,400	23,600	6,840	46,800	3,410	3,350	2,300
26	2,380	2,520	5,280	6,960	4,020	16,400	19,300	6,360	36,900	3,620	3,590	2,570
27	2,650	2,800	5,130	5,840	3,630	13,600	16,400	5,160	27,600	3,320	3,290	2,930
28	2,380	3,080	5,360	4,820	3,480	12,200	14,200	4,290	21,500	2,840	2,870	2,990
29	2,520	3,280	6,080	4,100	3,570	10,500	12,400	3,660	18,100	2,720	2,660	2,420
30	2,680	5,960	6,680	4,000	-----	9,400	10,200	3,540	18,000	2,450	2,660	2,210
31	2,280	-----	8,520	4,000	-----	10,000	-----	6,520	-----	2,570	2,180	-----
TOTAL	91,220	86,950	337,240	192,640	129,380	427,290	500,140	332,670	544,600	255,450	85,440	70,670
MEAN	2,943	2,898	10,880	6,214	4,461	13,780	16,670	10,730	18,150	8,240	2,756	2,356
MAX	5,700	5,960	28,600	10,700	8,160	31,800	36,800	25,400	60,000	28,300	3,650	3,230
MIN	1,930	2,320	3,600	4,000	2,980	3,930	6,480	3,540	5,320	2,450	1,690	1,850
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL 2,235,010	MEAN 6,123	MAX 28,600	MIN 1,580	CFSM -	IN. -						
WTR YR 1972	TOTAL 3,053,690	MEAN 8,343	MAX 60,000	MIN 1,690	CFSM -	IN. -						

DELAWARE RIVER BASIN

29

01440400 Brodhead Creek near Analomink, Pa.

LOCATION.--Lat 41°05'05", long 75°12'54", Monroe County, on left bank 1.5 miles upstream from Paradise Creek, 1.6 miles southeast of Henryville, and 2.3 miles north of Analomink.

DRAINAGE AREA.--65.9 sq mi.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 586.50 ft above mean sea level. Prior to Dec. 12, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 121 cfs (24.93 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,760 cfs June 23 (gage height, 6.68 ft), from rating curve extended as explained below; minimum, 12 cfs Sept. 9, 10, 11, 12, 13, 17, 18; minimum gage height, 1.32 ft Sept. 11, 12, 18.

Period of record: Maximum discharge, 12,900 cfs July 28, 1969 (gage height, 11.82 ft), from rating curve extended above 1,400 cfs on basis of slope-area measurement of peak flow; minimum, 5.9 cfs Sept. 8, 1964; minimum gage height, 1.22 ft Sept. 18, 19, 23, 1964.

REMARKS.--Records good except those for winter periods, which are 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	79	100	214	154	90	175	185	151	938	316	43	17
2	71	141	171	175	93	350	181	158	537	245	40	16
3	68	150	150	199	100	637	169	171	403	208	41	17
4	62	128	130	171	201	433	163	328	347	182	38	16
5	60	112	124	155	142	350	154	319	363	178	34	15
6	55	104	152	145	130	288	148	253	290	172	31	14
7	53	117	366	140	120	251	158	226	246	148	33	14
8	50	113	438	129	110	240	144	215	204	152	44	13
9	47	101	393	127	105	213	132	225	180	171	36	13
10	131	99	410	173	98	190	125	261	238	137	31	12
11	172	99	594	178	94	168	121	222	187	120	28	12
12	122	93	533	149	92	200	118	195	167	106	26	12
13	100	89	431	173	158	236	168	178	160	126	26	14
14	91	85	353	337	284	221	199	170	138	119	23	18
15	83	82	321	252	214	204	189	200	135	101	25	15
16	76	85	331	210	199	197	236	223	129	97	24	14
17	72	82	293	190	169	634	530	222	127	130	25	13
18	66	76	254	170	156	591	368	278	122	102	23	14
19	64	75	214	162	150	441	302	223	466	107	21	32
20	61	77	199	150	140	359	347	285	353	93	20	20
21	59	75	187	142	130	324	360	323	545	101	17	17
22	56	75	169	131	125	738	314	263	1,320	76	20	17
23	55	69	146	131	120	771	339	222	2,260	66	18	15
24	78	62	144	156	115	497	298	196	1,390	60	17	15
25	145	84	148	173	110	384	261	174	857	54	17	16
26	135	94	138	150	110	320	229	155	630	51	21	24
27	115	86	135	127	105	276	207	138	478	47	22	28
28	104	91	129	120	103	242	188	128	372	45	37	29
29	96	133	120	111	117	220	173	117	309	42	23	29
30	90	306	144	100	-----	214	158	112	328	39	20	30
31	86	-----	201	94	-----	200	-----	626	-----	39	18	-----
TOTAL	2,602	3,083	7,732	5,014	3,880	10,564	6,664	6,957	14,219	3,630	842	531
MEAN	83.9	103	249	162	134	341	222	224	474	117	27.2	17.7
MAX	172	306	594	337	284	771	530	626	2,260	316	44	32
MIN	47	62	120	94	90	168	118	112	122	39	17	12
CFSM	1.27	1.56	3.78	2.46	2.03	5.17	3.37	3.40	7.19	1.78	.41	.27
IN.	1.47	1.74	4.36	2.83	2.19	5.96	3.76	3.93	8.03	2.05	.48	.30

CAL YR 1971 TOTAL 51,528 MEAN 141 MAX 780 MIN 12 CFSM 2.14 IN 29.09
WTR YR 1972 TOTAL 65,718 MEAN 180 MAX 2,260 MIN 12 CFSM 2.73 IN 37.10

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-22	1830	5.28	1,390	6-23	1600	6.68	2,760
6-1	0300	5.14	1,290				

DELAWARE RIVER BASIN

01442500 Brodhead Creek at Minisink Hills, Pa.

LOCATION.--Lat 40°59'55", long 75°08'35", Monroe County, on left bank at Minisink Hills, 500 ft upstream from Marshall Creek, 1,500 ft downstream from Coates Paper Box Co., 0.8 mile upstream from mouth, and 3 miles southeast of East Stroudsburg.

DRAINAGE AREA.--259 sq mi.

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

GAGE.--Nonrecording gage and water-stage recorder. Datum of gage is 301.84 ft above mean sea level. Prior to Aug. 19, 1955, water-stage recorder, and Aug. 23 to Nov. 24, 1955, nonrecording gages, at sites about 1,300 ft upstream at datum 2.19 ft higher. Nov. 25, 1955 to July 24, 1956, nonrecording gage at site 40 ft upstream at present datum.

AVERAGE DISCHARGE.--21 years (1951-72), 524 cfs (27.47 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,680 cfs June 23 (gage height, 7.6 ft, from graph based on gage readings), from rating curve extended above 3,600 cfs; minimum daily, 68 cfs Sept. 10-12.
Period of record: Maximum discharge, 68,800 cfs Aug. 19, 1955 (gage height, 29.9 ft, site and datum then in use, 27.0 ft, present site and datum, from floodmarks), from rating curve extended above 4,600 cfs on basis of computation of flow over dam at gage height, 14.43 ft, and slope-area measurement at peak flow, site and datum then in use; minimum, 29 cfs Sept. 27, 1964 (gage height, 1.12 ft).

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1232: 1951(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	308	730	1,410	674	421	923	818	666	4,250	1,390	200	84
2	291	1,120	1,100	847	455	1,700	800	754	2,530	1,050	172	82
3	280	1,100	925	1,040	521	2,820	781	772	1,890	935	166	82
4	250	945	856	895	1,220	1,990	745	1,310	1,450	838	166	78
5	240	800	718	820	720	1,670	709	1,310	1,490	818	148	74
6	225	683	907	800	620	1,390	666	1,060	1,220	809	142	74
7	217	763	2,220	754	540	1,190	658	965	1,080	674	172	73
8	196	666	2,420	736	490	1,110	658	935	876	607	204	73
9	187	576	2,160	692	460	975	576	1,060	754	624	172	73
10	599	544	2,100	1,090	440	847	544	1,220	838	552	148	68
11	778	514	2,460	1,010	420	809	506	1,030	700	492	128	68
12	506	499	2,170	996	410	925	499	935	576	441	122	68
13	414	477	1,880	915	1,100	1,060	693	828	536	604	125	82
14	374	441	1,530	1,590	1,790	965	828	790	529	599	119	82
15	355	414	1,450	1,220	1,090	935	718	945	499	506	117	74
16	324	414	1,420	900	955	975	825	1,080	477	407	114	72
17	302	400	1,220	840	820	2,880	1,980	915	521	506	112	74
18	274	374	1,130	800	760	2,720	1,370	1,480	469	434	112	244
19	264	349	945	760	700	2,060	1,190	1,120	1,510	414	107	767
20	250	349	876	720	620	1,670	1,350	1,470	1,240	428	100	169
21	245	349	895	700	580	1,420	1,480	1,630	1,780	477	93	125
22	235	324	838	700	540	2,340	1,300	1,360	3,500	374	87	114
23	225	302	700	692	500	2,660	1,360	1,180	7,500	302	87	102
24	398	264	718	790	480	2,020	1,270	1,050	6,090	280	89	93
25	692	349	727	847	470	1,630	1,130	915	3,850	259	126	93
26	709	393	666	700	460	1,390	1,070	800	2,940	240	95	91
27	514	362	607	580	450	1,240	905	754	2,320	217	109	95
28	484	434	632	540	450	1,100	856	692	1,850	191	149	91
29	441	828	599	500	579	985	790	624	1,470	187	119	91
30	414	2,070	674	470	-----	1,040	745	591	1,540	176	95	100
31	387	-----	925	440	-----	876	-----	2,490	-----	180	89	-----
TOTAL	11,378	17,833	37,878	25,058	19,061	46,315	27,820	32,731	56,275	16,011	3,984	3,456
MEAN	367	594	1,222	808	657	1,494	927	1,056	1,876	516	129	115
MAX	778	2,070	2,460	1,590	1,790	2,880	1,980	2,490	7,500	1,390	204	767
MIN	187	264	599	440	410	809	499	591	469	176	87	68
CFSM	1.42	2.29	4.72	3.12	2.54	5.77	3.58	4.08	7.24	1.99	.50	.44
IN.	1.63	2.56	5.44	3.60	2.74	6.65	4.00	4.70	8.08	2.30	.57	.50

CAL YR 1971 TOTAL 232,394 MEAN 637 MAX 3,230 MIN 84 CFSM 2.46 IN 33.38
WTR YR 1972 TOTAL 297,800 MEAN 814 MAX 7,500 MIN 68 CFSM 3.14 IN 42.77

PEAK DISCHARGE (BASE, 4,300 CFS).--June 1 (0500) 5,600 cfs (6.04 ft); June 23 (0100) 8,680 cfs (7.6 ft).

DELAWARE RIVER BASIN

31

01446500 Delaware River at Belvidere, N. J.

LOCATION.--Lat 40°49'36", long 75°05'02", Warren County, on left bank at Belvidere, 800 ft downstream from Pequest River, and at mile 197.7 upstream from Atlantic Ocean.

DRAINAGE AREA.--4,535 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 226.43 ft above mean sea level. Prior to Jan. 1, 1929, nonrecording gage at site 200 ft upstream at same datum.

AVERAGE DISCHARGE.--50 years, 7,744 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 74,100 cfs June 24 (gage height, 15.34 ft); minimum, 1,990 cfs Sept. 11 (gage height, 3.24 ft).

Period of record: Maximum discharge, 273,000 cfs Aug. 19, 1955 (gage height, 30.21 ft, from highwater mark in gage house), from rating curve extended above 110,000 cfs on basis of flood-routing study; minimum, 609 cfs Sept. 28, 29, 1943 (gage height, 2.11 ft).

Flood of Oct. 10, 1903 reached a stage of 28.6 ft, from floodmark (discharge, 220,000 cfs, from rating curve extended above 170,000 cfs).

REMARKS.--Records excellent. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack (see p. 87) and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see New Jersey Annual Report) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see New Jersey Annual Report).

REVISIONS (WATER YEARS).--WSP 781: 1933(M). WSP 951: 1940-41, drainage area. WSP 1432: 1923, 1924(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	3,850	4,490	12,000	12,000	4,940	6,510	11,500	11,400	37,400	30,600	3,500	2,520
2	3,680	6,020	11,500	9,760	5,480	9,140	11,900	11,300	36,700	29,600	3,580	2,570
3	3,380	6,710	9,200	10,400	5,300	23,000	13,300	11,000	26,100	22,500	3,700	2,560
4	3,140	6,340	8,300	10,500	6,440	35,000	13,300	13,000	20,900	19,400	3,750	2,630
5	3,460	5,800	7,000	10,000	5,910	21,300	12,300	26,300	19,800	16,400	3,880	2,610
6	3,420	5,260	6,500	9,000	4,920	16,500	11,000	27,700	18,000	16,000	3,850	2,520
7	3,360	5,030	9,700	7,700	4,940	14,300	10,700	20,800	15,800	14,100	3,280	2,650
8	3,310	5,100	24,700	7,100	4,310	12,700	10,700	17,500	13,700	12,300	3,340	2,630
9	3,350	5,030	31,200	6,060	4,240	11,500	9,430	16,500	11,900	10,900	4,130	2,610
10	4,240	4,690	23,900	6,630	4,780	10,100	8,710	17,600	13,000	10,400	4,080	2,590
11	7,100	4,530	23,200	7,570	4,630	8,980	8,940	19,200	13,300	10,200	3,800	2,270
12	7,320	4,020	30,200	8,890	4,340	7,780	8,910	17,200	10,500	9,320	3,400	2,690
13	6,520	3,970	26,100	9,610	4,940	9,200	9,600	15,100	9,810	9,120	3,220	2,770
14	5,640	3,900	20,000	10,400	8,380	11,100	16,100	12,900	8,820	9,280	2,670	3,300
15	5,030	3,900	17,300	13,500	10,100	11,200	20,900	12,200	7,780	7,630	2,950	3,630
16	4,680	4,250	16,200	9,660	11,300	10,100	19,100	13,000	7,050	6,340	3,480	3,180
17	4,000	4,440	16,400	6,240	10,000	14,200	26,300	13,000	6,920	7,250	2,930	2,730
18	3,680	4,060	16,000	7,390	8,460	34,900	35,900	14,800	6,850	8,120	2,460	2,770
19	3,700	3,770	13,700	8,340	7,190	30,900	32,300	13,600	10,200	7,320	2,110	4,200
20	3,470	3,920	11,500	8,690	5,740	22,100	29,700	12,600	13,400	7,000	2,520	3,340
21	3,500	3,800	10,500	8,410	4,720	19,000	39,200	12,900	13,100	6,860	2,440	2,810
22	3,360	3,680	9,490	7,730	5,670	19,500	37,200	12,200	19,500	6,270	2,540	2,650
23	3,100	3,780	8,530	6,250	5,610	34,300	31,900	11,200	48,200	4,860	2,670	2,810
24	3,170	4,600	7,450	6,420	5,230	36,000	30,400	9,980	71,300	4,150	2,650	2,790
25	4,220	4,600	6,950	8,350	6,070	26,600	26,800	8,920	57,000	3,980	3,360	2,730
26	3,980	4,400	7,260	9,030	5,900	21,300	22,900	8,170	45,300	4,250	3,630	2,690
27	3,990	4,300	7,180	7,630	4,960	17,800	20,100	6,990	35,100	3,950	3,750	2,850
28	3,910	5,200	7,280	6,590	4,880	15,900	17,500	6,030	27,400	3,580	3,340	3,420
29	3,840	5,300	7,800	5,970	5,340	14,100	15,300	5,240	22,600	3,300	3,180	3,100
30	3,950	10,700	8,620	5,360	-----	12,500	12,700	4,800	21,000	3,200	3,050	2,810
31	3,700	-----	10,200	4,810	-----	12,900	-----	7,950	-----	3,260	2,710	-----
TOTAL	127,050	145,590	425,860	255,990	174,720	550,410	574,590	411,080	668,430	311,440	99,950	85,430
MEAN	4,098	4,853	13,740	8,258	6,025	17,760	19,150	13,260	22,280	10,050	3,224	2,848
MAX	7,320	10,700	31,200	13,500	11,300	36,000	39,200	27,700	71,300	30,600	4,130	4,200
MIN	3,100	3,680	6,500	4,810	4,240	6,510	8,710	4,800	6,850	3,200	2,110	2,270
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL 2,780,680	MEAN 7,618	MAX 31,200	MIN 1,750	CFSM -	IN. -						
WTR YR 1972	TOTAL 3,830,540	MEAN 10,470	MAX 71,300	MIN 2,110	CFSM -	IN. -						

DELAWARE RIVER BASIN

01446600 Martins Creek near East Bangor, Pa.

LOCATION.--Lat 40°54'00", long 75°12'08", Northampton County, at right downstream end of bridge on township road, 100 ft downstream from confluence of the East Fork and West Fork, 1.8 miles northwest of East Bangor.

DRAINAGE AREA.--10.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 663.92 ft above mean sea level.

AVERAGE DISCHARGE.--11 years, 14.2 cfs (18.54 inches per year).

EXTREMES.--Current year: Maximum discharge, 430 cfs June 22 (gage height, 3.31 ft), from rating curve extended as explained below; minimum, 0.60 cfs Aug. 30, 31, Sept. 1, 2, 6, 9 (gage height, 1.51 ft).
Period of record: Maximum discharge, 1,620 cfs Apr. 2, 1970 (gage height, 3.89 ft), from rating curve extended above 210 cfs on basis of contracted-opening and flow over embankment measurements at gage height, 3.87 ft; no flow at times.

REMARKS.--Records fair, except those for winter periods, which are poor. Diversion above station for irrigation.

REVISIONS (WATER YEARS).--WRD Penna. 1967: 1962, 1964(M), 1965, 1966(M). WRD Penna. 1970: 1969(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	4.5	67	62	18	8.0	44	17	9.8	132	32	3.1	.99
2	5.3	129	29	29	8.0	78	16	18	54	27	3.0	.82
3	7.0	83	20	49	9.0	97	14	20	48	22	2.8	1.6
4	5.6	45	17	28	35	56	13	43	36	22	2.8	1.3
5	4.7	29	15	22	21	33	14	45	54	21	2.6	1.2
6	4.7	23	25	18	16	25	13	24	33	22	2.5	.74
7	4.7	25	99	14	13	20	12	17	23	20	2.8	.90
8	4.5	25	75	13	11	20	12	16	17	17	3.5	.90
9	4.7	20	45	13	9.6	20	11	27	14	16	3.0	.99
10	53	17	36	48	8.8	15	9.3	49	17	14	2.6	1.2
11	75	16	33	34	8.2	13	8.4	37	14	12	2.2	1.2
12	28	14	28	29	7.8	20	8.4	23	10	9.8	2.2	.99
13	12	14	23	22	15	37	19	19	9.8	14	2.0	1.6
14	7.8	14	20	34	60	26	32	18	10	17	2.0	2.2
15	6.6	14	22	24	35	24	23	28	10	13	1.8	1.8
16	5.6	12	23	15	25	29	23	39	12	9.8	1.6	1.8
17	5.3	10	20	11	20	177	39	28	15	8.4	1.8	2.7
18	5.0	9.8	18	10	17	114	25	44	39	16	1.8	4.2
19	4.5	9.3	15	9.6	14	49	17	28	117	22	2.2	5.0
20	4.2	9.8	14	9.4	13	32	24	41	75	11	2.4	1.8
21	4.5	10	14	9.0	13	26	39	56	122	10	2.1	1.8
22	4.5	11	14	9.2	12	45	27	30	250	9.8	1.6	1.6
23	4.5	10	10	16	12	62	30	22	285	7.5	1.5	1.6
24	16	8.4	12	20	12	35	25	18	128	5.3	1.5	2.1
25	38	12	14	26	12	26	20	15	90	4.2	1.5	2.7
26	25	22	13	25	12	23	16	13	82	4.0	1.6	2.5
27	14	28	12	15	12	20	13	12	63	3.7	2.1	2.8
28	9.3	34	12	11	12	18	12	12	44	3.5	2.2	3.0
29	7.4	82	10	10	20	17	10	11	35	3.3	1.6	3.1
30	7.0	187	16	9.0	-----	17	10	10	34	3.1	.90	5.3
31	8.8	-----	27	8.4	-----	17	-----	83	-----	3.1	.67	-----
TOTAL	391.7	990.3	793	608.6	471.4	1,235	552.1	855.8	1,872.8	403.5	65.97	60.43
MEAN	12.6	33.0	25.6	19.6	16.3	39.8	18.4	27.6	62.4	13.0	2.13	2.01
MAX	75	187	99	49	60	177	39	83	285	32	3.5	5.3
MIN	4.2	8.4	10	8.4	7.8	13	8.4	9.8	9.8	3.1	.67	.74
CFSM	1.21	3.17	2.46	1.88	1.57	3.83	1.77	2.65	6.00	1.25	.20	.19
IN.	1.40	3.54	2.84	2.18	1.69	4.42	1.97	3.06	6.70	1.44	.24	.22

CAL YR 1971 TOTAL 7,371.00 MEAN 20.2 MAX 187 MIN 1.3 CFSM 1.94 IN 26.37
WTR YR 1972 TOTAL 8,300.60 MEAN 22.7 MAX 285 MIN .67 CFSM 2.18 IN 29.69

PEAK DISCHARGE (BASE, 135 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11- 2	1200	2.77	142	6- 1	0115	2.94	198
11-30	0200	3.10	270	6-22	2000*	3.31	430
3-17	1230	3.01	226				

DELAWARE RIVER BASIN

33

01446700 Delaware River at Easton, Pa.

LOCATION.--Lat 40°42'43", long 75°11'48", Northampton County, on right bank 200 ft upstream from city of Easton pumping station, 1.2 miles upstream from Bushkill Creek in Easton.

DRAINAGE AREA.--4,636 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 157.84 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 8,046 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 72,100 cfs June 24 (gage height, 21.29 ft); minimum, 1,850 cfs Sept. 11 (gage height, 4.00 ft).

Period of record: Maximum discharge, 76,500 cfs Apr. 3, 1970 (gage height, 22.08 ft, from floodmark); minimum, 1,640 cfs Aug. 16, 1971 (gage height, 3.87 ft).

REMARKS.--Records fair. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack (see p. 87) and by Cannonsville, Pepacton, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs about 100 miles upstream (see New York Annual Report) and smaller reservoirs. Diversion from Cannonsville, Pepacton, and Neversink Reservoirs (see New York Annual Report). Records of water quality for the current year are published in Part 2 of this report.

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	3,860	4,950	14,000	12,000	5,180	6,940	12,100	12,000	37,000	29,600	3,480	2,410
2	4,030	6,920	12,500	10,100	5,910	9,330	12,100	11,900	40,000	29,200	3,750	2,500
3	3,810	7,780	10,000	10,600	5,660	20,600	13,300	11,500	32,000	22,600	3,770	2,440
4	3,580	7,260	8,500	10,700	6,890	31,500	13,500	12,700	25,000	19,500	3,860	2,500
5	2,700	6,530	7,720	10,400	6,260	22,300	12,600	23,200	20,000	16,600	3,950	2,550
6	3,670	5,930	7,070	9,500	5,540	17,200	11,500	26,900	18,000	16,100	4,170	2,390
7	3,580	5,660	9,770	8,220	5,350	14,900	10,900	21,300	16,000	14,400	3,460	2,530
8	3,670	5,660	21,100	7,690	4,700	13,200	11,100	17,900	14,000	12,400	3,330	2,530
9	3,710	5,570	31,400	6,790	4,580	12,100	9,970	16,700	12,700	11,000	4,170	2,480
10	4,720	5,230	23,900	7,210	5,130	10,800	9,250	17,500	12,800	10,600	4,340	2,510
11	7,780	5,090	22,400	7,720	5,040	9,670	9,360	19,200	13,800	10,200	4,010	2,140
12	8,160	4,520	28,400	9,100	4,810	8,520	9,330	17,500	11,200	9,510	3,670	2,100
13	7,320	4,430	26,000	9,980	5,330	9,670	9,460	15,500	10,300	9,190	3,430	2,400
14	6,360	4,360	20,500	10,400	8,610	11,400	14,700	13,400	9,410	9,570	2,700	2,600
15	5,640	4,340	17,500	13,200	10,100	11,800	20,700	12,700	8,590	7,640	2,840	2,800
16	5,250	4,610	16,000	10,700	11,400	10,800	19,000	13,200	7,890	6,530	3,730	3,200
17	4,540	4,880	16,000	7,210	10,400	14,700	22,900	13,300	7,900	7,320	3,100	2,900
18	4,170	4,540	16,100	7,260	8,900	33,000	27,800	14,900	7,670	8,080	2,530	2,600
19	4,120	4,170	14,000	8,610	7,910	31,400	27,900	13,700	10,700	7,210	2,090	3,000
20	3,920	4,360	12,000	8,900	7,750	23,000	28,100	13,500	14,200	7,000	2,410	3,700
21	3,880	4,120	10,900	8,780	7,750	19,600	28,900	13,300	13,800	6,710	2,260	2,800
22	3,810	4,250	9,910	8,160	7,750	19,600	27,400	13,000	21,500	6,430	2,390	2,650
23	3,480	4,120	9,010	7,020	7,780	27,500	27,800	12,000	29,400	5,230	2,650	2,840
24	3,620	4,500	7,970	6,790	6,890	24,500	27,800	11,000	54,000	4,360	2,510	2,840
25	4,650	7,000	7,590	8,330	6,480	23,800	26,100	10,000	55,000	3,970	3,060	2,780
26	4,470	7,300	7,640	9,330	6,360	21,400	22,700	9,000	44,100	4,340	3,480	2,780
27	4,450	5,800	7,690	8,440	5,490	18,100	20,300	8,300	34,800	4,100	3,790	2,860
28	4,410	5,400	7,610	7,000	5,180	16,200	17,800	7,600	27,700	3,790	3,290	3,460
29	4,210	6,100	7,940	6,480	5,610	14,500	15,700	6,800	23,100	3,370	3,120	3,270
30	4,360	15,000	8,750	5,930	-----	12,900	13,200	6,200	21,600	3,290	2,940	2,860
31	4,210	-----	9,940	5,280	-----	13,100	-----	7,000	-----	3,220	2,660	-----
TOTAL	140,140	170,380	429,810	267,730	194,740	534,030	533,670	422,700	654,160	313,060	100,940	81,420
MEAN	4,521	5,679	13,860	8,636	6,715	17,230	17,790	13,640	21,810	10,100	3,256	2,714
MAX	8,160	15,000	31,400	13,200	11,400	33,000	28,900	26,900	55,000	29,600	4,340	3,700
MIN	2,700	4,120	7,070	5,280	4,580	6,940	9,250	6,200	7,670	3,220	2,090	2,100
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL 2,903,960	MFAN 7,956	MAX 31,400	MIN 1,870	CFSM -	IN. -						
WTR YR 1972	TOTAL 3,842,780	MFAN 10,500	MAX 55,000	MIN 2,090	CFSM -	IN. -						

DELAWARE RIVER BASIN

01447500 Lehigh River at Stoddartsville, Pa.

LOCATION.--Lat 41°07'49", long 75°37'33", Monroe County, on left bank 75 ft upstream from bridge on State Highway 115, at Stoddartsville, 1.9 miles upstream from Tobyhanna Creek, and 4 miles southwest of Thornhurst.

DRAINAGE AREA.--91.7 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,463.81 ft above mean sea level. Prior to Oct. 1, 1946, nonrecording gage at site 350 ft downstream at datum 2.14 ft lower.

AVERAGE DISCHARGE.--29 years, 180 cfs (26.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,210 cfs June 23 (gage height, 5.88 ft), from rating curve extended above 800 cfs; minimum, 17 cfs Sept. 30 (gage height, 0.49 ft).
Period of record: Maximum discharge, 31,900 cfs Aug. 19, 1955 (gage height, 16.37 ft, from floodmarks), from rating curve extended above 1,700 cfs on basis of slope-area measurement of peak flow; minimum observed, 7.0 cfs Sept. 26, 27, 1964 (gage height, 0.22 ft).
Flood of May 22, 1942, reached a stage of 12.03 ft, present site and datum (discharge, 15,700 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1382: 1947, 1951.

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	120	107	257	300	140	204	290	209	1,860	378	68	28
2	108	180	216	280	130	518	295	216	1,040	320	64	26
3	106	220	206	320	130	926	282	295	692	288	61	27
4	98	176	175	290	184	726	259	513	509	279	59	25
5	94	153	159	261	160	516	239	571	456	275	55	24
6	90	140	192	231	150	407	233	425	367	295	51	25
7	92	169	571	211	140	334	273	347	314	287	59	25
8	94	162	726	181	130	318	246	312	256	239	81	24
9	88	144	627	184	125	319	219	315	225	257	68	23
10	154	139	647	270	120	287	204	449	344	264	58	22
11	240	139	995	320	120	238	198	378	270	222	50	21
12	177	133	914	367	120	260	200	306	218	180	47	21
13	145	128	707	334	179	340	254	266	194	160	46	26
14	128	123	568	470	387	277	325	246	182	152	43	38
15	119	122	513	367	328	251	314	258	170	134	41	29
16	109	126	549	280	294	245	372	324	178	134	39	26
17	97	123	480	240	246	750	812	282	183	225	36	23
18	92	116	410	200	194	762	593	252	188	196	38	23
19	93	112	340	200	170	625	458	233	759	202	41	50
20	89	112	290	190	160	511	524	264	524	166	36	50
21	89	110	280	190	160	471	618	339	426	139	33	35
22	85	114	270	179	150	797	497	286	1,200	120	32	30
23	83	105	250	186	150	1,140	475	232	2,920	104	30	27
24	84	103	250	251	149	762	482	198	1,840	90	32	24
25	114	105	250	294	138	558	423	175	1,220	81	35	23
26	200	149	240	258	131	457	351	153	946	76	31	22
27	166	133	240	213	130	389	304	140	731	71	32	21
28	138	127	240	186	127	343	269	130	560	68	44	20
29	122	140	230	165	135	315	244	121	456	65	40	19
30	111	274	260	150	-----	322	222	117	411	62	39	20
31	106	-----	340	140	-----	309	-----	1,300	-----	62	33	-----
TOTAL	3,631	4,184	12,392	7,708	4,877	14,677	10,475	9,652	19,639	5,591	1,422	797
MEAN	117	139	400	249	168	473	349	311	655	180	45.9	26.6
MAX	240	274	995	470	387	1,140	812	1,300	2,920	378	81	50
MIN	83	103	159	140	120	204	198	117	170	62	30	19
CFSM	1.28	1.52	4.36	2.72	1.83	5.16	3.81	3.39	7.14	1.96	.50	.29
IN.	1.47	1.70	5.03	3.13	1.98	5.95	4.25	3.92	7.97	2.27	.58	.32

CAL YR 1971 TOTAL 75,823 MEAN 208 MAX 1,020 MIN 26 CFSM 2.27 IN 30.76
WTR YR 1972 TOTAL 95,045 MEAN 260 MAX 2,920 MIN 19 CFSM 2.84 IN 38.56

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-23	0030	3.64	1,380	6-23	0400	5.88	3,210
5-31	1930	5.00	2,380				

DELAWARE RIVER BASIN

35

01447680 Tunkhannock Creek near Long Pond, Pa.

LOCATION.--Lat 41°03'55", long 75°31'14", Monroe County, on left bank, 0.6 mile downstream from unnamed tributary, 0.9 mile downstream from bridge on Legislative Route 45040, 3 miles west of Long Pond, and 5 miles upstream from mouth.

DRAINAGE AREA.--18.0 sq mi. At site used prior to July 7, 1966, 16.8 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,800 ft (from topographic map). Prior to July 7, 1966, nonrecording gage at site 0.9 mile upstream at different datum.

AVERAGE DISCHARGE.--7 years, 39.6 cfs (29.88 inches per year), adjusted for diversion since October 1969.

EXTREMES.--Current year: Maximum discharge, 373 cfs June 24 (gage height, 3.79 ft); minimum, 5.5 cfs Sept. 12, 13 (gage height, 2.01 ft).

Period of record: Maximum discharge, 480 cfs July 30, 1969 (gage height, 4.34 ft); minimum, 2.4 cfs Mar. 11, 1969 (gage height, 1.84 ft).

REMARKS.--Records good except those for winter periods, which are fair. Diversion above station, since October 1969, to Wild Creek basin.

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	30	56	56	31	56	63	38	162	105	25	15
2	22	49	45	53	29	112	62	42	145	98	24	14
3	20	55	38	56	28	170	62	50	116	87	24	13
4	20	46	34	56	44	182	60	71	88	75	23	11
5	19	39	29	50	39	119	54	89	76	74	22	9.5
6	19	34	33	43	34	101	47	70	71	74	21	9.9
7	18	34	67	40	30	65	44	53	66	73	21	8.7
8	18	37	104	37	28	62	39	50	61	68	22	8.7
9	19	37	106	36	27	62	36	48	54	64	23	8.7
10	25	36	109	52	26	58	39	58	54	60	22	7.5
11	39	34	131	65	25	53	42	55	57	54	20	7.5
12	43	34	134	67	24	51	48	48	52	50	19	6.2
13	37	31	117	63	34	68	56	44	47	48	18	7.1
14	30	31	101	87	72	66	72	42	44	50	17	8.1
15	25	30	89	74	66	57	64	51	41	49	17	8.7
16	23	31	81	60	56	60	61	75	41	48	16	8.7
17	21	33	74	50	45	112	95	75	47	53	16	8.7
18	20	30	58	40	37	154	80	67	48	53	16	10
19	19	29	52	41	34	128	63	61	62	51	16	13
20	19	30	49	39	33	97	76	64	81	46	16	17
21	19	30	47	37	32	80	88	86	86	42	16	19
22	19	27	50	36	31	129	80	80	169	39	15	17
23	18	28	53	35	30	183	74	65	332	37	14	15
24	22	27	58	45	29	145	70	55	363	35	14	14
25	35	27	53	58	28	117	62	50	304	33	13	12
26	49	27	55	54	27	82	54	46	235	29	13	10
27	52	30	53	48	25	77	50	44	185	28	14	9.0
28	43	31	52	44	25	69	44	41	149	26	16	8.1
29	34	34	52	40	28	66	41	40	124	26	16	8.1
30	27	46	52	37	-----	64	39	39	111	25	17	8.4
31	25	-----	56	34	-----	63	-----	101	-----	25	16	-----
TOTAL	824	1,017	2,088	1,533	997	2,908	1,765	1,798	3,471	1,625	562	321.6
MEAN	26.6	33.9	67.4	49.5	34.4	93.8	58.8	58.0	116	52.4	18.1	10.7
MAX	52	55	134	87	72	183	95	101	363	105	25	19
MIN	18	27	29	34	24	51	36	38	41	25	13	6.2
(\bar{x})	1.12	2.39	4.02	.92	.77	.83	12.6	5.07	1.11	.50	.38	.46
MEAN \neq	27.7	36.3	71.4	50.4	35.2	94.6	71.4	63.1	117	52.9	18.5	11.2
CFSM \neq	1.54	2.02	3.97	2.80	1.96	5.26	3.97	3.51	6.50	2.94	1.03	.62
IN. \neq	1.78	2.25	4.58	3.23	2.11	6.06	4.43	4.05	7.25	3.39	1.19	.69
CAL YR 1971	TOTAL 14,882.5	MEAN 40.8	MAX 154	MIN 4.9	MEAN \neq	42.1	CFSM \neq	2.34	IN. \neq	31.75		
WTR YR 1972	TOTAL 18,909.6	MEAN 51.7	MAX 363	MIN 6.2	MEAN \neq	54.2	CFSM \neq	3.01	IN. \neq	41.01		

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-2	0800	3.10	182	3-25	0730	3.14	195
3-4	0745	3.51	306	6-24	0300	3.79	373
3-22	2115	3.13	192				

\neq Diversion above station to Wild Creek basin, equivalent in cubic feet per second, furnished by city of Bethlehem.

\neq Adjusted for diversion.

DELAWARE RIVER BASIN

01447720 Tobyhanna Creek near Blakeslee, Pa.

LOCATION.--Lat 41°05'05", long 75°36'21", Carbon County, on left bank 50 ft downstream from bridge on State Highway 940, 500 ft downstream from Shingle Mill Run, and 1.5 miles southwest of Blakeslee.

DRAINAGE AREA.--118 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,511.23 ft above mean sea level. Prior to Jan. 16, 1962, non-recording gage at site 50 ft upstream at same datum.

AVERAGE DISCHARGE.--11 years, 216 cfs (24.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,910 cfs June 23 (gage height, 8.43 ft); minimum, 42 cfs Sept. 11 (gage height, 1.74 ft).

Period of record: Maximum discharge, 6,760 cfs July 29, 1969 (gage height, 10.69 ft), from rating curve extended above 4,200 cfs on basis of slope-area measurement at gage height, 19.41 ft; minimum, 22 cfs Sept. 24, 25, 1964 (gage height, 1.51 ft).

Flood of Aug. 19, 1955, reached a stage of 19.41 ft, from floodmark (discharge, 35,300 cfs, by slope-area measurement).

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by Pocono Lake about 5.0 miles upstream and minor diversion from Tunkhannock Creek basin into Wild Creek basin.

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	184	191	376	351	193	328	382	269	1,800	516	103	65
2	166	291	308	347	194	763	391	299	1,080	455	101	62
3	160	326	268	376	204	1,440	383	362	764	395	96	59
4	149	265	232	317	297	885	361	637	544	354	96	54
5	139	220	217	302	260	642	331	738	473	354	89	53
6	135	189	259	258	238	463	314	536	406	372	84	50
7	131	196	630	246	223	383	333	416	356	335	96	49
8	124	196	775	222	200	361	318	378	302	296	132	48
9	122	193	665	219	190	344	285	368	267	308	126	48
10	193	215	670	328	180	307	270	469	311	302	105	45
11	314	210	950	377	170	276	268	444	301	288	92	44
12	279	203	880	382	170	311	277	365	262	251	86	45
13	230	193	683	359	275	438	344	312	239	232	81	54
14	196	187	563	587	577	441	447	291	229	227	76	75
15	177	182	520	437	514	391	441	333	220	212	75	110
16	160	184	555	299	442	372	487	463	237	220	70	160
17	151	177	535	241	356	907	970	453	258	326	72	171
18	137	164	472	232	305	1,060	756	401	247	282	72	276
19	131	160	385	240	280	795	549	380	446	245	81	282
20	126	162	360	237	260	610	580	429	570	222	73	276
21	122	160	354	239	240	527	732	592	550	192	68	273
22	117	160	347	242	220	1,180	597	512	1,690	178	65	265
23	113	147	317	250	210	1,550	542	398	3,610	158	62	225
24	151	141	320	320	212	988	520	327	2,570	143	68	158
25	248	160	320	386	208	685	467	285	1,630	130	84	215
26	445	175	314	332	210	533	401	246	1,200	122	73	136
27	347	177	311	298	201	459	353	223	925	114	69	134
28	262	173	314	258	197	414	317	210	710	108	86	110
29	215	210	302	232	209	387	296	199	575	105	82	87
30	184	376	314	218	-----	397	278	194	524	103	78	81
31	173	-----	388	199	-----	394	-----	1,380	-----	103	70	-----
TOTAL	5,781	5,983	13,904	9,331	7,435	19,031	12,990	12,909	23,296	7,648	2,611	3,710
MEAN	186	199	449	301	256	614	433	416	777	247	84.2	124
MAX	445	376	950	587	577	1,550	970	1,380	3,610	516	132	282
MIN	113	141	217	199	170	276	268	194	220	103	62	44
CFSM	1.58	1.69	3.81	2.55	2.17	5.20	3.67	3.53	6.58	2.09	.71	1.05
IN.	1.82	1.89	4.38	2.94	2.34	6.00	4.10	4.07	7.34	2.41	.82	1.17

CAL YR 1971	TOTAL	96,737	MEAN	265	MAX	1,090	MIN	49	CFSM	2.25	IN	30.50
WTR YR 1972	TOTAL	124,629	MEAN	341	MAX	3,610	MIN	44	CFSM	2.89	IN	39.29

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	0500	5.76	1,630	6- 1	0100	6.62	2,260
3-22	2300	6.13	1,890	6-23	1300	8.43	3,910

DELAWARE RIVER BASIN

37

01447800 Lehigh River below Francis E. Walter Lake near White Haven, Pa.

LOCATION.--Lat 41°06'17", long 75°43'57", Luzerne County, on right bank 0.7 mile downstream from Francis E. Walter Lake, 2.0 miles upstream from Fawn Run, and 4 miles northeast of White Haven.

DRAINAGE AREA.--290 sq mi.

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1962 published as "below Bear Creek Reservoir", October 1962 to September 1971 published as "below Francis E. Walter Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 1,212.95 ft above mean sea level, (levels by Corps of Engineers).

AVERAGE DISCHARGE.--15 years, 555 cfs (25.99 inches per year), adjusted for storage since February 1961.

EXTREMES.--Current year: Maximum discharge, 4,130 cfs June 1 (gage height, 6.54 ft); minimum, 42 cfs Aug. 15 (gage height, 2.36 ft).

Period of record: Maximum discharge, 13,800 cfs Dec. 21, 1957 (gage height, 9.85 ft), from rating curve extended above 6,100 cfs; minimum, 1.3 cfs Nov. 14, 1961, result of shutoff at lake; minimum gage height, 1.86 ft Sept. 16, 1964; minimum daily discharge, 22 cfs July 20-23, 1965.

Maximum discharge known, 54,200 cfs Aug. 19, 1955, based on slope-area measurement at site 4.9 miles downstream.

REMARKS.--Records good. Flow regulated by Francis E. Walter Lake 0.7 mile upstream since February 1961 (see p. 87).

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	409	435	1,060	864	504	595	954	593	4,010	2,740	267	141
2	378	601	804	872	497	1,560	931	655	3,410	2,700	265	122
3	369	932	645	1,020	423	2,550	803	806	2,570	2,640	263	122
4	279	762	615	949	508	2,800	743	1,600	1,720	2,580	231	122
5	214	595	608	754	646	1,970	754	2,080	1,250	2,510	206	98
6	221	547	595	690	602	1,210	750	1,410	1,030	2,430	205	82
7	224	547	1,730	668	520	1,030	805	1,160	923	2,350	205	82
8	231	554	2,400	653	390	1,000	841	996	770	2,220	207	66
9	574	574	2,020	608	340	979	800	923	706	1,980	245	56
10	457	554	1,930	645	350	855	560	1,310	770	1,350	285	58
11	872	541	2,160	898	350	804	402	1,270	812	970	230	58
12	714	491	2,340	1,120	360	773	610	998	722	796	189	58
13	608	451	2,890	1,030	446	916	767	814	574	727	153	80
14	491	463	1,970	1,360	1,130	993	1,030	718	522	707	155	141
15	457	457	1,350	1,330	1,200	982	1,080	778	522	724	134	141
16	435	457	1,370	815	988	880	1,070	954	516	543	109	290
17	404	457	1,410	642	760	2,110	2,340	1,050	522	680	110	324
18	373	440	1,330	666	651	2,840	1,990	1,000	532	661	141	207
19	307	424	985	712	653	2,000	1,530	967	1,300	578	515	364
20	294	414	813	700	634	1,600	1,400	812	1,440	576	135	424
21	307	409	915	642	601	1,430	1,810	1,060	1,200	463	98	419
22	303	409	923	611	530	2,160	1,720	1,280	721	404	64	355
23	294	373	787	606	470	3,300	1,390	1,020	387	403	76	319
24	294	355	746	699	420	2,810	1,280	722	406	362	102	315
25	350	360	762	870	436	1,520	1,340	608	978	243	125	263
26	906	398	762	910	463	1,340	1,120	608	1,970	209	167	167
27	881	479	746	739	462	1,280	899	516	2,390	211	182	170
28	638	510	746	626	456	1,050	821	479	2,520	214	182	170
29	491	516	738	519	452	911	796	474	2,810	214	182	170
30	429	923	714	524	-----	941	686	468	2,780	214	182	170
31	435	-----	813	520	-----	976	-----	2,070	-----	236	167	-----
TOTAL	13,639	15,428	37,677	24,262	16,242	46,165	32,022	30,199	40,783	33,635	5,777	5,554
MEAN	440	514	1,215	783	560	1,489	1,067	974	1,359	1,085	186	185
MAX	906	932	2,890	1,360	1,200	3,300	2,340	2,080	4,010	2,740	515	424
MIN	214	355	595	519	340	595	402	468	387	209	64	56
MEAN [‡]	442	515	1,219	776	561	1,488	1,065	1,001	1,871	568	182	184
CFSM [‡]	1.52	1.78	4.20	2.68	1.93	5.13	3.67	3.45	6.45	1.96	.63	.63
IN. [‡]	1.75	1.99	4.84	3.09	2.08	5.91	4.10	3.98	7.20	2.26	.73	.70
CAL YR 1971	TOTAL 238,910	MEAN 655	MAX 3,120	MIN 66	MEAN [‡] 656	CFSM [‡] 656	CFSM [‡] 2.26	IN. [‡] 30.64				
WTR YR 1972	TOTAL 301,383	MEAN 823	MAX 4,010	MIN 56	MEAN [‡] 823	CFSM [‡] 823	CFSM [‡] 2.84	IN. [‡] 38.63				

[‡] Adjusted for change in contents in Francis E. Walter Lake.

DELAWARE RIVER BASIN

01448500 Dilldown Creek near Long Pond, Pa.

LOCATION.--Lat 41°02'08", long 75°32'37", Monroe County, on left bank 60 ft upstream from bridge on Shucks Mill Road, 2.8 miles upstream from Mud Run, 4 miles northeast of Albrightsville, and 4.4 miles west of Long Pond.

DRAINAGE AREA.--2.39 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,665.07 ft above mean sea level.

AVERAGE DISCHARGE.--24 years, 4.67 cfs (26.53 inches per year).

EXTREMES.--Current year: Maximum discharge, 121 cfs June 22 (gage height, 2.60 ft); minimum daily, 0.70 cfs Sept. 29.

Period of record: Maximum discharge, 630 cfs June 14, 1969 (gage height, 3.995 ft), from rating curve extended above 300 cfs on basis of culvert and flow-over-dam computations of peak flow; minimum, 0.10 cfs Dec. 10, 1964 (gage height, 0.55 ft).

REMARKS.--Records good.

REVISIONS. (WATER YEARS).--WSP 1382: 1949(M), 1950-53.

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	2.0	4.9	3.7	4.8	3.5	8.2	6.3	5.4	16	9.8	2.0	.97
2	2.0	6.3	3.1	6.7	3.6	16	6.2	6.3	9.9	8.0	1.8	1.0
3	2.0	3.9	3.0	6.4	4.1	24	5.5	8.2	9.2	7.3	1.9	1.0
4	2.0	3.3	2.8	5.1	7.4	10	5.2	16	7.5	6.7	1.9	.92
5	1.9	3.0	2.6	5.4	3.9	8.7	5.2	10	7.1	8.0	1.6	.92
6	1.9	3.0	5.4	4.6	3.8	7.2	5.3	7.3	6.3	7.2	1.6	.87
7	1.9	4.8	14	4.4	3.4	7.2	5.2	6.8	6.1	6.3	2.7	.87
8	1.8	3.3	12	4.1	3.0	7.4	4.6	6.8	5.0	5.6	2.1	.84
9	1.8	3.0	9.9	5.0	3.0	6.3	4.2	8.6	4.6	5.6	1.7	.84
10	5.2	3.0	14	8.2	3.0	5.4	4.1	10	6.0	4.8	1.6	.80
11	3.3	3.0	24	8.1	2.9	4.8	4.3	7.4	4.5	4.2	1.5	.80
12	2.2	2.8	16	7.1	2.8	6.2	4.1	6.5	4.2	3.9	1.5	.82
13	2.0	2.8	13	7.0	9.6	7.0	7.3	6.1	4.0	5.0	1.5	1.3
14	2.0	2.6	11	14	11	6.1	6.0	9.0	4.0	4.3	1.4	1.6
15	2.0	2.8	12	7.3	6.0	5.2	6.5	9.8	4.0	3.8	1.4	.90
16	1.9	2.8	12	6.1	5.2	6.0	9.2	14	5.0	4.8	1.4	.80
17	1.9	2.6	9.4	5.5	4.7	22	14	8.5	4.5	5.5	1.4	.78
18	1.9	2.6	8.1	5.5	4.5	13	8.0	7.3	4.3	3.9	1.5	1.5
19	1.8	2.8	7.2	5.8	4.2	9.4	7.1	6.6	9.4	3.9	1.4	1.8
20	1.8	2.9	7.1	5.5	4.0	8.0	12	11	5.8	3.0	1.2	.97
21	1.8	2.7	7.4	5.4	3.8	8.0	10	9.9	10	2.8	1.2	.87
22	1.8	2.5	6.7	5.2	3.7	26	8.9	7.1	47	2.6	1.2	.84
23	1.8	2.3	5.8	5.8	3.6	17	9.5	6.2	69	2.4	1.1	.78
24	3.4	2.2	6.2	8.1	3.6	11	9.9	5.5	38	2.3	1.3	.84
25	3.4	2.5	6.1	8.3	3.5	9.5	8.0	5.0	26	2.2	1.3	.84
26	3.2	2.5	5.6	6.4	3.5	8.7	7.1	4.6	22	2.1	1.2	.80
27	2.2	2.6	5.5	4.6	3.3	7.8	6.4	4.5	16	2.1	2.3	.78
28	2.1	2.7	5.6	4.5	3.4	7.2	6.1	4.2	12	2.0	2.2	.74
29	2.0	5.1	5.0	4.2	4.5	6.8	5.8	4.1	11	1.9	1.2	.70
30	2.0	7.3	6.3	4.1	-----	6.8	5.4	4.1	12	1.9	1.1	.76
31	2.2	-----	7.0	3.7	-----	6.6	-----	31	-----	2.0	1.0	-----
TOTAL	69.2	98.6	257.5	186.9	126.5	303.5	207.4	257.8	390.4	135.9	48.2	28.25
MEAN	2.23	3.29	8.31	6.03	4.36	9.79	6.91	8.32	13.0	4.38	1.55	.94
MAX	5.2	7.3	24	14	11	26	14	31	69	9.8	2.7	1.8
MIN	1.8	2.2	2.6	3.7	2.8	4.8	4.1	4.1	4.0	1.9	1.0	.70
CFSM	.93	1.38	3.48	2.52	1.82	4.10	2.89	3.48	5.44	1.83	.65	.39
IN.	1.08	1.53	4.01	2.91	1.97	4.72	3.23	4.01	6.08	2.12	.75	.44

CAL YR 1971 TOTAL 1,595.28 MEAN 4.37 MAX 29 MIN .92 CFSM 1.83 IN 24.83
WTR YR 1972 TOTAL 2,110.15 MEAN 5.77 MAX 69 MIN .70 CFSM 2.41 IN 32.84

PEAK DISCHARGE (BASE, 45 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-22	1630	2.14	45	6-22	2000	2.60	121
5-31	0930	2.24	58				

DELAWARE RIVER BASIN

39

01449360 Pohopoco Creek at Kresgeville, Pa.

LOCATION.--Lat 40°53'51", long 75°30'10", Monroe County, on right bank 20 ft downstream from bridge on U. S. Route 209 at Kresgeville, 0.2 mile downstream from Middle Creek, and 13 miles northeast of Lehighton.

DRAINAGE AREA.--49.9 sq mi.

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

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

AVERAGE DISCHARGE.--6 years, 94.3 cfs (25.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs June 23 (gage height, 7.17 ft); minimum, 25 cfs Sept. 10, 11, 12 (gage height, 2.94 ft).

Period of record: Maximum discharge, 2,080 cfs July 28, 1969 (gage height, 9.21 ft), from rating curve extended above 800 cfs; minimum, 16 cfs Oct. 9, 10, 1970 (gage height, 2.86 ft).

REMARKS.--Records good except those for winter periods, which are fair. Records of water quality 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	57	128	242	93	84	178	135	109	348	242	58	31
2	56	203	191	122	83	231	130	115	290	203	55	31
3	55	220	164	128	90	306	122	119	246	182	54	31
4	52	193	150	118	96	259	119	210	201	169	54	29
5	50	161	134	125	105	226	114	250	176	166	50	29
6	50	143	159	116	109	191	107	210	167	158	48	28
7	49	150	283	111	94	170	107	180	150	145	57	27
8	47	130	332	107	90	161	101	170	134	136	63	27
9	46	116	343	115	87	142	95	160	127	131	50	26
10	103	112	315	152	84	130	92	160	140	119	47	26
11	103	106	310	133	81	120	91	140	117	110	45	25
12	73	99	291	130	78	144	87	130	109	104	44	26
13	69	95	264	130	207	140	118	120	105	122	43	28
14	67	88	232	211	335	130	113	120	102	109	41	33
15	65	87	217	184	190	120	107	130	97	100	42	29
16	63	84	198	164	156	148	121	150	100	92	42	32
17	60	81	175	150	137	432	185	124	97	95	39	29
18	59	77	162	146	128	374	168	137	102	87	40	33
19	58	77	148	142	129	287	160	123	174	84	38	55
20	56	78	142	131	118	237	177	152	128	81	36	34
21	56	75	137	127	110	211	167	151	135	78	35	32
22	55	71	127	119	100	283	155	136	320	73	34	31
23	54	66	116	119	97	309	160	130	886	70	34	29
24	71	65	118	130	98	265	152	125	736	66	40	29
25	81	87	113	131	94	234	142	117	555	65	39	30
26	78	84	107	108	96	209	134	110	455	64	34	29
27	66	81	103	95	90	191	129	105	368	63	36	28
28	61	84	100	94	89	180	127	100	317	60	41	28
29	59	146	95	91	113	170	119	93	281	58	34	28
30	58	306	109	89	-----	160	112	88	270	57	33	30
31	60	-----	112	87	-----	145	-----	236	-----	58	32	-----
TOTAL	1,937	3,493	5,689	3,898	3,368	6,483	3,846	4,400	7,433	3,347	1,338	903
MEAN	62.5	116	184	126	116	209	128	142	248	108	43.2	30.1
MAX	103	306	343	211	335	432	185	250	886	242	63	55
MIN	46	65	95	87	78	120	87	88	97	57	32	25
CFSM	1.25	2.32	3.69	2.53	2.32	4.19	2.57	2.85	4.97	2.16	.87	.60
IN.	1.44	2.60	4.24	2.91	2.51	4.83	2.87	3.28	5.54	2.50	1.00	.67

CAL YR 1971 TOTAL 37,640 MEAN 103 MAX 517 MIN 23 CFSM 2.06 IN 28.06
WTR YR 1972 TOTAL 46,135 MEAN 126 MAX 886 MIN 25 CFSM 2.53 IN 34.39

PEAK DISCHARGE (BASE, 700 CFS).--June 23 (1400*) 1,020 cfs (7.17 ft).

*About.

DELAWARE RIVER BASIN

01449500 Wild Creek at Hatchery, Pa.

LOCATION.--Lat 40°55'22", long 75°33'32", Carbon County, on left bank at Hatchery, 0.5 mile downstream from Penn Forest Dam, 2.2 miles upstream from Wild Creek Dam, 4 miles upstream from mouth, and 9.5 miles northeast of Palmerton.

DRAINAGE AREA.--16.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 842.71 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 34.4 cfs (27.81 inches per year), adjusted for storage since January 1959.

EXTREMES.--Current year: Maximum discharge, 220 cfs June 23 (gage height, 3.15 ft), from rating curve extended above 60 cfs on basis of contracted-opening measurement at gage height, 5.59 ft; minimum, 7.4 cfs Dec. 6, 7; minimum gage height, 1.56 ft Oct. 25.

Period of record: Maximum discharge, 2,360 cfs May 23, 1942 (gage height, 6.00 ft), from rating curve extended above 220 cfs on basis of contracted-opening measurement at gage height, 5.59 ft; minimum, 1.0 cfs Aug. 3-6, Oct. 2, 1958, Oct. 24, 1969 (result of regulation).

REMARKS.--Records fair. Flow completely regulated by Penn Forest Reservoir 0.5 mile upstream, since October 1958 (see p. 87).

REVISIONS (WATER YEARS).--WSP 1051: Drainage area. WSP 1382: 1941-42, 1943(M), 1944-45, 1947, 1949, 1951-53.

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	67	28	16	37	31	36	53	55	130	62	18	30
2	68	59	13	42	31	44	53	59	103	62	16	30
3	68	53	10	43	35	74	49	62	92	66	15	30
4	71	29	10	35	43	77	47	77	81	63	18	30
5	71	23	9.6	38	41	62	46	80	73	56	13	30
6	73	18	9.2	36	38	60	39	77	69	54	12	30
7	73	18	8.4	36	36	65	45	73	68	49	14	30
8	74	16	11	37	33	65	53	71	59	46	32	30
9	74	13	10	33	30	59	44	71	50	46	56	30
10	76	13	9.6	42	28	54	41	73	60	43	68	30
11	77	13	10	43	28	50	38	70	48	38	45	30
12	79	20	10	43	28	54	33	66	44	35	35	30
13	64	28	9.6	44	37	55	41	44	44	45	34	31
14	34	28	8.4	54	54	55	47	35	42	48	30	30
15	25	28	25	50	47	55	50	49	42	43	31	30
16	20	28	60	46	37	51	59	59	44	40	33	30
17	20	28	73	41	46	94	89	56	45	39	35	31
18	20	28	80	38	43	94	84	57	43	34	35	32
19	20	28	68	42	47	80	77	53	57	31	35	32
20	20	28	68	43	44	70	77	58	55	28	35	32
21	20	29	73	42	38	66	78	63	54	26	35	32
22	20	31	63	38	38	81	74	60	84	23	35	32
23	20	31	46	40	35	94	74	57	201	24	35	32
24	20	30	44	44	35	84	71	53	180	23	35	32
25	22	26	46	49	35	74	69	50	147	21	35	32
26	17	13	41	41	37	71	63	46	132	20	35	33
27	19	7.7	41	36	37	64	58	44	115	15	33	35
28	19	19	41	35	36	64	54	43	115	17	31	35
29	19	33	42	35	35	58	53	42	123	16	30	35
30	19	24	46	34	-----	58	50	41	109	15	30	35
31	19	-----	50	33	-----	56	-----	95	-----	16	30	-----
TOTAL	1,308	770.7	1,051.8	1,250	1,083	2,024	1,709	1,839	2,509	1,144	974	941
MEAN	42.2	25.7	33.9	40.3	37.3	65.3	57.0	59.3	83.6	36.9	31.4	31.4
MAX	79	59	80	54	54	94	89	95	201	66	68	35
MIN	17	7.7	8.4	33	28	36	33	35	42	15	12	30
MEAN [≠]	30.0	32.3	62.2	40.0	37.5	66.0	57.8	59.6	81.2	36.9	9.9	4.5
CFSM [≠]	1.79	1.92	3.70	2.38	2.23	3.93	3.44	3.55	4.83	2.20	.59	.27
IN. [≠]	2.06	2.14	4.27	2.74	2.40	4.53	3.84	4.09	5.39	2.54	.68	.30

CAL YR 1971 TOTAL 13,582.4 MEAN 37.2 MAX 129 MIN 1.2 MEAN[≠] 37.2 CFSM[≠] 2.21 IN.[≠] 30.07
WTR YR 1972 TOTAL 16,603.5 MEAN 45.4 MAX 201 MIN 7.7 MEAN[≠] 43.2 CFSM[≠] 2.57 IN.[≠] 34.98

[≠] Adjusted for change in contents in Penn Forest Reservoir.

DELAWARE RIVER BASIN

41

01449800 Pohopoco Creek below Beltzville Dam near Parryville, Pa.

LOCATION.--Lat 40°50'44", long 75°38'46", Carbon County, on right bank 0.1 mile upstream from Sawmill Run, 0.45 mile downstream from Beltzville Dam, 1.3 miles upstream from Bull Run, and 2.3 miles northeast of Parryville.

DRAINAGE AREA.--96.4 sq mi.

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

AVERAGE DISCHARGE.--5 years, 194 cfs (27.33 inches per year).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 492.05 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,650 cfs May 17 (gage height, 5.50 ft); minimum, 2.7 cfs Sept. 7 (gage height, 2.19 ft).

Period of record: Maximum discharge, 1,650 cfs May 17, 1972 (gage height, 5.50 ft); maximum gage height, 5.52 ft Aug. 4, 1969; minimum discharge, 0.1 cfs Mar. 10, 1970 (gage height, 2.07 ft), result of upstream shutoff.

REMARKS.--Records excellent. Flow regulated by Wild Creek and Penn Forest Reservoirs, 7.3 and 10.0 miles upstream, respectively, and Beltzville Lake, 0.45 mile upstream (see p. 87). Figures of daily discharge do not include diversion from Wild Creek Reservoir to city of Bethlehem. Records of water quality for the current year are published in Part 2 of this report. Diversion from Tunkhannock Creek to Wild Creek basin above station since October 1969 (see p. 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	37	39	278	116	171	171	171	175	296	728	61	37
2	37	37	302	116	149	264	171	175	611	596	61	41
3	37	37	302	116	142	408	163	175	927	557	62	41
4	37	39	302	116	142	476	171	215	617	555	102	41
5	37	39	302	145	145	476	139	259	273	704	84	41
6	37	39	302	220	145	476	91	307	175	822	61	41
7	37	39	302	312	145	413	91	307	175	566	61	31
8	37	37	302	312	145	336	91	307	229	298	57	38
9	37	37	302	312	145	312	91	307	259	228	61	41
10	37	37	302	312	145	264	91	307	259	189	61	41
11	37	37	302	237	132	220	142	307	259	117	61	41
12	37	37	302	182	125	167	171	259	218	89	61	41
13	37	37	139	167	125	167	171	175	131	89	61	41
14	37	37	41	167	139	220	171	175	94	89	61	37
15	37	37	41	167	156	246	171	175	94	112	61	41
16	37	37	41	167	356	246	171	429	92	125	61	40
17	37	37	69	171	562	282	297	382	140	125	61	40
18	37	37	108	179	503	356	434	94	171	125	61	41
19	37	37	194	179	387	476	434	282	336	146	61	40
20	37	37	307	179	387	535	434	270	319	171	61	40
21	37	39	250	179	382	562	434	173	255	153	48	40
22	37	81	211	179	273	568	434	171	260	125	41	40
23	37	139	211	179	145	568	278	226	261	125	41	41
24	37	152	190	179	108	568	171	259	259	108	41	41
25	37	152	163	179	108	568	175	259	380	99	41	41
26	37	152	163	179	108	568	175	259	444	75	41	54
27	37	152	132	182	108	476	175	259	674	61	41	40
28	37	152	113	182	108	362	175	259	845	61	41	40
29	37	152	113	182	108	269	175	206	843	61	41	41
30	37	190	116	182	-----	269	175	175	838	61	41	41
31	37	-----	116	182	-----	207	-----	177	-----	61	41	-----
TOTAL	1,147	2,111	6,318	5,856	5,794	11,496	6,233	7,505	10,734	7,421	1,739	1,214
MEAN	37.0	70.4	204	189	200	371	208	242	358	239	56.1	40.5
MAX	37	190	307	312	562	568	434	429	927	822	102	54
MIN	37	37	41	116	108	167	91	94	92	61	41	31
(\bar{x})	36.9	35.1	34.3	34.3	36.3	35.7	36.7	38.3	40.0	40.6	41.1	42.0
MEAN \neq	121	217	335	231	216	400	260	281	489	182	69.7	43.3
CFSM \neq	1.26	2.25	3.48	2.40	2.24	4.15	2.70	2.91	5.07	1.89	.72	.45
IN. \neq	1.45	2.51	4.01	2.77	2.42	4.78	3.01	3.36	5.66	2.18	.83	.50
CAL YR 1971	TOTAL 39,457	MEAN 108	MAX 898	MIN 21	MEAN \neq 204	CFSM \neq 2.12	IN. \neq 28.76					
WTR YR 1972	TOTAL 67,568	MEAN 185	MAX 927	MIN 31	MEAN \neq 237	CFSM \neq 2.46	IN. \neq 33.48					

\neq Diversion above station from Wild Creek Reservoir for municipal supply, equivalent in cubic feet per second, furnished by city of Bethlehem.

\neq Adjusted for diversion from Wild Creek Reservoir and change in contents in Penn Forest, Wild Creek Reservoirs, and Beltzville Lake.

DELAWARE RIVER BASIN

01450500 Aquashicola Creek at Palmerton, Pa.

LOCATION.--Lat 40°48'22", long 75°35'54", Carbon County, on right bank 1,200 ft upstream from Sixth Street Bridge in Palmerton, and 1.2 miles upstream from mouth.

DRAINAGE AREA.--76.7 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 389.08 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 146 cfs (25.85 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 2,240 cfs June 23 (gage height, 7.44 ft); minimum, 26 cfs Sept. 29 (gage height, 2.83 ft).

Period of record: Maximum discharge, 11,700 cfs July 10, 1945 (gage height, 13.63 ft), from rating curve extended above 2,500 cfs on basis of contracted-opening measurement of peak flow; minimum, 2.6 cfs Sept. 12, 1957, from rating curve extended below 16 cfs; minimum gage height, 2.44 ft Sept. 16, 1964; minimum daily discharge, 9.1 cfs Sept. 15, 1964.

REMARKS.--Records good. Regulation at low flow by mills above station. Occasional diversion from Pohopoco Creek into Aquashicola Creek above station. Figures of daily discharge do not include water diverted above station from Aquashicola Creek by the New Jersey Zinc Co.

REVISIONS (WATER YEARS).--WSP 1051: 1940-45 (monthly net diversion), drainage area. WRD Penna. 1968: 1967 (monthly net diversion).

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	103	217	532	109	113	250	168	141	818	296	63	39
2	101	585	384	150	113	330	158	150	582	249	58	37
3	99	665	303	173	122	440	145	143	424	228	61	39
4	93	520	255	175	228	370	138	280	328	214	69	37
5	89	350	217	196	160	310	133	332	277	201	55	35
6	82	260	240	180	163	270	124	283	246	183	54	35
7	84	280	395	175	158	240	122	246	219	163	61	35
8	80	240	563	168	136	210	116	220	194	160	68	34
9	76	210	519	170	131	193	109	220	179	160	55	34
10	158	190	431	226	127	173	105	217	184	138	51	33
11	175	180	377	209	120	158	101	185	157	127	49	31
12	150	165	329	214	113	173	99	173	144	120	49	33
13	138	158	299	220	367	175	122	165	137	145	48	34
14	133	143	267	336	435	163	127	163	129	131	47	37
15	131	136	255	336	293	160	118	180	123	113	45	35
16	124	129	237	286	243	183	129	201	122	105	44	33
17	118	122	214	255	212	730	201	170	126	101	44	31
18	111	113	198	231	193	704	214	200	127	97	45	33
19	105	109	180	217	190	466	209	184	200	95	45	63
20	101	109	173	198	170	360	226	208	179	95	42	41
21	97	105	165	183	153	303	214	222	186	93	42	34
22	93	99	150	170	148	388	203	212	576	82	41	31
23	91	91	138	165	140	515	220	203	1,990	76	41	29
24	109	85	138	168	140	451	212	190	1,370	76	49	29
25	129	107	136	163	130	363	201	172	919	76	51	29
26	118	107	129	145	140	306	188	159	694	75	42	29
27	103	103	124	131	130	267	178	149	545	69	44	28
28	99	109	122	129	125	237	165	139	446	66	57	28
29	97	201	116	127	160	212	158	133	383	65	45	27
30	95	781	122	124	-----	196	145	127	349	63	41	29
31	97	-----	127	120	-----	180	-----	315	-----	65	39	-----
TOTAL	3,379	6,669	7,835	5,849	5,053	9,476	4,748	6,082	12,353	3,927	1,545	1,022
MEAN	109	222	253	189	174	306	158	196	412	127	49.8	34.1
MAX	175	781	563	336	435	730	226	332	1,990	296	69	63
MIN	76	85	116	109	113	158	99	127	122	63	39	27
(σ)	+0.5	+1.3	+1.3	+1.0	+0.2	+0.2	+0.5	+2.8	+0.2	+1.0	+0.9	+0.4
MEAN \neq	110	223	254	190	174	306	158	199	412	128	50.7	34.5
CFSM \neq	1.43	2.91	3.31	2.48	2.27	3.99	2.06	2.59	5.37	1.67	.66	.45
IN. \neq	1.65	3.25	3.82	2.86	2.45	4.60	2.30	2.99	5.99	1.92	.76	.50

CAL YR 1971 TOTAL 63,617 MEAN 174 MAX 965 MIN 33 MEAN \neq 173 CFSM \neq 2.26 IN. \neq 30.73
WTR YR 1972 TOTAL 67,938 MEAN 186 MAX 1,990 MIN 27 MEAN \neq 187 CFSM \neq 2.44 IN. \neq 33.09

PEAK DISCHARGE (BASE, 1,000 CFS).--June 23 (0515) 2,240 cfs (7.44 ft).

\neq Figures of net diversion, in cubic feet per second, include water from Pohopoco Creek to Aquashicola Creek plus water diverted above station from Aquashicola Creek; furnished by New Jersey Zinc Co.

\neq Adjusted for diversion.

DELAWARE RIVER BASIN

43

01451000 Lehigh River at Walnutport, Pa.

LOCATION.--Lat 40°45'25", long 75°36'12", Northampton County, on left bank 0.3 mile upstream from highway bridge at Walnutport, and 0.4 mile upstream from Trout Creek.

DRAINAGE AREA.--889 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 350.27 ft above mean sea level.

AVERAGE DISCHARGE.--26 years, 1,751 cfs (26.75 inches per year).

EXTREMES.--Current year: Maximum discharge, 39,000 cfs June 23 (gage height, 11.65 ft); minimum, 242 cfs Sept. 10, 11 (gage height, 1.77 ft).

Period of record: Maximum discharge, 77,800 cfs Aug. 19, 1955 (gage height, 17.68 ft); minimum, 57 cfs July 27, 1965 (gage height, 1.25 ft), result of upstream shutoff.

Maximum stage known, 20.6 ft May 23, 1942, from floodmarks.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Wild Creek Reservoir since October 1946, Penn Forest Reservoir since October 1958, and Francis E. Walter Lake since February 1961 (see p. 87).

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	1,090	1,500	3,940	1,900	1,300	2,370	2,640	2,010	10,700	5,970	780	407
2	982	2,810	3,210	2,040	1,380	4,200	2,560	2,080	8,570	5,460	767	380
3	956	3,320	2,730	2,220	1,410	7,870	2,430	2,370	6,990	5,160	767	362
4	895	2,990	2,410	2,240	2,080	7,430	2,210	3,820	5,510	5,010	938	362
5	759	2,260	2,260	2,170	1,800	6,200	2,150	5,480	3,840	5,030	741	344
6	705	1,970	2,350	1,950	1,700	4,600	2,010	4,480	3,350	5,090	626	328
7	705	2,020	4,030	2,040	1,500	3,800	2,010	3,640	2,940	4,600	689	305
8	665	1,860	6,160	1,970	1,300	3,550	2,040	3,440	2,680	4,180	819	275
9	791	1,690	5,950	1,950	1,200	3,240	1,940	3,110	2,410	4,200	702	275
10	1,130	1,640	5,550	2,350	1,100	2,940	1,850	3,840	2,460	3,330	715	248
11	1,740	1,570	6,250	2,350	1,150	2,620	1,490	3,800	2,350	2,480	702	242
12	1,540	1,490	6,130	2,600	1,100	2,660	1,550	3,130	2,190	2,120	614	248
13	1,240	1,350	5,690	2,700	2,260	2,800	2,010	2,840	1,940	2,080	566	260
14	1,180	1,290	5,240	3,320	3,850	2,900	2,310	2,540	1,680	1,940	509	328
15	1,050	1,300	3,740	3,580	3,420	2,860	2,500	2,700	1,620	1,870	478	380
16	1,010	1,290	3,580	2,700	3,030	2,920	2,560	3,280	1,650	1,740	457	335
17	969	1,240	3,380	2,300	2,990	6,200	4,780	3,110	1,740	1,700	425	499
18	919	1,200	3,190	2,100	2,560	7,210	5,060	2,740	1,750	1,770	446	520
19	872	1,140	2,970	2,220	2,430	6,000	4,160	2,760	2,740	1,630	626	509
20	759	1,160	2,520	2,110	2,200	4,960	4,080	2,860	3,480	1,590	754	689
21	748	1,100	2,580	2,000	2,100	4,380	4,430	2,940	3,330	1,510	425	689
22	748	1,070	2,450	1,840	1,900	5,480	4,350	3,260	10,400	1,270	380	689
23	748	1,090	2,260	1,830	1,600	8,080	3,990	2,900	24,600	1,210	320	554
24	791	1,060	2,080	2,000	1,400	7,110	3,330	2,580	11,500	1,150	353	520
25	943	1,460	2,040	2,150	1,460	5,400	3,390	2,210	7,750	1,050	446	542
26	1,100	1,500	2,000	2,200	1,550	4,300	3,090	2,120	7,300	897	398	478
27	1,740	1,420	1,930	1,860	1,490	4,110	2,700	2,030	7,140	793	614	344
28	1,210	1,520	1,840	1,790	1,470	3,570	2,410	1,840	6,600	767	780	335
29	1,160	2,130	1,780	1,540	1,620	3,070	2,350	1,740	6,600	728	566	335
30	943	4,420	1,810	1,500	-----	2,900	2,220	1,630	6,580	715	478	353
31	943	-----	1,990	1,400	-----	2,820	-----	5,220	-----	728	446	-----
TOTAL	31,031	51,860	104,040	66,920	54,350	138,550	84,600	92,500	162,390	77,768	18,327	12,135
MEAN	1,001	1,729	3,356	2,159	1,874	4,469	2,820	2,984	5,413	2,509	591	405
MAX	1,740	4,420	6,250	3,580	3,850	8,080	5,060	5,480	24,600	5,970	938	689
MIN	665	1,060	1,780	1,400	1,100	2,370	1,490	1,630	1,620	715	320	242
CFSM	1.13	1.94	3.78	2.43	2.11	5.03	3.17	3.36	6.09	2.82	.66	.46
IN.	1.30	2.17	4.35	2.80	2.27	5.80	3.54	3.87	6.80	3.25	.77	.51

CAL YR 1971 TOTAL 681,797 MEAN 1,868 MAX 8,000 MIN 322 CFSM 2.10 IN 28.53
WTR YR 1972 TOTAL 894,471 MEAN 2,444 MAX 24,600 MIN 242 CFSM 2.75 IN 37.43

DELAWARE RIVER BASIN

01451500 Little Lehigh Creek near Allentown, Pa.

LOCATION.--Lat 40°34'56", long 75°29'00", Lehigh County, on right bank at downstream side of bridge on Lehigh Parkway in Allentown, 0.8 mile upstream from Cedar Creek, and 2.9 miles upstream from mouth.

DRAINAGE AREA.--80.8 sq mi.

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1946, published as "at Allentown".

GAGE.--Water-stage recorder and, since September 1958, masonry control. Datum of gage is 253.41 ft above mean sea level.

AVERAGE DISCHARGE.--27 years, 88.5 cfs (14.87 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,800 cfs June 22 (gage height, 11.80 ft), from rating curve extended as explained below; minimum, 75 cfs Sept. 27, 28, 29 (gage height, 2.37 ft).

Period of record: Maximum discharge, 11,800 cfs June 22, 1972 (gage height, 11.80 ft), from rating curve extended above 980 cfs on basis of slope-area measurement of peak flow; minimum, 17 cfs Feb. 4, 1965 (gage height, 1.84 ft), result of upstream shutoff; minimum gage height, 1.39 ft June 17, 18, 22, 1949.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Occasional regulation at low flow by fish hatchery above 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	103	138	248	116	100	215	157	123	297	264	130	96
2	103	217	192	153	103	314	154	140	177	236	123	94
3	105	217	172	162	110	355	150	140	171	234	124	92
4	100	172	162	135	179	260	152	161	146	246	126	89
5	100	147	153	144	116	223	151	155	137	223	120	86
6	98	135	156	132	100	190	147	134	131	221	119	88
7	98	141	195	121	95	183	145	129	127	205	124	87
8	95	135	199	119	90	179	142	133	121	197	121	90
9	93	129	175	121	92	163	139	189	118	192	115	86
10	210	124	165	172	95	160	137	209	115	182	111	82
11	185	121	159	156	100	155	137	159	111	177	108	84
12	135	119	153	147	98	163	134	143	110	172	108	86
13	121	119	150	144	221	164	150	136	109	216	108	85
14	116	116	147	144	276	163	159	134	110	206	105	82
15	113	121	147	129	182	184	147	143	110	176	104	80
16	108	121	147	110	156	199	152	142	118	170	103	80
17	105	116	141	113	144	381	202	131	164	194	100	80
18	105	113	138	116	138	296	157	134	138	178	103	82
19	105	113	132	119	138	225	145	127	190	177	102	84
20	103	116	135	116	127	199	144	131	178	166	100	82
21	103	113	132	116	121	189	140	132	176	167	98	81
22	105	110	127	113	110	216	139	121	2,900	162	96	81
23	100	108	121	116	105	237	146	116	2,930	154	100	78
24	129	105	124	116	110	197	148	112	602	149	110	77
25	132	150	124	121	124	182	139	108	397	148	100	77
26	124	150	121	113	142	177	132	105	339	157	110	77
27	116	144	121	108	138	171	127	104	321	145	105	76
28	110	150	121	108	136	168	125	102	279	138	100	76
29	108	232	119	105	154	163	123	102	285	134	100	75
30	103	365	124	105	-----	164	121	102	323	132	100	81
31	103	-----	129	103	-----	161	-----	498	-----	125	98	-----
TOTAL	3,534	4,357	4,629	3,893	3,800	6,396	4,341	4,495	11,430	5,643	3,371	2,494
MEAN	114	145	149	126	131	206	145	145	381	182	109	83.1
MAX	210	365	248	172	276	381	202	498	2,930	264	130	96
MIN	93	105	119	103	90	155	121	102	109	125	96	75
CFSM	1.41	1.79	1.84	1.56	1.62	2.55	1.79	1.79	4.72	2.25	1.35	1.03
IN.	1.63	2.01	2.13	1.79	1.75	2.94	2.00	2.07	5.26	2.60	1.55	1.15

CAL YR 1971 TOTAL 50,652 MEAN 139 MAX 1,320 MIN 52 CFSM 1.72 IN 23.32
WTR YR 1972 TOTAL 58,383 MEAN 160 MAX 2,930 MIN 75 CFSM 1.98 IN 26.88

PEAK DISCHARGE (BASE, 450 CFS)

NOTE.--No gage-height record
Aug. 17 to Sept. 20.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	2130	3.50	525	5-31	1530	4.10	950
3-17	0845	3.38	454	6-22	2115	11.80	11,800

DELAWARE RIVER BASIN

45

01451800 Jordan Creek near Schnecksville, Pa.

LOCATION.--Lat 40°39'42", long 75°37'38", Lehigh County, on upstream side of wooden covered bridge at Trexler-Lehigh County Game Preserve, 1.0 mile downstream from Mill Creek, and 1.1 miles southwest of Schnecksville.

DRAINAGE AREA.--53.0 sq mi.

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

GAGE.--Nonrecording gage. Altitude of gage is 400 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 83.8 cfs (21.47 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,100 cfs June 22 (gage height, 12.32 ft, from floodmark), from rating curve extended as explained below; minimum observed, 4.1 cfs Sept. 18 (gage height, 2.49 ft); minimum gage height observed, 2.28 ft Oct. 8, 9.

Period of record: Maximum discharge, 7,100 cfs June 22, 1972 (gage height, 12.32 ft, from floodmark), from rating curve extended above 680 cfs on basis of contracted-opening measurement of peak flow; minimum observed, 0.4 cfs July 26, 1966; minimum gage height observed, 1.74 ft July 19, 26, 1966.

REMARKS.--Records good except those for winter periods, which are 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	38	166	465	64	45	287	96	73	196	228	26	6.0
2	36	477	308	90	55	445	90	76	92	186	22	5.8
3	38	390	233	114	64	605	82	82	98	156	24	5.6
4	35	259	172	114	168	310	73	266	83	135	32	5.8
5	34	203	142	147	77	222	73	213	101	135	21	6.4
6	32	164	149	135	70	168	70	166	77	105	21	5.5
7	33	162	245	124	65	153	68	151	75	80	19	5.3
8	30	111	218	104	60	138	62	135	60	80	18	5.2
9	34	103	218	111	65	124	55	162	59	105	18	5.3
10	119	98	205	176	79	98	57	172	54	75	16	5.2
11	109	89	184	170	80	80	57	149	44	67	15	4.6
12	88	80	157	190	73	89	55	135	41	59	14	5.0
13	79	75	138	209	366	98	62	117	42	84	14	5.5
14	76	69	124	284	318	94	79	114	40	84	14	6.4
15	68	72	117	196	224	88	70	114	35	74	13	6.6
16	60	75	111	176	172	126	88	98	42	74	13	5.0
17	55	64	98	184	136	646	198	92	121	69	13	4.5
18	52	60	95	170	119	525	138	111	158	59	14	4.2
19	50	60	73	114	96	318	116	80	425	56	12	8.6
20	48	66	80	108	101	224	186	88	445	48	11	6.0
21	45	59	77	111	101	188	116	75	465	51	9.9	5.3
22	42	55	69	108	69	240	116	66	2,120	42	9.7	5.2
23	45	51	68	100	64	245	119	60	2,440	36	8.9	5.0
24	60	51	66	101	80	213	106	57	940	32	8.6	5.0
25	79	126	61	95	77	182	96	54	619	50	8.6	5.2
26	60	153	64	72	83	164	90	46	434	47	8.4	4.8
27	52	131	60	60	86	140	84	46	302	31	9.2	4.9
28	50	100	59	55	75	122	82	46	237	29	17	4.9
29	48	166	59	50	114	112	77	42	270	26	8.9	4.9
30	46	1,010	88	45	-----	109	73	42	270	25	7.6	5.3
31	51	-----	69	40	-----	103	-----	89	-----	24	6.6	-----
TOTAL	1,692	4,745	4,272	3,817	3,182	6,656	2,734	3,217	10,385	2,352	453.4	163.0
MEAN	54.6	158	138	123	110	215	91.1	104	346	75.9	14.6	5.43
MAX	119	1,010	465	284	366	646	198	266	2,440	228	32	8.6
MIN	30	51	59	40	45	80	55	42	35	24	6.6	4.2
CFSM	1.03	2.98	2.60	2.32	2.08	4.06	1.72	1.96	6.53	1.43	.28	.10
IN.	1.19	3.33	3.00	2.68	2.23	4.67	1.92	2.26	7.29	1.65	.32	.11

CAL YR 1971 TOTAL 38,867.8 MEAN 106 MAX 2,020 MIN 9.4 CFSM 2.00 IN 27.28
WTR YR 1972 TOTAL 43,668.4 MEAN 119 MAX 2,440 MIN 4.2 CFSM 2.25 IN 30.65

PEAK DISCHARGE (BASE, 1,100 CFS).--Nov. 30 (0700) 1,310 cfs (5.59 ft); June 22 (1930) 7,100 cfs (12.32 ft).

DELAWARE RIVER BASIN

01452000 Jordan Creek at Allentown, Pa.

LOCATION.--Lat 40°37'23", long 75°28'58", Lehigh County, on right bank 200 ft upstream from bridge on State Highway 145, 0.5 mile northwest of city limits of Allentown, and 2.5 miles upstream from mouth.

DRAINAGE AREA.--75.8 sq mi.

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder and rubble masonry control (crest raised one foot in August 1958).
Datum of gage is 259.82 ft above mean sea level (Pennsylvania Department of Transportation benchmark).

AVERAGE DISCHARGE.--28 years, 106 cfs (18.99 inches per year).

EXTREMES.--Current year: Maximum discharge, 16,200 cfs June 23 (gage height, 11.61 ft, from floodmark), from rating curve extended as explained below; minimum, 1.9 cfs Sept. 26, 29 (gage height, 2.27 ft).
Period of record: Maximum discharge, 16,200 cfs June 23, 1972 (gage height, 11.61 ft, from floodmark), from rating curve extended above 6,100 cfs on basis of slope-area measurement of peak flow; no flow on many days.

Flood of May 23, 1942, reached a stage of approximately 7.1 ft outside, from floodmarks 650 ft downstream.

REMARKS.--Records good. Some regulation at low flow by mills above 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	53	185	698	64	45	374	112	71	203	244	31	15
2	51	629	391	94	60	650	104	73	112	211	28	15
3	51	450	271	154	71	864	96	75	112	181	26	14
4	46	320	207	134	203	552	91	219	94	157	29	13
5	42	270	167	160	144	380	89	227	141	138	28	13
6	41	230	150	138	101	262	82	181	99	131	23	8.4
7	41	200	258	141	80	211	77	154	96	109	23	4.6
8	36	150	231	141	70	185	77	138	77	96	27	5.2
9	34	131	235	131	75	147	71	154	69	150	23	5.8
10	160	123	227	215	82	131	67	211	67	96	19	4.3
11	160	112	207	195	75	115	64	174	64	84	18	4.3
12	125	99	174	231	69	131	62	154	56	75	17	5.5
13	112	91	160	249	305	144	73	138	53	109	17	7.6
14	104	84	144	315	1,150	128	99	125	53	106	17	5.2
15	94	89	141	262	458	131	75	131	44	82	14	4.9
16	84	96	134	174	271	203	84	123	46	89	13	4.6
17	75	77	120	178	195	837	188	101	125	96	14	4.3
18	67	69	109	171	167	754	167	115	128	82	15	8.0
19	62	67	96	160	138	458	150	89	471	77	15	7.0
20	58	71	94	134	115	320	147	84	594	69	14	3.4
21	54	64	94	117	117	253	138	84	397	62	13	3.1
22	53	58	84	109	123	295	120	71	2,280	56	12	3.7
23	51	53	67	106	79	330	138	62	6,400	51	13	3.1
24	69	49	82	109	99	280	120	58	1,320	46	15	3.1
25	101	171	77	114	99	244	112	53	738	44	15	3.7
26	87	223	71	84	101	207	101	48	491	58	17	2.5
27	71	185	71	60	96	178	91	46	347	41	17	2.2
28	62	188	69	50	99	160	84	42	267	36	15	2.5
29	58	391	64	45	134	141	79	38	244	32	20	2.2
30	54	1,890	67	40	-----	131	75	36	310	30	18	4.0
31	54	-----	89	35	-----	123	-----	109	-----	29	16	-----
TOTAL	2,210	6,815	5,049	4,310	4,821	9,319	3,033	3,384	15,498	2,867	582	183.2
MEAN	71.3	227	163	139	166	301	101	109	517	92.5	18.8	6.11
MAX	160	1,890	698	315	1,150	864	188	227	6,400	244	31	15
MIN	34	49	64	35	45	115	62	36	44	29	12	2.2
CFSM	.94	2.99	2.15	1.83	2.19	3.97	1.33	1.44	6.82	1.22	.25	.08
IN.	1.08	3.34	2.48	2.12	2.37	4.57	1.49	1.66	7.61	1.41	.29	.09

CAL YR 1971 TOTAL 48,567.0 MEAN 133 MAX 1,890 MIN 12 CFSM 1.75 IN 23.83
WTR YR 1972 TOTAL 58,071.2 MEAN 159 MAX 6,400 MIN 2.2 CFSM 2.10 IN 28.50

PEAK DISCHARGE (BASE, 1,300 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	0600*	5.85	2,490	6-23	0200	11.61	16,200
2-14	0200	5.48	1,920				

DELAWARE RIVER BASIN

47

01452500 Monocacy Creek at Bethlehem, Pa.

LOCATION.--Lat 40°38'28", long 75°22'47", Northampton County, on right bank 40 ft downstream from highway bridge at entrance to Monocacy Park at Bethlehem, and 2.1 miles upstream from mouth.

DRAINAGE AREA.--44.5 sq mi.

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

GAGE.--Water-stage recorder. Concrete control since July 17, 1969. Datum of gage is 247.24 ft above mean sea level (levels by Corps of Engineers). Prior to May 15, 1962, nonrecording gage at site 40 ft upstream at same datum.

AVERAGE DISCHARGE.--24 years, 46.3 cfs (14.13 inches per year).

EXTREMES.--Current year: Maximum discharge, 548 cfs June 23 (gage height, 3.82 ft), from rating curve extended above 130 cfs as explained below; minimum, 40 cfs Oct. 8 (gage height, 2.31 ft).

Period of record: Maximum discharge, 2,340 cfs Feb. 28, 1958 (gage height, 7.63 ft), from rating curve extended above 560 cfs on basis of slope-area measurement at gage height, 9.74 ft; minimum, 3.0 cfs Jan. 9, 1966 (gage height, 1.67 ft).

Flood of July 10, 1945, reached a stage of 9.74 ft, from floodmarks (discharge, 5,200 cfs, by slope-area measurement).

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Some regulation at low flow by mill above station since April 1954.

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	53	98	197	64	62	121	88	68	155	135	64	53
2	53	116	116	83	64	132	83	70	110	119	59	51
3	53	140	76	83	66	172	80	80	100	113	59	51
4	51	121	71	80	90	138	78	90	90	108	59	48
5	48	103	71	90	62	124	80	84	86	103	57	46
6	48	93	71	85	58	106	80	78	83	98	55	48
7	44	90	78	80	54	108	78	72	80	98	64	46
8	40	78	95	78	50	100	80	74	78	93	66	48
9	42	78	92	78	52	93	76	100	76	88	62	46
10	95	78	89	103	54	85	73	105	73	83	59	44
11	108	80	86	93	56	80	71	90	68	83	57	43
12	98	73	84	98	59	90	71	84	66	80	57	46
13	88	71	83	108	121	90	80	78	64	95	59	44
14	85	71	82	106	175	88	76	76	66	85	57	43
15	83	71	82	95	113	95	71	78	62	76	55	43
16	80	73	82	78	90	108	73	76	64	88	55	42
17	76	73	85	73	80	206	88	73	95	88	57	42
18	68	73	85	80	73	188	78	73	95	100	59	43
19	66	64	80	83	66	155	73	70	127	105	59	44
20	62	66	80	78	51	127	78	72	116	116	57	48
21	62	66	78	76	51	124	78	74	135	100	57	46
22	57	66	73	73	51	127	78	70	253	80	55	44
23	53	66	68	73	50	124	83	66	496	76	57	44
24	62	66	73	71	52	113	83	63	412	71	62	43
25	76	78	71	76	59	106	78	60	300	71	53	43
26	68	90	68	68	66	103	74	58	230	73	62	43
27	66	90	68	64	57	93	71	58	197	68	57	44
28	66	88	68	66	62	90	70	58	166	64	55	43
29	66	108	66	64	85	93	68	57	155	62	55	44
30	62	326	69	62	-----	93	66	58	149	62	55	44
31	62	-----	73	62	-----	90	-----	280	-----	59	55	-----
TOTAL	2,041	2,754	2,560	2,471	2,029	3,562	2,304	2,493	4,247	2,740	1,799	1,357
MEAN	65.8	91.8	82.6	79.7	70.0	115	76.8	80.4	142	88.4	58.0	45.2
MAX	108	326	197	108	175	206	88	280	496	135	66	53
MIN	40	64	66	62	50	80	66	57	62	59	53	42
CFSM	1.48	2.06	1.86	1.79	1.57	2.58	1.73	1.81	3.19	1.99	1.30	1.02
IN.	1.71	2.30	2.14	2.07	1.70	2.98	1.93	2.08	3.55	2.29	1.50	1.13

CAL YR 1971 TOTAL 24,641 MEAN 67.5 MAX 554 MIN 31 CFSM 1.52 IN 20.60
WTR YR 1972 TOTAL 30,357 MEAN 82.9 MAX 496 MIN 40 CFSM 1.86 IN 25.38

PEAK DISCHARGE (BASE, 300 CFS)

NOTE.--No gage-height record
April 25 to June 5.
* About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-30	1700*	3.70	500	5-31	Unk.	Unk.	Unk.
2-13	2300	3.34	356	6-23	0930	3.82	548
5- 4	1800*	3.37	368				

DELAWARE RIVER BASIN

01453000 Lehigh River at Bethlehem, Pa.

LOCATION.--Lat 40°36'55", long 75°22'45", Lehigh County, on left bank 120 ft upstream from New Street Bridge at Bethlehem, and 1,800 ft upstream from Monocacy Creek.

DRAINAGE AREA.--1,279 sq mi, includes that of Monocacy Creek. At site used prior to Oct. 1, 1928, 1,229 sq mi.

PERIOD OF RECORD.--Sept. 1902 to February 1905, April 1909 to current year. Monthly discharge only for some periods, published in WSP 1302. Published as "at South Bethlehem" prior to Oct. 1913.

GAGE.--Water-stage recorder. Datum of gage is 210.94 ft above mean sea level. Prior to October 1928, nonrecording gage at New Street Bridge 120 ft downstream at same datum. Oct. 1, 1928 to Sept. 30, 1962, water-stage recorder at site 4,250 ft downstream at datum 2.49 ft lower.

AVERAGE DISCHARGE.--65 years (1902-4, 1909-72), 2,251 cfs (23.90 inches per year), adjusted for diversion 1902-4, 1909-42 and, for recirculated water, October 1, 1959 to September 30, 1962.

EXTREMES.--Current year: Maximum discharge, 57,900 cfs June 23 (gage height, 20.02 ft, from floodmark), from rating curve extended above 8,900 cfs on basis of slope-area measurement of peak flow; minimum, 688 cfs Sept. 10, 12 (gage height, 1.61 ft).

Period of record: Maximum discharge, 92,000 cfs May 23, 1942 (gage height, about 25.9 ft, from floodmark, present site and datum), from rating curve extended above 48,000 cfs; minimum, 125 cfs June 28, 1965 (gage height, 0.94 ft).

Flood of Feb. 28, 1902, reached a stage of 24.9 ft from floodmark, present site and datum (discharge, about 88,000 cfs).

REMARKS.--Records fair. Flow regulated by Wild Creek Reservoir, since January 1941, Penn Forest Reservoir since October 1958, Francis E. Walter Reservoir since February 1961, and Beltzville Lake since February 1971 (see p. 87). Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 261: 1903-5. WSP 321: 1910-11. WSP 1051: Drainage area. WSP 1141: 1929-34(M). WSP 1302: 1914(M), 1916(M), 1918, 1921, 1927-28. WSP 1432: 1903, 1919(M), 1920-21, 1929, 1933.

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	1,750	2,600	6,900	2,580	1,900	3,570	3,370	2,570	10,200	7,240	1,200	846
2	1,620	5,520	5,230	2,780	2,000	5,580	3,290	2,600	8,380	6,380	1,310	815
3	1,570	6,140	4,310	3,370	2,240	9,500	3,160	2,780	7,130	5,660	1,220	800
4	1,490	4,990	3,790	3,210	3,520	8,880	2,910	4,440	6,060	5,350	1,320	795
5	1,360	3,720	3,450	3,230	2,930	7,550	2,850	6,380	4,710	5,090	1,190	790
6	1,230	3,190	3,370	3,000	2,200	5,740	2,660	5,480	4,050	5,060	1,030	781
7	1,210	3,180	5,310	2,890	2,000	4,860	2,580	4,480	3,640	4,930	1,100	763
8	1,200	2,960	7,750	2,950	1,800	4,500	2,620	4,200	3,360	4,400	1,230	736
9	1,150	2,650	7,800	2,880	1,900	4,080	2,540	4,120	2,890	4,280	1,120	732
10	2,660	2,580	6,850	3,630	2,010	3,790	2,440	4,800	2,820	3,790	1,040	700
11	3,110	2,430	7,400	3,550	1,960	3,360	2,150	4,660	2,740	3,010	1,060	692
12	2,760	2,300	7,400	3,810	1,860	3,370	2,040	3,940	2,610	2,520	1,010	692
13	2,230	2,180	6,730	4,020	2,570	3,610	2,270	3,550	2,420	2,490	963	714
14	2,020	2,120	6,660	4,680	6,660	3,610	2,830	3,150	2,160	2,490	900	732
15	1,840	2,170	4,820	4,950	5,290	3,690	2,910	3,280	2,060	2,240	876	772
16	1,740	2,230	4,570	3,950	4,480	3,790	3,140	3,640	2,160	2,130	852	781
17	1,660	2,060	4,340	3,570	4,340	8,000	4,200	3,550	2,650	2,040	810	786
18	1,580	1,950	4,100	3,400	3,790	10,000	4,710	3,290	2,580	2,030	825	921
19	1,520	1,860	3,760	3,370	3,540	8,000	5,030	3,110	3,970	2,040	840	928
20	1,420	1,840	3,400	3,190	3,320	7,000	4,860	3,260	5,030	2,200	1,100	914
21	1,370	1,760	3,320	3,040	2,980	5,600	5,120	3,300	4,100	2,000	900	977
22	1,370	1,710	3,220	2,840	3,120	5,900	5,080	3,420	8,030	1,800	840	1,010
23	1,350	1,670	3,000	2,780	2,380	9,380	4,880	3,230	40,000	1,700	800	991
24	1,600	1,660	2,800	2,950	2,380	8,350	4,140	2,960	25,000	1,600	830	894
25	1,740	2,540	2,780	3,160	2,340	6,730	4,050	2,570	15,000	1,600	860	876
26	1,780	2,890	2,710	3,250	2,320	5,270	3,760	2,450	11,000	1,500	882	876
27	2,360	2,550	2,660	2,850	2,320	4,970	3,360	2,380	9,500	1,400	963	795
28	2,030	2,600	2,520	2,740	2,280	4,480	3,020	2,220	8,280	1,300	1,140	768
29	1,790	3,430	2,460	2,300	2,390	3,920	2,890	2,120	7,790	1,250	1,070	768
30	1,570	8,930	2,460	2,100	-----	3,670	2,760	2,000	7,840	1,200	921	768
31	1,500	-----	2,690	2,000	-----	3,610	-----	4,590	-----	1,200	888	-----
TOTAL	53,580	88,410	138,560	99,020	82,820	174,360	101,620	108,520	218,160	91,920	31,090	24,413
MEAN	1,728	2,947	4,470	3,194	2,856	5,625	3,387	3,501	7,272	2,965	1,003	814
MAX	3,110	8,930	7,800	4,950	6,660	10,000	5,120	6,380	40,000	7,240	1,320	1,010
MIN	1,150	1,660	2,460	2,000	1,800	3,360	2,040	2,000	2,060	1,200	800	692
CFSM	1.35	2.30	3.49	2.50	2.23	4.40	2.65	2.74	5.69	2.32	.78	.64
IN.	1.56	2.57	4.03	2.88	2.41	5.07	2.96	3.16	6.35	2.67	.90	.71

CAL YR 1971 TOTAL 1,039,932 MEAN 2,849 MAX 15,100 MIN 568 CFSM 2.23 IN 30.25
WTR YR 1972 TOTAL 1,212,473 MEAN 3,313 MAX 40,000 MIN 692 CFSM 2.59 IN 35.27

NOTE.--No gage-height record June 23-27.

DELAWARE RIVER BASIN

49

01454700 Lehigh River at Glendon, Pa.

LOCATION.--Lat 40°40'09", long 75°14'12", Northampton County, on right bank 140 ft upstream from highway bridge in Hugh Moore Parkway at Glendon, 1.9 miles upstream from mouth, and 2.0 miles southwest of Easton.

DRAINAGE AREA.--1,359 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 164.30 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 2,559 cfs (25.57 inches per year).

EXTREMES.--Current year: Maximum discharge, 60,600 cfs June 23 (gage height, 24.86 ft), from rating curve extended above 19,000 cfs; minimum, 840 cfs Sept. 11 (gage height, 6.88 ft).

Period of record: Maximum discharge, 60,600 cfs June 23, 1972 (gage height, 24.86 ft), from rating curve extended above 19,000 cfs; minimum, 526 cfs Oct. 1, 1966 (gage height, 6.59 ft).

REVISIONS.--The maximum discharge for the water year 1971 has been revised to 25,000 cfs Feb. 14, 1971 (gage height, 16.80 ft), superseding figure published in WRD Penna. 1971.

REMARKS.--Records good. Flow regulated by Francis E. Walter, Penn Forest, and Wild Creek Reservoirs and since February 1971, Beltzville Lake about 60 miles upstream (see p. 87). Records of water quality for the current year, collected at site 1.9 miles downstream, are published in Part 2 of this report.

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	1.760	2.570	7.100	2.630	2.210	3.750	3.420	2.730	12.800	7.800	1.600	1.060
2	1.680	5.250	5.440	3.000	2.300	5.690	3.300	2.770	9.890	7.000	1.600	1.080
3	1.620	6.060	4.440	3.480	2.260	9.960	3.190	2.940	8.310	6.800	1.540	1.020
4	1.560	5.090	3.890	3.280	3.490	9.680	2.970	4.320	6.640	6.360	1.700	1.000
5	1.470	3.930	3.560	3.390	2.600	8.090	2.900	6.640	4.780	6.510	1.600	990
6	1.350	3.340	3.400	3.100	2.200	6.040	2.730	5.650	3.850	6.160	1.420	980
7	1.320	3.270	5.240	3.030	2.000	4.940	2.690	4.390	3.330	5.450	1.510	950
8	1.300	3.100	7.520	3.000	1.800	4.530	2.710	4.110	3.010	5.490	1.620	910
9	1.260	2.800	7.780	2.920	1.900	4.100	2.600	4.180	2.760	4.350	1.500	930
10	2.660	2.660	6.970	3.690	2.060	3.810	2.520	4.710	2.700	3.490	1.400	880
11	2.940	2.570	7.330	3.610	2.040	3.390	2.290	4.640	2.600	3.240	1.420	860
12	2.660	2.460	7.610	3.800	1.940	3.450	2.170	3.960	2.470	3.360	1.370	870
13	2.270	2.340	6.930	4.010	2.940	3.690	2.550	3.530	2.270	2.970	1.310	910
14	2.110	2.180	6.830	4.600	6.890	3.670	3.100	3.190	2.000	2.940	1.260	920
15	1.980	2.200	5.010	4.940	5.270	3.810	3.070	3.370	1.890	2.930	1.210	980
16	1.870	2.250	4.640	4.000	4.370	3.980	3.270	3.780	1.930	2.700	1.170	960
17	1.790	2.120	4.370	3.450	4.130	8.270	5.100	3.850	2.760	2.500	1.130	950
18	1.730	2.060	4.110	3.390	3.720	10.300	6.200	3.650	2.710	2.500	1.160	1,240
19	1.680	2.010	3.780	3.360	3.510	8.350	5.120	3.300	4.080	2.550	1.180	1,280
20	1.580	2.000	3.480	3.190	3.240	6.580	4.820	3.560	5.220	2.600	1.500	1,200
21	1.510	1.940	3.370	3.040	2.880	5.730	5.120	3.570	4.400	2.600	1.170	1,270
22	1.510	1.880	3.240	2.870	3.090	6.020	5.070	3.640	13.700	2.270	1.080	1,270
23	1.490	1.850	3.040	2.800	2.460	9.600	4.960	3.460	44.300	2.090	1.020	1,190
24	1.770	1.830	2.870	2.900	2.440	8.740	4.250	3.160	19.500	2.030	1.040	1,090
25	1.950	2.520	2.810	3.120	2.390	7.160	4.110	2.760	12.500	1.970	1.120	1,120
26	1.930	3.150	2.760	3.120	2.430	5.440	3.850	2.590	10.800	1.910	1.400	1,100
27	2.330	2.710	2.700	2.830	2.390	5.140	3.450	2.480	10.100	1.690	1.420	990
28	2.180	2.760	2.590	2.670	2.350	4.620	3.150	2.340	9.100	1.640	1.410	950
29	1.930	3.490	2.520	2.480	2.530	4.010	3.000	2.220	8.830	1.590	1.320	930
30	1.780	9.060	2.560	2.380	-----	3.750	2.880	2.100	8.980	1.540	1.140	1,010
31	1.670	-----	2.800	2.290	-----	3.650	-----	5.810	-----	1.560	1.080	-----
TOTAL	56,640	91,450	140,690	100,370	83,830	179,940	106,560	113,400	228,210	108,590	41,400	30,890
MEAN	1.827	3.048	4.538	3.238	2.891	5.805	3.552	3.658	7.607	3.503	1.335	1.030
MAX	2.940	9.060	7.780	4.940	6.890	10.300	6.200	6.640	44.300	7.800	1.700	1,280
MIN	1.260	1.830	2.520	2.290	1.800	3.390	2.170	2.100	1.890	1.540	1.020	860
CFSM	1.34	2.24	3.34	2.38	2.13	4.27	2.61	2.69	5.60	2.58	.98	.76
IN.	1.55	2.50	3.85	2.75	2.29	4.93	2.92	3.10	6.25	2.97	1.13	.85

CAL YR 1971 TOTAL 1,078,844 MEAN 2.956 MAX 16,000 MIN 843 CFSM 2.18 IN 29.53
WTR YR 1972 TOTAL 1,281,970 MEAN 3.503 MAX 44,300 MIN 860 CFSM 2.58 IN 35.09

DELAWARE RIVER BASIN

01459500 Tohickon Creek near Pipersville, Pa.

LOCATION.--Lat 40°26'01", long 75°07'01", Bucks County, on right bank at highway bridge, 1.5 miles northeast of Pipersville, and 4.5 miles upstream from mouth.

DRAINAGE AREA.--97.4 sq mi.

PERIOD OF RECORD.--July 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 258.96 ft above mean sea level.

AVERAGE DISCHARGE.--37 years, 137 cfs (19.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,240 cfs June 22 (gage height, 8.75 ft), from rating curve extended above 5,000 cfs as explained below; minimum, 2.3 cfs Sept. 29 (gage height, 0.63 ft).

Period of record: Maximum discharge, 16,000 cfs Aug. 18, 1955 (gage height, 11.26 ft), from rating curve extended above 3,600 cfs on basis of slope-area measurement at gage height, 10.48 ft; minimum, 0.05 cfs Sept. 29, 1941; minimum daily, 0.1 cfs Sept. 24, 29, Oct. 6, 1941.

REMARKS.--Records good except those for winter periods, which are fair. Regulation at low flow by mills above station. Flood flows affected by construction work on Nockamixon Dam 7.6 miles upstream since September 1971.

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	27	89	600	93	44	1,150	69	61	725	566	11	3.8
2	43	659	300	347	46	1,390	64	91	513	544	10	4.4
3	40	940	230	611	56	1,170	59	225	481	558	9.2	4.2
4	32	409	200	246	441	573	58	400	448	529	8.8	4.2
5	28	200	170	415	378	286	71	353	415	500	8.8	4.4
6	26	129	150	301	326	200	65	199	374	478	9.2	4.4
7	23	200	170	157	254	151	58	106	311	449	8.8	4.2
8	20	209	230	124	150	144	53	219	177	414	8.1	3.7
9	19	124	190	128	120	116	48	623	54	367	7.7	3.7
10	1,690	100	166	485	100	88	44	655	40	268	7.1	3.3
11	1,280	93	137	413	80	75	42	542	34	178	6.1	3.2
12	283	85	113	303	83	79	41	470	29	58	5.3	3.8
13	137	80	97	229	927	111	51	379	25	222	5.8	4.5
14	95	75	84	277	1,560	123	145	188	24	219	6.4	4.0
15	75	70	84	167	485	289	110	264	25	149	6.1	3.8
16	60	72	93	102	304	496	142	291	30	72	5.5	3.7
17	50	70	87	116	213	1,410	514	241	111	54	5.3	3.5
18	42	67	75	93	158	861	444	172	187	47	5.3	3.2
19	38	64	64	77	138	309	333	115	265	40	5.3	3.2
20	34	66	61	70	136	178	171	123	268	41	4.6	2.9
21	30	64	69	60	145	138	109	193	256	50	4.0	2.9
22	30	62	64	65	122	193	96	133	1,960	35	4.0	2.8
23	29	60	51	83	118	438	162	88	1,040	28	4.6	2.6
24	226	58	49	104	103	216	347	66	717	22	4.2	2.7
25	409	600	54	119	101	139	283	52	828	19	3.7	2.9
26	226	450	54	120	158	112	154	42	658	20	3.5	2.8
27	135	300	51	75	241	95	105	36	613	17	4.8	2.8
28	97	250	50	59	250	84	86	32	588	17	4.8	3.1
29	77	310	47	50	558	76	73	28	586	15	4.6	2.8
30	66	800	60	45	-----	72	65	26	619	13	4.6	3.7
31	58	-----	143	40	-----	71	-----	509	-----	12	4.2	-----
TOTAL	5,425	6,755	3,993	5,574	7,795	10,833	4,062	6,922	12,401	6,001	191.4	105.2
MEAN	175	225	129	180	269	349	135	223	413	194	6.17	3.51
MAX	1,690	940	600	611	1,560	1,410	514	655	1,960	566	11	4.5
MIN	19	58	47	40	44	71	41	26	24	12	3.5	2.6
CFSM	1.80	2.31	1.32	1.85	2.76	3.58	1.39	2.29	4.24	1.99	.06	.04
IN.	2.07	2.58	1.53	2.13	2.98	4.14	1.55	2.64	4.74	2.29	.07	.04

CAL YR 1971 TOTAL 76,106.6 MEAN 209 MAX 4,690 MIN 3.2 CFSM 2.15 IN 29.07
WTR YR 1972 TOTAL 70,057.6 MEAN 191 MAX 1,960 MIN 2.6 CFSM 1.96 IN 26.76

PEAK DISCHARGE (BASE, 3,100 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1300	7.19	5,130	2-14	0045	6.62	4,250
11-29	1800*	-	4,200*	6-22	1715	8.75	8,240

DELAWARE RIVER BASIN

51

01463500 Delaware River at Trenton, N. J.
(International Hydrologic Decade River Station)

LOCATION.--40°13'18", long 74°46'42", Mercer County, on left bank 450 ft upstream from Calhoun Street Bridge at Trenton, 0.5 mile upstream from Assunpink Creek, and at mile 134.5 upstream from Atlantic Ocean.

DRAINAGE AREA.--6,780 sq mi.

PERIOD OF RECORD.--October 1912 to current year. Prior to February 1913 monthly discharge only, published in WSP 1302. Gage-height records collected in this vicinity since 1904 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Sept. 30, 1965, at datum 7.77 ft higher. Feb. 24, 1913, to Oct. 2, 1928, nonrecording gage on downstream side of highway bridge at site 500 ft downstream.

AVERAGE DISCHARGE.--60 years, 11,430 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 103,000 cfs June 23 (elevation, 17.86 ft); minimum, 3,200 cfs Sept. 12 (elevation, 8.13 ft). Flow in Delaware and Raritan Canal not included.

Period of record: Maximum discharge, 329,000 cfs Aug. 20, 1955 (gage height, 20.83 ft, datum then in use, from highwater mark in gage house), from rating curve extended above 230,000 cfs; minimum, 1,180 cfs Oct. 31, 1963 (gage height, -0.51 ft, datum then in use). Flow in Trenton power race and Delaware and Raritan Canal not included.

Flood of Oct. 11, 1903 reached an elevation of about 28.5 ft above mean sea level (discharge estimated, 295,000 cfs). Maximum elevation known, 30.6 ft above mean sea level Mar. 8, 1904, from floodmark (ice jam).

REMARKS.--Records excellent. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lakes Wallenpaupack (see p. 87) and Hopatcong and Pepacton, Cannonsville, Swing-ing Bridge, Toronto, Cliff Lake and Neversink Reservoirs (see New Jersey Annual Report) and Wild Creek Reservoir (see p. 87) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs and to Delaware and Raritan Canal (see New Jersey Annual Report). Water diverted just above station by borough of Morrisville, Pa., and city of Trenton for municipal supply (see New Jersey Annual Report). Records of water quality for the current year are published in Part 2 of the New Jersey Annual Report.

REVISIONS (WATER YEARS).--WSP 951: Drainage area. WSP 1302: 1913-20 WSP 1382: 1924, 1928.

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	6,220	6,540	23,600	14,900	7,690	13,600	16,800	15,500	42,700	36,200	5,260	3,990
2	6,440	12,900	20,500	15,200	8,230	17,300	15,700	14,900	54,700	42,000	5,600	3,940
3	6,510	17,800	17,300	16,600	8,480	26,700	16,300	17,100	42,000	34,400	5,550	3,990
4	6,040	15,900	14,600	15,500	11,500	49,400	17,000	18,100	33,000	29,300	5,620	3,810
5	5,540	13,100	13,100	16,200	11,100	36,300	16,400	26,000	28,100	25,700	5,810	3,820
6	4,990	11,400	12,000	15,300	9,730	27,200	15,200	37,200	25,800	24,000	5,760	3,750
7	5,500	10,500	13,900	12,900	8,470	21,800	14,100	29,600	22,500	23,000	5,460	3,600
8	5,380	10,500	23,300	11,900	8,430	19,200	14,100	25,000	19,700	19,800	5,280	3,710
9	5,410	9,780	41,700	11,200	7,440	17,600	13,500	25,000	17,100	18,300	5,390	3,700
10	10,300	8,850	36,100	12,300	7,400	15,800	12,200	25,800	15,500	16,800	5,870	3,640
11	16,000	8,870	31,200	13,000	7,530	14,100	11,700	26,300	17,900	15,000	5,680	3,580
12	13,100	8,410	35,700	13,900	7,310	12,900	11,500	24,800	15,700	13,800	5,430	3,320
13	11,500	7,830	37,300	14,900	9,650	13,500	12,000	21,400	13,600	18,100	5,030	3,760
14	10,300	7,590	30,400	15,800	18,600	14,700	14,800	18,800	12,800	15,500	4,710	3,880
15	9,120	7,370	25,300	18,000	17,400	16,700	24,100	18,500	11,700	12,500	4,170	4,360
16	8,320	7,530	22,200	18,000	17,400	16,700	23,900	18,000	10,700	11,200	4,380	4,760
17	7,700	7,810	21,500	12,500	16,600	22,400	27,300	18,600	12,100	10,100	4,770	4,270
18	6,800	7,690	21,300	10,700	14,500	40,600	41,700	19,400	11,100	11,300	4,300	3,870
19	6,410	7,200	19,700	12,300	13,500	46,200	40,600	18,800	16,400	11,500	3,940	4,410
20	6,320	7,000	17,200	12,700	11,600	34,400	35,700	18,500	21,500	10,400	3,560	5,580
21	5,900	6,950	15,400	12,500	9,920	27,800	39,400	18,300	20,900	10,500	4,170	4,720
22	5,880	6,680	14,400	12,000	9,150	25,800	46,300	17,700	36,700	9,810	3,720	4,250
23	5,700	6,250	13,100	11,300	9,730	36,600	38,900	16,600	87,600	8,830	3,760	4,010
24	6,850	6,660	11,900	10,100	3,940	48,900	38,100	15,200	97,000	7,250	3,850	4,120
25	9,450	10,700	11,200	10,900	9,010	39,000	34,000	13,600	84,900	6,670	3,900	4,050
26	8,510	11,500	10,800	12,900	9,870	30,500	29,600	12,200	65,300	6,640	4,780	4,010
27	7,780	9,290	11,000	12,400	9,680	25,600	26,000	11,500	53,600	6,530	5,900	4,030
28	8,030	9,970	10,700	10,800	8,780	22,600	22,600	10,200	43,000	6,070	5,280	4,020
29	7,180	11,100	10,700	9,840	9,830	20,100	19,900	9,150	36,500	5,600	4,960	4,460
30	6,920	24,400	11,300	9,080	-----	17,800	17,400	8,340	33,700	5,330	4,640	4,240
31	6,720	-----	12,900	8,370	-----	17,100	-----	9,570	-----	5,160	4,330	-----
TOTAL	236,820	298,070	611,300	403,990	307,470	788,900	706,800	579,660	1,003,8M	477,290	150,860	121,650
MEAN	7,639	9,936	19,720	13,030	10,600	25,450	23,560	18,700	33,460	15,400	4,866	4,055
MAX	16,000	24,400	41,700	18,000	18,600	49,400	46,300	37,200	97,000	42,000	5,900	5,580
MIN	4,990	6,250	10,700	8,370	7,310	12,900	11,500	8,340	10,700	5,160	3,560	3,320
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-

CAL YR 1971 TOTAL 4,452,100 MEAN 12,200 MAX 41,700 MIN 3,250 CFSM - IN. -
WTR YR 1972 TOTAL 5,686,610 MEAN 15,540 MAX 97,000 MIN 3,320 CFSM - IN. -

DELAWARE RIVER BASIN

01465500 Neshaminy Creek near Langhorne, Pa.

LOCATION.--Lat 40°10'26", long 74°57'26", Bucks County, on left bank at bridge on State Highway 213, 0.3 mile downstream from Mill Creek, and 1.7 miles west of Langhorne.

DRAINAGE AREA.--210 sq mi.

PERIOD OF RECORD.--October 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 40.57 ft above mean sea level (corrected).

AVERAGE DISCHARGE.--38 years, 273 cfs (17.65 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,600 cfs June 22 (gage height, 9.95 ft); minimum, 20 cfs Sept. 26 (gage height, 0.75 ft).

Period of record: Maximum discharge, 49,300 cfs Aug. 19, 1955 (gage height, 22.84 ft, from floodmarks), from rating curve extended above 4,700 cfs on basis of contracted-opening measurement at gage height, 15.94 ft, and slope-area measurement of peak flow; minimum, 1.9 cfs Sept. 8, 1957; minimum gage height, 0.35 ft Sept. 1, 2, 1963.

Flood of Aug. 23, 1933, reached a stage of 17.3 ft, from floodmark (discharge, 30,000 cfs, from rating curve extended as explained above).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Some regulation at low flow by mills above station. Occasional regulation by Springfield Lake (capacity, 650,000,000 gal), completed in 1934; no significant regulation except during period May 1934 to January 1944, when the lake was filling, and in September 1949, July 1954, July through October 1957, September, October 1961. Records of water quality for the current year are published in Part 2 of this report. Interceptor sewer installed along left bank in May, June 1966.

REVISIONS (WATER YEARS).--WSP 1332: 1949. WSP 1432: 1936-37.

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	167	241	822	360	150	1,710	262	201	816	500	119	42
2	176	245	530	800	160	1,470	248	195	295	330	114	161
3	198	345	434	1,100	273	2,600	234	1,470	273	250	104	164
4	167	417	393	700	1,840	1,080	241	2,130	208	230	117	75
5	150	280	357	900	448	715	262	750	161	210	102	53
6	144	238	322	700	680	580	238	439	141	200	88	45
7	133	273	373	600	318	485	224	357	138	190	84	42
8	122	288	732	450	290	480	221	515	130	180	84	41
9	117	231	570	500	260	413	208	1,350	114	170	80	42
10	3,180	218	420	700	230	365	195	1,720	112	160	75	39
11	1,840	211	370	600	200	337	189	645	97	155	67	38
12	510	198	320	500	245	345	186	457	90	150	65	37
13	365	189	280	397	1,680	365	218	377	90	4,450	67	38
14	322	179	250	495	1,820	369	373	373	102	1,180	65	42
15	273	170	240	373	680	615	273	1,030	102	466	62	38
16	238	182	250	269	565	500	329	500	125	349	56	34
17	218	176	240	280	448	1,470	1,540	397	401	314	55	31
18	198	164	220	299	389	1,350	525	369	291	276	56	28
19	189	156	200	262	615	585	361	322	208	385	62	44
20	176	164	180	262	590	457	318	439	273	262	60	41
21	167	161	190	245	434	413	295	409	182	224	50	34
22	161	153	180	234	448	510	262	314	3,300	201	47	34
23	158	136	170	234	357	786	345	273	3,660	179	44	31
24	924	128	160	255	357	466	635	245	972	161	45	26
25	1,290	2,090	170	248	349	389	434	221	1,730	150	60	31
26	525	1,490	180	218	640	357	310	198	810	147	82	26
27	417	525	170	195	695	329	273	182	500	144	170	30
28	337	750	160	186	738	310	252	173	385	133	109	30
29	299	500	150	170	1,290	291	231	161	650	125	62	28
30	269	3,680	250	160	-----	284	214	153	972	119	50	35
31	252	-----	400	150	-----	276	-----	156	-----	117	45	-----
TOTAL	13,682	14,178	9,683	12,842	17,189	20,702	9,896	16,521	17,328	12,107	2,346	1,380
MEAN	441	473	312	414	593	668	330	533	578	391	75.7	46.0
MAX	3,180	3,680	822	1,100	1,840	2,600	1,540	2,130	3,660	4,450	170	164
MIN	117	128	150	150	150	276	186	153	90	117	44	26
CFSM	2.10	2.25	1.49	1.97	2.82	3.18	1.57	2.54	2.75	1.86	.36	.22
IN.	2.42	2.51	1.72	2.27	3.04	3.67	1.75	2.93	3.07	2.14	.42	.24

CAL YR 1971 TOTAL 166,338 MEAN 456 MAX 15,400 MIN 21 CFSM 2.17 IN 29.47
WTR YR 1972 TOTAL 147,854 MEAN 404 MAX 4,450 MIN 26 CFSM 1.92 IN 26.19

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	2130	9.67	8,150	3- 3	1400	7.14	4,700
11-25	1930	7.26	4,760	5- 3	2130	8.15	5,910
11-30	0730	8.36	6,200	6-22	2330	9.95	8,600
2-13	2330	7.66	5,360	7-13	1500	9.66	8,140

DELAWARE RIVER BASIN

53

01465770 Poquessing Creek at Trevoise Road, Philadelphia, Pa.

LOCATION.--Lat 40°07'55", long 74°59'40", Bucks County, on right bank 30 ft downstream from Trevoise Road Bridge, 1 mile southwest of Trevoise.

DRAINAGE AREA.--5.08 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 120 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 6.44 cfs (17.22 inches per year).

EXTREMES.--Current year: Maximum discharge, 784 cfs Nov. 29 (gage height, 5.91 ft), from rating curve extended as explained below; minimum daily, 1.2 cfs Aug. 22, 24.

Period of record: Maximum discharge, 2,100 cfs (revised) Aug. 28, 1971 (gage height, 8.38 ft, in gage well, 9.10 ft outside, from floodmark), from rating curve extended above 150 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 0.1 cfs Aug. 31, 1966.

REVISIONS.--Figures of maximum discharge for the water years 1970 and 1971 have been revised to 669 cfs Aug. 23, 1970 (gage height, 5.58 ft) and 2,100 cfs Aug. 28, 1971 (gage height, 8.38 ft, in gage well, 9.10 ft outside, from floodmark), superseding figures published in WRD Penna. 1970 and 1971.

REMARKS.--Records fair. Records of water quality for the current year are published in Part 2 of this report. The figures of peak discharge for the water year 1971 have been revised as shown in the following table. They supersede figures published in WRD Penna. 1971.

REVISED PEAK DISCHARGE.--1971: July 30 (1215) 567 cfs (5.24 ft); Aug. 28 (0500) 2,100 cfs (8.38 ft, in gage well, 9.10 ft outside, from floodmark); Sept. 11 (1245) 870 cfs (6.15 ft); Sept. 13 (0630) 356 cfs (4.38 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	5.5	4.4	16	6.6	3.4	8.7	9.1	4.8	4.8	5.2	2.8	1.8
2	15	6.6	18	20	3.8	8.4	9.1	4.8	6.3	3.9	2.8	8.6
3	6.0	15	19	9.8	63	46	8.7	24	4.8	3.9	5.7	2.2
4	5.0	5.5	18	10	18	12	12	13	4.2	3.4	4.9	1.9
5	4.7	5.3	17	22	6.9	11	9.1	6.9	4.0	5.4	2.6	1.9
6	6.4	5.3	18	9.8	5.8	9.5	8.4	5.8	4.2	3.9	2.2	1.9
7	4.4	10	75	8.7	6.0	10	9.1	5.8	4.0	3.6	2.2	1.9
8	4.6	4.6	12	8.1	5.3	12	9.1	7.1	3.6	4.1	2.1	1.8
9	4.8	4.4	7.8	13	5.1	11	8.1	42	3.4	3.9	2.1	2.4
10	51	4.4	7.8	16	4.8	8.0	8.1	13	3.8	3.4	2.1	1.7
11	11	4.4	7.8	10	4.6	8.0	8.1	10	3.6	3.2	1.8	1.7
12	8.4	4.4	9.1	8.7	4.6	8.5	7.8	7.8	3.8	3.2	3.0	1.9
13	8.1	4.5	8.7	9.5	47	8.0	16	4.8	3.8	92	3.9	2.1
14	11	4.2	8.4	9.5	11	20	8.7	37	4.2	7.4	2.1	2.1
15	6.0	4.6	8.4	8.1	7.4	24	14	11	3.6	6.1	1.9	1.7
16	5.5	4.6	8.4	7.8	6.6	12	22	6.6	5.3	9.1	1.9	1.5
17	5.8	4.3	8.1	4.5	6.0	38	33	17	14	5.7	2.1	1.5
18	5.8	4.4	8.4	4.7	6.6	13	11	7.1	21	5.2	2.1	1.7
19	5.5	4.4	7.4	4.7	33	9.1	8.1	6.9	8.7	4.9	2.4	3.4
20	5.5	4.2	9.8	4.6	12	9.1	6.3	24	5.3	4.9	1.8	2.2
21	5.3	3.8	8.1	4.2	8.4	9.5	5.5	7.4	5.8	4.3	1.5	1.7
22	4.8	3.6	7.4	4.0	9.5	21	8.1	6.9	89	4.3	1.2	1.7
23	4.6	3.6	7.1	4.2	6.9	13	6.3	5.5	19	4.1	1.3	1.5
24	67	43	8.1	4.2	8.1	11	12	5.5	12	3.9	1.2	1.5
25	20	52	7.4	4.4	11	11	6.3	5.1	30	5.7	1.3	1.7
26	11	7.1	7.8	3.8	29	11	5.5	4.8	8.2	3.4	12	1.8
27	10	19	7.4	3.6	11	11	5.3	4.6	6.1	3.4	7.1	1.8
28	7.1	8.1	6.9	3.3	12	10	5.1	4.6	5.7	3.2	2.2	1.5
29	4.8	96	6.6	3.0	10	9.8	5.1	4.6	48	3.2	2.2	1.7
30	4.6	19	9.8	3.1	-----	10	4.8	4.4	17	3.0	2.2	4.9
31	4.6	-----	7.4	3.2	-----	9.8	-----	4.6	-----	3.4	1.9	-----
TOTAL	323.8	364.7	377.1	237.1	366.8	413.4	289.8	317.4	357.2	224.3	86.6	65.7
MEAN	10.4	12.2	12.2	7.65	12.6	13.3	9.66	10.2	11.9	7.24	2.79	2.19
MAX	67	96	75	22	63	46	33	42	89	92	12	8.6
MIN	4.4	3.6	6.6	3.0	3.4	8.0	4.8	4.4	3.4	3.0	1.2	1.5
CFSM	2.05	2.40	2.40	1.51	2.48	2.62	1.90	2.01	2.34	1.43	.55	.43
IN.	2.37	2.67	2.76	1.74	2.69	3.03	2.12	2.32	2.62	1.64	.63	.48

CAL YR 1971 TOTAL 3,463.54 MEAN 9.49 MAX 220 MIN .56 CFSM 1.87 IN 25.36
WTR YR 1972 TOTAL 3,423.90 MEAN 9.35 MAX 96 MIN 1.2 CFSM 1.84 IN 25.07

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-25	0530	4.73	432	6-22	1515	5.57	666
11-29	1815	5.91	784	6-29	1300	4.38	356
2-3	2145	4.67	442	7-13	0545	5.12	531
5-14	1815	4.00	280				

DELAWARE RIVER BASIN

01465785 Walton Run at Philadelphia, Pa.

LOCATION.--Lat 40°05'22", long 74°59'37", Philadelphia County, on right bank 110 ft downstream from bridge on Decatur Road, 1 mile upstream from mouth, Philadelphia.

DRAINAGE AREA.--2.17 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 77.63 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 3.11 cfs (19.46 inches per year).

EXTREMES.--Current year: Maximum discharge, 657 cfs July 16 (gage height, 7.24 ft); minimum 0.38 cfs Sept. 17 (gage height, 2.31 ft).

Period of record: Maximum discharge, 1,430 cfs Aug. 27, 1967 (gage height, 9.46 ft), from rating curve extended above 740 cfs on basis of step-backwater analysis; minimum, 0.07 cfs Dec. 24, 25, 1966 (gage height, 2.18 ft).

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

REVISIONS (WATER YEARS).--WRD Penna. 1971: 1967(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	1.3	1.2	2.0	.90	1.0	1.8	2.1	1.1	1.3	2.0	1.1	.80
2	5.9	4.1	1.6	9.0	1.1	1.8	1.1	1.1	1.5	1.5	1.1	2.5
3	.87	10	1.5	1.4	38	33	1.2	11	1.5	1.4	2.9	1.0
4	.99	1.6	1.3	3.5	6.3	2.3	4.3	4.2	2.0	1.5	3.2	.70
5	1.1	1.3	1.1	8.0	1.2	1.5	1.4	1.9	1.5	3.2	1.3	.70
6	1.2	1.0	1.8	1.3	1.0	1.4	1.4	1.3	1.3	1.5	1.2	.80
7	1.1	6.2	15	1.2	1.1	1.4	2.3	1.1	1.2	2.4	1.3	.80
8	1.0	1.2	4.0	1.1	.90	2.4	1.5	2.5	1.2	1.7	1.2	.70
9	.76	1.3	1.7	7.0	.80	1.3	1.0	28	1.2	1.1	1.0	1.0
10	34	1.3	1.5	3.5	.70	1.2	1.1	4.0	1.3	1.2	.92	.60
11	2.2	1.3	1.3	1.4	.80	1.0	1.4	1.5	1.2	1.3	.76	.60
12	1.2	1.2	1.1	1.3	.83	1.2	1.3	1.5	1.2	1.3	.84	1.8
13	1.1	1.0	1.2	1.5	28	1.2	9.2	1.1	1.3	32	.76	1.6
14	12	.76	1.2	1.5	3.9	7.4	1.7	20	1.3	2.0	1.0	1.1
15	2.1	1.2	1.2	1.0	1.7	5.1	7.1	9.7	1.2	1.7	.92	.92
16	1.1	1.1	1.1	.84	1.5	2.9	13	2.9	1.3	42	.80	.68
17	1.0	1.1	1.1	1.1	1.3	25	17	6.7	2.0	3.2	.80	.48
18	1.3	1.1	1.0	1.2	2.1	4.3	1.8	2.2	18	2.0	1.0	4.1
19	1.4	1.1	1.0	1.1	30	2.3	1.4	1.8	5.0	2.0	1.8	2.1
20	1.4	.92	2.0	1.2	3.8	3.2	1.7	17	1.8	1.8	.80	.92
21	1.4	.84	1.1	1.1	3.0	3.4	1.3	1.7	1.8	1.7	1.0	1.0
22	1.4	1.0	.90	.92	3.4	11	4.1	1.4	40	1.4	.80	.92
23	1.1	1.0	.90	.84	1.5	3.2	1.3	1.5	9.0	1.3	.70	.61
24	57	7.8	1.0	1.1	3.5	2.7	4.6	1.4	2.0	1.5	.80	.54
25	4.9	58	.90	1.6	4.8	2.6	1.4	1.3	10	3.4	.90	.77
26	1.8	2.1	.90	1.0	17	3.2	1.5	1.2	2.5	1.7	30	.1
27	1.7	10	.90	1.0	2.1	6.0	1.2	1.0	1.5	1.5	4.0	1.6
28	1.4	2.4	.90	.90	2.3	6.0	1.1	1.4	1.3	.4	1.0	1.2
29	1.3	51	1.1	.80	2.0	6.8	.92	1.0	18	1.0	.90	1.1
30	1.1	5.4	2.5	.85	-----	6.2	.84	1.2	8.0	.80	1.0	4.3
31	1.3	-----	1.0	.90	-----	3.2	-----	1.3	-----	1.4	.90	-----
TOTAL	147.42	179.52	55.80	60.05	165.63	156.0	91.26	135.0	142.4	123.90	66.70	37.04
MEAN	4.76	5.98	1.80	1.94	5.71	5.03	3.04	4.35	4.75	4.00	2.15	1.23
MAX	57	58	15	9.0	38	33	17	28	40	42	30	4.3
MIN	.76	.76	.90	.80	.70	1.0	.84	1.0	1.2	.80	.70	.48
CFSM	2.19	2.76	.83	.89	2.63	2.32	1.40	2.00	2.19	1.84	.99	.57
IN.	2.53	3.08	.96	1.03	2.84	2.67	1.56	2.31	2.44	2.12	1.14	.63

CAL YR 1971 TOTAL 1,855.23 MEAN 5.08 MAX 173 MIN .30 CFSM 2.34 IN 31.80
 WTR YR 1972 TOTAL 1,360.72 MEAN 3.72 MAX 58 MIN .48 CFSM 1.71 IN 23.33

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-25	0500	5.28	261	7-13	0530	6.07	389
11-29	1830	6.12	398	7-16	1930	7.24	657
3- 3	0530	5.35	272	8- 3	2300	5.43	284
6-22	1600*	5.64	316				

NOTE.--No gage-height record
 Dec. 11 to Jan. 14, June 10-30,
 Aug. 16 to Sept. 12.
 * About.

01465790 Byberry Creek at Chalfont Road, Philadelphia, Pa.

LOCATION.--Lat 40°05'01", long 74°58'57", Philadelphia County, on right bank 200 ft downstream from Chalfont Road Bridge, 0.2 mile downstream from Walton Run, Philadelphia.

DRAINAGE AREA.--5.34 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 48.98 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 8.02 cfs (20.40 inches per year).

EXTREMES.--Current year: Maximum discharge, 748 cfs July 16 (gage height, 8.14 ft); minimum, 1.6 cfs Sept. 21 (gage height, 1.83 ft).

Period of record: Maximum discharge, 1,930 cfs Aug. 28, 1971 (gage height, 12.47 ft, from floodmark), from rating curve extended above 950 cfs; minimum, 0.4 cfs Aug. 4, 1965; minimum gage height, 1.27 ft June 4, 1965, before completion of control.

REMARKS.--Records good. Records of water quality 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	4.6	4.2	7.0	3.3	3.6	5.3	4.6	4.6	3.9	8.2	2.2	2.4
2	16	12	5.5	30	3.6	4.9	4.9	4.6	7.1	4.9	2.1	8.8
3	3.9	28	4.6	4.9	91	73	4.6	25	4.6	5.7	21	2.6
4	3.9	5.3	4.2	9.5	21	10	12	11	3.9	4.9	4.9	2.2
5	4.2	4.2	4.0	27	4.2	7.7	4.9	4.9	3.6	11	2.1	2.2
6	4.6	3.9	9.0	4.9	3.1	6.2	4.6	4.9	3.6	4.9	1.9	2.4
7	3.6	20	4.9	4.2	3.9	6.2	6.6	4.6	3.3	9.5	2.1	2.4
8	3.6	4.2	14	3.9	3.1	10	5.3	4.9	3.3	7.7	2.1	2.2
9	3.3	4.2	5.7	24	2.8	5.7	4.2	4.9	3.3	4.2	1.7	3.3
10	75	4.2	4.9	13	2.6	5.7	4.2	13	3.6	4.2	1.6	2.1
11	8.2	3.9	4.6	5.3	2.6	5.3	4.6	5.3	3.3	4.2	1.6	2.1
12	4.9	3.9	4.2	4.6	2.4	6.2	4.6	4.9	3.3	4.6	1.6	3.1
13	4.2	3.3	4.6	6.2	57	5.7	25	4.9	3.6	120	3.5	3.3
14	22	3.9	4.6	6.2	10	19	6.6	41	3.6	7.7	5.8	2.2
15	6.6	3.9	4.6	3.9	5.3	16	19	31	3.3	5.3	2.6	2.2
16	4.2	3.6	4.2	4.2	4.6	9.5	31	8.2	3.6	7.9	2.6	2.2
17	4.6	3.6	4.2	4.6	4.2	56	41	13	24	8.2	2.6	2.1
18	5.3	3.6	3.9	4.6	5.7	14	6.6	7.7	52	3.3	3.3	7.1
19	5.7	3.6	3.6	3.9	67	7.7	5.7	5.3	16	3.1	5.7	5.7
20	5.7	3.3	7.7	3.9	13	8.2	6.2	38	6.2	2.8	2.2	2.1
21	5.3	3.3	4.2	3.9	8.8	8.8	5.3	6.2	6.2	2.8	3.1	2.1
22	4.9	3.1	3.6	3.6	8.2	25	13	4.9	114	2.4	2.6	2.1
23	4.6	3.1	3.6	3.6	4.9	10	7.1	4.9	24	2.6	2.4	1.9
24	100	15	3.9	3.6	8.2	8.2	13	4.6	5.7	2.4	2.6	1.9
25	20	170	3.3	4.6	11	6.6	5.3	4.2	32	10	2.8	2.4
26	7.0	11	3.6	3.3	36	5.7	5.3	4.2	8.8	2.4	85	2.4
27	6.0	21	3.3	3.3	7.7	7.1	4.9	4.2	4.9	2.2	15	3.1
28	5.0	11	3.6	3.1	7.1	7.1	4.9	4.2	4.6	2.2	3.1	2.6
29	4.2	150	3.3	2.8	6.2	7.1	4.6	4.6	53	2.2	2.8	2.4
30	3.9	25	10	2.9	-----	6.6	4.2	4.2	28	2.1	3.3	10
31	4.6	-----	3.6	3.1	-----	4.9	-----	5.3	-----	2.1	2.8	-----
TOTAL	359.6	539.3	200.1	209.9	408.8	379.4	273.8	337.3	440.3	336.8	198.7	93.6
MEAN	11.6	18.0	6.45	6.77	14.1	12.2	9.13	10.9	14.7	10.9	6.41	3.12
MAX	100	170	49	30	91	73	41	49	114	120	85	10
MIN	3.3	3.1	3.3	2.8	2.4	4.9	4.2	4.2	3.3	2.1	1.6	1.9
CFSM	2.17	3.37	1.21	1.27	2.64	2.28	1.71	2.04	2.75	2.04	1.20	.58
IN.	2.51	3.76	1.39	1.46	2.85	2.64	1.91	2.35	3.07	2.35	1.38	.65

CAL YR 1971 TOTAL 4,710.0 MEAN 12.9 MAX 450 MIN 1.4 CFSM 2.42 IN 32.81
WTR YR 1972 TOTAL 3,777.6 MEAN 10.3 MAX 170 MIN 1.6 CFSM 1.93 IN 26.32

PEAK DISCHARGE (BASE, 400 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-25	0600*	-	450*	7-13	0630	6.94	539
11-29	1930*	-	650*	7-16	1900	8.14	748
2-3	2130	6.19	434	8-26	2045	7.61	649
6-22	1600	7.09	562				

DELAWARE RIVER BASIN

01467083 Rock Creek above Curtis Arboretum near Philadelphia, Pa.

LOCATION.--Lat 40°04'54", long 75°09'03", Montgomery County, on right bank 60 ft upstream from stone arch bridge, 1,600 ft upstream from Washington Lane, Cheltenham Township, about 1.2 miles above mouth.

DRAINAGE AREA.--1.15 sq mi.

PERIOD OF RECORD.--May 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 245 ft (from topographic map).

EXTREMES.--May to September 1971: Maximum discharge, 787 cfs Sept. 11 (gage height, 5.99 ft), from rating curve extended above 75 cfs; minimum, 0.43 cfs Aug. 16, 23 (gage height, 1.85).

Water year 1972: Maximum discharge, 402 cfs June 2 (gage height, 4.85 ft), from rating curve extended above 130 cfs; minimum, 0.27 cfs July 27 (gage height, 2.11 ft).

REMARKS.--Records fair. Records of water quality for the current year are published in Part 2 of this report.

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								1.1	.80	3.1	3.3	2.3
2								1.0	.80	1.2	.93	2.2
3								1.1	1.2	.86	1.3	2.1
4								1.0	.74	.86	9.3	2.1
5								.90	.74	1.2	6.6	1.9
6								4.5	3.5	1.3	.80	2.1
7								1.5	.80	1.2	.74	2.2
8								4.0	.86	.74	.68	2.2
9								1.1	.74	.93	.58	2.1
10								1.0	.74	.74	.68	4.6
11								.93	.68	.93	.86	52
12								.86	2.1	.68	.68	22
13								10	.68	.68	.58	29
14								1.0	5.3	.63	.68	3.9
15								12	.93	.58	.58	3.9
16								5.2	.93	.58	.54	3.9
17								2.0	.86	1.7	.58	3.9
18								1.1	.86	.68	.58	3.7
19								1.0	.86	2.2	2.6	3.7
20								1.0	.86	.74	.63	3.7
21								3.1	15	.63	.63	22
22								1.0	1.0	.63	.58	3.3
23								.93	.86	.58	.50	3.3
24								1.0	.80	.54	.54	3.3
25								3.7	.74	.68	.54	3.3
26								1.1	.74	.54	.63	3.3
27								.93	.80	.63	44	3.3
28								.80	.86	.58	34	3.2
29					-----			.86	.93	1.2	3.3	2.6
30					-----			4.4	1.1	18	2.7	2.1
31		-----			-----		-----	1.5	-----	3.9	2.6	-----
TOTAL								71.61	47.81	49.44	123.24	203.2
MEAN								2.31	1.59	1.59	3.98	6.77
MAX								12	15	18	44	52
MIN								.80	.68	.54	.50	1.9
CFSM								2.01	1.38	1.38	3.46	5.89
IN.								2.32	1.55	1.60	3.99	6.57

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-28	0330	4.42	335	9-21	0340	4.61	342
9-11	0955	5.99	787				

01467083 Rock Creek above Curtis Arboretum near Philadelphia, Pa.--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	1.7	1.4	2.0	.90	1.0	2.2	1.7	1.6	1.2	1.8	.50	.90
2	2.5	2.6	1.6	3.7	1.1	2.3	1.7	1.7	2.4	1.8	.50	2.5
3	1.3	3.0	1.4	1.0	9.4	6.6	1.6	14	1.5	1.7	1.4	1.2
4	1.1	1.3	1.3	1.2	2.4	2.9	2.2	8.0	1.7	1.7	1.6	1.0
5	.98	1.3	1.2	2.4	1.7	2.9	1.7	3.0	1.6	2.1	1.0	1.0
6	.82	1.3	1.5	1.1	1.5	2.9	1.5	2.0	1.7	1.8	.90	1.0
7	.63	2.1	4.5	.98	1.5	2.7	1.8	1.5	1.6	1.7	1.1	1.0
8	.50	1.3	1.6	.98	1.4	2.9	1.7	2.0	1.7	1.5	1.0	1.0
9	.45	1.2	1.3	3.0	1.3	2.6	1.6	7.9	1.7	1.2	.90	1.2
10	45	1.2	1.2	1.3	1.2	2.6	1.6	2.2	2.0	.98	.82	.90
11	2.7	1.2	1.1	1.1	1.2	2.3	1.7	2.2	1.9	.98	.82	.90
12	2.7	1.2	1.1	1.1	1.2	2.3	1.6	2.2	1.7	1.1	.70	1.0
13	2.7	1.2	1.2	1.7	7.9	2.1	5.9	2.2	2.1	11	.94	1.2
14	3.2	1.0	1.2	1.2	2.2	3.0	1.7	5.6	2.0	1.5	.98	.78
15	2.6	1.3	1.2	1.4	1.3	2.1	3.5	2.7	1.9	1.6	1.1	.90
16	2.6	1.6	1.1	1.0	1.3	1.9	5.0	2.2	2.7	2.2	1.3	.90
17	2.5	1.0	1.1	1.0	1.3	9.4	3.9	2.2	4.1	1.3	1.5	.94
18	1.8	1.0	1.0	1.0	1.5	2.1	2.3	2.2	6.3	1.3	1.2	1.2
19	1.4	1.1	1.0	1.1	3.2	2.0	2.0	2.2	5.0	1.3	1.1	1.3
20	1.2	1.1	2.0	1.1	2.2	1.9	1.6	2.6	2.3	1.3	1.1	.94
21	1.1	1.0	1.1	1.1	1.9	1.9	1.6	2.1	2.1	1.9	1.1	.90
22	1.1	1.1	1.0	1.0	2.1	5.6	2.3	2.1	19	.78	1.3	.90
23	1.0	.98	1.0	1.1	1.7	2.3	1.7	2.1	2.9	.60	1.1	.94
24	30	7.4	1.2	1.1	1.8	2.1	2.1	2.1	2.3	1.9	1.2	.80
25	4.0	20	1.0	1.5	2.7	2.0	1.5	1.7	3.5	.66	1.0	.85
26	1.5	1.7	1.0	1.1	4.1	1.9	1.4	1.3	1.7	.37	11	.90
27	1.3	1.8	1.0	1.1	2.1	1.7	1.4	1.3	1.7	.33	2.0	.94
28	1.3	1.7	.94	.90	2.5	1.8	1.3	1.2	1.8	.35	1.1	.94
29	1.3	17	.98	.80	2.3	1.7	1.2	1.2	2.9	.55	1.1	.85
30	1.3	5.0	1.7	.80	-----	1.9	1.1	1.2	2.2	.37	1.1	1.5
31	1.4	-----	.94	.90	-----	1.7	-----	1.2	-----	.60	1.0	-----
TOTAL	123.68	86.08	41.46	39.66	67.0	84.3	61.9	87.7	87.2	48.27	43.46	31.28
MEAN	3.99	2.87	1.34	1.28	2.31	2.72	2.06	2.83	2.91	1.56	1.40	1.04
MAX	45	20	4.5	3.7	9.4	9.4	5.9	14	19	11	11	2.5
MIN	.45	.98	.94	.80	1.0	1.7	1.1	1.2	1.2	.33	.50	.78
CFSM	3.47	2.50	1.17	1.11	2.01	2.37	1.79	2.46	2.53	1.36	1.22	.90
IN.	4.00	2.78	1.34	1.28	2.17	2.73	2.00	2.84	2.82	1.56	1.41	1.01

CAL YR 1971 TOTAL 251.22 MEAN .69 MAX 45 MIN 0 CFSM .60 IN 8.13
WTR YR 1972 TOTAL 801.99 MEAN 2.19 MAX 45 MIN .33 CFSM 1.90 IN 25.94

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1045	4.27	258	5- 3	0550	4.29	262
3- 3	0520	4.41	292	6- 2	2035	4.85	402
4-13	1315	4.44	300	7-13	0640	4.30	265
4-16	1930	4.63	348	8-26	2010	4.56	330

01469500 Little Schuylkill River at Tamaqua, Pa.

LOCATION.--Lat 40°48'25", long 75°58'20", Schuylkill County, on left bank at pumping plant of Panther Valley Water Co., 0.6 mile upstream from Tamaqua, and 0.8 mile upstream from Panther Creek.

DRAINAGE AREA.--42.9 sq mi.

PERIOD OF RECORD.--October 1919 to current year. Monthly discharge only for some periods, published in WSP 1302. June 1916 to September 1919 (gage heights and discharge measurements only) in reports of Water Supply Commission of Pennsylvania.

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 817.48 ft above mean sea level. Prior to June 21, 1929, nonrecording gage at site 3,600 ft downstream at datum 28.64 ft lower.

AVERAGE DISCHARGE.--53 years, 91.3 cfs (28.90 inches per year), adjusted for diversion and, since February 1933, for storage.

EXTREMES.--Current year: Maximum discharge, 3,800 cfs June 22 (gage height, 7.64 ft); minimum, 8.2 cfs Sept 28 (gage height, 1.52 ft).

Period of record: Maximum discharge, 7,790 cfs Aug. 18, 1955 (gage height, 11.10 ft), from rating curve extended above 3,200 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 2.9 cfs Sept. 2, 1966.

REMARKS.--Records fair. Flow regulated by Still Creek Reservoir 6.5 miles upstream (see p. 88). Figures of daily discharge do not include water diverted from reservoir.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 971: 1942. WSP 1302: 1922, 1926-30. WSP 1432: 1920-21, 1933.

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	57	74	178	67	60	131	103	90	403	195	14	17
2	58	149	149	84	62	289	99	93	245	162	14	17
3	57	195	129	99	70	600	93	124	198	146	13	16
4	52	170	115	86	129	424	88	223	167	136	16	16
5	42	136	101	95	90	317	82	235	144	129	15	14
6	34	110	115	88	76	241	76	207	124	124	14	13
7	31	115	232	84	70	195	76	184	112	105	23	15
8	29	90	306	84	66	175	71	159	95	93	33	24
9	29	76	343	86	64	149	63	193	86	88	24	24
10	52	71	359	115	62	131	60	226	99	76	19	14
11	52	65	498	119	58	119	60	195	78	67	17	24
12	39	60	456	124	55	136	58	184	71	57	15	97
13	27	57	355	119	198	134	74	159	65	53	14	43
14	26	52	271	193	275	124	86	181	61	47	13	25
15	25	65	238	170	201	117	82	184	58	42	13	18
16	24	63	207	160	178	131	105	178	65	39	12	11
17	24	53	173	140	151	278	216	149	69	36	14	10
18	27	47	154	130	136	241	193	139	69	33	19	11
19	30	46	136	120	149	210	175	151	124	31	18	13
20	30	49	124	115	136	181	198	149	108	29	16	11
21	30	49	117	103	110	159	178	149	264	26	14	11
22	30	44	108	95	96	264	159	131	2,180	24	14	10
23	29	38	97	97	82	285	159	115	1,910	22	12	9.6
24	34	35	90	110	76	241	154	103	1,530	20	12	10
25	43	82	88	108	68	210	136	90	1,270	19	16	11
26	61	86	86	90	78	184	121	80	1,060	22	21	10
27	50	74	82	78	74	162	112	76	942	19	33	10
28	44	74	78	72	69	144	103	73	595	18	42	9.6
29	42	99	69	68	76	126	99	65	390	17	30	9.0
30	42	207	71	64	-----	117	95	61	313	16	23	11
31	43	-----	76	62	-----	110	-----	184	-----	15	19	-----
TOTAL	1,193	2,531	5,601	3,225	3,015	6,325	3,374	4,530	12,895	1,906	572	534.2
MEAN	38.5	84.4	181	104	104	204	112	146	430	61.5	18.5	17.8
MAX	61	207	498	193	275	600	216	235	2,180	195	42	97
MIN	24	35	69	62	55	110	58	61	58	15	12	9.0
(#)	2.8	4.6	7.3	6.7	6.4	2.8	6.3	6.3	10.1	5.1	.6	.0
MEAN#	40.2	93.4	188	111	111	207	118	152	440	64.8	15.2	10.9
CFSM#	.94	2.18	4.38	2.59	2.59	4.83	2.75	3.54	10.26	1.51	.35	.25
IN.#	1.08	2.43	5.05	2.99	2.79	5.57	3.07	4.08	11.45	1.74	.40	.28

CAL YR 1971 TOTAL 31,446.0 MEAN 86.2 MAX 587 MIN 13 MEAN# 95.7 CFSM# 2.23 IN.# 30.25
WTR YR 1972 TOTAL 45,701.2 MEAN 125 MAX 2,180 MIN 9.0 MEAN# 129 CFSM# 3.01 IN.# 40.93

PEAK DISCHARGE (BASE, 700 CFS).--June 22 (1600) 3,800 cfs (7.64 ft).

Diversion from Still Creek Reservoir, equivalent in cubic feet per second, furnished by Panther Valley Water Company.

Adjusted for diversion and change in contents in Still Creek Reservoir.

DELAWARE RIVER BASIN

59

01470500 Schuylkill River at Berne, Pa.

LOCATION.--Lat 40°31'21", long 75°59'55", Berks County, on right bank 50 ft upstream from highway bridge at Berne 0.5 mile upstream from Mill Creek, and 6.5 miles downstream from Little Schuylkill River.

DRAINAGE AREA.--355 sq mi.

PERIOD OF RECORD.--August 1947 to current year. Monthly discharge only for August 1947, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 310.65 ft above mean sea level.

AVERAGE DISCHARGE.--25 years, 670 cfs (25.63 inches per year).

EXTREMES.--Current year: Maximum discharge, 42,800 cfs June 22 (gage height, 19.0 ft, from floodmark in gage shelter), from rating curve extended above 17,000 cfs; minimum, 160 cfs Sept. 6, 7, 8; minimum gage height, 4.74 ft Oct. 22, 23.

Period of record: Maximum discharge, 42,800 cfs June 22, 1972 (gage height, 19.0 ft, from floodmark in gage shelter), from rating curve extended above 17,000 cfs; minimum, 31 cfs Sept. 2, 1949.

Flood in May 1942, reached a stage of 15.0 ft, from floodmarks (discharge, 26,900 cfs).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Some regulation at low flow by mine pumpage and by Still Creek Reservoir about 25 miles upstream from station (see p. 88). Records of water quality for the current year are published in Part 2 of this report.

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	368	943	2,460	517	500	1,440	735	639	2,150	2,180	336	178
2	384	2,460	1,820	681	526	2,580	710	631	1,500	1,810	308	178
3	389	2,370	1,460	826	566	4,710	644	718	1,390	1,590	301	183
4	350	1,850	1,260	766	1,410	3,580	607	1,700	1,100	1,530	357	183
5	315	1,440	1,090	899	1,020	2,610	577	2,210	963	1,430	294	183
6	299	1,200	1,110	836	1,100	2,010	533	1,770	819	1,340	288	169
7	283	1,200	2,110	826	846	1,610	523	1,510	766	1,150	308	164
8	267	976	2,500	816	776	1,420	497	1,310	666	1,170	403	164
9	256	815	2,560	826	760	1,190	460	1,410	605	1,330	288	200
10	412	749	2,350	1,140	720	1,040	439	1,790	655	1,080	263	194
11	478	695	2,440	1,040	709	929	471	1,560	566	960	244	178
12	358	637	2,290	1,160	566	992	456	1,450	518	856	244	216
13	315	626	1,970	1,150	1,320	975	544	1,330	502	868	257	251
14	302	581	1,640	1,890	2,350	870	656	1,270	487	757	238	221
15	298	573	1,520	1,700	1,790	844	534	1,330	465	746	221	183
16	289	542	1,370	1,470	1,570	898	563	1,390	496	714	216	178
17	304	486	1,200	1,300	1,340	1,980	1,380	1,150	586	735	216	178
18	289	454	1,110	1,140	1,200	2,000	1,320	1,060	643	653	232	205
19	261	443	997	1,050	1,220	1,690	1,220	1,060	896	613	221	800
20	260	475	931	941	1,130	1,430	1,200	1,020	813	537	216	269
21	248	470	867	867	1,040	1,230	1,140	1,000	1,130	511	205	216
22	249	435	786	816	878	1,860	998	905	22,000	476	194	210
23	258	376	709	816	756	2,320	1,050	790	26,000	451	189	194
24	345	361	690	836	737	1,950	990	716	11,000	426	183	194
25	414	1,240	662	816	709	1,670	888	656	7,280	411	200	205
26	573	1,420	627	709	766	1,440	802	596	5,320	485	200	178
27	478	1,100	610	627	776	1,250	754	577	4,100	387	343	178
28	434	989	610	580	727	1,080	709	552	3,270	364	350	173
29	400	1,420	566	560	796	959	696	534	2,790	350	232	169
30	360	3,680	566	540	-----	905	672	510	2,830	336	200	183
31	365	-----	627	520	-----	809	-----	1,150	-----	343	183	-----
TOTAL	10,601	31,006	41,508	28,661	28,604	50,271	22,768	34,294	102,306	26,589	7,930	6,375
MEAN	342	1,034	1,339	925	986	1,622	759	1,106	3,410	858	256	213
MAX	573	3,680	2,560	1,890	2,350	4,710	1,380	2,210	26,000	2,180	403	800
MIN	248	361	566	517	500	809	439	510	465	336	183	164
CFSM	.96	2.91	3.77	2.61	2.78	4.57	2.14	3.12	9.61	2.42	.72	.60
IN.	1.11	3.25	4.35	3.00	3.00	5.27	2.39	3.59	10.72	2.79	.83	.67

CAL YR 1971 TOTAL 280,353 MEAN 768 MAX 4,740 MIN 131 CFSM 2.16 IN 29.38
WTR YR 1972 TOTAL 390,913 MEAN 1,068 MAX 26,000 MIN 164 CFSM 3.01 IN 40.96

PEAK DISCHARGE (BASE, 4,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-30	0300	7.81	4,500	6-22	2400*	19.0	42,800
3- 3	1100	8.39	5,980				

NOTE.--No gage-height record
June 22-24.
*About.

DELAWARE RIVER BASIN

01470720 Maiden Creek tributary at Lenhartsville, Pa.

LOCATION.--Lat 40°34'23", long 75°52'34", Berks County, on left bank 60 ft downstream from culvert on Interstate Highway 78, 0.5 mile upstream from mouth, and 0.5 mile east of Lenhartsville.

DRAINAGE AREA.--7.46 sq mi.

PERIOD OF RECORD.--Annual maximum and occasional discharge measurements, water years 1962-65. October 1965 to current year.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 368.78 ft above mean sea level. July 12, 1961 to Sept. 15, 1965 crest-stage gage at site 60 ft upstream at same datum.

AVERAGE DISCHARGE.--7 years, 10.8 cfs (19.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,530 cfs June 22 (gage height, 6.46 ft, from peak-stage indicator), from rating curve extended as explained below; minimum, 1.1 cfs Sept. 10, 11, 12, 17, 18 (gage height, 2.25 ft).

Period of record: Maximum discharge, 1,530 cfs June 22, 1972 (gage height, 6.46 ft, from peak-stage indicator), from rating curve extended above 280 cfs on basis of computation of peak flow through culvert; maximum gage height, 6.7 ft Feb. 8, 1965, from floodmark; no flow on many days.

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

WRD Penna Water Year	Date	Discharge (cfs)	Gage Height (feet)
1967	Aug. 9, 1967	755	5.01
1969	July 30, 1969	661	4.78
1970	Apr. 2, 1970	530	4.50
1971	Feb. 13, 1971	800	5.09

REMARKS.--Records good except those for period of no gage-height record and those for winter periods, which are 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	5.4	49	66	4.8	4.4	42	8.1	6.6	58	42	3.8	1.9
2	5.4	97	44	16	5.1	80	7.7	6.4	45	34	3.4	2.0
3	5.1	76	30	16	11	101	6.8	7.3	31	30	3.4	1.9
4	4.5	48	23	18	19	71	7.2	27	23	28	3.8	1.6
5	4.5	34	17	20	14	51	6.1	21	17	25	2.9	1.5
6	4.2	25	21	17	11	34	5.7	21	14	24	2.8	1.5
7	3.9	23	28	17	9.6	26	5.7	18	12	21	4.2	1.4
8	3.7	16	28	15	8.6	20	5.4	15	9.3	22	3.3	1.4
9	3.5	13	29	20	7.8	15	4.8	23	8.2	25	2.8	1.6
10	12	12	27	21	7.2	13	4.5	20	7.4	21	2.4	1.2
11	6.8	10	23	24	6.4	11	4.5	18	6.0	18	2.3	1.2
12	5.7	9.1	20	29	7.2	13	3.9	17	5.5	17	2.4	1.5
13	5.4	8.1	16	31	57	11	9.5	15	5.5	16	2.3	1.9
14	5.4	6.8	14	44	48	11	6.9	15	5.2	15	2.1	1.9
15	5.1	7.2	13	37	40	14	7.3	14	4.7	14	2.1	1.5
16	4.8	6.4	11	31	30	19	13	14	8.9	16	2.0	1.3
17	4.5	5.7	9.6	23	23	60	22	9.9	24	14	2.3	1.3
18	4.2	5.4	9.1	20	19	61	23	8.7	74	15	2.3	13
19	3.9	5.7	7.7	17	19	45	21	7.2	157	12	2.0	6.0
20	3.7	5.7	7.7	13	16	33	20	8.0	130	9.8	1.7	3.3
21	3.7	5.1	7.2	12	13	25	15	6.9	220	8.8	1.6	2.8
22	3.5	4.5	6.1	10	9.8	35	14	6.0	740	7.7	1.6	2.5
23	3.5	4.2	5.7	10	8.4	33	13	5.3	560	6.6	1.6	2.1
24	7.7	4.2	6.1	9.6	7.6	31	13	4.7	220	5.9	1.6	2.1
25	8.1	31	5.7	9.6	7.2	26	10	4.4	150	7.2	1.5	2.1
26	6.1	28	5.4	7.2	11	21	9.4	4.1	110	5.9	1.4	2.0
27	5.7	26	5.4	6.4	9.6	17	8.7	3.8	84	5.1	12	1.9
28	5.4	25	5.4	5.6	11	14	7.9	3.5	64	4.6	5.1	1.8
29	5.4	65	4.8	5.2	20	12	7.5	3.4	50	4.1	2.9	1.8
30	5.1	105	6.8	4.8	-----	11	7.0	3.5	54	3.9	2.4	2.3
31	6.8	-----	5.7	4.4	-----	9.6	-----	33	-----	4.1	2.1	-----
TOTAL	162.7	761.1	508.4	518.6	460.9	965.6	298.6	370.7	2,897.7	482.7	88.1	70.3
MEAN	5.25	25.4	16.4	16.7	15.9	31.1	9.95	12.0	96.6	15.6	2.84	2.34
MAX	12	105	66	44	57	101	23	33	740	42	12	13
MIN	3.5	4.2	4.8	4.4	4.4	9.6	3.9	3.4	4.7	3.9	1.4	1.2
CFSM	.70	3.40	2.20	2.24	2.13	4.17	1.33	1.61	12.9	2.09	.38	.31
IN.	.81	3.80	2.54	2.59	2.30	4.82	1.49	1.85	14.45	2.41	.44	.35

CAL YR 1971 TOTAL 4,984.2 MEAN 13.7 MAX 300 MIN 1.1 CFSM 1.84 IN 24.85
WTR YR 1972 TOTAL 7,585.4 MEAN 20.7 MAX 740 MIN 1.2 CFSM 2.77 IN 37.83

PEAK DISCHARGE (BASE, 90 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11- 2	0830	3.39	130	5-31	2315	3.48	153
11-29	1800	3.44	142	6-18	1500	4.02	338
2-13	1430	3.60	187	6-22	Unk.	6.46	1,530
3- 3	0445	3.46	148	9-18	2045	3.25	99

NOTE.--No gage-height record June 20 to July 13.

01470960 Tulpehocken Creek at Blue Marsh damsite near Reading, Pa.

LOCATION.--Lat 40°22'00", long 76°01'16", Berks County, on right bank 1 mile upstream from Rebers Bridge and Plum Creek, 1 mile east of Blue Marsh, 3 miles north of Sinking Spring and 5.5 miles northwest of Reading.

DRAINAGE AREA.--175 sq mi.

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

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

AVERAGE DISCHARGE.--7 years, 233 cfs (18.08 inches per year).

EXTREMES.--Current year: Maximum discharge, 16,100 cfs June 22 (gage height, 18.7 ft, from floodmarks), from rating curve extended as explained below; minimum daily, 88 cfs Sept. 24.

Period of record: Maximum discharge, 16,100 cfs June 22, 1972 (gage height, 18.7 ft, from floodmarks), from rating curve extended above 2,600 cfs on basis of runoff comparison with downstream station; minimum, 22 cfs Sept. 11, 12, 13, 1966; minimum gage height, 1.45 ft July 29, 30, 31, 1965.

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

WRD Penna Water Year	Date	Discharge (cfs)	Gage Height (feet)
1969	July 30, 1969	7,190	9.99
1970	Apr. 2, 1970	5,330	8.13
1971	Feb. 13, 1971	8,880	11.68

REMARKS.--Records good except those for period of no gage-height record and those for winter periods, which are fair. Records of water quality 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	104	346	1,000	184	190	701	298	255	561	798	226	110
2	101	747	620	311	190	1,210	294	266	324	669	205	111
3	113	621	470	342	208	1,470	272	279	307	615	210	111
4	101	454	370	294	539	996	268	588	260	582	293	106
5	101	364	320	329	360	812	260	494	243	538	195	103
6	98	320	450	294	310	627	243	411	223	498	184	101
7	95	320	540	281	280	550	239	376	215	440	192	98
8	92	260	630	272	260	500	239	400	196	502	196	98
9	92	235	533	277	240	430	227	486	188	554	174	103
10	174	223	495	430	230	401	215	653	181	414	164	99
11	177	211	459	387	220	364	215	539	174	382	159	93
12	129	196	406	430	210	355	204	481	166	350	154	98
13	116	184	378	406	799	342	269	433	177	588	156	110
14	113	170	346	675	864	333	296	413	184	415	153	105
15	113	166	342	533	603	346	272	402	170	359	141	100
16	107	166	324	450	528	337	302	408	178	516	136	96
17	104	156	298	380	454	663	594	390	334	740	138	92
18	101	145	281	360	415	533	467	383	234	510	145	92
19	101	145	260	351	387	469	414	328	382	460	137	100
20	98	156	256	324	330	425	392	316	493	400	129	96
21	95	149	252	307	300	396	355	304	474	360	124	92
22	95	139	231	285	280	550	340	277	6,800	330	123	92
23	95	129	215	294	260	609	349	256	11,000	310	119	90
24	142	126	219	285	250	511	417	243	5,200	290	119	88
25	177	912	215	285	250	464	346	227	3,000	280	130	92
26	264	760	208	243	340	425	315	215	1,800	297	115	92
27	177	550	204	227	360	392	296	208	1,100	262	144	90
28	156	500	200	210	346	369	277	200	800	249	182	92
29	145	1,100	188	200	439	342	269	192	900	231	129	90
30	139	1,700	196	200	-----	333	257	188	1,070	223	121	94
31	139	-----	211	190	-----	315	-----	341	-----	220	114	-----
TOTAL	3,854	11,650	11,117	10,036	10,442	16,570	9,201	10,952	37,334	13,382	4,907	2,934
MEAN	124	388	359	324	360	535	307	353	1,244	432	158	97.8
MAX	264	1,700	1,000	675	864	1,470	594	653	11,000	798	293	111
MIN	92	126	188	184	190	315	204	188	166	220	114	88
CFSM	.71	2.22	2.05	1.85	2.06	3.06	1.75	2.02	7.11	2.47	.90	.56
IN.	.82	2.48	2.36	2.13	2.22	3.52	1.96	2.33	7.94	2.84	1.04	.62

CAL YR 1971	TOTAL 103,756	MEAN 284	MAX 4,180	MIN 79	CFSM 1.62	IN 22.06
WTR YR 1972	TOTAL 142,379	MEAN 389	MAX 11,000	MIN 88	CFSM 2.22	IN 30.27

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-25	1300	4.42	1,840	3- 3	0900	4.36	1,780
11-29	Unk.	4.61	2,010	6-22	2400*	18.7	16,100
2-13	1845	4.79	2,170	7-16	2230	4.15	1,600

NOTE.--No gage-height record
June 22-29.

*About.

DELAWARE RIVER BASIN

01471000 Tulpehocken Creek near Reading, Pa.

LOCATION.--Lat 40°22'08", long 75°58'46", Berks County, on right bank 15 ft upstream from covered bridge, 1 mile downstream from Cacoosing Creek, 2.5 miles upstream from mouth, and 3.5 miles northwest of square at Reading.

DRAINAGE AREA.--211 sq mi.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for October, November 1950, published in WSP 1722.

GAGE.--Water-stage recorder. Datum of gage is 216.00 ft above mean sea level.

AVERAGE DISCHARGE.--22 years, 289 cfs (18.60 inches per year).

EXTREMES.--Current year: Maximum discharge, 17,000 cfs June 23 (gage height, 15.65 ft, from floodmark in gage shelter), from rating curve extended as explained below; minimum, 104 cfs Sept. 17; minimum gage height, 1.33 ft Sept. 17, 29.

Period of record: Maximum discharge, 17,000 cfs June 23, 1972 (gage height, 15.65 ft, from floodmark in gage shelter), from rating curve extended above 3,500 cfs on basis of contracted-opening measurement of peak flow; minimum, 23 cfs Dec. 1, 1964 (gage height, 0.94 ft), result of upstream shutoff.

REVISIONS.--The maximum discharge for water year 1971 has been revised to about 10,000 cfs Feb. 13, 1971 (gage height, unknown), superseding figure published in WRD Penna. 1971.

REMARKS.--Records good except those for periods of doubtful and no gage-height record and those for winter periods, which are fair. Some regulation at low flow by mills above station.

REVISIONS (WATER YEARS).--WSP 1382: 1951-53, 1954(M). WRD Penna 1967: 1965(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	139	355	1,200	230	240	865	367	328	689	871	267	136
2	139	865	760	380	250	1,400	362	348	403	736	245	139
3	150	768	580	420	273	1,730	338	357	377	676	241	150
4	136	566	490	360	668	1,170	338	663	328	644	348	136
5	136	460	430	390	386	957	328	589	314	607	232	129
6	132	397	540	370	340	743	309	498	290	566	220	126
7	129	403	680	350	300	657	304	460	281	504	228	122
8	125	339	720	330	280	607	304	498	254	537	236	122
9	122	305	661	340	260	520	285	595	241	607	207	129
10	228	296	613	540	250	487	272	785	236	471	199	126
11	233	277	579	480	240	450	272	663	224	434	191	119
12	168	259	515	520	230	434	263	595	216	403	187	126
13	153	246	490	500	955	423	338	537	228	785	187	139
14	150	228	430	840	1,060	413	372	515	236	504	187	133
15	146	228	430	700	746	423	343	504	220	434	176	126
16	143	224	400	580	647	413	382	509	241	572	164	119
17	139	207	370	500	553	785	696	493	423	816	168	116
18	132	199	350	450	502	638	566	487	314	566	180	116
19	132	199	330	442	466	566	509	413	493	520	168	129
20	129	212	310	408	400	509	487	398	548	460	157	122
21	129	199	310	392	350	482	444	377	626	428	153	116
22	125	187	290	365	320	657	423	343	7,700	392	150	116
23	125	176	270	370	300	715	434	318	12,000	362	146	110
24	180	180	270	365	300	607	509	300	6,200	343	146	110
25	212	1,120	270	365	290	554	428	285	3,600	343	157	116
26	291	828	260	315	340	509	398	272	2,000	348	143	116
27	212	654	250	296	390	476	372	263	1,200	309	172	110
28	187	579	250	280	420	444	352	254	1,000	295	207	116
29	176	1,210	230	260	528	413	348	245	989	276	157	113
30	168	2,000	240	250	-----	408	333	245	1,160	267	146	119
31	172	-----	260	250	-----	382	-----	428	-----	263	139	-----
TOTAL	4,938	14,166	13,778	12,638	12,284	19,837	11,476	13,565	43,031	15,339	5,904	3,702
MEAN	159	472	444	408	424	640	383	438	1,434	495	190	123
MAX	291	2,000	1,200	840	1,060	1,730	696	785	12,000	871	348	150
MIN	122	176	230	230	230	382	263	245	216	263	139	110
CFSM	.75	2.24	2.10	1.93	2.01	3.03	1.82	2.08	6.80	2.35	.90	.58
IN.	.87	2.50	2.43	2.23	2.17	3.50	2.02	2.39	7.59	2.70	1.04	.65

CAL YR 1971 TOTAL 129,591 MEAN 355 MAX 4,900 MIN 107 CFSM 1.68 IN 22.85
WTR YR 1972 TOTAL 170,658 MEAN 466 MAX 12,000 MIN 110 CFSM 2.21 IN 30.09

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	1730	4.36	2,330	3- 3	1000	4.12	2,080
2-13	1930	4.49	2,460	6-23	0130*	15.65	17,000

NOTE.--No gage-height record June 23-28. Doubtful gage-height record Dec. 14 to Jan. 18.
*About.

DELAWARE RIVER BASIN

63

01472000 Schuylkill River at Pottstown, Pa.

LOCATION.--Lat 40°14'30", long 75°39'05", Montgomery County, on right bank at Hanover Street Bridge in Pottstown, 0.3 mile downstream from Manatawny Creek.

DRAINAGE AREA.--1,147 sq mi.

PERIOD OF RECORD.--October 1926 to current year. Monthly discharges only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 117.86 ft above mean sea level. Prior to Nov. 23, 1928, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--46 years, 1,821 cfs (21.56 inches per year).

EXTREMES.--Current year: Maximum discharge, 95,900 cfs June 23 (gage height, 29.97 ft, from floodmark), from rating curve extended as explained below; minimum, 499 cfs Sept. 17, 18 (gage height, 1.68 ft).
Period of record: Maximum discharge, 95,900 cfs June 23, 1972 (gage height, 29.97 ft, from floodmark), from rating curve extended above 15,000 cfs, on basis of volume-discharge study; minimum, 87 cfs Aug. 13, 1930 (gage height, 0.43 ft); minimum daily, 175 cfs Sept. 19, 1932.
Maximum stage known prior to October 1926, 21.0 ft Feb. 28, 1902, from floodmarks (discharge, 53,900 cfs).

REMARKS.--Records good except those for period of no gage height record, which are fair. Some regulation at low flow by mill above station. Records of water quality for the current year are published in Part 2 of this report.

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	955	1,250	7,350	1,510	1,370	4,260	2,260	1,870	6,090	6,000	1,140	572
2	918	4,780	5,150	2,060	1,440	8,000	2,160	1,970	4,150	5,000	1,090	572
3	974	6,370	4,060	2,730	1,550	9,000	2,060	2,060	3,520	4,500	1,020	586
4	918	4,890	3,390	2,310	3,450	7,500	2,000	3,610	2,930	4,500	1,210	564
5	856	3,700	2,970	2,520	2,630	6,650	1,940	5,130	2,600	4,000	1,070	556
6	812	3,030	2,770	2,530	2,180	5,260	1,820	4,030	2,290	3,600	955	549
7	761	2,830	4,240	2,250	2,240	4,360	1,760	3,420	2,110	3,300	946	535
8	720	2,630	5,070	2,160	1,890	3,900	1,750	3,640	1,910	3,100	1,080	513
9	695	2,180	4,940	2,150	1,600	3,370	1,650	4,320	1,750	3,000	1,020	579
10	1,760	1,990	4,650	3,170	1,500	3,030	1,550	5,200	1,670	3,000	882	609
11	1,980	1,870	4,200	3,050	1,400	2,730	1,560	4,260	1,620	2,800	830	556
12	1,300	1,730	3,900	3,050	1,500	2,630	1,550	3,780	1,500	2,600	786	549
13	1,070	1,640	3,700	3,080	3,790	2,760	2,000	3,430	1,400	3,500	803	616
14	983	1,560	3,400	3,870	7,210	2,690	2,100	3,180	1,350	3,800	803	664
15	928	1,500	3,100	4,030	5,130	2,820	2,300	3,370	1,300	2,270	729	602
16	891	1,510	2,800	3,360	4,180	2,750	4,500	3,300	1,400	2,180	711	527
17	856	1,420	2,600	2,910	3,550	5,860	4,080	3,070	2,000	3,420	695	513
18	838	1,310	2,400	2,820	3,140	5,820	3,610	3,340	1,800	2,570	728	589
19	795	1,270	2,160	2,600	3,120	4,830	3,220	2,690	1,700	2,840	728	1,080
20	753	1,290	2,050	2,470	2,900	4,030	2,980	2,600	3,900	2,240	703	983
21	744	1,290	1,990	2,270	2,520	3,550	3,010	2,520	4,140	1,990	656	656
22	728	1,220	1,860	2,120	2,620	3,810	2,680	2,370	29,000	1,810	632	602
23	720	1,130	1,550	2,090	2,240	5,650	2,840	2,200	71,200	1,650	616	572
24	1,160	1,040	1,600	2,100	2,160	4,730	3,080	2,000	29,200	1,550	609	526
25	1,450	4,220	1,600	2,100	2,130	4,110	2,660	1,800	11,700	1,460	616	520
26	1,380	5,430	1,550	1,980	2,420	3,670	2,370	1,700	8,600	1,520	632	584
27	1,400	3,910	1,500	1,710	2,640	3,280	2,210	1,590	7,700	1,380	812	640
28	1,170	3,330	1,500	1,650	2,530	3,000	2,070	1,530	7,000	1,290	955	609
29	1,070	4,020	1,500	1,600	3,030	2,730	1,980	1,490	6,000	1,200	838	594
30	1,000	9,530	1,530	1,560	-----	2,600	1,930	1,480	7,500	1,150	664	640
31	955	-----	1,680	1,480	-----	2,460	-----	4,560	-----	1,120	602	-----
TOTAL	31,540	83,870	92,760	75,290	78,060	131,840	71,680	91,510	229,030	84,340	25,561	18,257
MEAN	1,017	2,796	2,992	2,429	2,692	4,253	2,389	2,952	7,634	2,721	825	609
MAX	1,980	9,530	7,350	4,030	7,210	9,000	4,500	5,200	71,200	6,000	1,210	1,080
MIN	695	1,040	1,500	1,480	1,370	2,460	1,550	1,480	1,300	1,120	602	513
CFSM	.89	2.44	2.61	2.12	2.35	3.71	2.08	2.57	6.66	2.37	.72	.53
IN.	1.02	2.72	3.01	2.44	2.53	4.28	2.32	2.97	7.43	2.74	.83	.59

CAL YR 1971 TOTAL 816,197 MEAN 2,236 MAX 30,900 MIN 549 CFSM 1.95 IN 26.47
WTR YR 1972 TOTAL 1,013,738 MEAN 2,770 MAX 71,200 MIN 513 CFSM 2.42 IN 32.88

PEAK DISCHARGE (BASE, 7,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-30	1400	8.05	10,400	5-31	1930	7.16	8,680
2-14	0800	6.85	8,110	6-23	1300*	29.97	95,900
3- 3	0700*	10.50	15,800				

NOTE.--No gage height record
June 12 to July 14.
* About.

DELAWARE RIVER BASIN

01472157 French Creek near Phoenixville, Pa.

LOCATION.--Lat 40°09'05", long 75°36'06", Chester County, on right bank 70 ft downstream from two-span county bridge on French Creek Road, 4.5 miles northwest of Phoenixville, and 7.3 miles upstream from mouth.

DRAINAGE AREA.--59.1 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 160 ft (from topographic map). Prior to Nov. 7, 1968, nonrecording gage at site 70 ft upstream at same datum.

EXTREMES.--Current year: Maximum discharge, 11,200 cfs June 22 (gage height, 13.66 ft), from rating curve extended as explained below; minimum, 20 cfs Sept. 8 (gage height, 4.28 ft).
Period of record: Maximum discharge, 11,200 cfs June 22, 1972 (gage height, 13.66 ft), from rating curve extended above 2,500 cfs on basis of slope-area measurement of peak flow; minimum, 11 cfs July 4, 5, 1969 (gage height, 4.11 ft).

REMARKS.--Records good except those for winter months and those for the month of August, which are fair. Records of water quality 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	55	86	145	72	56	368	102	80	326	195	45	30
2	60	120	109	207	64	545	100	81	140	159	43	40
3	65	198	97	127	100	426	95	145	117	145	43	39
4	60	115	93	95	284	255	109	201	104	132	45	32
5	55	84	86	150	95	222	102	120	132	147	40	30
6	52	78	89	106	100	183	93	89	93	142	38	30
7	50	106	250	83	84	171	91	86	88	122	38	29
8	48	88	150	77	75	165	95	159	77	137	37	26
9	47	77	120	84	66	142	91	261	74	124	35	33
10	600	75	110	192	64	140	82	284	72	109	33	30
11	200	72	100	117	70	132	82	150	68	98	33	27
12	110	69	90	97	89	137	81	117	68	93	34	30
13	84	69	85	102	450	137	142	102	71	255	35	34
14	81	65	80	109	350	186	142	102	86	162	33	32
15	77	68	89	84	270	240	192	153	72	102	33	29
16	68	67	88	71	200	171	192	132	93	97	32	27
17	68	63	86	89	180	615	379	100	122	120	32	26
18	63	62	82	91	150	284	147	106	80	95	33	25
19	61	62	80	75	160	195	111	97	106	91	33	29
20	59	63	89	75	153	168	102	115	89	81	32	27
21	59	62	84	78	156	156	97	106	201	77	31	25
22	58	58	76	77	132	210	111	89	4,530	71	31	27
23	59	55	74	83	132	225	150	81	1,630	67	31	25
24	213	57	81	81	115	156	198	75	400	64	31	24
25	213	482	78	80	113	134	122	69	442	84	40	25
26	115	234	76	71	177	124	98	62	312	89	45	25
27	89	122	75	64	168	117	91	59	246	68	60	24
28	80	111	74	64	162	113	86	58	207	67	45	25
29	74	261	69	62	237	109	83	57	255	63	38	24
30	71	386	95	60	-----	111	80	57	277	62	33	31
31	75	-----	88	58	-----	109	-----	422	-----	53	31	-----
TOTAL	3,069	3,515	2,988	2,881	4,452	6,446	3,646	3,815	10,578	3,371	1,143	860
MEAN	99.0	117	96.4	92.9	154	208	122	123	353	109	36.9	28.7
MAX	600	482	250	207	450	615	379	422	4,530	255	60	40
MIN	47	55	69	58	56	109	80	57	68	53	31	24
CFSM	1.68	1.98	1.63	1.57	2.61	3.52	2.06	2.08	5.97	1.84	.62	.49
IN.	1.93	2.21	1.88	1.81	2.80	4.06	2.29	2.40	6.66	2.12	.72	.54

CAL YR 1971 TOTAL 39,545 MEAN 108 MAX 1,360 MIN 19 CFSM 1.83 IN 24.89
WTR YR 1972 TOTAL 46,764 MEAN 128 MAX 4,530 MIN 24 CFSM 2.17 IN 29.44

PEAK DISCHARGE (BASE, 750 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	2015	6.67	764	6-22	1615	13.66	11,200
3-17	0700	6.78	872				

DELAWARE RIVER BASIN

65

01472174 Pickering Creek near Chester Springs, Pa.

LOCATION.--Lat 40°05'22", long 75°37'50", Chester County, on left bank 30 ft downstream from bridge on Horse-shoe Trail Road, 0.45 mile downstream from unnamed tributary, and 0.75 mile southwest of Chester Springs.

DRAINAGE AREA.--5.98 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 280 ft (from topographic map). Prior to Aug. 11, 1967, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--5 years, 8.92 cfs (20.26 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,410 cfs June 22 (gage height, 5.21 ft), from rating curve extended above 700 cfs; minimum, 3.3 cfs Sept. 18, 19 (gage height, 1.14 ft).

Period of record: Maximum discharge, 2,410 cfs June 22, 1972 (gage height, 5.21 ft), from rating curve extended above 700 cfs; minimum, 0.87 cfs Sept. 1, 2, 1969 (gage height, 0.94 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	9.0	11	17	9.6	7.0	39	11	9.0	9.6	11	6.9	6.9
2	11	12	14	24	8.6	36	11	8.8	8.6	10	6.5	5.6
3	9.8	16	13	12	32	30	11	20	8.4	15	6.5	4.9
4	9.0	11	12	12	32	16	12	19	7.8	11	6.5	4.7
5	8.8	10	12	18	16	15	11	11	7.6	12	6.1	4.5
6	8.8	9.6	13	11	11	12	11	9.8	7.4	11	5.9	4.4
7	8.6	10	38	10	10	12	11	12	7.2	10	6.1	4.4
8	8.3	9.4	20	10	9.0	12	11	11	6.9	10	5.9	4.4
9	8.3	9.2	15	14	8.5	11	11	27	6.9	10	5.6	4.1
10	82	9.2	15	14	8.0	11	11	19	6.7	9.4	5.2	4.1
11	16	9.2	13	12	8.8	11	10	12	6.5	9.0	5.2	4.5
12	11	9.0	12	12	9.6	12	10	10	6.5	8.8	5.4	4.7
13	10	9.0	12	13	93	12	24	9.6	7.4	31	5.6	4.5
14	10	8.6	11	12	18	20	13	11	8.0	11	5.4	4.1
15	10	8.8	12	11	12	17	33	15	7.2	9.6	5.1	3.9
16	10	8.8	11	12	11	16	23	11	10	9.2	4.9	3.6
17	9.6	8.6	11	10	10	74	33	9.8	16	9.2	5.1	3.5
18	9.6	8.6	10	9.4	10	17	12	9.6	8.6	10	5.2	3.6
19	9.2	8.8	10	9.8	17	14	11	8.8	10	9.2	4.9	3.9
20	9.4	9.0	11	9.5	18	13	11	10	8.4	8.6	4.7	3.6
21	9.4	8.6	11	10	21	13	9.8	9.6	26	8.4	4.5	3.6
22	9.4	8.0	10	9.2	11	18	15	8.8	450	8.0	4.4	3.8
23	9.6	7.8	9.6	9.8	16	14	12	8.2	62	7.6	4.2	3.6
24	41	9.4	10	9.6	10	13	16	7.8	24	7.4	4.2	3.6
25	15	102	10	9.0	11	12	11	7.6	34	7.6	4.1	3.6
26	12	17	10	8.2	18	12	10	7.4	17	7.4	5.2	3.6
27	10	13	9.6	8.0	14	12	9.4	7.2	13	7.0	9.6	3.6
28	10	12	9.6	8.0	17	11	9.2	7.2	12	7.0	5.4	3.6
29	9.6	66	9.4	7.6	24	11	9.0	7.0	19	6.9	4.4	3.5
30	9.6	34	11	7.4	-----	11	9.0	7.2	14	6.9	4.4	4.4
31	10	-----	10	7.2	-----	11	-----	11	-----	7.2	4.4	-----
TOTAL	414.0	473.6	392.2	339.3	491.5	538	401.4	342.4	836.7	306.4	167.5	124.8
MEAN	13.4	15.8	12.7	10.9	16.9	17.4	13.4	11.0	27.9	9.88	5.40	4.16
MAX	82	102	38	24	93	74	33	27	450	31	9.6	6.9
MIN	8.3	7.8	9.4	7.2	7.0	11	9.0	7.0	6.5	6.9	4.1	3.5
CFSM	2.24	2.64	2.12	1.82	2.83	2.91	2.24	1.84	4.67	1.65	.90	.70
IN.	2.58	2.95	2.44	2.11	3.06	3.35	2.50	2.13	5.20	1.91	1.04	.78

CAL YR 1971 TOTAL 4,598.6 MEAN 12.6 MAX 252 MIN 2.4 CFSM 2.11 IN 28.61
WTR YR 1972 TOTAL 4,827.8 MEAN 13.2 MAX 450 MIN 3.5 CFSM 2.21 IN 30.03

PEAK DISCHARGE (BASE, 220 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1115	4.34	440	2-13	1430	4.16	316
11-29	2000	4.06	272	6-22	1300	5.21	2,410

01473000 Perkiomen Creek at Graterford, Pa.

LOCATION.--Lat 40°13'46", long 75°27'07", Montgomery County, on left bank 1,650 ft upstream from highway bridge at Graterford, 0.5 mile upstream from Landis Brook and 2.5 miles north of Collegeville.

DRAINAGE AREA.--279 sq mi.

PERIOD OF RECORD.--June 1914 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1950, published as "at Graters Ford".

GAGE.--Water-stage recorder. Datum of gage is 112.66 ft above mean sea level. June 1914 to Sept. 6, 1921, non-recording gage at site 1,650 ft downstream at datum, 3.29 ft lower. Sept. 7, 1921 to Sept. 13, 1927, non-recording gage at present site and datum.

AVERAGE DISCHARGE.--58 years, 373 cfs (18.16 inches per year), adjusted for storage since December 1956.

EXTREMES.--Current year: Maximum discharge, 35,800 cfs June 22 (gage height, 17.08 ft); minimum, 36 cfs Sept. 10 (gage height, 1.00 ft).

Period of record: Maximum discharge, 39,900 cfs July 9, 1935 (gage height, 18.26 ft), from rating curve extended above 12,000 cfs on basis of slope-area measurement at gage height, 16.23 ft; minimum, 4.7 cfs Oct. 5, 1941; minimum daily, 5.6 cfs Oct. 5, 1941.

REMARKS.--Records good. Some regulation since December 21, 1956 by Green Lane Reservoir 10.5 miles upstream (see p.). Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1171: 1935(M). WSP 1302: 1915-16, 1927-29. WSP 1382: 1932-33, 1935, 1937, 1942, 1947, 1948(M), 1949(P), 1950(M), 1951-52(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	548	209	983	238	170	3,140	287	273	3,320	540	98	62
2	540	1,110	586	820	190	3,400	287	311	810	376	98	66
3	382	1,620	443	1,150	217	3,180	259	495	602	343	88	72
4	111	830	394	563	1,590	1,260	302	1,210	406	463	91	70
5	105	463	343	1,170	495	939	287	750	327	302	84	61
6	102	370	321	686	412	642	259	476	273	311	77	59
7	95	443	840	437	327	548	264	365	273	259	75	57
8	88	394	1,200	359	297	555	255	634	217	238	79	57
9	88	306	642	321	250	450	238	2,070	194	242	84	59
10	3,220	287	518	1,160	210	376	229	2,190	190	209	77	55
11	1,570	273	450	972	220	354	225	906	162	183	70	55
12	508	242	370	695	230	430	221	563	145	169	68	57
13	315	234	348	563	2,640	400	412	412	151	722	66	55
14	255	213	306	722	2,450	618	482	365	165	533	68	55
15	226	209	311	482	1,190	983	394	722	162	273	66	55
16	197	242	311	311	884	2,390	525	972	176	209	64	57
17	185	213	287	321	634	3,050	2,310	548	406	251	64	55
18	179	198	273	316	510	1,150	1,100	456	264	213	66	53
19	172	186	229	264	533	704	600	354	540	259	64	53
20	159	198	242	259	489	555	500	327	686	186	62	59
21	149	198	259	255	518	518	450	376	489	190	61	57
22	141	186	234	255	463	1,120	500	297	13,300	190	59	57
23	148	155	194	282	388	704	600	247	7,960	148	59	51
24	529	145	202	311	412	533	900	209	2,370	126	59	51
25	689	2,920	221	338	359	463	600	186	2,220	112	72	51
26	399	1,540	202	297	586	388	500	165	1,250	136	72	53
27	301	790	202	221	790	376	437	151	780	123	129	57
28	253	760	202	200	790	316	418	145	540	109	93	62
29	220	1,940	194	190	1,790	316	354	139	563	101	75	62
30	205	3,280	202	180	-----	327	273	132	950	93	68	66
31	199	-----	343	180	-----	306	-----	2,170	-----	91	64	-----
TOTAL	12,278	20,154	11,852	14,518	20,034	30,491	14,468	18,616	39,891	7,700	2,320	1,739
MEAN	396	672	382	468	691	984	482	601	1,330	248	74.8	58.0
MAX	3,220	3,280	1,200	1,170	2,640	3,400	2,310	2,190	13,300	722	129	72
MIN	88	145	194	180	170	306	221	132	145	91	59	51
MEAN [≠]	401	676	379	467	696	980	482	604	1,332	242	68.6	43.0
CFSM [≠]	1.44	2.42	1.36	1.67	2.49	3.51	1.73	2.16	4.77	.87	.25	.15
IN. [≠]	1.66	2.70	1.57	1.92	2.68	4.05	1.93	2.49	5.32	1.00	.29	.17

CAL YR 1971 TOTAL 200,915 MEAN 550 MAX 11,400 MIN 31 MEAN[≠] 550 CFSM[≠] 1.97 IN.[≠] 26.79
WTR YR 1972 TOTAL 194,061 MEAN 530 MAX 13,300 MIN 51 MEAN[≠] 529 CFSM[≠] 1.90 IN.[≠] 25.78

[≠] Adjusted for change in contents in Green Lane Reservoir.

DELAWARE RIVER BASIN

67

01473120 Skippack Creek near Collegeville, Pa.

LOCATION.--Lat 40°09'52", long 75°26'01", Montgomery County, on right bank 60 ft downstream from two-span highway bridge, 1.5 miles upstream from mouth, and 2 miles southeast of Collegeville.

DRAINAGE AREA.--53.7 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 99.03 ft above mean sea level. Prior to June 15, 1967, nonrecording gage at site 60 ft upstream at same datum.

AVERAGE DISCHARGE.--6 years, 69.6 cfs (17.60 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,240 cfs June 22 (gage height, 10.48 ft); minimum, 2.5 cfs Sept. 24, 25, 26, 28 (gage height, 0.93 ft).

Period of record: Maximum discharge, 40,400 cfs Sept. 13, 1971 (gage height, 22.5 ft, from floodmark), from rating curve extended above 8,400 cfs on basis of slope-area measurement of peak flow; minimum, 0.1 cfs Sept. 12, 13, 1966: minimum gage height, 0.79 ft Oct. 3, 1969.

REMARKS.--Records good. Records of water quality 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	32	43	134	22	19	632	28	33	375	84	11	3.3
2	31	48	91	183	20	554	24	33	108	67	9.0	9.9
3	32	84	73	121	73	536	18	192	122	107	9.0	9.0
4	28	71	63	79	313	189	26	228	74	93	9.0	4.8
5	27	54	52	274	126	150	26	113	76	67	7.5	3.9
6	26	51	50	121	108	108	17	82	50	62	6.8	3.6
7	24	57	134	82	79	93	15	72	55	50	6.4	3.6
8	23	50	175	64	70	87	13	113	33	43	6.8	3.3
9	22	44	95	65	60	64	11	373	26	37	6.4	3.3
10	774	44	80	202	52	59	9.0	311	20	30	5.8	4.5
11	280	41	70	127	54	50	9.0	158	13	24	5.4	3.3
12	140	37	58	92	57	52	8.3	117	9.9	20	5.4	3.3
13	85	34	54	110	470	50	50	95	9.9	403	5.4	3.6
14	69	31	47	110	245	69	50	88	18	131	5.4	3.9
15	57	33	47	75	146	114	59	155	11	82	5.1	3.9
16	48	34	46	66	123	80	107	96	46	62	4.8	3.0
17	43	31	40	80	95	515	363	88	185	62	4.5	2.7
18	38	28	37	48	80	201	123	80	55	46	4.8	2.5
19	36	26	31	45	87	120	92	66	57	50	5.1	2.7
20	33	28	35	40	104	93	77	69	67	33	5.1	2.7
21	31	24	35	38	116	79	66	60	57	30	3.9	2.7
22	29	18	28	35	79	114	67	50	1,550	48	3.6	3.0
23	28	16	24	39	87	117	90	39	405	22	3.9	3.0
24	136	16	27	36	64	80	168	31	201	13	3.9	2.7
25	94	654	26	33	60	66	98	28	375	12	17	2.5
26	66	180	23	26	141	59	76	20	170	22	5.1	2.5
27	56	113	23	24	147	50	64	15	117	9.9	46	3.0
28	50	114	23	23	183	44	53	12	90	11	7.5	2.7
29	45	603	21	22	359	39	46	9.9	113	11	5.4	3.0
30	43	376	25	21	-----	35	39	9.9	117	9.9	4.5	3.9
31	41	-----	35	20	-----	33	-----	337	-----	9.9	3.6	-----
TOTAL	2,467	2,983	1,702	2,323	3,617	4,532	1,892.3	3,173.8	4,605.8	1,751.7	233.1	109.8
MEAN	79.6	99.4	54.9	74.9	125	146	63.1	102	154	56.5	7.52	3.66
MAX	774	654	175	274	470	632	363	373	1,550	403	46	9.9
MIN	22	16	21	20	19	33	8.3	9.9	9.9	9.9	3.6	2.5
CFSM	1.48	1.85	1.02	1.39	2.33	2.72	1.18	1.90	2.87	1.05	.14	.07
IN.	1.71	2.07	1.18	1.61	2.51	3.14	1.31	2.20	3.19	1.21	.16	.08

CAL YR 1971 TOTAL 40,543.5 MEAN 111 MAX 6,600 MIN 2.6 CFSM 2.07 IN 28.09
WTR YR 1972 TOTAL 29,390.5 MEAN 80.3 MAX 1,550 MIN 2.5 CFSM 1.50 IN 20.36

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1415	9.80	4,860	2-13	1615	6.98	1,900
11-29	2115	8.01	2,980	6-22	1930	10.48	5,240

DELAWARE RIVER BASIN

01474500 Schuylkill River at Philadelphia, Pa.

LOCATION.--Lat 39°58'00", long 75°11'20", Philadelphia County, on right bank 150 ft upstream from Fairmount Dam, 1,500 ft upstream from Spring Garden Street Bridge, in Philadelphia, and 8.7 miles upstream from mouth.

DRAINAGE AREA.--1,893 sq mi.

PERIOD OF RECORD.--September 1931 to current year. Records for January 1898 to December 1912, published in WSP 35, 48, 65, 82, 97, 125, 166, 202, 241, 261, 281, 301, 381, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5.74 ft above mean sea level. Prior to Nov. 25, 1956, water-stage recorder at site on right bank just upstream from Fairmount Dam at same datum. Nov. 26, 1956 to Oct. 6, 1966, water-stage recorder at site on left bank 40 ft upstream from Fairmount Dam at same datum.

AVERAGE DISCHARGE.--41 years, 2,816 cfs (20.20 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 103,000 cfs June 23 (gage height, 14.65 ft); minimum 448 cfs Sept. 18 (gage height, 5.78 ft); minimum daily, 517 cfs Sept. 18.

Period of record: Maximum discharge, 103,000 cfs June 23, 1972 (gage height, 14.65 ft); no flow over dam at times; minimum daily, 0.6 cfs Sept. 2, 1966.

Maximum stage known, 17.0 ft Oct. 4, 1896 (discharge, 135,000 cfs from rating curve extended above 46,000 cfs). Flood of Mar. 1, 1902, reached a stage of 14.8 ft (discharge, 98,000).

REMARKS.--Records good except those below 1,000 cfs, which are fair. Some regulation by reservoirs above station. Records of daily discharge do not include diversion above station by city of Philadelphia for municipal water supply. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1302: 1936(M). WSP 1432: 1945. See also PERIOD OF RECORD.

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	1,830	1,550	10,700	2,130	1,630	9,010	2,950	2,360	12,500	8,130	1,500	679
2	1,830	1,710	7,240	2,550	1,670	12,900	2,750	2,360	6,790	6,380	1,460	1,110
3	1,830	8,870	5,530	5,350	2,090	16,100	2,700	3,840	5,050	5,620	1,390	822
4	1,480	7,180	4,610	3,680	6,250	13,500	2,550	5,350	4,120	5,740	1,460	733
5	1,260	5,110	4,010	4,230	4,560	9,710	2,550	6,790	3,510	5,020	1,540	652
6	1,200	4,060	3,510	4,500	3,050	7,630	2,360	5,650	3,000	4,840	1,280	625
7	1,160	3,620	4,670	3,300	2,900	6,130	2,220	4,610	2,650	4,360	1,180	625
8	1,070	3,680	7,830	2,950	2,600	5,470	2,220	4,830	2,400	3,850	1,210	571
9	1,000	2,950	6,610	2,850	2,220	4,720	2,090	6,610	2,090	4,020	1,320	598
10	9,640	2,550	6,070	4,500	2,130	4,120	1,910	10,500	1,870	4,020	1,140	679
11	7,630	2,360	5,590	4,830	2,000	3,730	1,830	7,050	1,870	3,420	1,070	679
12	3,460	2,180	5,290	4,280	1,870	3,460	1,830	5,470	1,670	3,060	977	625
13	2,310	2,040	4,890	4,170	5,230	3,510	2,310	4,780	1,630	5,860	977	679
14	1,910	1,910	4,390	4,610	13,000	3,730	3,200	4,450	1,790	6,590	977	733
15	1,750	1,830	3,950	5,290	8,280	4,500	3,300	5,290	1,670	3,690	915	679
16	1,590	1,830	3,840	4,390	6,190	4,230	3,350	5,110	1,630	3,110	853	625
17	1,480	1,790	3,460	3,510	5,050	11,000	7,760	4,500	3,050	3,690	853	571
18	1,410	1,630	3,150	3,400	4,280	10,100	6,010	4,230	3,000	3,850	822	517
19	1,330	1,550	2,850	3,250	4,450	7,180	4,670	3,730	2,900	3,630	884	625
20	1,260	1,550	2,750	3,100	4,060	5,770	4,060	3,400	6,190	3,110	822	1,070
21	1,190	1,590	2,750	2,850	3,510	4,940	3,900	3,400	4,780	2,860	760	884
22	1,160	1,510	2,500	2,650	3,570	5,000	3,680	3,100	26,200	2,570	733	679
23	1,160	1,410	2,270	2,550	3,150	7,180	4,060	2,750	93,400	2,240	679	625
24	2,270	1,330	2,130	2,650	2,850	6,430	5,000	2,450	73,500	1,980	706	625
25	3,570	7,500	2,130	2,600	2,850	5,470	4,390	2,220	26,600	2,240	760	571
26	2,550	9,360	2,130	2,550	3,460	4,830	3,510	2,040	16,000	2,240	1,350	571
27	2,360	6,130	2,000	2,180	4,340	4,280	3,050	1,870	12,100	1,980	2,240	598
28	2,040	5,050	1,950	2,000	4,120	3,900	2,800	1,790	9,460	1,770	1,070	544
29	1,790	5,470	1,870	1,950	5,410	3,510	2,600	1,710	8,200	1,650	1,180	544
30	1,670	15,800	1,870	1,910	-----	3,300	2,500	1,670	9,670	1,540	946	625
31	1,550	-----	2,220	1,790	-----	3,150	-----	2,850	-----	1,500	791	-----
TOTAL	67,740	115,100	124,760	102,550	116,770	198,490	98,110	126,760	349,290	114,560	33,845	20,163
MEAN	2,185	3,837	4,025	3,308	4,027	6,403	3,270	4,089	11,640	3,695	1,092	672
MAX	9,640	15,800	10,700	5,350	13,000	16,100	7,760	10,500	93,400	8,130	2,240	1,110
MIN	1,000	1,330	1,870	1,790	1,630	3,150	1,830	1,670	1,630	1,500	679	517
(\bar{x})	265	265	260	228	241	253	249	252	257	302	307	285
MEAN \neq	2,450	4,102	4,285	3,536	4,268	6,656	3,519	4,341	11,900	3,997	1,399	957
CFSM \neq	1.29	2.17	2.26	1.87	2.25	3.52	1.86	2.29	6.29	2.11	.74	.51
IN. \neq	1.49	2.42	2.61	2.16	2.43	4.06	2.08	2.64	7.02	2.43	.85	.57

CAL YR 1971	TOTAL	1,191,845	MEAN	3,265	MAX	34,500	MIN	340	MEAN \neq	3,535	CFSM \neq	1.87	IN. \neq	25.34
WTR YR 1972	TOTAL	1,468,138	MEAN	4,011	MAX	93,400	MIN	517	MEAN \neq	4,275	CFSM \neq	2.26	IN. \neq	30.76

PEAK DISCHARGE (BASE, 18,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1845	8.98	20,300	3- 3	1330	8.77	18,500
11-30	0415	8.83	19,000	6-23	0800	14.65	103,000

\neq Diversion, equivalent in cubic feet per second, for municipal water supply; furnished by city of Philadelphia.

\neq Adjusted for diversion.

DELAWARE RIVER BASIN

69

01475300 Darby Creek at Waterloo Mills near Devon, Pa.

LOCATION.--Lat 40°01'21", long 75°25'20", Chester County, on left bank 125 ft upstream from bridge on Waterloo Road, 2 miles south of Devon, and 2.5 miles northwest of Newtown Square.

DRAINAGE AREA.--5.15 sq mi.

PERIOD OF RECORD.--May to September 1972.

GAGE.--Water-stage recorder. Altitude of the gage is 310 ft (from topographic map).

EXTREMES.--Maximum discharge during period, 985 cfs June 22 (gage height, 5.49 ft); minimum, 2.1 cfs Sept. 23 (gage height, 1.45 ft).

REMARKS.--Records good. Records of water quality 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								8.9	9.6	11	6.3	3.8
2								8.8	9.3	9.9	6.0	27
3								21	9.0	11	5.8	6.4
4								17	7.6	9.6	5.7	5.0
5								12	7.3	12	5.5	4.6
6								11	7.3	10	5.4	4.3
7								10	7.0	9.3	5.4	4.2
8								10	6.7	9.0	5.2	4.0
9								26	6.4	8.6	5.1	5.7
10								17	6.7	7.9	4.7	3.9
11								12	5.7	7.7	4.7	3.6
12								12	5.9	7.6	4.7	5.0
13								13	7.6	40	4.9	4.4
14								28	7.6	11	4.8	4.0
15								20	6.4	9.0	4.3	3.7
16								14	7.3	9.5	4.1	3.5
17								12	12	9.2	4.3	3.4
18								12	11	8.3	4.5	4.0
19								11	12	7.7	4.1	6.1
20								12	9.3	7.9	3.8	3.7
21								11	16	7.9	3.7	3.6
22								11	268	7.1	3.7	3.6
23								10	22	6.8	3.6	2.9
24								10	15	6.6	3.6	3.2
25								9.0	21	12	3.2	3.4
26								8.2	13	8.0	30	3.2
27								8.2	12	6.8	35	3.2
28								9.1	7.9	11	6.5	5.2
29								9.1	7.9	15	6.3	4.5
30					-----			8.9	7.9	13	6.3	4.1
31		-----			-----		-----	12	-----	6.9	3.8	-----
TOTAL								390.8	567.7	297.4	199.7	144.3
MEAN								12.6	18.9	9.59	6.44	4.81
MAX								28	268	40	35	27
MIN								7.9	5.7	6.3	3.2	2.9
CFSM								2.45	3.67	1.86	1.25	.93
IN.								2.82	4.10	2.15	1.44	1.04

PEAK DISCHARGE (BASE, 200 CFS).--June 22 (1430) 985 cfs (5.49 ft); Aug. 26 (2215) 382 cfs (4.10 ft).

DELAWARE RIVER BASIN

01475510 Darby Creek near Darby, Pa.

LOCATION.--Lat 39°55'44", long 75°16'22", Delaware County, on right bank 30 ft upstream from Providence Road Bridge, Upper Darby, 2.3 miles upstream from Cobbs Creek, and 8.4 miles above mouth.

DRAINAGE AREA.--37.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 19.41 ft above mean sea level. Prior to May 9, 1964, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--8 years, 65.7 cfs (23.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,370 cfs Oct. 10 (gage height, 8.90 ft), from rating curve extended as explained below; minimum, 23 cfs Sept. 24, 27 (gage height, 1.34 ft).

Period of record: Maximum discharge, 4,610 cfs June 12, 1968 (gage height, 9.12 ft), from rating curve extended above 920 cfs on basis of step-backwater analysis; minimum, 8.8 cfs Sept. 2, 1966 (gage height, 1.16 ft).

REMARKS.--Records good. Records of water quality 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	62	66	88	64	50	158	79	65	86	77	44	30
2	88	94	79	161	57	143	75	65	77	68	41	200
3	64	152	75	83	242	294	73	150	92	66	39	50
4	59	77	75	77	231	119	96	120	66	68	39	40
5	57	66	71	138	68	106	77	90	64	88	38	35
6	56	64	75	81	61	94	71	84	62	68	37	32
7	54	90	182	75	62	92	77	80	59	61	37	31
8	54	64	141	71	56	94	75	80	57	66	37	30
9	51	61	81	106	54	88	70	200	57	64	36	40
10	942	61	77	124	53	88	68	130	57	57	36	30
11	152	59	77	81	53	86	71	100	56	54	34	27
12	86	59	75	81	54	88	68	90	56	51	34	35
13	75	59	75	83	326	86	228	95	68	333	37	32
14	111	57	75	81	119	124	101	210	71	79	37	30
15	88	61	77	77	77	101	195	140	59	62	33	29
16	73	57	77	70	73	83	192	100	56	57	32	28
17	70	56	75	71	70	305	263	118	88	62	32	28
18	66	56	75	68	70	124	96	88	132	54	34	28
19	66	57	73	70	101	92	88	83	99	51	32	66
20	64	59	83	73	83	88	86	99	94	50	30	33
21	62	56	77	66	73	86	88	83	119	51	30	29
22	64	54	73	61	77	205	111	77	1,180	47	29	28
23	64	53	64	62	71	119	90	75	231	45	29	27
24	256	81	70	59	73	92	119	73	124	44	29	26
25	121	510	66	61	92	86	83	71	182	114	29	28
26	77	104	66	56	161	83	77	70	99	86	195	28
27	71	99	66	56	101	83	72	68	81	45	358	27
28	70	86	64	52	106	83	70	68	73	42	50	28
29	70	382	64	50	141	81	68	66	96	41	35	28
30	71	173	75	45	-----	81	66	66	189	41	32	36
31	73	-----	70	45	-----	81	-----	77	-----	45	30	-----
TOTAL	3,337	2,973	2,461	2,348	2,855	3,533	2,993	2,981	3,830	2,137	1,565	1,139
MEAN	108	99.1	79.4	75.7	98.4	114	99.8	96.2	128	68.9	50.5	38.0
MAX	942	510	182	161	326	305	263	210	1,180	333	358	200
MIN	51	53	64	45	50	81	66	65	56	41	29	26
CFSM	2.89	2.65	2.12	2.02	2.63	3.05	2.67	2.57	3.42	1.84	1.35	1.02
IN.	3.32	2.96	2.45	2.34	2.84	3.51	2.98	2.97	3.81	2.13	1.56	1.13

CAL YR 1971 TOTAL 35,035 MEAN 96.0 MAX 1,770 MIN 21 CFSM 2.57 IN 34.85
WTR YR 1972 TOTAL 32,152 MEAN 87.8 MAX 1,180 MIN 26 CFSM 2.35 IN 31.98

PEAK DISCHARGE (BASE, 800 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1115	8.90	4,370	5-14	2230*	4.88	1,360
11-25	0530	4.09	996	6-22	1400	7.04	2,690
11-29	1845	5.35	1,600	6-30	1745	5.37	1,600
2- 3	2200	4.20	1,040	7-13	0515	3.70	820
4-16	2115	3.86	892	8-26	2200	5.23	1,540

DELAWARE RIVER BASIN

71

01475530 Cobbs Creek at U. S. Highway No. 1 near Philadelphia, Pa.

LOCATION.--Lat 39°59'29", long 75°16'49", Philadelphia County, on left bank 30 ft downstream from bridge on U.S. Highway No. 1 and 50 ft upstream from unnamed tributary at west city limits of Philadelphia.

DRAINAGE AREA.--4.78 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 121.76 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 6.09 cfs (17.30 inches per year).

EXTREMES.--Current year: Maximum discharge, 572 cfs Oct. 10 (gage height, 6.41 ft), from rating curve extended above 170 cfs; minimum, 1.5 cfs Sept. 26; minimum gage height, 2.18 ft Aug. 26, Sept. 26.

Period of record: Maximum discharge, 1,040 cfs Sept. 11, 1971 (gage height, 6.97 ft), from rating curve extended above 160 cfs; minimum, 0.3 cfs Oct. 13, Nov. 24, 25, 1965; minimum gage height, 2.03 ft Nov. 25, 1965.

REMARKS.--Records good. Records of water quality for 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	2.1	4.4	6.9	3.9	3.7	11	7.3	5.9	6.2	4.7	4.4	2.1
2	7.4	10	5.9	23	3.9	8.7	8.3	5.6	16	4.2	3.9	17
3	3.2	18	5.6	5.6	52	35	8.7	25	7.6	4.2	3.9	2.7
4	3.2	5.6	5.3	7.3	15	8.3	12	24	5.0	4.2	3.7	2.5
5	3.4	5.0	5.0	16	6.9	7.6	5.6	8.0	5.0	8.3	3.7	2.5
6	3.6	5.0	6.2	5.6	6.6	6.2	6.2	6.6	4.4	4.7	3.9	2.3
7	2.9	9.0	29	5.0	6.9	6.2	8.3	6.2	4.4	3.9	3.7	2.3
8	8.7	4.7	9.4	4.4	5.9	7.3	6.6	6.2	3.9	5.0	3.4	2.1
9	5.0	4.7	6.2	17	5.9	5.6	5.6	39	4.2	3.7	3.7	5.0
10	114	4.7	6.2	8.7	5.3	5.6	4.2	11	4.2	3.4	3.2	2.3
11	10	4.4	5.9	6.6	5.3	5.3	4.4	9.7	4.4	3.2	3.2	2.9
12	6.6	4.4	5.6	5.9	4.4	5.6	3.4	10	6.2	3.2	2.9	5.3
13	5.6	4.4	5.3	8.3	44	5.6	34	11	10	31	3.2	5.0
14	6.9	4.4	5.3	6.9	9.0	15	6.6	47	10	5.9	3.2	3.4
15	5.3	6.9	5.3	5.3	5.9	8.0	29	21	6.2	5.0	2.7	2.5
16	5.0	4.4	5.0	5.0	5.3	6.6	35	11	6.2	4.4	2.9	2.1
17	5.0	4.2	5.0	5.0	5.0	39	27	8.7	17	4.2	2.5	2.1
18	4.7	3.9	5.0	5.0	5.3	7.3	8.0	8.0	20	3.9	2.9	5.3
19	4.4	4.2	5.0	5.3	10	5.3	6.9	7.3	7.6	3.9	2.7	5.6
20	4.4	3.9	8.3	5.3	7.3	5.0	7.3	11	5.9	3.9	2.7	2.1
21	4.7	3.9	5.3	5.0	5.9	4.7	5.9	7.3	6.6	4.2	2.3	2.1
22	4.4	3.9	4.4	5.0	6.9	29	12	6.9	109	3.7	2.5	2.1
23	4.4	3.9	4.4	5.0	5.0	6.9	6.9	6.6	17	3.7	2.3	2.1
24	42	17	5.3	5.0	5.9	5.6	11	6.6	13	3.4	2.5	2.1
25	9.0	64	4.4	5.6	11	5.6	6.2	6.2	16	15	2.3	2.1
26	5.9	8.0	4.4	4.4	22	5.0	5.9	5.6	6.2	6.2	37	2.1
27	5.3	11	4.4	4.2	8.7	5.0	6.2	5.0	5.3	4.4	15	2.1
28	5.0	6.6	4.4	4.0	11	5.0	5.6	5.3	4.7	4.2	3.2	2.1
29	4.4	70	4.2	3.8	13	5.0	5.3	5.3	5.0	3.9	2.7	2.1
30	4.4	12	8.7	3.7	-----	5.0	5.3	5.0	12	3.9	2.3	5.0
31	5.0	-----	4.4	3.7	-----	5.6	-----	6.9	-----	4.7	2.3	-----
TOTAL	305.9	316.5	195.7	204.5	303.0	286.6	304.7	348.9	349.2	172.2	140.8	101.0
MEAN	9.87	10.6	6.31	6.60	10.4	9.25	10.2	11.3	11.6	5.55	4.54	3.37
MAX	114	70	29	23	52	39	35	47	109	31	37	17
MIN	2.1	3.9	4.2	3.7	3.7	4.7	3.4	5.0	3.9	3.2	2.3	2.1
CFSM	2.06	2.22	1.32	1.38	2.18	1.94	2.13	2.36	2.43	1.16	.95	.71
IN.	2.38	2.46	1.52	1.59	2.36	2.23	2.37	2.72	2.72	1.34	1.10	.79

CAL YR 1971 TOTAL 3,176.7 MEAN 8.70 MAX 182 MIN 1.6 CFSM 1.82 IN 24.72
WTR YR 1972 TOTAL 3,029.0 MEAN 8.28 MAX 114 MIN 2.1 CFSM 1.73 IN 23.57

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1030	6.41	572	6-22	1900	5.12	306
11-29	1800	5.42	364	8-26	2130	5.53	386

DELAWARE RIVER BASIN

01475540 Cobbs Creek below Indian Creek near Upper Darby, Pa.

LOCATION.--Lat 39°58'09", long 75°15'31", Philadelphia County, on left bank 1,000 ft downstream from Indian Creek and 1,200 upstream from unnamed tributary, Philadelphia.

DRAINAGE AREA.--9.65 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 73.69 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 13.4 cfs (18.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,470 cfs Oct. 10 (gage height, 8.52 ft), from rating curve extended as explained below; minimum, 5.0 cfs Sept. 26, 27, 29 (gage height, 2.20 ft).
Period of record: Maximum discharge, 2,920 cfs Sept. 11, 1971 (gage height, 11.12 ft, from floodmark), from rating curve extended above 200 cfs on basis of slope-area measurement of gage height, 7.46 ft; minimum, 0.4 cfs Sept. 24, 1965 (gage height, 2.31 ft).

REMARKS.--Records good. Records of water quality 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	11	13	21	13	11	20	14	13	12	14	9.0	6.1
2	27	29	19	41	12	18	14	12	38	12	8.5	30
3	12	35	18	14	77	55	14	77	14	11	8.2	6.5
4	11	15	18	18	30	19	25	32	12	10	7.5	6.1
5	11	14	17	30	16	18	11	13	11	18	7.7	5.9
6	11	14	20	15	15	16	11	13	9.5	11	7.7	6.1
7	10	25	51	14	15	15	14	12	9.5	10	7.2	5.9
8	11	14	22	13	14	17	12	26	8.7	14	6.5	5.7
9	12	13	17	35	13	15	11	47	8.7	11	6.5	13
10	224	13	16	21	13	15	13	17	9.0	10	6.8	5.4
11	22	13	16	15	13	15	15	14	8.5	9.5	6.3	5.7
12	17	14	15	14	14	15	13	13	8.5	9.5	6.1	8.7
13	15	14	15	19	65	14	53	13	16	79	6.5	9.0
14	16	13	15	16	19	31	14	75	11	12	6.3	5.9
15	15	18	16	14	15	18	47	31	8.7	10	6.1	3.4
16	14	13	16	14	14	15	70	15	22	9.5	5.9	5.7
17	14	13	15	13	14	55	38	16	34	9.2	5.9	5.4
18	14	13	16	13	14	19	14	13	50	9.5	6.3	9.2
19	13	12	15	13	25	17	13	17	13	10	5.9	11
20	13	12	22	14	18	15	14	20	10	11	5.9	5.7
21	13	12	15	13	15	15	12	13	22	10	5.4	6.3
22	13	12	13	13	18	47	24	13	172	9.2	5.7	5.7
23	13	12	13	13	14	19	16	12	29	9.0	5.4	5.4
24	60	35	15	13	16	17	19	12	18	8.5	5.7	5.4
25	20	85	13	14	25	16	13	12	31	68	5.9	5.7
26	15	18	13	12	38	15	12	12	12	13	88	5.4
27	14	26	13	12	19	15	12	12	10	9.5	35	5.7
28	13	16	14	11	23	15	12	12	9.5	9.2	8.5	5.7
29	13	109	14	11	24	15	12	12	10	8.7	6.8	5.7
30	13	29	24	10	-----	15	12	11	62	8.7	6.3	10
31	14	-----	14	10	-----	15	-----	12	-----	9.5	6.1	-----
TOTAL	694	674	541	491	619	626	574	622	689.6	453.5	315.6	221.4
MEAN	22.4	22.5	17.5	15.8	21.3	20.2	19.1	20.1	23.0	14.6	10.2	7.38
MAX	224	109	51	41	77	55	70	77	172	79	88	30
MIN	10	12	13	10	11	14	11	11	8.5	8.5	5.4	3.4
CFSM	2.32	2.33	1.81	1.64	2.21	2.09	1.98	2.08	2.38	1.51	1.06	.76
IN.	2.68	2.60	2.09	1.89	2.39	2.41	2.21	2.40	2.66	1.75	1.22	.85

CAL YR 1971 TOTAL 7,715.4 MEAN 21.1 MAX 478 MIN 5.5 CFSM 2.19 IN 29.74
WTR YR 1972 TOTAL 6,521.1 MEAN 17.8 MAX 224 MIN 3.4 CFSM 1.84 IN 25.14

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1115	8.52	1,470	6-30	1730	7.51	994
11-29	1830	7.44	966	7-13	0530	7.07	820
4-16	1915	6.78	718	7-25	1845	7.41	954
5- 3	1015	7.27	898	8-26	2145	7.89	1,160
6-22	1400	8.18	1,300				

DELAWARE RIVER BASIN

73

01475545 Naylor Creek at West Chester Pike near Philadelphia, Pa.

LOCATION.--Lat 39°58'13", long 75°18'11", Delaware County, 200 feet north of West Chester Pike, 0.4 mile west of intersection of West Chester Pike and U. S. Route 1, 8 miles west of city hall, Philadelphia.

DRAINAGE AREA.--1.10 sq mi.

PERIOD OF RECORD.--June to September 1972.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 215 ft (from topographic map).

EXTREMES.--Maximum discharge during period, 548 cfs June 30 (gage height, 2.63 ft), from rating curve extended above 40 cfs on basis of area-velocity study; minimum daily, 0.30 cfs Sept. 19-30.

REMARKS.--Records fair. Records of water quality 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									1.0	.89	.70	.76
2									3.0	.76	.70	.64
3									1.6	.76	.70	.54
4									1.0	.76	.70	.54
5									.90	.64	.70	.54
6									.90	.64	.64	.54
7									.90	.64	.64	.54
8									.80	.89	.64	.54
9									.80	.64	.64	.45
10									.80	.54	.64	.37
11									.80	.54	.64	.37
12									1.0	.54	.64	.37
13									2.0	7.6	.64	.37
14									1.1	.76	.64	.37
15									.89	.73	.64	.37
16									2.8	.70	.64	.37
17									1.7	.64	.54	.37
18									3.0	.64	.54	.37
19									2.3	.64	.54	.30
20									1.6	.64	.54	.30
21									5.4	.64	.54	.30
22									17	.64	.54	.30
23									3.9	.64	.54	.30
24									2.1	.64	.54	.30
25									4.2	2.5	.54	.30
26									1.4	1.0	3.9	.30
27									1.2	.80	1.0	.30
28									1.2	.70	.89	.30
29									1.4	.65	.89	.30
30									7.6	.70	1.0	.30
31		-----			-----		-----		-----	.75	1.0	-----
TOTAL									74.29	30.25	24.08	12.02
MEAN									2.48	.98	.78	.40
MAX									17	7.6	3.9	.76
MIN									.80	.54	.54	.30
CFSM									2.25	.89	.71	.36
IN.									2.51	1.02	.81	.41

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6-21	2245	1.88	258	7-13	0430	1.71	202
6-30	1645	2.63	548				

DELAWARE RIVER BASIN

01475550 Cobbs Creek at Darby, Pa.

LOCATION.--Lat 39°55'02", long 75°14'22", Delaware County, on right bank at Darby, 60 ft upstream from dam, 200 ft upstream from bridge on Woodland Avenue, and 1.1 miles upstream from mouth.

DRAINAGE AREA.--22.0 sq mi.

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

GAGE.--Water-stage recorder and masonry control. Datum of gage is 11.93 ft above mean sea level. Prior to Apr. 29, 1964, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--8 years, 25.9 cfs (15.99 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,010 cfs June 22 (gage height, 5.16 ft), from rating curve extended above 850 cfs; minimum, 6.4 cfs Aug. 22, 23 (gage height, 1.30 ft).

Period of record: Maximum discharge, 4,390 cfs Sept. 11, 1971 (gage height, 7.21 ft), from rating curve extended above 850 cfs; no flow on many days during 1964-66.

REMARKS.--Records good. Records of water quality 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	34	36	36	17	16	36	21	21	21	27	15	9.9
2	76	91	25	111	18	31	20	18	64	19	14	64
3	36	135	21	20	178	178	20	211	41	18	13	11
4	34	41	19	29	79	34	51	73	20	17	12	9.5
5	34	39	18	79	20	29	18	23	19	39	12	9.3
6	34	39	20	21	20	27	17	20	17	17	11	9.3
7	31	70	153	19	21	25	25	19	17	20	12	9.3
8	34	41	46	17	17	29	20	19	17	21	10	9.0
9	34	44	21	76	17	25	17	185	16	17	10	17
10	610	44	20	46	17	27	17	46	16	16	9.3	8.8
11	73	44	20	21	17	25	21	23	14	16	8.8	8.6
12	48	41	20	19	17	27	17	21	15	16	8.6	14
13	44	31	20	31	211	27	139	20	44	286	9.3	14
14	41	29	23	25	36	67	20	192	29	17	9.7	10
15	44	39	23	19	21	34	111	128	15	15	8.6	8.8
16	39	23	25	17	20	23	135	61	17	14	7.9	8.6
17	39	31	25	18	19	192	132	73	46	15	7.9	8.3
18	41	34	23	18	20	34	21	29	156	14	8.3	9.7
19	39	34	23	17	82	23	20	29	27	15	8.1	27
20	39	36	46	19	39	23	20	56	19	15	7.3	9.7
21	36	36	20	19	27	23	19	25	29	15	7.3	9.3
22	36	36	18	17	34	125	56	25	565	14	7.3	8.8
23	34	39	17	18	21	29	23	23	73	13	7.2	8.1
24	262	85	20	19	27	21	51	23	46	13	7.3	8.1
25	61	355	19	20	51	21	20	23	88	135	8.3	8.5
26	44	46	18	18	118	20	19	21	23	21	203	8.5
27	39	79	18	18	36	21	19	20	18	15	128	8.5
28	36	41	18	17	41	21	18	20	17	15	21	9.7
29	36	328	19	16	44	21	18	20	18	14	12	8.6
30	36	73	39	15	-----	23	18	20	153	14	11	21
31	41	-----	19	15	-----	21	-----	20	-----	15	11	-----
TOTAL	2,065	2,040	852	831	1,284	1,262	1,123	1,507	1,660	918	626.2	374.9
MEAN	66.6	68.0	27.5	26.8	44.3	40.7	37.4	48.6	55.3	29.6	20.2	12.5
MAX	610	355	153	111	211	192	139	211	565	286	203	64
MIN	31	23	17	15	16	20	17	18	14	13	7.2	8.1
CFSM	3.03	3.09	1.25	1.22	2.01	1.85	1.70	2.21	2.51	1.35	.92	.57
IN.	3.49	3.45	1.44	1.41	2.17	2.13	1.90	2.55	2.81	1.55	1.06	.63

CAL YR 1971 TOTAL 17,822.8 MEAN 48.8 MAX 933 MIN 6.8 CFSM 2.22 IN 30.14
 MTR YR 1972 TOTAL 14,543.1 MEAN 39.7 MAX 610 MIN 7.2 CFSM 1.80 IN 24.59

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1145	5.06	1,920	6-22	1545	5.16	2,010
11-29	1915	4.75	1,640	6-30	1830	4.42	1,380
5- 3	1500	4.40	1,360	7-13	0645	4.80	1,690
5-14	2245	4.25	1,240	8-26	2330	4.86	1,740

DELAWARE RIVER BASIN

75

01476030 Little Crum Creek at Michigan Avenue, Swarthmore, Pa.

LOCATION.--Lat 39°53'42", long 75°20'19", Delaware County, on left bridge abutment at Michigan Avenue, Ridley Township, Swarthmore.

DRAINAGE AREA.--1.15 sq mi.

PERIOD OF RECORD.--May 1971 to current year.

GAGE.--Water-stage recorder and concrete and rock control. Altitude of gage is 40 ft (from topographic map).

EXTREMES.--May to September 1971: Maximum discharge, 605 cfs Sept. 13 (gage height, 9.77 ft, from crest-stage indicator), from rating curve extended above 10 cfs; minimum, 0.04 cfs July 28 (gage height, 2.11 ft).

Water year 1972: Maximum discharge, 128 cfs Oct. 10 (gage height, 4.74 ft), from rating curve extended above 10 cfs; minimum, 0.02 cfs Sept. 16, 17 (gage height, 2.17 ft).

REMARKS.--Records fair except those for winter periods and those for periods of no gage-height record, which are poor. Records of water quality for the period November 1970 to September 1972 are published in Part 2 of this report.

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								.50	.55	.70	2.8	.45
2								.80	.53	.62	.97	.43
3								.55	3.0	.56	.52	.42
4								.50	.62	.56	.60	.43
5								.45	.60	.53	1.7	.42
6								1.2	.56	.56	.59	.41
7								.60	.53	.50	.56	.38
8								1.8	.51	.44	.53	.37
9								.80	.50	.41	.50	.37
10								.70	.47	.32	.44	.40
11								.60	.43	.53	.74	6.0
12								.50	.40	.47	.41	4.0
13								6.0	.41	.38	.38	15
14								2.0	.55	.41	.32	5.0
15								1.8	.45	.30	.29	1.0
16								2?	.46	.44	.32	.90
17								.80	.44	.47	.32	.84
18								.57	.44	.59	.32	.79
19								.52	.47	.70	.50	.84
20								.49	.50	.59	.32	.79
21								.99	5.1	.62	.24	3.5
22								.52	.70	.50	.29	.76
23								.52	.59	.50	.24	.76
24								.54	.53	.47	.24	.75
25								1.2	.56	.44	.24	.74
26								.62	.50	.41	.24	.80
27								.50	.41	.29	7.0	.79
28								.48	.38	.35	10	.69
29								.47	.38	2.7	1.0	.66
30								.91	.35	14	.70	.66
31		-----					-----	.67	-----	4.4	.52	-----
TOTAL								50.60	21.92	34.76	33.84	49.35
MEAN								1.63	.73	1.12	1.09	1.65
MAX								22	5.1	14	10	15
MIN								.45	.35	.29	.24	.37
CFSM								1.42	.63	.97	.95	1.43
IN.								1.64	.71	1.12	1.09	1.60

PEAK DISCHARGE (BASE, 100 CFS).--Sept. 13 (Unk.) 605 cfs (9.77 ft) *.

NOTE.--No gage-height record Aug. 27 to Sept. 14.

* From crest-stage indicator.

DELAWARE RIVER BASIN

01476030 Little Crum Creek at Michigan Avenue, Swarthmore, Pa.--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	.66	1.5	1.9	.50	.54	.81	1.0	1.0	.81	1.1	.45	.50
2	1.2	2.7	1.2	3.0	.54	.66	1.1	1.0	1.6	.93	.43	2.0
3	.66	4.9	1.0	.80	10	2.6	1.1	4.7	1.0	.93	.41	1.1
4	.65	1.5	.90	.90	1.1	.76	1.4	2.1	.93	.76	.39	1.0
5	.66	1.4	.80	2.0	.66	.71	.87	1.1	.87	1.1	.38	.90
6	.62	1.4	.90	.80	.62	.66	.87	1.1	.81	.76	.37	.70
7	.61	2.0	2.5	.65	.58	.71	1.1	1.0	.76	.71	.36	.50
8	.61	1.5	1.3	.58	.58	.76	1.0	2.8	.76	.81	.34	.40
9	.60	1.6	1.0	2.1	.58	.76	.93	2.8	.81	.71	.32	.45
10	26	1.5	.80	.95	.58	.76	1.0	1.5	.76	.62	.30	.40
11	.87	1.2	.76	.86	.58	.71	1.1	1.4	.66	.45	.32	.35
12	.64	1.2	.72	.70	.54	.81	1.1	1.4	.66	.36	.34	.80
13	.62	1.2	.70	.81	4.1	.81	3.7	1.3	1.3	8.6	.36	.54
14	.65	1.2	.68	.71	.87	3.1	1.1	10	1.5	1.4	.34	.24
15	.61	1.3	.68	.62	.66	1.2	5.6	3.1	1.1	1.2	.30	.27
16	.60	1.3	.66	.58	.62	1.2	3.1	1.9	1.1	.90	.28	.04
17	.59	1.4	.64	.58	.58	6.1	5.3	3.7	1.2	.84	.29	.04
18	.61	1.4	.64	.58	.62	1.4	1.4	1.7	5.8	.78	.30	.21
19	.62	1.5	.64	.54	1.4	1.2	1.2	1.5	1.1	.70	.29	.58
20	.61	1.5	1.0	.58	1.0	1.1	1.1	1.8	.93	.64	.28	.24
21	.60	1.5	.70	.58	.93	1.1	1.1	1.4	3.7	.64	.27	.39
22	.59	1.9	.60	.54	.87	3.7	1.9	1.3	28	.58	.26	.46
23	.61	2.2	.60	.54	.76	1.2	1.2	1.2	3.5	.54	.25	.42
24	4.6	5.1	.64	.58	.76	1.1	1.9	1.2	1.7	.50	.24	.42
25	1.6	18	.60	.66	1.1	1.1	1.2	1.2	2.6	.80	.24	.50
26	1.6	2.3	.56	.66	2.6	1.1	1.1	1.2	1.3	.56	2.0	.50
27	1.5	2.1	.56	.62	.93	1.1	1.1	1.2	1.1	.47	2.4	.36
28	1.5	1.9	.56	.54	1.1	1.0	1.1	1.1	1.1	.44	.71	.39
29	1.5	5.0	.53	.54	1.1	1.1	1.0	1.1	1.9	.42	.87	.30
30	1.5	3.5	1.0	.54	-----	1.0	1.1	1.0	3.7	.45	.70	.87
31	1.6	-----	.70	.54	-----	1.0	-----	1.0	-----	.47	.60	-----
TOTAL	55.89	76.7	26.47	25.18	36.90	41.32	47.77	59.8	73.06	30.17	15.39	15.87
MEAN	1.80	2.56	.85	.81	1.27	1.33	1.59	1.93	2.44	.97	.50	.53
MAX	26	18	2.5	3.0	10	6.1	5.6	10	28	8.6	2.4	2.0
MIN	.59	1.2	.53	.50	.54	.66	.87	1.0	.66	.36	.24	.04
CFSM	1.57	2.23	.74	.70	1.10	1.16	1.38	1.68	2.12	.84	.43	.46
IN.	1.81	2.48	.86	.81	1.19	1.34	1.55	1.93	2.36	.98	.50	.51

CAL YR 1971 TOTAL 159.06 MEAN .44 MAX 26 MIN 0 CFSM .38 IN 5.15
WTR YR 1972 TOTAL 504.52 MEAN 1.38 MAX 28 MIN .04 CFSM 1.20 IN 16.32

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1040	4.74	128	6-22	1230	4.34	105
11-29	1800*	4.42	109	6-26	1800*	4.48	113

NOTE.--No gage-height record
July 16 to Sept. 13.

* About.

† From crest-stage indicator.

DELAWARE RIVER BASIN

77

01477000 Chester Creek near Chester, Pa.

LOCATION.--Lat 39°52'08", long 75°24'31", Delaware County, on right bank 30 ft downstream from Dutton Mill Bridge and 3 miles northwest of Chester.

DRAINAGE AREA.--61.1 sq mi.

PERIOD OF RECORD.--August 1931 to current year. Monthly discharges only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 23.41 ft above mean sea level (Penn Central Railroad benchmark).

Prior to June 27, 1966 water-stage recorder at site 50 ft upstream and June 28, 1966 to Oct. 4, 1967, nonrecording gage, 150 ft upstream, all at same datum.

AVERAGE DISCHARGE.--41 years, 81.2 cfs (18.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,180 cfs June 22 (gage height, 13.28 ft), from rating curve extended as explained below; minimum, 32 cfs Aug. 24, 25 (gage height, 3.08 ft).

Period of record: Maximum discharge, 21,000 cfs (revised) Sept. 13, 1971 (gage height, 24.59 ft, from floodmark), from rating curve extended above 2,400 cfs on basis of contracted-opening measurement at gage height, 13.57 ft and slope-area measurement of peak flow; minimum, 0.3 cfs Aug. 7, 1934 (gage height, 0.28 ft); minimum daily, 6.5 cfs Sept. 25, 1941.

REMARKS.--Records fair.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for high-water period in water year 1971, superseding those published in WRD Penna. 1971, are given herewith.

		Date		Discharge		Per square mile	Runoff in inches
		Sept. 13	Sept. 14	6,510	4,540		
Month	CFS-days	Maximum	Minimum	Mean			
September 1971	16,288	6,510	29	543	8.89	9.91	
WTR YR 1971	50,762	6,510	15	139	2.27	30.83	

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	100	117	139	90	90	235	119	104	109	104	70	40
2	144	112	125	160	89	225	119	102	79	81	65	96
3	133	257	115	119	198	275	115	185	81	75	63	57
4	110	155	115	111	320	176	125	201	70	71	62	44
5	96	105	105	156	100	156	123	137	66	75	59	43
6	91	112	110	121	92	141	115	117	63	75	57	42
7	76	139	217	106	78	135	111	109	61	75	59	40
8	72	117	233	100	66	133	115	106	56	89	59	38
9	80	105	141	110	60	121	109	165	54	94	55	60
10	1,100	102	123	150	62	119	108	185	49	89	51	45
11	359	100	120	117	64	119	108	127	46	83	51	33
12	210	98	115	109	66	125	104	113	42	79	49	35
13	179	98	102	106	326	123	158	108	90	308	52	38
14	182	91	100	108	167	141	150	123	117	106	54	42
15	173	93	105	96	106	148	201	222	98	76	47	45
16	155	93	105	90	94	125	210	150	89	73	46	43
17	144	89	96	88	83	343	320	127	100	68	44	42
18	136	86	91	86	81	198	160	117	119	62	49	42
19	133	89	96	90	109	158	139	111	119	59	46	100
20	130	93	112	93	104	145	131	121	106	55	43	50
21	128	89	105	88	94	143	123	115	143	54	38	45
22	125	89	86	80	90	205	135	109	2,150	51	35	43
23	125	84	78	80	83	196	145	100	377	46	35	41
24	271	107	86	75	85	156	152	96	125	62	34	39
25	210	746	100	75	90	143	131	90	137	73	34	42
26	167	207	105	65	154	137	117	87	108	84	34	42
27	150	141	84	61	131	133	111	85	106	71	83	40
28	133	139	86	68	160	129	108	83	99	71	60	42
29	125	424	86	66	225	127	106	83	112	68	47	42
30	130	407	100	66	-----	125	102	79	175	67	41	50
31	133	-----	95	65	-----	125	-----	87	-----	70	38	-----
TOTAL	5,500	4,684	3,476	2,995	3,467	4,960	4,070	3,744	5,146	2,514	1,560	1,401
MEAN	177	156	112	96.6	120	160	136	121	172	81.1	50.3	46.7
MAX	1,100	746	233	160	326	343	320	222	2,150	308	83	100
MIN	72	84	78	61	60	119	102	79	42	46	34	33
CFSM	2.90	2.55	1.83	1.58	1.96	2.62	2.23	1.98	2.82	1.33	.82	.76
IN.	3.35	2.85	2.12	1.82	2.11	3.02	2.48	2.28	3.13	1.53	.95	.85

CAL YR 1971 TOTAL 56,560 MEAN 155 MAX 6,510 MIN 23 CFSM 2.54 IN 34.44
WTR YR 1972 TOTAL 43,517 MEAN 119 MAX 2,150 MIN 33 CFSM 1.95 IN 26.49

PEAK DISCHARGE (BASE, 1,400 CFS).--Oct. 10 (2200) 2,140 cfs (7.98 ft); June 22 (1500) 6,180 cfs (13.28 ft).

DELAWARE RIVER BASIN

01480000 Red Clay Creek at Wooddale, Del.

LOCATION.--Lat 39°45'52", long 75°38'08", New Castle County, on right bank 12 ft upstream from bridge on State Highway 48, 0.3 mile south of Wooddale, 2.3 miles north of Marshallton, and 4.9 miles upstream from mouth.

DRAINAGE AREA.--47.0 sq mi.

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

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

AVERAGE DISCHARGE.--29 years, 61.7 cfs (17.83 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,120 cfs June 22 (gage height, 8.96 ft); minimum, 4.9 cfs Aug. 22, Sept. 10, result of regulation; minimum daily, 23 cfs Sept. 24.

Period of record: Maximum discharge, 4,780 cfs Sept. 12, 1960 (gage height, 9.93 ft); minimum, 2.9 cfs Sept. 4, 1966; minimum daily, 4.5 cfs Sept. 4, 1966.

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by mills above station. Records of water quality for the current year are published in Part 2 of the Maryland-Delaware Annual Report.

REVISIONS (WATER YEARS).--WSP 1141: 1948. WSP 1272: 1951(M). WSP 1432: 1944(M), 1945, 1946(M), 1948, 1949(M). WRD Penna. 1969: 1960(M), 1964(M), 1966-67(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	69	81	120	68	60	191	83	95	78	133	55	29
2	86	92	102	146	64	170	82	92	61	95	51	95
3	79	204	94	100	161	296	78	137	58	86	48	46
4	69	116	91	87	307	141	98	179	57	84	49	35
5	68	95	85	139	89	127	84	107	64	96	48	32
6	66	86	88	93	78	107	79	95	57	92	44	31
7	62	110	164	80	78	106	79	92	57	81	44	30
8	60	86	154	75	67	104	84	86	52	76	52	29
9	60	81	110	95	63	96	74	156	50	79	42	29
10	1,170	79	102	155	62	97	72	166	48	72	39	26
11	225	79	95	102	62	93	76	101	45	67	38	26
12	122	76	88	88	61	97	74	88	45	64	38	28
13	105	76	86	86	662	94	145	82	59	481	40	31
14	98	72	83	89	194	126	104	105	78	130	40	31
15	92	79	84	79	114	124	275	189	57	89	36	31
16	86	78	84	62	98	101	227	113	51	76	35	28
17	83	73	80	58	86	391	429	93	66	81	36	26
18	81	72	79	64	85	152	143	85	64	72	39	26
19	79	72	75	72	182	119	119	81	80	67	36	28
20	76	72	97	72	127	106	116	92	60	64	33	26
21	76	69	87	74	112	102	110	84	92	62	34	26
22	75	65	78	72	107	198	153	78	1,800	60	29	26
23	74	61	74	79	93	145	147	73	368	57	31	24
24	256	72	79	77	93	109	166	69	159	55	30	23
25	162	436	76	76	100	99	123	66	172	55	30	25
26	111	127	74	65	200	93	110	64	118	53	29	26
27	93	105	73	63	145	88	101	62	100	53	91	25
28	87	96	73	69	150	86	98	62	89	53	50	26
29	82	354	69	65	187	85	95	60	111	51	36	24
30	79	226	79	65	-----	85	92	61	207	53	32	29
31	79	-----	78	62	-----	85	-----	78	-----	55	30	-----
TOTAL	4,010	3,390	2,801	2,577	3,887	4,013	3,716	2,991	4,403	2,692	1,265	917
MEAN	129	113	90.4	83.1	134	129	124	96.5	147	86.8	40.8	30.6
MAX	1,170	436	164	155	662	391	429	189	1,800	481	91	95
MIN	60	61	69	58	60	85	72	60	45	51	29	23
CFSM	2.74	2.40	1.92	1.77	2.85	2.74	2.64	2.05	3.13	1.85	.87	.65
IN.	3.17	2.68	2.22	2.04	3.08	3.18	2.94	2.37	3.48	2.13	1.00	.73

CAL YR 1971 TOTAL 35,754 MEAN 98.0 MAX 1,450 MIN 16 CFSM 2.09 IN 28.30
WTR YR 1972 TOTAL 36,662 MEAN 100 MAX 1,800 MIN 23 CFSM 2.13 IN 29.02

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1530	7.24	2,920	6-22	1730	8.96	4,120
11-29	2015	5.09	1,360	7-13	1430	5.32	1,520
2-13	1530	5.66	1,760				

DELAWARE RIVER BASIN

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01480300 West Branch Brandywine Creek near Honey Brook, Pa.

LOCATION.--Lat 40°04'22", long 75°51'40", Chester County, at right upstream end of bridge on Legislative Route 15185, at Birdell, 0.4 mile downstream from Two Log Run, and 3.0 miles southeast of Honey Brook.

DRAINAGE AREA.--18.7 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 591.20 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 21.7 cfs (15.76 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,140 cfs June 22 (gage height, 11.41 ft) from rating curve extended as explained below; minimum, 5.0 cfs Sept. 29; minimum gage height, 1.22 ft Jan. 31.

Period of record: Maximum discharge, 8,140 cfs June 22, 1972 (gage height, 11.41 ft), from rating curve extended above 1,900 cfs on basis of slope-area measurement of peak flow; minimum, 1.7 cfs Aug. 15, 16, 17, 18, 19, 1963 (gage height, 1.09 ft).

REMARKS.--Records good. Records of water quality 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	15	21	32	20	16	252	21	17	173	37	16	7.3
2	19	32	26	62	17	324	21	17	30	32	14	8.8
3	19	41	24	36	32	186	20	49	32	31	14	8.4
4	16	25	24	26	103	42	23	99	41	30	15	7.6
5	16	20	22	51	26	41	21	32	63	36	13	7.3
6	16	18	26	28	19	29	20	25	25	33	13	7.3
7	15	24	76	23	16	30	20	23	23	30	15	6.9
8	14	20	79	22	14	30	21	22	20	30	16	6.5
9	14	18	34	26	13	24	20	66	20	30	13	6.9
10	156	18	30	62	14	24	19	66	19	28	13	6.5
11	41	18	27	36	15	24	19	30	18	27	12	6.5
12	22	17	24	29	16	26	18	25	18	26	13	7.6
13	19	17	23	27	426	27	55	23	21	111	17	8.0
14	19	16	22	31	119	35	50	25	25	26	13	7.6
15	18	17	23	24	39	42	60	30	21	21	11	7.3
16	17	17	24	19	34	29	55	26	33	22	11	6.5
17	16	16	22	17	27	239	80	23	27	43	12	6.1
18	16	16	21	19	26	45	27	60	21	41	12	6.1
19	16	16	19	21	30	29	22	24	24	30	11	6.9
20	15	16	24	22	30	25	21	27	21	22	11	6.5
21	16	16	23	23	26	25	22	25	41	20	10	6.5
22	16	15	20	22	24	75	33	22	2,520	19	10	6.5
23	16	14	19	25	22	49	34	20	374	17	9.2	6.1
24	60	14	21	26	21	28	54	19	73	17	9.2	6.1
25	38	315	21	26	25	25	26	19	99	16	9.2	6.5
26	26	66	21	21	42	24	21	18	49	17	9.2	6.5
27	22	40	20	19	40	22	19	17	38	16	16	6.1
28	20	36	20	19	37	22	18	17	36	16	9.2	6.1
29	19	150	19	19	103	21	17	17	54	15	8.4	5.7
30	18	195	26	18	-----	23	16	17	59	15	8.0	11
31	18	-----	25	17	-----	22	-----	278	-----	16	7.3	-----
TOTAL	768	1,264	837	836	1,372	1,839	873	1,178	4,018	870	370.7	209.7
MEAN	24.8	42.1	27.0	27.0	47.3	59.3	29.1	38.0	134	28.1	12.0	6.99
MAX	156	315	79	62	426	324	80	278	2,520	111	17	11
MIN	14	14	19	17	13	21	16	17	18	15	7.3	5.7
CFSM	1.33	2.25	1.44	1.44	2.53	3.17	1.56	2.03	7.17	1.50	.64	.37
IN.	1.53	2.51	1.67	1.66	2.73	3.66	1.74	2.34	7.99	1.73	.74	.42
CAL YR 1971	TOTAL 10,615.4	MEAN 29.1	MAX 691	MIN 6.5	CFSM 1.56	IN 21.12						
WTR YR 1972	TOTAL 14,435.4	MEAN 39.4	MAX 2,520	MIN 5.7	CFSM 2.11	IN 28.72						

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	2345	6.16	684	5-31	2315	5.95	595
2-13	1745	7.40	1,300	6-22	1430	11.41	8,140

DELAWARE RIVER BASIN

01480500 West Branch Brandywine Creek at Coatesville, Pa.

LOCATION.--Lat 39°59'08", long 75°49'40", Chester County, on right bank at city limits of Coatesville, 1,200 ft upstream from bridge on old Lincoln Highway, and 0.6 mile downstream from Rock Run.

DRAINAGE AREA.--45.8 sq mi.

PERIOD OF RECORD.--October 1943 to December 1951, January 1970 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 305 ft (from topographic map). Sept. 10, 1943 to Dec. 31, 1951, nonrecording gage at site 1,100 ft downstream at different datum.

AVERAGE DISCHARGE.--10 years (1943-51, 1970-72), 70.6 cfs (20.93 inches per year), adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 7,770 cfs June 22 (gage height, 9.92 ft), from rating curve extended as explained below; minimum, 10 cfs Sept. 26 (gage height, 3.46 ft).

Period of record: Maximum discharge 7,770 cfs June 22, 1972 (gage height, 9.92 ft), from rating curve extended above 2,200 cfs on basis of slope-area measurement of peak flow; minimum observed, 4.6 cfs Sept. 10, 1944 (gage height, 0.70 ft, site and datum then in use); minimum daily, 9.6 cfs Sept. 12, 1949.

Flood of Aug. 9, 1942 reached a stage of 12.3 ft, site and datum then in use (discharge, 8,600 cfs, by slope-area measurement).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversion above station from Rock Run Reservoir (capacity, 320,000,000 gallons), 2.6 miles upstream, for municipal supply of city of Coatesville.

CORRECTIONS.--The figure of net diversion for September 1971, used in adjusting the previously published monthly mean discharge, should be 3.69 cfs instead of 0.00 cfs, as shown.

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	70	90	51	46	338	72	64	286	107	47	24
2	54	80	75	134	48	472	70	64	84	89	45	29
3	57	110	70	100	76	290	67	132	84	84	44	29
4	47	80	66	69	216	134	78	214	81	78	46	24
5	47	60	62	117	61	124	78	110	152	92	43	23
6	44	55	66	73	54	97	70	78	67	92	42	21
7	44	75	150	58	54	99	67	70	61	78	50	21
8	42	60	180	56	45	92	72	72	54	78	45	20
9	42	55	90	70	45	79	67	155	52	78	42	20
10	332	52	80	123	45	79	62	180	49	70	38	18
11	162	52	74	90	44	77	64	92	47	62	35	18
12	64	50	68	70	44	83	62	75	46	61	36	20
13	54	50	66	75	360	80	166	67	52	234	43	25
14	52	48	64	80	500	100	152	75	70	107	42	22
15	49	49	66	60	125	139	187	101	57	70	37	20
16	47	50	68	45	101	90	169	75	59	64	33	19
17	47	49	63	48	79	400	266	67	84	110	35	18
18	49	46	60	51	71	150	110	129	56	86	37	18
19	49	47	56	54	90	100	89	72	92	104	34	20
20	49	49	60	56	88	90	84	78	61	62	31	18
21	49	47	58	58	74	85	86	72	110	59	29	17
22	49	45	54	60	70	140	107	64	3,400	54	28	18
23	49	44	51	62	64	160	125	57	854	52	28	17
24	148	50	55	61	58	91	148	56	194	47	31	16
25	125	450	54	61	63	84	98	52	242	49	30	18
26	75	200	53	52	92	81	81	50	152	50	30	18
27	65	100	52	47	122	78	72	50	119	47	45	17
28	60	95	52	51	99	75	70	49	101	47	35	17
29	56	200	50	49	163	72	67	49	155	47	27	16
30	56	350	58	51	-----	75	64	49	169	46	25	23
31	60	-----	63	47	-----	72	-----	290	-----	47	23	-----
TOTAL	2,169	2,768	2,174	2,079	2,997	4,126	2,970	2,808	7,090	2,351	1,136	604
MEAN	70.0	92.3	70.1	67.1	103	133	99.0	90.6	236	75.8	36.6	20.1
MAX	332	450	180	134	500	472	266	290	3,400	234	50	29
MIN	42	44	50	45	44	72	62	49	46	46	23	16
(X)	3.68	3.68	3.69	3.69	3.68	3.69	3.69	3.69	3.70	3.64	3.73	3.72
MEAN#	73.7	96.0	73.8	70.8	107	137	103	94.3	240	79.4	40.3	23.8
CFSM#	1.61	2.10	1.61	1.55	2.34	2.99	2.25	2.06	5.24	1.73	.88	.52
IN.#	1.86	2.34	1.86	1.79	2.52	3.45	2.51	2.38	5.85	1.99	1.02	.58
CAL YR 1971	TOTAL 28,469	MEAN 78.0	MAX 1,180	MIN 12	MEAN# 81.7	CFSM# 1.78	IN.# 24.29					
WTR YR 1972	TOTAL 33,272	MEAN 90.9	MAX 3,400	MIN 16	MEAN# 94.6	CFSM# 2.07	IN.# 28.15					

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	1045	5.56	732	6-22	1815	9.92	7,770
2-13	1930	6.20	1,270				

NOTE.--No gage-height record

Nov. 19 to Dec. 21.

Diversion for municipal supply and change in contents in Rock Run Reservoir, equivalent in cubic feet per second.

Adjusted for diversion and change in reservoir contents.

01480617 West Branch Brandywine Creek at Modena, Pa.

LOCATION.--Lat 39°57'42", long 75°48'06", Chester County, on left bank at bridge on Legislative Route 15068 at Modena and 300 ft upstream from Dennis Run.

DRAINAGE AREA.--55.0 sq mi.

PERIOD OF RECORD.--January 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 265 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 7,940 cfs June 22 (gage height, 11.48 ft, from floodmark), from rating curve extended above 920 cfs as explained below; minimum, 7.0 cfs Sept. 16 (gage height, 2.39 ft).
Period of record: Maximum discharge, 7,940 cfs June 22, 1972 (gage height, 11.48, from floodmarks), from rating curve extended above 920 cfs on basis of slope-area measurement of peak flow; minimum, 4.1 cfs Oct. 14, 1970 (gage height, 2.27 ft).

REMARKS.--Records good. Flow regulated by Rock Run Reservoir (capacity 320,000,000 gallons), 5.6 miles upstream. Records of water quality for the current year are published in Part 2 of this report.

CORRECTION.--The date of peak discharge published in WRD Penna. 1971 as 2,450 cfs on Aug. 5, 1971 has been corrected to 2,450 cfs on Aug. 28, 1971.

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	60	90	126	68	56	375	83	83	333	148	64	33
2	70	102	100	166	56	524	81	88	113	120	54	45
3	70	143	92	140	113	357	76	172	105	113	54	39
4	65	105	90	110	249	175	90	266	113	108	60	35
5	60	76	83	143	76	154	83	143	187	123	54	33
6	58	74	88	102	66	126	76	105	92	120	50	32
7	56	97	194	76	68	120	79	97	79	105	50	32
8	54	81	226	72	58	118	79	105	70	103	55	31
9	52	72	126	83	46	100	74	213	68	103	48	30
10	500	70	107	151	50	100	70	233	64	96	45	29
11	200	70	100	107	52	92	72	126	60	86	44	26
12	120	68	90	83	52	97	70	105	66	78	44	28
13	90	66	88	92	588	97	197	97	79	298	52	29
14	80	64	86	97	410	134	172	107	97	140	50	28
15	79	66	86	76	151	151	216	140	68	92	45	27
16	74	68	88	54	123	120	207	107	81	86	39	26
17	72	64	81	58	102	444	322	95	110	133	42	25
18	72	62	79	62	97	184	140	166	76	110	45	26
19	72	62	72	66	123	123	113	102	115	128	44	30
20	66	66	83	68	105	107	107	107	81	84	39	26
21	68	64	83	70	90	105	105	100	157	78	37	25
22	68	58	72	68	84	166	137	92	4,010	71	36	27
23	68	56	68	74	78	191	157	81	1,230	69	36	24
24	220	66	74	74	72	115	187	74	326	62	36	25
25	169	500	72	74	90	100	126	72	342	69	35	27
26	105	253	70	60	160	97	102	68	211	62	37	29
27	86	118	70	56	145	90	95	68	168	62	55	26
28	79	113	70	60	137	90	90	66	145	62	44	28
29	72	266	64	60	213	83	90	66	208	60	39	27
30	72	371	79	60	-----	88	88	70	220	59	33	36
31	76	-----	86	56	-----	86	-----	347	-----	62	35	-----
TOTAL	3,053	3,431	2,893	2,586	3,710	4,909	3,584	3,761	9,074	3,090	1,401	884
MEAN	98.5	114	93.3	83.4	128	158	119	121	302	99.7	45.2	29.5
MAX	500	500	226	166	588	524	322	347	4,010	298	64	45
MIN	52	56	64	54	46	83	70	66	60	59	33	24
(σ)	0	0	0	0	0	0	0	0	0	0	0	0
MEAN \neq	98.5	114	93.3	83.4	128	158	119	121	302	99.7	45.2	29.5
CFSM \neq	1.79	2.07	1.70	1.52	2.33	2.87	2.16	2.20	5.89	1.81	.82	.54
IN. \neq	2.06	2.31	1.96	1.75	2.51	3.31	2.41	2.54	6.12	2.09	.94	.60

CAL YR 1971	TOTAL 39,181	MEAN 107	MAX 1,440	MIN 21	MEAN \neq 107	CFSM \neq 1.95	IN. \neq 26.50
WTR YR 1972	TOTAL 42,376	MEAN 116	MAX 4,010	MIN 24	MEAN \neq 116	CFSM \neq 2.11	IN. \neq 28.60

PEAK DISCHARGE (BASE, 840 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-13	1500	6.25	1,380	7-13	1300	5.05	840
6-22	1900	11.48*	7,940				

* From floodmarks.
 \neq Change in contents in Rock Run Reservoir, equivalent in cubic feet per second, furnished by city of Coatesville.
 \neq Adjusted for change in reservoir contents.

DELAWARE RIVER BASIN

01480675 Marsh Creek near Glenmoore, Pa.

LOCATION.--Lat 40°05'52", long 75°44'31", Chester County, on left bank, 200 ft north of Pennsylvania Turnpike, 1.2 miles downstream from Lyons Run, 1.8 miles upstream from Balck Horse Creek, and 3 miles northeast of Glenmoore.

DRAINAGE AREA.--8.57 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 450 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 11.6 cfs (18.38 inches per year).

EXTREMES.--Current year: Maximum discharge, 946 cfs June 22 (gage height, 4.68 ft); minimum, 2.1 cfs Sept. 23, 24 (gage height, 1.29 ft).

Period of record: Maximum discharge, 946 cfs June 22, 1972 (gage height, 4.68 ft); minimum, 0.3 cfs Aug. 31, 1966 (gage height, 0.98 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	7.3	12	29	11	7.7	44	13	11	65	26	7.7	2.8
2	8.2	16	15	23	8.4	91	12	12	19	19	7.1	4.5
3	9.0	28	13	30	15	82	12	24	12	17	6.9	4.5
4	8.2	23	13	16	38	36	13	38	9.9	15	13	3.8
5	7.6	14	12	23	17	26	13	23	11	18	8.4	3.3
6	7.0	11	13	18	9.9	20	12	13	9.5	20	6.4	3.2
7	6.2	18	29	12	8.0	20	11	14	8.7	16	6.4	3.0
8	5.6	16	39	10	7.0	20	12	30	7.4	16	6.4	3.0
9	5.6	12	24	13	6.2	16	12	43	6.6	19	5.7	3.0
10	55	11	17	32	6.6	16	11	50	6.1	15	5.1	2.7
11	73	10	16	22	7.1	14	10	23	5.7	13	4.6	2.5
12	21	9.8	13	16	7.1	15	10	15	5.7	11	5.5	3.2
13	11	9.4	13	16	55	16	23	13	6.9	29	4.8	3.5
14	9.0	9.0	12	16	86	22	29	14	9.9	33	4.8	3.2
15	8.2	9.4	13	12	24	33	27	24	8.7	15	4.3	2.7
16	7.6	9.4	13	8.4	19	21	35	21	11	12	4.0	2.5
17	7.3	9.0	12	6.6	14	75	52	15	19	15	3.9	2.4
18	7.0	9.0	12	7.7	13	44	24	13	12	20	4.3	2.4
19	6.5	9.4	10	9.9	12	21	16	12	14	18	4.3	2.5
20	6.5	9.8	12	11	11	17	15	16	14	13	3.9	2.4
21	6.5	9.8	13	12	11	16	16	16	18	11	3.6	2.4
22	6.5	9.0	11	12	10	24	19	13	444	9.5	3.4	2.5
23	6.7	7.3	9.5	13	9.5	32	26	11	259	8.4	3.6	2.3
24	25	8.7	11	15	9.0	19	29	9.5	71	7.4	3.4	2.2
25	44	90	12	14	11	15	20	8.7	50	8.4	3.3	2.3
26	25	90	11	11	22	15	14	8.0	41	12	3.8	2.4
27	15	24	11	8.7	23	13	13	7.7	29	9.9	4.8	2.3
28	11	18	10	8.7	24	13	12	7.7	23	8.4	4.2	2.2
29	9.8	29	9.9	8.7	30	13	12	7.4	29	7.1	3.6	2.2
30	9.4	69	12	9.1	-----	13	11	7.4	41	6.9	3.3	3.0
31	10	-----	16	8.7	-----	13	-----	44	-----	7.1	3.1	-----
TOTAL	445.7	610.0	456.4	434.5	521.5	835	534	564.4	1,267.1	456.1	157.6	84.9
MEAN	14.4	20.3	14.7	14.0	18.0	26.9	17.8	18.2	42.2	14.7	5.08	2.83
MAX	73	90	39	32	86	91	52	50	444	33	13	4.5
MIN	5.6	7.3	9.5	6.6	6.2	13	10	7.4	5.7	6.9	3.1	2.2
CFSM	1.68	2.37	1.72	1.63	2.10	3.14	2.08	2.12	4.92	1.72	.59	.33
IN.	1.93	2.65	1.98	1.89	2.26	3.62	2.32	2.45	5.50	1.98	.68	.37

CAL YR 1971 TOTAL 6,129.1 MEAN 16.8 MAX 276 MIN 1.5 CFSM 1.96 IN 26.60

WTR YR 1972 TOTAL 6,367.2 MEAN 17.4 MAX 444 MIN 2.2 CFSM 2.03 IN 27.64

PEAK DISCHARGE (BASE, 130 CFS).--Feb. 14 (0100) 135 cfs (2.44 ft); June 22 (1800) 946 cfs (4.68 ft).

DELAWARE RIVER BASIN

83

01480700 East Branch Brandywine Creek near Downingtown, Pa.

LOCATION.--Lat 40°02'05", long 75°42'32", Chester County, on right bank 20 ft downstream from bridge on Dowlin Forge Road, 200 ft east of State Highway 282, 0.4 mile downstream from Shamona Creek, 1.5 miles downstream from Marsh Creek, 2.0 miles upstream from Beaver Creek, and 2.2 miles north of Downingtown.

DRAINAGE AREA.--60.6 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1948-57. October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 270 ft (from topographic map). Prior to July 30, 1966 non-recording gage at same site and datum.

AVERAGE DISCHARGE.--7 years, 79.7 cfs (17.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,070 cfs June 22 (gage height, 12.06 ft, from floodmark), from rating curve extended above 5,000 cfs; minimum, 21 cfs Sept. 25 (gage height, 2.37 ft).

Period of record: Maximum discharge, 8,070 cfs June 22, 1972 (gage height, 12.06 ft, from floodmark), from rating curve extended above 5,000 cfs; minimum, 7.2 cfs Sept. 2, 3, 11, 12, 13, 1966 (gage height, 1.80 ft).

REMARKS.--Records good. Records of water quality 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	71	101	155	81	64	410	95	97	274	236	66	31
2	85	114	117	183	73	752	93	97	131	168	60	43
3	85	177	103	149	110	418	89	177	105	160	57	40
4	76	126	101	108	219	216	105	261	85	152	76	33
5	73	93	97	174	150	186	99	152	99	164	62	32
6	69	95	103	114	100	152	89	117	81	160	55	31
7	66	114	207	91	70	149	89	103	78	140	55	31
8	64	97	228	85	60	144	93	139	68	128	59	30
9	63	83	142	97	55	121	91	246	63	140	51	29
10	647	81	121	201	60	119	83	252	60	120	48	28
11	252	80	112	136	65	114	83	144	57	104	45	29
12	142	76	103	112	70	124	80	114	56	101	45	35
13	108	74	99	117	620	126	210	103	62	325	48	40
14	101	69	95	121	334	180	172	108	80	212	48	35
15	93	71	99	93	163	201	282	134	68	132	45	32
16	87	69	97	70	134	149	231	126	80	132	41	29
17	85	66	95	78	114	620	383	108	126	148	42	27
18	89	64	91	74	108	234	180	103	83	178	43	28
19	85	68	85	76	117	155	144	97	110	164	42	30
20	83	71	99	77	144	131	134	110	89	107	40	29
21	83	71	97	78	110	124	134	108	103	91	37	28
22	85	68	89	83	100	177	166	95	3,220	83	36	27
23	85	62	81	88	90	186	183	85	1,390	76	36	27
24	222	63	85	95	85	134	213	78	660	71	34	25
25	231	677	87	93	100	114	152	74	515	66	33	23
26	142	255	83	80	166	110	126	69	338	81	34	22
27	101	144	83	69	158	105	114	68	260	71	71	22
28	91	121	81	74	160	101	108	66	256	69	42	24
29	83	349	78	72	237	97	101	66	276	62	34	23
30	80	354	93	70	-----	101	97	64	320	60	34	31
31	87	-----	101	68	-----	99	-----	335	-----	64	31	-----
TOTAL	3,714	3,953	3,307	3,107	4,036	6,049	4,219	3,896	9,193	3,965	1,450	894
MEAN	120	132	107	100	139	195	141	126	306	128	46.8	29.8
MAX	647	677	228	201	620	752	383	335	3,220	325	76	43
MIN	63	62	78	68	55	97	80	64	56	60	31	22
CFSM	1.98	2.18	1.77	1.65	2.29	3.22	2.33	2.08	5.05	2.11	.77	.49
IN.	2.28	2.43	2.03	1.91	2.48	3.71	2.59	2.39	5.64	2.43	.89	.55

CAL YR 1971 TOTAL 45,053 MEAN 123 MAX 1,990 MIN 23 CFSM 2.03 IN 27.66
WTR YR 1972 TOTAL 47,783 MEAN 131 MAX 3,220 MIN 22 CFSM 2.16 IN 29.33

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	0830	5.78	1,880	3- 2	1100	4.54	948
11-25	0530	4.71	1,070	3-17	0700	5.00	1,270
11-29	1930	5.14	1,370	6-22	1730	12.06	8,070
2-13	1700	5.90	1,980				

DELAWARE RIVER BASIN

01480870 East Branch Brandywine Creek below Downingtown, Pa.

LOCATION.--Lat 39°58'07", long 75°40'25", Chester County, on left bank at downstream side of Sugars Bridge (State Highway 322), 2,000 ft upstream from Valley Creek, 1.5 miles north of Marshallton, and 3.3 miles southeast of Downingtown.

DRAINAGE AREA.--89.9 sq mi.

PERIOD OF RECORD.--February to September 1972.

GAGE.--Nonrecording gage Feb. 1 to Apr. 10, June 25 to Sept. 30. Water-stage recorder April 11 to June 22. Altitude of gage is 195 ft (from topographic map).

EXTREMES.--Maximum discharge during period, 8,160 cfs June 22 (gage height, 12.4 ft, from floodmark), from rating curve extended above 580 cfs on basis of slope-area measurement of peak flow; minimum, 34 cfs Sept. 26, 27 (gage height, 2.26 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					136	600	150	144	199	277	100	53
2					130	1,190	150	142	174	222	93	78
3					176	620	142	257	138	209	90	73
4					472	311	160	347	121	203	114	62
5					180	266	168	213	134	211	92	54
6					153	225	158	166	114	207	87	52
7					120	210	146	152	111	183	86	52
8					110	203	150	177	102	179	89	49
9					100	181	142	314	98	181	82	48
10					100	174	136	380	93	163	78	46
11					110	166	134	208	88	150	76	43
12					123	168	135	179	88	144	73	52
13					1,210	172	338	162	96	419	79	59
14					414	230	251	166	125	245	76	53
15					220	272	332	244	105	179	71	48
16					181	237	302	216	121	155	69	42
17					156	984	420	185	174	170	70	40
18					150	347	242	160	120	210	70	42
19					152	228	198	182	170	197	69	45
20					179	201	182	220	127	138	65	42
21					160	192	184	160	170	126	61	42
22					140	252	214	138	2,680	117	60	42
23					130	269	243	134	2,210	111	59	41
24					120	201	274	123	858	105	59	39
25					140	179	202	127	670	102	59	38
26					230	172	174	114	444	114	59	34
27					210	166	152	111	336	106	93	34
28					203	160	154	109	274	102	70	35
29					329	156	150	105	355	99	62	35
30					-----	160	145	105	409	97	56	44
31		-----			-----	158	-----	380	-----	100	55	-----
TOTAL					6,234	9,050	5,928	5,820	10,904	5,221	2,322	1,417
MEAN					215	292	198	188	363	168	74.9	47.2
MAX					1,210	1,190	420	380	2,680	419	114	78
MIN					100	156	134	105	88	97	55	34
CFSM					2.39	3.25	2.20	2.09	4.04	1.87	.83	.53
IN.					2.58	3.74	2.45	2.41	4.51	2.16	.96	.59

PEAK DISCHARGE (BASE, 1,200 CFS)

/ From floodmark.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-13	1830	7.35	2,740	3-17	0900	7.12	2,180
3- 2	1430	6.08	1,430	6-22	2100	12.4 /	8,160

01481000 Brandywine Creek at Chadds Ford, Pa.

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

DRAINAGE AREA.--287 sq mi, including that of Harvey Run.

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

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

AVERAGE DISCHARGE.--52 years, (1911-53, 1962-72), 381 cfs (18.03 inches per year).

EXTREMES.--Current year: Maximum discharge, 23,800 cfs June 22 (gage height, 16.56 ft), from rating curve extended as explained below; minimum, 123 cfs Sept. 29 (gage height, 1.26 ft).

Period of record: Maximum discharge, 23,800 cfs June 22, 1972 (gage height, 16.56 ft), from rating curve extended above 7,000 cfs on basis of area-velocity study; minimum, 4.9 cfs Oct. 2, 1941 (gage height, 0.28 ft); minimum daily, 42 cfs Sept. 12, 1966.

REMARKS.--Records good. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for the water year 1971, superseding figures published in WRD Penna. 1971 are given below:

Date Discharge
Nov. 13----1,950
Nov. 14----726
Nov. 15----1,220

Month	CFS-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
November 1970	13,462	1,950	143	449	1.56	1.74
CAL YR 1970	148,853	3,290	115	408	1.42	19.28
WTR YR 1971	198,586	6,910	116	544	1.90	25.80

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	524	524	767	434	365	1,460	557	467	1,150	775	341	186
2	587	533	628	713	395	2,280	557	463	602	645	314	355
3	614	763	583	718	547	1,910	526	750	571	593	305	256
4	520	641	569	529	1,340	1,150	584	1,120	517	580	328	211
5	497	515	538	713	524	980	571	720	625	607	305	194
6	488	484	547	605	461	840	521	539	544	616	283	186
7	461	551	808	488	461	794	521	499	481	539	283	186
8	443	515	1,090	466	399	781	530	553	440	535	296	177
9	434	470	704	484	350	704	503	870	409	548	283	173
10	3,120	470	628	776	360	686	481	1,180	391	503	265	166
11	1,380	457	601	614	370	659	485	755	373	458	256	162
12	727	443	565	538	378	673	472	625	355	431	256	173
13	596	439	547	529	2,140	668	870	607	359	1,410	269	194
14	560	425	524	578	2,240	772	940	611	440	850	269	186
15	529	434	533	497	826	920	1,060	820	354	535	251	177
16	490	443	533	404	700	727	1,080	640	310	476	238	162
17	480	430	511	470	619	2,140	1,620	607	517	535	242	158
18	470	421	497	439	587	1,180	810	645	368	481	256	155
19	460	421	479	448	745	820	650	602	580	640	242	169
20	450	430	529	452	718	725	602	593	400	440	224	158
21	450	416	524	461	620	695	589	602	445	427	215	155
22	440	395	479	457	580	890	660	571	6,740	395	211	158
23	450	378	448	475	550	1,040	800	535	9,260	359	202	147
24	1,200	391	466	475	520	740	845	499	1,730	350	202	147
25	1,000	2,110	470	457	601	665	655	481	1,630	346	202	151
26	700	1,140	457	416	860	640	562	458	1,110	391	202	147
27	560	664	448	391	840	611	521	445	880	346	400	143
28	538	601	443	412	781	593	499	436	760	341	256	147
29	506	950	430	399	985	584	485	427	880	328	215	140
30	488	1,890	461	404	-----	589	472	422	1,110	323	202	155
31	488	-----	502	391	-----	575	-----	815	-----	337	194	-----
TOTAL	20,650	18,744	17,309	15,633	20,862	28,491	20,028	19,357	34,331	16,140	8,007	5,274
MEAN	666	625	558	504	719	919	668	624	1,144	521	258	176
MAX	3,120	2,110	1,090	776	2,240	2,280	1,620	1,180	9,260	1,410	400	355
MIN	434	378	430	391	350	575	472	422	310	323	194	140
CFSM	2.32	2.18	1.94	1.76	2.51	3.20	2.33	2.17	3.99	1.82	.90	.61
IN.	2.68	2.43	2.24	2.03	2.70	3.69	2.60	2.51	4.45	2.09	1.04	.68

CAL YR 1971	TOTAL	224,202	MEAN	614	MAX	6,910	MIN	143	CFSM	2.14	IN	29.06
WTR YR 1972	TOTAL	224,826	MEAN	614	MAX	9,260	MIN	140	CFSM	2.14	IN	29.14

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	2000	9.39	5,710	6-22	2300	16.56	23,800
2-14	0100	8.96	5,150				

DELAWARE RIVER BASIN

01481500 Brandywine Creek at Wilmington, Del.

LOCATION.--Lat 39°46'09", long 75°34'25", New Castle County, on right bank in Rockford Park, 0.2 mile downstream from Henry Clay Bridge, in Wilmington, and 4.2 miles upstream from mouth.

DRAINAGE AREA.--314 sq mi.

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

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

AVERAGE DISCHARGE.--26 years, 451 cfs (19.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 29,000 cfs June 23 (gage height, 15.49 ft), from rating curve extended above 18,000 cfs; minimum, 149 cfs Sept. 29; minimum daily, 164 cfs Sept. 29.

Period of record: Maximum discharge, 29,000 cfs June 23, 1972 (gage height, 15.49 ft), from rating curve extended above 18,000 cfs; minimum discharge, about 30 cfs Dec. 26, 1948, during the period of ice effect; minimum daily, 56 cfs Aug. 23, 24, 1957.

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by mills above station. No diversion just above station by plant of E. I. du Pont de Nemours & Co. since June 13, 1960. Records of water quality for the current year are published in Part 2 of the Maryland-Delaware Annual Report.

REVISIONS (WATER YEARS).--WSP 1432: 1948, 1950. WRD Penna. 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	603	590	962	479	359	1,540	630	624	1,320	921	414	201
2	650	681	881	680	406	2,570	622	625	667	826	382	345
3	699	1,140	768	836	744	2,340	597	883	572	755	369	296
4	600	943	720	563	1,760	1,340	642	1,390	513	739	375	237
5	572	718	656	760	672	1,040	654	976	678	752	358	220
6	558	638	626	696	584	908	590	715	522	810	332	209
7	532	670	917	556	577	863	586	663	483	707	326	211
8	510	654	1,370	521	500	854	602	657	444	691	343	199
9	500	585	881	549	465	776	574	1,010	424	710	315	196
10	4,000	582	792	890	493	752	555	1,360	413	661	305	189
11	2,230	569	736	712	472	712	559	858	390	621	290	182
12	1,060	552	680	591	458	720	549	722	380	593	285	193
13	941	545	640	549	2,180	720	827	669	421	1,820	300	222
14	847	533	605	605	2,900	792	1,180	823	552	1,220	305	223
15	754	537	605	521	935	1,000	1,260	1,170	474	746	280	203
16	692	549	598	412	845	809	1,530	842	415	647	261	187
17	657	530	563	412	728	2,420	2,120	698	607	686	265	182
18	637	511	549	458	680	1,390	1,060	734	508	638	280	179
19	622	503	521	451	953	899	915	697	648	782	270	192
20	602	516	570	458	776	836	865	683	547	561	253	182
21	596	499	570	458	712	800	806	679	510	536	245	178
22	590	482	528	458	736	990	827	627	5,530	501	233	183
23	585	455	493	472	626	1,230	1,030	588	14,300	453	229	174
24	1,340	467	507	479	648	863	1,040	557	1,990	444	225	168
25	1,290	2,560	514	465	633	776	893	541	1,670	429	225	176
26	857	1,480	500	424	944	744	757	518	1,030	482	225	174
27	711	846	493	400	935	704	699	506	914	431	424	171
28	652	730	486	412	863	680	668	501	926	417	290	172
29	620	1,310	472	400	1,020	656	648	493	1,000	399	245	164
30	585	2,460	486	412	-----	664	627	489	1,440	391	225	182
31	567	-----	542	400	-----	664	-----	860	-----	407	221	-----
TOTAL	26,659	23,835	20,231	16,479	24,604	32,052	24,912	23,158	40,288	20,776	9,095	5,990
MEAN	860	795	653	532	848	1,034	830	747	1,343	670	293	200
MAX	4,000	2,560	1,370	890	2,900	2,570	2,120	1,390	14,300	1,820	424	345
MIN	500	455	472	400	359	656	549	489	380	391	221	164
CFSM	2.74	2.53	2.08	1.69	2.70	3.29	2.64	2.38	4.28	2.13	.93	.64
IN.	3.16	2.82	2.40	1.95	2.91	3.80	2.95	2.74	4.77	2.46	1.08	.71

CAL YR 1971 TOTAL 277,556 MEAN 760 MAX 9,770 MIN 148 CFSM 2.42 IN 32.88
WTR YR 1972 TOTAL 268,079 MEAN 732 MAX 14,300 MIN 164 CFSM 2.33 IN 31.76

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-10	2300	8.34	6,010	6-23	0330	15.49	29,000
2-14	0400	7.97	5,460				

Lakes and reservoirs in Delaware River basin

- 01428900 PROMPTON LAKE.--Lat 41°35'18", long 75°19'39", Wayne County, at dam on West Branch Lackawaxen River, 0.3 mile north of Prompton, 0.4 mile upstream from highway bridge, and 0.5 mile upstream from Van Auken Creek. Drainage area, 59.6 sq mi. Period of record, December 1960 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 5,790 acre-ft June 23 (elevation, 1,132.46 ft); minimum, 3,360 acre-ft Sept. 12 (elevation, 1,124.80 ft). Extremes for period of record: Maximum contents, 6,120 acre-ft Mar. 10, 1964 (elevation, 1,133.40 ft); minimum (after first filling), 2,920 acre-ft Sept. 27, 1964 (elevation, 1,123.20 ft).
- Reservoir formed by an earth and rockfill dam with ungated bed rock spillway at elevation 1,205.00 ft. Storage began July 1960. Capacity at elevation 1,205.00 ft is 51,700 acre-ft. Ordinary minimum (conservation) pool elevation, 1,125.00 ft (capacity, 3,420 acre-ft). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel. Records furnished by Corps of Engineers.
- 01429400 GENERAL EDGAR JADWIN RESERVOIR.--Lat 41°36'44", long 75°15'55", Wayne County, at dam on Dyberry Creek, 0.45 mile upstream from unnamed tributary, 2.4 miles north of Honesdale, and 2.9 miles upstream from mouth. Drainage area, 64.5 sq mi. Period of record, October 1959 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 1,140 acre-ft June 24 (elevation, 994.85 ft); minimum, no storage many times. Extremes for period of record: Maximum contents, 4,000 acre-ft Apr. 11, 1962 (elevation, 1,009.0 ft); minimum, no storage many times.
- Reservoir formed by an earth and rockfill dam with ungated, concrete spillway at elevation, 1,053.00 ft. Storage began in October 1959. Capacity at elevation 1,053.00 ft is 24,500 acre-ft. Reservoir is used for flood control. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel. Records furnished by Corps of Engineers.
- 01431700 LAKE WALLENPAUPACK.--Lat 41°27'35", long 75°11'10", Wayne County, at dam on Wallenpaupack Creek at Wilsonville, Pa., 1.2 miles south of Hawley and 1.5 miles upstream from mouth. Drainage area, 228 sq mi. Period of record, January 1926 to current year. Gage, vertical staff. Datum of gage is at mean sea level (levels by Pennsylvania Power and Light Co.). Extremes for current year: Maximum contents, 150,600 acre-ft June 24 (elevation, 1,188.76 ft); minimum, 65,960 acre-ft Nov. 7, 8 (elevation, 1,173.30 ft). Extremes for period of record: Maximum contents, 178,200 acre-ft Aug. 19-21, 1955 (elevation, 1,193.45 ft); minimum (after first filling), 12,280 acre-ft Mar. 28, 1958 (elevation, 1,162.60 ft).
- Reservoir formed by concrete gravity-type and earthfill dam, with concrete spillway at elevation, 1,176.00 ft, in two sections. Spillway equipped with roller gate, 14 ft high, on each section. Storage began Nov. 3, 1925; water in reservoir first reached minimum pool elevation in January 1926. Total capacity at elevation, 1,190.00 ft (top of gates) is 209,300 acre-ft of which 157,800 acre-ft is controlled storage above elevation, 1,160.00 ft (minimum pool). Reservoir is used for generation of hydroelectric power. Figures given herein represent usable contents. Records furnished by Pennsylvania Power and Light Co.
- 01447780 FRANCIS E. WALTER RESERVOIR (formerly published as Bear Creek Reservoir).--Lat 41°06'45", long 75°43'15", Luzerne County, at dam on Lehigh River, 2,200 ft downstream from Bear Creek and 5 miles northwest of White Haven, Pa. Drainage area, 289 sq mi. Period of record, February 1961 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 42,600 acre-ft June 26 (elevation, 1,398.20 ft); minimum, 1,660 acre-ft Apr. 10 (elevation, 1,296.80 ft). Extremes for period of record: Maximum contents, 42,600 acre-ft June 26, 1972 (elevation, 1,398.20 ft); minimum (after establishment of conservation pool), 1,510 acre-ft Apr. 23, 1962 (elevation, 1,295.10 ft).
- Reservoir formed by an earthfill embankment covered with a rock shell, with concrete spillway at elevation, 1,450.0 ft. Storage began Feb. 17, 1961; water in reservoir first reached conservation pool elevation in June 1961. Total capacity at elevation 1,450.0 ft is 110,700 acre-ft of which 108,700 acre-ft is controlled storage above elevation 1,300.0 ft (conservation pool). Dead storage is 2,000 acre-ft. Reservoir is used for flood control and recreation. Figures given herein represent total contents. Flow regulated by three gates and low flow by-pass system. Records furnished by Corps of Engineers.
- 01449400 PENN FOREST RESERVOIR.--Lat 40°55'45", long 75°33'45", Carbon County, at dam on Wild Creek near Hatchery, Pa., 0.7 mile upstream from Hatchery, 2.6 miles upstream from Wild Creek Dam, 4.4 miles upstream from mouth, and 10 miles northeast of Palmerton. Drainage area, 16.5 sq mi. Period of record, October 1958 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by city of Bethlehem). Extremes for current year: Maximum contents, 20,410 acre-ft June 24 (elevation, 1,000.74 ft); minimum, 17,100 acre-ft Sept. 30 (elevation, 993.49 ft). Extremes for period of record: Maximum contents, 20,460 acre-ft Apr. 2, 1970 (elevation, 1,000.83 ft); minimum, 176 acre-ft Oct. 6, 1965 (elevation, 902.40 ft).
- Reservoir formed by an earthfill dam, with ungated concrete spillway at elevation, 1,000.00 ft. Storage began in October 1958. Capacity at elevation 1,000.00 ft is 19,980 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is done by valves on pipe through dam. Records furnished by city of Bethlehem. Figures given herein include diversion, since October 1969, from Tunkhannock Creek basin into Wild Creek basin.
- 01449700 WILD CREEK RESERVOIR.--Lat 40°53'50", long 75°33'50", Carbon County, at dam on Wild Creek near Hatchery, Pa., 1.6 miles upstream from mouth, 2.4 miles south of Hatchery, and 7.5 miles northeast of Palmerton. Drainage area, 22.2 sq mi. Period of record, January 1941 to current year. Gage, nonrecording. Datum of gage is at mean sea level (levels by city of Bethlehem). Extremes for current year: Maximum contents, 12,280 acre-ft June 24 (elevation, 820.94 ft); minimum, 10,870 acre-ft Oct. 1 (elevation, 815.60 ft). Extremes for period of record: Maximum contents, 12,880 acre-ft May 23, 1942 (elevation, 822.93 ft); minimum (after first filling), 2,680 acre-ft Nov. 15, 1966 (elevation, 774.10 ft).
- Reservoir formed by earthfill dam, with concrete ungated spillway at elevation, 820.00 ft. Storage began January 27, 1941; water in reservoir first reached minimum pool elevation in February 1941. Total capacity at elevation 820.00 ft is 12,500 acre-ft of which 12,000 acre-ft is controlled storage. Reservoir is used for municipal water supply. Figures given herein represent usable contents. Regulation is done by valves on pipe through dam. Records furnished by city of Bethlehem. Since October 1969 the basin upstream has received diversions from the Tunkhannock Creek basin (see p.).

Lakes and reservoirs in Delaware River basin--Continued

01449790 BELTZVILLE LAKE.--Lat 40°50'56", long 75°38'19", Carbon County, at dam on Pohopoco Creek, 0.45 mile upstream from gaging station on Pohopoco Creek, 0.55 mile upstream from Sawmill Run, and 2.3 miles north-east of Parryville. Drainage area, 96.3 sq mi. Period of record, February 1971 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 48,300 acre-ft June 27 (elevation, 635.00 ft); minimum, 30,050 acre-ft Oct. 15 (elevation, 614.60 ft). Extremes for period of record: Maximum contents, 48,300 acre-ft June 27, 1972 (elevation, 635.00 ft); minimum, 136 acre-ft Feb. 8, 1971 (elevation, 516.20 ft).

Reservoir formed by an earth and rockfill dam with ungated, partially lined spillway at elevation, 651.00 ft. Storage began Feb. 8, 1971. Capacity at elevation 651.00 ft is 68,300 acre-ft. Ordinary minimum (conservation) pool elevation, 628.00 ft (capacity, 41,250 acre-ft). Dead storage is 1,390 acre-ft. Reservoir is used for recreation, flood control, low-flow augmentation, and water supply. Figures given herein represent total contents. Regulation is accomplished by a multi-level water-quality outlet system and two flood-control gates. Records furnished by Corps of Engineers.

01469200 STILL CREEK RESERVOIR.--Lat 40°51'25", long 75°59'30", Schuylkill County, at dam on Still Creek, 1 mile upstream from mouth, and 2.3 miles north of Hometown, Pa. Drainage area, 8.5 sq mi. Period of record, January 1933 to current year. Staff gage. Datum of gage is at mean sea level (levels by Panther Valley Water Co.). Extremes for current year: Maximum contents, 8,460 acre-ft June 24 (elevation, 1,182.58 ft); minimum, 7,560 acre-ft Sept. 30 (elevation, 1,179.50 ft). Extremes for period of record: Maximum contents, 8,570 acre-ft Oct. 15, 1955 (elevation, 1,182.92 ft), but may have been greater during 1950 and 1951 water years; minimum, 390 acre-ft Feb. 26, 1933 (elevation, 1,132.00 ft).

Reservoir formed by earthfill dam, with ungated concrete spillway at elevation 1,182.00 ft. Storage began in February 1933. Capacity at elevation 1,182.00 ft is 8,290 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is done by valves on pipe through dam. Records furnished by Panther Valley Water Co.

01472200 GREEN LANE RESERVOIR.--Lat 40°20'30", long 75°28'45", Montgomery County, at dam on Perkiomen Creek at Green Lane, Pa., 0.4 mile west of Green Lane and 2.1 miles upstream from Unami Creek. Drainage area, 70.9 sq mi. Period of record, December 1956 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Philadelphia Suburban Water Co.). Extremes for current year: Maximum contents, 17,030 acre-ft June 23 (elevation, 290.05 ft); minimum, 10,320 acre-ft Oct. 2 (elevation, 281.91 ft). Extremes for period of record: Maximum contents, 17,030 acre-ft June 23, 1972 (elevation, 290.05 ft); minimum (after first filling), 1,270 acre-ft Aug. 25, 1957 (elevation, 251.60 ft).

Reservoir formed by concrete, gravity-type dam, with ungated spillway at elevation 286.00 ft. Storage began December 21, 1956. Capacity at spillway level (elevation 286.00 ft), 13,430 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is done by valves on pipe through dam. Records furnished by Philadelphia Suburban Water Co.

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change ^a in contents (equivalent in cfs)
<hr/>						
	01428900	PROMPTON LAKE		01429400	GENERAL EDGAR JADWIN RESERVOIR	
Sept. 30.....	1,125.60	3,590	-	975.41	0	-
Oct. 31.....	1,125.51	3,560	-0.5	974.92	0	0
Nov. 30.....	1,126.40	3,810	+4.2	977.35	0	0
Dec. 31.....	1,127.00	3,980	+2.8	978.43	9	+0.1
CAL YR 1971.....	-	-	+5	-	-	0
Jan. 31.....	1,125.88	3,670	-5.0	976.12	0	-0.1
Feb. 29.....	1,125.71	3,620	-9	976.12	0	0
Mar. 31.....	1,126.88	3,950	+5.4	978.90	18	+3
Apr. 30.....	1,126.31	3,790	-2.7	977.03	0	-3
May 31.....	1,127.02	3,990	+3.3	981.32	93	+1.5
June 30.....	1,127.60	4,170	+3.0	991.27	727	+10.7
July 31.....	1,125.08	3,440	-11.9	975.33	0	-11.8
Aug. 31.....	1,124.97	3,410	-5	974.98	0	0
Sept. 30.....	1,125.12	3,450	+7	975.43	0	0
WTR YR 1972	-	-	-2	-	-	0

DELAWARE RIVER BASIN

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Lakes and reservoirs in Delaware River basin--Continued

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
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01431700 LAKE WALLENPAUPACK						
Sept. 30.....	1,178.00	90,800	-	1,300.70	2,070	-
Oct. 31.....	1,173.80	68,560	-362	1,301.80	2,180	+1.8
Nov. 30.....	1,175.40	76,920	+141	1,302.58	2,260	+1.3
Dec. 31.....	1,183.70	121,920	+732	1,305.10	2,520	+4.2
CAL YR 1971.....	-	-	+22.8	-	-	+6
Jan. 31.....	1,183.20	119,120	-45.5	1,301.16	2,120	-6.5
Feb. 29.....	1,181.90	111,950	-125	1,301.69	2,170	+9
Mar. 31.....	1,184.80	128,080	+262	1,301.32	2,130	-7
Apr. 30.....	1,186.70	138,790	+180	1,300.31	2,030	-1.7
May 31.....	1,188.50	149,100	+168	1,314.40	3,670	+26.7
June 30.....	1,187.00	140,500	-145	1,388.20	34,120	+512
July 31.....	1,183.70	121,920	-302	1,303.40	2,340	-517
Aug. 31.....	1,179.80	100,520	-348	1,300.71	2,070	-4.4
Sept. 30.....	1,179.10	96,740	-63.5	1,300.40	2,040	-5
WTR YR 1972.....	-	-	+8.2	-	-	0
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01449400 PENN FOREST RESERVOIR						
Sept. 30.....	997.12	18,680	-	815.60	10,870	-
Oct. 31.....	994.67	17,930	-12.2	818.31	11,610	+12.0
Nov. 30.....	996.31	18,320	+6.6	819.32	11,860	+4.2
Dec. 31.....	1,000.14	20,060	+28.3	820.10	12,030	+2.8
CAL YR 1971.....	-	-	0	-	-	+1.8
Jan. 31.....	1,000.10	20,040	-3	820.17	12,050	+3
Feb. 29.....	1,000.13	20,050	+2	820.11	12,030	-3
Mar. 31.....	1,000.19	20,090	+7	820.17	12,050	+3
Apr. 30.....	1,000.27	20,140	+8	820.25	12,080	+5
May 31.....	1,000.31	20,160	+3	820.28	12,080	0
June 30.....	1,000.07	20,020	-2.4	820.61	12,180	+1.7
July 31.....	1,000.08	20,020	0	818.06	11,550	-10.2
Aug. 31.....	997.17	18,700	-21.5	817.80	11,470	-1.3
Sept. 30.....	993.49	17,100	-26.9	817.54	11,400	-1.2
WTR YR 1972.....	-	-	-2.2	-	-	+7
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01449790 BELTZVILLE LAKE						
Sept. 30.....	612.40	28,480	-	1,181.58	8,160	-
Oct. 31.....	616.40	31,400	+47.5	1,181.33	8,090	-1.1
Nov. 30.....	623.80	37,380	+101	1,182.21	8,350	+4.4
Dec. 31.....	628.20	41,440	+66.0	1,182.04	8,300	-8
CAL YR 1971.....	-	-	+57.2	-	-	0
Jan. 31.....	628.70	41,920	+7.8	1,182.06	8,300	0
Feb. 29.....	627.50	40,780	-19.8	1,182.08	8,310	+2
Mar. 31.....	627.00	40,300	-7.8	1,182.00	8,310	0
Apr. 30.....	627.90	41,160	+14.4	1,182.12	8,320	+2
May 31.....	627.90	41,160	0	1,182.06	8,300	-3
June 30.....	633.40	46,600	+91.4	1,182.12	8,320	+3
July 31.....	628.00	41,250	-87.0	1,181.75	8,210	-1.8
Aug. 31.....	627.70	40,960	-4.7	1,180.92	7,970	-3.9
Sept. 30.....	627.00	40,300	-11.1	1,179.50	7,560	-6.9
WTR YR 1972.....	-	-	+16.3	-	-	-0.8
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01469200 STILL CREEK RESERVOIR						
Sept. 30.....	612.40	28,480	-	1,181.58	8,160	-
Oct. 31.....	616.40	31,400	+47.5	1,181.33	8,090	-1.1
Nov. 30.....	623.80	37,380	+101	1,182.21	8,350	+4.4
Dec. 31.....	628.20	41,440	+66.0	1,182.04	8,300	-8
CAL YR 1971.....	-	-	+57.2	-	-	0
Jan. 31.....	628.70	41,920	+7.8	1,182.06	8,300	0
Feb. 29.....	627.50	40,780	-19.8	1,182.08	8,310	+2
Mar. 31.....	627.00	40,300	-7.8	1,182.00	8,310	0
Apr. 30.....	627.90	41,160	+14.4	1,182.12	8,320	+2
May 31.....	627.90	41,160	0	1,182.06	8,300	-3
June 30.....	633.40	46,600	+91.4	1,182.12	8,320	+3
July 31.....	628.00	41,250	-87.0	1,181.75	8,210	-1.8
Aug. 31.....	627.70	40,960	-4.7	1,180.92	7,970	-3.9
Sept. 30.....	627.00	40,300	-11.1	1,179.50	7,560	-6.9
WTR YR 1972.....	-	-	+16.3	-	-	-0.8

DELAWARE RIVER BASIN

Lakes and reservoirs in Delaware River basin--Continued

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01472200 GREEN LANE RESERVOIR			
Sept. 30.....	285.64	13,110	-
Oct. 31.....	286.00	13,430	+5.2
Nov. 30.....	286.27	13,670	+4.0
Dec. 31.....	286.04	13,470	-3.3
CAL YR 1971.....	-	-	+2
Jan. 31.....	285.99	13,420	-.8
Feb. 29.....	286.30	13,700	+4.9
Mar. 31.....	286.00	13,430	-4.4
Apr. 30.....	285.96	13,400	-.5
May 31.....	286.15	13,560	+2.6
June 30.....	286.30	13,700	+2.4
July 31.....	285.90	13,340	-5.9
Aug. 31.....	285.47	12,960	-6.2
Sept. 30.....	284.41	12,070	-15.0
WTR YR 1972.....	-	-	-1.4

SUSQUEHANNA RIVER BASIN

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01516500 Corey Creek near Mainesburg, Pa.

LOCATION.--Lat 41°47'27", long 77°00'54", Tioga County, on right bank 30 ft upstream from township bridge, 500 ft upstream from small tributary, 1.1 miles west of Mainesburg, 3.5 miles east of Mansfield, and 4.2 miles upstream from mouth.

DRAINAGE AREA.--12.2 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,337.50 ft above mean sea level. Prior to June 28, 1954 non-recording gage at site 30 ft downstream at same datum.

AVERAGE DISCHARGE.--18 years, 11.7 cfs (13.02 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,580 cfs June 23 (gage height, 10.44 ft, from floodmark), from rating curve extended as explained below; minimum daily, 0.26 cfs Sept. 11.
Period of record: Maximum discharge, 5,580 cfs June 23, 1972 (gage height, 10.44 ft, from floodmark), from rating curve extended above 490 cfs on basis of slope-area measurements at gage height, 7.88 ft and at peak flow; no flow for many days.

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	1.7	2.2	7.7	15	7.2	10	21	9.0	11	56	1.7	.40
2	1.5	6.3	6.4	15	6.8	260	24	18	5.6	30	3.8	.35
3	1.5	5.3	5.6	15	6.4	169	21	31	19	50	4.3	.35
4	1.4	4.6	5.2	12	6.0	70	18	40	54	35	2.9	.57
5	1.3	4.2	5.0	11	6.4	46	17	28	17	33	2.1	.45
6	1.4	3.8	7.1	10	7.2	35	16	22	11	39	1.9	.35
7	2.1	4.9	28	9.6	6.4	31	19	19	8.4	25	5.2	.35
8	1.7	4.2	31	8.6	6.0	73	17	20	6.4	20	5.6	.30
9	1.7	3.8	24	7.6	5.6	35	16	81	6.4	16	2.5	.35
10	3.0	4.0	21	13	5.2	28	17	77	7.6	18	2.0	.30
11	3.0	4.0	18	20	5.0	27	18	39	5.4	13	1.7	.26
12	2.2	3.6	14	12	4.8	39	21	28	4.8	9.8	1.6	.30
13	1.9	3.4	12	13	4.6	37	26	22	5.4	8.6	1.5	.45
14	1.8	3.0	11	12	6.0	30	29	22	4.6	7.8	1.4	.70
15	1.7	4.4	16	11	7.0	24	26	20	6.4	8.1	1.6	.84
16	1.5	4.6	14	8.0	6.2	51	113	33	39	13	1.7	.57
17	1.5	4.0	11	14	5.6	66	98	32	22	9.1	1.8	.45
18	1.3	3.6	10	18	5.2	43	47	24	11	6.3	2.0	.45
19	1.2	3.8	9.0	16	4.7	32	34	20	9.6	5.2	1.9	2.9
20	1.1	4.0	8.9	12	4.4	30	37	22	8.2	5.0	1.5	1.6
21	1.0	4.0	9.2	8.3	4.7	32	28	21	65	4.1	1.2	1.0
22	1.1	3.8	8.0	8.9	4.5	107	26	16	1,910	3.4	1.0	1.0
23	1.2	3.6	8.8	10	4.3	57	23	13	675	2.9	.90	.77
24	2.5	3.2	7.4	16	4.2	33	20	11	131	3.2	.74	1.0
25	3.8	4.6	6.3	15	4.1	26	17	9.4	98	2.4	.68	1.4
26	3.2	3.4	7.1	12	4.0	22	14	8.0	68	2.1	.56	1.1
27	3.0	3.8	7.1	10	3.9	18	12	6.6	49	1.9	.70	2.2
28	2.5	4.9	8.3	8.6	3.9	15	10	5.2	35	1.9	.77	1.6
29	2.4	6.3	6.5	7.8	4.1	15	9.0	4.2	32	1.7	.63	1.2
30	2.4	9.9	31	7.2	-----	19	8.6	4.2	92	1.6	.57	1.3
31	2.2	-----	25	6.8	-----	20	-----	11	-----	1.5	.45	-----
TOTAL	59.8	129.2	389.6	363.4	154.4	1,500	802.6	716.6	3,417.8	434.6	56.90	24.86
MEAN	1.93	4.31	12.6	11.7	5.32	48.4	26.8	23.1	114	14.0	1.84	.83
MAX	3.8	9.9	31	20	7.2	260	113	81	1,910	56	5.6	2.9
MIN	1.0	2.2	5.0	6.8	3.9	10	8.6	4.2	4.6	1.5	.45	.26
CFSM	.16	.35	1.03	.96	.44	3.97	2.20	1.89	9.34	1.15	.15	.07
IN.	.18	.39	1.19	1.11	.47	4.57	2.45	2.19	10.42	1.33	.17	.08

CAL YR 1971 TOTAL 4,232.22 MEAN 11.6 MAX 281 MIN .03 CFSM .95 IN 12.90
WTR YR 1972 TOTAL 8,049.76 MEAN 22.0 MAX 1,910 MIN .26 CFSM 1.80 IN 24.55

PEAK DISCHARGE (BASE, 280 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 2	1900	5.5	870	6-23	0015	10.44	5,580
4-16	1845	4.65	524				

SUSQUEHANNA RIVER BASIN

01517000 Elk Run near Mainesburg, Pa.

LOCATION.--Lat 41°48'54", long 76°57'55", Tioga County, on left bank 250 ft downstream from highway bridge, 0.5 mile upstream from small tributary, 2.8 miles northeast of Mainesburg, 5.5 miles upstream from mouth, and 5.8 miles east of Mansfield.

DRAINAGE AREA.--10.2 sq mi.

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

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

AVERAGE DISCHARGE.--18 years, 10.5 cfs (13.98 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,940 cfs June 22 (gage height, 6.00 ft, in gage well, 6.75 ft outside, from floodmarks), from rating curve extended as explained below; minimum daily, 0.10 cfs Sept. 11.

Period of record: Maximum discharge, 3,940 cfs June 22, 1972 (gage height, 6.00 ft in gage well, 6.75 ft outside, from floodmarks), from rating curve extended above 300 cfs on basis of contracted-opening measurement of peak flow; no flow on many days.

REMARKS.--Records 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	.55	2.8	5.2	11	4.3	20	17	5.8	9.0	27	.70	.15
2	.42	6.5	4.2	12	4.1	240	25	8.6	4.6	18	1.0	.13
3	.38	5.2	4.0	11	3.8	201	20	22	3.4	30	1.8	.13
4	.34	4.5	3.8	9.1	3.5	88	18	31	63	23	1.8	.23
5	.50	3.8	3.6	8.7	3.7	50	14	24	18	18	1.0	.17
6	.73	3.6	5.0	8.0	4.5	32	14	18	9.1	27	.82	.14
7	.66	4.7	27	7.6	4.1	30	16	15	6.7	18	1.6	.13
8	.60	4.0	35	6.6	3.9	53	14	16	4.8	13	2.4	.11
9	.55	3.4	27	6.3	3.6	25	14	65	4.3	11	1.0	.13
10	1.5	3.6	22	9.1	3.4	20	14	68	6.1	15	.82	.11
11	2.0	3.6	17	18	3.1	14	16	38	3.6	9.6	.76	.10
12	1.5	3.2	13	11	2.9	36	16	26	3.0	6.4	.70	.12
13	1.1	3.2	9.6	12	2.8	32	25	18	3.2	5.8	.70	.18
14	1.0	2.8	8.7	12	3.0	27	28	18	2.7	4.3	.52	.28
15	.81	3.6	16	9.0	3.6	18	26	16	3.9	4.3	.58	.33
16	.66	4.0	12	5.7	3.3	40	109	29	39	7.4	.58	.21
17	.66	3.4	8.3	13	3.1	54	73	27	9.1	4.3	.58	.17
18	.60	3.2	7.8	16	2.9	37	40	19	6.7	2.7	.70	.16
19	.55	3.2	7.2	11	2.7	26	29	16	6.1	2.4	.64	2.2
20	.50	3.4	7.2	6.9	2.6	26	33	18	4.8	2.0	.52	1.0
21	.46	3.6	7.2	6.6	2.8	31	22	17	113	1.8	.40	.40
22	.50	3.6	6.3	6.3	2.6	107	20	11	1,580	1.2	.31	.39
23	.55	3.1	7.2	9.1	2.5	60	18	8.0	570	1.0	.25	.32
24	3.9	2.8	6.3	15	2.5	36	15	6.7	115	1.8	.22	.60
25	5.0	3.2	4.7	12	2.4	24	12	5.8	81	1.0	.19	.54
26	3.6	3.4	6.0	6.6	2.4	18	10	4.3	54	.88	.16	.48
27	3.2	3.6	6.0	5.2	2.3	16	8.0	3.6	37	.88	.25	1.7
28	3.2	4.2	6.9	4.8	2.3	12	7.0	3.0	27	.88	.28	1.3
29	3.0	5.0	5.4	4.6	4.0	12	6.1	2.5	20	.76	.23	.98
30	2.8	8.3	25	4.4	-----	18	5.4	2.5	44	.76	.21	1.1
31	2.8	-----	20	4.0	-----	16	-----	9.5	-----	.70	.18	-----
TOTAL	44.62	116.5	344.6	282.6	92.7	1,419	684.5	572.3	2,852.1	260.86	21.90	13.99
MEAN	1.44	3.88	11.1	9.12	3.20	45.8	22.8	18.5	95.1	8.41	.71	.47
MAX	5.0	8.3	35	18	4.5	240	109	68	1,580	30	2.4	2.2
MIN	.34	2.8	3.6	4.0	2.3	12	5.4	2.5	2.7	.70	.16	.10
CFSM	.14	.38	1.09	.89	.31	4.49	2.24	1.81	9.32	.82	.07	.05
IN.	.16	.42	1.26	1.03	.34	5.18	2.50	2.09	10.40	.95	.08	.05

CAL YR 1971 TOTAL 3,818.35 MEAN 10.5 MAX 292 MIN 0 CFSM 1.03 IN 13.93
 WTR YR 1972 TOTAL 6,705.67 MEAN 18.3 MAX 1,580 MIN .10 CFSM 1.79 IN 24.46

PEAK DISCHARGE (BASE, 230 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 2	2000*	3.55*	980*	6- 4	1700	2.50	420
4-16	1900	2.73	524	6-22	1900	6.00	3,940

SUSQUEHANNA RIVER BASIN

93

01518000 Tioga River at Tioga, Pa.

LOCATION.--Lat 41°54'30", long 77°07'47", Tioga County, on left bank 130 ft upstream from highway bridge at Tioga, 0.8 mile upstream from Crooked Creek.

DRAINAGE AREA.--282 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,021.0 ft above mean sea level. Prior to Sept. 9, 1953, at site 20 ft upstream at datum 2.11 ft higher. Sept. 9, 1953 to Aug. 10, 1954, at site 130 ft downstream at present datum.

AVERAGE DISCHARGE.--34 years, 326 cfs (15.70 inches per year).

EXTREMES.--Current year: Maximum discharge, 59,000 cfs June 22 (gage height, 19.70 ft, from floodmark), from rating curve extended as explained below; minimum, 25 cfs Sept. 11, 12, 16, 17 (gage height, 0.24 ft).
Period of record: Maximum discharge, 59,000 cfs June 22, 1972 (gage height, 19.70 ft, from floodmark), from rating curve extended above 8,000 cfs on basis of slope-area measurement and contracted-opening measurements at gage height, 15.47 ft and slope-area measurement of peak flow; minimum, 4.5 cfs Aug. 10, 11, 1955.

REMARKS.--Records fair. Records of water quality at Tioga Junction, 5.0 miles downstream, for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 871: 1938.

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	110	105	239	547	180	400	928	257	388	1,480	58	32
2	95	203	161	489	160	4,000	1,180	351	251	795	98	32
3	85	306	130	446	150	6,280	896	586	193	1,400	123	30
4	80	217	110	380	140	2,000	813	835	683	1,210	98	32
5	76	185	100	371	120	1,280	670	805	798	685	80	30
6	78	161	130	230	110	944	609	598	367	1,040	67	29
7	74	175	777	190	110	888	690	526	261	743	67	28
8	62	180	1,470	170	100	1,230	609	494	193	535	105	27
9	73	152	1,010	160	92	920	552	1,740	161	420	88	28
10	100	146	968	190	90	805	586	2,230	209	460	69	28
11	140	148	880	541	86	670	598	1,180	161	386	65	29
12	120	138	677	489	82	798	696	873	128	284	60	27
13	100	132	563	460	80	952	950	709	121	220	58	28
14	88	119	455	652	96	936	1,100	677	117	318	56	33
15	78	124	536	367	120	843	960	696	107	426	54	32
16	70	159	640	240	110	888	2,200	813	756	966	47	29
17	62	136	460	180	105	1,480	3,600	1,120	376	426	53	28
18	58	123	392	200	90	1,240	1,500	968	220	275	53	32
19	55	117	351	330	78	1,010	1,000	709	193	443	53	60
20	52	130	317	270	72	976	1,030	652	161	678	49	51
21	50	126	320	200	76	1,060	777	696	336	262	44	41
22	48	123	240	170	72	3,540	729	526	23,800	194	43	36
23	46	108	190	300	68	2,360	722	419	26,900	169	41	32
24	57	110	160	586	66	1,200	603	347	4,730	162	41	33
25	245	110	170	677	64	944	536	288	3,130	132	41	36
26	217	112	190	371	62	896	460	235	2,160	115	39	35
27	183	110	242	290	62	858	401	198	1,460	98	38	46
28	150	128	268	250	68	835	340	173	1,030	86	38	43
29	130	161	245	220	150	805	313	150	795	73	38	38
30	117	302	569	210	-----	880	281	136	1,730	62	36	41
31	110	-----	1,020	190	-----	873	-----	320	-----	53	33	-----
TOTAL	3,009	4,546	13,980	10,366	2,859	42,791	26,329	20,307	71,915	14,596	1,833	1,026
MEAN	97.1	152	451	334	98.6	1,380	878	655	2,397	471	59.1	34.2
MAX	245	306	1,470	677	180	6,280	3,600	2,230	26,900	1,480	123	60
MIN	46	105	100	160	62	400	281	136	107	53	33	27
CFSM	.34	.54	1.60	1.18	.35	4.89	3.11	2.32	8.50	1.67	.21	.12
IN.	.40	.60	1.84	1.37	.38	5.64	3.47	2.68	9.49	1.93	.24	.14

CAL YR 1971 TOTAL 135,303 MEAN 371 MAX 4,030 MIN 12 CFSM 1.32 IN 17.85
WTR YR 1972 TOTAL 213,557 MEAN 583 MAX 26,900 MIN 27 CFSM 2.07 IN 28.17

PEAK DISCHARGE (BASE, 6,500 CFS).--Mar 2 (2300) 15,800 cfs (9.8 ft); June 22 (2130) 59,000 cfs (19.70 ft).

SUSQUEHANNA RIVER BASIN

01518500 Crooked Creek at Tioga, Pa.

LOCATION.--Lat 41°54'08", long 77°08'55", Tioga County, on right bank 30 ft upstream from Penn Central Railroad bridge, 1 mile southwest of Tioga, 1 mile upstream from Elkhorn Creek and 3 miles upstream from mouth.

DRAINAGE AREA.--122 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,051.28 ft above mean sea level.

AVERAGE DISCHARGE.--19 years, 109 cfs (12.13 inches per year).

EXTREMES.--Current year: Maximum discharge, 21,000 cfs June 23, on basis of runoff comparison with nearby stations; maximum gage height, 18.29 ft, from floodmark (backwater from Tioga River); minimum daily discharge, 6.0 cfs Oct. 23.

Period of record: Maximum discharge, 21,000 cfs June 23, 1972, on basis of runoff comparison with nearby stations; maximum gage height, 18.29 ft, from floodmark (backwater from Tioga River); minimum discharge, 1.8 cfs Oct. 30, 1963; minimum gage height, 1.94 ft Sept. 4, 5, 6, 7, 1971.

REMARKS.--Records poor. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1332: 1953.

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	9.7	12	40	191	64	100	235	90	110	320	36	9.6
2	9.0	13	22	165	60	1,500	343	101	70	200	35	9.4
3	8.4	19	21	141	54	2,100	278	187	35	300	35	9.2
4	7.8	15	21	117	50	826	229	189	140	250	35	9.2
5	7.0	12	21	107	40	520	198	209	170	170	31	9.0
6	6.6	10	23	77	41	375	182	166	110	220	26	8.8
7	6.8	12	72	70	39	315	193	151	80	180	26	9.0
8	6.6	11	325	62	36	643	178	151	55	135	27	9.2
9	7.4	9.7	153	59	34	388	165	796	47	110	28	9.2
10	8.6	11	140	71	33	261	182	814	60	137	22	9.4
11	11	12	110	172	32	202	177	463	50	116	20	9.0
12	12	11	90	158	30	275	180	325	41	97	19	8.8
13	12	11	75	202	30	355	245	229	39	86	17	9.8
14	11	13	60	343	34	345	283	230	36	94	14	11
15	9.6	16	82	165	40	227	247	240	34	139	16	10
16	8.6	19	140	80	37	275	556	270	140	209	14	9.8
17	8.0	17	85	68	34	658	1,100	280	56	125	13	9.6
18	7.6	14	65	90	30	500	508	180	50	100	15	11
19	7.2	14	55	128	28	415	363	140	43	94	15	15
20	6.8	15	51	92	26	398	368	130	40	154	13	15
21	6.4	15	51	80	28	443	298	180	120	98	12	14
22	6.0	14	45	64	26	1,140	241	140	7,100	75	11	13
23	16	11	35	205	25	754	237	110	7,800	63	11	12
24	30	10	31	227	24	448	200	95	1,200	60	11	11
25	46	12	35	345	24	308	177	82	800	55	12	10
26	34	14	45	180	23	243	151	73	570	50	13	11
27	28	15	70	130	23	211	133	65	350	44	12	13
28	20	16	70	110	23	194	116	58	250	41	11	12
29	17	23	95	92	50	170	105	52	200	38	10	12
30	14	37	235	80	-----	235	95	47	350	37	9.8	13
31	13	-----	400	72	-----	229	-----	95	-----	36	11	-----
TOTAL	402.1	433.7	2,763	4,143	1,018	15,053	7,963	6,338	20,146	3,833	580.8	322.0
MEAN	13.0	14.5	89.1	134	35.1	486	265	204	672	124	18.7	10.7
MAX	46	37	400	345	64	2,100	1,100	814	7,800	320	36	15
MIN	6.0	9.7	21	59	23	100	95	47	34	36	9.8	8.8
CFSM	.11	.12	.73	1.10	.29	3.98	2.17	1.67	5.51	1.02	.15	.09
N.	.12	.13	.84	1.26	.31	4.59	2.43	1.93	6.14	1.17	.18	.10

CAL YR 1971 TOTAL 38,206.5 MEAN 105 MAX 1,700 MIN 5.8 CFSM .86 IN 11.65
WTR YR 1972 TOTAL 62,995.6 MEAN 172 MAX 7,800 MIN 6.0 CFSM 1.41 IN 19.21

PEAK DISCHARGE (BASE, 2,400 CFS).--Mar. 2 (2400*) 5,240 cfs (11.46 ft); June 23 (0100*) 21,000 cfs (unknown).

* About.

SUSQUEHANNA RIVER BASIN

95

01520000 Cowanesque River near Lawrenceville, Pa.

LOCATION.--Lat 41°59'04", long 77°09'06", Tioga County, on left bank 0.8 mile downstream from Cook Creek, 1.8 miles southwest of Lawrenceville, and 2.5 miles upstream from mouth.

DRAINAGE AREA.--298 sq mi.

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

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

AVERAGE DISCHARGE.--21 years, 271 cfs (12.35 inches per year).

EXTREMES.--Current year: Maximum discharge, about 40,500 cfs June 23, from rating curve extended as explained below; maximum gage height, 17.26 ft June 23 from floodmarks (backwater from Tioga River); minimum daily discharge, 11 cfs Oct. 22, 23.

Period of record: Maximum discharge, about 40,500 cfs June 23, 1972, from rating curve extended above 6,000 cfs on basis of runoff comparison with nearby stations; maximum gage height, 17.26 ft June 23, 1972, from floodmarks (backwater from Tioga River); minimum discharge, 0.8 cfs Aug. 31, Sept. 1, 27, 1964; minimum gage height, 1.77 ft Sept. 13, 1957.

REVISIONS.--The figure of maximum discharge for the water year 1971 has been revised to 10,500 cfs Mar. 15, 1971 (gage height, 9.80 ft), superseding figure published in WRD Penna. 1971.

REMARKS.--Records fair except those for June 22, 23, which are poor. Records of water quality 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	23	33	78	631	140	500	615	183	183	992	56	19
2	20	33	58	494	130	2,000	812	225	120	646	53	18
3	19	35	51	395	110	3,910	672	370	84	507	52	17
4	16	40	49	313	98	1,630	545	383	157	564	52	16
5	14	35	51	250	82	1,220	453	531	139	325	48	16
6	15	32	58	210	86	803	420	353	79	356	41	16
7	15	33	239	180	80	706	427	308	63	273	39	16
8	15	32	1,210	160	76	2,040	370	330	51	203	40	17
9	16	32	494	140	72	974	342	2,630	44	163	41	16
10	19	30	353	170	68	615	414	2,240	47	163	37	16
11	20	32	293	408	64	440	395	1,200	47	156	33	16
12	20	33	230	427	60	583	427	812	37	118	29	17
13	20	33	187	395	56	911	599	599	33	97	26	16
14	19	33	146	800	62	920	785	523	33	97	23	18
15	17	32	183	280	72	545	655	508	30	95	26	18
16	15	32	359	160	70	615	1,170	545	100	88	21	18
17	15	33	212	140	66	1,680	2,760	767	108	82	22	19
18	14	30	160	200	62	1,330	1,270	615	60	77	22	18
19	13	29	140	350	58	1,040	929	447	45	80	23	23
20	12	30	130	280	52	974	1,060	389	37	128	22	25
21	12	37	130	180	58	1,140	893	414	51	109	20	23
22	11	35	95	150	54	2,380	681	298	8,700	88	20	21
23	11	25	86	380	52	1,560	706	225	21,500	82	20	19
24	17	23	82	395	51	1,000	553	179	2,910	78	20	19
25	45	28	90	749	50	706	474	146	1,570	75	22	19
26	114	35	111	350	48	591	376	120	1,020	74	24	19
27	92	35	171	230	47	508	319	97	639	69	21	22
28	60	40	179	200	47	501	267	81	435	65	20	22
29	49	49	179	180	150	453	230	70	310	62	20	22
30	42	70	389	160	-----	623	200	60	2,350	61	19	23
31	37	-----	1,540	150	-----	591	-----	86	-----	57	20	-----
TOTAL	827	1,029	7,733	9,507	2,121	33,489	19,819	15,734	40,982	6,030	932	564
MEAN	26.7	34.3	249	307	73.1	1,080	661	508	1,366	195	30.1	18.8
MAX	114	70	1,540	800	150	3,910	2,760	2,630	21,500	992	56	25
MIN	11	23	49	140	47	440	200	60	30	57	19	16
CFSM	.09	.12	.84	1.03	.25	3.62	2.22	1.70	4.58	.65	.10	.06
IN.	.10	.13	.97	1.19	.26	4.18	2.47	1.96	5.12	.75	.12	.07

CAL YR 1971 TOTAL 97,272.1 MEAN 266 MAX 4,970 MIN 2.9 CFSM .89 IN 12.14
WTR YR 1972 TOTAL 138,767.0 MEAN 379 MAX 21,500 MIN 11 CFSM 1.27 IN 17.32

PEAK DISCHARGE (BASE, 6,300 CFS)

* About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 2	2200	10.6	13,000	6-30	0745	8.31	6,380
6-23	0300	-	40,500*				

SUSQUEHANNA RIVER BASIN

01531500 Susquehanna River at Towanda, Pa.

LOCATION.--Lat 41°45'55", long 76°26'28", Bradford County, on right bank under Bridge Street Bridge at Towanda, 1.8 miles upstream from Towanda Creek.

DRAINAGE AREA.--7,797 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 694.38 ft above mean sea level. Prior to Oct. 18, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--59 years, 10,390 cfs (18.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 320,000 cfs June 24 (gage height, 33.43 ft from floodmarks), from rating curve extended above 180,000 cfs; minimum, 960 cfs Oct. 9 (gage height, 0.00 ft).
Period of record: Maximum discharge, 320,000 cfs June 24, 1972 (gage height, 33.43 ft from floodmarks), from rating curve extended above 180,000 cfs; minimum, 334 cfs Sept. 23, 24, 1964; minimum gage height, -0.56 ft Aug. 17, 1965.
Maximum stage known prior to 1892, 25.0 ft Mar. 17, 1865 (discharge, about 188,000 cfs).

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

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1302: 1922, 1929.

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	1,340	1,340	5,890	26,900	6,600	15,300	24,700	12,700	8,560	37,400	2,960	1,650
2	1,290	1,340	7,500	19,500	6,500	35,700	29,400	11,900	16,800	32,900	2,870	1,560
3	1,210	1,410	6,940	16,700	6,400	105,000	32,400	13,100	16,100	25,200	3,710	1,490
4	1,160	1,530	5,920	14,700	6,200	75,400	28,600	20,900	12,700	24,000	6,020	1,400
5	1,110	1,610	5,250	13,100	5,200	48,600	24,000	36,500	17,000	21,400	5,620	1,330
6	1,110	1,580	5,070	11,200	4,500	36,400	20,800	33,300	19,600	18,400	4,500	1,300
7	1,130	1,560	9,460	9,160	3,900	29,500	18,800	25,300	15,200	16,100	3,740	1,270
8	1,050	1,580	37,400	8,630	3,400	27,600	17,100	21,400	11,900	13,800	4,390	1,220
9	1,020	1,660	41,400	8,270	3,200	31,000	15,300	39,500	10,600	13,100	4,720	1,170
10	1,080	1,770	31,200	8,260	3,100	22,500	15,000	75,300	10,000	11,100	4,360	1,110
11	1,190	1,750	29,000	9,250	3,300	17,000	15,100	60,600	10,600	10,400	3,690	1,070
12	1,390	1,770	28,900	12,400	4,100	14,800	16,500	44,300	9,750	9,680	3,190	1,050
13	1,560	1,770	26,200	13,100	5,000	17,900	20,700	33,000	8,100	8,800	2,850	1,050
14	1,680	1,750	20,700	17,600	6,200	19,800	39,200	26,100	7,020	8,480	2,600	1,110
15	1,770	1,750	16,000	23,400	7,000	19,500	45,100	22,600	6,470	8,240	3,010	1,200
16	1,650	1,850	18,300	15,700	8,000	16,700	43,900	22,400	8,330	7,710	3,340	1,240
17	1,490	2,030	22,200	10,200	8,000	25,400	61,600	27,200	16,400	8,280	2,800	1,280
18	1,390	2,090	19,500	8,070	6,900	41,800	59,800	26,800	18,800	7,640	2,690	1,420
19	1,270	2,020	14,800	9,950	5,800	42,800	51,700	22,300	13,400	7,150	2,630	1,940
20	1,210	1,930	12,000	12,400	4,600	33,700	47,400	18,300	10,100	7,920	2,470	1,860
21	1,160	1,900	11,000	12,100	3,800	29,100	51,500	16,700	10,300	7,750	2,280	1,710
22	1,080	1,950	10,600	10,800	3,500	38,700	47,300	15,600	123,000	6,700	2,060	1,580
23	1,040	2,130	9,890	9,910	3,300	70,500	42,500	13,500	283,000	5,530	1,920	1,470
24	1,040	2,310	8,520	12,500	3,100	55,700	37,200	11,500	252,000	4,940	2,040	1,470
25	1,050	2,410	8,120	14,200	3,100	42,000	32,900	9,940	111,000	4,470	1,940	1,470
26	1,130	2,320	9,650	16,500	3,300	32,200	27,400	8,600	67,100	4,150	1,900	1,440
27	1,460	2,390	11,200	12,000	4,000	26,100	22,700	7,510	48,600	3,910	1,880	1,440
28	1,680	2,540	12,500	10,000	5,000	21,000	19,500	6,640	36,700	3,690	1,840	1,470
29	1,580	2,830	14,800	8,000	9,000	19,100	16,500	5,970	29,200	3,540	1,860	1,490
30	1,490	3,540	14,900	7,400	-----	19,700	14,400	5,380	26,300	3,340	1,880	1,520
31	1,410	-----	26,400	7,000	-----	23,000	-----	5,460	-----	3,120	1,730	-----
TOTAL	40,220	58,410	501,210	388,900	146,000	1,053,5M	939,000	700,300	1,234.6M	348,840	93,490	41,780
MEAN	1,297	1,947	16,170	12,550	5,034	33,980	31,300	22,590	41,150	11,250	3,016	1,393
MAX	1,770	3,540	41,400	26,900	9,000	105,000	61,600	75,300	283,000	37,400	6,020	1,940
MIN	1,020	1,340	5,070	7,000	3,100	14,800	14,400	5,380	6,470	3,120	1,730	1,050
CFSM	.17	.25	2.07	1.61	.65	4.36	4.01	2.90	5.28	1.44	.39	.18
IN.	.19	.28	2.39	1.86	.70	5.03	4.48	3.34	5.89	1.66	.45	.20

CAL YR 1971 TOTAL 3,690,118 MEAN 10,110 MAX 82,000 MIN 820 CFSM 1.30 IN 17.61
WTR YR 1972 TOTAL 5,546,280 MEAN 15,150 MAX 283,000 MIN 1,020 CFSM 1.94 IN 26.46

PEAK DISCHARGE (BASE, 68,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	1900	17.78	112,000	5-10	1500	14.29	79,800
3-23	1330	13.90	76,700	6-24	0330	33.43	320,000
4-17	2030	13.15	70,700				

01532000 Towanda Creek near Monroeton, Pa.

LOCATION.--Lat 41°42'27", long 76°28'20", Bradford County, on left bank 10 ft upstream from Lehigh Valley Railroad Bridge, 1,000 ft upstream from South Branch Towanda Creek, and 0.5 mile south of Monroeton.

DRAINAGE AREA.--215 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 753.70 ft above mean sea level. Prior to Oct. 1, 1942, non-recording gage at site 1 mile upstream at datum 20.44 ft higher.

AVERAGE DISCHARGE.--58 years, 282 cfs (17.81 inches per year).

EXTREMES.--Current year: Maximum discharge, 47,000 cfs June 22 (gage height, 15.30 ft, from floodmark in gage well), from rating curve extended as explained below; minimum, 8.8 cfs Sept. 12, 13; minimum gage height, 0.24 ft Oct. 23, 24.

Period of record: Maximum discharge, 47,000 cfs June 22, 1972 (gage height, 15.30 ft, from floodmark in gage well), from rating curve extended above 9,500 cfs on basis of slope-area and contracted-opening measurements at gage height, 10.33 ft and slope-area measurement of peak flow; minimum observed, 0.7 cfs Sept. 15, 17, 21, 22, 1932.

REMARKS.--Records fair.

REVISIONS.(WATER YEARS).--WSP 756: Drainage area. WSP 1051: 1943-44(M). WSP 1302: 1922(M), 1924, 1925-26(M), 1928, 1929(M), 1930-31. WSP 1432: 1921(M), 1932(M), 1933, 1934-35(M), 1936, 1938(M), 1940.

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	48	55	173	501	200	700	583	173	851	463	36	17
2	38	82	117	420	180	6,000	730	244	490	328	34	16
3	35	188	119	396	160	6,310	618	405	338	256	34	14
4	30	124	119	347	140	1,670	522	968	290	256	36	14
5	25	97	97	330	130	1,090	439	938	338	197	32	13
6	25	80	141	200	120	717	405	630	237	224	29	12
7	28	78	601	150	130	583	469	501	198	231	27	12
8	28	82	1,380	130	120	998	410	410	165	178	32	11
9	24	67	983	130	110	624	364	968	130	178	32	11
10	48	60	879	237	100	435	396	1,770	180	197	27	11
11	105	60	844	334	96	330	420	1,010	130	165	24	10
12	93	55	642	415	90	517	511	717	100	123	22	8.8
13	71	48	517	369	88	704	796	578	92	113	21	9.4
14	55	43	420	648	100	679	938	506	88	128	20	11
15	45	40	405	480	130	506	783	517	80	139	20	13
16	39	63	511	220	110	624	1,880	679	293	851	19	13
17	33	58	410	150	96	1,140	3,040	1,000	227	360	18	12
18	29	49	360	170	88	1,040	1,220	800	168	242	18	11
19	27	46	313	330	80	837	830	560	130	181	19	12
20	24	53	289	250	74	698	743	500	120	165	19	14
21	22	56	285	190	86	736	642	540	1,710	145	18	16
22	21	58	274	160	80	3,490	511	400	28,700	118	17	14
23	21	49	195	330	76	2,400	469	290	14,400	94	18	12
24	28	40	234	667	70	1,180	396	237	3,060	79	18	13
25	134	78	213	698	68	783	343	204	1,790	76	17	14
26	154	51	201	475	66	601	293	171	1,150	61	17	14
27	129	46	213	396	64	490	255	150	747	56	18	19
28	103	56	224	378	64	430	227	130	529	52	18	20
29	84	84	224	310	120	401	207	120	402	46	18	19
30	74	185	281	260	-----	501	185	100	519	40	18	18
31	61	-----	803	230	-----	506	-----	444	-----	37	18	-----
TOTAL	1,681	2,131	12,467	10,301	3,036	37,720	19,625	16,660	57,652	5,779	714	404.2
MEAN	54.2	71.0	402	332	105	1,217	654	537	1,922	186	23.0	13.5
MAX	154	188	1,380	698	200	6,310	3,040	1,770	28,700	851	36	20
MIN	21	40	97	130	64	330	185	100	80	37	17	8.8
CFSM	.25	.33	1.87	1.54	.49	5.66	3.04	2.50	8.94	.87	.11	.06
IN.	.29	.37	2.16	1.78	.53	6.53	3.40	2.88	9.98	1.00	.12	.07

CAL YR 1971 TOTAL 93,511.5 MEAN 256 MAX 3,360 MIN 6.5 CFSM 1.19 IN 16.18
WTR YR 1972 TOTAL 168,170.2 MEAN 459 MAX 28,700 MIN 8.8 CFSM 2.13 IN 29.10

PEAK DISCHARGE (BASE, 4,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-2	2300	9.68	16,900	4-16	2200	6.88	7,670
3-22	1700	6.50	6,840	6-22	1700	15.30	47,000

SUSQUEHANNA RIVER BASIN

01532850 Middle Branch Wyalusing Creek tributary near Birchardville, Pa.

LOCATION.--Lat 41°51'45", long 76°00'26", Susquehanna County, on left bank 60 ft upstream from bridge on State Highway 267, 1,000 ft upstream from mouth, and 1.2 miles north of Birchardville.

DRAINAGE AREA.--5.67 sq mi.

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

GAGE.--Water-stage recorder, crest-stage gage, and concrete-control. Datum of gage is 1,077.51 ft above mean sea level. Oct. 7, 1959 to Aug. 12, 1965, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--7 years, 7.97 cfs (19.09 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,120 cfs June 22 (gage height, 6.85 ft), from rating curve extended above 30 cfs; minimum, 0.37 cfs Oct. 3, 4, 5, 6, (gage height, 3.71 ft).
Period of record: Maximum discharge, 1,120 cfs June 22, 1972 (gage height, 6.85 ft), from rating curve extended above 30 cfs; minimum daily, 0.1 cfs on many days.

REMARKS.--Records good except those for winter periods and those above 100 cfs, 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	.41	.99	6.8	12	5.2	5.0	16	5.4	31	10	.58	1.4
2	.39	4.9	5.1	11	4.3	60	18	7.0	35	7.1	.90	1.3
3	.39	3.5	4.7	9.4	3.5	123	14	30	30	15	47	1.1
4	.37	2.3	4.3	8.4	3.4	54	12	110	30	11	14	1.0
5	.39	1.7	3.9	7.7	3.2	25	12	62	21	7.9	4.3	.90
6	.45	1.5	11	6.6	3.2	26	11	31	14	7.1	3.0	.79
7	.57	5.6	70	5.8	3.0	21	11	22	11	5.7	2.6	.70
8	.48	3.5	66	5.4	2.8	16	10	18	8.3	5.1	2.8	.63
9	.45	2.5	42	5.0	2.6	23	11	34	7.6	4.5	2.0	.63
10	2.9	2.9	33	5.6	2.2	49	9.3	37	7.0	5.1	1.6	.54
11	1.9	3.3	25	9.4	1.8	71	11	24	4.9	4.0	1.1	.51
12	.99	2.9	18	7.4	1.7	38	11	19	4.0	3.0	1.1	.51
13	.82	2.5	15	9.4	5.0	13	30	15	3.6	2.8	1.0	.63
14	.69	2.1	12	11	9.0	13	25	15	3.1	3.0	5.1	.70
15	.64	2.1	16	9.6	8.2	9.7	21	17	2.8	2.8	15	.63
16	.57	2.3	14	8.0	7.6	21	48	20	20	3.8	3.8	.58
17	.57	2.1	10	7.0	6.4	67	49	14	7.3	3.3	3.3	18
18	.54	1.7	9.1	6.6	5.0	38	30	12	4.9	2.2	2.8	12
19	.51	2.1	8.4	6.4	4.5	28	22	11	4.9	1.9	2.2	7.5
20	.51	2.3	8.0	5.8	4.0	25	24	12	3.8	1.7	1.7	4.3
21	.51	3.3	8.4	5.1	3.4	36	17	11	75	1.6	1.4	3.0
22	.51	3.5	6.6	4.7	3.0	105	16	7.9	647	1.3	1.1	2.4
23	.51	2.5	8.4	9.4	2.8	67	15	6.1	249	1.1	1.0	1.9
24	.69	2.1	5.8	10	2.5	33	13	5.1	98	.90	.90	2.2
25	2.9	2.7	5.6	9.8	2.2	23	11	4.2	57	.79	1.4	2.6
26	4.9	2.9	6.3	8.0	2.1	18	9.3	3.3	43	.79	1.6	2.0
27	2.3	3.3	7.1	6.0	1.9	14	7.9	2.8	27	.70	6.4	2.2
28	1.6	4.1	6.8	5.4	1.9	12	6.7	2.4	18	.63	7.5	1.9
29	1.3	6.8	5.8	5.0	2.5	13	6.1	2.0	14	.58	3.0	1.7
30	1.1	12	17	4.8	-----	14	5.4	2.1	14	.54	2.2	2.0
31	.99	-----	17	4.6	-----	14	-----	18	-----	.58	1.6	-----
TOTAL	31.85	95.99	477.1	230.3	108.9	1,074.7	502.7	580.3	1,496.2	116.51	143.98	76.25
MEAN	1.03	3.20	15.4	7.43	3.76	34.7	16.8	18.7	49.9	3.76	4.64	2.54
MAX	4.9	12	70	12	9.0	123	49	110	647	15	47	18
MIN	.37	.99	3.9	4.6	1.7	5.0	5.4	2.0	2.8	.54	.58	.51
CFSM	.18	.56	2.72	1.31	.66	6.12	2.96	3.30	8.80	.66	.82	.45
IN.	.21	.63	3.13	1.51	.71	7.05	3.30	3.81	9.82	.76	.94	.50

CAL YR 1971 TOTAL 2,538.98 MEAN 6.96 MAX 70 MIN .23 CFSM 1.23 IN 16.66
WTR YR 1972 TOTAL 4,934.78 MEAN 13.5 MAX 647 MIN .37 CFSM 2.38 IN 32.38

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	1930	5.60	221	5- 4	1400	5.88	321
3-22	1730	5.69	242	6-22	0430	6.85	1,120
4-16	2045	5.63	221	8- 3	1930	5.47	256

01533950 South Branch Tunkhannock Creek near Montdale, Pa.

LOCATION.--Lat 41°34'29", long 75°38'32", Lackawanna County, on right bank 70 ft upstream from highway bridge, 0.6 mile downstream from Scott, 1.0 mile upstream from East Benton, 3.5 miles northwest of Montdale, 7.5 miles west of Carbondale, and 16 miles upstream from mouth.

DRAINAGE AREA.--12.6 sq mi.

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

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

AVERAGE DISCHARGE.--12 years, 14.0 cfs (15.09 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,160 cfs June 22 (gage height, 5.43 ft), from rating curve extended above 350 cfs on basis of slope-area measurement of peak flow; minimum, 0.39 cfs Sept. 7, 8, 9, 10, 11, 12; minimum gage height, 1.05 ft Oct. 1, 2, 5, 6, Sept. 7, 8, 9, 10, 11, 12, 13.

Period of record: Maximum discharge, 1,440 cfs Apr. 2, 1970 (gage height 5.73 ft), from rating curve extended above 350 cfs on basis of slope-area measurement at gage height, 5.43 ft; minimum 0.08 cfs July 23, 1968; minimum gage height, 0.95 ft Mar. 16, 1969.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in the water-supply papers and annual reports indicated.

WSP	WRD Penna	Water Year	Date	Discharge (cfs)	Gage Height (feet)	WSP	WRD Penna	Water Year	Date	Discharge (cfs)	Gage Height (feet)
1903	1961	Apr. 25, 1961	640	4.56	-	1966	Feb. 13, 1966	560	-		
1903	1962	Apr. 1, 1962	610	4.50	-	1969	June 20, 1969	1,330	5.38		
1903	1964	May 14, 1964	1,220	5.50	-	1970	Apr. 2, 1970	1,440	5.73		
1903	1965	Feb. 7, 1965	665	4.61							

REMARKS.--Records fair.

REVISIONS.--The figures of peak discharge for water years 1961, 1964-66, 1969, 1970 have been revised as shown in the following table. They supersede figures published in WSP 1903 and WRD Penna., 1961, 1964, 1969, 1970.

REVISED PEAK DISCHARGE.--1961: Feb. 25 (unknown) 625 cfs (4.53 ft); Apr. 25 (unknown) 640 cfs (4.56 ft).

1964: Jan. 25 (1200) 1,080 cfs (5.32 ft); Mar. 5 (1300) 792 cfs (4.85 ft); Mar. 10 (0800) 886 cfs (5.01 ft); May 14 (1900) 1,220 cfs (5.50 ft).

1969: June 15 (1330) 952 cfs (5.12 ft); June 20 (2200) 1,130 cfs (5.38 ft); July 26 (1945) 826 cfs (4.91 ft); July 28 (1545) 570 cfs (4.41 ft); July 30 (0345) 898 cfs (5.03 ft); Aug. 1 (1945) 732 cfs (4.74 ft).

1970: Mar. 26 (2100) 560 cfs (4.39 ft); Apr. 2 (1645) 1,440 cfs (5.73 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	1.7	2.4	51	20	11	15	18	13	173	40	3.0	.89
2	1.6	4.3	30	28	9.7	80	21	16	58	31	2.8	.80
3	1.7	8.8	27	25	9.0	133	21	30	37	24	4.5	.72
4	1.6	5.4	19	21	8.8	67	19	157	54	23	4.5	.72
5	1.6	3.7	18	18	8.2	37	17	92	45	19	3.0	.58
6	1.8	3.2	55	15	8.0	35	17	54	29	18	2.7	.51
7	2.1	7.9	325	14	7.6	27	22	38	23	16	5.3	.45
8	1.8	5.8	188	13	7.0	32	19	31	18	13	24	.45
9	1.6	4.8	97	12	6.4	32	22	30	23	13	6.9	.51
10	9.4	5.1	71	18	6.0	21	23	41	74	16	4.8	.39
11	8.6	5.6	59	23	5.6	15	25	28	29	13	3.6	.39
12	5.0	4.8	41	20	5.4	61	24	23	22	10	3.2	.39
13	3.5	4.6	32	22	6.2	47	75	20	19	9.0	3.0	2.2
14	3.0	3.8	27	38	22	28	54	18	17	9.0	8.1	2.0
15	2.7	8.2	40	31	20	21	44	20	14	14	14	1.5
16	2.4	8.5	32	19	18	87	121	29	17	10	5.3	.98
17	2.2	6.3	24	17	17	248	140	20	16	22	4.5	.98
18	2.0	5.8	21	16	13	75	65	25	12	15	3.8	2.7
19	1.9	5.6	22	15	11	44	45	18	13	11	3.4	1.9
20	1.8	5.6	19	14	10	34	57	18	11	9.0	2.7	1.5
21	1.7	5.8	19	13	9.0	31	44	23	12	7.2	2.2	1.3
22	1.6	6.1	15	12	8.0	96	39	17	331	6.4	1.8	1.3
23	1.6	5.1	19	14	7.4	71	42	14	421	5.6	1.6	1.1
24	1.7	4.6	14	27	8.0	42	33	12	182	5.2	1.4	1.3
25	2.0	13	13	22	8.0	32	28	10	109	4.7	1.4	1.4
26	3.1	14	17	20	7.6	27	24	9.0	86	6.0	1.3	1.2
27	3.1	6.9	17	13	7.2	23	20	7.5	63	4.8	1.8	1.3
28	2.5	8.2	17	13	7.2	19	17	6.9	45	4.0	2.0	1.2
29	2.3	53	14	11	7.6	18	15	6.3	38	3.4	1.5	1.1
30	2.6	133	29	11	-----	21	13	6.0	35	2.8	1.3	1.3
31	2.5	-----	36	10	-----	19	-----	76	-----	2.7	1.1	-----
TOTAL	82.7	359.9	1,408	565	279.9	1,538	1,124	908.7	2,026	387.8	130.5	33.06
MEAN	2.67	12.0	45.4	18.2	9.65	49.6	37.5	29.3	67.5	12.5	4.21	1.10
MAX	9.4	133	325	38	22	248	140	157	421	40	24	2.7
MIN	1.6	2.4	13	10	5.4	15	13	6.0	11	2.7	1.1	.39
CFSM	.21	.95	3.60	1.44	.77	3.94	2.98	2.33	5.36	.99	.33	.09
IN.	.24	1.06	4.16	1.67	.83	4.54	3.32	2.68	5.98	1.14	.39	.10

CAL YR 1971 TOTAL 6,826.30 MEAN 18.7 MAX 325 MIN 1.0 CFSM 1.48 IN 20.15
WTR YR 1972 TOTAL 8,843.56 MEAN 24.2 MAX 421 MIN .39 CFSM 1.92 IN 26.11

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2100	5.03	898	5- 4	1315	4.76	646
3-17	0015	4.89	728	6- 1	0245	4.57	540
4-16	2145	4.93	756	6-22	2215	5.43	1,160

SUSQUEHANNA RIVER BASIN

01534000 Tunkhannock Creek near Tunkhannock, Pa.

LOCATION.--Lat 41°33'29", long 75°53'42", Wyoming County, on left bank 300 ft upstream from bridge on U. S. Highway 6 at Dixon, 3 miles northeast of Tunkhannock, and 4 miles upstream from mouth.

DRAINAGE AREA.--383 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 610.50 ft above mean sea level (Pennsylvania Department of Transportation benchmark). Prior to Aug. 10, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--58 years, 528 cfs (18.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 15,100 cfs June 23 (gage height 11.26 ft), from rating curve extended above 5,600 cfs; minimum, 40 cfs Oct. 6; minimum gage height, 1.34 ft Sept. 13.

Period of record: Maximum discharge, 33,600 cfs Mar. 10, 1964 (gage height, 14.26 ft), from rating curve extended above 4,700 cfs on basis contracted-opening measurement at gage height, 13.96 ft; minimum, 6.2 cfs Sept. 24, 1964; minimum gage height, 0.73 ft Aug. 12, 1930.

REMARKS.--Records good except those for winter periods and those for June 22, 23, which are fair.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1051: 1921(M), 1932, 1934-35(M), 1936, 1938(M), 1939-40, 1942-44, 1945(M). WSP 1302: 1922, 1923(M), 1924-25, 1927-28. WSP 1432: 1919(M), 1920, 1933, 1943(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	51	70	1,050	929	340	500	696	435	3,480	1,780	133	92
2	49	101	720	894	300	3,700	738	493	1,730	1,080	127	81
3	49	193	600	908	280	6,880	744	804	1,270	810	149	78
4	45	131	430	762	290	2,210	672	3,830	1,430	744	324	71
5	44	105	350	732	250	1,460	619	3,220	1,910	619	203	79
6	42	98	641	570	250	971	625	1,770	1,120	592	155	83
7	45	126	4,180	520	230	804	690	1,310	894	509	158	76
8	46	175	5,800	480	210	957	636	1,040	678	430	410	70
9	44	145	3,490	450	200	786	603	1,020	581	385	235	67
10	60	134	3,600	500	190	581	614	1,540	971	430	164	64
11	161	134	3,770	625	180	476	603	1,120	630	400	135	60
12	128	131	2,310	690	170	786	648	880	476	329	133	56
13	96	123	1,660	630	190	1,070	1,380	756	420	291	119	70
14	81	115	1,250	1,340	660	901	1,810	690	385	570	105	92
15	72	126	1,320	845	600	678	1,300	702	338	564	431	85
16	65	158	1,400	520	600	1,090	1,820	831	493	559	312	73
17	60	142	1,100	500	470	5,390	4,770	714	504	708	214	63
18	56	131	922	490	380	2,500	2,080	642	375	435	180	182
19	53	123	768	490	340	1,570	1,470	564	375	352	149	164
20	49	123	732	480	320	1,190	1,390	586	334	307	135	152
21	46	126	738	450	290	1,070	1,340	792	537	274	117	119
22	46	142	696	440	270	2,350	1,110	592	10,400	243	96	96
23	45	139	542	493	250	3,340	1,240	493	11,900	214	87	101
24	48	123	570	774	270	1,850	1,010	425	6,110	186	85	107
25	54	190	564	780	260	1,280	866	365	3,420	173	83	110
26	89	270	564	560	240	1,040	750	312	2,410	190	110	114
27	87	250	608	440	230	894	660	278	1,710	164	143	170
28	74	237	603	410	230	762	586	262	1,250	149	210	164
29	67	289	570	390	260	684	526	232	1,030	135	200	135
30	76	1,250	756	370	-----	732	471	210	999	124	164	119
31	72	-----	1,520	350	-----	702	-----	1,320	-----	122	119	-----
TOTAL	2,000	5,600	43,824	18,812	8,750	49,204	32,467	28,228	58,160	13,868	5,385	2,993
MEAN	64.5	187	1,414	607	302	1,587	1,082	911	1,939	447	174	99.8
MAX	161	1,250	5,800	1,340	660	6,880	4,770	3,830	11,900	1,780	431	182
MIN	42	70	350	350	170	476	471	210	334	122	83	56
CFSM	.17	.49	3.69	1.58	.79	4.14	2.83	2.38	5.06	1.17	.45	.26
IN.	.19	.54	4.26	1.83	.85	4.78	3.15	2.74	5.65	1.35	.52	.29

CAL YR 1971 TOTAL 188,711 MEAN 517 MAX 5,800 MIN 38 CFSM 1.35 IN 18.33
WTR YR 1972 TOTAL 269,291 MEAN 736 MAX 11,900 MIN 42 CFSM 1.92 IN 26.16

PEAK DISCHARGE (BASE, 5,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	0400	8.60	8,180	4-17	0300	8.21	7,400
3- 3	0500	9.75	10,800	5- 4	1900	8.42	7,820
3-17	0500	7.84	6,460	6-23	0200	11.26	15,100

SUSQUEHANNA RIVER BASIN

101

01534300 Lackawanna River near Forest City, Pa.

LOCATION.--Lat 41°40'47", long 75°28'20", Susquehanna County, on left bank 400 ft downstream from bridge on State Highway 171, 1.3 miles downstream from new Stillwater Dam, 1.7 miles below confluence of East and West Branches, and 2.2 miles north of Forest City.

DRAINAGE AREA.--38.8 sq mi.

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

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

AVERAGE DISCHARGE.--14 years, 65.4 cfs (22.89 inches per year), adjusted for storage since December 1959.

EXTREMES.--Current year: Maximum discharge, 1,010 cfs June 26 (gage height, 4.84 ft), from rating curve extended above 600 cfs; minimum, 5.8 cfs Sept. 13; minimum gage height, 1.51 ft Oct. 7, 8, 9, 10, Sept. 13. Period of record: Maximum discharge, 1,390 cfs Jan. 22, 1959 (gage height, 6.41 ft), from rating curve extended above 600 cfs; minimum daily, 2.0 cfs Oct. 27, 28, Nov. 2-5, 1964; minimum gage height, 1.35 ft Oct. 13, 1964. Maximum discharge known, 2,530 cfs May 22, 1942, from computation of flow over dam.

REMARKS.--Records good. Flow regulated by Stillwater Lake 1.3 miles upstream since December 1959 (see p.181).

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	8.9	11	94	116	45	34	128	63	207	242	17	12
2	8.9	11	80	104	44	110	164	66	236	228	17	10
3	8.4	12	70	94	42	332	177	81	217	192	22	9.5
4	8.0	14	70	85	45	372	157	110	197	150	35	8.6
5	7.6	17	57	76	41	362	112	277	177	112	34	8.2
6	7.2	19	65	60	40	322	66	457	141	95	26	7.8
7	6.8	27	191	59	40	274	157	289	104	81	21	7.4
8	6.4	33	325	57	36	225	124	182	77	66	28	7.0
9	6.4	34	510	53	34	157	99	143	65	57	30	6.6
10	6.8	33	602	54	32	97	89	152	63	53	24	7.0
11	8.4	33	606	65	31	71	89	148	60	53	19	7.4
12	14	30	619	85	29	66	114	120	56	49	16	6.6
13	18	30	514	87	32	77	164	95	52	45	13	6.6
14	18	26	351	150	44	93	245	82	47	65	11	8.2
15	15	30	242	161	54	84	262	84	43	99	53	8.6
16	14	39	213	102	57	79	265	89	89	102	82	8.2
17	13	41	216	70	53	182	62	86	75	84	56	8.6
18	12	36	198	68	47	280	345	89	57	68	41	17
19	11	34	166	74	49	283	741	84	52	54	33	27
20	11	32	134	76	40	256	581	75	52	45	27	25
21	10	33	114	70	39	228	442	93	52	42	22	21
22	9.8	33	100	62	40	228	312	89	130	37	18	17
23	9.3	31	76	63	38	118	242	75	81	33	15	14
24	9.8	28	71	85	35	177	197	65	44	28	13	13
25	9.8	35	71	98	33	375	157	57	283	24	12	12
26	11	31	74	98	34	341	130	53	985	26	11	11
27	12	42	76	78	32	296	108	48	895	25	12	18
28	13	49	81	68	32	247	91	44	745	22	14	30
29	12	52	87	60	31	197	81	39	517	20	17	28
30	11	80	87	54	-----	155	69	34	309	17	17	25
31	11	-----	116	50	-----	124	-----	56	-----	17	14	-----
TOTAL	328.5	960	6,276	2,482	1,149	6,242	5,970	3,425	6,108	2,231	770	396.3
MEAN	10.6	32.0	202	80.1	39.6	201	199	110	204	72.0	24.8	13.2
MAX	18	80	619	161	57	375	741	457	985	242	82	30
MIN	6.4	11	57	50	29	34	62	34	43	17	11	6.6
MEAN [≠]	10.7	34.5	203	78.1	39.1	203	198	122	197	64.6	24.7	13.5
CFSM [≠]	.28	.89	5.23	2.01	1.01	5.23	5.10	3.14	5.08	1.66	.64	.35
IN. [≠]	.32	.99	6.03	2.32	1.09	6.03	5.69	3.62	5.67	1.91	.74	.39

CAL YR 1971 TOTAL 27,027.7 MEAN 74.0 MAX 619 MIN 4.9 MEAN[≠] 74.2 CFSM[≠] 1.91 IN.[≠] 26.00
 *TR YR 1972 TOTAL 36,337.8 MEAN 99.3 MAX 985 MIN 6.4 MEAN[≠] 99.3 CFSM[≠] 2.56 IN.[≠] 34.80

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

SUSQUEHANNA RIVER BASIN

01534500 Lackawanna River at Archbald, Pa.

LOCATION.--Lat 41°30'16", long 75°32'33", Lackawanna County, on right bank in Archbald, 0.5 mile upstream from White Oak Run and Gilmartin Street Bridge.

DRAINAGE AREA.--108 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 889.33 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 196 cfs (24.65 inches per year), adjusted for storage since December 1959.

EXTREMES.--Current year: Maximum discharge, 3,000 cfs June 22 (gage height, 6.09 ft); minimum, 37 cfs Sept. 11, 13; minimum gage height, 1.60 ft Oct. 6, 8, 9, 10.

Period of record: Maximum discharge, 9,510 cfs May 22, 1942 (gage height, 10.58 ft), from rating curve extended above 2,200 cfs on basis of slope-area measurement of peak flow; minimum, 3.0 cfs Oct. 9, 11, 1943; minimum daily, 13 cfs Nov. 1, 1964.

REMARKS.--Records good. Regulation at low flow by mine pumps above station. Flow regulated by Stillwater Lake about 17 miles upstream since December 1959 (see p.181). Records of water quality 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	45	56	276	262	129	206	355	211	785	778	73	55
2	43	88	231	265	127	798	411	217	578	542	100	52
3	43	86	203	252	127	1,150	407	271	501	475	105	49
4	41	79	193	229	139	879	370	785	484	423	107	48
5	41	77	173	217	118	672	314	705	470	339	96	46
6	42	79	242	187	118	587	237	830	370	294	86	45
7	41	113	990	179	118	515	363	610	321	255	109	43
8	39	111	1,300	171	105	453	307	466	255	240	156	42
9	41	104	1,110	164	98	351	271	415	262	217	111	41
10	79	106	1,250	171	98	268	262	449	355	217	98	40
11	82	102	1,400	195	96	223	271	398	265	198	88	40
12	68	98	1,230	211	94	252	311	336	234	182	81	40
13	66	96	949	220	141	281	587	291	217	161	75	53
14	65	90	678	311	192	274	640	268	201	169	94	48
15	63	100	573	294	177	246	605	268	184	192	151	45
16	59	108	551	231	179	339	844	294	223	198	156	42
17	56	108	497	198	159	1,110	935	291	220	182	127	43
18	53	102	449	190	149	886	747	287	187	161	107	71
19	51	98	378	195	149	717	1,110	265	177	141	96	63
20	48	96	329	192	134	587	1,020	271	166	127	86	61
21	48	98	294	184	127	569	811	300	187	115	81	61
22	47	102	262	169	127	907	645	271	1,170	107	73	61
23	45	92	217	169	118	791	596	243	2,240	98	68	53
24	50	86	211	214	122	591	497	217	1,320	92	65	53
25	60	98	203	226	118	700	423	198	978	90	63	50
26	70	100	206	209	115	630	370	179	1,620	88	59	49
27	62	106	206	179	111	555	318	164	1,410	84	63	49
28	60	117	209	169	111	484	277	151	1,170	81	63	59
29	59	154	203	159	120	419	249	139	865	75	63	63
30	56	344	229	149	-----	386	226	131	723	70	61	61
31	54	-----	294	139	-----	339	-----	351	-----	71	58	-----
TOTAL	1,677	3,194	15,536	6,300	3,716	17,165	14,779	10,272	18,138	6,462	2,819	1,526
MEAN	54.1	106	501	203	128	554	493	331	605	208	90.9	50.9
MAX	82	344	1,400	311	192	1,150	1,110	830	2,240	778	156	71
MIN	39	56	173	139	94	206	226	131	166	70	58	40
MEAN [‡]	54.2	108	502	201	128	556	492	343	598	201	90.8	51.2
CFSM [‡]	.50	1.00	4.65	1.86	1.19	5.15	4.56	3.18	5.54	1.86	.84	.47
IN. [‡]	.58	1.12	5.36	2.14	1.28	5.94	5.09	3.67	6.18	2.14	.97	.52

CAL YR 1971 TOTAL 72,598 MEAN 199 MAX 1,400 MIN 28 MEAN[‡] 199 CFSM[‡] 1.84 IN.[‡] 25.03
 WTR YR 1972 TOTAL 101,584 MEAN 278 MAX 2,240 MIN 39 MEAN[‡] 278 CFSM[‡] 2.57 IN.[‡] 34.99

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

SUSQUEHANNA RIVER BASIN

103

01536000 Lackawanna River at Old Forge, Pa.

LOCATION.--Lat 41°21'33", long 75°44'41", Lackawanna County, on right bank 150 ft upstream from Delaware, Lackawanna, and Western Railroad Bridge in Old Forge, and 0.5 mile upstream from St. Johns Creek.

DRAINAGE AREA.--332 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 595.26 ft above mean sea level.

AVERAGE DISCHARGE.--34 years, 498 cfs (20.37 inches per year), adjusted for storage since December 1959.

EXTREMES.--Current year: Maximum discharge, 9,340 cfs June 23 (gage height, 8.78 ft), from rating curve extended as explained below; minimum, 48 cfs Sept. 11 (gage height, 1.66 ft).

Period of record: Maximum discharge, 31,000 cfs Aug. 19, 1955 (gage height, 20.05 ft, from floodmark), from rating curve extended above 5,000 cfs on basis of slope-area measurement at gage height, 15.30 ft and of peak flow; minimum, 20 cfs Sept. 21, 1964 (gage height, 1.28 ft).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Stillwater Lake about 33 miles upstream since December 1959 (see p. 181). Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1432: 1939(M), 1940, 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	73	103	1,040	583	259	634	703	500	3,140	900	106	77
2	70	221	772	665	255	2,210	767	514	1,890	800	162	75
3	66	239	592	703	250	3,200	767	672	1,410	720	156	71
4	61	187	519	597	335	1,980	647	2,120	1,250	660	125	69
5	59	162	433	569	237	1,540	583	2,130	1,360	620	119	69
6	64	156	545	455	230	1,270	468	1,800	977	560	103	69
7	65	252	1,790	430	200	1,110	680	1,420	809	520	145	64
8	58	232	3,020	401	170	1,060	597	1,140	634	443	390	66
9	61	196	2,230	378	170	878	527	1,010	649	418	180	61
10	239	200	2,370	443	160	680	514	1,300	1,470	507	142	55
11	266	202	2,760	520	150	547	507	1,090	887	401	133	55
12	192	181	2,290	612	150	801	540	878	703	356	122	83
13	141	178	1,830	583	461	932	835	775	590	313	113	196
14	118	165	1,440	887	792	878	1,120	687	520	329	99	136
15	105	193	1,290	751	540	775	1,070	680	455	361	188	116
16	103	207	1,220	534	540	818	1,370	792	527	340	196	71
17	92	186	1,060	468	430	3,220	2,620	743	527	455	176	61
18	86	176	950	461	384	2,410	1,670	687	443	345	145	91
19	78	166	801	468	390	1,810	1,780	597	576	293	133	87
20	74	169	711	449	345	1,460	1,890	642	461	255	116	89
21	73	178	649	407	274	1,370	1,850	735	534	211	108	89
22	72	179	561	378	260	1,830	1,520	642	3,530	196	101	111
23	76	151	443	367	220	2,260	1,470	547	6,530	176	96	79
24	88	138	443	605	240	1,560	1,330	455	3,600	162	87	75
25	105	176	455	590	230	1,440	1,110	401	2,380	142	85	79
26	202	217	437	480	220	1,300	932	345	2,480	145	83	77
27	169	225	430	395	220	1,160	784	303	2,160	136	96	73
28	141	245	424	401	220	1,000	687	269	1,840	128	122	73
29	119	493	395	378	298	860	612	237	1,300	119	89	87
30	108	1,320	514	350	-----	835	540	215	1,000	113	87	108
31	104	-----	727	308	-----	743	-----	1,580	-----	133	85	-----
TOTAL	3,328	7,093	33,141	15,616	8,630	42,571	30,530	25,906	44,632	11,257	4,088	2,512
MEAN	107	236	1,069	504	298	1,373	1,018	836	1,488	363	132	83.7
MAX	266	1,320	3,020	887	792	3,220	2,620	2,130	6,530	900	390	196
MIN	58	103	395	308	150	547	468	215	443	113	83	55
MEAN#	107	238	1,070	502	298	1,375	1,017	848	1,481	356	132	84.0
CFSM#	.32	.72	3.22	1.51	.90	4.14	3.06	2.55	4.46	1.07	.40	.25
IN.#	.37	.80	3.71	1.74	.97	4.77	3.41	2.94	4.98	1.23	.46	.28

CAL YR 1971 TOTAL 162,991 MEAN 447 MAX 3,020 MIN 45 MEAN# 447 CFSM# 1.35 IN.# 18.26
WTR YR 1972 TOTAL 229,304 MEAN 627 MAX 6,530 MIN 55 MEAN# 627 CFSM# 1.89 IN.# 25.66

Adjusted for change in contents in Stillwater Lake.

SUSQUEHANNA RIVER BASIN

01536500 Susquehanna River at Wilkes-Barre, Pa.

LOCATION.--Lat 41°15'03", long 75°52'52", Luzerne County, on left bank at foot of West Union Street, Wilkes-Barre, 800 ft downstream from North Street Bridge, and 1.6 miles upstream from Toby Creek.

DRAINAGE AREA.--9,960 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 512.07 ft above mean sea level. See WSP 1722 for history of changes prior to Mar. 23, 1949.

AVERAGE DISCHARGE.--73 years, 13,090 cfs (17.84 inches per year).

EXTREMES.--Current year: Maximum discharge, 345,000 cfs June 24 (gage height, 40.91 ft, from floodmark) from rating curve extended as explained below; minimum, 1,490 cfs Sept. 12 (gage height, -0.08 ft).
Period of record: Maximum discharge, 345,000 cfs June 24, 1972 (gage height, 40.91 ft, from floodmark), from rating curve extended above 200,000 cfs on basis of slope-area measurement of peak flow; minimum, 528 cfs Sept. 27, 1964 (gage height, -1.78 ft).
Maximum stage known prior to 1899, 33.1 ft Mar. 18, 1865, from floodmarks (discharge, about 232,000 cfs).

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

REVISIONS (WATER YEARS).--WSP 109: 1900-1905. WSP 351: Drainage area. WSP 781: 1902(M), WSP 1302: 1916. WSP 1432: 1901-5, 1907, 1909, 1913, 1937(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	2,080	2,220	7,490	31,600	8,730	7,540	29,100	17,700	19,500	38,200	3,670	2,300
2	2,010	2,360	8,020	27,600	8,200	20,900	31,500	16,200	20,200	41,800	3,610	2,140
3	1,980	2,530	8,910	22,500	8,200	105,000	36,700	16,400	23,900	35,200	3,530	2,050
4	1,920	2,650	8,430	20,000	7,990	121,000	37,000	25,400	21,500	28,200	4,490	1,970
5	1,840	2,620	7,240	18,100	7,430	74,400	32,700	48,900	21,300	27,400	6,910	1,880
6	1,770	2,560	6,790	15,700	5,780	52,000	28,100	49,800	23,800	24,100	6,210	1,810
7	1,750	2,760	11,900	13,400	5,000	39,400	25,700	39,900	23,800	21,100	5,190	1,760
8	1,700	2,740	32,800	11,600	4,500	33,800	23,400	31,400	18,700	18,800	5,570	1,710
9	1,700	2,700	54,700	10,000	4,300	35,900	21,300	29,600	15,500	17,000	5,120	1,660
10	1,900	2,710	49,400	10,400	4,000	32,300	19,700	66,300	16,200	16,500	5,360	1,580
11	2,090	2,780	42,900	10,700	4,300	24,100	19,700	84,200	14,100	14,700	4,790	1,540
12	2,230	2,790	38,500	12,800	4,600	21,300	19,900	62,000	13,700	13,300	4,200	1,500
13	2,220	2,760	35,100	16,300	5,670	22,300	22,000	47,400	12,500	12,000	3,670	1,600
14	2,230	2,730	30,100	18,700	6,820	25,400	34,000	36,900	10,400	10,900	3,300	1,680
15	2,320	2,740	24,600	23,900	7,820	25,800	50,100	31,800	9,060	10,900	3,110	1,620
16	2,390	2,850	21,800	23,800	9,410	23,900	52,500	29,700	8,820	10,600	3,510	1,560
17	2,390	2,830	24,200	17,800	9,830	35,500	73,000	31,500	11,800	11,800	3,880	1,580
18	2,240	2,880	25,500	13,300	9,150	48,100	80,300	34,300	19,700	11,200	3,430	1,610
19	2,100	3,000	21,900	11,300	7,970	55,000	67,300	31,700	21,400	10,200	3,170	2,110
20	1,980	3,000	17,900	13,300	5,370	48,900	59,300	27,000	15,900	9,720	2,990	2,180
21	1,890	2,930	15,500	15,400	4,280	38,900	57,700	24,800	13,000	10,800	2,870	2,360
22	1,830	2,900	14,200	14,800	4,500	39,400	58,500	22,400	68,700	8,990	2,680	2,200
23	1,770	2,830	13,100	13,300	4,400	76,600	53,400	20,300	272,000	8,190	2,520	2,000
24	1,760	2,880	12,000	14,000	4,300	83,200	48,300	17,600	329,000	6,860	2,370	1,900
25	1,800	3,330	10,600	18,200	4,200	60,800	42,300	15,100	275,000	5,970	2,250	1,870
26	2,090	3,500	9,970	18,700	4,300	46,000	36,800	12,900	128,000	5,420	2,430	1,870
27	2,080	3,610	11,700	18,300	4,700	36,000	31,100	11,000	73,500	4,950	2,400	1,850
28	2,130	3,610	13,700	15,700	5,600	30,100	26,500	9,580	53,300	4,650	2,510	1,860
29	2,350	4,020	15,200	12,500	6,000	26,200	22,900	8,520	41,400	4,360	2,520	1,850
30	2,410	6,340	17,500	10,100	-----	24,400	19,900	7,710	34,100	4,120	2,450	1,880
31	2,290	-----	20,800	8,940	-----	26,300	-----	10,100	-----	3,880	2,380	-----
TOTAL	63,240	90,160	632,450	502,740	177,350	1,340.4M	1,160.7M	918,110	1,629.8M	451,810	113,090	55,480
MEAN	2,040	3,005	20,400	16,220	6,116	43,240	38,690	29,620	54,330	14,570	3,648	1,849
MAX	2,410	6,340	54,700	31,600	9,830	121,000	80,300	84,200	329,000	41,800	6,910	2,360
MIN	1,700	2,220	6,790	8,940	4,000	7,540	19,700	7,710	8,820	3,880	2,250	1,500
CFSM	.20	.30	2.05	1.63	.61	4.34	3.88	2.97	5.45	1.46	.37	.19
IN.	.24	.34	2.36	1.88	.66	5.01	4.34	3.43	6.09	1.69	.42	.21

CAL YR 1971 TOTAL 4,722,080 MEAN 12,940 MAX 105,000 MIN 1,450 CFSM 1.30 IN 17.64
WTR YR 1972 TOTAL 7,135,350 MEAN 19,500 MAX 329,000 MIN 1,500 CFSM 1.96 IN 26.65

PEAK DISCHARGE (BASE, 82,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
J-3	2330	22.77	131,000	5-11	0500	17.79	89,800
3-24	0300	17.96	91,200	6-24	1900	40.91	345,000
4-18	1100	16.96	83,200				

01537000 Toby Creek at Luzerne, Pa.

LOCATION.--Lat 41°16'57", long 75°53'46", Luzerne County, on right bank at Luzerne, 150 ft upstream from bridge on U. S. Highway 309, 0.5 mile upstream from inlet works of flood basin, and 2.5 miles upstream from mouth.

DRAINAGE AREA.--32.4 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 574.60 ft above mean sea level.

AVERAGE DISCHARGE.--31 years, 43.5 cfs (18.23 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 3,390 cfs June 22 (gage height, 6.07 ft, in gage well, 7.59 ft outside, from floodmarks), from rating curve extended as explained below; minimum, 2.2 cfs Sept. 17; minimum gage height, 0.29 ft Oct. 8.

Period of record: Maximum discharge, 3,390 cfs June 22, 1972 (gage height, 6.07 ft, in gage well, 7.59 ft outside, from floodmark), from rating curve extended above 1,200 cfs on basis of slope-area measurement of peak flow; minimum, 0.1 cfs Sept. 12, 1944; minimum daily, 0.5 cfs Sept. 20, Oct. 8, 1946.

REMARKS.--Records fair. Some regulation by Huntsville Reservoir 5.9 miles upstream (usable capacity, 256,900,000 cu. ft). Diversion from reservoir for municipal supply.

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	7.2	11	45	41	36	112	42	30	538	70	14	11
2	7.9	36	36	44	33	223	43	29	242	53	13	11
3	8.3	27	32	46	31	253	38	60	152	54	14	12
4	7.5	19	29	40	39	136	36	190	109	49	14	11
5	7.9	16	26	42	30	111	34	180	82	55	12	11
6	7.5	15	40	35	25	82	32	124	65	51	12	12
7	8.3	29	100	30	21	71	45	98	54	43	14	15
8	7.5	21	270	28	19	80	38	80	40	40	20	8.1
9	8.7	18	230	28	18	65	34	124	57	38	12	8.8
10	26	20	204	32	17	51	31	174	77	68	10	9.6
11	25	19	236	40	18	43	32	122	45	38	9.2	8.4
12	21	17	157	49	22	123	31	92	35	25	9.2	8.8
13	16	15	117	60	110	119	51	80	31	22	9.2	14
14	14	14	91	79	70	92	58	74	28	21	8.1	8.1
15	14	15	91	91	45	83	59	74	25	19	11	9.6
16	13	16	84	64	48	127	136	82	46	19	10	8.4
17	13	14	70	61	45	310	246	71	37	19	11	7.5
18	12	12	59	56	40	186	146	57	59	21	10	8.1
19	12	11	50	51	36	131	113	48	100	26	9.2	11
20	12	12	50	45	33	100	119	99	59	22	9.2	8.4
21	11	13	51	40	29	87	98	117	282	27	8.1	7.8
22	11	13	42	36	26	146	85	82	1,680	20	7.8	7.8
23	11	11	35	45	24	163	80	66	1,430	18	7.5	8.4
24	13	9.4	37	70	23	115	75	54	465	14	8.1	8.1
25	14	30	34	80	22	89	65	43	276	13	10	7.5
26	34	15	33	76	21	77	54	35	218	12	9.6	7.5
27	19	11	33	66	23	63	46	30	152	13	19	8.1
28	16	13	30	54	25	57	40	26	100	12	15	8.1
29	14	25	28	48	30	49	36	23	85	13	14	8.1
30	14	54	56	42	-----	51	34	29	83	13	12	12
31	13	-----	61	40	-----	48	-----	452	-----	15	9.6	-----
TOTAL	418.8	551.4	2,457	1,559	959	3,443	1,977	2,845	6,652	923	351.8	285.2
MEAN	13.5	18.4	79.3	50.3	33.1	111	65.9	91.8	222	29.8	11.3	9.51
MAX	34	54	270	91	110	310	246	452	1,680	70	20	15
MIN	7.2	9.4	26	28	17	43	31	23	25	12	7.5	7.5
(%)	7.48	7.74	7.49	8.89	8.00	7.49	7.74	7.49	19.60	20.56	11.18	8.41
MEAN#	21.0	26.1	86.8	57.8	41.1	118	73.6	99.3	242	50.4	22.5	17.9
CFSM#	.65	.81	2.68	1.78	1.27	3.64	2.27	3.06	7.47	1.56	.69	.55
IN#	.75	.90	3.09	2.05	1.37	4.20	2.53	3.53	8.33	1.80	.80	.61

CAL YR 1971 TOTAL 14,833.8 MEAN 40.6 MAX 301 MIN 4.8 MEAN# 47.4 CFSM# 1.46 IN# 19.87
WTR YR 1972 TOTAL 22,422.2 MEAN 61.3 MAX 1,680 MIN 7.2 MEAN# 71.4 CFSM# 2.20 IN# 29.96

PEAK DISCHARGE (BASE, 630 CFS).--May 31 (2330) 872 cfs (2.83 ft); June 22 (2215) 3,390 cfs (6.07 ft).

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

Adjusted for diversion.

SUSQUEHANNA RIVER BASIN

01537500 Solomon Creek at Wilkes-Barre, Pa.

LOCATION.--Lat 41°13'39", long 75°54'17", Luzerne County, on right bank at southwest city limits of Wilkes-Barre, 20 ft downstream from bridge on Central Railroad of Pennsylvania, 0.4 mile downstream from Spring Run, and 3.4 miles upstream from mouth.

DRAINAGE AREA.--15.7 sq mi.

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

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 548.31 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 20.4 cfs (17.65 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,220 cfs June 22 (gage height, 6.92 ft), from rating curve extended as explained below; minimum, 0.14 cfs Sept. 20; minimum gage height, 0.89 ft July 21.

Period of record: Maximum discharge, 2,450 cfs Aug. 18, 1955 (gage height, 9.83 ft), from rating curve extended above 380 cfs on basis of computation of peak flow through culvert; minimum, 0.13 cfs Sept. 16, Oct. 20, 1969; minimum daily, 0.50 cfs Sept. 23, 1969; minimum gage height, 0.14 ft Aug. 16, 25, 1940. Maximum stage known, 11.4 ft Sept. 16, 1933, from floodmark.

REMARKS.--Records fair. Regulation by mine pumps above station.

REVISIONS (WATER YEARS).--WSP 1272: Drainage area. WSP 1382: 1940, 1942, 1944(P), 1945-47, 1949(M), 1951-52, 1953-54(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	6.4	7.2	43	13	9.6	34	13	12	109	13	1.2	.60
2	7.5	22	33	23	8.6	83	13	11	63	10	1.0	.89
3	6.6	16	29	17	8.4	101	12	34	45	7.4	1.1	.83
4	4.5	14	26	18	13	68	9.3	104	32	5.3	.89	.83
5	4.3	13	21	18	11	48	8.9	83	22	6.2	2.6	.83
6	3.9	13	38	21	9.2	33	8.1	57	17	4.0	1.4	1.1
7	3.9	25	101	14	8.4	27	12	42	13	3.2	4.3	1.0
8	3.7	16	112	14	7.8	26	10	29	10	3.1	2.3	1.6
9	4.5	12	94	18	7.4	22	9.6	37	8.4	3.3	1.5	1.7
10	28	14	100	18	7.0	21	8.1	51	12	6.9	.89	1.7
11	16	12	105	22	6.8	24	8.4	40	8.1	3.3	1.0	1.5
12	13	13	77	24	23	28	7.9	32	5.7	2.9	1.2	1.1
13	12	12	58	27	55	20	12	27	4.9	2.9	1.3	4.6
14	12	11	44	34	20	20	11	23	4.1	2.4	.89	1.7
15	11	9.7	39	30	17	19	16	21	3.5	3.1	.89	.83
16	11	8.7	32	24	19	21	44	25	4.3	5.1	.55	1.1
17	9.7	7.2	26	20	17	70	64	21	4.8	3.9	.71	1.7
18	6.9	6.6	26	18	16	45	46	19	9.3	2.0	.50	2.5
19	6.6	6.6	23	17	14	30	36	17	5.7	1.8	.89	1.7
20	5.9	8.4	21	15	13	25	54	37	3.2	1.4	1.0	1.1
21	5.5	9.0	18	13	11	22	43	39	27	1.3	1.0	1.3
22	5.2	5.7	16	13	10	38	40	31	351	2.0	.71	1.7
23	6.2	5.0	14	13	9.2	42	34	25	278	2.0	.71	1.7
24	6.4	4.6	13	20	8.4	31	33	22	135	1.4	.89	2.0
25	10	45	15	20	8.0	29	27	17	87	1.3	1.0	1.5
26	12	16	14	20	7.8	25	22	14	60	1.5	1.3	1.5
27	8.7	8.1	13	17	7.6	20	20	12	40	1.3	3.1	1.0
28	8.7	9.3	12	15	7.6	17	17	10	26	1.4	1.7	1.1
29	11	37	8.4	13	14	14	17	8.6	19	1.6	4.1	1.3
30	9.7	62	14	12	-----	14	15	10	16	1.7	.95	2.4
31	9.3	-----	12	11	-----	12	-----	52	-----	1.4	.65	-----
TOTAL	270.1	449.1	1,197.4	572	374.8	1,029	671.3	962.6	1,424.0	108.1	42.22	44.41
MEAN	8.71	15.0	38.6	18.5	12.9	33.2	22.4	31.1	47.5	3.49	1.36	1.48
MAX	28	62	112	34	55	101	64	104	351	13	4.3	4.6
MIN	3.7	4.6	8.4	11	6.8	12	7.9	8.6	3.2	1.3	.50	.60
CFSM	.55	.96	2.46	1.18	.82	2.11	1.43	1.98	3.03	.22	.09	.09
IN.	.64	1.06	2.84	1.36	.89	2.44	1.59	2.28	3.37	.26	.10	.11

CAL YR 1971 TOTAL 6,012.65 MEAN 16.5 MAX 112 MIN .85 CFSM 1.05 IN 14.25

WTR YR 1972 TOTAL 7,145.03 MEAN 19.5 MAX 351 MIN .50 CFSM 1.24 IN 16.93

PEAK DISCHARGE (BASE, 320 CFS).--Feb. 13 (1400) 383 cfs (4.13 ft); June 22 (1945) 1,220 cfs (6.92 ft).

SUSQUEHANNA RIVER BASIN

107

01538000 Wapwallopen Creek near Wapwallopen, Pa.

LOCATION.--Lat 41°03'33", long 76°05'38", Luzerne County, on left bank 100 ft upstream from Harts Bridge, 2.2 miles southeast of Wapwallopen, and 3.7 miles upstream from mouth.

DRAINAGE AREA.--43.8 sq mi.

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

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

AVERAGE DISCHARGE.--53 years, 62.7 cfs (19.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,410 cfs June 22 (gage height, 11.04 ft), from rating curve extended as explained below; minimum, 7.7 cfs Sept. 11; minimum gage height, 1.01 ft Oct. 10.

Period of record: Maximum discharge, 5,410 cfs June 22, 1972 (gage height, 11.04 ft), from rating curve extended above 1,300 cfs on basis of contracted-opening measurement of peak flow; minimum, 1.1 cfs Aug. 4, 1955 (gage height, 0.44 ft); minimum daily, 1.5 cfs Aug. 31, 1953, Aug. 5, 1955.

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

REVISIONS (WATER YEARS).--WSP 1302: 1926(M), 1929(M), 1938(M). WSP 1432: 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	28	33	163	63	46	150	70	69	288	90	30	12
2	27	63	119	81	45	310	68	76	167	76	28	12
3	27	60	101	95	45	384	63	142	163	68	28	12
4	25	45	88	81	99	219	60	394	113	63	31	12
5	25	41	78	88	50	179	57	321	98	69	25	10
6	25	38	119	74	42	142	54	209	84	68	23	11
7	26	62	452	66	37	126	64	167	76	58	26	11
8	24	54	418	62	33	138	55	142	64	61	38	11
9	23	45	337	66	31	109	52	189	57	66	27	10
10	59	45	357	105	29	90	49	282	61	117	23	9.1
11	88	47	377	114	28	84	49	184	51	68	21	8.2
12	49	44	255	138	95	98	46	152	45	55	21	9.6
13	39	42	195	112	198	116	57	130	45	49	20	14
14	36	38	153	184	305	95	63	119	42	46	18	23
15	34	40	147	121	180	88	67	114	39	42	18	15
16	31	41	127	100	132	99	103	150	40	80	18	12
17	30	38	107	88	103	321	290	114	42	108	18	11
18	28	36	96	80	87	189	150	98	41	68	18	11
19	28	36	85	98	70	145	126	86	84	62	18	20
20	27	41	83	80	62	123	232	124	47	53	16	17
21	27	38	84	76	56	112	191	150	126	53	15	13
22	25	36	77	69	50	180	158	103	2,070	49	14	12
23	25	33	68	76	45	197	148	88	1,770	42	14	12
24	28	31	65	110	41	139	148	79	638	39	14	11
25	36	123	66	104	39	120	121	70	370	36	14	12
26	66	195	61	80	39	108	104	62	256	38	14	12
27	45	93	59	68	41	98	93	56	184	34	14	12
28	38	49	62	62	43	89	84	52	139	31	14	12
29	34	101	58	56	50	83	78	47	119	29	14	11
30	32	305	67	50	-----	84	72	45	110	28	14	13
31	31	-----	88	48	-----	77	-----	170	-----	29	13	-----
TOTAL	1,066	1,893	4,612	2,695	2,121	4,492	2,972	4,184	7,429	1,775	619	370.9
MEAN	34.4	63.1	149	86.9	73.1	145	99.1	135	248	57.3	20.0	12.4
MAX	88	305	452	184	305	384	290	394	2,070	117	38	23
MIN	23	31	58	48	28	77	46	45	39	28	13	8.2
CFSM	.79	1.44	3.40	1.98	1.67	3.31	2.26	3.08	5.66	1.31	.46	.28
IN.	.91	1.61	3.92	2.29	1.80	3.82	2.52	3.55	6.31	1.51	.53	.32

CAL YR 1971 TOTAL 26,163.9 MEAN 71.7 MAX 477 MIN 9.9 CFSM 1.64 IN 22.22
WTR YR 1972 TOTAL 34,228.9 MEAN 93.5 MAX 2,070 MIN 8.2 CFSM 2.13 IN 29.07

PEAK DISCHARGE (BASE, 580 CFS).--May 4 (1600) 788 cfs (4.76 ft); June 22 (2030) 5,410 cfs (11.04 ft).

SUSQUEHANNA RIVER BASIN

01539000 Fishing Creek near Bloomsburg, Pa.

LOCATION.--Lat 41°04'41", long 76°25'53", Columbia County, on left bank 25 ft downstream from highway bridge, 0.8 mile downstream from Green Creek, 0.9 mile west of Orangeville, and 5.5 miles north of Bloomsburg.

DRAINAGE AREA.--274 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 540.68 ft above mean sea level (Reading Company benchmark).

AVERAGE DISCHARGE.--34 years, 462 cfs (22.90 inches per year).

EXTREMES.--Current year: Maximum discharge, 30,900 cfs June 22 (gage height, 15.18 ft, from floodmark in gage shelter), from rating curve extended as explained below; minimum, 41 cfs Sept. 12 (gage height, 1.82 ft).
Period of record: Maximum discharge, 30,900 cfs June 22, 1972 (gage height, 15.18 ft, from floodmark in gage shelter), from rating curve extended above 9,500 cfs on basis of contracted-opening measurement at gage height, 12.08 ft; minimum, 7.6 cfs July 19, 1939; minimum gage height, 1.54 ft Aug. 11, 1966; minimum daily discharge, 8.4 cfs Sept. 12, 13, 18, 19, 1964.

REMARKS.--Records good except those for winter periods, which are fair. Some diurnal fluctuation at low flow caused by mill above station.

REVISIONS (WATER YEARS).--WSP 1202: 1939-42, 1948(P), 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	116	111	608	493	440	806	626	397	1,420	902	176	68
2	102	321	470	525	420	1,980	715	392	1,120	715	163	65
3	97	493	382	551	403	3,300	655	619	998	584	190	61
4	91	362	353	481	715	2,170	598	1,920	806	505	219	58
5	88	303	299	512	400	1,660	544	2,930	693	499	163	56
6	86	269	481	397	350	1,260	512	1,990	551	538	140	53
7	84	321	2,120	360	320	1,040	605	1,500	493	430	140	51
8	80	307	3,090	340	300	1,040	525	1,170	408	372	254	50
9	77	261	2,530	330	290	870	464	1,260	347	347	204	47
10	127	245	2,320	408	280	693	452	1,660	387	452	159	45
11	249	237	2,650	487	280	551	446	1,390	333	414	137	43
12	196	218	2,270	605	280	640	481	1,170	292	337	122	45
13	169	207	1,790	605	476	760	693	966	271	305	116	50
14	153	193	1,410	1,080	1,330	768	1,040	878	258	292	119	103
15	141	200	1,260	998	846	700	1,010	1,060	242	333	108	81
16	127	211	1,170	715	693	830	1,230	1,790	538	564	98	65
17	116	189	990	600	544	1,700	3,760	1,370	531	1,160	98	61
18	106	176	806	580	476	1,540	2,520	1,130	424	738	106	58
19	99	169	655	626	435	1,280	1,820	918	760	531	106	58
20	93	182	605	538	397	1,100	1,710	775	598	564	95	53
21	88	186	570	481	342	974	1,560	886	958	557	88	53
22	84	189	499	435	320	1,960	1,280	708	18,000	452	81	54
23	80	165	397	531	290	2,910	1,190	577	18,500	367	77	50
24	84	153	408	830	280	1,940	1,010	487	5,670	314	72	50
25	106	165	403	974	270	1,490	830	419	3,670	275	68	51
26	186	211	377	918	260	1,210	700	367	2,750	254	66	51
27	172	218	362	798	280	1,010	605	328	1,980	227	95	48
28	141	222	372	660	288	830	525	301	1,520	208	88	48
29	124	334	347	600	337	723	476	275	1,310	186	83	47
30	114	723	387	520	-----	723	430	262	1,080	172	79	47
31	106	-----	619	470	-----	655	-----	1,010	-----	166	72	-----
TOTAL	3,682	7,541	31,000	18,448	12,342	39,113	29,012	30,905	66,908	13,760	3,782	1,670
MEAN	119	251	1,000	595	426	1,262	967	997	2,230	444	122	55.7
MAX	249	723	3,090	1,080	1,330	3,300	3,760	2,930	18,500	1,160	254	103
MIN	77	111	299	330	260	551	430	262	242	166	66	43
CFSM	.43	.92	3.65	2.17	1.55	4.61	3.53	3.64	8.14	1.62	.45	.20
IN.	.50	1.02	4.21	2.50	1.68	5.31	3.94	4.20	9.08	1.87	.51	.23

CAL YR 1971 TOTAL 162,461 MEAN 445 MAX 3,090 MIN 37 CFSM 1.62 IN 22.06
WTR YR 1972 TOTAL 258,163 MEAN 705 MAX 18,500 MIN 43 CFSM 2.57 IN 35.05

PEAK DISCHARGE (BASE, 4,000 CFS).--Apr. 17 (0800) 4,250 cfs (6.64 ft); June 22 (2200) 30,900 cfs (15.18 ft)

SUSQUEHANNA RIVER BASIN

109

01540200 Trexler Run near Ringtown, Pa.

LOCATION.--Lat 40°51'10", long 76°16'48", Schuylkill County, at bridge on Legislative Route 53064, 1.9 miles upstream from mouth, and 2.5 miles west of Ringtown.

DRAINAGE AREA.--1.77 sq mi.

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

GAGE.--Water-stage recorder and masonry control. Altitude of gage is 1,110 ft (from topographic map). Oct. 6, 1958 to Aug. 20, 1963, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--9 years, 1.81 cfs (13.89 inches per year).

EXTREMES.--Current year: Maximum discharge, 487 cfs June 22 (gage height, 5.15 ft), from rating curve extended as explained below; minimum, 0.29 cfs Oct. 8, 9, 10, Sept. 9, 10, 11, 12; minimum gage height, 1.21 ft Oct. 8, 9, 10.

Period of record: Maximum discharge, 487 cfs June 22, 1972 (gage height, 5.15 ft), from rating curve extended above 40 cfs on basis of contracted-opening and flow-over-road measurement of peak flow; no flow for many days.

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	.35	1.3	2.4	1.5	1.5	8.8	2.4	2.5	4.2	5.4	1.4	.38
2	.35	1.9	1.9	2.4	1.4	13	2.4	2.5	3.4	4.5	1.4	.42
3	.35	1.4	1.8	2.1	1.4	19	2.1	4.4	3.3	3.9	1.3	.38
4	.35	1.5	1.8	1.8	3.1	12	2.0	11	2.5	3.4	1.2	.38
5	.35	1.4	1.7	2.4	4.4	9.9	1.8	9.4	2.0	4.2	1.1	.38
6	.35	1.4	3.9	1.9	1.8	7.3	1.7	8.0	1.8	3.4	.99	.35
7	.35	1.4	13	1.8	1.6	6.2	2.3	6.9	1.6	3.0	1.5	.35
8	.32	1.2	14	1.6	1.4	5.1	2.0	6.2	1.2	3.0	1.6	.35
9	.29	1.1	14	1.6	1.2	4.0	1.8	8.5	1.1	2.8	1.1	.35
10	.85	1.1	16	3.0	1.1	3.6	1.7	8.0	1.3	3.0	.99	.32
11	.85	1.1	17	2.8	1.1	3.1	1.7	6.6	.85	2.4	.85	.32
12	.67	.99	13	3.6	3.0	3.7	1.6	5.4	.79	2.1	.79	.38
13	.56	.92	9.4	3.7	8.0	3.2	1.9	4.6	.79	2.1	.79	.42
14	.56	.92	7.3	4.7	12	2.8	2.1	4.1	.67	2.0	.73	.46
15	.56	.85	6.7	4.0	7.0	2.8	2.3	3.8	.61	2.0	.67	.38
16	.51	.79	5.3	3.9	5.0	4.3	3.4	5.0	.73	3.1	.67	.35
17	.51	.73	4.4	3.7	3.4	6.3	10	4.4	.67	3.9	.61	.35
18	.46	.67	3.9	3.4	3.3	4.7	5.2	4.0	.79	2.7	.73	.42
19	.46	.73	3.3	3.3	2.9	4.5	4.3	3.6	.79	2.4	.67	.51
20	.46	.67	3.1	2.8	2.5	4.2	6.0	3.4	.56	2.4	.61	.38
21	.42	.67	3.0	2.7	2.2	3.8	4.7	3.3	9.1	2.2	.56	.42
22	.42	.61	2.5	2.2	2.0	3.4	4.6	3.1	192	2.1	.56	.42
23	.42	.56	2.1	2.4	1.8	5.6	4.5	2.8	66	2.0	.51	.38
24	.51	.51	2.1	3.4	1.6	5.1	4.2	2.7	37	1.9	.51	.46
25	.73	1.9	1.9	2.8	1.5	4.7	3.9	2.4	24	1.8	.51	.42
26	1.1	.99	1.9	2.1	1.5	4.2	3.6	2.1	18	1.8	.56	.38
27	.67	1.1	1.8	2.0	1.7	3.8	3.3	2.1	12	1.7	.79	.38
28	.61	.99	1.8	1.8	1.8	3.4	3.0	2.0	8.8	1.6	1.1	.38
29	.61	2.1	1.6	1.7	3.1	3.1	2.8	1.9	7.3	1.4	.73	.38
30	.67	3.4	1.8	1.6	-----	2.8	2.5	2.0	7.3	1.3	.51	.46
31	.67	-----	1.7	1.5	-----	2.5	-----	6.0	-----	1.2	.38	-----
TOTAL	16.34	34.90	166.1	80.2	84.3	170.9	95.8	142.7	411.15	80.7	26.42	11.71
MEAN	.53	1.16	5.36	2.59	2.91	5.51	3.19	4.60	13.7	2.60	.85	.39
MAX	1.1	3.4	17	4.7	12	19	10	11	192	5.4	1.6	.51
MIN	.29	.51	1.6	1.5	1.1	2.5	1.6	1.9	.56	1.2	.38	.32
CFSM	.30	.66	3.03	1.46	1.64	3.11	1.80	2.60	7.74	1.47	.48	.22
IN.	.34	.73	3.49	1.69	1.77	3.59	2.01	3.00	8.64	1.70	.56	.25

CAL YR 1971 TOTAL 797.80 MEAN 2.19 MAX 17 MIN .24 CFSM 1.24 IN 16.77
WTR YR 1972 TOTAL 1321.22 MEAN 3.61 MAX 192 MIN .29 CFSM 2.04 IN 27.77

PEAK DISCHARGE (BASE, 25 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	0355	2.40	33	6-22	1445	5.15	487
5- 4	0945	2.39	32				

SUSQUEHANNA RIVER BASIN

01540500 Susquehanna River at Danville, Pa.

LOCATION.--Lat 40°57'29", long 76°37'10", Montour County, on right bank 200 ft upstream from Mill Street Bridge at Danville and 0.8 mile upstream from Mahoning Creek.

DRAINAGE AREA.--11,220 sq mi, approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 431.29 ft above mean sea level. Prior to June 29, 1939, nonrecording gage at or near Mill Street Bridge at same datum. Since Oct. 1, 1971, water-stage recorder at old site for station on Susquehanna River at Sunbury used as an auxiliary gage for this station.

AVERAGE DISCHARGE.--73 years, 15,060 cfs (18.23 inches per year).

EXTREMES.--Current year: Maximum discharge, 363,000 cfs June 25, from rating curve extended above 230,000 cfs; maximum gage height, 32.32 ft June 24 (backwater from West Branch Susquehanna River); minimum discharge, 1,940 cfs Sept. 13 (gage height, 2.37 ft).

Period of record: Maximum discharge, 363,000 cfs June 25, 1972, from rating curve extended above 230,000 cfs; maximum gage height, 32.32 ft June 24, 1972 (backwater from West Branch Susquehanna River); minimum discharge, 508 cfs Sept. 27, 1964 (gage height, 1.51 ft).

Maximum stage known prior to 1899, 28 ft. Mar. 18, 1965.

REMARKS.--Records good except those for winter periods, which are fair. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1302: 1904, 1914-17, 1923. WSP 1432: 1900-03, 1905-6, 1908-10, 1912-13, 1933.

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	2,730	3,000	11,400	26,300	10,000	10,000	29,100	19,900	23,300	38,600	5,130	3,030
2	2,600	3,230	10,900	31,800	9,600	17,600	31,200	18,100	26,000	47,400	4,930	2,920
3	2,500	4,150	11,000	26,000	9,200	71,600	35,100	17,800	26,600	42,600	4,700	2,730
4	2,450	3,960	11,100	22,400	9,500	126,000	38,900	23,900	26,700	34,300	5,060	2,630
5	2,350	3,870	10,100	20,400	9,000	99,100	35,600	48,600	23,600	30,000	5,130	2,500
6	2,300	3,750	9,480	18,200	8,000	65,600	30,800	58,700	23,800	29,100	7,800	2,400
7	2,230	3,750	16,600	15,900	6,000	47,700	27,400	50,500	26,300	24,800	7,360	2,330
8	2,150	4,090	30,200	14,200	5,600	38,900	25,600	39,200	23,200	21,900	6,960	2,250
9	2,080	3,870	55,400	12,600	5,000	36,000	23,300	33,000	18,000	19,500	6,920	2,200
10	2,280	3,750	62,200	12,200	4,700	38,300	21,100	49,600	17,000	18,700	6,390	2,110
11	3,090	3,750	53,800	12,700	4,900	28,500	20,100	90,900	16,400	17,600	6,320	2,010
12	3,170	3,750	48,500	13,800	5,400	24,400	20,200	77,400	14,800	15,500	5,800	1,990
13	3,060	3,720	42,000	16,200	6,400	23,800	21,400	57,800	14,500	14,400	5,240	2,010
14	2,980	3,630	35,700	20,300	8,000	25,500	28,100	44,800	12,800	13,100	4,700	2,230
15	2,950	3,630	30,000	22,800	9,800	27,900	45,800	36,500	11,200	12,300	4,270	2,350
16	2,980	3,750	25,600	27,500	11,500	27,200	55,000	34,900	10,600	12,800	4,060	2,150
17	3,030	3,720	24,600	23,700	12,500	32,800	74,900	33,700	11,000	14,000	4,500	2,030
18	2,980	3,660	27,400	17,900	11,800	48,100	87,300	36,100	15,700	14,200	4,830	2,030
19	2,810	3,660	25,100	14,600	11,000	57,800	79,400	35,600	23,300	13,000	4,400	2,180
20	2,660	3,840	21,100	13,400	9,000	56,700	67,800	30,900	20,600	11,600	4,120	2,630
21	2,530	3,840	17,600	15,900	7,000	46,000	64,000	28,200	16,200	11,400	3,900	2,840
22	2,400	3,780	16,200	16,400	6,000	41,400	64,200	25,600	91,200	11,900	3,720	2,980
23	2,330	3,660	14,700	15,600	5,600	67,800	60,100	23,100	262,000	10,900	3,540	2,810
24	2,350	3,540	13,900	15,400	5,400	94,500	54,400	20,200	328,000	9,480	3,340	2,630
25	2,380	4,020	12,800	17,500	5,400	74,400	48,000	17,500	335,000	8,240	3,140	2,500
26	2,810	4,370	11,600	20,600	5,800	55,900	42,300	15,200	188,000	7,440	3,000	2,430
27	3,140	4,630	11,700	20,100	6,200	43,000	35,900	13,300	96,300	6,720	3,250	2,430
28	2,920	4,730	13,700	18,000	6,400	34,900	30,400	11,700	71,300	6,220	3,310	2,400
29	2,870	5,130	15,100	16,000	7,000	29,600	26,200	10,600	54,100	5,830	3,370	2,350
30	3,000	9,880	16,600	12,000	-----	26,800	22,900	9,680	43,600	5,520	3,370	2,400
31	3,090	-----	19,600	11,000	-----	26,200	-----	13,800	-----	5,270	3,170	-----
TOTAL	83,200	122,110	725,680	561,400	221,700	1,444.0M	1,246.5M	1,026.8M	1,871.1M	534,320	145,730	72,480
MEAN	2,684	4,070	23,410	18,110	7,645	46,580	41,550	33,120	62,370	17,240	4,701	2,416
MAX	3,170	9,880	62,200	31,800	12,500	126,000	87,300	90,900	335,000	47,400	7,800	3,030
MIN	2,080	3,000	9,480	11,000	4,700	10,000	20,100	9,680	10,600	5,270	3,000	1,990
CFSM	.24	.36	2.09	1.61	.68	4.15	3.70	2.95	5.56	1.54	.42	.22
IN.	.28	.40	2.41	1.86	.74	4.79	4.13	3.40	6.20	1.77	.48	.24

CAL YR 1971 TOTAL 5,343,640 MEAN 14,640 MAX 102,000 MIN 1,540 CFSM 1.30 IN 17.72
WTR YR 1972 TOTAL 8,055,000 MEAN 22,010 MAX 335,000 MIN 1,990 CFSM 1.96 IN 26.71

SUSQUEHANNA RIVER BASIN

111

01541000 West Branch Susquehanna River at Bower, Pa.

LOCATION.--Lat 40°53'49", long 78°40'38", Clearfield County, on right bank at downstream side of highway bridge at Bower, 4.6 miles downstream from Chest Creek and Mahaffey.

DRAINAGE AREA.--315 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,207.14 ft above mean sea level. Prior to Oct. 17, 1929, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--59 years, 545 cfs (23.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 27,500 cfs June 23 (gage height, 18.64 ft), from rating curve extended as explained below; minimum, 51 cfs Sept. 8, 11, 12 (gage height, 4.11 ft).

Period of record: Maximum discharge, 31,500 cfs Mar. 18, 1936 (gage height, 19.74 ft, from floodmark in gage shelter), from rating curve extended above 7,200 cfs on basis of slope-area measurement of peak flow; minimum, 14 cfs Aug. 29, 1939; minimum daily, 16 cfs Sept. 29, Oct. 1, 6, 13, 1930, Aug. 29, Aug. 31 to Sept. 2, 1939.

Maximum stage known prior to 1913, about 18.5 ft May 13, 1889 (discharge, about 27,000 cfs).

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

REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 1302: 1914-17, 1918(M), 1922-23, 1924(M), 1925-29, 1930-31(M), 1933(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	343	167	991	1,580	390	2,000	483	427	181	1,030	137	65
2	310	310	718	2,140	360	6,920	523	411	160	796	131	63
3	283	469	530	1,370	360	9,290	532	458	189	957	123	62
4	270	330	470	1,240	320	4,070	1,200	459	216	1,120	123	62
5	251	275	440	1,910	210	2,200	1,450	451	822	889	133	59
6	215	243	429	1,300	300	1,490	1,110	369	409	1,510	113	56
7	198	229	2,850	1,180	320	1,400	1,470	347	286	1,540	119	54
8	190	210	4,220	1,080	280	2,100	1,280	323	220	1,130	131	54
9	176	192	3,380	839	270	1,630	1,050	405	190	884	123	71
10	166	186	2,190	916	270	1,320	907	758	243	717	116	62
11	161	184	1,490	1,190	260	1,270	806	546	186	615	101	52
12	154	173	1,120	1,080	260	1,170	701	478	159	497	94	64
13	145	162	862	950	280	1,560	1,180	436	720	431	92	188
14	140	153	730	846	360	2,140	1,380	428	709	381	87	3,840
15	137	195	629	658	340	1,810	3,050	436	443	335	89	1,690
16	131	210	1,610	350	350	1,560	3,650	393	382	441	79	615
17	125	177	1,330	430	320	2,130	5,140	363	464	455	82	396
18	122	163	1,050	500	290	1,780	2,840	350	329	350	215	350
19	121	171	908	540	260	1,410	1,780	338	286	284	138	322
20	120	247	766	542	240	1,150	1,600	347	296	255	104	232
21	118	297	675	761	290	1,030	1,320	384	817	226	88	187
22	115	351	880	630	330	1,400	1,200	314	5,490	216	81	162
23	113	282	827	1,090	300	1,340	1,330	275	23,200	193	79	141
24	114	232	664	1,220	320	1,010	1,070	239	15,100	252	99	171
25	167	228	578	1,440	360	820	923	219	9,070	241	90	215
26	296	252	582	1,150	400	733	780	188	5,430	192	83	160
27	424	230	548	800	470	642	662	169	2,840	176	123	162
28	310	282	670	700	450	593	575	160	1,770	177	96	148
29	230	385	680	600	520	546	512	146	1,410	159	85	157
30	196	855	777	500	-----	569	461	148	1,350	143	77	435
31	179	-----	734	440	-----	514	-----	186	-----	138	70	-----
TOTAL	6,020	7,840	34,328	29,972	9,480	57,597	40,965	10,971	73,367	16,730	3,301	10,295
MEAN	194	261	1,107	967	327	1,858	1,366	354	2,446	540	106	343
MAX	424	855	4,220	2,140	520	9,290	5,140	758	23,200	1,540	215	3,840
MIN	113	153	429	350	210	514	461	146	159	138	70	52
CFSM	.62	.83	3.51	3.07	1.04	5.90	4.34	1.12	7.77	1.71	.34	1.09
IN.	.71	.93	4.05	3.54	1.12	6.80	4.84	1.30	8.66	1.98	.39	1.22
CAL YR 1971	TOTAL 213,145	MEAN 584	MAX 4,800	MIN 58	CFSM 1.85	IN 25.17						
WTR YR 1972	TOTAL 300,866	MEAN 822	MAX 23,200	MIN 52	CFSM 2.61	IN 35.53						

PEAK DISCHARGE (BASE, 4,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	1500	10.07	4,700	6-23	1630	18.64	27,500
3- 3	0730	13.15	10,500	9-14	1900	10.81	5,840
4-17	0530	10.94	6,050				

SUSQUEHANNA RIVER BASIN

01541200 West Branch Susquehanna River near Curwensville, Pa.

LOCATION.--Lat 40°57'41", long 78°31'10", Clearfield County, on left bank 30 ft downstream from bridge on State Highway 453, 0.85 mile downstream from Curwensville Reservoir, 1.1 miles south of Curwensville and 1.8 miles upstream from Anderson Creek.

DRAINAGE AREA.--367 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,124.52 ft above mean sea level. Prior to Aug. 24, 1956, nonrecording gage and crest-stage gage 30 ft upstream at same datum.

AVERAGE DISCHARGE.--17 years, 605 cfs (22.39 inches per year), adjusted for storage since November 1965.

EXTREMES.--Current year: Maximum discharge, 8,590 cfs June 25 (gage height, 11.40 ft); minimum, 8.4 cfs Nov. 8 (gage height, 1.66 ft); minimum daily, 52 cfs Sept. 4, 5.

Period of record: Maximum discharge, 15,700 cfs Mar. 10, 1964 (gage height, 14.19 ft); no flow at times; minimum daily, 19 cfs Aug. 16, 17, 1966.

REMARKS.--Records good except those below 90 cfs, which are poor. Flow regulated by Curwensville Lake 0.85 mile upstream (see p.181).

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	410	134	1,180	2,350	534	608	687	473	234	6,690	171	63
2	347	184	1,170	1,570	514	2,640	631	291	191	5,640	171	61
3	277	342	838	1,020	527	623	655	199	229	1,600	164	54
4	213	435	623	134	467	3,370	847	221	295	1,490	134	52
5	171	416	534	695	305	4,320	1,850	229	585	1,030	115	52
6	191	310	527	1,310	174	2,870	1,310	242	671	1,340	142	173
7	199	250	1,530	1,610	316	1,370	1,480	242	321	2,150	142	300
8	188	188	3,060	1,700	387	2,020	1,760	250	259	1,450	139	238
9	171	217	4,070	1,600	364	2,260	1,330	259	202	1,080	164	57
10	171	191	3,470	1,530	326	1,390	996	600	225	1,030	161	68
11	171	229	2,630	1,490	331	1,270	935	671	250	866	134	228
12	148	238	1,520	1,390	305	856	819	500	246	730	125	217
13	117	209	1,100	1,100	286	1,930	885	507	398	556	86	81
14	95	209	801	1,020	268	3,950	1,640	623	1,140	454	62	385
15	107	206	1,160	1,010	321	4,970	1,890	473	647	487	76	1,300
16	125	217	1,600	885	369	4,830	3,300	429	331	493	117	1,850
17	125	225	1,400	435	404	4,330	3,810	381	410	600	125	1,730
18	125	225	1,090	81	375	3,150	3,990	358	473	608	95	1,150
19	117	221	1,020	448	342	2,500	3,600	364	286	382	135	810
20	110	225	819	704	286	2,350	2,710	369	250	310	177	782
21	107	342	398	965	250	1,970	1,750	655	507	316	148	739
22	97	460	310	895	259	1,450	1,270	331	1,730	316	101	655
23	97	448	663	895	310	1,910	1,450	305	1,580	321	86	541
24	110	364	679	1,480	358	1,380	1,390	305	2,130	268	86	493
25	164	435	663	1,630	410	1,010	1,150	259	8,410	291	86	336
26	347	460	663	1,660	435	875	925	225	8,420	310	87	250
27	593	521	756	1,090	435	875	810	209	8,360	197	87	137
28	381	507	773	955	514	739	679	181	8,240	184	116	188
29	246	507	915	782	578	671	593	181	7,830	202	131	246
30	213	739	1,270	593	-----	655	585	181	7,360	206	110	202
31	171	-----	2,400	541	-----	712	-----	213	-----	195	73	-----
TOTAL	6,104	9,654	39,632	33,568	10,750	63,854	45,727	10,726	62,210	31,792	3,746	13,438
MEAN	197	322	1,278	1,083	371	2,060	1,524	346	2,074	1,026	121	448
MAX	593	739	4,070	2,350	578	4,970	3,990	671	8,420	6,690	177	1,850
MIN	95	134	310	81	174	608	585	181	191	184	62	52
MEAN [‡]	192	305	1,326	1,053	378	2,052	1,522	424	2,420	690	120	323
CFSM [‡]	.52	.83	3.61	2.87	1.03	5.59	4.15	1.16	6.59	1.88	.33	.88
IN. [‡]	.60	.93	4.16	3.31	1.11	6.44	4.63	1.34	7.35	2.17	.38	.98
CAL YR 1971	TOTAL 250,461	MEAN 686	MAX 5,220	MIN 47	MEAN [‡] 694	CFSM [‡] 1.89	IN. [‡] 25.59					
WTR YR 1972	TOTAL 331,201	MEAN 905	MAX 8,420	MIN 52	MEAN [‡] 901	CFSM [‡] 2.46	IN. [‡] 33.40					

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

SUSQUEHANNA RIVER BASIN

113

01541308 Bradley Run near Ashville, Pa.

LOCATION.--Lat 40°30'33", long 78°35'02", Cambria County, on right bank 200 ft downstream from bridge on State Highway 53 at Syberton, 0.2 mile upstream from mouth, and 4.5 miles southwest of Ashville.

DRAINAGE AREA.--6.77 sq mi.

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

AVERAGE DISCHARGE.--5 years, 13.5 cfs (27.08 inches per year).

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

EXTREMES.--Current year: Maximum discharge, 679 cfs June 23 (gage height, 3.82 ft), from rating curve extended as explained below; minimum, 1.8 cfs Sept. 10, 11 (gage height, 1.45 ft).

Period of record: Maximum discharge, 679 cfs June 23, 1972 (gage height, 3.82 ft); from rating curve extended above 70 cfs in basis of a slope-area measurement of peak flow; minimum, 1.2 cfs on many days in 1970 water year (gage height, 1.42 ft).

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

WRD Penna Water Year	Date	Discharge (cfs)	Gage Height (feet)
1968	May 27, 1968	159	2.37
1969	June 2, 1969	127	2.27
1970	Aug. 31, 1970	298	2.76
1971	Sept. 16, 1971	278	2.68

REMARKS.--Records fair.

REVISIONS.--The figures of peak discharge for water years 1968, 1970, 1971, have been revised as shown in the following table. They supersede figures published in WRD Penna. 1968, 1970, 1971.

REVISED PEAK DISCHARGE.--1968: Mar. 23 (0715) 105 cfs (2.20 ft); May 27 (1915) 159 cfs (2.37 ft).

1970: Apr. 2 (1445) 256 cfs (2.66 ft); Apr. 9 (1715) 133 cfs (2.29 ft); Apr. 14 (1345) 219 cfs (2.55 ft); Aug. 31 (0330) 298 cfs (2.76 ft).

1971: Feb. 22 (1420) 106 cfs (2.12 ft); Feb. 28 (0125) 148 cfs (2.26 ft); Mar. 15 (1820) 145 cfs (2.25 ft); Aug. 21 (1855) 232 cfs (2.54 ft); Sept. 13 (2115) 172 cfs (2.34 ft); Sept. 16 (1525) 278 cfs (2.68 ft); Sept. 20 (0010) 160 cfs (2.30 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	13	11	10	11	9.8	42	17	17	7.5	20	4.9	2.4
2	12	15	9.2	15	9.8	190	17	15	8.6	17	4.9	2.5
3	12	24	8.6	14	9.8	260	16	18	9.8	18	5.8	2.2
4	11	17	8.1	13	9.8	160	32	26	8.1	15	4.9	2.2
5	10	15	8.1	15	9.2	96	20	23	14	22	4.6	2.2
6	9.8	13	58	13	8.6	70	19	19	9.8	18	4.2	2.2
7	9.8	12	136	12	8.6	56	40	18	8.6	15	4.9	2.0
8	9.2	11	109	12	8.1	76	26	16	8.1	15	4.2	2.0
9	8.6	10	79	14	7.5	58	23	34	7.5	13	3.9	2.0
10	8.6	10	55	19	7.5	44	23	26	8.1	13	3.6	2.0
11	8.1	9.8	38	17	7.0	36	23	22	7.0	12	3.4	2.0
12	7.5	9.2	28	15	7.0	33	19	19	6.5	11	3.2	2.7
13	7.0	9.2	23	15	8.1	40	55	17	10	10	3.1	4.9
14	7.0	8.6	20	14	8.1	56	40	17	8.6	9.5	3.0	34
15	6.5	8.1	20	12	7.6	52	88	16	7.0	9.5	2.9	4.9
16	6.0	8.1	17	11	7.2	45	100	14	14	11	2.8	3.5
17	6.0	7.5	15	11	7.0	58	106	13	9.2	9.5	2.7	3.0
18	5.8	7.5	14	12	6.4	45	82	12	8.6	8.4	2.9	3.9
19	5.4	7.5	14	12	5.6	38	58	11	7.5	7.9	3.3	3.0
20	5.2	7.5	16	12	6.2	32	52	18	7.0	7.3	3.2	2.7
21	4.9	8.1	15	12	7.0	32	38	13	52	6.8	2.8	2.5
22	4.8	7.0	13	12	7.6	67	47	12	278	6.3	2.6	2.5
23	5.2	6.5	12	14	7.0	50	36	12	389	6.3	2.5	2.2
24	6.0	6.5	12	14	7.6	38	30	10	129	16	2.6	2.5
25	15	7.0	12	17	8.6	32	26	9.8	80	6.8	2.7	2.5
26	44	6.5	12	12	10	26	22	9.2	55	6.3	2.6	2.5
27	28	7.0	12	12	9.6	22	19	8.6	39	6.8	3.1	2.7
28	20	7.5	12	12	10	20	17	8.1	29	6.3	3.1	2.7
29	17	10	11	12	15	18	16	8.1	27	5.8	2.9	4.9
30	14	14	14	12	-----	17	14	8.1	25	5.4	2.7	4.9
31	12	-----	12	10	-----	17	-----	8.6	-----	5.4	2.6	-----
TOTAL	339.4	301.1	823.0	408	241.3	1,826	1,121	478.5	1,278.5	340.3	106.6	116.2
MEAN	10.9	10.0	26.5	13.2	8.32	58.9	37.4	15.4	42.6	11.0	3.44	3.87
MAX	44	24	136	19	15	260	106	34	389	22	5.8	34
MIN	4.8	6.5	8.1	10	5.6	17	14	8.1	6.5	5.4	2.5	2.0
CFSM	1.61	1.48	3.91	1.95	1.23	8.70	5.52	2.27	6.29	1.62	.51	.57
IN.	1.86	1.65	4.52	2.24	1.33	10.03	6.16	2.63	7.03	1.87	.59	.64

CAL YR 1971 TOTAL 5,977.4 MEAN 16.4 MAX 136 MIN 2.2 CFSM 2.42 IN 32.84
WTR YR 1972 TOTAL 7,379.9 MEAN 20.2 MAX 389 MIN 2.0 CFSM 2.98 IN 40.55

PEAK DISCHARGE (BASE, 110 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-25	Unk.	2.75	302	4-16	1715	2.32	166
12- 7	1140	2.30	160	6-23	0335	3.82	679
3- 3	Unk.	2.70	285	9-14	0115	2.54	159

SUSQUEHANNA RIVER BASIN

01541500 Clearfield Creek at Dimeling, Pa.

LOCATION.--Lat 40°58'18", long 78°24'22", Clearfield County, on right bank at downstream side of highway bridge at Dimeling, 600 ft downstream from Little Clearfield Creek, and 4 miles southeast of Clearfield.

DRAINAGE AREA.--371 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,146.08 ft above mean sea level. Prior to Oct. 17, 1928, nonrecording gage and Oct. 17, 1928 to Oct. 25, 1967, water-stage recorder at site 200 ft upstream, all at same datum.

AVERAGE DISCHARGE.--59 years, 566 cfs (20.72 inches per year), adjusted for storage since December 1960.

EXTREMES.--Current year: Maximum discharge, 22,400 cfs June 23 (gage height, 17.56 ft), from rating curve extended above 3,200 cfs on basis of a slope-area measurement of peak flow; minimum, 60 cfs Sept. 7, 8 (gage height, 2.85 ft).

Period of record: Maximum discharge, 30,600 cfs Mar. 18, 1936 (gage height, 18.49 ft, from floodmark in gage shelter), from rating curve extended above 15,000 cfs; minimum, 6.0 cfs Oct. 1, 9, 1925; minimum daily, 7.1 cfs Oct. 1, 1925.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Glendale Lake about 25 miles upstream (see p.181).

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 891: 1936-39. WSP 1302: -1915-17, 1918-19(M). WSP 1502: 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	345	297	814	1,090	450	2,000	598	566	327	1,900	181	69
2	305	406	604	1,090	430	5,600	615	555	280	1,430	165	66
3	276	653	450	1,340	370	8,240	615	588	345	1,400	156	66
4	260	466	410	1,050	290	5,200	766	648	397	1,460	150	66
5	233	392	370	1,010	320	3,240	1,030	708	642	1,260	153	64
6	219	345	1,150	920	360	2,310	814	609	513	1,890	141	64
7	205	323	3,590	778	370	1,910	1,110	529	354	1,700	133	62
8	194	293	3,960	697	340	2,380	1,230	487	293	1,460	141	61
9	181	264	2,800	642	320	2,050	1,030	555	257	1,210	150	64
10	178	249	2,040	808	310	1,650	934	1,020	293	998	130	67
11	168	241	1,580	1,120	310	1,360	871	778	245	878	120	64
12	159	223	1,220	1,050	320	1,230	790	681	208	742	110	66
13	144	212	1,010	941	350	1,460	1,090	631	451	659	107	85
14	135	198	871	885	440	1,950	1,550	620	878	582	103	305
15	128	205	1,450	760	380	1,820	2,210	659	540	508	98	529
16	122	276	1,230	440	400	1,640	3,590	593	451	582	91	223
17	117	226	1,020	520	360	1,980	5,260	609	598	582	89	150
18	112	201	906	560	330	1,820	3,480	598	471	503	96	128
19	110	198	802	560	290	1,550	2,420	518	401	416	110	120
20	105	219	760	545	310	1,330	2,070	508	397	373	107	122
21	101	241	906	642	350	1,180	1,790	588	416	336	91	101
22	98	272	772	571	390	1,310	1,550	492	7,550	301	85	91
23	103	233	653	892	360	1,510	1,810	431	21,100	276	81	83
24	125	205	615	1,130	390	1,200	1,450	387	14,100	359	87	91
25	289	201	604	1,260	440	1,010	1,230	345	7,330	332	89	110
26	1,050	245	620	1,000	500	899	1,040	310	5,510	272	85	101
27	719	226	626	800	560	802	885	276	3,940	237	98	94
28	508	245	637	700	540	742	766	253	2,820	226	96	91
29	421	332	626	600	600	692	681	237	2,300	215	85	181
30	363	754	983	540	-----	686	615	253	2,260	191	81	230
31	323	-----	1,520	490	-----	637	-----	426	-----	185	73	-----
TOTAL	7,796	8,841	35,599	25,431	11,180	61,388	43,890	16,458	75,667	23,463	3,482	3,614
MEAN	251	295	1,148	820	386	1,980	1,463	531	2,522	757	112	120
MAX	1,050	754	3,960	1,340	600	8,240	5,260	1,020	21,100	1,900	181	529
MIN	98	198	370	440	290	637	598	237	208	185	73	61
MEAN [†]	249	295	1,154	817	390	1,975	1,465	522	2,562	717	108	128
CFSM [†]	.67	.80	3.11	2.20	1.05	5.32	3.95	1.41	6.91	1.93	.29	.35
IN. [†]	.77	.89	3.58	2.54	1.13	6.13	4.41	1.63	7.71	2.22	.33	.39

CAL YR 1971 TOTAL 235,499 MEAN 645 MAX 5,070 MIN 71 MEAN[†] 645 CFSM[†] 1.74 IN.[†] 23.59
WTR YR 1972 TOTAL 316,809 MEAN 866 MAX 21,100 MIN 61 MEAN[†] 866 CFSM[†] 2.33 IN.[†] 31.73

[†] Adjusted for change in contents in Glendale Lake.

01542000 Moshannon Creek at Osceola Mills, Pa.

LOCATION.--Lat 40°50'58", long 78°16'05", Clearfield County, on left bank 10 ft upstream from Penn Central Railroad bridge at Osceola Mills, and 0.1 mile downstream from Trout Run.

DRAINAGE AREA.--68.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,446.98 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 109 cfs (21.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,120 cfs June 23 (gage height, 14.25 ft), from rating curve extended as explained below; minimum daily, 16 cfs Sept. 5-11, 22, 23.

Period of record: Maximum discharge, 5,120 cfs June 23, 1972 (gage height, 14.25 ft), from rating curve extended above 1,800 cfs on basis of contracted-opening measurements at gage heights, 7.58 ft, 9.00 ft, and at peak flow; minimum, 6.9 cfs Dec. 5, 1957; minimum gage height, 1.58 ft Oct. 11, 1943; minimum daily discharge, 7.8 cfs Sept. 21, 1955.

REMARKS.--Records good except those for winter periods and those for period June 23 to September 30, which are fair.

REVISIONS (WATER YEARS).--WSP 1232: 1941-46, 1948, 1950-51, 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	34	41	71	126	78	260	158	145	86	359	52	18
2	33	83	60	147	78	1,140	166	137	83	302	50	18
3	31	62	56	153	66	1,610	160	149	103	284	50	17
4	30	50	50	137	52	861	181	145	106	255	46	17
5	29	47	46	145	58	585	130	130	126	263	42	16
6	29	46	205	128	68	429	121	119	89	260	41	16
7	29	46	380	121	66	369	166	112	83	220	47	16
8	27	44	404	115	62	380	145	110	77	225	46	16
9	27	42	345	113	60	296	139	158	78	198	42	16
10	28	42	302	139	56	269	137	164	91	188	39	16
11	26	41	266	160	56	246	136	137	74	170	38	16
12	25	40	228	143	58	241	130	139	69	151	35	24
13	25	38	195	136	66	260	190	137	151	137	32	30
14	25	36	186	132	94	278	168	151	134	126	31	53
15	23	46	220	121	85	269	255	162	106	128	29	23
16	23	41	177	86	80	278	352	168	119	137	28	19
17	22	36	158	96	70	293	741	186	105	122	30	17
18	22	34	147	110	62	272	527	186	100	108	32	19
19	22	38	137	115	56	255	422	175	93	100	30	20
20	21	38	145	113	60	241	387	190	88	94	26	18
21	21	42	143	124	64	230	296	173	128	88	25	17
22	21	38	122	112	70	263	299	153	2,030	83	24	16
23	25	33	110	156	64	278	278	141	4,490	80	24	16
24	41	40	110	162	68	263	244	130	2,750	89	27	17
25	66	53	106	173	66	244	225	121	1,910	74	25	18
26	74	35	113	145	72	222	205	112	1,470	66	24	17
27	46	35	110	130	70	205	188	103	969	62	23	18
28	42	41	112	110	72	193	173	96	677	59	22	20
29	40	54	100	96	100	181	162	91	566	56	21	24
30	39	94	143	86	-----	181	151	88	444	53	20	47
31	39	-----	151	80	-----	166	-----	98	-----	53	19	-----
TOTAL	985	1,356	5,098	3,910	1,977	11,258	7,032	4,306	17,395	4,590	1,020	615
MEAN	31.8	45.2	164	126	68.2	363	234	139	580	148	32.9	20.5
MAX	74	94	404	173	100	1,610	741	190	4,490	359	52	53
MIN	21	33	46	80	52	166	121	88	69	53	19	16
CFSM	.46	.66	2.38	1.83	.99	5.28	3.40	2.02	8.43	2.15	.48	.30
IN.	.53	.73	2.76	2.11	1.07	6.09	3.80	2.33	9.41	2.48	.55	.33

CAL YR 1971 TOTAL 39,556 MEAN 108 MAX 870 MIN 14 CFSM 1.57 IN 21.39
WTR YR 1972 TOTAL 59,542 MEAN 163 MAX 4,490 MIN 16 CFSM 2.37 IN 32.19

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	0500	7.04	1,880	6-23	0600	14.25	5,120
4-17	0215	5.04	978				

SUSQUEHANNA RIVER BASIN

01542500 West Branch Susquehanna River at Karthaus, Pa.

LOCATION.--Lat 41°06'56", long 78°06'43", Clearfield County, on left bank 900 ft upstream from bridge on State Highway 879 at Karthaus, 1,000 ft upstream from Mosquito Creek, and 3.3 miles downstream from Moshannon Creek. Records include flow of Mosquito Creek.

DRAINAGE AREA.--1,462 sq mi. includes that of Mosquito Creek.

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

GAGE.--Water-stage recorder. Datum of gage is 830.59 ft above mean sea level. Prior to Sept. 30, 1920, nonrecording gage at site 900 ft downstream at datum 20.88 ft lower. Feb. 21 to Sept. 30, 1940, nonrecording gage at site 900 ft downstream at present datum.

AVERAGE DISCHARGE.--32 years (1940-72), 2,417 cfs (22.45 inches per year), adjusted for storage since December 1960.

EXTREMES.--Current year: Maximum discharge, 84,300 cfs June 23 (gage height, 18.57 ft), from rating curve extended above 50,000 cfs; minimum, 259 cfs Sept. 11, 12 (gage height, 0.97 ft).
Period of record: Maximum discharge, 84,300 cfs June 23, 1972 (gage height, 18.57 ft), from rating curve extended above 50,000 cfs; minimum, 100 cfs Sept. 26, 27, 1964 (gage height, 0.43 ft).
Maximum stage known, about 24.5 ft Mar. 18, 1936, from floodmarks at highway bridge (discharge, about 135,000 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Curwensville Lake about 50 miles upstream and by Glendale Lake (see p. 181).

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	1,060	918	2,490	6,940	2,100	3,600	2,870	2,560	1,640	13,800	850	348
2	1,070	948	2,470	6,080	2,000	14,500	2,920	2,380	1,460	11,500	812	310
3	1,000	1,270	1,900	5,720	1,900	22,500	2,830	2,380	1,320	7,800	809	283
4	903	1,480	1,600	3,830	1,700	18,000	3,000	2,400	1,420	6,740	775	285
5	829	1,400	1,400	3,240	1,400	13,800	4,300	2,400	1,700	5,390	693	282
6	807	1,230	2,060	3,970	1,200	10,800	4,700	2,290	2,290	5,910	634	275
7	636	1,130	6,790	3,910	1,200	7,050	4,000	2,090	1,860	6,890	646	267
8	743	1,020	10,800	4,090	1,300	7,190	4,300	1,980	1,370	6,970	673	501
9	709	940	11,700	3,830	1,300	8,100	4,600	2,180	1,240	6,110	654	595
10	682	910	9,920	3,890	1,200	6,240	4,100	2,860	1,830	5,280	653	379
11	655	821	8,190	4,470	1,200	5,050	3,800	3,430	1,760	4,490	643	270
12	636	829	6,360	4,600	1,100	4,690	3,600	2,890	1,460	3,600	584	290
13	610	836	4,620	4,200	1,000	4,230	3,500	2,690	1,510	3,110	592	758
14	554	771	3,930	3,830	940	7,970	5,200	2,840	2,860	2,810	532	660
15	501	757	4,110	3,590	1,300	9,450	6,200	3,150	3,030	2,480	460	1,100
16	472	792	5,190	2,500	1,400	9,570	12,000	2,970	2,350	2,570	371	2,280
17	412	836	4,670	2,000	1,400	9,520	17,000	2,860	1,960	2,550	418	2,190
18	478	785	4,050	1,600	1,300	9,000	15,000	2,890	2,090	2,320	482	2,010
19	467	771	3,500	2,000	1,200	7,000	12,000	2,740	1,880	2,000	473	1,240
20	456	792	3,320	2,550	1,100	6,600	9,780	2,920	1,560	1,840	431	1,020
21	434	829	2,600	2,900	920	6,000	7,760	2,960	1,690	1,540	518	978
22	428	933	1,800	3,030	900	5,600	6,340	3,090	21,700	1,370	496	918
23	434	1,060	2,230	3,560	1,000	7,400	6,500	2,470	79,200	1,260	434	829
24	489	1,020	2,460	4,670	1,200	6,800	6,100	2,250	48,900	1,420	406	764
25	722	888	2,410	5,700	1,300	5,200	5,300	2,060	32,500	1,420	404	792
26	1,220	1,020	2,440	5,820	1,400	4,400	4,500	1,760	28,900	1,400	393	655
27	2,040	1,060	2,550	5,090	1,400	3,700	3,850	1,610	23,100	1,270	396	518
28	1,690	1,110	2,660	4,180	1,400	3,530	3,460	1,470	19,200	1,040	399	456
29	1,290	1,190	2,700	3,300	1,600	3,090	3,020	1,340	16,700	922	404	412
30	1,070	1,500	3,390	2,600	-----	3,030	2,730	1,320	15,800	906	410	617
31	978	-----	7,420	2,300	-----	2,920	-----	1,580	-----	870	392	-----
TOTAL	24,475	29,846	131,730	119,990	38,360	236,530	175,260	74,810	324,280	117,578	16,837	22,282
MEAN	790	995	4,249	3,871	1,323	7,630	5,842	2,413	10,810	3,793	543	743
MAX	2,040	1,500	11,700	6,940	2,100	22,500	17,000	3,430	79,200	13,800	850	2,280
MIN	412	757	1,400	1,600	900	2,920	2,730	1,320	1,240	870	371	267
MEAN [‡]	783	978	4,303	3,838	1,334	7,618	5,842	2,482	11,200	3,417	538	626
CFSM [‡]	.54	2.67	2.94	2.63	.91	5.21	4.00	1.70	7.66	2.34	.37	.43
IN [‡]	.62	.75	3.39	3.03	.98	6.01	4.46	1.96	8.55	2.70	.43	.48
CAL YR 1971 TOTAL	920,581			MEAN 2,522	MAX 18,000	MIN 321	MEAN [‡] 2,528	CFSM [‡] 1.73	IN [‡] 23.46			
WTR YR 1972 TOTAL	1,311,978			MEAN 3,585	MAX 79,200	MIN 267	MEAN [‡] 3,580	CFSM [‡] 2.45	IN [‡] 33.36			

[‡] Adjusted for change in contents in Curwensville and Glendale Lakes.

SUSQUEHANNA RIVER BASIN

117

01542810 Waldy Run near Emporium, Pa.

LOCATION.--Lat 41°34'44", long 78°17'34", Cameron County, on left bank 15 ft downstream from highway bridge at North Creek Chapel, 0.1 mile upstream from mouth, and 5.5 miles northwest of Emporium.

DRAINAGE AREA.--5.24 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,263.62 ft above mean sea level. July 25, 1963 to Aug. 27, 1964 crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--8 years (1964-72), 8.01 cfs (20.76 inches per year).

EXTREMES.--Current year: Maximum discharge, 469 cfs June 22 (gage height, 5.86 ft), from rating curve extended as explained below; minimum, 0.10 cfs Sept. 11 (gage height, 3.16 ft).

Period of record: Maximum discharge, 828 cfs Sept. 28, 1967 (gage height, 6.32 ft), from rating curve extended above 80 cfs on basis of slope-area measurements at gage heights, 5.09 ft, 5.86 ft, and at peak flow; no flow Sept. 14-19, 1964.

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	.62	.57	4.2	35	4.5	3.5	24	5.7	2.0	16	.81	.27
2	.52	1.0	3.1	18	3.7	60	29	9.0	2.4	12	.74	.24
3	.44	1.0	2.9	13	3.5	102	22	16	2.0	11	1.5	.24
4	.52	.81	2.4	8.0	2.5	40	16	23	2.2	11	.90	.24
5	.68	.74	2.0	7.0	1.9	22	12	23	1.7	12	.68	.20
6	.62	.62	6.1	5.7	1.6	13	12	19	1.5	11	.62	.18
7	.74	.68	29	5.7	1.4	12	16	15	1.3	12	1.3	.16
8	.62	.62	54	3.9	1.5	25	16	12	1.2	11	1.2	.18
9	.62	.52	39	3.6	1.5	24	13	15	1.3	8.5	.81	.24
10	.74	.62	31	4.2	1.4	16	11	24	1.7	8.5	.68	.14
11	.81	.62	21	6.1	1.4	11	14	24	1.2	7.5	.62	.12
12	.62	.57	14	9.0	1.3	9.6	27	17	.90	7.5	.57	.27
13	.52	.57	9.6	11	1.3	9.0	58	12	1.2	6.6	.57	.81
14	.44	.52	8.0	13	1.6	15	82	14	1.0	4.9	.52	.74
15	.40	.74	11	11	1.8	18	49	21	1.5	4.2	.48	.48
16	.33	.81	19	7.6	1.8	16	98	42	7.0	3.9	.40	.33
17	.30	.74	17	5.4	1.7	16	134	52	5.7	2.9	.57	.30
18	.24	.74	14	4.1	1.5	17	52	36	4.2	2.4	.57	.57
19	.22	1.2	11	4.8	1.4	15	30	22	3.4	2.2	.48	.48
20	.20	1.3	8.6	5.3	1.3	15	21	16	3.1	1.9	.40	.33
21	.18	1.9	7.8	4.9	1.2	18	15	14	117	1.9	.36	.24
22	.18	1.7	6.4	6.6	1.1	61	15	12	268	1.7	.33	.20
23	.20	1.4	5.4	28	1.1	70	15	9.0	275	1.7	.57	.16
24	.90	1.3	5.2	39	1.2	34	15	7.0	88	2.2	.57	.40
25	1.7	1.2	5.4	61	1.5	19	12	5.3	39	1.5	.44	.48
26	1.5	1.5	7.0	48	1.7	13	10	3.9	30	1.3	.68	.44
27	1.2	1.7	8.2	24	1.7	10	8.5	3.1	23	1.2	.90	.90
28	.90	1.9	9.0	15	1.6	9.6	7.0	2.6	15	1.0	.74	.52
29	.74	2.2	9.2	10	1.8	10	6.1	2.2	12	.90	.52	.52
30	.68	4.6	30	6.6	-----	14	5.3	2.4	15	.81	.40	1.7
31	.62	-----	90	5.4	-----	17	-----	2.4	-----	.81	.33	-----
TOTAL	19.00	34.39	490.5	429.9	51.5	734.7	844.9	481.6	928.50	172.02	20.26	12.08
MEAN	.61	1.15	15.8	13.9	1.78	23.7	28.2	15.5	31.0	5.55	.65	.40
MAX	1.7	4.6	90	61	4.5	102	134	52	275	16	1.5	1.7
MIN	.18	.52	2.0	3.6	1.1	3.5	5.3	2.2	.90	.81	.33	.12
CFSM	.12	.22	3.02	2.65	.34	4.52	5.38	2.96	5.92	1.06	.12	.08
IN.	.13	.24	3.48	3.05	.37	5.22	6.00	3.42	6.59	1.22	.14	.09

CAL YR 1971 TOTAL 2,446.37 MEAN 6.70 MAX 90 MIN .08 CFSM 1.28 IN 17.37
WTR YR 1972 TOTAL 4,219.35 MEAN 11.5 MAX 275 MIN .12 CFSM 2.19 IN 29.95

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	Unk.	4.45	130	4-16	2030	4.88	219
3- 2	2245	4.57	154	6-22	2215	5.86	469

SUSQUEHANNA RIVER BASIN

01543000 Driftwood Branch Sinnemahoning Creek at Sterling Run, Pa.

LOCATION.--Lat 41°24'48", long 78°11'50", Cameron County, on downstream side of first pier of highway bridge at village of Sterling Run and 300 ft upstream from Sterling Run.

DRAINAGE AREA.--272 sq mi.

PERIOD OF RECORD.--October 1913 to current year. Monthly discharge only for some periods, published in WSP 130.

GAGE.--Water-stage recorder and nonrecording gage. Datum of gage is 894.84 ft above mean sea level. Oct. 1, 1913 to Sept. 30, 1931, nonrecording gage and Oct. 1, 1931 to Sept. 30, 1932, water-stage recorder at present site and datum. Oct. 1, 1932 to Sept. 30, 1942, nonrecording gage at site 800 ft upstream at same datum.

AVERAGE DISCHARGE.--59 years, 442 cfs (22.07 inches per year).

EXTREMES.--Current year: Maximum discharge, 32,000 cfs June 22 (gage height, 12.20 ft, from floodmark), from rating curve extended as explained below; minimum, 8.1 cfs Sept. 8, 9, 11, 12, 13 (gage height, -0.27 ft).
Period of record: Maximum discharge, 47,800 cfs July 18, 1942 (gage height, 14.70 ft, from floodmarks at highway bridge), from rating curve extended above 11,000 cfs on basis of slope-area measurement of peak flow; minimum observed, 0.4 cfs Sept. 7, 12-14, 1930.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1272: Drainage area. WSP 1502: 1933(M), 1934-38, 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	111	95	317	2,000	350	200	780	304	202	925	72	15
2	83	108	230	1,310	320	2,700	945	361	161	746	67	13
3	71	148	200	935	290	5,260	868	544	202	877	78	12
4	58	124	190	712	210	2,330	823	704	212	1,170	87	11
5	61	111	180	664	160	1,470	737	796	221	955	59	10
6	55	101	352	470	120	985	696	746	161	1,180	48	9.4
7	61	98	1,110	400	130	814	805	672	144	1,260	48	8.7
8	63	98	2,080	350	140	1,230	762	595	124	1,050	70	8.1
9	55	95	1,590	310	130	1,130	664	648	112	805	63	8.1
10	53	92	1,250	396	130	925	610	859	148	771	52	8.7
11	55	95	982	476	120	737	656	859	121	610	41	8.1
12	53	98	758	618	120	680	796	771	101	463	37	8.1
13	42	95	618	688	110	664	1,500	640	104	407	35	13
14	35	95	532	859	130	960	2,120	680	109	413	32	64
15	32	89	799	740	150	860	1,930	746	101	372	28	50
16	28	104	1,150	580	150	850	3,040	945	393	402	26	32
17	28	108	1,050	400	140	1,030	5,200	1,130	300	335	23	20
18	24	101	853	320	130	1,030	2,600	985	229	263	25	19
19	20	104	670	360	120	945	1,620	771	202	221	26	25
20	18	148	595	425	110	905	1,210	753	198	246	25	25
21	17	152	546	431	100	975	915	823	2,480	221	20	19
22	15	152	448	372	94	1,900	805	728	13,000	179	19	15
23	15	110	369	1,230	110	2,480	796	610	18,600	154	18	11
24	20	100	379	1,620	120	1,630	737	509	5,490	176	18	12
25	145	96	374	2,150	140	1,130	656	407	2,880	147	20	16
26	186	120	488	1,940	150	868	572	330	2,210	147	20	22
27	155	138	553	1,470	150	720	489	263	1,740	112	20	41
28	127	141	618	1,000	140	618	419	229	1,280	101	28	54
29	114	166	610	700	150	580	378	202	1,100	87	32	37
30	104	310	2,020	560	-----	680	340	183	1,170	77	23	65
31	98	-----	3,750	450	-----	688	-----	225	-----	72	19	-----
TOTAL	2,002	3,592	25,661	24,936	4,414	37,974	34,469	19,028	53,495	14,944	1,179	660.2
MEAN	64.6	120	828	804	152	1,225	1,149	614	1,783	482	38.0	22.0
MAX	186	310	3,750	2,150	350	5,260	5,200	1,130	18,600	1,260	87	65
MIN	15	89	180	310	94	200	340	183	101	72	18	8.1
CFSM	.24	.44	3.04	2.96	.56	4.50	4.22	2.26	6.56	1.77	.14	.08
IN.	.27	.49	3.51	3.41	.60	5.19	4.71	2.60	7.32	2.04	.16	.09

CAL YR 1971 TOTAL 131,726.2 MEAN 361 MAX 3,750 MIN 4.2 CFSM 1.33 IN 18.02
WTR YR 1972 TOTAL 222,354.2 MEAN 608 MAX 18,600 MIN 8.1 CFSM 2.24 IN 30.41

PEAK DISCHARGE (BASE, 4,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	2300	4.57	5,300	4-17	0030	5.52	7,060
3-3	0130	5.63	7,300	6-22	2330	12.20	32,000

SUSQUEHANNA RIVER BASIN

119

01543500 Sinnemahoning Creek at Sinnemahoning, Pa.

LOCATION.--Lat 41°19'02", long 78°06'12", Cameron County, on left bank 0.2 mile upstream from Grove Run and 0.7 mile upstream from Penn Central Railroad bridge at Sinnemahoning.

DRAINAGE AREA.--685 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 769.36 ft above mean sea level.

AVERAGE DISCHARGE.--34 years, 1,087 cfs (21.55 inches per year).

EXTREMES.--Maximum discharge, 60,800 cfs June 23 (gage height, 21.78 ft), from rating curve extended as explained below; minimum, 40 cfs Sept. 12; minimum gage height, 1.73 ft Oct. 21, 22, 23.

Period of record: Maximum discharge, 60,800 cfs June 23, 1972 (gage height, 21.78 ft), from rating curve extended above 31,000 cfs on basis of slope-area measurement at gage height, 21.58 ft; minimum, 1.2 cfs Sept. 4, 1939 (gage height, 1.18 ft); minimum daily, 1.4 cfs Sept. 3, 1939.

Maximum stage known, 21.94 ft Mar. 18, 1936, from floodmark (discharge, 61,200 cfs, from rating extended as explained above).

REMARKS.--Records good except those for winter periods, which are fair. Records of water quality 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	329	146	653	5,180	1,000	1,000	1,740	841	557	2,510	240	67
2	236	182	491	3,780	860	7,000	2,020	916	461	2,030	230	60
3	191	305	400	2,990	760	15,100	1,910	1,640	479	1,920	250	55
4	164	255	350	2,260	600	7,340	1,870	1,960	510	2,310	290	53
5	167	216	320	2,020	480	4,590	1,910	2,070	623	1,890	230	51
6	160	191	663	1,500	400	3,280	1,730	1,870	448	2,510	170	48
7	167	182	2,780	1,200	450	2,670	2,130	1,700	389	2,650	170	45
8	171	174	4,650	1,000	430	3,470	2,020	1,490	333	2,270	240	43
9	146	164	3,710	880	420	3,280	1,840	1,680	301	2,090	230	44
10	139	157	2,910	1,000	390	2,830	1,700	2,250	454	2,330	200	44
11	143	160	2,330	1,200	360	2,330	1,690	2,090	405	1,750	170	42
12	133	157	1,780	1,500	340	2,170	1,790	1,920	315	1,360	150	43
13	119	150	1,450	1,870	320	2,150	2,610	1,670	334	1,150	140	58
14	108	146	1,210	2,150	350	2,830	3,870	1,720	449	1,060	130	382
15	103	139	2,170	1,960	400	2,870	4,330	1,900	366	1,040	116	290
16	95	153	2,920	1,400	400	2,540	6,150	2,210	1,190	1,190	99	183
17	90	150	2,600	1,100	380	2,970	11,000	2,390	1,070	1,030	90	123
18	88	143	2,180	900	350	2,960	6,270	2,080	790	812	93	99
19	83	143	1,700	1,000	330	2,680	4,130	1,720	686	665	99	99
20	77	178	1,450	1,080	310	2,480	3,330	1,890	627	674	90	102
21	72	203	1,350	1,090	280	2,540	2,690	2,310	2,930	720	76	83
22	70	212	1,110	949	260	4,220	2,290	1,990	20,100	560	69	69
23	72	182	881	2,320	290	5,640	2,440	1,680	44,000	470	65	60
24	85	157	870	3,330	330	4,140	2,140	1,400	14,800	560	69	62
25	221	182	847	4,430	360	3,030	1,930	1,140	8,070	470	93	85
26	305	203	1,010	4,320	400	2,390	1,660	910	6,980	450	183	104
27	265	178	1,260	3,280	420	1,950	1,420	736	5,030	400	123	120
28	208	195	1,310	2,500	380	1,690	1,210	624	3,410	350	152	206
29	182	245	1,340	1,900	400	1,510	1,060	546	2,810	300	130	161
30	160	491	3,520	1,600	-----	1,670	921	507	3,050	270	96	227
31	150	-----	8,850	1,200	-----	1,640	-----	598	-----	250	78	-----
TOTAL	4,699	5,739	59,065	62,889	12,450	106,960	81,801	48,448	121,967	38,041	4,561	3,108
MEAN	152	191	1,905	2,029	429	3,450	2,727	1,563	4,066	1,227	147	104
MAX	329	491	8,850	5,180	1,000	15,100	11,000	2,390	44,000	2,650	290	382
MIN	70	139	320	880	260	1,000	921	507	301	250	65	42
CFSM	.22	.28	2.78	2.96	.63	5.04	3.98	2.28	5.94	1.79	.21	.15
IN.	.26	.31	3.21	3.42	.68	5.81	4.44	2.63	6.62	2.07	.25	.17

CAL YR 1971 TOTAL 330,248 MEAN 905 MAX 8,850 MIN 18 CFSM 1.32 IN 17.93
WTR YR 1972 TOTAL 549,728 MEAN 1,502 MAX 44,000 MIN 42 CFSM 2.19 IN 29.85

PEAK DISCHARGE (BASE, 8,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-23	0130	8.00	10,900	4-17	0330	8.70	13,000
3-3	0330	10.57	18,600	6-23	0300	21.78	60,800

SUSQUEHANNA RIVER BASIN

01544000 First Fork Sinnemahoning Creek near Sinnemahoning, Pa.

LOCATION.--Lat 41°24'06", long 78°01'28", Cameron County, on right bank 350 ft downstream from Woodrock Run, 1,500 ft upstream from Roaring Run, 0.75 mile downstream from George B. Stevenson Dam, and 7.5 miles north-east of Sinnemahoning.

DRAINAGE AREA.--245 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 878.71 ft above mean sea level. Prior to Apr. 1, 1954, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--19 years, 359 cfs (19.90 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 7,150 cfs June 28 (gage height, 4.75 ft); minimum, 18 cfs Sept. 28 (gage height, -0.35 ft).

Period of record: Maximum discharge, 10,200 cfs Mar. 1, 1956 (gage height, 6.60 ft); minimum, 0.9 cfs Sept. 3, 1964; minimum daily, 2.9 cfs Sept. 3, Oct. 13-15, 1964.

Maximum discharge known, 80,000 cfs July 18, 1942, by slope-area measurement.

REMARKS.--Records good. Flow regulated by First Fork Sinnemahoning Creek Reservoir 0.75 mile upstream since January 31, 1956 (see p.181). Records of water quality 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	40	96	184	1,680	404	218	830	291	211	5,100	66	26
2	44	83	148	1,280	317	1,610	1,040	315	174	3,580	60	24
3	46	102	135	918	265	451	1,100	532	231	613	55	24
4	41	113	138	738	240	2,970	920	791	211	821	52	23
5	34	110	146	565	197	3,340	706	990	197	812	55	22
6	32	109	209	409	143	2,700	634	960	178	736	64	21
7	31	99	673	375	171	1,080	688	791	174	700	77	21
8	34	95	1,730	375	162	886	697	679	148	821	77	22
9	34	91	1,620	319	135	930	625	697	123	727	77	21
10	34	90	1,370	308	118	860	608	810	202	900	77	20
11	34	88	1,170	293	117	663	617	920	192	764	62	20
12	34	88	775	398	117	662	753	870	130	523	52	21
13	34	84	731	484	128	613	1,320	734	120	390	58	25
14	33	78	606	707	183	593	2,140	688	123	461	58	42
15	33	72	620	866	153	684	1,880	763	126	554	58	45
16	33	85	866	742	123	691	1,970	1,200	237	691	52	35
17	33	92	968	557	123	679	3,700	1,340	192	709	42	32
18	33	91	858	558	124	708	2,620	1,070	153	570	58	30
19	33	103	662	511	110	727	1,570	860	178	410	66	42
20	32	121	554	384	100	726	1,230	673	178	538	53	42
21	32	134	443	341	90	752	1,000	850	417	579	44	44
22	32	130	375	314	82	1,270	840	673	736	390	38	37
23	32	111	296	673	80	2,000	725	546	137	287	44	30
24	47	92	263	1,180	81	1,480	643	469	106	324	52	29
25	83	92	321	1,720	103	1,120	643	356	461	248	52	27
26	122	98	293	2,090	118	839	549	281	2,650	207	48	30
27	139	104	327	1,330	93	625	469	276	5,130	161	48	25
28	131	104	404	1,060	78	540	417	242	6,130	120	48	71
29	128	109	455	754	110	574	368	207	6,610	90	48	58
30	121	180	860	557	-----	617	328	192	5,950	90	44	69
31	115	-----	2,340	469	-----	688	-----	207	-----	71	32	-----
TOTAL	1,684	3,044	20,544	22,955	4,265	32,296	31,630	20,273	31,805	22,987	1,717	978
MEAN	54.3	101	663	740	147	1,042	1,054	654	1,060	742	55.4	32.6
MAX	139	180	2,340	2,090	404	3,340	3,700	1,340	6,610	5,100	77	71
MIN	31	72	135	293	78	218	328	192	106	71	32	20
MEAN#	54.1	102	664	740	147	1,044	1,052	654	1,348	454	60.9	34.1
CFSM#	.22	.42	2.71	3.02	.60	4.26	4.29	2.67	5.50	1.85	.25	.14
IN.#	.25	.47	3.12	3.48	.65	4.91	4.79	3.08	6.14	2.13	.29	.16

CAL YR 1971 TOTAL 117,323 MEAN 321 MAX 2,520 MIN 22 MEAN# 321 CFSM# 1.31 IN.# 17.81
WTR YR 1972 TOTAL 194,178 MEAN 531 MAX 6,610 MIN 20 MEAN# 531 CFSM# 2.17 IN.# 29.47

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

SUSQUEHANNA RIVER BASIN

121

01544500 Kettle Creek at Cross Fork, Pa.

LOCATION.--Lat 41°28'33", long 77°49'34", Potter County, on right bank just upstream from abutment of former highway bridge, 0.2 mile downstream from Potter-Clinton County Line, and 0.7 mile southwest of Cross Fork.

DRAINAGE AREA.--136 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,027.12 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--32 years, 218 cfs (21.77 inches per year).

EXTREMES.--Current year: Maximum discharge, 14,300 cfs June 23 (gage height, 11.76 ft, from floodmark in gage well), from rating curve extended as explained below; minimum daily, 11 cfs Oct. 21-23.

Period of record: Maximum discharge, 14,300 cfs June 23, 1972 (gage height, 11.76 ft, from floodmark in gage well), from rating curve extended above 9,200 cfs on basis of slope-area measurement at gage height, 10.38 ft; minimum daily, 1.2 cfs Sept. 2-4, 1971; minimum gage height observed, -0.14 ft Oct. 16, 19, 23, 26, 1963.

Maximum stage known, about 14.0 ft Mar. 18, 1936, from information by local residents (discharge, about 20,000 cfs, from rating curve extended as explained above).

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	23	34	68	865	200	100	514	190	160	438	70	32
2	21	62	58	691	160	1,200	671	211	149	404	65	31
3	20	66	54	516	140	2,480	651	467	156	385	81	30
4	18	58	64	397	120	1,210	555	681	156	343	72	33
5	19	54	66	331	100	808	450	696	143	292	58	31
6	19	50	113	261	90	569	398	626	128	317	53	29
7	26	50	308	235	100	459	402	528	117	337	57	29
8	21	45	823	196	100	454	379	442	107	350	74	29
9	20	41	877	178	90	426	357	471	115	327	58	29
10	25	41	847	178	76	382	346	532	140	350	52	27
11	32	41	788	180	70	343	354	578	114	324	48	26
12	27	37	621	199	70	329	446	519	105	292	46	26
13	23	35	492	225	76	322	780	434	105	254	46	43
14	19	32	393	406	86	332	1,150	430	97	244	45	53
15	17	40	380	450	96	318	1,060	426	90	269	49	39
16	16	45	432	376	76	315	1,210	471	147	726	43	32
17	15	41	459	310	66	332	2,050	506	134	830	54	25
18	14	40	432	280	66	361	1,420	510	128	614	50	22
19	12	42	368	260	62	372	969	442	121	449	44	20
20	12	47	315	238	56	382	732	410	110	337	41	19
21	11	50	271	216	54	430	560	350	155	263	35	17
22	11	47	219	202	52	871	471	312	3,010	210	38	15
23	11	40	185	389	50	1,340	406	276	10,500	174	41	15
24	18	38	175	637	48	940	357	242	3,000	161	39	16
25	52	37	163	1,020	47	661	318	208	1,450	139	38	20
26	65	46	175	1,120	47	501	285	175	1,000	118	43	20
27	52	45	165	859	56	410	260	151	752	102	39	36
28	46	47	178	642	72	350	236	134	568	93	39	26
29	40	52	178	469	74	332	214	121	461	83	37	22
30	37	66	413	330	-----	372	195	132	486	76	36	36
31	35	-----	931	260	-----	430	-----	163	-----	72	33	-----
TOTAL	777	1,369	11,011	12,916	2,400	18,131	18,196	11,834	23,904	9,373	1,524	828
MEAN	25.1	45.6	355	417	82.8	585	607	382	797	302	49.2	27.6
MAX	65	66	931	1,120	200	2,480	2,050	696	10,500	830	81	53
MIN	11	32	54	178	47	100	195	121	90	72	33	15
CFSM	.18	.34	2.61	3.07	.61	4.30	4.46	2.81	5.86	2.22	.36	.20
IN.	.21	.37	3.01	3.53	.66	4.96	4.98	3.24	6.54	2.56	.42	.23

CAL YR 1971 TOTAL 70,992.5 MEAN 195 MAX 2,230 MIN 1.2 CFSM 1.43 IN 19.42
WTR YR 1972 TOTAL 112,263.0 MEAN 307 MAX 10,500 MIN 11 CFSM 2.26 IN 30.71

PEAK DISCHARGE (BASE 2,400 CFS).--Mar 3 (0230) 3,430 cfs (5.97 ft); June 23 (0500*) 14,300 cfs (11.76 ft).
* About.

SUSQUEHANNA RIVER BASIN

01545000 Kettle Creek near Westport, Pa.

LOCATION.--Lat 41°19'12", long 77°52'27", Clinton County, on left bank 0.4 mile upstream from Short Bend Run, 3.5 miles upstream from mouth and Westport, and 5 miles downstream from Kettle Creek Lake.

DRAINAGE AREA.--233 sq mi.

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

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

AVERAGE DISCHARGE.--18 years, 343 cfs (19.99 inches per year), adjusted for storage since October 1961.

EXTREMES.--Current year: Maximum discharge, 5,750 cfs June 28 (gage height, 8.69 ft); minimum, 9.7 cfs Oct. 22 (gage height, 1.35 ft).
Period of record: Maximum discharge, 7,970 cfs Mar. 8, 1956; maximum gage height, 13.31 ft Jan. 22, 1959 (ice jam); minimum discharge, 3.0 cfs Dec. 6, 1964 (gage height, 1.12 ft); minimum daily, 4.4 cfs Nov. 3, 6, 12, 1964.

REMARKS.--Records good except those for winter periods, which are fair. Regulation from Kettle Creek Lake 5 miles upstream since February 1962 (see p.181).

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	96	128	1,580	348	197	818	265	302	4,180	120	34
2	74	98	125	1,180	300	1,290	974	306	268	1,360	118	33
3	70	130	108	854	250	576	1,180	563	322	694	116	32
4	66	141	121	593	210	3,490	936	964	347	694	125	31
5	63	138	125	552	170	3,810	753	1,130	356	640	116	31
6	60	132	164	465	140	2,080	632	1,040	331	628	90	31
7	60	126	515	368	160	792	631	911	276	623	80	29
8	48	121	1,360	368	160	747	652	736	240	628	103	28
9	44	111	1,730	296	140	772	626	748	201	623	112	28
10	53	104	1,560	284	130	743	583	859	244	689	99	27
11	58	101	1,280	296	120	611	562	999	220	694	88	26
12	63	97	940	319	120	571	668	944	192	623	78	26
13	61	92	780	352	130	559	1,150	754	189	521	77	32
14	58	88	597	547	150	555	1,960	730	180	466	72	39
15	55	84	642	735	160	559	1,810	736	139	495	68	50
16	52	87	681	614	130	543	1,660	846	207	1,160	68	49
17	49	89	753	480	110	555	3,870	1,050	223	1,330	66	44
18	47	86	763	470	110	599	2,580	1,030	214	1,030	72	41
19	37	86	647	450	100	636	1,620	853	201	730	72	37
20	111	88	532	410	96	649	1,290	820	186	563	66	36
21	35	93	491	372	86	676	944	827	223	451	60	34
22	11	95	336	308	82	1,240	748	736	1,100	369	53	33
23	14	91	284	513	78	2,560	678	607	552	295	50	29
24	32	87	256	923	76	1,570	579	480	872	287	49	31
25	58	83	256	1,530	74	1,190	531	437	4,590	265	47	31
26	108	94	262	1,770	76	892	471	351	5,220	223	46	34
27	130	93	277	1,320	90	716	414	276	5,260	195	44	40
28	129	92	273	994	104	588	369	240	5,510	158	41	52
29	121	97	277	747	106	542	339	230	5,330	144	29	53
30	109	111	447	557	-----	560	314	223	4,860	125	34	55
31	101	-----	1,490	484	-----	678	-----	287	-----	118	34	-----
TOTAL	2,057	3,031	18,200	20,731	4,006	31,546	30,342	20,978	38,355	21,001	2,293	1,076
MEAN	66.4	101	587	669	138	1,018	1,011	677	1,279	677	74.0	35.9
MAX	130	141	1,730	1,770	348	3,810	3,870	1,130	5,510	4,180	125	55
MIN	11	83	108	284	74	197	314	223	139	118	29	26
MEAN [‡]	67.5	102	591	662	140	1,018	1,010	678	1,388	571	73.5	37.1
CFSM [‡]	.29	.44	2.54	2.84	.60	4.37	4.33	2.91	5.96	2.45	.32	.16
IN. [‡]	.33	.49	2.93	3.27	.65	5.04	4.83	3.36	6.65	2.82	.37	.18

CAL YR 1971 TOTAL 116,310.5 MEAN 319 MAX 2,760 MIN 9.5 MEAN[‡] 319 CFSM[‡] 1.37 IN.[‡] 18.59
WTR YR 1972 TOTAL 193,616.0 MEAN 529 MAX 5,510 MIN 11 MEAN[‡] 529 CFSM[‡] 2.27 IN.[‡] 30.92

[‡] Adjusted for change in contents in Kettle Creek Lake.

01545500 West Branch Susquehanna River at Renovo, Pa.

LOCATION.--Lat 41°19'28", long 77°45'03", Clinton County, on left bank at foot of Eighth Street at Renovo, 1 mile upstream from Paddy Run.

DRAINAGE AREA.--2,975 sq mi.

PERIOD OF RECORD.--October 1907 to current year. Monthly discharge only for some periods, published in WSP 1302. Gage height records collected July 1895 to December 1903 and October 1905 to September 1972 are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 634.19 ft above mean sea level. Prior to Mar. 17, 1930, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--65 years (1907-72), 4,881 cfs (22.28 inches per year), adjusted for storage since October 1961.

EXTREMES.--Current year: Maximum discharge observed, 181,000 cfs June 23 (gage height, 26.56 ft), from rating curve extended above 60,000 cfs on basis of slope-area measurements at gage heights 26.56 ft and 29.39 ft; minimum, 355 cfs Sept. 8 (gage height, -0.05 ft).

Period of record: Maximum discharge, 236,000 cfs Mar. 18, 1936 (gage height, 29.39 ft, from floodmark in gage shelter), from rating curve extended above 87,000 cfs on basis of slope-area measurement of peak flow; minimum, 80 cfs Dec. 6, 1908 (gage height, -1.10 ft).

Maximum stage known prior to 1895, 27.3 ft June 1, 1889, from floodmark (discharge, about 211,000 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Curwensville, Glendale, and Kettle Creek Lakes and First Fork Sinnemahoning Creek Reservoir about 15 miles upstream (see p.181). Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1302: 1908-10, 1912-13, 1914-15(M). WRD Penna. 1969: 1968.

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	1,640	3,370	17,800	4,500	4,000	6,970	4,700	3,400	27,000	1,710	586
2	1,900	1,640	3,770	13,900	4,200	20,000	7,560	4,610	3,130	20,800	1,640	526
3	1,600	1,990	3,160	11,500	3,900	44,700	7,920	5,550	2,900	14,200	1,580	470
4	1,500	2,430	2,600	9,220	3,300	34,900	7,300	6,730	3,020	11,000	1,540	414
5	1,420	2,380	2,300	7,410	2,700	28,200	7,690	7,410	3,290	9,820	1,480	390
6	1,350	2,200	2,840	6,990	2,400	21,700	8,310	7,120	3,600	10,100	1,350	383
7	1,240	2,020	8,680	6,760	2,600	13,700	8,310	6,530	3,620	11,200	1,230	376
8	1,080	1,780	19,200	6,660	2,500	12,500	9,250	5,860	2,720	11,500	1,210	362
9	1,170	1,680	21,100	6,230	2,400	13,800	8,920	5,930	2,350	10,500	1,230	568
10	1,120	1,530	18,300	6,180	2,400	11,900	8,000	7,410	2,670	11,100	1,230	676
11	1,090	1,480	15,200	6,890	2,200	9,670	7,430	8,030	3,230	9,890	1,200	510
12	1,040	1,380	11,600	7,720	2,100	8,710	7,410	7,750	2,620	8,200	1,140	398
13	985	1,380	9,070	7,670	2,000	8,200	8,480	6,840	2,480	6,990	1,090	430
14	920	1,320	7,590	7,920	2,100	10,600	13,300	6,580	3,160	6,260	1,040	1,050
15	830	1,240	7,750	7,000	2,600	13,600	14,900	7,490	4,430	5,860	996	1,290
16	750	1,230	10,100	5,600	2,600	13,900	20,300	8,110	4,230	6,630	890	2,170
17	712	1,320	9,950	4,500	2,500	14,400	37,800	8,860	4,300	7,230	810	2,820
18	640	1,320	9,040	3,700	2,400	14,500	30,900	8,250	3,620	6,460	712	2,610
19	685	1,270	7,620	4,600	2,300	12,400	21,900	7,510	3,500	5,400	760	2,260
20	685	1,290	6,760	5,160	2,000	11,300	17,500	7,410	3,130	4,750	790	1,490
21	685	1,420	5,100	5,190	1,700	10,900	14,600	8,650	3,980	4,390	750	1,360
22	568	1,460	3,700	5,330	1,800	12,900	11,300	8,080	33,500	3,930	740	1,270
23	568	1,600	4,100	6,710	1,900	19,700	11,000	6,780	150,000	3,310	740	1,160
24	676	1,650	4,370	10,000	2,000	16,400	10,200	5,880	75,700	3,010	685	1,060
25	1,040	1,540	4,480	13,300	2,200	12,400	9,220	5,190	47,000	3,160	622	1,050
26	1,990	1,530	4,450	15,700	2,300	9,920	8,110	4,370	51,500	3,070	740	1,040
27	2,870	1,640	4,930	12,800	2,300	8,340	7,070	3,790	39,800	2,870	650	900
28	3,010	1,740	5,050	9,000	2,300	7,380	6,260	3,370	35,200	2,610	685	800
29	2,450	1,850	5,310	7,200	2,400	6,760	5,670	3,060	32,200	2,260	685	860
30	2,020	2,270	6,230	6,000	-----	6,610	5,100	2,850	30,900	1,960	667	840
31	1,760	-----	20,400	5,000	-----	6,760	-----	3,200	-----	1,810	640	-----
TOTAL	40,354	49,220	248,120	249,640	72,600	440,750	348,680	193,920	565,180	237,270	31,232	30,119
MEAN	1,302	1,641	8,004	8,053	2,503	14,220	11,620	6,255	18,840	7,654	1,007	1,004
MAX	3,010	2,430	21,100	17,800	4,500	44,700	37,800	8,860	150,000	27,000	1,710	2,820
MIN	568	1,230	2,300	3,700	1,700	4,000	5,100	2,850	2,350	1,810	622	362
MEAN [†]	1,296	1,627	8,063	8,013	2,516	14,210	11,620	6,326	19,620	6,884	1,007	890
CFSM [†]	.44	.55	2.71	2.69	.85	4.78	3.91	2.13	6.59	2.31	.34	.30
IN. [†]	.51	.61	3.12	3.10	.92	5.51	4.36	2.46	7.35	2.66	.39	.34
CAL YR 1971	TOTAL 1,691,120	MEAN 4,633	MAX 35,700	MIN 375	MEAN [†] 4,640	CFSM [†] 6,845	CFSM [†] 1.56	IN. [†] 21.17				
WTR YR 1972	TOTAL 2,507,085	MEAN 6,850	MAX 150,000	MIN 362	MEAN [†] 6,845	CFSM [†] 2.30	CFSM [†] 1.56	IN. [†] 31.33				

[†] Adjusted for change in contents in Curwensville, Glendale, and Kettle Creek Lakes and First Fork Sinnemahoning Creek Reservoir.

SUSQUEHANNA RIVER BASIN

01545600 Young Womans Creek near Renovo, Pa.
(Hydrologic bench-mark station)

LOCATION.--Lat 41°23'22", long 77°41'28", Clinton County, on left bank, 0.3 mile downstream from Laureelly Fork, 1.5 miles upstream from Left Branch Young Womans Creek, 3.7 miles upstream from mouth, and 5 miles northeast of Renovo.

DRAINAGE AREA.--46.2 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 780 ft (from topographic map).

AVERAGE DISCHARGE.--7 years (1965-72), 65.7 cfs (19.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,370 cfs June 23 (gage height, 7.98 ft), from rating curve extended as explained below; minimum, 4.4 cfs Oct. 23, 24 (gage height, 1.60 ft).

Period of record: Maximum discharge, 5,370 cfs June 23, 1972 (gage height, 7.98 ft), from rating curve extended above 1,000 cfs on basis of slope-area measurement of peak flow; minimum 1.1 cfs Sept. 6, 7, 1971; minimum gage height, 1.45 ft Aug. 30, 31, Sept. 1, 1966.

REMARKS.--Records good except those for winter periods, which are fair. Records of water quality 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	8.5	15	26	158	72	45	174	67	50	208	29	7.0
2	8.0	26	21	151	62	290	221	69	54	182	31	6.6
3	7.5	24	19	130	54	632	217	98	52	182	34	6.2
4	6.6	21	20	110	46	386	190	113	46	158	26	6.6
5	6.6	20	24	98	39	273	158	130	41	147	22	6.2
6	7.0	19	37	82	35	203	144	133	40	151	20	6.2
7	10	19	95	74	39	162	144	126	37	133	21	6.2
8	9.1	18	199	64	39	166	133	116	34	144	28	5.8
9	8.5	17	230	59	36	147	123	137	34	154	22	5.8
10	11	17	230	59	32	137	119	140	50	212	19	5.4
11	14	17	221	64	29	119	123	144	40	199	16	5.1
12	12	15	190	64	28	119	133	140	38	170	15	5.1
13	9.7	15	158	67	30	110	203	130	38	154	16	7.5
14	9.1	14	133	84	34	110	278	151	35	140	14	12
15	8.5	17	126	89	36	101	278	158	40	147	15	9.1
16	8.0	16	126	84	31	98	380	170	107	309	12	7.0
17	8.0	15	130	82	27	113	730	174	92	268	15	6.2
18	7.5	15	126	78	26	123	499	174	84	203	15	6.2
19	7.0	17	110	79	25	123	341	154	77	158	13	7.0
20	6.6	18	98	72	23	123	273	158	64	130	12	7.0
21	6.6	19	87	64	21	130	208	144	89	104	10	5.8
22	5.8	18	74	64	20	217	174	130	1,360	84	9.7	5.1
23	4.7	15	64	98	19	330	151	116	3,310	74	9.1	4.7
24	8.0	14	59	144	19	288	137	101	1,090	67	9.7	6.6
25	21	13	54	194	19	226	119	87	647	59	12	9.1
26	32	17	57	208	19	178	107	74	468	50	11	7.0
27	21	17	52	182	19	151	95	64	352	43	10	10
28	19	18	52	154	19	133	84	54	268	40	10	8.5
29	17	20	48	130	20	123	77	48	221	35	9.7	7.5
30	16	26	95	100	-----	130	72	46	244	34	8.0	13
31	16	-----	158	88	-----	144	-----	52	-----	31	7.5	-----
TOTAL	340.3	532	3,119	3,174	918	5,630	6,085	3,598	9,102	4,170	501.7	211.5
MEAN	11.0	17.7	101	102	31.7	182	203	116	303	135	16.2	7.05
MAX	32	26	230	208	72	632	730	174	3,310	309	34	13
MIN	4.7	13	19	59	19	45	72	46	34	31	7.5	4.7
CFSM	.24	.38	2.19	2.21	.69	3.94	4.39	2.51	6.56	2.92	.35	.15
IN.	.27	.43	2.51	2.56	.74	4.53	4.90	2.90	7.33	3.36	.40	.17

CAL YR 1971 TOTAL 21,830.6 MEAN 59.8 MAX 497 MIN 1.3 CFSM 1.29 IN 17.58
WTR YR 1972 TOTAL 37,381.5 MEAN 102 MAX 3,310 MIN 4.7 CFSM 2.21 IN 30.10

PEAK DISCHARGE (BASE, 460 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	0045	3.48	749	6-23	0500	7.98	5,370
4-17	0145	3.55	794				

SUSQUEHANNA RIVER BASIN

125

01546500 Spring Creek near Axemann, Pa.

LOCATION.--Lat 40°53'23", long 77°47'40", Centre County, on right bank at upstream side of highway bridge, 1.6 miles west of Axemann, 1.8 miles southwest of Bellefonte, and 2.5 miles upstream from Logan Branch.

DRAINAGE AREA.--87.2 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 788.81 ft above mean sea level. Prior to Nov. 19, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 83.3 cfs (12.97 inches per year).

EXTREMES.--Maximum discharge, 5,410 cfs June 23 (gage height, 7.47 ft, in gage well, 8.75 ft outside, from floodmarks), from rating curve extended as explained below; minimum, 29 cfs Nov. 24; minimum gage height, 2.16 ft Sept. 22.

Period of record: Maximum discharge, 5,410 cfs June 23, 1972 (gage height, 7.47 in gage well, 8.75 ft outside, from floodmarks), from rating curve extended above 1,400 cfs on basis of contracted-opening measurement of peak flow; minimum, 9.6 cfs Nov. 24, 1941 (gage height, 1.69 ft); minimum daily, 20 cfs Dec. 20, 30, 1963, Jan. 28, 29, 31, 1966.

Flood of March 1936 reached a stage of 8.6 ft, from information by local residents.

REMARKS.--Records good. Occasional regulation at low flow by fish hatchery and by Rockview Penitentiary above 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	46	44	45	61	74	192	103	122	122	390	114	73
2	46	51	44	71	73	374	107	125	105	340	110	72
3	48	40	43	71	76	563	98	133	101	310	108	72
4	46	39	42	67	78	393	105	149	96	290	105	72
5	46	38	40	73	66	298	98	138	94	340	101	70
6	46	37	89	69	69	262	96	128	89	380	99	69
7	46	37	137	67	96	235	112	125	87	360	103	69
8	46	38	144	67	67	222	98	122	83	330	105	69
9	45	38	133	67	66	190	94	152	83	300	101	67
10	49	38	121	69	66	175	91	158	87	280	95	66
11	48	37	115	73	66	160	94	138	79	230	92	66
12	46	37	106	73	64	155	91	135	77	200	92	70
13	46	38	98	69	83	149	120	130	94	190	90	73
14	46	37	96	73	98	149	110	138	83	178	87	73
15	46	40	100	66	85	141	133	155	79	176	85	69
16	46	38	91	58	92	141	163	144	103	216	85	67
17	45	37	85	64	89	152	336	133	92	181	85	66
18	45	36	81	66	85	141	245	128	88	166	85	69
19	45	37	79	67	89	133	215	122	86	171	83	67
20	46	36	79	66	78	130	215	146	84	159	82	66
21	46	37	76	67	76	128	181	130	110	155	80	66
22	48	36	71	64	79	141	169	122	931	148	80	66
23	46	35	67	69	76	138	166	120	2,910	144	79	65
24	56	35	66	78	78	130	158	115	1,480	146	79	70
25	64	36	66	81	79	125	152	110	1,100	141	77	66
26	60	34	64	76	87	117	141	105	770	137	77	66
27	46	34	63	78	85	117	133	101	590	133	77	67
28	44	35	63	81	87	117	128	98	490	127	77	69
29	43	43	60	79	115	112	122	96	450	124	76	73
30	42	54	67	78	-----	110	117	98	440	122	74	67
31	42	-----	64	78	-----	105	-----	158	-----	120	73	-----
TOTAL	1,460	1,152	2,495	2,186	2,322	5,695	4,191	3,974	11,083	6,684	2,756	2,060
MEAN	47.1	38.4	80.5	70.5	80.1	184	140	128	369	216	88.9	68.7
MAX	64	54	144	81	115	563	336	158	2,910	390	114	73
MTN	42	34	40	58	64	105	91	96	77	120	73	65
CFSM	.54	.44	.92	.81	.92	2.11	1.61	1.47	4.23	2.48	1.02	.79
IN.	.62	.49	1.06	.93	.99	2.43	1.79	1.70	4.73	2.85	1.18	.88

CAL YR 1971 TOTAL 34,162 MEAN 93.6 MAX 536 MIN 34 CFSM 1.07 IN 14.57
WTR YR 1972 TOTAL 46,058 MEAN 126 MAX 2,910 MIN 34 CFSM 1.45 IN 19.65

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	1100	4.22	715	6-23	0245	7.47	5,410
4-17	0330	3.55	397				

SUSQUEHANNA RIVER BASIN

01547100 Spring Creek at Milesburg, Pa.

LOCATION.--Lat 40°55'54", long 77°47'13", Centre County, on left bank 60 ft downstream from privately-owned bridge, 400 ft west of State Route 144, 0.8 mile upstream from mouth and Milesburg.

DRAINAGE AREA.--142 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 696.42 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 8,170 cfs June 23 (gage height, 13.20 ft, from peak-stage indicator), from rating curve extended as explained below; minimum, 101 cfs Nov. 23; minimum gage height, 2.45 ft Oct. 11, 23.

Period of record: Maximum discharge, 8,170 cfs June 23, 1972 (gage height, 13.20 ft, from peak-stage indicator), from rating curve extended above 900 cfs on basis of computation of peak flow over dam; minimum, 60 cfs Sept. 30, 1969 (gage height, 2.22 ft).

REMARKS.--Records fair. Occasional regulation at low flow by fish hatchery and by Rockview Penitentiary above 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	120	119	132	159	188	435	225	252	273	640	242	154
2	120	151	128	175	185	801	227	257	236	590	238	151
3	122	129	125	180	188	1,110	220	270	228	570	227	152
4	120	123	123	175	188	817	226	292	220	560	223	151
5	119	120	120	183	168	665	218	277	215	650	217	149
6	119	117	212	178	173	540	213	260	211	720	216	147
7	118	116	305	176	168	480	231	258	207	700	222	146
8	117	117	321	173	167	447	214	256	200	620	223	145
9	117	116	297	171	161	394	209	299	203	580	214	142
10	123	117	276	175	159	368	207	314	205	550	210	139
11	120	114	253	178	160	341	208	287	191	490	206	138
12	119	113	232	178	158	327	206	281	189	450	206	144
13	117	111	218	175	187	316	246	274	210	430	206	153
14	116	111	212	178	220	317	234	288	196	400	199	153
15	116	116	220	168	202	306	272	322	189	380	194	146
16	116	114	202	154	208	302	349	317	214	460	189	143
17	116	111	192	165	204	317	673	304	199	400	186	140
18	116	111	188	168	198	301	561	293	190	360	180	144
19	114	111	182	171	207	291	477	279	187	380	176	143
20	114	111	183	171	189	288	454	314	183	350	173	140
21	114	111	180	176	185	282	400	290	229	330	170	140
22	116	110	171	170	188	302	382	276	2,300	320	168	138
23	113	110	167	182	179	298	363	264	6,000	310	166	132
24	126	110	165	199	182	284	338	253	2,800	310	175	141
25	146	113	162	205	184	271	318	242	1,650	300	167	137
26	151	108	160	199	197	263	302	231	1,300	290	166	131
27	128	108	159	204	195	256	286	224	1,030	282	165	134
28	125	111	159	207	200	249	274	217	860	274	164	135
29	123	123	154	200	249	240	264	213	810	264	162	141
30	119	149	167	197	-----	234	255	217	740	256	159	138
31	117	-----	165	192	-----	228	-----	301	-----	250	156	-----
TOTAL	3,737	3,501	5,930	5,582	5,437	12,070	9,052	8,422	21,865	13,466	5,965	4,287
MEAN	121	117	191	180	187	389	302	272	729	434	192	143
MAX	151	151	321	207	249	1,110	673	322	6,000	720	242	154
MIN	113	108	120	154	158	228	206	213	183	250	156	131
CFSM	.85	.82	1.35	1.27	1.32	2.74	2.13	1.92	5.13	3.06	1.35	1.01
IN.	.98	.92	1.55	1.46	1.42	3.16	2.37	2.21	5.73	3.53	1.56	1.12

CAL YR 1971 TOTAL 73,827 MEAN 202 MAX 963 MIN 108 CFSM 1.42 IN 19.34
WTR YR 1972 TOTAL 99,314 MEAN 271 MAX 6,000 MIN 108 CFSM 1.91 IN 26.02

PEAK DISCHARGE (BASE, 570 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	0945	6.55	1,210	6-23	0330*	13.20	8,170
4-17	0430	5.09	712				

NOTE.--No gage-height record
June 22 to July 26.
*About.

SUSQUEHANNA RIVER BASIN

127

01547200 Bald Eagle Creek below Spring Creek at Milesburg, Pa.

LOCATION.--Lat 40°56'35", long 77°47'12", Centre County, on right bank 130 ft downstream from bridge on U. S. Highway 220 at Milesburg, 250 ft downstream from Spring Creek.

DRAINAGE AREA.--265 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 682.49 ft above mean sea level. Prior to Aug. 31, 1956, nonrecording gage at site 130 ft upstream at same datum.

AVERAGE DISCHARGE.--17 years, 362 cfs (18.55 inches per year).

EXTREMES.--Current year: Maximum discharge, 21,300 cfs June 23 (gage height, 11.67 ft, from floodmark in gage well), from rating curve extended above 9,000 cfs; minimum, 106 cfs Oct. 23 (gage height, -0.56 ft).
Period of record: Maximum discharge, 21,300 cfs June 23, 1972 (gage height, 11.67 ft, from floodmark in gage well) from rating curve extended above 9,000 cfs; minimum, 50 cfs Aug. 3, 1966 (gage height, -0.80 ft).

REMARKS.--Records good prior to June 21, poor 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	156	195	372	432	316	2,210	372	391	684	1,500	420	210
2	152	553	290	530	295	4,200	396	406	463	1,300	400	210
3	152	437	257	524	282	4,860	372	480	416	1,200	390	210
4	149	325	237	453	269	2,120	396	541	367	1,100	380	200
5	145	269	218	458	218	1,410	401	524	339	1,300	370	200
6	142	237	1,380	382	237	1,010	377	474	312	1,500	380	200
7	139	214	2,210	348	253	856	485	463	295	1,300	400	200
8	139	199	1,860	316	237	934	442	437	273	1,100	390	190
9	135	188	1,310	303	225	732	416	626	273	1,000	370	190
10	142	184	959	321	222	658	401	789	295	950	360	180
11	139	177	739	362	218	582	396	638	257	850	350	180
12	135	170	576	357	214	553	377	570	245	740	340	180
13	132	166	485	339	257	553	607	507	299	740	330	190
14	132	159	432	372	391	601	582	619	316	620	320	200
15	132	166	576	325	353	576	841	818	282	612	310	190
16	128	173	485	237	348	626	1,450	910	518	707	310	180
17	128	159	432	303	325	760	3,300	767	382	701	300	180
18	128	156	396	334	321	746	1,570	718	325	667	290	180
19	125	152	353	325	312	664	1,080	607	307	623	280	180
20	125	156	348	299	286	601	975	804	282	673	280	180
21	125	163	353	339	295	564	781	711	746	645	270	180
22	125	159	303	299	299	746	760	619	9,600	601	260	180
23	125	149	269	480	273	796	760	535	15,000	560	250	170
24	163	145	273	645	286	684	678	474	6,000	535	250	180
25	427	152	265	725	295	588	619	421	3,400	521	250	180
26	811	159	269	576	334	524	553	372	2,300	511	240	180
27	377	159	261	507	348	480	496	339	1,600	500	240	180
28	286	181	273	458	357	453	458	321	1,600	490	230	170
29	241	273	257	396	691	416	427	303	1,700	480	230	180
30	214	463	396	362	-----	401	396	330	1,800	460	220	180
31	199	-----	491	316	-----	382	-----	697	-----	440	220	-----
TOTAL	5,848	6,438	17,325	12,423	8,757	31,286	21,164	17,211	50,676	24,926	9,630	5,610
MEAN	189	215	559	401	302	1,009	705	555	1,689	804	311	187
MAX	811	553	2,210	725	691	4,860	3,300	910	15,000	1,500	420	210
MIN	125	145	218	237	214	382	372	303	245	440	220	170
CFSM	.71	.81	2.11	1.51	1.14	3.81	2.66	2.09	6.37	3.03	1.17	.71
IN.	.82	.90	2.43	1.74	1.23	4.39	2.97	2.42	7.11	3.50	1.35	.79

CAL YR 1971 TOTAL 149,291 MEAN 409 MAX 3,110 MIN 125 CFSM 1.54 IN 20.96
WTR YR 1972 TOTAL 211,294 MEAN 577 MAX 15,000 MIN 125 CFSM 2.18 IN 29.66

PEAK DISCHARGE (BASE, 2,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 6	2200	3.01	2,990	4-17	0345	4.12	4,510
3- 3	0245	5.25	6,370	6-23	0300*	11.67	21,300

NOTE.--No gage-height record
June 22 to July 14; doubtful
gage-height record July 27 to
Sept. 30.

*About.

SUSQUEHANNA RIVER BASIN

01547500 Bald Eagle Creek at Blanchard, Pa.

LOCATION.--Lat 41°03'06", long 77°36'17", Centre County, on left bank, 0.4 mile downstream from Foster Joseph Sayers Lake, 0.7 mile upstream from Marsh Creek, and 0.9 mile south of Blanchard.

DRAINAGE AREA.--339 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 579.79 ft above mean sea level.

AVERAGE DISCHARGE.--18 years, 416 cfs (16.66 inches per year), adjusted for storage since March 1971.

EXTREMES.--Current year: Maximum discharge, 4,890 cfs June 28 (gage height, 9.37 ft); minimum, 36 cfs May 23 (gage height, 2.78 ft); minimum daily, 91 cfs Mar. 3.

Period of record: Maximum discharge, 10,100 cfs Mar. 10, 1964 (gage height, 11.59 ft), from rating curve extended above 4,100 cfs; no flow June 16, Nov. 10, 1970, result of shutoff at reservoir; minimum daily discharge, 62 cfs Apr. 22, 1971.

REMARKS.--Records good. Flow regulated by Foster Joseph Sayers Lake 0.4 mile upstream (see p.181). Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1903: 1956(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	283	320	563	575	365	1,470	471	481	966	4,530	302	193
2	204	655	587	687	355	1,740	563	481	714	4,410	322	186
3	189	798	521	735	355	91	533	525	468	4,290	362	175
4	189	934	395	742	350	990	499	674	468	4,160	378	175
5	189	1,100	360	735	320	2,160	499	728	372	4,050	326	175
6	189	1,090	623	593	278	1,750	499	655	326	3,950	288	175
7	196	1,070	1,560	444	278	1,050	504	583	322	3,130	298	172
8	196	1,050	1,970	405	278	1,050	499	590	317	2,240	312	193
9	196	1,020	1,960	375	278	1,050	504	590	312	2,200	312	331
10	200	1,160	1,800	375	278	1,020	504	694	312	2,500	298	331
11	200	1,230	1,450	375	278	910	504	742	312	2,170	262	253
12	200	1,040	728	380	278	812	504	742	312	1,090	248	168
13	200	868	515	385	305	812	504	742	312	735	244	224
14	200	847	482	449	493	812	504	749	357	661	244	362
15	181	826	557	482	533	812	510	868	341	674	244	362
16	164	694	648	444	533	812	521	1,140	583	735	244	655
17	164	385	551	411	444	777	635	1,140	505	812	244	903
18	164	227	488	411	433	687	648	918	444	714	244	770
19	164	227	460	405	449	581	617	819	410	531	244	399
20	164	227	390	405	444	539	623	974	312	635	244	236
21	167	227	365	455	411	460	1,230	918	635	635	232	179
22	164	227	365	477	375	466	1,830	721	1,000	577	208	179
23	164	227	320	477	375	599	1,820	674	200	544	193	179
24	164	211	296	661	370	714	1,990	583	280	493	193	179
25	335	200	296	854	370	714	2,130	462	2,910	444	197	179
26	756	274	296	896	375	714	2,090	410	3,790	394	244	179
27	896	287	296	840	375	655	1,760	410	4,220	367	266	220
28	661	235	315	674	400	482	918	416	4,640	357	220	248
29	370	274	325	642	545	395	475	422	4,730	336	193	248
30	287	411	370	477	-----	400	481	383	4,640	322	193	248
31	287	-----	449	400	-----	400	-----	635	-----	298	193	-----
TOTAL	8,083	18,341	20,321	16,666	10,921	25,924	25,369	20,869	35,510	48,984	7,992	8,476
MEAN	261	611	656	538	377	836	846	673	1,184	1,580	258	283
MAX	896	1,230	1,970	896	545	2,160	2,130	1,140	4,730	4,530	378	903
MIN	164	200	296	375	278	91	471	383	200	298	193	168
MEAN [†]	231	306	656	523	391	1,193	847	678	2,019	765	256	191
CFSM [†]	.68	.90	1.94	1.54	1.15	3.52	2.50	2.00	5.96	2.26	.76	.56
IN. [†]	.78	1.00	2.24	1.78	1.24	4.06	2.79	2.31	6.65	2.61	.88	.62

CAL YR 1971 TOTAL 167,790 MEAN 460 MAX 2,660 MIN 62 MEAN[†] 460 CFSM[†] 1.36 IN.[†] 18.78
WTR YR 1972 TOTAL 247,456 MEAN 676 MAX 4,730 MIN 91 MEAN[†] 671 CFSM[†] 1.98 IN.[†] 26.96

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

01547700 Marsh Creek at Blanchard, Pa.

LOCATION.--Lat 41°03'34", long 77°36'22", Centre County, on right bank 20 ft downstream from highway bridge, 0.5 mile southwest of Blanchard, 0.6 mile downstream from bridge on U. S. Highway 220, and 0.6 mile upstream from mouth.

DRAINAGE AREA.--44.1 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 586.16 ft above mean sea level. Prior to Aug. 31, 1956, non-recording gage at site 20 ft upstream at same datum.

AVERAGE DISCHARGE.--17 years, 53.5 cfs (16.47 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,870 cfs June 23 (gage height, 6.98 ft, from floodmark in gage well, 7.96 ft outside, from floodmarks), from rating curve extended as explained below; minimum, 2.7 cfs Nov. 24 (gage height, 1.29 ft).

Period of record: Maximum discharge, 4,870 cfs June 23, 1972 (gage height, 6.98 ft, from floodmark in gage well, 7.96 ft outside, from floodmarks), from rating curve extended above 1,000 cfs on basis of slope-area measurement of peak flow; no flow Aug. 30, 31, 1966.

REMARKS.--Records fair.

CORRECTIONS.--Revised figures of runoff in cubic feet per second per square mile and in inches, for the water year 1971, are given herewith:

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water Year	Cal. Year 1970
Cfs/m	.20	2.70	1.98	.93	4.01	3.47	1.52	1.30	.19	.10	.06	.39	1.38	1.47
Inches	.24	3.01	2.28	1.07	4.17	3.99	1.69	1.50	.21	.11	.06	.44	18.78	19.96

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	24	43	134	50	60	54	53	90	260	59	8.5
2	9.4	59	34	141	43	900	58	54	82	200	52	8.2
3	9.4	52	30	118	42	1,500	51	67	75	160	55	8.2
4	8.0	47	25	104	42	518	53	77	67	110	49	8.2
5	8.0	39	23	104	27	289	49	85	58	140	41	7.9
6	7.4	34	204	82	24	178	47	85	49	210	40	7.6
7	8.0	30	348	73	22	139	80	85	43	240	41	7.6
8	6.8	25	388	63	19	139	80	77	37	260	33	7.6
9	6.3	23	290	57	25	108	82	105	35	240	29	7.6
10	8.0	20	220	57	24	99	80	124	37	250	24	7.3
11	8.0	18	166	66	21	87	77	128	29	160	21	7.0
12	6.3	16	125	61	19	96	67	117	26	130	19	7.3
13	5.8	15	101	61	30	93	77	99	28	112	22	11
14	5.8	13	87	68	104	102	70	111	26	98	18	17
15	5.3	13	98	61	73	105	111	131	25	271	15	9.0
16	4.9	12	90	54	48	128	300	157	32	397	14	7.3
17	4.9	10	82	50	38	170	766	146	26	229	15	6.6
18	4.9	9.4	79	58	30	178	374	124	25	147	15	6.6
19	4.5	10	73	56	27	153	223	105	25	150	13	9.9
20	4.5	10	68	48	25	135	178	139	22	225	11	7.3
21	4.5	11	63	47	23	121	128	139	54	206	9.9	7.0
22	4.5	9.4	54	42	22	161	121	142	1,900	173	9.9	7.0
23	4.9	7.4	47	66	25	187	111	117	3,800	143	11	6.3
24	9.4	6.3	45	115	28	157	111	96	1,400	143	13	7.3
25	25	9.4	43	138	26	124	102	80	660	137	12	11
26	63	8.7	43	122	24	102	90	62	550	109	15	8.2
27	47	8.7	42	109	24	87	80	51	380	93	14	7.9
28	40	12	47	98	23	75	70	43	250	81	13	7.6
29	33	23	40	82	31	65	62	40	220	70	11	8.5
30	30	47	104	68	-----	60	56	49	260	64	9.9	16
31	25	-----	148	57	-----	54	-----	96	-----	61	9.0	-----
TOTAL	422.5	622.3	3,250	2,460	959	6,370	3,808	2,984	10,311	5,269	713.7	254.5
MEAN	13.6	20.7	105	79.4	33.1	205	127	96.3	344	170	23.0	8.48
MAX	63	59	388	141	104	1,500	766	157	3,800	397	59	17
MIN	4.5	6.3	23	42	19	54	47	40	22	61	9.0	6.3
CFSM	.31	.47	2.38	1.80	.75	4.65	2.88	2.18	7.80	3.85	.52	.19
IN.	.36	.52	2.74	2.08	.81	5.37	3.21	2.52	8.70	4.44	.60	.21

CAL YR 1971 TOTAL 20,017.0 MEAN 54.8 MAX 616 MIN 1.2 CFSM 1.24 IN 16.89
WTR YR 1972 TOTAL 37,424.0 MEAN 102 MAX 3,800 MIN 4.5 CFSM 2.31 IN 31.57

PEAK DISCHARGE (BASE, 450 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 6	1800	2.74	454	6-23	0230*	6.98	4,870
3- 3	0200	5.15	2,310	7-15	2130	4.62	1,790
4-17	0230	3.84	1,030				

SUSQUEHANNA RIVER BASIN

01547800 South Fork Beech Creek near Snow Shoe, Pa.

LOCATION.--Lat 41°01'30", long 77°54'15", Centre County, on right bank at downstream side of bridge on State Highway 144, 0.6 mile downstream from Horsehead Run, 2.5 miles east of Snow Shoe, and 4.2 miles upstream from confluence with North Fork Beech Creek.

DRAINAGE AREA.--12.2 sq mi.

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

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

EXTREMES.--Current year: Maximum discharge, 1,170 cfs June 23 (gage height, 5.36 ft), from rating curve extended as explained below; minimum, 2.1 cfs Sept. 22, 29; minimum gage height, 0.90 ft Oct. 21, 22, 23.

Period of record: Maximum discharge, 1,170 cfs June 23, 1972 (gage height, 5.36 ft), from rating curve extended above 600 cfs on basis of contracted-opening measurement at gage height, 4.94 ft; minimum, 1.7 cfs Oct. 9, 10, 1970; minimum gage height, 0.83 ft Oct. 9, 10, 1970, Sept. 4, 5, 1971.

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	9.7	16	11	29	17	20	30	27	23	66	15	4.4
2	9.2	25	9.0	34	16	120	32	27	20	56	15	4.4
3	8.8	22	10	33	15	200	29	28	19	51	15	4.1
4	8.2	19	9.2	29	14	138	28	31	18	43	14	4.1
5	7.7	18	8.8	29	13	81	26	29	16	44	13	3.9
6	7.6	16	25	25	12	52	25	28	15	45	12	3.4
7	7.5	15	60	22	12	39	32	28	13	41	12	3.4
8	6.9	14	80	19	13	38	28	27	12	52	12	3.2
9	6.6	13	98	18	14	27	27	40	18	52	12	3.2
10	6.8	13	80	20	10	23	26	45	14	66	10	2.8
11	6.7	12	64	25	8.2	21	26	44	12	54	10	3.0
12	6.2	11	54	23	7.6	21	25	43	14	45	11	3.6
13	5.9	11	44	23	11	21	30	39	14	41	12	6.2
14	5.8	10	34	22	19	22	29	41	14	38	9.8	6.5
15	5.6	10	36	20	15	20	37	44	13	41	9.4	4.4
16	5.5	9.8	33	18	12	20	57	43	15	41	8.6	3.6
17	5.3	9.0	28	19	10	27	113	47	14	35	8.6	3.4
18	5.3	8.6	25	17	9.2	27	104	51	13	32	8.6	3.2
19	5.0	9.0	22	16	9.0	27	86	51	13	30	7.8	3.2
20	5.0	8.6	21	15	8.8	27	82	67	12	29	7.5	2.8
21	4.9	9.0	20	16	8.6	30	66	64	20	27	7.2	2.6
22	4.9	8.2	18	15	8.4	73	66	59	324	26	6.5	2.4
23	5.0	7.5	15	20	8.8	94	64	48	765	25	6.8	2.4
24	11	9.0	15	27	9.2	72	58	41	334	25	7.8	3.2
25	26	10	15	30	8.8	54	50	35	200	23	6.5	3.0
26	43	7.2	18	35	8.4	41	40	30	155	21	6.8	2.6
27	31	7.2	16	28	8.2	35	35	26	108	20	6.5	2.6
28	27	8.6	18	28	8.0	31	32	23	79	19	5.9	2.6
29	22	9.6	16	25	9.0	29	30	20	78	17	5.6	4.1
30	19	11	25	22	-----	29	28	23	83	16	5.3	5.0
31	17	-----	32	19	-----	29	-----	27	-----	16	4.7	-----
TOTAL	346.1	357.3	960.0	721	323.2	1,488	1,341	1,176	2,448	1,137	292.9	107.3
MEAN	11.2	11.9	31.0	23.3	11.1	48.0	44.7	37.9	81.6	36.7	9.45	3.58
MAX	43	25	98	35	19	200	113	67	765	66	15	6.5
MIN	4.9	7.2	8.8	15	7.6	20	25	20	12	16	4.7	2.4
CFSM	.92	.98	2.54	1.91	.91	3.93	3.66	3.11	6.69	3.01	.77	.29
IN.	1.06	1.09	2.93	2.20	.99	4.54	4.09	3.59	7.46	3.47	.89	.33

CAL YR 1971 TOTAL 7,616.0 MEAN 20.9 MAX 153 MIN 2.2 CFSM 1.71 IN 23.22
WTR YR 1972 TOTAL 10,697.8 MEAN 29.2 MAX 765 MIN 2.4 CFSM 2.39 IN 32.62

PEAK DISCHARGE (BASE, 120 CFS)

*Unknown

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	*	*	*	6-23	0230	5.36	1,170
3- 3	0015	2.93	260				

SUSQUEHANNA RIVER BASIN

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01547950 Beech Creek at Monument, Pa.

LOCATION.--Lat 41°06'42", long 77°42'09", Centre County, on right bank 800 ft downstream from bridge at Monument, 850 ft downstream from Monument Run, 0.6 mile upstream from Twin Run, and 8.7 miles upstream from mouth.

DRAINAGE AREA.--152 sq mi.

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

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

EXTREMES.--Current year: Maximum discharge, 9,740 cfs June 23 (gage height, 15.22 ft), from rating curve extended as explained below; minimum, 27 cfs Sept. 23, 24 (gage height, 5.11 ft).

Period of record: Maximum discharge, 9,740 cfs June 23, 1972 (gage height, 15.22 ft), from rating curve extended above 2,500 cfs on basis of slope-area measurement of peak flow; minimum, 17 cfs Sept. 4, 5, 1971; minimum gage height, 5.11 ft Sept. 23, 24, 1972.

REMARKS.--Records good except those for winter periods, which are fair. Records of water quality 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	90	143	120	413	260	290	469	298	281	986	120	38
2	85	235	96	458	240	1,390	418	302	246	881	109	37
3	81	239	113	453	210	3,350	408	320	227	846	109	36
4	77	220	108	408	200	2,130	408	329	220	777	100	37
5	73	203	101	408	170	1,420	370	333	212	764	90	35
6	72	185	308	360	150	1,010	342	324	190	811	84	33
7	72	173	735	333	140	784	453	333	160	777	83	32
8	66	160	1,160	302	140	747	423	329	150	993	82	32
9	62	146	1,190	286	150	618	413	408	190	1,080	77	32
10	66	141	1,030	290	110	551	394	463	140	1,330	72	30
11	66	132	854	307	100	500	389	448	130	1,140	68	29
12	60	125	677	290	94	490	360	453	140	944	68	31
13	56	117	562	286	120	485	408	428	150	797	79	48
14	54	108	474	294	220	500	403	469	150	706	68	75
15	51	105	485	250	180	479	562	474	140	654	62	48
16	49	99	448	220	160	474	980	474	162	881	59	39
17	48	94	398	210	150	545	2,170	469	144	712	63	34
18	46	88	374	230	140	557	1,650	469	132	610	63	35
19	45	90	342	250	130	562	1,200	438	132	524	59	35
20	43	92	329	234	120	568	989	551	122	461	54	32
21	43	92	315	238	110	605	762	599	168	404	50	29
22	43	88	273	220	110	879	684	593	2,640	340	49	28
23	43	77	242	320	120	1,200	650	540	7,490	298	50	27
24	81	85	230	379	130	879	580	474	3,770	284	60	32
25	163	113	223	448	120	618	534	413	2,420	253	49	39
26	258	75	227	458	120	534	479	356	1,980	224	48	32
27	217	73	220	430	120	485	428	311	1,570	194	50	30
28	203	77	220	400	110	463	384	277	1,230	175	49	29
29	182	92	202	370	130	469	351	250	1,090	153	45	42
30	163	125	273	330	-----	463	315	250	1,080	138	41	57
31	151	-----	408	300	-----	479	-----	302	-----	126	39	-----
TOTAL	2,809	3,792	12,737	10,175	4,254	24,524	18,376	12,477	26,856	19,263	2,099	1,093
MEAN	90.6	126	411	328	147	791	613	402	895	621	67.7	36.4
MAX	258	239	1,190	458	260	3,350	2,170	599	7,490	1,330	120	75
MIN	43	73	96	210	94	290	315	250	122	126	39	27
CFSM	.60	.83	2.70	2.16	.97	5.20	4.03	2.64	5.89	4.09	.45	.24
IN.	.69	.93	3.12	2.49	1.04	6.00	4.50	3.05	6.57	4.71	.51	.27

CAL YR 1971 TOTAL 89,840 MEAN 246 MAX 1,940 MIN 17 CFSM 1.62 IN 21.99
WTR YR 1972 TOTAL 138,455 MEAN 378 MAX 7,490 MIN 27 CFSM 2.49 IN 33.89

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	0800	10.99	3,800	6-23	0345	15.22	9,740
4-17	0730	9.57	2,300				

SUSQUEHANNA RIVER BASIN

01548000 Bald Eagle Creek at Beech Creek Station, Pa.

LOCATION.--Lat 41°03'55", long 77°34'03", Clinton County, at downstream end of center pier of highway bridge just downstream from Beech Creek, at Beech Creek Station, and 3 miles downstream from Foster Joseph Sayers Lake.

DRAINAGE AREA.--559 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 571.74 ft above mean sea level (Pennsylvania Department of Transportation bench mark). Prior to Jan. 10, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--62 years, 783 cfs (19.02 inches per year), adjusted for storage since March 1971.

EXTREMES.--Current year: Maximum discharge, 19,400 cfs June 23 (gage height, 12.29 ft), from rating curve extended above 12,000 cfs; minimum, 204 cfs Sept. 12, 13, 23, 24 (gage height, 1.69 ft).
Period of record: Maximum discharge, 25,600 cfs Mar. 18, 1936 (gage height, 14.42 ft), from rating curve extended above 12,000 cfs; minimum, 29 cfs Aug. 22, 1930 (gage height, 1.21 ft); minimum daily, 80 cfs Jan. 16, 24, 25, 1931.

REMARKS.--Records good. Flow regulated by Foster Joseph Sayers Lake 3 miles upstream (see p.181).

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1001: 1931(M). WSP 1111: 1936(M). WSP 1302: 1911(M), 1912-15, 1918, 1922, 1923-25(M), 1931. WSP 1502: 1919, 1920(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	399	463	663	1,160	683	2,470	908	775	1,390	6,890	443	242
2	311	950	650	1,370	624	5,100	1,030	782	1,060	6,550	448	233
3	297	1,180	574	1,420	611	6,640	933	867	710	6,270	482	225
4	288	1,300	458	1,320	598	4,780	859	1,070	697	5,920	494	225
5	288	1,510	425	1,310	543	4,990	820	1,160	604	5,760	432	221
6	283	1,460	1,140	1,070	474	3,640	790	1,050	520	5,780	394	221
7	283	1,420	3,130	836	474	2,200	958	958	502	4,810	399	216
8	274	1,360	4,340	753	399	2,160	933	950	480	3,900	410	229
9	270	1,310	4,270	690	409	1,930	916	1,080	469	3,990	405	358
10	274	1,420	3,820	690	430	1,800	891	1,340	514	4,710	384	353
11	279	1,470	3,050	724	420	1,560	875	1,370	463	4,190	348	291
12	270	1,220	1,790	710	404	1,450	844	1,360	441	2,420	333	208
13	262	984	1,330	704	458	1,440	891	1,310	452	1,720	348	264
14	257	933	1,110	782	782	1,470	899	1,370	491	1,510	333	432
15	240	899	1,220	775	753	1,440	1,130	1,580	463	1,560	319	410
16	220	775	1,330	690	745	1,470	1,920	1,970	738	2,170	314	670
17	220	436	1,090	663	624	1,570	4,590	1,980	650	1,850	319	976
18	216	292	975	690	604	1,480	3,290	1,640	561	1,530	319	863
19	216	292	891	669	604	1,360	2,320	1,440	543	1,200	314	443
20	212	297	797	643	586	1,260	1,970	1,850	436	1,220	309	273
21	212	297	738	690	543	1,170	2,430	1,870	844	1,140	295	208
22	212	292	683	690	537	1,500	3,270	1,570	6,640	976	273	208
23	212	283	598	828	458	2,110	3,190	1,400	16,600	871	255	208
24	236	266	561	1,180	520	2,050	3,290	1,170	8,670	805	277	212
25	491	262	555	1,540	514	1,740	3,400	933	9,010	728	264	221
26	1,120	315	555	1,590	520	1,530	3,220	782	8,890	636	295	216
27	1,270	324	549	1,510	508	1,310	2,730	710	7,630	571	319	242
28	958	292	567	1,280	537	1,020	1,540	669	7,310	541	286	273
29	592	349	555	1,150	797	859	852	630	7,290	499	250	282
30	469	520	738	908	-----	852	805	611	7,210	477	246	309
31	452	-----	1,040	745	-----	836	-----	993	-----	443	242	-----
TOTAL	11,583	23,171	40,192	29,780	16,159	65,187	52,494	37,240	92,278	81,637	10,549	9,732
MEAN	374	772	1,297	961	557	2,103	1,750	1,201	3,076	2,633	340	324
MAX	1,270	1,510	4,340	1,590	797	6,640	4,590	1,980	16,600	6,890	494	976
MIN	212	262	425	643	399	836	790	611	436	443	242	208
MEAN [≠]	344	467	1,297	946	571	2,460	1,751	1,206	3,911	1,818	338	232
CFSM [≠]	.62	.84	2.32	1.69	1.02	4.40	3.13	2.16	7.00	3.25	.60	.42
IN [≠]	.72	.94	2.68	1.95	1.10	5.07	3.49	2.49	7.81	3.75	.69	.47
CAL YR 1971	TOTAL 298,275	MEAN 817	MAX 5,830	MIN 124	MEAN [≠]	817	CFSM [≠]	1.46	IN. [≠]	20.13		
WTR YR 1972	TOTAL 470,002	MEAN 1,284	MAX 16,600	MIN 208	MEAN [≠]	1,279	CFSM [≠]	2.29	IN. [≠]	31.16		

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

SUSQUEHANNA RIVER BASIN

133

01548500 Pine Creek at Cedar Run, Pa.

LOCATION.--Lat 41°31'18", long 77°26'52", Lycoming County, on left bank at downstream side of highway bridge at village of Cedar Run, 2,000 ft downstream from Cedar Run and 1.2 miles upstream from Gamble Run.

DRAINAGE AREA.--604 sq mi.

PERIOD OF RECORD.--July 1918 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 780.36 ft above mean sea level. Prior to Feb. 13, 1930, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--54 years, 808 cfs (18.17 inches per year).

EXTREMES.--Current year: Maximum discharge, 66,000 cfs June 23 (gage height, 16.0 ft, from floodmark), from rating curve extended as explained below; minimum, 53 cfs Sept. 11, 12; minimum gage height, 1.54 ft Oct. 23.

Period of record: Maximum discharge, 66,000 cfs June 23, 1972 (gage height, 16.0 ft, from floodmark), from rating curve extended above 16,000 cfs on basis of slope-area measurement at gage height, 14.39 ft; minimum, 8.0 cfs Sept. 1, 2, 3, 1939; minimum gage height, 0.80 ft Nov. 28, 1930.

REMARKS.--Records good except those for winter periods, which are 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	180	197	383	2,190	800	700	1,970	711	683	3,030	269	77
2	157	293	371	1,960	700	5,000	2,620	783	517	2,370	255	70
3	143	367	330	1,610	620	8,790	2,420	1,180	459	2,090	296	70
4	132	312	300	1,310	560	5,180	2,110	1,530	414	2,060	310	67
5	124	280	290	1,160	470	3,730	1,790	1,760	452	1,490	235	67
6	124	261	563	903	420	2,570	1,590	1,600	370	1,830	205	64
7	129	257	1,130	700	440	2,000	1,660	1,490	338	1,530	199	60
8	130	249	2,620	600	440	2,460	1,470	1,360	299	1,330	249	57
9	123	228	2,530	540	400	1,980	1,330	2,090	281	1,190	223	60
10	127	221	2,470	640	360	1,640	1,350	3,150	351	1,460	187	60
11	149	220	2,330	830	340	1,400	1,390	2,940	294	1,240	165	57
12	142	212	1,870	920	340	1,580	1,590	2,480	253	996	150	57
13	126	201	1,530	817	369	1,970	2,430	2,030	244	846	145	64
14	114	192	1,250	1,560	460	1,810	3,560	1,850	246	755	140	81
15	107	211	1,240	1,310	430	1,540	3,510	1,790	249	899	130	84
16	100	242	1,510	1,000	370	1,400	4,210	1,670	595	1,800	125	84
17	96	227	1,290	820	330	1,980	7,180	1,750	489	1,210	125	74
18	92	212	1,230	780	310	2,030	5,210	1,920	355	952	135	70
19	89	216	1,090	820	290	1,840	3,810	1,610	325	795	135	84
20	86	236	999	876	270	1,780	3,030	1,560	293	1,490	117	88
21	84	244	913	769	250	1,920	2,370	1,520	395	1,080	105	81
22	81	241	799	686	260	3,950	1,930	1,290	19,700	825	96	74
23	80	216	636	1,230	260	4,700	1,740	1,120	42,600	687	92	67
24	103	200	633	1,640	240	3,590	1,460	977	13,700	621	105	64
25	255	220	602	2,550	230	2,620	1,280	839	7,370	523	100	74
26	372	240	593	2,510	210	2,030	1,120	711	4,860	464	92	74
27	324	226	636	2,180	210	1,690	1,000	613	3,420	401	105	121
28	266	220	660	1,810	220	1,490	898	541	2,500	370	105	100
29	238	243	662	1,440	240	1,370	822	486	2,080	333	96	92
30	216	332	1,020	1,100	-----	1,610	749	454	3,890	296	92	100
31	204	-----	2,680	960	-----	1,760	-----	613	-----	276	81	-----
TOTAL	4,693	7,216	35,160	38,221	10,830	78,110	67,599	44,418	108,022	35,239	4,864	2,242
MEAN	151	241	1,134	1,233	373	2,520	2,253	1,433	3,601	1,137	157	74.7
MAX	372	367	2,680	2,550	800	8,790	7,180	3,150	42,600	3,030	310	121
MIN	80	192	290	540	210	700	749	454	244	276	81	57
CFSM	.25	.40	1.88	2.04	.62	4.17	3.73	2.37	5.96	1.88	.26	.12
IN.	.29	.44	2.17	2.35	.67	4.81	4.16	2.74	6.65	2.17	.30	.14

CAL YR 1971 TOTAL 284,493 MEAN 779 MAX 7,240 MIN 38 CFSM 1.29 IN 17.52
WTR YR 1972 TOTAL 436,614 MEAN 1,193 MAX 42,600 MIN 57 CFSM 1.98 IN 26.89

PEAK DISCHARGE (BASE, 5,900 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	0030	7.42	12,200	6-23	0030*	16.0	66,000
4-17	0130	6.38	8,600				

SUSQUEHANNA RIVER BASIN

01549500 Blockhouse Creek near English Center, Pa.

LOCATION.--Lat 41°28'25", long 77°13'52", Lycoming County, on right bank just downstream from bridge on State Highway 284, 0.7 mile upstream from Blacks Creek, 1.7 miles upstream from confluence with Texas Creek, and 5 miles northeast of English Center.

DRAINAGE AREA.--37.7 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,041.85 ft above mean sea level.

AVERAGE DISCHARGE.--32 years, 55.4 cfs (19.96 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,260 cfs June 23 (gage height, 9.34 ft), from rating curve extended as explained below; minimum, 2.3 cfs Sept. 11, 12 (gage height, 0.71 ft).
 Period of record: Maximum discharge, 6,260 cfs June 23, 1972 (gage height, 9.34 ft), from rating curve extended above 1,200 cfs on basis of contracted-opening measurement at gage height, 8.81 ft; no flow Aug. 6, 7, 31, Sept. 2, 1962.
 Flood of Mar. 18, 1936 reached a stage of 9.0 ft, from floodmark (discharge 5,780 cfs, from rating curve extended as explained above).

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 951: 1941. WSP 1031: 1942-44(M). WSP 1502: 1942.

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	29	36	62	41	100	135	39	57	210	15	3.4
2	22	78	34	66	35	700	176	56	55	139	14	3.1
3	20	57	30	57	31	1,180	168	77	52	107	15	3.1
4	19	49	28	48	28	418	126	97	51	80	14	3.1
5	18	45	26	41	25	220	105	104	52	65	12	2.9
6	18	42	66	40	22	151	100	99	42	71	11	2.7
7	21	43	236	35	22	113	117	93	38	89	11	2.5
8	17	37	315	31	22	128	97	81	35	71	12	2.5
9	15	34	260	28	21	102	92	128	32	65	10	2.7
10	26	33	243	29	19	90	90	156	38	77	8.9	2.7
11	31	31	220	33	17	81	102	128	29	63	6.8	2.3
12	22	28	163	40	17	83	118	113	27	55	6.0	2.9
13	19	26	118	46	18	99	226	95	26	50	4.4	5.3
14	17	24	95	63	20	97	246	122	26	51	4.1	7.6
15	15	34	107	56	23	78	246	156	25	86	3.9	5.7
16	15	31	89	47	21	75	629	236	65	195	4.0	4.4
17	14	26	75	41	19	126	875	298	41	102	5.0	3.6
18	13	24	67	47	17	130	368	229	37	84	6.2	3.6
19	12	27	60	55	16	122	207	153	37	72	5.4	6.4
20	12	29	56	42	15	126	171	137	34	120	4.6	5.7
21	11	29	52	38	14	144	122	107	118	80	4.0	4.7
22	11	25	42	36	14	898	105	83	3,180	60	3.7	3.8
23	10	20	39	75	15	583	95	70	2,670	50	4.0	3.6
24	42	18	37	107	14	264	81	61	845	40	4.6	4.1
25	52	22	35	111	13	166	70	54	462	35	4.4	5.3
26	49	20	36	90	12	128	61	48	279	30	4.1	5.0
27	39	22	36	80	13	111	54	43	163	26	4.1	5.7
28	36	24	36	70	14	102	48	40	113	22	5.0	6.0
29	33	29	30	60	21	99	44	36	97	20	4.4	5.0
30	31	45	78	54	-----	117	40	37	354	18	3.8	6.8
31	29	-----	77	48	-----	118	-----	70	-----	16	3.6	-----
TOTAL	714	981	2,822	1,676	579	6,949	5,114	3,246	9,080	2,249	219.0	126.2
MEAN	23.0	32.7	91.0	54.1	20.0	224	170	105	303	72.5	7.06	4.21
MAX	52	78	315	111	41	1,180	875	298	3,180	210	15	7.6
MIN	10	18	26	28	12	75	40	36	25	16	3.6	2.3
CFSM	.61	.87	2.41	1.44	.53	5.94	4.51	2.79	8.04	1.92	.19	.11
IN.	.70	.97	2.78	1.65	.57	6.86	5.05	3.20	8.96	2.22	.22	.12

CAL YR 1971 TOTAL 19,533.22 MEAN 53.5 MAX 629 MIN .87 CFSM 1.42 IN 19.27
 WTR YR 1972 TOTAL 33,755.20 MEAN 92.2 MAX 3,180 MIN 2.3 CFSM 2.45 IN 33.31

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 2	2300	5.9	2,350	4-16	2030	5.39	1,980
3-22	1600	4.80	1,470	6-23	0115	9.34	6,260

01549700 Pine Creek below Little Pine Creek near Waterville, Pa.

LOCATION.--Lat 41°16'25", long 77°19'28", Lycoming County, on downstream side of suspension bridge, 0.9 mile downstream from Ramsey Run, 4 miles downstream from Little Pine Creek, 4 miles south of Waterville, and 9.2 miles upstream from mouth.

DRAINAGE AREA.--944 sq mi.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 570.62 ft above mean sea level.

AVERAGE DISCHARGE.--15 years, 1,260 cfs (18.13 inches per year).

EXTREMES.--Current year: Maximum discharge, 104,000 cfs June 23 (gage height, 22.76 ft, from floodmarks), from rating curve extended as explained below; minimum daily, 68 cfs Sept. 4-8, 10, 11.
Period of record: Maximum discharge, 104,000 cfs June 23, 1972 (gage height, 22.76 ft, from floodmarks), from rating curve extended above 22,000 cfs on basis of slope-area measurement of peak flow; minimum observed, 25 cfs Sept. 25, 26, 27, 1964; minimum gage height observed; 0.97 ft Sept. 13, 1964.
REVISIONS: The maximum discharge for the water year 1964 has been revised to 45,300 cfs Mar. 5, 1964 (gage height, 13.67 ft), superseding figure published in WSP 1903 and WRD Penna. 1964.

REMARKS.--Records good except those for period of no gage-height record or those for winter periods, which are fair. Flood flows subject to regulation by Little Pine Creek Reservoir 8.5 miles upstream (capacity, 24,900 acre-ft).

REVISIONS.--The figures of peak discharge for the water year 1964 have been revised, as shown in the following table. They supersede figures published in WSP 1903 and WRD Penna. 1964.
REVISED PEAK DISCHARGE.--1964: Mar. 5 (2000) 45,300 cfs (13.67 ft); Mar. 10 (1700) 32,800 cfs (11.54 ft).

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	325	371	650	3,340	1,200	1,500	3,250	938	1,020	6,000	424	91
2	269	402	630	2,960	1,100	10,800	4,020	1,110	879	4,400	409	81
3	242	769	552	2,570	900	16,700	4,000	1,580	813	3,500	416	74
4	218	670	419	2,250	820	9,780	3,170	2,470	758	3,300	453	68
5	211	610	379	1,880	750	7,400	2,570	3,000	714	3,200	368	68
6	199	561	630	1,580	700	5,030	2,390	2,650	681	3,300	304	68
7	187	506	1,410	1,180	720	3,280	2,410	2,430	610	3,600	275	68
8	171	444	5,350	960	720	3,320	2,320	2,250	515	3,400	354	68
9	166	386	5,300	840	680	3,170	2,110	2,790	461	3,340	341	71
10	160	356	5,030	980	600	2,410	2,050	4,610	515	3,250	298	68
11	248	332	4,920	1,210	560	2,050	2,110	4,100	470	3,040	264	68
12	255	317	4,660	1,580	520	2,160	2,410	3,660	394	2,420	232	74
13	230	296	4,020	1,400	540	2,860	3,380	3,390	356	1,880	202	74
14	199	289	3,390	1,880	720	2,500	5,190	3,000	340	1,640	178	84
15	187	269	2,720	1,700	680	2,290	5,140	2,960	356	1,620	206	91
16	182	303	2,860	1,400	600	2,110	6,370	3,080	986	5,060	197	87
17	176	411	2,650	1,200	540	2,610	13,500	3,710	1,060	3,270	178	84
18	166	402	2,180	1,400	500	3,280	9,720	3,680	747	2,800	173	87
19	155	340	1,880	1,520	460	2,920	7,170	3,040	692	2,280	187	110
20	150	332	1,710	1,180	440	2,820	4,920	2,800	630	2,890	178	106
21	145	394	1,610	1,150	400	2,760	4,000	2,800	700	2,010	168	117
22	139	386	1,460	1,050	400	6,050	3,000	2,360	18,000	1,560	151	102
23	134	363	1,200	1,580	440	8,560	2,500	1,930	75,000	1,300	146	87
24	139	348	1,050	2,540	400	6,650	2,390	1,560	26,000	1,160	151	91
25	325	394	938	3,360	380	4,500	2,180	1,370	14,000	1,010	151	106
26	660	363	890	4,050	360	3,480	1,760	1,140	10,000	846	142	102
27	681	340	824	3,610	350	2,720	1,490	1,010	7,300	706	134	106
28	660	332	813	2,700	350	2,390	1,310	902	6,100	622	125	151
29	580	332	791	2,000	570	2,110	1,110	714	5,100	550	117	155
30	506	402	968	1,600	-----	2,050	986	630	6,900	501	110	159
31	436	-----	3,760	1,400	-----	2,800	-----	998	-----	453	102	-----
TOTAL	8,501	12,020	65,644	58,050	17,400	133,060	108,926	72,662	182,097	75,108	7,134	2,766
MEAN	274	401	2,118	1,873	600	4,292	3,631	2,344	6,070	2,423	230	92.2
MAX	681	769	5,350	4,050	1,200	16,700	13,500	4,610	75,000	6,000	453	159
MIN	134	269	379	840	350	1,500	986	630	340	453	102	68
CFSM	.29	.42	2.24	1.98	.64	4.55	3.85	2.48	6.43	2.57	.24	.10
IN.	.33	.47	2.59	2.29	.69	5.24	4.29	2.86	7.18	2.96	.28	.11

CAL YR 1971 TOTAL 445,790 MEAN 1,221 MAX 10,400 MIN 43 CFSM 1.29 IN 17.57
WTR YR 1972 TOTAL 743,368 MEAN 2,031 MAX 75,000 MIN 68 CFSM 2.15 IN 29.29

PEAK DISCHARGE (BASE, 9,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-2	2400	9.4	22,100	6-23	0400	22.76	104,000
4-17	0600	7.95	15,000				

SUSQUEHANNA RIVER BASIN

01549780 Larrys Creek at Cogan House, Pa.

LOCATION.--Lat 41°25'04", long 77°09'46", Lycoming County, on right bank, attached to upstream wingwall of bridge on State Highway 184 at Cogan House, 0.7 mile upstream from Wolf Run, 2.3 miles upstream from Wendell Run, and 15 miles northwest of Williamsport.

DRAINAGE AREA.--6.80 sq mi.

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

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

AVERAGE DISCHARGE.--12 years, 9.52 cfs (19.01 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,130 cfs June 22 (gage height, 5.29 ft), from rating curve extended as explained below; minimum, 0.90 cfs Sept. 18, 22, 23, 24, 28, 29; minimum gage height, 1.13 ft Sept. 9, 10.

Period of record: Maximum discharge, 1,130 cfs June 22, 1972 (gage height, 5.29 ft), from rating curve extended above 130 cfs on basis of contracted-opening measurement of peak flow; no flow on many days.

REVISIONS.--Figures of maximum discharge for the water years 1964 and 1967 have been revised to 701 cfs Mar. 10, 1964 (gage height, 4.49 ft) and 374 cfs Nov. 28, 1966 (gage height, 3.62 ft), superseding figures published in WSP 1903 and WRD Penna. 1964 and 1967.

REMARKS.--Records fair. Regulation at low flow from several ponds.

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	6.4	8.1	7.2	12	6.2	25	28	8.6	17	48	5.1	2.0
2	6.0	22	7.2	13	5.4	160	32	9.5	17	35	4.5	2.2
3	5.6	18	6.2	12	5.0	167	28	16	16	28	5.1	2.4
4	5.2	19	5.8	10	5.0	63	23	27	15	21	4.2	2.4
5	4.9	16	5.4	9.5	4.6	37	19	36	13	18	3.9	2.2
6	4.9	14	25	7.8	4.2	26	17	31	12	18	3.9	2.6
7	5.2	13	60	6.4	3.9	20	17	23	11	14	4.2	2.9
8	3.9	10	73	5.2	3.7	22	16	18	9.5	15	3.9	3.1
9	3.6	8.6	68	4.6	3.6	17	15	25	10	15	3.6	2.2
10	6.8	8.1	68	4.9	3.5	14	14	26	9.5	20	3.4	1.2
11	5.6	6.8	72	6.8	3.4	19	16	28	7.6	19	3.1	1.2
12	4.2	6.0	55	6.0	3.3	13	18	25	7.2	18	3.6	1.3
13	3.6	5.6	38	10	3.2	16	27	19	6.8	16	3.9	2.4
14	3.6	4.6	29	16	5.0	17	27	22	6.4	21	2.9	2.2
15	3.3	7.6	28	10	4.5	13	29	26	12	43	2.6	1.4
16	3.3	5.2	24	7.6	4.0	13	63	36	27	83	2.6	1.2
17	3.0	4.6	22	6.8	3.6	22	126	58	18	52	3.4	1.0
18	2.8	4.2	21	8.0	3.4	24	61	80	17	34	3.4	3.1
19	2.5	5.2	17	11	3.2	24	38	56	17	25	2.9	2.4
20	2.5	4.9	15	8.1	3.0	25	31	45	15	19	2.4	1.4
21	2.5	5.2	12	6.8	3.1	30	22	34	45	15	2.4	1.2
22	2.2	4.2	9.0	6.4	2.9	133	19	28	626	12	2.4	1.0
23	2.5	3.6	9.5	13	2.8	94	17	24	384	12	2.4	.90
24	11	3.3	7.2	21	2.7	48	14	19	112	11	2.4	1.4
25	8.6	4.9	6.4	26	2.6	31	13	16	65	9.3	2.2	1.3
26	10	4.2	6.4	24	2.5	24	11	14	49	7.8	2.2	1.2
27	10	4.6	5.6	18	2.5	20	10	12	37	7.4	2.6	1.2
28	11	4.9	5.2	14	2.5	18	9.0	11	29	6.6	2.6	.90
29	9.5	6.0	4.2	11	5.0	18	8.1	10	27	6.2	2.2	1.2
30	9.0	9.5	10	9.0	-----	21	7.2	13	55	5.8	2.2	1.8
31	8.6	-----	12	7.6	-----	23	-----	22	-----	5.4	2.0	-----
TOTAL	171.8	241.9	734.3	332.5	108.3	1,197	775.3	818.1	1,693.0	660.5	98.2	52.90
MEAN	5.54	8.06	23.7	10.7	3.73	38.6	25.8	26.4	56.4	21.3	3.17	1.76
MAX	11	22	73	26	6.2	167	126	80	626	83	5.1	3.1
MIN	2.2	3.3	4.2	4.6	2.5	13	7.2	8.6	6.4	5.4	2.0	.90
CFSM	.81	1.19	3.49	1.57	.55	5.68	3.79	3.88	8.29	3.13	.47	.26
IN.	.94	1.32	4.02	1.82	.59	6.55	4.24	4.48	9.26	3.61	.54	.29

CAL YR 1971 TOTAL 4,035.94 MEAN 11.1 MAX 73 MIN .14 CFSM 1.63 IN 22.08
WTR YR 1972 TOTAL 6,883.80 MEAN 18.8 MAX 626 MIN .90 CFSM 2.76 IN 37.66

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-2	2100	3.71	371	6-22	1615	5.29	1,130
3-22	1330	2.85	190	7-15	2045	2.76	179
4-16	2400	2.72	165				

01550000 Lycoming Creek near Trout Run, Pa.

LOCATION.--Lat 41°25'06", long 77°01'59", Lycoming County, on right bank 150 ft upstream from highway bridge, 300 ft upstream from Penn Central Railroad bridge, 0.5 mile downstream from Grays Run, and 2.8 miles upstream from village of Trout Run.

DRAINAGE AREA.--173 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 693.95 ft above mean sea level. Prior to June 1, 1939, nonrecording gage at site 150 ft downstream at same datum.

AVERAGE DISCHARGE.--58 years (1914-72), 275 cfs (21.59 inches per year).

EXTREMES.--Current year: Maximum discharge, 25,900 cfs June 22 (gage height, 20.19 ft, from floodmark in gage shelter), from rating curve extended as explained below; minimum, 11 cfs Sept. 11, 12 (gage height, 1.60 ft).
Period of record: Maximum discharge, 25,900 cfs June 22, 1972 (gage height, 20.19 ft, from floodmark in gage shelter), from rating curve extended above 5,300 cfs on basis of slope-area measurement of peak flow; minimum, 3.2 cfs Sept. 27, 1936; minimum daily, 4.0 cfs Sept. 19-24, 27, 28, 1936, Sept. 1, 1968.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 921: 1933, 1934(M), 1935-39. WSP 1302: 1914-16, 1922(M), 1923-25, 1926(M), 1927-28, 1930, 1931(M). WSP 1502: 1920-21(M), 1932(M), 1933.

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	130	180	254	324	200	170	766	262	601	964	72	34
2	116	394	203	312	180	2,200	916	418	444	706	85	29
3	109	408	190	286	170	3,840	784	596	408	563	163	28
4	98	333	183	262	160	1,550	694	808	394	470	160	26
5	94	290	163	258	150	1,060	612	826	444	370	111	23
6	89	262	246	190	140	778	568	689	351	428	94	22
7	96	262	778	180	140	650	673	596	333	342	87	19
8	87	239	1,330	160	130	689	557	519	299	258	102	17
9	79	213	1,080	150	130	579	508	766	278	217	81	17
10	104	203	1,080	187	120	480	513	976	299	394	68	15
11	166	197	1,190	258	120	408	557	790	254	258	60	12
12	130	180	886	278	110	470	656	684	243	193	59	14
13	109	171	695	290	110	601	970	590	239	163	54	23
14	100	160	500	491	180	601	1,040	662	239	163	47	34
15	94	180	540	300	157	486	1,020	766	246	294	41	30
16	87	197	640	250	143	444	1,740	928	645	1,490	36	27
17	83	171	540	230	125	667	2,880	1,020	428	695	40	23
18	77	160	440	303	120	760	1,540	904	347	475	43	27
19	76	160	360	303	110	694	1,120	724	351	351	41	62
20	72	174	330	262	100	662	994	673	329	299	35	48
21	70	171	310	235	110	700	832	612	1,330	262	31	33
22	67	168	280	210	100	3,180	706	480	13,900	190	28	28
23	65	151	240	356	96	2,330	640	389	11,100	163	26	23
24	133	143	200	546	92	1,290	557	342	3,100	174	31	21
25	428	154	190	563	92	916	480	299	2,150	151	38	20
26	365	151	200	413	90	742	418	254	1,680	148	116	22
27	290	154	220	361	88	640	370	235	1,180	125	65	23
28	254	160	220	342	86	590	324	224	844	120	96	27
29	220	183	200	303	88	568	294	217	689	98	59	26
30	200	274	270	270	-----	667	270	224	1,480	79	53	32
31	187	-----	459	228	-----	672	-----	667	-----	70	40	-----
TOTAL	4,275	6,243	14,417	9,101	3,637	30,084	23,999	18,140	44,625	10,673	2,062	785
MEAN	138	208	465	294	125	970	800	585	1,488	344	66.5	26.2
MAX	428	408	1,330	563	200	3,840	2,880	1,020	13,900	1,490	163	62
MIN	65	143	163	150	86	170	270	217	239	70	26	12
CFSM	.80	1.20	2.69	1.70	.72	5.61	4.62	3.38	8.60	1.99	.38	.15
IN.	.92	1.34	3.10	1.96	.78	6.47	5.16	3.90	9.60	2.30	.44	.17

CAL YR 1971	TOTAL	98,476.2	MEAN	270	MAX	1,790	MIN	4.1	CFSM	1.56	IN	21.18
WTR YR 1972	TOTAL	168,041.0	MEAN	459	MAX	13,900	MIN	12	CFSM	2.65	IN	36.13

PEAK DISCHARGE (BASE, 2,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	0045	10.74	7,280	4-16	2245	9.29	5,440
3-22	1745	9.27	5,420	6-22	2400	20.19	25,900

01551500 West Branch Susquehanna River at Williamsport, Pa.

LOCATION.--Lat 41°14'17", long 76°59'56", Lycoming County, on left bank at upstream edge of Market Street Bridge at Williamsport, 350 ft upstream from Hagermans Run.

DRAINAGE AREA.--5,682 sq mi.

PERIOD OF RECORD.--March 1895 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 494.98 ft above mean sea level. Mar. 1, 1895 to Sept. 30, 1928, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--77 years, 8,751 cfs (20.91 inches per year), adjusted for storage since October 1961.

EXTREMES.--Current year: Maximum discharge observed, 279,000 cfs June 23 (gage height, 34.75 ft), from rating curve extended as explained below; minimum, 1,160 cfs Sept. 9 (gage height, 0.03 ft).

Period of record: Maximum discharge observed, 279,000 cfs June 23, 1972 (gage height, 34.75 ft), from rating curve extended above 210,000 cfs on basis of slope-area measurement at gage height, 33.57 ft; minimum, 162 cfs Sept. 17, 1963; minimum daily, 251 cfs Sept. 13, 1932; minimum gage height, -0.67 ft Sept. 3, 1966.

Maximum stage known prior to 1895, 32.4 ft June 1, 1889 (discharge, about 252,000 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Glendale, Curwensville, Kettle Creek, Foster Joseph Sayers Lakes, First Fork Sinnemahoning Creek Reservoir (see p.181), and by Little Pine Creek Reservoir (capacity, 24,900 acre-ft) about 40 miles upstream.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1302: 1925-28. WSP 1502: 1895-1904, 1912-13, 1919.

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	3,530	3,150	4,240	26,900	8,000	6,320	14,500	8,540	9,750	52,400	3,360	1,490
2	3,130	3,460	5,120	22,200	7,400	24,800	16,100	8,450	8,360	43,900	3,270	1,420
3	2,760	4,660	5,050	19,000	6,600	97,900	17,000	9,220	7,400	33,200	3,270	1,360
4	2,580	4,740	4,500	16,000	6,000	79,400	16,000	12,900	6,660	26,100	3,270	1,290
5	2,420	5,010	4,260	12,900	5,200	58,300	14,800	16,100	6,720	23,600	3,150	1,240
6	2,250	4,970	4,700	10,500	4,500	44,700	14,700	15,800	6,550	22,200	2,900	1,220
7	2,140	4,680	9,520	9,400	4,000	31,100	15,300	14,500	6,380	23,300	2,710	1,200
8	2,070	4,360	27,100	8,600	3,900	23,700	15,600	13,000	6,050	21,900	2,660	1,190
9	1,930	4,100	37,600	8,200	3,800	24,000	15,700	13,000	5,030	21,600	2,720	1,170
10	2,060	3,890	35,000	8,000	3,700	22,800	14,800	16,800	4,740	22,700	2,610	1,200
11	2,140	3,800	30,500	8,600	3,700	19,200	13,800	16,000	4,850	23,200	2,490	1,390
12	2,130	3,730	24,400	10,100	3,900	17,000	13,700	17,800	5,100	18,600	2,360	1,410
13	2,000	3,400	18,600	10,600	4,400	17,000	14,800	16,000	4,550	14,900	2,360	1,350
14	1,920	3,200	14,600	11,600	5,200	16,900	20,400	14,700	4,340	13,000	2,250	1,390
15	1,820	3,130	12,800	11,000	6,600	20,600	25,400	15,600	4,850	12,000	2,140	1,710
16	1,700	3,080	14,500	9,000	6,200	21,500	30,900	18,000	7,190	18,100	2,090	2,040
17	1,590	2,920	16,100	8,200	5,830	22,800	70,200	20,000	7,880	18,900	1,990	2,780
18	1,520	2,660	14,700	7,800	5,200	25,100	67,700	19,900	7,100	15,800	1,950	3,690
19	1,440	2,550	12,900	10,000	4,800	23,800	47,400	17,800	6,440	12,900	1,890	3,360
20	1,390	2,500	11,200	8,910	4,500	21,300	35,200	16,200	5,910	11,200	1,860	2,870
21	1,360	2,540	10,100	8,080	4,100	20,400	29,300	17,400	7,860	10,600	1,860	2,240
22	1,390	2,550	9,260	7,810	3,900	26,500	24,400	16,900	80,800	8,990	1,750	2,020
23	1,350	2,560	7,810	8,430	3,700	42,200	21,800	15,300	240,000	7,490	1,680	1,900
24	1,560	2,640	6,770	12,800	3,600	38,500	20,400	12,800	200,000	6,600	1,680	1,830
25	2,020	2,780	6,690	17,000	3,500	31,300	18,800	10,900	130,000	6,130	1,670	1,810
26	2,900	2,680	6,670	23,200	3,800	22,400	16,900	9,360	87,100	5,990	1,680	1,710
27	4,360	2,720	6,740	22,500	4,200	18,400	15,100	7,940	74,800	5,220	1,760	1,720
28	4,950	2,810	7,060	18,500	4,500	16,000	13,000	6,950	63,800	4,780	1,880	1,700
29	4,660	3,020	7,120	14,900	4,500	14,200	10,800	6,240	56,000	4,250	1,740	1,620
30	3,890	3,600	7,500	12,000	-----	13,500	9,540	5,730	55,900	3,780	1,620	1,670
31	3,420	-----	16,000	9,500	-----	14,000	-----	7,010	-----	3,520	1,560	-----
TOTAL	74,380	101,890	399,110	392,230	139,230	875,620	674,040	418,840	1,122.1M	516,850	70,180	52,990
MEAN	2,399	3,396	12,870	12,650	4,801	28,250	22,470	13,510	37,400	16,670	2,264	1,766
MAX	4,950	5,010	37,600	26,900	8,000	97,900	70,200	20,000	240,000	52,400	3,360	3,690
MIN	1,350	2,500	4,240	7,800	3,500	6,320	9,540	5,730	4,340	3,520	1,560	1,170
MEAN#	2,363	3,077	12,930	12,590	4,828	28,600	22,470	13,590	39,020	15,080	2,262	1,557
CFSM#	.42	.54	2.28	2.22	.85	5.03	3.95	2.39	6.87	2.65	.40	.27
IN#	.48	.60	2.63	2.56	.92	5.80	4.41	2.76	7.66	3.06	.46	.30

CAL YR 1971 TOTAL 2,901,967 MEAN 7,951 MAX 61,000 MIN 840 MEAN# 7,958 CFSM# 1.40 IN.# 19.04
WTR YR 1972 TOTAL 4,837,470 MEAN 13,220 MAX 240,000 MIN 1,170 MEAN# 13,210 CFSM# 2.32 IN.# 31.64

NOTE.--Doubtful gage-height record June 23-25.

Adjusted for change in contents in Glendale Lake, Curwensville, First Fork Sinnemahoning Creek, Kettle Creek, and Foster Joseph Sayers Reservoirs.

01552000 Loyalsock Creek at Loyalsockville, Pa.

LOCATION.--Lat 41°19'26", long 76°54'42", Lycoming County, on left bank 500 ft downstream from highway bridge at Loyalsockville, 2.5 miles downstream from Wallis Run and 7.3 miles upstream from mouth.

DRAINAGE AREA.--443 sq mi.

PERIOD OF RECORD.--August 1925 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1969, published as "at Loyalsock."

GAGE.--Water-stage recorder. Datum of gage is 585.63 ft above mean sea level (Pennsylvania Department of Transportation benchmark). Prior to Sept. 16, 1926, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--47 years, 739 cfs (22.65 inches per year).

EXTREMES.--Current year: Maximum discharge, 88,700 cfs June 23 (gage height, 14.74 ft, from floodmark in gage well), from rating curve extended as explained below; minimum, 81 cfs Sept. 11, 12; minimum gage height, 2.69 ft Oct. 24.

Period of record: Maximum discharge, 88,700 cfs June 23, 1972 (gage height, 14.74 ft, from floodmark in gage well), from rating curve extended above 16,000 cfs on basis of slope-area measurement at gage height, 12.20 ft; minimum, 11 cfs Sept. 25, 26, Nov. 24, 1964; minimum gage height, 2.11 ft Aug. 12, 1966.

REMARKS.--Records good except those for winter periods, which are fair. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 871: 1938(M). WSP 1051: 1926(M), 1933(M), 1936(M). WSP 1302: 1926-30. WSP 1502: 1932-33, 1935(M), 1937(M).

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	162	212	610	790	655	450	1,460	618	2,380	1,850	213	130
2	146	393	450	721	566	5,400	1,780	746	1,600	1,290	220	119
3	138	688	377	696	526	10,500	1,590	1,130	1,210	1,010	247	111
4	130	519	367	618	500	3,960	1,370	3,070	1,130	835	247	106
5	127	422	327	603	470	2,490	1,200	4,110	1,010	743	210	102
6	122	367	439	462	450	2,000	1,130	2,510	825	779	180	98
7	124	357	1,840	420	420	1,700	1,320	1,900	696	716	190	96
8	119	362	4,160	380	400	1,800	1,140	1,520	588	618	280	93
9	117	318	2,940	422	380	1,300	1,020	1,690	588	550	250	90
10	141	299	2,680	444	370	960	1,060	2,530	640	658	220	86
11	299	290	2,680	532	360	790	1,090	2,100	506	674	190	84
12	294	277	2,020	737	360	844	1,240	1,660	433	529	173	84
13	235	260	1,550	704	350	1,280	1,530	1,380	404	429	180	93
14	209	247	1,200	1,780	740	1,320	1,930	1,440	388	394	190	130
15	184	255	1,190	1,340	700	1,080	1,780	1,750	790	406	180	164
16	174	285	1,380	1,100	600	940	2,720	2,470	1,170	1,560	160	162
17	162	281	1,130	900	500	1,780	9,300	2,120	790	2,080	150	135
18	152	255	960	800	450	2,040	4,030	1,890	729	1,140	150	120
19	146	251	807	950	420	1,750	2,700	1,510	721	835	160	120
20	138	255	746	772	400	1,530	2,330	1,300	600	1,070	130	120
21	133	264	696	671	390	1,510	2,220	1,410	3,080	835	120	110
22	127	260	640	580	370	6,750	1,750	1,150	37,000	658	120	120
23	124	247	500	781	350	7,610	1,560	940	45,000	500	110	110
24	162	228	512	1,260	340	3,650	1,350	790	10,000	580	110	110
25	251	239	519	1,530	330	2,420	1,180	671	5,860	430	100	100
26	351	239	469	1,300	320	1,870	1,020	573	4,130	360	100	110
27	327	255	469	1,200	330	1,560	911	512	2,610	323	170	100
28	290	260	469	970	340	1,370	807	456	1,810	299	160	100
29	255	290	450	854	360	1,240	729	410	1,410	267	150	98
30	232	539	493	790	-----	1,390	663	532	1,710	239	140	96
31	220	-----	1,050	704	-----	1,420	-----	2,620	-----	220	130	-----
TOTAL	5,791	9,414	34,120	25,811	12,747	74,704	53,910	47,508	129,808	22,877	5,330	3,297
MEAN	187	314	1,101	833	440	2,410	1,797	1,533	4,327	738	172	110
MAX	351	688	4,160	1,780	740	10,500	9,300	4,110	45,000	2,080	280	164
MIN	117	212	327	380	320	450	663	410	388	220	100	84
CFSM	.42	.71	2.49	1.88	.99	5.44	4.06	3.46	9.77	1.67	.39	.25
IN.	.49	.79	2.87	2.17	1.07	6.27	4.53	3.99	10.90	1.92	.45	.28

CAL YR 1971 TOTAL 235,271 MEAN 645 MAX 6,070 MIN 41 CFSM 1.46 IN 19.76
 WTR YR 1972 TOTAL 425,317 MEAN 1,162 MAX 45,000 MIN 84 CFSM 2.62 IN 35.72

PEAK DISCHARGE (BASE, 6,400 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	0200	9.09	17,300	4-17	0230	8.39	14,200
3-22	2100	8.57	14,900	6-23	0400*	14.74	88,700

SUSQUEHANNA RIVER BASIN

01552500 Muncy Creek near Sonestown, Pa.

LOCATION.--Lat 41°21'25", long 76°32'06", Sullivan County, on right bank 150 ft downstream from Slip Run, 185 ft downstream from bridge on State Highway 464, and 1.2 miles east of Sonestown.

DRAINAGE AREA.--23.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,025.01 ft above mean sea level. Prior to Mar. 31, 1941, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 45.6 cfs (26.02 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,260 cfs June 22 (gage height, 8.94 ft), from rating curve extended above 3,400 cfs; minimum daily, 4.5 cfs Sept. 11, 12.

Period of record: Maximum discharge, 8,260 cfs June 22, 1972 (gage height, 8.94 ft), from rating curve extended above 3,400 cfs; minimum, 0.1 cfs Sept. 11, 12, 13, 1964.

REMARKS.--Records poor.

REVISIONS (WATER YEARS).--WSP 1502: 1941-42.

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	9.1	12	49	46	45	30	74	32	140	135	10	7.2
2	8.8	61	37	48	38	200	86	34	84	90	11	6.8
3	8.4	46	35	45	35	385	74	82	64	77	12	6.6
4	8.0	37	32	41	34	167	69	259	56	65	12	6.0
5	7.8	31	34	41	33	111	62	220	45	71	11	5.8
6	7.6	28	84	35	31	83	62	135	36	65	10	5.6
7	8.4	37	259	29	29	73	69	97	33	49	9.0	5.4
8	8.0	29	248	23	27	93	59	79	30	39	11	5.2
9	7.8	26	190	25	26	69	59	90	29	36	17	4.9
10	9.0	25	170	30	25	67	57	107	39	101	14	4.6
11	19	24	180	41	25	63	63	85	26	58	11	4.5
12	19	22	140	50	24	63	68	73	22	39	9.8	4.5
13	17	21	110	54	24	68	105	65	21	33	10	5.4
14	15	19	86	120	66	68	111	72	19	67	11	6.8
15	14	22	74	89	52	59	109	88	18	80	10	9.0
16	13	21	88	63	41	71	293	140	49	413	9.0	8.0
17	12	19	76	54	35	129	322	120	32	550	8.2	7.0
18	11	17	64	50	31	105	160	100	29	215	8.6	6.4
19	11	19	54	66	28	90	113	88	31	149	9.2	6.4
20	9.4	20	46	54	27	81	121	74	26	126	7.6	6.0
21	9.4	22	43	47	26	83	100	88	402	101	6.8	6.0
22	8.7	20	39	41	25	556	85	70	3,910	83	6.2	6.2
23	8.7	17	34	58	23	274	76	52	1,000	61	6.0	5.8
24	12	16	30	90	22	152	68	41	289	44	5.8	5.6
25	14	17	31	107	22	111	59	35	182	36	5.6	5.6
26	20	19	29	90	21	89	52	28	154	29	5.4	5.8
27	15	20	28	80	22	74	46	24	116	21	10	5.6
28	13	22	34	70	23	68	41	21	105	17	9.2	5.4
29	12	46	29	60	25	65	37	19	97	13	8.6	5.4
30	11	76	49	54	-----	74	33	25	103	11	8.0	5.4
31	11	-----	61	49	-----	71	-----	170	-----	10	7.6	-----
TOTAL	358.1	811	2,463	1,750	885	3,692	2,733	2,613	7,187	2,884	290.6	178.9
MEAN	11.6	27.0	79.5	56.5	30.5	119	91.1	84.3	240	93.0	9.37	5.96
MAX	20	76	259	120	66	556	322	259	3,910	550	17	9.0
MIN	7.6	12	28	23	21	30	33	19	18	10	5.4	4.5
CFSM	.49	1.13	3.34	2.37	1.28	5.00	3.83	3.54	10.1	3.91	.39	.25
IN.	.56	1.27	3.85	2.74	1.38	5.77	4.27	4.08	11.23	4.51	.45	.28

CAL YR 1971 TOTAL 14,170.6 MEAN 38.8 MAX 303 MIN 2.0 CFSM 1.63 IN 22.15
WTR YR 1972 TOTAL 25,845.6 MEAN 70.6 MAX 3,910 MIN 4.5 CFSM 2.97 IN 40.40

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-22	1515	5.15	1,140	6-22	1715	8.94	8,260
4-16	2030	5.21	1,200	7-16	2315	4.73	1,830

01553120 White Deer Creek above Sand Spring Run near White Deer, Pa.

LOCATION.--Lat 41°03'17", long 77°04'31", Union County, on left bank 20 ft downstream from bridge on White Deer Creek Road, 1,500 ft upstream from Sand Spring Run, and 11.3 miles west of White Deer.

DRAINAGE AREA.--17.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,046.15 ft above mean sea level. Prior to May 16, 1968, non-recording gage at bridge 30 ft upstream at same datum.

EXTREMES.--Current year: Maximum discharge, 2,330 cfs June 22 (gage height, 8.17 ft, in gage well, 9.47 ft outside, from floodmarks), from rating curve extended as explained below; minimum, 5.3 cfs Sept. 10, 11, 12; minimum gage height, 2.49 ft Oct. 21, 22, 23.

Period of record: Maximum discharge, 2,330 cfs June 22, 1972 (gage height, 8.17 ft, in gage well, 9.47 ft outside, from floodmarks), from rating curve extended above 520 cfs on basis of slope-area measurement of peak flow; minimum daily, 3.1 cfs Oct. 17, 18, 1968.

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

	WRD	Water Year	Date	Discharge (cfs)	Gage Height (feet)
Penna.		1968	May 29	240	4.67
Penna.		1970	Apr. 2	440	5.30
Penna.		1971	Sept. 13	321	4.95

REMARKS.--Records fair.

REVISIONS.--The figures of peak discharge for the water years 1970-71 have been revised as shown in the following table. They supersede figures published in WRD Penna., 1970 and 1971.

REVISED PEAK DISCHARGE.--1970: Apr. 2 (1730) 440 cfs (5.30 ft); Apr. 10 (0330) 259 cfs (4.74 ft).

1971: Oct. 22 (0800) 248 cfs (4.70 ft); Nov. 13 (1000) 246 cfs (4.69 ft); Sept. 13 (1530) 321 cfs (4.95ft).

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	19	34	21	24	26	40	63	35	41	147	22	6.4
2	18	49	15	26	22	184	69	35	40	111	20	6.1
3	18	38	15	28	24	602	62	49	48	90	20	6.1
4	16	33	14	24	27	305	58	68	46	73	18	6.4
5	16	32	14	27	31	170	54	59	48	73	17	6.1
6	17	32	31	25	31	115	50	60	41	72	16	6.1
7	18	32	58	24	30	92	56	58	38	58	21	5.8
8	15	30	70	21	28	85	50	54	35	62	32	5.8
9	14	28	85	22	26	70	48	73	34	55	18	5.8
10	23	28	96	25	27	61	46	78	36	75	15	5.5
11	23	27	101	28	28	55	49	72	30	58	14	5.3
12	17	25	89	30	29	62	48	70	27	56	13	5.8
13	15	24	76	28	46	63	57	66	28	53	20	8.2
14	14	23	74	30	35	60	53	66	26	50	13	10
15	14	22	64	26	30	57	65	71	24	46	12	7.3
16	14	21	56	25	26	58	87	90	38	87	11	6.4
17	13	20	48	24	23	67	160	80	30	57	12	6.1
18	13	19	44	32	21	68	131	76	27	51	12	7.9
19	12	19	40	32	19	69	106	68	27	49	10	8.7
20	12	19	38	28	28	72	102	88	23	46	9.3	7.3
21	12	19	37	28	27	78	83	74	266	42	8.5	6.7
22	12	18	33	27	26	260	76	70	1,330	37	8.5	6.7
23	12	16	30	35	25	251	70	64	1,140	34	8.2	6.4
24	35	15	30	40	24	157	63	58	515	37	8.2	7.3
25	57	16	29	35	22	114	58	53	318	38	7.9	8.2
26	61	17	28	29	21	94	52	46	224	36	8.9	7.0
27	54	16	27	30	21	81	48	41	166	29	8.2	6.7
28	50	17	28	30	21	73	44	37	126	26	7.9	6.4
29	44	19	25	30	25	66	41	34	147	24	7.0	6.4
30	39	26	28	29	-----	68	38	36	196	24	6.7	8.2
31	36	-----	30	28	-----	64	-----	69	-----	22	6.1	-----
TOTAL	733	734	1,374	870	769	3,661	1,987	1,898	5,115	1,718	411.4	203.1
MEAN	23.6	24.5	44.3	28.1	26.5	118	66.2	61.2	171	55.4	13.3	6.77
MAX	61	49	101	40	46	602	160	90	1,330	147	32	10
MIN	12	15	14	21	19	40	38	34	23	22	6.1	5.3
CFSM	1.33	1.38	2.49	1.58	1.49	6.63	3.72	3.44	9.61	3.11	.75	.38
IN.	1.53	1.53	2.87	1.82	1.61	7.65	4.15	3.97	10.69	3.59	.86	.42

CAL YR 1971 TOTAL 11,237.0 MEAN 30.8 MAX 188 MIN 3.5 CFSM 1.73 IN 23.48
WTR YR 1972 TOTAL 19,473.5 MEAN 53.2 MAX 1,330 MIN 5.3 CFSM 2.99 IN 40.70

PEAK DISCHARGE (BASE, 200 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	0300*	6.0*	740*	6-22	2130	8.17	2,330
3-22	1500*	5.2*	400*	6-29	2300	5.41	275

SUSQUEHANNA RIVER BASIN

01553130 Sand Spring Run near White Deer, Pa.

LOCATION.--Lat 41°03'31", long 77°04'37", Union County, on right bank 12 ft downstream from bridge on White Deer Creek Road, 500 ft upstream from mouth, and 11.3 miles west of White Deer.

DRAINAGE AREA.--4.93 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,037.16 ft above mean sea level. Prior to May 15, 1968 nonrecording gage at bridge 20 ft upstream at same datum.

EXTREMES.--Current year: Maximum discharge, 1,000 cfs June 22 (gage height, 5.68 ft), from rating curve extended as explained below; minimum daily, 1.8 cfs Sept. 11, 17, 22, 23.

Period of record: Maximum discharge, 1,000 cfs June 22, 1972 (gage height, 5.68 ft), from rating curve extended above 200 cfs on basis of slope-area measurement of peak flow; minimum, 0.84 cfs Sept. 25, 1970; minimum gage height, 2.57 ft Sept. 9, 10, 1971.

REVISIONS.--The figures of maximum discharge for water years 1970 and 1971 have been revised to 74 cfs Apr. 2, 1970 (gage height, 4.19 ft) and 458 cfs Sept. 13, 1971 (gage height, 5.38 ft), superseding figures published in WRD Penna. 1970 and 1971.

REMARKS.--Records fair.

REVISIONS.--The figures of peak discharge for the water year 1971 have been revised as shown in the following table. They supersede figures published in WRD Penna. 1971.

REVISED PEAK DISCHARGE.--1971: Oct. 22 (0630) 88 cfs (4.50 ft); Feb. 13 (1700) 103 cfs (4.70 ft); Sept. 13 (1500) 458 cfs (5.38 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	4.2	8.2	5.6	7.2	8.0	13	19	12	12	29	7.4	2.3
2	4.1	11	4.9	7.8	7.8	74	19	12	14	24	7.0	2.3
3	4.1	8.8	4.9	7.4	8.2	150	17	16	14	22	6.8	2.3
4	4.1	8.4	4.8	7.0	9.0	56	17	19	13	20	6.4	2.3
5	4.1	8.0	4.5	7.6	8.8	39	16	16	12	20	5.9	2.2
6	4.8	8.0	9.7	6.8	8.8	29	15	17	12	19	5.6	2.2
7	4.8	8.0	12	6.7	8.2	26	16	16	11	17	6.8	2.2
8	4.2	7.6	17	6.7	7.8	26	15	15	9.8	18	6.5	2.0
9	4.1	7.2	17	6.7	7.2	21	14	22	9.5	16	5.4	2.0
10	6.8	7.2	19	6.8	7.6	20	14	20	9.5	17	4.9	1.9
11	6.0	7.0	19	7.6	8.0	18	14	19	8.6	16	4.6	1.8
12	5.1	6.7	17	7.8	8.2	20	13	18	8.2	15	4.4	2.0
13	5.0	6.5	15	7.6	13	19	16	17	8.2	15	4.2	2.4
14	4.9	6.4	14	7.8	9.5	18	14	17	8.0	14	4.0	2.4
15	4.8	6.2	14	7.4	8.2	17	19	21	8.4	14	3.8	2.0
16	4.7	6.0	13	8.0	8.2	18	34	19	11	19	3.7	1.9
17	4.6	5.9	12	8.6	7.8	21	44	18	8.6	16	3.7	1.8
18	4.6	5.9	11	8.2	7.6	20	32	18	9.0	15	3.6	2.2
19	4.5	5.9	10	8.0	7.8	20	26	17	8.4	14	3.3	2.2
20	4.5	5.9	10	7.8	8.4	21	26	27	7.2	13	3.1	2.0
21	4.5	5.7	9.8	7.6	8.0	22	21	22	100	12	3.0	1.9
22	4.5	5.4	9.0	7.8	8.0	83	21	21	470	12	2.9	1.8
23	4.8	5.1	8.6	9.2	7.8	66	20	19	102	11	2.8	1.8
24	11	5.1	8.6	10	7.6	42	18	17	58	11	2.7	2.0
25	13	5.1	8.4	9.2	7.2	34	17	15	46	11	2.5	2.2
26	13	5.1	8.2	8.6	7.4	28	16	14	38	10	2.5	2.0
27	12	5.1	8.0	8.8	7.2	25	14	13	31	9.5	2.6	2.0
28	10	5.3	8.2	8.8	7.0	22	14	12	26	9.0	2.5	2.0
29	9.2	5.9	7.6	8.8	8.8	21	13	11	33	8.6	2.4	2.0
30	8.8	6.7	8.4	8.6	-----	21	12	12	37	8.2	2.4	2.2
31	8.6	-----	8.0	8.2	-----	19	-----	20	-----	7.8	2.3	-----
TOTAL	193.4	199.3	327.2	245.1	237.1	1,029	566	532	1,143.4	463.1	129.7	62.3
MEAN	6.24	6.64	10.6	7.91	8.18	33.2	18.9	17.2	38.1	14.9	4.18	2.08
MAX	13	11	19	10	13	150	44	27	470	29	7.4	2.4
MIN	4.1	5.1	4.5	6.7	7.0	13	12	11	7.2	7.8	2.3	1.8
CFSM	1.27	1.35	2.15	1.60	1.66	6.73	3.83	3.49	7.73	3.02	.85	.42
IN.	1.46	1.50	2.47	1.85	1.79	7.76	4.27	4.01	8.63	3.49	.98	.47

CAL YR 1971 TOTAL 2,817.5 MEAN 7.72 MAX 35 MIN 1.2 CFSM 1.57 IN 21.26
WTR YR 1972 TOTAL 5,127.6 MEAN 14.0 MAX 470 MIN 1.8 CFSM 2.84 IN 38.69

PEAK DISCHARGE (BASE, 55 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	0200	5.00	290	4-16	1800	4.34	111
3-22	1530	4.45	132	6-22	1400	5.68	1,000

SUSQUEHANNA RIVER BASIN

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01553140 White Deer Creek near White Deer, Pa.

LOCATION.--Lat 41°04'18", long 76°56'03", Union County, on left bank 30 ft downstream from bridge on Legislative Route 59045, 2 miles downstream from White Deer Creek Dam, and 3.2 miles west of White Deer.

DRAINAGE AREA.--40.0 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 586.28 ft above mean sea level. Prior to May 27, 1968, nonrecording gage at bridge 30 ft upstream at same datum.

EXTREMES.--Current year: Maximum discharge, 6,410 cfs June 22 (gage height, 9.89 ft), from rating curve extended as explained below; minimum daily, 10 cfs Sept. 11.

Period of record: Maximum discharge, 6,410 cfs June 22, 1972 (gage height, 9.89 ft), from rating curve extended above 1,400 cfs on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 0.90 cfs Aug. 30, 1968 (gage height, 2.75 ft).

REMARKS.--Records good except those for winter periods, which are fair, and those after June 22, which are poor. Figures of daily discharge do not include water diverted above station for public supply by White Deer Mountain Water Company.

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	30	59	40	49	58	96	136	83	93	229	48	14
2	29	92	33	56	50	410	144	80	85	181	45	13
3	29	75	32	57	52	1,300	131	120	111	155	45	13
4	26	61	31	50	56	680	126	167	94	139	41	13
5	25	58	31	58	60	353	117	147	98	138	38	13
6	25	58	83	54	68	256	110	147	86	120	35	12
7	28	61	133	50	66	210	130	142	80	122	46	12
8	23	55	160	46	62	195	111	133	71	125	72	12
9	22	51	190	47	54	164	102	188	66	118	40	12
10	42	50	202	50	56	144	99	195	70	122	34	11
11	40	47	214	57	56	130	99	184	57	111	31	10
12	28	42	190	63	56	144	98	172	52	106	29	12
13	24	41	164	59	86	146	120	155	52	100	45	14
14	22	38	142	64	74	141	118	155	50	96	29	17
15	22	36	136	59	64	133	149	168	52	92	28	12
16	22	36	122	56	56	141	221	197	89	194	25	11
17	22	33	105	52	52	162	366	179	62	134	27	11
18	20	32	94	68	47	162	304	171	70	117	27	13
19	20	31	84	56	44	166	245	155	67	108	23	15
20	19	31	82	58	64	167	231	185	50	100	21	14
21	19	32	77	56	60	176	188	167	493	96	19	13
22	19	29	70	53	56	424	172	160	4,570	84	19	13
23	20	27	63	75	54	493	162	142	2,000	76	18	12
24	59	25	61	86	50	350	146	130	601	84	19	13
25	105	27	58	75	48	265	133	114	399	74	18	15
26	118	29	57	70	46	215	122	102	309	68	20	14
27	99	30	53	64	45	186	112	92	239	62	17	13
28	90	32	53	64	45	167	104	83	190	58	16	13
29	79	39	49	66	54	152	94	75	224	54	15	13
30	70	51	57	66	-----	150	87	76	303	50	14	15
31	64	-----	61	62	-----	139	-----	160	-----	48	13	-----
TOTAL	1,260	1,308	2,927	1,846	1,639	8,017	4,477	4,424	10,783	3,361	917	388
MEAN	40.6	43.6	94.4	59.5	56.5	259	149	143	359	108	29.6	12.9
MAX	118	92	214	86	86	1,300	366	197	4,570	229	72	17
MIN	19	25	31	46	44	96	87	75	50	48	13	10
(%)	2.71	2.76	2.75	2.64	2.59	2.82	2.70	2.72	2.81	2.74	2.73	2.82
MEAN#	43.3	46.4	97.2	62.1	59.1	262	152	146	362	111	32.3	15.7
CFSM#	1.08	1.16	2.43	1.55	1.48	6.55	3.80	3.65	9.05	2.78	.81	.39
IN.#	1.24	1.29	2.80	1.79	1.60	7.55	4.24	4.21	10.10	3.20	.93	.44

CAL YR 1971 TOTAL 22,815.3 MEAN 62.5 MAX 443 MIN 2.0 MEAN# 65.4 CFSM# 1.64 IN.# 22.17
WTR YR 1972 TOTAL 41,347.0 MEAN 113 MAX 4,570 MIN 10 MEAN# 116 CFSM# 2.90 IN.# 39.39

PEAK DISCHARGE (BASE, 450 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	Unk.	Unk.	Unk.	6-22	0800	9.89	6,410
3-22	2100	6.09	595	7-16	1900	6.48	898

Diversion, equivalent in cubic feet per second, for public water supply; furnished by White Deer Mountain Water Company.

Adjusted for diversion.

SUSQUEHANNA RIVER BASIN

01553500 West Branch Susquehanna River at Lewisburg, Pa.

LOCATION.--Lat 40°58'05", long 76°52'25", Union County, at downstream side of left abutment of Market Street bridge at Lewisburg, 0.2 mile downstream from Buffalo Creek, and 7.4 miles upstream from mouth.

DRAINAGE AREA.--6,847 sq mi.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302. September 1913 to August 1923 (gage heights only) are contained in reports of Water Supply Commission of Pennsylvania or Pennsylvania Department of Forests and Waters.

GAGE.--Water-stage recorders. Datum of gage is 428.20 ft above mean sea level. Sept. 21, 1913 to Aug. 31, 1923, Dec. 7, 1939 to July 2, 1940, nonrecording gages at same site and datum. Since Oct. 1, 1942, water-stage recorder for station on Susquehanna River at Sunbury used as an auxiliary gage for this station.

AVERAGE DISCHARGE.--33 years (1939-72), 10,340 cfs (20.51 inches per year), adjusted for storage since October 1961.

EXTREMES.--Current year: Maximum discharge, about 300,000 cfs June 24; maximum gage height, 34.23 ft June 24, from floodmarks (backwater from Susquehanna River); minimum discharge, 1,350 cfs Sept. 10 (gage height, 1.25 ft).

Period of record: Maximum discharge, about 300,000 cfs June 24, 1972; maximum gage height, 34.23 ft June 24, from floodmarks (backwater from Susquehanna River); minimum discharge, not determined.

Maximum stage known prior to 1939, 32.1 ft Mar. 19, 1936, from floodmarks (discharge, 287,000 cfs, from slope-area measurement at Watsontown), backwater from Susquehanna River.

REMARKS.--Records good except those for period of no gage-height record or those for winter periods, which are fair. Flow regulated by Glendale, Curwensville, Kettle Creek, Foster Joseph Sayers Lakes, First Fork Sinnemahoning Creek Reservoir (see p.181) and Little Pine Creek Reservoir (capacity, 24,900 acre-ft) about 75 miles upstream. Records of water quality 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	4,460	4,060	5,920	28,000	11,000	7,890	16,400	11,000	12,600	58,000	4,800	1,940
2	3,780	4,270	6,480	25,800	9,800	21,400	17,700	10,600	12,000	50,000	4,600	1,850
3	3,330	6,310	6,740	22,300	9,200	99,700	19,300	11,400	11,000	41,000	4,570	1,770
4	2,970	6,740	6,070	19,100	8,400	98,800	18,700	15,600	9,650	33,000	4,540	1,710
5	2,790	6,650	5,450	16,500	7,000	69,600	16,900	22,300	9,290	28,000	4,400	1,610
6	2,590	6,710	5,970	14,000	6,000	53,600	16,300	21,300	9,000	26,000	4,040	1,500
7	2,450	6,440	12,200	12,500	5,600	39,000	17,100	19,000	8,510	27,000	3,740	1,440
8	2,370	5,930	27,600	11,000	5,200	28,700	17,200	16,800	8,280	26,000	3,930	1,420
9	2,240	5,520	42,600	10,500	5,000	27,000	17,300	16,400	7,220	26,000	3,880	1,420
10	2,350	5,130	41,900	10,000	4,900	25,700	16,600	20,700	6,520	26,000	3,640	1,350
11	2,790	4,910	37,000	10,900	4,800	22,200	15,700	19,600	6,360	27,000	3,320	1,480
12	2,770	4,780	31,200	12,300	4,900	20,000	15,300	19,000	6,620	23,000	3,080	1,710
13	2,570	4,440	24,200	13,200	5,400	19,700	16,000	20,300	6,150	18,000	3,060	1,750
14	2,380	3,970	19,200	14,400	7,000	20,000	20,400	18,000	5,680	16,000	3,030	1,790
15	2,250	3,800	16,700	15,600	10,000	21,600	27,100	18,400	5,640	14,000	2,830	1,910
16	2,130	3,720	17,000	13,000	9,850	23,800	31,100	21,500	8,860	21,000	2,680	2,400
17	2,010	3,640	19,000	11,000	8,760	25,900	71,100	23,200	10,100	22,000	2,560	2,630
18	1,880	3,250	18,000	10,500	7,900	29,100	81,600	23,500	9,790	19,000	2,490	4,180
19	1,800	3,030	16,300	13,000	7,050	29,000	59,500	21,400	8,950	16,700	2,440	4,430
20	1,710	2,990	14,300	12,100	5,790	25,600	43,900	19,200	8,330	14,200	2,380	3,770
21	1,660	3,000	13,000	10,900	5,300	23,600	35,600	19,200	12,600	13,500	2,350	3,010
22	1,620	3,050	12,100	10,400	5,000	27,000	30,100	19,500	105,000	11,900	2,280	2,440
23	1,650	3,000	10,800	10,800	4,800	51,700	26,100	17,600	250,000	10,300	2,170	2,260
24	1,740	2,960	9,220	14,200	4,600	47,800	23,900	15,300	285,000	8,990	2,190	2,170
25	2,450	3,240	8,830	20,200	4,600	36,600	21,900	13,200	185,000	8,280	2,130	2,170
26	3,680	3,230	8,730	24,900	4,700	28,800	19,900	11,600	110,000	8,210	2,110	2,080
27	5,120	3,090	8,610	25,900	5,200	23,000	17,700	10,100	85,000	7,340	2,310	2,060
28	6,210	3,310	8,990	22,300	5,400	19,600	15,700	8,960	74,000	6,690	2,420	2,040
29	6,470	3,560	9,090	18,800	5,800	17,200	13,400	8,140	66,000	6,120	2,400	1,960
30	5,440	4,910	9,300	15,000	-----	15,900	11,800	7,530	64,000	5,510	2,190	1,980
31	4,510	-----	12,400	13,000	-----	16,100	-----	9,670	-----	5,040	2,020	-----
TOTAL	92,170	129,640	484,900	482,100	188,950	1,015.6M	771,300	510,000	1,407.2M	623,780	94,580	64,230
MEAN	2,973	4,321	15,640	15,550	6,516	32,760	25,710	16,450	46,910	20,120	3,051	2,141
MAX	6,470	6,740	42,600	28,000	11,000	99,700	81,600	23,500	285,000	58,000	4,800	4,430
MIN	1,620	2,960	5,450	10,000	4,600	7,890	11,800	7,530	5,640	5,040	2,020	1,350
MEAN [†]	2,937	4,002	15,700	15,490	6,544	33,110	25,710	16,530	48,530	18,540	3,049	1,932
CFSM [†]	.43	.58	2.29	2.26	.96	4.84	3.75	2.41	7.09	2.71	.45	.28
IN. [†]	.50	.65	2.64	2.61	1.04	5.58	4.18	2.78	7.91	3.12	.52	.31
CAL YR 1971 TOTAL	3,538,884			MEAN 9,696	MAX 73,100	MIN 963	MEAN [†] 9,702	CFSM [†] 1.42	IN. [†] 19.28			
WTR YR 1972 TOTAL	5,864,390			MEAN 16,020	MAX 285,000	MIN 1,350	MEAN [†] 16,010	CFSM [†] 2.34	IN. [†] 31.84			

[†] Adjusted for change in contents in Glendale, Curwensville, Kettle Creek, Foster Joseph Sayers Lakes and First Fork Sinnemahoning Creek Reservoir.

SUSQUEHANNA RIVER BASIN

145

01553600 East Branch Chillisquaque Creek near Washingtonville, Pa.

LOCATION.--Lat 41°04'57", long 76°39'17", Montour County, on right bank 30 ft upstream from highway bridge on Legislative Route 47017, 0.2 mile downstream from White Hall Creek, 0.7 mile upstream from Middle Branch Chillisquaque Creek, 2.3 miles upstream from mouth, and 2.5 miles northeast of Washingtonville.

DRAINAGE AREA.--9.48 sq mi.

PERIOD OF RECORD.--April 1960 to current year. Prior to October 1969, published as White Hall Creek near Washingtonville.

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

AVERAGE DISCHARGE.--12 years, 10.3 cfs (14.75 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,390 cfs June 22 (gage height, 11.11 ft, from floodmark in gage shelter), from rating curve extended as explained below; no flow for many days.

Period of record: Maximum discharge, 4,390 cfs June 22, 1972 (gage height, 11.11 ft, from floodmark in gage shelter), from rating curve extended above 350 cfs on basis of contracted-opening measurement of peak flow at site 0.7 mile upstream, adjusted for intervening area; no flow for many days.

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	.15	2.1	18	7.4	7.0	163	5.2	5.2	21	14	1.8	
2	.12	11	11	11	6.5	226	7.1	5.2	14	8.9	1.2	
3	.18	7.1	8.0	12	6.5	233	5.4	15	14	7.2	1.2	
4	.18	4.7	6.0	10	7.0	55	5.4	174	11	5.8	1.3	
5	.10	3.5	5.5	9.0	6.0	30	4.9	83	8.4	12	.70	
6	.10	3.0	75	7.0	5.5	16	4.5	36	6.1	9.5	.42	
7	.12	3.7	158	5.5	5.2	15	11	21	4.9	6.5	1.0	
8	.12	2.8	117	5.0	5.0	24	7.4	16	3.7	13	3.7	
9	.08	2.4	62	6.0	5.0	16	6.1	79	3.1	8.0	1.2	
10	3.7	2.4	38	9.0	4.5	13	5.9	87	4.9	10	.50	
11	3.9	2.1	27	15	4.2	11	6.1	50	2.6	6.3	.30	
12	1.9	1.8	18	20	4.0	24	5.4	35	2.1	4.8	.25	
13	1.3	1.7	14	20	25	20	10	24	2.1	4.2	.21	
14	1.1	1.4	12	29	50	18	9.5	16	1.9	4.0	.16	
15	.78	4.3	17	19	25	25	21	45	1.8	4.2	.12	
16	.69	4.5	13	15	17	45	100	55	19	74	.06	
17	.61	3.1	10	11	13	67	136	31	9.0	86	.12	
18	.47	2.8	8.7	8.3	9.5	37	45	34	37	30	.19	
19	.47	2.8	7.9	7.5	6.5	22	26	29	32	16	.16	
20	.41	3.0	7.6	7.0	4.5	16	70	17	17	10	.08	
21	.36	2.8	7.6	7.5	11	13	39	13	145	8.3	.02	
22	.36	2.2	5.7	7.9	8.0	79	30	9.8	1,400	5.3	0	
23	.41	1.9	5.2	17	6.0	50	24	7.4	450	4.0	0	
24	2.5	1.5	5.2	44	4.5	28	18	5.7	103	3.1	0	
25	4.5	3.5	4.9	32	6.0	19	12	4.3	67	9.5	0	
26	9.8	4.1	4.9	25	5.0	13	9.5	3.3	65	4.9	0	
27	4.1	4.9	4.7	15	7.0	10	8.2	2.7	50	3.1	.23	
28	2.8	8.5	5.2	12	9.0	8.2	7.1	2.4	33	2.4	.08	
29	2.4	34	4.3	10	10	6.9	6.1	1.9	19	1.9	.04	
30	2.1	56	12	8.5	-----	6.9	5.4	1.9	13	1.7	0	
31	1.9	-----	11	7.5	-----	5.7	-----	19	-----	1.5	0	-----
TOTAL	47.71	189.6	704.4	420.1	283.4	1,315.7	651.2	928.8	2,560.6	380.1	15.04	0
MEAN	1.54	6.32	22.7	13.6	9.77	42.4	21.7	30.0	85.4	12.3	.49	0
MAX	9.8	56	158	44	50	233	136	174	1,400	86	3.7	0
MIN	.08	1.4	4.3	5.0	4.0	5.7	4.5	1.9	1.8	1.5	0	0
CFSM	.16	.67	2.39	1.43	1.03	4.47	2.29	3.16	9.01	1.30	.05	0
IN.	.19	.74	2.76	1.65	1.11	5.16	2.56	3.64	10.05	1.49	.06	0

CAL YR 1971 TOTAL 4,356.42 MEAN 11.9 MAX 257 MIN 0 CFSM 1.26 IN 17.09
WTR YR 1972 TOTAL 7,496.65 MEAN 20.5 MAX 1,400 MIN 0 CFSM 2.16 IN 29.42

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	0515	7.57	884	6-22	1500*	11.11	4,390
4-16	2015	6.50	560	7-16	2315	5.52	511
5- 4	0915	5.72	389				

NOTE.--No gage-height record
June 22-30.

*About.

SUSQUEHANNA RIVER BASIN

01554000 Susquehanna River at Sunbury, Pa.

LOCATION.--Lat 40°50'04", long 76°49'37", Snyder County, on right bank at borough of Shamokin Dam, on grounds of Pennsylvania Power and Light Company generating plant, 1 mile downstream from Shamokin Creek, and 1.8 miles south of Sunbury.

DRAINAGE AREA.--18,300 sq mi, approximately (excluding that of Shamokin Creek).

PERIOD OF RECORD.--October 1937 to current year. June 1918 to September 1937 (gage heights only) in reports of Pennsylvania Department of Forests and Waters.

GAGE.--Water-stage recorder. Datum of gage is 408.61 ft above mean sea level. See WSP 1903 for history of changes prior to Dec. 13, 1937. Dec. 13, 1937 to Mar. 23, 1967, water-stage recorder at site 1.7 miles upstream at datum 11.05 ft higher.

AVERAGE DISCHARGE.--35 years, 25,480 cfs, (18.91 inches per year).

EXTREMES.--Current year: Maximum discharge, 620,000 cfs June 24 (gage height, 35.80 ft), from rating curve extended as explained below; minimum, 964 cfs Oct. 16 (gage height, 4.83 ft), result of shutoff at Sunbury Fabridam; minimum daily, 2,930 cfs Oct. 16.

Period of record: Maximum discharge, 620,000 cfs June 24, 1972 (gage height, 35.80 ft), from rating curve extended above 290,000 cfs on basis of runoff comparisons with upstream stations; minimum, 964 cfs Oct. 16, 1971 (gage height, 4.83 ft), result of shutoff at Sunbury Fabridam.

REMARKS.--Records good except those for winter periods, which are fair. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 891: 1936(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,510	7,110	18,400	53,100	23,300	18,000	45,500	31,400	35,400	101,000	10,000	5,100
2	6,670	7,290	18,300	59,100	21,300	41,000	48,700	29,400	40,200	99,100	9,620	4,900
3	5,960	9,720	18,300	50,200	20,500	157,000	53,700	29,500	38,600	85,800	9,180	4,700
4	5,780	10,500	18,100	42,900	22,000	231,000	57,700	37,900	37,800	69,400	9,480	4,500
5	5,140	10,100	16,500	38,300	19,900	171,000	53,900	72,400	33,700	58,700	9,230	4,240
6	4,780	10,200	15,900	33,600	17,500	120,000	48,100	81,300	33,000	56,500	11,200	4,020
7	5,080	9,770	29,300	29,500	15,100	89,600	45,500	71,500	34,800	52,200	11,500	3,870
8	4,640	9,710	55,700	27,300	11,300	69,900	43,800	57,700	32,300	48,200	11,100	3,760
9	4,400	9,210	96,400	25,000	9,770	64,200	41,600	50,500	26,000	45,300	10,900	3,690
10	4,600	8,750	106,000	23,800	9,400	65,200	38,700	64,500	23,900	44,300	10,100	3,560
11	5,540	8,500	92,500	24,000	9,400	53,700	36,700	114,000	23,500	45,500	10,000	3,520
12	6,200	8,410	81,700	26,300	10,000	45,800	36,100	101,000	22,300	40,000	9,250	3,690
13	5,460	8,190	68,500	29,600	12,000	44,400	37,400	79,300	21,200	34,000	8,680	3,790
14	5,000	7,650	57,900	34,900	23,000	46,000	46,500	63,900	19,300	29,900	8,070	3,910
15	3,540	10,000	49,400	38,800	23,400	50,000	69,800	55,900	17,600	27,800	7,380	4,180
16	2,930	8,160	44,300	41,200	21,200	52,800	85,400	58,700	20,000	32,600	6,860	4,460
17	5,090	7,920	44,200	35,600	22,800	58,200	137,000	58,500	21,700	46,500	7,020	4,600
18	4,720	7,420	46,000	30,400	21,400	76,900	169,000	60,800	24,600	38,300	7,420	5,610
19	4,510	7,090	43,500	27,800	19,700	86,400	139,000	58,800	32,900	32,200	7,120	6,500
20	4,240	6,940	37,500	26,100	16,500	83,300	112,000	51,900	30,900	27,800	6,660	6,160
21	4,110	6,950	32,300	26,700	12,600	71,300	100,000	48,300	27,800	26,500	6,380	6,070
22	3,880	6,860	29,200	27,600	12,000	68,700	95,200	46,700	209,000	25,500	6,170	5,320
23	3,880	6,820	26,500	26,900	11,000	114,000	86,800	42,000	533,000	22,800	5,860	5,160
24	4,230	6,650	23,800	29,000	11,000	140,000	79,300	37,100	609,000	20,100	5,570	4,920
25	4,700	7,200	22,500	37,700	11,000	114,000	70,900	32,100	504,000	17,800	5,320	4,710
26	6,220	7,590	21,200	45,500	12,000	86,600	62,900	27,900	325,000	16,600	5,270	4,540
27	8,070	7,860	20,600	47,900	13,000	67,800	55,300	24,300	196,000	14,900	5,460	4,450
28	8,350	7,900	22,400	43,700	14,000	55,900	46,600	21,600	146,000	13,300	5,630	4,400
29	9,020	8,850	24,100	36,900	14,200	48,000	40,600	19,400	119,000	12,300	5,840	4,330
30	8,250	13,600	25,600	30,600	-----	43,700	35,700	17,700	110,000	11,200	5,660	4,340
31	7,560	-----	30,900	26,100	-----	42,600	-----	23,800	-----	10,600	5,390	-----
TOTAL	170,060	252,920	1,237.5M	1,076.1M	460,270	2,477.0M	2,019.4M	1,569.8M	3,348.5M	1,206.7M	243,320	137,000
MEAN	5,486	8,431	39,920	34,710	15,870	79,900	67,310	50,640	111,600	38,930	7,849	4,567
MAX	9,020	13,600	106,000	59,100	23,400	231,000	169,000	114,000	609,000	101,000	11,500	6,500
MIN	2,930	6,650	15,900	23,800	9,400	18,000	35,700	17,700	17,600	10,600	5,270	3,520
CFSM	.30	.46	2.18	1.90	.87	4.37	3.68	2.77	6.10	2.13	.43	.25
IN.	.35	.51	2.52	2.19	.94	5.04	4.11	3.19	6.81	2.45	.49	.28
CAL YR 1971	TOTAL	8,992,000	MEAN	24,640	MAX	168,000	MIN	2,720	CFSM	1.35	IN	18.28
WTR YR 1972	TOTAL	14,198,570	MEAN	38,790	MAX	609,000	MIN	2,930	CFSM	2.12	IN	28.86

SUSQUEHANNA RIVER BASIN

147

01554500 Shamokin Creek near Shamokin, Pa.

LOCATION.--Lat 40°48'37", long 76°35'04", Northumberland County, on right bank at Weigh Scales, 1 mile downstream from Trout Run, 1.1 miles upstream from Bennys Run, and 2 miles northwest of Shamokin.

DRAINAGE AREA.--54.2 sq mi.

PERIOD OF RECORD.--November 1939 to current year. Published as "at Weigh Scales" 1939-63.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 606.28 ft above mean sea level. Nov. 14, 1939 to Jan. 9, 1967, water-stage recorder at site 0.4 mile upstream at datum 2.00 ft higher and Jan. 10 to Dec. 10, 1967, nonrecording gage at site 0.4 mile downstream at datum 11.50 ft lower.

AVERAGE DISCHARGE.--32 years (1940-72), 83.5 cfs (20.92 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,070 cfs June 22 (gage height, 8.72 ft), from rating curve extended as explained below; minimum, 33 cfs Oct. 20 (gage height, 2.26 ft).

Period of record: Maximum discharge, 4,070 cfs June 22, 1972 (gage height, 8.72 ft), from rating curve extended above 320 cfs on basis of slope-area measurement of peak flow; minimum, 3.2 cfs Feb. 15, 1940 (gage height, 0.42 ft, at site and datum then in use); minimum daily, 9.8 cfs Jan. 5, 1947.

REMARKS.--Records good. Regulation by mine pumps above 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	41	72	87	81	90	154	122	138	182	375	122	64
2	42	87	74	106	90	237	122	141	171	330	116	64
3	41	63	68	90	103	310	113	197	178	305	113	64
4	40	56	66	85	113	245	113	241	161	286	111	63
5	38	56	63	90	94	237	111	174	154	290	108	61
6	45	56	122	83	90	229	111	171	151	263	106	61
7	42	61	216	81	85	216	113	164	148	245	141	60
8	41	53	212	79	83	200	106	157	138	241	113	60
9	38	52	220	90	83	171	101	193	138	241	103	61
10	76	52	229	94	81	154	99	193	141	279	99	53
11	46	55	233	103	81	135	99	167	130	212	97	53
12	41	52	212	106	83	132	97	167	124	204	97	55
13	40	52	189	106	99	122	108	161	124	193	94	58
14	40	50	178	116	130	119	99	164	122	186	90	53
15	38	50	167	108	116	119	101	178	116	193	90	50
16	40	49	154	103	116	124	138	178	132	216	85	50
17	38	47	141	103	111	138	197	186	119	212	87	49
18	37	46	132	106	101	124	154	197	138	178	83	49
19	37	50	124	106	108	119	161	182	124	167	81	56
20	40	52	119	98	101	116	208	178	113	161	79	49
21	41	49	116	92	97	119	178	164	193	161	79	46
22	40	45	103	92	94	193	182	161	2,960	154	79	45
23	38	44	99	111	94	167	182	148	2,080	148	77	45
24	49	42	99	119	94	157	182	145	1,370	145	76	49
25	74	52	97	111	97	157	167	145	1,050	174	74	45
26	64	55	94	97	106	154	164	132	854	148	74	44
27	45	60	90	97	97	145	154	127	698	135	77	44
28	42	58	90	97	94	135	151	124	578	132	74	42
29	41	111	85	97	113	127	145	119	484	127	70	42
30	41	124	92	94	-----	124	141	130	423	124	68	45
31	41	-----	85	90	-----	116	-----	250	-----	124	66	-----
TOTAL	1,357	1,751	4,056	3,031	2,844	4,995	4,119	5,172	13,494	6,299	2,829	1,580
MEAN	43.8	58.4	131	97.8	98.1	161	137	167	450	203	91.3	52.7
MAX	76	124	233	119	130	310	208	250	2,960	375	141	64
MIN	37	42	63	79	81	116	97	119	113	124	66	42
CFSM	.81	1.08	2.42	1.80	1.81	2.97	2.53	3.08	8.30	3.75	1.68	.97
IN.	.93	1.20	2.78	2.08	1.95	3.43	2.83	3.55	9.26	4.32	1.94	1.08

CAL YR 1971 TOTAL 29,911 MEAN 81.9 MAX 277 MIN 36 CFSM 1.51 IN 20.53

WTR YR 1972 TOTAL 51,527 MEAN 141 MAX 2,960 MIN 37 CFSM 2.60 IN 35.37

PEAK DISCHARGE (BASE, 700 CFS).--June 22 (0900) 4,070 cfs (8.72 ft).

SUSQUEHANNA RIVER BASIN

01555000 Penns Creek at Penns Creek, Pa.

LOCATION.--Lat 40°52'00", long 77°02'55", Union County, on left bank 200 ft downstream from bridge on State Highway 104, 0.8 mile northeast of Penns Creek, and 2.9 miles upstream from Sweitzers Run.

DRAINAGE AREA.--301 sq mi.

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1965, published as Penn Creek at Penns Creek.

GAGE.--Water-stage recorder. Datum of gage is 506.72 ft above mean sea level. Prior to Feb. 1, 1930, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 412 cfs (18.54 inches per year).

EXTREMES.--Current year: Maximum discharge, 34,600 cfs June 23 (gage height, 14.85 ft, from floodmark in gage well), from rating curve extended as explained below; minimum, 86 cfs Oct. 21, 22, 23; minimum gage height, 1.47 ft Sept. 23, 24.

Period of record: Maximum discharge, 34,600 cfs June 23, 1972 (gage height, 14.85 ft, from floodmark in gage well), from rating curve extended above 6,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 7.0 cfs Sept. 27, 1932; minimum daily, 21 cfs Aug. 30, Sept. 3, 1966.

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

WSP	Water Year	Date	Discharge (cfs)	Gage Height (feet)
741, 1302, 1502	1933	Aug. 24, 1933	11,800	11.00
756, 1302	1934	Sept. 16, 1934	19,800	13.00
801, 1302, 1502	1936	Mar. 18, 1936	15,700	12.12*
891, 1302	1940	Mar. 31, 1940	13,600	11.61
1202, 1722	1951	Nov. 25, 1950	13,700	11.62

* From floodmark

REMARKS.--Records fair. Records of water quality for current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 891: 1934(M). WSP 1502: 1933(M), 1934, 1936(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	125	187	330	270	190	1,000	628	501	1,200	2,380	270	120
2	119	260	249	260	190	3,820	676	510	940	1,470	270	110
3	119	302	235	350	340	8,150	634	575	740	1,000	280	110
4	117	242	220	320	456	4,950	595	990	620	800	250	110
5	111	217	210	300	274	3,130	575	1,010	540	900	220	110
6	107	214	461	320	250	2,170	525	844	480	920	230	110
7	104	217	1,350	260	220	1,710	600	790	420	780	260	100
8	100	202	1,590	230	210	1,700	575	736	380	660	280	100
9	99	190	1,430	220	210	1,320	525	1,050	340	580	240	100
10	134	184	1,240	300	200	1,090	506	1,230	310	520	231	100
11	143	178	1,120	270	200	934	501	948	290	470	211	100
12	123	175	913	420	200	864	492	864	270	420	205	110
13	109	168	796	450	340	857	565	796	320	390	260	120
14	104	160	700	392	772	857	652	802	380	470	245	110
15	100	158	724	356	712	790	634	892	290	400	198	120
16	97	155	640	232	664	790	878	1,050	330	700	183	109
17	95	150	550	210	600	983	2,420	892	440	900	183	103
18	92	148	501	280	483	976	1,960	844	580	780	186	109
19	90	150	461	396	461	906	1,300	766	640	700	177	120
20	89	148	447	396	420	857	1,070	885	500	600	160	112
21	87	148	434	368	380	838	1,000	871	3,340	520	152	103
22	87	143	392	344	350	1,440	940	724	10,900	470	149	101
23	87	134	348	388	320	1,970	880	658	24,600	430	130	96
24	145	127	352	520	310	1,480	840	600	9,960	400	120	97
25	274	153	340	492	290	1,220	800	520	7,210	360	120	107
26	438	158	330	400	300	1,060	760	480	5,700	330	110	105
27	323	143	319	360	350	934	660	440	4,100	310	110	99
28	256	153	302	320	420	844	600	390	3,220	320	170	107
29	226	208	333	300	474	766	560	370	3,130	290	130	101
30	202	352	323	280	-----	736	525	360	3,170	270	130	103
31	187	-----	305	260	-----	694	-----	700	-----	260	120	-----
TOTAL	4,489	5,524	17,945	10,264	10,586	49,836	23,876	23,088	85,340	19,800	5,980	3,202
MEAN	145	184	579	331	365	1,608	796	745	2,845	639	193	107
MAX	438	352	1,590	520	772	8,150	2,420	1,230	24,600	2,380	280	120
MIN	87	127	210	210	190	694	492	360	270	260	110	96
CFSM	.48	.61	1.92	1.10	1.21	5.34	2.64	2.48	9.45	2.12	.64	.36
IN.	.55	.68	2.22	1.27	1.31	6.16	2.95	2.85	10.55	2.45	.74	.40

CAL YR 1971 TOTAL 143,666 MEAN 394 MAX 3,030 MIN 57 CFSM 1.31 IN 17.76

WTR YR 1972 TOTAL 259,930 MEAN 710 MAX 24,600 MIN 87 CFSM 2.36 IN 32.12

PEAK DISCHARGE (BASE, 3,100 CFS).--Mar. 3 (1000) 9,480 cfs (10.15 ft); June 23 (0430) 34,600 cfs (14.85 ft).

SUSQUEHANNA RIVER BASIN

149

01555500 East Mahantango Creek near Dalmatia, Pa.

LOCATION.--Lat 40°36'40", long 76°54'44", Northumberland County, on right bank at highway bridge, 2 miles upstream from mouth, and 3.2 miles south of Dalmatia.

DRAINAGE AREA.--162 sq mi.

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1945 published as Mahantango Creek East near Dalmatia.

GAGE.--Water-stage recorder. Datum of gage is 400.50 ft above mean sea level. (Pennsylvania Department of Transportation benchmark). Prior to Feb. 11, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 216 cfs (18.11 inches per year).

EXTREMES.--Current year: Maximum discharge, 69,900 cfs June 22 (gage height, 26.62 ft, from floodmark in gage shelter), from rating curve extended as explained below; minimum daily, 22 cfs Sept. 6-12.

Period of record: Maximum discharge, 69,900 cfs June 22, 1972 (gage height, 26.62 ft, from floodmark in gage shelter), from rating curve extended above 4,000 cfs on basis of slope-area measurement of peak flow; minimum, 1.3 cfs Oct. 7, 1957, Nov. 3, 1964; minimum gage height, 0.84 ft Sept. 21, 1932.

REMARKS.--Records fair prior to June 20, poor thereafter.

REVISIONS (WATER YEARS).--WSP 891: 1933(M). WSP 1302: 1930(M), 1938(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	70	160	800	142	130	799	231	186	312	669	88	29
2	64	542	500	157	150	2,200	232	192	224	544	82	25
3	64	665	400	280	171	2,840	205	291	248	462	76	25
4	63	498	340	247	440	1,630	189	848	194	426	71	23
5	59	359	270	270	314	1,070	176	1,190	167	445	66	23
6	57	286	600	270	280	724	165	768	148	445	60	22
7	55	260	1,300	253	250	561	163	578	139	357	77	22
8	52	221	2,200	244	210	495	155	474	124	312	122	22
9	47	185	1,800	224	190	398	143	543	115	318	79	22
10	80	174	1,300	280	180	343	134	828	120	275	62	22
11	155	163	1,000	307	170	299	133	670	106	250	55	22
12	110	147	800	440	170	277	128	564	96	217	52	25
13	92	134	660	498	500	269	150	475	100	197	56	30
14	84	124	520	633	800	250	176	428	98	185	53	38
15	78	117	459	450	542	248	159	413	89	177	47	34
16	72	115	399	250	436	254	187	503	100	334	43	28
17	68	108	342	220	363	419	760	399	131	653	42	23
18	66	101	310	290	324	443	621	352	192	377	44	26
19	63	99	273	321	300	399	486	338	291	293	44	23
20	59	106	257	286	286	353	460	307	206	238	40	23
21	57	101	250	263	297	322	414	290	1,400	203	37	33
22	55	95	218	234	280	566	344	258	39,000	189	33	28
23	54	86	194	237	218	1,080	334	227	17,000	162	33	25
24	63	80	191	253	200	767	316	201	4,200	147	32	24
25	84	155	191	244	190	572	287	182	1,800	132	30	25
26	221	152	177	218	210	472	255	161	1,300	128	30	24
27	231	150	174	190	250	399	233	149	770	117	30	30
28	174	200	166	180	237	349	215	140	700	108	48	30
29	147	1,300	155	160	300	308	203	132	620	96	51	27
30	127	1,200	144	150	-----	281	191	129	840	90	37	25
31	115	-----	163	140	-----	253	-----	330	-----	90	31	-----
TOTAL	2,786	8,083	16,553	8,331	8,388	19,640	7,445	12,546	70,830	8,636	1,651	778
MEAN	89.9	269	534	269	289	634	262	405	2,361	279	53.3	25.9
MAX	231	1,300	2,200	633	800	2,840	760	1,190	39,000	669	122	38
MIN	47	80	144	140	130	248	128	129	89	90	30	22
CFSM	.55	1.66	3.30	1.66	1.78	3.91	1.62	2.50	14.6	1.72	.33	.16
IN.	.64	1.86	3.80	1.91	1.93	4.51	1.80	2.88	16.26	1.98	.38	.18
CAL YR 1971	TOTAL	93,245	MEAN	255	MAX	2,930	MIN	28	CFSM	1.57	IN	21.41
WTR YR 1972	TOTAL	166,067	MEAN	454	MAX	39,000	MIN	22	CFSM	2.80	IN	38.13

PEAK DISCHARGE (BASE, 1,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	Unk.	5.65	2,060	3- 3	0900	7.22	3,320
12- 7	Unk.	6.02	2,350	6-22	1600*	26.62	69,900

NOTE.--No gage-height record
June 21-29.
*About.

SUSQUEHANNA RIVER BASIN

01556000 Frankstown Branch Juniata River at Williamsburg, Pa.

LOCATION.--Lat 40°27'47", long 78°12'00", Blair County, on left bank 10 ft downstream from highway bridge at Williamsburg, 2.5 miles upstream from Clover Creek.

DRAINAGE AREA.--291 sq mi.

PERIOD OF RECORD.--October 1916 to current year. Monthly figures only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 831.78 ft above mean sea level (Penn Central Railroad bench mark). Prior to Aug. 14, 1928, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--56 years, 386 cfs (18.01 inches per year).

EXTREMES.--Current year: Maximum discharge, 16,400 cfs June 23 (gage height, 18.39 ft); minimum, 62 cfs Sept. 24; minimum gage height, 2.22 ft Oct. 20.

Period of record: Maximum discharge, 47,600 cfs Mar. 18, 1936 (gage height, 18.58 ft, from floodmark in gage shelter), from rating curve extended above 7,300 cfs on basis of slope-area measurement of peak flow; minimum, 13 cfs July 24, 1934 (gage height, 0.97 ft); minimum daily, 31 cfs Dec. 24, 25, 1930.

Maximum stage known, 19.1 ft June 1, 1889, from floodmark (discharge about 35,500 cfs).

REMARKS.--Records good. Regulation at low flow by mills above station.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WRD Penna. 1971: 1954(M), 1960(M), 1961(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	366	609	645	306	307	3,770	400	485	464	890	184	102
2	328	895	459	462	305	4,900	449	515	352	762	174	99
3	314	701	382	302	307	5,040	425	577	435	1,190	182	97
4	277	582	350	465	253	2,400	625	725	459	977	189	95
5	256	506	313	524	165	1,690	597	761	610	1,290	167	95
6	236	450	1,960	456	227	1,220	550	623	424	1,270	155	92
7	224	403	3,520	415	274	1,010	694	590	394	1,000	174	90
8	206	360	3,450	387	226	1,090	711	554	343	839	170	106
9	190	330	2,410	373	214	904	690	1,000	314	718	153	214
10	190	313	1,570	457	209	804	648	1,150	314	731	141	236
11	153	291	1,960	484	213	711	597	900	275	597	137	229
12	168	272	1,100	473	209	565	547	767	253	514	141	161
13	157	262	911	436	268	704	1,230	649	340	480	141	113
14	152	231	767	489	707	958	1,290	638	378	484	133	415
15	146	225	757	409	579	942	2,350	741	284	534	126	167
16	141	219	663	226	659	1,010	2,760	885	864	565	120	116
17	138	207	557	316	536	1,060	5,340	729	625	469	135	104
18	135	204	547	411	472	976	2,340	667	424	408	224	109
19	128	201	448	416	453	607	1,470	577	396	307	155	113
20	123	200	489	350	296	752	1,200	928	335	313	133	97
21	120	207	499	392	369	681	962	741	1,480	266	124	95
22	125	209	422	352	495	947	1,030	649	9,860	247	120	94
23	145	176	376	446	440	955	950	624	14,700	236	116	88
24	316	174	380	470	446	944	827	541	7,170	249	155	92
25	1,330	171	382	501	467	664	768	484	3,480	224	124	99
26	2,750	188	367	401	815	591	689	428	2,210	209	137	94
27	1,110	198	359	401	797	531	673	372	1,540	207	161	102
28	746	254	350	423	785	490	606	311	1,150	216	131	249
29	571	481	316	410	2,110	451	598	288	1,030	193	118	157
30	480	953	340	380	-----	435	488	319	1,390	182	111	178
31	420	-----	371	335	-----	414	-----	703	-----	182	106	-----
TOTAL	12,171	10,472	27,228	12,928	13,703	38,636	32,504	19,921	52,293	16,749	4,537	4,098
MEAN	393	349	876	417	473	1,246	1,083	643	1,743	540	146	137
MAX	2,750	953	3,520	562	2,110	5,040	5,340	1,150	14,700	1,290	224	415
MIN	120	171	313	226	185	414	400	288	253	182	106	88
CFSM	1.35	1.20	3.02	1.43	1.63	4.28	3.72	2.21	5.99	1.86	.50	.47
IN.	1.56	1.34	3.48	1.65	1.75	4.94	4.16	2.55	6.68	2.14	.58	.52

CAL YR 1971 TOTAL 193,636 MEAN 531 MAX 4,520 MIN 77 CFSM 1.82 IN 24.75
 WTR YR 1972 TOTAL 245,240 MEAN 670 MAX 14,700 MIN 88 CFSM 2.30 IN 31.35

PEAK DISCHARGE (BASE, 4,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-26	0145	10.60	5,140	4-17	0815	11.99	6,630
3- 3	0830	11.25	5,820	6-23	1000	18.39	16,400

01557500 Bald Eagle Creek at Tyrone, Pa.

LOCATION.--Lat 40°41'01", long 78°14'02", Blair County, on left bank, 0.2 mile upstream from plant of West Virginia Pulp and Paper Co., at Tyrone, 0.2 mile upstream from Laurel Run, and 1.3 miles upstream from mouth.

DRAINAGE AREA.--44.1 sq mi.

PERIOD OF RECORD.--October 1944 to current year. Prior to October 1967, published as South Bald Eagle Creek at Tyrone.

GAGE.--Water-stage recorder. Datum of gage is 921.80 ft above mean sea level. Oct. 1, 1944 to Nov. 15, 1950, water-stage recorder, and Nov. 16, 1950 to Nov. 30, 1952, nonrecording gage at site 0.5 mile downstream at datum 17.99 ft lower.

AVERAGE DISCHARGE.--28 years, 74.3 cfs (22.88 inches per year), adjusted for diversion from October 1950 to November 1952.

EXTREMES.--Current year: Maximum discharge, 5,050 cfs June 22 (gage height, 6.66 ft), from rating curve extended above 1,000 cfs on basis of slope-area measurement at gage height, 5.73 ft; minimum, 4.9 cfs Sept. 11; minimum gage height, 0.32 ft Oct. 20, 21, 22, 23.

Period of record: Maximum discharge, 5,140 cfs Nov. 25, 1950 (gage height, 7.5 ft, from floodmarks, at site and datum then in use), from rating curve extended above 2,100 cfs on basis of contracted-opening measurement of peak flow; minimum, 2.2 cfs Sept. 26, 27, 1959; minimum gage height, 0.15 ft Aug. 31, Sept. 1, 1962, Sept. 11, 1965, Sept. 1, 2, 3, 4, 1966.

Maximum stage known, about 15 ft Mar. 17 or 18, 1936 (site and datum in use prior to Dec. 1, 1952).

REMARKS.--Records poor. Prior to Oct. 1, 1950, daily discharges were affected by diversion from the basin of a small quantity of water for boiler feed makeup for West Virginia Pulp and Paper Co. From Oct. 1, 1950 to Nov. 30, 1952, in addition to the effects of above diversion, daily discharges were affected by diversion into the basin, by West Virginia Pulp and Paper Co., of water from ground-water sources. Daily discharges subsequent to Nov. 30, 1952 are not affected by diversion.

REVISIONS (WATER YEARS).--WSP 1903: 1954(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	21	43	84	79	74	415	74	74	88	290	24	7.2
2	20	153	68	120	63	813	77	78	73	240	23	7.2
3	19	107	66	128	61	851	71	90	93	220	23	6.8
4	18	84	56	115	61	363	98	105	109	190	22	8.4
5	17	72	48	115	50	244	86	106	108	220	20	8.0
6	16	64	468	96	54	173	83	96	88	230	19	6.1
7	15	57	547	87	58	149	115	90	80	210	20	5.8
8	15	52	488	79	52	180	104	84	70	170	20	5.5
9	14	48	360	73	46	137	98	147	66	150	18	7.2
10	15	46	297	82	45	124	94	145	64	140	17	5.5
11	14	42	260	90	45	110	91	126	57	120	16	4.9
12	13	39	212	87	50	105	83	112	52	100	15	9.8
13	13	37	171	81	54	113	165	98	165	84	15	15
14	12	34	162	93	110	131	142	168	119	70	14	38
15	12	43	177	81	84	133	408	222	100	72	14	12
16	12	38	147	58	80	147	471	297	131	76	13	7.2
17	12	34	131	72	70	168	628	258	105	58	14	6.1
18	12	32	120	76	64	162	327	241	93	49	17	7.6
19	11	33	107	72	66	143	226	187	85	47	15	9.3
20	10	33	110	67	54	126	194	182	78	45	14	6.1
21	10	39	103	69	58	117	148	151	189	42	13	5.5
22	10	34	87	73	66	184	158	131	2,780	39	12	5.5
23	11	31	78	117	56	192	147	120	2,800	35	11	4.9
24	39	28	78	133	58	170	136	106	1,200	32	14	10
25	129	42	76	162	62	144	124	95	740	35	10	11
26	128	33	75	130	88	124	110	87	470	32	10	7.6
27	73	36	72	119	86	110	98	79	350	30	12	6.4
28	60	45	70	110	100	98	87	73	270	30	12	7.6
29	51	67	61	96	220	89	79	68	320	28	10	16
30	46	108	87	85	-----	83	73	86	360	26	8.8	32
31	42	-----	92	78	-----	76	-----	117	-----	25	8.0	-----
TOTAL	890	1,554	4,958	2,923	2,035	6,176	4,795	4,019	11,303	3,135	473.8	290.2
MEAN	28.7	51.8	160	94.3	70.2	199	160	130	377	101	15.3	9.67
MAX	129	153	547	162	220	851	628	297	2,800	290	24	38
MIN	10	28	48	58	45	76	71	68	52	25	8.0	4.9
CFSM	.65	1.17	3.63	2.14	1.59	4.51	3.63	2.95	8.55	2.29	.35	.22
IN.	.75	1.31	4.18	2.47	1.72	5.21	4.04	3.39	9.53	2.64	.40	.24

CAL YR 1971 TOTAL 27,922.4 MEAN 76.5 MAX 568 MIN 3.8 CFSM 1.73 IN 23.55
WTR YR 1972 TOTAL 42,552.0 MEAN 116 MAX 2,800 MIN 4.9 CFSM 2.63 IN 35.89

PEAK DISCHARGE (BASE, 940 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	0030	3.95	1,360	6-22	2245	6.66	5,050
4-16	2245	3.65	1,130				

SUSQUEHANNA RIVER BASIN

01558000 Little Juniata River at Spruce Creek, Pa.

LOCATION.--Lat 40°36'45", long 78°08'27", Huntingdon County, on right bank 150 ft downstream from Penn Central Railroad bridge, 0.5 mile northwest of village of Spruce Creek, and 0.5 mile upstream from Spruce Creek.

DRAINAGE AREA.--220 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 751.15 ft above mean sea level.

AVERAGE DISCHARGE.--34 years, 362 cfs (22.35 inches per year).

EXTREMES.--Current year: Maximum discharge, 28,600 cfs June 23 (gage height, 16.98 ft), from rating curve extended as explained below; minimum, 91 cfs Sept. 11, 12; minimum gage height, 1.89 ft Oct. 22.
 Period of record: Maximum discharge, 28,600 cfs June 23, 1972 (gage height, 16.98 ft), from rating curve extended above 5,600 cfs on basis of slope-area measurement at gage height, 15.77 ft; minimum, 45 cfs Sept. 26, 1943, Oct. 4, 1949; minimum gage height, 1.41 ft Sept. 26, 1943.
 Maximum stage known, about 19.1 ft Mar. 18, 1936, from floodmarks 175 ft downstream (discharge, 39,800 cfs, from rating curve extended as explained above).

REMARKS.--Records good. Some regulation at low flow by mills above 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	340	333	446	340	333	2,330	390	411	506	1,040	183	104
2	310	647	350	543	311	4,070	422	483	413	860	173	102
3	290	518	305	576	314	4,750	385	496	441	880	175	99
4	250	432	287	514	302	2,280	564	556	472	754	178	100
5	240	377	261	538	227	1,540	505	602	556	920	161	99
6	220	343	2,010	450	240	1,160	471	530	408	1,010	153	99
7	210	317	2,800	409	267	980	668	510	361	905	165	99
8	190	290	2,790	374	222	1,050	613	475	315	794	168	97
9	180	273	2,010	353	215	836	578	750	291	691	158	99
10	180	259	1,630	406	212	746	545	833	282	641	147	95
11	170	245	1,380	439	212	656	520	722	252	520	140	93
12	160	232	1,120	406	207	615	472	651	235	450	136	110
13	150	222	917	384	245	669	866	584	654	390	133	131
14	140	210	867	420	489	786	824	695	507	389	129	253
15	140	250	1,040	360	367	777	2,000	1,020	389	410	127	149
16	130	227	836	264	374	813	2,310	1,260	640	431	123	114
17	130	205	732	327	321	881	3,530	983	590	356	127	104
18	120	197	660	360	305	854	1,930	846	495	319	149	108
19	118	195	576	353	311	768	1,370	699	451	298	131	116
20	116	200	581	317	259	696	1,170	791	388	278	121	104
21	116	210	572	337	273	647	938	653	863	280	119	100
22	114	202	470	308	308	917	940	570	12,500	250	116	99
23	118	178	417	485	261	970	907	535	21,100	230	116	97
24	243	176	413	547	284	854	820	460	6,190	230	138	104
25	1,080	197	399	647	302	741	726	415	3,420	240	121	112
26	1,610	188	388	538	413	651	662	372	2,330	220	121	104
27	746	197	374	510	413	576	586	335	1,680	210	123	100
28	551	230	363	497	424	519	525	310	1,300	208	119	151
29	439	324	324	439	1,290	470	476	289	1,270	193	114	147
30	377	602	384	406	-----	447	428	346	1,370	185	108	180
31	337	-----	406	357	-----	406	-----	609	-----	183	104	-----
TOTAL	9,525	8,476	26,108	13,204	9,701	34,455	27,141	18,791	60,669	14,765	4,276	3,469
MEAN	307	283	842	426	335	1,111	905	606	2,022	476	138	116
MAX	1,610	647	2,800	647	1,290	4,750	3,530	1,260	21,100	1,040	183	253
MIN	114	176	261	264	207	406	385	289	235	183	104	93
CFSM	1.40	1.29	3.83	1.94	1.52	5.05	4.11	2.75	9.19	2.16	.63	.53
IN.	1.61	1.43	4.41	2.23	1.64	5.83	4.59	3.18	10.26	2.50	.72	.59

CAL YR 1971 TOTAL 161,181 MEAN 442 MAX 2,960 MIN 75 CFSM 2.01 IN 27.25
 WTR YR 1972 TOTAL 230,580 MEAN 630 MAX 21,100 MIN 93 CFSM 2.86 IN 38.99

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-25	2330	8.45	4,560	4-17	0030	8.85	5,060
12- 6	1700	7.90	3,910	6-23	0130	16.98	28,600
3- 3	0500	9.71	6,340				

01559000 Juniata River at Huntingdon, Pa.

LOCATION.--Lat 40°29'05", long 78°01'09", Huntingdon County, on right bank 170 ft downstream from Smithfield Bridge at Huntingdon, and 0.8 mile upstream from Standing Stone Creek.

DRAINAGE AREA.--816 sq mi.

PERIOD OF RECORD.--September 1941 to current year. Gage-height records collected in this vicinity for the period May 1895 to December 1938 are contained in reports of U. S. Weather Bureau. Prior to October 1950, published as Frankstown Branch Juniata River at Huntingdon.

GAGE.--Water-stage recorder. Datum of gage is 599.69 ft above mean sea level.

AVERAGE DISCHARGE.--31 years, 1,046 cfs (17.41 inches per year).

EXTREMES.--Current year: Maximum discharge, 57,000 cfs June 23 (gage height, 20.03 ft), from rating curve extended above 20,000 cfs; minimum, 42 cfs Oct. 18 (gage height, 0.52 ft).

Period of record: Maximum discharge, 57,000 cfs June 23, 1972 (gage height, 20.03 ft), from rating curve extended above 20,000 cfs; minimum observed, 14 cfs Feb. 8, 1948, Aug. 2, 1954; minimum gage height observed, 0.27 ft Feb. 8, 1948.

Flood of Mar. 18, 1936, reached a stage of 21.87 ft, from floodmark (discharge, 81,000 cfs, by computation of flow over dam).

REMARKS.--Records good except those for winter periods, which are fair. Regulation at low flow by Warrior Ridge hydroelectric plant 4 miles upstream. Records of water quality 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	737	992	1,040	941	907	7,100	1,140	1,310	1,790	3,160	726	432
2	749	1,740	1,180	1,110	907	10,600	1,210	1,430	1,300	2,640	704	426
3	554	1,770	983	1,690	891	13,100	1,170	1,450	1,360	3,240	688	420
4	719	1,350	907	1,340	899	6,940	1,310	1,420	1,340	3,030	704	414
5	645	1,180	642	1,390	820	4,640	1,630	2,040	1,790	3,090	659	420
6	547	1,050	3,360	1,310	514	3,460	1,360	1,680	1,310	3,700	631	414
7	575	941	6,080	1,150	700	2,890	1,590	1,590	1,180	3,160	645	403
8	420	875	7,780	1,080	800	2,910	1,690	1,500	1,050	2,690	667	397
9	508	818	5,690	1,020	700	2,470	1,650	1,980	962	2,370	623	444
10	469	779	4,560	1,110	600	2,200	1,550	3,010	926	2,240	588	520
11	445	734	3,770	1,230	640	1,930	1,470	2,340	860	1,950	561	520
12	540	756	3,040	1,240	680	1,810	1,380	2,090	810	1,700	554	553
13	426	787	2,590	1,140	660	1,810	2,170	1,840	1,280	1,560	561	488
14	426	652	2,170	1,220	1,370	2,140	2,920	1,870	1,480	1,490	540	766
15	403	645	2,570	1,110	1,390	2,330	4,500	2,140	1,190	1,530	527	722
16	368	689	2,140	740	1,400	2,380	6,060	2,860	2,170	1,900	508	479
17	403	638	1,020	883	1,260	2,590	11,100	2,280	2,340	1,490	514	431
18	280	575	1,670	1,030	1,100	2,450	6,150	2,040	1,470	1,330	588	423
19	414	568	1,470	1,080	1,000	2,240	4,090	1,750	1,400	1,170	609	444
20	391	469	1,410	983	760	2,020	3,380	2,050	1,210	1,140	527	422
21	386	667	1,510	992	940	1,850	2,860	2,030	2,820	1,030	494	403
22	403	397	1,290	949	1,000	2,210	2,600	1,680	26,600	959	488	397
23	341	527	1,140	1,140	960	2,570	2,780	1,590	50,400	913	442	390
24	304	667	1,110	1,350	1,010	2,350	2,320	1,410	23,500	899	527	396
25	1,320	595	1,110	1,410	1,060	1,920	2,140	1,260	11,700	880	527	426
26	5,410	547	1,060	1,320	1,380	1,730	1,930	1,150	7,480	813	514	413
27	2,460	553	1,040	1,200	1,700	1,560	1,740	1,040	5,240	795	514	402
28	1,730	620	1,000	1,210	1,560	1,430	1,640	936	4,050	803	520	524
29	1,330	748	941	1,140	2,980	1,320	1,570	874	3,590	779	475	562
30	1,100	1,910	924	1,090	-----	1,250	1,370	900	4,250	741	457	579
31	1,000	-----	1,130	983	-----	1,180	-----	2,100	-----	726	444	-----
TOTAL	25,853	25,239	69,927	35,581	30,708	97,400	78,470	54,060	166,848	53,918	17,566	14,028
MEAN	834	841	2,256	1,148	1,059	3,142	2,615	1,744	5,562	1,739	567	468
MAX	5,410	1,910	8,080	1,690	2,980	13,100	11,100	3,010	50,400	3,700	726	766
MIN	280	397	842	740	514	1,180	1,140	874	810	726	444	390
CFSM	1.02	1.03	2.76	1.41	1.30	3.85	3.21	2.14	6.82	2.13	.69	.57
IN.	1.18	1.15	3.19	1.62	1.40	4.44	3.58	2.46	7.61	2.46	.80	.64

CAL YR 1971 TOTAL 477,010 MEAN 1,307 MAX 9,720 MIN 182 CFSM 1.60 IN 21.75
 WTR YR 1972 TOTAL 669,598 MEAN 1,830 MAX 50,400 MIN 280 CFSM 2.24 IN 30.53

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-26	0415	6.83	7,380	4-17	1130	9.06	12,400
12-7	0115	7.84	9,480	6-23	0715	20.03	57,000
3-3	0830	9.96	14,600				

SUSQUEHANNA RIVER BASIN

01559700 Buffalo Run tributary near Manns Choice, Pa.

LOCATION.--Lat 39°58'40", long 78°37'08", Bedford County, at left downstream end of bridge on State Highway 96, 2,000 ft upstream from mouth, 2.3 miles south of Manns Choice, and 11 miles southwest of Bedford.

DRAINAGE AREA.--5.28 sq mi.

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

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 1,230 ft (from topographic map).

AVERAGE DISCHARGE.--11 years, 5.12 cfs (13.17 inches per year).

EXTREMES.--Current year: Maximum discharge, 528 cfs June 22 (gage height, 3.33 ft), from rating curve extended above 150 cfs on basis of slope-area measurement of peak flow; minimum, 0.25 cfs Sept. 1, 2, 4, 10; minimum gage height, 0.41 ft Oct. 20.

Period of record: Maximum discharge, 1,010 cfs Sept. 28, 1967 (gage height, 4.26 ft), from rating curve extended above 150 cfs; no flow Aug. 4-11, 1966.

REVISIONS.--The maximum discharge for the water year 1970 has been revised to 567 cfs June 18, 1970 (gage height, 3.40 ft), superseding figure published in WRD Penna. 1970.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WRD Penna. 1970: 1968-69(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	1.1	3.4	8.2	2.2	3.4	8.4	4.7	10	4.2	13	1.2	.27
2	1.2	8.9	6.1	5.9	3.2	115	4.7	10	3.9	11	1.1	.27
3	1.2	6.3	5.3	4.4	3.4	87	4.1	15	3.5	9.2	1.9	.27
4	1.1	4.9	4.7	3.9	6.4	43	7.2	17	3.2	7.2	1.2	.27
5	1.1	4.4	4.2	6.7	5.0	27	5.1	14	2.8	8.7	1.1	.27
6	.84	3.9	18	4.7	3.9	18	4.6	14	2.6	7.2	.91	.30
7	.78	3.4	38	4.6	2.9	15	6.5	14	2.5	5.3	1.4	.27
8	.72	3.0	39	4.4	2.5	13	6.3	14	2.2	4.6	.98	.27
9	.67	2.7	31	4.7	2.3	10	6.1	26	2.0	4.1	.84	.27
10	.78	2.4	22	5.5	2.2	9.2	6.3	21	2.2	3.7	.72	.27
11	.67	2.2	16	6.7	2.1	8.4	6.3	19	2.0	3.2	.67	.30
12	.62	2.0	12	6.5	2.0	7.9	6.3	16	1.7	3.2	.67	.33
13	.57	1.8	9.7	5.9	13	16	26	13	1.7	3.2	.67	.33
14	.57	1.7	8.7	6.1	12	17	18	13	1.9	2.6	.57	.33
15	.52	1.6	7.7	4.7	8.2	15	80	12	1.6	2.3	.52	.33
16	.52	1.5	6.5	5.7	7.4	26	106	10	4.6	2.3	.48	.30
17	.52	1.4	5.7	10	6.4	21	75	9.2	2.3	2.1	.91	.30
18	.52	1.3	4.9	6.7	5.6	19	40	8.4	2.0	2.0	.98	.52
19	.48	1.3	4.4	5.7	4.9	16	27	7.7	2.1	1.8	.62	.44
20	.48	1.3	4.7	5.1	4.3	13	21	7.9	1.8	1.8	.52	.36
21	.48	1.4	4.1	5.7	11	11	16	6.7	42	1.6	.48	.33
22	.48	1.4	3.4	4.9	17	12	21	5.1	210	1.6	.40	.33
23	.57	1.2	2.5	5.3	12	9.7	15	4.7	213	1.4	.57	.33
24	7.4	1.1	3.1	4.9	9.2	8.4	15	4.4	77	1.4	.57	.36
25	18	1.7	2.9	4.6	11	7.4	14	4.1	33	1.3	.57	.36
26	7.2	1.5	2.9	4.7	30	6.7	13	3.7	19	1.2	.62	.36
27	4.1	1.8	2.8	3.5	20	6.3	11	3.5	13	1.2	.48	.48
28	3.2	3.7	2.6	4.1	23	5.9	10	3.1	9.2	1.4	.40	.57
29	2.5	15	2.3	4.5	77	5.5	9.7	3.1	26	1.3	.36	.62
30	1.9	15	2.9	4.0	-----	5.3	10	3.2	16	1.3	.33	.57
31	1.5	-----	2.5	3.7	-----	4.7	-----	5.3	-----	1.3	.30	-----
TOTAL	62.29	103.2	288.8	160.0	311.3	663.4	595.9	318.1	709.0	113.5	23.04	10.58
MEAN	2.01	3.44	9.32	5.16	10.7	21.4	19.9	10.3	23.6	3.66	.74	.35
MAX	18	15	39	10	77	115	106	26	213	13	1.9	.62
MIN	.48	1.1	2.3	2.2	2.0	4.7	4.1	3.1	1.6	1.2	.30	.27
CFSM	.38	.65	1.77	.98	2.03	4.05	3.77	1.95	4.47	.69	.14	.07
IN.	.44	.73	2.03	1.13	2.19	4.67	4.20	2.24	5.00	.80	.16	.07

CAL YR 1971 TOTAL 2,620.91 MEAN 7.18 MAX 90 MIN .27 CFSM 1.36 IN 18.47
WTR YR 1972 TOTAL 3,359.11 MEAN 9.18 MAX 213 MIN .27 CFSM 1.74 IN 23.67

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-29	1600	2.64	235	4-16	1645	3.19	455
3- 3	0115	2.34	153	6-22	0345	3.33	528

SUSQUEHANNA RIVER BASIN

155

01560000 Dunning Creek at Belden, Pa.

LOCATION.--Lat 40°04'18", long 78°29'34", Bedford County, on left bank 10 ft upstream from highway bridge, 0.8 mile southeast of Belden, 3.8 miles north of Bedford, and 4.3 miles above mouth.

DRAINAGE AREA.--172 sq mi.

PERIOD OF RECORD.--May 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,051.16 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 217 cfs (17.13 inches per year).

EXTREMES.--Current year: Maximum discharge, 12,000 cfs June 23 (gage height, 12.67 ft), from rating curve extended as explained below; minimum, 16 cfs Sept. 23, 24 (gage height, 1.16 ft).

Period of record: Maximum discharge, 12,000 cfs June 23, 1972 (gage height, 12.67 ft), from rating curve extended above 4,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 2.6 cfs Sept. 6, 1964; minimum gage height, 0.92 ft Jan. 8, 1954 (result of freezeup).

Maximum stage known, 17.8 ft Mar. 18, 1936, from floodmarks (backwater from Raystown Branch Juniata River) discharge, about 16,900 cfs.

REVISIONS.--The maximum discharge for the water year 1967 has been revised to 5,890 cfs Sept. 29, 1967 (gage height, 10.57 ft), superseding figure published in WRD Penna. 1967.

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

REVISIONS (WATER YEARS).--WSP 971: 1940(M). WSP 1502: 1940-41.

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	138	470	435	132	185	2,600	182	218	199	548	41	34
2	126	904	309	231	144	2,740	213	196	156	412	37	31
3	121	645	261	277	132	2,930	195	364	199	390	38	30
4	107	448	242	261	129	1,330	342	459	156	344	41	28
5	102	334	202	338	156	876	321	513	146	476	35	25
6	97	269	908	265	179	577	338	440	126	515	32	24
7	87	224	2,050	246	138	461	418	373	120	455	40	22
8	79	185	2,440	235	120	444	401	319	104	395	40	22
9	75	162	1,010	220	110	418	367	774	94	316	31	21
10	72	147	1,230	246	110	392	342	860	92	278	25	19
11	70	132	948	301	100	334	317	671	80	228	24	19
12	61	121	637	305	100	317	277	513	74	191	24	20
13	59	110	457	277	150	461	812	378	80	185	25	21
14	57	99	363	330	439	775	908	411	106	150	24	25
15	51	92	350	254	346	804	1,830	454	82	135	21	30
16	49	87	305	217	392	880	2,410	675	248	153	20	23
17	48	82	254	300	338	848	3,470	556	203	121	53	20
18	48	77	227	273	269	750	1,400	464	114	110	301	24
19	44	72	206	231	202	581	840	351	99	92	77	25
20	42	75	235	188	132	444	658	644	82	82	52	22
21	40	75	239	209	230	371	479	484	1,750	73	43	20
22	40	79	202	182	301	475	612	406	7,180	67	37	20
23	42	66	185	239	371	515	575	346	9,140	61	32	18
24	141	61	199	239	250	422	551	285	4,290	55	35	24
25	537	70	192	254	320	354	464	236	1,750	52	34	20
26	1,140	82	179	213	791	239	378	196	1,050	48	77	20
27	607	87	169	269	746	254	315	165	709	47	99	22
28	392	126	159	250	709	231	268	140	523	50	67	55
29	299	235	138	246	1,840	213	236	120	581	43	53	52
30	227	585	156	199	-----	202	210	146	913	40	43	67
31	192	-----	162	185	-----	188	-----	537	-----	41	37	-----
TOTAL	5,180	6,201	15,649	7,612	9,429	22,516	20,129	12,694	30,446	6,153	1,538	803
MEAN	167	207	505	246	325	726	671	409	1,015	198	49.6	26.8
MAX	1,140	904	2,440	338	1,840	2,930	3,470	860	9,140	548	301	67
MIN	40	61	138	132	100	188	182	120	74	40	20	18
CFSM	.97	1.20	2.94	1.43	1.89	4.22	3.90	2.38	5.90	1.15	.29	.16
IN.	1.12	1.34	3.36	1.65	2.04	4.87	4.35	2.75	6.58	1.33	.33	.17

CAL YR 1971 TOTAL 106,453 MEAN 292 MAX 2,610 MIN 19 CFSM 1.70 IN 23.02
 WTR YR 1972 TOTAL 138,350 MEAN 378 MAX 9,140 MIN 18 CFSM 2.20 IN 29.92

PEAK DISCHARGE (BASE, 2,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	0300	7.92	2,820	4-17	0530	9.61	4,310
3- 3	1000	8.74	3,460	6-23	1230	12.67	12,000

SUSQUEHANNA RIVER BASIN

01562000 Raystown Branch Juniata River at Saxton, Pa.

LOCATION.--Lat 40°12'57", long 78°15'56", Bedford County, on left bank, 500 ft downstream from bridge on State Highway 913, 0.5 mile west of Saxton, and 1.5 miles upstream from Shoup Run.

DRAINAGE AREA.--756 sq mi.

PERIOD OF RECORD.--September 1911 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 795.77 ft above mean sea level. Prior to Oct. 1, 1931, nonrecording gage at site 0.8 mile downstream at datum 4.82 ft lower.

AVERAGE DISCHARGE.--61 years, 889 cfs (15.97 inches per year).

EXTREMES.--Current year: Maximum discharge, 40,200 cfs June 22 (gage height, 17.74 ft), from rating curve extended as explained below; minimum, 147 cfs Sept. 26, 27 (gage height, 1.29 ft).
Period of record: Maximum discharge, 80,500 cfs Mar. 18, 1936 (gage height, 24.54 ft, from floodmark in gage shelter), from rating curve extended above 17,000 cfs on basis of slope-area measurement of peak flow; minimum, 39 cfs Sept. 6, 7, 12, 1966 (gage height, 0.84 ft).

Maximum stage known prior to 1911, 23.0 ft present site, June 1, 1889, from floodmarks (discharge, about 71,300 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Some regulation at low flow by mills above station.

REVISIONS (WATER YEARS).--WSP 1302: 1912-13(M), 1914-15. WSP 1502: 1934, 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	426	708	2,330	531	480	10,000	781	1,070	1,340	2,700	294	201
2	372	1,380	1,750	546	470	10,700	799	1,030	826	2,020	290	193
3	349	2,300	1,200	906	460	12,400	816	1,070	731	1,670	287	186
4	328	1,820	304	1,030	460	7,400	868	1,680	701	1,530	304	179
5	312	1,440	648	930	700	4,490	1,100	2,300	631	1,690	325	175
6	281	1,180	1,120	1,100	600	3,150	1,110	2,120	599	1,600	296	171
7	267	948	4,460	923	520	2,440	1,040	1,810	532	1,520	299	167
8	244	803	7,790	887	460	2,110	1,270	1,560	492	1,300	305	164
9	231	701	5,220	610	410	1,950	1,330	2,030	444	1,170	299	164
10	231	624	4,540	607	400	1,720	1,160	3,890	430	992	265	157
11	235	576	3,490	912	390	1,560	1,100	3,290	417	872	242	164
12	222	533	2,640	1,170	360	1,390	1,140	2,650	388	772	233	166
13	210	492	2,000	1,180	600	1,370	1,620	2,020	373	712	269	218
14	201	458	1,550	1,230	1,500	2,240	4,200	1,780	386	696	228	239
15	210	428	1,400	1,100	1,300	2,870	4,280	1,860	432	640	220	248
16	201	401	1,320	780	1,400	2,900	4,780	1,860	556	828	211	244
17	214	382	1,150	900	1,200	3,550	11,500	1,930	1,180	694	210	244
18	231	351	960	1,300	980	3,020	7,550	1,750	841	606	331	258
19	225	328	861	1,120	760	2,520	4,370	1,730	602	558	669	272
20	222	319	784	950	560	1,960	3,140	1,830	534	489	375	253
21	218	318	823	845	700	1,710	2,560	2,420	2,560	449	289	231
22	197	314	806	845	980	1,640	2,080	1,970	32,100	420	254	210
23	190	309	784	775	1,300	1,870	2,580	1,670	38,100	392	236	167
24	218	311	592	867	920	1,640	2,340	1,410	25,600	364	224	150
25	667	297	611	848	1,200	1,450	2,160	1,190	10,100	344	223	150
26	3,320	318	604	855	2,800	1,270	1,810	998	5,820	326	226	150
27	2,370	362	585	785	3,100	1,090	1,600	839	3,870	318	239	157
28	1,530	368	566	671	2,800	1,010	1,410	740	2,750	315	302	164
29	1,110	604	530	620	4,000	933	1,260	665	2,100	309	281	179
30	865	1,820	510	560	-----	884	1,140	615	3,300	303	244	222
31	727	-----	512	520	-----	635	-----	957	-----	298	222	-----
TOTAL	16,625	21,193	54,240	27,303	31,800	94,172	76,894	52,734	138,735	26,897	8,692	5,863
MEAN	543	706	1,750	881	1,097	3,038	2,563	1,701	4,625	868	280	195
MAX	3,320	2,300	7,790	1,300	4,000	12,400	11,500	3,890	38,100	2,700	669	272
MIN	190	297	510	520	360	835	781	615	373	298	210	150
CFSM	.72	.93	2.31	1.17	1.45	4.02	3.39	2.25	6.12	1.15	.37	.26
IN.	.83	1.04	2.67	1.34	1.56	4.63	3.78	2.59	6.83	1.32	.43	.29

CAL YR 1971 TOTAL 425,985 MEAN 1,167 MAX 12,000 MIN 127 CFSM 1.54 IN 20.96
WTR YR 1972 TOTAL 555,348 MEAN 1,517 MAX 38,100 MIN 150 CFSM 2.01 IN 27.33

PEAK DISCHARGE (BASE, 7,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	1130	8.20	8,320	4-17	1330	10.46	12,500
3- 3	1030	10.80	13,200	6-22	2230	17.74	40,200

SUSQUEHANNA RIVER BASIN

157

01563200 Raystown Branch Juniata River below Raystown Dam near Huntingdon, Pa.

LOCATION.--Lat 40°25'44", long 77°59'29", Huntingdon County, on left bank 1 mile downstream from Raystown Dam, 4 miles south of Huntingdon, and 4.7 miles upstream from mouth.

DRAINAGE AREA.--960 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 597.36 ft above mean sea level (Corps of Engineers bench mark).

EXTREMES.--Maximum discharge, 23,300 cfs June 23 (gage height, 18.22 ft), from rating curve extended above 14,000 cfs; minimum, 12 cfs Sept. 1, 2, 4 (gage height, 2.29 ft).

Period of record: Maximum discharge, 24,100 cfs Apr. 3, 1970 (gage height, 18.54 ft), from rating curve extended above 14,000 cfs; minimum, 12 cfs Sept. 1, 2, 4, 1972 (gage height, 2.29 ft).

REMARKS.--Records good. Flow regulated by mills and by dam construction above station. Records of water quality 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	606	910	2,150	648	703	7,930	1,010	1,360	1,410	13,100	370	107
2	527	1,420	2,400	687	720	11,500	991	1,280	1,490	9,220	364	15
3	457	2,290	1,940	850	802	12,700	990	1,290	1,140	3,520	360	14
4	412	2,540	1,390	1,130	692	13,400	1,010	1,570	1,030	2,170	360	46
5	383	2,060	1,050	1,250	612	12,500	1,080	2,230	1,100	1,830	390	149
6	362	1,600	1,220	1,220	452	9,750	1,220	2,590	1,020	1,850	420	190
7	338	1,290	2,990	1,270	484	4,920	1,280	2,410	867	2,000	380	198
8	318	1,070	6,620	1,160	720	3,320	1,270	2,140	745	1,810	370	194
9	292	910	8,550	1,080	670	2,700	1,410	2,040	665	1,550	390	191
10	281	802	6,800	1,020	630	2,380	1,450	3,140	610	1,370	390	188
11	274	720	5,270	1,040	554	2,110	1,390	4,270	568	1,220	330	184
12	266	665	4,060	1,160	556	1,890	1,300	3,820	541	1,090	305	183
13	263	617	3,110	1,360	589	1,720	1,400	3,120	531	969	296	192
14	252	571	2,400	1,430	928	1,760	2,480	2,500	540	892	329	221
15	242	536	1,950	1,480	2,080	2,460	4,310	2,280	576	853	300	250
16	232	503	1,750	1,360	2,630	3,040	6,710	2,240	689	1,010	280	258
17	228	475	1,580	778	2,700	3,450	10,900	2,300	1,420	1,160	266	259
18	225	452	1,390	654	2,520	3,830	12,000	2,260	1,630	992	302	259
19	228	430	1,190	1,180	2,040	3,440	10,600	2,080	1,240	833	477	262
20	235	412	1,080	1,350	1,380	2,890	6,380	2,110	922	745	653	270
21	235	404	1,010	1,200	1,170	2,350	4,050	2,520	1,270	651	523	272
22	235	395	1,000	1,080	1,170	2,080	3,140	2,730	10,700	595	456	276
23	228	387	961	1,070	1,520	2,080	2,850	2,360	19,700	546	467	266
24	228	379	916	1,030	1,490	2,120	2,990	2,000	18,900	512	440	245
25	288	387	778	1,080	1,660	1,900	2,790	1,670	18,900	486	391	221
26	1,840	374	760	1,050	2,080	1,700	2,500	1,410	18,500	446	322	202
27	3,410	391	754	1,000	3,420	1,490	2,150	1,200	17,800	412	293	191
28	2,630	448	737	961	4,170	1,310	1,890	1,030	17,000	402	299	199
29	1,770	541	703	796	4,170	1,210	1,670	903	16,000	394	363	222
30	1,240	1,090	670	820	-----	1,130	1,480	826	14,700	382	353	233
31	961	-----	665	844	-----	1,070	-----	1,080	-----	374	320	-----
TOTAL	19,486	25,069	67,844	33,038	43,312	126,130	94,731	64,759	172,204	53,384	11,559	5,957
MEAN	629	836	2,189	1,066	1,494	4,069	3,158	2,089	5,740	1,722	373	199
MAX	3,410	2,540	8,550	1,480	4,170	13,400	12,000	4,270	19,700	13,100	653	276
MIN	225	374	665	648	452	1,070	990	826	531	374	266	14
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-

CAL YR 1971 TOTAL 516,059 MEAN 1,414 MAX 15,900 MIN 102 CFSM - IN. -
WTR YR 1972 TOTAL 717,473 MEAN 1,960 MAX 19,700 MIN 14 CFSM - IN. -

SUSQUEHANNA RIVER BASIN

01563500 Juniata River at Mapleton Depot, Pa.

LOCATION.--Lat 40°23'32", long 77°56'07", Huntingdon County, on right bank 0.25 mile downstream from Scrub Run, and 0.3 mile downstream from bridge on State Highway 655 at Mapleton Depot.

DRAINAGE AREA.--2,030 sq mi.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 557.31 ft above mean sea level.

AVERAGE DISCHARGE.--35 years, 2,386 cfs (15.96 inches per year).

EXTREMES.--Current year: Maximum discharge, 125,000 cfs June 23 (gage height, 33.07 ft), from rating curve extended above 39,000 cfs; minimum, 313 cfs Oct. 18 (gage height, 1.93 ft).
 Period of record: Maximum discharge, 125,000 cfs June 23, 1972 (gage height, 33.07 ft), from rating curve extended above 39,000 cfs; minimum, 68 cfs Sept. 13, 1964; minimum daily, 101 cfs Aug. 21, 1966.
 Maximum stage known, 38.2 ft Mar. 18, 1936, from floodmark (discharge, 145,000 cfs, from rating curve extended above 39,000 cfs on basis of data for station at Newport).

REMARKS.--Records good except those for winter periods, which are fair. Regulation by hydroelectric plant and by dam construction above 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	1,570	2,280	4,320	1,910	1,800	17,400	2,610	3,200	3,830	16,900	1,180	660
2	1,440	3,500	4,100	2,130	1,900	25,900	2,670	3,230	3,350	12,800	1,150	477
3	1,150	4,440	3,400	3,180	2,000	32,300	2,630	3,360	3,000	7,510	1,120	462
4	1,230	4,320	2,770	2,990	1,800	23,700	2,710	4,470	2,790	5,670	1,130	458
5	1,210	3,660	2,260	3,190	1,500	19,000	3,250	5,460	3,440	5,140	1,080	559
6	992	3,050	5,220	3,080	1,100	14,900	3,030	5,180	2,820	6,230	1,050	617
7	968	2,600	13,300	2,910	1,400	9,100	3,310	4,820	2,480	5,860	1,080	627
8	903	2,260	16,200	2,720	1,500	7,190	3,490	4,340	2,180	4,930	1,120	622
9	876	2,000	16,200	2,540	1,400	5,980	3,450	4,720	1,960	4,250	1,050	644
10	864	1,820	12,800	2,560	1,400	5,250	3,470	7,230	1,840	4,070	1,000	722
11	814	1,680	10,200	2,730	1,300	4,660	3,380	7,550	1,720	3,620	943	727
12	881	1,600	7,990	2,880	1,400	4,310	3,170	6,790	1,600	3,130	918	762
13	767	1,610	6,470	2,950	1,500	4,080	4,140	5,740	1,960	2,840	912	744
14	753	1,390	5,190	3,170	3,180	4,360	6,310	5,010	2,680	2,660	906	943
15	723	1,350	5,150	3,080	4,280	5,330	10,100	5,080	2,110	2,550	870	1,080
16	664	1,380	4,450	2,630	4,850	6,120	14,700	5,960	3,630	4,000	822	786
17	728	1,270	3,950	1,970	4,700	6,880	25,500	5,300	4,910	3,730	810	727
18	527	1,160	3,570	2,020	4,370	7,080	20,600	4,980	3,810	2,930	852	722
19	724	1,120	3,170	2,640	3,820	6,420	16,200	4,480	3,280	2,440	1,060	739
20	702	995	2,950	2,800	2,780	5,560	11,200	4,740	2,720	2,240	1,150	722
21	693	1,210	2,980	2,640	2,460	4,780	8,100	5,260	4,890	1,980	1,060	704
22	701	946	2,730	2,470	2,730	4,720	6,660	5,060	44,000	1,790	943	699
23	635	1,030	2,490	2,640	2,930	5,280	6,600	4,570	115,000	1,660	943	682
24	618	1,110	2,410	2,910	2,980	5,010	6,170	3,990	62,200	1,580	962	671
25	1,620	1,130	2,270	2,990	3,170	4,400	5,690	3,490	35,600	1,520	950	677
26	7,630	1,040	2,160	2,920	3,960	3,970	5,130	3,070	28,500	1,410	864	655
27	6,290	1,100	2,140	2,650	5,710	3,600	4,520	2,710	24,700	1,330	816	638
28	4,820	1,200	2,070	2,500	6,470	3,280	4,110	2,390	22,200	1,330	822	739
29	3,510	1,700	1,970	2,300	8,000	3,040	3,790	2,160	20,300	1,270	846	828
30	2,690	3,580	1,880	2,200	-----	2,900	3,410	2,050	20,000	1,210	822	852
31	2,270	-----	2,140	2,100	-----	2,740	-----	3,670	-----	1,190	780	-----
TOTAL	49,963	57,533	159,400	82,400	86,390	259,240	200,100	140,060	433,500	119,770	30,011	20,945
MEAN	1,612	1,918	5,142	2,658	2,979	8,363	6,670	4,518	14,450	3,864	968	698
MAX	7,630	4,440	16,200	3,190	8,000	32,300	25,500	7,550	115,000	16,900	1,180	1,080
MIN	527	948	1,880	1,910	1,100	2,740	2,610	2,050	1,600	1,190	780	458
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-

CAL YR 1971 TOTAL 1,150,192 MEAN 3,151 MAX 29,500 MIN 434 CFSM - IN. -
 WTR YR 1972 TOTAL 1,639,312 MEAN 4,479 MAX 115,000 MIN 458 CFSM - IN. -

SUSQUEHANNA RIVER BASIN

159

01564500 Aughwick Creek near Three Springs, Pa.

LOCATION.--Lat 40°12'45", long 77°55'32", Huntingdon County, on right bank 10 ft downstream from bridge on State Highway 994, 300 ft upstream from East Broad Top Railroad Bridge, 350 ft upstream from Three Springs Creek, and 3.5 miles northeast of village of Three Springs. Records include flow of Three Springs Creek.

DRAINAGE AREA.--205 sq mi, includes that of Three Springs Creek.

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

GAGE.--Water-stage recorder. Datum of gage is 618.65 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--34 years, 240 cfs (15.90 inches per year).

EXTREMES.--Current year: Maximum discharge, 23,700 cfs June 22 (gage height, 19.20 ft), from rating curve extended as explained below; minimum, 11 cfs Sept. 10, 11, 12 (gage height, 2.54 ft).

Period of record: Maximum discharge, 23,700 cfs June 22, 1972 (gage height, 19.20 ft), from rating curve extended above 2,900 cfs on basis of contracted-opening measurement at gage height, 18.04 ft; minimum, 0.8 cfs Sept. 2, 3, 4, 11, 12, 13, 1966 (gage height, 1.74 ft).

Maximum stage known, about 19.3 ft June 1, 1889 (discharge not determined; previously published figure is believed to be in error and should not be used).

REMARKS.--Records good except those for winter periods, which are 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	51	191	622	99	130	3,800	171	226	680	574	54	17
2	46	546	392	225	130	4,640	201	224	419	418	52	15
3	46	570	278	511	120	4,470	176	354	433	352	48	15
4	46	373	266	345	228	2,150	176	718	331	310	52	14
5	44	260	234	373	184	1,290	191	1,020	314	348	47	13
6	40	201	610	324	150	825	163	673	239	410	41	13
7	36	177	3,040	278	120	642	176	526	210	314	46	13
8	32	149	3,270	251	100	558	209	425	174	254	54	12
9	29	131	1,850	217	90	429	205	708	153	220	46	12
10	37	120	1,280	242	84	359	198	1,170	146	193	35	12
11	51	114	900	257	88	301	201	832	130	170	29	11
12	47	104	630	334	86	281	197	633	113	147	28	12
13	35	97	503	314	300	272	493	498	114	132	44	12
14	30	90	396	407	1,300	321	879	469	133	123	49	13
15	29	83	363	334	1,070	377	1,630	456	119	156	34	13
16	27	78	307	180	1,030	495	2,630	484	403	278	27	13
17	26	75	254	230	767	658	4,320	388	961	317	30	12
18	26	70	223	280	586	566	1,770	346	390	359	99	16
19	25	69	189	275	450	448	1,000	326	366	204	72	20
20	25	70	181	254	200	366	746	767	288	154	44	19
21	23	71	177	204	250	321	579	871	1,980	127	33	19
22	22	73	154	179	290	403	598	639	17,600	112	28	18
23	20	66	123	189	270	452	686	484	18,700	91	26	17
24	46	63	131	191	260	345	577	372	7,110	79	26	16
25	674	51	129	179	250	304	499	296	2,780	70	27	16
26	2,490	88	121	156	700	278	421	238	1,520	62	25	16
27	670	91	121	131	820	251	353	199	915	57	23	20
28	373	101	116	143	776	228	301	175	674	58	23	23
29	248	263	105	186	1,520	207	266	157	1,320	58	23	27
30	189	767	105	170	-----	196	237	163	825	53	21	26
31	163	-----	112	150	-----	186	-----	1,070	-----	52	18	-----
TOTAL	5,646	5,202	17,182	7,608	12,349	26,419	20,254	15,907	59,560	6,252	1,204	475
MEAN	182	173	554	245	426	852	675	513	1,985	202	38.8	15.8
MAX	2,490	767	3,270	511	1,520	4,640	4,320	1,170	18,700	574	99	27
MIN	20	51	105	99	84	186	168	157	113	52	18	11
CFSM	.89	.84	2.70	1.20	2.08	4.16	3.29	2.50	9.68	.99	.19	.08
IN.	1.02	.94	3.12	1.38	2.24	4.79	3.68	2.89	10.81	1.13	.22	.09

CAL YR 1971 TOTAL 110,126.2 MEAN 302 MAX 4,290 MIN 8.2 CFSM 1.47 IN 19.98
WTR YR 1972 TOTAL 178,058.0 MEAN 486 MAX 18,700 MIN 11 CFSM 2.37 IN 32.31

PEAK DISCHARGE (BASE, 2,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-26	0230	9.63	4,190	4-17	0500	10.86	5,740
12- 8	0230	9.64	4,200	6-22	1600	19.20	23,700
3- 3	0400	10.43	5,170	6-29	0430	7.66	2,220

SUSQUEHANNA RIVER BASIN

01565700 Little Lost Creek at Oakland Mills, Pa.

LOCATION.--Lat 40°36'19", long 77°18'42", Juniata County, on right bank at bridge on Legislative Route 34007, 0.8 mile south of Oakland Mills, and 1 mile upstream from mouth.

DRAINAGE AREA.--6.52 sq mi.

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum, water years 1960-63. August 1963 to current year. Prior to August 1964, published as "near Oakland Mills."

GAGE.--Water-stage recorder. Datum of gage is 551.17 ft above mean sea level. June 8, 1960 to Aug. 7, 1963, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--9 years (1963-72), 5.98 cfs (12.46 inches per year).

EXTREMES.--Current year: Maximum discharge, 468 cfs June 22 (gage height, 8.41 ft), from rating curve extended above 250 cfs; minimum, 0.65 cfs Oct. 1, 8, 9, 19, 20, 21, 22 (gage height, 4.23 ft).

Period of record: Maximum discharge, 468 cfs June 22, 1972 (gage height, 8.41 ft), from rating curve extended above 250 cfs; minimum (1963-72), 0.2 cfs Nov. 2, 3, 4, 5, 6, 1963, Oct. 4, 1964, Aug. 24, Sept. 2, 1965; minimum gage height, 4.18 ft Aug. 24, Sept. 2, 1965.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WRD Penna. 1970: 1967-69(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	.73	5.1	8.4	4.1	3.4	35	9.5	7.8	11	41	7.8	3.4
2	.73	11	5.3	7.8	3.4	110	10	8.2	7.8	26	7.8	3.1
3	.73	6.2	4.4	6.5	4.4	129	8.7	21	6.9	24	7.4	3.1
4	.73	4.1	3.9	5.8	11	32	9.1	51	6.2	20	7.4	3.1
5	.73	3.1	3.4	8.2	9.5	26	7.8	24	6.2	30	6.5	3.1
6	.73	2.7	38	5.5	4.4	20	7.8	17	5.5	25	6.5	2.9
7	.73	3.2	51	5.2	4.1	21	8.2	14	5.5	20	8.2	2.9
8	.65	2.4	36	4.6	3.4	23	7.4	12	4.9	17	6.9	2.9
9	.65	2.2	28	4.6	2.7	16	6.5	29	4.6	15	6.2	3.4
10	2.2	2.2	21	5.5	2.5	14	6.2	22	4.4	14	5.8	2.7
11	1.4	2.1	16	8.2	2.5	13	6.2	16	4.1	13	5.8	2.7
12	1.0	2.0	13	9.9	2.5	13	5.8	13	3.9	12	5.8	3.4
13	.81	1.9	11	7.8	34	14	11	12	4.6	12	6.2	3.1
14	.81	1.7	11	9.9	36	14	8.7	14	4.4	11	5.5	2.9
15	.73	1.9	12	6.5	20	18	12	17	3.9	11	5.2	2.5
16	.73	1.8	9.9	4.6	19	24	26	17	12	21	5.2	2.3
17	.73	1.7	8.7	4.6	14	25	32	13	7.4	16	5.2	2.2
18	.73	1.6	7.8	4.6	11	20	17	13	6.5	12	5.2	4.4
19	.73	1.7	6.9	4.9	9.0	16	14	10	5.5	11	4.9	2.9
20	.73	1.6	6.9	4.4	6.2	14	15	17	4.6	11	4.6	2.2
21	.73	1.7	6.5	4.4	9.8	13	12	12	212	10	4.6	2.0
22	.65	1.4	5.5	4.4	8.0	31	12	10	339	9.9	4.4	1.8
23	.73	1.3	4.6	6.2	6.6	23	11	9.5	256	9.1	4.4	1.7
24	2.7	1.3	4.9	6.5	6.6	18	10	8.7	96	8.7	4.4	1.8
25	6.2	1.8	4.9	6.5	6.2	15	9.1	8.2	62	8.2	4.1	1.7
26	5.6	1.8	4.9	4.6	9.2	13	8.7	7.4	46	7.8	3.9	1.4
27	2.7	2.0	4.6	4.4	7.8	12	7.8	6.9	29	7.8	3.9	1.7
28	2.0	3.5	4.6	4.4	8.6	11	7.4	6.5	40	8.2	3.6	1.6
29	1.7	6.7	4.1	4.1	13	10	6.9	6.5	48	8.2	3.6	1.6
30	1.6	14	4.4	4.1	-----	10	6.9	7.4	59	7.8	3.4	1.6
31	1.5	-----	4.4	3.6	-----	9.5	-----	19	-----	7.8	3.4	-----
TOTAL	43.12	95.7	356.0	176.4	278.8	762.5	320.7	450.1	1,306.9	455.5	167.8	76.1
MEAN	1.39	3.19	11.5	5.69	9.61	24.6	10.7	14.5	43.6	14.7	5.41	2.54
MAX	6.2	14	51	9.9	36	129	32	51	339	41	8.2	4.4
MIN	.65	1.3	3.4	3.6	2.5	9.5	5.8	6.5	3.9	7.8	3.4	1.4
CFSM	.21	.49	1.76	.87	1.47	3.77	1.64	2.22	6.69	2.25	.83	.39
IN.	.25	.55	2.03	1.01	1.59	4.35	1.83	2.57	7.46	2.60	.96	.43

CAL YR 1971 TOTAL 2,185.80 MEAN 5.99 MAX 72 MIN .65 CFSM .92 IN 12.47
WTR YR 1972 TOTAL 4,489.62 MEAN 12.3 MAX 339 MIN .65 CFSM 1.89 IN 25.62

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 6	1845	5.91	111	5- 4	1145	5.95	111
3- 3	0230	7.30	280	6-22	1630	8.41	468
4-16	2345	5.82	100	6-28	1900	6.43	161

SUSQUEHANNA RIVER BASIN

161

01567000 Juniata River at Newport, Pa.

LOCATION.--Lat 40°28'42", long 77°07'46", Perry County, on right bank at downstream side of highway bridge at Newport, 1,000 ft upstream from Little Buffalo Creek.

DRAINAGE AREA.--3,354 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 363.93 ft above mean sea level. Prior to July 16, 1929, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--73 years, 4,227 cfs (17.12 inches per year).

EXTREMES.--Current year: Maximum discharge, 187,000 cfs June 23 (gage height, 33.97 ft), from rating curve extended above 100,000 cfs; minimum, 477 cfs Oct. 20 (gage height, 3.19 ft).
Period of record: Maximum discharge, 190,000 cfs Mar. 19, 1936 (gage height, 34.24 ft, from floodmark in gage shelter), from rating curve extended above 100,000 cfs; minimum, 195 cfs July 27, 1966 (gage height, 2.81 ft); minimum daily, 221 cfs Nov. 2, 1966.
Maximum stage known, 35.9 ft June 1, 1889, from floodmarks (discharge, 209,000 cfs, from rating curve extended above 100,000 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Some regulation by hydroelectric plant and dam construction above station. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 781: 1902(M). WSP 921: 1936(M). WSP 1302: 1915-17. WSP 1502: 1899-1908, 1914, 1924, 1936. WSP 1722: 1916.

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	2,170	2,770	5,930	3,020	3,000	18,100	4,310	5,190	8,540	25,300	2,320	1,200
2	1,890	3,900	6,020	3,100	2,900	35,500	4,310	5,080	7,070	21,100	2,280	1,110
3	1,740	5,700	5,160	3,900	2,900	55,900	4,310	5,580	5,760	16,400	2,210	974
4	1,540	5,900	4,230	5,110	3,000	45,000	4,180	8,300	5,050	11,700	2,120	765
5	1,310	5,190	3,490	4,880	2,600	32,100	4,180	12,000	4,640	9,830	2,040	720
6	1,440	4,290	3,470	5,080	2,300	25,100	4,610	10,900	5,020	10,400	2,000	705
7	1,270	3,640	16,900	4,770	1,700	19,100	4,400	9,300	4,310	11,200	2,000	780
8	1,130	3,100	25,800	4,420	2,000	13,700	4,640	8,210	3,820	9,890	2,040	876
9	1,080	2,700	26,500	4,210	2,200	11,100	4,860	8,360	3,420	8,420	1,970	892
10	1,060	2,410	23,500	4,030	2,100	9,210	4,800	12,500	3,140	8,060	1,890	924
11	1,160	2,170	19,000	4,160	2,000	6,090	4,770	13,400	2,930	7,520	1,760	908
12	1,040	2,000	15,100	4,640	1,900	7,220	4,670	12,300	2,770	6,510	1,680	1,110
13	974	1,850	11,700	4,830	2,300	6,740	4,750	10,600	2,720	5,640	1,660	1,200
14	1,010	1,830	9,550	5,160	5,000	6,480	7,310	9,240	3,050	5,790	1,620	1,200
15	892	1,720	8,180	5,440	9,000	6,330	10,500	8,810	3,790	5,000	1,540	1,180
16	844	1,580	7,730	4,500	9,800	8,210	18,600	8,990	4,100	7,490	1,500	1,480
17	795	1,600	8,660	3,800	9,240	9,710	32,500	9,120	8,060	14,800	1,420	1,350
18	735	1,520	5,900	3,000	8,210	10,500	36,700	8,720	8,510	9,740	1,390	1,150
19	780	1,370	5,280	3,300	7,520	10,100	26,400	7,790	6,800	7,040	1,390	1,200
20	588	1,310	4,800	4,160	6,000	8,930	20,900	7,430	5,530	5,700	1,540	1,080
21	750	1,290	4,480	4,290	4,600	7,850	15,600	8,300	10,400	4,970	1,700	1,040
22	750	1,160	4,340	4,050	3,500	8,000	11,900	8,540	61,200	4,340	1,720	1,010
23	735	1,270	4,000	3,950	4,000	9,240	10,900	7,760	165,000	3,900	1,540	974
24	796	1,010	3,720	4,160	4,200	8,750	10,300	6,860	162,000	3,570	1,480	974
25	1,060	1,250	3,570	4,480	4,500	7,820	9,460	5,990	81,900	3,290	1,460	974
26	3,520	1,440	3,440	4,310	5,080	6,890	8,570	5,220	47,700	3,070	1,500	957
27	11,000	1,270	3,290	4,130	6,830	6,190	7,640	4,640	37,200	2,890	1,420	974
28	7,460	1,370	3,220	3,840	8,900	5,640	6,770	4,160	31,000	2,720	1,310	1,060
29	5,440	1,760	3,120	3,820	13,000	5,160	6,130	3,770	27,800	2,610	1,240	1,040
30	4,000	3,190	3,000	3,640	-----	4,830	5,670	3,490	28,200	2,520	1,220	1,160
31	3,100	-----	2,930	3,200	-----	4,580	-----	5,990	-----	2,410	1,240	-----
TOTAL	62,060	71,560	254,030	129,380	140,280	422,570	304,640	246,540	751,430	243,820	52,200	30,967
MEAN	2,002	2,385	8,195	4,174	4,837	13,630	10,150	7,953	25,050	7,865	1,684	1,032
MAX	11,000	5,900	26,500	5,440	13,000	55,900	36,700	13,400	165,000	25,300	2,320	1,480
MIN	588	1,010	2,930	3,000	1,700	4,580	4,180	3,490	2,720	2,410	1,220	705
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-

CAL YR 1971 TOTAL 1,797,995 MEAN 4,926 MAX 44,100 MIN 425 CFSM - IN. -
WTR YR 1972 TOTAL 2,709,477 MEAN 7,403 MAX 165,000 MIN 588 CFSM - IN. -

SUSQUEHANNA RIVER BASIN

01567500 Bixler Run near Loysville, Pa.

LOCATION.--Lat 40°22'15", long 77°24'09", Perry County, on right bank 400 ft upstream from bridge on State Highway 850 at Bixler, 2.3 miles upstream from mouth, and 3.6 miles west of Loysville.

DRAINAGE AREA.--15.0 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 601.22 ft above mean sea level. Prior to May 14, 1954, nonrecording gage and crest-stage gage 400 ft downstream at same datum.

AVERAGE DISCHARGE.--18 years, 16.9 cfs (15.30 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,570 cfs July 16 (gage height, 9.69 ft), from rating curve extended as explained below; minimum daily, 3.1 cfs Oct. 6-8, 15-22.

Period of record: Maximum discharge, 8,780 cfs Nov. 1, 1956 (gage height, 10.39 ft), from rating curve extended above 1,000 cfs on basis of slope-area measurement of peak flow; minimum, 1.5 cfs Feb. 2, 1959.

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	3.2	38	23	13	11	175	22	27	116	49	15	6.1
2	3.2	39	17	30	11	299	28	26	66	41	14	6.1
3	3.2	22	15	23	14	402	20	62	50	42	14	6.1
4	3.2	15	13	21	27	139	20	120	37	34	13	6.1
5	3.2	12	11	26	21	98	18	83	31	59	12	6.4
6	3.1	10	90	20	16	68	17	59	27	43	12	5.8
7	3.1	9.2	177	19	15	60	18	48	24	36	14	5.4
8	3.1	8.2	136	18	13	54	18	44	21	33	12	5.8
9	3.2	7.6	109	18	12	41	16	130	19	30	11	5.0
10	6.3	7.3	100	22	11	38	15	106	19	28	10	5.6
11	4.1	6.8	93	22	11	33	16	74	16	25	9.7	5.4
12	3.4	6.6	65	24	11	32	15	57	15	23	9.7	6.2
13	3.2	6.3	49	23	55	30	41	47	24	25	10	7.4
14	3.2	5.8	40	28	96	32	30	58	19	24	9.1	7.2
15	3.1	9.6	36	21	75	40	94	43	16	24	8.5	7.4
16	3.1	7.6	30	18	69	46	156	38	128	445	8.5	5.6
17	3.1	6.3	26	19	53	48	171	33	51	148	8.8	5.4
18	3.1	6.1	24	19	45	41	89	30	75	62	9.1	13
19	3.1	6.6	22	19	36	35	66	27	54	45	8.2	6.7
20	3.1	6.6	21	17	27	31	62	41	42	36	7.6	6.1
21	3.1	6.3	20	17	38	29	45	29	524	30	7.3	5.9
22	3.1	5.6	17	15	33	67	51	25	2,120	27	7.3	5.9
23	3.2	5.1	16	18	27	51	42	23	918	24	7.3	5.4
24	13	5.3	17	16	27	42	39	21	256	22	7.0	5.9
25	82	7.1	15	18	26	36	34	19	141	20	7.0	5.9
26	33	7.3	15	13	37	31	30	17	96	19	7.0	5.6
27	15	8.2	15	12	33	28	27	16	69	19	7.6	6.6
28	10	12	15	13	37	26	25	15	56	18	7.0	7.0
29	7.9	19	13	13	94	24	23	15	77	16	6.4	6.7
30	7.1	30	15	13	-----	23	22	34	65	16	6.1	7.0
31	6.8	-----	14	11	-----	21	-----	273	-----	16	6.1	-----
TOTAL	251.5	342.5	1,269	579	981	2,120	1,270	1,640	5,172	1,479	292.3	190.7
MEAN	8.11	11.4	40.9	18.7	33.8	68.4	42.3	52.9	172	47.7	9.43	6.36
MAX	82	39	177	30	96	402	171	273	2,120	445	15	13
MIN	3.1	5.1	11	11	11	21	15	15	15	16	6.1	5.0
CFSM	.54	.76	2.73	1.25	2.25	4.56	2.82	3.53	11.5	3.18	.63	.42
IN.	.62	.85	3.15	1.44	2.43	5.26	3.15	4.07	12.83	3.67	.72	.47

CAL YR 1971 TOTAL 7,353.5 MEAN 20.1 MAX 299 MIN 2.9 CFSM 1.34 IN 18.24
WTR YR 1972 TOTAL 15,587.0 MEAN 42.6 MAX 2,120 MIN 3.1 CFSM 2.84 IN 38.66

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-25	1815	5.31	347	5-31	2115	6.09	660
3- 3	0315	6.34	794	6-22	1630	8.90	4,400
4-16	1930	5.49	408	7-16	2000	9.69	6,570

SUSQUEHANNA RIVER BASIN

163

01568000 Sherman Creek at Shermans Dale, Pa.

LOCATION.--Lat 40°19'24", long 77°10'09", Perry County, on left bank on downstream side of bridge on State Highway 34 at Shermans Dale, and 1.2 miles upstream from Fishing Run.

DRAINAGE AREA.--200 sq mi.

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some months, published in WSP 1302. Prior to October 1962, published as "at Shermantale."

GAGE.--Water-stage recorder. Datum of gage is 422.63 ft above mean sea level. Prior to Jan. 29, 1930, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 278 cfs (18.88 inches per year).

EXTREMES.--Current year: Maximum discharge, 27,500 cfs June 23 (gage height, 18.09 ft), from rating curve extended above 18,000 cfs; minimum, 27 cfs Sept. 9; minimum gage height, 0.87 ft, Oct. 14.

Period of record: Maximum discharge, 27,500 cfs June 23, 1972 (gage height, 18.09 ft), from rating curve extended above 18,000 cfs; minimum, 3.9 cfs Dec. 1, 1930; minimum gage height, 0.62 ft Sept. 11, 1966; minimum daily discharge, 10 cfs Dec. 24, 25, 1930, Sept. 30, 1941.

Flood of July 22, 1927 reached a stage of 20.34 ft, from floodmark (discharge, about 44,000 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Some regulation at low flow by mills above station.

REVISIONS. (WATER YEARS).--WSP 1302: 1930(M). WSP 1502: 1933, 1934(M), 1935-36.

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	50	264	616	146	151	2,080	305	335	1,120	815	119	40
2	46	800	393	250	180	3,900	375	447	650	641	121	41
3	46	498	289	455	180	4,780	305	925	524	555	119	42
4	45	328	255	286	511	2,100	283	1,780	410	511	99	42
5	43	253	207	360	280	1,410	274	1,480	364	627	89	44
6	41	210	521	322	240	1,010	247	960	309	645	86	40
7	39	194	3,140	277	210	835	244	765	286	515	101	38
8	38	168	2,350	250	180	785	247	654	247	434	108	40
9	36	149	1,760	244	170	614	241	1,260	227	386	88	33
10	63	139	1,600	346	150	533	224	1,640	216	346	75	39
11	106	129	1,690	375	150	460	218	1,030	196	309	70	36
12	74	117	1,150	498	150	434	207	805	180	274	66	41
13	57	110	890	426	511	422	451	663	216	259	73	52
14	43	102	686	511	1,390	439	695	677	256	318	73	49
15	45	119	623	390	1,010	494	1,160	875	196	286	64	51
16	43	155	529	202	885	618	1,490	860	277	845	60	41
17	42	110	439	274	654	825	2,850	659	468	1,280	58	41
18	40	98	379	356	529	677	1,340	663	515	507	63	159
19	39	96	322	335	443	564	960	515	605	379	61	104
20	38	101	309	265	325	481	830	765	349	312	57	63
21	38	102	289	247	418	434	695	695	4,200	262	57	51
22	37	95	250	227	460	1,120	710	560	15,500	224	51	44
23	38	80	218	233	368	1,140	755	468	18,300	199	49	38
24	66	77	213	236	342	810	695	398	5,340	180	51	39
25	338	92	210	233	318	654	596	346	2,390	164	49	46
26	1,640	173	199	204	460	564	524	299	1,570	146	45	41
27	399	141	193	161	524	494	464	268	1,100	136	60	48
28	256	150	183	174	464	439	410	244	870	141	99	64
29	193	417	166	193	785	390	375	227	980	126	57	60
30	154	763	164	177	-----	368	346	216	1,220	117	49	52
31	137	-----	169	141	-----	329	-----	1,990	-----	117	45	-----
TOTAL	4,270	6,230	20,402	8,794	12,438	30,203	18,516	23,469	59,081	12,056	2,262	1,519
MEAN	138	208	658	284	429	974	617	757	1,969	389	73.0	50.6
MAX	1,640	800	3,140	511	1,390	4,780	2,850	1,990	18,300	1,280	121	159
MIN	36	77	164	141	150	329	207	216	180	117	45	33
CFSM	.69	1.04	3.29	1.42	2.15	4.87	3.09	3.79	9.85	1.95	.37	.25
IN.	.79	1.16	3.79	1.64	2.31	5.62	3.44	4.37	10.99	2.24	.42	.28

CAL YR 1971 TOTAL 113,940 MEAN 312 MAX 4,770 MIN 16 CFSM 1.56 IN 21.19
WTR YR 1972 TOTAL 199,240 MEAN 544 MAX 18,300 MIN 33 CFSM 2.72 IN 37.06

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	0600	6.44	3,480	4-17	0430	7.19	3,670
3- 3	1030	9.26	6,040	6-23	0200	18.09	27,500

SUSQUEHANNA RIVER BASIN

01568500 Clark Creek near Carsonville, Pa.

LOCATION.--Lat 40°27'37", long 76°45'06", Dauphin County, on right bank 0.3 mile downstream from DeHart Dam, 1.8 miles southeast of Carsonville, and 15 miles upstream from mouth.

DRAINAGE AREA.--22.5 sq mi.

PERIOD OF RECORD.--September 1937 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 552.32 ft above mean sea level. Prior to Jan. 6, 1939, water-stage recorder at site about 1,700 ft upstream at datum 9.49 ft higher. Jan. 6, 1939 to July 27, 1940, nonrecording gage at site 100 ft downstream at different datum.

AVERAGE DISCHARGE.--34 years (1937-39, 1940-72), 38.4 cfs (23.18 inches per year), adjusted for storage and diversion since 1941.

EXTREMES.--Current year: Maximum discharge, 4,800 cfs June 22 (gage height, 10.98 ft), from rating curve extended as explained below; minimum, 2.6 cfs Aug. 8 (gage height, 0.93 ft).
Period of record: Maximum discharge, 4,800 cfs June 22, 1972 (gage height, 10.98 ft), from rating curve extended above 240 cfs on the basis of computation of peak flow over dam; minimum daily discharge, 0.2 cfs Jan. 29 to Feb. 3, 1940.

REMARKS.--Records good. Flow regulated by DeHart Reservoir (see p. 182). Diversion from reservoir to city of Harrisburg.

REVISIONS (WATER YEARS).--WSP 1302: 1940 (M). WSP 1702: 1942 (monthly mean).

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	5.3	14	78	13	17	45	32	27	18	124	7.4	5.1
2	5.3	14	48	25	13	124	32	20	14	93	7.4	5.1
3	5.3	20	57	31	21	281	28	34	11	75	7.4	5.1
4	5.3	9.7	29	26	56	219	26	83	10	61	7.4	5.1
5	5.3	6.1	30	33	44	169	21	104	9.1	61	7.1	5.1
6	9.1	7.1	66	23	36	130	19	77	7.1	56	7.1	5.1
7	5.1	23	167	20	33	101	21	69	13	44	7.4	5.1
8	13	21	193	18	26	86	18	66	9.7	60	5.3	5.1
9	9.5	36	199	21	22	66	15	84	8.3	98	4.8	5.0
10	5.6	7.0	170	30	20	56	14	114	5.7	51	4.5	5.1
11	5.2	22	180	37	18	47	13	87	8.0	22	4.5	5.1
12	9.4	6.9	170	46	16	43	13	74	8.8	8.3	4.6	5.5
13	9.2	8.4	150	45	30	40	19	64	8.6	8.0	4.8	5.3
14	5.0	22	130	52	54	40	24	64	5.5	7.7	4.6	5.3
15	5.0	21	100	48	49	37	25	65	31	8.0	4.3	5.1
16	5.1	7.2	81	42	47	40	32	74	6.2	8.0	3.7	5.1
17	9.1	22	66	38	45	70	56	60	5.7	8.0	4.0	5.1
18	5.0	6.9	54	35	44	58	45	51	5.9	7.7	4.3	5.3
19	5.0	7.0	47	33	71	48	41	50	5.7	7.7	4.3	5.1
20	8.7	6.9	42	31	60	41	45	39	5.7	7.7	4.3	5.1
21	8.8	6.9	37	32	43	38	48	37	174	11	4.3	5.1
22	5.0	22	32	26	36	77	41	39	4,130	7.7	4.3	5.1
23	5.0	7.2	27	28	32	119	43	27	2,150	7.7	5.3	5.0
24	5.4	23	25	30	26	87	43	22	671	7.7	5.1	5.0
25	5.7	10	24	30	23	74	39	22	340	7.7	5.1	5.1
26	10	12	24	26	30	64	32	16	226	7.7	5.5	5.0
27	5.1	14	23	23	31	55	29	12	155	7.7	5.7	5.1
28	8.9	17	20	23	28	48	25	11	107	7.7	5.3	5.1
29	8.7	74	17	20	28	42	24	11	99	7.7	5.3	5.1
30	5.0	113	19	19	-----	39	23	11	159	7.7	5.0	5.1
31	12	-----	15	17	-----	34	-----	25	-----	7.4	5.1	-----
TOTAL	215.1	587.3	2,320	921	999	2,418	886	1,539	8,408.0	903.8	165.2	153.6
MEAN	6.94	19.6	74.8	29.7	34.4	78.0	29.5	49.6	280	29.2	5.33	5.12
MAX	13	113	199	52	71	281	56	114	4,130	124	7.4	5.5
MIN	5.0	6.1	15	13	13	34	13	11	5.5	7.4	3.7	5.0
(%)	20.2	19.6	20.0	20.0	20.9	21.1	21.0	20.8	22.9	22.5	23.4	22.1
MEAN [†]	21.5	55.3	91.1	49.9	56.9	99.1	49.8	69.6	307	40.2	9.69	3.89
CFSM [†]	.96	2.46	4.05	2.22	2.53	4.40	2.21	3.09	13.64	1.79	.43	.17
IN [†]	1.11	2.74	4.67	2.56	2.73	5.07	2.47	3.56	15.22	2.06	.50	.19
CAL YR 1971 TOTAL	9,394.9			MEAN 25.7	MAX 209	MIN 4.0	MEAN [†]	46.6	CFSM [†]	2.07	IN [†]	28.08
WTR YR 1972 TOTAL	19,516.0			MEAN 53.3	MAX 4,130	MIN 3.7	MEAN [†]	70.9	CFSM [†]	3.15	IN [†]	42.66

[†] Diversion, equivalent in cubic feet per second, from DeHart Reservoir for municipal supply; furnished by City of Harrisburg.

[†] Adjusted for diversion and change in reservoir contents.

SUSQUEHANNA RIVER BASIN

165

01569000 Stony Creek near Dauphin, Pa.

LOCATION.--Lat 40°22'46", long 76°54'31", Dauphin County, on left bank at site of former railroad bridge, 1.5 miles northeast of Dauphin, and 2.2 miles upstream from mouth.

DRAINAGE AREA.--33.2 sq mi (revised).

PERIOD OF RECORD.--September 1937 to September 1945, January 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 353.75 ft above mean sea level, datum of 1907.

AVERAGE DISCHARGE.--13 years (1937-45, 1967-72), 59.4 cfs (24.30 inches per year)

EXTREMES.--Current year: Maximum discharge 9,990 cfs June 22 (gage height, 14.44 ft, from floodmark in gage shelter), from rating curve extended as explained below; minimum, 9.2 cfs Sept. 11, 23, 24 (gage height, 1.03 ft).

Period of record: Maximum discharge, 9,990 cfs June 22, 1972 (gage height, 14.44 ft, from floodmark in gage shelter), from rating curve extended above 1,200 cfs on basis of slope-area measurement of peak flow; minimum, 0.6 cfs Oct. 11, 1941; minimum gage height, 0.97 ft Sept. 18, 19, 1941.

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

REVISIONS (WATER YEARS).--WSP 1302: 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	26	60	128	47	42	180	71	63	72	192	25	12
2	24	139	90	76	45	291	69	63	57	133	23	12
3	23	133	73	79	59	551	66	95	47	111	22	12
4	21	92	65	68	135	322	63	190	42	101	22	12
5	21	69	59	74	80	226	60	203	39	108	20	11
6	21	59	92	69	70	182	58	139	37	110	19	10
7	19	59	302	62	62	157	57	113	36	92	25	10
8	18	57	333	56	56	144	56	105	32	79	26	10
9	16	51	280	57	52	130	53	168	30	70	21	10
10	32	48	249	80	50	115	51	213	31	79	19	9.8
11	45	46	277	93	48	101	51	166	27	69	17	9.5
12	37	44	242	110	46	93	49	133	26	59	17	16
13	27	42	186	101	93	89	71	118	29	54	19	15
14	23	40	155	98	132	89	81	125	32	51	23	13
15	21	40	142	82	116	89	93	125	29	47	18	12
16	19	39	130	66	98	93	99	125	35	65	16	11
17	18	40	116	80	87	144	153	118	46	69	16	10
18	17	41	104	73	80	142	128	104	47	51	18	10
19	16	41	92	66	76	105	104	92	71	44	18	12
20	16	38	84	63	72	90	98	89	62	40	16	10
21	16	36	79	61	67	81	93	86	316	37	15	9.8
22	16	33	72	59	64	139	93	79	7,510	34	15	9.8
23	16	31	65	63	60	188	98	71	2,660	31	14	9.5
24	21	30	63	65	58	139	98	65	884	30	13	9.5
25	41	86	60	72	56	112	90	59	444	28	13	10
26	60	67	58	60	77	102	81	54	317	35	12	10
27	58	52	56	56	74	95	74	51	237	29	19	10
28	42	56	54	52	71	89	71	48	177	28	30	14
29	33	127	51	50	95	83	67	46	159	25	18	12
30	30	178	51	47	-----	79	63	46	241	25	14	12
31	29	-----	51	46	-----	74	-----	67	-----	24	13	-----
TOTAL	822	1,874	3,859	2,131	2,121	4,514	2,359	3,219	13,772	1,950	576	333.9
MEAN	26.5	62.5	124	68.7	73.1	146	78.6	104	459	62.9	18.6	11.1
MAX	60	178	333	110	135	551	153	213	7,510	192	30	16
MIN	16	30	51	46	42	74	49	46	26	24	12	9.5
CFSM	.80	1.88	3.73	2.07	2.20	4.40	2.37	3.13	13.8	1.89	.56	.33
IN.	.92	2.10	4.32	2.39	2.38	5.06	2.64	3.61	15.43	2.18	.65	.37

CAL YR 1971 TOTAL 23,742.1 MEAN 65.0 MAX 454 MIN 7.0 CFSM 1.96 IN 26.60
WTR YR 1972 TOTAL 37,530.9 MEAN 103 MAX 7,510 MIN 9.5 CFSM 3.10 IN 42.05

PEAK DISCHARGE (BASE, 250 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	0330	3.64	354	6-22	1400*	14.44	9,990
3- 3	0600	4.49	642				

SUSQUEHANNA RIVER BASIN

01570000 Conodoguinet Creek near Hogestown, Pa.

LOCATION.--Lat 40°15'08", long 77°01'17", Cumberland County, on left bank 1,000 ft upstream from highway bridge, 0.4 mile downstream from Hogestown Run, and 1 mile northeast of Hogestown.

DRAINAGE AREA.--470 sq mi. At site used Sept. 25, 1911 to Sept. 30, 1917, 485 sq mi.

PERIOD OF RECORD.--October 1911 to September 1917, October 1929 to September 1958, June 1967 to current year. October 1917 to December 1919 (gage heights and discharge measurements only) contained in reports of Water Supply Commission of Pennsylvania, published as "at Brysons Bridge" 1912-17. Monthly discharges only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 351.00 ft above mean sea level. Prior to December 1919, non-recording gage at site 2 miles downstream at different datum. Oct. 1, 1929 to Aug. 3, 1931, nonrecording gage at site 1,000 ft downstream at present datum.

AVERAGE DISCHARGE.--40 years (1911-17, 1929-58, 1967-72), 578 cfs (16.70 inches per year).

EXTREMES.--Current year: Maximum discharge, 33,700 cfs June 23 (gage height, 17.01 ft, from floodmark in gage shelter); minimum, 113 cfs Oct. 22, 23, 24 (gage height, 1.13 ft).
Period of record: Maximum discharge, 33,700 cfs June 23, 1972 (gage height, 17.01 ft, from floodmark in gage shelter); minimum, 24 cfs Dec. 16, 1930; minimum daily, 26 cfs Dec. 23, 1930.

REMARKS.--Records good except those for winter periods, which are fair. Since June 1969 the Riverton Consolidated Water Co. diverts water, equivalent to a mean discharge of about 6.0 cfs, at a point just upstream from gage for municipal water supply. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1722: 1913, 1917.

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	412	2,130	360	294	3,670	614	710	1,310	1,910	374	232
2	174	811	1,470	441	320	7,000	643	685	850	1,490	370	229
3	164	1,120	1,010	811	360	9,800	661	1,190	673	1,270	358	229
4	158	811	784	804	797	5,000	568	3,150	591	1,130	347	226
5	152	599	659	790	750	2,700	546	3,600	530	1,090	340	223
6	149	487	712	818	600	2,000	510	2,210	499	1,300	329	221
7	136	432	3,320	718	520	1,510	489	1,660	451	1,110	332	215
8	127	384	4,900	648	470	1,360	510	1,390	415	941	358	212
9	125	329	3,770	593	460	1,140	504	1,690	382	837	347	212
10	152	307	2,630	694	430	987	470	2,620	370	754	315	209
11	227	290	2,120	832	410	889	451	1,980	355	700	301	204
12	242	269	1,660	965	390	818	437	1,540	336	640	294	212
13	198	254	1,360	1,010	760	785	608	1,280	347	600	294	218
14	167	242	1,120	909	3,200	785	1,550	1,220	386	740	291	218
15	155	242	1,010	700	2,820	954	1,690	1,330	370	660	285	212
16	142	265	909	507	2,040	1,030	3,540	1,270	355	1,700	275	204
17	136	234	790	407	1,560	1,400	4,730	1,180	386	2,400	272	198
18	133	216	706	555	1,250	1,390	3,340	1,210	480	1,400	275	198
19	125	205	626	577	1,240	1,140	2,100	1,070	574	900	278	204
20	125	209	588	544	979	961	1,670	1,110	520	760	278	223
21	119	209	571	487	895	831	1,440	1,510	1,080	667	265	201
22	119	205	534	471	1,010	1,000	1,320	1,220	11,600	591	256	196
23	116	191	471	456	818	2,250	1,760	1,030	24,500	530	253	193
24	125	184	446	466	730	1,670	1,640	883	23,100	489	253	193
25	188	555	441	461	712	1,300	1,410	772	9,270	456	250	196
26	1,660	665	427	400	874	1,100	1,200	679	4,400	428	247	196
27	1,860	593	412	356	1,690	948	1,040	608	2,820	411	256	193
28	860	566	402	342	1,680	850	922	552	2,160	402	285	204
29	604	1,010	388	333	1,990	766	837	515	2,030	394	285	196
30	471	2,130	374	329	-----	716	766	484	2,470	382	256	207
31	398	-----	379	310	-----	667	-----	766	-----	374	238	-----
TOTAL	9,695	14,426	37,119	18,094	30,049	57,417	37,966	41,114	93,610	27,456	9,157	6,274
MEAN	313	481	1,197	584	1,036	1,852	1,266	1,326	3,120	886	295	209
MAX	1,860	2,130	4,900	1,010	3,200	9,800	4,730	3,600	24,500	2,400	374	232
MIN	116	184	374	310	294	667	437	484	336	374	238	193
CFSM	.67	1.02	2.55	1.24	2.20	3.94	2.69	2.82	6.64	1.89	.63	.44
IN.	.77	1.14	2.94	1.43	2.38	4.54	3.00	3.25	7.41	2.17	.72	.50

CAL YR 1971 TOTAL 244,768 MEAN 671 MAX 6,720 MIN 116 CFSM 1.43 IN 19.37
WTR YR 1972 TOTAL 382,377 MEAN 1,045 MAX 24,500 MIN 116 CFSM 2.22 IN 30.26

PEAK DISCHARGE (BASE, 4,000 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	1500	6.80	5,080	5- 5	0315	6.37	4,130
2-14	Unk.	6.08	4,120	6-23	2400*	17.01	33,700
4-17	1830	7.16	5,190				

SUSQUEHANNA RIVER BASIN

167

01570100 Conodoguinet Creek tributary No. 1 near Enola, Pa.

LOCATION.--Lat 40°17'27", long 76°59'38", Cumberland County, on right bank 720 ft upstream from bridge on State Highway 944, 3.2 miles upstream from mouth, and 3.3 miles west of Enola.

DRAINAGE AREA.--0.77 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 418.56 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 604 cfs June 22 (gage height, 5.71 ft), from rating curve extended as explained below; minimum daily, 0.07 cfs Oct. 1, 6-8, Sept. 23.

Period of record: Maximum discharge, 604 cfs June 22, 1972 (gage height, 5.71 ft), from rating curve extended above 50 cfs on basis of slope-area measurement of peak flow; minimum, 0.04 cfs Sept. 17, 18, 22, 23, 24, 25, 1970, July 27, 1971; minimum gage height, 1.56 ft Oct. 1, 2, 1969.

REMARKS.--Records good. Records of water quality 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	.07	.63	2.2	.27	.35	11	.98	1.2	1.0	1.4	.23	.10
2	.08	.91	1.4	2.2	.40	9.4	1.1	1.2	.50	1.2	.20	.09
3	.08	.50	1.0	1.3	3.2	9.2	.75	3.4	.56	1.0	.21	.09
4	.08	.35	.90	1.0	3.8	3.3	.75	5.6	.45	.86	.18	.08
5	.08	.31	.80	1.5	1.3	2.8	.68	2.6	.35	1.6	.17	.08
6	.07	.27	5.0	.96	1.0	2.1	.62	1.9	.35	1.0	.17	.08
7	.07	.27	8.3	.75	.98	1.9	.68	1.7	.31	.76	.25	.08
8	.07	.21	3.9	.62	.68	2.0	.88	1.8	.27	.66	.19	.08
9	.08	.18	2.4	.88	.56	1.8	.75	7.8	.27	.60	.16	.10
10	.27	.21	2.0	1.2	.56	1.8	.68	4.4	.27	.56	.14	.08
11	.13	.18	1.8	1.3	.50	1.5	.68	2.5	.24	.51	.14	.08
12	.11	.15	1.5	1.6	.50	1.3	.62	2.0	.24	.48	.15	.16
13	.10	.15	1.4	1.7	7.6	1.1	3.6	1.7	.50	.52	.14	.11
14	.10	.12	1.3	1.6	3.7	1.4	1.9	3.3	.40	.53	.13	.10
15	.09	.18	1.2	1.1	2.2	1.8	5.4	2.2	.27	.40	.12	.09
16	.11	.15	1.0	.75	1.9	2.4	6.9	1.9	.45	2.4	.12	.09
17	.11	.12	.94	.56	1.5	3.0	6.0	1.6	.40	1.5	.15	.08
18	.10	.12	.92	.56	1.4	1.8	2.8	1.6	1.4	.69	.14	.10
19	.10	.12	.75	.62	1.7	1.4	2.2	1.2	.98	.53	.12	.10
20	.08	.12	.62	.56	1.4	1.2	2.2	1.4	.45	.46	.11	.09
21	.08	.15	.50	.56	1.1	1.1	1.8	1.1	9.3	.41	.11	.09
22	.08	.12	.40	.50	1.1	5.5	3.4	.94	143	.36	.11	.08
23	.09	.12	.35	.68	.97	2.8	2.6	.68	28	.33	.10	.07
24	.35	.13	.40	.62	.97	2.0	2.5	.62	7.4	.32	.10	.09
25	.31	3.0	.35	.88	1.1	1.8	1.9	.62	5.0	.30	.10	.09
26	.24	1.4	.35	.50	2.1	1.5	1.6	.56	3.0	.29	.09	.08
27	.18	1.8	.35	.45	2.0	1.3	1.4	.50	2.0	.28	.18	.09
28	.15	1.8	.31	.50	2.4	1.2	1.3	.45	1.5	.27	.12	.09
29	.12	6.9	.27	.45	6.0	1.1	1.1	.45	3.0	.26	.10	.09
30	.12	4.1	.35	.45	-----	1.1	1.0	.45	3.0	.25	.09	.12
31	.15	-----	.31	.40	-----	.92	-----	1.0	-----	.24	.09	-----
TOTAL	3.85	24.77	43.27	27.02	52.97	82.52	58.77	58.37	214.86	20.97	4.41	2.75
MEAN	.12	.83	1.40	.87	1.83	2.66	1.96	1.88	7.16	.68	.14	.092
MAX	.35	6.9	8.3	2.2	7.6	11	6.9	7.3	143	2.4	.25	.16
MTN	.07	.12	.27	.27	.35	.92	.62	.45	.24	.24	.09	.07
CFSM	.16	1.08	1.82	1.13	2.38	3.45	2.55	2.44	9.30	.88	.18	.12
IN.	.19	1.20	2.09	1.31	2.56	3.99	2.84	2.82	10.38	1.01	.21	.13

CAL YR 1971 TOTAL 331.76 MEAN .91 MAX 23 MIN .06 CFSM 1.18 IN 16.03
WTR YR 1972 TOTAL 594.53 MEAN 1.62 MAX 143 MIN .07 CFSM 2.10 IN 28.72

PEAK DISCHARGE (BASE, 35 CFS).--June 22 (0115) 604 cfs (5.71 ft).

SUSQUEHANNA RIVER BASIN

01570300 Conodoguinet Creek tributary No. 3 at Enola, Pa.

LOCATION.--Lat 40°18'05", long 76°56'57", Cumberland County, on right bank at upstream side of culvert on Valley Road, 1 mile northwest of Enola and 2.3 miles upstream from mouth.

DRAINAGE AREA.--0.38 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 416.56 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 263 cfs June 22 (gage height, 7.73 ft), from rating curve extended as explained below; no flow Sept. 17, 23, 26.

Period of record: Maximum discharge, 263 cfs June 22, 1972 (gage height, 7.73 ft), from rating curve extended above 15 cfs on basis of computation of peak flow through culvert; no flow on many days.

REMARKS.--Records good. Records of water quality 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	.02	.87	.76	.11	.21	5.9	.47	.70	.63	1.0	.06	.01
2	.03	.83	.40	1.8	.21	4.0	.61	.73	.31	.62	.05	.01
3	.03	.21	.29	.67	2.8	3.9	.41	2.7	.38	.49	.06	.02
4	.03	.13	.23	.47	2.3	1.4	.42	3.8	.19	.38	.05	.02
5	.03	.10	.18	.95	.53	1.3	.36	1.3	.14	1.0	.04	.02
6	.02	.08	3.4	.40	.47	.90	.33	.92	.14	.51	.04	.01
7	.02	.08	4.3	.32	.49	.86	.39	.81	.11	.36	.10	.01
8	.02	.06	1.6	.27	.39	.72	.52	.87	.08	.25	.06	.02
9	.02	.06	1.1	.64	.35	.35	.41	4.8	.08	.24	.04	.04
10	.38	.06	.91	.83	.33	.56	.36	2.1	.10	.23	.04	.02
11	.08	.04	.77	.84	.31	.49	.38	1.1	.06	.19	.04	.02
12	.06	.04	.54	.76	.31	.52	.32	.84	.06	.24	.04	.14
13	.03	.04	.46	.54	4.5	.48	2.6	.67	.31	.27	.04	.06
14	.03	.04	.41	.53	2.2	.79	.87	2.0	.14	.23	.03	.04
15	.03	.05	.43	.34	1.2	.95	3.5	1.2	.09	.18	.03	.03
16	.03	.04	.38	.23	.90	1.7	4.3	1.2	.27	1.4	.03	.03
17	.03	.04	.31	.28	.71	1.8	2.9	.87	.13	.79	.04	0
18	.03	.04	.26	.26	.66	.81	1.3	.90	1.6	.78	.04	.03
19	.03	.04	.22	.31	.89	.59	1.0	.57	.57	.16	.03	.02
20	.02	.04	.25	.28	.76	.53	1.0	.81	.18	.16	.02	.02
21	.02	.04	.21	.30	.63	.53	.72	.59	14	.10	.02	.02
22	.03	.04	.16	.30	.68	3.4	2.1	.45	99	.09	.02	.02
23	.03	.04	.14	.50	.59	1.4	1.4	.36	14	.09	.02	0
24	.16	.04	.16	.38	.59	.87	1.4	.30	4.7	.07	.02	.01
25	.43	2.8	.14	.63	.73	.71	.88	.25	3.1	.07	.02	.01
26	.21	.94	.14	.28	1.4	.62	.69	.22	2.0	.06	.02	0
27	.08	.71	.14	.24	1.2	.54	.58	.20	1.1	.08	.11	.01
28	.06	1.0	.14	.29	1.6	.50	.51	.18	2.4	.07	.05	.03
29	.05	3.7	.12	.25	3.9	.47	.46	.17	4.7	.05	.03	.03
30	.04	2.0	.16	.25	-----	.50	.43	.31	2.8	.06	.05	.05
31	.09	-----	.14	.21	-----	.45	-----	.99	-----	.08	.03	-----
TOTAL	2.17	14.20	18.85	14.46	31.84	38.54	31.62	32.91	153.37	9.80	1.27	.75
MEAN	.070	.47	.61	.47	1.10	1.24	1.05	1.06	5.11	.32	.041	.025
MAX	.43	3.7	4.3	1.8	4.5	5.9	4.3	4.8	99	1.4	.11	.14
MIN	.02	.04	.12	.11	.21	.35	.32	.17	.06	.05	.02	0
CFSM	.18	1.24	1.61	1.24	2.89	3.26	2.76	2.79	13.4	.84	.11	.07
IN.	.21	1.39	1.85	1.42	3.12	3.77	3.10	3.22	15.01	.96	.12	.07

CAL YR 1971 TOTAL 174.96 MEAN .48 MAX 13 MIN 0 CFSM 1.26 IN 17.13
WTR YR 1972 TOTAL 349.78 MEAN .96 MAX 99 MIN 0 CFSM 2.53 IN 34.24

PEAK DISCHARGE (BASE, 45 CFS).--June 22 (0115) 263 cfs (7.73 ft).

SUSQUEHANNA RIVER BASIN

169

01570500 Susquehanna River at Harrisburg, Pa.

LOCATION.--Lat 40°15'10", long 76°52'27", Dauphin County, on left bank at Nagle Street, 500 ft upstream from sanitary dam, 3,700 ft downstream from Walnut Street Bridge in Harrisburg, and 1.1 miles upstream from Paxton Creek.

DRAINAGE AREA.--24,100 sq mi, approximately.

PERIOD OF RECORD.--October 1890 to current year.

GAGE.--Water-stage recorder and concrete-slab control. Datum of gage is 290.01 ft above mean sea level. Supplementary nonrecording gage at Walnut Street Bridge at same datum. Prior to Oct. 1, 1928, nonrecording gage at Walnut Street Bridge at same datum. Sanitary dam built during period Sept. 30, 1913 to Aug. 29, 1916. Major repairs to dam Sept. 15 to Dec. 23, 1964.

AVERAGE DISCHARGE.--82 years, 33,930 cfs (19.12 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,020,000 cfs June 24 (gage height, 32.57 ft, from floodmark); minimum, 3,440 cfs Oct. 18 (gage height, 2.98 ft).

Period of record: Maximum discharge, 1,020,000 cfs June 24, 1972 (gage height, 32.57 ft from floodmark); minimum, 1,600 cfs Nov. 29, 1930, result of freezeup. Minimum daily discharge since construction of sanitary dam and not affected by freezeup, 1,700 cfs Sept. 18, 1964; minimum gage height, 1.83 ft Sept. 13, 1964. Maximum stage known during period 1786 to 1890, 26.8 ft at Walnut Street June 2, 1889 (discharge, 654,000 cfs).

REMARKS.--Records excellent except those for winter periods, which are good. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 711: 1929. WSP 1502: 1891-1923, 1926(M), 1928. WSP 1702: 1953 (total runoff in inches), 1958 (1957 calendar year mean discharge).

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	10,300	13,100	28,800	40,200	30,000	38,500	51,400	43,400	43,700	145,000	14,900	7,600
2	10,600	14,400	31,000	57,400	28,600	75,800	54,700	39,900	51,700	131,000	14,400	7,180
3	9,500	17,600	28,600	61,500	26,600	179,000	58,400	39,600	49,500	119,000	13,800	7,040
4	8,750	20,700	26,800	54,700	30,600	324,000	63,600	48,300	47,500	97,100	13,300	6,650
5	8,020	19,800	25,200	48,900	29,000	266,000	63,800	78,300	44,200	78,900	13,100	6,280
6	7,460	18,200	23,800	44,800	24,000	184,000	58,900	103,000	41,000	74,900	12,800	6,020
7	7,040	17,200	42,800	40,200	21,000	136,000	54,400	97,300	40,400	70,700	14,500	5,780
8	6,780	16,000	85,600	35,900	19,000	103,000	52,800	82,400	40,400	65,600	15,300	5,650
9	6,650	15,500	123,000	33,300	16,000	85,400	50,600	71,600	35,900	59,200	14,700	5,650
10	6,780	14,500	147,000	32,000	15,000	81,100	48,300	80,400	30,600	58,100	14,200	5,430
11	7,180	13,600	134,000	31,600	15,000	75,600	45,600	117,000	29,000	58,100	13,300	5,320
12	7,740	13,100	114,000	33,100	17,000	61,300	43,900	135,000	27,600	54,100	13,100	5,540
13	8,300	12,600	96,900	36,700	20,000	56,000	44,500	109,000	26,800	46,100	12,400	5,780
14	8,020	12,400	81,100	41,000	32,000	55,500	50,900	90,800	25,900	41,000	11,900	5,650
15	7,320	11,700	69,000	46,400	42,000	58,100	71,600	76,900	24,500	37,200	11,100	5,650
16	6,520	13,800	59,700	46,000	40,000	64,300	106,000	73,500	23,800	37,200	10,300	5,780
17	4,360	12,200	55,200	40,000	36,700	69,200	154,000	75,300	30,800	64,200	9,800	6,150
18	6,020	11,700	54,700	38,000	36,200	84,600	231,000	74,900	34,100	63,300	9,800	6,520
19	6,400	11,100	54,400	36,700	34,600	99,400	201,000	75,100	40,200	48,300	9,960	6,900
20	6,280	10,600	49,500	35,400	30,000	102,000	156,000	69,700	42,300	40,700	9,800	7,880
21	6,020	10,300	43,700	33,300	24,200	92,000	133,000	64,600	42,900	35,700	9,350	7,880
22	5,650	10,100	38,500	34,100	22,000	82,200	117,000	62,600	331,000	33,600	9,050	7,740
23	5,650	9,960	35,100	34,100	21,000	109,000	110,000	57,900	890,000	31,000	8,750	7,040
24	5,650	10,100	32,000	34,100	20,300	156,000	101,000	52,000	954,000	27,600	8,450	6,780
25	6,020	11,400	29,600	38,800	20,500	148,000	92,200	45,300	720,000	24,200	8,020	6,650
26	8,300	11,700	28,000	47,800	22,900	113,000	81,800	39,600	483,000	22,400	7,740	6,400
27	18,000	12,100	26,600	53,000	24,900	90,000	72,800	35,100	305,000	21,300	7,880	6,280
28	19,600	12,100	25,600	52,500	27,600	73,200	62,600	30,600	216,000	19,400	8,160	6,520
29	17,200	13,500	27,300	46,100	28,800	62,600	54,900	27,600	173,000	17,800	7,880	6,280
30	16,000	20,100	28,800	40,000	-----	55,800	48,300	24,900	158,000	16,800	7,880	6,280
31	14,000	-----	30,800	34,000	-----	52,000	-----	30,600	-----	15,700	7,740	-----
TOTAL	272,110	411,160	1,677,1M	1,281.6M	755,500	3,232.6M	2,535.0M	2,052.2M	5,002.8M	1,655.2M	343,360	192,300
MEAN	8,778	13,710	54,100	41,340	26,050	104,300	84,500	66,200	166,800	53,390	11,080	6,410
MAX	19,600	20,700	147,000	61,500	42,000	324,000	231,000	135,000	954,000	145,000	15,300	7,880
MIN	4,360	9,960	23,800	31,600	15,000	38,500	43,900	24,900	23,800	15,700	7,740	5,320
CFSM	.36	.57	2.24	1.72	1.08	4.33	3.51	2.75	6.92	2.22	.46	.27
IN.	.42	.63	2.59	1.98	1.17	4.99	3.91	3.17	7.72	2.55	.53	.30

CAL YR 1971 TOTAL 12,128,150 MEAN 33,230 MAX 214,000 MIN 4,080 CFSM 1.38 IN 18.72
WTR YR 1972 TOTAL 19,410,930 MEAN 53,040 MAX 954,000 MIN 4,360 CFSM 2.20 IN 29.96

PEAK DISCHARGE (BASE, 180,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-4	1200	16.88	336,000	6-24	0200	32.57	1,020,000
4-18	1100	13.39	238,000				

SUSQUEHANNA RIVER BASIN

01571500 Yellow Breeches Creek near Camp Hill, Pa.

LOCATION.--Lat 40°13'29", long 76°53'54", Cumberland County, on left bank 50 ft downstream from single-span highway bridge, 150 ft downstream from Olmsted's Mill dam, 1 mile southeast of Camp Hill and 3.1 miles upstream from mouth.

DRAINAGE AREA.--216 sq mi.

PERIOD OF RECORD.--April 1909 to December 1919, June 1954 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to June 1954, published as "at Olmsted's Mill."

GAGE.--Water-stage recorder. Datum of gage is 307.49 ft above mean sea level. March 1909 to December 1919, nonrecording gage at site 50 ft upstream at same datum.

AVERAGE DISCHARGE.--28 years (1909-1919, 1954-1972), 276 cfs (17.35 inches per year).

EXTREMES.--Current year: Maximum discharge, 15,900 cfs June 22 (gage height, 18.33 ft, from floodmarks); minimum daily, 125 cfs Sept. 12.

Period of record: Maximum discharge, 15,900 cfs June 22, 1972 (gage height, 18.33 ft, from floodmarks), minimum, 23 cfs Sept. 12, 1966 (gage height, 0.17 ft); minimum daily, 67 cfs Sept. 13, 1966.

Flood of July 22, 1953, reached a stage of 9.4 ft, from floodmarks (discharge, 3,940 cfs, from rating curve extended above 2,500 cfs).

REMARKS.--Records fair. The Mechanicsburg Water Co. diverts water at a point about 4 miles upstream from station for municipal water supply, equivalent to a mean discharge at station of 1.1 cfs. Some diurnal fluctuation at low flow caused by mill above station.

REVISIONS (WATER YEARS).--WSP 1302: 1910, 1912-13, 1914(M), 1916.

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	248	527	238	211	1,060	405	455	580	873	330	224
2	147	402	393	359	228	1,610	426	493	430	744	320	196
3	149	333	339	450	264	1,810	414	570	350	687	310	181
4	145	275	308	333	661	1,720	384	1,140	400	639	300	170
5	145	241	278	341	367	1,180	378	927	600	669	290	163
6	145	226	313	327	333	916	367	694	350	711	300	153
7	141	223	795	291	319	779	369	623	260	610	320	145
8	138	213	966	275	269	704	375	589	230	567	330	136
9	138	206	842	275	259	610	363	782	210	537	315	130
10	195	206	838	356	261	560	342	1,080	190	507	298	130
11	218	202	866	347	254	520	336	745	180	518	279	130
12	169	195	792	373	248	502	332	642	170	475	275	125
13	155	190	651	344	562	487	492	594	170	462	283	130
14	153	188	556	388	897	491	635	596	220	462	283	140
15	149	190	505	336	621	584	774	627	260	437	265	145
16	145	197	468	246	555	569	973	594	264	444	277	150
17	143	184	426	280	502	738	1,210	569	287	447	298	140
18	140	180	393	297	475	596	931	587	329	470	292	135
19	141	180	362	302	508	515	761	529	483	422	306	130
20	140	180	347	297	452	477	688	582	320	395	304	190
21	138	177	339	288	414	461	632	545	609	376	298	174
22	138	171	316	283	454	661	644	440	12,400	361	296	172
23	138	165	291	288	393	788	804	378	12,300	348	328	163
24	155	165	283	286	403	588	708	393	7,510	336	350	155
25	248	243	288	278	390	533	611	341	3,660	330	302	150
26	438	280	278	256	497	508	559	322	1,910	323	275	145
27	278	272	269	241	572	483	524	276	1,350	328	298	145
28	221	275	264	243	503	465	487	254	1,080	330	330	150
29	199	556	254	241	610	443	466	240	971	315	287	155
30	188	854	248	236	-----	436	454	230	1,090	308	259	155
31	190	-----	254	228	-----	423	-----	350	-----	319	265	-----
TOTAL	5,372	7,617	14,049	9,323	12,482	22,217	16,844	17,187	49,163	14,750	9,263	4,607
MEAN	173	254	453	301	430	717	561	554	1,639	476	299	154
MAX	438	854	966	450	897	1,810	1,210	1,140	12,400	873	350	224
MIN	138	165	248	228	211	423	332	230	170	308	259	125
CFSM	.80	1.18	2.10	1.39	1.99	3.32	2.60	2.56	7.59	2.20	1.38	.71
IN.	.93	1.31	2.42	1.61	2.15	3.83	2.90	2.96	8.47	2.54	1.60	.79

CAL YR 1971 TOTAL 124,246 MEAN 340 MAX 1,880 MIN 128 CFSM 1.57 IN 21.40
WTR YR 1972 TOTAL 182,874 MEAN 500 MAX 12,400 MIN 125 CFSM 2.31 IN 31.49

PEAK DISCHARGE (BASE, 1,250 CFS)

*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	2200	4.63	1,360	5- 4	1330	5.11	1,570
3- 3	1300	6.03	2,000	5- 9	2400	4.35	1,270
4-17	0530	4.37	1,280	6-22	0900*	18.33	15,900

01573000 Swatara Creek at Harper Tavern, Pa.

LOCATION.--Lat 40°24'09", long 76°34'39", Lebanon County, on left bank 10 ft downstream from bridge on State Highway 934 at Harper Tavern, 6 miles northwest of Annville and 8.5 miles downstream from Little Swatara Creek.

DRAINAGE AREA.--337 sq mi.

PERIOD OF RECORD.--January 1919 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1927, published as "at Harpers."

GAGE.--Water-stage recorder. Datum of gage is 356.68 ft above mean sea level. Prior to July 16, 1931, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--53 years, 556 cfs (22.41 inches per year).

EXTREMES.--Current year: Maximum discharge, 66,700 cfs June 23 (gage height, 23.72 ft, from floodmark in gage shelter), from rating curve extended as explained below; minimum daily, 64 cfs Sept. 10, 11.

Period of record: Maximum discharge, 66,700 cfs June 23, 1972 (gage height, 23.72 ft, from floodmark in gage shelter), from rating curve extended above 25,000 cfs on basis of slope-area measurement of peak flow; minimum, 6.0 cfs Aug. 21, 1965 (gage height, -0.10 ft).

Flood of June 1, 1889, reached a stage of 25.6 ft, from floodmark (discharge, 88,000 cfs, revised, from rating curve extended as explained above).

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

REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 1202: 1948. WSP 1302: 1920(M), 1921, 1924-25(M), 1927-28(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	144	1,200	2,180	336	336	1,870	509	410	1,620	1,840	177	81
2	136	3,220	1,450	675	364	3,310	492	414	716	1,420	163	76
3	139	2,070	1,100	966	418	5,120	448	645	640	1,250	144	74
4	133	1,360	919	710	1,850	3,000	423	2,680	518	1,150	183	74
5	125	996	765	892	919	2,110	414	2,640	444	1,070	149	72
6	123	787	942	776	620	1,520	377	1,560	381	1,050	126	70
7	113	809	2,900	670	560	1,250	369	1,190	356	760	142	68
8	106	665	2,720	615	500	1,170	364	1,050	305	645	174	66
9	103	541	2,270	620	460	925	340	1,390	276	942	139	66
10	282	509	1,950	1,220	440	809	313	2,030	272	760	121	64
11	452	474	1,920	1,090	430	690	305	1,430	247	705	109	64
12	250	418	1,580	1,270	380	655	302	1,180	219	582	107	72
13	190	393	1,330	1,100	1,450	650	453	1,000	240	536	121	77
14	171	356	1,100	1,960	2,710	630	635	925	258	500	121	81
15	161	344	1,060	1,100	1,490	670	545	954	226	453	99	80
16	147	360	903	760	1,220	732	660	1,000	298	444	91	74
17	141	298	798	820	984	1,810	1,710	793	431	582	91	70
18	130	279	705	875	842	1,340	1,240	675	645	418	98	68
19	147	268	610	743	776	1,060	990	605	1,120	364	98	70
20	123	298	591	665	625	886	892	563	1,170	332	89	83
21	113	283	577	610	580	787	837	541	2,240	302	84	76
22	111	254	514	559	620	1,370	721	487	34,400	287	89	71
23	111	216	444	582	530	1,820	820	435	42,500	258	71	68
24	139	205	448	610	554	1,300	782	393	11,800	233	69	67
25	311	2,770	444	650	514	1,080	675	364	4,810	226	67	68
26	1,240	2,490	414	527	635	936	582	332	3,510	250	66	70
27	730	1,370	402	435	743	804	527	309	2,400	205	93	69
28	530	1,180	381	427	680	710	478	291	1,760	196	113	70
29	430	2,040	352	410	948	635	453	276	1,840	180	120	70
30	367	4,360	348	406	-----	605	427	265	2,920	166	100	74
31	345	-----	406	344	-----	554	-----	966	-----	163	88	-----
TOTAL	7,743	30,813	32,523	23,423	23,178	40,808	18,083	27,793	118,562	18,269	3,502	2,153
MEAN	250	1,027	1,049	756	799	1,316	603	897	3,952	589	113	71.8
MAX	1,240	4,360	2,900	1,960	2,710	5,120	1,710	2,680	42,500	1,840	183	83
MIN	103	205	348	336	336	554	302	265	219	163	66	64
CFSM	.74	3.05	3.11	2.24	2.37	3.91	1.79	2.66	11.7	1.75	.34	.21
IN.	.85	3.40	3.59	2.59	2.56	4.50	2.00	3.07	13.09	2.02	.39	.24
CAL YR 1971	TOTAL 245,231	MEAN 672	MAX 9,030	MIN 69	CFSM 1.99	IN 27.07						
WTR YR 1972	TOTAL 346,850	MEAN 948	MAX 42,500	MIN 64	CFSM 2.81	IN 38.29						

PEAK DISCHARGE (BASE, 4,800 CFS)

NOTE.--No gage-height record
June 22, 23.
*About.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-30	0500	7.76	5,660	6-23	0030*	23.72	66,700
3- 3	1500	7.86	5,780				

SUSQUEHANNA RIVER BASIN

01573086 Beck Creek near Cleona, Pa.

LOCATION.--Lat 40°19'24", long 76°29'00", Lebanon County, on right bank at bridge on Township Road T421, 0.4 mile upstream from mouth, and one mile south of Cleona.

DRAINAGE AREA.--7.87 sq mi.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 414.77 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 6.83 cfs (11.79 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,150 cfs June 22 (gage height, 11.53 ft), from rating curve extended as explained below; minimum, 2.4 cfs Nov. 24; minimum gage height, 3.58 ft Oct. 19, 20.

Period of record: Maximum discharge, 5,150 cfs June 22, 1972 (gage height, 11.53 ft), from rating curve extended above 100 cfs on basis of computation of peak flow through culvert and over road; minimum, no flow Jan. 30, 31, 1966.

REMARKS.--Records 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	3.3	6.7	18	6.7	8.6	27	15	10	16	39	11	6.9
2	3.4	12	14	9.2	8.4	35	14	10	11	36	11	6.9
3	3.4	9.8	13	8.6	10	27	14	11	11	36	10	6.9
4	3.0	7.6	12	7.9	14	21	14	18	10	33	9.5	6.9
5	2.9	6.4	11	8.6	9.2	20	14	13	9.8	33	9.2	6.7
6	2.9	5.6	12	7.9	9.2	18	14	12	8.9	29	9.2	6.7
7	2.8	5.4	20	7.9	9.5	17	13	12	8.6	28	9.8	6.9
8	2.6	4.9	17	7.6	8.6	17	13	12	8.4	26	9.2	6.9
9	2.8	4.7	14	8.1	8.6	16	12	14	8.4	25	8.6	6.9
10	4.7	4.7	13	10	8.6	16	12	16	7.9	23	8.1	6.7
11	4.3	4.5	13	9.2	8.4	15	11	13	7.4	22	8.1	6.4
12	3.9	4.5	11	9.2	8.4	15	11	13	7.4	22	7.9	7.2
13	3.7	4.3	11	9.2	18	15	12	12	6.9	24	7.9	6.9
14	3.6	4.0	10	13	13	15	15	13	6.9	21	7.6	6.9
15	3.4	4.0	9.8	11	11	15	14	13	6.7	20	7.4	6.7
16	3.4	3.9	9.2	9.5	11	15	17	13	6.9	20	7.2	6.4
17	3.2	3.7	8.4	9.8	10	21	20	12	6.9	18	7.4	6.2
18	3.0	3.4	7.9	10	10	17	16	12	6.2	18	7.4	6.2
19	3.1	3.3	7.6	10	8.9	16	14	12	7.4	17	7.2	6.2
20	2.9	3.1	7.6	10	8.1	15	13	11	8.1	17	7.2	6.0
21	2.8	3.1	7.4	9.8	7.6	15	13	11	26	16	7.2	6.0
22	2.7	2.8	6.9	8.6	8.4	21	12	11	1,440	15	6.7	5.6
23	2.9	2.7	6.4	8.9	8.6	20	14	11	139	15	6.4	5.4
24	3.5	2.6	6.7	8.9	8.9	17	15	11	97	14	6.4	5.4
25	5.0	16	6.4	9.2	8.9	17	13	11	83	13	6.4	5.4
26	7.8	10	6.2	8.4	9.2	17	12	10	70	13	6.7	5.3
27	6.0	8.1	6.2	8.1	10	16	11	9.8	59	12	9.5	5.1
28	5.1	8.1	6.0	8.4	14	16	11	9.8	51	12	7.6	4.9
29	4.7	21	5.8	8.4	19	15	11	9.5	50	11	7.2	5.1
30	4.2	36	5.6	8.9	-----	15	11	9.2	46	11	7.2	5.1
31	4.3	-----	6.4	8.6	-----	15	-----	15	-----	11	6.9	-----
TOTAL	115.3	216.9	309.5	279.6	296.1	557	401	370.3	2,231.8	650	249.1	186.8
MEAN	3.72	7.23	9.98	9.02	10.2	18.0	13.4	11.9	74.4	21.0	8.04	6.23
MAX	7.8	36	20	13	19	35	20	18	1,440	39	11	7.2
MIN	2.6	2.6	5.6	6.7	7.6	15	11	9.2	6.2	11	6.4	4.9
CFSM	.47	.92	1.27	1.15	1.30	2.29	1.70	1.51	9.45	2.67	1.02	.79
IN.	.55	1.03	1.46	1.32	1.40	2.63	1.90	1.75	10.55	3.07	1.18	.88

CAL YR 1971 TOTAL 2,931.1 MEAN 8.03 MAX 122 MIN 2.6 CFSM 1.02 IN 13.85
WTR YR 1972 TOTAL 5,863.4 MEAN 16.0 MAX 1,440 MIN 2.6 CFSM 2.03 IN 27.72

PEAK DISCHARGE (BASE, 80 CFS).--Nov. 30 (0045) 85 cfs (5.12 ft); June 22 (0900) 5,150 cfs (11.53 ft).

SUSQUEHANNA RIVER BASIN

173

01574000 West Conewago Creek near Manchester, Pa.

LOCATION.--Lat 40°04'56", long 76°43'13", York County, on left bank 500 ft upstream from bridge on State Highway 181, 0.7 mile downstream from Little Conewago Creek, and 1.5 miles north of Manchester.

DRAINAGE AREA.--510 sq mi.

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for October 1928, published in WSP 1302. Prior to October 1931, published as Conewago Creek near Manchester.

GAGE.--Water-stage recorder. Datum of gage is 263.68 ft above mean sea level.

AVERAGE DISCHARGE.--44 years, 579 cfs (15.42 inches per year).

EXTREMES.--Current year: Maximum discharge, 81,700 cfs June 22 (gage height, 30.26 ft, from floodmark in gage shelter), from rating curve extended as explained below; minimum, 40 cfs Sept. 11; minimum gage height, 1.92 ft Oct. 23, 24.

Period of record: Maximum discharge, 81,700 cfs June 22, 1972 (gage height, 30.26 ft, from floodmark in gage shelter), from rating curve extended above 45,000 cfs on basis of slope-area measurement of peak flow; minimum, 1.9 cfs Oct. 13, 1941; minimum gage height, 1.03 ft Aug. 9, 1966.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Occasional regulation by Conewago Lake (capacity, 3,570 acre-ft) since October 1959.

REVISIONS.--WSP 741: Drainage area. WSP 1502: 1930, 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	120	960	3,260	301	251	5,340	519	578	792	1,750	240	76
2	107	2,270	1,710	620	291	5,790	532	553	587	1,080	220	67
3	103	1,580	1,170	2,000	355	5,820	574	636	355	887	220	63
4	109	1,130	969	920	3,500	3,550	478	2,940	383	1,150	210	63
5	229	740	857	957	1,500	2,150	457	2,470	816	922	181	61
6	229	581	818	1,120	896	1,470	422	1,170	351	1,340	163	59
7	216	528	3,190	738	777	1,140	397	879	277	934	156	55
8	210	495	4,390	628	579	1,060	411	790	243	792	158	53
9	204	429	2,460	592	431	882	428	1,390	208	683	235	48
10	404	398	1,910	1,150	400	757	386	4,180	186	624	181	44
11	1,080	394	1,630	1,250	370	693	354	1,800	177	564	141	44
12	551	364	1,310	1,100	360	651	349	1,120	164	503	122	43
13	272	337	1,100	930	1,380	646	838	900	176	610	116	47
14	207	319	893	1,110	3,910	641	2,710	807	234	560	118	49
15	170	282	794	968	1,800	1,160	2,400	923	313	520	158	58
16	149	261	759	600	1,450	1,010	4,130	861	246	540	131	61
17	130	234	686	429	1,200	2,510	4,670	728	253	600	116	52
18	124	211	597	542	985	1,650	2,200	713	243	540	109	50
19	115	201	524	602	1,130	1,080	1,440	727	321	480	114	47
20	106	197	485	567	900	870	1,120	609	348	440	131	91
21	100	200	485	534	860	763	982	995	1,610	400	116	103
22	97	195	446	494	940	1,310	1,040	689	62,000	370	101	71
23	94	180	388	476	819	3,270	2,350	547	37,000	350	87	56
24	104	163	359	534	807	1,600	1,700	453	10,000	320	76	58
25	188	1,430	376	571	774	1,200	1,410	397	5,800	310	69	56
26	2,340	3,000	362	487	1,330	920	1,040	349	3,500	330	69	52
27	1,120	1,720	348	360	2,380	820	862	315	2,000	290	73	50
28	606	1,620	332	321	1,800	689	742	292	1,400	270	91	49
29	441	3,490	315	322	2,810	622	666	277	1,400	260	114	50
30	360	8,650	297	324	-----	585	614	268	1,980	250	127	52
31	323	-----	310	305	-----	559	-----	339	-----	250	95	-----
TOTAL	10,608	32,559	33,530	21,852	34,985	51,208	36,221	29,695	133,363	18,919	4,238	1,728
MEAN	342	1,085	1,082	705	1,206	1,652	1,207	958	4,445	610	137	57.6
MAX	2,340	8,650	4,390	2,000	3,910	5,820	4,670	4,180	62,000	1,750	240	103
MIN	94	163	297	301	251	559	349	268	164	250	69	43
CFSM	.67	2.13	2.12	1.38	2.36	3.24	2.37	1.88	8.72	1.20	.27	.11
IN.	.77	2.37	2.45	1.59	2.55	3.74	2.64	2.17	9.73	1.38	.31	.13

CAL YR 1971 TOTAL 271,106 MEAN 743 MAX 8,860 MIN 35 CFSM 1.46 IN 19.77
WTR YR 1972 TOTAL 408,906 MEAN 1,117 MAX 62,000 MIN 43 CFSM 2.19 IN 29.83

PEAK DISCHARGE (BASE, 10,800 CFS).--Nov. 30 (0600) 12,700 cfs (12.28 ft); June 22 (1000)* 81,700 cfs (30.26 ft).

NOTE.--No gage-height record June 22-30.

*About.

SUSQUEHANNA RIVER BASIN

01574500 Codorus Creek at Spring Grove, Pa.

LOCATION.--Lat 39°52'43", long 76°51'13", York County, on right bank at downstream side of county highway bridge No. 132, 0.1 mile downstream from unnamed tributary, 0.3 mile downstream from east boundary of Spring Grove, and 7 miles southwest of York.

DRAINAGE AREA.--75.5 sq mi. Area at site used prior to Nov. 1, 1965, 74.3 sq mi.

PERIOD OF RECORD.--May 1929 to September 1964, November 1965 to current year. Monthly discharge only for some periods, published in WSP 1302. October 1962 to September 1968, published as West Branch Codorus Creek at Spring Grove.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 430.86 ft above mean sea level. Prior to Jan. 18, 1930, nonrecording gage, Jan. 18, 1930 to Sept. 9, 1941, water-stage recorder at site 0.9 mile upstream and Sept. 10, 1941 to Sept. 30, 1964, water-stage recorder at site 0.8 mile upstream, all at datum 5.64 ft higher. Nov. 1 to Dec. 20, 1965, nonrecording gage about 40 ft downstream from gage at unknown datum, Dec. 21, 1965 to Mar. 31, 1966, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--41 years (1929-64, 1966-72), 76.0 cfs (13.67 inches per year), adjusted for diversion since March 1961 and for storage since 1966.

EXTREMES.--Current year: Maximum discharge, 19,400 cfs June 22 (gage height, 15.57 ft, from floodmark in gage shelter), from rating curve extended as explained below; minimum daily, 26 cfs Sept. 10.

Period of record: Maximum discharge, 19,400 cfs June 22, 1972 (gage height, 15.57 ft, from floodmark in gage shelter), from rating curve extended above 1,300 cfs on basis of computations of flow over dam at gage height, 6.80 ft and at peak flow; no flow part of day Oct. 26, 1947; minimum daily, 0.6 cfs Sept. 4, 1966.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Daily discharges include water diverted around station by waste treatment plant of P. H. Glatfelter Company.

COOPERATION.--Records of change in reservoir contents and daily diversion furnished by P. H. Glatfelter Company.

REVISIONS (WATER YEARS).--WSP 1302: 1929-30. WSP 1502: 1932(M), 1933, 1935(M), 1940, 1942(M), 1943, 1944-46(M), 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	57	78	248	54	57	388	86	115	231	290	80	36
2	58	103	212	135	60	339	105	114	114	243	77	38
3	60	111	162	93	100	350	92	139	94	219	76	38
4	56	84	156	96	283	260	89	213	84	204	67	36
5	56	69	128	145	105	247	85	164	135	238	65	34
6	54	63	151	124	89	216	79	126	103	208	62	33
7	55	66	364	126	88	205	74	115	98	181	66	33
8	61	57	400	121	74	200	77	110	82	208	90	31
9	57	55	260	140	70	180	70	188	72	190	61	32
10	196	55	210	190	67	177	77	214	70	176	54	26
11	93	55	180	165	64	170	68	161	64	168	53	29
12	78	52	150	157	63	169	64	138	64	161	51	31
13	80	66	140	151	260	167	155	123	69	254	60	35
14	75	50	130	158	173	182	117	119	99	172	52	38
15	63	50	110	143	134	184	198	125	80	160	53	38
16	53	60	120	130	122	179	223	126	79	150	50	36
17	51	57	100	127	118	280	404	111	75	130	50	35
18	50	55	96	110	125	188	235	113	73	120	60	46
19	50	56	88	113	174	166	196	101	69	110	56	44
20	54	60	82	97	142	141	178	114	75	100	50	38
21	54	57	76	107	136	137	155	106	250	96	46	37
22	55	54	75	82	156	250	231	97	11,000	92	43	36
23	54	50	74	83	144	174	223	88	3,200	88	43	34
24	60	59	78	82	148	137	218	82	1,500	100	49	37
25	162	243	68	85	160	121	181	76	954	137	46	36
26	197	153	73	71	277	115	156	71	602	94	76	38
27	84	121	58	69	240	107	142	77	467	91	50	37
28	65	138	78	81	254	102	130	75	395	86	42	38
29	56	510	53	70	372	98	123	74	350	82	40	41
30	50	584	62	69	-----	94	117	67	420	78	38	46
31	60	-----	58	61	-----	93	-----	125	-----	83	37	-----
TOTAL	2,254	3,271	4,240	3,435	4,255	5,816	4,348	3,667	20,968	4,709	1,743	1,087
MEAN	72.7	109	137	111	147	188	145	118	699	152	56.2	36.2
MAX	197	584	400	190	372	388	404	214	11,000	290	90	46
MIN	50	50	53	54	57	93	64	67	64	78	37	26
(%)	-10.7	+17.8	+10.7	-19.4	+25.4	-2.3	+13.4	0	0	-30.2	-15.0	-29.2
MEAN [≠]	62.0	127	148	91.6	172	186	158	118	699	122	41.2	7.0
CFSM [≠]	.82	1.68	1.96	1.21	2.28	2.46	2.09	1.56	9.26	1.62	.55	.09
IN. [≠]	.94	1.87	2.26	1.40	2.46	2.84	2.33	1.80	10.33	1.87	.63	.10
CAL YR 1971	TOTAL 40,912	MEAN 112	MAX 1,300	MIN 40	MEAN [≠] 111	CFSM [≠] 1.47	IN. [≠] 20.05					
WTR YR 1972	TOTAL 59,793	MEAN 163	MAX 11,000	MIN 26	MEAN [≠] 160	CFSM [≠] 2.12	IN. [≠] 28.83					

NOTE.--No gage-height record June 21-24.

[≠] Figures of net change in contents, in cubic feet per second, in Lake Marburg.

[≠] Adjusted for change in contents in Lake Marburg.

01574800 East Branch Codorus Creek tributary near Winterstown, Pa.

LOCATION.--Lat 39°48'57", long 76°37'59", York County, on right bank 20 ft downstream from highway bridge, 1.5 miles upstream from mouth, and 1.7 miles southwest of Winterstown.

DRAINAGE AREA.--5.17 sq mi.

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum, water years 1960-68. October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 680 ft (from topographic map). November 1959 to September 1968, crest-stage gage at same site and datum.

EXTREMES.--Current year: Maximum discharge, 2,190 cfs June 22 (gage height, 10.44 ft, from floodmark in gage well), from rating curve extended as explained below; minimum, 2.8 cfs Sept. 17; minimum gage height, 2.86 ft June 11.

Period of record: Maximum discharge, 2,190 cfs June 22, 1972 (gage height, 10.44 ft, from floodmark in gage well), from rating curve extended above 80 cfs on basis of slope-area measurement of peak flow; minimum, 1.2 cfs July 1, 1969 (gage height, 2.62 ft).

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

WRD Penna	Date	Discharge (cfs)	Gage Height (feet)
Water Year			
1969	July 28, 1969	562	7.02
1970	July 9, 1970	290	5.50
1971	Feb. 8, 1971	280	5.45

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

REVISIONS.--The figures of peak discharge for water years 1969-71 have been revised as shown in the following table. They supersede figures published in WRD Penna. 1970-71.

REVISED PEAK DISCHARGE.--1970: Apr. 2 (1330) 100 cfs (4.26 ft); June 18 (1915) 90 cfs (4.17 ft); June 21 (1330) 83 cfs (4.10 ft); July 2 (0500) 286 cfs (5.48 ft); July 9 (1500) 290 cfs (5.50 ft).
1971: Nov. 4 (2100) 115 cfs (4.39 ft); Feb. 8 (1930) 280 cfs (5.45 ft); Feb. 13 (1445) 271 cfs (5.40 ft); June 14 (1400) 128 cfs (4.49 ft); Aug. 3 (1915) 171 cfs (4.80 ft); Aug. 27 (1745) 100 cfs (4.26 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	6.3	7.4	23	7.2	5.7	26	10	9.3	7.7	29	7.8	4.3
2	7.7	9.3	19	11	6.0	33	10	8.9	6.3	24	7.4	4.3
3	6.9	10	17	8.3	13	35	9.3	11	5.7	21	7.4	4.3
4	6.3	8.6	16	8.0	14	26	9.6	16	6.3	20	7.1	4.1
5	6.3	8.0	14	9.3	9.3	23	8.9	11	6.3	22	6.8	4.1
6	6.0	8.0	14	7.7	8.9	20	8.9	10	5.7	20	6.8	3.9
7	5.7	8.0	19	7.4	8.6	19	9.3	10	5.4	18	11	3.9
8	5.7	7.7	18	7.2	7.4	18	8.9	9.6	5.2	20	8.2	3.7
9	5.4	7.4	17	8.3	7.2	16	8.3	14	4.9	18	6.8	3.7
10	16	7.4	16	8.9	6.9	14	8.0	12	4.9	17	6.3	3.5
11	8.9	7.4	15	8.3	6.9	14	8.3	11	4.5	16	6.1	3.5
12	7.7	7.4	14	8.0	6.9	13	8.0	11	4.5	19	6.1	3.7
13	7.2	7.2	14	7.7	33	13	11	10	6.6	23	7.7	3.7
14	7.2	6.9	13	8.0	19	14	9.3	10	6.3	18	6.1	3.7
15	6.9	7.4	12	7.2	16	13	13	11	5.2	15	5.9	3.5
16	6.9	6.9	12	6.8	14	12	13	10	5.4	14	5.6	3.3
17	6.6	6.6	11	6.6	13	17	14	9.3	4.9	13	5.9	3.2
18	6.6	6.6	11	6.9	13	14	12	8.6	4.9	12	5.6	5.9
19	6.3	6.6	10	7.2	15	13	11	8.3	4.9	11	5.4	4.1
20	6.0	6.6	10	7.2	13	12	11	9.6	4.7	11	5.2	3.5
21	6.0	6.6	10	7.2	12	12	10	8.6	47	10	5.0	3.5
22	6.0	6.0	8.9	7.2	11	17	13	8.3	474	9.6	5.0	3.5
23	6.0	5.7	8.6	7.4	11	15	11	7.7	172	9.0	5.0	3.2
24	9.6	6.0	8.6	7.2	11	14	12	7.4	109	10	4.8	3.3
25	10	19	8.3	6.9	11	13	11	7.2	79	15	7.7	3.3
26	9.3	11	8.3	6.3	15	12	11	6.9	52	11	5.9	3.3
27	7.7	11	8.0	6.0	14	12	10	6.9	42	9.0	5.0	3.2
28	7.4	11	8.0	6.6	14	11	10	6.9	35	8.6	5.0	3.2
29	7.2	29	7.7	6.3	18	11	9.6	6.6	32	8.0	4.8	3.2
30	6.9	32	8.0	6.3	-----	11	9.3	6.9	35	7.6	4.5	4.3
31	7.7	-----	7.7	6.0	-----	10	-----	9.3	-----	8.0	4.3	-----
TOTAL	226.4	288.7	387.1	230.6	353.8	503	308.7	293.3	1,187.3	466.8	192.2	111.9
MEAN	7.30	9.62	12.5	7.44	12.2	16.2	10.3	9.46	39.6	15.1	6.20	3.73
MAX	16	32	23	11	33	35	14	16	474	29	11	5.9
MIN	5.4	5.7	7.7	6.0	5.7	10	8.0	6.6	4.5	7.6	4.3	3.2
CFSM	1.41	1.86	2.42	1.44	2.36	3.13	1.99	1.83	7.66	2.92	1.20	.72
IN.	1.63	2.08	2.79	1.66	2.55	3.62	2.22	2.11	8.54	3.36	1.38	.81

CAL YR 1971 TOTAL 3,431.1 MEAN 9.40 MAX 107 MIN 3.1 CFSM 1.82 IN 24.69
WTR YR 1972 TOTAL 4,549.8 MEAN 12.4 MAX 474 MIN 3.2 CFSM 2.40 IN 32.74

PEAK DISCHARGE (BASE, 75 CFS)

NOTE.--No gage-height record
June 26 to Aug. 2

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	1730	4.25	98	7- 8	1845	5.28	201
2-13	1200	4.61	143	7-16	1715	5.31	206
6-22	0500	10.44	2,190				

SUSQUEHANNA RIVER BASIN

01575000 South Branch Codorus Creek near York, Pa.

LOCATION.--Lat 39°55'14", long 76°44'57", York County, on right bank 100 ft downstream from dam of pumping station of York Water Co., 200 ft upstream from Penn Central Railroad Bridge, 0.5 mile upstream from mouth, and 3 miles southwest of York.

DRAINAGE AREA.--117 sq mi.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only prior to October 1931, published in WSP 1302. May 1925 to September 1927 (gage heights and discharge measurements only) in reports of Pennsylvania Department of Forests and Waters.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 373.03 ft above mean sea level, adjustment of 1907. Prior to Aug. 21, 1928, nonrecording gage at site 180 ft upstream at datum 5.00 ft higher.

AVERAGE DISCHARGE.--45 years, 129 cfs (14.97 inches per year), adjusted for diversion and, since October 1966, for storage.

EXTREMES.--Current year: Maximum discharge, 26,700 cfs June 22 (gage height, 22.62 ft, from floodmarks), from rating curve extended as explained below; minimum daily, 18 cfs Sept. 10.

Period of record: Maximum discharge, 26,700 cfs June 22, 1972 (gage height, 22.62 ft, from floodmarks), from rating curve extended above 600 cfs on basis of slope-area, contracted-opening, and contracted opening and flow-over-road measurements at gage heights, 9.04 ft, 17.97 ft, and of peak flow; no flow at times.

REMARKS.--Records good prior to June 19, poor thereafter. Regulation at low flow by pumping plant above station. Some regulation, during entire period of record, from reservoirs of York Water Company (combined capacity, 2,500,000,000 gal). Diversion above station for municipal supply of city of York.

REVISIONS (WATER YEARS).--WSP 1302: 1931. WSP 1502: 1932-33, 1941, 1948.

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	52	116	424	101	79	509	173	154	697	270	105	31
2	65	154	363	235	90	558	173	139	209	260	95	29
3	82	257	279	150	132	562	143	175	170	340	95	28
4	53	132	279	124	473	427	164	329	194	250	102	40
5	47	120	240	192	182	391	128	187	294	278	95	27
6	46	116	224	124	180	320	141	189	139	267	90	29
7	46	124	357	116	152	305	132	152	137	256	132	27
8	38	99	360	122	128	282	157	150	110	220	136	27
9	41	97	294	128	124	238	128	243	108	240	95	25
10	317	92	268	209	120	243	112	276	103	220	70	18
11	139	90	259	150	105	204	124	182	92	200	73	20
12	87	87	240	150	108	227	122	170	84	181	70	22
13	73	92	204	134	546	192	222	185	110	261	74	29
14	68	89	209	161	317	222	189	159	159	145	64	31
15	69	86	185	120	229	207	296	170	105	186	56	50
16	65	81	185	103	240	207	302	175	92	200	53	31
17	63	73	175	101	182	372	455	132	101	215	53	29
18	58	72	152	112	189	235	271	132	96	220	56	40
19	56	72	157	118	302	232	268	132	78	186	61	68
20	49	75	152	116	199	199	222	150	72	128	54	30
21	50	78	139	114	194	189	222	141	600	186	48	34
22	52	63	132	118	197	302	279	118	16,000	167	45	34
23	54	58	112	132	154	282	282	108	8,000	160	43	31
24	106	66	141	110	180	224	251	97	2,000	114	43	33
25	173	424	120	120	166	222	229	99	1,100	116	40	32
26	291	259	122	86	323	212	197	82	620	116	114	24
27	132	209	114	86	296	189	182	84	460	109	66	24
28	103	219	108	101	273	185	175	86	370	98	53	46
29	92	593	101	96	398	185	175	87	320	98	48	24
30	84	1,020	114	96	-----	170	166	78	290	96	43	27
31	96	-----	120	86	-----	168	-----	341	-----	95	33	-----
TOTAL	2,747	5,113	6,329	3,911	6,258	8,460	6,080	4,902	32,910	5,878	2,205	940
MEAN	88.6	170	204	126	216	273	203	158	1,097	190	71.1	31.3
MAX	317	1,020	424	235	546	562	455	341	16,000	340	136	68
MIN	38	58	101	86	79	168	112	78	72	95	33	18
(\neq)	31.2	30.5	29.2	28.9	28.0	28.4	28.5	29.9	29.1	30.1	34.1	32.7
MEAN \neq	120	200	233	155	244	301	232	188	1,126	220	105	64.0
CFSM \neq	1.03	1.71	1.99	1.32	2.09	2.87	1.98	1.61	9.62	1.88	1.90	.55
IN. \neq	1.19	1.91	2.29	1.52	2.25	2.96	2.21	1.86	10.73	2.17	1.04	.61
CAL YR 1971	TOTAL 57,193	MEAN 157	MAX 2,160	MIN 14	MEAN \neq 188	CFSM \neq 188	IN. \neq 21.74					
WTR YR 1972	TOTAL 85,733	MEAN 234	MAX 16,000	MIN 18	MEAN \neq 264	CFSM \neq 2.26	IN. \neq 30.74					

NOTE.--No gage-height record June 20 to July 2.

\neq Diversion for municipal supply of city of York and change in contents in reservoirs of York Water Co., equivalent in cubic feet per second; furnished by York Water Co.

\neq Adjusted for diversion and change in reservoir contents.

SUSQUEHANNA RIVER BASIN

177

01575500 Codorus Creek near York, Pa.

LOCATION.--Lat 39°56'46", long 76°45'20", York County, on left bank 0.5 mile upstream from Richland Avenue Bridge, 2 miles downstream from South Branch Codorus Creek, and 2 miles southwest of York.

DRAINAGE AREA.--222 sq mi.

PERIOD OF RECORD.--August 1940 to current year. October 1915 to August 1923, August 1926 to September 1932 (gage heights and discharge measurements only) in reports of Pennsylvania Department of Forests and Waters. Published as "at York" 1915-32.

GAGE.--Water-stage recorder. Datum of gage is 356.39 ft above mean sea level (Corps of Engineers benchmark). Prior to Sept. 30, 1932, nonrecording gage at site 1.6 miles downstream at different datum.

AVERAGE DISCHARGE.--32 years, 234 cfs (14.31 inches per year), adjusted for diversion and, since October 1951, for storage.

EXTREMES.--Current year: Maximum discharge, 30,000 cfs June 22 (gage height, 26.36 ft, from floodmark in gage shelter), from rating curve extended above 6,000 cfs; minimum, 59 cfs Sept. 11 (gage height, 2.06 ft).

Period of record: Maximum discharge, 30,000 cfs June 22, 1972 (gage height, 26.36 ft, from floodmark in gage shelter), from rating curve extended above 6,000 cfs; minimum, 3.0 cfs Oct. 25, 1966 (gage height, 1.40 ft), result of upstream shutoff.

Flood of Aug. 23, 1933 reached a stage of about 24.0 ft, present site and datum, from floodmark 500 ft downstream (discharge, about 32,000 cfs).

REMARKS.--Records fair. Regulation at low flow by mills and pumping plant above station. Diversion above station for municipal supply of city of York. Flood flows regulated by Indian Rock Reservoir 2.1 miles upstream (see p. 182) and by three reservoirs (combined capacity, 21,385,000,000 gallons).

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	109	221	850	180	154	1,090	322	344	1,250	900	214	90
2	117	293	706	396	175	852	334	323	391	780	190	95
3	138	439	537	318	235	779	290	379	317	920	186	101
4	109	280	514	249	938	641	298	690	338	780	188	95
5	100	234	422	378	345	540	270	471	535	1,100	174	90
6	97	217	409	305	315	490	266	402	291	800	159	90
7	96	224	716	278	282	460	264	338	290	640	163	90
8	91	187	895	285	237	440	286	324	241	560	258	83
9	93	181	606	288	216	410	254	487	224	512	166	88
10	509	175	538	473	214	390	226	659	210	447	134	79
11	306	169	509	373	198	380	254	448	191	434	144	67
12	183	163	433	362	199	370	237	393	175	573	138	76
13	164	167	396	337	929	360	432	381	212	488	159	92
14	155	171	374	372	631	400	428	345	312	622	149	99
15	145	155	344	309	423	520	611	368	225	566	128	97
16	125	158	358	266	418	500	695	376	203	402	118	86
17	121	148	312	263	345	680	1,200	315	211	346	120	81
18	114	145	302	263	355	533	686	305	200	320	134	81
19	108	142	276	267	552	482	606	292	183	290	132	153
20	105	151	261	255	407	416	511	318	182	270	120	88
21	108	151	243	245	390	393	480	308	743	250	107	85
22	110	132	238	240	416	625	589	273	16,000	240	103	86
23	112	124	211	250	359	628	681	254	8,900	230	99	81
24	173	130	247	231	389	456	585	233	6,200	220	112	78
25	283	742	230	236	378	421	524	229	5,600	279	105	86
26	606	538	214	190	711	402	444	200	5,100	248	233	81
27	265	384	209	181	695	363	409	200	4,800	223	118	79
28	202	407	212	206	637	351	384	203	4,400	226	109	99
29	178	949	193	196	942	343	374	204	2,200	221	103	88
30	158	2,280	198	191	-----	326	354	187	1,300	214	97	114
31	164	-----	215	173	-----	320	-----	498	-----	214	95	-----
TOTAL	5,344	9,857	12,168	8,556	12,485	15,361	13,294	10,747	61,424	14,315	4,445	2,698
MEAN	172	329	393	276	431	496	443	347	2,047	462	143	89.9
MAX	606	2,280	895	473	942	1,090	1,200	690	16,000	1,100	258	153
MIN	91	124	193	173	154	320	226	187	175	214	95	67
(\neq)	+20.5	+48.3	+39.9	+9.5	+53.4	+26.1	+41.9	+29.9	+29.1	-1	+19.1	+3.5
MEAN \neq	192	379	431	286	487	520	485	378	2,076	461	162	93.3
CFSM \neq	.86	1.71	1.94	1.29	2.19	2.34	2.18	1.70	9.35	2.08	.73	.42
IN. \neq	.99	1.91	2.24	1.49	2.36	2.70	2.43	1.96	10.43	2.40	.84	.47

CAL YR 1971 TOTAL 112,934 MEAN 309 MAX 4,050 MIN 63 MEAN \neq 339 CFSM \neq 1.53 IN. \neq 20.73
WTR YR 1972 TOTAL 170,694 MEAN 466 MAX 16,000 MIN 67 MEAN \neq 493 CFSM \neq 2.22 IN. \neq 30.22

NOTE.--No gage-height record June 22.

\neq Diversion for municipal supply of city of York and change in contents in reservoirs, equivalent in cubic feet per second. Records of diversion and change in contents in three reservoirs furnished by P. H. Glatfelter Co. and York Water Co.

\neq Adjusted for diversion and change in reservoir contents.

SUSQUEHANNA RIVER BASIN

01576000 Susquehanna River at Marietta, Pa.

LOCATION.--Lat 40°03'16", long 76°31'52", Lancaster County, on left bank, 420 ft upstream from Chickies Creek and 1 mile downstream from Marietta. Records include flow of Chickies Creek.

DRAINAGE AREA.--25,990 sq mi, approximately (includes that of Chickies Creek).

PERIOD OF RECORD.--October 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 200.56 ft above mean sea level.

AVERAGE DISCHARGE.--41 years, 35,590 cfs (18.61 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,080,000 cfs June 23 (gage height, 64.54 ft, from floodmarks); minimum, 3,700 cfs Sept. 8 (gage height, 32.15 ft).
 Period of record: Maximum discharge, 1,080,000 cfs June 23, 1972 (gage height, 64.54 ft, from floodmarks); minimum, 618 cfs Sept. 26, 1932 (gage height, 30.89 ft), when York Haven powerplant was shut down in order to obtain current-meter measurements at low water; minimum daily, 1,380 cfs Sept. 26, 1932.
 Maximum stage known prior to 1931, 58.3 ft June 2, 1889, from floodmark (discharge, about 630,000 cfs).

REMARKS.--Records excellent except those for period of no gage-height record and those for winter periods, which are good. Discharge below 8,000 cfs regulated by Metropolitan Edison Co., plant at York Haven. Accuracy of records for entire period has been verified independently by Pennsylvania Power and Light Co., and Safe Harbor Water Power Corp. by comparison with records obtained at Safe Harbor, Holtwood, and Conowingo powerplants below station.

COOPERATION.--Gage-height record furnished by Safe Harbor Water Power Corp.

REVISIONS (WATER YEARS).--WSP 781: 1933(M). WSP 1502: 1937.

DISCHARGE, IN THOUSANDS OF 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	11.5	16.3	36.7	36.7	33.8	46.2	56.4	50.1	46.3	165	18.1	9.61
2	11.5	19.6	39.1	62.8	31.9	82.4	58.8	45.4	55.9	146	17.4	9.25
3	11.6	23.0	35.1	72.8	30.3	169	62.4	43.9	56.3	136	16.6	8.97
4	10.7	24.2	32.0	63.6	35.0	328	67.3	52.6	53.0	112	16.0	8.94
5	9.64	24.0	29.8	57.2	32.0	291	70.6	81.0	52.2	91.4	15.3	8.67
6	9.32	21.9	27.7	53.3	26.7	211	66.5	109	45.5	84.8	15.0	8.00
7	8.44	20.4	37.3	47.7	22.8	158	61.2	109	43.8	80.6	14.9	7.20
8	8.00	19.2	91.4	42.2	22.6	119	57.9	95.0	44.1	75.0	16.6	6.27
9	7.62	18.1	126	38.6	18.9	96.3	56.1	82.3	41.5	68.7	17.2	5.94
10	9.42	17.3	159	37.8	16.9	88.7	53.4	91.4	34.8	65.2	16.7	6.08
11	10.2	16.0	152	37.0	17.6	85.5	50.6	115	31.0	65.5	16.2	6.31
12	9.55	15.2	130	37.2	19.6	71.7	48.0	149	30.2	62.9	15.7	6.08
13	9.31	14.3	111	40.0	22.1	63.9	48.8	128	28.8	57.0	15.2	6.79
14	9.91	14.2	92.3	45.5	35.2	62.5	55.4	104	28.7	50.7	14.4	6.75
15	9.12	13.5	79.1	51.7	51.0	64.7	70.7	88.2	27.0	45.6	13.8	6.90
16	8.05	13.6	69.1	52.6	51.6	70.0	108	81.1	25.8	41.4	13.0	6.47
17	7.59	15.6	62.2	47.0	45.0	79.5	151	82.6	29.5	58.6	11.8	6.79
18	5.75	13.0	59.9	44.0	43.2	88.6	236	81.3	35.4	75.0	11.4	7.67
19	7.69	12.8	59.9	41.0	41.9	105	223	82.3	41.4	58.6	11.3	7.94
20	7.52	11.8	56.7	39.6	33.7	112	180	78.3	47.4	49.8	11.5	8.32
21	7.40	12.3	50.7	38.0	29.0	104	151	72.9	46.6	42.7	11.6	9.36
22	6.98	11.8	44.6	36.5	26.0	92.6	132	69.7	380	38.5	11.2	8.95
23	6.54	10.9	40.4	38.1	24.0	109	125	65.9	950	36.3	11.0	8.31
24	6.86	10.7	37.0	37.3	23.0	161	116	59.4	1,040	33.1	10.8	7.88
25	7.87	16.6	33.6	39.4	24.0	169	105	52.5	860	29.7	10.4	8.05
26	11.3	22.1	31.5	48.5	27.0	134	92.5	45.6	620	26.6	10.0	7.49
27	16.4	18.8	29.9	56.1	30.0	105	83.5	40.0	390	24.8	9.81	7.36
28	23.4	17.4	28.5	58.4	33.1	85.4	73.5	35.2	260	23.5	10.1	7.29
29	20.9	19.3	28.7	53.4	35.6	72.7	64.3	31.4	198	21.7	10.4	7.54
30	18.8	38.2	30.5	46.5	-----	64.3	56.5	28.5	178	20.3	10.1	7.15
31	17.3	-----	32.0	39.6	-----	58.5	-----	28.2	-----	19.0	9.87	-----
TOTAL	326.18	522.1	1,873.7	1,440.1	883.5	3,548.5	2,781.4	2,278.8	5,721.2	1,906.0	413.38	228.33
MEAN	10.5	17.4	60.4	46.5	30.5	114	92.7	73.5	191	61.5	13.3	7.61
MAX	23.4	38.2	159	72.8	51.6	328	236	149	1,040	165	18.1	9.61
MIN	5.75	10.7	27.7	36.5	16.9	46.2	48.0	28.2	25.8	19.0	9.81	5.94
CFSM	.40	.67	2.32	1.79	1.17	4.39	3.57	2.83	7.35	2.37	.51	.29
IN.	.47	.75	2.68	2.06	1.26	5.08	3.98	3.26	8.19	2.73	.59	.33

CAL YR 1971 TOTAL 13,653.16 MEAN 37.4 MAX 229 MIN 5.28 CFSM 1.44 IN 19.54
 WTR YR 1972 TOTAL 21,923.19 MEAN 59.9 MAX 1,040 MIN 5.75 CFSM 2.30 IN 31.38

NOTE.--No gage-height record June 22-28.

01576500 Conestoga Creek at Lancaster, Pa.

LOCATION.--Lat 40°03'00", long 76°16'39", Lancaster County, on left bank at Penn Central Railroad Bridge, 50 ft downstream from small tributary, 500 ft downstream from diversion dam of city water works, and 0.75 mile east of Lancaster.

DRAINAGE AREA.--324 sq mi.

PERIOD OF RECORD.--September 1928 to March 1932; August, September 1932; April 1933 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 245.63 ft above mean sea level. Prior to May 1, 1933, at site 600 ft upstream at different datum, excluding small tributary.

AVERAGE DISCHARGE.--42 years (1928-31, 1933-72), 380 cfs (15.93 inches per year), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 88,300 cfs June 23 (gage height, 27.80 ft, from floodmark), from rating curve extended as explained below; minimum, 96 cfs Sept. 28 (gage height, 2.98 ft).

Period of record: Maximum discharge, 88,300 cfs June 23, 1972 (gage height, 27.80 ft, from floodmark), from rating curve extended above 4,000 cfs on basis of slope-area measurement at gage height, 17.52 ft and contracted-opening measurement of peak flow; probably no flow at times; minimum daily discharge, 7 cfs Aug. 11, 1930.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Regulation at low flow by waterworks and mill above station. Diversion above station for municipal supply of city of Lancaster. Records of water quality for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1202: Drainage area. WSP 1502: 1943(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	193	272	983	326	289	1,410	512	487	2,150	1,270	402	178
2	207	659	781	673	312	2,070	512	519	716	1,090	381	185
3	223	759	687	737	326	1,900	481	557	564	990	365	189
4	202	544	638	427	833	1,280	469	1,210	788	926	360	175
5	189	377	584	538	377	1,110	475	945	1,010	910	341	178
6	183	331	577	493	383	953	439	652	551	902	331	169
7	173	336	923	394	362	885	427	584	499	809	345	155
8	169	331	1,100	377	308	848	439	893	445	750	355	169
9	165	294	737	388	308	737	422	1,100	405	817	321	169
10	544	285	666	870	303	701	383	1,530	380	700	303	162
11	663	280	624	680	298	666	377	915	360	645	289	165
12	321	264	570	564	294	652	372	788	320	612	289	165
13	247	255	544	506	1,060	645	525	716	350	2,800	317	182
14	228	243	512	564	2,010	624	781	694	390	1,720	312	175
15	217	243	512	499	900	744	752	730	372	886	281	165
16	207	255	499	383	759	659	885	701	346	862	272	159
17	197	255	469	427	659	1,770	1,540	631	687	926	267	149
18	190	247	439	433	604	1,090	885	577	433	736	276	149
19	187	247	411	439	638	803	730	551	487	693	272	152
20	181	255	416	439	538	723	687	519	481	619	255	155
21	177	247	411	439	564	680	666	512	659	586	238	144
22	181	235	372	433	597	825	652	481	24,600	567	226	141
23	174	221	336	445	519	1,110	833	439	47,600	523	218	130
24	217	217	341	427	538	766	930	405	4,770	499	211	132
25	321	2,350	352	405	519	687	730	383	2,170	487	211	138
26	411	1,380	336	377	638	652	624	362	1,540	475	211	135
27	326	818	336	331	737	611	570	346	1,310	441	243	130
28	235	730	331	336	645	584	538	346	1,100	435	238	130
29	214	998	317	326	878	557	519	326	1,400	413	211	127
30	207	2,550	326	336	-----	551	499	321	1,690	397	196	138
31	203	-----	377	312	-----	531	-----	825	-----	402	185	-----
TOTAL	7,552	16,478	16,507	14,324	17,196	27,824	18,654	20,045	98,573	24,888	8,722	4,690
MEAN	244	549	532	462	593	898	622	647	3,286	803	281	156
MAX	663	2,550	1,100	870	2,010	2,070	1,540	1,530	47,600	2,800	402	189
MIN	165	217	317	312	289	531	372	321	320	397	185	127
(%)	6.8	4.9	7.2	5.4	6.7	7.3	6.9	6.3	4.7	2.8	6.4	7.3
MEAN#	251	554	539	467	600	905	629	653	3,291	806	287	163
CFSM#	.77	1.71	1.66	1.44	1.85	2.79	1.94	2.02	10.16	2.49	.89	.50
IN.#	.89	1.91	1.91	1.66	2.00	3.22	2.16	2.33	11.34	2.87	1.03	.56
CAL YR 1971	TOTAL 187,439	MEAN 514	MAX 4,000	MIN 125	MEAN# 522	CFSM# 759	CFSM# 1.61	IN.# 21.83				
WTR YR 1972	TOTAL 275,453	MEAN 753	MAX 47,600	MIN 127	MEAN# 759	CFSM# 2.34	IN.# 31.88					

PEAK DISCHARGE (BASE, 2,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-25	1845	7.81	4,310	6-1	0645	7.21	3,530
11-30	0500	7.92	4,470	6-23	0400*	27.80	88,300
2-14	0115	7.62	4,000	7-13	2045	8.61	5,430

NOTE.--No gage-height record June 22, 23.

*About.

Diversion above station for municipal supply, equivalent in cubic feet per second, furnished by city of Lancaster.

Adjusted for diversion.

SUSQUEHANNA RIVER BASIN

01578400 Bowery Run near Quarryville, Pa.

LOCATION.--Lat 39°53'41", long 76°06'50", Lancaster County, on left bank at single-span bridge, 1.1 miles upstream from mouth, and 2.5 miles east of Quarryville.

DRAINAGE AREA.--5.98 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 468.08 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 6.61 cfs (15.01 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,050 cfs June 22 (gage height, 6.55 ft), from rating curve extended above 150 cfs as explained below; minimum daily, 3.9 cfs Nov. 23.
 Period of record: Maximum discharge, 2,220 cfs July 3, 1964 (gage height, 7.7 ft, from floodmark), from rating curve extended above 150 cfs on basis of slope-area measurement of peak flow; minimum, 1.0 cfs Sept. 1, 2, 3, 4, 9, 10, 11, 12, 1966; minimum gage height, 2.32 ft July 6, 1963.

REMARKS.--Records 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	5.5	8.3	7.3	5.5	5.5	23	9.4	8.9	17	13	8.8	4.5
2	8.7	12	6.6	13	5.9	17	9.2	9.0	12	13	8.6	4.6
3	6.8	11	6.2	6.9	18	21	9.0	15	11	13	8.4	4.8
4	6.1	6.2	6.2	6.6	11	11	9.2	29	118	13	8.0	4.5
5	6.1	5.5	5.9	9.0	6.2	11	8.8	12	18	16	7.6	4.7
6	6.1	5.2	6.9	6.2	5.5	9.4	8.2	11	11	13	7.6	4.6
7	5.9	6.9	14	5.9	5.9	9.7	7.8	11	9.0	13	8.0	4.5
8	5.9	5.5	9.0	5.9	5.2	9.0	7.8	11	8.0	19	7.6	4.8
9	6.2	5.2	7.3	7.6	4.8	8.0	8.0	20	7.6	14	7.3	4.8
10	33	5.5	6.9	8.7	4.8	8.0	7.2	14	7.3	12	6.9	4.6
11	9.4	5.2	6.6	7.3	4.8	7.6	6.8	11	6.9	12	6.9	4.6
12	7.2	5.2	6.2	6.6	4.8	8.3	11	11	6.9	12	6.9	4.6
13	6.2	5.2	5.9	6.6	31	8.0	18	10	9.0	79	6.9	5.0
14	5.6	4.8	5.9	6.9	12	9.4	13	11	9.4	13	6.6	5.2
15	5.2	5.2	5.9	5.9	9.4	9.0	25	11	7.3	12	6.6	4.8
16	5.0	4.8	5.9	4.8	8.7	9.7	22	10	8.3	13	6.6	4.5
17	4.8	4.7	5.9	5.2	7.6	44	24	10	9.0	13	6.9	4.3
18	4.7	4.6	5.5	5.5	8.0	13	14	9.9	7.3	11	6.9	4.2
19	4.6	4.5	5.5	5.9	8.7	12	13	9.6	7.6	11	6.2	4.2
20	4.5	4.5	6.2	5.9	7.6	12	13	9.0	6.9	10	6.2	4.3
21	4.8	4.3	5.9	5.9	8.3	12	13	8.6	58	9.8	6.0	4.3
22	4.5	4.1	5.2	6.2	7.6	21	17	8.2	256	9.6	5.8	4.2
23	5.5	4.5	5.2	6.6	7.3	14	15	7.8	20	9.4	5.6	4.1
24	12	5.9	5.9	6.2	7.3	13	14	7.4	11	9.2	5.4	4.2
25	9.0	41	5.5	6.2	7.6	12	11	7.0	12	9.0	5.2	4.3
26	8.0	8.3	5.5	5.9	13	11	9.8	6.6	8.7	8.6	5.2	4.2
27	6.6	6.9	5.5	5.5	11	11	9.2	6.4	8.3	8.6	6.0	4.0
28	6.0	6.2	5.5	5.9	12	10	9.2	6.2	9.0	8.4	6.0	4.0
29	5.6	44	5.2	5.9	26	10	9.1	6.0	15	8.2	5.4	4.0
30	5.2	10	6.2	5.9	-----	9.8	9.0	6.0	14	8.2	5.0	4.2
31	6.0	-----	5.9	5.5	-----	9.6	-----	49	-----	8.2	4.7	-----
TOTAL	220.7	255.2	197.3	201.6	325.5	393.5	360.7	362.6	709.5	422.2	205.8	133.6
MEAN	7.12	8.51	6.36	6.50	11.2	12.7	12.0	11.7	23.7	13.6	6.64	4.45
MAX	33	44	14	13	81	44	25	49	256	79	8.8	5.2
MIN	4.5	4.1	5.2	4.8	4.8	7.6	6.8	6.0	6.9	8.2	4.7	4.0
CFSM	1.19	1.42	1.06	1.09	1.87	2.12	2.01	1.96	3.96	2.27	1.11	.74
IN.	1.37	1.59	1.23	1.25	2.02	2.45	2.24	2.26	4.41	2.63	1.28	.83

CAL YR 1971 TOTAL 3,419.0 MEAN 9.37 MAX 273 MIN 3.3 CFSM 1.57 IN 21.27
 WTR YR 1972 TOTAL 3,788.2 MEAN 10.4 MAX 256 MIN 4.0 CFSM 1.74 IN 23.57

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-29	1815	5.33	326	6-4	2200	6.14	746
2-13	1300	5.73	491	6-22	0700	6.55	1,050
5-31	0315	5.22	307	7-13	0945	5.85	821

Lakes and reservoirs in Susquehanna River basin

- 01534180 STILLWATER LAKE.--Lat 41°41'46", long 75°29'10", Susquehanna County, at Stillwater Dam on Lackawanna River, 0.3 mile downstream from confluence of East and West Branches, 1.4 miles south of Uniondale and 3.5 miles north of Forest City. Drainage area, 37.1 sq mi. Period of record, December 1959 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 5,500 acre-ft June 25 (elevation, 1,602.00 ft); minimum, 445 acre-ft Sept. 12 (elevation, 1,572.45 ft). Extremes for period of record: Maximum contents, 5,860 acre-ft Apr. 5, 1960 (elevation, 1,603.2 ft); minimum, 242 acre-ft Sept. 10, 1960 (elevation, 1,568.85 ft).
Reservoir formed by an earthfill dam, rock faced, with ungated concrete spillway at elevation 1,621.00 ft. Storage began in December 1959. Capacity at elevation 1,621.00 ft is 12,000 acre-ft. Reservoir is used for flood control and municipal water supply. Figures given herein represent total contents. Flood storage is regulated by power-operated slide gate; water supply storage is regulated by a weir formed by stop logs. Records furnished by Corps of Engineers.
- 01541180 CURWENSVILLE LAKE.--Lat 40°57'13", long 78°31'40", Clearfield County, at Curwensville Dam on West Branch Susquehanna River, 0.7 mile upstream from State Highway 453, 1.2 miles south of Curwensville, Pa. and 2.5 miles upstream from Anderson Creek. Drainage area, 365 sq mi. Period of record, November 1965 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 87,650 acre-ft June 25 (elevation, 1,214.11 ft); minimum, 2,010 acre-ft Sept. 29 (elevation, 1,148.20 ft); Extremes for period of record: Maximum contents, 87,650 acre-ft June 25, 1972 (elevation, 1,214.11 ft); minimum, 252 acre-ft Nov. 6, 1968 (elevation, 1,136.70 ft).
Reservoir formed by earthfill dam with excavated chute spillway with concrete control sill at elevation 1,228.00 ft. Storage began in November 1965. Capacity at elevation 1,228.00 ft is 124,200 acre-ft. Conservation pool elevation, 1,155.00 ft (capacity, 4,870 acre-ft). Reservoir is used for flood control, recreation and study of water quality. Figures given herein represent total contents. Flow regulated by three gates and low-flow by-pass system. Records furnished by Corps of Engineers.
- 01541340 GLENDALE LAKE.--Lat 40°41'50", long 78°32'15", Cambria County, at Glendale Dam on Beaverdam Run, 1 mile upstream from Dutch Run, 1.3 miles southwest of Flinton, Pa., 1.9 miles above mouth, and 3.4 miles south of Coalport. Drainage area, 41.9 sq mi. Period of record, December 1960 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 33,390 acre-ft June 24 (elevation, 1,431.63 ft); minimum, 25,120 acre-ft Sept. 10, 11 (elevation, 1,426.88 ft). Extremes for period of record: Maximum contents, unknown; minimum, no storage at times.
Reservoir formed by an earth and rockfill dam with ungated, concrete spillway at elevation, 1,435.50 ft. Storage began Dec. 1, 1960. Capacity at elevation, 1,435.50 ft is 41,200 acre-ft of which 15,900 acre-ft is controlled storage above elevation 1,427.00 ft (conservation pool). Dead storage is 25,300 acre-ft. Reservoir is used for flood control and recreation. Figures given herein represent total contents. Regulation is controlled by 72-inch sluice gate and an 8-inch by-pass valve. Records furnished by Pennsylvania Department of Environmental Resources.
- 01543900 FIRST FORK SINNEMAHONING CREEK RESERVOIR.--Lat 41°24'25", long 78°01'10", Cameron County, at control tower of George B. Stevenson Dam, on First Fork Sinnemahoning Creek, 8 miles northeast of Sinnemahoning, Pa., and 8 miles upstream from mouth. Drainage area, 243 sq mi. Period of record, January 1956 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level, datum unknown. Extremes for current year: Maximum contents, 62,030 acre-ft June 26 (elevation, 1,015.87 ft); minimum, 1,180 acre-ft July 25 (elevation, 912.22 ft). Extremes for period of record: Maximum contents, 62,030 acre-ft June 26, 1972 (elevation, 1,015.87 ft); minimum (after first filling), 348 acre-ft Aug. 20, 1957 (elevation, 900.57 ft).
Reservoir is formed by an earthfill dam. Storage began Jan. 31, 1956. Capacity, 75,800 acre-ft between elevations 890.00 ft (sill of outlet gates) and 1,026.00 ft (crest of spillway). No dead storage. Ordinary minimum (conservation) pool elevation, 920.00 ft (capacity, 2,000 acre-ft). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Records furnished by Pennsylvania Department of Environmental Resources.
- 01544800 KETTLE CREEK LAKE (formerly published as Alvin R. Bush Reservoir).--Lat 41°21'37", long 77°55'27", Clinton County, at control tower of dam on Kettle Creek, 1.1 mile downstream from Sugar Camp Run, and 8.5 miles upstream from mouth and Westport, Pa. Drainage area, 226 sq mi. Period of record, February 1962 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 51,660 acre-ft June 25 (elevation, 919.13 ft); minimum, 1,510 acre-ft Jan. 27 (elevation, 839.46 ft); Extremes for period of record: Maximum contents, 51,660 acre-ft June 25, 1972 (elevation, 919.13 ft); minimum, no storage June 7, 1962.
Reservoir formed by an earthfill embankment, rock faced, with ungated concrete spillway at elevation, 937.0 ft. Storage began Feb. 7, 1962; water in reservoir first reached conservation pool elevation in March 1962. Total capacity at elevation, 937.0 ft is 75,000 acre-ft. No dead storage. Ordinary minimum (conservation) pool elevation, 840.0 ft (capacity, 1,590 acre-ft). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Storage is regulated by three gates and low-flow by-pass system. Records furnished by Corps of Engineers.
- 01547480 FOSTER JOSEPH SAYERS RESERVOIR.--Lat 41°02'53", long 77°36'35", Centre County, at Foster Joseph Sayers Dam, on Bald Eagle Creek, 1 mile upstream from Marsh Creek, and 1.2 miles south of Blanchard. Drainage area, 339 sq mi. Period of record, March 1971 to current year. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 103,900 acre-ft June 25 (elevation 658.41 ft); minimum, 5,950 acre-ft Jan. 30 (elevation, 609.42 ft). Extremes for period of record: Maximum contents, 103,900 acre-ft June 25, 1972 (elevation, 658.41 ft); minimum, 4,960 acre-ft Mar. 10, 1971 (elevation, 607.74 ft).
Reservoir formed by an earthfill dam with ungated concrete ogee weir at elevation 657.00 ft, with abutting concrete gravity walls and partially paved exit channel. Storage began in March 1971. Capacity at elevation 657.00 ft is 99,100 acre-ft. Dead storage is 25 acre-ft. Ordinary minimum (conservation) pool elevation, 610.00 ft (capacity, 6,300 acre-ft). Reservoir used for flood control and recreation. Figures given herein represent total contents. Regulation is accomplished by two gates. Records furnished by Corps of Engineers.

SUSQUEHANNA RIVER BASIN

Lakes and reservoirs in Susquehanna River basin--Continued

01568400 DeHART RESERVOIR.--Lat 40°27'50", long 76°44'50", Dauphin County, at dam on Clark Creek, 1.8 miles southeast of Carsonville, Pa., and 15.3 miles upstream from mouth. Drainage area, 21.7 sq mi. Period of record, October 1940 to current year. Staff gage. Datum of gage is at mean sea level (levels by city of Harrisburg). Extremes for current year: Maximum contents, 19,320 acre-ft June 24 (elevation, 645.50 ft); minimum, 15,480 acre-ft Sept. 30 (elevation, 638.92 ft). Extremes for period of record: Maximum contents, 19,320 acre-ft June 24, 1972 (elevation, 645.50 ft); minimum (after first filling), 4,680 acre-ft Jan. 2, 1966 (elevation, 613.33 ft).

Reservoir formed by earthfill dam, with ungated concrete spillway at elevation 644.0 ft (crest of spillway raised 4 ft in November 1954). Storage began Jan. 21, 1940. Capacity at elevation 644.00 ft is 18,480 acre-ft. Reservoir is used for municipal water supply. Figures given herein represent total contents. There are no gates on spillway and regulation is controlled by valves on pipe through dam. Records furnished by city of Harrisburg.

01574900 (revised) INDIAN ROCK RESERVOIR.--Lat 39°55'22", long 76°45'14", York County, at dam on Codorus Creek, 0.1 mile upstream from mouth of South Branch Codorus Creek, 0.3 mile west of pumping station of York Water Co., and 3 miles southwest of York, Pa. Drainage area, 93.7 sq mi. Period of record, September 1962 to current year in reports of Geological Survey, September 1942 to August 1962 in files of Baltimore District, Corps of Engineers. Gage, water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 30,200 acre-ft June 23 (elevation, 436.44 ft); minimum, 16 acre-ft Nov. 23 (elevation, 372.74 ft). Extremes for period of record: Maximum contents, 30,200 acre-ft June 23, 1972 (elevation, 436.44 ft); minimum, no storage many times.

Reservoir formed by an earth and rockfill dam with ungated concrete spillway at elevation 435.0 ft. Reservoir completed in June 1942; storage began in June 1946. Capacity at elevation 435.0 ft is 28,000 acre-ft. No dead storage. Reservoir is used for flood control. Figures given herein represent total contents. Flood storage is regulated by three vertical-lift tractor gates. Water is stored only during high flows and released when downstream conditions warrant. Records furnished by Corps of Engineers.

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01534180 STILLWATER LAKE				01541180 CURWENSVILLE LAKE		
Sept. 30.....	1,572.69	469	-	1,155.57	5,190	-
Oct. 31.....	1,572.75	475	+0.1	1,155.06	4,900	-4.7
Nov. 30.....	1,574.25	625	+2.5	1,153.12	3,900	-16.8
Dec. 31.....	1,574.72	672	+8	1,158.25	6,830	+47.7
CAL YR 1971.....	-	-	+2	-	-	+6.1
Jan. 31.....	1,573.46	546	-2.0	1,155.25	5,010	-29.6
Feb. 29.....	1,573.16	516	-5	1,155.99	5,420	+7.1
Mar. 31.....	1,574.64	664	+2.4	1,155.15	4,950	-7.6
Apr. 30.....	1,573.92	592	-1.2	1,154.92	4,830	-2.0
May 31.....	1,580.80	1,350	+12.3	1,162.11	9,630	+78.1
June 30.....	1,577.35	935	-7.0	1,181.20	30,220	+346
July 31.....	1,572.81	481	-7.4	1,162.05	9,580	-336
Aug. 31.....	1,572.72	472	-1	1,161.96	9,510	-1.1
Sept. 30.....	1,572.87	487	+3	1,148.30	2,050	-125
WTR YR 1972.....	-	-	0	-	-	-4.3
01541340 GLENDALE LAKE				01543900 F F SINNEMAHOING CREEK RESERVOIR		
Sept. 30.....	1,427.50	26,100	-	919.90	1,990	-
Oct. 31.....	1,427.42	25,970	-2.1	919.80	1,980	-2
Nov. 30.....	1,427.43	25,990	+3	920.29	2,030	+8
Dec. 31.....	1,427.68	26,390	+6.5	920.53	2,060	+5
CAL YR 1971.....	-	-	0	-	-	0
Jan. 31.....	1,427.56	26,200	-3.1	920.39	2,050	-2
Feb. 29.....	1,427.70	26,420	+3.8	920.48	2,060	+2
Mar. 31.....	1,427.52	26,130	-4.7	921.63	2,210	+2.4
Apr. 30.....	1,427.59	26,240	+1.8	920.51	2,060	-2.5
May 31.....	1,427.23	25,670	-9.3	920.57	2,070	+2
June 30.....	1,428.73	28,070	+40.3	966.70	19,220	+288
July 31.....	1,427.20	25,620	-39.8	915.66	1,530	-288
Aug. 31.....	1,427.04	25,360	-4.2	918.92	1,870	+5.5
Sept. 30.....	1,427.34	25,840	+8.1	919.70	1,960	+1.5
WTR YR 1972.....	-	-	-4	-	-	0

SUSQUEHANNA RIVER BASIN

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Lakes and reservoirs in Susquehanna River basin--Continued

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
01544800 KETTLE CREEK LAKE				01547480 FOSTER JOSEPH SAYERS RESERVOIR		
Sept. 30.....	840.59	1,680	-	628.96	27,040	-
Oct. 31.....	841.08	1,750	+1.1	627.78	25,170	-30.4
Nov. 30.....	841.56	1,830	+1.3	611.07	7,000	-305
Dec. 31.....	843.00	2,070	+3.9	611.06	6,990	-2
CAL YR 1971.....	-	-	+4	-	-	0
Jan. 31.....	840.20	1,620	-7.3	609.60	6,060	-15.1
Feb. 29.....	840.98	1,740	+2.1	610.90	6,880	+14.3
Mar. 31.....	841.20	1,770	+5	630.02	28,840	+357
Apr. 30.....	840.61	1,680	-1.5	630.05	28,890	+8
May 31.....	841.18	1,770	+1.5	630.23	29,210	+5.2
June 30.....	864.05	8,270	+109	650.78	78,920	+835
July 31.....	840.99	1,740	-106	630.00	28,800	-815
Aug. 31.....	840.77	1,710	-5	629.94	28,700	-1.6
Sept. 30.....	841.22	1,780	+1.2	626.50	23,250	-91.6
WTR YR 1972.....	-	-	+1	-	-	-5.2
01568400 DeHART RESERVOIR				01574900 INDIAN ROCK RESERVOIR		
Sept. 30.....	643.42	18,140	-	373.44	23.1	-
Oct. 31.....	642.83	17,790	-5.7	373.17	20.2	0
Nov. 30.....	644.50	18,750	+16.1	379.65	140	+2.0
Dec. 31.....	644.08	18,520	-3.7	373.08	19.3	-2.0
CAL YR 1971.....	-	-	0	-	-	-1
Jan. 31.....	644.08	18,520	0	373.85	28.0	+1
Feb. 29.....	644.25	18,610	+1.6	381.21	186	+2.7
Mar. 31.....	644.25	18,610	0	375.23	47.6	-2.2
Apr. 30.....	644.17	18,570	-7	375.43	50.7	+1
May 31.....	644.08	18,520	-8	379.64	139	+1.4
June 30.....	644.50	18,750	+3.9	378.95	119	-3
July 31.....	643.25	18,040	-11.5	375.62	53.7	-1.1
Aug. 31.....	641.25	16,870	-19.0	374.63	38.6	-2
Sept. 30.....	638.92	15,480	-23.4	374.16	32.1	-1
WTR YR 1972.....	-	-	-3.7	-	-	0

POTOMAC RIVER BASIN

01603500 Evitts Creek near Centerville, Pa.

LOCATION.--Lat 39°47'23", long 78°38'48", Bedford County, on left bank 2 miles upstream from Thomas W. Koon Dam, 3.0 miles south of Centerville, 7.0 miles upstream from Rock Gully Creek, and at mile 16.3.

DRAINAGE AREA.--30.2 sq mi.

PERIOD OF RECORD.--September 1932 to current year. Prior to October 1952, published as "near Bedford Valley".

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,027.59 ft above mean sea level (city of Cumberland bench mark).

AVERAGE DISCHARGE.--40 years, 30.9 cfs (13.89 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,750 cfs June 22 (gage height, 5.06 ft); minimum, 3.7 cfs Sept. 17, 18 (gage height, 1.11 ft).

Period of record: Maximum discharge, 5,240 cfs Mar. 17, 1936 (gage height, 7.13 ft), from rating curve extended above 400 cfs on basis of slope-area measurements at gage heights 4.64 and 7.13 ft; minimum, 0.70 cfs Dec. 17, 1958 (gage height, 0.79 ft), result of freezeup.

Maximum stage known, about 8 ft, from floodmark, date unknown.

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

REVISIONS (WATER YEARS).--WSP 781: 1933(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	6.7	20	50	15	16	382	31	44	25	78	11	4.7
2	7.0	40	29	40	16	394	30	43	21	63	10	4.7
3	8.4	27	25	30	15	414	28	92	20	55	17	4.5
4	7.8	19	22	22	15	221	43	118	18	46	14	4.7
5	7.5	17	20	32	14	159	34	99	17	61	11	4.5
6	6.5	16	50	25	14	118	29	82	16	57	9.4	4.4
7	6.0	15	220	21	14	101	38	74	15	40	16	4.4
8	5.5	14	500	20	14	88	40	70	14	33	13	4.2
9	5.5	13	200	20	14	72	37	143	13	31	9.4	4.2
10	5.8	13	120	25	14	66	34	115	14	28	8.4	4.0
11	5.5	12	80	31	14	57	33	95	12	26	7.8	4.0
12	5.1	12	70	41	15	55	32	84	11	24	7.5	4.2
13	4.9	11	60	30	101	191	163	76	20	23	7.8	4.4
14	4.9	11	50	30	132	150	113	82	19	20	7.5	4.5
15	4.7	10	45	24	84	126	300	74	20	18	7.0	4.4
16	4.7	10	40	20	86	147	340	64	41	18	6.5	4.2
17	4.7	9.4	34	20	63	124	364	59	31	18	6.2	3.8
18	4.7	9.0	31	30	52	103	198	57	46	18	9.8	6.0
19	4.5	9.0	28	25	44	88	147	49	55	15	8.4	5.5
20	4.4	9.0	29	23	47	78	118	54	28	17	7.0	4.4
21	4.4	9.8	27	24	70	70	95	49	194	14	6.2	4.4
22	4.4	9.8	22	23	60	78	121	41	1,580	13	6.0	4.4
23	4.9	8.7	20	25	65	66	97	37	1,490	12	5.8	4.0
24	35	7.8	20	28	70	55	82	33	644	11	5.8	4.0
25	72	11	19	24	82	49	74	31	300	11	5.8	4.4
26	57	11	19	19	263	46	64	28	183	10	6.2	4.5
27	24	12	18	18	143	43	59	26	129	10	7.2	4.2
28	18	21	18	18	147	40	52	24	99	11	5.8	5.8
29	16	80	16	17	346	37	49	23	118	11	5.5	8.1
30	14	106	17	17	-----	34	46	26	126	9.8	5.1	8.1
31	13	-----	16	16	-----	32	-----	41	-----	11	4.7	-----
TOTAL	377.5	573.5	1,915	753	2,030	3,684	2,891	1,933	5,319	812.8	258.8	141.6
MEAN	12.2	19.1	61.8	24.3	70.0	119	96.4	62.4	177	26.2	8.35	4.72
MAX	72	106	500	41	346	414	364	143	1,580	78	17	8.1
MIN	4.4	7.8	16	15	14	32	28	23	11	9.8	4.7	3.8
CFSM	.40	.63	2.05	.80	2.32	3.94	3.19	2.07	5.86	.87	.28	.16
IN.	.47	.71	2.36	.93	2.50	4.54	3.56	2.38	6.55	1.00	.32	.17

CAL YR 1971 TOTAL 15,506.9 MEAN 42.5 MAX 573 MIN 3.7 CFSM 1.41 IN 19.10

WTR YR 1972 TOTAL 20,689.2 MEAN 56.5 MAX 1,580 MIN 3.8 CFSM 1.87 IN 25.48

PEAK DISCHARGE (BASE, 400 CFS)

*From floodmark.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	Unk.	*3.24	736	4-16	1900	3.02	556
2-29	2145	3.02	556	6-22	0800	5.06	2,750
3- 2	2400	3.00	540	6-23	1200	4.24	1,760
4-15	1430	3.04	572				

01613050 Tonoloway Creek near Needmore, Pa.

LOCATION.--Lat 39°53'54", long 78°07'57", Fulton County, on left bank 10 ft downstream from bridge on Legislative Route 29015, 0.2 mile upstream from Foster Creek, and 3.5 miles north of Needmore.

DRAINAGE AREA.--10.7 sq mi.

PERIOD OF RECORD.--Occasional discharge measurements and annual maximum, water years 1963-65. October 1965 to current year.

GAGE.--Water-stage recorder, crest-stage gage and concrete control. Datum of gage is 688.94 ft above mean sea level. Prior to Sept. 2, 1965, crest-stage gage at same site at datum 2.0 ft higher.

AVERAGE DISCHARGE.--7 years, 12.1 cfs (15.36 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,300 cfs June 22 (gage height, 9.17 ft), from rating curve extended as explained below; minimum, 0.03 cfs Sept. 11, 12, 16, 17, 18; minimum gage height, 2.51 ft Sept. 17, 18.

Period of record: Maximum discharge, 1,300 cfs June 22, 1972 (gage height, 9.17 ft), from rating curve extended above 550 cfs on basis of contracted-opening measurement of peak flow; no flow on many days.

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

REVISIONS (WATER YEARS).--WRD Penna. 1969: 1966-68(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	3.9	7.7	28	3.9	6.0	167	10	17	30	17	1.8	.55
2	3.6	15	20	13	5.4	147	11	19	16	29	2.0	.55
3	3.0	17	15	17	7.0	89	8.8	25	14	33	2.6	.45
4	2.8	16	12	13	17	52	10	56	19	22	2.0	.41
5	2.6	13	9.5	15	12	38	8.8	45	30	29	1.7	.29
6	2.2	11	20	13	8.6	28	8.2	30	17	26	1.4	.23
7	2.0	9.5	83	13	7.4	24	10	26	12	22	3.6	.15
8	1.7	7.1	121	11	6.8	20	10	25	9.0	18	2.0	.13
9	1.7	6.0	72	11	6.0	16	9.4	44	7.0	14	1.5	.11
10	2.6	5.5	50	12	5.6	14	9.4	56	6.0	12	1.3	.06
11	2.0	4.7	37	12	5.4	14	9.4	47	5.0	9.6	1.2	.04
12	1.7	4.3	27	15	5.2	12	9.4	35	4.3	8.0	1.2	.11
13	1.4	3.9	21	14	5.0	13	52	27	3.8	6.8	1.2	.37
14	1.4	3.6	17	15	82	18	72	29	3.8	6.0	1.1	.11
15	1.3	3.3	15	13	63	18	87	27	4.4	5.4	.90	.04
16	1.2	3.0	13	7.0	54	26	104	28	7.6	5.0	.67	.03
17	1.2	2.8	11	7.8	44	34	87	30	8.0	5.2	1.3	.03
18	1.2	2.6	10	8.6	36	33	62	32	12	5.2	3.3	.90
19	1.1	2.6	3.3	9.0	28	26	43	28	18	4.0	1.5	.61
20	1.1	2.6	8.3	9.5	30	21	30	31	14	3.1	1.2	.20
21	1.1	2.8	7.7	9.5	24	18	24	25	418	2.8	.98	.15
22	1.1	2.6	6.0	8.3	20	26	25	20	868	2.6	.82	.23
23	1.2	2.2	7.1	8.9	21	22	36	15	588	2.6	1.5	.11
24	3.3	2.0	5.5	8.3	17	20	31	16	194	2.1	2.3	.06
25	30	3.3	5.1	7.7	18	19	26	14	91	1.8	1.3	.20
26	44	2.8	5.1	7.7	54	16	23	13	53	1.7	1.2	.20
27	26	3.0	5.1	6.8	54	15	21	12	36	1.8	1.5	1.3
28	17	4.3	5.1	6.8	52	13	19	11	27	2.0	2.0	1.8
29	11	15	4.3	6.8	115	12	18	10	27	1.7	1.3	3.1
30	8.9	30	4.3	6.6	-----	11	17	9.6	24	1.5	.98	1.7
31	7.1	-----	4.3	6.4	-----	10	-----	19	-----	1.8	.67	-----
TOTAL	190.4	209.2	657.7	316.6	854.4	992	891.4	821.6	2,566.9	302.7	48.02	14.22
MEAN	6.14	6.97	21.2	10.2	29.5	32.0	29.7	26.5	85.6	9.76	1.55	.47
MAX	44	30	121	17	115	167	104	56	868	33	3.6	3.1
MIN	1.1	2.0	4.3	3.9	5.2	10	8.2	9.6	3.8	1.5	.67	.03
CFSM	.57	.65	1.98	.95	2.76	2.99	2.78	2.48	8.00	.91	.14	.04
IN.	.66	.73	2.29	1.10	2.97	3.45	3.10	2.86	8.92	1.05	.17	.05

CAL YR 1971 TOTAL 5,315.74 MEAN 14.6 MAX 173 MIN .06 CFSM 1.36 IN 18.48
WTR YR 1972 TOTAL 7,865.14 MEAN 21.5 MAX 868 MIN .03 CFSM 2.01 IN 27.34

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-13	1800	4.63	210	6-22	0445	9.17	1,300
3- 1	1630	4.50	187	7- 2	1800	4.36	162

NOTE.--No gage-height record
May 20 to June 19.

POTOMAC RIVER BASIN

01614090 Conococheague Creek near Fayetteville, Pa.

LOCATION.--Lat 39°55'48", long 77°26'23", Adams County, on right bank 20 ft downstream from bridge on State Highway 233, 0.3 mile upstream from Birch Run, 1.3 miles upstream from Chambersburg Reservoir Dam, 4 miles northeast of Fayetteville, and 12 miles east of Chambersburg.

DRAINAGE AREA.--5.05 sq mi.

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

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 1,132.76 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 6.34 cfs (17.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 392 cfs June 22 (gage height, 3.45 ft), from rating curve extended as explained below; minimum, 1.0 cfs Oct. 19, 20, Sept. 17, 18; minimum gage height, 1.16 ft Oct. 9, 19, 20, Sept. 17, 18.

Period of record: Maximum discharge, 392 cfs June 22, 1972 (gage height, 3.45 ft), from rating curve extended above 75 cfs on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 0.1 cfs on many days; minimum gage height, 0.67 ft Sept. 3, 1966.

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	1.4	4.9	5.1	6.0	5.3	31	11	13	8.5	22	4.1	1.8
2	1.7	6.3	4.5	12	5.3	56	14	13	7.7	19	3.7	1.8
3	1.8	4.9	4.3	9.2	7.9	73	11	21	7.3	18	4.6	1.9
4	1.6	4.3	4.1	7.5	11	47	11	24	6.2	16	4.1	1.8
5	1.6	4.1	3.9	8.5	6.3	37	9.7	20	5.6	22	3.6	1.7
6	1.4	4.1	5.5	7.2	6.3	30	9.3	18	5.3	17	3.3	1.6
7	1.2	4.3	20	6.6	6.3	25	9.3	18	4.8	14	5.9	1.6
8	1.2	4.1	26	6.6	6.2	24	8.9	18	4.3	13	5.6	1.4
9	1.2	3.9	29	7.2	6.2	20	8.5	23	3.9	12	3.6	1.4
10	3.9	3.9	31	8.8	6.2	18	8.1	20	3.6	13	3.1	1.3
11	2.3	3.9	34	7.9	6.0	16	8.1	17	3.4	13	2.8	1.4
12	1.6	3.7	24	8.2	5.7	15	7.3	16	3.1	11	3.0	1.5
13	1.4	3.7	21	7.7	23	14	20	16	3.3	10	7.7	1.7
14	1.3	3.5	18	8.2	18	17	15	18	3.9	9.3	3.6	1.4
15	1.2	3.5	16	7.2	17	16	21	17	3.0	8.5	3.0	1.3
16	1.2	3.3	15	6.9	17	19	24	15	2.7	8.1	2.7	1.2
17	1.2	3.2	13	7.7	16	20	27	15	2.5	7.7	3.3	1.1
18	1.2	3.2	12	7.2	15	16	22	14	8.1	7.3	3.9	1.8
19	1.2	3.3	11	7.5	15	14	21	14	8.1	6.5	2.8	1.9
20	1.1	3.3	11	7.2	14	14	20	25	4.1	5.9	2.5	1.4
21	1.2	3.3	10	7.5	12	13	18	18	35	5.6	2.4	1.4
22	1.2	3.2	8.8	7.2	12	24	25	17	298	5.3	2.3	1.4
23	1.2	2.9	8.2	7.5	10	18	21	15	306	4.8	2.3	2.0
24	6.3	3.0	8.2	7.5	10	16	20	15	142	4.6	2.1	1.4
25	10	3.7	7.9	6.9	10	15	18	13	78	4.3	2.1	1.2
26	7.5	3.2	7.7	6.0	14	15	17	12	52	4.1	2.1	1.1
27	4.7	3.3	7.5	5.7	12	14	16	11	36	4.1	3.4	1.2
28	3.9	3.5	7.2	6.0	11	13	15	11	28	4.1	3.4	1.4
29	3.5	6.0	6.9	5.7	17	13	14	9.7	35	3.9	2.4	2.7
30	3.3	7.5	6.9	5.7	-----	13	13	9.3	32	3.7	2.0	2.3
31	3.5	-----	6.6	5.5	-----	12	-----	11	-----	4.3	1.8	-----
TOTAL	77.0	119.0	394.3	226.5	321.7	688	463.2	497.0	1,141.4	302.1	103.2	47.1
MEAN	2.48	3.97	12.7	7.31	11.1	22.2	15.4	16.0	38.0	9.75	3.33	1.57
MAX	10	7.5	34	12	23	73	27	25	306	22	7.7	2.7
MIN	1.1	2.9	3.9	5.5	5.3	12	7.3	9.3	2.5	3.7	1.8	1.1
CFSM	.49	.79	2.51	1.45	2.20	4.40	3.05	3.17	7.52	1.93	.66	.31
IN.	.57	.88	2.90	1.67	2.37	5.07	3.41	3.66	8.41	2.23	.76	.35

CAL YR 1971 TOTAL 2,707.6 MEAN 7.42 MAX 46 MIN 1.1 CFSM 1.47 IN 19.95
 WTR YR 1972 TOTAL 4,380.5 MEAN 12.0 MAX 306 MIN 1.1 CFSM 2.38 IN 32.27

PEAK DISCHARGE (BASE, 70 CFS).--Mar. 3 (0500) 100 cfs (2.66 ft); June 22 (1415) 392 cfs (3.45 ft).

NEWELL CREEK BASIN

187

03008000 Newell Creek near Port Allegany, Pa.

LOCATION.--Lat 41°53'43", long 78°20'56", McKean County, on right bank at downstream side of concrete bridge, 0.5 mile upstream from bridge on State Highway 155, and 6.5 miles northwest of Port Allegany.

DRAINAGE AREA.--7.79 sq mi.

PERIOD OF RECORD.--Annual maximum and occasional discharge measurements, water years 1960-65. October 1965 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 1,450 ft (from topographic map). Nov. 4, 1959, to Sept. 30, 1965, crest-stage gage at site 60 ft upstream and Oct. 1, 1965, to Sept. 30, 1968, water-stage recorder at present site both at datum 1.00 ft higher.

AVERAGE DISCHARGE.--7 years, 11.5 cfs (20.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,000 cfs June 21 (gage height, 6.40 ft), from rating extended above 590 cfs; minimum daily, 0.14 cfs Sept. 11.

Period of record: Maximum discharge, 3,000 cfs June 21, 1972 (gage height, 6.40 ft), from rating curve extended above 590 cfs; no flow on many days.

REMARKS.--Records good except those for winter periods, which are 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	2.0	.79	8.3	40	7.0	30	13	7.8	3.8	18	1.5	.36
2	1.5	1.4	7.8	29	5.8	210	15	17	3.5	14	1.4	.31
3	1.1	1.5	6.1	21	5.4	119	14	19	4.0	15	1.9	.31
4	.92	1.4	4.7	17	5.2	50	15	21	41	12	1.5	.36
5	.83	1.5	4.8	14	4.8	32	14	21	27	11	1.2	.31
6	.83	1.3	7.4	11	5.4	25	13	18	15	12	1.1	.27
7	1.0	1.9	69	10	4.8	35	13	16	10	11	27	.27
8	.92	1.9	85	8.5	4.5	83	12	16	7.2	9.2	22	.23
9	.83	1.8	41	8.3	4.3	36	11	41	5.9	8.0	13	.31
10	.92	2.3	28	14	4.1	25	10	37	5.4	12	8.4	.20
11	1.2	2.8	22	22	4.0	21	10	28	4.0	8.8	5.8	.14
12	1.3	3.3	16	20	4.0	38	11	23	3.2	7.2	4.6	.17
13	1.3	4.4	13	25	7.0	37	16	18	2.9	6.1	3.4	.31
14	1.1	4.1	9.9	26	11	43	17	17	2.5	5.2	2.9	1.5
15	.92	4.4	18	15	9.4	32	17	15	15	4.6	2.9	.99
16	.83	4.0	18	10	8.4	37	58	15	44	11	2.1	.55
17	.65	3.7	15	11	7.6	42	61	16	21	7.2	2.1	.42
18	.56	3.3	13	12	7.0	33	39	14	14	5.5	1.7	.55
19	.38	4.2	11	13	6.6	28	30	12	10	8.8	1.4	.55
20	.29	4.7	11	11	6.2	28	37	13	7.8	13	1.2	.48
21	.20	5.0	11	11	6.2	31	29	11	876	7.2	1.1	.36
22	.16	4.5	8.6	11	6.0	70	27	9.5	549	5.2	.99	.31
23	.20	3.0	8.3	22	6.0	46	24	7.8	365	5.2	.86	.31
24	1.1	3.0	8.0	25	6.4	31	21	6.7	122	5.2	.74	.42
25	1.7	3.3	7.5	34	6.0	24	17	5.6	80	4.6	.64	.55
26	1.8	3.0	12	25	5.6	19	14	4.5	57	3.4	.55	.48
27	1.6	3.2	11	17	5.4	16	12	3.8	38	3.1	.86	.99
28	1.4	4.0	15	14	6.0	14	10	3.2	25	2.5	.86	.74
29	1.1	4.7	13	11	7.0	12	8.8	2.9	26	2.1	.64	.64
30	.96	11	94	9.0	-----	14	7.8	4.2	24	1.7	.48	2.5
31	.83	-----	74	8.0	-----	13	-----	5.8	-----	1.5	.42	-----
TOTAL	30.43	99.39	671.4	524.8	177.1	1,274	596.6	449.8	2,409.2	241.3	115.24	15.89
MEAN	.98	3.31	21.7	16.9	6.11	41.1	19.9	14.5	80.3	7.78	3.72	.53
MAX	2.0	11	94	40	11	210	61	41	876	18	27	2.5
MIN	.16	.79	4.7	8.0	4.0	12	7.8	2.9	2.5	1.5	.42	.14
CFSM	.13	.42	2.79	2.17	.78	5.28	2.55	1.86	10.3	1.00	.48	.07
IN.	.15	.47	3.21	2.51	.85	6.08	2.85	2.15	11.50	1.15	.55	.08
CAL YR 1971	TOTAL 3,097.64	MEAN 8.49	MAX 146	MIN 0	CFSM 1.09	IN 14.79						
WTR YR 1972	TOTAL 6,605.15	MEAN 18.0	MAX 876	MIN .14	CFSM 2.31	IN 31.54						

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2200	4.65	292	6- 4	1645	4.49	268
12-30	1415	4.14	216	6-21	0645	6.40	3,000
3- 2	1730	4.72	303				

03010500 Allegheny River at Eldred, Pa.

LOCATION.--Lat 41°57'48", long 78°23'11", McKean County, on right bank at site of former highway bridge, 600 ft upstream from bridge on State Highway 346, 1,000 ft upstream from Knapp Creek, half a mile north of Eldred, and at mile 267.8.

DRAINAGE AREA.--550 sq mi.

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,416.53 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 926 cfs (22.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 65,400 cfs June 23 (gage height, 29.05 ft, from floodmark); from rating curve extended as explained below; minimum daily, 60 cfs Sept. 13.
Period of record: Maximum discharge, 65,400 cfs June 23, 1972 (gage height, 29.05 ft, from floodmark), from rating curve extended above 21,000 cfs on basis of slope-area measurement at gage height 27.6 ft; minimum, 22 cfs Sept. 29, 30, 1959 (gage height, 1.27 ft).

REMARKS.--Records good except those for winter periods, which are fair. Water-quality records 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	124	173	631	3,840	1,010	500	1,550	754	569	2,340	242	84
2	135	172	402	3,420	899	2,710	1,800	1,160	469	1,740	240	79
3	133	227	451	2,610	755	4,170	1,850	1,580	521	1,680	234	76
4	124	226	425	1,890	666	4,980	1,760	1,610	529	1,630	274	73
5	124	201	336	1,590	500	5,580	1,700	1,800	688	1,270	222	74
6	124	188	456	1,240	540	4,800	1,500	1,620	494	1,340	186	72
7	126	185	1,790	1,150	520	2,780	1,520	1,530	426	1,170	868	68
8	131	200	3,120	1,030	480	3,370	1,440	1,430	369	984	940	66
9	126	197	2,750	848	450	3,310	1,290	1,920	329	880	458	64
10	124	188	2,410	1,030	430	2,480	1,220	2,450	380	1,180	308	64
11	135	209	2,120	1,240	420	1,860	1,260	2,130	348	1,030	248	62
12	140	216	1,740	1,330	400	2,020	1,510	1,910	297	772	214	62
13	135	224	1,450	1,260	360	2,360	1,960	1,650	283	654	194	60
14	122	241	1,210	1,760	400	2,350	2,930	1,510	287	582	184	100
15	110	239	1,440	1,490	450	2,200	3,120	1,580	298	639	180	150
16	102	330	1,850	1,020	420	1,960	3,270	1,880	889	1,050	178	120
17	96	299	1,500	800	400	2,450	4,000	1,940	768	928	155	100
18	92	274	1,390	1,280	380	2,290	5,770	1,920	496	663	155	78
19	88	274	1,230	1,310	370	1,940	5,480	1,670	424	570	151	140
20	84	362	1,130	1,240	320	1,830	4,390	1,480	385	936	136	108
21	80	372	1,130	1,060	370	1,990	3,460	1,530	4,820	702	121	88
22	77	367	1,000	920	360	2,830	2,560	1,250	22,100	576	111	74
23	77	320	736	1,450	350	3,700	2,230	1,040	55,700	489	105	66
24	90	289	765	1,950	340	3,900	1,860	882	49,000	475	101	63
25	185	279	805	2,300	330	3,360	1,590	751	22,400	460	111	69
26	262	309	909	2,600	320	2,490	1,360	640	11,900	472	106	76
27	279	289	1,150	2,310	320	1,910	1,180	552	7,800	373	116	94
28	230	307	1,180	2,040	310	1,620	1,030	491	5,240	340	139	89
29	210	350	1,230	1,640	330	1,460	918	447	3,460	305	139	89
30	193	566	1,830	1,330	-----	1,540	816	425	3,040	268	108	148
31	180	-----	3,580	1,170	-----	1,550	-----	705	-----	248	94	-----
TOTAL	4,238	8,073	42,146	50,148	13,200	82,290	66,324	42,237	194,709	26,746	7,018	2,556
MEAN	137	269	1,360	1,618	455	2,655	2,211	1,362	6,490	863	226	85.2
MAX	279	566	3,580	3,840	1,010	5,580	5,770	2,450	55,700	2,340	940	150
MIN	77	172	336	800	310	500	816	425	283	248	94	60
CFSM	.25	.49	2.47	2.94	.83	4.83	4.02	2.48	11.8	1.57	.41	.15
IN.	.29	.55	2.85	3.39	.89	5.57	4.49	2.86	13.17	1.81	.47	.17

CAL YR 1971 TOTAL 262,582 MEAN 719 MAX 4,380 MIN 29 CFSM 1.31 IN 17.76
WTR YR 1972 TOTAL 539,685 MEAN 1,475 MAX 55,700 MIN 60 CFSM 2.68 IN 36.50

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 5	0300	13.76	5,750	6-23	a2100	f29.05	65,400
4-18	1600	14.09	6,110				

a About.

f From floodmark.

03011020 Allegheny River at Salamanca, N.Y.

LOCATION.--Lat 42°09'23", long 78°42'56", Cattaraugus County, on left bank 230 ft upstream from Main Street bridge in Salamanca, 1.3 miles downstream from Great Valley Creek, and 1.6 miles upstream from Little Valley Creek, and at mile 229.5.

DRAINAGE AREA.--1,608 sq mi.

PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1964, published as "at Red House."

GAGE.--Water-stage recorder. Datum of gage is 1,358.00 ft above mean sea level (Corps of Engineers bench mark). Prior to Sept. 3, 1917, nonrecording gage and Sept. 4, 1917, to Sept. 30, 1964, water-stage recorder at site 7.5 miles downstream at different datum. Oct. 1, 1964, to Sept. 30, 1967, at present site at datum 0.04 ft lower.

AVERAGE DISCHARGE.--69 years, 2,757 cfs (23.28 inches per year).

EXTREMES.--Current year: Maximum discharge, 73,000 cfs June 23 (gage height, 24.01 ft, from floodmarks); minimum, 238 cfs Sept. 4-5, 24 (gage height, 3.11 ft).

Period of record: Maximum discharge, 73,000 cfs June 23, 1972 (gage height, 24.01 ft, from floodmarks); minimum daily, 79 cfs Sept. 10, 11, 1971.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1385: 1907, 1909-12, 1913(M), 1914-15, 1916-17(M), 1925, 1927. WSP 1907: 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	402	380	2,100	11,300	2,600	1,390	4,650	2,210	2,030	7,130	781	313
2	350	360	1,550	9,080	2,400	9,700	5,340	2,920	1,560	5,330	759	283
3	317	350	1,100	7,100	2,200	20,000	5,300	4,770	1,450	4,760	770	268
4	294	424	1,100	5,180	1,800	16,100	4,910	4,710	1,460	5,880	825	253
5	317	447	980	4,200	900	13,700	4,690	4,730	1,840	4,380	770	245
6	290	447	1,320	3,300	1,300	10,900	4,190	4,280	1,600	4,360	640	337
7	299	508	5,220	2,500	1,300	8,080	3,940	4,030	1,280	4,290	825	377
8	299	547	13,800	2,300	1,200	11,900	3,740	4,240	1,120	3,700	3,900	345
9	299	534	10,500	2,400	1,000	10,000	3,310	7,580	975	3,240	2,220	445
10	290	528	7,630	2,700	960	7,200	3,190	8,880	986	4,210	1,430	436
11	294	575	6,380	3,790	900	5,200	3,260	6,900	975	4,230	1,070	321
12	330	628	5,220	4,220	860	5,510	4,050	5,570	840	3,320	892	298
13	340	770	4,320	3,900	840	7,200	6,050	4,710	770	2,810	770	353
14	312	942	3,650	5,600	1,220	7,850	9,080	4,130	740	2,530	704	590
15	281	931	4,150	4,400	1,300	7,280	8,830	4,050	750	2,290	836	1,000
16	265	942	5,730	2,800	1,200	6,200	9,600	4,610	3,470	3,060	792	781
17	253	900	4,710	2,200	1,100	8,600	14,200	5,470	3,020	4,290	682	533
18	253	760	4,070	2,900	1,100	8,000	12,400	5,200	2,010	2,890	630	428
19	253	730	3,610	4,010	1,000	6,350	11,700	4,430	1,550	2,310	600	394
20	253	1,020	3,340	3,940	660	5,570	11,700	3,850	1,320	2,240	542	411
21	253	1,140	3,360	3,610	960	5,930	10,100	3,770	6,780	2,400	488	361
22	265	1,180	3,210	2,970	980	9,700	7,450	3,310	33,200	1,930	453	305
23	257	1,030	2,600	4,000	900	13,500	6,250	2,790	67,900	1,660	419	260
24	312	880	2,500	5,110	880	10,600	5,260	2,400	64,900	1,500	411	253
25	424	840	2,880	6,830	820	8,750	4,510	2,100	50,400	1,480	394	283
26	489	850	3,260	6,800	800	6,600	3,850	1,820	35,700	1,610	377	329
27	508	880	4,000	5,400	760	5,000	3,310	1,590	23,800	1,300	361	650
28	528	964	4,170	5,000	900	4,400	2,920	1,390	14,700	1,130	402	693
29	477	1,120	4,090	4,200	953	4,000	2,630	1,260	9,580	1,020	453	560
30	554	1,790	5,430	3,200	-----	4,450	2,360	1,160	8,880	916	411	1,290
31	435	-----	14,000	2,900	-----	4,530	-----	1,820	-----	825	353	-----
TOTAL	10,493	23,397	139,980	137,840	33,793	254,190	182,770	120,680	345,586	93,021	24,960	13,395
MEAN	338	780	4,515	4,446	1,165	8,200	6,092	3,893	11,520	3,001	805	447
MAX	554	1,790	14,000	11,300	2,600	20,000	14,200	8,880	67,900	7,130	3,900	1,290
MIN	253	350	980	2,200	660	1,390	2,360	1,160	740	825	353	245
CFSM	.21	.49	2.81	2.76	.72	5.10	3.79	2.42	7.16	1.87	.50	.28
IN.	.24	.54	3.24	3.19	.78	5.88	4.23	2.79	7.99	2.15	.58	.31

CAL YR 1971 TOTAL 817,593 MEAN 2,240 MAX 17,600 MIN 79 CFSM 1.39 IN 18.91
WTR YR 1972 TOTAL 1,380,105 MEAN 3,771 MAX 67,900 MIN 245 CFSM 2.35 IN 31.93

PEAK DISCHARGE (BASE, 17,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	1000	10.68	20,700	6-23	1300	24.01	73,000

KINZUA CREEK BASIN

03011800 Kinzua Creek near Guffey, Pa.

LOCATION.--Lat 41°45'59", long 78°43'08", McKean County, in Allegheny National Forest, on right bank 130 ft upstream from bridge on U.S. Highway 219, 0.2 mile upstream from Wintergreen Run, 1.0 mile downstream from Pine Run, and 1.5 miles west of Guffey.

DRAINAGE AREA.--46.4 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, published as "at Tallyho", water years 1959-65. October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,540 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 72.2 cfs (21.13 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,220 cfs June 22 (gage height, 8.99 ft), from rating curve extended as explained below; minimum, 6.0 cfs Sept. 7, 8, 10-12 (gage height, 2.38 ft).
Period of record: Maximum discharge, 5,220 cfs June 22, 1972 (gage height, 8.99 ft), from rating curve extended above 1,300 cfs on basis of slope-area measurement at gage height, 8.33 ft; minimum, 4.0 cfs Sept. 2, 3, 1966 (gage height, 2.35 ft).

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

REVISIONS (WATER YEARS).--WRD Pa. 1968: 1967(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	12	49	218	64	60	141	74	38	159	21	7.0
2	10	17	39	185	54	320	152	196	34	125	21	6.6
3	9.4	19	39	149	45	372	134	154	42	132	23	8.6
4	11	17	35	123	42	275	140	129	37	120	21	7.5
5	13	15	33	108	40	214	123	136	30	104	17	7.0
6	13	15	66	88	45	174	123	113	26	118	15	6.7
7	15	17	260	86	40	166	140	107	23	92	23	6.5
8	15	17	298	70	37	306	118	108	20	75	31	6.6
9	13	15	218	70	35	210	105	159	22	70	21	8.0
10	15	16	185	92	33	170	104	154	23	143	17	6.5
11	15	17	163	102	33	147	136	118	19	104	14	6.0
12	12	17	129	91	33	161	154	105	18	73	13	6.7
13	11	26	107	105	50	167	238	99	19	66	13	12
14	10	26	94	145	66	159	228	105	19	57	12	19
15	9.4	30	168	80	50	138	200	105	28	52	12	13
16	8.8	31	149	60	42	150	430	104	81	127	11	9.4
17	8.2	24	115	80	37	200	420	92	37	99	11	9.1
18	8.2	20	102	92	31	161	282	88	26	64	11	16
19	7.6	27	89	108	35	140	230	73	23	51	11	11
20	7.6	37	88	94	30	140	212	81	23	58	9.6	8.9
21	7.6	34	89	92	38	165	183	84	1,040	47	9.3	7.8
22	7.0	31	75	86	32	428	156	67	1,860	40	8.8	7.0
23	8.2	26	61	163	30	321	150	57	2,120	39	8.7	6.6
24	16	25	66	159	35	242	127	50	690	46	8.6	8.1
25	24	28	83	194	31	196	110	43	520	34	8.6	8.8
26	21	23	122	154	29	163	92	39	378	32	8.3	9.0
27	18	24	110	138	28	138	83	35	258	30	11	10
28	15	28	129	123	27	125	73	32	191	26	10	9.5
29	13	32	107	107	26	120	66	30	236	24	8.7	9.6
30	13	73	290	89	-----	140	48	30	228	22	8.0	28
31	12	-----	327	72	-----	127	-----	50	-----	21	7.2	-----
TOTAL	378.0	739	3,885	3,523	1,118	5,995	4,898	2,817	8,109	2,250	424.8	286.5
MEAN	12.2	24.6	125	114	38.6	193	163	90.9	270	72.6	13.7	9.55
MAX	24	73	327	218	66	428	430	196	2,120	159	31	28
MIN	7.0	12	33	60	26	60	48	30	18	21	7.2	6.0
CFSM	.26	.53	2.69	2.46	.83	4.16	3.51	1.96	5.82	1.56	.30	.21
IN.	.30	.59	3.11	2.82	.90	4.81	3.93	2.26	6.50	1.80	.34	.23
CAL YR 1971	TOTAL 21,435.0	MEAN 58.7	MAX 348	MIN 5.0	CFSM 1.27	IN 17.18						
WTR YR 1972	TOTAL 34,423.3	MEAN 94.1	MAX 2,120	MIN 6.0	CFSM 2.03	IN 27.60						

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	2100	4.85	520	+4-16	Unknown	*5.51	846
3- 2	-	-	a 640	6-21	1130	6.86	1,970
3-22	1300	5.11	645	6-22	2330	8.99	5,220

+ Probably.
* From magnet.

OHIO RIVER MAIN STEM

191

03012600 Allegheny River at Warren, Pa.

LOCATION.--Lat 41°49'28", long 79°07'09", Warren County, at center pier on downstream side of bridge on U. S. Highway 6 at Warren, 1,500 ft upstream from Glade Run, 6.9 miles downstream from Kinzua Dam, and at mile 191.2.

DRAINAGE AREA.--2,223 sq mi. Area at site used prior to Nov. 1, 1964, 2,179 sq mi.

PERIOD OF RECORD.--October 1955 to September 1972 (discontinued). Published as "near Kinzua" (sta 03012500) prior to October 1968.

GAGE.--Water-stage recorder. Datum of gage is 1,172.77 above mean sea level (Corps of Engineers bench mark). Prior to Nov. 1, 1964, water-stage recorder at site 7.4 miles upstream at different datum. Nov. 1, 1964, to Aug. 4, 1966, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--37 years, 3,748 cfs (22.90 inches per year), adjusted for storage since October 1965.

EXTREMES.--Current year: Maximum discharge, 25,000 cfs June 28 (gage height, 14.12 ft); minimum daily, 700 cfs Feb. 8-14.
Period of record: Maximum discharge, 60,500 cfs Mar. 8, 1956 (gage height, 19.95 ft, site and datum then in use); minimum not determined.

REMARKS.--Records good. Flow regulated since October 1965 by Allegheny Reservoir 6.9 miles upstream (see p.237). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Three discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1275: 1936-37.

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	2,570	1,620	887	7,930	6,810	5,330	4,340	3,060	1,550	24,300	1,680	1,200
2	2,520	1,610	815	9,090	5,320	4,200	4,360	2,100	1,720	23,800	2,040	1,200
3	2,460	1,570	805	9,000	4,520	3,880	4,380	2,920	1,720	24,100	2,110	1,200
4	1,970	1,630	806	9,300	3,700	5,700	4,140	4,080	1,740	24,100	2,060	1,200
5	1,070	1,690	779	9,150	3,660	7,830	4,130	4,060	1,720	23,800	2,010	1,510
6	1,000	1,660	991	8,580	3,620	7,920	4,380	4,060	1,840	23,400	2,010	1,940
7	990	1,630	1,770	8,430	3,100	8,190	4,400	4,100	2,000	23,100	1,410	2,130
8	932	1,590	1,380	8,460	700	8,460	4,380	3,980	2,020	23,100	1,390	2,720
9	960	1,500	1,130	8,340	700	9,630	4,380	5,700	2,040	23,100	1,400	3,230
10	970	1,390	970	8,310	700	11,800	3,410	9,640	1,990	23,100	1,380	3,130
11	932	1,390	960	8,370	700	11,800	1,640	11,600	1,980	23,000	1,380	3,050
12	941	1,410	932	8,280	700	11,600	950	11,600	1,450	22,900	1,390	3,030
13	1,100	1,420	1,260	8,550	700	8,380	1,110	11,300	1,000	18,900	1,400	2,970
14	1,420	1,410	2,280	8,400	700	3,640	1,170	11,200	1,010	10,400	1,400	2,650
15	1,350	1,390	2,900	8,340	1,400	3,680	1,220	9,790	1,180	5,100	1,370	1,880
16	1,360	1,390	3,510	8,310	1,930	5,440	1,510	5,680	1,420	4,100	1,370	1,550
17	1,340	1,240	5,320	8,220	2,390	7,920	2,630	3,900	2,060	4,460	1,390	1,550
18	1,300	752	6,450	8,280	2,720	9,820	6,630	5,060	2,050	5,550	1,390	1,550
19	1,290	797	6,330	8,460	2,770	11,600	12,700	5,430	2,060	4,800	1,330	1,330
20	1,290	797	6,420	8,400	1,800	11,800	13,500	4,880	2,100	4,080	1,310	817
21	1,380	806	6,510	8,310	1,300	11,800	12,800	4,840	2,530	3,800	1,750	817
22	1,570	743	6,450	8,010	1,200	12,100	15,800	4,380	4,390	1,410	3,020	826
23	1,680	725	6,300	8,070	2,200	11,800	15,500	3,420	6,320	1,370	2,730	817
24	1,690	725	6,240	8,190	4,930	11,800	12,500	2,860	10,800	1,380	2,440	817
25	1,670	770	6,210	8,460	6,840	11,700	5,620	2,340	19,500	1,390	3,140	817
26	1,650	752	6,270	8,340	3,480	11,600	3,800	1,720	17,800	1,380	3,670	844
27	1,600	743	6,510	8,220	3,400	11,700	3,820	1,690	22,000	1,390	3,290	835
28	1,570	779	6,540	8,070	3,800	10,400	3,860	1,690	24,300	1,390	2,450	826
29	1,610	815	6,330	7,950	5,300	6,850	3,800	1,720	24,700	1,390	1,820	835
30	1,680	990	7,050	7,980	-----	4,300	3,760	1,760	24,500	1,380	1,210	910
31	1,660	-----	6,660	7,860	-----	4,300	-----	1,600	-----	1,400	1,210	-----
TOTAL	45,525	35,734	117,766	259,660	81,090	266,970	166,620	152,160	191,490	356,870	57,950	48,181
MEAN	1,469	1,191	3,794	8,376	2,796	8,612	5,554	4,908	6,383	11,510	1,869	1,606
MAX	2,570	1,690	7,050	9,300	6,840	12,100	15,800	11,600	24,700	24,300	3,670	3,230
MIN	932	725	779	7,860	700	3,640	950	1,600	1,000	1,370	1,210	817
MEAN [‡]	666	1,333	6,549	6,026	1,696	10,520	8,084	5,059	14,120	4,020	1,120	657
CFSM [‡]	.30	.60	2.95	2.71	.76	4.73	3.64	2.28	6.35	1.81	.50	.30
IN. [‡]	.35	.67	3.40	3.12	.82	5.45	4.06	2.63	7.08	2.09	.58	.33

CAL YR 1971 TOTAL 1,097,755 MEAN 3,008 MAX 23,100 MIN 680 MEAN[‡] 3,112 CFSM[‡] 1.40 IN.[‡] 19.01
WTR YR 1972 TOTAL 1,780,016 MEAN 4,863 MAX 24,700 MIN 700 MEAN[‡] 4,995 CFSM[‡] 2.25 IN.[‡] 30.58

[‡] Adjusted for change in contents in Allegheny Reservoir.

CONEWANGO CREEK BASIN

03015000 Conewango Creek at Russell, Pa.

LOCATION.--Lat 41°56'17", long 79°08'00", Warren County, on left bank at highway bridge in Russell, 0.5 mile upstream from Akeley Run, and 8.0 miles upstream from mouth.

DRAINAGE AREA.--816 sq mi.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October, November 1939, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,222.18 ft above mean sea level, unadjusted. Prior to Apr. 10, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 1,453 cfs (24.18 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 9,020 cfs June 26 (gage height, 8.81 ft); minimum, 124 cfs Oct. 4 (gage height, 2.08 ft).

Period of record: Maximum discharge, 14,400 cfs Apr. 7, 1947 (gage height, 10.69 ft); minimum not determined; minimum daily, 57 cfs Oct. 17, 1960.

Flood in March 1936 reached a stage of 10.9 ft, from floodmark (discharge, 14,600 cfs).

REMARKS.--Records good. Flow regulated by Chautauqua Lake (see p. 237).

REVISIONS (WATER YEARS).--WSP 1083: 1936(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	142	150	2,190	4,270	1,550	1,460	2,720	728	537	6,040	310	241
2	136	151	2,010	4,340	1,460	4,880	2,790	1,160	624	5,300	300	232
3	133	149	1,750	4,260	1,390	5,830	2,800	2,080	579	4,920	340	227
4	130	167	1,510	3,940	1,330	5,440	2,780	1,960	544	4,430	356	227
5	133	329	1,330	3,340	1,120	5,590	2,800	1,530	558	3,540	340	227
6	133	527	1,600	2,660	1,050	5,570	2,720	1,240	516	3,140	300	222
7	136	624	3,620	2,170	1,000	5,470	2,560	1,040	454	2,610	442	218
8	139	766	4,650	1,830	940	5,950	2,240	1,160	406	2,260	1,110	209
9	142	770	4,550	1,660	880	5,810	1,940	2,340	378	1,960	776	205
10	176	687	4,640	1,880	840	5,470	1,730	2,800	373	1,970	624	209
11	240	643	4,690	2,400	800	5,030	1,710	2,610	340	2,040	495	214
12	350	657	4,570	2,560	800	4,880	1,920	2,180	315	1,820	418	209
13	338	745	4,300	2,540	1,030	4,890	2,200	1,750	305	1,530	378	214
14	282	838	3,780	2,810	1,120	5,000	2,550	1,430	295	1,190	356	315
15	232	874	3,450	2,520	1,220	5,140	2,740	1,270	300	984	335	579
16	201	971	3,500	1,910	1,300	5,340	3,260	1,570	495	840	320	858
17	177	902	3,280	1,750	1,300	6,040	4,290	1,960	624	824	310	760
18	163	747	3,030	1,720	1,280	6,330	4,280	2,010	565	712	315	530
19	155	668	2,680	1,980	1,270	6,220	4,350	1,760	448	704	310	395
20	149	684	2,350	2,330	1,050	5,920	4,430	1,510	373	957	305	325
21	143	780	2,300	2,500	1,000	5,540	4,200	1,350	373	939	295	290
22	139	1,070	2,320	2,420	1,150	5,490	3,640	1,220	2,080	736	285	255
23	139	1,190	2,090	2,720	1,200	5,590	3,060	957	5,750	572	250	232
24	145	1,140	1,870	2,870	1,160	5,570	2,600	760	6,380	481	260	241
25	184	1,090	2,050	3,180	1,140	5,440	2,250	680	7,900	579	330	265
26	204	1,060	2,360	3,020	1,120	5,080	1,960	612	8,920	558	310	325
27	198	1,080	2,680	2,650	1,080	4,540	1,680	509	8,780	460	275	608
28	187	1,280	2,900	2,340	1,070	3,870	1,460	442	8,130	418	260	1,310
29	170	1,480	2,940	2,050	1,090	3,230	1,270	412	7,380	384	270	1,240
30	160	2,040	3,520	1,770	-----	2,860	912	406	6,780	351	265	1,120
31	154	-----	4,320	1,650	-----	2,740	-----	460	-----	330	245	-----
TOTAL	5,510	24,259	92,830	80,040	32,740	156,210	79,842	41,896	71,502	53,579	11,485	12,502
MEAN	178	809	2,995	2,582	1,129	5,039	2,661	1,351	2,383	1,728	370	417
MAX	350	2,040	4,690	4,340	1,550	6,330	4,430	2,800	8,920	6,040	1,110	1,310
MIN	130	149	1,330	1,650	800	1,460	912	406	295	330	245	205
MEAN [‡]	195	998	3,067	2,375	989	5,370	2,542	1,401	2,669	1,426	329	451
CFSM [‡]	.24	1.22	3.76	2.91	1.21	6.58	3.12	1.72	3.27	1.75	.40	.55
IN. [‡]	.28	1.36	4.33	3.35	1.30	7.59	3.48	1.98	3.65	2.02	.46	.61
CAL YR 1971	TOTAL 469,019	MEAN 1,285	MAX 6,510	MIN 121	MEAN [‡] 1,301	CFSM [‡] 1.59	IN. [‡] 21.66					
WTR YR 1972	TOTAL 662,395	MEAN 1,810	MAX 8,920	MIN 130	MEAN [‡] 1,824	CFSM [‡] 2.24	IN. [‡] 30.41					

[‡] Adjusted for change in contents in Chautauqua Lake.

CONEWANGO CREEK BASIN

193

03015280 Jackson Run near North Warren, Pa.

LOCATION.--Lat 41°54'10", long 79°14'18", Warren County, on right bank at downstream side of highway bridge on Creamery Road, 0.6 mile upstream from Mud Run, and 5 miles northwest of North Warren.

DRAINAGE AREA.--12.8 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1373.67 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 23.1 cfs (24.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs, Mar. 2, from rating curve extended above 330 cfs; maximum gage height, 5.46 ft Mar. 2 (backwater from ice); minimum daily discharge, 1.6 cfs Oct. 3.
Period of record: Maximum discharge, 1,020 cfs Mar. 2, 1972, from rating curve extended above 330 cfs; maximum gage height, 5.58 ft Feb. 11, 1966 (backwater from ice), minimum discharge, 0.4 cfs Oct. 22, 26-27, 1963 (gage height, 1.18 ft).

REMARKS.--Records good except those for winter periods, which are 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	2.5	2.9	27	40	15	58	30	17	6.3	42	4.8	2.4
2	1.9	3.5	27	28	14	700	35	48	5.9	28	4.5	2.2
3	1.6	3.4	16	23	13	680	29	116	6.3	42	4.8	2.4
4	1.7	5.3	14	21	13	613	36	47	5.6	32	4.3	2.4
5	1.8	11	13	20	12	350	30	32	4.5	40	4.0	2.4
6	2.0	7.4	76	17	14	278	28	24	3.8	51	3.4	2.4
7	2.3	6.8	224	17	13	179	27	21	3.6	30	16	2.2
8	3.0	6.9	200	16	12	143	22	33	3.2	24	11	2.2
9	5.0	6.7	67	16	11	74	21	67	3.0	23	6.3	2.4
10	17	7.7	51	28	11	63	18	41	3.2	44	5.0	2.4
11	7.0	11	41	40	10	53	22	29	3.0	24	4.3	2.4
12	5.0	12	48	25	10	49	25	22	2.8	19	3.8	2.4
13	4.1	16	45	42	15	57	36	19	3.4	16	3.8	2.5
14	3.5	14	21	56	25	88	30	19	3.6	15	3.8	28
15	3.0	15	26	25	22	63	41	26	4.5	13	3.8	8.3
16	2.7	13	33	18	21	90	102	39	7.9	27	3.4	4.5
17	2.5	10	34	20	19	127	106	36	4.3	16	3.4	3.8
18	2.3	8.6	28	22	18	72	48	26	3.6	12	3.4	3.8
19	2.3	14	26	24	16	53	35	21	3.4	11	3.2	3.8
20	2.2	15	24	28	16	53	45	18	3.2	9.1	2.7	3.6
21	2.2	20	27	25	15	67	32	16	13	8.3	2.7	3.2
22	2.2	19	32	22	14	191	27	14	121	7.5	2.5	3.2
23	2.3	16	23	45	13	106	27	12	404	6.7	2.5	3.0
24	10	13	20	33	13	61	23	9.5	209	7.5	3.0	3.0
25	10	13	30	51	12	49	21	8.3	179	6.7	3.2	3.2
26	5.8	13	56	40	12	40	16	7.1	129	6.3	3.0	8.3
27	4.6	14	50	30	12	31	15	6.3	61	5.9	2.8	9.5
28	4.0	21	42	25	13	28	13	5.6	39	5.6	2.8	5.6
29	3.5	28	36	21	14	26	12	5.3	80	5.3	2.8	6.3
30	3.2	57	140	18	-----	28	11	7.9	72	5.0	2.7	28
31	3.1	-----	100	16	-----	27	-----	12	-----	4.8	2.4	-----
TOTAL	124.3	404.2	1,597	852	418	4,497	963	805.0	1,392.1	587.7	130.1	159.8
MEAN	4.01	13.5	51.5	27.5	14.4	145	32.1	26.0	46.4	19.0	4.20	5.33
MAX	17	57	224	56	25	700	106	116	404	51	16	28
MIN	1.6	2.9	13	16	10	26	11	5.3	2.8	4.8	2.4	2.2
CFSM	.31	1.05	4.02	2.15	1.13	11.3	2.51	2.03	3.63	1.48	.33	.42
IN.	.36	1.17	4.64	2.48	1.21	13.07	2.80	2.34	4.05	1.71	.38	.46

CAL YR 1971 TOTAL 6,683.9 MEAN 18.3 MAX 230 MIN 1.0 CFSM 1.43 IN 19.43
WTR YR 1972 TOTAL 11,930.2 MEAN 32.6 MAX 700 MIN 1.6 CFSM 2.55 IN 34.67

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	1615	3.75	462	3- 2	1730	5.35	1,020
+12-30	Unknown	*3.26	308	6-23	0515	4.22	627

+ Probably.

* From magnet.

BROKENSTRAW CREEK BASIN

03015500 Brokenstraw Creek at Youngsville, Pa.

LOCATION.--Lat 41°51'09", long 79°19'03", Warren County, on right bank 150 ft downstream from bridge on Main Street at Youngsville, 500 ft upstream from Matthews Run, and 3.7 miles upstream from mouth. Records include flow of Matthews Run.

DRAINAGE AREA.--321 sq mi., including that of Matthews Run.

PERIOD OF RECORD.--October 1909 to current year. Monthly discharge only for some periods, published in WSP 1305. Flow of Matthews Run included in records since October 1938.

GAGE.--Water-stage recorder. Datum of gage is 1,186.92 ft above mean sea level, adjustment of 1907. Prior to Sept. 30, 1933, nonrecording gage at site 150 ft upstream at datum 2.00 ft higher. Oct. 1, 1933, to June 15, 1939, nonrecording gage at site 150 ft upstream, and June 16, 1939, to Sept. 30, 1961, water-stage recorder at present site, both at datum 1.00 ft higher.

AVERAGE DISCHARGE.--63 years, 574 cfs (24.29 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,800 cfs June 23 (gage height, 10.78 ft); minimum, 64 cfs Sept. 11, 12 (gage height, 0.62 ft).

Period of record: Maximum discharge, about 18,000 cfs Mar. 25, 1913 (gage height, 14.2 ft., present datum); minimum observed, 19 cfs Oct. 14, 1934.

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

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1083: 1913(M). WSP 1275: 1920, 1932, 1936. WSP 1305: 1910-15, 1928-29.

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	87	91	1,250	2,410	370	660	874	350	341	740	131	75
2	78	92	780	1,310	350	5,440	1,050	1,000	275	600	131	72
3	73	92	535	836	330	4,550	954	1,810	251	1,110	140	72
4	77	105	435	705	310	4,170	953	1,300	270	1,040	140	75
5	85	224	369	628	300	2,700	1,080	836	267	820	127	74
6	80	296	1,040	480	330	1,600	908	653	227	1,230	117	71
7	91	365	4,510	487	310	1,270	827	562	198	1,030	209	69
8	108	414	5,280	470	300	2,350	714	605	171	695	675	69
9	106	344	3,310	457	290	1,900	599	1,230	161	550	515	71
10	285	331	1,840	697	280	1,630	576	1,240	169	860	293	71
11	366	396	1,180	999	270	1,080	654	811	156	805	206	66
12	291	443	966	989	300	970	788	613	144	585	161	66
13	242	574	751	871	552	1,420	966	525	147	453	144	74
14	189	634	617	1,080	762	2,040	1,090	520	162	397	131	345
15	154	606	1,260	750	746	2,130	1,150	644	171	349	121	413
16	129	589	1,640	450	711	2,060	1,880	1,100	584	413	113	209
17	112	450	1,300	470	652	2,740	2,490	1,330	491	373	109	147
18	99	338	819	500	568	2,530	2,100	954	297	296	119	142
19	91	337	659	540	501	1,740	1,130	685	216	260	103	129
20	84	467	626	580	400	1,230	1,060	570	183	251	95	109
21	78	566	697	540	430	1,340	1,100	511	340	233	90	95
22	75	675	729	520	390	3,330	900	440	2,480	206	86	86
23	76	580	548	994	370	3,620	780	381	9,700	194	86	81
24	119	515	554	1,130	452	2,480	700	334	7,260	248	86	82
25	194	476	728	1,190	372	1,420	620	287	5,740	203	107	90
26	177	463	1,030	1,020	330	1,010	540	250	4,150	185	115	133
27	149	488	1,250	751	310	860	500	221	2,570	172	103	275
28	128	664	1,240	654	320	790	450	203	1,480	166	95	254
29	113	848	1,000	544	330	751	400	191	872	153	95	197
30	103	1,460	2,310	450	-----	812	360	224	840	147	86	317
31	98	-----	2,870	400	-----	842	-----	396	-----	133	81	-----
TOTAL	4,137	13,923	42,123	23,902	11,936	61,465	28,193	20,776	40,313	14,897	4,810	4,029
MEAN	133	464	1,359	771	412	1,983	940	670	1,344	481	155	134
MAX	366	1,460	5,280	2,410	762	5,440	2,490	1,810	9,700	1,230	675	413
MIN	73	91	369	400	270	660	360	191	144	133	81	66
CFSM	.41	1.45	4.23	2.40	1.28	6.18	2.93	2.09	4.19	1.50	.48	.42
IN.	.48	1.61	4.88	2.77	1.38	7.12	3.27	2.41	4.67	1.73	.56	.47

CAL YR 1971 TOTAL 197,235 MEAN 540 MAX 5,280 MIN 45 CFSM 1.68 IN 22.86
WTR YR 1972 TOTAL 270,504 MEAN 739 MAX 9,700 MIN 65 CFSM 2.30 IN 31.35

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-7	2030	8.96	7,700	6-23	1030	10.78	11,800
3-2	1530	8.75	7,300				

OHIO RIVER MAIN STEM

195

03016000 Allegheny River at West Hickory, Pa.

LOCATION.--Lat 41°34'15", long 79°24'29", Forest County, on right bank at downstream side of bridge on State Highway 127 at West Hickory, 0.6 mile upstream from Siggins Run, 0.8 mile downstream from East Hickory Creek, and at mile 158.9.

DRAINAGE AREA.--3,660 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,059.90 ft above mean sea level. Prior to Dec. 12, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--31 years, 6,414 cfs (23.80 inches per year), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 42,300 cfs June 25 (gage height, 11.18 ft); maximum gage height, 12.97 ft Feb. 24 (backwater from ice); minimum discharge, 988 cfs Oct. 6 (gage height, 3.06 ft).
Period of record: Maximum discharge, 101,000 cfs Mar. 8, 1956 (gage height, 17.20 ft); maximum gage height, 17.83 ft Jan. 25, 1964 (backwater from ice); minimum discharge not determined.

REMARKS.--Records good. Flow regulated by Allegheny Reservoir 39 miles upstream since October 1965 and by Chautauqua Lake (see p. 237).

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	3,170	1,850	5,030	15,500	10,300	9,380	8,460	4,910	2,770	34,200	2,050	1,720
2	3,020	1,850	4,220	16,000	8,100	19,600	8,860	4,880	2,790	33,000	2,600	1,720
3	2,870	1,810	3,520	14,500	7,900	20,000	8,740	7,380	2,990	33,200	2,720	1,720
4	2,820	1,780	3,040	14,600	6,140	17,000	8,660	8,850	2,940	33,600	2,720	1,720
5	1,810	1,970	2,670	13,800	4,400	18,500	8,500	7,620	2,890	31,600	2,690	1,700
6	1,130	2,310	3,520	12,700	4,800	17,300	8,700	6,660	2,820	31,700	2,620	2,500
7	1,130	2,500	12,500	11,900	3,900	17,200	8,460	6,140	2,960	30,500	2,350	2,450
8	1,150	2,670	13,500	11,400	2,900	19,200	7,940	5,960	2,890	29,900	2,990	2,670
9	1,150	2,670	11,600	10,900	2,500	19,200	7,340	8,060	2,860	28,900	3,120	3,540
10	1,350	2,480	9,380	11,200	2,400	21,000	6,900	14,000	2,860	30,000	2,570	3,490
11	1,590	2,410	8,180	12,600	2,300	20,900	4,680	17,000	2,740	29,100	2,310	3,350
12	1,520	2,450	7,500	13,100	2,800	19,700	4,070	16,100	2,620	27,900	2,160	3,330
13	1,650	2,650	6,900	12,800	3,100	18,600	4,740	15,300	1,830	25,200	2,090	3,350
14	1,800	2,870	7,340	13,800	3,600	12,800	5,500	14,700	1,700	14,200	2,010	3,600
15	1,830	2,840	9,050	12,800	4,000	12,600	5,980	14,200	1,760	7,620	1,990	3,270
16	1,740	2,920	9,940	11,700	4,500	13,100	7,620	10,400	3,170	5,780	1,910	2,720
17	1,700	2,820	10,600	12,400	5,000	19,500	11,600	7,760	3,350	5,300	1,910	2,650
18	1,610	2,160	11,200	11,100	5,800	19,400	12,600	8,340	3,300	6,380	1,930	2,480
19	1,500	1,830	10,500	11,400	5,300	21,800	17,700	9,140	3,040	6,180	1,890	2,310
20	1,470	1,990	9,980	12,100	4,800	20,600	22,700	7,900	2,920	5,060	1,830	1,610
21	1,500	2,180	9,990	12,300	4,400	20,900	19,100	7,420	3,170	5,150	1,800	1,300
22	1,560	2,500	10,100	11,900	3,800	25,400	22,400	7,020	6,340	3,380	2,920	1,240
23	1,740	2,570	9,540	12,700	4,100	25,100	21,500	5,580	34,400	2,500	3,220	1,190
24	1,890	2,480	9,260	13,300	3,700	22,800	20,100	4,330	26,600	2,430	2,890	1,210
25	2,240	2,380	9,340	14,100	6,000	20,800	10,800	4,160	39,400	2,290	3,170	1,220
26	2,090	2,290	10,200	13,700	8,000	19,600	6,780	3,040	34,400	2,410	4,070	1,320
27	2,010	2,290	11,000	12,800	7,220	18,600	6,260	2,820	35,700	2,270	4,020	1,610
28	1,930	2,650	11,600	12,000	6,980	17,600	5,900	2,670	36,700	2,200	3,220	2,030
29	1,850	3,220	11,300	11,400	8,220	13,000	5,400	2,620	36,200	2,160	2,970	2,430
30	1,910	5,120	14,900	10,500	-----	6,900	5,150	2,670	35,900	2,090	1,850	2,670
31	1,890	-----	17,700	10,700	-----	8,400	-----	3,020	-----	2,030	1,760	-----
TOTAL	56,620	74,610	290,290	392,400	146,900	558,740	303,280	240,690	346,010	478,230	78,350	68,120
MEAN	1,826	2,487	9,364	12,660	5,068	18,020	10,110	7,764	11,530	15,430	2,527	2,271
MAX	3,170	5,120	18,500	16,000	10,300	25,400	22,700	17,000	39,400	34,200	4,070	3,600
MIN	1,130	1,780	2,670	10,700	2,300	8,460	4,070	2,620	1,700	2,030	1,760	1,190
MEAN [†]	1,040	2,818	12,180	10,110	3,828	20,270	12,520	7,965	19,550	7,640	1,736	1,356
CFSM [†]	.28	.77	3.33	2.76	1.05	5.54	3.42	2.18	5.34	2.09	.47	.37
IN. [†]	.32	.86	3.84	3.18	1.13	6.39	3.82	2.51	5.96	2.41	.54	.41

CAL YR 1971 TOTAL 1,952,220 MEAN 5,349 MAX 31,800 MIN 1,040 MEAN[†] 5,469 CFSM[†] 1.49 IN.[†] 20.25
WTR YR 1972 TOTAL 3,034,300 MEAN 8,290 MAX 39,400 MIN 1,130 MEAN[†] 8,436 CFSM[†] 2.30 IN.[†] 31.37

[†] Adjusted for change in contents in Allegheny Reservoir and Chautauqua Lake.

TIONESTA CREEK BASIN

03017500 Tionesta Creek at Lynch, Pa.

LOCATION.--Lat 41°36'07", long 79°03'01", Forest County, in Allegheny National Forest, on left bank at downstream side of highway bridge at Lynch, 500 ft upstream from Bluejay Creek, and 7 miles south of Sheffield.

DRAINAGE AREA.--233 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 1,252.43 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--35 years, 424 cfs (24.71 inches per year).

EXTREMES.--Current year: Maximum discharge, 12,400 cfs June 23 (gage height, 10.42 ft), from rating curve extended as explained below; minimum, 31 cfs Sept. 11, 12, 23, 24 (gage height, 0.89 ft).
Period of record: Maximum discharge, 15,000 cfs Jan. 22, 1959 (gage height, 11.25 ft, from floodmark in gage well), from rating curve extended above 4,600 cfs on basis of slope-area measurement of peak flow; minimum, 11 cfs Aug. 26, 27, 1962 (gage height, 0.67 ft).

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

REVISIONS (WATER YEARS).--WSP 923: 1939-40. WSP 1555: 1943, 1946-47, 1948(M), 1952, 1953(M), 1955-56.

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	132	83	616	1,630	400	250	726	340	189	1,120	129	37
2	110	90	459	1,280	350	2,000	869	956	169	843	129	36
3	98	102	446	1,010	300	2,390	758	988	165	997	129	37
4	89	89	345	794	270	1,800	826	857	203	1,010	122	39
5	89	87	310	696	250	1,300	786	755	165	774	91	37
6	84	83	707	579	270	1,100	728	643	130	1,100	80	34
7	94	91	2,360	589	230	900	818	581	122	864	163	34
8	87	92	3,070	465	210	1,460	710	550	108	690	229	33
9	75	85	1,920	457	200	980	627	811	104	605	119	42
10	103	90	1,400	513	190	700	600	830	120	1,190	94	38
11	110	103	1,100	535	180	600	714	662	102	934	80	32
12	89	102	835	542	170	637	840	601	94	660	73	38
13	89	118	686	561	230	564	1,320	545	105	560	71	71
14	95	123	601	787	350	659	1,540	560	115	490	64	125
15	89	148	1,130	578	250	628	1,440	527	120	450	60	80
16	84	161	1,120	400	190	680	1,920	534	595	1,200	54	49
17	80	136	856	460	180	1,300	2,690	603	272	920	55	42
18	72	121	735	500	170	1,010	1,780	624	178	635	58	57
19	59	145	625	480	180	784	1,350	543	154	525	55	57
20	55	199	587	440	170	708	1,290	564	136	515	49	44
21	53	220	583	420	190	793	1,100	588	1,210	440	46	38
22	56	228	503	442	180	2,220	911	488	4,200	350	44	34
23	57	181	437	790	170	2,260	864	423	10,600	301	44	32
24	104	180	418	865	160	1,450	723	374	4,520	360	44	34
25	200	190	447	1,070	150	1,040	631	321	3,540	270	43	44
26	130	178	660	896	150	787	552	270	2,790	220	42	44
27	113	193	678	766	140	637	489	234	1,920	192	80	75
28	99	268	801	691	150	554	435	206	1,310	180	73	69
29	86	332	716	607	160	505	392	185	1,220	156	54	50
30	78	864	1,910	543	-----	607	354	178	1,650	138	44	243
31	78	-----	2,630	447	-----	658	-----	249	-----	129	39	-----
TOTAL	2,837	5,082	29,691	20,833	6,190	31,961	28,783	16,590	36,306	18,818	2,457	1,625
MEAN	91.5	169	958	672	213	1,031	959	535	1,210	607	79.3	54.2
MAX	200	864	3,070	1,630	400	2,390	2,690	988	10,600	1,200	229	243
MIN	53	83	310	400	140	250	354	178	94	129	39	32
CFSM	.39	.73	4.11	2.88	.91	4.42	4.12	2.30	5.19	2.61	.34	.23
IN.	.45	.81	4.74	3.33	.99	5.10	4.60	2.65	5.80	3.00	.39	.26

CAL YR 1971 TOTAL 135,220 MEAN 370 MAX 3,070 MIN 15 CFSM 1.59 IN 21.59
WTR YR 1972 TOTAL 201,173 MEAN 550 MAX 10,600 MIN 32 CFSM 2.36 IN 32.12

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-7	2330	6.07	3,620	6-23	0630	10.42	12,400
12-30	2100	6.01	3,560				

TIONESTA CREEK BASIN

197

03020000 Tionesta Creek at Tionesta Dam, Pa.

LOCATION.--Lat 41°28'44", long 79°26'26", Forest County, on left bank 100 ft downstream from outlet tunnel at Tionesta Dam, 1.5 miles southeast of Tionesta, and 1.2 miles upstream from mouth.

DRAINAGE AREA.--479 sq mi.

PERIOD OF RECORD.--June 1940 to current year. Prior to October 1970, published as "at Tionesta Creek Dam".

GAGE.--Water-stage recorder. Datum of gage is 1,043.43 ft above mean sea level, unadjusted. July 1, 1954, to Dec. 6, 1960, water-stage recorder at present site and at datum 1.5 ft higher. See WSP 1305 or 1725 for history of changes prior to July 1, 1954.

AVERAGE DISCHARGE.--32 years, 858 cfs (24.32 inches per year), adjusted for storage since January 1941.

EXTREMES.--Current year: Maximum discharge, 8,890 cfs June 27 (gage height, 8.43 ft); minimum daily, 30 cfs Sept. 5.

Period of record: Maximum discharge, about 13,500 cfs Mar. 12, 1964; maximum gage height, 11.31 ft Mar. 13, 1964 (backwater from Allegheny River); minimum daily discharge, 0.4 cfs Feb. 28, 29, May 22 to June 16, 1968.

REMARKS.--Records good. Flow completely regulated since 1941 by Tionesta Lake 0.2 mile upstream (see p.237).

COOPERATION.--Three discharge measurements 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	596	240	1,280	2,710	588	220	1,300	570	528	3,080	248	54
2	592	240	1,660	4,080	592	230	1,310	760	345	4,730	248	54
3	584	240	1,590	3,950	596	250	1,100	610	245	2,920	248	54
4	383	238	1,180	3,820	600	500	280	640	245	3,490	248	54
5	123	238	675	3,640	600	1,990	160	740	245	3,350	248	30
6	123	235	572	2,840	592	3,470	170	934	248	3,250	248	40
7	123	235	630	1,680	588	4,040	330	940	248	3,650	213	54
8	123	233	725	1,220	584	3,950	1,890	952	248	3,460	165	54
9	123	233	2,390	1,100	400	3,870	2,250	520	248	2,840	170	54
10	123	233	4,030	1,080	110	3,600	470	33	250	2,300	183	54
11	123	230	3,930	1,080	80	3,420	410	33	250	2,810	183	54
12	225	230	3,760	1,090	220	3,190	420	33	250	3,180	183	54
13	341	230	3,560	1,090	220	2,160	460	590	253	2,250	183	54
14	341	230	2,880	1,100	150	1,370	460	1,050	253	1,170	183	54
15	338	230	2,110	1,120	152	1,470	730	2,250	253	940	183	54
16	335	228	2,180	982	155	1,860	755	3,660	551	952	180	54
17	332	228	2,180	840	157	2,350	1,650	3,480	845	1,460	180	54
18	180	228	2,120	840	158	2,430	5,050	3,260	845	2,110	180	90
19	62	228	2,050	845	250	3,000	6,600	2,250	835	1,590	180	123
20	62	228	1,700	1,110	253	3,460	4,330	1,290	820	922	147	123
21	62	230	1,310	1,320	253	3,290	4,810	1,290	820	916	117	123
22	62	468	1,300	1,290	160	2,720	5,040	1,280	930	910	117	123
23	62	1,040	1,070	1,290	255	2,500	3,700	1,040	1,180	765	117	123
24	62	550	815	1,310	165	2,600	3,520	805	2,360	635	117	123
25	62	220	815	1,350	405	2,600	3,290	805	7,600	630	106	121
26	140	223	820	1,380	976	2,580	2,550	805	7,660	536	80	119
27	240	225	850	1,380	958	2,540	1,580	675	8,080	359	54	119
28	240	228	874	1,380	410	3,150	1,050	536	8,300	359	54	119
29	240	235	898	1,360	210	3,400	785	532	7,680	300	54	119
30	240	552	958	1,340	-----	3,160	785	528	4,610	248	54	119
31	240	-----	1,100	1,070	-----	2,160	-----	528	-----	248	54	-----
TOTAL	6,882	8,626	52,012	50,687	10,837	77,530	57,235	33,419	57,225	56,360	4,925	2,424
MEAN	222	288	1,678	1,635	374	2,501	1,908	1,078	1,908	1,818	159	80.8
MAX	596	1,040	4,030	4,080	976	4,040	6,600	3,660	8,300	4,730	248	123
MIN	62	220	572	840	80	220	160	33	245	248	54	30
MEAN [#]	207	333	1,934	1,324	467	2,424	1,903	1,073	2,355	1,397	157	102
CFSM [#]	.43	.70	4.04	2.76	.97	5.06	3.97	2.24	4.92	2.92	.33	.21
IN. [#]	.50	.78	4.66	3.18	1.05	5.83	4.43	2.58	5.49	3.37	.38	.23

CAL YR 1971 TOTAL 270,030 MEAN 740 MAX 6,300 MIN 40 MEAN[#] 766 CFSM[#] 1.60 IN.[#] 21.73
WTR YR 1972 TOTAL 418,162 MEAN 1,143 MAX 8,300 MIN 30 MEAN[#] 1,143 CFSM[#] 2.39 IN.[#] 32.48

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

OIL CREEK BASIN

03020500 Oil Creek at Rouseville, Pa.

LOCATION.--Lat 41°28'54", long 79°41'44", Venango County, on right bank 100 ft downstream from bridge on State Highway 8, about 300 ft upstream from Cherrytree Run, and 1 mile north of Rouseville. Records include flow of Cherrytree Run.

DRAINAGE AREA.--300 sq mi., including that of Cherrytree Run.

PERIOD OF RECORD.--June 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,028.33 ft above mean sea level, unadjusted. Prior to June 9, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years, 516 cfs (23.36 inches per year).

EXTREMES.--Current year: Maximum discharge, 12,000 cfs June 23 (gage height, 10.25 ft); minimum, 63 cfs Sept. 8, 11 (gage height, 1.67 ft).

Period of record: Maximum discharge, 21,000 cfs Jan. 22, 1959 (gage height, 11.97 ft); minimum observed, 22 cfs July 29, Sept. 5, 7, 1934; minimum gage height, 1.48 ft Aug. 20, 1971.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1053: 1936-37(M), 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	130	80	913	1,430	320	600	631	347	305	676	156	68
2	105	85	520	969	310	5,030	696	1,010	257	730	151	67
3	90	95	463	767	310	5,210	658	1,760	252	2,550	152	68
4	86	87	352	655	310	2,380	708	1,150	278	1,850	145	78
5	98	92	306	616	280	1,490	773	765	243	1,090	130	73
6	90	112	1,070	464	300	911	660	624	197	1,480	121	69
7	107	128	4,640	494	280	849	664	544	179	1,150	167	66
8	116	137	5,410	461	270	2,280	583	528	163	758	253	63
9	106	143	1,930	424	260	1,590	530	1,010	186	653	178	82
10	214	146	1,040	624	250	965	509	1,010	211	1,380	145	72
11	311	182	807	950	240	732	510	671	169	1,050	126	67
12	198	218	675	806	230	829	518	559	153	698	116	89
13	171	263	568	678	350	1,460	647	490	405	572	114	134
14	142	314	527	982	800	2,160	767	509	418	503	110	166
15	122	289	1,590	596	700	1,960	1,090	676	393	437	126	173
16	109	282	1,780	380	620	1,630	1,800	865	1,740	595	117	137
17	94	216	934	400	560	3,290	2,760	870	679	537	109	108
18	86	180	715	440	480	1,940	1,340	852	463	410	103	203
19	83	181	602	470	430	1,230	889	647	356	366	97	152
20	79	314	575	500	400	1,060	1,120	600	298	357	96	109
21	77	366	662	530	400	1,170	1,180	590	746	303	86	94
22	74	462	669	505	400	2,700	815	502	3,040	279	83	82
23	75	333	487	881	350	2,780	757	428	9,720	264	90	74
24	81	274	482	838	400	1,420	674	387	6,570	293	82	78
25	136	242	589	893	340	1,030	597	329	6,100	255	82	90
26	134	230	1,000	658	300	870	516	279	4,860	229	78	117
27	112	248	1,210	531	280	770	455	244	2,130	203	82	221
28	99	386	1,080	502	270	712	408	222	1,190	193	87	224
29	91	547	898	424	260	663	377	208	852	179	87	200
30	86	1,320	2,520	359	-----	694	345	231	774	168	77	407
31	82	-----	3,480	330	-----	647	-----	440	-----	159	72	-----
TOTAL	3,584	7,952	38,494	19,557	10,700	51,052	23,977	19,347	43,327	20,367	3,618	3,631
MEAN	116	265	1,242	631	369	1,647	799	624	1,444	657	117	121
MAX	311	1,320	5,410	1,430	800	5,210	2,760	1,760	9,720	2,550	253	407
MIN	74	80	306	330	230	600	345	208	153	159	72	63
CFSM	.39	.88	4.14	2.10	1.23	5.49	2.66	2.08	4.81	2.19	.39	.40
IN.	.44	.99	4.77	2.43	1.33	6.33	2.97	2.40	5.37	2.53	.45	.45

CAL YR 1971 TOTAL 170,106 MEAN 466 MAX 5,410 MIN 37 CFSM 1.55 IN 21.09
WTR YR 1972 TOTAL 245,606 MEAN 671 MAX 9,720 MIN 63 CFSM 2.24 IN 30.46

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	0100	8.76	8,100	3- 2	2000	8.17	6,940
12-30	2100	7.29	5,300	6-23	0930	10.25	12,000

FRENCH CREEK BASIN

199

03021520 French Creek near Union City, Pa.
(Formerly published as French Creek at Carters Corners)

LOCATION.--Lat 41°54'27", long 79°53'52", Erie County, at center pier on downstream side of bridge on State Highway 97, 0.4 mile upstream from South Branch French Creek, 0.9 mile downstream from Union City Reservoir, and 2.8 miles west of Union City.

DRAINAGE AREA.--221 sq mi.

PERIOD OF RECORD.--October 1909 to current year. Published as North Branch French Creek at Kimmeytown May 1910 to September 1914, as "at Kimmeytown" October 1915 to September 1932, and as "at Carters Corners" (sta 03021500) October 1932 to September 1971. Monthly discharge only for some periods published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,192.3 ft above mean sea level. Prior to Dec. 22, 1948, non-recording gage at site 4.5 miles upstream at datum 43.4 ft higher. Dec. 22, 1948, to Sept. 30, 1971, water-stage recorder at site 4.6 miles upstream at datum 43.4 ft higher.

AVERAGE DISCHARGE.--63 years, 417 cfs (25.62 inches per year), adjusted for storage since 1971.

EXTREMES.--Current year: Maximum discharge, 2,880 cfs June 26 (gage height, 8.00 ft); minimum daily, 32 cfs Sept. 12, 13.

Period of record: Maximum discharge, 20,000 cfs Apr. 5, 1947 (gage height, 13.50 ft, site and datum then in use), by slope-area measurement of peak flow; maximum gage height observed, 16.0 ft Feb. 20, 1918 (backwater from ice), site and datum then in use; minimum discharge observed, 3.9 cfs Aug. 15, 18-21, 1930.

REMARKS.--Records fair. Flow regulated by Union City Reservoir, located 0.9 mile upstream, beginning October 1971 (see p. 237).

COOPERATION.--Gage-height record and 16 discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1275: 1934, 1936-37(M), 1939(M), 1942(M). WSP 1305: 1910-11, 1913, 1914(M), 1915-16, 1925, 1928. WRD Pa. 1970: 1969.

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	55	64	1,120	1,420	410	450	1,280	180	229	1,540	49	35
2	49	79	1,050	1,410	365	1,360	1,240	425	180	1,450	52	39
3	43	84	940	1,350	295	1,650	1,220	512	148	1,390	82	40
4	41	146	641	1,310	280	2,080	1,210	536	148	1,320	93	38
5	41	400	446	1,240	240	1,820	1,180	518	148	1,230	70	37
6	39	536	504	1,130	250	1,700	1,160	405	102	1,160	60	37
7	56	620	1,130	964	260	1,600	1,100	268	86	1,040	116	35
8	70	830	1,400	711	270	1,680	1,020	218	72	886	295	34
9	80	760	1,900	494	260	1,710	940	555	66	571	268	36
10	257	560	1,900	512	250	1,650	830	816	69	380	145	37
11	326	518	1,700	774	230	1,550	690	781	67	345	89	35
12	218	506	1,300	872	250	1,400	676	512	63	246	71	32
13	168	536	900	746	340	1,440	753	331	64	154	64	32
14	114	634	800	718	430	1,740	830	240	68	123	55	90
15	83	655	1,270	584	554	2,160	858	286	102	114	52	138
16	70	690	1,310	450	648	2,270	940	390	370	130	47	89
17	63	560	1,310	300	725	2,500	1,160	425	405	138	46	66
18	57	415	1,260	415	602	2,550	1,280	336	251	109	45	52
19	57	254	1,200	510	500	2,340	1,300	250	138	88	43	46
20	66	365	1,080	872	450	2,090	1,260	201	91	78	39	42
21	60	440	996	932	400	1,910	1,210	174	88	72	36	38
22	58	620	924	879	370	2,080	1,160	148	306	68	35	36
23	56	634	739	908	350	2,530	1,110	123	1,100	63	35	34
24	55	566	578	1,050	330	2,420	1,030	107	1,840	66	35	39
25	59	482	767	1,120	320	2,130	893	97	2,550	64	46	50
26	67	415	964	1,100	310	1,860	578	95	2,870	66	45	70
27	66	420	1,140	1,060	300	1,640	322	86	2,760	64	45	91
28	62	494	1,200	932	290	1,460	218	84	2,440	62	48	157
29	62	676	1,120	683	290	1,340	190	79	2,040	60	49	163
30	61	996	1,140	554	-----	1,320	174	72	1,730	55	46	135
31	59	-----	1,360	488	-----	1,300	-----	208	-----	52	40	-----
TOTAL	2,618	14,955	34,089	26,488	10,569	55,730	27,812	9,458	20,591	13,184	2,241	1,803
MEAN	84.5	499	1,100	854	364	1,798	927	305	686	425	72.3	60.1
MAX	326	996	1,900	1,420	725	2,550	1,300	816	2,870	1,540	295	163
MIN	39	64	446	300	230	450	174	72	63	52	35	32
MEAN#	85.5	514	1,244	666	364	1,948	771	306	895	221	72.4	62.4
CFSM#	.39	2.33	5.63	3.01	1.65	8.81	3.49	1.38	4.05	1.00	.33	.28
IN.#	.45	2.60	6.49	3.47	1.78	10.16	3.89	1.59	4.52	1.15	.38	.31

CAL YR 1971 TOTAL 141,976 MEAN 389 MAX 3,500 MIN 10 MEAN# 405 CFSM# 1.83 IN.# 25.70
WTR YR 1972 TOTAL 219,538 MEAN 600 MAX 2,870 MIN 32 MEAN# 598 CFSM# 2.71 IN.# 36.79

Adjusted for change in contents in Union City Reservoir.

FRENCH CREEK BASIN

03021700 Little Conneauttee Creek near McKean, Pa.

LOCATION.--Lat 41°55'53", long 80°05'02", Erie County, on left bank at downstream side of highway bridge on old Waterford Road, 2.2 miles east of McLane, and 5.5 miles southeast of McKean (Middleboro).

DRAINAGE AREA.--3.60 sq mi.

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

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 1,330 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 7.38 cfs (27.84 inches per year).

EXTREMES.--Current year: Maximum discharge, 596 cfs June 23 (gage height, 4.52 ft); minimum daily, 0.02 cfs Aug. 25, 26.

Period of record: Maximum discharge, 830 cfs July 5, 1969 (gage height, 4.78 ft in gage well, 4.90 ft, from floodmarks), from rating curve extended above 310 cfs on basis of contracted-opening measurement of peak flow; no flow on many days.

REMARKS.--Records good except those for winter periods and those below 1 cfs, which are 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	.40	.35	12	7.5	2.6	22	9.9	6.3	2.4	3.1	.15	.11
2	.30	.46	6.9	6.6	2.4	249	8.4	26	1.9	2.2	.30	.07
3	.21	1.0	5.1	4.8	2.3	70	6.6	11	1.2	2.9	.26	.11
4	.21	5.7	4.4	4.4	2.3	27	20	6.0	1.5	2.9	.23	.11
5	.21	15	4.0	4.0	2.1	13	8.4	5.4	1.0	5.7	.21	.11
6	.21	12	65	3.6	2.1	11	7.5	5.4	.73	6.9	.20	.11
7	5.1	16	86	3.4	2.0	18	6.3	3.3	.55	2.7	18	.11
8	2.0	7.5	43	3.2	2.0	92	4.1	8.1	.47	1.7	3.5	.07
9	11	7.8	13	3.8	2.0	40	3.5	31	.55	6.3	1.3	.11
10	44	9.6	10	20	1.9	29	4.1	6.6	.73	14	.50	.11
11	7.2	17	22	15	1.9	7.2	5.1	3.7	.55	3.1	.30	.11
12	3.0	21	7.2	6.0	1.9	36	4.6	2.7	.47	1.8	.23	.11
13	1.4	33	5.7	8.7	3.0	76	12	2.2	.39	1.3	.20	.15
14	1.0	16	5.4	6.9	8.0	99	6.3	3.9	.55	1.2	.17	1.2
15	.64	13	71	4.6	14	28	27	4.4	13	1.5	.15	1.3
16	.46	5.7	17	3.5	14	64	150	3.9	8.7	1.3	.11	.82
17	.54	3.8	6.9	2.7	11	54	35	3.7	2.2	1.1	.11	.39
18	.35	3.2	5.1	4.0	8.5	18	15	2.7	1.2	.82	.15	.20
19	.30	10	4.8	46	6.0	10	8.0	2.0	1.1	.73	.11	.20
20	.25	8.8	6.0	13	5.0	14	9.0	1.7	.64	.55	.11	.20
21	.25	23	16	9.7	4.5	31	6.0	1.7	.47	.47	.07	.15
22	.25	12	7.5	12	4.0	96	4.5	1.2	8.4	.39	.04	.11
23	.25	5.4	3.6	43	3.6	17	4.0	.92	210	.32	.04	.07
24	.35	4.0	12	13	3.3	9.9	3.5	.73	147	.32	.04	.11
25	.54	4.0	11	45	3.1	7.8	3.0	.64	109	1.1	.02	.15
26	.54	4.6	58	6.8	3.0	6.6	2.5	.47	43	.82	.02	1.7
27	.46	7.5	16	4.0	2.9	6.3	2.0	.39	7.8	.47	.39	5.1
28	.46	31	20	3.5	2.8	7.8	1.9	.32	4.1	.39	.47	1.6
29	.64	36	6.9	3.2	2.8	10	1.7	.26	3.9	.39	.26	1.0
30	.40	61	91	3.0	-----	15	1.6	.55	4.4	.26	.20	27
31	.35	-----	25	2.8	-----	9.1	-----	2.5	-----	.20	.20	-----
TOTAL	83.27	395.41	667.5	317.7	125.0	1,193.7	381.5	149.68	577.90	66.93	28.04	42.69
MEAN	2.69	13.2	21.5	10.2	4.31	38.5	12.7	4.83	19.3	2.16	.90	1.42
MAX	44	61	91	46	14	249	150	31	210	14	18	27
MIN	.21	.35	3.6	2.7	1.9	6.3	1.6	.26	.39	.20	.02	.07
CFSM	.75	3.67	5.97	2.83	1.20	10.7	3.53	1.34	5.36	.60	.25	.39
IN.	.86	4.09	6.90	3.28	1.29	12.33	3.94	1.55	5.97	.69	.29	.44

CAL YR 1971 TOTAL 3,180.17 MEAN 8.71 MAX 122 MIN 0 CFSM 2.42 IN 32.86
WTR YR 1972 TOTAL 4,029.32 MEAN 11.0 MAX 249 MIN .02 CFSM 3.06 IN 41.64

PEAK DISCHARGE (BASE, 200 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	1345	3.92	262	6-23	0730	4.52	596
3-2	0815	4.21	386	6-24	1300	3.94	269
4-16	a1600	3.92	262	6-25	1915	3.87	246

a About.

FRENCH CREEK BASIN

201

03024000 French Creek at Utica, Pa.

LOCATION.--Lat 41°26'15", long 79°57'22", Venango County, on right bank at upstream side of bridge on Legislative Route 60019 at Utica, 2,000 ft upstream from Mill Creek.

DRAINAGE AREA.--1,028 sq mi.

PERIOD OF RECORD.--August 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,019.44 ft above mean sea level. Prior to Nov. 27, 1933, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years, 1,746 cfs (23.06 inches per year), adjusted for storage since 1971.

EXTREMES.--Current year: Maximum discharge, 13,600 cfs June 26 (gage height, 10.01 ft); minimum 162 cfs Sept. 10-12 (gage height, 1.47 ft).

Period of record: Maximum discharge, 23,800 cfs Mar. 7, 1964 (gage height, 13.2 ft, from floodmark in gage well); minimum, 43 cfs July 30, 1934 (gage height, 1.03 ft).

Maximum stage since at least 1912, 15.7 ft in March 1913 (discharge, 35,600 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Flood flow regulated since 1971 by Union City Reservoir (see p. 237) and Woodcock Creek Lake. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 823: 1936(M). WSP 1275: 1933, 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	433	240	4,160	6,340	1,390	2,360	3,050	1,070	778	4,240	327	197
2	365	240	3,440	4,960	1,340	10,200	3,010	1,910	906	3,520	309	187
3	309	239	3,020	4,110	1,320	11,800	2,960	3,520	855	4,260	305	309
4	277	261	2,590	3,450	1,350	11,900	2,980	3,490	796	3,750	308	267
5	256	320	2,060	3,110	896	9,330	3,220	2,660	702	3,390	327	268
6	246	696	2,990	2,700	1,040	6,480	3,040	2,130	634	4,060	326	227
7	251	1,110	7,820	2,510	1,120	5,240	2,870	1,740	558	3,670	324	194
8	270	1,430	10,000	2,370	1,000	7,440	2,670	1,560	484	2,950	685	175
9	351	1,630	9,090	2,010	980	6,910	2,470	2,170	509	2,630	1,150	173
10	917	1,570	6,320	2,160	960	5,940	2,320	3,090	625	3,220	897	165
11	1,550	1,470	4,830	2,860	940	4,840	2,160	2,860	513	3,040	650	162
12	1,480	1,560	4,210	3,000	940	4,610	1,960	2,370	458	2,290	501	174
13	1,280	1,650	3,600	2,790	1,100	5,530	2,050	1,860	1,530	1,840	413	263
14	954	1,760	3,240	2,610	1,740	7,220	2,400	1,590	1,250	1,510	367	372
15	687	1,770	4,570	2,270	2,210	8,090	3,030	1,910	1,190	1,260	479	572
16	555	1,640	5,620	1,360	2,460	7,870	4,060	2,350	2,570	1,300	492	728
17	464	1,530	4,620	1,200	2,530	8,840	5,500	2,510	2,200	1,170	398	663
18	400	1,290	3,880	1,440	2,360	8,530	4,960	2,290	1,680	1,060	400	1,080
19	352	1,110	3,390	1,850	2,100	7,360	4,130	1,940	1,280	1,080	317	607
20	316	1,020	3,050	2,530	1,720	5,840	3,930	1,550	994	865	283	436
21	295	1,250	3,200	2,890	1,600	4,940	4,020	1,360	907	755	256	349
22	283	1,710	3,280	2,860	1,600	5,710	3,490	1,180	1,390	703	237	305
23	271	1,850	2,880	3,060	1,400	7,540	3,120	1,040	7,160	626	227	267
24	263	1,660	2,520	3,430	1,500	7,170	2,850	903	9,550	576	212	265
25	267	1,430	2,890	3,500	1,400	5,900	2,580	785	12,200	544	206	267
26	271	1,290	3,650	3,440	1,300	4,840	2,270	683	12,300	505	208	429
27	282	1,250	4,640	2,980	1,200	4,210	1,880	608	12,600	474	212	740
28	284	1,600	4,350	2,620	1,200	3,790	1,530	550	9,960	442	219	875
29	274	2,290	4,090	2,320	1,340	3,460	1,280	507	6,530	407	220	890
30	260	3,620	5,390	1,840	-----	3,320	1,140	510	5,070	377	216	1,090
31	248	-----	7,440	1,640	-----	3,240	-----	618	-----	348	208	-----
TOTAL	14,711	40,486	136,830	86,210	42,036	200,450	86,930	53,314	98,179	56,862	11,679	12,696
MEAN	475	1,350	4,414	2,781	1,450	6,466	2,898	1,720	3,273	1,834	377	423
MAX	1,550	3,620	10,000	6,340	2,530	11,900	5,500	3,520	12,600	4,260	1,150	1,090
MIN	246	239	2,060	1,200	896	2,360	1,140	507	458	348	206	162
MEAN [‡]	476	1,365	4,558	2,593	1,450	6,616	2,742	1,721	3,482	1,630	377	425
CFSM [‡]	.46	1.33	4.43	2.52	1.41	6.44	2.67	1.67	3.39	1.59	.37	.41
IN. [‡]	.53	1.48	5.11	2.91	1.52	7.42	2.98	1.93	3.78	1.83	.43	.46
CAL YR 1971 TOTAL	630,096			MEAN 1,726	MAX 10,300	MIN 65	MEAN [‡] 1,742	CFSM [‡] 1.69	IN. [‡] 22.98			
WTR YR 1972 TOTAL	840,383			MEAN 2,296	MAX 12,600	MIN 162	MEAN [‡] 2,294	CFSM [‡] 2.23	IN. [‡] 30.38			

[‡] Adjusted for change in contents in Union City Reservoir.

FRENCH CREEK BASIN

03025000 Sugar Creek at Sugarcreek, Pa.

LOCATION.--Lat 41°25'43", long 79°52'48", Venango County, on left bank at downstream side of highway bridge, 0.8 mile north of Sugarcreek, 0.9 mile upstream from mouth, and 3 miles northwest of Franklin.

DRAINAGE AREA.--166 sq mi.

PERIOD OF RECORD.--August 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,013.03 ft above mean sea level, adjustment of 1912. Prior to Dec. 7, 1939, nonrecording gage, and Dec. 8, 1939 to Aug. 31, 1948, water-stage recorder, at same site at datum 3.00 ft higher; Sept. 1, 1948 to Nov. 11, 1952, water-stage recorder at same site at datum 2.20 ft higher; Nov. 12, 1952 to Sept. 30, 1960, water-stage recorder at same site at datum 1.00 ft higher.

AVERAGE DISCHARGE.--40 years, 264 cfs (21.60 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,240 cfs June 23 (gage height, 9.85 ft); minimum daily, 20 cfs Oct. 21-23.

Period of record: Maximum discharge, 10,000 cfs May 28, 1946 (gage height, 11.49 ft, present datum); maximum gage height, 11.5 ft Jan. 25, 1937, present datum, from graph based on gage readings; minimum discharge observed, 9.2 cfs Oct. 22, 1935.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 758: Drainage area. WSP 1335: 1933-34(M), 1937-39, 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	35	23	218	970	185	565	292	200	162	585	108	50
2	31	26	142	720	178	4,410	298	388	149	500	105	49
3	29	28	146	550	180	2,060	292	725	146	2,050	105	68
4	28	27	131	452	180	1,210	360	530	180	1,140	99	57
5	31	26	115	420	151	874	339	408	158	820	91	51
6	31	28	750	322	166	605	310	325	140	946	88	50
7	34	29	2,630	304	164	595	325	280	132	625	104	49
8	40	29	2,410	274	151	1,460	295	265	124	476	108	48
9	40	28	620	262	156	820	268	456	217	428	92	48
10	62	31	353	384	147	615	256	432	307	1,150	86	47
11	48	35	259	615	146	472	259	322	176	585	81	45
12	35	39	174	476	144	640	238	277	151	420	80	49
13	31	39	140	444	226	1,030	332	253	964	368	78	80
14	28	38	241	595	468	1,370	329	277	645	360	78	105
15	28	44	1,230	339	388	1,110	826	353	655	295	118	83
16	25	46	832	238	376	1,190	1,350	357	1,990	515	81	63
17	24	41	555	256	313	1,710	1,440	436	705	388	89	132
18	23	38	428	268	319	1,090	826	400	456	301	91	319
19	23	43	346	301	286	760	605	322	343	280	78	131
20	21	65	339	274	208	640	705	298	313	304	71	97
21	20	68	408	289	238	620	600	295	748	229	68	86
22	20	76	360	268	238	1,100	515	244	2,140	195	66	78
23	20	59	283	480	198	988	464	208	6,080	178	78	72
24	23	58	336	440	220	690	392	188	3,440	200	68	77
25	33	57	436	428	200	580	336	168	3,720	162	63	78
26	32	54	715	301	193	505	295	151	2,920	147	62	136
27	28	58	778	259	172	444	262	140	1,500	139	60	190
28	27	103	802	256	185	396	238	132	1,010	132	60	128
29	25	142	585	217	195	350	217	128	826	124	58	220
30	24	380	2,170	205	-----	353	203	151	766	118	54	525
31	24	-----	1,620	195	-----	304	-----	220	-----	112	53	-----
TOTAL	923	1,758	20,552	11,802	6,371	29,556	13,467	9,329	31,263	14,272	2,521	3,211
MEAN	29.8	58.6	663	381	220	953	449	301	1,042	460	81.3	107
MAX	62	380	2,630	970	468	4,410	1,440	725	6,080	2,050	118	525
MIN	20	23	115	195	144	304	203	128	124	112	53	45
CFSM	.18	.35	3.99	2.30	1.33	5.74	2.70	1.81	6.28	2.77	.49	.64
IN.	.21	.39	4.61	2.64	1.43	6.62	3.02	2.09	7.01	3.20	.56	.72

CAL YR 1971 TOTAL 87,095 MEAN 239 MAX 2,630 MIN 13 CFSM 1.44 IN 19.52
WTR YR 1972 TOTAL 145,025 MEAN 396 MAX 6,080 MIN 20 CFSM 2.39 IN 32.50

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2315	8.29	5,660	6-16	0315	7.16	3,940
12-30	1915	7.84	4,960	6-23	0930	9.85	8,240
3- 2	1630	8.23	5,570				

FRENCH CREEK BASIN

203

03025200 Patchel Run near Franklin, Pa.

LOCATION.--Lat 41°25'20", long 79°50'59", Venango County, on right bank at downstream side of highway bridge, 0.7 mile upstream from mouth, and 1.5 miles northwest of Franklin.

DRAINAGE AREA.--5.69 sq mi.

PERIOD OF RECORD.--Annual maximums and occasional discharge measurements, water years 1961-64. August 1964 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Altitude of gage is 1,040 ft (from topographic map). July 20, 1960, to Aug. 19, 1964, crest-stage gage at same site and at datum 3.00 ft higher.

AVERAGE DISCHARGE.--8 years, 8.74 cfs (20.86 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,650 cfs July 2 (gage height, 6.28 ft), from rating curve extended as explained below; minimum, 0.78 cfs Nov. 23; minimum gage height, 2.90 ft Sept. 9, 10.

Period of record: Maximum discharge, 1,650 cfs July 2, 1972 (gage height, 6.28 ft), from rating curve extended above 130 cfs on basis of slope-area measurement at gage height 4.67 ft from crest-stage gage, present datum; minimum, 0.42 cfs Oct. 8, 1966 (gage height, 2.89 ft), result of unusual regulation.

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	1.4	.95	3.5	28	4.9	21	9.6	7.7	4.8	5.6	2.9	1.5
2	1.3	1.3	3.0	23	4.7	69	9.6	14	4.4	147	2.8	1.8
3	1.3	1.1	3.0	18	5.2	44	8.4	19	4.2	92	2.7	1.3
4	1.3	1.0	2.8	15	5.0	29	9.6	15	4.0	43	2.6	1.3
5	1.2	.95	2.7	13	4.2	23	8.4	14	3.6	30	2.6	1.2
6	1.3	1.0	22	11	4.9	18	8.0	13	3.3	20	2.5	1.2
7	1.4	1.1	37	9.4	4.0	21	8.4	11	3.1	14	4.2	1.0
8	1.2	1.0	32	8.1	4.1	30	8.0	11	3.0	12	3.4	1.0
9	1.4	1.1	22	8.3	4.3	20	7.4	13	14	17	3.2	.95
10	1.7	1.2	17	9.5	3.9	18	7.4	11	9.2	28	3.0	.90
11	1.2	1.4	13	8.9	3.6	15	7.4	10	6.5	15	2.7	.95
12	1.2	1.6	10	8.0	5.0	19	7.4	10	5.9	12	2.7	1.7
13	1.1	1.4	9.1	8.7	25	28	10	9.6	17	10	2.5	4.2
14	1.1	1.6	14	8.3	14	36	8.4	10	11	9.0	3.3	4.0
15	1.0	1.8	27	8.9	10	30	20	11	11	8.0	4.8	1.8
16	1.0	1.0	20	5.6	9.2	36	29	11	12	16	2.5	1.4
17	.95	.95	18	6.2	8.0	37	29	10	8.8	10	4.6	12
18	.95	.91	15	6.8	8.4	29	24	10	8.0	8.0	3.2	6.5
19	.89	1.3	13	6.7	8.4	22	20	9.2	7.1	7.0	2.3	3.1
20	.89	1.1	13	6.3	6.4	19	21	10	8.0	6.4	1.9	2.7
21	.89	1.4	12	6.1	7.2	17	16	9.2	18	5.8	1.9	2.2
22	.89	1.2	10	6.3	7.1	23	15	8.4	36	5.2	1.8	1.9
23	.89	.98	8.7	9.1	6.0	19	14	8.0	128	4.8	3.1	1.7
24	1.3	1.0	9.5	7.7	6.8	17	13	7.1	66	4.6	2.5	1.8
25	1.1	1.1	9.5	7.5	5.9	16	12	6.5	62	4.3	2.2	1.9
26	1.0	1.1	16	11	5.9	15	10	5.9	44	4.0	1.9	3.0
27	.95	1.5	14	9.8	5.4	13	9.6	5.6	21	3.7	2.4	3.1
28	.95	2.1	17	6.7	5.8	13	8.8	5.2	12	3.4	2.0	2.2
29	.95	2.9	14	6.0	7.1	11	8.4	5.0	10	3.2	1.8	11
30	.95	5.2	50	5.6	-----	11	7.7	5.9	7.1	3.1	1.7	19
31	.95	-----	37	5.2	-----	9.6	-----	5.4	-----	3.0	1.6	-----
TOTAL	34.60	42.24	494.8	298.7	200.4	728.6	375.5	301.7	553.0	555.1	83.3	98.30
MEAN	1.12	1.41	16.0	9.64	6.91	23.5	12.5	9.73	18.4	17.9	2.69	3.28
MAX	1.7	5.2	50	28	25	69	29	19	128	147	4.8	19
MIN	.89	.91	2.7	5.2	3.6	9.6	7.4	5.0	3.0	3.0	1.6	.90
CFSM	.20	.25	2.81	1.69	1.21	4.13	2.20	1.71	3.23	3.15	.47	.58
IN.	.23	.28	3.23	1.95	1.31	4.76	2.45	1.97	3.62	3.63	.54	.64

CAL YR 1971 TOTAL 2,652.96 MEAN 7.27 MAX 56 MIN .68 CFSM 1.28 IN 17.34
WTR YR 1972 TOTAL 3,766.24 MEAN 10.3 MAX 147 MIN .89 CFSM 1.81 IN 24.62

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	1145	4.46	172	7- 2	2145	6.28	1,650
6-23	0145	4.96	400				

03025500 Allegheny River at Franklin, Pa.

LOCATION.--Lat 41°23'22", long 79°49'14", Venango County, on right bank at downstream side of Eighth Street Bridge on U. S. Highway 322 at Franklin, 1,000 ft downstream from French Creek, and at mile 124.4.

DRAINAGE AREA.--5,982 sq mi.

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at same site since April 1905 are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 955.92 ft above mean sea level, unadjusted. Prior to Sept. 16, 1932, nonrecording gage and Sept. 16-30, 1932, water-stage recorder, at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--58 years, 10,260 cfs (23.29 inches per year) adjusted for storage since 1940.

EXTREMES.--Current year: Maximum discharge, 85,400 cfs June 25 (gage height, 15.84 ft from floodmark in well); minimum 1,620 cfs Oct. 7 (gage height, 2.57 ft).

Period of record: Maximum discharge, 138,000 cfs Mar. 13, 1920 (gage height, 20.65 ft, present datum); maximum gage height observed, 26.0 ft, present datum, Feb. 27, 1917 (backwater from ice) and Feb. 26, 1926 (backwater from ice); minimum discharge, 334 cfs July 30, 1934 (gage height, 1.63 ft).

Flood of Mar. 17, 1865, reached a stage of 25.0 ft, present datum, and that of Mar. 26, 1913, a stage of 24.6 ft, present datum, from graph based on gage readings (discharges, 196,000 cfs and 191,000 cfs, respectively, from rating curve extended above 120,000 cfs). Maximum discharge since at least 1864 is that of Mar. 17, 1865.

REMARKS.--Records good. Flow regulated by Allegheny Reservoir 74 miles upstream since 1965, by Chautauqua Lake, by Tionesta Lake since 1940, by Union City Reservoir since 1971 (see p. 237), and by Woodcock Creek Lake since 1971.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 783: 1913(M). WSP 1003: 1920(M). WSP 1305: 1926(M), 1928-29(M). WSP 1385: 1920, 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	4,210	2,660	3,400	27,900	13,500	13,600	14,500	8,000	5,410	43,800	3,160	2,210
2	3,880	2,520	11,500	28,600	11,600	34,800	14,900	10,000	5,550	42,500	3,210	2,150
3	3,680	2,230	9,800	25,900	10,900	54,400	14,900	14,500	5,380	51,600	3,700	2,270
4	3,480	2,190	8,620	23,800	9,630	38,200	13,900	16,400	5,380	47,100	3,650	2,230
5	2,950	2,250	6,830	22,900	7,260	34,200	13,900	13,800	4,680	42,500	3,550	2,210
6	1,880	2,840	9,220	20,600	8,110	30,100	13,400	11,900	4,320	42,900	3,530	2,230
7	1,700	3,550	27,300	18,300	7,640	28,400	13,300	10,800	4,210	40,800	3,470	2,910
8	2,290	3,990	41,900	16,900	6,430	36,000	13,300	10,200	4,170	38,100	3,670	2,980
9	2,720	4,380	28,300	15,600	4,310	33,500	14,700	11,800	4,500	35,900	4,990	3,550
10	3,280	4,260	23,700	16,100	4,110	33,200	11,300	18,300	5,040	39,000	4,330	3,990
11	4,290	4,030	19,800	18,500	4,020	30,800	9,490	21,400	4,320	37,300	3,650	3,910
12	4,210	4,150	17,700	19,500	4,240	29,800	8,090	20,800	4,050	34,900	3,280	3,990
13	4,130	4,320	15,800	18,800	4,870	32,000	8,520	19,500	5,600	32,300	3,070	4,350
14	3,750	4,740	15,100	19,900	6,320	28,800	10,400	19,300	4,660	21,600	2,970	4,600
15	3,480	5,230	19,100	18,400	7,190	28,400	12,800	20,000	3,670	12,800	3,140	4,800
16	3,160	5,460	22,300	15,900	7,610	27,200	17,500	20,400	11,400	10,900	2,930	4,240
17	2,980	5,320	20,200	14,900	8,490	37,800	26,200	17,200	8,860	9,740	2,860	3,960
18	2,820	4,770	19,600	14,900	9,020	35,900	25,400	16,100	7,740	10,600	2,810	5,030
19	2,500	3,880	18,200	15,300	8,970	35,600	30,400	15,900	6,760	10,600	2,650	3,880
20	2,380	3,910	16,900	16,900	7,310	33,800	35,100	12,900	6,200	8,400	2,480	3,230
21	2,250	4,320	16,400	18,000	6,840	32,400	31,100	12,100	7,030	8,230	2,320	2,330
22	2,190	5,180	16,600	17,800	5,780	38,000	33,100	11,200	14,200	7,600	2,470	2,130
23	2,270	5,960	15,200	18,800	6,110	43,600	31,300	9,820	65,500	5,030	3,900	1,990
24	2,520	5,990	13,900	20,300	5,770	37,300	29,500	7,850	57,300	4,680	3,570	1,960
25	2,860	4,880	14,400	20,700	10,200	33,100	22,100	6,900	75,800	4,430	3,350	2,030
26	2,860	4,600	16,700	20,800	11,900	30,300	14,700	6,410	76,000	4,130	3,930	2,170
27	2,880	4,520	19,600	19,200	9,210	28,300	11,700	5,670	65,600	3,860	4,490	3,070
28	2,790	5,090	20,000	18,100	8,780	27,200	10,200	4,520	62,000	3,600	4,110	3,330
29	2,700	6,800	19,400	16,800	9,130	23,600	9,140	4,130	55,500	3,350	3,480	4,130
30	2,630	10,200	25,300	15,700	-----	18,900	8,600	4,380	49,600	3,380	2,950	5,200
31	2,700	-----	36,100	14,800	-----	16,500	-----	5,090	-----	3,160	2,270	-----
TOTAL	92,420	134,220	578,870	590,600	225,250	985,700	523,440	387,270	640,430	664,790	103,940	97,060
MEAN	2,981	4,474	18,670	19,050	7,767	31,800	17,450	12,490	21,350	21,440	3,353	3,235
MAX	4,290	10,200	41,900	28,600	13,500	54,400	35,100	21,400	76,000	51,600	4,990	5,200
MIN	1,700	2,190	6,830	14,800	4,020	13,600	8,090	4,130	3,670	3,160	2,270	1,960
MEAN [†]	2,181	4,866	21,890	16,800	6,627	34,120	19,700	12,690	30,030	13,020	2,561	2,343
CFSM [†]	.36	.81	3.66	2.67	1.11	5.70	3.29	2.12	5.02	2.18	.43	.39
IN. [†]	.42	.90	4.22	3.08	1.20	6.57	3.67	2.44	5.60	2.51	.50	.44
CAL YR 1971	TOTAL 3,310,590	MEAN 9,070	MAX 44,400	MIN 1,700	MEAN [†] 9,233	CFSM [†] 1.54	IN. [†] 20.94					
WTR YR 1972	TOTAL 5,023,990	MEAN 13,730	MAX 76,000	MIN 1,700	MEAN [†] 13,870	CFSM [†] 2.32	IN. [†] 31.55					

[†] Adjusted for change in contents in Allegheny Reservoir, Chautauqua Lake, Tionesta Lake, and Union City Reservoir.

CLARION RIVER BASIN

205

03026500 Sevenmile Run near Rasselas, Pa.

LOCATION.--Lat 41°37'52", long 78°34'37", McKean County, on right bank 300 ft upstream from highway bridge, 600 ft upstream from Fivemile Run, and 3.2 miles northeast of Rasselas.

DRAINAGE AREA.--7.84 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,690.73 ft above mean sea level.

AVERAGE DISCHARGE.--21 years, 13.8 cfs (23.90 inches per year).

EXTREMES.--Current year: Maximum discharge, 976 cfs June 21 (gage height, 4.84 ft); minimum daily, 0.50 cfs Sept. 23.

Period of record: Maximum discharge, 1,620 cfs Sept. 28, 1967 (gage height, 4.79 ft), from rating curve extended above 200 cfs on basis of slope-area measurement at gage height 4.60 ft; maximum gage height, 4.84 ft June 21, 1972; minimum discharge, 0.07 cfs Sept. 21, 1955.

REMARKS.--Records good except those for winter periods, which are 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	2.3	1.1	9.7	47	13	9.0	28	10	6.2	32	1.9	.73
2	1.4	2.6	8.8	35	12	62	29	21	5.6	25	1.8	.66
3	1.1	2.8	8.2	27	11	57	26	24	7.2	25	3.3	.80
4	.95	2.1	7.1	23	10	43	27	22	7.9	22	2.1	.73
5	1.0	1.8	6.5	20	9.0	30	24	20	6.3	19	1.7	.66
6	1.2	1.7	12	17	9.4	25	25	18	5.4	21	1.4	.60
7	1.4	1.9	57	15	8.0	27	28	16	4.9	16	1.8	.60
8	1.1	1.8	67	13	7.0	51	24	16	4.1	13	2.1	.66
9	1.1	1.7	55	13	6.4	33	21	22	4.0	12	1.5	.80
10	1.7	1.8	45	16	6.0	26	20	21	4.9	15	1.4	.60
11	1.7	1.8	33	17	5.8	25	26	18	3.8	12	1.3	.55
12	1.3	1.9	25	16	5.6	25	29	16	3.4	10	1.2	.66
13	1.1	3.9	21	19	7.0	23	77	15	3.9	9.0	1.2	1.4
14	1.0	3.3	18	25	9.0	23	64	18	3.6	10	1.1	1.3
15	.87	4.8	32	16	7.0	20	58	18	3.7	11	1.0	.95
16	.87	4.8	30	13	6.2	21	212	17	19	9.7	.95	.66
17	.80	3.9	24	15	5.8	29	178	16	10	8.7	1.1	.66
18	.80	3.3	21	16	5.4	24	74	14	8.5	7.1	1.1	.87
19	.73	5.1	18	17	6.0	21	47	13	7.7	6.5	.95	.80
20	.73	6.8	16	16	5.6	22	42	13	7.0	5.8	.87	.66
21	.73	6.1	16	16	6.4	27	32	13	371	5.1	.80	.60
22	.73	5.8	14	15	5.8	107	28	11	396	4.1	.80	.55
23	.73	4.8	12	28	5.4	66	25	9.9	324	4.1	.80	.50
24	1.9	4.7	13	30	5.2	42	22	8.8	142	4.8	.95	.73
25	3.0	4.6	14	45	4.9	32	19	7.7	102	3.3	.87	.80
26	2.1	4.5	26	34	4.7	27	16	6.8	75	3.0	.87	.73
27	1.7	4.6	23	27	4.6	23	14	6.2	49	2.6	1.8	1.1
28	1.4	5.1	25	23	5.0	22	13	5.5	33	2.4	1.4	.80
29	1.3	5.7	22	20	5.6	22	12	4.9	52	2.1	1.0	.87
30	1.2	12	104	17	-----	26	11	5.9	45	1.9	.87	3.3
31	1.1	-----	88	15	-----	25	-----	10	-----	1.9	.80	-----
TOTAL	39.04	116.8	871.3	666	202.8	1,015.0	1,251	437.7	1,716.1	325.1	40.73	25.33
MEAN	1.26	3.89	28.1	21.5	6.99	32.7	41.7	14.1	57.2	10.5	1.31	.84
MAX	3.0	12	104	47	13	107	212	24	396	32	3.3	3.3
MIN	.73	1.1	6.5	13	4.6	9.0	11	4.9	3.4	1.9	.80	.50
CFSM	.16	.50	3.58	2.74	.89	4.17	5.32	1.80	7.30	1.34	.17	.11
IN.	.19	.55	4.13	3.16	.96	4.82	5.94	2.08	8.14	1.54	.19	.12

CAL YR 1971 TOTAL 3,876.90 MEAN 10.6 MAX 109 MIN .10 CFSM 1.35 IN 18.40
WTR YR 1972 TOTAL 6,706.90 MEAN 18.3 MAX 396 MIN .50 CFSM 2.33 IN 31.82

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	1615	3.78	252	6-21	0745	4.84	976
4-16	1615	4.22	516	6-22	1915	4.74	804

CLARION RIVER BASIN

03027500 East Branch Clarion River at East Branch Clarion River Dam, Pa.

LOCATION.--Lat 41°33'11", long 78°35'47", Elk County, on left bank 700 ft upstream from Middle Fork, 0.5 mile downstream from East Branch Clarion River Dam, and 1.2 miles northeast of Glen Hazel.

DRAINAGE AREA.--73.2 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,517.58 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--24 years, 132 cfs (24.49 inches per year) adjusted for storage since 1952.

EXTREMES.--Current year: Maximum discharge, 1,810 cfs June 24 (gage height, 6.03 ft); minimum daily, 34 cfs Apr. 11.

Period of record: Maximum discharge, 2,590 cfs May 10, 1957 (gage height, 7.25 ft); minimum, 0.20 cfs July 25, 1969 (gage height, 1.06 ft); minimum daily, 0.40 cfs July 24-27, 1969.

Flood of May 28, 1946, reached a stage of 8.3 ft from graph based on gage readings at site 1,000 ft downstream and at different datum (discharge, 4,000 cfs).

REMARKS.--Records good. Flow completely regulated since June 1952 by East Branch Clarion River Lake 0.5 mile upstream (see p.

COOPERATION.--Eight discharge measurements furnished by Corps of Engineers.

REVISIONS.--WSP 1235: 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	109	107	48	52	60	93	38	145	50	1,470	190	171
2	109	107	48	52	60	93	37	147	50	1,460	190	168
3	109	106	48	52	60	93	37	149	50	1,460	192	168
4	138	99	48	52	60	94	37	147	50	1,450	192	168
5	168	107	48	52	60	94	37	147	56	1,440	190	166
6	150	107	48	52	60	94	37	147	62	1,430	190	164
7	121	101	48	52	60	95	37	147	62	1,420	190	157
8	112	90	48	53	60	95	37	147	84	1,400	190	140
9	112	82	48	53	60	180	37	211	105	1,140	188	128
10	112	82	48	53	60	262	37	272	105	752	188	115
11	112	82	50	53	60	262	34	270	105	575	188	151
12	110	82	50	53	60	262	38	268	105	482	188	193
13	110	82	50	53	60	262	38	268	105	384	188	180
14	109	82	51	56	60	262	38	270	105	202	188	168
15	109	82	51	56	60	262	38	270	105	74	188	157
16	109	82	51	57	60	262	38	270	105	74	185	149
17	109	82	51	57	57	262	141	270	108	73	182	138
18	107	81	51	57	83	262	450	197	111	106	180	123
19	107	81	51	58	93	262	580	122	111	140	178	103
20	107	81	51	58	93	262	570	122	110	140	178	103
21	107	81	51	59	93	262	560	122	111	138	178	123
22	107	81	51	59	93	167	555	121	113	138	175	147
23	107	81	51	59	93	67	545	119	113	138	175	145
24	107	76	51	59	93	67	540	119	1,000	138	175	147
25	109	68	51	59	93	67	404	84	1,600	138	173	145
26	109	67	51	59	93	67	270	50	1,510	157	173	145
27	109	63	51	59	93	67	206	50	1,080	173	173	147
28	107	63	51	59	93	56	145	49	1,210	173	173	145
29	107	57	51	59	93	38	142	49	1,120	171	171	147
30	107	48	52	59	-----	39	142	49	1,200	180	171	147
31	107	-----	52	60	-----	37	-----	48	-----	190	171	-----
TOTAL	3,512	2,490	1,550	1,731	2,123	4,747	5,845	4,846	10,801	17,406	5,651	4,448
MEAN	113	83.0	50.0	55.8	73.2	153	195	156	360	561	182	148
MAX	168	107	52	60	93	262	580	272	1,600	1,470	192	193
MIN	107	48	48	52	57	37	34	48	50	73	171	103
MEAN [#]	16.6	35.9	24.6	23.0	69.2	32.9	35.9	16.2	57.6	16.6	14.0	6.0
CFSM [#]	.23	.49	3.36	3.14	.95	4.49	4.90	2.21	7.87	2.27	.19	.08
IN. [#]	.27	.55	3.87	3.62	1.02	5.18	5.47	2.55	8.78	2.62	.22	.09
CAL YR 1971	TOTAL 36,425	MEAN 99.8	MAX 476	MIN 25	MEAN [#] 104	CFSM [#] 1.42	IN. [#] 19.35					
WTR YR 1972	TOTAL 65,150	MEAN 174	MAX 1,600	MIN 34	MEAN [#] 184	CFSM [#] 2.51	IN. [#] 34.24					

[#] Adjusted for change in contents in East Branch Clarion River Lake.

CLARION RIVER BASIN

207

03028000 West Branch Clarion River at Wilcox, Pa.

LOCATION.--Lat 41°34'31", long 78°41'33", Elk County, on right bank 20 ft downstream from highway bridge at Wilcox, 100 ft downstream from Wilson Run, and 0.1 mile upstream from Penn Central Railroad bridge.

DRAINAGE AREA.--63.0 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,502.02 ft above mean sea level. Prior to Nov. 18, 1953, nonrecording gage at site 20 ft upstream at same datum. Nov. 18 to Dec. 8, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--19 years, 118 cfs (25.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,900 cfs June 22 (gage height, 9.64 ft); minimum, 8.0 cfs Oct. 6, 19, 20, 21, 22 (gage height, 1.28 ft).

Period of record: Maximum discharge, 5,490 cfs Sept. 28, 1967 (gage height, 10.01 ft), from rating curve extended above 3,000 cfs; minimum, 4.2 cfs Sept. 21, 1955 (gage height, 1.27 ft).

REMARKS.--Records good except those for winter periods, which are 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	13	11	73	468	128	70	222	104	52	302	26	11
2	10	29	68	362	106	380	245	206	49	233	25	11
3	8.8	25	67	275	100	665	222	203	53	233	35	11
4	8.1	18	56	219	86	422	248	201	79	188	26	11
5	8.1	16	53	188	74	329	217	196	52	179	21	11
6	11	15	131	148	80	242	217	178	43	192	20	11
7	15	19	438	139	70	248	239	163	41	156	24	10
8	10	17	490	120	64	468	211	158	37	140	29	10
9	10	16	392	114	58	315	191	219	38	132	22	13
10	19	18	315	148	54	255	183	193	39	142	19	10
11	15	20	245	156	52	211	230	173	33	114	18	9.7
12	11	19	191	153	50	201	254	166	32	95	18	12
13	10	28	159	156	60	206	513	151	41	85	17	25
14	9.6	25	146	251	70	214	493	178	36	89	16	23
15	8.8	37	269	170	60	188	513	161	42	85	16	16
16	8.8	36	222	110	52	217	996	153	148	89	14	13
17	8.1	29	197	130	47	308	1,100	146	66	76	16	13
18	8.1	26	174	150	45	257	653	135	55	61	16	22
19	8.4	40	150	161	50	227	454	120	50	56	15	16
20	8.0	47	143	139	47	225	394	126	49	52	13	13
21	8.1	48	138	130	54	257	299	118	1,690	47	13	11
22	8.1	43	113	168	50	657	263	102	2,430	41	13	11
23	8.4	35	100	263	47	573	242	90	2,870	39	13	10
24	26	32	107	278	45	422	206	81	1,270	45	13	14
25	29	38	107	380	42	326	183	72	930	37	13	14
26	19	34	191	299	40	263	161	64	690	33	14	13
27	15	36	168	263	40	219	142	58	464	31	20	23
28	13	43	206	227	45	196	126	53	313	29	16	16
29	12	50	177	181	50	183	116	50	416	27	13	15
30	11	115	741	168	-----	206	106	56	393	25	12	45
31	11	-----	699	135	-----	193	-----	70	-----	25	11	-----
TOTAL	369.4	965	6,726	6,249	1,766	9,143	9,639	4,144	12,501	3,078	557	443.7
MEAN	11.9	32.2	217	202	60.9	295	321	134	417	99.3	18.0	14.8
MAX	29	115	741	468	128	665	1,100	219	2,870	302	35	45
MIN	8.0	11	53	110	40	70	106	50	32	25	11	9.7
CFSM	.19	.51	3.44	3.21	.97	4.68	5.10	2.13	6.62	1.58	.29	.23
IN.	.22	.57	3.97	3.69	1.04	5.40	5.69	2.45	7.38	1.82	.33	.26

CAL YR 1971 TOTAL 33,476.4 MEAN 91.7 MAX 741 MIN 5.6 CFSM 1.46 IN 19.77
WTR YR 1972 TOTAL 55,581.1 MEAN 152 MAX 2,870 MIN 8.0 CFSM 2.41 IN 32.82

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	1700	5.33	1,570	6-21	0930	7.14	2,590
3-22	1430	4.44	1,010	6-22	2330	9.64	4,900
4-16	2000	6.19	2,190				

CLARION RIVER BASIN

03028500 Clarion River at Johnsonburg, Pa.

LOCATION.--Lat 41°29'10", long 78°40'43", Elk County, on right bank at downstream side of highway bridge in Johnsonburg, 0.1 mile downstream from Johnson Run, and 0.4 mile downstream from confluence of East and West Branches.

DRAINAGE AREA.--204 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,422.98 ft above mean sea level. Prior to Nov. 8, 1951, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--27 years, 369 cfs (24.56 inches per year) adjusted for storage since 1952.

EXTREMES.--Current year: Maximum discharge, 11,600 cfs June 22 (gage height, 9.94 ft); minimum daily, 96 cfs Nov. 9 (result of regulation above station).

Period of record: Maximum discharge, 11,700 cfs May 28, 1946 (gage height, 9.2 ft, from graph based on gage readings); maximum gage height, 9.94 ft June 22, 1972; minimum discharge, 6 cfs Sept. 18, 1952 (gage height, 0.68 ft), result of regulation above station; minimum daily, 20 cfs Oct. 5, 1948, Nov. 6, 1951.

Flood in July 1942 reached a stage of 16.7 ft, from floodmark.

REMARKS.--Records good. Flow regulated since June 1952 by East Branch Clarion River Lake 7.9 miles upstream (see p. 237) and at low flow by industrial plants above station.

COOPERATION.--Two discharge measurements furnished by Corps of Engineers.

REVISIONS.--WSP 1235: 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	160	143	240	1,080	296	274	450	325	143	2,030	240	193
2	146	146	170	829	264	882	504	486	146	1,880	243	193
3	143	140	184	630	252	1,580	462	528	182	1,950	246	193
4	153	126	168	522	224	1,070	540	504	146	1,780	249	193
5	188	117	143	450	176	843	486	504	160	1,810	234	193
6	176	133	391	355	200	660	462	468	153	1,780	231	189
7	160	123	1,030	330	192	642	516	450	143	1,710	240	182
8	140	111	1,200	296	153	1,050	450	444	140	1,650	249	170
9	140	96	934	288	162	829	405	635	180	1,440	234	164
10	157	99	762	355	158	787	385	684	196	1,080	231	155
11	150	105	594	390	150	696	450	624	180	902	228	164
12	143	102	474	365	150	678	486	600	172	800	225	219
13	129	108	395	394	160	696	894	570	180	662	225	193
14	129	105	373	504	188	726	899	636	184	458	222	177
15	126	120	648	385	168	666	998	600	265	313	219	188
16	123	123	594	308	168	714	1,640	588	535	305	216	193
17	123	114	522	340	145	934	2,400	570	300	277	216	207
18	120	111	456	365	180	815	1,840	486	264	249	213	199
19	117	133	380	365	196	750	1,520	365	248	402	213	162
20	117	160	345	316	184	744	1,360	380	838	354	210	148
21	120	157	335	316	184	808	1,170	375	4,080	302	207	155
22	114	150	288	314	184	1,510	1,080	330	5,300	274	202	177
23	117	133	244	576	172	1,280	1,040	308	6,920	280	202	174
24	150	133	260	636	188	934	948	288	3,380	291	204	177
25	164	123	264	853	184	720	787	244	3,350	264	199	185
26	140	117	406	696	184	588	570	176	2,820	249	202	190
27	136	123	375	600	176	498	486	160	2,090	252	222	219
28	136	143	432	516	176	432	385	146	1,840	246	213	199
29	136	160	380	415	192	390	360	140	1,940	234	204	190
30	133	320	1,440	350	-----	450	335	181	1,920	234	204	350
31	133	-----	1,700	300	-----	410	-----	168	-----	246	196	-----
TOTAL	4,319	3,974	16,127	14,439	5,406	24,056	24,308	12,963	38,395	24,704	6,839	5,691
MEAN	139	132	520	466	186	776	810	418	1,280	797	221	190
MAX	188	320	1,700	1,080	296	1,580	2,400	684	6,920	2,030	249	350
MIN	114	96	143	288	145	274	335	140	140	234	196	148
MEAN [‡]	42.6	84.9	71.6	64.0	182	952	974	424	1,496	402	53	48
CFSM [‡]	.21	.42	3.51	3.14	.89	4.67	4.77	2.08	7.33	1.97	.26	.24
IN. [‡]	.24	.47	4.05	3.62	.96	5.38	5.32	2.40	8.18	2.27	.30	.27

CAL YR 1971 TOTAL 99,143 MEAN 272 MAX 1,700 MIN 96 MEAN[‡] 276 CFSM[‡] 1.35 IN.[‡] 18.39
 WTR YR 1972 TOTAL 181,221 MEAN 495 MAX 6,920 MIN 96 MEAN[‡] 501 CFSM[‡] 2.46 IN.[‡] 33.46

[‡] Adjusted for change in contents in East Branch Clarion River Lake.

CLARION RIVER BASIN

209

03029400 Toms Run at Cooksburg, Pa.

LOCATION.--Lat 41°20'16", long 79°12'50", Clarion County, on right bank about 100 ft downstream from foot-bridge on Longfellow Trail, Cook Forest State Park, 0.6 mile upstream from mouth, and half a mile north-west of Cooksburg.

DRAINAGE AREA.--12.6 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,180.74 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 18.1 cfs (19.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 532 cfs June 22 (gage height, 3.65 ft); maximum gage height, 3.70 ft Sept. 18 (backwater from construction of weir); minimum daily discharge, 0.91 cfs Oct. 17.
Period of record: Maximum discharge, 656 cfs Mar. 10, 1964 (gage height, 4.17 ft); maximum gage height, 4.37 ft Mar. 5, 1964 (backwater from ice); minimum daily discharge, 0.31 cfs Aug. 19, 1971; minimum gage height, 1.14 ft Aug. 6, 1962.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality records 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	2.4	2.7	72	97	16	122	21	14	10	34	1.2	2.0
2	1.9	5.3	49	86	14	244	24	28	10	24	1.2	1.9
3	1.4	3.4	28	66	12	122	19	24	12	34	.96	2.0
4	1.3	2.2	22	55	11	70	22	20	24	38	1.1	2.2
5	1.3	1.8	21	53	10	50	26	19	19	22	1.4	2.0
6	1.7	1.7	208	41	11	35	22	16	13	32	1.2	1.9
7	1.9	2.2	178	36	9.4	35	32	15	9.4	30	2.2	1.8
8	1.3	2.2	106	31	8.4	77	26	14	8.2	30	3.0	1.7
9	1.2	1.9	53	29	7.6	50	20	24	45	39	2.5	2.3
10	4.8	2.4	31	38	7.0	40	19	24	47	41	2.0	1.9
11	2.2	2.7	20	39	6.4	30	19	20	29	30	1.7	1.7
12	1.8	2.4	13	36	6.0	25	24	17	22	24	7.4	3.6
13	1.4	2.4	9.3	35	10	57	41	15	53	18	2.2	5.8
14	1.7	2.2	17	35	22	97	53	20	41	14	1.8	6.3
15	1.4	2.7	129	25	17	81	75	17	49	9.5	2.0	4.4
16	1.1	2.7	98	18	17	102	176	21	70	22	1.8	3.2
17	.91	2.0	64	19	16	138	297	25	46	17	2.2	4.0
18	1.0	1.9	40	20	13	96	171	21	38	11	3.3	7.9
19	1.1	3.4	27	21	11	66	114	17	32	8.1	2.6	4.4
20	1.1	5.3	23	15	9.0	53	79	32	38	6.7	1.7	2.9
21	1.0	6.5	23	16	8.0	55	77	31	246	4.7	1.8	2.4
22	1.0	4.3	16	15	7.2	146	53	25	266	3.8	2.2	1.9
23	1.6	3.4	13	55	6.6	122	51	21	358	2.9	3.3	1.6
24	16	3.0	12	61	6.2	75	42	21	193	6.0	2.6	2.0
25	14	3.8	11	75	6.0	53	35	17	193	8.1	2.4	2.1
26	7.9	3.0	25	55	5.8	41	29	14	157	3.8	2.9	2.1
27	5.3	4.8	27	41	5.6	32	24	12	110	2.9	4.2	2.5
28	4.3	15	35	35	6.4	26	17	10	77	2.6	3.5	2.1
29	3.0	57	28	28	7.0	24	15	8.8	55	2.2	2.8	1.9
30	2.7	86	195	23	-----	25	14	11	47	1.7	2.4	4.9
31	2.4	-----	168	20	-----	21	-----	13	-----	1.4	2.1	-----
TOTAL	92.11	240.3	1,761.3	1,219	292.6	2,210	1,637	586.8	2,317.6	524.4	73.66	87.4
MEAN	2.97	8.01	56.8	39.3	10.1	71.3	54.6	18.9	77.3	16.9	2.38	2.91
MAX	16	86	208	97	22	244	297	32	358	41	7.4	7.9
MIN	.91	1.7	9.3	15	5.6	21	14	8.8	8.2	1.4	.96	1.6
CFSM	.24	.64	4.51	3.12	.80	5.66	4.33	1.50	6.13	1.34	.19	.23
IN.	.27	.71	5.20	3.60	.86	6.52	4.83	1.73	6.84	1.55	.22	.26
CAL YR 1971	TOTAL	6,435.54	MEAN	17.6	MAX	208	MIN	.31	CFSM	1.40	IN	19.00
WTR YR 1972	TOTAL	11,042.17	MEAN	30.2	MAX	358	MIN	.91	CFSM	2.40	IN	32.60

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 1	2230	2.90	163	3-22	1300	2.46	199
12- 6	0800	3.47	378	4-17	0700	3.44	473
12-30	1330	3.47	384	6-21	0200	3.21	409
3- 2	0615	3.27	426	6-22	2215	3.65	532
3-16	2115	2.34	165				

CLARION RIVER BASIN

03029500 Clarion River at Cooksburg, Pa.

LOCATION.--Lat 41°19'50", long 79°12'33", Jefferson County, on left bank at downstream side of bridge on State Highway 36 at Cooksburg, 300 ft downstream from Toms Run, and 2.7 miles upstream from Cathers Run.

DRAINAGE AREA.--807 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for October, November 1938, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,147.00 ft above mean sea level. Prior to May 17, 1939, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 1,408 cfs (23.69 inches per year) adjusted for storage since 1952.

EXTREMES.--Current year: Maximum discharge, 53,300 cfs June 23 (gage height, 18.84 ft); minimum not determined; minimum daily, 249 cfs Oct. 22.

Period of record: Maximum discharge, 53,300 cfs June 23, 1972 (gage height, 18.84 ft); minimum, 41 cfs Aug. 30, 1939 (gage height, 1.22 ft).

Maximum stage since 1935, 19 ft Mar. 17, 1936, from floodmarks (discharge, about 56,000 cfs).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by East Branch Clarion River Lake since June 1952 (see p. 237 and at low flow by industrial plants above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1305: 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	640	317	1,690	5,980	1,500	1,600	1,920	1,210	724	5,560	489	319
2	510	329	1,170	4,480	1,300	5,000	2,080	1,410	585	4,580	484	312
3	438	428	907	4,100	1,200	9,500	2,040	2,120	562	4,360	471	308
4	388	448	894	3,080	1,100	7,000	2,020	2,110	578	5,540	489	305
5	360	388	775	2,830	900	5,000	2,440	1,960	937	4,120	467	301
6	388	351	1,050	2,350	1,000	3,500	2,070	1,760	657	5,260	427	301
7	384	361	4,840	1,970	900	3,200	2,310	1,620	548	4,650	419	298
8	404	364	6,440	1,770	800	4,500	2,250	1,520	496	3,860	459	294
9	364	350	4,610	1,570	700	5,000	1,980	1,690	503	3,530	475	291
10	356	327	3,490	1,810	700	3,600	1,840	2,500	673	4,430	439	280
11	396	335	2,780	2,110	660	3,300	1,790	2,040	634	3,430	411	268
12	376	350	2,230	2,150	600	3,100	1,940	1,860	527	2,630	399	259
13	335	347	1,860	1,940	700	3,100	2,270	1,750	612	2,110	415	351
14	313	350	1,630	2,150	760	3,700	3,600	1,760	868	1,770	427	570
15	297	349	3,200	1,950	760	3,500	4,280	1,950	716	1,580	399	570
16	287	379	4,070	1,200	720	3,300	7,520	1,790	1,680	1,470	367	443
17	276	403	2,950	1,000	700	4,500	12,500	1,780	1,990	1,480	355	367
18	269	372	2,480	1,520	700	5,200	7,560	1,720	1,300	1,190	359	399
19	262	367	2,070	1,620	840	4,000	5,630	1,490	1,070	988	363	423
20	257	453	1,830	1,610	800	3,600	4,730	1,440	931	1,030	351	359
21	252	544	1,820	1,540	800	4,000	4,380	1,820	9,350	973	339	305
22	249	557	1,650	1,520	780	6,000	3,520	1,530	19,500	826	327	277
23	250	513	1,350	1,720	760	7,000	3,470	1,330	43,200	735	331	284
24	278	457	1,220	2,760	720	5,000	2,960	1,180	17,800	819	347	291
25	482	470	1,250	3,410	800	3,500	2,620	1,050	13,900	770	359	301
26	566	456	1,380	4,010	780	3,000	2,170	900	12,200	693	339	327
27	479	449	1,930	3,500	740	2,500	1,870	729	8,930	618	371	335
28	409	498	1,810	2,900	740	2,000	1,620	649	5,840	582	403	431
29	369	634	1,890	2,500	900	1,800	1,430	597	4,940	545	411	391
30	342	1,310	4,130	2,000	-----	2,100	1,310	566	6,970	507	359	387
31	325	-----	10,900	1,700	-----	2,000	-----	602	-----	484	335	-----
TOTAL	11,301	13,256	80,296	74,750	24,360	124,100	98,120	46,433	159,221	71,120	12,386	10,347
MEAN	365	442	2,590	2,411	840	4,003	3,271	1,498	5,307	2,294	400	345
MAX	640	1,310	10,900	5,980	1,500	9,500	12,500	2,500	43,200	5,560	489	570
MIN	249	317	775	1,000	600	1,600	1,310	566	496	484	327	259
MEAN [‡]	269	395	2,786	2,585	836	4,179	3,435	1,504	5,523	1,899	232	203
CFSM [‡]	.33	.49	3.45	3.20	1.04	5.18	4.26	1.86	6.84	2.35	.29	.25
IN. [‡]	.38	.55	3.98	3.69	1.12	5.97	4.75	2.14	7.63	2.71	.33	.28

CAL YR 1971 TOTAL 426,385 MEAN 1,168 MAX 10,900 MIN 220 MEAN[‡] 1,172 CFSM[‡] 1.45 IN.[‡] 19.72
WTR YR 1972 TOTAL 725,690 MEAN 1,983 MAX 43,200 MIN 249 MEAN[‡] 1,989 CFSM[‡] 2.46 IN.[‡] 33.53

[‡] Adjusted for change in contents in East Branch Clarion River Lake.

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-31	0300	10.12	14,200	6-23	1100	18.84	53,300
4-17	0500	10.26	14,600				

CLARION RIVER BASIN

211

03030500 Clarion River near Piney, Pa.

LOCATION.--Lat 41°11'33", long 79°26'25", Clarion County, on left bank 0.2 mile downstream from hydroelectric plant of Pennsylvania Electric Co., 2.3 miles northeast of Piney, 2.4 miles upstream from Piney Creek, and 3 miles southwest of Clarion.

DRAINAGE AREA.--951 sq mi.

PERIOD OF RECORD.--October 1944 to current year (monthly discharge only October 1944 to September 1947).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,002.06 ft above mean sea level (Pennsylvania Electric Co. bench mark). Prior to Dec. 23, 1947, records from hydroelectric plant 0.2 mile upstream.

AVERAGE DISCHARGE.--28 years, 1,698 cfs (24.25 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 74,500 cfs June 23 (gage height, 28.24 ft from floodmark), from rating curve extended as explained below; minimum daily, 29 cfs Nov. 13.
Period of record: Maximum discharge, 74,500 cfs June 23, 1972 (gage height, 28.24 ft, from floodmark), from rating curve extended above 17,000 cfs on basis of slope-area measurement at gage height 20.70 ft in gage well, 21.8 ft from outside high-water profile; minimum not determined.
The flood of Mar. 18, 1936 reached a discharge of 50,000 cfs, as determined by Pennsylvania Electric Co. (elevation, 1,028.5 ft, at lower pool of dam).

REMARKS.--Records good. Flow regulated by East Branch Clarion River Lake since June 1952 (see p. 237) and by hydroelectric plant at Piney Dam 0.2 mile upstream since 1924 (combined capacity of reservoirs, 113,200 acre-ft). Water-quality records 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	1,240	827	2,050	6,750	1,620	1,890	2,270	1,640	947	5,230	772	580
2	750	475	1,510	5,400	1,550	4,940	1,700	1,790	1,410	4,570	784	104
3	46	586	1,320	4,870	1,940	12,500	2,830	2,590	400	4,300	827	110
4	410	742	165	4,340	1,930	6,140	2,270	2,370	36	5,100	1,110	77
5	400	435	435	3,270	445	5,830	2,620	2,260	1,320	4,200	57	535
6	400	55	3,180	2,870	38	5,520	2,630	1,930	784	4,900	43	273
7	390	46	6,130	2,750	1,100	2,970	2,870	1,690	778	4,700	748	280
8	540	430	7,540	2,370	925	5,290	2,480	1,940	772	4,450	778	646
9	410	485	6,400	1,590	925	5,400	2,740	2,390	778	3,630	772	224
10	46	610	5,090	2,550	925	4,320	2,260	2,630	1,140	4,410	410	34
11	530	400	4,110	2,660	904	2,980	2,260	2,140	238	4,480	400	395
12	560	592	2,610	2,680	904	3,160	2,260	2,440	1,030	2,670	57	592
13	580	29	2,830	2,700	380	3,970	2,850	1,900	1,690	2,440	94	628
14	770	82	2,550	2,070	1,290	5,580	4,300	1,490	1,260	2,470	440	1,770
15	410	622	4,250	1,970	1,290	5,590	4,050	2,720	1,540	1,750	622	1,160
16	34	604	4,980	1,010	1,200	4,790	9,820	1,900	2,650	1,300	425	150
17	41	410	4,370	1,240	925	6,530	15,400	2,030	2,450	2,020	569	90
18	266	580	3,480	2,000	876	6,330	9,140	2,570	1,840	1,490	560	660
19	345	586	2,600	2,660	36	5,500	6,510	1,960	1,480	1,270	560	780
20	335	410	3,010	1,810	560	4,000	5,760	1,510	1,390	1,330	107	830
21	445	322	2,030	1,890	911	4,540	5,650	1,700	11,500	1,930	450	805
22	420	834	2,170	1,930	1,070	5,590	4,970	1,930	22,000	1,030	450	343
23	53	570	1,610	2,970	925	8,320	4,040	1,570	51,600	104	515	57
24	38	950	2,300	3,620	883	5,900	2,980	1,540	21,600	1,560	485	38
25	445	34	634	4,700	897	4,740	2,940	1,200	17,600	1,910	490	310
26	960	1,080	2,300	4,460	545	3,710	2,830	946	14,100	883	84	497
27	500	190	3,030	3,080	36	3,530	2,250	932	9,800	960	96	560
28	953	370	2,440	3,230	911	2,550	2,230	766	6,800	1,000	598	822
29	616	1,130	1,980	2,590	904	2,710	1,350	766	6,400	64	598	906
30	86	1,900	4,340	1,590	-----	2,500	1,140	766	5,300	41	560	784
31	38	-----	12,800	2,150	-----	2,510	-----	778	-----	1,170	575	-----
TOTAL	13,057	16,386	104,244	90,970	26,845	151,830	117,400	54,784	190,633	77,362	15,036	15,040
MEAN	421	546	3,363	2,935	926	4,898	3,913	1,767	6,354	2,496	485	501
MAX	1,240	1,900	12,800	6,750	1,940	12,500	15,400	2,720	51,600	5,230	1,110	1,770
MIN	34	29	165	1,010	36	1,890	1,140	766	36	41	43	34
(Δ)	-87.9	-67.3	+227	+149	-0.5	+151	+194	+0.8	+241	-440	-146	-154
MEAN Δ	333	479	3,590	3,084	926	5,049	4,107	1,768	6,595	2,056	339	347
CFSM Δ	.35	.50	3.77	3.24	.97	5.31	4.32	1.86	6.93	2.16	.36	.36
IN Δ	.40	.56	4.35	3.74	1.05	6.12	4.82	2.14	7.73	2.49	.42	.40
CAL YR 1971	TOTAL 509,272	MEAN 1,395	MAX 12,800	MIN 23								
WTR YR 1972	TOTAL 873,587	MEAN 2,387	MAX 51,600	MIN 29	MEAN Δ 1,403	CFSM Δ 1.48	IN Δ 20.01					
					MEAN Δ 2,392	CFSM Δ 2.52	IN Δ 34.22					

Δ Change in contents, equivalent in cubic feet per second, in East Branch Clarion River Lake and Piney Reservoir. Records of contents in Piney Reservoir furnished by Pennsylvania Electric Co.

Δ Adjusted for change in contents.

03031500 Allegheny River at Parker, Pa.

LOCATION.--Lat 41°06'02", long 79°40'53", Armstrong County, on right bank 500 ft downstream from bridge on State Highway 368 at Parker, 1.1 miles downstream from Clarion River, and at mile 83.4.

DRAINAGE AREA.--7,671 sq mi.

PERIOD OF RECORD.--October 1932 to current year. Prior to October 1963, published as "at Parkers Landing". Gage-height records collected at same site since 1885 are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 845.14 ft above mean sea level, adjustment of 1907. Prior to Oct. 1, 1932, U. S. Weather Bureau gages at different datums. Oct. 1-28, 1932, nonrecording gage at datum 27.00 ft lower.

AVERAGE DISCHARGE.--40 years, 13,000 cfs (23.01 inches per year) adjusted for storage since October 1940.

EXTREMES.--Current year: Maximum discharge, 147,000 cfs June 23 (gage height, 22.23 ft); minimum 2,040 cfs Oct. 7, 8 (gage height, 1.59 ft).

Period of record: Maximum discharge, about 175,000 cfs Jan. 22, 1959; maximum gage height, 29.60 ft Jan. 21, 1959 (backwater from ice); minimum discharge, 409 cfs July 30, 1934 (gage height, 0.67 ft).

Flood of Mar. 17, 1865 reached a stage of 29.4 ft, present datum (discharge, 250,000 cfs), from rating curve extended above 125,000 cfs.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated since 1965 by Allegheny Reservoir, by Chautauqua Lake, since 1941 by Tionesta Lake, since 1971 by Union City Reservoir (see p. 237) and Woodcock Creek Lake, since 1952 by East Branch Clarion River Lake (see p. 237), and since 1924 by Piney 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	6,080	2,970	16,000	41,100	16,500	31,500	18,500	10,600	6,630	52,300	4,330	3,020
2	5,680	3,510	14,000	37,600	14,800	51,000	17,600	12,500	6,640	48,600	4,170	2,430
3	5,010	3,300	12,300	35,400	13,500	68,300	18,800	16,300	6,070	57,100	4,550	2,400
4	4,280	3,360	10,600	31,100	13,200	50,300	18,000	20,400	5,600	57,700	4,880	2,460
5	4,240	3,460	8,860	29,200	10,000	42,900	17,800	18,400	5,750	51,100	4,520	2,480
6	3,540	3,370	10,700	26,100	7,550	39,100	17,600	15,500	6,120	52,000	3,910	3,240
7	2,550	3,860	30,900	23,300	8,500	34,000	18,000	13,800	5,470	49,600	4,210	4,160
8	2,480	4,440	51,900	21,000	8,300	44,600	17,400	13,300	5,430	45,300	4,580	4,710
9	2,490	5,300	40,300	18,600	6,800	44,000	18,800	13,500	5,420	41,800	5,240	3,550
10	2,700	5,540	32,500	19,700	5,200	40,000	16,100	20,100	7,080	44,000	5,660	3,910
11	3,420	5,380	26,200	21,700	5,300	36,800	14,000	23,900	6,180	44,800	4,860	4,140
12	4,570	5,130	22,200	23,700	5,600	35,400	11,900	24,700	5,670	40,300	4,540	4,560
13	4,380	5,460	20,000	23,100	6,800	40,900	12,300	22,700	8,140	37,800	3,580	5,220
14	4,310	5,260	18,000	23,500	8,200	43,000	16,300	21,700	10,800	29,700	3,550	7,280
15	4,280	5,720	24,200	22,000	10,500	40,300	19,700	22,900	7,580	19,500	4,280	6,860
16	3,680	6,350	30,500	18,600	10,900	36,600	32,600	24,300	14,100	13,700	3,970	5,590
17	3,160	6,010	26,900	15,900	10,500	47,500	49,800	21,800	14,100	14,600	3,690	4,530
18	2,960	5,620	24,700	17,600	10,600	48,000	39,300	19,800	11,900	12,900	3,940	7,130
19	3,050	5,090	22,600	18,200	11,000	43,900	39,100	19,700	10,300	13,400	4,110	6,490
20	2,730	4,550	21,100	19,000	9,500	41,100	42,800	16,500	8,780	11,900	3,180	5,060
21	2,690	4,640	19,900	20,200	7,800	39,400	40,400	15,100	19,300	10,500	2,960	4,140
22	2,650	5,340	19,800	20,600	8,800	42,300	40,400	14,400	38,500	10,100	3,160	3,170
23	2,550	6,470	18,400	22,700	7,700	54,400	38,600	13,100	118,000	6,890	4,340	2,640
24	2,530	7,200	17,100	25,900	7,400	46,700	34,500	11,000	95,000	6,890	4,960	2,290
25	3,160	6,180	16,300	27,100	8,900	41,500	29,800	9,200	92,300	6,760	4,300	2,350
26	3,750	5,100	18,000	27,200	12,400	36,900	21,400	8,210	95,900	6,340	4,190	2,570
27	3,760	5,710	23,200	24,500	12,500	34,100	15,900	6,470	78,300	5,530	5,130	3,250
28	3,800	5,180	23,900	22,500	12,000	31,600	14,100	5,960	70,400	5,160	5,190	4,040
29	4,010	6,580	23,600	20,300	15,000	29,700	12,200	5,550	64,100	4,420	4,400	4,590
30	3,100	11,200	29,900	18,000	-----	24,900	11,000	5,660	58,500	3,840	4,280	6,170
31	2,870	-----	57,300	18,000	-----	20,800	-----	6,050	-----	4,180	2,990	-----
TOTAL	110,460	157,280	731,860	733,400	285,750	1,261,5M	714,700	473,100	888,060	808,710	131,650	124,430
MEAN	3,563	5,243	23,610	23,660	9,853	40,690	23,820	15,260	29,600	26,090	4,247	4,148
MAX	6,080	11,200	57,300	41,100	16,500	68,300	49,800	24,700	118,000	57,700	5,660	7,280
MIN	2,480	2,970	8,860	15,900	5,200	20,800	11,000	5,550	5,420	3,840	2,960	2,290
(\bar{x})	-888	+324	+3,450	-2,900	-1,150	+2,470	+2,450	+198	+8,920	-8,860	-938	-1,050
MEAN \neq	2,675	5,567	27,060	20,760	8,703	43,160	26,270	15,460	38,520	17,230	3,309	3,098
CFSM \neq	.35	.73	3.53	2.71	1.13	5.63	3.42	2.02	5.02	2.25	.43	.40
IN. \neq	.40	.81	4.07	3.12	1.22	6.49	3.82	2.33	5.60	2.59	.50	.45

CAL YR 1971 TOTAL 4,179,190 MEAN 11,450 MAX 61,200 MIN 1,930 MEAN \neq 11,620 CFSM \neq 1.51 IN. \neq 20.57
WTR YR 1972 TOTAL 6,420,900 MEAN 17,540 MAX 118,000 MIN 2,290 MEAN \neq 17,690 CFSM \neq 2.31 IN. \neq 31.40

\neq Change in contents, equivalent in cubic feet per second, in Allegheny Reservoir, Chautauqua Lake, Tionesta Lake, Union City Reservoir, East Branch Clarion River Lake, and Piney Reservoir. Records of contents in Piney Reservoir furnished by Pennsylvania Electric Co.

\neq Adjusted for change in reservoir contents.

REDBANK CREEK BASIN

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03031950 Big Run near Sprankle Mills, Pa.

LOCATION.--Lat 40°59'30", long 79°05'26", Jefferson County, on right bank at downstream side of highway bridge, 0.5 mile downstream from McCracken Run, and 1.3 miles southeast of Sprankle Mills.

DRAINAGE AREA.--7.38 sq mi.

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

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 1,290 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 12.0 cfs (22.08 inches per year).

EXTREMES.--Current year: Maximum discharge, 854 cfs June 22 (gage height, 6.11 ft); minimum, 1.0 cfs Aug. 20-23, Sept. 7, 8, 10-12 (gage height, 1.92 ft).

Period of record: Maximum discharge, 854 cfs June 22, 1972 (gage height, 6.11 ft); maximum gage height, 6.23 ft Feb. 13, 1966; minimum discharge, 0.2 cfs July 20, 28-30, Aug. 19, 24, 30, 31, 1965; minimum gage height, 1.90 ft Aug. 17, 18, 1971.

REMARKS.--Records good except those for winter periods, which are 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	3.9	2.7	20	39	9.5	108	13	8.8	3.5	19	2.6	1.4
2	3.0	12	15	56	9.0	220	13	14	3.5	16	2.9	1.4
3	2.9	7.4	13	37	8.0	128	12	22	5.5	25	2.6	1.4
4	2.9	5.5	11	30	7.0	61	32	14	3.9	19	2.0	1.4
5	2.5	4.7	9.4	30	6.0	40	22	12	3.2	20	1.7	1.2
6	3.4	4.4	87	22	8.0	27	19	10	2.6	37	1.7	1.2
7	3.6	5.1	87	19	7.0	34	30	9.3	2.3	24	2.0	1.2
8	2.5	4.0	55	17	6.5	55	20	8.8	2.0	20	1.7	1.2
9	2.6	3.7	37	19	7.5	33	17	17	6.3	17	2.9	1.7
10	3.1	3.8	27	27	6.5	26	16	14	8.3	16	1.7	1.2
11	2.5	3.6	22	23	5.6	21	14	10	3.5	13	1.4	1.0
12	2.1	3.4	17	20	5.0	26	13	9.3	2.9	9.9	1.4	2.0
13	2.0	3.0	15	18	6.5	53	26	8.8	54	8.8	1.4	19
14	1.9	2.7	24	15	9.0	62	18	9.9	17	7.8	1.2	19
15	1.8	8.2	41	11	7.5	43	59	8.8	12	6.8	1.7	7.3
16	1.7	5.7	27	7.0	7.2	38	69	8.3	17	7.8	1.2	4.7
17	1.7	4.7	22	9.0	6.5	57	56	7.8	9.3	6.3	1.7	4.3
18	1.7	4.2	19	13	5.8	43	35	6.8	7.8	5.5	1.7	13
19	1.7	5.8	16	12	5.0	30	26	6.3	6.3	4.7	1.4	6.8
20	1.7	6.3	22	11	4.5	23	33	6.3	9.9	4.7	1.2	5.1
21	1.7	11	22	26	4.0	20	22	5.5	44	4.3	1.0	4.3
22	1.7	8.7	18	19	5.2	34	30	5.1	189	3.9	1.0	3.5
23	1.9	6.7	15	30	5.0	26	26	4.3	460	3.9	7.3	3.2
24	9.7	6.9	15	32	5.9	22	22	3.9	143	8.3	2.9	6.3
25	5.5	6.9	13	40	5.5	19	19	3.5	157	3.9	1.7	4.3
26	5.4	6.5	18	30	8.8	17	15	2.9	154	3.2	1.7	3.9
27	4.1	7.4	18	22	8.3	15	13	2.9	66	3.2	12	3.9
28	3.6	13	24	18	8.8	14	11	2.6	38	2.9	4.3	3.2
29	3.0	20	19	14	26	14	9.9	2.3	34	2.6	2.6	3.9
30	3.0	27	156	10	-----	16	9.3	3.2	26	2.6	2.0	29
31	2.7	-----	65	8.0	-----	13	-----	4.7	-----	2.6	1.7	-----
TOTAL	91.5	215.0	969.4	684.0	215.1	1,338	720.2	253.1	1,491.8	329.7	74.3	161.0
MEAN	2.95	7.17	31.3	22.1	7.42	43.2	24.0	8.16	49.7	10.6	2.40	5.37
MAX	9.7	27	156	56	26	220	69	22	460	37	12	29
MIN	1.7	2.7	9.4	7.0	4.0	13	9.3	2.3	2.0	2.6	1.0	1.0
CFSM	.40	.97	4.24	2.99	1.01	5.85	3.25	1.11	6.73	1.44	.33	.73
IN.	.46	1.08	4.89	3.45	1.08	6.74	3.63	1.28	7.52	1.66	.37	.81

CAL YR 1971 TOTAL 4,575.73 MEAN 12.5 MAX 164 MIN .65 CFSM 1.69 IN 23.06

WTR YR 1972 TOTAL 6,543.10 MEAN 17.9 MAX 460 MIN 1.0 CFSM 2.43 IN 32.98

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-6	1500	3.87	214	6-13	1030	3.88	202
12-30	1315	5.01	443	6-22	2345	6.11	854
3-2	1715	-	356	6-26	0100	4.82	386

REDBANK CREEK BASIN

03032500 Redbank Creek at St. Charles, Pa.

LOCATION.--Lat 40°59'40", long 79°23'40", Armstrong County, on left bank 400 ft downstream from highway bridge on Legislative Route 03117 at St. Charles, 0.3 mile downstream from Leatherwood Creek, and 3 miles west of New Bethlehem.

DRAINAGE AREA.--528 sq mi.

PERIOD OF RECORD.--Annual maximums, water years 1910-18, published herein. October 1918 to current year. Monthly discharge only for some periods, published in WSP 1305. Figures of daily discharge for November 1920 to June 1921, published in WSP 523 are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 973.14 ft above mean sea level, datum of 1912. Prior to July 10, 1940, nonrecording gage at site 500 ft upstream at datum 3.10 ft higher.

AVERAGE DISCHARGE.--54 years, 843 cfs (21.68 inches per year).

EXTREMES.--Current year: Maximum discharge, 32,800 cfs June 23 (gage height, 17.75 ft from floodmark in well); minimum, 41 cfs Aug. 23 (gage height, 1.78 ft).
Period of record: Maximum discharge, 50,000 cfs (revised) Mar. 18, 1936 (gage height, 18.60 ft, from floodmarks, site and datum then in use); minimum observed, 19 cfs Oct. 1, 1918.

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

WSP	Water year	Date	Discharge (cfs)	Gage height (feet)
(a)	1910	Feb. 28, 1910	14,900	10.46
(a)	1911	Sept. 15, 1911	13,300	9.81
(a)	1912	Oct. 2, 1911	32,800	14.7
(a)	1913	Mar. 26, 1913	22,600	12.16
(a)	1914	May 13, 1914	10,100	8.40
(a)	1915	Feb. 1, 1915	20,000	11.5
(a)	1916	Mar. 28, 1916	22,000	12.0
(a)	1917	Mar. 12, 1917	8,550	7.7
(a)	1918	Feb. 20, 1918	22,800	12.2
1305	1923	May 12, 1923	17,400	10.8
1305	1926	Sept. 5, 1926	18,800	11.2
1305	1928	Dec. 14, 1927	25,200	12.8
803,1305	1936	Mar. 18, 1936	50,000	18.60
823,1305	1937	Jan. 25, 1937	20,800	11.7
853,1305	1938	Dec. 18, 1937	20,400	11.6
973,1305	1943	Dec. 30, 1942	20,100	14.88
1033,1305	1945	Mar. 3, 1945	11,800	12.13
1235,1725	1952	Jan. 27, 1952	17,000	13.98
1275,1725	1953	May 31, 1953	14,600	13.18
1385,1725	1955	Oct. 16, 1954	16,600	13.82
1435,1725	1956	May 13, 1956	17,300	14.07
1555,1725	1958	July 15, 1958	15,000	13.31
1625,1725	1959	Jan. 22, 1959	16,800	13.89
1907	1964	Mar. 10, 1964	26,000	16.33
WRD 1966	1966	Feb. 13, 1966	19,100	14.60

a Not previously published in reports on Surface Water Supply of the United States; figures for 1912, 1913, 1915, 1916, 1918 supersede those published in WSP 1675.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1385: 1919, 1936-39. See also PERIOD OF RECORD. Revised figures of discharge, in cubic feet per second, for high-water periods in water years 1936, 1942, and 1964 and supplementary peak discharge for water years 1937, 1945, and 1956, are given herewith. They supersede figures published in WSP 800, 803, 823, 973, 1033, 1305, 1435, 1675, and 1907.

Mar. 17, 1936.....24,400	Dec. 30, 1942.....16,400	Mar. 10, 1964.....20,700
Mar. 18, 1936.....32,900	Dec. 31, 1942.....10,800	

Month	Cfs days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
March 1936.....	167,190	32,900	1,370	5,393	10.2	11.78
Water year 1936.....	330,218	32,900	25	902	1.71	23.26
Calendar year 1936.....	360,540	32,900	25	985	1.87	25.39
December 1942.....	58,557	16,400	270	1,889	3.58	4.12
Calendar year 1942.....	332,338	16,400	69	911	1.73	23.41
Water year 1943.....	413,258	16,400	33	1,132	2.14	29.09
March 1964.....	109,896	20,700	220	3,545	6.71	7.74
Water year 1964.....	288,446	20,700	39	788	1.49	20.31
Calendar year 1964.....	305,952	20,700	39	836	1.58	21.54

REVISED PEAK DISCHARGE.--1937: Jan. 25 (0600) 20,800 cfs (11.7 ft); Apr. 26 (0500) 20,000 cfs (11.5 ft).
1945: Mar. 3 (2400) 11,800 cfs (12.13 ft); Mar. 7 (0730) 11,700 cfs (12.07 ft).
1956: Feb. 25 (2200) 16,700 cfs (13.87 ft); May 13 (1100) 17,300 cfs (14.07 ft).

REDBANK CREEK BASIN

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03032500 Redbank Creek at St. Charles, Pa.--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	333	150	1,220	4,200	664	1,900	1,010	664	333	2,450	211	111
2	258	178	916	3,170	718	7,770	994	694	294	1,810	206	101
3	215	279	590	3,030	706	8,960	970	1,470	342	1,500	196	95
4	190	300	560	2,310	536	5,630	1,090	1,480	327	1,430	186	92
5	175	267	512	2,100	360	4,130	1,460	1,200	380	1,220	173	88
6	160	220	1,200	1,780	390	2,720	1,340	982	400	1,730	154	86
7	165	210	4,440	1,490	473	2,100	1,650	850	306	1,830	156	82
8	153	203	4,310	1,290	390	3,210	1,780	760	249	1,530	171	77
9	146	185	2,990	1,150	320	2,660	1,560	886	234	1,290	196	81
10	153	180	2,140	1,400	330	2,100	1,390	1,390	1,290	1,180	180	75
11	153	178	1,670	1,570	340	1,690	1,270	1,200	1,330	1,110	162	71
12	142	175	1,320	1,480	350	1,570	1,170	982	904	904	144	78
13	128	173	1,080	1,340	400	2,330	1,280	868	1,430	742	133	173
14	118	165	952	1,240	575	3,850	1,650	826	2,170	630	154	760
15	108	195	1,980	1,030	600	3,580	3,230	844	1,620	630	152	630
16	102	258	2,330	545	600	3,070	5,360	802	3,170	1,240	128	400
17	97	252	1,770	444	520	4,970	6,440	784	2,430	1,110	126	269
18	93	225	1,470	718	496	3,880	4,330	670	1,720	838	148	448
19	90	218	1,230	868	460	2,850	3,010	585	1,280	635	121	428
20	67	252	1,130	790	380	2,220	2,530	550	1,020	532	111	324
21	84	306	1,250	814	366	1,900	2,370	700	5,750	472	102	235
22	84	359	1,100	796	400	2,230	1,950	658	7,360	404	102	189
23	84	333	880	1,320	377	2,920	1,960	528	26,400	348	98	156
24	148	294	790	1,730	363	2,300	1,760	456	15,100	620	169	152
25	306	285	766	2,090	396	1,840	1,500	400	11,200	590	166	173
26	330	294	838	1,940	436	1,580	1,290	345	12,200	500	144	175
27	303	294	1,270	1,550	444	1,380	1,110	303	7,000	420	169	213
28	261	366	1,400	1,350	464	1,220	952	273	4,510	336	262	241
29	215	528	1,440	1,060	600	1,080	838	255	2,990	286	222	241
30	183	1,040	3,330	850	-----	1,150	736	240	2,870	247	171	580
31	163	-----	6,460	754	-----	1,150	-----	294	-----	222	135	-----
TOTAL	5,227	8,362	53,334	46,199	13,454	89,940	57,980	22,939	116,609	28,786	4,948	6,824
MEAN	169	279	1,720	1,490	464	2,901	1,933	740	3,887	929	160	227
MAX	333	1,040	6,460	4,200	718	8,960	6,440	1,480	26,400	2,450	262	760
MIN	84	150	512	444	320	1,080	736	240	234	222	98	71
CFSM	.32	.53	3.26	2.82	.88	5.49	3.66	1.40	7.36	1.76	.30	.43
IN.	.37	.59	3.76	3.25	.95	6.34	4.08	1.62	8.22	2.03	.35	.48

CAL YR 1971 TOTAL 285,202 MEAN 781 MAX 6,460 MIN 26 CFSM 1.48 IN 20.09
WTR YR 1972 TOTAL 454,602 MEAN 1,242 MAX 26,400 MIN 71 CFSM 2.35 IN 32.03

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	2400	11.13	9,590	4-17	0300	10.08	7,640
3- 3	0200	12.15	11,900	6-23	0930	17.75	32,800

a About.

f From floodmark.

MAHONING CREEK BASIN

03034000 Mahoning Creek at Punxsutawney, Pa.

LOCATION.--Lat 40°56'21", long 79°00'31", Jefferson County, on right bank 75 ft downstream from Williams Run, 1.9 miles downstream from Sawmill Run, and 2 miles west of Punxsutawney.

DRAINAGE AREA.--158 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,206.14 ft above mean sea level (Corps of Engineers bench mark). Prior to Oct. 1, 1946, at site 2.3 miles upstream at datum 13.30 ft higher.

AVERAGE DISCHARGE.--34 years, 263 cfs (22.60 inches per year).

EXTREMES.--Current year: Maximum discharge, 17,300 cfs June 23, (gage height, 15.94 ft, from floodmark in well), from rating curve extended as explained below; minimum, 30 cfs Sept. 11 (gage height, 0.91 ft).

Period of record: Maximum discharge, 17,300 cfs June 23, 1972 (gage height, 15.94 ft, floodmark in well), from rating curve extended above 4,300 cfs on basis of slope-area measurement at gage height 13.01 ft; minimum, 2.6 cfs Sept. 26, 1939.

Flood of Mar. 18, 1936, reached a stage of 15.6 ft, from floodmark, at former site and datum (discharge, 12,500 cfs, from rating curve extended above 4,300 cfs).

REMARKS.--Records good. Diurnal fluctuations at low flow by mine pumpage into stream above 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	61	46	248	1,090	255	810	267	243	100	630	82	38
2	57	65	202	968	237	4,090	279	267	90	478	78	36
3	55	82	168	908	224	5,420	267	276	100	446	78	34
4	54	65	143	695	200	2,070	438	252	120	454	64	35
5	53	58	124	670	160	1,260	510	228	170	360	54	34
6	51	54	517	514	200	795	454	204	120	700	47	33
7	55	55	1,470	434	170	665	610	192	100	530	41	32
8	52	52	1,260	375	140	1,050	522	183	85	466	56	32
9	49	51	805	354	110	815	450	228	75	396	72	36
10	49	52	580	498	140	660	400	282	65	351	63	31
11	48	52	454	490	130	522	366	231	175	312	54	31
12	46	51	357	454	130	490	330	213	168	267	46	38
13	44	49	312	422	140	765	442	201	112	237	40	67
14	43	48	297	382	180	1,130	454	207	553	195	34	198
15	42	58	570	318	155	950	825	204	382	126	39	97
16	41	71	494	230	160	848	1,300	228	330	120	35	63
17	40	62	418	180	145	1,280	1,890	198	279	110	33	57
18	39	58	357	260	136	986	1,250	183	216	150	56	97
19	39	61	318	270	130	755	836	171	183	450	50	85
20	38	79	330	267	120	610	800	168	150	380	45	64
21	37	101	372	366	110	530	655	158	334	310	38	57
22	37	107	318	318	120	805	625	138	1,990	260	34	53
23	37	89	276	545	122	755	705	126	13,200	230	110	49
24	57	87	273	625	130	570	590	115	4,460	220	70	58
25	69	91	261	765	124	478	502	105	3,430	170	53	64
26	83	87	318	625	148	418	422	96	4,010	140	49	58
27	68	87	354	510	155	369	360	90	2,210	110	53	61
28	57	111	400	446	163	339	321	85	1,280	105	53	57
29	52	148	396	363	222	312	288	82	932	94	47	57
30	48	269	1,400	324	-----	315	261	98	866	88	42	186
31	47	-----	2,000	273	-----	282	-----	92	-----	85	40	-----
TOTAL	1,548	2,346	15,792	14,939	4,556	31,144	17,419	5,544	36,285	8,970	1,656	1,838
MEAN	49.9	78.2	509	482	157	1,005	581	179	1,210	289	53.4	61.3
MAX	83	269	2,000	1,090	255	5,420	1,890	282	13,200	700	110	198
MIN	37	46	124	180	110	282	261	82	65	85	33	31
CFSM	.32	.49	3.22	3.05	.99	6.36	3.68	1.13	7.66	1.83	.34	.39
IN.	.36	.55	3.72	3.52	1.07	7.33	4.10	1.31	8.54	2.11	.39	.43

CAL YR 1971 TOTAL 95,778 MEAN 262 MAX 2,440 MIN 24 CFSM 1.66 IN 22.55
WTR YR 1972 TOTAL 142,037 MEAN 388 MAX 13,200 MIN 31 CFSM 2.46 IN 33.44

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	2100	6.77	3,280	6-23	a1100	f15.94	17,300
3-3	0300	9.97	6,470	6-26	a0800	8.33	4,720

a About.

f From floodmark.

MAHONING CREEK BASIN

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03034500 Little Mahoning Creek at McCormick, Pa.

LOCATION.--Lat 40°50'10", long 79°06'37", Indiana County, on left bank 200 ft upstream from highway bridge at McCormick, 1 mile west of Georgeville, 1.7 miles upstream from Ross Run, and 4 miles southeast of Smicksburg.

DRAINAGE AREA.--87.4 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,164.88 ft above mean sea level (Corps of Engineers bench mark). Prior to May 10, 1940, nonrecording gage at site 200 ft upstream at same datum.

AVERAGE DISCHARGE.--33 years, 146 cfs (22.69 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,200 cfs June 23 (gage height, 13.20 ft); minimum, 4.7 cfs Sept. 8, 9, 11, 12 (gage height, 1.15 ft).

Period of record: Maximum discharge, 6,200 cfs June 23, 1972 (gage height, 13.20 ft); maximum gage height, 13.86 ft Jan. 21, 1959 (backwater from ice); minimum discharge, 0.3 cfs Sept. 28, 1959.

REMARKS.--Records good except those for winter periods, which are 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	19	14	164	462	110	1,200	106	95	32	232	18	8.2
2	16	26	102	551	90	2,570	113	97	24	223	16	7.2
3	14	69	74	557	80	2,500	110	100	35	613	15	6.8
4	13	39	85	397	70	916	356	93	31	452	14	6.5
5	11	29	69	387	60	554	395	84	67	341	11	6.5
6	11	24	440	285	110	368	296	69	37	393	9.4	5.6
7	12	23	900	233	100	337	388	62	26	431	9.6	5.0
8	12	22	627	190	80	669	317	58	21	308	13	4.7
9	11	19	378	170	90	451	258	93	18	238	14	5.0
10	11	18	260	331	80	344	220	176	22	193	12	8.6
11	11	18	190	316	65	260	191	119	21	153	9.5	5.6
12	9.9	17	137	281	55	246	158	102	16	115	7.5	9.1
13	9.1	16	112	246	75	528	324	91	136	95	6.6	107
14	8.2	15	112	207	100	694	344	89	120	78	6.7	3,100
15	7.8	17	435	140	85	564	1,200	86	68	66	7.5	643
16	7.5	27	333	80	85	524	1,040	132	47	142	6.6	268
17	7.2	21	238	100	85	806	1,100	104	38	120	7.7	154
18	7.2	18	186	120	70	564	605	89	29	83	115	130
19	6.8	19	140	140	60	397	411	79	25	114	34	147
20	6.8	42	143	137	55	296	455	81	22	106	21	97
21	6.4	70	186	313	45	245	381	83	64	73	15	84
22	6.3	73	132	214	55	338	375	67	305	57	12	61
23	6.1	45	104	350	60	333	410	56	4,620	47	18	48
24	11	37	101	374	60	257	326	47	2,360	46	22	85
25	29	44	93	458	70	219	261	40	2,190	39	15	93
26	46	40	117	348	60	200	207	32	1,460	30	14	78
27	35	38	168	273	150	171	165	28	788	27	31	115
28	24	69	224	231	200	152	135	24	458	29	21	84
29	19	98	216	171	300	134	117	23	340	23	17	76
30	16	238	648	130	-----	135	103	22	330	19	13	394
31	15	-----	819	90	-----	116	-----	29	-----	18	9.9	-----
TOTAL	425.3	1,245	7,933	8,282	2,605	17,088	10,867	2,350	13,750	4,904	542.0	5,842.8
MEAN	13.7	41.5	256	267	89.8	551	362	75.8	458	158	17.5	195
MAX	46	238	900	557	300	2,570	1,200	176	4,620	613	115	3,100
MIN	6.1	14	69	80	45	116	103	22	16	18	6.6	4.7
CFSM	.16	.47	2.93	3.05	1.03	6.30	4.14	.87	5.24	1.81	.20	2.23
IN.	.18	.53	3.38	3.53	1.11	7.27	4.63	1.00	5.85	2.09	.23	2.49
CAL YR 1971	TOTAL 48,355.6	MEAN 132	MAX 1,400	MIN 3.4	CFSM 1.51	IN 20.58						
WTR YR 1972	TOTAL 75,834.1	MEAN 207	MAX 4,620	MIN 4.7	CFSM 2.37	IN 32.28						

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-3	0400	10.28	3,420	6-25	0400	9.04	2,540
4-15	1630	8.27	2,080	9-14	1130	12.65	5,650
6-23	1530	13.20	6,200				

MAHONING CREEK BASIN

03036000 Mahoning Creek at Mahoning Creek Dam, Pa.

LOCATION.--Lat 40°55'39", long 79°17'29", Armstrong County, on left bank at downstream side of highway bridge at McCrea Furnace, 700 ft downstream from Camp Run, 0.9 mile downstream from Mahoning Creek Dam, 1 mile southwest of Eddyville, and 2.1 miles upstream from Pine Run.

DRAINAGE AREA.--344 sq mi.

PERIOD OF RECORD.--August 1938 to current year. Monthly discharge only for August 1938, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,003.39 ft above mean sea level (Corps of Engineers bench mark). Prior to Feb. 1, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 573 cfs (22.62 inches per year) adjusted for storage since June 1941.

EXTREMES.--Current year: Maximum discharge, 7,820 cfs June 27 (gage height, 7.85 ft); minimum daily, 31 cfs Oct. 17.
Period of record: Maximum discharge, 10,400 cfs Mar. 8, 1942 (gage height, 8.10 ft); minimum daily, 8.8 cfs Sept. 19-26, 1959.

REMARKS.--Records good. Flow completely regulated since 1941 by Mahoning Creek Lake 0.9 mile upstream (see p. 237).

COOPERATION.--Four discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1305: 1941 (adjusted monthly runoff).

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	103	114	629	1,930	584	602	782	455	88	6,920	75	95
2	103	36	758	2,770	284	814	764	288	133	6,420	75	95
3	103	36	475	2,730	288	972	752	405	193	4,320	75	95
4	101	110	280	2,670	400	3,540	746	530	240	1,540	104	95
5	99	187	280	2,560	500	4,910	1,080	530	296	788	140	94
6	99	187	435	2,440	500	5,920	1,300	525	296	1,030	140	79
7	99	187	632	1,830	380	6,620	1,290	525	292	1,380	116	92
8	99	187	668	1,030	280	5,200	1,300	520	292	1,370	95	92
9	99	112	1,630	758	280	3,940	1,290	520	288	1,340	97	92
10	99	35	2,770	764	280	3,080	1,020	632	284	1,120	95	92
11	99	35	2,650	905	280	2,330	752	752	284	776	95	92
12	99	35	2,180	1,170	276	1,470	752	577	284	770	95	92
13	99	34	1,420	1,310	276	800	770	284	292	535	95	92
14	68	34	1,060	1,090	284	870	969	284	300	288	97	196
15	32	92	1,050	752	395	905	1,390	395	312	288	118	1,370
16	32	150	1,080	470	515	1,650	1,510	520	499	296	70	2,170
17	31	150	1,080	276	435	2,710	2,140	520	788	415	90	1,400
18	32	150	1,080	360	284	2,680	3,140	515	776	550	90	1,060
19	32	153	1,060	515	280	2,640	3,300	515	540	550	90	530
20	32	153	1,030	638	280	2,540	2,760	510	304	545	90	272
21	33	158	1,000	764	280	1,960	2,420	395	360	540	90	272
22	33	158	776	770	288	1,140	1,860	276	405	450	90	272
23	33	212	520	1,040	290	856	1,360	276	692	284	92	272
24	38	284	520	1,320	284	870	1,370	272	1,800	288	88	196
25	35	284	520	1,350	284	877	1,360	272	5,000	284	101	107
26	105	284	520	1,520	292	884	1,340	272	4,850	284	95	105
27	184	284	525	1,650	395	884	1,060	184	4,230	280	97	110
28	184	288	535	1,210	530	1,230	770	84	7,630	280	97	143
29	184	296	660	770	530	1,440	764	84	7,460	276	97	196
30	187	395	849	764	-----	1,390	746	88	7,220	155	97	209
31	187	-----	926	758	-----	1,080	-----	88	-----	75	95	-----
TOTAL	2,763	4,820	29,598	38,884	10,254	66,804	40,857	12,093	46,428	34,437	2,981	10,077
MEAN	89.1	161	955	1,254	354	2,155	1,362	390	1,548	1,111	96.2	336
MAX	187	395	2,770	2,770	584	6,620	3,300	752	7,630	6,920	140	2,170
MIN	31	34	280	276	276	602	746	84	88	75	70	79
MEAN [‡]	89.8	172	1,117	1,089	370	2,158	1,334	405	2,006	657	111	357
CFSM [‡]	.26	.50	3.25	3.17	1.08	6.27	3.88	1.18	5.83	1.91	.32	1.04
IN. [‡]	.30	.56	3.75	3.65	1.16	7.23	4.33	1.36	6.50	2.20	.37	1.16

CAL YR 1971 TOTAL 194,294 MEAN 532 MAX 7,540 MIN 27 MEAN[‡] 546 CFSM[‡] 1.59 IN.[‡] 21.52
WTR YR 1972 TOTAL 299,996 MEAN 820 MAX 7,630 MIN 31 MEAN[‡] 823 CFSM[‡] 2.39 IN.[‡] 32.57

[‡] Adjusted for change in contents in Mahoning Creek Lake.

03036500 Allegheny River at Kittanning, Pa.

LOCATION.--Lat 40°49'13", long 79°31'54", Armstrong County, on right bank 600 ft upstream from dam at lock 7 at Kittanning, 5.7 miles upstream from Crooked Creek, 9.7 miles downstream from Mahoning Creek, and at mile 45.8.

DRAINAGE AREA.--8,973 sq mi.

PERIOD OF RECORD.--August 1904 to September 1928, October 1934 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder and concrete dam control. Datum of gage is 771.32 ft above mean sea level, adjustment of 1912. Prior to Sept. 30, 1928, nonrecording gage at site 4,000 ft downstream at different datum. Oct. 1, 1934, to Apr. 19, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--62 years (1904-28, 1934-72), 15,430 cfs (23.35 inches per year) adjusted for storage since 1940.

EXTREMES.--Current year: Maximum discharge, 184,000 cfs June 23 (gage height, 25.42 ft); minimum, 2,390 cfs Oct. 9, 23, 24 (gage height, 11.71 ft).

Period of record: Maximum discharge, 269,000 cfs Mar. 26, 1913 (gage height, 30.7 ft, from floodmark, site and datum then in use); minimum observed, 570 cfs Sept. 15-17, 1913.

REMARKS.--Records good. Flow regulated since 1965 by Allegheny Reservoir, by Chautauqua Lake, since 1941 by Tionesta Lake, since 1971 by Union City Reservoir (see p. 237) and Woodcock Creek Lake, since 1952 by East Branch Clarion River Lake, since 1924 by Piney Reservoir, and since 1941 by Mahoning Creek Lake (see p. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: Drainage area. WSP 1305: 1906(M), 1914, 1925. WSP 1435: 1936-37, 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	6,390	3,070	17,000	50,600	18,000	19,200	21,600	12,300	6,910	61,300	4,740	3,060
2	6,380	3,680	16,700	44,000	17,000	55,100	20,300	12,800	6,870	56,300	4,340	2,980
3	5,410	3,450	13,800	42,600	15,400	84,600	20,100	17,300	7,520	59,500	4,450	2,750
4	4,530	3,550	11,700	37,400	14,900	63,900	20,800	22,900	6,520	60,400	4,850	2,470
5	4,480	3,630	10,000	34,800	11,600	54,200	20,900	21,500	5,900	53,000	5,070	2,710
6	4,030	3,520	10,900	31,700	7,820	49,100	21,000	18,200	6,940	53,500	4,000	3,160
7	3,090	3,740	33,000	28,000	9,520	44,000	21,700	16,100	6,150	52,800	3,940	2,880
8	2,590	4,400	53,200	24,500	9,340	52,500	22,200	14,800	5,800	48,700	4,620	3,500
9	2,700	5,180	47,500	22,100	7,820	53,700	21,700	15,400	5,690	44,400	4,920	3,700
10	2,660	5,630	38,300	21,600	5,750	46,900	20,400	20,700	7,420	44,800	6,030	3,350
11	2,890	5,580	31,300	24,100	6,010	42,400	17,200	26,100	8,610	46,500	5,060	4,050
12	4,370	5,120	26,400	26,500	6,240	39,400	14,700	27,000	6,290	41,700	4,350	4,420
13	4,440	5,440	22,700	26,300	7,150	43,300	14,700	25,000	8,070	39,000	3,710	5,050
14	4,330	5,150	20,300	25,900	8,800	51,000	19,000	23,600	14,100	33,200	3,450	9,510
15	4,250	5,610	24,900	25,200	11,600	47,600	25,500	23,500	10,100	22,700	4,170	9,370
16	3,900	6,530	33,500	20,400	12,300	42,900	39,500	26,200	15,300	16,600	4,220	9,430
17	3,190	6,510	30,000	16,400	11,800	54,700	59,300	24,200	19,000	16,200	3,720	6,460
18	2,980	6,030	27,000	16,900	12,300	57,100	50,500	21,200	15,000	14,500	3,810	7,940
19	2,980	5,680	25,100	20,600	12,500	50,900	45,800	21,100	12,500	14,700	3,760	8,720
20	2,850	4,930	22,900	21,300	10,100	47,400	48,300	19,300	10,500	13,700	3,590	6,260
21	2,640	4,880	22,200	23,000	8,440	44,200	47,700	16,700	23,400	11,500	2,980	5,150
22	2,650	5,320	21,000	23,100	9,980	44,500	44,700	15,700	45,600	11,400	3,160	4,080
23	2,650	6,640	19,900	24,400	8,350	57,700	43,700	14,700	144,000	9,160	3,450	3,210
24	2,580	7,340	17,700	29,300	8,260	51,800	38,800	12,500	126,000	7,060	5,650	2,910
25	3,070	7,590	17,600	31,000	9,430	45,800	35,500	10,500	106,000	8,120	5,170	2,690
26	3,760	5,650	16,900	31,500	14,300	40,700	26,400	9,310	119,000	7,710	4,530	2,930
27	4,250	6,400	23,100	28,500	14,400	37,100	20,000	7,860	88,700	6,320	4,930	3,320
28	3,850	5,830	25,400	26,300	12,400	34,700	16,900	6,760	80,900	5,900	5,350	4,140
29	4,140	7,090	26,600	23,000	13,200	33,500	15,200	5,970	73,100	5,450	5,650	4,840
30	3,750	10,900	30,800	21,100	-----	29,100	13,200	5,840	67,900	4,220	4,930	6,950
31	3,020	-----	64,400	19,600	-----	24,300	-----	6,350	-----	3,820	4,360	-----
TOTAL	114,800	164,070	801,800	841,700	314,710	1,443.3M	847,300	521,390	1,059.8M	874,160	136,960	141,990
MEAN	3,703	5,469	25,860	27,150	10,850	46,560	28,240	16,820	35,330	28,200	4,418	4,733
MAX	6,390	10,900	64,400	50,600	18,000	84,600	59,300	27,000	144,000	61,300	6,030	9,510
MIN	2,580	3,070	10,000	16,400	5,750	19,200	13,200	5,840	5,690	3,820	2,980	2,470
(\neq)	-887	+335	+3,610	-3,070	-1,130	+2,470	+2,420	+212	+9,380	-9,310	-924	-1,020
MEAN \neq	2,816	5,804	29,470	24,080	9,720	49,030	30,660	17,030	44,710	18,890	3,494	3,713
CFSM \neq	.31	.65	3.28	2.68	1.08	5.46	3.42	1.90	4.98	2.11	.39	.41
IN. \neq	.36	.73	3.78	3.09	1.16	6.29	3.82	2.19	5.56	2.43	.45	.46

CAL YR 1971 TOTAL 4,721,620 MEAN 12,940 MAX 71,000 MIN 1,830 MEAN \neq 13,120 CFSM \neq 1.46 IN. \neq 19.86
WTR YR 1972 TOTAL 7,261,970 MEAN 19,840 MAX 144,000 MIN 2,470 MEAN \neq 19,990 CFSM \neq 2.23 IN. \neq 30.32

\neq Change in contents, equivalent in cubic feet per second in Allegheny Reservoir, Chautauqua Lake, Tionesta Lake, Union City Reservoir, East Branch Clarion River Lake, Piney Reservoir, and Mahoning Creek Lake. Records of contents in Piney Reservoir furnished by Pennsylvania Electric Co.

\neq Adjusted for change in reservoir contents.

CROOKED CREEK BASIN

03038000 Crooked Creek at Idaho, Pa.

LOCATION.-- Lat 40°39'17", long 79°20'56", Armstrong County, on right bank at downstream end of old bridge abutment at Idaho, 0.4 mile downstream from Keystone Generating Station, 1.5 miles downstream from Plum Creek, and 2.4 miles west of Shelocta.

DRAINAGE AREA.--191 sq mi.

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

GAGE.--Water-stage recorder and concrete weir control. Datum of gage is 961.04 ft above mean sea level (Baltimore and Ohio Railroad bench mark).

AVERAGE DISCHARGE.--35 years, 280 cfs (19.91 inches per year) adjusted for storage since March 1968.

EXTREMES.--Current year: Maximum discharge, 13,200 cfs June 23 (gage height, 15.93 ft); minimum, 19 cfs Oct. 19 (gage height, 2.15 ft).

Period of record: Maximum discharge, 13,200 cfs June 23, 1972 (gage height, 15.93 ft); minimum daily, 1.0 cfs Oct. 22, 1966, result of abnormal regulation.

Flood in March 1936 reached a stage of 18.6 ft, from floodmark (discharge, 19,400 cfs).

REMARKS.--Records good. Flow regulated to some extent since March 1968 by Plum Creek Reservoir 7 miles upstream (usable capacity, 22,010 acre-ft). Evaporation from operation of steam-electric plant 0.4 mile upstream, which began during July 1967, can amount to as much as 30 cfs.

REVISIONS (WATER YEARS).--WSP 1385: 1938, 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	46	39	230	550	150	3,250	186	194	68	586	62	41
2	50	54	150	768	137	4,540	182	202	54	430	60	39
3	39	48	107	866	147	4,100	174	206	245	448	50	42
4	45	50	98	646	160	1,710	580	186	182	478	50	42
5	44	48	81	677	111	1,030	719	157	275	406	49	42
6	40	41	691	526	132	664	592	129	132	490	49	39
7	40	44	1,380	436	132	664	845	116	100	544	44	40
8	42	44	901	328	93	1,130	747	114	72	412	51	39
9	41	42	568	310	89	831	622	424	60	322	56	38
10	39	33	382	520	76	646	532	616	98	265	50	39
11	37	37	265	508	76	508	454	436	70	220	46	41
12	42	33	186	460	78	454	370	334	68	163	44	174
13	40	34	147	406	129	526	684	260	154	140	38	310
14	39	33	215	322	275	705	831	245	190	127	45	3,650
15	41	30	789	215	265	866	2,590	206	111	109	59	1,530
16	37	39	604	111	346	950	2,650	210	96	328	45	484
17	31	30	424	154	275	1,510	2,110	182	85	260	70	255
18	30	32	310	163	250	1,010	1,210	157	68	167	137	364
19	26	44	225	182	220	677	831	134	54	167	56	316
20	36	50	215	150	157	514	901	220	54	198	46	198
21	34	70	220	210	174	424	761	202	502	160	39	147
22	34	89	170	178	230	514	824	154	1,570	150	41	121
23	34	67	132	388	186	526	901	129	9,800	114	42	100
24	44	56	129	466	275	466	733	107	7,030	225	48	134
25	54	60	124	592	295	418	592	89	4,700	150	44	144
26	38	50	129	478	454	370	460	74	2,710	127	48	104
27	49	64	150	382	520	322	358	64	1,380	109	49	109
28	42	147	206	322	592	285	290	48	831	111	49	96
29	51	215	225	235	1,390	245	245	46	658	80	45	109
30	44	328	472	202	-----	250	206	46	740	67	40	894
31	42	-----	824	144	-----	202	-----	55	-----	65	34	-----
TOTAL	1,251	1,951	10,749	11,895	7,414	30,307	23,180	5,742	32,157	7,618	1,586	9,681
MEAN	40.4	65.0	347	384	256	978	773	185	1,072	246	51.2	323
MAX	54	328	1,380	866	1,390	4,540	2,650	616	9,800	586	137	3,650
MIN	26	30	81	111	76	202	174	46	54	65	34	38
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-

CAL YR 1971 TOTAL 101,942 MEAN 279 MAX 4,010 MIN 26 CFSM - IN. -
WTR YR 1972 TOTAL 143,531 MEAN 392 MAX 9,800 MIN 26 CFSM - IN. -

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 3	0030	9.19	4,680	6-23	1730	15.93	13,200
4-15	2000	7.86	3,750	9-14	1800	10.32	5,590

CROOKED CREEK BASIN

221

03039000 Crooked Creek at Crooked Creek Dam, Pa.

LOCATION.--Lat 40°43'13", long 79°30'42", Armstrong County, on right bank 0.4 mile downstream from Crooked Creek Dam, 3.5 miles south of Ford City, and 6.7 miles upstream from mouth.

DRAINAGE AREA.--278 sq mi.

PERIOD OF RECORD.--October 1909 to current year. Published as "at Hileman's Farm" 1910-29, and as "near Ford City" 1930-39. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 799.51 ft above mean sea level (levels by Corps of Engineers). Prior to Aug. 1, 1933, nonrecording gage at site 2 miles downstream at different datum. July 31, 1933, to Dec. 5, 1939, nonrecording gage at site 1.5 miles downstream at different datum.

AVERAGE DISCHARGE.--63 years, 418 cfs (20.42 inches per year) adjusted for storage from May 1940 to September 1968.

EXTREMES.--Current year: Maximum discharge, 5,350 cfs June 25 (gage height, 8.85 ft); minimum daily, 23 cfs Sept. 7.

Period of record: Maximum discharge, 21,000 cfs Mar. 18, 1936 (gage height, 17.86 ft, from floodmark, site and datum then in use), from rating curve extended above 8,000 cfs on basis of contracted-opening measurement of peak flow; minimum observed, 0.1 cfs Sept. 8, 11, 20, 25, 26, 1932.

REMARKS.--Records good. Flow completely regulated since 1940 by Crooked Creek Lake 0.4 mile upstream (see p. 238) and since 1968 by Plum Creek Reservoir (combined capacity, 115,910 acre-ft).

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1305: 1910-12, 1915-16, 1917(M), 1918, 1922-27, 1928(M), 1930(M). WSP 1435: 1919-21, 1932-33, 1935.

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	66	66	474	402	318	754	98	322	52	4,530	30	27
2	66	66	470	510	203	845	98	185	76	4,250	29	27
3	66	67	462	626	203	920	100	306	161	3,950	28	27
4	66	67	342	742	203	1,630	270	290	221	3,570	28	27
5	66	67	215	960	203	2,520	590	100	221	2,220	29	27
6	66	67	224	1,170	203	3,180	678	57	358	1,030	36	26
7	66	67	370	1,140	203	4,310	686	57	482	1,000	56	23
8	66	67	522	1,100	203	4,020	694	133	294	861	68	24
9	66	67	795	1,060	203	3,760	702	206	104	638	68	37
10	66	67	1,170	1,030	128	3,410	895	338	104	456	68	49
11	66	67	1,130	825	55	2,370	1,080	562	104	172	68	49
12	66	67	1,090	642	55	1,090	1,050	650	104	203	70	51
13	66	67	660	638	56	610	1,030	636	104	203	68	72
14	66	67	653	634	143	622	1,030	622	278	203	46	167
15	66	67	658	426	346	638	1,080	458	450	203	28	1,080
16	66	67	674	206	466	855	1,190	203	206	215	28	2,000
17	66	66	678	203	466	1,090	1,250	206	57	330	28	1,880
18	66	66	674	203	770	1,110	2,490	206	57	397	64	1,410
19	66	66	660	203	855	1,460	3,490	206	57	438	158	734
20	66	64	650	206	354	1,750	2,330	209	58	434	212	426
21	66	64	426	206	362	1,330	1,690	209	170	314	135	290
22	66	64	212	209	350	795	1,350	209	270	197	28	140
23	66	64	212	209	197	626	1,030	209	350	200	27	140
24	66	64	212	426	200	626	1,030	209	1,090	206	28	140
25	66	64	212	670	203	626	1,020	209	4,070	206	26	140
26	66	64	212	670	209	618	990	152	4,530	203	28	140
27	66	64	212	670	442	614	702	60	2,780	203	28	140
28	66	143	215	662	678	602	525	60	5,070	150	47	140
29	66	227	215	554	694	350	614	60	4,880	98	66	118
30	66	346	221	446	-----	94	598	60	4,720	78	66	96
31	66	-----	230	438	-----	96	-----	57	-----	44	47	-----
TOTAL	2,046	2,496	15,350	18,086	8,971	43,321	30,380	7,448	31,478	27,202	1,736	9,647
MEAN	66.0	83.2	495	583	309	1,397	1,013	240	1,049	877	56.0	322
MAX	66	346	1,170	1,170	855	4,310	3,490	650	5,070	4,530	212	2,000
MIN	66	64	212	203	55	94	98	57	52	44	26	23
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL 133,815	MEAN 367	MAX 2,520	MIN 17	CFSM -	IN. -						
WTR YR 1972	TOTAL 198,167	MEAN 541	MAX 5,070	MIN 23	CFSM -	IN. -						

KISKIMINETAS RIVER BASIN

03039200 Clear Run near Buckstown, Pa.

LOCATION.--Lat 40°02'49", long 78°50'00", Somerset County, on left bank at downstream side of bridge on State Highway 160, 0.8 mile south of Reels Corners, and 2.3 miles southeast of Buckstown.

DRAINAGE AREA.--3.68 sq mi.

PERIOD OF RECORD.--Annual maximum and occasional discharge measurements, water years 1961-64. September 1964 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 2,339.24 ft above mean sea level. July 6, 1960, to Aug. 31, 1964, crest-stage gage at site 50 ft upstream at same datum.

AVERAGE DISCHARGE.--8 years, 5.86 cfs (21.62 inches per year).

EXTREMES.--Current year: Maximum discharge, 266 cfs June 23 (gage height, 4.53 ft), from rating curve extended as explained below; minimum daily, 0.32 cfs Sept. 8-11.

Period of record: Maximum discharge, 266 cfs June 23, 1972 (gage height, 4.53 ft), from rating curve extended above 120 cfs on basis of slope-area measurements at gage heights 4.89 ft, gage then in use and 4.53 ft; maximum gage height, 5.30 ft Feb. 25, 1961 (gage then in use); no flow at times in water years 1964-66.

REMARKS.--Records good except those for periods of control leakage in August and September, which are 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	3.3	12	6.9	3.5	3.4	32	6.2	5.7	3.9	20	.88	.39
2	3.3	19	5.6	5.2	3.2	75	6.1	5.8	3.4	12	.69	.39
3	3.5	13	4.9	5.2	3.1	58	5.7	12	3.6	10	3.3	.36
4	3.0	9.4	4.3	4.3	2.8	28	16	14	3.0	8.3	1.7	.42
5	2.2	7.8	4.0	7.4	2.2	18	13	12	2.6	9.4	1.2	.36
6	2.4	6.9	16	5.2	2.4	13	10	9.3	2.4	8.8	.88	.34
7	2.4	6.0	61	4.6	2.1	13	12	8.2	2.2	6.6	1.2	.34
8	2.2	5.2	60	4.0	1.9	21	10	8.0	1.9	5.4	.93	.32
9	1.8	4.9	43	4.3	1.8	14	9.1	18	1.7	4.8	.83	.32
10	1.8	4.6	32	7.4	1.6	11	9.1	16	2.8	4.5	.69	.32
11	1.8	4.3	21	10	1.5	9.2	8.8	12	1.9	4.2	.69	.32
12	1.5	3.8	14	8.8	1.7	11	7.6	9.9	1.5	3.7	.69	.39
13	1.3	3.5	11	7.8	2.1	53	38	8.6	2.0	3.3	.65	.45
14	1.2	3.3	10	7.8	2.0	43	24	10	2.5	3.1	.61	.57
15	1.1	3.3	9.4	5.6	1.9	24	61	16	1.7	2.7	.54	.42
16	.98	3.0	8.3	4.0	2.0	30	62	14	2.5	2.7	.51	.39
17	.98	2.8	6.9	4.9	1.7	35	52	11	3.3	2.7	1.3	.34
18	.98	2.6	6.0	4.6	1.6	23	29	9.8	1.9	2.3	1.9	.45
19	.82	2.6	5.2	4.7	1.4	18	19	8.3	1.5	1.9	.93	.42
20	.74	2.8	7.4	4.5	1.3	16	16	8.1	1.5	1.7	.65	.39
21	.68	2.8	7.4	5.8	1.5	17	13	7.3	13	1.4	.54	.34
22	.68	2.6	5.2	5.3	3.0	34	20	6.3	52	1.3	.48	.36
23	.90	2.4	4.6	6.6	2.5	22	16	5.4	163	1.2	.48	.34
24	10	2.4	4.6	6.5	2.6	15	14	4.9	82	1.1	.45	.34
25	14	2.6	4.3	6.5	2.5	12	12	4.4	38	1.0	.42	.39
26	15	2.6	4.3	5.0	5.9	9.8	9.9	3.9	22	.99	.51	.36
27	7.4	3.0	4.0	4.3	4.6	8.9	8.4	3.6	13	1.1	.78	.54
28	5.2	3.3	4.0	4.4	4.0	8.3	7.3	3.4	9.4	1.0	.54	.54
29	4.6	5.6	3.5	4.0	11	7.6	6.5	3.2	40	.88	.45	1.3
30	4.3	12	4.3	3.9	-----	7.0	5.9	3.4	35	.88	.39	.99
31	4.3	-----	4.3	3.4	-----	6.5	-----	6.1	-----	.99	.39	-----
TOTAL	104.36	160.1	387.4	169.5	79.3	693.3	527.6	268.6	515.2	129.94	26.20	13.20
MEAN	3.37	5.34	12.5	5.47	2.73	22.4	17.6	8.66	17.2	4.19	.85	.44
MAX	15	19	61	10	11	75	62	18	163	20	3.3	1.3
MIN	.68	2.4	3.5	3.4	1.3	6.5	5.7	3.2	1.5	.88	.39	.32
CFSM	.92	1.45	3.40	1.49	.74	6.09	4.78	2.35	4.67	1.14	.23	.12
IN.	1.05	1.62	3.92	1.71	.80	7.01	5.33	2.72	5.21	1.31	.26	.13

CAL YR 1971 TOTAL 2,619.48 MEAN 7.18 MAX 62 MIN .11 CFSM 1.95 IN 26.48
WTR YR 1972 TOTAL 3,074.70 MEAN 8.40 MAX 163 MIN .32 CFSM 2.28 IN 31.08

PEAK DISCHARGE (BASE, 60 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	1615	3.33	79	4-16	2145	3.49	97
3- 2	1745	3.46	94	6-22	0600	3.19	64
3-13	1045	3.19	64	6-23	0715	4.53	266
4-13	1215	3.20	65	6-24	0130	3.72	135
4-15	1215	3.71	119	6-29	1830	3.40	90

03040000 Stony Creek at Ferndale, Pa.

LOCATION.--Lat 40°17'08", long 78°55'15", Cambria County, on right bank 50 ft upstream from highway bridge at Ferndale, 0.4 mile downstream from Bens Creek, 1.2 miles upstream from Johnstown city limits, and 5.2 miles upstream from confluence with Little Conemaugh River.

DRAINAGE AREA.--451 sq mi.

PERIOD OF RECORD.--October 1913 to March 1936, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305. Monthly figures adjusted for storage and diversion for October 1918 to September 1921, published in WSP 503, 523, have been found in error and should not be used. Published as "at Johnstown", 1914-36. Gage-height records collected in this vicinity since 1885 are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,184.20 ft above mean sea level. Prior to Mar. 19, 1936, nonrecording gage at site 3.5 miles downstream at different datum. Dec. 8, 1938, to Jan. 30, 1940, non-recording gage at site 50 ft downstream at present datum.

AVERAGE DISCHARGE.--34 years (1938-72), 752 cfs (22.64 inches per year) adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 22,800 cfs June 23 (gage height, 13.36 ft); minimum, 29 cfs Sept. 24 (gage height, 1.78 ft).

Period of record: Maximum discharge, 59,000 cfs Mar. 18, 1936 (gage height, 30.26 ft, from high-water mark, site and datum then in use), from rating curve extended above 13,000 cfs on the basis of slope-area and contracted-opening measurements of peak flow; minimum observed, 5 cfs Sept. 8, 1929.

REMARKS.--Records good. Regulation by mine pumpage and reservoirs and diversion above station; the four largest reservoirs have a combined capacity of 42,360 acre-ft. Figures of daily discharge do not include diversion from Stony Creek and Quemahoning Creek Reservoir to plants of Bethlehem Steel Co., and from Mill Creek, Dalton Run, and North Fork Bens Creek Reservoirs for water supply of city of Johnstown.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1305: 1915, 1918, 1923-26. WSP 1435: 1920-21, 1932, 1941(M), 1943(M), 1945-46(M). See also PERIOD OF RECORD.

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	480	517	1,220	446	388	4,500	643	691	415	1,700	153	47
2	420	1,150	832	659	370	10,900	661	617	320	1,500	143	47
3	380	1,010	639	1,080	365	9,520	653	868	467	1,450	201	46
4	340	705	565	843	300	4,220	1,510	1,220	366	1,300	278	47
5	320	564	500	986	240	2,650	1,800	1,420	297	1,510	215	45
6	305	496	2,010	907	290	1,900	1,290	1,060	252	1,690	177	41
7	280	456	4,850	737	300	1,710	1,580	883	230	1,300	187	37
8	261	402	6,270	630	260	2,660	1,660	802	205	1,000	171	35
9	239	370	4,110	612	250	2,050	1,390	1,520	187	813	145	37
10	236	356	2,660	859	240	1,630	1,220	2,030	220	687	125	36
11	228	335	2,040	984	260	1,290	1,090	1,450	217	602	115	36
12	233	315	1,550	982	278	1,270	947	1,120	176	497	109	37
13	217	290	1,220	827	316	4,260	3,180	937	234	456	115	48
14	207	266	1,030	812	390	4,750	3,130	894	295	458	111	84
15	195	252	1,070	651	381	3,150	6,720	980	290	377	107	79
16	170	246	972	376	396	3,140	7,760	1,170	294	395	103	52
17	168	232	799	432	374	3,600	9,660	874	397	400	148	43
18	158	219	709	507	347	2,700	4,300	764	289	377	410	49
19	151	215	628	550	316	2,090	2,610	678	247	327	174	58
20	148	222	761	510	250	1,710	2,150	681	191	300	133	51
21	143	252	988	640	292	1,470	1,770	635	1,120	282	113	43
22	143	255	763	595	456	1,770	1,920	552	2,910	260	105	40
23	147	228	618	679	474	1,800	1,970	484	15,900	239	99	35
24	265	233	601	725	510	1,470	1,670	417	11,300	215	101	32
25	578	250	573	814	547	1,240	1,470	374	6,190	194	96	35
26	888	275	553	638	830	1,110	1,200	337	3,370	187	94	38
27	578	298	517	547	944	966	992	295	2,100	184	115	65
28	440	397	498	535	963	866	838	275	1,500	180	103	96
29	374	627	440	493	2,300	783	727	256	1,400	168	68	77
30	339	1,780	490	470	-----	727	665	246	1,800	159	59	101
31	317	-----	552	387	-----	664	-----	590	-----	159	49	-----
TOTAL	9,348	13,213	41,028	20,913	13,627	82,566	67,176	25,120	53,179	19,366	4,322	1,517
MEAN	302	440	1,323	675	470	2,663	2,239	810	1,773	625	139	50.6
MAX	888	1,780	6,270	1,080	2,300	10,900	9,660	2,030	15,900	1,700	410	101
MIN	143	215	440	376	240	664	643	246	176	159	49	32
(\bar{x})	+74.0	+116	+209	+148	+148	+167	+142	+121	+170	+108	+47.3	+39.1
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL	337,324	MEAN	924	MAX	6,830	MIN	65	(\bar{x})	+ 130	CFSM	-
WTR YR 1972	TOTAL	351,375	MEAN	960	MAX	15,900	MIN	32	(\bar{x})	+ 124	CFSM	-

* Diversion from and change in contents in Quemahoning Creek, North Fork Bens Creek, Dalton Run, and Mill Creek Reservoirs and diversion from Stony Creek, equivalent in cubic feet per second. Records of diversion and reservoir contents furnished by Manufacturers Water Co., and Greater Johnstown Water Authority.

KISKIMINETAS RIVER BASIN

03041000 Little Conemaugh River at East Conemaugh, Pa.

LOCATION.--Lat 40°20'37", long 78°53'07", Cambria County, on right bank 100 ft downstream from bridge on State Highway 271 at East Conemaugh, 0.3 mile downstream from Clapboard Run, and 2.5 miles upstream from confluence with Stony Creek.

DRAINAGE AREA.--183 sq mi.

PERIOD OF RECORD.--April 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,207.94 ft above mean sea level. Prior to Feb. 1, 1940, non-recording gage at site 100 ft upstream at same datum.

AVERAGE DISCHARGE.--33 years, 316 cfs (23.45 inches per year), adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 16,600 cfs June 23 (gage height, 10.48 ft), from rating curve extended above 5,200 cfs as explained below; minimum daily, 58 cfs Aug. 15, Sept. 23, 24.

Period of record: Maximum discharge, 16,600 cfs June 23, 1972 (gage height, 10.48 ft), from rating curve extended above 5,200 cfs on basis of slope-area measurement at gage height, 8.86 ft; minimum, 3.4 cfs Sept. 28, Oct. 8, 9, 11, 1963 (gage height, 1.08 ft).

Maximum discharge since 1935, 28,800 cfs Mar. 17, 18, 1936, by slope-area measurement.

REMARKS.--Records good. Flow regulated by reservoirs and diversion above station; the two most effective reservoirs have a combined capacity of 5,640 acre-ft. Figures of daily discharge do not include diversion at South Fork intake to Cambria plant of Bethlehem Steel Co., from Saltlick Run Reservoir to city of Johnstown, and from Wilmore Reservoir (capacity, 3,145 acre ft) to Franklin plant of Bethlehem Steel Company.

REVISIONS (WATER YEARS).--WSP 1305: 1939-50 (adjusted monthly runoff).

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	212	251	412	263	227	2,420	357	323	186	636	76	106
2	196	450	312	376	218	4,620	392	330	174	484	110	97
3	186	386	258	474	216	3,960	372	422	380	678	138	92
4	172	307	247	390	202	1,750	825	536	322	615	156	92
5	162	262	220	441	175	1,140	754	641	364	741	123	88
6	155	237	1,490	378	190	826	620	487	253	748	110	88
7	154	225	3,180	334	170	762	914	432	216	594	115	86
8	146	198	2,600	303	150	1,260	786	394	186	502	105	84
9	132	184	1,550	297	140	866	669	690	169	436	94	82
10	127	177	1,070	462	120	696	627	786	174	385	84	78
11	120	166	834	450	130	585	592	578	155	342	72	78
12	110	155	627	408	135	578	522	501	141	298	66	86
13	106	146	529	381	172	939	1,210	444	179	270	70	92
14	105	136	468	402	246	1,180	1,080	432	225	242	62	168
15	97	128	480	312	215	966	2,150	456	164	213	58	115
16	93	125	432	192	221	1,080	2,640	480	293	258	100	78
17	92	119	374	285	187	1,310	3,620	397	339	270	140	66
18	87	116	343	302	176	1,030	1,740	355	231	220	448	76
19	79	115	304	299	165	810	1,150	320	205	183	153	80
20	78	114	368	263	155	683	948	455	174	165	123	68
21	77	129	417	327	189	613	754	390	1,770	150	105	63
22	77	126	329	278	232	939	802	327	4,020	138	90	62
23	77	105	284	359	205	858	762	300	12,300	130	120	58
24	139	105	293	385	235	669	634	273	5,270	147	130	58
25	438	109	282	444	239	571	564	244	2,960	147	115	62
26	842	112	273	357	310	515	480	217	1,680	130	230	61
27	417	117	278	317	330	462	426	197	1,090	110	318	75
28	322	144	279	333	339	426	379	184	806	105	186	102
29	258	213	255	293	957	402	344	173	706	98	150	86
30	223	543	282	281	-----	383	322	168	822	90	130	100
31	200	-----	316	233	-----	358	-----	220	-----	82	115	-----
TOTAL	5,679	5,700	19,386	10,619	6,648	33,659	27,435	12,152	35,954	9,607	4,092	2,527
MEAN	183	190	625	343	229	1,086	915	392	1,198	310	132	84.2
MAX	842	543	3,180	474	957	4,620	3,620	786	12,300	748	448	168
MIN	77	105	220	192	120	358	322	168	141	82	58	58
(%)	+6.5	+16.7	+11.9	+11.7	+12.3	+10.3	+13.5	+18.5	+27.8	+11.9	+8.3	+36.4
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL	144,230	MEAN	395	MAX	3,180	MIN	40	(%)	+16.1	CFSM	-
WTR YR 1972	TOTAL	173,458	MEAN	474	MAX	12,300	MIN	58	(%)	+15.8	CFSM	-
											IN.	-

/ Diversion from and change in contents in Wilmore and Saltlick Run Reservoirs, and diversion from South Fork intake, equivalent in cubic feet per second. Records of diversion and reservoir contents furnished by Manufacturers Water Company and Greater Johnstown Water Authority.

KISKIMINETAS RIVER BASIN

225

03041500 Conemaugh River at Seward, Pa.

LOCATION.--Lat 40°25'09", long 79°01'35", Westmoreland County, on left bank at upstream side of bridge on State Highway 56 at Seward, 2.0 miles downstream from Findley Run, and 9 miles northwest of Johnstown.

DRAINAGE AREA.--715 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,076.02 ft above mean sea level.

AVERAGE DISCHARGE.--34 years, 1,246 cfs (23.67 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 49,300 cfs June 23 (gage height, 18.93 ft); minimum, 308 cfs Sept. 24, 25 (gage height, 2.13 ft).

Period of record: Maximum discharge, 54,000 cfs Oct. 16, 1954 (gage height, 19.20 ft); minimum not determined; minimum daily, 105 cfs Dec. 28, 29, 31, 1938.

Maximum stage since 1935, 26.4 ft Mar. 18, 1936, from floodmarks (discharge, 90,000 cfs by contracted-opening measurement at site 6.7 miles downstream, adjusted for inflow).

REMARKS.--Records good. Flow regulated by steel mills and by reservoirs above station, the nine most effective of which have a combined capacity of 51,580 acre-ft. Water-quality records 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	970	861	2,200	1,030	880	7,460	1,310	1,360	890	3,350	515	398
2	861	1,820	1,540	1,380	870	13,800	1,360	1,270	740	2,450	494	386
3	816	1,750	1,270	2,060	861	16,700	1,340	1,570	1,190	2,490	606	374
4	772	1,370	1,220	1,740	816	7,880	2,500	1,960	1,070	2,400	789	374
5	724	1,130	1,040	1,820	652	4,980	3,290	2,520	1,040	2,610	606	374
6	684	992	2,870	1,810	724	3,480	2,420	1,960	816	2,980	536	368
7	652	920	9,030	1,640	789	2,790	2,930	1,720	732	2,400	578	362
8	613	843	10,700	1,390	676	4,320	3,100	1,570	660	1,990	557	356
9	571	798	6,080	1,220	652	3,530	2,570	2,340	606	1,700	522	356
10	557	772	4,040	1,600	620	2,780	2,280	3,420	613	1,510	487	338
11	550	740	3,060	1,800	644	2,230	2,070	2,520	613	1,370	459	344
12	550	700	2,490	1,780	644	2,130	1,860	2,060	557	1,160	445	362
13	536	660	1,860	1,610	732	4,980	4,140	1,790	628	1,060	452	374
14	515	613	1,640	1,580	890	6,580	5,240	1,690	764	1,060	445	501
15	501	592	1,680	1,340	852	5,020	7,260	1,720	700	910	438	466
16	459	592	1,620	950	890	4,680	11,600	2,020	910	1,050	424	374
17	438	571	1,550	1,120	825	5,740	15,900	1,660	1,220	1,070	487	338
18	438	557	1,400	1,090	798	4,640	7,840	1,480	861	960	1,280	368
19	431	550	1,240	1,150	780	3,440	4,840	1,330	780	834	652	374
20	424	543	1,370	1,090	636	2,840	3,750	1,460	660	764	522	356
21	424	585	1,750	1,270	684	2,420	3,080	1,400	2,130	740	473	338
22	424	620	1,460	1,190	960	2,980	3,050	1,210	6,930	700	452	332
23	417	578	1,210	1,370	960	3,100	3,300	1,070	32,300	652	445	320
24	515	571	1,150	1,480	1,040	2,520	2,760	960	19,400	636	452	308
25	981	564	1,120	1,640	1,100	2,140	2,450	873	10,900	636	473	320
26	2,100	585	1,070	1,430	1,480	1,960	2,070	798	6,190	592	515	324
27	1,330	620	1,070	1,310	1,670	1,780	1,800	732	4,000	571	740	392
28	1,050	1,030	1,090	1,330	1,680	1,660	1,600	684	2,930	571	564	466
29	880	1,840	992	1,120	3,080	1,540	1,430	660	2,760	536	473	417
30	789	2,570	1,040	1,060	-----	1,440	1,320	644	4,220	508	438	494
31	740	-----	1,250	910	-----	1,340	-----	960	-----	515	410	-----
TOTAL	21,712	26,937	71,102	43,310	27,885	132,880	110,460	47,411	107,810	40,775	16,729	11,254
MEAN	700	896	2,294	1,397	962	4,286	3,682	1,529	3,594	1,315	540	375
MAX	2,100	2,570	10,700	2,060	3,080	16,700	15,900	3,420	32,300	3,350	1,280	501
MIN	417	543	992	910	620	1,340	1,310	644	557	508	410	308
(\bar{x})	-56.9	-22.2	+72.9	-8.5	-9.3	+18.5	+0.9	-25.0	+30.4	-51.7	-116	-108
MEAN \neq	643	876	2,367	1,388	953	4,304	3,683	1,504	3,624	1,263	424	267
CFSM \neq	.90	1.23	3.31	1.94	1.33	6.02	5.15	2.10	5.07	1.77	.59	.37
IN. \neq	1.04	1.37	3.82	2.24	1.43	6.94	5.75	2.42	5.66	2.04	.68	.41

CAL YR 1971 TOTAL 612,991 MEAN 1,679 MAX 11,600 MIN 285 MEAN \neq 1,680 CFSM \neq 2.35 IN. \neq 31.89
WTR YR 1972 TOTAL 658,265 MEAN 1,799 MAX 32,300 MIN 308 MEAN \neq 1,776 CFSM \neq 2.48 IN. \neq 33.80

\neq Change in contents, equivalent in cubic feet per second, in Quemahoning Creek, North Fork Bens Creek, Dalton Run, Mill Creek, Saltlick Run, Hinckston Run, and Laurel Run Reservoirs. Records of reservoir contents furnished by Manufacturers Water Co. and Greater Johnstown Water Authority.

\neq Adjusted for change in contents.

KISKIMINETAS RIVER BASIN

03042000 Blacklick Creek at Josephine, Pa.

LOCATION.--Lat 40°28'24", long 79°11'01", Indiana County, on right bank on upstream side of old concrete dam at Josephine, 0.9 mile upstream from Two Lick Creek, and 5 miles northeast of Blairsville.

DRAINAGE AREA.--192 sq mi.

PERIOD OF RECORD.--January 1952 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 975.82 ft above mean sea level, datum of 1912. Prior to Aug. 25, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--20 years, 341 cfs (24.12 inches per year).

EXTREMES.--Current year: Maximum discharge, 20,800 cfs June 23 (gage height, 13.99 ft in gage well, 14.27 ft from outside gage); from rating curve extended above 5,500 cfs as explained below; minimum, 56 cfs Sept. 11, 12 (gage height, 3.41 ft).

Period of record: Maximum discharge, 20,800 cfs June 23, 1972 (gage height, 13.99 ft in gage well, 14.27 ft from outside gage), from rating curve extended above 5,500 cfs on basis of contracted-opening measurement at gage height, 11.35 ft in gage well, 12.67 ft from outside floodmark and slope-area measurement at gage height, 10.93 ft; minimum, 19 cfs Sept. 14, 1952, Nov. 4, 1953; minimum gage height, 3.15 ft Oct. 15, 1969.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation at low flow by mine pumpage above station.

REVISIONS (WATER YEARS).--WSP 1385: 1952-54 (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	325	144	595	542	250	2,540	305	305	155	637	128	85
2	277	315	435	922	240	5,180	335	272	134	476	128	83
3	245	395	360	1,170	230	5,160	335	320	380	415	147	83
4	213	272	330	794	260	2,440	1,170	375	340	405	250	74
5	193	221	281	778	180	1,350	1,190	500	574	488	172	70
6	179	195	1,190	630	210	930	810	390	350	707	134	70
7	189	192	2,930	524	200	818	1,370	345	254	542	126	76
8	175	169	2,710	452	170	1,570	1,110	325	202	430	141	72
9	158	161	1,540	425	160	1,080	850	686	172	375	139	87
10	150	155	1,020	672	150	850	742	898	189	330	128	72
11	139	158	770	794	160	665	651	630	158	330	116	61
12	131	150	595	693	190	630	560	506	128	263	106	70
13	123	144	518	588	240	868	810	430	185	241	128	118
14	116	136	458	520	300	1,280	890	390	290	225	108	644
15	113	126	707	370	270	1,050	1,790	380	205	195	108	446
16	113	123	602	270	250	1,020	2,220	330	581	254	104	213
17	108	113	482	400	240	1,590	3,390	286	651	560	118	150
18	104	108	435	450	220	1,210	1,650	254	385	375	574	150
19	104	116	380	400	210	890	1,080	241	295	277	250	158
20	106	141	385	340	200	714	993	320	250	233	179	126
21	96	164	452	370	210	616	842	305	390	209	140	106
22	94	172	365	330	250	763	770	237	1,920	217	128	101
23	92	147	305	464	240	834	834	205	15,100	185	123	92
24	131	136	300	500	230	623	672	182	7,860	277	118	90
25	166	172	295	602	260	518	574	166	4,020	295	106	87
26	435	158	300	510	340	482	488	144	2,270	198	108	92
27	277	152	350	410	430	420	420	134	1,390	172	118	92
28	198	217	435	370	460	390	365	126	906	179	106	111
29	166	315	446	320	1,000	360	325	113	763	155	101	118
30	150	693	530	300	-----	345	295	108	770	141	96	415
31	141	-----	714	270	-----	320	-----	147	-----	126	90	-----
TOTAL	5,207	5,860	21,245	16,180	7,750	37,506	27,836	10,050	41,267	9,912	4,518	4,212
MEAN	168	195	685	522	267	1,210	928	324	1,376	320	146	140
MAX	435	693	2,930	1,170	1,000	5,180	3,390	898	15,100	707	574	644
MIN	92	108	281	270	150	320	295	108	128	126	90	61
CFSM	.88	1.02	3.57	2.72	1.39	6.30	4.83	1.69	7.17	1.67	.76	.73
IN.	1.01	1.14	4.12	3.13	1.50	7.27	5.39	1.95	8.00	1.92	.88	.82

CAL YR 1971 TOTAL 159,230 MEAN 436 MAX 3,430 MIN 53 CFSM 2.27 IN 30.85
WTR YR 1972 TOTAL 191,543 MEAN 523 MAX 15,100 MIN 61 CFSM 2.72 IN 37.11

PEAK DISCHARGE (BASE, 2,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-8	0030	7.32	3,430	4-17	0230	8.12	4,610
3-3	0230	9.71	7,320	6-23	1200	13.99	20,800
4-15	1730	6.96	2,930				

KISKIMINETAS RIVER BASIN

227

03042200 Little Yellow Creek near Strongstown, Pa.

LOCATION.--Lat 40°33'45", long 78°56'44", Indiana County, on right bank 100 ft downstream from concrete box culvert on U. S. Highway 422, 1.4 miles northwest of Strongstown, 6 miles upstream from mouth, and 11 miles southeast of Indiana.

DRAINAGE AREA.--7.36 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959-60, and annual maximum, water year 1960. September 1960 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,586.83 ft above mean sea level. Aug. 25, 1959, to Aug. 31, 1960, low-flow gage, and Nov. 6, 1959, to Aug. 31, 1960, crest-stage gage at site 100 ft upstream at same datum.

AVERAGE DISCHARGE.--12 years, 12.4 cfs (22.88 inches per year).

EXTREMES.--Current year: Maximum discharge, 820 cfs June 23 (gage height, 6.10 ft); minimum, 0.94 cfs Sept. 9, 10, 11 (gage height, 1.32 ft).

Period of record: Maximum discharge, 820 cfs June 23, 1972 (gage height, 6.10 ft); minimum, 0.1 cfs Aug. 17, 1965; minimum gage height, 1.10 ft Sept. 1, 1962.

REMARKS.--Records good except those for winter periods, which are 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	8.6	3.7	20	23	10	137	8.8	8.5	2.3	11	2.6	1.5
2	7.2	20	16	47	8.0	258	9.3	7.6	2.9	9.6	2.3	1.2
3	6.2	12	17	38	7.0	179	9.0	9.6	7.1	8.8	5.2	1.2
4	5.3	8.9	11	29	11	65	56	11	9.9	11	2.9	1.2
5	4.8	7.6	9.0	28	8.0	42	35	9.9	7.1	20	2.3	1.1
6	4.9	6.7	73	21	6.0	32	27	8.2	5.0	25	2.1	1.2
7	5.1	6.4	104	17	8.0	34	52	7.6	4.2	16	3.5	1.2
8	4.5	5.4	72	15	6.0	52	35	7.4	3.7	13	2.8	1.2
9	3.6	5.1	46	15	5.2	35	28	22	4.0	11	3.4	1.1
10	3.5	5.0	33	28	5.0	26	24	18	4.4	11	2.3	.94
11	3.3	4.6	25	30	5.2	25	20	14	3.4	8.2	1.8	1.0
12	3.2	4.3	19	24	6.0	22	16	12	3.2	6.5	3.5	4.8
13	2.7	3.9	15	21	8.0	35	35	9.9	7.4	5.8	3.1	9.3
14	2.5	3.4	28	16	10	39	28	9.3	5.2	5.0	2.1	49
15	2.3	3.4	45	12	11	30	57	8.2	5.6	4.4	2.5	14
16	2.2	3.2	29	7.0	11	39	84	7.1	23	9.3	1.7	8.2
17	2.0	3.1	23	8.0	10	43	98	6.0	11	8.2	11	5.6
18	1.9	2.9	19	10	9.0	32	48	5.2	8.5	5.4	11	11
19	1.8	3.6	15	11	8.0	25	33	4.8	6.8	4.6	5.6	6.8
20	1.7	4.1	18	9.9	7.5	20	39	7.1	7.1	3.8	4.0	4.6
21	1.6	6.9	16	11	8.0	17	27	5.4	23	3.5	3.4	3.8
22	1.6	5.3	12	11	10	22	31	4.6	189	3.1	3.1	3.7
23	1.8	5.1	10	18	9.5	19	26	4.0	507	4.6	2.6	2.8
24	5.2	4.1	11	17	10	15	21	3.6	288	27	2.3	5.2
25	7.3	5.4	9.9	26	11	15	17	3.4	165	7.6	2.2	3.7
26	9.3	4.3	12	25	13	13	14	2.9	65	5.6	2.3	3.1
27	5.4	5.1	16	20	15	12	12	2.5	29	6.0	2.5	2.8
28	4.2	8.8	21	17	17	11	10	2.3	22	4.6	2.1	2.9
29	3.6	14	17	13	40	11	9.0	2.2	20	3.7	1.7	5.2
30	3.3	29	35	11	-----	10	8.2	2.3	15	3.4	1.6	21
31	3.1	-----	29	9.0	-----	9.0	-----	2.6	-----	3.1	1.5	-----
TOTAL	123.7	205.3	825.9	587.9	293.4	1,324.0	917.3	229.2	1,454.8	269.8	101.0	180.34
MEAN	3.99	6.84	26.6	19.0	10.1	42.7	30.6	7.39	48.5	8.70	3.26	6.01
MAX	9.3	29	104	47	40	258	98	22	507	27	11	49
MIN	1.6	2.9	9.0	7.0	5.0	9.0	8.2	2.2	2.3	3.1	1.5	.94
CFSM	.54	.93	3.61	2.58	1.37	5.80	4.16	1.00	6.59	1.18	.44	.82
IN.	.63	1.04	4.17	2.97	1.48	6.69	4.64	1.16	7.35	1.36	.51	.91

CAL YR 1971 TOTAL 5,386.78 MEAN 14.8 MAX 116 MIN .55 CFSM 2.01 IN 27.23
WTR YR 1972 TOTAL 6,512.64 MEAN 17.8 MAX 507 MIN .94 CFSM 2.42 IN 32.92

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 2	1930	4.37	314	6-23	0615	6.10	820
4-16	2230	3.84	208	6-24	0845	4.48	336

KISKIMINETAS RIVER BASIN

03042280 Yellow Creek near Homer City, Pa.

LOCATION.--Lat 40°34'18", long 79°06'13", Indiana County, on left bank 150 ft downstream from Ferrier Run, 0.3 mile upstream from Central Indiana County Water Authority dam, and 3.5 miles northeast of Homer City.

DRAINAGE AREA.--59.5 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,140 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 104 cfs (23.74 inches per year) adjusted for storage beginning June 1971.

EXTREMES.--Current year: Maximum discharge, 4,100 cfs probably June 23 (gage height, 7.46 ft), from rating curve extended above 650 cfs as explained below; minimum daily, 6.7 cfs Sept. 11.

Period of record: Maximum discharge, 4,100 cfs probably June 23, 1972 (gage height, 7.46 ft), from rating curve extended above 650 cfs on basis of computation of peak flow over dam; maximum gage height, 8.37 ft Feb. 14, 1971 (backwater from ice); minimum discharge, 1.4 cfs July 19, 1969 (gage height, 1.99 ft).

REMARKS.--Records good except those for winter periods or no gage-height record, which are fair. Flow regulated since 1971 by Yellow Creek Lake 4.2 miles upstream (see p.238).

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	36	40	65	189	63	658	60	61	23	126	27	12
2	36	44	101	261	58	1,370	61	58	35	98	25	11
3	36	41	104	340	57	1,370	60	60	56	78	30	10
4	37	40	95	264	63	704	196	63	62	66	24	13
5	36	40	85	238	58	398	279	64	70	78	22	12
6	39	39	213	189	50	239	229	60	50	151	21	12
7	35	39	522	150	50	195	310	55	40	159	19	10
8	34	39	514	126	45	259	276	53	35	132	24	9.5
9	34	39	361	115	41	238	224	110	32	102	21	8.1
10	34	39	259	145	40	197	182	161	38	82	22	7.3
11	35	39	192	187	37	155	151	143	33	72	18	6.7
12	35	39	147	188	37	134	130	122	30	60	20	10
13	35	38	122	165	38	139	164	104	42	50	22	18
14	35	38	123	143	45	165	189	92	37	44	19	155
15	35	38	234	100	46	173	317	80	33	39	17	179
16	36	39	231	54	49	178	495	70	60	46	16	105
17	36	39	188	66	51	239	810	63	90	56	21	68
18	36	39	151	70	48	217	518	56	60	52	58	74
19	36	39	124	78	48	178	299	52	50	45	50	72
20	36	37	114	78	45	144	257	62	50	39	40	62
21	37	25	110	82	50	122	234	62	140	38	32	50
22	37	23	93	80	48	123	201	55	400	42	27	40
23	37	22	79	107	58	128	191	52	3,500	42	24	35
24	39	23	70	125	57	114	166	40	2,500	64	22	35
25	39	23	66	137	62	101	139	35	1,000	70	18	34
26	41	23	69	134	84	94	116	32	460	53	18	33
27	40	25	86	117	104	87	97	29	260	44	18	32
28	40	29	103	111	116	81	84	26	200	40	18	31
29	40	34	111	96	216	76	72	24	180	36	16	31
30	40	42	155	84	-----	68	64	23	159	32	15	45
31	39	-----	218	80	-----	64	-----	25	-----	29	14	-----
TOTAL	1,141	1,054	5,105	4,299	1,764	8,408	6,571	1,992	9,725	2,065	738	1,220.6
MEAN	36.8	35.1	165	139	60.8	271	219	64.3	324	66.6	23.8	40.7
MAX	41	44	522	340	216	1,370	810	161	3,500	159	58	179
MIN	34	22	65	54	37	64	60	23	23	29	14	6.7
MEAN [‡]	28.0	63.5	175	133	71.4	261	219	59.3	334	60.1	21.5	43.6
CFSM [‡]	.47	1.07	2.94	2.24	1.20	4.39	3.68	1.00	5.61	1.01	.36	.73
IN. [‡]	.54	1.19	3.39	2.58	1.29	5.06	4.11	1.15	6.26	1.16	.42	.81

CAL YR 1971 TOTAL 35,922.8 MEAN 98.4 MAX 800 MIN 3.4 MEAN[‡] 119 CFSM[‡] 2.00 IN.[‡] 27.35
WTR YR 1972 TOTAL 44,082.6 MEAN 120 MAX 3,500 MIN 6.7 MEAN[‡] 122 CFSM[‡] 2.05 IN.[‡] 27.96

[‡] Adjusted for change in contents in Yellow Creek Lake.

NOTE.--No gage-height record May 24 to June 28, July 31 to Aug. 17.

KISKIMINETAS RIVER BASIN

229

03042500 Two Lick Creek at Graceton, Pa.

LOCATION.--Lat 40°31'02", long 79°10'19", Indiana County, on right bank 0.8 mile upstream from highway bridge on road leading west from Graceton, 1.1 miles downstream from Tearing Run, 1.5 miles upstream from Cherry Run, and 8 miles northeast of Blairsville.

DRAINAGE AREA.--171 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 981.63 ft above mean sea level.

AVERAGE DISCHARGE.--21 years, 266 cfs (21.12 inches per year) adjusted for storage since December 1968.

EXTREMES.--Current year: Maximum discharge, 19,600 cfs June 23 (gage height, 14.69 ft), from rating curve extended above 4,500 cfs as explained below; minimum, 31 cfs Sept. 7.
Period of record: Maximum discharge, 19,600 cfs June 23, 1972 (gage height, 14.69 ft), from rating curve extended above 4,500 cfs on basis of contracted-opening measurement at gage-height 12.71 at site 1.6 miles above gage, adjusted to gage site; minimum, 2.0 cfs Sept. 14, 15, 1952 (gage height, 1.27 ft); minimum daily, 8.7 cfs Sept. 14, 1952.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation caused by mine pumpage and by sewage-disposal plant above station. Flow regulated since December 1968 by Two Lick Creek Reservoir 10 miles upstream (capacity, 16,240 acre-ft) and since July 1971 by Yellow Creek Lake 11 miles upstream (see p. 238).

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	128	76	130	320	170	1,190	193	210	84	350	114	40
2	125	102	160	478	150	2,790	196	207	88	298	111	38
3	125	83	163	542	170	4,130	192	210	198	270	105	37
4	125	79	153	594	190	2,280	471	210	170	249	72	36
5	122	76	143	710	170	1,480	533	207	211	355	66	35
6	115	74	422	622	150	1,210	467	195	179	1,010	63	33
7	166	77	730	566	130	1,110	631	188	167	864	61	44
8	106	74	680	523	110	1,190	566	193	122	518	53	82
9	104	74	511	520	100	1,060	489	373	113	561	60	81
10	104	74	390	578	95	397	449	400	122	252	50	78
11	102	74	296	618	100	320	455	354	103	226	47	77
12	100	72	235	566	130	292	416	313	97	205	48	102
13	100	72	196	380	160	303	517	282	125	191	51	115
14	98	72	238	320	230	366	511	263	118	170	48	1,430
15	98	72	404	230	210	405	801	243	108	140	53	901
16	98	72	366	150	220	499	1,620	230	154	206	45	240
17	98	72	296	190	200	584	2,120	208	189	202	93	256
18	96	72	247	220	180	532	1,720	177	145	177	131	336
19	96	79	208	246	160	467	1,250	177	134	166	92	292
20	94	76	397	244	160	414	1,200	234	132	157	77	272
21	94	74	715	232	170	380	1,090	199	180	169	67	254
22	92	64	670	250	200	489	1,050	165	666	171	59	220
23	88	56	634	327	180	737	784	147	13,200	171	68	157
24	102	53	606	334	210	720	435	126	6,530	210	60	185
25	86	50	471	366	229	354	344	115	4,110	209	53	162
26	88	44	214	330	285	339	304	100	2,400	184	72	157
27	77	50	331	290	292	324	267	93	1,430	171	61	143
28	76	85	404	240	338	311	241	89	592	161	54	109
29	74	104	187	210	562	300	222	86	454	150	49	133
30	74	143	310	170	-----	287	212	85	408	141	45	254
31	76	-----	369	160	-----	250	-----	89	-----	133	41	-----
TOTAL	3,127	2,245	11,276	11,526	5,651	25,510	19,746	6,168	32,729	8,437	2,069	6,299
MEAN	101	74.8	364	372	195	823	658	199	1,091	272	66.7	210
MAX	166	143	730	710	562	4,130	2,120	400	13,200	1,010	131	1,430
MIN	74	44	130	150	95	250	192	85	84	133	41	33
(*)	-36.1	+49.6	+94.7	+9.1	+32.3	-80.9	+9.1	-1.1	+72.7	-48.6	-2.9	+37.9
MEAN#	64.9	124	459	381	227	742	667	198	1,164	223	63.8	248
CFSM#	.38	.73	2.68	2.23	1.33	4.34	3.90	1.16	6.81	1.30	.37	1.45
IN.#	.44	.81	3.09	2.57	1.43	5.00	4.35	1.34	7.60	1.50	.43	1.62
CAL YR 1971	TOTAL 96,208	MEAN 264	MAX 1,710	MIN 29	MEAN# 287	CFSM# 1.68	IN.# 22.86					
WTR YR 1972	TOTAL 134,783	MEAN 368	MAX 13,200	MIN 33	MEAN# 379	CFSM# 2.22	IN.# 30.18					

* Change in contents, equivalent in cubic feet per second, in Two Lick Creek Reservoir and Yellow Creek Lake. Records of contents in Two Lick Creek Reservoir furnished by Pennsylvania Electric Co.

Adjusted for change in reservoir contents.

KISKIMINETAS RIVER BASIN

03044000 Conemaugh River at Tunnelton, Pa.

LOCATION.--Lat 40°27'16", long 79°23'28", Indiana County, on right bank at downstream side of highway bridge at Tunnelton, 0.9 mile downstream from Boatyard Run, 2.0 miles downstream from Conemaugh River Dam, 3.8 miles southeast of Saltsburg, and 5.5 miles upstream from confluence with Loyalhanna Creek.

DRAINAGE AREA.--1,358 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 844.64 ft above mean sea level. Prior to Oct. 1, 1952, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 2,307 cfs (23.07 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 25,900 cfs June 25 (gage height, 12.60 ft); minimum daily, 193 cfs Sept. 6.

Period of record: Maximum discharge, 59,200 cfs Mar. 7, 1945 (gage height, 21.0 ft, from graph based on gage readings); minimum, 1 cfs Sept. 10, 1954 (gage height, 1.20 ft); minimum daily, 1 cfs Sept. 10, 1954.

REMARKS.--Records good. Flow regulated since 1971 by Yellow Creek Lake, since 1952 by Conemaugh River Lake 2 miles upstream (see p. 238) and by reservoirs above station, the ten most effective of which have a combined capacity of 67,810 acre-ft.

COOPERATION.--One discharge measurement 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	2,420	1,370	4,000	2,480	1,590	1,840	2,330	2,640	984	20,200	786	462
2	2,380	1,390	3,710	2,500	1,610	2,940	1,920	2,090	1,180	15,100	797	462
3	2,330	1,460	2,580	3,500	1,630	3,500	1,610	2,730	1,230	9,610	808	462
4	2,260	1,780	1,580	4,240	2,080	11,400	2,270	3,060	1,320	7,500	830	462
5	2,180	2,130	1,650	4,240	1,870	20,800	4,050	3,800	1,380	5,020	864	378
6	2,100	2,070	2,710	4,240	1,360	21,800	4,710	4,060	1,710	3,340	866	193
7	1,990	2,000	3,350	4,090	1,490	20,600	4,840	3,040	2,020	7,000	867	195
8	1,610	1,910	2,820	3,820	1,260	18,100	5,060	1,870	1,910	5,530	866	286
9	1,270	1,800	7,200	3,360	820	15,000	5,130	3,070	1,200	3,780	865	617
10	1,060	1,670	12,900	3,130	850	12,300	5,090	4,560	1,260	3,040	855	768
11	854	771	12,300	3,490	878	8,300	5,000	5,800	1,240	2,430	840	755
12	486	498	11,400	3,680	886	6,000	4,260	6,220	858	2,010	824	742
13	446	878	9,010	3,620	916	3,550	3,560	3,710	847	1,610	808	870
14	902	889	6,590	3,390	1,520	2,280	4,700	2,910	864	1,660	793	1,220
15	902	1,030	3,850	2,470	2,120	2,570	4,200	2,820	452	1,670	741	1,990
16	890	1,260	1,830	1,400	2,090	5,060	2,970	2,120	461	1,670	668	2,210
17	890	1,220	1,970	1,190	2,050	4,850	3,270	2,000	2,070	2,330	630	1,740
18	878	1,160	2,040	1,440	2,000	3,960	6,170	2,000	3,200	2,840	882	1,350
19	866	1,080	2,510	1,790	1,940	8,690	16,000	2,270	3,060	2,090	1,190	1,050
20	842	841	2,930	2,730	1,580	13,900	15,600	2,040	2,640	1,610	1,160	988
21	830	761	2,910	2,810	1,210	12,800	15,700	2,170	1,470	1,570	1,050	904
22	819	938	2,930	1,620	1,250	7,630	15,200	1,850	2,180	1,530	923	819
23	797	1,120	2,890	1,730	1,300	4,710	12,300	1,530	4,720	1,290	808	741
24	797	1,050	2,810	2,230	1,650	4,790	10,200	1,580	6,520	1,110	574	657
25	808	854	2,720	2,790	1,920	4,700	6,620	1,560	17,200	1,160	376	636
26	890	742	2,550	2,840	2,000	4,500	5,370	1,330	25,500	1,190	396	608
27	1,190	775	2,350	2,810	3,090	4,220	5,190	1,060	24,900	1,190	416	606
28	1,430	819	2,270	2,770	4,380	3,540	4,480	1,070	23,900	1,170	440	690
29	1,430	1,270	2,260	2,670	3,720	2,750	3,430	1,070	20,800	1,150	452	751
30	1,410	2,760	2,100	2,540	-----	2,680	3,310	1,050	20,000	998	460	1,000
31	1,400	-----	2,360	2,080	-----	2,540	-----	869	-----	775	462	-----
TOTAL	39,357	38,296	125,080	87,690	51,060	242,300	184,540	77,949	177,076	113,173	23,297	24,612
MEAN	1,270	1,277	4,035	2,829	1,761	7,816	6,151	2,514	5,903	3,651	752	820
MAX	2,420	2,760	12,900	4,240	4,380	21,800	16,000	6,220	25,500	20,200	1,190	2,210
MIN	446	498	1,580	1,190	820	1,840	1,610	869	452	775	376	193
(Δ)	-306	+12.4	+11.4	-11.1	+257	-288	+140	-176	+1,470	-1,420	-29.2	-117
MEAN Δ	964	1,289	4,149	2,818	2,018	7,528	6,291	2,338	7,373	2,231	723	703
CFSM Δ	.71	.95	3.06	2.08	1.49	5.54	4.63	1.72	5.43	1.64	.53	.52
IN. Δ	.82	1.06	3.53	2.40	1.61	6.39	5.17	1.98	6.06	1.89	.61	.58

CAL YR 1971 TOTAL 1,014,488 MEAN 2,779 MAX 23,200 MIN 380 MEAN Δ 2,794 CFSM Δ 2.06 IN. Δ 27.93
 WTR YR 1972 TOTAL 1,184,430 MEAN 3,236 MAX 25,500 MIN 193 MEAN Δ 3,201 CFSM Δ 2.36 IN. Δ 32.10

Δ Change in contents equivalent in cubic feet per second, in Quemahoning Creek, North Fork Bens Creek, Dalton Run, Mill Creek, Saltlick Run, Hinkston Run, Laurel Run, and Two Lick Creek Reservoirs, and Yellow Creek and Conemaugh River Lakes. Records of reservoir contents furnished by Manufacturers Water Co., Greater Johnstown Water Authority, and Pennsylvania Electric Co.

Δ Adjusted for change in reservoir contents.

KISKIMINETAS RIVER BASIN

231

03045000 Loyalhanna Creek at Kingston, Pa.

LOCATION.--Lat 40°17'33", long 79°20'27", Westmoreland County, on right bank 60 ft downstream from bridge on State Highway 217, at Kingston, 100 ft downstream from Miller Run, 1.9 miles upstream from Ninemile Run, and 3 miles southeast of Latrobe.

DRAINAGE AREA.--172 sq mi.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only October to December 1939, published in WSP 1305.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,013.16 ft above mean sea level (Corps of Engineers bench mark). Prior to Oct. 1, 1969, at datum 1.00 ft higher.

AVERAGE DISCHARGE.--33 years, 298 cfs (23.53 inches per year) adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 21,500 cfs June 23 (gage height, 13.76 ft), from rating curve extended above 8,700 cfs as explained below; minimum daily, 8.0 cfs Sept. 8.

Period of record: Maximum discharge, 29,700 cfs Oct. 15, 1954 (gage height, 15.8 ft, present datum, from floodmarks), from rating curve extended above 8,700 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.1 cfs Sept. 4, 1953; minimum daily, 0.2 cfs Oct. 23, 24, 1953.

Maximum stage since at least 1918, 15.8 ft, present datum, Oct. 15, 1954. Flood of Mar. 17 or 18, 1936, reached a stage of about 15.5 ft, present datum, from information by local residents (discharge, 21,000 cfs, from rating curve extended above 8,700 cfs).

REMARKS.--Records fair. Flow regulated by Latrobe Reservoir (capacity, 3,670 acre-ft), and diversion works at Kingston. Figures of daily discharge do not include diversion from reservoir and at Kingston intake to Borough of Latrobe. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1335: 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	235	114	703	224	170	2,930	224	251	78	520	55	13
2	200	204	490	567	160	3,280	247	191	82	396	50	12
3	191	182	380	660	150	3,160	251	280	150	946	54	14
4	182	170	311	515	200	1,450	654	293	85	468	62	12
5	162	136	255	643	170	987	603	410	82	486	49	11
6	150	122	1,590	515	160	691	490	334	74	712	40	10
7	145	124	2,360	445	140	625	973	298	67	610	53	9.0
8	127	109	1,780	365	130	850	896	275	61	472	62	8.0
9	114	100	1,080	375	120	673	709	677	59	355	44	10
10	112	101	751	620	110	576	608	980	110	287	36	14
11	107	111	586	598	110	475	520	709	60	231	30	10
12	97	105	450	520	120	484	435	554	59	185	25	10
13	87	98	375	470	278	1,750	1,700	445	130	160	40	31
14	84	89	334	435	390	1,480	1,230	365	70	199	33	115
15	80	86	380	320	298	1,080	2,540	320	52	136	25	58
16	76	84	329	210	370	1,340	3,060	293	123	410	22	31
17	74	77	275	240	288	1,700	3,630	247	79	440	28	24
18	68	74	251	300	255	1,110	1,490	218	82	298	60	40
19	63	95	214	306	221	775	909	196	70	220	50	39
20	60	124	263	249	200	586	739	176	66	175	35	25
21	58	140	275	390	180	485	559	169	102	140	30	18
22	53	155	224	324	400	526	631	152	1,000	128	27	16
23	59	143	185	385	320	500	631	136	14,200	132	19	16
24	84	140	197	375	400	415	554	116	7,230	104	17	15
25	120	140	185	460	470	356	480	105	2,610	89	14	13
26	200	165	182	365	781	320	400	85	1,320	79	15	13
27	124	235	194	320	649	298	334	90	760	79	25	21
28	101	425	232	290	728	263	284	82	386	76	36	77
29	92	585	221	250	2,100	239	247	79	308	64	27	55
30	86	1,060	251	210	-----	228	228	79	360	61	21	154
31	84	-----	263	190	-----	207	-----	78	-----	61	14	-----
TOTAL	3,475	5,493	15,566	12,136	10,068	29,839	26,256	8,683	29,915	8,719	1,098	894.0
MEAN	112	183	502	391	347	963	875	280	997	281	35.4	29.8
MAX	235	1,060	2,360	660	2,100	3,280	3,630	980	14,200	946	62	154
MIN	53	74	182	190	110	207	224	78	52	61	14	8.0
(\bar{x})	+5.6	+5.2	+12.6	+37.6	-24.6	+5.5	+9.5	+5.5	+12.7	+4.5	+5.0	+5.0
MEAN \neq	118	188	515	429	322	968	884	286	1,010	286	40.4	34.8
CFSM \neq	.69	1.09	2.99	2.49	1.87	5.63	5.14	1.66	5.87	1.66	.23	.20
IN. \neq	.80	1.22	3.45	2.87	2.02	6.49	5.73	1.91	6.55	1.91	.27	.22

CAL YR 1971 TOTAL 158,123.0 MEAN 433 MAX 5,050 MIN 41 MEAN \neq 441 CFSM \neq 2.56 IN. \neq 34.84

WTR YR 1972 TOTAL 152,142.0 MEAN 416 MAX 14,200 MIN 8.0 MEAN \neq 423 CFSM \neq 2.46 IN. \neq 33.44

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	
2-29	2100	6.67	3,720	4-16	2400	8.16	6,000	\neq Diversion from and change in contents in Latrobe Reservoir and diversion from Kingston intake, equivalent in cubic feet per second; furnished by Latrobe Municipal Authority. \neq Adjusted for diversion and change in reservoir contents.
3- 3	0400	7.24	4,520	6-23	1130	13.76	21,500	
4-15	1800	7.42	4,810					

KISKIMINETAS RIVER BASIN

03047000 Loyalhanna Creek at Loyalhanna Dam, Pa.

LOCATION.--Lat 40°27'53", long 79°27'05", Westmoreland County, on left bank at downstream side of highway bridge, 0.7 mile downstream from Loyalhanna Dam, 1.5 miles south of Saltsburg, and 4.0 miles upstream from confluence with Conemaugh River.

DRAINAGE AREA.--292 sq mi.

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1970, published as "at Loyalhanna Creek Dam." Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 861.15 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--33 years, 472 cfs (21.95 inches per year) adjusted for storage since June 1942.

EXTREMES.--Current year: Maximum discharge, 6,080 cfs June 30 (gage height, 8.05 ft), minimum daily, 47 cfs Aug. 26 to Sept. 4, Sept. 9-13.

Period of record: Maximum discharge, 11,700 cfs June 5, 1941 (gage height, 10.30 ft), from rating curve extended above 5,200 cfs; minimum, 0.2 cfs Oct. 9, 10, 15, 16, 22-24, 1947, Sept. 16, 17, 1948 (gage height, -0.06 ft); minimum daily, 0.2 cfs Oct. 23, 1947.

REMARKS.--Records good. Flow completely regulated since 1942 by Loyalhanna Lake 0.7 mile upstream (see p. 238 and Latrobe Reservoir (combined capacity, 99,000 acre-ft)).

REVISIONS (WATER YEARS).--WSP 1435: 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	390	101	1,350	395	378	949	399	399	177	5,820	105	47
2	390	103	1,470	403	377	796	399	403	216	4,810	105	47
3	386	105	1,010	651	298	850	398	527	219	4,180	106	47
4	276	267	598	892	404	1,460	400	601	219	3,980	108	47
5	102	426	587	1,040	511	2,200	510	602	216	2,920	108	75
6	105	307	605	1,190	379	2,680	641	605	216	1,850	108	108
7	108	209	704	1,170	370	3,050	658	603	213	1,820	108	105
8	110	152	751	1,160	280	3,010	799	598	156	1,470	108	77
9	111	96	1,500	1,090	210	2,930	956	600	100	904	108	47
10	113	97	2,080	1,040	210	2,850	1,100	752	100	628	108	47
11	113	100	2,040	1,040	210	2,750	1,270	1,030	101	623	108	47
12	115	100	1,990	820	210	2,620	1,250	1,170	102	614	109	47
13	115	103	1,930	596	216	1,940	1,240	1,150	104	425	108	47
14	115	103	1,850	610	334	1,270	1,640	1,110	283	219	108	76
15	115	103	1,750	614	444	1,310	1,410	851	334	222	108	107
16	115	103	917	505	448	2,000	769	592	214	225	108	108
17	115	103	388	391	458	2,420	823	588	218	452	108	108
18	117	105	394	395	576	2,020	2,030	408	219	662	107	110
19	118	108	395	401	645	2,320	4,050	214	219	656	105	110
20	118	108	395	501	630	2,700	3,620	218	219	645	105	110
21	118	109	395	605	610	2,570	3,690	220	224	526	105	110
22	118	163	399	602	600	2,130	3,560	222	262	418	106	109
23	118	326	396	601	610	1,310	2,800	224	384	413	108	108
24	120	418	392	604	610	808	2,190	225	1,500	407	108	108
25	120	391	390	608	725	798	1,140	188	3,910	297	78	106
26	120	381	384	615	856	611	807	216	4,200	213	47	105
27	296	371	381	620	1,040	390	695	216	4,400	213	47	104
28	457	381	378	616	1,170	395	492	216	4,830	151	47	103
29	447	612	381	612	1,220	399	392	215	4,390	103	47	105
30	432	1,020	384	600	-----	399	395	215	5,090	104	47	116
31	267	-----	392	487	-----	399	-----	211	-----	105	47	-----
TOTAL	5,860	7,071	26,976	21,476	15,029	52,334	40,523	15,389	33,035	36,075	2,933	2,591
MEAN	189	236	870	693	518	1,688	1,351	496	1,101	1,164	94.6	86.4
MAX	457	1,020	2,080	1,190	1,220	3,050	4,050	1,170	5,090	5,820	109	116
MIN	102	96	378	391	210	390	392	188	100	103	47	47
(Δ)	-9.7	+53.2	-34.5	+15.5	+80.7	-87.6	-2.6	+6.3	+640	-626	-4.7	+28.0
MEAN Δ	179	289	836	708	599	1,600	1,348	502	1,741	538	89.9	114
CFSM Δ	.61	.99	2.86	2.42	2.05	5.48	4.62	1.72	5.96	1.84	.31	.39
IN. Δ	.70	1.10	3.30	2.79	2.21	6.32	5.15	1.98	6.65	2.17	.36	.44

CAL YR 1971 TOTAL 257,582 MEAN 706 MAX 3,420 MIN 19 MEAN Δ 707 CFSM Δ 2.42 IN. Δ 32.81
WTR YR 1972 TOTAL 259,292 MEAN 708 MAX 5,820 MIN 47 MEAN Δ 710 CFSM Δ 2.43 IN. Δ 33.12

Δ Change in contents, equivalent in cubic feet per second, in Latrobe Reservoir and Loyalhanna Lake. Records of contents in Latrobe Reservoir furnished by the Latrobe Municipal Authority.

Δ Adjusted for change in reservoir contents.

KISKIMINETAS RIVER BASIN

233

03048500 Kiskiminetas River at Vandergrift, Pa.

LOCATION.--Lat 40°36'16", long 79°33'08", Westmoreland County, on left bank 0.5 mile upstream from bridge on State Highway 56 at Vandergrift, and 2.2 miles upstream from Pine Run.

DRAINAGE AREA.--1,825 sq mi.

PERIOD OF RECORD.--August 1937 to current year. Monthly discharge only for some periods, published in WSP 1305. October 1920 to September 1932 (gage heights and discharge measurements only) in reports of Pennsylvania Department of Forest and Waters.

GAGE.--Water-stage recorder. Datum of gage is 769.40 ft above mean sea level (Corps of Engineers bench mark). Oct. 1, 1920, to Sept. 30, 1930, nonrecording gage; Oct. 1, 1930, to Sept. 30, 1932, water-stage recorder, at site two-thirds of a mile downstream at different datum.

AVERAGE DISCHARGE.--35 years, 2,997 cfs (22.30 inches per year) adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 32,600 cfs June 25 (gage height, 17.81 ft); minimum, 270 cfs Sept. 9 (gage height, 3.07 ft).
Period of record: Maximum discharge, 71,900 cfs Mar. 31, 1940 (gage height, 25.70 ft); minimum, 56 cfs Oct. 15, 16, 1952; minimum daily, 60 cfs Oct. 15, 1952.
Flood of Mar. 18, 1936, reached a stage of 41.64 ft, from floodmark at present site (discharge, 185,000 cfs, by slope-area measurement).

REMARKS.--Records good. Flow regulated since 1971 by Yellow Creek Lake, since 1952 by Conemaugh River Lake 23 miles upstream, since 1942 by Loyahanna Lake 20 miles upstream (see p. 238) and by other reservoirs above station, the 12 most effective of which have a combined capacity of 100,100 acre-ft. Figures of daily discharge do not include diversion from Beaver Run Reservoir to plants and communities downstream, nor into the Monongahela River basin. Water-quality records at Leechburg 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	2,910	1,560	5,480	3,080	2,100	4,510	2,910	3,550	1,350	28,300	984	536		
2	2,860	1,560	5,460	3,260	2,110	5,440	2,700	2,680	1,460	23,200	996	530		
3	2,820	1,590	4,580	3,960	2,150	6,280	2,090	3,120	1,670	15,800	1,000	530		
4	2,730	1,660	2,260	5,390	2,300	12,300	2,500	3,840	1,730	12,700	1,010	532		
5	2,420	2,310	2,310	5,550	2,940	24,300	4,260	4,230	1,730	10,400	1,040	530		
6	2,310	2,510	3,240	5,660	1,850	26,100	5,460	4,810	1,810	5,370	1,050	376		
7	2,220	2,330	5,560	5,490	1,910	25,400	6,040	4,360	2,300	9,550	1,070	277		
8	2,070	2,240	4,020	5,200	1,930	23,700	6,310	2,550	2,190	8,310	1,060	278		
9	1,490	2,060	6,950	4,780	1,210	19,300	6,540	3,300	1,740	5,020	1,070	463		
10	1,420	1,930	15,700	4,430	1,170	17,100	6,510	5,520	1,270	4,180	1,050	820		
11	1,020	1,610	15,100	4,650	1,250	12,900	6,560	6,580	1,410	3,210	1,030	628		
12	963	350	14,300	4,780	1,260	9,610	6,000	8,110	1,220	3,010	1,020	838		
13	360	962	12,300	4,480	1,400	7,330	5,080	5,840	1,070	2,270	1,010	871		
14	855	1,050	9,230	4,270	1,650	4,030	6,150	4,240	1,070	2,060	984	1,280		
15	1,060	1,060	7,190	3,800	2,960	4,590	7,990	3,940	1,320	2,050	969	1,830		
16	1,060	1,430	3,240	2,150	2,930	7,460	4,840	3,380	395	2,170	864	2,490		
17	1,050	1,420	2,550	1,710	2,810	10,600	5,210	3,560	1,700	2,820	826	1,940		
18	1,040	1,360	2,600	1,880	2,760	5,940	8,970	2,960	3,550	3,800	854	1,810		
19	1,020	1,310	2,760	2,330	2,840	10,500	21,400	2,650	3,300	3,280	1,310	1,250		
20	1,010	1,170	3,520	2,760	2,580	17,000	21,600	2,450	2,980	2,390	1,360	1,170		
21	998	870	3,430	4,080	1,970	17,100	20,000	2,600	2,830	2,330	1,270	1,090		
22	986	764	3,440	2,320	2,040	12,200	21,200	2,480	5,170	2,120	1,150	997		
23	979	1,390	3,390	2,510	2,060	6,510	16,400	1,870	16,300	1,980	1,080	917		
24	1,000	1,550	3,320	2,800	2,300	5,800	14,400	1,900	13,100	1,630	938	847		
25	1,030	1,380	3,210	3,720	2,770	5,710	9,320	1,860	28,700	1,640	563	791		
26	1,010	755	3,110	3,690	3,170	5,400	6,530	1,740	31,900	1,520	493	765		
27	1,080	1,210	2,910	3,030	3,880	4,830	6,200	1,380	30,800	1,520	500	743		
28	1,690	1,350	2,840	3,590	6,010	4,440	5,510	1,380	30,300	1,490	508	778		
29	1,910	1,570	2,840	3,470	6,300	3,330	4,040	1,370	27,600	1,360	522	960		
30	1,910	3,300	2,780	3,310	-----	3,270	3,910	1,350	25,900	1,310	527	1,520		
31	1,870	-----	2,930	3,030	-----	3,110	-----	1,330	-----	1,010	533	-----		
TOTAL	47,151	45,611	162,550	115,760	72,610	326,090	246,630	100,930	247,865	167,800	28,641	28,587		
MEAN	1,521	1,520	5,244	3,734	2,504	10,520	8,221	3,256	8,262	5,413	924	953		
MAX	2,910	3,300	15,700	5,660	6,300	26,100	21,600	8,110	31,900	28,300	1,360	2,490		
MIN	360	350	2,260	1,710	1,170	3,110	2,090	1,330	395	1,010	493	277		
(\bar{x})	-314	+82.5	+163	+83.1	+426	-308	+182	-139	+2,180	-2,020	-48.4	-69.8		
MEAN \bar{x}	1,207	1,602	5,407	3,817	2,930	10,210	8,403	3,117	10,440	3,393	876	883		
CFSM \bar{x}	.66	.88	2.96	2.09	1.61	5.59	4.60	1.71	5.72	1.86	.48	.48		
IN \bar{x}	.76	.98	3.41	2.41	1.74	6.44	5.13	1.97	6.38	2.14	.55	.54		
CAL YR 1971	TOTAL	1,355,533	MEAN	3,714	MAX	27,500	MIN	350	MEAN \bar{x}	3,764	CFSM \bar{x}	2.06	IN \bar{x}	28.00
WTR YR 1972	TOTAL	1,590,225	MEAN	4,345	MAX	31,900	MIN	277	MEAN \bar{x}	4,354	CFSM \bar{x}	2.39	IN \bar{x}	32.45

* Change in contents in Quemahoning Creek, North Fork Bens Creek, Dalton Run, Mill Creek, Saltlick Run, Hinckston Run, Laurel Run, and Two Lick Creek Reservoirs, and Yellow Creek and Conemaugh River Lakes, and Latrobe Reservoir, Loyahanna Lake and Beaver Run Reservoir and diversion from Beaver Run Reservoir, equivalent in cubic feet per second. Records of diversion and reservoir contents furnished by Manufacturers Water Co., Greater Johnstown Water Authority, Pennsylvania Electric Co., Latrobe Municipal Authority, and Municipal Authority of Westmoreland County.

* Adjusted for diversion and change in reservoir contents.

BUFFALO CREEK BASIN

03049000 Buffalo Creek near Freeport, Pa.

LOCATION.--Lat 40°42'57", long 79°41'59", Butler County, on right bank 0.6 mile upstream from Little Buffalo Creek and 3 miles north of Freeport.

DRAINAGE AREA.--137 sq mi.

PERIOD OF RECORD.--October 1940 to current year. Monthly discharge only for October 1940, published in WSP 1305.

GAGE.--Water-stage recorder. Altitude of gage is 792 ft (by barometer). Prior to July 19, 1962, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 186 cfs (18.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,980 cfs June 23 (gage height, 11.21 ft); minimum daily, 7.5 cfs Oct. 22, 23.

Period of record: Maximum discharge, 14,000 cfs Oct. 15, 1954 (gage height, 13.60 ft, from floodmarks), from rating curve extended above 4,300 cfs on basis of slope-area measurement of peak flow; minimum observed, 1.3 cfs Oct. 16-18, 1960; minimum gage height, 0.69 ft Sept. 1, 1962.

REMARKS.--Records good except those for October, July, August, September and winter periods, which are 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	20	15	130	515	105	1,400	155	142	54	480	43	24
2	16	20	91	480	90	2,880	152	162	50	330	93	20
3	15	31	68	386	110	1,760	139	370	183	298	70	19
4	14	26	78	332	120	910	190	261	128	280	55	19
5	13	17	76	386	100	640	198	205	84	235	46	18
6	13	14	582	300	130	440	186	165	64	320	38	17
7	13	15	927	268	110	450	321	142	59	235	34	16
8	13	14	588	218	100	928	317	130	48	196	39	15
9	13	14	372	201	90	668	289	265	45	168	47	15
10	14	14	264	276	76	509	265	380	82	158	49	15
11	15	14	211	243	68	385	245	277	51	158	36	13
12	14	15	152	211	100	375	209	229	39	121	31	44
13	11	14	125	197	150	610	329	194	76	104	28	89
14	10	13	163	178	350	814	353	179	91	96	25	608
15	10	12	425	120	300	820	2,110	162	94	87	29	375
16	10	13	363	80	250	808	1,540	165	415	306	36	200
17	9.4	13	280	100	210	1,010	1,110	179	194	204	26	98
18	8.8	13	218	130	180	760	754	142	125	149	25	70
19	8.3	13	169	170	160	515	538	119	96	126	25	64
20	7.9	16	172	140	130	380	658	139	111	106	20	50
21	7.8	27	178	130	140	321	526	142	1,030	100	17	40
22	7.5	32	135	110	170	395	580	111	1,920	96	15	35
23	7.5	27	105	240	120	400	550	98	7,710	83	15	29
24	8.8	23	115	250	160	333	455	84	2,970	80	47	30
25	24	25	105	270	140	301	375	70	2,040	73	50	33
26	25	26	107	250	120	265	305	61	1,520	62	43	29
27	18	32	122	220	110	233	253	53	948	62	46	39
28	14	64	201	190	200	209	209	50	584	71	64	34
29	15	91	204	160	480	187	175	47	497	60	44	30
30	15	184	696	140	-----	221	155	45	638	49	34	131
31	15	-----	885	120	-----	168	-----	61	-----	44	29	-----
TOTAL	406.0	847	8,307	7,011	4,569	20,095	13,641	4,829	21,946	4,937	1,199	2,219
MEAN	13.1	28.2	268	226	158	648	455	156	732	159	38.7	74.0
MAX	25	184	927	515	480	2,880	2,110	380	7,710	480	93	608
MIN	7.5	12	68	80	68	168	139	45	39	44	15	13
CFSM	.10	.21	1.96	1.65	1.15	4.73	3.32	1.14	5.34	1.16	.28	.54
IN.	.11	.23	2.26	1.90	1.24	5.46	3.70	1.31	5.96	1.34	.33	.60

CAL YR 1971 TOTAL 55,909.0 MEAN 153 MAX 1,490 MIN 5.5 CFSM 1.12 IN 15.18
WTR YR 1972 TOTAL 90,006.0 MEAN 246 MAX 7,710 MIN 7.5 CFSM 1.80 IN 24.44

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-2	2000	5.95	3,100	6-23	0830	11.21	9,980
4-15	1330	6.53	3,730				

OHIO RIVER MAIN STEM

235

03049500 Allegheny River at Natrona, Pa.

LOCATION.--Lat 40°36'55", long 79°43'07", Allegheny County, on right bank 520 ft upstream from dam at lock 4 at Natrona, 5.8 miles downstream from Kiskiminetas River, and at mile 24.3.

DRAINAGE AREA.--11,410 sq mi, approximately.

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

GAGE.--Water-stage recorder and concrete dam control. Datum of gage is 737.11 ft above mean sea level, (Corps of Engineers bench mark). Prior to Apr. 14, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 18,960 cfs (22.57 inches per year) adjusted for storage since 1940.

EXTREMES.--Current year: Maximum discharge, 205,000 cfs June 23 (gage height, 24.96 ft); minimum, 2,910 cfs Sept. 7 (gage height, 9.22 ft).

Period of record: Maximum discharge, 238,000 cfs Dec. 30, 1942 (gage height, 27.46 ft); minimum, 895 cfs Oct. 22, 1963; minimum gage height, 8.82 ft July 25, 26, 1966.

Flood of Mar. 18, 1936, reached a stage of 32.06 ft (discharge, 365,000 cfs, determined by Corps of Engineers).

REMARKS.--Records good. Flow regulated by Allegheny Reservoir, Chautauqua and Tionesta Lakes, Union City Reservoir, Woodcock Creek, East Branch Clarion River, Mahoning Creek, Crooked Creek, Yellow Creek, Conemaugh River, and Loyalhanna Lakes (see pp. 237, 238) and by 15 smaller reservoirs (combined capacity, excluding that of Chautauqua Lake, 2,069,000 acre-ft). Slight diversion since 1952 from Beaver Run Reservoir into the Monongahela River basin. Water-quality records at Oakmont through June and at Natrona thereafter for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1435: 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	9,110	4,470	22,300	56,600	20,800	26,900	25,500	16,900	7,730	92,400	5,910	4,160
2	9,090	4,970	23,300	48,600	19,400	58,200	23,500	15,500	8,000	81,500	5,790	3,900
3	8,160	4,910	19,600	48,100	18,200	99,900	22,500	20,100	9,350	75,900	5,790	3,590
4	7,290	5,000	14,900	44,800	17,500	78,300	24,200	27,200	8,540	75,300	6,150	3,340
5	6,710	5,950	13,000	42,300	15,500	78,700	25,900	26,500	7,680	66,400	6,340	3,290
6	6,310	5,980	14,700	39,800	10,300	75,300	27,900	24,000	8,430	59,000	5,440	3,490
7	5,420	5,800	37,700	35,600	10,800	71,400	29,100	21,300	8,760	62,900	5,270	3,200
8	4,590	6,290	56,300	31,500	11,300	76,500	30,300	17,900	8,070	58,600	5,970	3,790
9	3,990	6,720	57,000	28,700	9,210	75,600	29,500	19,100	7,410	51,700	6,220	4,320
10	3,850	7,210	55,600	27,100	7,040	66,600	29,000	26,100	7,610	49,000	7,240	4,650
11	3,650	7,100	48,400	29,500	6,700	58,300	25,700	32,800	10,000	50,400	6,590	5,330
12	4,830	5,440	42,600	31,900	7,210	50,600	23,000	36,000	7,640	46,800	5,790	5,910
13	4,770	5,840	36,900	31,800	8,200	50,900	21,700	32,500	8,130	42,700	5,210	6,590
14	4,800	5,970	31,400	30,800	10,300	57,100	25,900	29,000	14,300	38,400	4,760	11,800
15	5,110	6,220	33,200	30,200	14,700	54,800	37,700	28,100	12,100	27,800	5,330	12,200
16	4,890	7,350	38,800	23,400	16,100	51,800	47,700	30,000	14,300	21,100	5,560	14,200
17	4,210	7,600	35,500	18,100	15,400	65,500	65,100	28,900	20,900	18,900	4,930	11,000
18	3,830	7,120	31,900	18,300	15,800	65,400	62,000	24,900	18,900	19,300	4,930	11,000
19	3,780	6,760	30,000	22,900	16,600	62,100	68,000	24,200	16,000	18,700	5,560	11,300
20	3,700	6,010	28,300	23,800	13,900	65,100	70,700	22,800	13,900	16,600	5,500	8,280
21	3,450	5,560	27,300	27,200	10,500	62,200	68,300	19,900	25,500	14,200	4,700	6,780
22	3,420	5,930	25,700	25,800	12,300	56,900	66,200	18,800	52,000	13,600	4,430	5,560
23	3,400	7,440	24,800	26,800	10,800	63,600	61,300	16,900	162,000	11,400	4,700	4,430
24	3,510	8,410	22,500	32,000	10,600	59,700	55,100	14,900	157,000	8,510	6,460	4,160
25	3,820	8,990	22,100	35,700	11,800	53,300	47,800	12,700	141,000	9,710	6,090	3,690
26	4,500	6,780	21,000	36,500	17,100	47,900	35,700	11,100	159,000	9,260	5,620	3,790
27	5,060	7,150	26,400	33,700	19,100	43,700	28,600	9,270	127,000	8,140	5,680	4,160
28	5,600	7,020	29,000	31,200	19,600	41,000	24,000	7,860	119,000	7,580	6,460	4,870
29	5,840	8,210	30,000	27,800	21,600	38,300	20,600	7,090	107,000	6,980	6,530	5,740
30	5,670	13,600	31,800	25,200	-----	33,600	18,200	6,850	97,900	5,790	5,620	8,130
31	4,860	-----	65,400	22,500	-----	28,500	-----	7,350	-----	5,040	5,210	-----
TOTAL	157,220	201,840	997,400	988,200	398,360	1,817.7M	1,140.7M	636,520	1,365.2M	1,073.6M	175,780	186,650
MEAN	5,072	6,728	32,170	31,880	13,740	58,640	38,020	20,530	45,510	34,630	5,670	6,222
MAX	9,110	13,600	65,400	56,600	21,600	99,900	70,700	36,000	162,000	92,400	7,240	14,200
MIN	3,400	4,470	13,000	18,100	6,700	26,900	18,200	6,850	7,410	5,040	4,430	3,200
(Δ)	-1,250	+420	+3,850	-3,040	-610	+2,200	+2,550	+73.4	+12,100	-11,900	-1,010	-1,070
MEAN \neq	3,822	7,148	36,020	28,840	13,130	60,840	40,570	20,600	57,610	22,730	4,660	5,152
CFSM \neq	.33	.63	3.16	2.53	1.15	5.33	3.56	1.81	5.05	1.99	.41	.45
IN. \neq	.38	.70	3.64	2.92	1.24	6.14	3.97	2.09	5.63	2.29	.47	.50
CAL YR 1971	TOTAL 6,271,850	MEAN 19,180	MAX 80,600	MIN 3,290	MEAN \neq 17,380	CFSM \neq 1.52	IN. \neq 20.68					
WTR YR 1972	TOTAL 9,139,130	MEAN 24,970	MAX 162,000	MIN 3,200	MEAN \neq 25,130	CFSM \neq 2.20	IN. \neq 29.97					

Δ Change in contents in Allegheny Reservoir, Chautauqua and Tionesta Lakes, Union City Reservoir, East Branch Clarion River, Mahoning Creek, Crooked Creek, Yellow Creek, Conemaugh River, and Loyalhanna Lakes, and in 15 smaller reservoirs and diversion from Beaver Run Reservoir into the Monongahela River basin, equivalent in cubic feet per second. Records of smaller reservoir contents furnished by Pennsylvania Electric Co., Manufacturers Water Co., Greater Johnstown Water Authority, Latrobe Municipal Authority, and Municipal Authority, of Westmoreland County.

\neq Adjusted for diversion and change in reservoir contents.

PINE CREEK BASIN

03049800 Little Pine Creek near Etna, Pa.

LOCATION.--Lat 40°31'13", long 79°56'18", Allegheny County, on right bank at downstream side of highway bridge on Saxonburg Boulevard, 0.7 mile upstream from mouth, and 1.5 miles northeast of Etna.

DRAINAGE AREA.--5.78 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete and steel-rail control. Datum of gage is 778.26 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 5.76 cfs (13.53 inches per year).

EXTREMES.--Current year: Maximum discharge, 357 cfs June 23 (gage height, 3.82 ft), from rating curve extended above 150 cfs as explained below; minimum, 0.17 cfs Aug. 24, 25 (gage height, 1.18 ft).
Period of record: Maximum discharge, 360 cfs Mar. 4, 1963 (gage height, 3.85 ft), from rating curve extended above 150 cfs on basis of slope-area measurement of peak flow; maximum gage height, 5.76 ft Feb. 5, 1971 (backwater from ice); no flow on many days.

REMARKS.--Records good except those for winter periods, which are 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	1.2	.53	3.7	5.4	4.2	67	7.0	10	1.2	12	1.3	.29
2	1.2	.82	2.0	17	4.0	72	7.0	12	1.4	8.6	2.6	2.1
3	1.1	.60	1.8	14	8.0	52	5.9	10	1.6	10	2.3	1.6
4	1.0	.46	1.5	14	7.0	29	9.6	7.0	1.3	8.0	2.1	.88
5	.90	.40	1.3	20	6.0	15	10	5.0	1.1	9.4	1.4	.58
6	.90	.34	41	12	5.2	12	10	4.5	.99	10	1.1	.46
7	.90	.60	31	9.4	4.5	22	24	4.0	.90	7.5	1.4	.34
8	.70	.46	21	7.0	4.2	27	14	4.5	.74	6.0	1.3	.29
9	.67	.40	11	8.2	3.9	15	11	12	1.3	5.1	1.9	.40
10	.82	.46	8.2	8.8	3.5	11	11	9.0	.90	6.0	1.1	.22
11	.74	.46	7.0	7.0	3.5	11	10	7.0	.70	4.3	.88	.20
12	.60	.40	5.4	6.5	6.0	16	8.8	5.0	.60	3.4	.78	1.9
13	.53	.40	4.8	5.9	13	42	13	4.5	10	3.1	.78	3.7
14	.46	.40	13	4.5	11	43	10	4.1	6.0	2.8	.64	31
15	.40	.40	16	4.0	15	30	60	3.9	2.6	7.5	.64	5.1
16	.42	.40	10	3.5	11	29	48	4.0	3.0	27	.46	2.6
17	.42	.40	5.4	6.0	10	25	34	4.8	2.0	23	.52	1.8
18	.34	.34	3.7	5.0	8.6	12	21	3.7	1.3	11	.78	3.7
19	.34	.60	2.0	9.0	7.6	11	18	2.6	1.0	8.0	.70	1.9
20	.29	.60	2.6	10	7.0	10	33	3.1	30	7.5	.40	1.6
21	.29	.82	2.0	5.4	6.0	10	21	2.6	7.0	6.0	.25	1.3
22	.29	1.1	1.7	4.2	9.0	10	40	2.0	70	4.3	.29	1.1
23	.40	.82	1.6	4.2	8.0	10	25	1.7	195	3.7	.22	.88
24	1.7	.74	1.6	5.9	10	9.4	15	1.6	66	3.7	.18	2.3
25	1.1	.99	1.5	8.8	13	8.8	11	1.5	50	2.6	1.1	1.3
26	.74	1.1	1.7	8.0	22	8.2	9.0	1.3	27	1.9	8.0	1.9
27	.67	1.7	1.8	6.4	21	7.6	7.0	1.2	16	2.3	1.9	1.7
28	.60	2.6	4.2	5.4	35	7.0	6.0	1.2	8.6	1.9	1.1	1.4
29	.53	10	3.1	5.0	49	7.6	5.4	1.1	13	1.6	.70	1.8
30	.53	11	11	4.6	-----	7.0	8.0	1.4	13	1.6	.52	8.0
31	.53	-----	9.4	4.4	-----	6.5	-----	1.6	-----	1.4	.40	-----
TOTAL	21.31	40.34	232.0	239.5	316.2	643.1	512.7	137.9	534.23	211.2	37.74	82.34
MEAN	.69	1.34	7.48	7.73	10.9	20.7	17.1	4.45	17.8	6.81	1.22	2.74
MAX	1.7	11	41	20	49	72	60	12	195	27	8.0	31
MIN	.29	.34	1.3	3.5	3.5	6.5	5.4	1.1	.60	1.4	.18	.20
CFSM	.12	.23	1.29	1.34	1.89	3.58	2.96	.77	3.08	1.18	.21	.47
IN.	.14	.26	1.49	1.54	2.04	4.14	3.30	.89	3.44	1.36	.24	.53

CAL YR 1971 TOTAL 2,176.16 MEAN 5.96 MAX 98 MIN .06 CFSM 1.03 IN 14.01
WTR YR 1972 TOTAL 3,008.56 MEAN 8.22 MAX 195 MIN .18 CFSM 1.42 IN 19.36

PEAK DISCHARGE (BASE, 150 CFS).--June 23 (0200) 357 cfs (3.82 ft).

Lakes and reservoirs in Allegheny River basin

- 03012520 ALLEGHENY RESERVOIR.--Lat 41°50'17", long 79°00'15" (revised), Warren County, in Allegheny National Forest, at control house at Kinzua Dam on Allegheny River, 3 miles upstream from Hemlock Run, and 7 miles east of Warren. Drainage area, 2,180 sq mi. Period of record, October 1965 to current year. Prior to October 1966 published as Allegheny River Reservoir. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 1,121,120 acre-ft June 27 (elevation, 1,362.20 ft); minimum, 302,300 acre-ft Mar. 1 (elevation, 1,300.67 ft). Extremes for period of record: Maximum contents, 1,121,120 acre-ft June 27, 1972 (elevation, 1,362.20 ft); minimum (after first filling), 113,310 acre-ft Jan. 26, 1968 (elevation 1,268.68).
- Reservoir is formed by a concrete gravity dam with a gated spillway and with an earthfill section, rock-faced, at right side. Storage began during construction and reservoir acted as retention basin from October 1965 to December 1966. Dam became operational in January 1967. Reservoir first reached minimum pool elevation during period of construction. Capacity, 1,180,000 acre-ft between elevations 1,205.0 ft (invert of low level sluices) and 1,365.0 ft (full pool). Dead storage is 128 acre-ft. Minimum pool elevation, 1,240 ft (capacity, 24,240 acre-ft). Winter low-water pool elevation, 1,292 ft (capacity, 239,780 acre-ft). Summer low-water pool elevation, 1,328 ft (capacity, 572,610 acre-ft). Storage to summer pool normally occurs during period April to May. Depletion of low-water storage for augmenting flow in Allegheny River normally occurs during period July to December. Figures given herein represent total contents. Reservoir is used for flood control, low-flow augmentation and water-quality control of Allegheny River and downstream rivers, power generation, and recreation. Records furnished by Corps of Engineers.
- 03013990 (revised) CHAUTAUQUA LAKE.--Lat 42°14'20", long 79°29'50", Chautauqua County, N.Y., on right bank of outlet of Mud Creek, 25 ft upstream from bridge on State Highway 17J, 0.1 mile from lake, and 1 mile south of Mayville, N.Y. Drainage area, 189 sq mi. Period of record, November 1949 to current year. Water-stage recorder. Datum of gage is 1,300.00 ft above mean sea level. Prior to Dec. 21, 1956, nonrecording gage at site near mouth of Big Inlet at same datum. Extremes for current year: Maximum daily gage height, 10.12 ft June 25; minimum daily, 7.01 ft Feb. 29. Extremes for period of record: Maximum daily gage height, 10.65 ft Mar. 9, 1956; minimum daily, 6.29 ft Nov. 17, 1953.
- Lake is regulated at outlet by Warner Dam. Capacity of lake not determined; area of water surface, 20.9 sq mi. Figures of change in contents computed from surface area multiplied by change in stage.
- 03019500 TIONESTA LAKE.--Lat 41°28'25", long 79°26'20", Forest County, in Allegheny National Forest, at control tower, 0.8 mile upstream from Tionesta Dam on Tionesta Creek, 1.8 miles upstream from mouth, and 2 miles southeast of Tionesta. Drainage area, 478 sq mi. Period of record, December 1940 to current year. Prior to October 1970 published as "Tionesta Creek Reservoir". Water-stage recorder. Datum of gage is at mean sea level, datum of Corps of Engineers, which is 0.08 ft above mean sea level. Extremes for current year: Maximum contents, 72,080 acre-ft June 25 (elevation, 1,143.38 ft); minimum, 7,660 acre-ft Nov. 24 (elevation, 1,084.76 ft). Extremes for period of record: Maximum contents, 111,320 acre-ft Mar. 11, 1964 (elevation, 1,161.55 ft); minimum (after first filling), 3,280 acre-ft May 12, 1971 (elevation, 1,074.02 ft).
- Lake is formed by rock-faced earthfill dam with uncontrolled saddle spillway with concrete floor and sides. Dam became fully operational in December 1940 and lake first reached minimum pool elevation, 1,085.00 ft (capacity, 7,780 acre-ft) on Jan. 23, 1941. Capacity, 133,400 acre-ft between elevations 1,052.00 ft (sill of outlet gates) and 1,170.00 ft (full pool). Figures given herein represent total contents. Lake is used for flood control and recreation. Records furnished by Corps of Engineers.
- 03021518 UNION CITY RESERVOIR.--Lat 41°55'13", long 79°53'59", Erie County, in tower at left center of Union City Dam on French Creek, 1.4 miles upstream from South Branch French Creek, and 3.2 miles northwest of Union City. Drainage area, 220 sq mi. Period of record, July 1971 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 22,170 acre-ft June 26 (elevation, 1,264.30 ft); minimum, 3 acre-ft Sept. 24 (elevation, 1,212.13 ft).
- Reservoir is formed by earthfill dam with sidehill, concrete-lined spillway completed September 1971. Dam became operational in July 1970. Usable capacity 47,650 acre-ft between elevation 1,210.0 ft (invert of inlet of conduit) and 1,278.0 ft (crest of spillway). No dead storage. Figures given herein represent usable contents. Reservoir is used for flood control only. Records furnished by Corps of Engineers.
- 03027000 EAST BRANCH CLARION RIVER LAKE.--Lat 41°33'35", long 78°35'40", Elk County, at control tower at East Branch Clarion River Dam on East Branch Clarion River, 1.7 miles northeast of Glen Hazel, and 7.5 miles upstream from confluence with West Branch Clarion River. Drainage area, 72.4 sq mi (figure from Corps of Engineers). Period of record, June 1952 to current year. Prior to October 1970 published as "East Branch Clarion River Reservoir". Water-stage recorder. Datum of gage is at mean sea level (Corps of Engineers bench mark). Extremes for current year: Maximum contents, 85,010 acre-ft June 24 (elevation, 1,685.55 ft); minimum, 22,460 acre-ft Nov. 28 (elevation, 1,620.30 ft). Extremes for period of record: Maximum contents, 85,010 acre-ft June 24, 1972 (elevation, 1,685.55 ft); minimum, 160 acre-ft Nov. 9, 1952 (elevation, 1,541.07 ft).
- Lake is formed by an earthfill dam, rock-faced. Dam completed in 1952. Controlled storage began in June 1952. Capacity, 83,300 acre-ft between elevations 1,555 ft (sill of outlet gates) and 1,685 ft (full pool). Minimum pool elevation, 1,555 ft (capacity, 1,000 acre-ft). Winter low-water pool elevation, 1,651 ft (capacity, 45,600 acre-ft). Summer low-water pool elevation, 1,670 ft (capacity, 65,300 acre-ft). Storage to summer pool normally occurs during period Mar. 1 to Apr. 30. Depletion of low-water storage for augmenting flow in Clarion River occurs normally during period June to October. Figures given herein represent total contents. Lake is used for flood control, for low-flow augmentation of Clarion River and downstream rivers, and for recreation. Records furnished by Corps of Engineers.
- 03035500 MAHONING CREEK LAKE.--Lat 40°55'18", long 79°16'41", Armstrong County, at control house at Mahoning Creek Dam on Mahoning Creek, 0.7 mile upstream from Camp Run, 1.5 miles south of Eddyville, and 3 miles upstream from Pine Run. Drainage area, 340 sq mi. Period of record, June 1941 to current year. Prior to October 1970 published as "Mahoning Creek Reservoir". Water-stage recorder. Datum of gage is at mean sea level, datum of Corps of Engineers, which is 0.64 ft above mean sea level. Extremes for current year: Maximum contents, 69,870 acre-ft June 27 (elevation, 1,160.16 ft); minimum, 4,460 acre-ft May 1 (elevation, 1,074.90 ft). Extremes for period of record: Maximum contents, 72,580 acre-ft Mar. 11, 1964 (elevation, 1,161.32 ft); minimum (after first filling), 330 acre-ft July 2, 3, 1944 (elevation, 1,026.80 ft).
- Lake is formed by a concrete gravity dam with a gated spillway. Storage began during construction sometime prior to June 15, 1941 and first reached minimum pool elevation, 1,075 ft (capacity, 4,480 acre-ft) on June 21, 1941. Capacity, 74,100 acre-ft between elevations 1,015 ft (sill of outlet gates) and 1,162 ft (full pool); dead storage, 100 acre-ft. Figures given herein represent total contents. Lake is used for flood control and recreation. Records furnished by Corps of Engineers.

Lakes and reservoirs in Allegheny River basin--Continued

03038500 CROOKED CREEK LAKE.--Lat 40°42'51", long 79°30'30", Armstrong County, at control tower at Crooked Creek Dam on Crooked Creek, 4 miles south of Ford City, and 7.2 miles upstream from mouth. Drainage area, 277 sq mi. Period of record, May 1940 to current year. Prior to October 1970 published as "Crooked Creek Reservoir". Water-stage recorder. Datum of gage is at mean sea level, datum of Corps of Engineers, which is 2.07 ft below mean sea level. Extremes for current year: Maximum contents, 61,450 acre-ft June 25 (elevation, 901.29 ft); minimum 4,100 acre-ft May 1 (elevation, 838.83 ft). Extremes for period of record: Maximum contents, 61,450 acre-ft June 25, 1972 (elevation, 901.29 ft); minimum, 1,230 acre-ft Nov. 30, 1964 (elevation, 827.62 ft).

Lake is formed by an earthfill dam, rock-faced. Storage began in May 1940. Capacity, 93,900 acre-ft between elevations 809 ft (sill of outlet gates) and 920 ft (full pool). Minimum pool elevation, 840 ft (capacity, 4,510 acre-ft). Figures given herein represent total contents. Lake is used for flood control and recreation. Records furnished by Corps of Engineers.

03042260 YELLOW CREEK LAKE.--Lat 40°35'27", long 79°03'11", Indiana County, in gatehouse at right end of Yellow Creek Dam on Yellow Creek, at Yellow Creek State Park, 3 miles southwest of Penn Run. Drainage area, 52.5 sq mi. Period of record, July 1971 to current year. Water-stage recorder. Datum of gage is at mean sea level (Pennsylvania Department of Environmental Resources bench mark). Extremes for current year: Maximum contents, 18,420 acre-ft June 23 (elevation, 1,285.02 ft); minimum, 12,250 acre-ft Oct. 23, 24 (elevation, 1,278.19 ft). Extremes for period of record: Maximum contents, 18,420 acre-ft June 23, 1972 (elevation, 1,285.02 ft); minimum (after first filling), 12,250 acre-ft Oct. 23-24, 1971 (elevation, 1,278.19 ft).

Lake is formed by an earthfill dam with concrete spillway. Storage began July 11, 1971. Usable capacity, 13,800 acre-ft between elevation 1245.5 ft (sill of 4-foot and 1.5-foot outlet gates) and 1280.0 ft (spillway crest). No dead storage. Figures given herein represent usable contents. Lake is used for recreation. Dam built by Pennsylvania Department of Forests and Waters and now maintained by Pennsylvania Department of Environmental Resources.

03043500 CONEMAUGH RIVER LAKE.--Lat 40°28'11", long 79°22'07", Indiana County, at face of dam on right bank at Conemaugh River Dam on Conemaugh River, 2 miles upstream from highway bridge at Tunnelton, and 7.5 miles upstream from Loyalhanna Creek. Drainage area, 1,351 sq mi. Period of record, October 1951 to current year. Prior to October 1970 published as "Conemaugh River Reservoir". Water-stage recorder. Datum of gage is at mean sea level (Corps of Engineers bench mark). Prior to Dec. 18, 1952, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 237,980 acre-ft June 25 (elevation, 969.45 ft); minimum, 3,390 acre-ft June 21 (elevation, 878.15 ft). Extremes for period of record: Maximum contents, 237,980 acre-ft June 25, 1972 (elevation, 969.45 ft); minimum (after dam became fully operational), 807 acre-ft, Nov. 19, 1954 (elevation, 864.13 ft).

Lake is formed by a concrete gravity dam with a gated spillway and with an earth embankment at the right end. Storage began during construction and lake acted as a retention basin from November 1951 to November 1953. Dam became fully operational in November 1953. Lake first reached minimum pool elevation, 880 ft (capacity, 4,000 acre-ft) on Nov. 24, 1951. Capacity, 273,600 acre-ft between elevations 860 ft (sill of sluice gates) and 975 ft (full pool). Dead storage is 400 acre-ft. Figures given herein represent total contents. Lake is used for flood control and recreation. Records furnished by Corps of Engineers.

03046500 LOYALHANNA LAKE.--Lat 40°27'25", long 79°27'07", Westmoreland County, at control house at Loyalhanna Dam on Loyalhanna Creek, 2 miles south of Saltsburg, and 4.7 miles upstream from mouth. Drainage area, 290 sq mi. Period of record, June 1942 to current year (fragmentary October 1943 to March 1946). Prior to October 1970 published as "Loyalhanna Creek Reservoir". Water-stage recorder. Datum of gage is at mean sea level (Corps of Engineers bench mark). Extremes for current year: Maximum contents, 72,830 acre-ft June 25 (elevation, 967.41 ft); minimum, 2,140 acre-ft Feb. 3 (elevation, 910.47 ft). Extremes for period of record: Maximum contents, 72,830 acre-ft June 25, 1972 (elevation, 967.41 ft); little or no contents at times.

Lake is formed by a concrete gravity dam with a gated spillway and with an earth embankment at the left end. Storage began in June 1942 and first reached minimum pool elevation 910 ft (capacity, 2,040 acre-ft) on Sept. 2, 1942. Capacity, 95,300 acre-ft between elevations 878 ft (sill of outlet gates) and 975 ft (full pool). Figures given herein represent total contents. Lake is used for flood control and recreation. Records furnished by Corps of Engineers. Revisions: WSP 1305: Drainage area.

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
	03012520	Allegheny Reservoir		03013990	Chautauqua Lake	
Sept. 30.....	1,310.72	388,990	-	-	-	-
Oct. 31.....	1,305.20	339,610	-803	-	-	+17.4
Nov. 30.....	1,306.18	348,070	+142	-	-	+189
Dec. 31.....	1,323.22	517,030	+2,750	-	-	+71.7
CAL YR 1971.....	-	-	+104	-	-	+15.9
Jan. 31.....	1,308.95	372,700	-2,350	-	-	-207
Feb. 29.....	1,301.58	309,550	-1,100	-	-	-140
Mar. 31.....	1,314.70	427,270	+1,910	-	-	+331
Apr. 30.....	1,328.44	577,960	+2,530	-	-	-119
May 31.....	1,329.20	587,260	+151	-	-	+50.1
June 30.....	1,358.52	1,047,730	+7,740	-	-	+286
July 31.....	1,329.20	587,260	-7,490	-	-	-302
Aug. 31.....	1,325.34	541,180	-749	-	-	-41.3
Sept. 30.....	1,320.27	484,720	-948	-	-	+33.8
WTR YR 1972	-	-	+132	-	-	+14.0

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

NORTHEND ELEVATION AND CONTENTS AT 2400; WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972						
Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
	03019500	Tionesta Lake		03021518	Union City Reservoir	
Sept. 30.....	1,090.21	10,550	-	1,232.8	1,880	-
Oct. 31.....	1,088.51	9,620	-15.1	1,233.1	1,940	+1.0
Nov. 30.....	1,093.17	12,310	+45.2	1,236.6	2,850	+15.3
Dec. 31.....	1,112.10	28,080	+256	1,255.0	11,730	+144
CAL YR 1971.....	-	-	+26.4	-	-	+16.2
Jan. 31.....	1,087.27	8,950	-311	1,219.17	154	-188
Feb. 29.....	1,096.15	14,310	+93.2	1,218.54	125	-5
Mar. 31.....	1,088.49	9,600	-76.6	1,251.54	9,320	+150
Apr. 30.....	1,087.89	9,280	-5.4	1,216.27	50.5	-156
May 31.....	1,087.28	8,960	-5.2	1,217.52	85.2	+6
June 30.....	1,118.82	35,570	+447	1,256.00	12,550	+209
July 31.....	1,088.61	9,670	-421	1,212.76	5.8	-204
Aug. 31.....	1,088.41	9,560	-1.8	1,213.29	9.3	+1
Sept. 30.....	1,090.67	10,810	+21.0	1,219.00	144	+2.3
WTR YR 1972.....	-	-	+0.4	-	-	-2.4
	03027000	E. Br. Clarion River Lake		03035000	Mahoning Creek Lake	
Sept. 30.....	1,633.79	31,410	-	1,076.67	4,770	-
Oct. 31.....	1,625.17	25,480	-96.4	1,076.91	4,810	+7
Nov. 30.....	1,620.66	22,680	-47.1	1,080.31	5,460	+10.9
Dec. 31.....	1,638.18	34,700	+196	1,113.66	15,410	+162
CAL YR 1971.....	-	-	+4.5	-	-	+13.7
Jan. 31.....	1,650.82	45,390	+174	1,079.21	5,250	-165
Feb. 29.....	1,650.57	45,160	-4.0	1,083.80	6,150	+15.6
Mar. 31.....	1,661.54	55,960	+176	1,084.59	6,320	+2.8
Apr. 30.....	1,670.35	65,720	+164	1,076.04	4,660	-27.9
May 31.....	1,670.65	66,070	+5.7	1,080.87	5,570	+14.8
June 30.....	1,681.02	78,920	+216	1,136.45	32,850	+458
July 31.....	1,660.25	54,610	-395	1,077.41	4,910	-454
Aug. 31.....	1,649.60	44,280	-168	1,082.03	5,800	+14.5
Sept. 30.....	1,639.58	35,800	-142	1,087.95	7,040	+20.8
WTR YR 1972.....	-	-	+6.0	-	-	+3.1
	03038500	Crooked Creek Lake		03042260	Yellow Creek Lake	
Sept. 30.....	844.09	6,070	-	1,279.02	12,920	-
Oct. 31.....	842.97	5,620	-7.3	1,278.35	12,380	-8.8
Nov. 30.....	845.54	6,690	+18.0	1,280.30	14,070	+28.4
Dec. 31.....	849.60	8,720	+33.0	1,280.99	14,690	+10.1
CAL YR 1971.....	-	-	+4.6	-	-	+20.3
Jan. 31.....	841.23	4,960	-61.2	1,280.57	14,310	-6.2
Feb. 29.....	850.91	9,460	+78.2	1,281.24	14,920	+10.6
Mar. 31.....	844.40	6,200	-53.0	1,280.55	14,300	-10.1
Apr. 30.....	839.75	4,420	-29.9	1,280.53	14,280	-3
May 31.....	843.34	5,770	+22.0	1,280.19	13,970	-5.0
June 30.....	883.15	37,010	+525	1,280.83	14,550	+9.7
July 31.....	843.10	5,670	-510	1,280.39	14,150	-6.5
Aug. 31.....	843.51	5,830	+2.6	1,280.23	14,010	-2.3
Sept. 30.....	847.18	7,450	+27.2	1,280.42	14,180	+2.9
WTR YR 1972.....	-	-	+1.9	-	-	+1.7

ALLEGHENY RIVER BASIN

Lakes and reservoirs in Allegheny River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972						
Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
	03043500	Conemaugh River Lake		03046500	Loyalhanna Lake	
Sept. 30.....	909.95	25,270	-	913.98	3,020	-
Oct. 31.....	897.29	12,200	-213	912.34	2,580	-7.2
Nov. 30.....	895.98	11,310	-15.0	921.44	5,900	+55.8
Dec. 31.....	890.25	8,040	-53.2	915.43	3,470	-39.5
CAL YR 1971.....	-	-	-9.1	-	-	+8
Jan. 31.....	888.84	7,320	-11.7	912.37	2,580	-14.5
Feb. 29.....	906.45	20,800	+234	926.91	9,060	+113
Mar. 31.....	887.93	6,900	-226	916.51	3,830	-85.1
Apr. 30.....	900.36	14,640	+130	915.68	3,550	-4.7
May 31.....	884.31	5,440	-150	917.30	4,120	+9.3
June 30.....	936.75	87,020	+1,370	953.78	41,960	+636
July 31.....	885.68	5,960	-1,320	916.22	3,730	-622
Aug. 31.....	896.25	11,490	+89.9	916.22	3,730	0
Sept. 30.....	891.65	8,770	-45.7	920.88	5,630	+31.9
WTR YR 1972.....	-	-	-22.7	-	-	+3.6

MONONGAHELA RIVER BASIN

241

03072000 Dunkard Creek at Shannopin, Pa.

LOCATION.--Lat 39°45'33", long 79°58'15", Greene County, on left bank at Shannopin, 1,300 ft upstream from highway bridge at mine buildings, 1.2 miles north of Dunkard, 3.5 miles upstream from mouth, and 4 miles southwest of Greensboro.

DRAINAGE AREA.--229 sq mi.

PERIOD OF RECORD.--October 1940 to current year. Prior to December 1940 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Altitude of gage is 806 ft (by barometer).

AVERAGE DISCHARGE.--32 years, 263 cfs (15.60 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,900 cfs June 23 (gage height, 9.49 ft); minimum, 6.7 cfs Sept. 14, 23-25 (gage height, 1.08 ft).

Period of record: Maximum discharge, 16,800 cfs June 4, 1941 (gage height, 14.02 ft), from rating curve extended above 10,000 cfs on basis of slope-area measurement of peak flow; minimum, 0.4 cfs Aug. 28, 1944.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation at low flow by mine pumpage above station.

REVISIONS (WATER YEARS).--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	49	44	747	261	155	830	177	183	61	700	29	11
2	43	92	391	276	160	597	174	177	62	400	28	10
3	41	309	262	823	252	1,340	166	248	51	500	30	9.1
4	38	235	196	545	1,420	1,090	232	403	50	2,030	34	9.1
5	35	148	159	1,130	400	906	618	363	73	1,340	31	10
6	31	108	327	1,190	240	702	468	283	90	1,700	31	10
7	30	92	1,510	653	200	558	415	232	65	806	29	9.6
8	28	78	1,880	413	180	489	946	202	50	456	25	9.1
9	26	66	792	317	200	447	794	234	40	298	22	8.5
10	25	59	452	788	190	378	585	300	35	206	20	8.5
11	25	54	335	1,060	170	310	456	240	30	164	18	8.5
12	23	50	255	746	177	270	365	196	28	142	16	8.5
13	21	46	206	511	906	770	2,600	169	31	113	16	7.4
14	22	44	171	408	2,020	1,540	2,780	155	62	100	15	8.0
15	22	43	164	303	1,240	1,480	1,220	172	131	109	14	11
16	20	44	160	130	1,340	1,130	1,250	244	95	95	13	12
17	20	40	148	170	966	1,270	1,470	280	77	127	14	11
18	20	37	136	182	686	958	926	268	79	218	15	12
19	18	34	123	190	618	678	609	338	65	152	22	11
20	17	34	121	188	492	501	495	303	56	110	53	10
21	16	39	134	189	363	405	423	230	49	87	64	9.1
22	15	47	127	198	674	410	650	186	78	72	44	8.0
23	16	56	112	216	854	662	1,120	161	3,820	61	30	7.0
24	32	58	107	364	906	603	730	131	2,690	51	23	6.7
25	78	64	107	596	1,180	510	543	107	1,100	43	20	6.7
26	93	69	101	647	1,820	393	410	90	600	35	19	7.4
27	80	79	106	409	1,450	360	320	74	450	29	28	11
28	65	504	109	320	926	310	255	64	350	28	26	15
29	54	812	108	261	918	257	214	57	1,100	26	21	18
30	44	1,400	133	219	-----	232	186	53	1,300	28	16	15
31	40	-----	264	166	-----	202	-----	56	-----	30	15	-----
TOTAL	1,087	4,775	9,943	13,869	21,103	20,588	21,597	6,199	12,768	10,256	781	298.2
MEAN	35.1	159	321	447	728	664	720	200	426	331	25.2	9.94
MAX	93	1,400	1,880	1,190	2,020	1,540	2,780	403	3,820	2,030	64	18
MIN	15	34	101	130	155	202	166	53	28	26	13	6.7
CFSM	1.15	1.69	1.40	1.95	3.18	2.90	3.14	1.87	1.86	1.45	1.11	1.04
IN.	1.18	1.78	1.62	2.25	3.43	3.34	3.51	1.01	2.07	1.67	1.13	1.05

CAL YR 1971 TOTAL 97,939.0 MEAN 268 MAX 4,190 MIN 2.5 CFSM 1.17 IN 15.91
WTR YR 1972 TOTAL 123,264.2 MEAN 337 MAX 3,820 MIN 6.7 CFSM 1.47 IN 20.02

PEAK DISCHARGE (BASE 4,000 CFS).--Apr. 13 (2300) 5,760 cfs (9.42 ft); June 23 (1600) 5,900 cfs (9.49 ft).

MONONGAHELA RIVER BASIN

03072500 Monongahela River at Greensboro, Pa.

LOCATION.--Lat 39°47'15", long 79°55'26", Greene County, on left bank on land guide wall, 950 ft upstream from dam at lock 7, at Greensboro, 0.4 mile upstream from Georges Creek, 2.0 miles downstream from Dunkard Creek, 4.3 miles downstream from Cheat River, and at mile 85.2.

DRAINAGE AREA.--4,407 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder and concrete dam control. Datum of gage is 767.55 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--34 years, 7,988 cfs (24.62 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 103,000 cfs June 23 (gage height, 23.64 ft); minimum daily, 753 cfs June 11.

Period of record: Maximum discharge, 134,000 cfs Mar. 7, 1967 (gage height, 29.61 ft); minimum daily, 204 cfs Sept. 1-3, 5, 1946; minimum gage height, 10.23 ft Apr. 29, 1941.

Flood of July 1888 reached a stage of about 36 ft, from high-water profile by Corps of Engineers. Flood of Mar. 18, 1936, reached a stage of 28.4 ft (discharge, 130,000 cfs).

REMARKS.--Records good above 5,000 cfs and fair below except those below 1,000 cfs, which are poor. Flow regulated since 1938 by Tygart Lake 66 miles upstream (see p. 261) and since 1926 by Lake Lynn 8 miles upstream (combined capacity, 357,300 acre-ft).

REVISIONS (WATER YEARS).--WSP 1113: 1939(M), 1941(M). WSP 1435: 1939. WSP 1907: 1936(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	6,620	4,460	27,400	2,570	9,930	42,100	5,850	6,290	3,910	27,000	3,340	1,090
2	3,720	7,970	22,700	4,410	5,380	34,900	3,370	6,750	3,100	21,400	5,420	1,000
3	3,510	13,000	17,800	12,600	8,100	45,300	7,450	12,900	1,590	22,900	4,920	1,030
4	4,330	10,500	10,300	11,500	20,100	36,200	12,200	18,800	1,170	22,900	3,530	1,320
5	3,490	8,200	7,630	19,900	15,000	32,200	20,000	23,100	2,500	20,800	5,840	1,290
6	4,020	6,900	15,400	29,300	10,100	28,000	21,100	23,000	2,340	24,800	4,990	1,930
7	3,240	4,800	22,600	23,000	10,900	25,000	21,800	17,900	1,600	24,800	6,630	2,250
8	2,930	4,750	34,900	19,900	9,540	21,100	32,000	10,300	1,820	20,400	6,230	1,260
9	1,980	5,260	23,300	14,100	9,440	17,100	28,700	10,500	2,060	12,100	5,130	1,140
10	1,760	2,440	22,200	25,000	8,060	13,900	23,700	14,200	1,550	11,400	3,290	986
11	3,260	2,950	19,100	30,100	6,620	11,800	19,700	14,700	753	4,490	1,730	1,580
12	2,620	3,130	12,600	29,800	5,160	6,440	14,400	14,900	1,750	4,720	1,150	1,540
13	2,140	2,370	11,800	23,800	15,000	13,400	20,300	13,000	1,680	3,610	2,110	1,330
14	1,130	2,450	10,600	17,300	21,400	21,500	32,600	7,800	3,260	3,280	2,070	1,640
15	2,250	2,480	6,320	14,300	16,100	23,600	25,800	8,300	1,750	2,120	1,860	1,700
16	1,180	2,890	4,730	9,650	18,700	20,600	23,500	8,170	4,600	2,690	1,880	1,470
17	1,080	1,840	5,040	8,550	16,600	25,300	32,400	9,630	1,670	5,720	2,170	1,090
18	1,980	1,590	3,700	7,700	14,100	22,900	28,600	8,710	3,170	3,930	3,920	2,000
19	1,760	2,060	2,730	7,700	11,600	17,000	23,700	9,390	2,920	2,490	3,810	1,210
20	1,880	1,830	6,400	8,390	8,490	15,500	21,800	8,870	5,920	2,800	1,890	1,540
21	1,610	2,070	7,490	11,900	8,520	16,900	15,300	7,940	5,370	3,580	2,740	1,660
22	1,390	2,670	9,180	15,100	10,100	15,400	17,900	7,370	9,170	1,760	2,770	1,110
23	1,640	2,750	8,270	15,000	21,500	16,100	27,600	8,000	73,200	879	3,420	939
24	1,930	3,410	7,040	15,400	26,500	15,800	27,700	5,610	65,600	1,520	1,470	975
25	2,980	3,760	4,310	18,300	36,800	11,400	25,100	4,990	39,800	2,020	1,680	1,870
26	5,400	4,700	3,140	17,300	54,800	7,690	22,600	3,910	32,000	1,300	1,060	1,200
27	5,210	4,190	5,760	17,000	46,100	11,500	19,500	4,000	27,200	1,510	1,090	1,020
28	4,150	9,690	5,030	16,700	37,400	12,300	13,400	1,250	25,100	1,380	2,320	960
29	4,010	18,000	6,980	14,800	36,800	11,700	4,680	1,940	24,100	983	1,720	1,510
30	1,830	34,500	6,550	11,700	-----	8,440	4,040	2,600	19,900	800	1,340	900
31	1,480	-----	3,490	11,600	-----	6,680	-----	2,820	-----	2,290	2,780	-----
TOTAL	86,510	177,610	354,490	481,370	518,840	607,750	596,790	297,640	370,553	262,372	94,500	40,540
MEAN	2,791	5,920	11,440	15,530	17,890	19,600	19,890	9,601	12,350	8,464	3,048	1,351
MAX	6,620	34,500	34,900	30,100	54,800	45,300	32,600	23,100	73,200	27,000	6,830	2,250
MIN	1,080	1,590	2,730	2,570	5,160	6,440	3,370	1,250	753	800	1,060	900
(\neq)	-264	+47.7	-880	-11.5	+1,820	-1,540	+1,370	+43.9	+1,360	-1,320	-85.2	-562
MEAN \neq	2,527	5,968	10,560	15,520	19,710	18,060	21,260	9,645	13,710	7,144	2,963	789
CFSM \neq	.57	1.35	2.40	3.52	4.47	4.10	4.82	2.19	3.11	1.62	.67	.18
IN. \neq	.66	1.51	2.77	4.06	4.82	4.73	5.38	2.52	3.47	1.87	.77	.20

CAL YR 1971 TOTAL 3,095,203 MEAN 8,480 MAX 57,800 MIN 350 MEAN \neq 8,454 CFSM \neq 1.92 IN. \neq 26.05
WTR YR 1972 TOTAL 3,888,965 MEAN 10,630 MAX 73,200 MIN 753 MEAN \neq 10,610 CFSM \neq 2.41 IN. \neq 32.76

\neq Change in contents, equivalent in cubic feet per second, in Tygart Lake and Lake Lynn. Records of contents in Lake Lynn furnished by Allegheny Power Service Corp.

\neq Adjusted for change in reservoir contents.

MONONGAHELA RIVER BASIN

243

03072590 Georges Creek at Smithfield, Pa.

LOCATION.--Lat 39°47'44", long 79°47'47", Fayette County, on right bank at downstream side of bridge on Georges Township Road at Smithfield, 1.6 miles upstream from Mountain Creek, and 2.5 miles southwest of Fairchance.

DRAINAGE AREA.--16.3 sq mi.

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

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 959.44 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 17.0 cfs (14.16 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,640 cfs June 23 (gage height, 10.01 ft, from floodmark), from rating curve extended above 480 cfs on basis of contracted-opening measurement of peak flow, minimum, 0.34 cfs Sept. 23, 24 (gage height, 1.92 ft).

Period of record: Maximum discharge, 1,640 cfs June 23, 1972 (gage height, 10.01 ft, from floodmark), from rating curve extended above 480 cfs on basis of contracted-opening measurement of peak flow; no flow Aug. 19, 1965, Sept. 14, 1966.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Occasional regulation from unknown upstream source.

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	6.6	9.0	33	14	12	110	13	16	6.2	40	2.4	.48
2	6.2	15	22	25	11	100	12	17	5.4	27	2.3	.53
3	6.2	11	17	25	64	206	11	31	5.1	29	2.2	.58
4	5.4	7.4	14	25	60	88	41	27	9.5	29	3.0	.74
5	5.1	6.2	12	69	30	69	37	26	7.8	27	2.6	.68
6	4.8	5.8	34	45	22	46	31	23	5.8	37	1.9	.53
7	4.5	6.2	105	34	18	38	39	22	5.1	29	2.2	.40
8	4.2	5.1	70	26	16	38	37	21	4.0	23	2.0	.40
9	3.8	4.8	35	29	14	32	32	45	4.0	18	1.7	.48
10	3.8	5.1	25	45	13	30	29	65	8.2	14	1.2	.44
11	3.8	4.8	21	56	12	25	27	46	4.5	12	1.1	.40
12	3.2	4.5	18	43	11	27	24	34	3.6	9.5	1.0	.44
13	2.8	4.2	16	38	102	572	163	27	4.8	8.6	1.2	.53
14	3.0	4.0	14	34	56	254	85	22	7.8	9.0	.94	2.1
15	2.6	3.8	13	25	78	130	107	23	5.4	9.0	1.3	1.9
16	2.4	3.8	11	12	64	178	226	18	11	14	1.1	.68
17	2.2	3.6	10	16	44	139	224	19	8.0	17	2.8	.53
18	1.9	3.6	9.4	18	37	91	89	17	6.0	9.5	1.8	.53
19	1.8	4.0	9.0	19	35	62	59	14	5.4	7.0	1.7	.68
20	1.7	4.8	10	18	26	46	51	13	5.0	5.8	1.2	.53
21	1.7	6.6	9.0	23	23	38	35	12	100	5.1	.87	.44
22	1.7	5.4	8.2	21	53	43	61	11	45	4.5	.80	.44
23	2.0	4.5	7.8	26	34	34	51	10	1,000	4.0	.74	.40
24	4.0	5.4	8.2	29	55	29	46	8.8	350	3.8	.68	.40
25	4.2	7.4	7.8	28	61	25	39	11	150	3.6	.58	.68
26	4.0	7.8	8.2	22	156	22	31	9.5	80	3.2	.48	.58
27	2.6	14	9.0	21	120	20	26	7.4	45	3.0	.80	.53
28	2.1	24	9.5	21	110	18	22	7.0	34	2.8	.87	.63
29	1.9	35	8.6	17	130	17	20	6.2	81	2.4	.63	.58
30	1.7	58	17	15	-----	16	18	6.2	65	2.2	.53	1.4
31	1.7	-----	16	13	-----	13	-----	7.0	-----	2.5	.44	-----
TOTAL	103.6	284.8	607.7	852	1,467	2,556	1,686	622.1	2,072.6	411.5	43.06	19.66
MEAN	3.34	9.49	19.6	27.5	50.6	82.5	56.2	20.1	69.1	13.3	1.39	.66
MAX	6.6	58	105	69	156	572	226	65	1,000	40	3.0	2.1
MIN	1.7	3.6	7.8	12	11	13	11	6.2	3.6	2.2	.44	.40
CFSM	.20	.58	1.20	1.69	3.10	5.06	3.45	1.23	4.24	.82	.09	.04
IN.	.24	.65	1.39	1.94	3.35	5.83	3.85	1.42	4.73	.94	.10	.04

CAL YR 1971 TOTAL 7,309.10 MEAN 20.0 MAX 350 MIN .56 CFSM 1.23 IN 16.68
WTR YR 1972 TOTAL 10,726.02 MEAN 29.3 MAX 1,000 MIN .40 CFSM 1.80 IN 24.48

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-13	0615	7.15	968	6-23	Unknown	10.01	1,640
4-16	1930	5.47	554				

NOTE.--No gage-height record June 16-27.

f From floodmark.

MONONGAHELA RIVER BASIN

03072840 Tenmile Creek near Clarksville, Pa.

LOCATION.--Lat 39°59'51", long 80°02'31", Greene County, on right bank 75 ft upstream from dam, 200 ft upstream from single-span steel-truss bridge, 1.5 miles north of Clarksville, and 2.3 miles upstream from South Fork Tenmile Creek.

DRAINAGE AREA.--133 sq mi.

PERIOD OF RECORD.--October 1968 to current year (monthly discharge only October, November 1968).

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 807.06 ft above mean sea level (Corps of Engineers bench mark).

EXTREMES.--Current year: Maximum discharge, 10,400 cfs Mar. 13 (gage height, 7.28 ft, from floodmarks); from rating curve extended above 4,500 cfs; minimum, 2.0 cfs Sept. 18 (gage height, 0.17 ft).
Period of record: Maximum discharge, 10,400 cfs Mar. 13, 1972 (gage height, 7.28 ft, from floodmarks); from rating curve extended above 4,500 cfs; minimum since November 1968, 2.0 cfs Sept. 18, 1972 (gage height, 0.17 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	12	14	122	86	97	411	138	125	32	150	22	4.9
2	10	23	81	104	86	377	135	120	28	113	21	4.2
3	9.7	33	59	162	127	869	122	125	30	115	20	4.0
4	10	25	54	144	273	462	160	113	36	106	20	4.2
5	9.9	20	47	338	137	383	177	104	32	189	19	4.4
6	9.3	17	810	280	176	283	158	90	21	223	16	4.5
7	9.1	17	600	212	161	281	326	82	21	158	17	4.0
8	9.0	15	400	168	90	407	350	79	18	125	23	4.0
9	8.7	15	250	160	110	303	275	88	15	106	20	3.0
10	8.1	15	186	295	90	249	234	86	28	88	15	2.7
11	8.3	14	149	300	94	209	206	70	26	83	13	2.9
12	8.5	13	116	238	96	593	180	65	18	70	11	4.0
13	8.5	13	100	206	510	6,450	2,530	60	24	63	11	3.8
14	9.1	12	85	177	523	1,130	812	57	66	56	11	3.8
15	8.5	12	125	132	423	724	1,360	60	46	50	11	3.8
16	8.9	12	122	66	433	1,220	1,030	67	82	111	9.8	3.2
17	8.7	12	106	120	301	892	764	75	74	123	12	2.4
18	8.3	12	94	128	240	559	440	79	39	82	15	2.7
19	8.0	12	81	138	232	392	326	82	31	61	18	3.4
20	7.7	14	86	107	177	300	310	68	27	52	14	5.1
21	7.5	19	84	113	167	258	250	61	588	46	13	5.8
22	7.5	22	72	104	287	295	410	56	280	40	10	4.4
23	7.7	21	62	142	236	290	392	51	4,400	36	8.9	2.9
24	43	20	67	171	248	254	290	43	1,070	32	7.6	2.9
25	59	23	62	223	292	230	242	39	552	29	6.5	3.8
26	31	25	61	187	466	206	202	35	342	28	7.6	3.4
27	23	32	65	152	346	189	177	30	238	26	8.0	6.8
28	18	100	67	140	353	171	155	28	180	27	7.6	56
29	15	125	69	121	447	158	142	27	174	25	6.7	29
30	14	188	73	107	-----	174	132	27	189	23	6.0	150
31	11	-----	96	75	-----	148	-----	28	-----	23	6.2	-----
TOTAL	417.0	895	4,451	5,096	7,218	18,867	12,425	2,120	8,707	2,459	406.9	340.0
MEAN	13.5	29.8	144	164	249	609	414	68.4	290	79.3	13.1	11.3
MAX	59	188	810	338	523	6,450	2,530	125	4,400	223	23	150
MIN	7.5	12	47	66	86	148	122	27	15	23	6.0	2.4
CFSM	.10	.22	1.08	1.23	1.87	4.58	3.11	.51	2.18	.60	.10	.09
IN.	.12	.25	1.24	1.43	2.02	5.28	3.48	.59	2.44	.69	.11	.10

CAL YR 1971 TOTAL 45,777.5 MEAN 125 MAX 1,580 MIN 6.6 CFSM .94 IN 12.80
WTR YR 1972 TOTAL 63,401.9 MEAN 173 MAX 6,450 MIN 2.4 CFSM 1.30 IN 17.73

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 6	1530	3.81	1,490	4-13	1230	5.39	4,240
3- 3	0400	3.54	1,210	4-15	1645	4.57	2,530
3-13	a1030	f7.28	10,400	6-21	1015	3.55	1,220
3-16	1015	3.95	1,660	6-23	0815	6.28	6,620

a About.

f From floodmark.

MONONGAHELA RIVER BASIN

245

03073000 South Fork Tenmile Creek at Jefferson, Pa.

LOCATION.--Lat 39°55'23", long 80°04'22", Greene County, on right bank at downstream side of highway bridge, 1 mile southwest of Jefferson, and 3.1 miles downstream from Ruff Creek.

DRAINAGE AREA.--180 sq mi.

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for October 1931, published in WSP 1305.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 852.54 ft above mean sea level, adjustment of 1907. Prior to Oct. 21, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--41 years, 196 cfs (14.79 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,980 cfs June 23 (gage height, 12.07 ft); minimum, 1.5 cfs Sept. 20, 23, 24 (gage height, 0.67 ft).

Period of record: Maximum discharge, 13,800 cfs June 4, 1941 (gage height, 18.45 ft, from floodmark in gage house), from rating curve extended above 7,600 cfs on basis of slope-area measurement of peak flow; minimum observed, 0.05 cfs Sept. 3, 1938 (gage height, 0.36 ft).

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

REVISIONS (WATER YEARS).--WSP 1305: 1949. WSP 1435: 1932-34, 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	15	16	308	120	100	664	151	149	29	509	15	3.9
2	13	37	181	150	80	537	150	142	25	266	14	3.6
3	12	78	128	250	110	1,370	140	170	23	355	18	66
4	12	54	103	200	696	680	189	168	21	678	53	22
5	12	36	86	800	300	500	247	147	28	1,290	34	14
6	11	27	1,220	400	200	430	218	123	22	1,070	23	9.3
7	11	24	900	270	150	400	347	109	18	545	18	6.3
8	9.3	21	600	200	120	552	494	102	14	319	16	4.7
9	8.5	17	400	180	130	442	459	129	13	230	19	4.4
10	7.9	15	303	520	110	347	361	135	14	175	15	3.9
11	8.0	15	223	473	90	261	285	104	12	156	12	2.9
12	7.7	14	166	354	100	235	232	90	11	120	10	2.5
13	7.4	13	139	275	1,020	2,460	2,450	83	11	101	9.1	2.5
14	7.0	13	121	234	1,210	1,380	1,310	81	25	85	8.1	2.5
15	7.1	12	154	177	901	1,000	1,730	86	38	72	6.6	2.4
16	6.7	12	160	80	956	1,250	1,460	89	38	111	5.7	2.9
17	6.1	11	144	100	684	1,210	971	88	65	125	12	2.6
18	6.0	10	130	129	497	814	599	111	30	89	16	2.2
19	6.0	10	109	146	400	558	422	92	21	67	24	1.9
20	6.0	12	118	123	280	396	420	83	16	52	40	1.7
21	5.3	15	121	127	220	314	320	79	1,030	42	26	1.7
22	4.8	22	103	115	450	425	811	72	505	36	16	1.7
23	5.3	22	85	131	350	527	839	58	5,410	31	12	1.6
24	40	19	88	145	400	416	560	49	2,330	26	8.5	1.6
25	80	25	84	253	500	339	421	41	930	22	8.1	1.7
26	48	25	86	257	1,080	274	297	35	519	19	7.8	1.8
27	34	35	90	200	787	236	233	28	307	17	9.3	1.9
28	25	230	92	187	672	207	197	25	210	17	8.8	9.2
29	21	342	96	173	781	184	174	23	1,170	17	6.5	7.6
30	17	595	100	137	-----	195	156	23	1,010	17	5.2	25
31	16	-----	140	90	-----	162	-----	33	-----	16	4.4	-----
TOTAL	476.1	1,777	6,778	6,996	13,374	18,765	16,643	2,747	13,895	6,675	481.1	216.0
MEAN	15.4	59.2	219	226	461	605	555	88.6	463	215	15.5	7.20
MAX	80	595	1,220	800	1,210	2,460	2,450	170	5,410	1,290	53	66
MIN	4.8	10	84	80	80	162	140	23	11	16	4.4	1.6
CFSM	.09	.33	1.22	1.26	2.56	3.36	3.08	.49	2.57	1.19	.09	.04
IN.	.10	.37	1.40	1.45	2.76	3.88	3.44	.57	2.87	1.38	.10	.04

CAL YR 1971 TOTAL 74,139.6 MEAN 203 MAX 5,210 MIN 3.2 CFSM 1.13 IN 15.32
WTR YR 1972 TOTAL 88,823.2 MEAN 243 MAX 5,410 MIN 1.6 CFSM 1.35 IN 18.36

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-13	1000	8.07	3,650	6-23	1400	12.07	6,980
4-13	1300	8.55	3,990				

MONONGAHELA RIVER BASIN

03074300 Lick Run at Hopwood, Pa.

LOCATION.--Lat 39°52'04", long 79°41'40", Fayette County, on left bank at southeast edge of Hopwood, along road leading to Lick Hollow State Park, 0.4 mile upstream from road leading south from Hopwood to Fairchance, and 1.5 miles upstream from Benningtons Spring Run.

DRAINAGE AREA.--3.80 sq mi.

PERIOD OF RECORD.--Annual maximum and occasional discharge measurements, water years 1959-66. October 1966 to current year.

GAGE.--Water stage recorder, crest-stage gage at present site, and concrete V-notch control. Altitude of gage is 1,200 ft above mean sea level (from crest-stage gage datum elevation at former site). Sept. 10, 1958 to Sept. 30, 1966, crest-stage gage at site 500 ft downstream at different datum.

AVERAGE DISCHARGE.--6 years, 6.62 cfs (23.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 690 cfs June 23 (gage height, 4.30 ft), from rating curve extended above 310 cfs as explained below; maximum gage height, 4.37 ft June 23 (backwater from collapsed bridge); minimum discharge, 0.07 cfs Sept. 7, 8, 11, 12 (gage height, 1.09 ft).

Period of record: Maximum discharge, 690 cfs June 23, 1972 (gage height, 4.30 ft) from rating curve extended above 310 cfs on basis of contracted-opening measurement of peak flow; maximum gage height, 4.37 ft June 23, 1972 (backwater from collapsed bridge); minimum discharge, 0.07 cfs Sept. 13, 14, 1970, Sept. 7, 8, 11, 12, 1972; minimum gage height, 1.09 ft Sept. 7, 8, 11, 12, 1972.

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	2.7	1.5	17	7.3	3.0	93	3.5	4.0	2.0	16	1.1	.10
2	2.2	2.5	10	13	2.9	81	3.5	4.3	1.7	11	1.7	.10
3	2.0	3.3	7.3	14	10	67	3.3	5.8	1.6	9.8	2.4	.11
4	1.7	2.5	5.8	12	12	36	10	6.2	2.7	8.8	2.0	.35
5	1.5	2.0	5.0	22	6.5	23	10	7.3	2.2	9.3	1.7	.44
6	1.4	1.6	8.8	17	5.4	14	8.8	7.3	1.6	12	1.4	.11
7	1.4	1.7	24	14	4.7	11	11	6.9	1.5	11	1.2	.09
8	1.3	1.4	22	9.6	3.8	14	9.6	6.5	1.4	8.8	1.1	.08
9	1.3	1.2	15	9.6	3.4	13	8.0	18	1.5	7.6	.92	.10
10	1.2	1.3	11	18	3.3	11	8.0	31	2.2	6.4	.76	.10
11	1.2	1.2	8.0	20	3.3	8.0	7.6	22	1.4	5.1	.55	.08
12	1.3	1.1	6.5	16	3.0	46	6.9	14	1.3	4.2	.44	.08
13	1.1	1.0	5.4	14	8.0	233	55	9.6	2.0	3.9	.44	.11
14	1.0	.95	5.0	10	6.9	79	36	7.6	3.0	3.3	.35	.39
15	1.1	.90	5.0	7.3	8.8	52	39	6.5	2.2	2.7	.39	.61
16	1.2	.86	4.3	3.0	11	49	55	9.6	3.0	3.1	.35	.31
17	.90	.84	4.0	4.5	8.8	50	61	23	2.7	4.8	2.3	.20
18	.80	.80	3.5	5.4	7.3	34	32	19	2.5	3.1	1.6	.39
19	.74	2.0	3.3	5.0	6.5	23	20	14	2.7	1.5	1.3	.35
20	.70	2.7	3.8	4.7	5.4	15	15	11	2.0	1.0	1.0	.20
21	.70	3.0	3.5	5.0	4.7	12	11	8.0	4.6	.76	.61	.13
22	.80	3.3	3.0	5.4	7.6	13	19	6.9	100	.61	.49	.10
23	1.0	3.0	3.0	7.3	7.3	11	20	5.2	440	.50	.44	.09
24	1.7	3.0	3.0	8.0	9.6	9.6	16	4.3	120	.39	.31	.15
25	1.7	2.7	3.0	8.8	12	8.8	12	3.8	53	.84	.30	.15
26	1.1	2.7	3.0	7.0	36	6.5	9.6	3.3	29	.92	.44	.13
27	.66	5.8	3.3	5.6	26	5.8	7.3	2.7	18	.84	.74	.20
28	.58	12	5.0	4.7	23	5.4	6.5	2.5	16	.76	.55	.27
29	.51	19	5.0	4.0	61	4.7	5.4	2.2	34	.61	.39	.20
30	.51	35	7.6	3.5	-----	4.3	4.7	2.2	23	.55	.23	.84
31	.51	-----	8.0	3.2	-----	3.8	-----	2.2	-----	.61	.13	-----
TOTAL	36.51	120.85	222.1	288.9	311.2	1,036.9	514.7	276.9	878.8	140.79	27.63	6.56
MEAN	1.18	4.03	7.16	9.32	10.7	33.4	17.2	8.93	29.3	4.54	.89	.22
MAX	2.7	35	24	22	61	233	61	31	440	16	2.4	.84
MIN	.51	.80	3.0	3.0	2.9	3.8	3.3	2.2	1.3	.39	.13	.08
CFSM	.31	1.06	1.88	2.45	2.82	8.79	4.53	2.35	7.71	1.19	.23	.06
IN.	.36	1.18	2.17	2.83	3.05	10.15	5.04	2.71	8.60	1.38	.27	.06

CAL YR 1971 TOTAL 2,509.70 MEAN 6.88 MAX 197 MIN .19 CFSM 1.81 IN 24.57
WTR YR 1972 TOTAL 3,861.84 MEAN 10.6 MAX 440 MIN .08 CFSM 2.79 IN 37.81

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-1	1630	2.40	120	4-16	1500	2.34	105
3-13	0015	3.85	555	6-23	0500	4.30	690

MONONGAHELA RIVER BASIN

247

03074500 Redstone Creek at Waltersburg, Pa.

LOCATION.--Lat 39°58'48", long 79°45'52", Fayette County, near center of span on downstream side of highway bridge at Waltersburg, 400 ft upstream from Bolden Run, and 0.9 mile upstream from Allen Run.

DRAINAGE AREA.--73.7 sq mi.

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for October 1942, published in WSP 1305.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 883.28 ft above mean sea level.

AVERAGE DISCHARGE.--30 years, 96.6 cfs (17.80 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,660 cfs June 23 (gage height, 14.83 ft); minimum observed, 22 cfs Sept. 22, 23, 24, 25, 26; minimum gage height observed, 0.58 ft Sept. 22, 23, 25, 26.
Period of record: Maximum discharge, 8,660 cfs June 23, 1972 (gage height, 14.83 ft), minimum observed, 4.2 cfs Aug. 2, 1962; minimum gage height observed, 0.58 ft Sept. 22, 23, 25, 26, 1972.

REMARKS.--Records fair. Some regulation at low flow by mine pumpage into stream above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1435: 1943-45(M), 1946, 1947(M), 1948(P), 1949-50(M), 1951(P), 1952(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	50	48	107	69	56	482	91	91	57	184	44	28
2	43	49	85	126	54	479	89	95	43	148	39	28
3	41	39	71	116	128	700	87	123	38	307	44	27
4	40	33	64	118	212	420	137	107	36	272	41	27
5	35	32	75	280	132	339	117	100	66	322	38	27
6	37	28	238	188	116	231	114	89	44	295	32	25
7	38	35	370	148	97	204	155	98	38	197	38	25
8	38	27	325	118	80	202	184	85	44	155	35	25
9	35	28	238	123	73	158	148	186	44	132	34	27
10	32	29	143	168	63	150	145	194	58	110	35	26
11	33	27	122	181	58	130	135	150	35	100	28	25
12	32	27	100	152	86	180	150	126	35	81	30	26
13	30	24	87	135	412	2,620	1,510	104	32	84	31	25
14	34	25	100	127	233	1,040	546	98	153	72	30	25
15	32	25	91	101	226	712	962	107	95	65	31	28
16	30	25	78	73	254	728	787	116	100	85	28	25
17	29	27	70	73	192	640	708	165	74	194	51	23
18	30	25	63	77	152	465	423	129	73	100	40	26
19	30	28	62	95	152	330	288	124	130	73	52	27
20	26	28	66	81	123	280	258	103	64	61	33	25
21	25	40	60	90	133	215	210	95	92	59	28	23
22	25	32	55	98	260	232	328	90	669	51	27	22
23	25	30	51	113	170	208	248	71	6,620	37	30	22
24	38	27	52	110	224	169	197	69	1,760	48	28	22
25	49	33	49	120	243	148	165	59	672	51	29	22
26	45	32	54	91	632	135	148	64	395	46	32	22
27	30	60	62	78	178	126	110	48	268	46	34	25
28	27	73	71	87	322	117	117	42	184	46	31	23
29	27	122	69	87	409	110	109	40	248	38	31	25
30	25	186	85	65	-----	113	90	38	232	37	29	39
31	25	-----	80	60	-----	95	-----	53	-----	32	28	-----
TOTAL	1,036	1,244	3,243	3,548	5,670	12,158	8,756	3,059	12,399	3,528	1,061	765
MEAN	33.4	41.5	105	114	196	392	292	98.7	413	114	34.2	25.5
MAX	50	186	370	280	632	2,620	1,510	194	6,620	322	52	39
MIN	25	24	49	60	54	95	87	38	32	32	27	22
CFSM	.45	.56	1.42	1.55	2.66	5.32	3.96	1.34	5.60	1.55	.46	.35
IN.	.52	.63	1.64	1.79	2.86	6.14	4.42	1.54	6.26	1.78	.54	.39

CAL YR 1971 TOTAL 36,811 MEAN 101 MAX 1,650 MIN 22 CFSM 1.37 IN 18.58
WTR YR 1972 TOTAL 56,467 MEAN 154 MAX 6,620 MIN 22 CFSM 2.09 IN 28.50

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-13	0800	9.55	4,100	4-15	1800	5.48	1,650
3-14	1900	4.82	1,320	6-23	1300	14.83	8,660
4-13	0600	6.15	1,980				

MONONGAHELA RIVER BASIN

03075000 Monongahela River at Charleroi, Pa.

LOCATION.--Lat 40°08'58", long 79°54'06", Westmoreland County, on right bank at end of land guide wall, 1,100 ft downstream from dam at lock 4 at Charleroi, 1.3 miles downstream from Maple Creek, and at mile 41.3.

DRAINAGE AREA.--5,213 sq mi.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge prior to 1940, adjusted for reservoir contents, published in WSP 1305. Records for March 1886 to March 1905 (high-water periods only), published in WSP 169, are unreliable and should not be used (peak discharge of July 11, 1888, as published in WSP 783, is still considered reliable).

GAGE.--Water-stage recorder and concrete dam (17.5 miles downstream). Datum of gage is 717.40 ft above mean sea level (Corps of Engineers bench mark). Prior to Oct. 1, 1967, water-stage recorder at site 0.4 mile upstream at datum 17.93 ft higher. Oct. 1, 1965, to Sept. 30, 1967, auxiliary staff gage and Apr. 14, 1966, to Sept. 30, 1967, auxiliary water-stage recorder at sites 17.5 miles and 17.3 miles, respectively, downstream at different datums.

AVERAGE DISCHARGE.--39 years, 8,871 cfs (23.11 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge about 110,000 cfs June 24; maximum gage height, 35.4 ft June 24 (backwater from Youghiogheny River); minimum discharge not determined; minimum daily, 605 cfs June 11. Period of record: Maximum discharge, 158,000 cfs Mar. 7, 1967 (gage height, 41.63 ft, from floodmark in gage well, present datum); minimum not determined. Maximum stage since 1887, 42.0 ft on lower gage, at old lock 0.4 mile downstream, or about 42.7 ft (revised) on present gage, July 11, 1888 (discharge, about 156,000 cfs).

REMARKS.--Records fair above 2,000 cfs and poor below. Flow regulated by locks above station, since 1938 by Tygart Lake (see p. 261) and since 1926 by Lake Lynn (combined capacity, 357,300 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 758: Drainage area. WSP 783: 1888(M). WSP 1435: 1934, 1936. See also PERIOD OF RECORD.

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	6,620	3,860	31,800	3,220	11,200	49,600	7,430	6,680	2,540	28,000	3,450	2,110
2	4,990	7,050	24,700	4,290	6,450	42,300	3,890	8,140	2,620	23,800	4,860	1,090
3	3,570	12,100	19,500	12,200	7,760	50,800	6,250	12,900	1,900	22,500	4,920	1,330
4	3,930	12,300	13,000	13,300	20,600	48,000	11,100	18,800	1,130	26,900	3,690	1,380
5	3,870	8,380	7,920	19,900	17,700	39,700	20,300	25,200	2,510	23,600	5,210	1,600
6	3,390	7,500	16,500	34,400	11,700	34,500	21,800	25,500	2,030	28,200	4,890	1,520
7	3,990	5,290	25,900	27,000	11,800	28,900	21,900	20,500	1,050	27,600	6,690	1,870
8	2,590	4,480	38,200	21,300	10,300	24,600	34,700	12,800	1,570	22,300	5,690	2,000
9	2,370	5,260	29,600	16,100	10,300	20,900	33,500	11,100	1,800	14,800	5,050	1,070
10	1,850	2,840	25,000	25,400	8,680	17,000	26,500	15,700	1,520	11,600	3,240	1,180
11	2,480	2,560	20,200	33,400	7,730	14,300	22,300	15,600	605	7,060	2,110	1,260
12	2,980	3,470	14,100	35,200	5,960	9,570	17,100	15,900	1,110	5,120	1,220	1,450
13	2,760	2,680	13,000	27,800	13,600	34,300	27,800	15,000	1,290	4,350	1,520	1,550
14	1,310	2,500	12,200	19,500	28,400	30,100	41,900	9,800	2,840	3,360	1,870	1,700
15	1,440	2,680	8,240	16,700	19,500	34,500	36,700	8,670	1,850	3,070	1,800	1,350
16	1,320	2,480	5,660	10,700	22,000	27,600	32,400	8,860	4,230	3,420	1,700	1,500
17	1,190	2,140	5,890	9,840	19,800	34,100	40,800	10,200	2,050	6,240	1,900	1,260
18	1,500	1,530	4,710	8,740	16,900	29,600	36,800	9,750	2,290	5,340	3,270	1,720
19	2,140	2,190	3,860	8,140	14,700	21,500	28,400	10,700	3,180	3,070	4,080	1,500
20	1,370	1,530	5,970	9,040	10,700	17,800	26,000	9,820	4,570	3,010	2,480	1,290
21	1,540	2,040	8,160	12,500	10,600	19,400	19,000	8,580	6,890	3,960	2,480	1,400
22	1,360	2,280	9,720	15,400	9,920	17,600	19,200	7,820	8,950	2,180	2,760	1,220
23	1,400	2,800	9,320	13,600	22,500	18,800	32,400	8,200	66,000	1,200	3,570	950
24	2,340	3,240	7,480	15,500	27,700	17,900	32,100	6,180	92,100	1,600	3,010	725
25	2,600	3,680	5,520	20,400	38,600	13,900	30,000	6,050	50,000	1,740	2,010	1,110
26	5,120	4,560	3,960	17,800	55,300	10,200	26,000	4,180	38,200	1,720	1,300	1,350
27	5,860	4,200	5,440	18,600	59,200	11,400	22,600	4,060	28,700	1,430	1,400	950
28	4,480	9,300	6,240	18,000	45,200	13,300	17,000	2,370	27,200	1,400	2,500	1,180
29	3,820	15,800	7,600	16,000	41,400	12,600	8,560	1,520	29,600	1,030	2,100	1,450
30	2,460	35,100	6,400	13,600	-----	9,580	5,830	3,220	21,500	1,220	1,500	1,870
31	1,500	-----	4,900	12,600	-----	7,640	-----	1,920	-----	1,600	1,400	-----
TOTAL	88,140	175,820	400,690	530,170	586,200	761,990	710,260	325,720	411,825	292,420	93,670	41,935
MEAN	2,843	5,661	12,930	17,100	20,210	24,580	23,680	10,510	13,730	9,433	3,022	1,398
MAX	6,620	35,100	38,200	35,200	59,200	50,800	41,900	25,500	92,100	28,200	6,690	2,110
MIN	1,190	1,530	3,860	3,220	5,960	7,640	3,890	1,520	605	1,030	1,220	725
(∇)	-264	+47.7	-880	-11.5	+1,820	-1,540	+1,370	+43.9	+1,360	-1,320	-85.2	-562
MEAN ∇	2,579	5,909	12,050	17,090	22,030	23,040	25,050	10,550	15,090	8,113	2,937	836
CFSM ∇	.49	1.13	2.31	3.28	4.23	4.42	4.81	2.02	2.89	1.56	.56	.16
IN. ∇	.56	1.26	2.66	3.78	4.56	5.10	5.37	2.33	3.22	1.80	.65	.18

CAL YR 1971 TOTAL 3,419,287 MEAN 9,368 MAX 60,400 MIN 400 MEAN ∇ 9,342 CFSM ∇ 1.79 IN. ∇ 24.31
WTR YR 1972 TOTAL 4,418,840 MEAN 12,070 MAX 92,100 MIN 605 MEAN ∇ 12,050 CFSM ∇ 2.31 IN. ∇ 31.47

∇ Change in contents, equivalent in cubic feet per second, in Tygart Lake and Lake Lynn. Records of contents in Lake Lynn furnished by Allegheny Power Service Corp.

∇ Adjusted for change in reservoir contents.

MONONGAHELA RIVER BASIN

249

03076500 Youghiogheny River at Friendsville, Md.

LOCATION.--Lat 39°39'13", long 79°24'31", Garrett County, on left bank 0.7 mile upstream from bridge on State Highway 42 at Friendsville, and 1.5 miles upstream from Bear Creek.

DRAINAGE AREA.--295 sq mi.

PERIOD OF RECORD.--August 1898 to December 1904 and October 1940 to current year. October, November 1940 monthly discharge only, published in WSP 1305. September 1922 to September 1926 (gage heights only) in reports of Pennsylvania Department of Forests and Waters.

GAGE.--Water-stage recorder. Datum of gage is 1,487.33 ft above mean sea level. Aug. 17, 1898, to Dec. 31, 1904, and Sept. 1, 1922, to Sept. 30, 1926, nonrecording gages at bridge 0.7 mile downstream at datum 16.24 and 16.29 ft lower, respectively.

AVERAGE DISCHARGE.--38 years (1898-1904, 1940-1972), 632 cfs (29.09 inches per year), adjusted for storage since 1940.

EXTREMES.--Current year: Maximum discharge, 7,250 cfs June 23 (gage height, 6.72 ft); minimum, 24 cfs Sept. 25, 26 (gage height, 1.86 ft); minimum daily, 25 cfs Sept. 25.

Period of record: Maximum discharge, 13,000 cfs Oct. 16, 1954 (gage height, 8.99 ft), from rating curve extended above 5,800 cfs on basis of slope-area measurement of peak flow; minimum daily, 8.2 cfs Sept. 11, 1966.

Maximum stage since 1898, 14.2 ft Mar. 29, 1924, from floodmarks, site and datum then in use, or 10.2 ft, present site and datum (discharge, about 15,600 cfs, from rating curve extended as explained above).

REMARKS.--Records good. Low and medium flow regulated since 1925 by Deep Creek Reservoir (see p. 261). Water-quality records for the current year are published in Part 2 of Water Resources Data for Maryland and Delaware.

REVISIONS (WATER YEARS).--WSP 1385: Drainage area at former site, 1898-1905, 1941(M), 1942, 1944-45, 1948-49, 1951(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	499	307	2,170	369	554	4,360	818	859	436	1,690	387	229
2	348	558	1,340	563	460	5,210	648	763	365	1,110	380	76
3	294	803	989	1,180	444	5,100	752	1,180	210	978	368	71
4	408	619	675	925	330	2,920	1,420	1,370	178	921	358	71
5	423	541	537	1,460	240	1,910	1,840	1,580	303	1,300	451	161
6	403	316	902	1,490	350	1,390	1,340	971	294	1,830	248	172
7	393	292	3,450	1,130	400	1,180	1,320	749	288	1,390	494	176
8	386	383	3,760	753	430	1,670	1,500	813	279	1,100	523	172
9	293	403	2,470	697	410	1,390	1,070	1,110	261	909	428	55
10	195	392	1,680	1,980	440	1,110	1,260	1,200	147	781	392	44
11	337	383	1,200	1,790	420	905	1,130	971	146	594	370	114
12	396	387	892	1,710	230	905	1,010	857	248	630	161	168
13	374	224	897	1,360	210	2,770	2,200	602	251	450	107	214
14	374	172	776	1,230	380	3,140	2,710	519	260	501	233	183
15	381	299	696	794	480	2,490	2,520	788	403	225	266	196
16	205	302	676	480	461	2,260	2,580	1,090	317	286	254	88
17	142	340	581	680	462	2,320	3,450	939	159	436	276	59
18	318	317	412	658	449	1,880	2,440	835	138	387	363	128
19	354	319	330	675	290	1,570	1,820	791	286	366	191	94
20	347	239	660	665	240	1,280	1,580	572	383	436	288	38
21	304	227	906	927	430	1,110	1,390	492	376	372	318	34
22	293	392	700	674	660	1,130	1,840	641	749	163	306	33
23	143	339	725	651	1,000	1,180	2,380	634	5,180	130	282	27
24	136	346	678	889	1,600	1,030	1,930	538	5,460	300	271	26
25	436	248	394	978	2,810	930	1,690	567	3,100	292	299	25
26	668	374	345	884	3,350	944	1,440	480	2,110	382	112	26
27	513	339	609	737	2,840	1,200	1,240	251	1,460	337	138	30
28	408	472	640	714	2,070	918	1,090	222	1,030	359	288	34
29	375	1,240	712	506	3,040	805	986	208	4,460	175	276	49
30	221	3,430	648	442	-----	905	924	386	2,890	109	254	76
31	169	-----	664	505	-----	944	-----	439	-----	338	244	-----
TOTAL	10,536	15,003	32,114	28,496	25,480	56,856	48,318	23,417	32,167	19,277	9,326	2,869
MEAN	340	500	1,036	919	879	1,834	1,611	755	1,072	622	301	95.6
MAX	668	3,430	3,760	1,980	3,350	5,210	3,450	1,580	5,460	1,830	523	229
MIN	136	172	330	369	210	805	648	208	138	109	107	25
MEAN#	205	460	1,119	964	910	1,974	1,618	708	1,139	550	150	33.6
CFM#	.70	1.56	3.79	3.27	3.08	6.69	5.48	2.40	3.86	1.86	.51	.11
IN #	.80	1.73	4.37	3.77	3.32	7.71	6.11	2.77	4.31	2.14	.59	.12
CAL YR 1971	TOTAL 266,059	MEAN 729	MAX 4,720	MIN 37	MEAN# 727	CFM# 727	CFM# 727	CFM# 727	IN# 33.45			
WTR YR 1972	TOTAL 303,859	MEAN 830	MAX 5,460	MIN 25	MEAN# 819	CFM# 819	CFM# 819	CFM# 819	IN# 37.79			

≠ Adjusted for change in contents in Deep Creek Reservoir.

MONONGAHELA RIVER BASIN

03077500 Youghiogheny River at Youghiogheny River Dam, Pa.

LOCATION.--Lat 39°48'19", long 79°21'52", Somerset County, on right bank 800 ft upstream from bridge on State Highway 281, 0.2 mile downstream from Youghiogheny River Dam, 0.2 mile south of Confluence, 0.7 mile upstream from Casselman River, and at mile 73.2.

DRAINAGE AREA.--436 sq mi.

PERIOD OF RECORD.--September 1904 to September 1913 (gage heights only), October 1939 to current year. Monthly discharge only for October 1939 to April 1940, published in WSP 1305. Figures of daily discharge prior to January 1911, published in WSP 169, 205, 243, 263, and 283, are unreliable and should not be used. September 1904 to September 1922 (gage heights only) in reports of Water Supply Commission of Pennsylvania or Pennsylvania Department of Forests and Waters. Published as "at Confluence" 1904-22.

GAGE.--Water-stage recorder. Datum of gage is 1,310.17 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--33 years (1939-72), 845 cfs (26.32 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 6,700 cfs June 27, 30; maximum gage height, 9.98 ft June 23 (backwater from Casselman River); minimum daily discharge, 274 cfs May 27 to June 5.
Period of record: Maximum discharge, 13,700 cfs Mar. 5, 1948 (gage height, 11.28 ft); maximum gage height, 19.08 ft Oct. 15, 1954 (backwater from Casselman River); practically no flow at times during May and June 1950 when reservoir gates were closed.

REMARKS.--Records good. Flow regulated since 1925 by Deep Creek Reservoir and since 1943 by Youghiogheny River Lake 0.2 mile upstream (see p. 261).

COOPERATION.--Five discharge measurements furnished by Corps of Engineers.

REVISIONS.--WSP 893: Drainage area; see PERIOD OF RECORD.

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	1,080	879	385	1,440	550	967	912	967	274	6,650	615	944
2	1,070	879	599	1,440	550	435	912	967	274	5,640	615	1,010
3	1,070	879	791	1,440	550	435	912	967	274	3,530	615	1,010
4	1,070	879	791	1,440	550	1,400	923	1,750	274	956	604	1,010
5	1,070	874	791	1,440	550	4,700	1,520	1,680	274	956	604	1,010
6	971	868	808	1,450	550	6,510	2,180	931	361	2,070	593	1,010
7	1,010	864	813	1,440	455	6,370	2,170	1,100	407	2,870	593	1,000
8	945	857	835	1,440	385	5,300	2,170	1,100	445	1,680	593	1,130
9	945	857	857	1,440	385	4,320	2,160	1,530	445	2,160	593	1,370
10	945	738	907	1,440	385	4,240	1,550	1,880	446	2,150	593	1,430
11	934	791	1,330	1,460	385	3,530	923	1,840	445	1,560	593	1,280
12	821	728	1,620	1,460	385	2,050	923	1,460	445	769	593	1,120
13	813	846	1,590	1,460	385	770	934	1,110	445	604	582	1,110
14	775	846	1,580	1,460	385	466	1,720	1,110	450	604	648	1,100
15	824	846	1,570	1,460	385	466	1,560	1,100	455	604	714	1,100
16	824	843	1,560	1,450	385	1,180	940	1,100	455	604	725	1,100
17	835	835	1,550	1,440	385	2,190	940	1,080	455	604	725	1,100
18	835	835	1,540	1,440	385	2,190	3,800	1,020	455	615	813	1,100
19	835	835	1,530	1,200	385	2,190	6,630	956	455	615	923	981
20	835	835	1,520	780	385	3,330	5,400	934	455	615	923	857
21	771	835	1,520	780	385	4,040	4,640	912	455	615	923	857
22	657	796	1,520	784	385	3,010	4,220	776	455	615	917	857
23	802	747	1,510	791	385	2,030	3,690	637	455	626	912	857
24	802	747	1,500	791	385	1,620	3,630	542	455	637	912	857
25	802	747	1,480	728	385	901	2,960	455	1,180	637	901	867
26	802	747	1,480	550	415	912	2,230	364	3,010	637	901	868
27	802	743	1,460	550	425	912	1,860	274	5,740	637	901	879
28	759	740	1,460	550	952	912	1,240	274	6,590	637	901	879
29	879	698	1,450	550	1,690	912	971	274	2,300	637	901	878
30	879	604	1,450	550	-----	912	967	274	3,540	626	901	868
31	879	-----	1,450	550	-----	912	-----	274	-----	626	901	-----
TOTAL	27,341	24,218	39,247	35,194	14,167	70,112	65,587	29,638	32,169	42,786	23,228	30,439
MEAN	882	807	1,266	1,135	489	2,262	2,186	956	1,072	1,380	749	1,015
MAX	1,080	879	1,620	1,460	1,690	6,510	6,630	1,880	6,590	6,650	923	1,430
MIN	657	604	385	550	385	435	912	274	274	604	582	857
MEAN [‡]	258	650	1,505	1,304	1,287	2,926	2,302	903	1,575	726	231	59.0
CFSM [‡]	.59	1.49	3.45	2.99	2.95	6.71	5.28	2.07	3.61	1.67	.53	.14
IN. [‡]	.68	1.66	3.98	3.45	3.18	7.74	5.89	2.39	4.03	1.93	.61	.16
CAL YR 1971	TOTAL 400,563	MEAN 1,097	MAX 6,280	MIN 115	MEAN [‡] 1,058	CFSM [‡] 2.43	IN. [‡] 32.93					
WTR YR 1972	TOTAL 434,126	MEAN 1,186	MAX 6,650	MIN 274	MEAN [‡] 1,143	CFSM [‡] 2.62	IN. [‡] 35.70					

[‡] Adjusted for change in contents in Deep Creek Reservoir and Youghiogheny River Lake. Records for Deep Creek Reservoir furnished by Pennsylvania Electric Co.

03078000 Casselman River at Grantsville, Md.

LOCATION.--Lat 39°42'08", long 79°08'12", Garrett County, on left bank at downstream side of highway bridge, 0.3 mile upstream from Slaubaugh Run, 0.7 mile downstream from U. S. Highway 40, and 1 mile northeast of Grantsville.

DRAINAGE AREA.--62.5 sq mi. .

PERIOD OF RECORD.--July 1947 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,089.03 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--25 years, 116 cfs (25.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,810 cfs Mar. 13 (gage height, 5.67 ft); minimum daily, 4.8 cfs Sept. 10, 11, 12.

Period of record: Maximum discharge, 8,400 cfs Oct. 15, 1954 (gage height, 10.70 ft), from rating curve extended above 2,600 cfs on basis of contracted-opening measurement at gage height 8.13 ft; no flow Aug. 31, 1962, result of regulation from unknown source.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality records for the current year are published in Part 2 of Water Resources Data for Maryland and Delaware.

REVISIONS (WATER YEARS).--WSP 1143: 1948.

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	69	54	275	67	74	1,180	116	101	65	235	27	8.1
2	69	122	186	153	72	1,530	120	97	56	157	22	7.6
3	69	142	148	181	67	1,240	118	228	49	129	41	7.2
4	62	94	135	123	58	546	344	238	42	110	172	8.6
5	56	76	117	227	66	370	286	256	39	120	82	9.2
6	50	70	224	170	76	276	198	175	37	130	42	8.1
7	47	67	955	135	79	272	221	144	36	110	175	6.2
8	46	60	1,250	110	72	436	229	132	31	100	90	5.7
9	42	57	681	115	68	302	191	253	28	90	54	5.2
10	41	56	436	229	64	233	191	300	35	72	41	4.8
11	39	54	334	222	64	191	173	193	30	64	32	4.8
12	35	51	250	231	64	254	143	157	26	58	29	4.8
13	32	49	201	178	84	2,120	649	137	25	54	27	6.6
14	31	45	166	176	80	874	464	142	35	46	26	7.6
15	29	43	152	125	88	528	410	187	37	41	22	16
16	28	42	135	83	100	458	562	242	28	60	20	9.2
17	28	40	115	74	88	464	921	200	29	49	32	7.2
18	27	38	106	76	82	385	430	163	25	41	62	17
19	25	39	101	76	80	322	288	152	24	36	35	13
20	24	49	161	100	66	254	238	139	18	42	27	8.6
21	22	57	156	161	120	218	197	134	38	31	22	7.2
22	22	56	108	129	180	268	336	127	70	28	17	7.2
23	29	53	90	136	250	247	292	108	1,350	25	15	6.6
24	68	48	89	172	320	200	272	88	720	22	14	6.2
25	140	54	85	177	469	178	217	78	336	21	13	6.6
26	180	64	82	126	876	161	178	71	228	20	19	7.2
27	86	75	81	98	495	158	152	63	178	19	20	7.2
28	64	112	81	105	344	158	132	59	132	20	15	13
29	54	268	76	90	822	141	117	54	756	19	13	28
30	50	484	77	88	-----	156	108	54	435	20	11	29
31	46	-----	76	74	-----	128	-----	95	-----	25	8.6	-----
TOTAL	1,610	2,519	7,129	4,207	5,368	14,248	8,293	4,567	4,938	1,994	1,225.6	283.7
MEAN	51.9	84.0	230	136	185	460	276	147	165	64.3	39.5	9.46
MAX	180	484	1,250	231	876	2,120	921	300	1,350	235	175	29
MIN	22	38	76	67	58	128	108	54	18	19	8.6	4.8
CFSM	.83	1.34	3.68	2.18	2.96	7.36	4.42	2.35	2.64	1.03	.63	.15
IN.	.96	1.50	4.24	2.50	3.20	8.48	4.94	2.72	2.94	1.19	.73	.17

CAL YR 1971 TOTAL 56,944.4 MEAN 156 MAX 1,830 MIN 9.2 CFSM 2.50 IN 33.89
WTR YR 1972 TOTAL 56,382.3 MEAN 154 MAX 2,120 MIN 4.8 CFSM 2.46 IN 33.56

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 8	0315	4.27	1,520	4-13	1545	3.86	1,190
2-26	0400	4.68	1,880	4-17	0130	4.17	1,320
3- 2	2045	4.57	1,780	6-23	*1200	4.80	1,820
3-13	0815	5.67	2,810	6-29	1115	4.10	1,260

* About.

† From crest stage indicator.

MONONGAHELA RIVER BASIN

03079000 Casselman River at Markleton, Pa.

LOCATION.--Lat 39°51'35", long 79°13'40", Somerset County, on right bank at downstream side of highway bridge at Markleton, 2 miles southwest of Casselman, and 7 miles downstream from Coxes Creek.

DRAINAGE AREA.--382 sq mi.

PERIOD OR RECORD.--August to September 1913 (gage heights and discharge measurement only), October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305. October 1913 to September 1920 (gage heights and discharge measurements only) in reports of Water Supply Commission of Pennsylvania.

GAGE.--Water-stage recorder. Datum of gage is 1,655.29 ft above mean sea level, adjustment of 1907. Prior to Nov. 19, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--52 years (1920-72), 647 cfs (23.00 inches per year).

EXTREMES.--Current year: Maximum discharge, 14,300 cfs June 23 (gage height, 8.83 ft); minimum, 36 cfs Sept. 12 (gage height, 1.02 ft).

Period of record: Maximum discharge, 50,000 cfs (estimated) Oct. 15, 1954 (gage height, 14.06 ft), on basis of summation of peak flows at nearby stations; minimum, 10 cfs Sept. 9, 1957; minimum gage height, 0.85 ft Sept. 30, Oct. 1, 1968.

REMARKS.--Records good except those for winter periods, which are fair. Slight diversion above station to city of Frostburg, Md., in the Potomac River basin. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1305: 1923-31. WSP 1435: 1932-34, 1935(M), 1936-38. WSP 1625: 1924(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	459	500	1,820	448	421	6,950	558	760	370	1,870	115	67
2	421	1,160	1,260	752	421	9,330	572	656	290	1,230	108	61
3	415	1,090	1,040	1,110	375	7,680	572	1,130	256	1,020	218	58
4	380	792	856	816	230	3,360	1,780	1,450	222	936	530	60
5	360	616	736	1,140	200	2,190	1,720	1,510	202	952	421	58
6	310	518	2,310	1,010	290	1,540	1,190	1,120	178	1,170	222	56
7	285	476	6,670	824	350	1,430	1,180	920	167	840	395	52
8	270	415	7,340	720	340	2,300	1,240	808	149	648	390	48
9	244	380	4,210	688	300	1,590	1,050	1,220	136	551	235	45
10	226	365	2,660	1,020	270	1,280	976	1,570	182	476	164	42
11	222	355	1,950	1,190	240	1,050	912	1,100	160	432	133	40
12	198	330	1,440	1,170	240	1,120	816	920	130	370	118	42
13	178	310	1,180	1,000	300	9,540	4,170	800	139	330	218	43
14	167	280	1,010	1,050	400	5,270	3,410	784	235	295	130	54
15	156	261	960	808	430	3,050	4,870	832	198	252	108	84
16	149	252	856	365	450	2,940	5,020	976	178	239	95	80
17	142	231	728	537	440	2,940	7,340	856	340	280	93	58
18	136	218	640	704	400	2,130	3,290	752	390	239	124	73
19	130	218	572	736	340	1,690	2,090	664	610	214	149	103
20	121	252	792	600	250	1,350	1,680	608	265	182	110	69
21	115	315	928	784	340	1,180	1,340	616	400	178	90	54
22	115	330	672	672	500	1,290	1,880	616	1,160	175	80	47
23	127	310	537	736	900	1,290	1,800	500	10,400	171	73	42
24	330	320	530	848	800	1,050	1,560	437	6,740	133	67	40
25	586	320	506	880	1,100	944	1,350	385	3,200	127	265	43
26	920	421	476	696	2,400	880	1,100	340	1,960	118	136	43
27	608	470	482	586	2,170	816	936	295	1,340	110	226	43
28	443	704	476	593	1,750	768	808	265	992	113	149	61
29	355	1,170	448	544	4,290	696	712	248	2,870	105	108	71
30	305	3,230	506	530	-----	696	632	239	3,830	100	88	124
31	275	-----	558	400	-----	624	-----	494	-----	113	75	-----
TOTAL	9,148	16,609	45,149	23,957	20,937	78,964	56,554	23,871	37,689	13,969	5,433	1,761
MEAN	295	554	1,456	773	722	2,547	1,885	770	1,256	451	175	58.7
MAX	920	3,230	7,340	1,190	4,290	9,540	7,340	1,570	10,400	1,870	530	124
MIN	115	218	448	365	200	624	558	239	130	100	67	40
CFSM	.77	1.45	3.81	2.02	1.89	6.67	4.93	2.02	3.29	1.18	.46	.15
IN.	.89	1.62	4.40	2.33	2.04	7.69	5.51	2.32	3.67	1.36	.53	.17
CAL YR 1971	TOTAL 319,954	MEAN 877	MAX 7,340	MIN 62	CFSM 2.30	IN 31.16						
WTR YR 1972	TOTAL 334,041	MEAN 913	MAX 10,400	MIN 40	CFSM 2.39	IN 32.53						

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2100	7.37	9,240	4-15	1600	7.18	8,680
3- 2	2300	7.72	10,300	4-17	0030	7.62	10,000
3-13	1230	8.62	13,400	6-23	1200	8.83	14,300

MONONGAHELA RIVER BASIN

253

03080000 Laurel Hill Creek at Ursina, Pa.

LOCATION.--Lat 39°49'17", long 79°19'16", Somerset County, on right bank 500 ft downstream from bridge on State Highway 53, at Ursina, and 2.7 miles upstream from mouth.

DRAINAGE AREA.--121 sq mi.

PERIOD OF RECORD.--August to September 1913 (gage heights and discharge measurement only). October 1918 to current year. Monthly discharge only for some periods, published in WSP 1305. October 1913 to September 1918 (gage heights and discharge measurements only) in reports of Water Supply Commission of Pennsylvania.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 1,335.26 ft above mean sea level, unadjusted. Prior to July 18, 1939, nonrecording gage at bridge half a mile downstream at datum 6.20 ft lower.

AVERAGE DISCHARGE.--54 years (1918-72), 264 cfs (29.63 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,350 cfs June 23 (gage height, 7.08 ft); minimum, 8.9 cfs Sept. 11, 12; minimum gage height, 0.77 ft Sept. 23, 24.
Period of record: Maximum discharge, 10,900 cfs Oct. 15, 1954 (gage height, 10.63 ft), from rating curve extended above 6,100 cfs on basis of slope-area measurement of peak flow; minimum, 2.2 cfs Sept. 26, 1932.

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

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 893: 1919-21, 1932-34. WSP 1305: 1922-31. WSP 1435: 1919-20. WSP 1625: 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	181	214	842	278	170	2,200	226	199	74	808	40	14
2	162	561	538	461	150	3,340	230	188	69	487	37	13
3	148	541	406	626	120	3,040	223	248	67	426	60	12
4	130	353	335	455	95	1,370	811	268	61	414	180	12
5	114	264	277	590	70	831	811	354	58	414	90	12
6	103	223	685	485	100	553	536	306	52	536	62	12
7	98	200	2,370	394	140	477	553	277	47	426	64	11
8	92	167	2,620	320	120	930	533	257	42	336	56	10
9	83	148	1,560	290	110	664	440	547	38	285	47	9.5
10	78	138	1,000	496	100	492	385	772	55	230	40	12
11	76	127	709	539	90	390	340	520	56	192	36	10
12	71	116	491	456	85	434	292	402	43	153	33	10
13	63	107	382	395	100	3,050	1,670	324	45	129	116	12
14	60	97	318	371	120	2,280	1,190	285	84	110	64	13
15	57	93	327	270	140	1,350	1,750	259	98	95	48	28
16	55	90	278	170	150	1,340	2,330	229	70	95	39	24
17	52	81	239	200	140	1,650	2,810	241	95	129	37	17
18	51	77	220	230	120	1,100	1,320	222	72	122	47	17
19	49	80	225	220	100	764	811	200	547	88	42	18
20	44	102	263	210	90	577	636	184	173	73	40	17
21	41	142	350	305	130	471	499	174	211	64	31	15
22	41	151	259	274	200	689	718	159	509	68	27	13
23	48	144	227	316	300	734	721	133	5,180	64	26	11
24	73	140	216	341	250	523	616	109	4,000	56	24	11
25	163	167	201	369	450	423	514	97	1,940	54	22	12
26	217	168	192	341	700	380	406	85	1,050	52	21	13
27	140	197	209	366	594	337	331	75	620	47	21	13
28	108	295	225	277	538	305	276	70	444	48	24	19
29	93	550	229	277	1,250	275	240	68	1,300	44	21	21
30	85	1,340	288	210	-----	262	215	66	1,380	40	20	27
31	81	-----	352	190	-----	236	-----	77	-----	40	17	-----
TOTAL	2,857	7,073	16,833	10,722	6,722	31,467	22,433	7,395	18,480	6,125	1,432	438.5
MEAN	92.2	236	543	346	232	1,015	748	239	616	198	46.2	14.6
MAX	217	1,340	2,620	626	1,250	3,340	2,810	772	5,180	808	180	28
MIN	41	77	192	170	70	236	215	66	38	40	17	9.5
CFSM	.76	1.95	4.49	2.86	1.92	8.39	6.18	1.98	5.09	1.64	.38	.12
IN.	.88	2.17	5.18	3.30	2.07	9.67	6.90	2.27	5.68	1.88	.44	.13

CAL YR 1971 TOTAL 128,053.0 MEAN 351 MAX 5,640 MIN 17 CFSM 2.90 IN 39.37
WTR YR 1972 TOTAL 131,977.5 MEAN 361 MAX 5,180 MIN 9.5 CFSM 2.98 IN 40.57

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-7	1830	4.63	3,170	4-16	2130	4.95	3,580
3-2	2030	5.27	4,000	4-23	1300	7.08	6,350
3-13	0900	5.12	3,810				

MONONGAHELA RIVER BASIN

03081000 Youghiogheny River below Confluence, Pa.

LOCATION.--Lat 39°49'39", long 79°22'22", Fayette County, on left bank 1.0 mile downstream from Casselman River, 1.5 miles northwest of Confluence, and at mile 72.0.

DRAINAGE AREA.--1,029 sq mi.

PERIOD OF RECORD.--June 1940 to current year. Monthly discharge only for June 1940, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,302.77 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--32 years, 1,935 cfs (25.54 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 23,200 cfs June 23 (gage height, 11.88 ft); minimum daily, 532 cfs June 5.

Period of record: Maximum discharge, 69,500 cfs Oct. 15, 1954 (gage height, 19.92 ft), from rating curve extended above 25,000 cfs on basis of slope-area measurement of peak flow; minimum, 40 cfs Oct. 14, 1943 (gage height, 0.31 ft); minimum daily, 121 cfs Sept. 27, 1943.

Flood of Mar. 17 or 18, 1936, reached a stage of 21.6 ft, from floodmarks (discharge, 85,000 cfs).

REMARKS.--Records good. Flow regulated since 1925 by Deep Creek Reservoir and since 1943 by Youghiogheny River Lake 1 mile upstream (see p. 261).

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	1,900	1,530	3,700	2,340	1,210	11,300	1,860	2,030	790	9,910	794	1,060
2	1,820	2,790	2,770	2,720	1,230	14,900	1,860	1,960	653	7,780	781	1,150
3	1,780	2,940	2,510	3,600	1,190	13,200	1,860	2,440	610	5,480	885	1,140
4	1,720	2,250	2,210	3,010	1,030	7,110	3,380	3,660	567	2,680	1,430	1,140
5	1,670	1,920	1,980	3,490	869	8,110	4,890	4,050	532	2,570	1,260	1,140
6	1,500	1,740	2,940	3,360	996	8,740	4,430	2,660	584	4,110	988	1,130
7	1,490	1,650	10,300	2,980	1,060	8,320	4,210	2,580	632	4,520	1,060	1,120
8	1,400	1,540	12,300	2,750	857	8,790	4,420	2,400	646	2,940	1,210	1,250
9	1,360	1,470	7,710	2,660	833	6,990	4,030	3,530	622	3,250	976	1,480
10	1,340	1,320	5,340	3,210	804	6,380	3,360	4,890	672	3,080	871	1,530
11	1,320	1,360	4,580	3,630	783	5,130	2,470	3,900	687	2,400	816	1,390
12	1,170	1,260	4,010	3,520	785	3,920	2,300	3,130	625	1,450	787	1,240
13	1,110	1,350	3,530	3,240	895	15,400	6,900	2,520	619	1,200	952	1,240
14	1,050	1,310	3,190	3,260	1,040	9,790	7,850	2,400	773	1,130	934	1,250
15	1,070	1,270	3,130	2,880	1,080	5,940	8,380	2,380	783	1,060	972	1,300
16	1,060	1,260	2,930	2,230	1,100	6,010	8,760	2,580	740	1,040	935	1,300
17	1,050	1,230	2,720	2,230	1,110	7,590	13,300	2,450	956	1,100	926	1,250
18	1,040	1,200	2,590	2,540	1,020	6,100	9,050	2,200	768	1,070	1,020	1,250
19	1,020	1,200	2,450	2,300	947	5,170	9,770	1,940	1,830	988	1,160	1,160
20	1,000	1,260	2,650	1,770	798	5,990	8,070	1,850	958	937	1,130	960
21	921	1,350	3,060	2,030	877	6,390	6,790	1,840	1,010	904	1,080	926
22	831	1,350	2,650	1,910	1,340	5,540	6,910	1,720	2,060	921	1,050	909
23	993	1,260	2,440	1,990	1,850	4,530	6,610	1,400	17,500	899	1,040	895
24	1,090	1,280	2,390	2,180	1,760	3,480	6,150	1,320	14,000	855	1,030	891
25	1,590	1,280	2,360	2,080	2,220	2,670	5,210	1,020	7,540	828	1,230	890
26	1,970	1,400	2,300	1,750	4,070	2,440	4,130	856	6,830	825	1,170	890
27	1,650	1,500	2,310	1,570	3,810	2,310	3,440	677	8,130	794	1,160	891
28	1,380	1,860	2,320	1,550	3,670	2,200	2,590	631	8,380	806	1,160	905
29	1,400	2,680	2,300	1,460	7,510	2,090	2,110	602	7,260	787	1,080	936
30	1,330	5,860	2,340	1,410	-----	2,060	1,970	586	9,680	778	1,050	976
31	1,290	-----	2,580	1,230	-----	1,960	-----	815	-----	786	1,020	-----
TOTAL	41,315	51,670	110,590	76,880	46,744	200,550	157,060	67,017	97,437	67,878	31,957	33,589
MEAN	1,333	1,722	3,567	2,480	1,612	6,469	5,235	2,162	3,248	2,190	1,031	1,120
MAX	1,970	5,860	12,300	3,630	7,510	15,400	13,300	4,890	17,500	9,910	1,430	1,530
MIN	831	1,200	1,980	1,230	783	1,960	1,860	586	532	778	781	890
MEAN [†]	709	1,565	3,806	2,649	2,410	7,133	5,351	2,109	3,751	1,536	513	164
CFSM [†]	.69	1.52	3.70	2.57	2.34	6.93	5.20	2.05	3.65	1.49	.50	.16
IN. [†]	.80	1.70	4.27	2.96	2.52	7.99	5.80	2.36	4.07	1.72	.58	.18
CAL YR 1971	TOTAL 935,643	MEAN 2,563	MAX 17,300	MIN 601	MEAN [†] 2,524	CFSM [†] 2.45	IN. [†] 33.30					
WTR YR 1972	TOTAL 982,687	MEAN 2,685	MAX 17,500	MIN 532	MEAN [†] 2,642	CFSM [†] 2.57	IN. [†] 34.95					

[†] Adjusted for change in contents in Deep Creek Reservoir and Youghiogheny River Lake. Records of contents in Deep Creek Reservoir furnished by Pennsylvania Electric Co.

MONONGAHELA RIVER BASIN

255

03082200 Poplar Run near Normalville, Pa.

LOCATION.--Lat 40°00'59", long 79°25'33", Fayette County, on right bank at downstream side of bridge on State Highways 711 and 381, 0.7 mile upstream from mouth, 1.8 miles northeast of Normalville, and 7 miles southwest of Donegal.

DRAINAGE AREA.--9.27 sq mi.

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

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 1,408.26 ft above mean sea level.

AVERAGE DISCHARGE.--11 years, 18.5 cfs (27.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,240 cfs June 23 (gage height, 6.76 ft), from rating curve extended above 480 cfs as explained below; minimum, 0.44 cfs Sept. 23, 24 (gage height, 1.82 ft).
Period of record: Maximum discharge, 1,890 cfs Sept. 14, 1971 (gage height, 8.37 ft), from rating curve extended above 480 cfs on basis of slope-area measurement at gage height 6.05 ft; no flow July 30, 31, Aug. 16-20, Sept. 11, 1965, Aug. 7, 9, 1966.

REMARKS.--Records good except those for winter periods, which are 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	6.2	5.6	48	16	9.6	237	12	12	4.0	28	5.2	.75
2	5.6	9.4	31	47	8.4	246	12	11	4.2	20	4.1	.70
3	5.1	9.4	23	40	8.0	166	12	19	4.4	62	11	.70
4	4.7	5.6	18	30	7.2	78	51	28	3.2	57	14	.75
5	4.3	3.7	15	48	7.0	53	36	34	3.0	59	7.3	.75
6	4.1	3.1	131	34	10	36	26	24	2.8	69	4.9	.60
7	3.7	3.5	159	27	7.6	42	48	19	2.7	48	6.1	.60
8	3.3	2.6	82	21	7.0	64	42	26	2.5	33	4.6	.56
9	2.9	2.4	47	24	6.4	42	34	89	2.5	24	3.7	.75
10	2.9	2.6	33	51	6.0	31	28	73	8.9	20	2.9	.60
11	3.1	2.6	25	41	5.8	26	23	45	3.4	16	2.5	.56
12	2.7	2.4	19	31	6.0	48	19	31	2.7	12	2.1	.52
13	2.5	2.3	16	27	11	223	103	23	14	9.6	2.5	.70
14	2.4	2.2	16	24	10	120	61	20	9.6	7.6	1.9	2.1
15	2.3	2.2	16	17	15	81	153	20	6.2	6.4	1.7	1.4
16	2.2	2.2	14	12	20	168	194	18	12	15	1.5	.90
17	2.2	2.0	12	17	15	129	149	19	10	32	2.0	.75
18	2.0	1.9	11	16	13	80	74	17	6.5	19	3.1	.65
19	2.0	2.6	9.7	19	12	53	48	14	5.9	12	2.7	.75
20	1.8	6.1	13	20	11	38	47	13	4.8	9.2	2.3	.65
21	1.8	8.3	13	37	10	30	34	12	6.8	9.2	1.5	.56
22	1.9	7.6	10	28	20	40	49	10	186	86	1.3	.52
23	2.1	7.0	9.2	32	17	35	44	8.6	876	76	1.2	.44
24	2.6	7.8	9.4	27	20	28	35	7.7	351	30	1.1	.48
25	4.5	8.8	8.5	32	23	25	28	6.5	141	21	1.0	.60
26	4.7	10	9.4	23	54	22	22	5.4	70	15	1.3	.65
27	2.6	14	11	20	41	19	18	5.0	43	12	1.9	.70
28	2.1	33	19	18	43	17	16	4.6	28	9.6	1.9	1.9
29	1.9	64	17	15	216	16	14	4.2	50	7.3	1.2	1.1
30	1.7	120	21	13	-----	15	12	4.0	38	6.7	1.0	1.2
31	1.7	-----	19	11	-----	12	-----	4.4	-----	6.1	.85	-----
TOTAL	93.6	354.9	885.2	818	640.0	2,220	1,444	627.4	1,903.1	837.7	100.35	23.89
MEAN	3.02	11.8	28.6	26.4	22.1	71.6	48.1	20.2	63.4	27.0	3.24	.80
MAX	6.2	120	159	51	216	246	194	89	876	86	14	2.1
MIN	1.7	1.9	8.5	11	5.8	12	12	4.0	2.5	6.1	.85	.44
CFSM	.33	1.27	3.09	2.85	2.38	7.72	5.19	2.18	6.84	2.91	.35	.09
IN.	.38	1.42	3.55	3.28	2.57	8.41	5.79	2.52	7.64	3.36	.40	.10

CAL YR 1971 TOTAL 8,827.56 MEAN 24.2 MAX 886 MIN .70 CFSM 2.61 IN 35.42
WTR YR 1972 TOTAL 9,948.14 MEAN 27.2 MAX 876 MIN .44 CFSM 2.93 IN 39.92

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-29	1730	4.48	438	4-15	1145	4.54	419
3- 1	1630	4.54	419	4-16	1630	4.90	545
3- 3	0015	4.27	336	6-23	1045	6.76	1,240
3-13	0545	4.68	468	7-22	1900	4.75	492
3-16	1845	4.37	366				

MONONGAHELA RIVER BASIN

03082500 Youghiogheny River at Connellsville, Pa.

LOCATION.--Lat 40°01'03", long 79°35'38", Fayette County, on left bank at downstream side of Crawford Avenue Bridge at Connellsville, 1.2 miles upstream from Mounts Creek, and at mile 44.0.

DRAINAGE AREA.--1,326 sq mi.

PERIOD OF RECORD.--July 1908 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 860.13 ft above mean sea level. Prior to Aug. 15, 1928, non-recording gage, and Aug. 15, 1928, to July 7, 1958, water-stage recorder at same site and datum. July 8, 1958, to Sept. 8, 1959, nonrecording gage at site 0.4 mile downstream at different datum.

AVERAGE DISCHARGE.--64 years, 2,524 cfs (25.85 inches per year), adjusted for storage since August 1925.

EXTREMES.--Current year: Maximum discharge, 51,600 cfs June 23 (gage height, 16.53 ft); minimum daily, 719 cfs June 6; minimum gage height, 1.87 ft Oct. 23.
Period of record: Maximum discharge, 103,000 cfs Oct. 16, 1954 (gage height, 21.96 ft), from rating curve extended above 55,000 cfs; minimum, 11 cfs Sept. 23, 26, 27, 1908, Oct. 18, 1910 (gage height, 0.11 ft).

REMARKS.--Records good. Flow regulated since 1925 by Deep Creek Reservoir and since 1943 by Youghiogheny River Lake 29.4 miles upstream (see p. 261) and by several smaller reservoirs above station. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Two discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1305: 1912(M), 1914(M), 1916-17(M), 1918, 1922-25. WSP 1435: 1919-20. WSP 1725: 1916, 1932 (monthly, yearly summaries).

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	2,500	1,800	6,070	3,230	1,810	17,400	2,650	2,730	1,250	11,600	1,050	1,060
2	2,390	3,170	4,090	3,620	1,840	22,200	2,620	2,700	989	9,190	1,030	1,210
3	2,300	3,900	3,630	5,060	1,840	21,500	2,620	3,030	903	7,510	1,160	1,220
4	2,230	3,030	3,170	4,250	1,940	10,700	4,010	4,070	863	4,220	1,770	1,220
5	2,150	2,610	2,850	4,630	1,200	9,550	6,550	5,250	790	3,820	1,760	1,210
6	1,980	2,360	3,900	4,780	1,400	10,700	5,690	3,580	719	4,910	1,430	1,200
7	1,970	2,220	12,800	4,160	1,600	9,610	5,400	3,490	865	6,170	1,280	1,190
8	1,800	2,090	17,100	3,750	1,240	10,700	5,760	3,270	837	4,020	1,580	1,190
9	1,750	1,950	10,700	3,550	1,200	8,700	5,160	4,330	840	4,060	1,370	1,550
10	1,700	1,860	7,320	4,430	1,150	7,730	4,660	6,840	945	3,790	1,180	1,660
11	1,690	1,760	5,830	4,950	1,100	6,910	3,520	5,460	941	3,460	1,070	1,630
12	1,600	1,620	5,080	4,780	1,080	4,750	3,280	4,530	844	2,280	1,020	1,330
13	1,430	1,760	4,430	4,350	1,350	22,900	9,540	3,570	840	1,780	1,030	1,320
14	1,370	1,700	3,980	4,250	1,700	16,200	11,600	3,280	1,160	1,660	1,100	1,340
15	1,390	1,660	3,920	3,790	1,650	9,760	11,800	3,220	1,210	1,560	1,140	1,430
16	1,370	1,630	3,700	3,050	1,700	8,480	14,100	3,280	1,090	1,550	1,010	1,460
17	1,340	1,600	3,440	2,900	1,500	11,500	20,500	3,410	1,360	1,830	1,010	1,420
18	1,320	1,560	3,250	3,200	1,500	8,900	11,800	3,180	1,210	1,760	1,070	1,390
19	1,280	1,560	3,100	3,240	1,200	7,270	12,200	2,840	2,490	1,520	1,240	1,400
20	1,260	1,640	3,140	2,630	1,010	6,850	10,200	2,680	1,600	1,400	1,220	1,090
21	1,210	1,800	3,730	2,890	1,300	7,640	8,130	2,600	1,410	1,320	1,140	1,010
22	1,060	1,880	3,380	2,890	1,700	7,240	8,210	2,530	3,590	1,350	1,080	981
23	1,160	1,740	3,090	2,920	2,200	6,010	8,390	2,050	38,100	1,550	1,060	950
24	1,360	1,740	3,000	3,090	2,600	5,070	7,480	1,840	25,300	1,330	1,050	950
25	1,880	1,790	2,960	3,200	3,000	3,710	6,920	1,540	12,000	1,230	1,130	950
26	2,400	1,880	2,910	2,930	5,200	3,490	5,190	1,400	8,810	1,170	1,300	950
27	2,220	2,120	2,950	2,570	6,020	3,270	4,600	1,050	9,230	1,130	1,150	970
28	1,790	2,810	3,060	2,510	4,990	3,130	3,660	955	9,350	1,110	1,260	1,100
29	1,780	3,730	3,140	2,350	9,890	2,990	3,010	896	8,940	1,080	1,150	1,120
30	1,680	8,750	3,120	2,200	-----	2,900	2,800	856	10,800	1,050	1,080	1,160
31	1,620	-----	3,520	1,930	-----	2,790	-----	975	-----	1,040	1,040	-----
TOTAL	52,980	69,720	146,360	108,280	66,010	280,550	212,050	91,432	149,276	91,450	36,960	36,661
MEAN	1,709	2,324	4,721	3,493	2,276	9,050	7,068	2,949	4,976	2,950	1,192	1,222
MAX	2,500	8,750	17,100	5,060	9,890	22,900	20,500	6,840	38,100	11,600	1,770	1,660
MIN	1,060	1,560	2,850	1,930	1,010	2,790	2,620	856	719	1,040	1,010	950
MEAN [†]	1,085	2,167	4,960	3,662	3,074	9,714	7,184	2,896	5,479	2,296	674	266
CFSM [†]	.82	1.63	3.74	2.76	2.32	7.33	5.42	2.18	4.13	1.73	.51	.20
IN. [†]	.94	1.82	4.31	3.18	2.52	8.45	6.05	2.51	4.61	1.99	.59	.22

CAL YR 1971 TOTAL 1,279,929 MEAN 3,507 MAX 32,100 MIN 741 MEAN[†] 3,468 CFSM[†] 2.62 IN.[†] 35.49
WTR YR 1972 TOTAL 1,341,729 MEAN 3,666 MAX 38,100 MIN 719 MEAN[†] 3,623 CFSM[†] 2.73 IN.[†] 37.17

[†] Adjusted for change in contents in Deep Creek Reservoir and Youghiogheny River Lake. Records for Deep Creek Reservoir furnished by Pennsylvania Electric Co.

03083000 Green Lick Run at Green Lick Reservoir, Pa.

LOCATION.--Lat 40°06'18", long 79°30'01", Fayette County, on left bank at upstream end of Green Lick Reservoir, 1.4 miles upstream from Latta Run, and 4 miles southeast of Mount Pleasant.

DRAINAGE AREA.--3.07 sq mi.

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

GAGE.--Water-stage recorder and a four V-notch sharp-crested weir. Datum of gage is 1,254.7 ft above mean sea level (Penn Central Railroad bench mark).

AVERAGE DISCHARGE.--31 years, 5.50 cfs (24.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 848 cfs June 23 (gage height, 3.13 ft), from rating curve extended above 160 cfs on basis of computation of peak flow over dam; minimum, 0.19 cfs Sept. 23, 24 (gage height, 0.18 ft).

Period of record: Maximum discharge, 1,400 cfs Aug. 13, 1943 (gage height, 5.1 ft, backwater from debris), by slope-area measurement; maximum gage height, 5.42 ft May 24, 1944 (backwater from debris); minimum discharge, 0.04 cfs Oct. 3, 1957; minimum gage height, 0.10 ft Oct. 3, 1957, July 28-31, Aug. 5, 6, 16, 17, 18, 1965.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1053: 1943(m). WSP 1305: 1942(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	3.0	1.2	12	3.9	2.8	66	3.1	3.2	1.0	11	1.2	.33
2	2.8	2.4	7.5	11	2.6	56	3.1	3.2	1.0	8.7	1.0	.30
3	2.5	2.5	5.7	10	4.4	47	3.1	4.4	.93	20	3.6	.30
4	2.2	1.6	4.7	7.7	4.8	23	11	6.4	1.4	18	7.5	.36
5	2.0	1.1	4.0	18	3.6	14	7.3	7.7	1.1	27	2.8	.30
6	1.9	1.0	42	11	3.3	9.5	6.0	5.7	.76	28	2.0	.27
7	1.8	1.1	41	7.8	3.1	12	15	5.0	.67	19	2.9	.24
8	1.5	.93	23	6.0	2.8	18	12	5.4	.59	12	2.8	.24
9	1.3	.87	13	7.0	2.3	11	9.5	19	.59	9.2	1.8	.24
10	1.3	.93	9.2	16	2.1	8.9	8.2	23	1.4	7.3	1.4	.24
11	1.2	.93	6.9	13	1.9	7.3	6.9	14	.67	4.8	1.1	.21
12	1.1	.93	5.5	10	2.1	13	5.9	9.8	.55	3.0	1.0	.24
13	.93	.87	4.5	9.0	3.5	63	30	7.1	2.5	2.4	1.1	.36
14	.87	.76	4.7	8.0	3.2	36	17	5.7	2.1	2.0	.81	1.3
15	.81	.76	5.4	6.0	4.1	24	56	4.8	1.1	1.8	.71	.59
16	.76	.76	4.5	3.5	5.4	52	55	4.4	2.5	4.1	.63	.36
17	.76	.71	4.0	5.0	4.7	41	41	4.4	2.5	8.7	.81	.30
18	.67	.71	3.6	4.5	4.2	23	20	3.7	1.2	4.5	1.1	.33
19	.63	.93	3.2	6.0	4.1	13	12	3.1	.87	3.0	.93	.33
20	.59	1.7	4.4	7.0	3.7	9.5	11	2.9	1.0	2.3	.76	.27
21	.55	2.1	4.0	12	3.3	7.7	8.2	2.7	1.9	8.4	.59	.24
22	.59	1.7	3.1	8.0	5.7	9.2	13	2.3	69	9.5	.51	.21
23	.63	1.5	2.9	10	5.2	7.5	11	1.9	361	7.3	.47	.21
24	1.6	1.8	3.0	8.0	6.4	6.0	9.5	1.6	73	4.4	.43	.21
25	1.7	1.9	2.8	9.0	7.1	5.9	8.4	1.4	39	3.3	.43	.21
26	2.3	2.3	3.2	6.0	19	5.5	8.9	1.1	22	2.6	.63	.21
27	1.4	4.0	3.9	5.0	14	5.0	7.7	1.0	13	2.4	1.2	.87
28	.93	9.5	5.0	4.5	14	4.4	5.2	.87	10	2.0	.76	1.2
29	.76	19	4.2	4.0	59	4.0	3.9	.81	22	1.6	.55	.51
30	.67	28	5.0	3.5	-----	3.7	3.5	.81	15	1.5	.43	1.6
31	.67	-----	4.5	3.1	-----	3.2	-----	1.2	-----	1.4	.36	-----
TOTAL	40.42	94.49	250.4	243.5	202.4	609.3	412.4	158.59	650.33	241.2	42.31	12.58
MEAN	1.30	3.15	8.08	7.85	6.98	19.7	13.7	5.12	21.7	7.78	1.36	.42
MAX	3.0	28	42	18	59	66	56	23	361	28	7.5	1.6
MIN	.55	.71	2.8	3.1	1.9	3.2	3.1	.81	.55	1.4	.36	.21
CFSM	.42	1.03	2.63	2.56	2.27	6.42	4.46	1.67	7.07	2.53	.44	.14
IN.	.49	1.14	3.03	2.95	2.45	7.38	5.00	1.92	7.88	2.92	.51	.15
CAL YR 1971	TOTAL 2,676.42	MEAN 7.33	MAX 344	MIN .19	CFSM 2.39	IN 32.43						
WTR YR 1972	TOTAL 2,957.92	MEAN 8.08	MAX 361	MIN .21	CFSM 2.63	IN 35.84						

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-29	1645	2.09	104	4-15	1145	2.40	173
3-13	0530	2.11	108	4-16	1630	2.19	124
3-16	1745	2.18	122	6-23	0800	3.13	848

MONONGAHELA RIVER BASIN

03083500 Youghiogheny River at Sutersville, Pa.

LOCATION.--Lat 40°14'24", long 79°48'24", Allegheny County, on left bank 500 ft upstream from highway bridge at Sutersville, 2.1 miles downstream from Sewickley Creek, and at mile 15.2.

DRAINAGE AREA.--1,715 sq mi.

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 733.36 ft above mean sea level. Prior to June 1, 1939, non-recording gage at site 500 ft downstream at same datum.

AVERAGE DISCHARGE.--52 years, 2,957 cfs (23.42 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, about 83,000 cfs June 23; maximum gage height, 29.7 ft June 23 (backwater from Monongahela River); minimum discharge, 776 cfs Oct. 23 (gage height, 3.04 ft).
Period of record: Maximum discharge, 108,000 cfs Oct. 16, 1954 (gage height, 32.5 ft, from floodmark); minimum observed, 57 cfs Sept. 29, 30, 1922.

REMARKS.--Records good. Flow regulated since 1925 by Deep Creek Reservoir and since 1943 by Youghiogheny River Lake 58 miles upstream (see p. 261) and by several smaller reservoirs above station. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Two discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1305: 1924, 1926(M), 1931(M). WSP 1435: 1935-36.

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	2,690	1,620	7,860	3,590	2,050	18,600	3,110	3,130	1,230	12,800	1,160	1,170
2	2,530	2,540	5,020	3,750	2,060	22,600	3,050	3,110	1,200	10,700	1,140	1,190
3	2,430	4,340	4,130	5,670	2,120	27,700	3,040	3,270	1,070	9,180	1,160	1,280
4	2,340	3,730	3,700	5,110	3,140	14,800	3,480	4,090	1,190	5,830	1,470	1,270
5	2,220	3,100	3,120	5,640	1,890	10,600	7,240	5,710	1,220	5,330	1,920	1,270
6	2,150	2,760	5,330	6,030	1,500	11,700	6,440	4,470	911	6,410	1,600	1,260
7	1,960	2,500	12,700	5,110	1,850	10,400	6,760	3,840	871	7,590	1,340	1,240
8	1,900	2,440	20,400	4,490	1,520	11,300	7,240	3,630	920	5,740	1,440	1,230
9	1,780	2,290	13,400	4,140	1,490	9,840	6,460	4,020	919	4,530	1,500	1,400
10	1,730	2,200	8,840	4,900	1,410	8,370	5,900	7,400	1,020	4,490	1,260	1,650
11	1,690	2,020	6,700	5,850	1,360	7,610	4,650	6,480	1,010	4,190	1,130	1,690
12	1,660	2,020	6,000	5,730	1,310	5,760	4,130	5,400	961	3,070	1,060	1,530
13	1,450	1,890	5,110	5,160	1,300	21,100	8,540	4,260	1,020	2,350	1,090	1,430
14	1,400	1,680	4,630	4,920	1,600	23,600	15,600	3,770	1,290	2,030	1,240	1,780
15	1,330	1,910	4,550	4,470	1,760	13,700	12,600	3,600	1,630	1,880	1,180	1,580
16	1,340	1,890	4,280	3,680	1,810	10,800	18,300	3,610	2,180	2,210	1,210	1,500
17	1,320	1,840	3,940	3,140	1,660	15,100	24,700	3,750	2,040	2,710	1,160	1,440
18	1,290	1,740	3,680	3,920	1,500	11,700	15,100	3,620	1,680	2,490	1,210	1,470
19	1,270	1,770	3,440	3,700	1,450	8,980	13,800	3,370	2,080	2,030	1,320	1,460
20	1,240	1,840	3,390	3,180	1,370	7,600	11,900	2,980	2,220	1,780	1,450	1,300
21	1,220	1,990	3,900	3,220	1,300	8,610	9,250	2,830	2,120	1,680	1,360	1,090
22	1,130	2,200	3,780	3,430	1,800	8,410	8,980	2,750	5,200	1,770	1,290	1,040
23	1,050	2,100	3,360	3,450	2,600	7,120	9,690	2,410	56,600	2,500	1,240	998
24	1,460	2,010	3,190	3,630	3,100	6,270	8,340	2,050	51,400	1,850	1,220	993
25	1,550	2,120	3,160	3,930	3,600	4,830	7,910	1,760	21,600	1,530	1,230	997
26	2,190	2,150	3,100	3,660	6,000	4,260	6,080	1,530	12,500	1,400	1,430	990
27	2,430	2,460	3,120	3,050	7,760	4,000	5,360	1,300	10,600	1,340	1,360	1,060
28	2,020	3,420	3,210	2,920	6,520	3,780	4,370	1,090	10,900	1,280	1,400	1,310
29	1,720	4,210	3,440	2,760	9,190	3,600	3,520	1,020	10,700	1,230	1,350	1,160
30	1,700	8,320	3,350	2,550	-----	3,440	3,220	973	10,500	1,170	1,250	3,190
31	1,610	-----	3,790	2,290	-----	3,300	-----	1,030	-----	1,160	1,200	-----
TOTAL	53,800	77,430	167,620	126,970	76,020	329,480	248,810	102,253	218,782	114,250	40,370	40,968
MEAN	1,735	2,581	5,407	4,096	2,621	10,630	8,294	3,298	7,293	3,685	1,302	1,366
MAX	2,690	8,320	20,400	6,030	9,190	27,700	24,700	7,400	56,600	12,800	1,920	3,190
MIN	1,050	1,620	3,100	2,290	1,300	3,300	3,040	973	871	1,160	1,060	990
MEAN*	1,111	2,424	5,646	4,265	3,419	11,290	8,410	3,245	7,796	3,031	784	410
CFSM*	.65	1.41	3.29	2.49	1.99	6.58	4.90	1.89	4.55	1.77	.46	.24
IN.*	.75	1.57	3.79	2.87	2.15	7.59	5.47	2.18	5.08	2.04	.53	.27

CAL YR 1971 TOTAL 1,465,826 MEAN 4,016 MAX 32,900 MIN 812 MEAN* 3,976 CFSM* 2.32 IN.* 31.45
WTR YR 1972 TOTAL 1,596,753 MEAN 4,363 MAX 56,600 MIN 871 MEAN* 4,320 CFSM* 2.52 IN.* 34.29

* Adjusted for change in contents in Deep Creek Reservoir and Youghiogheny River Lake. Records of contents in Deep Creek Reservoir furnished by Pennsylvania Electric Co.

MONONGAHELA RIVER BASIN

259

03084000 Abers Creek near Murrys ville, Pa.

LOCATION.--Lat 40°27'01", long 79°42'50", Allegheny County, on right bank at downstream side of highway bridge, 30 ft upstream from small tributary, 2 miles northwest of Murrys ville, and 5 miles northwest of Export.

DRAINAGE AREA.--4.39 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 936.73 ft above mean sea level (Pennsylvania Department of Transportation bench mark). Prior to Oct. 1, 1950, water-stage recorder at site 800 ft upstream at different datum.

AVERAGE DISCHARGE.--24 years, 5.12 cfs (15.84 inches per year).

EXTREMES.--Current year: Maximum discharge, 720 cfs June 23 (gage height, 5.78 ft); minimum, 0.37 cfs Sept. 6, 7, 8, 10, 11, 12 (gage height, 1.48 ft).

Period of record: Maximum discharge, 1,600 cfs July 5, 1950 (gage height, 7.72 ft, from floodmarks at present site), from rating curve extended above 910 cfs on basis of contracted-opening measurement of peak flow; no flow at times during some years.

REMARKS.--Records good except those for winter periods, which are 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	.98	.91	3.7	6.0	3.8	34	4.4	5.6	1.7	4.4	1.7	.50
2	.98	3.1	2.6	15	3.5	37	4.1	8.5	2.8	5.2	1.5	.45
3	.91	.98	2.0	9.0	7.0	29	3.9	7.0	4.4	4.9	4.1	.55
4	.91	.91	1.7	12	6.0	17	15	5.6	3.4	3.6	1.6	.55
5	.84	.84	1.6	16	5.0	15	8.0	4.6	2.0	9.0	1.2	.55
6	.91	.91	45	10	4.5	13	6.5	4.4	1.8	6.0	1.1	.37
7	.91	1.2	25	7.5	4.0	15	31	4.1	1.4	4.1	1.8	.41
8	.72	.84	13	6.0	3.7	18	16	4.6	1.1	3.4	1.0	.41
9	.84	.84	9.0	9.0	3.6	15	12	14	1.8	2.8	3.0	.88
10	.91	.91	7.0	11	3.5	13	9.5	8.0	1.4	3.0	.94	.37
11	.72	.84	5.2	8.0	3.5	11	8.0	5.2	1.1	2.4	.87	.37
12	.60	.78	4.6	6.5	4.5	14	7.0	4.6	1.1	2.3	1.5	.55
13	.58	.78	4.1	5.6	11	24	17	4.1	8.0	2.6	.87	3.6
14	.58	.72	9.0	4.9	10	31	9.5	3.8	4.1	2.1	.72	9.8
15	.55	.78	11	3.5	13	22	24	3.6	2.1	12	1.0	4.0
16	.55	.72	7.0	2.8	11	22	22	3.8	2.2	13	.66	1.6
17	.55	.72	5.2	4.5	7.5	18	17	4.4	1.5	13	1.2	1.4
18	.48	.72	4.0	4.0	6.5	16	11	3.2	1.4	4.9	1.4	3.4
19	.48	1.2	3.0	5.2	5.6	13	9.0	2.6	1.2	21	.87	1.2
20	.48	1.0	4.4	4.1	5.2	10	15	3.0	17	11	.60	.95
21	.48	1.9	3.9	3.9	4.8	9.0	9.0	3.0	17	7.5	.55	.87
22	.50	2.9	3.2	5.2	6.4	12	17	2.8	82	5.6	.55	.72
23	.52	1.3	2.6	11	6.0	11	12	2.4	239	4.6	1.0	.66
24	5.0	1.3	3.4	6.5	6.5	8.5	9.5	2.2	39	6.5	.60	1.2
25	1.2	2.9	3.2	9.5	8.0	7.0	8.0	2.8	26	2.6	4.6	.72
26	1.0	2.6	5.2	8.0	15	6.0	6.5	2.8	15	2.1	1.5	.72
27	.91	6.7	4.4	7.0	12	5.6	5.6	2.0	10	3.0	2.3	3.0
28	.84	6.0	10	6.0	19	4.9	4.9	1.5	7.5	2.0	.87	1.5
29	.78	9.7	5.2	5.4	35	6.5	4.4	1.5	5.6	1.7	.66	20
30	.84	6.7	9.8	4.8	-----	5.2	5.6	2.1	5.2	1.6	.60	40
31	.84	-----	7.5	4.2	-----	4.4	-----	2.6	-----	1.5	.50	-----
TOTAL	27.39	61.70	226.5	222.1	235.1	467.1	332.4	130.4	507.8	169.4	41.36	101.30
MEAN	.88	2.06	7.31	7.16	8.11	15.1	11.1	4.21	16.9	5.46	1.33	3.38
MAX	5.0	9.7	45	16	35	37	31	14	239	21	4.6	40
MIN	.48	.72	1.6	2.8	3.5	4.4	3.9	1.5	1.1	1.5	.50	.37
CFSM	.20	.47	1.67	1.63	1.85	3.44	2.53	.96	3.85	1.24	.30	.77
IN.	.23	.52	1.92	1.88	1.99	3.96	2.82	1.10	4.30	1.44	.35	.86

CAL YR 1971 TOTAL 1,819.13 MEAN 4.98 MAX 79 MIN .48 CFSM 1.13 IN 15.41
WTR YR 1972 TOTAL 2,522.55 MEAN 6.89 MAX 239 MIN .37 CFSM 1.57 IN 21.38

PEAK DISCHARGE (BASE, 200 CFS).--June 23 (0100) 720 cfs (5.78 ft); probably Sept. 30 (time unknown) 389 cfs (4.43 ft from floodmark in well).

MONONGAHELA RIVER BASIN

03085000 Monongahela River at Braddock, Pa.

LOCATION.--Lat 40°23'28", long 79°51'30", Allegheny County, near right bank on river guide wall 300 ft upstream from dam at lock 2, at Braddock, 1,700 ft downstream from Turtle Creek, and 11.2 miles upstream from confluence with Allegheny River.

DRAINAGE AREA.--7,337 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder and fixed-crest concrete dam control with streamward lock chamber usable as floodway during high flow since 1951. Datum of gage is 707.16 ft above mean sea level. Prior to Aug. 13, 1951, at site 700 ft upstream at same datum.

AVERAGE DISCHARGE.--34 years, 12,137 cfs (22.46 inches per year) adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, about 180,000 cfs June 24; maximum gage height, 31.39 ft June 24 (backwater from Allegheny River); minimum discharge, not determined; minimum daily discharge, 2,110 cfs Sept. 23.

Period of record: Maximum discharge, 201,000 cfs June 5, 1941 (gage height, 31.20ft); maximum gage height, 31.39 ft June 24, 1972 (backwater from Allegheny River); minimum discharge, 559 cfs Sept. 20, 22, 23, 1946; minimum daily, 703 cfs Sept. 3, 4, 22, 1946; minimum gage height, 12.01 ft Oct. 7-13, 1943.

Flood of Mar. 18, 1936 reached a stage of 38.8 ft, from floodmarks (discharge, 210,000 cfs).

REMARKS.--Records good. Flow regulated by locks and hydroelectric plants, since 1938 by Tygart Lake, since 1926 by Lake Lynn, since 1925 by Deep Creek Reservoir, and since 1943 by Youghiogheny River Lake (see p. 261) combined capacity, 704,300 acre-ft. Figures of daily discharge include slight diversion from Beaver Run Reservoir in the Kiskiminetas River basin to the Borough of Jeannette in the Monongahela River basin. Water-quality records 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	9,620	4,360	40,900	7,500	14,500	68,000	11,200	9,180	3,720	38,400	4,000	3,470
2	8,640	9,040	29,700	13,200	9,720	66,600	8,040	11,300	5,240	35,900	5,840	2,170
3	6,200	14,700	24,000	15,900	10,100	81,400	9,070	13,700	3,800	31,100	6,560	2,300
4	5,800	15,800	17,700	19,500	22,600	71,300	13,100	21,000	2,740	33,200	5,720	2,350
5	6,250	12,000	11,900	22,200	21,000	52,200	26,100	27,700	4,780	28,200	7,210	2,660
6	5,420	10,400	19,000	36,400	16,200	47,900	27,800	28,600	3,580	33,900	6,620	2,470
7	5,990	7,690	35,100	32,100	13,800	41,200	28,400	24,000	2,770	34,300	8,380	2,720
8	4,450	6,790	51,900	24,900	13,200	38,100	38,000	16,300	2,810	29,800	7,340	3,310
9	4,430	6,940	46,300	20,500	11,500	35,000	39,200	14,500	3,110	20,900	7,210	2,290
10	3,420	5,740	32,500	26,500	13,500	27,000	32,300	21,200	3,140	16,300	5,150	2,600
11	3,870	3,760	28,300	34,800	12,200	22,100	26,500	21,200	2,330	13,400	4,180	2,640
12	4,620	4,790	21,300	37,900	8,280	16,600	21,800	20,200	2,420	8,130	2,580	3,060
13	4,320	4,490	18,300	32,200	12,700	44,900	28,300	19,100	3,250	7,670	2,520	2,940
14	3,540	3,800	16,400	24,000	31,800	53,700	55,300	15,200	4,300	6,050	3,220	4,710
15	2,460	4,440	13,700	20,700	23,700	46,200	46,400	11,900	4,960	5,640	3,080	3,040
16	2,920	3,700	9,650	14,900	25,200	37,700	49,800	12,200	6,070	5,040	3,010	3,080
17	2,340	3,980	9,920	12,200	24,600	45,900	57,700	14,000	6,320	9,150	3,310	2,850
18	2,450	3,090	8,940	12,100	20,400	41,000	52,500	14,000	4,200	8,410	3,800	2,980
19	3,350	3,380	7,600	13,400	17,700	31,400	40,700	13,800	5,680	5,920	5,450	2,980
20	2,680	3,310	8,120	12,700	14,100	25,000	37,500	12,500	7,180	5,190	4,600	2,550
21	2,870	3,630	11,000	13,600	12,400	27,300	29,200	11,800	12,600	5,590	3,570	2,700
22	2,520	3,780	13,000	18,400	15,500	25,900	25,700	10,900	15,500	4,610	3,990	2,530
23	2,500	4,640	12,800	18,100	24,300	26,000	40,100	10,500	105,000	4,120	4,210	2,110
24	3,740	4,580	10,700	18,600	29,600	23,500	38,200	8,800	158,000	3,500	3,600	2,180
25	3,740	5,640	9,580	25,500	42,500	19,700	36,000	8,050	78,600	3,440	2,580	2,260
26	6,380	6,170	7,000	20,500	59,600	15,300	30,800	6,340	51,800	3,330	2,750	2,750
27	8,340	6,620	7,880	20,900	74,500	14,600	27,000	5,250	41,700	2,980	2,410	2,290
28	6,810	10,600	9,310	20,400	53,900	16,900	21,300	4,040	37,600	2,690	3,180	2,980
29	5,060	17,700	10,100	18,300	51,100	16,500	13,500	2,550	40,300	2,660	3,180	3,650
30	5,070	37,600	11,300	17,400	-----	14,000	9,030	3,840	32,700	2,330	2,690	7,100
31	2,870	-----	9,360	15,500	-----	11,800	-----	3,400	-----	2,720	2,550	-----
TOTAL	142,670	233,160	563,260	640,800	700,200	1,104,770	920,540	417,050	656,200	414,570	134,490	87,720
MEAN	4,602	7,772	18,170	20,670	24,140	35,640	30,680	13,450	21,870	13,370	4,338	2,924
MAX	9,620	37,600	51,900	37,900	74,500	81,400	57,700	28,600	158,000	38,400	8,380	7,100
MIN	2,340	3,090	7,000	7,500	8,280	11,800	8,040	2,550	2,330	2,330	2,410	2,110
(\bar{x})	-909	-130	-662	+136	+2,600	-894	+1,460	-31.7	+1,840	-2,000	-627	-1,540
MEAN \neq	3,693	7,642	17,510	20,810	26,740	34,750	32,140	13,420	23,710	11,370	3,711	1,384
CFSM \neq	.50	1.04	2.39	2.84	3.64	4.74	4.38	1.83	3.23	1.55	.51	.19
IN. \neq	.58	1.16	2.76	3.27	3.93	5.46	4.89	2.11	3.60	1.79	.59	.21

CAL YR 1971 TOTAL 4,895,810 MEAN 13,410 MAX 83,300 MIN 1,690 MEAN \neq 13,320 CFSM \neq 1.82 IN. \neq 24.69
WTR YR 1972 TOTAL 6,015,360 MEAN 16,440 MAX 158,000 MIN 2,110 MEAN \neq 16,360 CFSM \neq 2.23 IN. \neq 30.35

\neq Change in contents in Tygart Lake, Lake Lynn, and Deep Creek Reservoir, and Youghiogheny River Lake, and diversion from Beaver Run Reservoir, equivalent in cubic feet per second. Records of contents in Lake Lynn, in Deep Creek Reservoir, and of diversion from Beaver Run Reservoir, furnished by Allegheny Power Service Corp., Pennsylvania Electric Co., and Municipal Authority of Westmoreland County, respectively.

\neq Adjusted for change in reservoir contents and diversion.

Lakes and reservoirs in Monongahela River basin

03055500 TYGART LAKE.--Lat 39°18'50", long 80°02'00", Taylor County, W. Va., at dam on Tygart Valley River, 2.2 miles upstream from Threefork Creek, and 2.4 miles upstream from Grafton, W. Va. Drainage area, 1,184 sq mi. Period of record, April 1938 to current year. Prior to October 1960 published as "Tygart Reservoir". Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 251,130 acre-ft June 25 (elevation, 1,155.22 ft); minimum, 13,650 acre-ft Feb. 21 (elevation, 1,013.60 ft). Extremes for period of record: Maximum contents, 251,130 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).

Lake 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. Lake is used for flood control, for supplementary supply for navigation on Monongahela River during periods of low flow, and for recreation. Records furnished by Corps of Engineers.

03076000 DEEP CREEK RESERVOIR.--Lat 39°30'34", long 79°23'28", Garrett County, Md., on Deep Creek at dam, 1.8 miles upstream from mouth, and 7 miles north of Oakland, Md. Drainage area, 64.7 sq mi. Period of record, July 1925 to current year. Prior to October 1950, monthend contents published in WSP 1305, and October 1950 to September 1955, monthend contents published in WSP 1385. Water-stage recorder at right end of spillway. Datum of gage is at mean sea level (unadjusted). Extremes for current year: Maximum contents 87,000 acre-ft Apr. 18 (elevation, 2,460.40 ft); minimum, 63,700 acre-ft Nov. 25 (elevation, 2,453.80 ft). Extremes for period of record: Maximum contents, 93,260 acre-ft July 24, 25, 1949 (elevation, 2,462.075 ft); minimum observed, 11,760 acre-ft Sept. 30, 1925 (elevation, 2,433.45 ft).

Reservoir is formed by an earthfill dam completed January 1925. Usable capacity, 92,975 acre-ft between elevations 2,425 ft (top of intake to outlet tunnel) and 2,462 ft (crest of spillway). Dead storage, 13,085 acre-ft. Figures given herein represent usable contents. Reservoir is used for hydroelectric power. Records furnished by Pennsylvania Electric Co.

03077000 YOUGHIOGHENY RIVER LAKE.--Lat 39°47'56", long 79°22'06", Somerset County, remote control recorder at control house at dam, 1.2 miles upstream from Confluence, Pa., since June 1951. Water-stage recorder and transmitter at lat 39°45'21", long 79°24'00", at bridge on U. S. Highway 40, 500 ft upstream from Stuck Hollow Run, 0.6 mile upstream from Tub Run, on Youghiogheny River, 7.5 miles upstream from Youghiogheny River Dam, Pa. Drainage area, 434 sq mi. Period of record, October 1943 to current year. Prior to October 1970 published as "Youghiogheny River Reservoir". Water-stage recorder. Datum of gage is at mean sea level. Prior to Mar. 9, 1948, nonrecording gage at dam at same datum. Mar. 9, 1948, to present, water-stage recorder also at transmitter site at same datum. Extremes for current year: Maximum contents, 194,840 acre-ft June 26 (elevation, 1,452.44 ft); minimum, 49,190 acre-ft Nov. 27 (elevation, 1,390.62 ft). Extremes for period of record: Maximum contents, 210,250 acre-ft May 16, 1967 (elevation, 1,457.23 ft); minimum (after dam became fully operational), 7,730 acre-ft, Jan. 9, 1954 (elevation, 1,349.00 ft).

Lake is formed by a rock-faced earthfill dam with uncontrolled side channel spillway. Storage began during construction and lake acted as a retention basin from December 1942 to December 1947. Dam became fully operational in January 1948. Lake first reached minimum pool elevation, 1,344.0 ft (capacity, 5,230 acre-ft in December 1942. Capacity 254,000 acre-ft between elevations 1,319.50 ft (invert at intake to outlet tunnel) and 1,470.00 ft (full pool). Winter low-water pool elevation is 1,419.0 ft, capacity, 103,000 acre-ft. Summer low-water pool elevation is 1,439.0 ft, capacity, 154,500 acre-ft. Storage to summer pool normally occurs during period Mar. 15 to Apr. 15. Depletion of low-water storage for Youghiogheny River flow augmentation occurs normally during the period July through November. Figures given herein represent total contents. Lake is used for flood control, for low-flow augmentation of Youghiogheny River and downstream rivers, and for recreation. 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 (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
03055500 Tygart Lake				03076000 Deep Creek Reservoir		
Sept. 30.....	1,083.09	93,180	-	2,457.30	75,700	-
Oct. 31.....	1,067.06	69,440	-386	2,454.90	67,400	-135
Nov. 30.....	1,068.54	71,480	+34.3	2,454.20	65,000	-40.3
Dec. 31.....	1,027.89	25,110	-754	2,455.70	70,100	+82.9
CAL YR 1971.....	-	-	-30.2	-	-	-1.9
Jan. 31.....	1,027.88	25,100	-0.2	2,456.50	72,900	+45.5
Feb. 29.....	1,099.86	121,790	+1,680	2,457.00	74,700	+31.3
Mar. 31.....	1,042.40	39,240	-1,340	2,459.40	83,300	+140
Apr. 30.....	1,093.23	109,920	+1,190	2,459.50	83,700	+6.7
May 31.....	1,094.98	112,960	+49.4	2,458.70	80,800	-47.2
June 30.....	1,135.73	197,550	+1,420	2,459.80	84,800	+67.2
July 31.....	1,094.96	112,930	-1,380	2,458.60	80,400	-71.6
Aug. 31.....	1,092.71	109,020	-63.6	2,456.00	71,100	-151
Sept. 30.....	1,069.42	72,690	-610	2,454.90	67,400	-62.2
WTR YR 1972.....	-	-	-28.2	-	-	-11.4

MONONGAHELA RIVER BASIN

Lakes and reservoirs in Monongahela River basin--Continued

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
<u>03077000 Youghiogheny River Lake</u>			
Sept. 30.....	1,416.44	97,260	-
Oct. 31.....	1,401.52	67,170	-489
Nov. 30.....	1,397.57	60,250	-116
Dec. 31.....	1,402.98	69,840	+156
CAL YR 1971.....	-	-	-37.6
Jan. 31.....	1,406.96	77,440	+124
Feb. 29.....	1,426.69	121,530	+766
Mar. 31.....	1,438.73	153,750	+524
Apr. 30.....	1,441.00	160,240	+109
May 31.....	1,440.87	159,870	-6.0
June 30.....	1,449.55	185,810	+436
July 31.....	1,437.42	150,010	-582
Aug. 31.....	1,429.02	127,450	-367
Sept. 30.....	1,405.31	74,240	-894
WTR YR 1972.....	-	-	-31.7

CHARTIERS CREEK BASIN

263

03085550 Chartiers Creek at Crafton, Pa.

LOCATION.--Lat 40°26'23", long 80°04'51", Allegheny County, near center of span on upstream side of bridge on West Steuben Street at Crafton, 2.8 miles downstream from Whiskey Run, and 4.5 miles upstream from mouth.

DRAINAGE AREA.--270 sq mi.

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

GAGE.--Nonrecording gage. Datum of gage is 725.99 ft above mean sea level (Corps of Engineers bench mark).

EXTREMES.--Current year: Maximum discharge, 5,430 cfs June 23 (gage height, 8.42 ft, from graph based on gage readings); minimum daily, 62 cfs Oct. 20, Nov. 7, 14-17.

REMARKS.--Records fair. Some regulation at low flow by mine drainage, reservoirs, and industrial usage above station.

COOPERATION.--Six discharge measurements 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	85	67	130	147	120	686	370	410	127	330	120	73
2	87	114	103	270	109	840	360	505	137	295	117	106
3	62	97	87	255	130	1,760	355	548	137	512	114	87
4	82	67	71	265	315	884	500	460	120	345	174	80
5	80	69	92	450	150	734	430	405	100	386	108	73
6	80	69	1,150	380	180	572	445	355	89	458	100	73
7	82	62	922	260	160	644	1,910	330	82	340	103	73
8	69	67	465	163	140	995	1,230	280	78	280	122	75
9	74	69	315	217	120	710	806	375	78	250	120	75
10	62	76	230	290	110	584	680	350	87	231	98	85
11	80	71	187	270	100	500	608	265	74	212	87	93
12	71	64	143	200	120	515	520	235	69	195	96	106
13	69	65	134	180	560	3,220	1,820	213	366	187	96	131
14	71	62	180	183	722	1,830	1,490	217	593	187	91	659
15	67	62	240	140	566	1,150	1,070	217	161	174	89	187
16	67	62	183	100	662	1,300	1,250	260	150	640	85	120
17	69	62	154	130	505	1,470	1,340	280	154	512	148	106
18	69	64	130	180	410	1,020	890	325	97	340	138	320
19	76	89	111	150	250	776	752	240	85	444	195	159
20	62	82	120	120	280	674	911	221	103	275	117	114
21	71	89	120	137	320	632	692	191	745	217	85	108
22	76	80	111	109	410	734	960	172	655	174	82	100
23	84	67	95	176	390	680	824	168	4,260	170	76	96
24	213	74	97	230	410	584	656	150	2,050	162	75	138
25	127	95	87	315	435	520	590	140	1,020	145	80	117
26	87	89	97	208	620	465	455	127	746	135	82	108
27	78	111	111	221	525	455	475	111	564	217	125	120
28	74	134	143	226	560	415	410	100	464	145	120	260
29	69	150	120	172	662	415	385	100	434	120	82	287
30	67	187	231	147	-----	515	410	120	392	114	76	897
31	65	-----	265	134	-----	385	-----	154	-----	117	71	-----
TOTAL	2,511	2,516	6,644	6,485	10,051	26,094	23,594	6,044	14,237	8,309	3,272	5,026
MEAN	81.0	83.9	214	209	347	861	786	259	475	268	106	168
MAX	213	187	1,150	450	722	3,220	1,910	548	4,260	640	195	897
MIN	62	62	71	100	100	385	355	100	69	114	71	73
CFSM	.30	.31	.79	.77	1.29	3.14	2.91	.96	1.76	.99	.39	.62
IN.	.35	.35	.92	.89	1.38	3.68	3.25	1.11	1.96	1.14	.45	.69

CAL YR 1971 TOTAL 102,034 MEAN 280 MAX 3,230 MIN 62 CFSM 1.04 IN 14.06

WTR YR 1972 TOTAL 117,383 MEAN 321 MAX 4,260 MIN 62 CFSM 1.19 IN 16.17

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-13	2000	8.14	5,120	6-23	1600	8.42	5,430
4-13	1700	5.87	2,850				

03086000 Ohio River at Sewickley, Pa.

LOCATION.--Lat 40°31'53", long 80°11'21", Allegheny County, on left bank 200 ft upstream from highway bridge at Sewickley, 0.5 mile upstream from Narrows Run, 1.5 miles upstream from Dashields Dam, and 11.8 miles downstream from confluence of Allegheny and Monongahela Rivers.

DRAINAGE AREA.--19,500 sq mi, approximately.

PERIOD OF RECORD.--October 1933 to current year.

GAGE.--Water-stage recorder and fixed-crest concrete dam control 1.5 miles downstream. Datum of gage is 690.00 ft above mean sea level, adjustment of 1912. Prior to Nov. 22, 1933, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--39 years, 31,960 cfs (22.26 inches per year) adjusted for storage since May 1938.

EXTREMES.--Current year: Maximum discharge, 370,000 cfs June 24 (gage height, 24.42 ft); minimum daily, 5,440 cfs Sept. 6.

Period of record: Maximum discharge, 574,000 cfs Mar. 18, 1936 (gage height, 34.75 ft, from floodmark in gage house); minimum, 1,800 cfs Sept. 4, 1957 (gage height, 2.60 ft).

REMARKS.--Records good. Some regulation by locks, and by many reservoirs above station (see pp.237,238,261). Combined capacity of reservoirs and lakes excluding that of Chautauqua Lake but including Lake Lynn and Deep Creek Reservoir and 15 smaller reservoirs, 2,773,000 acre-ft. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1305: 1938-40 (adjusted monthly runoff). WSP 1435: 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	19,400	8,400	62,000	66,500	35,800	89,800	38,000	27,700	12,100	139,000	9,910	7,940
2	17,900	13,900	53,400	55,800	29,300	115,000	32,500	28,800	15,100	129,000	11,900	6,460
3	13,900	18,900	44,300	63,600	29,000	170,000	32,400	33,500	14,800	114,000	12,600	6,190
4	13,100	21,200	33,900	63,400	40,700	154,000	38,600	48,500	13,100	117,000	12,500	5,550
5	13,300	17,500	26,300	64,500	37,000	135,000	51,900	54,200	12,800	102,000	13,800	6,450
6	11,900	16,200	37,700	76,900	28,400	127,000	56,000	53,200	13,000	96,500	12,400	5,440
7	11,500	13,700	71,800	68,900	25,200	118,000	61,000	46,600	13,000	101,000	14,200	6,150
8	9,470	13,100	105,000	57,000	25,600	118,000	70,000	36,100	11,600	93,100	13,700	7,190
9	8,920	13,000	108,000	50,500	21,800	117,000	70,000	34,600	11,300	74,400	13,800	5,910
10	7,100	12,900	89,100	52,800	20,600	99,100	63,200	46,700	11,300	65,200	12,900	7,140
11	7,400	11,300	77,300	64,100	17,200	85,000	54,000	53,800	13,500	63,900	11,100	7,630
12	9,360	10,500	63,000	69,400	16,500	69,400	46,400	55,800	11,100	55,600	8,810	9,290
13	9,910	9,690	55,400	64,700	22,800	95,200	52,600	52,100	13,300	50,700	8,300	10,700
14	8,100	10,100	48,500	55,200	42,500	120,000	83,300	44,500	20,300	44,700	8,400	20,200
15	7,500	10,500	47,500	51,700	39,100	111,000	86,000	40,000	19,200	35,600	8,400	15,500
16	8,200	10,600	47,700	40,400	42,000	93,900	102,000	42,400	19,100	29,000	8,500	17,600
17	6,610	12,000	46,700	32,000	40,700	114,000	123,000	43,400	28,400	30,100	8,920	14,500
18	5,800	10,500	41,600	30,000	37,100	116,000	125,000	40,000	23,700	29,200	9,030	15,300
19	7,400	10,000	38,400	36,800	35,600	99,800	114,000	38,600	23,000	27,100	11,300	15,500
20	5,980	9,690	37,100	36,400	30,100	93,900	117,000	36,100	23,700	24,400	10,200	11,500
21	6,520	9,580	38,800	41,500	24,500	92,800	105,000	32,400	36,600	22,100	8,800	10,000
22	5,980	9,800	38,900	44,200	25,600	86,000	96,700	30,800	64,300	19,700	8,360	8,610
23	5,720	12,100	38,600	44,900	35,800	90,500	107,000	28,000	218,000	17,900	8,520	6,560
24	8,000	12,600	33,400	48,800	40,000	87,600	100,000	25,300	344,000	13,300	10,500	7,060
25	7,700	15,400	32,900	59,000	50,500	75,200	88,400	21,700	237,000	14,600	9,250	6,440
26	10,100	13,400	28,500	56,400	70,900	64,700	68,700	18,900	215,000	13,100	8,920	7,260
27	12,900	14,100	33,900	55,400	87,600	58,000	57,600	15,700	180,000	12,500	8,530	6,520
28	12,600	17,900	39,100	51,900	69,600	58,400	46,900	13,100	161,000	10,900	9,610	8,000
29	10,700	26,000	40,000	47,100	70,400	55,400	36,100	10,800	152,000	10,700	9,910	9,650
30	11,300	50,400	42,200	42,700	-----	49,000	28,700	11,900	137,000	8,600	8,290	17,200
31	7,600	-----	71,800	37,700	-----	41,500	-----	12,400	-----	8,920	8,140	-----
TOTAL	301,870	434,960	1,572,880	1,630,280	1,091,980	3,000,280	2,152,080	1,077,680	2,068,380	1,573,880	319,500	289,440
MEAN	9,738	14,500	50,740	52,590	37,650	96,780	71,730	34,760	68,940	50,770	10,310	9,648
MAX	19,400	50,400	108,000	76,900	87,600	170,000	125,000	55,800	344,000	139,000	14,200	20,200
MIN	5,720	8,400	26,300	30,000	16,500	41,500	28,700	10,800	11,100	8,600	8,140	5,440
(∇)	-2,160	+290	+3,190	-2,900	+1,990	+1,300	+4,010	+41.7	+13,900	-13,900	-1,640	-2,610
MEAN	7,578	14,790	53,930	49,690	39,640	98,080	75,740	34,800	82,840	36,870	8,670	7,038
CFSM ∇	.39	.76	2.77	2.55	2.03	5.03	3.88	1.78	4.25	1.89	.44	.36
IN. ∇	.45	.85	3.19	2.94	2.19	5.80	4.33	2.05	4.74	2.18	.51	.40

CAL YR 1971 TOTAL 11,477,610 MEAN 31,450 MAX 131,000 MIN 5,680 MEAN ∇ 31,570 CFSM ∇ 1.62 IN. ∇ 21.96
WTR YR 1972 TOTAL 15,512,590 MEAN 42,380 MAX 344,000 MIN 5,440 MEAN ∇ 42,460 CFSM ∇ 2.18 IN. ∇ 29.63

∇ Change in contents, equivalent in cubic feet per second, in Allegheny Reservoir, Chautauqua and Tionesta Lakes, Union City Reservoir, and East Branch Clarion River, Mahoning Creek, Crooked Creek, Yellow Creek, Cone-maugh River, Loyahanna, and Tygart Lakes, Lake Lynn, Deep Creek Reservoir, Youghiogheny River Lake, and 15 smaller reservoirs. Records of reservoir contents furnished by Pennsylvania Electric Co., Manufacturers Water Co., Greater Johnstown Water Authority, Latrobe Municipal Authority of Westmoreland County, and Allegheny Power Service Corp.

∇ Adjusted for change in reservoir contents.

BIG SEWICKLEY CREEK BASIN

265

03086100 Big Sewickley Creek near Ambridge, Pa.

LOCATION.--Lat 40°36'27", long 80°09'49", Allegheny County, on left bank at downstream side of bridge, 1.3 miles downstream from East Branch Big Sewickley Creek, and 3.5 miles northeast of Ambridge.

DRAINAGE AREA.--15.6 sq mi.

PERIOD OF RECORD.--Annual maximum and occasional discharge measurements, water years 1963-67. October 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 810.93 ft above mean sea level. Aug. 31, 1962, to Sept. 20, 1967, crest-stage at same site and at datum 10 ft lower.

AVERAGE DISCHARGE.--5 years, 14.8 cfs (12.88 inches per year).

EXTREMES.--Current year: Maximum discharge, 800 cfs June 23 (gage height, 6.25 ft), from rating curve extended above 200 cfs as explained below; minimum, 0.19 cfs Aug. 25, Sept. 3; minimum gage height, 2.72 ft Oct. 5, 6, 15, 16, 18-20.

Period of record: Maximum discharge, 990 cfs Mar. 4, 1963 (gage height, 6.67 ft, present datum), from rating curve extended above 200 cfs on the basis of slope-area measurement of peak flow; maximum gage height, 7.22 ft Jan. 29, 1968 (backwater from ice); no flow on many days.

REMARKS.--Records good except those for winter periods, which are 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	1.7	1.4	10	24	11	144	14	15	3.2	26	1.9	.31
2	1.2	2.8	7.7	29	10	132	13	18	3.6	17	1.9	.27
3	1.1	2.3	9.5	23	20	97	12	16	2.9	14	1.9	.27
4	.90	1.5	6.4	23	16	73	16	14	10	10	2.0	.41
5	.78	1.1	5.9	29	14	46	15	12	5.5	16	1.6	.56
6	.90	1.1	90	24	12	37	15	11	3.6	13	1.5	.56
7	1.2	1.2	71	20	11	67	57	10	2.9	9.4	1.7	.46
8	.78	1.1	36	16	10	101	42	10	2.1	8.1	2.0	.41
9	.90	.90	21	17	9.0	63	33	17	3.2	7.8	3.2	.36
10	2.0	1.2	16	19	8.0	47	28	15	3.6	14	2.0	.46
11	1.4	1.2	12	16	8.0	41	25	13	2.1	8.7	1.5	.41
12	.90	1.1	9.4	14	15	55	21	12	1.8	6.9	1.3	.76
13	.78	1.1	7.7	14	35	128	48	10	5.1	6.2	1.6	8.1
14	.66	.90	51	12	50	112	38	11	33	5.6	1.1	70
15	.55	.90	66	10	40	86	161	9.8	10	6.5	.86	20
16	.55	.78	32	9.0	25	94	136	10	6.7	7.8	.76	6.0
17	.66	.78	21	13	21	92	97	13	4.9	6.7	.66	4.0
18	.66	.78	16	16	19	65	66	11	3.8	5.6	.76	10
19	.66	1.0	13	19	17	45	48	9.5	3.0	6.2	1.2	5.0
20	.78	1.2	13	14	15	34	76	10	4.9	5.7	.66	4.0
21	1.1	2.8	10	11	25	28	56	9.3	15	4.3	.41	3.0
22	1.4	3.2	8.4	12	22	44	84	7.9	48	3.9	.36	2.5
23	1.5	3.2	9.4	31	27	38	65	6.7	428	3.5	.31	2.0
24	3.6	3.6	7.7	25	22	30	49	5.9	164	3.9	.36	6.0
25	2.6	3.6	6.4	31	20	26	36	5.0	138	2.9	.27	3.0
26	2.0	3.2	7.7	31	35	22	28	4.3	66	2.4	1.5	5.0
27	1.7	5.6	8.0	24	33	20	22	3.8	35	3.0	2.4	4.0
28	1.7	8.8	14	21	55	18	19	3.4	24	2.9	1.3	3.0
29	1.5	13	13	17	107	18	17	3.2	34	2.3	.76	4.0
30	1.5	16	42	14	-----	17	16	3.3	30	2.0	.56	20
31	1.4	-----	37	12	-----	15	-----	3.7	-----	2.0	.36	-----
TOTAL	39.06	87.34	678.2	590.0	712.0	1,835	1,353	303.8	1,097.9	234.3	38.69	184.84
MEAN	1.26	2.91	21.9	19.0	24.6	59.2	45.1	9.80	36.6	7.56	1.25	6.16
MAX	3.6	16	90	31	107	144	161	18	428	26	3.2	70
MIN	.55	.78	5.9	9.0	8.0	15	12	3.2	1.8	2.0	.27	.27
CFSM	.08	.19	1.40	1.22	1.58	3.79	2.89	.63	2.35	.48	.08	.39
IN.	.09	.21	1.62	1.41	1.70	4.38	3.23	.72	2.62	.56	.09	.44

CAL YR 1971 TOTAL 6,063.36 MEAN 16.6 MAX 225 MIN .05 CFSM 1.06 IN 14.46
 *TR YR 1972 TOTAL 7,154.13 MEAN 19.5 MAX 428 MIN .27 CFSM 1.25 IN 17.06

PEAK DISCHARGE (BASE, 350 CFS).--June 23 (0400) 800 cfs (6.25 ft).

BEAVER RIVER BASIN

03101500 Shenango River at Pymatuning Dam, Pa.

LOCATION.--Lat 41°29'53", long 80°27'37", Crawford County, on left bank 500 ft downstream from Sugar Run, 900 ft downstream from Pymatuning Dam, 1.5 miles northwest of Jamestown, and at mile 84.9.

DRAINAGE AREA.--167 sq mi.

PERIOD OF RECORD.--June 1934 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 970.00 ft above mean sea level, adjustment of 1907.

AVERAGE DISCHARGE.--38 years, 197 cfs (16.02 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 832 cfs July 3 (gage height, 6.64 ft); minimum daily, 36 cfs Mar. 31, Apr. 1, 3, May 27-29, June 6-9, 11, 12.

Period of record: Maximum discharge, 1,540 cfs Sept. 4, 1937 (gage height, 9.2 ft); minimum, 0.1 cfs June 30 to July 3, 1934.

REMARKS.--Records excellent. Flow regulated by Pymatuning Reservoir since 1933 (see p. 276).

REVISIONS (WATER YEARS).--WSP 823: 1934-36. WSP 1083: 1936(M), 1937, 1940(M), 1941-45. WSP 1335: 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	131	214	218	356	355	252	36	450	38	697	60	68
2	130	214	218	365	310	339	37	463	38	684	48	79
3	130	214	218	364	302	110	36	546	41	680	48	87
4	130	216	218	364	305	72	41	467	38	350	55	86
5	130	216	218	382	305	60	40	457	37	660	59	85
6	131	216	266	398	305	53	38	453	36	660	59	86
7	131	218	351	410	305	91	54	450	36	660	59	87
8	132	218	331	410	304	147	79	450	36	660	60	109
9	132	217	299	410	300	64	79	459	36	660	60	131
10	134	214	300	421	300	47	79	429	37	660	60	130
11	133	214	305	422	245	42	78	347	36	660	60	131
12	144	214	305	414	193	52	77	247	36	660	60	132
13	151	214	340	412	167	85	80	218	54	660	60	135
14	151	214	360	410	126	131	80	225	43	660	60	136
15	159	214	420	408	112	73	158	230	46	660	62	133
16	163	214	366	403	93	76	197	180	74	660	62	132
17	163	214	357	405	76	78	232	167	60	660	62	133
18	163	214	351	405	72	54	247	117	56	320	62	136
19	182	214	350	415	71	44	276	69	55	120	62	133
20	191	214	353	410	68	41	348	56	54	120	62	133
21	208	214	357	410	68	40	393	55	54	120	62	134
22	218	216	350	410	71	102	420	53	60	120	62	134
23	218	214	351	414	70	70	416	52	322	120	62	134
24	218	214	353	414	68	52	438	51	509	120	62	134
25	217	214	353	411	68	50	458	51	271	90	62	134
26	217	214	362	407	68	46	454	42	596	75	62	139
27	215	214	362	405	67	43	452	36	691	75	62	144
28	214	217	372	405	67	40	451	36	682	75	62	138
29	214	215	362	405	73	38	450	36	686	75	62	135
30	214	224	466	404	-----	39	450	37	690	75	62	147
31	214	-----	352	400	-----	36	-----	39	-----	75	65	-----
TOTAL	5,278	6,453	10,184	12,469	4,934	2,467	6,674	6,968	5,448	12,571	1,865	3,655
MEAN	170	215	329	402	170	79.6	222	225	182	406	60.2	122
MAX	218	224	466	422	355	339	458	546	691	697	65	147
MIN	130	214	218	356	67	36	36	36	36	75	48	68
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL	55,656	MEAN	152	MAX	556	MIN	19	CFSM	-	IN.	-
WTR YR 1972	TOTAL	78,966	MEAN	216	MAX	697	MIN	36	CFSM	-	IN.	-

BEAVER RIVER BASIN

267

03102500 Little Shenango River at Greenville, Pa.

LOCATION.--Lat 41°25'19", long 80°22'35", Mercer County, on left bank 1,700 ft downstream from Williamson Crossing Bridge, 1 mile northeast of Greenville, and 2.0 miles upstream from mouth.

DRAINAGE AREA.--104 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 953.46 ft above mean sea level, adjustment of 1912. Prior to Nov. 4, 1915, nonrecording gage; Nov. 4, 1915, to Sept. 30, 1918, water-stage recorder; Nov. 7, 1919, to Aug. 31, 1923, and Nov. 19, 1925, to June 20, 1934, nonrecording gage at site 1 mile downstream at datum 8.96 ft lower.

AVERAGE DISCHARGE.--59 years, 139 cfs (18.15 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,950 cfs Mar. 2 (gage height, 8.59 ft); minimum, 3.0 cfs Oct. 3, 5, 6; minimum gage height, 0.94 ft Oct. 3.

Period of record: Maximum discharge, 8,540 cfs Jan. 22, 1959 (gage height, 14.30 ft), from rating curve extended above 3,200 cfs on basis of slope-area measurement at gage height 12.26 ft; minimum, 2.9 cfs July 31, 1934 (gage height, 0.58 ft).

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

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1305: 1914, 1922-23, 1926-29. WSP 1335: 1923(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	8.4	8.0	114	489	54	490	123	74	67	249	31	15
2	5.2	8.9	59	243	48	2,440	130	223	58	199	30	15
3	3.8	8.9	82	211	58	1,720	132	482	118	2,000	30	23
4	3.8	11	33	179	72	792	128	404	104	1,400	30	22
5	3.4	11	40	188	68	428	170	195	68	840	27	20
6	5.2	11	120	127	64	243	130	141	51	900	27	17
7	12	12	580	145	62	257	120	113	43	600	27	16
8	12	12	1,200	109	58	876	115	104	39	400	29	15
9	14	13	440	109	56	596	115	163	36	350	27	15
10	25	14	180	157	53	293	108	195	55	320	27	15
11	33	15	140	249	50	203	94	130	52	201	25	14
12	24	14	130	203	58	261	88	98	40	134	24	25
13	16	12	125	148	70	451	101	85	166	117	23	42
14	15	11	130	135	180	744	130	94	345	118	23	100
15	12	12	675	98	200	708	392	261	181	100	48	86
16	8.9	16	650	70	190	475	700	283	383	173	55	44
17	8.9	15	295	80	160	792	712	559	241	253	35	37
18	6.4	15	186	90	140	542	330	458	115	137	31	109
19	5.2	17	146	105	110	298	199	223	79	95	28	84
20	5.2	25	143	120	92	225	265	157	64	81	25	47
21	5.2	32	209	120	105	191	323	141	62	72	23	34
22	4.0	38	172	110	98	257	253	113	101	64	20	28
23	4.0	35	109	186	90	700	267	89	840	57	20	25
24	5.2	30	100	213	84	580	197	77	1,420	51	20	30
25	5.2	28	97	175	78	450	157	66	1,740	46	22	34
26	5.2	29	143	103	72	380	127	58	1,370	43	21	44
27	6.0	37	231	80	65	210	107	51	660	40	21	203
28	6.4	60	235	68	80	180	92	47	293	41	22	130
29	5.6	80	211	78	110	170	84	45	213	38	22	73
30	4.8	122	573	72	-----	161	77	44	207	35	19	143
31	6.4	-----	1,290	62	-----	141	-----	73	-----	34	18	-----
TOTAL	285.4	752.8	8,838	4,522	2,625	16,254	5,966	5,246	9,211	9,188	830	1,505
MEAN	9.21	25.1	285	146	90.5	524	199	169	307	296	26.8	50.2
MAX	33	122	1,290	489	200	2,440	712	559	1,740	2,000	55	203
MIN	3.4	8.0	33	62	48	141	77	44	36	34	18	14
CFSM	.09	.24	2.74	1.40	.87	5.04	1.91	1.63	2.95	2.85	.26	.48
IN.	.10	.27	3.16	1.62	.94	5.81	2.13	1.88	3.29	3.29	.30	.54

CAL YR 1971 TOTAL 40,808.7 MEAN 112 MAX 1,920 MIN 3.4 CFSM 1.08 IN 14.60
WTR YR 1972 TOTAL 65,223.2 MEAN 178 MAX 2,440 MIN 3.4 CFSM 1.71 IN 23.33

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 2	1700	8.59	2,950	7- 3	Unknown	*7.08	2,050
6-25	1100	6.63	1,820				

* From magnet.

BEAVER RIVER BASIN

03102850 Shenango River near Transfer, Pa.

LOCATION.--Lat 41°21'13", long 80°23'53", Mercer County, on left bank at downstream side of covered wooden bridge, 200 ft downstream from highway bridge, 0.6 mile downstream from Big Run, 2.5 miles northeast of Transfer, and at mile 71.8.

DRAINAGE AREA.--337 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 913.94 ft above mean sea level, (Pennsylvania Department of Transportation bench mark).

AVERAGE DISCHARGE.--7 Years 425 cfs (17.13 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 4,570 cfs Mar. 2 (gage height, 8.87 ft); minimum, 88 cfs Aug. 31 (gage height, 2.14 ft).

Period of record: Maximum discharge, 5,010 cfs Dec. 28, 1968 (gage height, 9.72 ft); minimum, 33 cfs July 20-22, 1968 (gage height, 1.71 ft).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated since 1933 by Pymatuning Reservoir 13 miles upstream (see p. 276) and by mills above station.

REVISIONS (WATER YEARS).--WRD Pa. 1967: 1966(M). WRD Pa. 1971: 1966, 1967.

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	143	224	418	1,080	400	1,200	216	586	129	1,260	112	92
2	140	224	316	794	370	4,250	220	882	116	1,070	94	100
3	138	224	275	738	390	2,530	225	1,410	208	3,470	94	116
4	138	224	260	682	400	1,110	265	1,100	180	2,650	94	116
5	138	224	256	714	370	658	298	794	136	1,920	98	114
6	140	224	626	626	350	404	235	698	114	1,960	98	112
7	145	224	1,790	618	340	507	240	642	102	1,350	102	112
8	142	224	2,010	570	370	1,590	265	634	96	1,070	105	116
9	145	224	1,050	578	340	866	245	754	94	978	102	156
10	163	229	658	722	310	470	225	770	107	1,150	100	156
11	160	229	578	850	290	347	216	594	112	1,030	98	156
12	154	224	521	762	260	452	200	434	96	922	96	174
13	163	224	494	674	300	914	230	358	270	906	96	196
14	160	224	594	690	350	1,400	260	386	458	930	96	276
15	160	229	1,490	610	400	1,070	922	690	287	890	116	245
16	166	233	1,310	480	350	922	1,300	674	549	1,130	134	180
17	166	228	842	500	310	1,270	1,280	874	398	1,130	109	180
18	166	224	650	510	270	834	802	754	208	770	105	308
19	172	229	578	618	240	494	602	392	171	265	102	255
20	191	229	586	650	210	380	842	276	150	235	98	200
21	195	242	706	642	260	325	930	240	142	216	96	177
22	211	256	626	618	250	842	922	204	168	200	94	168
23	211	251	521	754	240	1,030	914	177	1,410	192	94	165
24	220	242	514	778	220	610	778	174	2,390	188	94	177
25	220	242	507	714	210	476	738	168	3,010	184	96	177
26	224	238	586	586	200	458	682	139	2,470	180	94	220
27	224	260	722	542	190	398	642	112	1,750	174	92	434
28	224	300	770	542	220	336	610	105	1,200	171	94	330
29	224	322	714	550	250	281	594	98	1,090	168	94	240
30	224	437	1,830	510	-----	281	578	100	1,120	165	90	364
31	224	-----	2,150	460	-----	245	-----	123	-----	139	88	-----
TOTAL	5,491	7,308	24,948	20,162	8,660	26,950	16,476	15,342	18,730	27,063	3,075	5,812
MEAN	177	244	805	650	299	869	549	495	624	873	99.2	194
MAX	224	437	2,150	1,080	400	4,250	1,300	1,410	3,010	3,470	134	434
MIN	138	224	256	460	190	245	200	98	94	139	88	92
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL 123,009	MEAN 337	MAX 2,970	MIN 120	CFSM -	IN. -						
WTR YR 1972	TOTAL 180,017	MEAN 492	MAX 4,250	MIN 88	CFSM -	IN. -						

BEAVER RIVER BASIN

269

03103500 Shenango River at Sharpsville, Pa.

LOCATION.--Lat 41°15'58", long 80°28'22", Mercer County, on left bank 800 ft upstream from double highway bridge at Sharpsville, 0.7 mile downstream from Shenango River Dam, 1.8 miles upstream from McCullough Run, and at mile 55.1.

DRAINAGE AREA.--584 sq mi.

PERIOD OF RECORD.--March 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 861.57 ft above mean sea level.

AVERAGE DISCHARGE.--34 years, 708 cfs (16.46 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 3,440 cfs June 27 (gage height, 6.11 ft); minimum daily, 156 cfs Apr. 11-14.

Period of record: Maximum discharge, 15,700 cfs Jan. 22, 1959 (gage height, 15.97 ft); minimum daily, 43 cfs Sept. 3, 1941.

Flood of Mar. 26, 1913, reached at stage of 19.3 ft, from Pymatuning survey profile map (discharge not determined).

REMARKS.--Records good. Flow regulated by Pymatuning Reservoir since 1933 and by Shenango River Lake, 0.7 mile upstream, since 1967 (see pp. 276, 277).

COOPERATION.--Ten discharge measurements furnished by Corps of Engineers.

REVISIONS.--WRD Pa. 1970: 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	262	320	940	2,020	509	672	229	869	224	1,870	271	284
2	262	320	1,000	2,960	507	743	230	869	240	2,050	271	284
3	262	320	980	2,780	611	1,120	230	1,450	238	2,190	271	284
4	262	320	956	2,580	615	1,810	230	2,040	235	2,220	271	284
5	262	405	932	2,360	610	2,430	233	2,020	247	2,310	271	284
6	262	498	916	1,720	610	2,890	234	1,450	274	2,400	271	284
7	262	492	652	882	514	2,830	235	868	271	2,340	271	284
8	257	492	450	664	415	2,820	235	868	271	2,220	271	280
9	257	492	1,540	676	417	2,810	235	868	271	2,210	271	280
10	257	486	2,390	847	420	2,750	198	868	271	2,200	270	280
11	257	486	2,320	1,110	420	2,680	156	868	271	2,190	268	280
12	257	480	2,590	1,020	425	2,600	156	868	271	2,270	266	280
13	262	480	2,740	459	426	2,560	156	864	270	2,310	266	280
14	257	480	2,190	199	537	2,570	156	860	263	2,100	266	280
15	262	474	1,880	207	650	2,580	159	860	270	2,040	266	280
16	262	474	1,940	212	662	2,570	163	860	426	2,120	266	280
17	262	468	1,940	217	667	2,580	934	864	550	1,750	261	280
18	262	468	1,880	787	673	2,580	2,060	868	596	1,870	257	280
19	262	468	1,790	1,220	676	2,530	2,050	868	596	2,080	257	275
20	262	462	1,450	1,200	675	2,460	2,050	868	550	1,410	257	275
21	262	462	1,020	1,040	673	1,470	2,040	863	499	760	257	275
22	262	462	867	798	673	370	2,040	597	307	582	257	275
23	262	561	873	805	671	382	2,030	277	311	582	257	275
24	262	673	868	1,010	666	391	2,020	221	508	582	254	275
25	262	666	862	1,210	666	398	1,490	201	1,250	576	253	275
26	289	659	852	1,190	663	403	868	201	1,910	445	257	275
27	320	645	856	982	658	406	869	201	2,820	307	257	276
28	320	638	870	692	653	410	870	201	2,990	272	252	275
29	320	638	885	596	653	410	869	201	2,290	254	252	277
30	320	757	932	598	-----	414	868	201	1,870	273	252	280
31	320	-----	1,060	603	-----	347	-----	201	-----	271	275	-----
TOTAL	8,409	15,046	41,421	33,644	17,015	51,986	24,293	24,183	21,360	47,054	8,162	8,376
MEAN	271	502	1,336	1,085	587	1,677	810	780	712	1,518	263	279
MAX	320	757	2,740	2,960	676	2,890	2,060	2,040	2,990	2,400	275	284
MIN	257	320	450	199	415	347	156	201	224	254	252	275
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL	217,225	MEAN	595	MAX	4,290	MIN	188	CFSM	-	IN.	-
WTR YR 1972	TOTAL	300,949	MEAN	822	MAX	2,990	MIN	156	CFSM	-	IN.	-

BEAVER RIVER BASIN

03104760 Harthegig Run near Greenfield, Pa.

LOCATION.--Lat 41°11'10", long 80°19'38", Mercer County, on right bank at upstream end of wingwall of culvert on Legislative Route 43010 overpass of U. S. Interstate Highway 80, 1.3 miles upstream from mouth, 2 miles southeast of Greenfield, and 6 miles southwest of Mercer.

DRAINAGE AREA.--2.26 sq mi.

PERIOD OF RECORD.--Annual maximum, water years 1965-68. October 1968 to current year. Prior to October 1968, published as Little Neshannock Creek tributary near Greenfield and as Hathagig Run near Greenfield, October 1968 to September 1969.

GAGE.--Water-stage recorder, crest-stage gage, and culvert control. Datum of gage is 1,121.16 ft above mean sea level (Pennsylvania Department of Transportation bench mark). July 14, 1964, to Oct. 4, 1968, crest-stage gage at same site at datum 8.00 ft lower.

EXTREMES.--Current year: Maximum discharge, 682 cfs Apr. 15 (gage height, 2.94 ft), from rating curve extended above 57 cfs; minimum recorded, 0.05 cfs Nov. 19, but may have been less during period of no gage-height record, Sept. 8-14; minimum gage height, 1.04 ft Oct. 1-6, 8, Nov. 19, Aug. 4-7, 10, 11, 12-14, 15, 16, 19-21, 23, 24, 26, Aug. 28 to Sept. 7.

Period of record: Maximum discharge, 682 cfs Apr. 15, 1972, (gage height, 2.94 ft), from rating curve extended above 57 cfs; maximum gage height, 2.96 ft Dec. 28, 1968 (backwater from ice); minimum discharge, 0.02 cfs Aug. 17, 19, 1971; minimum gage height, 1.02 ft July 6, 14, 15, 17, Aug. 17, 19, 1971.

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

REVISIONS (WATER YEARS).--WRD Pa. 1970: 1969(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	.14	.08	.88	3.8	.35	70	1.5	14	1.4	2.2	.20	.07
2	.09	.20	.46	6.3	.30	38	1.5	72	1.8	1.4	.20	.07
3	.09	.14	.46	4.9	.50	10	1.5	85	24	9.4	.20	.07
4	.09	.11	.26	5.0	.70	5.0	2.2	14	6.7	3.7	.20	.07
5	.09	.10	.35	5.2	.56	3.8	1.5	6.1	1.6	5.5	.15	.07
6	.09	.10	.26	2.6	.50	3.5	1.5	3.4	.57	4.5	.15	.07
7	.14	.15	.28	1.4	.43	10	4.1	2.8	.26	1.8	.15	.07
8	.14	.12	9.9	1.2	.37	19	2.2	2.8	.15	1.2	.26	.07
9	.19	.10	4.1	2.1	.33	10	1.5	13	.15	.94	.20	.07
10	.19	.13	2.9	5.1	.31	4.1	1.5	6.0	.10	2.0	.20	.07
11	.14	.11	1.9	3.9	.30	3.9	1.5	2.0	.10	1.2	.15	.07
12	.13	.10	1.3	2.2	.40	7.2	1.5	.90	.10	.57	.15	.25
13	.12	.10	1.1	3.3	9.1	22	17	.70	2.0	14	.15	1.0
14	.11	.12	7.6	3.6	7.4	15	4.1	.76	.94	7.3	.33	2.5
15	.10	.15	19	2.0	7.1	8.1	147	.82	4.0	3.4	.10	.26
16	.10	.11	6.1	.40	6.2	15	65	.94	11	35	.15	.15
17	.09	.09	2.7	.45	2.8	12	29	1.4	1.8	8.0	.15	3.4
18	.08	.07	1.8	.49	2.2	6.0	8.7	1.4	.75	2.5	.20	8.0
19	.07	.14	1.6	.80	1.8	3.5	5.0	.94	.33	2.0	.07	1.6
20	.07	.09	3.3	.81	1.5	2.5	49	.75	.43	1.6	.07	.43
21	.07	.19	3.6	.96	2.0	2.2	14	.57	1.2	1.2	.07	.26
22	.07	.14	1.7	1.7	1.7	13	27	.43	8.7	.75	.15	.15
23	.10	.14	1.0	6.4	1.5	6.1	14	.33	80	.94	.07	.15
24	.15	.14	1.1	4.6	1.3	4.5	6.1	.26	39	1.4	.10	.15
25	.11	.14	1.1	2.9	1.2	3.5	3.7	.26	32	.43	.15	.15
26	.10	.14	2.1	2.5	1.1	3.0	2.8	.20	22	.33	.15	.26
27	.09	.35	2.9	.87	1.1	2.1	2.5	.20	4.5	.43	.10	1.2
28	.09	.72	5.4	.58	1.2	1.5	2.2	.20	2.0	.43	.07	.57
29	.08	2.3	2.7	.60	1.5	1.5	2.2	.15	2.0	.33	.07	10
30	.08	3.9	56	.50	-----	1.7	4.0	1.8	2.5	.26	.07	26
31	.08	-----	9.6	.40	-----	1.5	-----	1.2	-----	.20	.07	-----
TOTAL	3.28	10.47	206.91	77.56	55.75	309.2	425.3	235.31	252.08	114.91	4.50	57.25
MEAN	.11	.35	6.67	2.50	1.92	9.97	14.2	7.59	8.40	3.71	.15	1.91
MAX	.19	3.9	56	6.4	9.1	70	147	85	80	35	.33	26
MIN	.07	.07	.26	.40	.30	1.5	1.5	.15	.10	.20	.07	.07
CFSM	.05	.15	2.95	1.11	.85	4.41	6.28	3.36	3.72	1.64	.07	.85
IN.	.05	.17	3.41	1.28	.92	5.09	7.00	3.87	4.15	1.89	.07	.94

CAL YR 1971 TOTAL 845.86 MEAN 2.32 MAX 61 MIN .05 CFSM 1.03 IN 13.92
WTR YR 1972 TOTAL 1,752.52 MEAN 4.79 MAX 147 MIN .07 CFSM 2.12 IN 28.85

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	NOTE
12-30	1215	2.22	237	4-20	0930	1.90	112	NOTE.--No gage-height record Oct. 12 to Nov. 18 and Sept. 8-14.
3-1	a1800	2.10	200	5-2	2300	2.65	470	
4-15	0730	2.94	682	6-23	0900	1.99	144	
4-16	1515	1.92	119	7-16	0945	1.87	106	

a About.

BEAVER RIVER BASIN

271

03105500 Beaver River at Wampum, Pa.

LOCATION.--Lat 40°53'19", long 80°20'14", Lawrence County, on right bank at downstream side of bridge on State Highway 288 at Wampum, 2.9 miles upstream from Connoquenessing Creek, and at mile 15.4.

DRAINAGE AREA.--2,235 sq mi.

PERIOD OF RECORD.--July 1914 to September 1918, August 1932 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as "at Newport" 1914-18.

GAGE.--Water-stage recorder. Datum of gage is 736.24 ft above mean sea level (Penn Central Railroad bench mark). Prior to Sept. 30, 1914, nonrecording gage at site 500 ft downstream at datum 0.76 ft lower. Oct. 1, 1914, to Sept. 30, 1918, nonrecording gage at site 1 mile upstream at datum 0.84 ft higher. Aug. 26, 1932, to Nov. 16, 1938, nonrecording gage at present site and datum. Since 1932, auxiliary gage 10 miles downstream at station at Beaver Falls which is used during periods of backwater from Connoquenessing Creek.

AVERAGE DISCHARGE.--44 years (1914-18, 1932-72), 2,314 cfs (14.06 inches per year) adjusted for storage since 1932.

EXTREMES.--Current year: Maximum discharge, 21,400 cfs Apr. 15 (gage height, 13.98 ft); minimum, 719 cfs Oct. 20 (gage height, 3.11 ft); minimum daily, 740 cfs Oct. 21, 22.
Period of record: Maximum discharge, 50,100 cfs May 28, 1946, from slope-rating curve extended above 28,000 cfs on basis of contracted-opening measurement at gage height 21.44 ft; maximum gage height, 24.86 ft Jan. 22, 1959 (backwater from Connoquenessing Creek); minimum discharge observed, 74 cfs July 30, 1933 (gage height, 1.70 ft); minimum daily, 97 cfs July 22, Aug. 23, 1933.
Maximum stage since 1912, 29.9 ft Mar. 26, 1913, from floodmark (discharge, about 87,000 cfs).

REMARKS.--Records good. Flow regulated since 1942 by Berlin Lake, since 1916 by Milton Reservoir, since 1966 by Michael J. Kirwan Reservoir, since 1943 by Mosquito Creek Lake, since 1929 by Meander Creek Reservoir, since 1933 by Pymatuning Reservoir, and since 1967 by Shenango River Lake 40 miles upstream (see pp. 276, 277). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 728: Drainage area. WSP 1385: 1933-40, 1946, 1951-52. WSP 1725: 1960 (adjusted (runoff)).

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	900	804	2,190	6,560	1,220	6,710	1,860	3,300	1,330	3,670	1,260	845
2	851	816	2,160	5,640	1,120	12,800	1,750	3,600	1,330	3,440	1,240	880
3	880	849	1,920	5,330	1,340	11,100	1,710	5,660	5,520	4,590	1,190	1,250
4	840	802	1,720	4,690	1,690	7,030	1,790	5,360	2,280	5,650	1,180	954
5	830	790	1,600	4,640	1,500	5,460	1,770	4,630	1,520	5,190	1,140	879
6	820	900	2,660	4,010	1,480	5,070	1,580	4,180	1,210	5,760	1,110	862
7	890	1,030	6,640	2,740	1,440	5,400	2,030	2,930	1,110	5,210	1,050	860
8	900	1,000	8,450	1,930	1,160	10,100	1,950	2,580	1,030	4,290	1,050	856
9	900	980	5,840	1,740	1,070	8,790	1,720	2,860	1,010	3,790	985	854
10	1,180	990	4,890	1,970	1,030	6,790	1,570	3,510	1,170	4,040	964	830
11	1,070	980	4,130	2,510	1,050	5,670	1,460	3,400	1,000	3,850	940	829
12	1,020	960	3,650	2,700	1,090	5,760	1,350	2,760	940	3,650	882	988
13	890	940	3,950	2,210	1,610	8,290	2,560	2,460	1,370	4,080	949	1,370
14	784	910	3,920	1,820	2,660	12,000	3,090	2,510	1,610	4,750	917	2,160
15	783	950	5,910	1,340	2,930	11,900	12,900	2,540	1,610	3,860	986	1,690
16	785	950	6,630	964	3,230	9,390	18,400	2,850	4,130	5,150	943	1,270
17	776	920	5,650	874	2,840	10,500	16,400	3,670	2,380	7,130	927	1,100
18	764	910	4,230	938	2,580	9,180	9,490	3,410	2,000	5,200	1,040	3,600
19	764	940	3,510	1,810	2,300	7,480	7,060	2,920	1,670	4,540	959	2,210
20	749	1,010	3,300	2,030	1,880	6,680	9,160	2,520	1,530	4,680	918	2,160
21	740	1,010	3,070	2,080	1,860	6,650	9,950	2,150	1,610	3,250	874	1,620
22	740	1,200	2,600	1,840	2,170	5,240	8,660	1,990	2,030	2,720	868	1,450
23	748	1,110	2,240	2,310	2,070	6,290	9,320	1,590	6,800	2,530	1,040	1,450
24	777	1,230	1,980	2,690	2,090	5,540	8,350	1,330	7,500	2,620	1,050	1,510
25	794	1,280	1,830	2,780	1,950	4,930	7,290	1,210	7,500	2,410	928	1,490
26	780	1,310	1,790	2,340	2,070	4,320	5,920	1,120	6,500	2,040	960	1,500
27	808	1,390	1,870	2,090	1,950	3,700	5,370	1,060	5,100	1,630	1,060	1,840
28	842	1,570	2,110	1,670	2,160	3,120	4,720	1,020	5,000	1,380	946	1,870
29	811	1,610	2,170	1,340	3,410	2,590	4,090	995	4,600	1,250	919	1,780
30	802	2,200	5,520	1,250	-----	2,400	3,590	1,030	3,900	1,210	866	2,130
31	800	-----	9,440	1,220	-----	2,120	-----	1,390	-----	1,270	841	-----
TOTAL	26,157	32,341	117,570	78,056	54,950	213,000	166,860	82,535	86,290	114,830	30,982	43,087
MEAN	844	1,078	3,793	2,518	1,895	6,871	5,562	2,662	2,876	3,704	999	1,436
MAX	1,180	2,200	9,440	6,560	3,410	12,800	18,400	5,660	7,500	7,130	1,260	3,600
MIN	740	790	1,600	874	1,030	2,120	1,350	995	940	1,210	841	829
MEAN*	453	739	4,721	2,478	2,343	8,771	5,908	2,506	3,403	3,074	539	881
CFSM*	.20	.33	2.11	1.11	1.05	3.92	2.64	1.12	1.52	1.38	.24	.39
IN.*	.23	.37	2.43	1.28	1.13	4.52	2.95	1.29	1.70	1.59	.28	.44

CAL YR 1971 TOTAL 787,216 MEAN 2,157 MAX 16,000 MIN 740 MEAN* 2,154 CFSM* .96 IN.* 13.06
WTR YR 1972 TOTAL 1,046,658 MEAN 2,860 MAX 18,400 MIN 740 MEAN* 2,991 CFSM* 1.34 IN.* 18.21

* Adjusted for change in contents in Berlin Lake, Milton Reservoir, Michael J. Kirwan Reservoir, Mosquito Creek Lake, Meander Creek Reservoir, Pymatuning Reservoir, and Shenango River Lake.

BEAVER RIVER BASIN

03106000 Connoquenessing Creek near Zelienople, Pa.

LOCATION.--Lat 40°49'01", long 80°14'33", Beaver County, on right bank at downstream side of highway bridge at Hazen, 0.3 mile upstream from Brush Creek, 4 miles southeast of Ellwood City, and 6 miles west of Zelienople.

DRAINAGE AREA.--356 sq mi.

PERIOD OF RECORD.--October 1919 to current year. Monthly discharge only for some periods, published in WSP 1305. June 1915 to September 1919 (gage heights and discharge measurements only) in reports of Water Supply Commission of Pennsylvania. Published as "at Hazen" 1915-16, 1929-63, and as "near Hazen" 1917-28.

GAGE.--Water-stage recorder. Datum of gage is 852.31 ft above mean sea level, adjustment of 1912. Prior to June 23, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--53 years, 460 cfs (17.55 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,800 cfs June 24 (gage height, 13.32 ft); minimum, 35 cfs Nov. 19; minimum gage height, 1.01 ft Oct. 22, Nov. 19.

Period of record: Maximum discharge, 23,000 cfs June 29, 1924 (gage height, 16.66 ft), from rating curve extended above 18,000 cfs; minimum observed, 6.0 cfs July 21-23, 1936; minimum gage height, 0.76 ft Aug. 8, Sept. 16-17, 1966.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation by mills above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 893: 1937-38, 1939(M). WSP 1305: 1922-26, 1928. WSP 1335: 1920-21, 1924(M). WSP 1385: 1952.

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	42	479	1,390	270	3,180	392	370	129	1,480	92	55
2	68	46	336	1,160	250	5,970	388	430	127	1,030	94	51
3	60	76	266	1,090	270	4,250	365	535	2,270	842	96	52
4	59	77	234	842	320	2,210	392	420	944	764	86	64
5	55	53	201	1,010	300	1,520	475	345	555	686	79	56
6	51	42	983	824	280	1,080	397	282	370	932	70	48
7	54	40	2,670	698	260	1,060	740	257	297	650	73	46
8	62	40	1,840	590	240	2,370	824	238	228	530	82	43
9	56	41	1,070	520	220	1,710	716	305	192	475	92	42
10	80	40	770	626	210	1,290	632	505	349	545	101	41
11	98	40	612	566	220	1,020	560	329	220	578	79	42
12	72	41	470	480	230	992	495	271	166	401	69	58
13	74	42	398	440	500	1,380	692	244	192	337	66	175
14	59	40	377	400	820	1,750	824	261	235	293	65	782
15	50	40	1,140	300	720	1,860	3,180	264	250	257	60	450
16	47	38	1,030	210	620	1,680	4,490	250	722	329	89	200
17	46	38	779	270	540	2,260	3,360	401	450	333	66	140
18	47	36	651	400	470	1,720	1,990	365	297	254	62	178
19	44	37	530	440	420	1,270	1,340	305	232	232	65	170
20	42	42	512	390	360	998	1,680	282	198	247	62	117
21	40	64	576	350	430	818	1,480	345	490	206	56	94
22	38	98	449	280	450	950	1,400	257	1,030	175	51	86
23	45	102	365	650	410	1,070	1,320	214	7,690	166	49	80
24	50	85	362	668	390	872	1,060	187	9,540	170	86	76
25	78	83	345	716	370	788	890	166	5,620	175	85	82
26	83	100	332	572	350	704	728	144	4,010	136	71	80
27	65	113	379	500	450	620	602	123	2,370	125	157	85
28	56	249	524	460	520	550	510	112	1,500	138	127	88
29	50	335	573	410	1,150	495	440	104	1,220	121	89	77
30	46	652	1,290	357	-----	525	392	103	1,780	104	71	333
31	44	-----	2,310	290	-----	445	-----	133	-----	96	61	-----
TOTAL	1,799	2,772	22,853	17,899	12,040	47,407	32,754	8,547	43,673	12,807	2,451	3,891
MEAN	58.0	92.4	737	577	415	1,529	1,092	276	1,456	413	79.1	130
MAX	98	652	2,670	1,390	1,150	5,970	4,490	535	9,540	1,480	157	782
MIN	38	36	201	210	210	445	365	103	127	96	49	41
CFSM	.16	.26	2.07	1.62	1.17	4.29	3.07	.78	4.09	1.16	.22	.37
IN.	.19	.29	2.39	1.87	1.26	4.95	3.42	.89	4.56	1.34	.26	.41

CAL YR 1971 TOTAL 133,997 MEAN 367 MAX 4,520 MIN 18 CFSM 1.03 IN 14.00
WTR YR 1972 TOTAL 208,893 MEAN 571 MAX 9,540 MIN 36 CFSM 1.60 IN 21.83

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3- 2	0600	9.53	6,390	6-24	0300	13.32	11,800
4-15	2000	9.22	6,010				

BEAVER RIVER BASIN

273

03106300 Muddy Creek near Portersville, Pa.

LOCATION.--Lat 40°57'47", long 80°07'41", Butler County, on left bank at upstream side of highway bridge on blacktop road at Portersville Station, 0.1 mile north of U. S. Highway 422, 0.5 mile downstream from Lake Arthur Dam, and 3 miles north of Portersville.

DRAINAGE AREA.--51.2 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,155.20 ft above mean sea level. Prior to Apr. 8, 1963, non-recording gage at site 1,000 ft downstream at different datum. Apr. 8 to May 1, 1963, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--9 years, 66.5 cfs (17.64 inches per year) adjusted for storage since May 1969.

EXTREMES.--Current year: Maximum discharge, 670 cfs June 29 (gage height, 4.66 ft); minimum daily, 1.6 cfs Oct. 8; minimum gage height, 1.09 ft Sept. 26, 1972.

Period of record: Maximum discharge, 1,640 cfs Mar. 10, 1964 (gage height, 8.18 ft), from rating curve extended above 820 cfs on basis of slope-area measurement of peak flow; minimum, 0.4 cfs Sept. 17, 1966; minimum gage height, 1.09 ft Sept. 26, 1972.

REMARKS.--Records good. Some regulation from October 1966 to May 1969 and completely regulated thereafter by Lake Arthur 0.5 mile upstream (see p. 277). Water-quality records 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	4.8	27	6.5	153	59	120	100	120	16	503	18	6.8
2	4.2	29	7.9	155	57	237	93	112	20	438	17	5.7
3	3.8	29	8.4	157	59	346	88	104	88	400	15	4.3
4	3.2	21	8.8	150	68	360	87	96	84	365	13	3.3
5	2.8	6.8	10	148	62	345	82	88	78	183	12	2.5
6	1.9	5.7	23	141	62	305	79	81	70	123	10	2.2
7	1.7	5.7	56	128	62	278	77	72	62	124	9.3	2.2
8	1.6	5.7	81	120	57	293	84	68	53	123	9.7	4.3
9	1.7	5.7	94	112	52	283	92	70	49	120	9.7	4.3
10	2.8	5.7	96	108	48	263	86	64	50	123	8.8	4.3
11	2.0	5.7	87	102	44	239	78	58	44	121	7.9	6.1
12	2.4	5.4	85	99	42	219	72	54	39	114	6.8	9.7
13	2.4	5.4	75	91	57	225	90	52	45	105	6.8	13
14	1.9	5.4	79	88	76	239	150	52	52	102	5.7	26
15	2.0	5.6	99	76	79	247	300	51	65	94	9.3	27
16	2.0	5.7	103	70	82	253	430	52	123	91	6.8	26
17	3.6	5.7	105	65	84	275	480	57	128	85	5.7	25
18	3.6	6.1	96	59	84	273	450	56	124	78	5.7	32
19	2.8	6.5	96	58	88	253	410	59	117	70	4.7	29
20	3.8	6.5	91	56	85	233	370	59	111	63	4.3	27
21	2.4	6.5	87	54	79	211	350	56	114	56	3.5	23
22	2.0	6.5	81	56	78	207	320	53	123	50	3.0	18
23	4.2	6.5	76	65	75	201	295	47	323	44	6.9	17
24	21	6.8	66	73	73	189	260	42	473	50	8.4	15
25	21	6.5	63	69	70	177	230	37	578	42	7.9	14
26	17	6.5	62	78	69	161	210	33	605	36	7.9	16
27	22	6.8	63	76	66	148	190	25	558	34	11	17
28	22	7.2	65	76	66	136	170	20	490	30	11	18
29	22	9.3	68	72	73	130	150	18	555	26	9.7	17
30	23	7.5	97	68	-----	117	130	17	573	24	8.8	21
31	27	-----	136	63	-----	108	-----	17	-----	20	7.9	-----
TOTAL	238.6	269.4	2,171.6	2,886	1,956	7,071	6,003	1,790	5,810	3,837	272.2	436.7
MEAN	7.70	8.98	70.1	93.1	67.4	228	200	57.7	194	124	8.78	14.6
MAX	27	29	136	157	88	360	480	120	605	503	18	32
MIN	1.6	5.4	6.5	54	42	108	72	17	16	20	3.0	2.2
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1971	TOTAL 20,030.3	MEAN 54.9	MAX 463	MIN 1.3	CFSM -	IN. -						
WTR YR 1972	TOTAL 32,741.5	MEAN 89.5	MAX 605	MIN 1.6	CFSM -	IN. -						

BEAVER RIVER BASIN

03106500 Slippery Rock Creek at Wurtemburg, Pa.

LOCATION.--Lat 40°53'02", long 80°14'02", Lawrence County, on left bank at downstream side of highway bridge at Camp Allegheny, 2 miles north of Wurtemburg, and 2.8 miles upstream from mouth.

DRAINAGE AREA.--398 sq mi.

PERIOD OF RECORD.--October 1911 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 832.06 ft above mean sea level. Jan. 1, 1912, to Sept. 30, 1922, nonrecording gage at site 1.5 miles downstream at datum 13.77 ft lower and Oct. 1, 1922, to Sept. 30, 1940, nonrecording gage at site 2 miles downstream at datum 18.92 ft lower.

AVERAGE DISCHARGE.--61 years, 555 cfs (18.94 inches per year) adjusted for storage since May 1969.

EXTREMES.--Current year: Maximum discharge, 9,090 cfs June 24 (gage height, 8.09 ft); minimum, 58 cfs Oct. 23 (gage-height, 0.34 ft).

Period of record: Maximum discharge, 19,000 cfs Jan. 25, 1937 (gage height, 12.05 ft, from floodmark, site and datum then in use), from rating curve extended above 14,000 cfs; minimum observed, 16 cfs Sept. 13, 1932.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation since May, 1969 by Lake Arthur 13 miles upstream (see p. 277). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 743: Drainage area. WSP 1305: 1914-18, 1920-22, 1923-24(M), 1925-28, 1930. WSP 1385: 1932, 1935, 1936(M), 1937-39. WSP 1625: 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	130	66	604	2,030	340	2,200	624	553	292	1,810	178	113
2	108	69	367	1,480	320	5,380	612	696	353	1,370	175	102
3	95	71	250	1,360	300	5,010	623	814	1,980	1,400	170	98
4	86	72	213	1,130	340	3,070	700	793	826	1,900	162	96
5	79	72	191	1,150	320	2,160	799	606	468	1,510	152	92
6	75	72	661	935	300	1,540	727	517	337	1,820	142	89
7	78	73	2,780	705	280	1,500	938	463	293	1,360	140	86
8	80	74	3,170	614	260	2,970	939	420	253	960	145	84
9	85	73	1,880	558	240	2,470	715	502	237	772	157	87
10	105	74	1,180	661	220	1,730	630	649	300	855	150	85
11	136	77	789	748	230	1,330	589	542	270	796	137	82
12	126	83	600	653	240	1,310	543	407	231	610	130	114
13	100	84	487	579	330	2,240	880	358	438	530	128	176
14	87	83	464	580	950	3,150	1,240	374	846	670	133	620
15	80	86	1,550	400	980	2,620	3,320	435	732	550	164	577
16	74	97	1,790	270	850	2,210	3,980	457	3,340	585	244	292
17	73	104	1,200	350	700	2,790	4,980	811	1,860	688	164	191
18	73	95	789	440	560	2,290	3,100	796	1,140	505	137	453
19	67	86	632	510	500	1,690	2,020	600	689	385	133	919
20	64	97	592	450	390	1,360	2,130	502	538	340	121	519
21	62	128	686	400	420	1,170	2,120	464	892	312	108	283
22	60	155	606	360	470	1,330	1,700	413	1,650	279	95	208
23	60	155	459	1,000	440	1,730	1,530	359	6,560	254	167	173
24	66	130	406	1,170	410	1,430	1,310	322	8,620	300	355	159
25	78	122	410	964	400	1,220	1,120	294	6,850	300	240	148
26	91	123	395	609	370	1,130	922	267	5,510	244	162	156
27	91	139	502	471	410	1,020	780	241	3,350	234	224	163
28	82	222	614	412	450	878	691	218	2,180	248	281	187
29	79	331	688	370	600	775	624	201	1,830	224	206	181
30	72	540	1,720	350	-----	742	589	207	2,020	200	152	228
31	69	-----	3,280	330	-----	697	-----	264	-----	186	125	-----
TOTAL	2,611	3,653	29,955	22,039	12,620	61,142	41,475	14,545	54,885	22,197	5,177	6,761
MEAN	84.2	122	966	711	435	1,972	1,383	469	1,830	716	167	225
MAX	136	540	3,280	2,030	980	5,380	4,980	814	8,620	1,900	355	919
MIN	60	66	191	270	220	697	543	201	231	186	95	82
MEAN [†]	81.8	126	1,006	690	441	1,979	1,384	443	1,908	641	163	229
CFSM [†]	.21	.32	2.53	1.73	1.11	4.97	3.48	1.11	4.79	1.61	.41	.58
IN. [†]	.24	.36	2.92	1.99	1.20	5.73	3.88	1.28	5.34	1.86	.47	.65

CAL YR 1971 TOTAL 183,547 MEAN 503 MAX 5,670 MIN 50 MEAN[†] 504 CFSM[†] 1.27 IN.[†] 17.19
WTR YR 1972 TOTAL 277,060 MEAN 757 MAX 8,620 MIN 60 MEAN[†] 758 CFSM[†] 1.90 IN.[†] 25.92

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2330	5.22	3,700	6- 3	0430	5.28	3,790
12-31	1330	5.15	3,600	6-16	0500	5.65	4,380
3- 2	2300	6.74	6,400	6-24	0830	8.09	9,090
4-30	0230	6.39	5,730				

[†] Adjusted for change in contents in Lake Arthur.

BEAVER RIVER BASIN

275

03107500 Beaver River at Beaver Falls, Pa.

LOCATION.--Lat 40°45'48", long 80°18'55", Beaver County, on left bank at Beaver Falls, 200 ft upstream from pumping plant of Beaver Falls Municipal Authority, 7.0 miles downstream from Connoquenessing Creek, and at mile 5.5.

DRAINAGE AREA.--3,106 sq mi.

PERIOD OF RECORD.--October 1935 to current year (fragmentary records only prior to October 1956). Gage-height records collected at same site since 1908 are contained in reports of U. S. Weather Bureau.

GAGE.--Water-stage recorder and concrete dam control. Datum of gage is 727.48 ft above mean sea level, (Corps of Engineers bench mark). Prior to Dec. 3, 1941, nonrecording gage at site 200 ft downstream at same datum.

AVERAGE DISCHARGE.--16 years (1956-72), 3,301 cfs (14.43 inches per year) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 28,700 cfs Apr. 16 (gage height, 9.78 ft); minimum daily, 870 cfs Oct. 22.

Period of record: Maximum discharge, 69,900 cfs Jan. 22, 1959 (gage height, 14.42 ft); minimum not determined.

Flood of Mar. 27, 1913 reached a stage of 17.4 ft (discharge, 103,000 cfs, from rating curve extended above 60,000 cfs).

REMARKS.--Records good above 2,000 cfs and fair below except those below 1,200 cfs, which are poor. Pumpage from gage pool (averaging 3.4 cfs in 1935 and 6.0 cfs at present) for local water supply returns to river 2 miles downstream; information furnished by Beaver Falls Municipal Authority. Flow regulated since 1942 by Berlin Lake, since 1916 by Milton Reservoir, since 1966 by Michael J. Kirwan Reservoir, since 1943 by Mosquito Creek Lake, since 1929 by Meander Creek Reservoir, since 1933 by Pymatuning Reservoir, since 1967 by Shenango River Lake, (all over 50 miles upstream), and since 1969 by Lake Arthur 29 miles upstream (see pp. 276,277).

REVISIONS (WATER YEARS).--WSP 1725: 1960 (adjusted runoff).

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	1,230	912	3,540	11,000	1,950	11,500	3,260	4,300	1,850	7,500	1,600	1,110		
2	1,150	912	3,000	8,760	1,870	21,200	3,000	4,680	1,850	6,380	1,600	1,150		
3	1,070	940	2,530	8,450	2,030	20,500	2,900	6,840	9,780	6,590	1,540	1,360		
4	1,010	940	2,200	7,050	2,780	13,600	2,870	6,920	4,610	8,760	1,450	1,280		
5	996	926	1,980	7,100	2,260	10,200	3,190	5,810	2,940	7,590	1,430	1,120		
6	982	968	3,420	6,210	2,260	8,310	3,000	5,140	2,140	8,900	1,380	1,090		
7	1,030	1,110	11,900	4,610	2,260	8,090	3,350	3,950	1,870	7,820	1,330	1,070		
8	1,070	1,070	14,000	3,510	1,820	15,500	4,230	3,290	1,720	6,290	1,340	1,070		
9	1,030	1,070	9,880	3,100	1,680	14,200	3,670	3,540	1,630	5,410	1,360	1,070		
10	1,280	1,090	7,320	3,420	1,600	10,900	3,290	4,650	1,950	5,570	1,320	1,070		
11	1,300	1,070	5,970	4,050	1,580	8,760	3,000	4,580	1,720	5,730	1,280	1,070		
12	1,230	1,070	5,070	4,120	1,630	8,450	2,740	3,780	1,600	5,030	1,250	1,150		
13	1,090	1,070	5,030	3,510	2,230	11,000	3,910	3,160	1,980	5,110	1,250	1,630		
14	1,010	1,090	4,930	3,100	4,820	16,800	5,530	3,160	3,000	5,890	1,210	3,670		
15	968	1,090	8,220	2,350	5,220	17,000	16,400	3,320	2,620	5,110	1,210	3,190		
16	968	1,090	10,200	1,580	5,570	14,000	26,000	3,510	8,400	5,730	1,280	1,980		
17	968	1,090	8,400	1,510	4,790	15,800	24,700	4,680	5,110	8,720	1,250	1,580		
18	954	1,070	6,290	1,650	4,330	14,300	16,100	4,820	3,710	6,500	1,250	4,370		
19	926	1,100	5,110	2,530	3,840	11,500	11,400	4,090	2,870	5,370	1,230	3,580		
20	898	1,170	4,720	2,940	3,060	9,680	12,900	3,480	2,440	5,490	1,190	3,060		
21	884	1,210	4,640	3,000	2,900	9,350	14,600	3,100	3,000	4,230	1,120	2,170		
22	870	1,400	4,020	2,780	3,380	7,860	12,400	2,780	4,610	3,450	1,110	1,870		
23	898	1,360	3,320	3,840	3,130	9,590	13,000	2,320	17,900	3,130	1,140	1,800		
24	940	1,400	2,970	4,820	3,260	8,540	11,600	1,900	24,100	3,220	1,400	1,850		
25	940	1,470	2,780	4,750	3,100	7,410	9,970	1,700	19,900	3,060	1,430	1,800		
26	968	1,490	2,710	3,950	3,260	6,630	8,220	1,580	16,800	2,620	1,320	1,800		
27	1,010	1,560	2,870	3,290	3,260	5,770	7,100	1,540	12,300	2,140	1,470	2,140		
28	996	1,920	3,380	2,810	3,510	5,070	6,130	1,540	9,540	1,850	1,490	2,260		
29	954	2,320	3,780	2,290	5,410	4,300	5,260	1,510	8,090	1,700	1,380	2,140		
30	926	3,510	7,590	2,080	-----	3,910	4,610	1,510	8,400	1,600	1,230	2,710		
31	926	-----	15,500	1,980	-----	3,640	-----	1,820	-----	1,600	1,140	-----		
TOTAL	31,472	38,488	177,270	126,140	88,790	333,360	248,330	109,000	188,430	158,090	40,980	57,210		
MEAN	1,015	1,283	5,718	4,069	3,062	10,750	8,278	3,516	6,281	5,100	1,322	1,907		
MAX	1,300	3,510	15,500	11,000	5,570	21,200	26,000	6,920	24,100	8,900	1,600	4,370		
MIN	870	912	1,980	1,510	1,580	3,640	2,740	1,510	1,600	1,600	1,110	1,070		
MEAN≠	621	948	6,686	4,008	3,516	12,660	8,626	3,334	6,885	4,395	858	1,356		
CFSM≠	.20	.31	2.15	1.29	1.13	4.08	2.78	1.07	2.22	1.42	.28	.44		
IN.≠	.23	.35	2.48	1.49	1.22	4.70	3.10	1.23	2.48	1.64	.32	.49		
CAL YR 1971	TOTAL	1,140,326	MEAN	3,124	MAX	25,400	MIN	870	MEAN≠	3,122	CFSM≠	1.01	IN.≠	13.65
WTR YR 1972	TOTAL	1,597,560	MEAN	4,365	MAX	26,000	MIN	870	MEAN≠	4,497	CFSM≠	1.45	IN.≠	19.73

[‡] Adjusted for change in contents in Berlin Lake, Milton Reservoir, Michael J. Kirwan Reservoir, Mosquito Creek Lake, Meander Creek Reservoir, Pymatuning Reservoir, Shenango River Lake, and Lake Arthur.

BEAVER RIVER BASIN
Lakes and reservoirs in Beaver River basin

- 03090000 BERLIN LAKE.--Lat 41°02'46", long 81°00'10", in T. 1 N., R. 6 W., Portage County, Ohio, at dam on Mahoning River, 3.2 miles northwest of Berlin Center, Ohio. Drainage area, 248 sq mi. Period of record, December 1942 to current year. Prior to October 1970 published as "Berlin Reservoir". Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 74,260 acre-ft Apr. 18 (elevation, 1,028.63 ft); minimum, 13,640 acre-ft Nov. 26, 27 (elevation, 1,001.75 ft). Extremes for period of record: Maximum contents, 91,150 acre-ft July 8, 1943 (elevation, 1,032.0 ft); minimum, 1,540 acre-ft Jan. 10, 1944 (elevation, 978.82 ft).
- Lake is formed by earthfill dam with concrete spillway. Storage began in December 1942. Usable capacity 91,150 acre-ft between elevations 956.5 ft (invert of lowest outlet) and 1,032.0 ft (top of Tainter gates on controlled section) of which 1,800 acre-ft is in the conservation pool (elevation, 980.0 ft). No dead storage. Flow is normally controlled by sluiceways through dam but additional releases can be made through gates on controlled section of spillway. Lake is used for flood control and to augment flow of Mahoning River during periods of low flow. Water used for industrial purposes in vicinity of Warren and Youngstown, Ohio. Records furnished by Corps of Engineers.
- 03091000 MILTON RESERVOIR.--Lat 41°07'38", long 80°58'40", in T. 2 N., R. 5 W., Mahoning County, Ohio, at dam on Mahoning River, 0.8 mile southwest of Pricetown, Ohio. Drainage area, 273 sq mi. Period of record, December 1923 to current year. Monthend contents for some periods, published in WSP 1305. Water-stage recorder. Datum of gage is at mean sea level (levels by city of Youngstown, Ohio). Prior to Oct. 7, 1941, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 30,520 acre-ft Apr. 22 (elevation, 951.67 ft); minimum, 14,830 acre-ft Feb. 25 (elevation, 942.14 ft). Extremes for period of record: Maximum contents, 35,020 acre-ft June 29, 1924 (elevation, 953.8 ft); minimum, 1,220 acre-ft Jan. 23, 1954 (elevation, 924.27 ft, from graph based on gage readings).
- Reservoir is formed by earthfill dam with concrete spillway. Storage began in 1916. Usable capacity 29,150 acre-ft between elevations 906.0 ft (bottom of gates) and 951.0 ft (top of gates). No dead storage. Flow is regulated by two 16-inch and four 36-inch gates on spillway. Reservoir is used to augment flow of Mahoning River during periods of low flow. Water used for industrial purposes in vicinity of Warren and Youngstown, Ohio. Capacity table computed from base data furnished by city of Youngstown, Ohio, Division of Water.
- 03092450 MICHAEL J. KIRWAN RESERVOIR.--Lat 41°09'24", long 81°04'47", in T. 3 N., R. 6 W., Portage County, Ohio, at dam on West Branch Mahoning River, 0.5 mile southwest of Wayland, Ohio. Drainage area, 80.5 sq mi. Period of record, December 1966 to current year. Prior to October 1969 published as "West Branch Reservoir". Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 66,940 acre-ft Apr. 18 (elevation, 989.19 ft); minimum, 32,040 acre-ft Nov. 18 (elevation, 974.64 ft). Extremes for period of record: Maximum contents, 66,940 acre-ft Apr. 18, 1972 (elevation, 989.19 ft); minimum, 5,370 acre-ft Jan. 5, 1967 (elevation, 953.50 ft).
- Reservoir is formed by earthfill dam with concrete spillway. Storage began in December 1966. Usable capacity 78,660 acre-ft between elevations 936.8 ft (lowest outlet) and 993.0 ft (crest of spillway) of which 3,740 acre-ft is in conservation pool. Dead storage below elevation 936.8 ft, 85 acre-ft. Figures given herein represent usable contents. Flow is controlled by gates in concrete conduits in dam. Reservoir is used for flood control and to augment flow of Mahoning River during periods of low flow. Records furnished by Corps of Engineers.
- 03095000 MOSQUITO CREEK LAKE.--Lat 41°17'58", long 80°45'31", in T. 5 N., R. 3 W., Trumbull County, Ohio, at dam on Mosquito Creek, 3 miles southwest of Cortland, Ohio. Drainage area, 97.5 sq mi. Period of record, October 1943 to current year. Prior to October 1970 published as "Mosquito Creek Reservoir". Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 85,730 acre-ft June 27 (elevation, 902.07 ft); minimum, 42,200 acre-ft Nov. 21 (elevation, 895.68 ft). Extremes for period of record: Maximum contents, 99,100 acre-ft June 3, 1947 (elevation, 903.65 ft); minimum, 8,600 acre-ft Nov. 16, 1944 (elevation, 886.97 ft).
- Lake is formed by earthfill dam. A natural wasteway (elevation, 903.5 ft) discharges into the Grand River basin. Storage began in October 1943. Usable capacity 102,200 acre-ft between elevations 881.0 ft (lowest outlet) and 904.00 ft (reservoir-full level). Dead storage below 881.0 ft, 2,000 acre-ft. Figures given herein represent usable contents. Flow is controlled by gates in concrete conduits through dam. Reservoir is used for flood control and to augment flow of Mahoning River during periods of low flow. Water is used for industrial purposes in vicinity of Warren and Youngstown, Ohio, and for municipal supply of city of Warren, Ohio. Records furnished by Corps of Engineers.
- 03097000 MEANDER CREEK RESERVOIR.--Lat 41°09'12", long 80°46'45", in T. 3 N., R. 3 W., Trumbull County, Ohio, on right side of spillway near center of dam on Meander Creek, 0.8 mile northwest of Mineral Ridge, Ohio. Drainage area, 83.9 sq mi. Period of record, November 1929 to current year. Monthend contents for some periods, published in WSP 1305. Water-stage recorder. Datum of gage is at mean sea level (levels by Mahoning Valley Sanitary District). Extremes for current year: Maximum contents, 39,060 acre-ft Apr. 15 (elevation, 908.10 ft); minimum, 19,150 acre-ft Dec. 6 (elevation, 897.14 ft). Extremes for period of record: Maximum contents, 41,800 acre-ft Jan. 21, 1959 (elevation, 909.25 ft); minimum, 9,370 acre-ft Feb. 28, 1954 (elevation, 888.78 ft).
- Reservoir is formed by earthfill dam with concrete spillway. Storage began in 1929. Capacity at spillway level (elevation, 905 ft), 32,410 acre-ft. No dead storage. Figures given herein represent usable contents. Water used for municipal supply of cities of Niles and Youngstown, Ohio. Gage-height record furnished by Corps of Engineers. Capacity table computed from base data furnished by Mahoning Valley Sanitary District.
- 03100500 PYMATUNING RESERVOIR.--Lat 41°29'54", long 80°27'47", Crawford County, in gatehouse at Pymatuning Dam on Shenango River, 1.8 miles northwest of Jamestown, Pa., and at mile 85.1. Drainage area, 158 sq mi. Period of record, October 1932 to current year. Contents prior to October 1938 published in WSP 1305. Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1907. Prior to Nov. 20, 1934, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 210,680 acre-ft June 26 (elevation, 1,009.53 ft); minimum, 140,500 acre-ft Nov. 20 (elevation, 1,004.55 ft). Extremes for period of record: Maximum contents, 210,680 acre-ft June 26, 1972 (elevation, 1,009.53 ft); minimum (after first filling), 110,570 acre-ft Dec. 4, 1953 (elevation, 1,002.17 ft).
- Reservoir is formed in two parts. The main dam is earthfill with stone facing, provided with regulating gates (outlet gate sill elevation at 975.3 ft), and a spillway with crest elevation at 1,008.0 ft. An auxiliary dam 15 miles upstream from the main dam with spillway elevation at 1,010 ft has a fixed crest weir section in the earthfill causeway. Storage began Jan. 23, 1934 when all regulating gates were closed. Capacity, 188,040 acre-ft between elevations 975.3 ft and 1,008.0 ft was reached in March 1936. Dead storage, 10,150 acre-ft (93 acre-ft behind main dam below elevation 975.3 ft and 10,060 acre-ft behind upstream dam below elevation 1,010 ft). Upstream pool was filled (all dead storage accumulated) on March 5, 1934. Figures given herein represent usable contents. Reservoir is used to regulate flow in Shenango River, for flood control, and for recreation. Dams built by Pennsylvania Department of Forests and Waters and now maintained by Pennsylvania Department of Environmental Resources.

Lakes and reservoirs in Beaver River basin--Continued

03103400 SHENANGO RIVER LAKE.--Lat 41°15'54", long 80°27'47", Mercer County, at control house at right end of Shenango River Dam on Shenango River, at Sharpsville, Pa., 2.5 miles upstream from McCullough Run and at mile 55.8. Drainage area, 583 sq mi. Period of record, January 1967 to current year. Prior to October 1970 published as "Shenango River Reservoir". Water-stage recorder. Datum of gage is at mean sea level, datum of Corps of Engineers, which is 0.67 ft above mean sea level. Extremes for current year: Maximum contents, 69,220 acre-ft July 6 (elevation, 902.88 ft); minimum, 5,070 acre-ft Dec. 20 (elevation, 881.16 ft). Extremes for period of record: Maximum contents, 70,940 acre-ft Feb. 3, 1968 (elevation, 903.23 ft); minimum (after first filling), 5,070 acre-ft Dec. 20, 1971 (elevation, 881.16 ft).

Lake is formed by a concrete gravity dam with a fixed crest spillway. Fully controlled storage began in January 1967. Flow is controlled by gates in conduits through spillway section. Capacity of lake at full pool (elevation, 919.0 ft) is 191,360 acre-ft. Minimum pool first reached 11,080 acre-ft (elevation, 885.0 ft) in March 1967. Winter low-water pool elevation is normally at minimum pool; normally, summer low-water pool elevation is 896.0 ft (capacity, 41,000 acre-ft). Storage to summer pool normally occurs during period Mar. 15 to Apr. 30. Figures given herein represent total contents. Lake is used for flood control, low-flow augmentation, water-quality control of Shenango River and downstream rivers, and recreation. Records furnished by Corps of Engineers.

03106280 LAKE ARTHUR.--Lat 40°57'45", long 80°07'17", Butler County, in gatehouse at left end of spillway of Lake Arthur Dam on Muddy Creek, at Moraine State Park, 3 miles northeast of Portersville, Pa. Drainage area, 50.8 sq mi. Period of record, May 1969 to current year. Water-stage recorder. Datum of gage is at mean sea level (Pennsylvania Department of Environmental Resources bench mark). Prior to Aug. 23, 1969, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 44,060 acre-ft June 26 (elevation, 1,191.96 ft); minimum, 37,030 acre-ft Nov. 21 (elevation, 1,189.81 ft). Extremes for period of record: Maximum contents, 44,060 acre-ft June 26, 1972 (elevation, 1,191.96 ft); minimum (after first filling), 36,670 acre-ft Sept. 11, 1971 (elevation, 1189.69).

Lake is formed by an earthfill dam with concrete spillway. Storage began May 15, 1969. Usable capacity, 37,000 acre-ft between elevations 1,160 ft (sill of 6-foot outlet gate) and 1,189.8 ft (spillway crest). No dead storage. Figures given herein represent usable contents. Lake is used for recreation. Dam built by Pennsylvania Department of Forests and Waters and now maintained by Pennsylvania Department of Environmental Resources.

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
<u>03090000 Berlin Lake</u>				<u>03091000 Milton Reservoir</u>		
Sept. 30.....	1,005.05	16,920	-	947.95	23,430	-
Oct. 31.....	1,003.07	14,870	-33.3	945.21	18,980	-72.4
Nov. 30.....	1,002.07	13,930	-15.8	942.41	15,170	-64.0
Dec. 31.....	1,011.91	26,380	+202	943.17	16,160	+16.1
CAL YR 1971.....	-	-	-17.3	-	-	+4.0
Jan. 31.....	1,016.86	36,000	+156	942.65	15,480	-11.1
Feb. 29.....	1,020.69	45,570	+166	943.09	16,050	+9.9
Mar. 31.....	1,024.80	58,660	+213	948.24	23,950	+128
Apr. 30.....	1,024.56	57,810	-14.3	948.77	24,910	+16.1
May 31.....	1,024.49	57,560	-4.1	948.13	23,750	-18.9
June 30.....	1,024.05	56,010	-26.0	948.02	23,560	-3.2
July 31.....	1,024.47	57,490	+24.1	947.88	23,310	-4.1
Aug. 31.....	1,019.89	43,380	-229	947.94	23,420	+1.8
Sept. 30.....	1,015.39	32,870	-177	947.01	21,810	-27.1
WTR YR 1972.....	-	-	+22.0	-	-	-2.2
<u>03092450 Michael J. Kirwin Reservoir</u>				<u>03095000 Mosquito Creek Lake</u>		
Sept. 30.....	975.95	34,550	-	896.59	47,390	-
Oct. 31.....	974.85	32,430	-34.5	896.06	44,290	-50.4
Nov. 30.....	975.68	34,020	+26.7	896.00	43,940	-5.9
Dec. 31.....	979.03	40,940	+113	898.64	60,310	+266
CAL YR 1971.....	-	-	-2.2	-	-	-4.6
Jan. 31.....	980.24	43,660	+44.2	899.01	62,780	+40.2
Feb. 29.....	981.40	46,360	+46.9	899.54	66,530	+65.2
Mar. 31.....	985.74	57,290	+178	901.30	79,630	+213
Apr. 30.....	985.97	57,900	+10.3	901.52	81,360	+29.1
May 31.....	985.54	56,760	-18.5	901.51	81,280	-1.3
June 30.....	984.57	54,220	-42.7	901.95	84,760	+58.5
July 31.....	985.21	55,890	+27.2	901.13	78,290	-105
Aug. 31.....	983.52	51,540	-70.7	900.26	71,720	-107
Sept. 30.....	983.22	50,780	-12.8	899.92	69,210	-42.2
WTR YR 1972.....	-	-	+22.4	-	-	+30.1

Lakes and reservoirs in Beaver River basin--Continued

MONTHEND ELEVATIONS AND CONTENTS AT 2400. WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

MONTHEND ELEVATIONS AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972						
Date	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)	Elevation (feet)	Contents (acre- feet)	Change in contents (equivalent in cfs)
	03097000	Meander Creek Reservoir		03100500	Pymatuning Reservoir	
Sept. 30.....	899.41	22,550	-	1,005.75	156,470	-
Oct. 31.....	898.16	20,650	-30.9	1,005.19	148,940	-122
Nov. 30.....	897.30	19,380	-21.3	1,004.80	143,770	-86.9
Dec. 31.....	900.20	23,800	+71.9	1,005.68	155,520	+191
CAL YR 1971.....	-	-	-9.1	-	-	+26.9
Jan. 31.....	900.40	24,130	+5.4	1,004.80	143,770	-191
Feb. 29.....	901.02	25,130	+17.4	1,005.12	148,010	+73.7
Mar. 31.....	906.01	34,450	+152	1,008.10	189,490	+675
Apr. 30.....	906.36	35,200	+12.6	1,008.39	193,720	+71.1
May 31.....	905.50	33,420	-28.9	1,008.15	190,220	-56.9
June 30.....	904.83	32,080	-22.5	1,009.32	207,520	+291
July 31.....	905.74	33,900	+29.6	1,008.04	188,620	-307
Aug. 31.....	903.62	29,760	-67.3	1,008.70	198,290	+157
Sept. 30.....	903.10	28,790	-16.3	1,007.58	181,980	-274
WTR YR 1972.....	-	-	+8.6	-	-	+35.1
	03103400	Shenango River Lake		03106280	Lake Arthur	
Sept. 30.....	890.60	24,040	-	1,190.02	37,660	-
Oct. 31.....	889.49	21,120	-47.5	1,189.97	37,510	-2.4
Nov. 30.....	884.89	10,880	-172	1,190.04	37,730	+3.7
Dec. 31.....	886.93	15,030	+67.5	1,190.80	40,160	+39.5
CAL YR 1971.....	-	-	-0.9	-	-	+1.2
Jan. 31.....	884.33	9,860	-84.1	1,190.40	38,880	-20.8
Feb. 29.....	886.35	13,800	+68.5	1,190.51	39,230	+6.1
Mar. 31.....	894.16	34,720	+340	1,190.64	39,650	+6.8
Apr. 30.....	897.86	47,850	+221	1,190.67	39,740	+1.5
May 31.....	897.41	46,160	-27.5	1,190.17	38,140	-26.0
June 30.....	901.40	62,360	+272	1,191.28	42,750	+77.5
July 31.....	896.90	44,260	-294	1,190.17	38,140	-75.0
Aug. 31.....	894.35	35,350	-145	1,190.10	37,920	-3.6
Sept. 30.....	894.25	35,020	-5.5	1,190.17	38,140	+4.0
WTR YR 1972.....	-	-	+15.1	-	-	+0.7

RACCOON CREEK BASIN

279

03108000 Raccoon Creek at Moffatts Mill, Pa.

LOCATION.--Lat 40°37'40", long 80°20'16", Beaver County, on left bank at downstream side of highway bridge at Moffatts Mill, 1.4 miles downstream from Gums Run, 4 miles south of Vanport, and 4.2 miles upstream from mouth.

DRAINAGE AREA.--178 sq mi.

PERIOD OF RECORD.--September 1941 to current year. May 1915 to July 1932 (gage heights and discharge measurements only) in reports of Water Supply Commission of Pennsylvania or Pennsylvania Department of Forests and Waters.

GAGE.--Water-stage recorder. Datum of gage is 719.16 ft above mean sea level (Corps of Engineers bench mark). May 27, 1915, to July 31, 1932, and Sept. 2 to Dec. 3, 1941, nonrecording gages at same site and datum.

AVERAGE DISCHARGE.--31 years, 183 cfs (13.96 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,530 cfs Mar. 13 (gage height, 4.39 ft); minimum, 17 cfs Sept. 2 (gage height, 1.51 ft).

Period of record: Maximum discharge, 8,590 cfs Jan. 27, 1952 (gage height, 9.71 ft); minimum, 4.5 cfs Aug. 24, 25, 1965; minimum gage height, 1.28 ft Aug. 26, 1962.

Flood of Apr. 15, 1922, reached a stage of 9.80 ft (discharge, 10,000 cfs). Flood of Mar. 5, 1920, also reached a stage of 9.80 ft (backwater from ice).

REMARKS.--Records good except those for winter periods, which are fair. Normally no regulation from Raccoon Creek Lake. Diversion out of the basin from Cherry Valley and Service Creek Reservoirs upstream increased from an average of 4.0 cfs at the close of 1957 to 6.8 cfs for the present year; diversion began with 2.0 cfs for September 1957. Published records do not include diversion. Records of diversion furnished by Western Pennsylvania Water Company and Ambridge Water Authority.

REVISIONS (WATER YEARS).--WSP 1385: 1941-43.

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	72	25	106	269	86	819	208	314	68	154	40	18
2	51	29	72	264	110	819	204	309	72	118	47	18
3	42	42	52	273	140	959	188	359	109	143	49	79
4	38	32	59	234	230	674	208	296	72	127	59	35
5	33	28	54	327	130	557	208	251	57	121	45	26
6	31	24	354	309	150	435	176	216	52	184	38	21
7	32	24	752	269	120	480	812	196	52	127	40	19
8	28	26	510	229	100	987	805	184	47	106	50	46
9	26	21	314	208	90	710	552	225	45	115	51	81
10	36	21	221	251	80	557	465	242	44	140	45	81
11	40	26	176	225	100	455	404	184	42	143	35	77
12	32	24	133	196	130	422	345	165	42	109	32	79
13	25	24	115	184	210	1,110	728	158	47	99	38	291
14	25	22	172	176	470	1,100	704	168	208	115	35	868
15	25	21	368	112	390	938	896	168	115	91	31	300
16	25	21	300	81	500	861	1,050	165	66	225	26	168
17	25	21	229	150	380	1,060	1,050	172	54	264	38	124
18	25	20	180	168	310	791	752	184	47	158	66	225
19	24	20	140	165	260	602	585	150	44	121	40	165
20	22	31	140	147	210	490	752	136	42	133	54	106
21	21	33	133	133	250	435	692	136	86	96	33	84
22	21	42	106	118	260	541	994	127	94	77	26	72
23	22	32	84	208	220	579	924	112	602	66	25	44
24	33	26	99	242	260	480	698	101	480	59	24	42
25	52	29	86	296	278	413	541	94	358	54	21	54
26	35	36	89	234	435	368	435	81	278	51	38	47
27	28	38	99	190	417	332	372	74	204	51	52	49
28	29	70	127	170	455	296	323	70	154	61	38	45
29	25	81	143	140	656	269	282	66	147	49	26	49
30	24	147	234	120	-----	273	269	66	216	44	21	154
31	24	-----	359	100	-----	229	-----	72	-----	42	19	-----
TOTAL	971	1,036	6,006	6,188	7,427	19,041	16,622	5,241	3,944	3,443	1,182	3,467
MEAN	31.3	34.5	194	200	256	614	554	169	131	111	38.1	116
MAX	72	147	752	327	656	1,110	1,050	359	602	264	66	868
MIN	21	20	52	81	80	229	176	66	42	42	19	18
CFSM	.18	.19	1.09	1.12	1.44	3.45	3.11	.95	.74	.62	.21	.65
IN.	.20	.22	1.26	1.29	1.55	3.98	3.47	1.10	.82	.72	.25	.72

CAL YR 1971 TOTAL 65,908 MEAN 181 MAX 2,090 MIN 15 CFSM 1.02 IN 13.77
WTR YR 1972 TOTAL 74,568 MEAN 204 MAX 1,110 MIN 18 CFSM 1.15 IN 15.58

PEAK DISCHARGE (BASE, 1,500 CFS).--Mar. 13 (1530) 1,530 cfs (4.39 ft); Apr. 7 (1900) 1,500 cfs (4.36 ft).

BUFFALO CREEK BASIN

03111150 Brush Run near Buffalo, Pa.

LOCATION.--Lat 40°11'54", long 80°24'28", Washington County, on right bank at upstream side of highway bridge, 2.2 miles upstream from Dunkle Run, 3.0 miles upstream from mouth, 3.2 miles southwest of Buffalo, and 8 miles west of Washington.

DRAINAGE AREA.--10.3 sq mi.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 954.22 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--12 years, 8.49 cfs (11.19 inches per year).

EXTREMES.--Current year: Maximum discharge, 581 cfs Mar. 13 (gage height, 6.04 ft), from rating curve extended as explained below; minimum, 0.10 cfs Sept. 11, 12 (gage height, 1.63 ft).

Period of record: Maximum discharge, 1,180 cfs Feb. 13, 1966 (gage height, 7.73 ft), from rating curve extended above 210 cfs on basis of slope-area measurement at gage height 7.26 ft; maximum gage height, 7.93 ft Mar. 4, 1963 (backwater from ice); no flow on many days.

REMARKS.--Records good except those for winter periods, which are 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	.80	.50	2.8	8.6	5.0	25	12	11	2.0	8.5	2.5	.26
2	.73	1.1	2.5	15	4.7	82	11	12	2.3	9.1	2.2	.26
3	.67	.67	2.3	12	12	75	10	11	2.4	12	4.2	.26
4	.67	.50	1.8	13	17	41	16	9.6	1.7	8.5	5.8	.39
5	.61	.35	1.8	28	7.0	31	13	8.3	1.4	13	2.6	.32
6	.55	.35	45	16	9.0	26	12	7.5	1.4	12	2.1	.24
7	.55	.45	29	11	7.0	38	67	6.9	1.4	9.1	2.2	.19
8	.50	.40	15	8.6	6.0	52	35	6.9	1.0	8.0	2.0	.19
9	.50	.35	8.7	9.6	5.0	30	25	8.0	1.0	7.0	2.1	.16
10	.61	.45	6.2	12	4.5	24	21	6.6	1.2	6.0	1.7	.14
11	.67	.45	5.0	10	4.0	20	18	5.3	.93	5.5	1.4	.12
12	.55	.45	4.1	8.5	6.0	34	16	4.8	.86	4.9	1.4	.12
13	.45	.40	3.6	7.9	180	249	158	4.6	10	4.4	1.5	.26
14	.50	.35	4.7	6.5	130	72	45	4.6	4.0	4.0	1.3	5.5
15	.50	.40	6.1	5.0	60	52	41	5.1	2.1	11	1.0	2.5
16	.45	.40	5.5	4.0	33	80	43	6.4	2.6	27	.84	1.0
17	.40	.35	4.6	7.0	23	60	37	9.3	1.7	19	3.0	.65
18	.40	.35	3.9	10	19	43	26	6.4	1.3	11	2.2	12
19	.35	.55	3.9	13	11	31	22	4.8	1.1	8.0	3.2	2.3
20	.35	.73	4.2	7.8	12	26	25	4.4	19	7.2	1.8	1.4
21	.30	1.0	3.7	5.2	13	23	19	4.0	25	6.0	1.3	.94
22	.35	.97	2.9	4.8	16	32	33	3.5	17	5.3	.94	.74
23	.61	.74	3.2	8.0	13	27	26	3.2	166	4.7	.84	.56
24	2.4	.77	2.9	9.6	16	23	21	2.9	45	4.0	.65	.84
25	1.4	.97	2.6	14	22	20	17	2.4	33	3.6	.56	1.2
26	.86	1.0	3.1	9.0	29	18	15	2.1	22	3.3	.65	1.0
27	.69	2.1	3.4	11	22	16	14	1.8	16	3.8	1.8	15
28	.60	3.3	5.2	8.0	25	15	12	1.7	12	3.3	1.2	8.0
29	.52	3.4	4.9	7.0	29	15	11	1.7	11	2.9	.74	10
30	.50	4.4	16	6.2	-----	14	11	2.0	10	2.6	.47	21
31	.50	-----	14	5.6	-----	12	-----	2.9	-----	2.6	.39	-----
TOTAL	19.54	28.20	222.6	301.9	740.2	1,306	832	171.7	416.39	237.3	54.58	87.54
MEAN	.63	.94	7.18	9.74	25.5	42.1	27.7	5.54	13.9	7.65	1.76	2.92
MAX	2.4	4.4	45	28	180	249	158	12	166	27	5.8	21
MIN	.30	.35	1.8	4.0	4.0	12	10	1.7	.86	2.6	.39	.12
CFSM	.06	.09	.70	.95	2.48	4.09	2.69	.54	1.35	.74	.17	.28
IN.	.07	.10	.80	1.09	2.67	4.72	3.00	.62	1.50	.86	.20	.32

CAL YR 1971 TOTAL 3,168.63 MEAN 8.68 MAX 144 MIN .10 CFSM .84 IN 11.44
WTKR YR 1972 TOTAL 4,417.95 MEAN 12.1 MAX 249 MIN .12 CFSM 1.17 IN 15.96

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-13	-	-	a320	4-13	0800	5.50	446
3- 2	2015	4.69	286	6-23	0645	4.93	331
3-13	0115	6.04	581				

a About.

STREAMS TRIBUTARY TO LAKE ERIE

281

04213000 Conneaut Creek at Conneaut, Ohio

LOCATION.--Lat 41°55'37", long 80°36'15", Ashtabula County, on right bank at downstream side of Keefus Road bridge at Conneaut, and 6.4 miles upstream from mouth.

DRAINAGE AREA.--175 sq mi.

PERIOD OF RECORD.--July 1922 to December 1935, March 1950 to September 1961 (published as "at Amboy"), October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 610.30 ft above mean sea level, unadjusted. Prior to Aug. 17, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 252 cfs (19.56 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,820 cfs June 24 (gage height, 9.53 ft); minimum daily discharge, 4.3 cfs Sept. 10.

Period of record: Maximum discharge, 17,000 cfs Jan. 22, 1959 (gage height, 11.70 ft); maximum gage height, 12.94 ft Mar. 4, 1934 (backwater from ice); minimum discharge, 0.2 cfs July 31, Aug. 1, 1933, Aug. 1, 2, 1934.

REMARKS.--Records good except those for February which are fair. Water-quality records for the current year are published in Part 2 of Water Resources Data for Ohio.

REVISIONS (WATER YEARS).--WSP 714: 1926. WSP 784: 1933. WSP 1437: 1923-25(M), 1926-30, 1931-32(M), 1933, 1935(M). WSP 1912: 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	129	20	1,590	1,080	100	1,100	197	98	288	142	24	13
2	78	20	560	424	90	3,730	175	288	201	120	22	10
3	52	21	331	358	300	6,020	165	528	158	197	20	8.2
4	38	93	263	310	400	1,630	185	448	116	149	18	7.0
5	30	263	233	250	460	650	248	243	101	177	16	5.7
6	28	322	540	210	450	365	217	173	88	368	15	5.0
7	40	253	2,800	185	400	345	173	145	69	382	42	4.6
8	35	280	2,830	180	350	1,210	152	135	59	179	193	4.6
9	73	215	1,320	179	280	1,370	132	620	59	144	147	4.5
10	460	202	500	265	240	496	130	1,080	61	476	79	4.3
11	956	334	415	536	200	295	127	409	75	343	54	5.1
12	303	500	442	436	240	325	117	239	61	169	40	9.0
13	190	382	315	298	330	978	135	177	66	116	32	25
14	122	275	260	230	480	1,860	158	160	65	87	40	38
15	85	178	702	180	900	1,590	310	235	158	81	83	197
16	64	134	1,570	130	1,100	838	1,310	335	445	95	49	152
17	52	112	702	110	1,100	1,420	2,020	565	476	72	91	79
18	42	90	355	100	900	1,010	1,050	600	189	72	54	51
19	36	85	278	450	750	488	353	313	111	133	39	36
20	31	118	285	817	600	358	285	215	81	227	43	33
21	28	331	476	500	550	310	516	163	66	156	34	29
22	25	776	680	365	480	430	368	142	78	94	26	25
23	25	472	394	516	420	1,120	308	124	2,300	70	22	20
24	25	233	253	665	380	575	278	104	8,230	55	19	27
25	27	172	325	804	340	368	209	91	6,460	48	16	20
26	26	156	382	738	310	328	167	80	4,230	39	13	40
27	27	182	894	290	270	323	135	71	1,620	34	13	78
28	26	500	585	225	250	315	116	64	397	30	17	177
29	24	940	550	170	270	270	101	59	221	28	13	119
30	24	1,390	936	130	-----	235	92	69	161	27	19	595
31	22	-----	2,100	110	-----	239	-----	124	-----	26	15	-----
TOTAL	3,123	9,049	23,866	11,241	12,940	30,591	9,929	8,097	26,690	4,336	1,308	1,822.0
MEAN	101	302	770	363	446	987	331	261	890	140	42.2	60.7
MAX	956	1,390	2,830	1,080	1,100	6,020	2,020	1,080	8,230	476	193	595
MIN	22	20	233	100	90	235	92	59	59	26	13	4.3
CFSM	.58	1.73	4.40	2.07	2.55	5.64	1.89	1.49	5.09	.80	.24	.35
IN.	.66	1.92	5.07	2.39	2.75	6.50	2.11	1.72	5.67	.92	.28	.39

CAL YR 1971 TOTAL 101,447.5 MEAN 278 MAX 3,300 MIN 5.0 CFSM 1.59 IN 21.56
WTR YR 1972 TOTAL 142,992.0 MEAN 391 MAX 8,230 MIN 4.3 CFSM 2.23 IN 30.40

PEAK DISCHARGE (BASE, 2,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 7	2100	6.69	3,980	6-24	1700	9.53	9,820
3- 3	0800	8.74	7,850				

STREAMS TRIBUTARY TO LAKE ERIE

04213040 Raccoon Creek near West Springfield, Pa.

LOCATION.--Lat 41°56'42", long 80°26'51", Erie County, on right bank 12 ft upstream from highway bridge on Sanford Road, 1.4 miles east of West Springfield, 4.4 miles upstream from mouth, and 7 miles southwest of Girard.

DRAINAGE AREA.--2.53 sq mi.

PERIOD OF RECORD.--Annual maximum, water years 1962-68. October 1968 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and culvert control. Altitude of gage is 715 ft (from topographic map). May 9, 1961, to Oct. 2, 1968, crest-stage gage at same site and datum.

EXTREMES.--Current year: Maximum discharge, 220 cfs June 23 (gage height, 4.95 ft), from rating curve extended above 76 cfs as explained below; minimum daily, 0.01 cfs Sept. 8.

Period of record: Maximum discharge, 408 cfs Dec. 28, 1968 (gage height, 6.06 ft), from rating curve extended above 76 cfs on basis of computation of flow through culvert at gage height 5.39 ft; no flow on many days.

REMARKS.--Records good except those for winter periods or periods of doubtful gage-height record, which are 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	.05	.10	5.6	8.8	1.8	78	2.5	1.9	1.3	1.7	.12	.06
2	.04	.12	4.3	8.3	1.7	118	2.0	5.0	.90	1.1	.50	.05
3	.03	.25	3.2	7.1	1.7	20	5.2	3.8	.80	3.1	.45	.07
4	.03	5.2	2.6	6.6	1.7	11	8.1	2.9	1.1	2.5	.40	.08
5	.03	2.5	2.4	6.2	1.5	6.0	4.1	2.2	.57	4.3	.37	.06
6	.04	1.3	17	5.4	1.5	5.4	3.1	1.7	.51	5.8	.35	.09
7	.80	2.9	22	4.6	1.4	14	2.0	1.4	.45	2.2	4.0	.05
8	.70	1.7	10	3.7	1.4	17	1.4	3.5	.35	1.1	.80	.01
9	5.0	1.4	6.4	4.0	1.4	9.1	1.2	11	1.0	16	.60	.03
10	20	2.5	5.5	7.1	1.3	5.0	1.1	6.0	.80	27	.35	.03
11	4.0	3.7	5.3	5.6	1.3	4.6	1.0	4.3	.40	4.8	.20	.03
12	.80	2.1	4.7	4.0	1.3	6.9	.80	3.4	.35	2.0	.15	.03
13	.40	1.4	4.2	3.8	5.0	25	3.2	2.2	.80	1.2	.13	.45
14	.25	.86	3.8	3.7	9.0	25	2.2	2.8	1.3	.80	.11	2.2
15	.18	.96	14	4.0	17	11	6.9	8.6	2.6	.90	.09	.63
16	.14	.76	7.0	2.5	14	22	50	5.4	1.6	1.9	.08	.40
17	.11	.58	4.9	2.0	8.8	17	14	5.2	.57	.80	.11	.20
18	.10	.50	4.3	3.0	5.8	9.4	8.6	6.2	.40	2.6	.08	.14
19	.09	1.6	3.9	16	4.6	6.4	6.9	3.8	.35	7.8	.06	.14
20	.08	2.0	5.8	6.4	3.7	5.4	8.1	2.3	.35	1.6	.05	.14
21	.07	9.4	8.2	5.2	3.1	5.2	6.4	1.7	.35	.70	.04	.10
22	.06	4.8	5.6	4.4	2.6	15	6.6	1.1	2.2	.40	.03	.07
23	.10	2.5	3.8	8.8	2.3	8.8	5.8	.79	108	.63	.03	.05
24	.20	1.4	3.6	7.1	2.1	6.0	5.0	.70	106	1.0	.02	.08
25	.30	1.2	3.1	10	2.0	5.8	4.4	.57	67	.35	.02	.11
26	.30	1.3	4.8	4.1	1.9	5.0	3.8	.45	21	.31	.02	1.7
27	.25	2.0	4.6	3.4	1.8	4.6	3.2	.35	6.2	.27	.60	6.2
28	.25	3.7	4.6	2.6	1.8	4.1	1.9	.35	2.2	.23	.30	.90
29	.50	5.6	3.4	2.3	1.8	3.8	1.2	.35	2.3	.20	.20	.70
30	.15	12	27	2.1	-----	3.8	1.1	1.1	2.3	.17	.15	41
31	.10	-----	19	1.9	-----	2.9	-----	1.2	-----	.14	.10	-----
TOTAL	35.15	76.33	224.6	164.7	105.3	481.2	171.80	92.26	334.05	93.60	10.51	55.80
MEAN	1.13	2.54	7.25	5.31	3.63	15.5	5.73	2.98	11.1	3.02	.34	1.86
MAX	20	12	27	16	17	118	50	11	108	27	4.0	41
MIN	.03	.10	2.4	1.9	1.3	2.9	.80	.35	.35	.14	.02	.01
CFSM	.45	1.00	2.87	2.10	1.43	6.13	2.26	1.18	4.39	1.19	.13	.74
IN.	.52	1.12	3.30	2.42	1.55	7.08	2.53	1.36	4.91	1.38	.15	.82

CAL YR 1971 TOTAL 1,056.50 MEAN 2.89 MAX 67 MIN 0 CFSM 1.14 IN 15.53
WTR YR 1972 TOTAL 1,845.30 MEAN 5.04 MAX 118 MIN .01 CFSM 1.99 IN 27.13

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	1545	4.19	101	6-23	0500	4.95	220
3- 2	1115	4.54	186	6-24	1230	4.73	201
4-16	1530	4.68	197				

NOTE.--Doubtful gage-height record Oct. 13 to Nov. 3, May 19-23, 27-29, June 19-21, July 22 to Aug. 6, Aug. 10 to Sept. 12, Sept. 16-25.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of 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 the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1972

			Measurements			
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Date	Discharge (cfs)
Delaware River basin						
01428800	West Branch Lackawaxen River at Aldenville, Pa.	Lat 41°38'38", long 75°21'36", Wayne County, at bridge on State Highway 170, 0.3 mile southeast of Aldenville, 4.5 miles north of Prompton.	48.9	1970-72	10-14-71	28
					5-24-72	73
					9-12-72	12
01432500	Shohola Creek near Shohola, Pa.	Lat 41°27'20", long 74°55'25", Pike County, 1.4 miles above mouth and 1.4 miles south of Shohola.	83.6	1920-28/ 1957 1959-67 1969-72	7-28-72	67
					8-23-72	32
					8-31-72	16
					9-11-72	4.6
					9-15-72	7.6
				9-15-72	8.2	
01439400	Toms Creek at Egypt Mills near Bushkill, Pa.	Lat 41°07'29", long 74°57'14", Pike County, at bridge on U.S. Highway 209 at Egypt, 0.3 mile upstream from mouth and 3 miles northwest of Bushkill.	3.34	1970-72	9- 6-72	.07
01440250	Shawnee Creek at Shawnee on Delaware, Pa.	Lat 41°00'42", long 75°06'40", Monroe County, at bridge on State Highway 945, in village of Shawnee on Delaware, 0.6 mile upstream from mouth and 3 miles east of East Stroudsburg.	4.58	1970-72	9- 6-72	.71
01440500	Paradise Creek at Henryville, Pa.	Lat 41°06'00", long 75°15'05", Monroe County, at bridge on State Highway 191, 200 ft upstream from Cranberry Creek, and 0.5 mile northwest of Henryville.	30.2	1966-72	10-19-71	37
					5-17-72	99
					9- 7-72	16
01441000	McMichaels Creek at Stroudsburg, Pa.	Lat 40°58'45", long 75°12'05", Monroe County, at dismantled railroad bridge, 0.2 mile upstream from Little Pocono Creek and 0.8 mile southwest of Stroudsburg.	65.3	1911-38/ 1970-72	10-14-71	102
					5-17-72	155
					9- 7-72	30
01441500	Pocono Creek near Stroudsburg, Pa.	Lat 40°59'10", long 75°13'35", Monroe County, at bridge on Bridge Street, 1.3 miles west of Stroudsburg.	41.0	1911-19/ 1970-72	10-14-71	65
					5-17-72	125
					9- 7-72	13
01443100	Jacoby Creek at Portland, Pa.	Lat 40°55'00", long 75°06'19", Northampton County, at county highway bridge, 0.6 mile southwest of Portland and 0.7 mile upstream from mouth.	6.17	1970-72	9- 6-72	4.7

/ Operated as a continuous-record gaging station.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Delaware River basin--Continued						
01446650	Martins Creek below Little Martins Creek at Martins Creek, Pa.	Lat 40°47'02", long 75°11'08", Northampton County, at bridge on U.S. Highway 611 in village of Martins Creek and 0.9 mile upstream from mouth.	43.4	1932 1970-72	9- 6-72	17
01446900	Bushkill Creek near Easton, Pa.	Lat 40°42'38", long 75°14'46", Northampton County, at bridge just west of Bushkill Drive at Coilton, 0.8 mile downstream from Schoeneck Creek and 2 miles north of Easton.	72.0	1970-72	10-18-71 5-17-72 9- 5-72	110 124 40
01448100	Sandy Run near White Haven, Pa.	Lat 41°00'31", long 75°46'08", Luzerne County, at bridge on L.R. 40118, 800 ft upstream from Pond Creek and 3.8 miles south of White Haven.	10.9	1970-72	10-12-71 5-26-72 9-10-72	12 29 3.9
01449355	Middle Creek at Kresgeville, Pa.	Lat 40°54'03", long 75°29'50", Monroe County, at bridge on U.S. Highway 209, at Kresgeville, 0.5 mile downstream from Dotters Creek and 0.5 mile upstream from mouth.	18.6	1970-72	10-13-71 5-25-72 9- 8-72	24 44 11
01451110	Hockendauqua Creek near Northampton, Pa.	Lat 40°42'50", long 75°29'45", Northampton County, at bridge on county road, 1.7 miles north of Northampton and 3.3 miles upstream from mouth.	38.1	1970-72	10-15-71 5-26-72 9- 5-72	49 38 13
01451165	Catasauqua Creek at Catasauqua, Pa.	Lat 40°38'52", long 75°28'06", Lehigh County, at bridge on North Dauphin Street, Catasauqua, 0.1 mile upstream from mouth.	15.7	1970-72	10-15-71 5-26-72 9- 5-72	14 12 5.5
01457790	Cooks Creek at Durham Furnace, Pa.	Lat 40°34'56", long 75°12'20", Bucks County, on east side of Red Brick Road, 0.1 mile north of State Highway 212, 0.5 mile upstream from mouth and Durham Furnace.	29.4	1934 1944 1949-50 1970-72	8- 8-72	27
*01458900	Tinicum Creek near Ottsville, Pa.	Lat 40°28'14", long 75°08'13", Bucks County, at concrete bridge on gravel road, 0.9 mile below confluence of Rapp Creek and Beaver Creek, 1.5 miles east of Ottsville and 5.3 miles above mouth.	14.7	1971-72	9- 6-72	42
01459150	Tohickon Creek near Quakertown, Pa.	Lat 40°26'26", long 76°18'42", Bucks County, 1,000 ft downstream from highway bridge and mouth of Morgan Creek and 1 mile east of Quakertown.	27.5	1970-72	8- 8-72	3.4
01462300	Jericho Creek at Washington Crossing, Pa.	Lat 40°18'40", long 74°54'23", Bucks County, at bridge on State Highway 32, 0.3 mile upstream from mouth and 2.5 miles northwest of Washington Crossing.	9.52	1971-72	8- 8-72 9- 6-72	.36 .13
01470758	Moselem Creek near Shoemakersville, Pa.	Lat 40°30'10", long 75°52'47", Berks County, at bridge on county road, 0.4 mile upstream from mouth, 2.8 miles west of Moselem Springs and 5 miles east of Shoemakersville.	13.5	1970-72	10-18-71 5-18-72 9- 6-72	18 25 18
*01471800	Pine Creek near Manatawny, Pa.	Lat 40°24'43", long 75°44'02", Berks County, at steel bridge on macadam road, at Lobachsville, 0.5 mile upstream from mouth, 0.5 mile below West Branch Pine Creek and 2 miles north of Manatawny.	15.6	1970-72	8- 8-72	8.0
01475850	Crum Creek near Newtown Square, Pa.	Lat 39°58'35", long 75°26'13", Delaware County, at Castle Rock Bridge on State Highway 3, 0.6 mile upstream from Preston Run, 0.8 mile upstream from Geist Reservoir and 2 miles west of Newtown Square.	15.8	1932 1949 1970-72	8- 8-72	16

* Also a crest-stage partial-record station.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Delaware River basin--Continued						
01478150	East Branch White Clay Creek at Landenberg, Pa.	Lat 39°46'40", long 75°46'18", Chester County, at county highway bridge at Landenberg, 1.4 miles downstream from Egypt River and 4 miles southeast of West Grove.	25.6	1970-72	8- 7-72	29
01479700	West Branch Red Clay Creek near Kennett Square, Pa.	Lat 39 48'39", long 75°42'19", Chester County, at county highway bridge on Kaolin Road, 1 mile upstream from East Branch Red Clay Creek, 1.4 miles east of Kaolin and 2.5 miles south of Kennett Square.	17.0	1970-72	8- 7-72	20
Susquehanna River basin						
01516300	Tioga River at Covington, Pa.	Lat 41°44'42", long 77°04'49", Tioga County, at bridge on L.R. 58060, 0.1 mile west of Covington.	105	1970-72	10-29-71 5-24-72 9- 8-72	78 171 16
01530850	Bentley Creek at Ridgebury, Pa.	Lat 41°58'25", long 76°43'12", Bedford County, at bridge on L.R. 08068, at Ridgebury and 300 ft downstream from Three Falls Glen.	47.2	1970-72	10-21-71 5-24-72 9- 8-72	0 28 .37
01533100	Sugar Run Creek at Sugar Run, Pa.	Lat 41°38'31", long 76°13'55", Bedford County, at bridge on rural road, 0.3 mile east of Sugar Run and 0.4 mile upstream from mouth.	56.6	1970-72	10-20-71 5-25-72 9- 8-72	2.4 31 1.8
01533840	Tunkhannock Creek at Glenwood, Pa.	Lat 41°39'03", long 75°43'15", Susquehanna County, at bridge on State Highway 374 at Glenwood and 0.4 mile upstream from East Branch Tunkhannock Creek.	107	1951 1970-72	10-18-71 5-24-72 9-11-72	18 105 15
01533960	South Branch Tunkhannock Creek near East Benton, Pa.	Lat 41°34'23", long 75°40'00", Lackawanna County, at bridge on county road, 0.4 mile south of East Benton and 0.6 mile upstream from Cordner Pond tributary.	29.3	1970-72	10-13-71 5-25-72 9-11-72	9.1 20 3.2
01534170	East Branch Lackawanna River at Uniondale, Pa.	Lat 41°43'08", long 75°28'49", Susquehanna County, at bridge on L.R. 57041, 0.3 mile east of intersection of State Highway 171 and L.R. 57041 and 0.7 mile east of Uniondale.	17.3	1951 1970-72	10-14-71 5-24-72 9-12-72	6.9 30 3.7
01535540	Spring Brook near Spring Brook, Pa.	Lat 41°17'07", long 75°35'33", Lackawanna County, at bridge on private road, 1.5 miles south of Spring Brook and 1.8 miles upstream of Watres Reservoir dam.	8.98	1970-72	10-13-71 5-25-72 9-11-72	9.7 11 2.0
01536200	Abrahams Creek near Dallas, Pa.	Lat 41°20'41", long 75°54'00", Luzerne County, at culvert on L.R. 40131, 1.7 miles upstream from Frances Slocum State Park dam and 3 miles east of Dallas.	2.79	1970-72	10-13-71 5-25-72 9-11-72	.49 4.2 .06
01537900	Little Wapwallopen Creek near Wapwallopen, Pa.	Lat 41°05'43", long 76°07'18", Luzerne County, at bridge on State Highway 239, 1 mile downstream from Pond Creek and 2 miles north of Wapwallopen.	39.4	1970-72	10-12-71 5-26-72 9-10-72	44 48 .87
01538520	Little Nescopeck Creek at Sybertsville, Pa.	Lat 41°00'12", long 76°04'25", Luzerne County, at bridge on county road, at Sybertsville and 0.6 mile upstream from mouth.	13.8	1970-72	10-12-71 5-26-72 9-10-72	.70 1.7 .07
01538970	Fishing Creek at Forks, Pa.	Lat 41°06'27", long 76°21'44", Columbia County, at bridge on L.R. 19068, at Forks, 0.2 mile upstream from Huntingdon Creek.	114	1970-72	10-28-71 6- 5-72 9-12-72	72 169 25

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Susquehanna River basin--Continued						
01540350	Catawissa Creek at Catawissa, Pa.	Lat 40°57'00", long 76°27'56", Columbia County, at bridge on Second Street, at Catawissa and 0.2 mile upstream from mouth.	149	1949-50 1970-72	10-28-71	98
					9-12-72	47
01541250	Anderson Creek at Curwensville, Pa.	Lat 40°58'20", long 78°31'20", Clearfield County, at bridge on State Highway 453, at Curwensville, 800 ft upstream from mouth.	77.8	1945 1960 1963-64 1970-72	10-13-71	6.3
					5-19-72	110
					9- 6-72	7.1
01541325	Clearfield Creek at Flinton, Pa.	Lat 40°43'05", long 78°31'38", Cambria County, at bridge on L.R. 11063, 0.2 mile upstream from Beaverdam Run and 0.5 mile northwest of Flinton.	98.1	1970-72	10-19-71	44
					6-15-72	123
					9- 6-72	18
01541331	Killbuck Run near St. Augustine, Pa.	Lat 40°39'42", long 78°34'55", Cambria County, 800 ft upstream from mouth and 3.3 miles north of St. Augustine.	7.13	1968-72	10-19-71	1.6
					6-15-72	4.0
					9- 6-72	.22
01542330	Black Moshannon Creek near Philipsburg, Pa.	Lat 40°52'43", long 78°04'36", Centre County, at bridge on Shirk Road, 0.5 mile southeast of Black Moshannon State Airport and 6 miles east of Philipsburg.	2.33	1970-72	10-13-71	1.0
					5-18-72	11
					9- 6-72	.20
01543700	First Fork Sinnemahoning Creek at Wharton, Pa.	Lat 41°31'08", long 78°01'40", Potter County, at bridge on State Highway 872, 0.8 mile southwest of Wharton and 1 mile downstream from East Fork Sinnemahoning Creek.	182	1970-72	10-14-71	21
					9- 7-72	18
01545610	Left Branch Young Womans Creek near Renovo, Pa.	Lat 41°22'19", long 77°42'01", Clinton County, at bridge on L.R. 18022, 400 ft upstream from mouth and 4 miles northeast of Renovo.	35.9	1970-72	10-18-71	3.2
					6-19-72	51
					9- 7-72	4.6
01545680	Tangascootack Creek near Lock Haven, Pa.	Lat 41°10'32", long 77°32'53", Clinton County, at bridge on State Highway 120, 600 ft upstream from mouth and 7 miles northwest of Lock Haven.	36.5	1970-72	10-18-71	8.2
					6- 8-72	62
					9- 7-72	7.2
01547280	Antis Run near Milesburg, Pa.	Lat 40°58'35", long 77°44'42", Centre County, at bridge on U.S. Highway 220, at Curtin, 500 ft upstream from mouth and 3.7 miles east of Milesburg.	1.56	1956-57 1970-72	10-18-71	.06
					6- 6-72	.85
					9- 6-72	.02
01547600	Romola Branch near Howard, Pa.	Lat 41°03'27", long 77°41'10", Centre County, at bridge on L.R. 14009, at Romola, 200 ft upstream from mouth and 3.4 miles northwest of Howard.	5.05	1956-57 1970-72	10-15-71	.71
					6- 8-72	4.3
					9- 6-72	.55
01549550	Little Pine Creek near English Center, Pa.	Lat 41°24'46", long 77°19'19", Lycoming County, at bridge on L.R. 41021, 2.4 miles southwest of English Center.	135	1970-72	10-14-71	49
					5-25-72	121
					9- 7-72	12
01549790	Larrys Creek at Larrys Creek, Pa.	Lat 41°13'10", long 77°13'12", Lycoming County, at bridge on U.S. Highway 220, at Larrys Creek, 0.2 mile upstream from mouth.	89.0	1970-72	10-13-71	26
					5-26-72	91
					9- 9-72	8.8
01551830	Loyalsock Creek near Forksville, Pa.	Lat 41°28'10", long 76°35'05", Sullivan County, at bridge on State Highway 154, at Worlds End, 1.8 miles southeast of Forksville.	131	1970-72	10-20-71	39
					5-25-72	137
					9- 9-72	28
01553110	White Deer Hole Creek at Allenwood, Pa.	Lat 41°06'14", long 76°53'54", Union County, at bridge on county road 0.9 mile upstream from mouth and 0.4 mile south of Allenwood.	66.4	1970-72	10-13-71	28
					5-26-72	93
					9- 9-72	33
01553480	Buffalo Creek at Lewisburg, Pa.	Lat 40°58'19", long 76°53'30", Union County, at bridge on U.S. Highway 15, at Lewisburg and 0.6 mile upstream from mouth.	134	1970-72	10-13-71	93
					5-26-72	119
					9- 9-72	41

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Susquehanna River basin--Continued						
01555250	Mahanoy Creek at Dornsife, Pa.	Lat 40°44'40", long 76°47'28", Northumberland County, at bridge on State Highway 225 at Dornsife, 1.9 miles upstream from Schwaben Creek.	117	1949-50 1970-72	10-29-71	135
					9-12-72	116
01555570	Wiconisco Creek near Elizabethville, Pa.	Lat 40°33'40", long 76°48'30", Dauphin County, at bridge on State Highway 225 and 1 mile north of Elizabethville.	79.2	1949-50 1970-72	10 28-71	85
					9-11-72	22
01555780	Frankstown Branch Juniata River at East Freedom, Pa.	Lat 40°21'23", long 78°25'41", Blair County, at bridge on State Highway 164, 400 ft upstream from South Dry Run and 0.2 mile east of East Freedom.	47.4	1970-72	10-19-71	14
					6-14-72	30
					9- 6-72	9.2
01559750	Raystown Branch Juniata River near Manns Choice, Pa.	Lat 40°01'03", long 78°37'07", Bedford County, at bridge on State Highway 31, 0.3 mile upstream from Shawnee Branch and 2 miles northwest of Manns Choice.	50.8	1952-53 1970-72	10-20-71	56
					6-13-72	41
					9- 5-72	12
01559756	Shawnee Branch at Schellsburg, Pa.	Lat 40°02'17", long 78°39'16", Bedford County, at covered bridge, 0.3 mile upstream from mouth and 0.9 mile southwest of Schellsburg.	18.6	1968-72	10-21-71	4.8
					6-14-72	8.9
					9- 6-72	4.4
01564550	Blacklog Creek near Orbisonia, Pa.	Lat 40°13'55", long 77°52'25", Huntingdon County, at bridge on U.S. Highway 522, 0.5 mile downstream from Shade Creek and 1.4 miles southeast of Orbisonia.	65.0	1970-72	11-10-71	33
					5-26-72	61
					9- 7-72	8.1
01566900	Buffalo Creek near Newport, Pa.	Lat 40°29'37", long 77°08'20", Perry County, at bridge on L.R. 50013, 0.4 mile upstream from mouth and 1.2 miles north of Newport.	69.5	1948 1970-72	10-28-71	53
					5-30-72	47
					9-11-72	8.1
01571110	Yellow Breeches Creek near Walnut Bottom, Pa.	Lat 40°05'47", long 77°23'34", Cumberland County, at bridge on State Highway 174, 0.7 mile northeast of Walnut Bottom.	16.4	1970-72	5-25-72	24
					9- 6-72	1.5
01571185	Mountain Creek at Pine Grove Furnace, Pa.	Lat 40°01'51", long 77°18'18", Cumberland County, at bridge on county road, 0.2 mile south of Pine Grove Furnace and 0.5 mile upstream from Toms Run.	13.9	1970-72	5-25-72	36
					9- 6-72	5.8
01571190	Mountain Creek near Mount Holly Springs, Pa.	Lat 40°05'36", long 77°11'14", Cumberland County, 0.6 mile upstream from reservoir dam and 2 miles south of Mount Holly Springs.	37.4	1970-72	5-25-72	99
					9- 6-72	10
01571820	Swatara Creek at Ravine, Pa.	Lat 40°34'57", long 76°24'25", Schuylkill County, at bridge on State Highway 125, at Ravine and 0.5 mile downstream from Lower Rauch Creek.	43.3	1962-63 1965 1970-72	10-29-71	66
					9-11-72	17
01572950	Swatara Creek tributary near Harper Tavern, Pa.	Lat 40°26'28", long 76°36'00", Lebanon County, at bridge just west of State Highway 443 in Indiantown Gap Military Reservation, 1.9 miles upstream from State Memorial Lake dam and 2.5 miles north of Harper Tavern.	5.48	1970-72	10-29-71	7.1
					5-26-72	7.6
					9-11-72	1.5
01573940	Beaver Creek at Rossville, Pa.	Lat 40°04'39", long 76°54'56", York County, at bridge on Squire Gratz Road, 4,000 ft upstream from mouth and 1 mile north of Rossville.	8.21	1968-72	5-30-72	3.9
					9- 5-72	.01
01578360	East Branch Octoraro Creek near Mt. Vernon, Pa.	Lat 39°49'50", long 76°01'05", Lancaster County, at county bridge, 0.2 mile downstream from Muddy Run, 1 mile upstream from Octoraro Lake and 1.5 miles north of Mt. Vernon.	75.6	1970-72	8- 7-72	101

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Susquehanna River basin--Continued						
01578440	West Branch Octoraro Creek at White Rock, Pa.	Lat 39°49'29", long 76°05'25", Lancaster County, at county highway bridge at White Rock 1 mile upstream from Octoraro Lake, 1.2 miles downstream from Kings Run and 4 miles west of Mt. Vernon.	39.6	1970-72	8- 7-72	48
Potomac River basin						
01600400	Shaffers Run near Fairhope, Pa.	Lat 39°50'57", long 78°47'53", Somerset County, at bridge on L.R. 05012, 0.8 mile upstream from mouth and 1 mile north of Fairhope.	9.77	1970-72	10-20-71 6-14-72 9- 5-72	.74 3.0 .29
*01600700	Little Wills Creek at Bard, Pa.	Lat 39°55'35", long 78°39'40", Bedford County, at bridge on State Highway 96, at Bard.	10.2	1970-72	10-20-71 9- 5-72	.63 .10
01608900	Town Creek at Chaneyville, Pa.	Lat 39°48'31", long 78°29'46", Bedford County, at ford on county road, 1.2 miles downstream from confluence of Elk Lick and Wilson Run and 1.2 miles south of Chaneyville.	36.3	1970-72	10-20-71 6-13-72 9- 5-72	3.0 9.2 2.1
01610130	West Branch Sideling Hill Creek at Purcell, Pa.	Lat 39°47'11", long 78°21'53", Bedford County, at bridge on L.R. 05009, 0.2 mile south of Purcell, and 0.4 mile upstream from mouth.	21.3	1970-72	11-10-71 5-26-72 9- 7-72	5.9 11 .03
01613080	Little Tonoloway Creek at Warfordsburg, Pa.	Lat 39°45'30", long 78°11'19", Fulton County, at bridge on U.S. Highway 522, 0.2 mile upstream from Cove Run, and 0.5 mile north of Warfordsburg.	44.8	1968-72	11-10-71 5-26-72 9- 7-72	20 36 1.4
01613450	Licking Creek near Hustontown, Pa.	Lat 40°00'54", long 78°02'33", Fulton County, 200 ft downstream from Fortune Teller Creek and 2.8 miles south of Hustontown.	20.4	1970-72	11-15-71 6-13-72 9- 7-72	7.7 14 1.5
01614140	Back Creek near Chambersburg, Pa.	Lat 39°53'36", long 77°44'30", Franklin County, at bridge on L.R. 28052, 1.2 miles west of Turkey Foot and 5 miles southwest of Chambersburg.	63.0	1968-72	5-30-72 9- 7-72	51 5.7
*01638900	White Run near Gettysburg, Pa.	Lat 39°47'45", long 77°11'50", Adams County, at concrete bridge on U.S. Highway 140, 1 mile upstream from mouth and 2.5 miles southeast of Gettysburg.	12.4	1970-72	5-30-72 9-11-72	1.1 .12
Browns Run basin						
03012580	Browns Run at Warren, Pa.	Lat 41°49'21", long 79°06'33", Warren County, at site 300 ft below Morrison Run, and 0.5 mile southeast of Warren borough limit.	24.1	1970-72	5-18-72 8-15-72	200 6.2
West Hickory Creek basin						
03016100	West Hickory Creek near West Hickory, Pa.	Lat 41°34'32", long 79°26'20", Forest County, at highway bridge 1.5 miles above mouth, and 1.6 miles northwest of West Hickory.	18.0	1970-72	5-18-72 8-15-72	50 4.8

* Also a crest-stage partial-record station.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Tionesta Creek basin						
*03017800	Minister Creek near Truemans, Pa.	Lat 41°37'17", long 79°09'12", Forest County, in Allegheny National Forest, at bridge on State Highway 666, 0.4 mile above mouth and 1 mile west of Truemans.	10.8	1970-72	5-18-72 8-15-72	23 4.8
French Creek basin						
03021400	West Branch French Creek near Hornby, Pa.	Lat 42°06'08", long 79°49'20", Erie County, at bridge on State Highway 89, 2.4 miles southeast of Hornby and 10 miles above mouth.	43.7	1970-72	5-24-72 8-15-72	18 10
03022800	Cussewago Creek at Crossingville, Pa.	Lat 41°49'52", long 80°14'28", Crawford County, at highway bridge at Crossingville and 0.3 mile above West Branch.	12.6	1970-72	5-23-72 8-14-72	3.9 1.3
Clarion River basin						
03028900	Elk Creek at Ridgway, Pa.	Lat 41°25'31", long 78°43'38", Elk County, at bridge on State Highway 120 at Ridgway and 0.6 mile above mouth.	61.2	1970-72	5-25-72 8-15-72	53 16
*03029200	Clear Creek near Sigel, Pa.	Lat 41°19'17", long 79°04'39", Jefferson County, at bridge on State Highway 949 in Clear Creek State Park, 1,500 ft upstream from Phyllis Run and 4 miles northeast of Sigel.	8.67	1971-72	5-25-72 8-16-72	13 2.7
03030600	Piney Creek at Piney, Pa.	Lat 41°10'12", long 79°28'20", Clarion County, at bridge on State Highway 854 at Piney, 0.1 mile above mouth and 4 miles northwest of Reidsburg.	72.2	1933 1970-72	5-26-72 8- 4-72 8- 9-72 8-16-72	46 27 30 20
Redbank Creek basin						
03031620	Laborde Branch near Du Bois, Pa.	Lat 41°06'18", long 78°42'51", Clearfield County, at highway bridge, 0.6 mile downstream from Luthersburg Branch and 2 miles east of Maple Street Hospital in Du Bois.	15.0	1971-72	5-25-72 8-16-72	7.3 2.7
03031650	Kyle Run near Falls Creek, Pa.	Lat 41°09'37", long 78°51'51", Jefferson County, at highway bridge, 0.6 mile upstream from Kyle Lake and 3.2 miles west of the Falls Creek water tower.	2.09	1971-72	5-25-72 8-16-72	.88 .12
Pine Creek basin						
03036300	North Fork Pine Creek near Mosgrove, Pa.	Lat 40°52'38", long 79°24'00", Armstrong County, at bridge on State Highways 28 and 66 at Slabtown (Baum), 4 miles east of Mosgrove and 4.6 miles upstream from mouth.	3.42	1971-72	5-11-72 8-16-72	5.2 .17
Kiskiminetas River basin						
03039700	Dark Shade Creek at Central City, Pa.	Lat 40°06'18", long 78°47'55", Somerset County, at highway bridge at Central City and 3.4 miles above Clear Shade Creek.	8.51	1970-72	5-10-72 8-15-72	41 2.4

* Also a crest-stage partial-record station.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Kiskiminetas River basin--continued						
03045300	McCune Run at Keystone State Park, Pa.	Lat 40°22'26", long 79°22'25", Westmoreland County, at culvert in Keystone State Park, 200 ft above head of Keystone Lake and 3 miles southeast of New Alexandria.	1.73	1970-72	5-10-72 8-16-72	9.2 .12
03048300	Beaver Run near Slickville, Pa.	Lat 40°26'25", long 79°32'39", Westmoreland County, at highway bridge, 0.2 mile above Beaver Run Reservoir and 2 miles southwest of Slickville.	19.1	1970-72	6- 7-72 8-16-72	7.7 1.5
Bull Creek basin						
03049610	Bull Creek at Tarentum, Pa.	Lat 40°36'54", long 79°45'36", Allegheny County, at bridge on dirt road, 0.3 mile above Little Bull Creek and 0.9 mile north of Tarentum.	36.8	1970-72	5-11-72 8-14-72	40 3.1
Pucketa Creek basin						
03049630	Pucketa Creek at New Kensington, Pa.	Lat 40°33'05", long 79°45'03", Allegheny County, at bridge 0.7 mile above mouth, 1 mile southeast of New Kensington.	25.4	1970-72	5-11-72 8-14-72	54 2.9
Pine Creek basin						
03049810	Pine Creek at Etna, Pa.	Lat 40°29'42", long 79°56'26", Allegheny County, at highway bridge on ramp leading to 62nd Street Bridge at Etna and 0.8 mile above mouth.	66.8	1950-52 1970-72	5-11-72 8-17-72	67 12
Monongahela River basin						
03072700	Whiteley Creek at Kirby, Pa.	Lat 39°48'08", long 80°07'02", Greene County, at bridge on U.S. Highway 19 at Kirby and 1.4 mile above Dyers Fork.	8.74	1939 1949-51 1970-72	5- 9-72 8-15-72	5.3 .13
03072830	Daniels Run at Marianna, Pa.	Lat 40°01'37", long 80°05'26", Washington County, at Penn Central Railroad bridge, 0.2 mile above mouth and 0.5 mile northeast of Marianna.	17.3	1948-51 1970-72	5- 9-72 8-15-72	14 2.2
03075040	Pigeon Creek at Monongahela, Pa.	Lat 40°11'26", long 79°55'50", Washington County, at bridge east of State Highway 481, 0.8 mile south of Monongahela and 1.1 miles above mouth.	58.4	1951 1970-72	5- 9-72 8-16-72	49 7.4
03075090	Peters Creek at Large, Pa.	Lat 40°17'31", long 79°54'56", Allegheny County, at bridge on State Highway 51 at Large and 3 miles above mouth.	42.6	1966-67 1970-72	5- 9-72 8-16-72	46 15
03079600	Laurel Hill Creek near Bakersville, Pa.	Lat 40°00'32", long 79°14'04", Somerset County, at bridge at head of Laurel Lake, 2.3 miles southwest of Bakersville and 3.3 miles below Kooser Run.	38.2	1970-72	5-22-72 8-15-72	34 9.1
03083100	Jacobs Creek at Jacobs Creek, Pa.	Lat 40°07'23", long 79°44'14", Westmoreland County, 0.3 mile above highway bridge at Jacobs Creek and 0.4 mile above mouth.	94.9	1950 1965-67 1970-72	5- 9-72 8-16-72	138 18

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

			Measurements			
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Date	Discharge (cfs)
Beaver River basin						
03099900	Paden Creek near Pennline, Pa.	Lat 41°44'16", long 80°28'17", Crawford County, at bridge on road west at Steamburg, 2.7 miles northeast of Pennline and 4.7 miles upstream from mouth.	6.55	1971-72	8-14-72	1.1
03106030	Slippery Rock Creek at Boyers, Pa.	Lat 41°06'34", long 79°54'30", Butler County, at bridge 0.5 mile above Blacks Creek and 0.5 mile west of Boyers.	28.4	1967-72	5-26-72 8-14-72	16 10
Raccoon Creek basin						
03107700	Traverse Creek at Raccoon Creek State Park, Pa.	Lat 40°30'04", long 80°25'17", Beaver County, at highway bridge 0.2 mile southeast of Raccoon Creek State Park Headquarters, 1.8 miles northeast of Frankfort Springs and 3.5 miles above mouth.	14.6	1970-72	5- 9-72 8-14-72	14 1.7
Beaver Creek basin						
03109300	North Fork Little Beaver Creek at Darlington, Pa.	Lat 40°48'22", long 80°25'22", Beaver County, at bridge on State Highway 551 at Darlington and 12 miles below Honey Creek.	88.7	1949-51 1970-72	5- 9-72 8-14-72	82 20

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Delaware River basin							
01431000	Middle Creek near Hawley, Pa.	Lat 41°29'05", long 75°13'20", Wayne County, at bridge on L.R. 63022, 0.1 mile below Red Shale Brook, 2 miles northwest of Hawley, and 2.5 miles above mouth.	78.4	1945-60 [‡] 1961-72	6-23-72	7.28	3,050
01431680	Mill Brook near Paupack, Pa.	Lat 41°23'15", long 75°14'20", Pike County, at culvert on State Highway 507, 400 ft above mouth, 1.8 miles south of Paupack. Datum of gage is 1,183.84 ft above mean sea level.	4.84	1960-72	6-23-72	a5.9	260
01438300	Vandermark Creek at Milford, Pa.	Lat 41°19'35", long 74°47'50", Pike County, at stone bridge on Broad Street in Milford, and 0.4 mile above mouth. Datum of gage is 490.50 ft above mean sea level.	5.36	1962-72	6-23-72	2.91	142
01440300	Mill Creek at Mountainhome, Pa.	Lat 41°09'50", long 75°16'00", Monroe County, at stone-arch bridge on macadam road 0.5 mile east of Mountainhome, and 1.5 miles above mouth.	5.84	1961-72	6-23-72	6.81	222
01452300	East Branch Monocacy Creek near Bath, Pa.	Lat 40°43'10", long 75°22'10", Northampton County, on left bank 25 ft downstream from bridge on L.R. 40863, 1.5 miles southeast of Bath, and 2.5 miles upstream from mouth. Datum of gage is 372.06 ft above mean sea level.	5.35	1962-68 [‡] 1969-72	6-23-72	a5.18	314
01454600	Polk Valley Run at Hellertown, Pa.	Lat 40°34'05", long 75°19'45", Northampton County, at concrete bridge on L.R. 48093, 0.7 mile above mouth, and 1.5 miles southeast of Hellertown.	2.14	1963-72	6-22-72	4.55	60
*01458900	Tinicum Creek near Ottsville, Pa.	Lat 40°28'14", long 75°08'13", Bucks County, at concrete bridge on gravel road, 0.9 mile below confluence of Rapp Creek and Beaver Creek, 1.5 miles east of Ottsville, and 5.3 miles above mouth.	14.7	1962-72	6-22-72	7.27	4,260
01465780	Poquessing Creek above Byberry Creek at Philadelphia Pa.	Lat 40°14'10", long 74°58'33", Philadelphia County, on left bank 2,200 ft upstream from Byberry Creek, Philadelphia. Datum of gage is 17.26 ft above mean sea level.	13.2	1965-70 [‡] 1971-72	11-29-71	6.41	1,190
01465795	Byberry Creek at Grant Avenue, Philadelphia	Lat 40°03'45", long 74°59'47", Philadelphia County, on left bank 120 ft upstream from Grant Avenue Bridge, 1,300 ft west of Frankford Avenue, Philadelphia. Datum of gage is 26.17 ft above mean sea level.	7.13	1964-70 [‡] 1971-72	11-29-71	6.63	1,060

* Also low-flow partial-record station.

[‡] Operated as a continuous-record station.

a Outside high water mark.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual Maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Delaware River basin--continued							
01467043	Stream "A" at Philadelphia, Pa.	Lat 40°05'27", long 75°03'50", Philadelphia County, at concrete-box culvert on Bloomfield Avenue in Philadelphia, Pa.	1.20	1965-72	6-22-72	12.95	149
01467045	Pennypack Creek below Verree Road, Philadelphia, Pa.	Lat 40°05'04", long 75°03'34", Philadelphia County, on left bank 600 ft downstream from Verree Road and 1 mile downstream from Rockledge Branch, Philadelphia. Datum of gage is 67.26 ft above mean sea level.	42.8	1964-70 [‡] 1971-72	7-13-72	9.55	2,120
*01471800	Pine Creek near Manatawny, Pa.	Lat 40°24'43", long 75°44'02", Berks County, at steel bridge on macadam road, 0.5 mile above mouth, 0.5 mile below West Branch Pine Creek, and 2 miles north of Manatawny.	15.6	1961-72	6-22-72	9.25	812
01473100	Zacharias Creek near Skippack, Pa.	Lat 40°12'26", long 75°21'57", Montgomery County, at concrete weir, 1.2 miles above mouth, and 2.2 miles southeast of Skippack.	7.27	1960-72	6-22-72	9.76	5,860
01473880	Pine Run tributary at Fort Washington, Pa.	Lat 40°08'13", long 75°11'21", Montgomery County at corrugated half-round culvert on Delaware Road in Fort Washington Industrial Park at Fort Washington, and 300 ft above mouth.	2.01	1962-72	6-22-72	6.40	128
01473900	Wissahickon Creek at Fort Washington, Pa.	Lat 40°07'26", long 75°13'13", Montgomery County, on concrete bridge on State Highway 73, 0.5 mile downstream from Sandy Run, and 1 mile south of Fort Washington.	40.8	1961-68 [‡] 1969-72	6-22-72	10.50	2,670
01473980	Wissahickon Creek at Livezey Lane, Philadelphia, Pa.	Lat 40°02'59", long 75°12'52", Philadelphia County, on left bank 300 ft upstream from Green Valley Boat Club, 500 ft downstream from Chreshiem Creek in Philadelphia. Datum of gage is 78.55 ft above mean sea level.	59.2	1965-70 [‡] 1971-72	6-22-72	4.39	2,390
01478200	Middle Branch White Clay Creek near Landenberg, Pa.	Lat 39°46'54", long 75°48'03", Chester County, at bridge on L.R. 15017, 1.4 miles above mouth, and 1.8 miles west of Landenberg.	12.7	1960-72	6-22-72	12.29	3,860
01480610	Sucker Run near Coatesville, Pa.	Lat 39°58'20", long 75°51'06", Chester County, at concrete bridge on South Park Avenue at State Highway 372, 1.6 miles above mouth, and 2 miles west of Coatesville.	2.57	1964-72	6-22-72	6.96	926
01480680	Marsh Creek near Lyndell, Pa.	Lat 40°03'58", long 75°43'38", Chester County, at bridge on L.R. 15018 at Milford Mills, 1 mile northeast of Lyndell, 1.8 miles upstream from mouth, and 4.2 miles north of Downingtown.	17.8	1960-69 [‡] 1970-71		b	

* Also a low-flow partial-record station.

‡ Operated as a continuous-record station.

b Discontinued, flooded by Marsh Creek Dam.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual Maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Susquehanna River basin							
01516800	Manns Creek near Mansfield, Pa.	Lat 41°49'19", long 77°05'50", Tioga County, at bridge on gravel road, 0.5 mile above mouth, and 1.8 miles northwest of Mansfield.	3.01	1960-72	6-24-60	5.59	c482
					4-25-61	5.44	c442
					3-21-62	5.45	c445
					3-13-63	4.80	c210
					3-10-64	5.63	c491
					6- 2-65	d5.79	ec253
					2-13-66	5.03	c297
					3-23-68	5.24	c378
					4- 5-69	4.85	c228
					4- 2-70	4.70	c180
					3-15-71	5.45	c445
					6-22-72	7.10	715
01531250	North Branch Sugar Creek tributary near Columbia Cross Roads, Pa.	Lat 41°50'25", long 76°49'38", Bradford County, at bridge on secondary road, 14 miles upstream from mouth and 1.5 miles west of Columbia Cross Roads.	8.83	1962-68 ^g 1969-72	6-22-72	6.24	2,410
01532200	South Branch Towanda Creek at New Albany, Pa.	Lat 41°35'25", long 76°26'00", Bradford County, at bridge on gravel road, 0.1 mile below French Creek, 0.7 mile above Beaver Run and 0.8 mile south of New Albany.	13.3	1963-72	3-10-64	7.4	c1,400
					2-13-66	5.90	c740
					7- 6-67	5.64	c644
					11- 2-67	6.30	c900
					11-18-68	7.49	c1,440
					4- 2-70	7.05	c1,220
					2-27-71	5.47	c584
6-22-72	a9.86	2,850					
01533250	Tuscarora Creek near Silvara, Pa.	Lat 41°42'25", long 76°07'10", Bradford County, at culvert on gravel road, 1 mile northeast of Silvara, 1.1 miles above Mill Creek, and 4.6 miles above mouth.	11.8	1963-72	6-22-72	a13.07	e1,610
01533800	Butler Creek at Gibson, Pa.	Lat 41°48'10", long 75°38'45", Susquehanna County, at concrete bridge on State Highway 547, at Gibson, and 6 miles above mouth. Datum of gage is 1,189.29 ft above mean sea level.	7.38	1963-72	6-22-72	a7.8	870
01538800	Huntington Creek near Pikes Creek, Pa.	Lat 41°18'40", long 76°08'50", Luzerne County, at bridge on State Highway 118, 1.5 miles above Mitchler Run, and 2.8 miles west of Pikes Creek.	4.94	1960-72	6-22-72	9.34	950
01542720	Wilson Run at Penfield, Pa.	Lat 41°12'58", long 78°35'00", Clearfield County, at wooden bridge, 200 ft north of State Highway 153, 0.8 mile northwest of Penfield, and 0.7 mile above mouth.	8.34	1962-72	6-22-72	5.20	e403
01544450	Germania Branch at Germania, Pa.	Lat 41°38'49", long 77°39'22", Potter County, at concrete bridge on private road, 50 ft below Baders Hollow, 0.3 mile east of Germania and 4.6 miles above mouth.	2.40	1964-72	3- 5-64	c3.81	c138
					2- 7-65	g2.37	98
					2-14-66	c2.94	c72
					5-20-69	c3.77	c135
					9- 7-71	c2.19	c74
6-23-72	4.55	210					
01548020	Bull Run near Loganton, Pa.	Lat 41°00'30", long 77°19'35", Clinton County, at pipe culvert on State Route 477, and 2 miles southeast of Loganton.	1.99	1963-72	6-22-72	a8.94	348
01552100	Mill Creek near Warrensville, Pa.	Lat 41°20'10", long 76°57'45", Lycoming County, at bridge on L.R. 41044, 1.2 miles northwest of Warrensville, and 6 miles above mouth.	11.9	1961-72	6-22-72	a6.14	2,240

^g Operated as a continuous-record station.

a Outside high water mark.

c Revised.

d Doubtful gage height.

e Indirect measurement.

g Using auxiliary gage for discharge record.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual Maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Susquehanna River basin--continued							
01553050	White Deer Hole Creek near Elimsport, Pa.	Lat 41°07'05", long 77°04'00", Lycoming County, at bridge on L.R. 41001, 2.5 miles west of Elimsport, and 12.5 miles above mouth. Datum of gage is 650.84 ft above mean sea level.	18.2	1961-72	6-22-72	a11.83	e4,200
01555800	McDonald Run near East Freedom, Pa.	Lat 40°22'35", long 78°25'55", Blair County, at concrete culvert on U.S. Highway 220, 0.4 mile above mouth, and 1.5 miles north of East Freedom. Datum of gage is 1,014.18 ft above mean sea level.	1.54	1959-72	6-23-72	3.63	134
01556400	Sandy Run near Bellwood, Pa.	Lat 40°33'47", long 78°20'35", Blair County, at bridge on private road, 0.6 mile above mouth, and 2.5 miles south of Bellwood.	5.58	1962-72	3- 5-65 2-13-66 9-28-67 1-30-68 8-16-69 4- 2-70 11- 3-70 6-22-72	3.13 4.25 6.25 f3.50 4.19 4.46 3.36 a5.75	c93 c242 c900 c90 c194 c247 c84 630
01556500	Little Juniata River at Tipton, Pa.	Lat 40°37'40", long 78°17'38", Blair County, at Tipton, 100 ft below bridge on State Highway 220, and 150 ft below Tipton Run. Datum of gage is 946.76 ft above mean sea level.	93.7	1946-62 ^g 1963-72	6-23-72	9.24	6,140
01557100	Schell Run at Tyrone, Pa.	Lat 40°40'00", long 78°15'00", Blair County, 0.2 mile above U.S. Highway 220 between 5th Street and Shippen Street, Tyrone. Datum of gage is 919.11 ft above mean sea level.	1.68	1958-62 ^g 1963-72	6-22-72	2.68	220
01563800	Elders Branch near Hustontown, Pa.	Lat 40°05'20", long 78°02'55", Fulton County, at timber bridge on gravel road, 2.2 miles above mouth, and 5 miles northeast of Hustontown.	3.46	1960-72	4- 3-60 2-26-61 2-24-62 3- 4-63 4-21-64 2- 8-65 2-14-66 3- 6-67 10-26-67 8- 2-69 4- 2-70 11-12-70 6-22-72	6.41 6.46 6.30 7.20 5.49 6.19 6.34 6.72 7.23 4.86 g 5.35 8.60	c125 c130 c200 c275 c118 c161 c171 c222 c294 c51 c160 c84 540
01565920	Lick Run near East Waterford, Pa.	Lat 40°21'15", long 77°38'55", Juniata County, at culvert on L.R. 34070, 0.7 mile above mouth, and 1.5 miles southwest of East Waterford.	8.38	1962-72	2-24-62 3- 6-63 3- 5-64 3- 5-65 2-13-66 3- 6-67 5-29-68 3-25-69 4- 2-70 11-23-70 7-16-72	7.65 4.78 6.60 6.68 f9.33 6.92 6.43 4.34 a6.8 7.38 9.85	c390 c101 c240 c248 gc340 c273 c224 c77 c260 c342 1,870
01569340	Newburg Run at Newburg, Pa.	Lat 40°07'40", long 77°32'50", Cumberland County, at concrete bridge on State Highway 696, 0.4 mile above mouth, and 0.8 mile south of Newburg.	5.29	1964-72	2-27-66 3- 6-67 5-29-68 4- 2-70 2-22-71 6-22-72	5.98 4.54 4.35 5.99 a5.04 a7.4	c376 c162 c144 c378 c215 1,180

^g Operated as a continuous-record station.
a Outside high water mark.
c Revised.
e Indirect measurement.
f Affected by ice.
g Using auxiliary gage for discharge record.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual Maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Susquehanna River basin--continued							
01572900	Reeds Creek near Ono, Pa.	Lat 40°24'25", long 76°33'15" Lebanon County, at concrete culvert on U.S. Highway 22, 1 mile west of Ono, and 1.1 miles above mouth.	8.63	1962-72	6-23-72	h14.74	
01576320	Stony Run at Reamstown, Pa.	Lat 40°12'44", long 76°07'30", Lancaster County, at double-arch bridge, 0.1 mile southeast of U.S. Highway 222, 0.1 mile northwest of Reamstown, and 0.7 mile above mouth.	3.55	1964-72	6-22-72	7.00	995
01578200	Conowingo Creek near Buck, Pa.	Lat 39°50'35", long 76°11'45", Lancaster County, at concrete bridge on L.R. 36135, 2 miles above Jackson Run, and 2.5 miles southeast of Buck.	8.71	1963-72	6-22-72	7.76	e1,270
Potomac River basin							
*01600700	Little Wills Creek at Bard, Pa.	Lat 39°55'35", long 78°39'40", Bedford County, at bridge on State Highway 96 at Bard. Datum of gage is 1,264.2 ft above mean sea level.	10.2	1961-72	4- 2-70 6-22-72	8.45 9.13	c585 789
*01638900	White Run near Gettysburg, Pa.	Lat 39°47'45", long 77°11'50", Adams County, at concrete bridge on U.S. Highway 140, 1 mile above mouth, and 2.5 miles southeast of Gettysburg. Datum of gage is 414.65 ft above mean sea level.	12.4	1961-72	6-22-72	13.55	4,360
Conewango Creek basin							
03015080	Akeley Run near Russell, Pa.	Lat 41°55'55", long 79°05'38", Warren County, at highway bridge 1.1 miles upstream from Widdlefield Run, and 2.5 miles east of Russell. Datum of gage is 1,367.84 ft above mean sea level.	9.64	1962-72	6-23-72	2.60	683
Brokenstraw Creek basin							
03015390	Hare Creek near Corry, Pa.	Lat 41°56'29", long 79°38'41", Erie County, at concrete dam of Corry Water Co., 1.1 miles above Bear Creek, and 1.5 miles north of Corry.	12.3	1964-72	6-23-72	5.63	744
Tionesta Creek basin							
*03017800	Minister Creek near Truemans, Pa.	Lat 41°37'17", long 79°09'12", Forest County, in Allegheny National Forest, at bridge on State Highway 666, 0.4 mile above mouth, and 1 mile west of Truemans.	10.8	1961-72	6-23-72	3.41	539

* Also a low-flow partial-record station.

/ Not determined.

c Revised.

e Indirect measurement.

h Backwater from Swatara Creek.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Oil Creek basin							
03020440	West Branch Caldwell Creek near Grand Valley, Pa.	Lat 41°45'31", long 79°34'08", Warren County, at bridge 2 miles above Three Bridge Run, and 3 miles northwest of Grand Valley.	4.37	1964-72	6-23-72	8.60	e390
Richey Run basin							
03026400	Richey Run at Emlenton, Pa.	Lat 41°10'53", long 79°41'25", Clarion County, at highway bridge 1 mile east of Emlenton, and 1.2 miles above mouth.	5.88	1963-72	6-23-72	3.40	521
Clarion River basin							
*03029200	Clear Creek near Sigel, Pa.	Lat 41°19'17", long 79°04'39", Jefferson County, at bridge on State Highway 949 in Clear Creek State Park, 1,500 ft above Phyllis Run, and 4 miles northeast of Sigel.	8.67	1960-72	6-22-72	7.57	871
Redbank Creek basin							
03031780	Mill Creek near Brockway, Pa.	Lat 41°14'53", long 78°50'08", Jefferson County, at culvert on State Highway 28, and 2 miles west of Brockway.	2.12	1965-72	6-22-72	6.15	e235
Kiskiminetas River basin							
03042170	Stoney Run at Indiana, Pa.	Lat 40°36'31", long 79°09'49", Indiana County, at southwest edge of Indiana, 300 ft west of U.S. Highway 119, and 0.1 mile below Marsh Run.	4.39	1964-72	6-23-72	8.56	420
Buffalo Creek basin							
03049100	Little Buffalo Creek at Cabot, Pa.	Lat 40°45'57", long 79°46'01", Butler County, at highway bridge at Cabot, 500 ft above main bridge, and 3.5 miles above Sarver Run.	4.66	1959-72	6-23-72	7.49	404
Monongahela River basin							
03072880	Browns Creek near Nineveh, Pa.	Lat 39°56'27", long 80°17'21", Greene County, at highway bridge just below Brush Fork, and 1.8 miles southeast of Nineveh, Pa.	17.5	1963-72	6-23-72	10.02	1,420
03083600	Gillespie Run near Sutersville, Pa.	Lat 40°13'59", long 79°49'06", Allegheny County, at upstream highway bridge at Mustard, 0.4 mile above mouth, and 0.7 mile west of Sutersville.	4.04	1959-72	6-23-72	5.25	e586

* Also a low-flow partial-record station.
e Indirect measurement.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (cfs)
		Streams tributary to Lake Erie					
04213200	Mill Creek at Erie, Pa.	Lat 42°05'54", long 80°04'35", Erie County, at bridge on West 38th Street, 100 ft west of State Highway 505, at Erie.	9.16	1964-72	6-23-72	13.21	1,700

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record 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 square (■); and indirect measurements by the letter (a).

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
Delaware River basin						
Marshall Creek	Brodhead Creek	Lat 40°59'50", long 75°00'30", Monroe County, at bridge on rural road at Minisink Hills, 600 ft upstream from mouth.	26.8	1958-71	12- 2-71 1-12-72 3-21-72 5-18-72	145 69 110 129
Bushkill Creek	Delaware River	Lat 40°41'45", long 75°12'18", Northampton County, at mouth at Easton.	80.0	1968-71	11-11-71 12-20-71 1-27-72 5- 3-72 8- 1-72 8-18-72 9-21-72	172 136 114 142 *104 *83 *60
Monocacy Creek	Lehigh River	Lat 40°42'29", long 75°23'54", Northampton County, 0.2 mile west of State Highway 512 at Clyde and 1.3 miles south of Bath.	-	1970-71	10-15-71	*22
Little Lehigh Creek	. . . do. . .	Lat 40°31'51", long 75°36'04", Lehigh County, at bridge on State Highway 100, 1 mile south of Trexlertown.	-	1970-71	10-15-71	*18
Poquessing Creek	Delaware River	Lat 40°03'25", long 74°59'08", Philadelphia County, 600 ft upstream from Delaware River Expressway and 3,000 ft upstream from mouth, Philadelphia.	21.4	1965-70 [≠] 1971	5-22-72	*20
Pennypack Creek	. . . do. . .	Lat 40°03'00", long 75°01'59", Philadelphia County, 400 ft downstream from Rhawn Street Bridge, 0.8 mile upstream from Wooden Bridge Run, Philadelphia.	49.8	1965-70 [≠] 1971	5-23-72	*70
Wooden Bridge Run	Pennypack Creek	Lat 40°03'19", long 75°01'22", Philadelphia County, 200 ft upstream from Penn Central Railroad bridge, and 1,500 ft upstream from mouth, Philadelphia.	3.35	1965-70 [≠] 1971	12- 6-71 5-25-72 6- 5-72 8- 7-72	*2.4 *3.2 *2.1 *1.9
Tacony Creek	Frankford Creek	Lat 40°02'47", long 75°06'41", Philadelphia County, 20 ft downstream from county line, 0.4 mile upstream from Adams Avenue Bridge, Philadelphia.	16.2	1965-70 [≠] 1971	8-10-72	*12
Pigeon Creek	Schuylkill River	Lat 40°12'03", long 75°37'10", Chester County, at bridge on Ellis Woods Road, 1.8 miles west of Parker Ford and 3 miles upstream from mouth.	12.0	1970-71	4-13-72 7-26-72	31 *2.5
Stony Creek	. . . do. . .	Lat 40°10'01", long 75°32'57", Chester County, at bridge on Pikeland Avenue, 0.3 mile south of Spikeland City and 2.2 miles upstream from mouth.	4.07	1970-71	11- 2-71 4-13-72 5- 9-72 7-26-72	*6.1 *6.2 17 *2.5
Wissahickon Creek	. . . do. . .	Lat 40°04'50", long 75°13'35", Philadelphia County, 300 ft upstream from Bells Mill Road, 0.5 mile south of Mt. St. Joseph College, Philadelphia.	53.6	1965-70 [≠]	8- 2-72	*33
Do. . .	. . . do. . .	Lat 40°00'54", long 75°12'24", Philadelphia County, at Ridge Avenue Bridge, Philadelphia.	64.0	1897-1903 1905-6 1965-70 [≠]	5-24-72	*76

[≠] Operated as a continuous-recording station.

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Measurements Discharge (cfs)
Delaware River basin--Continued						
Chester Creek	Delaware River	Lat 39°54'03", long 75°27'34", Delaware County, at railroad bridge, 800 ft downstream from U.S. Highway 1, 6,700 ft upstream from West Branch Chester Creek and 1 mile northeast of Chester Heights.	34.3	-	9-13-71	10,900
West Branch Chester Creek	Chester Creek	Lat 39°53'15", long 75°24'08", Delaware County, at Rockdale and 1,600 ft up- stream from Chester Creek.	19.0	-	9-13-71	10,100
Chester Creek	Delaware River	Lat 39°52'26", long 75°24'55", Delaware County, at railroad bridge, 0.6 mile upstream from gaging station on Chester Creek near Chester.	59.9	-	9-13-71	20,100
East Branch Brandywine Creek	Brandywine Creek	Lat 39°58'07", long 75°40'25", Chester County, at bridge on U.S. Highway 322 and 3 miles southeast of Downingtown.	-	1971	1-24-72	155
Susquehanna River basin						
Tioga River	Chemung River	Lat 41°48'23", long 77°04'57", Tioga County, at bridge on U.S. Highway 6, at Mansfield.	156	-	6-22-72	24,200
Corey Creek	Tioga River	Lat 41°48'40", long 77°04'15", Tioga County, at Newtown Hill Road, at Mansfield.	22.1	-	6-22-72	10,600
Elk Run	Mill Creek	Lat 41°47'48", long 76°56'43", Tioga County, at bridge on U.S. Highway 6, 1.8 miles upstream from gaging station on Elk Run, near Mainesburg.	8.69	-	6-22-72	3,650
South Branch Towanda Creek	Towanda Creek	Lat 41°42'33", long 76°28'10", Bradford County, at mouth, at Monroeton.	48.6	-	11-16-71	*5.9
Susquehanna River	Chesapeake Bay	Lat 41°21'25", long 75°48'47", Luzerne County, at Coxton Yards, 1 mile upstream from mouth of Lackawanna River, near West Pittston.	9,533	-	6-23-72	339,000
Abrahams Creek	Susquehanna River	Lat 41°19'10", long 75°50'44", Luzerne County, at W. 8th St., at West Wyoming.	10.5	-	6-22-72	1,040
Sechler Run	. . . do. . .	Lat 40°57'34", long 76°36'18", Montour County, at bridge on U.S. Highway 11, at Danville.	5.42	-	6-22-72	2,310
Blizzard Run	Sechler Run	Lat 40°57'45", long 76°36'40", Montour County, at bridge on U.S. Highway 11, at Danville.	1.95	-	6-21-72	460
West Branch Susquehanna River	Susquehanna River	Lat 40°43'34", long 78°48'20", Indiana County, at bridge on State Highway 580, at Cherry Tree.	58.8	1970-71	10-28-71 11-24-71 1-10-72 6-22-72 7- 7-72 7-31-72 9-15-72	*40 *34 209 6,790 199 *35 289
Do. . .	. . . do. . .	Lat 40°52'51", long 78°45'54", Clearfield County, at covered bridge on county road at McGees Mills.	141	1970-71	10- 7-71 5-16-72	*85 176
North Witner Run	Clearfield Creek	Lat 40°46'20", long 78°33'20", Clearfield County, at county road, 300 ft upstream from confluence with South Witner Run, at Irvona.	20.7	-	6-22-72	2,650
Clearfield Creek	West Branch Susquehanna River	Lat 40°46'19", long 78°32'57", Clearfield County, below bridge on State Highway 53, at Irvona.	193	-	6-22-72	24,800

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements Date	Discharge (cfs).
Susquehanna River basin--Continued						
Mosquito Creek	West Branch Susquehanna River	Lat 40°07'03", long 78°06'35", Clearfield County, at mouth, at Karthaus.	71.2	1940-71	10- 4-71 12-16-71 4-25-72 6-12-72 7-11-72 9-13-72	*21 246 217 *49 196 30
West Creek	Driftwood Branch Sinnemahoning Creek	Lat 41°29'47", long 78°16'15", Cameron County, 1.6 miles southwest of intersection of State Highways 46 and 120 near Emporium.	59.1	1942 1945	6-22-72	a#7,510
Driftwood Branch Sinnema- honing Creek	Bennett Branch Sinnema- honing Creek	Lat 41°30'42", long 78°14'55", Cameron County, just upstream from bridge on State Highway 120, at Emporium.	86.2	-	6-22-72	a#6,180
First Fork Sinnema- honing Creek	Sinnemahoning Creek	Lat 41°31'08", long 78°01'40", Potter County, at bridge on State Highway 872, 0.8 mile southwest of Wharton and 1 mile downstream from East Fork Sinnemahoning Creek.	182	1968-71	12-16-71 3- 3-72 3-15-72 5- 1-72 7-19-72 7-20-72 9-14-72 9-15-72	555 3,410 532 217 315 512 38 33
Fishing Creek	Bald Eagle Creek	Lat 40°58'49", long 77°29'00", Clinton County, at bridge on macadam road, 3.1 miles west of Tylersville.	55.8	1971	10- 1-71 11-12-71 12- 8-71 12-17-71 3- 2-72 3- 2-72 3-17-72 6-22-72 9-21-72	*43 *48 183 107 754 645 209 1,920 *29
Do. . .	. . . do. . .	Lat 41°06'02", long 77°29'00", Clinton County, adjacent to State Highway 64, 0.5 mile south of Mill Hall.	179	1962-69	6-22-72	a#25,000
Pine Creek	West Branch Susquehanna River	Lat 41°43'59", long 77°38'39", Potter County, at bridge on State Highway 144, 150 ft upstream from South Branch Pine Creek, at Galetton.	167	-	6-22-72	a#15,900
Glade Run	. . . do. . .	Lat 41°11'58", long 76°46'40", Lycoming County, at bridge on county road, at east end of Muncy.	6.62	-	6-23-72	a#1,780
Wiconisco Creek	Susquehanna River	Lat 40°34'07", long 76°41'46", Dauphin County, above bridge on Arch Street, at Lykens.	29.0	-	6-22-72	a#18,700
Rattling Creek	Wiconisco Creek	Lat 40°33'52", long 76°41'57", Dauphin County, at park, at Lykens.	18.9	-	6-22-72	a#13,500
Juniata River	Susquehanna River	Lat 40°32'22", long 78°02'06", Huntingdon County, at West Penn Electric Company dam, at Warriors Ridge.	-	1936	6-23-72	a#53,700
Muddy Run	Juniata River	Lat 40°29'42", long 78°00'57", Huntingdon County, at culvert at 14th Street, at Huntingdon.	2.15	-	6-22-72	a#61
Crooked Creek	Juniata River	Lat 40°28'34", long 78°01'52", Huntingdon County, upstream from mouth, at Huntingdon.	26.4	-	6-22-72	a#4,540
Bloody Run	Raystown Branch Juniata River	Lat 40°00'55", long 78°22'26", Bedford County, at bridge on Third Street, Everett, and 0.4 mile upstream from mouth.	-	1969-71	10-27-71 1-14-72 5- 3-72	*1.5 *1.1 3.2

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Measurements Discharge (cfs)
Susquehanna River basin--Continued						
Scrub Run	Juniata River	Lat 40°23'39", long 77°56'22", Huntingdon County, at mouth, at Mapleton Depot.	3.99	1938-39 1949	6-25-72	70
Three Springs Creek	Aughwick Creek	Lat 40°12'48", long 77°55'34", Huntingdon County, at mouth and 3.5 miles northeast of Three Springs.	31.4	1940-71 ^b	5- 8-72 6-27-72	51 117
Paxton Creek	Susquehanna Creek	Lat 40°18'30", long 76°51'00", Dauphin County, at bridge on Progress Avenue, 2 miles north of Pen rock and 7.8 miles upstream from mouth.	11.2	1940-50 [≠]	6-22-72	am3,300
Do. . .	. . . do. . .	Lat 40°18'24", long 76°53'07", Dauphin County, flow from Wildwood Lake, Harrisburg.	-	-	6-22-72	am2,290
Potomac River basin						
Licking Creek	Potomac River	Lat 40°00'54", long 78°02'33", Fulton County, 200 ft upstream from Fortune Teller Creek and 2.8 miles south of Hustontown.	-	-	5-26-72	24
Marsh Creek	Monocacy River	Lat 39°50'25", long 77°17'46", Adams County, at bridge on L.R. 01002, about 3,000 ft upstream from Little Marsh Creek and 3.5 miles west of Gettysburg.	24.6	1971	10-20-71 11-12-71 3-13-72 5- 1-72 6-19-72 9- 8-72	*5.6 *13 39 34 *22 *4.6
Little Marsh Creek	Marsh Creek	Lat 39°49'49", long 77°19'04", Adams County, at bridge on L.R. 01002, 6,000 ft upstream from mouth and 4.6 miles west of Gettysburg.	20.5	1971	10-20-71 11-12-71 3-14-72 5- 1-72 6-19-72 9- 8-72	*4.1 *16 71 36 *20 *3.3
Toms Creek	Monocacy River	Lat 39°46'05", long 77°26'01", Adams County, at bridge on macadam road, 200 ft upstream from Copper Run, and 3.7 miles southwest of Fairfield.	4.80	1971	10-20-71 3-13-72 5- 2-72 6-19-72 9- 8-72	*1.3 10 10 *3.0 *.98
Allegheny River basin						
Allegheny River	Head of Ohio River	Lat 41°46'47", long 78°01'12", Potter County, at dam 2,080 ft upstream from bridge on U. S. Highway 6 at Coudersport, Pa., and 0.5 mile up- stream from Mill Creek.	44.6	-	6-21-72	am5,790
Mill Creek basin						
Mill Creek	Allegheny River	Lat 41°46'17", long 78°00'46", Potter County, at dam 860 ft upstream from Mill Street Bridge at Coudersport, Pa., and 600 ft upstream from mouth.	31.3	-	6-21-72	am3,490
Potato Creek basin						
Potato Creek	Allegheny River	Lat 41°48'35", long 78°25'46", McKean County, at bridge on U. S. Highway 6 at Smethport, Pa., and 0.1 mile downstream from Marvin Creek.	160	-	6-22-72	am12,800

^b Field estimate.[≠] Operated as a continuous-record station.

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements Date	Discharge (cfs)
Potato Creek basin--Continued						
Marvin Creek	Potato Creek	Lat 41°48'25", long 78°26'30", McKean County, at dam 0.5 mile downstream from U. S. Highway 6 at Smethport, Pa., and 0.6 mile upstream from Potato Creek.	55.2	-	6-22-72	b4,200
Clarion River basin						
Clarion River	Allegheny River	Lat 41°25'15", long 78°44'10", Elk County, at bridge on State Highway 948 in Ridgway, Pa., and 50 ft downstream from Elk Creek.	303	1940-53 ^b 1954-71	10-18-71	164
					11-29-71	240
					1- 3-72	1,110
					1-31-72	562
					3- 6-72	1,120
					4-10-72	690
					5-17-72	805
					6-22-72	5,580
					6-22-72	12,200
					7-25-72	300
					8-22-72	223
					9-18-72	234
Little Toby Creek	Clarion River	Lat 41°15'09", long 78°47'48", Jefferson County, at railroad bridge at Brockway, Pa., and 0.2 mile north of State Highway 28. Published as "Toby Creek" 1946-54.	-	1946-54	8- 8-72	*62
Little Toby Creek	Clarion River	Lat 41°21'53", long 78°49'22", Elk County, at railroad bridge 0.1 mile upstream from State Highway 949, and 0.8 mile south of Portland Mills, Pa.	126	-	10-22-71	*25
Spring Creek	Clarion River	Lat 41°24'59", long 78°56'52", Elk County, in Allegheny National Forest, at bridge 1.5 miles north of Hallton, Pa., and 1.6 miles upstream from mouth.	-	-	3-16-72	288
					8- 7-72	*27
Mill Creek	Clarion River	Lat 41°14'15", long 79°17'11", Clarion County, at bridge 1.9 miles upstream from mouth, and 3.2 miles north of Strattanville, Pa.	-	-	3-16-72	347
					8- 3-72	*21
Toby Creek	Clarion River	Lat 41°15'29", long 79°22'06", Clarion County, at bridge 1.5 miles west of Miola, Pa., and 2.5 miles upstream from mouth.	-	-	10-19-71	*3.9
					8- 3-72	*16
Deer Creek	Clarion River	Lat 41°10'24", long 79°28'41", Clarion County, at bridge on State Highway 854, 0.5 mile west of Piney, 0.1 mile upstream from mouth, and 4.5 miles northwest of Reidsburg, Pa.	74.2	-	8- 4-72	*30
Clarion River	Allegheny River	Lat 41°07'47", long 79°33'16", Clarion County, at bridge on State Highway 58 at Callensburg, Pa., and 0.3 mile upstream from Licking Creek.	-	1970-71	6- 8-72	141
Licking Creek	Clarion River	Lat 41°07'25", long 79°34'06", Clarion County, at bridge 0.5 mile west of Callensburg, Pa., and 0.6 mile upstream from mouth.	-	-	8- 3-72	*27
Clarion River	Allegheny River	Lat 41°08'57", long 79°39'37", Clarion County, at bridge one mile south of St. Petersburg, Pa., and 1.6 miles downstream from Turkey Run.	1,246	1940-41 1942-53 ^b 1969-70	6- 8-72	239
					8-17-72	282

b Field estimate.

≠ Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements Date	Discharge (cfs)
Redbank Creek basin						
Sandy Lick Creek	Redbank Creek	Lat 41°07'29", long 78°49'25", Jefferson County, at bridge on secondary road 0.4 mile south of Pancoast, and 1.7 miles southwest of Falls Creek, Pa.	-	-	8- 8-72	*32
Sandy Lick Creek	Redbank Creek	Lat 41°09'20", long 79°03'12", Jefferson County, at bridge on State Highway 236, 0.1 mile upstream from mouth, and 1.4 miles east of Brookville, Pa.	-	-	3-16-72 8- 9-72	753 *52
Redbank Creek	Allegheny River	Lat 41°09'29", long 79°04'52", Jefferson County, at bridge 0.2 mile below confluence of North Fork and Sandy Lick Creek at Brookville, Pa.	-	-	8- 2-72	*116
Little Sandy Creek	Redbank Creek	Lat 41°01'58", long 79°11'05", Jefferson County, at bridge 0.4 mile west of Langville, 1.3 miles north of North Freedom, Pa., and 2.6 miles upstream from mouth.	-	-	10-20-71 8- 2-72	*11 *17
Leatherwood Creek	Redbank Creek	Lat 41°01'12", long 79°23'14", Clarion County, at bridge 0.7 mile south of Leatherwood, and 3.0 miles west of New Bethlehem, Pa.	-	-	10-20-71	*2.4
Crooked Creek basin						
South Branch Plum Creek	Crooked Creek	Lat 40°43'12", long 79°13'26", Indiana County, at highway bridge 0.6 mile downstream from Sugarcamp Run, and 1.0 mile southwest of Willet, Pa.	30.0	1942-46 [‡] 1947-54 1970	9-14-72	1,340
Pine Run	Crooked Creek	Lat 40°46'05", long 79°03'24", Indiana County, at bridge on State Highway 403 at Marion Center, Pa., 150 ft east of U. S. Highway 119, and 4.7 miles upstream from mouth.	2.47	-	9-13-72	*3,370
Monongahela River basin						
Gist Run	Dunbar Creek	Lat 30°57'49", long 79°37'15", Fayette County, at Pechin, 0.8 mile upstream from mouth, and 0.9 mile southwest of Dunbar, Pa.	7.36	-	6-23-72	*1,230
Chartiers Creek basin						
Little Chartiers Creek Tributary	Little Chartiers Creek	Lat 40°13'41", long 80°08'40", Washington County, 25 feet upstream from bridge on Linden Road at Linden, 0.9 mile upstream from Ross Road tributary, and 2.4 miles southeast of Cannonsburg, Pa.	-	-	5-27-72	*0.13
Little Chartiers Creek	Chartiers Creek	Lat 40°13'42", long 80°08'39", Washington County, at bridge on Linden Road at Linden, 0.9 mile upstream from Ross Road tributary, and 2.4 miles southeast of Cannonsburg, Pa.	34.1	-	5-27-72	*9.91
Brush Run	Chartiers Creek	Lat 40°16'51", long 80°04'13", Washington County, at culvert on Bebout Road, 0.7 mile east of McMurray, Pa., and 3.5 miles upstream from mouth.	1.70	-	5-28-72	*.49

[‡] Operated as a continuous-record station.

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
Chartiers Creek basin--Continued						
Brush Run Tributary	Brush Run	Lat 40°16'34", long 80°04'22", Wash- ington County, at farm road cul- vert off Bebout Road, 800 ft up- stream from mouth, and 0.6 mile east of McMurray, Pa.	1.45	-	5-28-72	*.27
Brush Run	Chartiers Creek	Lat 40°16'45", long 80°05'02", Wash- ington County, at bridge on East McMurray Road at McMurray, Pa., and 2.7 miles upstream from mouth.	3.57	-	5-28-72	*.95
Brush Run	Chartiers Creek	Lat 40°16'52", long 80°05'23", Wash- ington County, off Valley Brook Road, 100 ft upstream from mine-water treatment plant, 0.4 mile west of McMurray, Pa., and 2.3 miles upstream from mouth.	4.85	-	5-29-72	*1.24
Brush Run	Chartiers Creek	Lat 40°17'23", long 80°06'19", Wash- ington County, off Valley Brook Road, 25 ft upstream from unnamed tributary at Old Washington Road, 0.2 mile southeast of Thompsonville, 1.2 miles upstream from mouth, and 1.4 miles northwest of McMurray, Pa.	7.00	-	5-29-72	4.48
Brush Run Tributary	Brush Run	Lat 40°17'25", long 80°06'20", Wash- ington County, at bridge on Valley Brook Road, 25 ft upstream from mouth, 0.2 mile southeast of Thompson- ville, and 1.4 miles northwest of Mc- Murray, Pa.	2.73	-	5-29-72	.68
Coal Run	Chartiers Creek	Lat 40°20'10", long 80°08'24", Allegheny County, just upstream from bridge on Coal Pit Run Road, 1.2 miles south of Morgan, 1.9 miles upstream from mouth, and 2.2 miles southwest of Bridgeville, Pa.	2.01	-	6- 8-72 8-25-72	*.28 *.10

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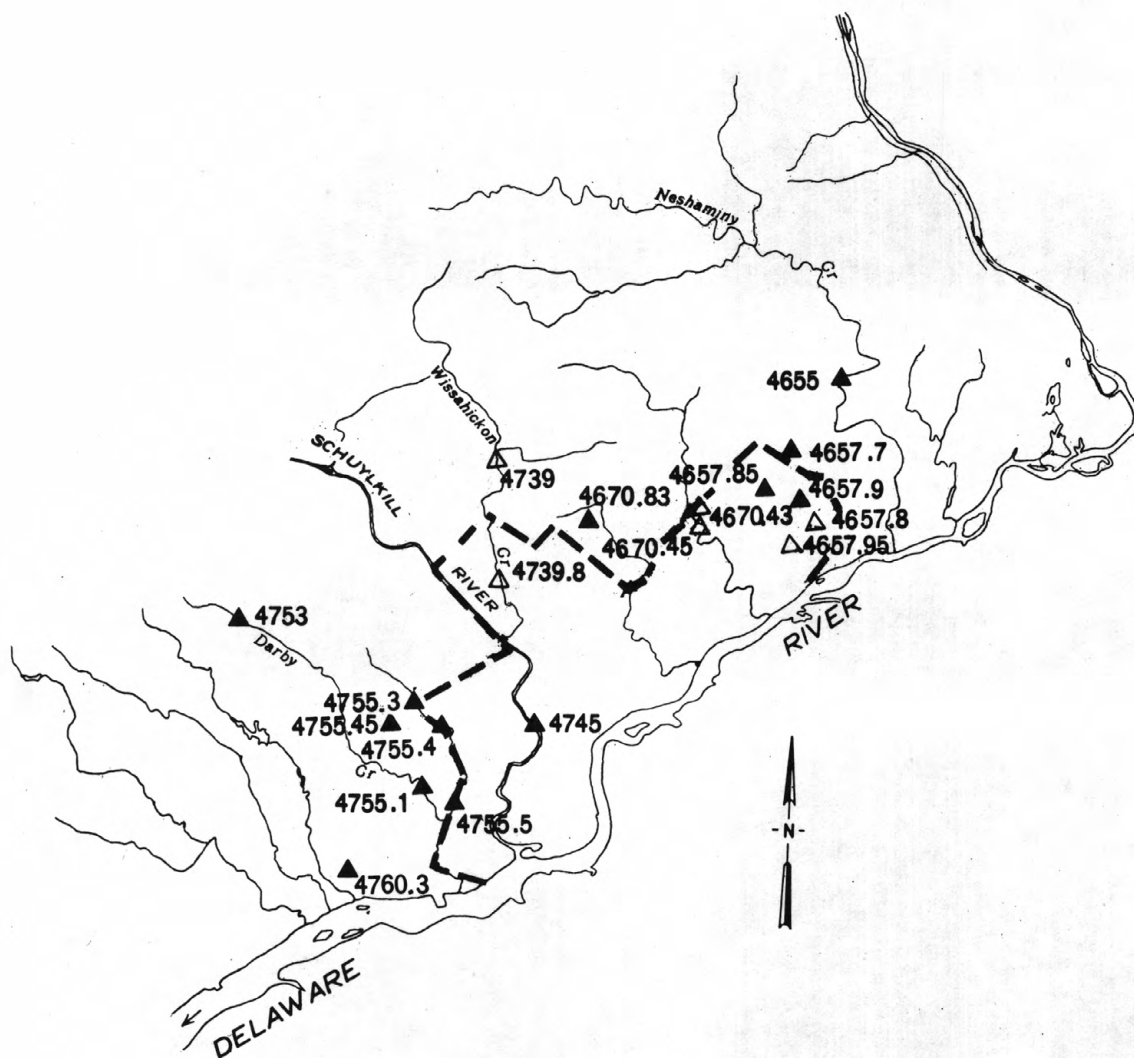
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EXPLANATION

- ▲ Continuous-record station
- △ Crest-stage station

Figure 3.--Map showing location of Philadelphia area gaging stations.

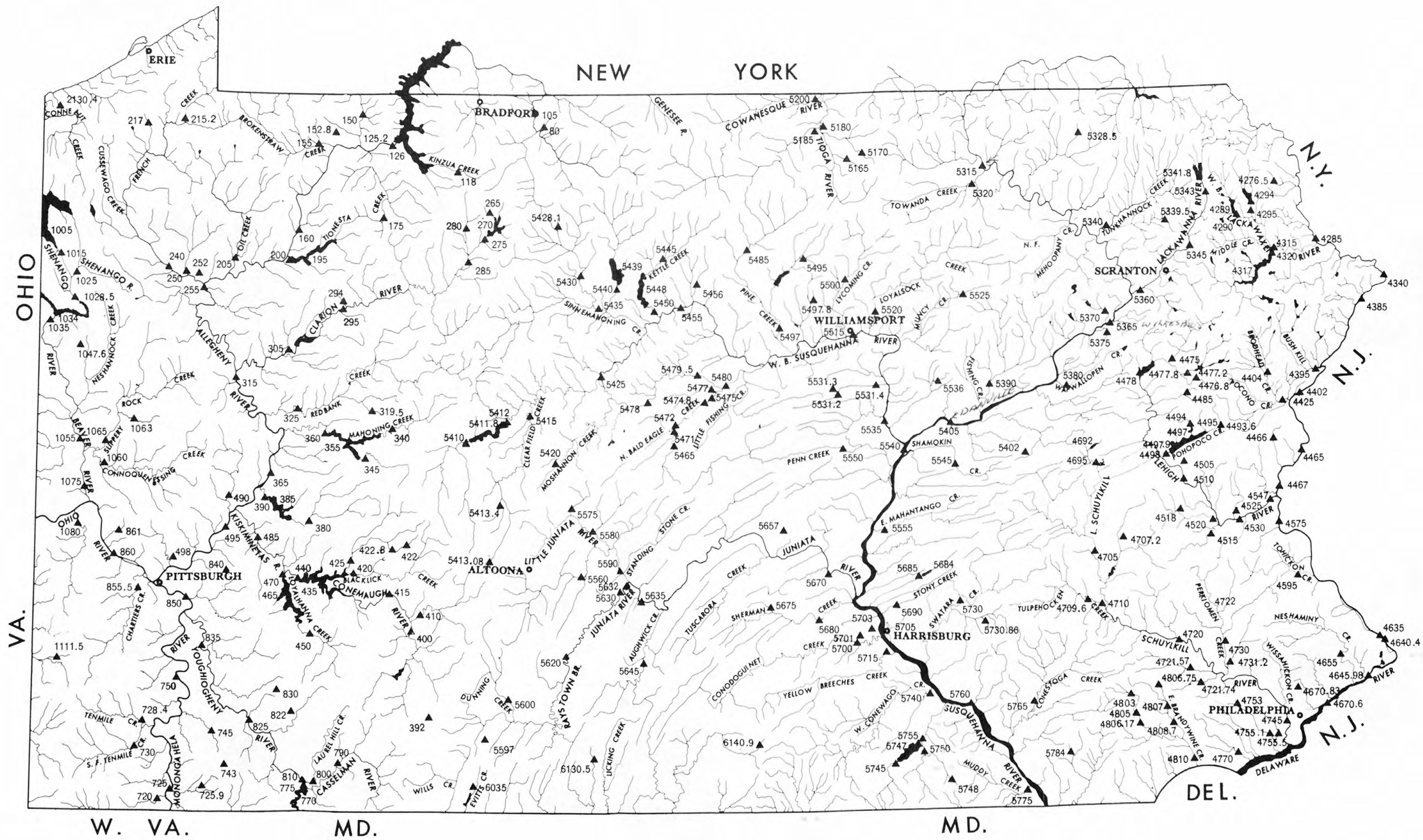


Figure 4.--Map showing location of gaging stations.

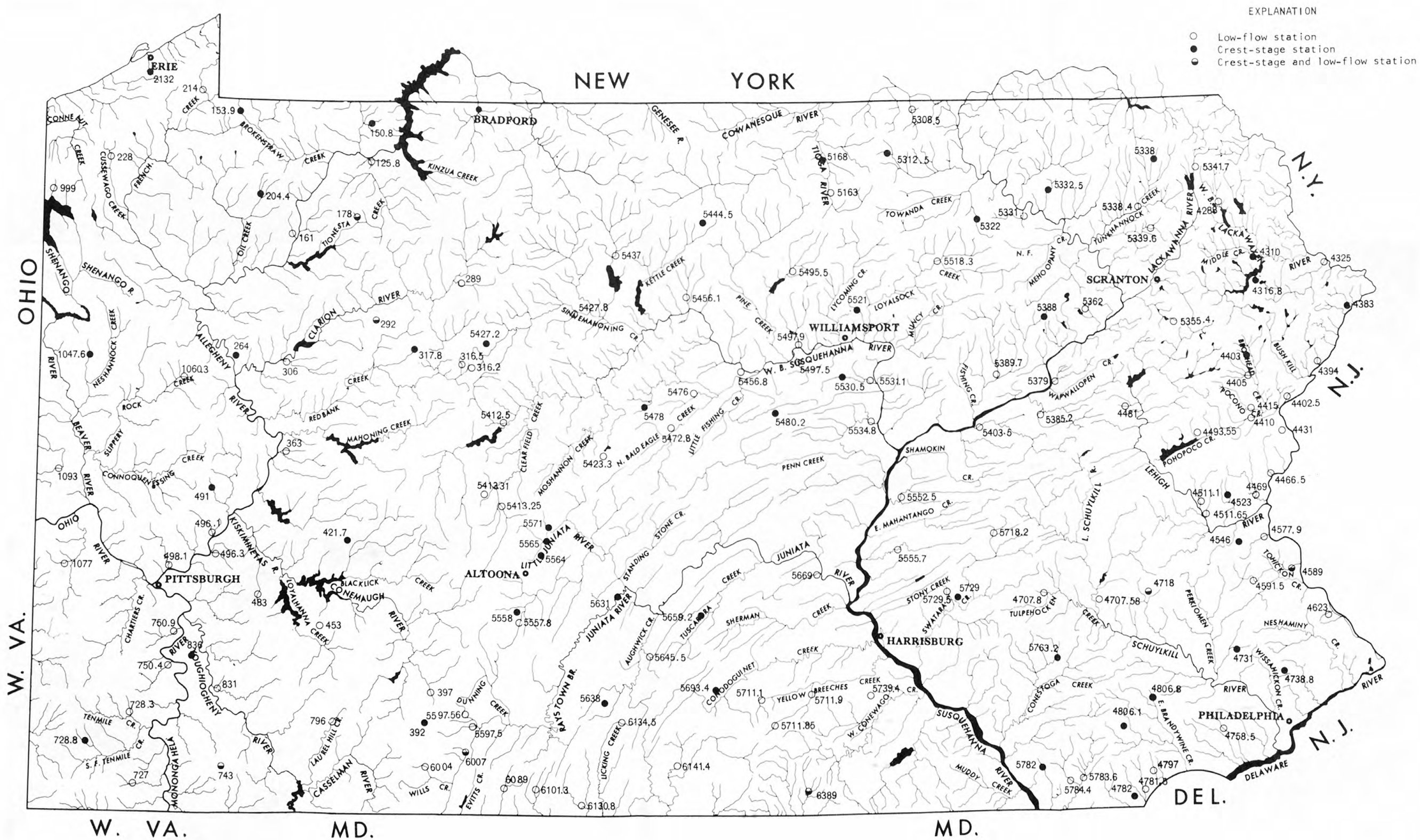
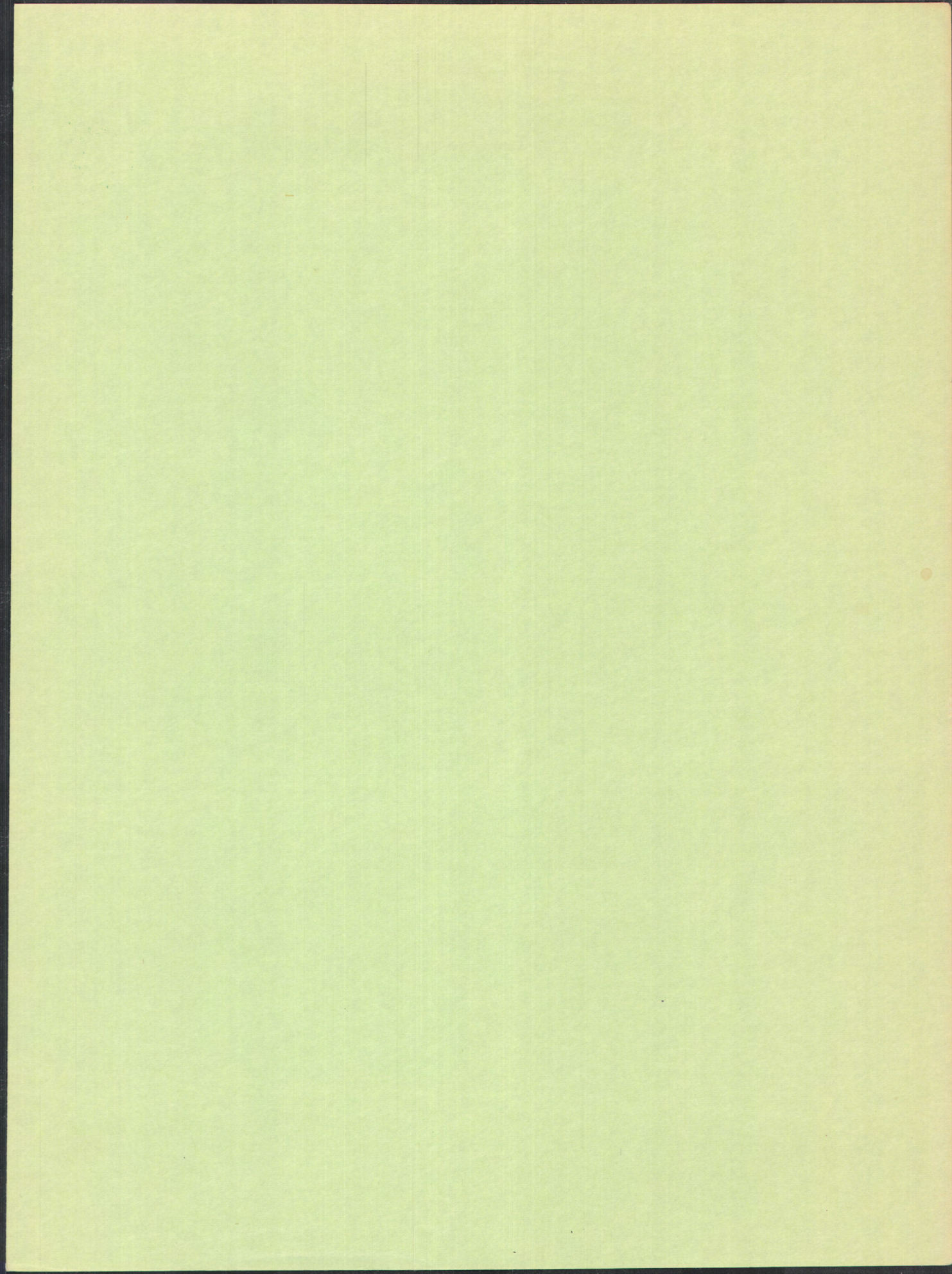


Figure 5.--Map showing location of partial-record stations.



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